

1922



THE MINING CATALOG

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Introduction

THE Third Edition of the COAL CATALOG is issued in response to a continued demand for the book. The Second Edition, brought out in 1920, reached a circulation of twice that of the First Edition, which appeared in 1918, while, for the present edition, we feel confident in predicting a distribution of at least 7,500 copies, or triple the number of books published in 1918. This steady increase in circulation attests the value of the COAL CATALOG, not only as a reference work on coal, but also as a publicity medium for those wishing to acquaint the public with the quality of their output or service.

The COAL CATALOG, in three years, has become a standard reference for the producer, seller and consumer of coal. The information it contains as an every-day help to those concerned with the fuel problem, and an examination of the new and revised material in this issue, will bear out the statement that the new volume is of even greater value than its predecessors.

One of the new features is the colored maps, which have been substituted for the outline maps of the several mining states east of the Mississippi river. These maps now make it possible to locate all the principal towns, cities, rivers and railroads, and, in addition, show the boundaries of the coal areas and the geographical limits of the coal fields as fixed by the United States Geological Survey.

The export situation is dealt with fully and in this section are also given the various pools as used at the three Hampton Roads exchanges, together with definitions and list of mines in each pool. Maps and illustrations have been added as a means of impressing the magnitude of the export trade and its possibilities.

A topical index is another of the useful improvements and will aid in finding quickly the information desired. An index of coals, with list of pages on which will be found either descriptive matter on the coal in question, as well as the names and addresses of dealers in same, is also included. In this index will likewise be found listed items or activities having a direct relation to the production or consumption of coal.

Some of the articles in this edition have been entirely rewritten, while nearly all have been revised and enlarged wherever material of value was applicable. Illustrations of an explanatory nature have been inserted in a number of instances. More data are included in the table of Fusibilities of Coal Ash, Analyses of Foreign Coals, Supplementary Analyses, following the various states, List of By-Product Coke Ovens, Etc.

The Directory of Coal Mines, which follows each state, gives a list of operations with such information on each as the purchaser of coal might desire to have. The Directory is the result of 20 years experience in the gathering of statistics in this field, and, while we believe it to be the most dependable information on any of the larger industries, it, nevertheless, is subject to error and change, and cannot be guaranteed.

In the selection of material here presented hundreds of publications have been consulted, consisting principally of reports of the various state mining departments; state geological surveys; reports of the United States Geological Survey; bulletins, pamphlets, etc., of the Bureau of Mines; proceedings of the various mining institutes; books on the coal resources of the country and articles in technical and trade papers. The descriptive matter has been largely compiled from these and we trust that due acknowledgment has been made in each case.

KEYSTONE CONSOLIDATED PUBLISHING COMPANY.

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HOW TO USE THE COAL CATALOG

Since the COAL CATALOG is strictly utilitarian in purpose, a few words of direction in its use will not be out of place.

Finding a Coal for a Particular Use. Let us suppose that a manufacturer of tile and pottery ware in Louisville, Ky., is in search of a coal fitted for kiln burning. The first step is to read the requirements of a coal for this purpose, as mentioned under the head of Tile and Pottery Burning in Part II. Immediately following the discussion we find a list of seams which, by virtue of their chemical composition, are well adapted, in some or all localities, for the purpose. It will be readily apparent that some of these seams are located at a prohibitive distance, and such, naturally, will be eliminated. Let us assume, then, as remaining for consideration, the following coals: Practically all the seams of eastern Kentucky and southwestern West Virginia; the Quakertown and Sharon seams of Ohio; the No. 4 and Block seams of Indiana; the No. 2 and No. 6 seams of Illinois.

Information will now be wanted on each of these coals, and, to obtain this, we will be guided by the page references at the head of the tabulated list of seams. The first reference is to a description of the seams, where will be found information on the thickness of each bed, its physical properties and its general analysis. The second reference is to the list of supplementary analyses, by the aid of which it is possible to select such localities as offer the most favorable coal from the standpoint of chemical and thermal value. The third reference is to the list of operations which enables the selection of all mines at or near the localities previously decided upon as offering the most favorable coal. The fourth, and last, reference is to the DIRECTORY section, where will be found, alphabetically arranged by companies, detailed information on each mine, such as the names of operating officials, sales agencies, size of mine, tippie equipment, railroad connections, etc., etc. By a process of elimination, based on freight rate and quality of coal, the consumer or sales agency is thus enabled to prepare a select list of mines qualified to supply the proper grade of fuel.

It must not be presumed that, because a seam is listed as capable of producing coal for a specific purpose, for instance, the one just mentioned, Tile and Pottery Burning, that all mines operating in this seam can supply a fuel meeting the requirements. This would be true only provided that each seam analyzed the same throughout its entire range, a condition which is rarely satisfied. Volatile matter, sulphur, ash and thermal value, the four factors which determine the suitability of coal for kiln burning, will be found to vary considerably in each seam dependent upon locality, though variations are usually gradual from place to place. For this reason, the list of supplementary analyses should always be replied upon to point out the localities producing coal suitable to the needs. Once this locality has been determined, it is a fair assumption that mines in the vicinity will yield approximately the same quality of coal.

The illustration here given of one service possible with the COAL CATALOG will serve to indicate how the same information may be derived, no matter for what the coal is intended. Public utilities operating gas retorts, metallurgical plants using coal in reverberatory furnaces, cement industries, users of powdered coal, in short, any industry requiring coal, whether for ordinary or for special purposes, will, by following the procedure as above outlined, find the COAL CATALOG an instrument for its location.

HOW TO USE THE COAL CATALOG--Continued.

Determining the Fusion Point of Ash in Certain Coals. An industrial enterprise, let us assume, wishes to know the fusion point of ash in a coal mined from the Lower Hartshorne seam in Pittsburg county, Oklahoma, neither the mine nor the town where the coal is produced being given in the Table, Fusibility of Coal Ash by States and Seams. By referring to this table, it will be noted that the lowest recorded softening temperature of coal taken from the Lower Hartshorne bed at five localities in Pittsburg county is 1980 deg. F., and the highest is 2120 deg. F. The average of all readings is 2034 deg. F., which differs only slightly from the average of the bed throughout the three counties. It follows that an assumption of 2030 deg. F., supplies the desired information and should be correct to within one per cent, no matter what part of the county the coal is from.

Tidewater Pool Lists as an Additional Classification. Inasmuch as chemical analyses and heat value enter largely into the arrangement of mines by pools, at the three Hampton Roads exchanges, there results a classification which serves to define the quality of coal, not only for the pool, but for each mine within the pool. This method of classification approaches closely to the ideal and may be regarded as the forerunner of classifications which will, in time, embrace all the coals of the United States.

Compiling List of Main Offices in Cities. We are asked, sometimes, concerning a list of coal company offices in the principal cities of the country, and the suggestion is made that this information would be useful to the trade. The answer is that, if such a list were inserted for all principal cities and towns, it would require much space, and, further, that it is readily obtainable from the COAL CATALOG, as it is. By turning to the List of Mines by Seams, which follows each state, it will be found that the general, or main, office address is given for each company listed. By scanning this column for all seams and all states, each company having its general office in the city in question may be marked and a list compiled from these.

Tracing Shipments to the Mine. The retail coal dealer is often partial to a certain coal from a certain mine and if, for any reason, he should notice a falling off in quality, or receive complaint from a customer, he may be inclined to doubt whether his pet brand was shipped him. An instance such as this has recently come to our attention where the retailer, in transmitting his order to the sales agency for two cars of his favorite coal, winds up with the following postscript (names have been changed): "Do not ship me anything but Jumping Jack coal from No. 1 Mine, shipping point Nemo, Ky., drift 48-inches thick. R. V. Winkle, Supt." Even were the agency so disposed, it would be difficult to work off an alien car on one who uses his COAL CATALOG so effectively.

Coal Field Directory. The uses to which the DIRECTORY may be put are well understood, being mainly to supply details on a company and its mine or mines. Where steam or domestic coal is wanted, that part which states the equipment in use at the mine for preparation, and the various sizes shipped, will be found especially valuable.

Advertisements In the COAL CATALOG. In this issue, advertisements will be found following the discussion of coals in the various states, and also in the sections on Sampling and Composition of Coals (Analysis), on Coke, and on Export Coals. In every case where advertising follows descriptive matter, it will be noted that the advertisement is likewise descriptive, although not to the extent of excluding sales or institutional matter. On these pages, however, descriptive matter predominates and the advertisement, therefore, becomes an addition to the general information of the section.

The advertisements in the Sales Section of the COAL CATALOG state the coals in which the agency specializes, service features, shipping facilities, etc., and, in many instances, a commendable addition is in the form of institutional data. The information on coal throughout the book, and the pages in this section, are naturally complementary. The sales information on these pages makes them of equal value to the users of the COAL CATALOG as the descriptive pages. Both classes are direct aids to those having to do with the sale or consumption of coal, and, as publishers, we will greatly appreciate mention of this book in every instance where the advertising pages have been of service. Merely add to your inquiry, "Score one for the COAL CATALOG."

GENERAL INDEX OF CONTENTS

PART I.

Divisions of Geological Time	17
Geology of Coal	18 to 36
Explanation of Geological and Mining Terms	37 to 40
Divisions of Coal Areas of the United States	41
Map of the Coal Fields of the United States	42
Preparation of Coal	43 to 51
Storage of Coal	52 to 64
Coal Sampling	65 to 68
Composition of Coal	69 to 74
Buying of Coal on a B. T. U. Basis	75 to 79
Fusibility of Coal Ash	80 to 112
Coke	117 to 120
List of Coke Ovens in the United States (other than By-Product)	121 to 124
List of By-Product Ovens in the United States	125
Export of Coal	138 to 149
Coal Exchanges and Pools	150 to 157
Tidewater Coal Exchange, Inc.	162 to 164
Newport News Coal Exchange, Inc.	165 to 172
Lamberts Point Coal Exchange	173 to 181
Sewalls Point Coal Exchange	182 to 184
Specific Gravity of Coal	185 to 193
Analyses of Coals in Alaska and Foreign Countries	194 to 205

PART II.

Classification of Coals According to Rank	207 to 215
Classification of Coals According to Use	216 to 237
Classification of Coals According to Physical Structure	238 to 240

PART III.

Alabama	242 to 264	New Mexico	581 to 590
Arkansas	265 to 273	North Dakota	591 to 599
Canada	274 to 280	Ohio	600 to 654
Colorado	281 to 305	Oklahoma	655 to 671
Illinois	306 to 371	Pennsylvania Anthracite	672 to 699
Indiana	372 to 417	Pennsylvania Bituminous	700 to 870
Iowa	418 to 435	Tennessee	871 to 892
Kansas	436 to 447	Texas	893 to 904
Kentucky	448 to 532	Utah	905 to 914
Maryland	533 to 545	Virginia	915 to 940
Michigan	546 to 556	Washington	941 to 955
Missouri	557 to 569	West Virginia	956 to 1154
Montana	560 to 580	Wyoming	1155 to 1169

PART IV.

List of National and Local Organizations	1170 to 1177
List of Sales Offices	1178 to 1197
Display Advertisements	1199 to 1350

Index of Contents

A

Abbott, W. L. quoted.....	52
Abbreviations Used in Directory.....	13
Advertisers, List of.....	14
Alabama Coals, Analysis.....	148
Alabama Coals, Fusion Point of	
Ash.....	82
Alabama, List of Coke Ovens.....	121
Alaska Coals, Fusion Point of Ash	83
Allen, Andrew, quoted.....	49
Althouse, H. W., quoted.....	27
American Coals for Export.....	144
Analyses in Coal Catalog Explained	73
Analyses and Pool Numbers of—	
Alabama Coals.....	148
Maryland Coals.....	146
Pennsylvania Coals.....	145, 146
Northern West Virginia Coals.....	146
Virginia Coals.....	148
Southern West Virginia Coals.....	147
Analyses of Coals in Foreign Coun-	
tries—	
Africa—	
East African Protectorate.....	203
Nigeria.....	203
Nyasaland.....	203
South Africa.....	203
Madagascar.....	204
Alaska.....	194
Antarctic.....	197
Asia—	
China.....	200
India.....	201
Japan.....	201
Korea.....	202
Malay States.....	201
Manchuria.....	202
Siberia.....	202
Turkey.....	202
Australia—	
Australia.....	204
New South Wales.....	204
New Zealand.....	204
Queensland.....	204
South Australia.....	204
Tasmania.....	205
Canada—	
Alberta.....	194
British Columbia.....	195
New Brunswick.....	195
N. W. Territories.....	195
Nova Scotia.....	195
Saskatchewan.....	196
Yukon.....	196
Central America—	
Guatemala.....	196
Panama.....	196
Europe—	
Bosnia.....	197
Bulgaria.....	197
England.....	197
Germany.....	198
Herzegovina.....	197
Italy.....	198
Rumania.....	199
Scotland.....	199
Servia.....	199
Wales.....	199
Mexico.....	196
Newfoundland.....	195
Philippine Islands.....	203
South America—	
Brazil.....	196
Chile.....	197
Trinidad.....	196
Venezuela.....	197
Analyses, Supplementary U.S. Coals—	
Alabama.....	247
Arkansas.....	249
Colorado.....	240
Illinois.....	314
Indiana.....	377
Iowa.....	426
Kansas.....	441
Kentucky.....	458
Maryland.....	539
Michigan.....	554
Missouri.....	563
Montana.....	576

New Mexico.....	587
North Dakota.....	596
Ohio.....	607
Oklahoma.....	661
Pennsylvania Bituminous.....	712
Tennessee.....	886
Texas.....	900
Utah.....	910
Virginia.....	923
Washington.....	949
West Virginia.....	966
Wyoming.....	1162

Analyses and Description of Export Coals—

Connellsville Coking Coal.....	146
Eastern Kentucky Coals.....	148
Elkhorn Coking Coal.....	148
Harlan Gas Coal.....	148
Standard Fairmont Gas Coal.....	140
Standard Kanawha Gas Coal.....	148
Standard Kanawha Splint Coal.....	148
Standard New River Coal.....	147
Pennsylvania Standard Gas and	
Coking Coals.....	146
Standard Pocahontas Coal.....	147
Standard Pocahontas and New	
River Coals.....	147
Southwest Virginia Coals.....	148
Westmoreland Gas Coal.....	146
Youghiogheny Gas Coal.....	146
Analyses, Methods of Reporting....	71

Analysis—

"Air Dried", Defined.....	71
"As Received", Defined.....	71
Calculations in Changing Basis....	71
Importance of on Specification	
Buying.....	78
"Moisture and Ash Free", Defined....	71
"Moisture Free", Defined.....	71
Of Coal.....	69

Anthracite Coal—

Analyses of Sizes Shipped.....	145
Analyses, Various Sizes.....	145
Description of.....	208
For Export.....	145
Impurities Permitted in.....	47
Influence of Size on Prices.....	47
List of Seams.....	208
Pennsylvania and Welsh Com-	
pared.....	145
Percentage of Sizes in Fresh Mined	47
Percentage of Sizes in Fresh Mined	
and Washery.....	47
Preparation of.....	44
Preparation, Dry Method.....	46
Preparation, Wet Method.....	45
Standard Sizes of.....	47
Welsh, Sizes of.....	145
Anticline, Defined.....	38

Areas, Coal, of the United States. 41

Arkansas Coals, Fusion Point of

Ash.....	81
Ash—	
Fusibility of.....	80
General Analyses of.....	80
In Coal.....	70
Ashley, G. H., quoted.....	30
Ashmead, D. C., quoted.....	44

B

Band, Defined.....	40
Bed, Defined.....	40
Bench, Defined.....	40
Bituminous Coal—	
Description of.....	210
List of Seams.....	211
Preparation of.....	47
Blakelev, A. G., quoted.....	185
Blauvelt, W. H., quoted.....	118
Block Coal, Described.....	239
Block Coal, List of Seams.....	239
Bone Coal, Defined.....	40
Brick, Tile and Pottery Burning—	
List of Seams Suitable for.....	226
Qualification of a Coal for.....	225
Brown, O. C., quoted.....	81
Bunker Coal, Foreign Trade in.....	144
Bunkering—	
List of Seams Suitable for.....	219
Qualification of a Coal for.....	218
Buying Coal on Specifications.....	75

Bureau of Mines, Acknowledg-	
ments Due.....	3, 82
By-Product Ovens in the United	
States, List of.....	125
By-Products, List of, Obtained in	
1920.....	120

C

California Coals, Fusion Point of	
Ash.....	84
Campbell, William, quoted.....	28
Cannel Coal—	
Description of.....	210
Formation of.....	35
List of Seams.....	211
Carbon-Divided-by-Oxygen-Plus-	
Ash Ratio.....	72
Cement Burning—	
List of Seams Suitable for.....	221
Qualifications of a Coal for.....	221
Chance, E. M., quoted.....	185
Classification of Coals—	
According to Physical Structure....	238
According to Rank.....	207
According to Use.....	216
Methods of.....	216
Clay Veins, Defined.....	37
Clay Ware Burning—	
(See Brick, Tile and Pottery Burning)	
Cleats, Defined.....	40
Climatic Conditions of Carbonifer-	
ous Period.....	29
Clinkering, Influence of Sulphur..	80
Coal Analysis.....	69
Coal Basin, Defined.....	40
Coal Sampling.....	65
Coke—	
Defined.....	117
Domestic.....	118
Foundry.....	117
Furnace.....	117
Made at Low Temperatures.....	119
Production in Connellsville Region..	120
Sizes of Domestic.....	118
Trade in Connellsville Region.....	120
Coke Ovens, List of—	
Alabama.....	121
Colorado.....	121
Illinois.....	121
Kentucky.....	121
New Mexico.....	121
Ohio.....	121
Oklahoma.....	121
Pennsylvania.....	122, 123
Tennessee.....	123
Utah.....	123
Virginia.....	124
Washington.....	124
West Virginia.....	124
Coking—	
List of Seams Suitable for Beehive..	218
Qualifications of a Coal for Beehive..	217
List of Seams Suitable for By-	
Product.....	220
Qualifications of a Coal for By-	
Product.....	219
Colorado Coals, Fusion Point of	
Ash.....	84
Colorado, List of Coke Ovens.....	121
Columnar Sections of Formations—	
Alabama.....	Opp. 243
Colorado.....	Opp. 282
Illinois.....	Opp. 307
Indiana.....	Opp. 373
Iowa.....	Opp. 420
Kansas.....	Opp. 438
Kentucky.....	Opp. 449
Maryland.....	Opp. 534
Michigan.....	Opp. 548
Missouri.....	Opp. 559
Montana.....	Opp. 572
New Mexico.....	Opp. 583
North Dakota.....	Opp. 593
Ohio.....	Opp. 601
Oklahoma.....	Opp. 657
Pennsylvania Anthracite.....	Opp. 674
Pennsylvania Bituminous.....	Opp. 701
Tennessee.....	Opp. 873
Texas.....	Opp. 895

(Continued on Next Page)

Index of Contents

Utah	907	Lewis County	947	Pennsylvania Anthracite	689
Virginia	917	Pierce County	946	Pennsylvania Bituminous	782
Washington	943	Thurston County	947	Tennessee	886
West Virginia	Opp. 957	Whatcomb County	947	Texas	902
Wyoming	1157			Utah	913
Combination Screen & Picking Table	50	Wyoming		Virginia	934
Comparisons of Coals by Ranks	214	Carbon County	1160	Washington	954
Composition of Coal	69	Converse County	1161	West Virginia	1080
Connellsville Coking Coal, Analysis of	146	Fremont County	1161	Wyoming	1167
Copyright, Notice of	2	Hot Springs County	1160	Division of Coal Areas	41
Correlation of Coal Seams	35	Lincoln County	1159	Divisions of Geological Time	17
Cosgrove, J. F., quoted	235	Sheridan County	1159	Domestic Use—	
Crop Coal, Defined	40	Sweetwater County	1158	List of Seams Suitable for	233
		Uinta County	1161	Qualifications of a Coal for	232
		Weston County	1161	Dulong's Formula	73
Counties, Coal Producing, Description of—		Counties, List of Operators—		Dumping Piers—	
(See also Seams and Fields)		Colorado		Baltimore, Map of	155
Colorado		Boulder County	294	Curtis Bay	156
Adams County	288	Delta County	294	Hampton Roads	157
Arapahoe County	288	El Paso County	294	New York, Map of	154
Archuleta County	286	Fremont County	294	New York, Philadelphia, Baltimore	153
Boulder County	288	Garfield County	294	Philadelphia, Map of	153
Delta County	289	Gunnison County	295		
Denver County	288	Jackson County	295	E	
Douglas County	288	Jefferson County	295	Elkhorn Coking Coal, Analysis of	148
Elbert County	288	La Plata County	295	England, Chief Competitor in Export Trade	143
El Paso County	288	Las Animas County	296	Erosion, Defined	39
Fremont County	286	Mesa County	296	Erosion of Original Coal Deposits	35
Garfield County	289	Moffat County	296	Estuary Theory of Coal Formation	26
Gunnison County	289	Montezuma County	296	Europe, Export Coal Trade with	143
Huerfano County	285	Rio Blanco County	297	Evaporative Power of Coal	235
Jackson County	287	Routt County	297	Exchanges and Pools, Tidewater	150
Jefferson County	288	Weld County	297	Export Coal to South America	142
La Plata County	286			Export Coal Trade, Future of	142
Larimer County	288	Iowa		Export—	
Las Animas County	285	Appanoose County	427	Alabama Coal, Analysis of	149
Mesa County	289	Boone County	427	American Coals for	144
Moffat County	288	Dallas County	428	Northern West Virginia and Maryland High Volatile, Analyses of	146
Montezuma County	286	Jasper County	428	Northern West Virginia and Maryland Low Volatile, Analyses of	146
Montrose County	287	Lucas County	428	Northern West Virginia and Maryland Low Volatile, Pool Numbers	146
Park County	287	Marion County	428	Pennsylvania High Volatile Analyses of	146
Pitkin County	289	Monroe County	428	Pennsylvania High Volatile, Pool Numbers	146
Rio Blanco County	289	Polk County	429	Pennsylvania High Volatile, Analyses of	145
Routt County	288	Wapello County	429	Pennsylvania Low Volatile, Analyses of	145
Weld County	288			Pennsylvania Low Volatile, Pool Numbers	145
Iowa		Montana		Pennsylvania Medium Volatile, Analyses of	145
Appanoose County	422	Carbon County	578	Pennsylvania Medium Volatile, Pool Numbers	146
Boone County	422	Cascade County	578	Seams Suitable for	226
Dallas County	423	Musselshell County	578	Southwest Virginia and Eastern Kentucky, Analyses of	148
Jasper County	423	Miscellaneous Counties	578	Southern West Virginia High Volatile, Analyses of	148
Lucas County	423	New Mexico		Southern West Virginia, High Volatile, Pool Numbers	148
Mahaska County	423	Colfax County	588	Southern West Virginia Medium Volatile, Analyses of	147
Marion County	423	Lincoln County	588	Southern West Virginia Low Volatile, Analyses of	147
Monroe County	421	McKinley County	588	Southern West Virginia Low Volatile, Pool Numbers	147
Polk County	424	Rio Arriba County	588	Southern West Virginia Low Volatile, Principal Beds	147
Van Buren County	424	Santa Fe County	588	Export of Coal	138 to 149
Wapello County	424	Socorro County	588	Export of Coal, Historical	138
Warren County	424			Export and Bunker Coal by Custom Districts, 1920	151
Wayne County	422	Utah		Export Trade, England Our Chief Competitor	143
Webster County	425	Carbon County	912	Export Trade with Europe	143
		Emery County	912	Exporting, Qualifications of a Coal for	225
Montana		Grand County	912	Exports and Imports, Coal, 1913-1920	140
Carbon County	573	Summit County	912	Exports, Bituminous for Thirty Years, Table	139
Cascade County	574	Uinta County	912	Exports, Coal, During 1920	141
Chouteau County	575	Washington		Exports, Prior to the War	140
Custer County	575	King County	953	Exports, Statistics on	139 to 141
Dawson County	575	Kittitas County	953	Exports, 1921, to September	142
Fergus County	575	Lewis County	953		
Musselshell County	575	Pierce County	953		
Park County	575	Skagit County	953		
Trail Creek County	575	Thurston County	953		
		Whatcomb County	953		
New Mexico		Wyoming			
Colfax County	584	Carbon County	1166		
Lincoln County	586	Lincoln County	1166		
McKinley County	585	Sheridan County	1166		
Rio Arriba County	585	Sweetwater County	1166		
Sandoval County	586				
San Juan County	585				
Santa Fe County	585				
Socorro County	585				
Pennsylvania					
Sullivan County	682				
Utah					
Carbon County	908				
Emery County	909				
Grand County	909				
Iron County	909				
San Pete County	909				
Summit County	909				
Uinta County	909				
Washington County	909				
Virginia					
Montgomery-Pulaski Counties	919				
Washington					
King County	945				
Kittitas County	944				

Index of Contents

F

Fairmont Gas Coal, Analysis of...	146
Faults, Defined	38
Faults of Erosion, Defined	38
Field, A. L., quoted	80
Fieldner, A. C., quoted.....	80, 81, 118
Fields, Coal Producing, Description of— (See also Seams and Counties)	

Alabama

Blount Mountain Basin	245
Cahaba Basin	244
Coosa Basin	244
Warrior Basin	245

Pennsylvania Anthracite

Eastern-Middle Field	680
Northern Field	678
Semianthracite Field	682
Southern Field	681
Western-Middle Field	679

Colorado

Canyon City Field	286
Colorado Springs Field	289
Denver Basin	288
Durango Field	286
Grand River Field	289
North Field	287
Park, South Field	287
Platte, South Field	288
Tongue Mesa Field	287
Trinidad Field	285
Yampa Field	288

Michigan

Bay Field	553
Cedar Grand Field	553
Jackson Field	553
Owosso Field	553
Saginaw Field	553
Sebewaing Field	553

North Dakota

Lignite Fields	594
----------------------	-----

Tennessee

Northeastern Field	875
Northwestern Field	873

Texas

Eagle Pass Field	897
Laredo Field	897
Lignite Field	898
North Central Field	896

Virginia

Brushy Mountain Field	919
Clinch Valley Field	919
Flat Top Field	918
Pocahontas Field	918
Richmond Field	919
Southwestern Virginia Field	919

Fields, List of Operators

(See also Seams and Counties)

Alabama

Blount Mountain Basin	250
Cahaba Basin	250
Warrior River Basin	251-254

Pennsylvania Anthracite

Eastern-Middle Field	686
Northern Field	684
Semianthracite Field	688
Southern Field	687
Western Field	686

Virginia

Brushy Mountain Field	932
Fires in Coal Piles, Detection of..	56
Fires, Extinguishing in Coal Piles.	56
Fires, Sources of in Coal Piles....	57
Fixed Carbon Content, Different	

Ranks of Coal	214
Fixed Carbon in Coal	70
Folding, Defined	38
Francis, C. K., quoted	119
Fuel Ratio	72
Fusibilities, Table of	82
Fusibility of Coal Ash	80
Fusion Point of Ash, How Determined	81

Fusion Points of Ash—Coals in—

Alaska	83
Arkansas	81
California	81
Alabama	82

Colorado	84
Idaho	86
Illinois	86
Indiana	87
Kansas	88
Kentucky	88
Maryland	90
Missouri	91
Montana	93
Nevada	94
New Mexico	91
North Dakota	95
Ohio	95
Oklahoma	96
Oregon	97
Pennsylvania Anthracite	100
Pennsylvania Bituminous	97
South Dakota	100
Tennessee	100
Texas	104
Utah	104
Virginia	105
Washington	106
West Virginia	108
Wyoming	111

G

General Descriptions of Coal

Resources—

Alabama	243
Arkansas	267
Colorado	284
Illinois	307
Indiana	373
Iowa	421
Kansas	439
Kentucky	449
Maryland	531
Michigan	549
Missouri	569
Montana	572
New Mexico	584
North Dakota	591
Ohio	601
Oklahoma	658
Pennsylvania Anthracite	675
Pennsylvania Bituminous	702
Tennessee	872
Texas	896
Utah	908
Virginia	918
Washington	944
West Virginia	957
Wyoming	1158

Geological Terms, Defined

Geological Time, Divisions of.....

Geology of Coal

H

Hall, A. E., quoted	80
Hampton Roads, Dumping Piers....	157
Harger, John, quoted	34
Harlan Gas Coal, Analysis of.....	148
Havelik, R. L., quoted	52
Heat Producing Values of Different	
Ranks of Coal	214
Heat Values of Coal	73
Heating of Stored Coal	55
Holmes, Dr. J. A., quoted	65
Hood, O. P., quoted	79
Horse Backs, Defined	37
Howatt, John, quoted	75

I

Idaho Coals, Fusion Point of Ash..	86
Illinois Coals, Fusion Point of Ash	86
Illinois, List of Coke Ovens.....	121
Illuminating Gas, Qualifications of	
a Coal for	226
Illuminating Gas, Seams Suitable	
for	227
Indiana Coals, Fusion Point of Ash	87
Instructions in Use of Coal Catalog	4
Introduction	3
Intrusions, Volcanic, Defined.....	39

K

Kanawha Gas Coal, Analysis of....	148
Kanawha Splint Coal, Analysis of..	118
Kansas Coals, Fusion Point of Ash	88
Kentucky Coals, Fusion Point of	
Ash	88
Kentucky, List of Coke Ovens....	121
Kreisinger, Henry, quoted.....	118

L

Lamberts Point Coal Exchange,	
Descriptions of Pools.....	174 to 181
Lamberts Point Coal Exchange,	
List of Mines	174 to 181
Lamberts Point Coal Exchange,	
List of Officials	173
Lesley, J. P., quoted.....	35
Le Conte, Joseph, quoted.....	
.....18, 20, 26, 29, 33	
Lewis, V. B., quoted.....	25
Lignite Coal, Description of.....	213
Lignite Coal Fields, List of.....	213
List of By-Product Ovens.....	125
List of Mines by Counties—	
Illinois	370, 371
Indiana	417
Kentucky	530 to 532
Ohio	652, 654
Pennsylvania Bituminous.....	863, 870
West Virginia	1149, 1154
Loading Booms	51
Locomotive Fuel, Qualifications of..	228
Locomotive Fuel, Seams Suitable	
for	229
Low Temperature Distillation.....	119
Ludlow, Edwin, quoted.....	77

M

Macfarlane, James, quoted.....	
.....17, 19, 22, 32, 34, 35	
Malcomson, C. T., quoted.....	120
Map of Coal Fields of United	
States	42
Maps of Mining Fields—	
Alabama	Opp. 242
Arkansas	266
Colorado	283
Illinois	Opp. 306
Indiana	Opp. 372
Iowa	419
Kansas	437
Kentucky	Opp. 448
Maryland	534
Michigan	547
Missouri	558
Montana	571
New Mexico	582
North Dakota	592
Ohio	Opp. 600
Oklahoma	656
Pennsylvania Anthracite	673
Pennsylvania Bituminous	Opp. 700
Pennsylvania Bituminous Fuel	
Ratios	701
Tennessee	Opp. 872
Texas	894
Utah	906
Virginia	916
Washington	942
West Virginia	Opp. 956
Wyoming	1156
Marcasite, Defined	40
Maryland Coals, Fusion Point of	
Ash	90
Melting, Coal Seams Suitable for..	229
Melting, Qualifications of a coal	
for	229
Metallurgical Fuel, Coal Seams	
Suitable for	229
Metallurgical Fuel, Qualifications	
of Coal for	229

Index of Contents

Miller, Hugh, quoted	24
Mineral Coal, Defined	40
Mining Terms, Defined	37
Missouri Coals, Fusion Point of Ash	91
Moisture Content, Different Ranks of Coal	214
Moisture in Coal	69
Moisture, Effect of on Stored Coal	55
Montana Coals, Fusion Point of Ash	93
Mother Coal, Defined	40

N

Nevada Coals, Fusion Point of Ash	94
Newberry, J. S., quoted	34
New Mexico Coals, Fusion Point of Ash	94
New Mexico, List of Coke Ovens	121
Newport News Coal Exchange, Inc., Analyses of Pools	165 to 172
Newport News Coal Exchange, Inc., Descriptions of Pools	165 to 172
Newport News Coal Exchange, Inc., List of Mines	165 to 172
Newport News Coal Exchange, Inc., List of Officials	165
New River Coal, Analysis of	147
New River Coal, Standard, Analysis of	147
Norris, R. V., quoted	47
North Dakota Coals, Fusion Point of Ash	95

O

Ohio Coals, Fusion Point of Ash	95
Ohio, List of Coke Ovens	121
Oklahoma Coals, Fusion Point of Ash	96
Oklahoma, List of Coke Ovens	121
Operators, List of—Working in—	
Alabama Seams	251, 255
Arkansas Seams	270
Illinois Seams	346, 350
Indiana Seams	402, 404
Iowa Seams	427, 429
Kansas Seams	442, 443
Kentucky Seams	485, 495
Maryland Seams	540, 541
Michigan Seams	555
Missouri Seams	564, 565
North Dakota Seams	597
Ohio Seams	612, 620
Oklahoma Seams	664, 666
Penna. Bituminous Seams	758, 781
Tennessee Seams	882, 885
Texas Seams	901
Virginia Seams	931, 933
Washington Seams	953
West Virginia Seams	1060, 1078
Oregon Coals, Fusion Point of Ash	97
Origin of Coal	18
Ovitz and Porter, quoted	66

P

Parr, S. W., quoted	66, 70, 119
Parting, Defined	40
Peat Bog Theory of Coal Formation	20
Peat to Anthracite Theory	33
Pennsylvania Anthracite, Fusion Point of Ash	100
Pennsylvania Bituminous, Fusion Point of Ash	97
Pennsylvania, List of Coke Ovens	122, 123
Phosphorus in Coal	70
Picking Tables	50
Pinch, Defined	37
Pittsburgh Thick Vein District	705

Pocahontas Coal, Analysis of	147
Pocahontas Coal, Standard, Analysis of	147
Pools, Tidewater (See Exports)	
Pope, G. S., quoted	66
Porter and Ovitz, quoted	66
Powdered Fuel, Coal Seams Suitable for	232
Powdered Fuel, Qualifications of a Coal for	230
Powell, A. R., quoted	70
Preparation of Anthracite Coal	44
Preparation of Bituminous Coal	47
Preparation of Coal, Factors Leading to	43
Producer Gas, Coal Seams Suitable for	233
Producer Gas, Qualifications of a Coal for	232
Provinces, Coal, of the United States	41
Provinces, Geographical Position of	41
Pulverized Coal—(See Powdered Coal)	
Pyrite, Iron, Defined	40

R

Rash, Defined	40
Ratios as a Means of Determining Fuel Values	72
Ratliff, W. C., quoted	81
Redmayne, R. A. S., quoted	34
Regions, Coal, of the United States	41
Regions Supplying Coal for Export and Bunkering, Map of	151
Ries, Heinrich, quoted	23, 25
Roll, Defined	40
Rooster Coal, Defined	40

S

Sag, Defined	40
Samples, Coal—	
Method of Preparing	67
Taken from Cargoes	68
Taken in Mine	65
Taken from Railroad Cars	66
Taken from Wagon	68
Sampling of Coal	65
Sampling, Importance of on Specification Buying	77
Sargasso Sea Theory of Coal Formation	27
Screening, Principles of Effective	49
Screens—	
Gravity	47
Lip	48
Shaker	49
Standard Sizes	48
Seam, Defined	40
Seams, Description and Analyses of—	
(See also Counties and Fields)	

Alabama

Big Seam	245
Black Creek Seam	245
Blackwood Seam	245
Blue Creek Seam	245
Carter Seam	245
Climax Seam	244
Coal City Seam	244
Corona Seam	245
Eureka Seam	244
Gholson Seam	244
Harkness Seam	244
Helena Seam	244
Henryellen Seam	244
Holt Seam	245
Horse Creek Seam	245
Jagger Seam	245
Jefferson Seam	245
Mary Lee Seam	245
Milldale Seam	245
Montevallo Seam	244
Morgan Seam	245
Mt. Carmel Seam	245
Newcastle Seam	245

Nickel Plate Seam	245
Pratt Seam	245
Thompson Seam	244
Underwood Seam	244
Woodstock Seam	244
Youngblood Seam	244

Arkansas

Denning Seam	268
Hartshorne Seam	268
Huntington Seam	268
Jenny Lind Seam	268
Lignite Seams	268
Mammoth Seam	268
Paris Seam	268
Shinn Basin Seams	268
Spadra Seam	268

Illinois

Belleville Seam	310
Blue Band Seam	310
Carterville Seam	310
Colchester Seam	312
Danville Seam	309
Eldorado Seam	311
Franklin-Williamson Seam	310
Fulton County Seam	312
Grape Creek Seam	310
Harrisburg Seam	311
Herrin Seam	310
La Salle Seam	311
Ledford Seam	310
Montgomery Seam	310
Mt. Olive Seam	310
Murphysboro Seam	312
No. 1 Seam	312
No. 2 Seam	311
No. 5 Seam	310
No. 6 Seam	309
No. 7 Seam	311
Peoria Seam	311
Springfield Seam	311
Standard Seam	310
Staunton Seam	310
Third Vein Seam	312
Wilmington Seam	312

Indiana

Brazil Block, Lower Seam	376
Brazil Block, Upper Seam	376
Cannelton Seam	376
Minshall Seam	376
No. 3 Seam	375
No. 4 Seam	375
No. 5 Seam	375
No. 6 Seam	374
No. 7 Seam	374

Iowa

Mystic Seam	422
-------------------	-----

Kansas

Bevier Seam	440
Cherokee Seam	439
Leavenworth Seam	440
Lignite Seam	440
Linn Seam	439
Mineral Seam	439
Osage Seam	440
Scammon Seam	440
Weir-Pittsburg, Lower Seam	439
Weir-Pittsburg, Upper Seam	440

Kentucky (Eastern)

A Seam	452
Alma Seam	451
Amburgy Seam	451
Birdseye Seam	455
C Seam	453
Cannel Seam	455
Cornett Seam	454
Cranes Creek, Lower Seam	455
Dean Seam	454
Douglas Seam	455
Elkhorn Seam	450
Ferndale Seam	455
Fire Clay Seam	454
Flag Seam	454
Four Mile Seam	455
Freeburn Seam	451
Harlan Seam	452
Hazard Seam	454
High Splint Seam	453
Hyslop Seam	455
Jellico Seam	452
Kellioka Seam	453
Keokee Seam	453
Keyser Seam	451
Leonard Seam	453
Low Splint Seam	451
Mason Seam	455
Millers Creek Seam	451
Mingo Seam	455
Miscellaneous Eastern Seams	455
North Fork Seam	450

(Continued on Next Page)

Index of Contents

North Jellico Seam	455
No. 3 Seam	450
No. 4 Seam	451
No. 6 Seam	451
No. 7 Seam	454
Pognes Branch Seam	455
Pond Creek Seam	451
Rock House Seam	450
Sandy Lick Seam	452
Straight Creek Seam	451
Thacker, Lower Seam	451
Thacker, Upper Seam	451
Van Lear Seam	451
Vulcan Seam	451
Wallins Seam	452
Warfield Seam	451
Wheeler Seam	451

Kentucky (Western)

Empire Seam	457
Herrin Seam	456
Mannington Seam	457
Nebo Seam	457
No. 9 Seam	456
No. 11 Seam	456
No. 12 Seam	455
Pineville Seam	455
Springfield Seam	456

Maryland

Bakerstown Seam	536
Barton Seam	536
Bayard Seam	537
Big Vein Seam	536
Bluebaugh Seam	538
Brookville Seam	538
Clarion Seam	538
Corinth Seam	537
Davis Seam	537
Elk Garden Seam	536
Five-foot Seam	537
Four-foot Seam	536
Fourteen-foot Seam	536
Freeport, Lower Seam	537
Freeport, Upper Seam	537
Gas Seam	536
Honeycomb Seam	536
Kittanning, Lower Seam	537
Kittanning, Upper Seam	537
Parker Seam	538
Pittsburgh Seam	536
Railroad Seam	540
Rock Vein Seam	537
Sandrock Seam	536
Sewickley, Upper Seam	537
Six-foot Seam	536
Three-foot Seam	536
Tyson or Gas Seam	536
White Rock Seam	537

Michigan

Bangor Seam	551
Bangor Rider Seam	551
Lower Seam	551
Miscellaneous Seams	551
Rider, Lower Seam	551
Rider, Middle Seam	551
Rider, Upper Seam	551
Saginaw Seam	551
Salzburg Seam	551
Salzburg Rider Seam	551
Verne, Lower Seam	551
Verne, Middle Seam	551
Verne, Upper Seam	551

Missouri

Bevier Seam	560
Cainsville Seam	561
Cannel Seam	562
Jordan Seam	561
Lexington Seam	561
Mendota Seam	561
Montserrat Seam	562
Mulberry Seam	562
Mulky Seam	562
Rich Hill, Lower Seam	561
Tebo Seam	562
Waverly Seam	562
Weir-Pittsburg, Lower Seam	561

North Dakota

Lignite Seams	594
---------------	-----

Ohio

Alexander Seam	603
Bayley's Run Seam	603
Bedford Cannel Seam	605
Big Vein Seam	603
Black Band Seam	603
Black Seam	603
Blue Limestone Seam	605
Blue Rock Seam	602
Brier Hill Seam	605
Brookville Seam	604
Cambridge Seam	603
Clarion Seam	604

Clay Vein Seam	601
Conway Seam	601
Coshocton Seam	603
Creek Seam	601
Del Ray Seam	603
Dennison Seam	603
Federal Creek Seam	602
Flint Ridge Seam	605
Flint Run Seam	601
Freeport, Lower Seam	603
Freeport, Upper Seam	603
Gray Limestone Seam	604
Great Vein Seam	603
Hamden Furnace Seam	603
Hatcher Seam	603
Hocking Valley Seam	603
Jackson Seam	605
Jackson Hill Seam	605
Kittanning, Lower Seam	601
Kittanning, Middle Seam	603
Leetonia Seam	601
Macksburg Seam	602
Mahoning Block Seam	605
Massillon Seam	605
Meigs Creek Seam	602
Mercer, Lower Seam	605
Mercer, Upper Seam	605
Mineral City Seam	603
Mineral Point Seam	604
Nelsonville Seam	603
New Castle Seam	604
New Lexington Seam	603
Norris Seam	603
No. 1 Seam	605
No. 2 Seam	605
No. 3 Seam	605
No. 3-A Seam	605
No. 4 Seam	604
No. 4-A Seam	604
No. 5 Seam	604
No. 6 Seam	603
No. 6-B Seam	603
No. 7 Seam	603
No. 8 Seam	602
No. 8-A Seam	602
No. 9 Seam	602
Osnaburg Seam	603
Palmyra Seam	605
Pike Run Seam	603
Pittsburgh Seam	602
Pomeroy Seam	602
Potters Vein Seam	604
Quakertown Seam	605
Redstone Seam	602
Rider Seam	603
Roger Seam	605
Sharon Seam	603
Sheridan Seam	603
Sherrodsville Seam	603
Stratitsville Seam	602
Wadsworth Seam	605
Washington Furnace Seam	603
Waterloo Seam	602
Wellston Seam	605
Whan Seam	603
Wilbur Seam	605
Winters Seam	604
Zanesville, Upper Seam	603
Zelaskie, Upper Seam	603

Oklahoma

Atoka Seam	659
Cavanal Seam	660
Dawson Seam	660
Grady Seam	659
Hartshorne Seam	659
Hartshorne, Lower Seam	659
Hartshorne, Upper Seam	659
Henryetta Seam	660
Henryetta-Dewar Seam	660
Jones Creek Seam	659
Lehigh Seam	659
McAlester Seam	659
McCurtain Seam	659
Panama Seam	659
Stigler Seam	659
Wittville Seam	659

Pennsylvania Bituminous

A Seam	710
A Prime Seam	709
Alton, Lower Seam	711
Alton, Upper Seam	711
B Seam	708
Bakerstown Seam	705
Barnett Seam	710
Bear Creek Seam	711
Berlin Seam	705
Big Red Seam	707
Blacklick Seam	708
Bloss Seam	709
Brookville Seam	710
C Seam	708
C Prime Seam	707

Cannel Seam	707
Clarion Seam	709
Chermont Seam	709
Chokyard Seam	706
Coleman Seam	706
Cushman Seam	710
D Seam	707
Dugus Seam	708
Darlington Seam	707
E Seam	706
Freeport, Double Seam	706
Freeport, Lower Seam	707
Freeport, Upper Seam	706
Freeport, Thick Seam	706
Gaines Seam	711
Kelly Seam	710
Kittanning, Lower Seam	708
Kittanning, Middle Seam	708
Kittanning, Upper Seam	707
Lemon Seam	706
Limestone Seam	707
Mapletown Seam	704
Mercer Group Seams	708
Miller Seam	707
Moshannon Seam	707
Mt. Savage Seam	711
N. Washington Cannel Seam	707
No. 4 Seam	709
Pardoe Seam	706
Philson Seam	704
Pittsburgh Seam	705
Pittsburgh Thick Vein	705
Price Seam	704
Redstone Seam	707
Rock Vein Seam	704
Sewickley Seam	710
Seymour Seam	708
Sonman Seam	708
Twin Vein Seam	706
Washington Seam	702
Waynesburg Seam	704
Woodland Cannel Seam	707

Tennessee

Bear Creek Seam	874
Big Mary Seam	876
Black Wax Seam	876
Blue Gem Seam	879
Bon Air Seam	877
Brushy Mountain Seam	877
Clifty Seam	877
Coal Creek Seam	877
Dean, Lower Seam	877
Dixie Seam	876
Isofine Seam	874
Jellico Seam	876
Jordan Seam	875
Kent Seam	875
Klondike Seam	876
Kramor Seam	876
Log Mountain Seam	876
Miscellaneous Seams	875, 878
Newcomb Seam	876
Poplar Creek Seam	877
Red Ash Seam	877
Rex Seam	875
Rich Mountain Seam	876
Rockwood Seam	874
Sewanee Seam	878
State Seam	877
Swamp Angel Seam	879
Wilder Seam	875

Texas

Lignite Seams	898
No. 1 Seam	896
No. 7 Seam	897

Virginia

Banner, Lower Seam	921
Banner, Upper Seam	921
Darby Seam	922
Edwards Seam	921
Imboden Seam	921
Jawbone Seam	922
Kennedy Seam	922
Miscellaneous High Volatile Seams	919, 920
No. 5 Seam	922
Pocahontas No. 3 Seam	920
Raven Seam	920
Red Ash Seam	920
Roda Seam	922
Taggart Seam	922
Triassic Seams	919
Widow Kennedy Seam	922

Washington

Big Dirty Seam	945
Lakedale Seam	945
McKay Seam	945
No. 2 Seam	947

(Continued on Next Page)

Index of Contents

Primrose Seam	947
Roslyn Seam	944
Wright Seam	945

West Virginia

Alma Seam	962
Bakerstown Seam	959
Beckley Seam	963
Belmont Seam	960
Black Band Seam	961
Buffalo Creek Seam	961
Burnwell Seam	962
Campbells Creek Seam	962
Cedar Grove Seam	961
Chilton Seam	961
Coalburg Seam	963
Davy Seam	961
Dorothy Seam	962
Eagle Seam	964
Fire Creek Seam	962
Freeburn Seam	960
Freeport, Lower Seam	959
Freeport, Upper Seam	963
Jaeger Seam	961
Island Creek Seam	960
Kittanning, Lower Seam	960
Kittanning, Upper Seam	958
Mapetown Seam	962
Mohawk Seam	962
No. 1 as Seam	962
No. 2 Gas Seam	960
No. 5 Block Seam	962
Peerless Seam	959
Pittsburgh Seam	964
Pocahontas Thick Vein Seam	965
Pocahontas Thin Vein Seam	964
Pocahontas No. 3 Seam	964
Pocahontas No. 4 Seam	964
Pocahontas No. 6 Seam	962
Powellton Seam	964
Quinnimont Seam	962
Rawl Seam	961
Red Jacket Seam	958
Redstone Seam	963
Sewell Seam	958
Sewickley Seam	960
Stockton-Lewiston Seam	961
Thacker Seam	965
Thin Vein Seam	963
Tug River Seam	963
War Creek Seam	962
War Eagle, Middle Seam	962
War Eagle, Upper Seam	962
Warfield Seam	958
Waynesburg Seam	963
Welch Seam	961
W. nifrede Seam	961

Selvig, W. A., quoted..... 81

Semianthracite Coal—

Description of	209
List of Seams	209

Semibituminous Coal—

Description of	209
List of Seams	209

Sewalls Point Coal Exchange—

Descriptions of Pools.....	182 to 183
List of Mines	184
List of Officials	182

Sizes, Standard Anthracite Coal... 47

Smith, A. W., quoted.....29, 32

Smithing, Coal Seams Suitable for.234

Smithing Qualifications of a Coal

for233

Smokeless Coal, Defined.....238

Smokeless Coal Seams, List of...238

South America, Export Coal to...142

South Dakota Coals, Fusion Point

of Ash
 100 |

Specific Gravity of Coal.....185

Specific Gravity of Coal, How

Found
 185 |

Specific Gravities of Coal—

Alabama	186
Arkansas	186
Asia	193
Colorado	186
Europe	192
Illinois	187
Indiana	187
Iowa	187
Kansas	187
Kentucky	187
Maryland	188
Missouri	188
Montana	188

New Mexico	188
North Dakota	188
Ohio	189
Oklahoma	189
Pennsylvania Anthracite	189
Pennsylvania Bituminous	190
Tennessee	191
Texas	191
Virginia	191
West Virginia	191
Wyoming	191

Specification System—

Advantages of	76
Buying Coal	75
Why Unpopular	76

Specification Method of Buying,
Substitute for 78

Specifications, Nature of—

For Coal Purchase	75
May Run Counter to Conservation	77
Replaced by Reputation	78

Splint Coals, Defined240

Splint Coal Seams, List of.....240

Split Seams, Defined 40

Spontaneous Combustion in Stored

Coal54, 55

Steam Use, List of Seams Suitable

for235

Steam Use, Qualifications of a coal

for234

Sterling, Paul, diagrams..... 46

Stoek, H. H., Storage of Coal.... 52

Storage of Coal—

Appliances for	58
Methods of Piling.....58, 62, 63	
System, Choice of	58

Stored Coal—

Decrease in Heating Value of.....	56
Effect of Sulphur on.....	55
Heating of	55

Method of Piling
 57 |

Spontaneous Combustion in...54, 55

Ventilation of
 56 |

Storing Coal—

Advantages of	52
Appliances for	58
Cableway System	62

Circular System61, 62, 63

Conveyor System
 63 |

Disadvantages of
 52 |

Ideal Plant for
 58 |

Kinds Suitable for
 54 |

Pile Method58, 60, 62

Place for
 53 |

Practicability of
 52 |

Preparation for
 54 |

Silos and Bins
 64 |

Time of Year for
 54 |

Trestle Method
 59 |

Truck Method
 63, 64 |

Under Water
 63, 64 |

Subbituminous Coal, Description

of212

Subbituminous Coal Fields, List of.213

Succession of Strata
 32 |

Sulphur—

Defined	40
Effect of on Stored Coal	55
In Coal	70

Syncline, Defined 38

T

Table of Contents 6

Tables—

Bituminous Exports for Thirty	139
Years	

Exports and Imports, Coal, 1913-

1920.....140

Exports, Coal to Various Countries.

1919-1920.....141

Foreign Bunker Coal Loaded.

1914-1920.....82

Fushilities
 82 |

Tennessee Coals, Fusion Point of

Ash100

Tennessee, List of Coke Ovens..123

Texas Coals, Fusion Point of Ash.104

Thiessen, Reinhardt, quoted...23, 36

Throw, Defined 40

Tidewater Coal Exchange, Inc., De-
scriptions of Pools162

Tile and Pottery Burning—

(See Brick, Tile and Pottery Burning)

Time Required for Coal Formation 30

Trough, Defined 40

True Coal Vein Formation..... 28

U

United States Geological Survey,
Acknowledgments Due...3, 82, 207

Utah Coals, Fusion Point of Ash.104

Utah, List of Coke Ovens.....123

V

Vegetation of Carboniferous Period 29

Vegetation—Oil Theory of Coal

Formation 28

Vein, Defined 40

Ventilation of Coal Piles..... 56

Virginia Coals, Fusion Point of

Ash105

Virginia, List of Coke Ovens.....124

Volatile Matter Content, Different

Ranks of Coal214

Volatile Matter in Coal..... 69

W

Wadleigh, F. R., The Export of
Coal138

Wagner, F. H., quoted..... 71

Walker, M. A., quoted..... 45

Walsh, M. J., quoted.....78, 76

Washington Coals, Fusion Point of

Ash106

Washington, List of Coke Ovens...124

Water, Quenching Fire in a Coal

Pile with 55

Water Gas, List of Seams Suitable

for237

Water Gas, Qualifications of a Coal

for236

Wegemann, Carrol H., quoted..... 19

Weights of Loose and Solid Coal—

Alabama186

Arkansas186

Colorado186

Illinois186

Indiana187

Iowa187

Kansas187

Kentucky187

Maryland188

Missouri188

Montana188

New Mexico188

North Dakota188

Ohio189

Oklahoma189

Pennsylvania Anthracite189

Pennsylvania Bituminous190

Tennessee191

Texas191

Virginia191

West Virginia191

Wyoming191

Weights of Solid Coal—

Asia193

Europe192

Greenland192

Westmoreland Gas Coal, Analyses

of146

West Virginia Coals, Fusion Point

of Ash108

West Virginia, List of Coke Ovens.124

White, David, quoted.....23, 30, 36

White, I. C., quoted..... 21

Wyoming Coals, Fusion Point of

Ash111

Y

Youghiogheny Gas Coal, Analysis

of146

ABBREVIATIONS.

With reference to
Directory of Mines

PO	Post Office Address.
SP	Shipping Point or Freight Station of Mine.
CTY	County.
RR	Railroad.
PR	President.
VP	Vice President.
TR	Treasurer.
GM	General Manager.
PA	Purchasing Agent.
GS	General Superintendent.
EM	Mining Engineer.
SA	Sales Agent.
MS	Mine Superintendent.
MF	Mine Foreman.
IF	Inside Foreman.
OF	Outside Foreman.
CE	Consulting Engineer.
EE	Electrical Engineer.
MM	Master Mechanic.
SM	Manager of Store.
SCO	Supply Co. or Store.
S of H	System of Hauling.
S of M	System of Mining.
PP	Power Plant Equipment.
EMP	Men Employed.

Alphabetical List of Advertisers

A
 Acme Gas Coal Company.....736
 Adams, Rowe & Norman.....1329
 Addy, Matthew Co., The.....1287
 Ajax-Elkhorn Coal Company.....
462, 463, 1332
 Alden Coal Mining Co., Inc.....683, 1204
 Algoma Block Coal Co.....1053
 Allied Mining Companies.....1274
 American Eagle Colliery.....999
 Amherst Fuel Company...1026, 1323
 American Coal & Supply Co.....
317, 1334
 American Export & Inland Coal
 Corp.1317
 Argyle Coal Company (Pa.).....737
 Argyle Coal Company (W. Va.)...1322
 Astel Coal Company, The.....1301
 Astor Collieries Corp.....1206, 1207
 Atwater, William C. & Co., Inc.1205
 Atwill-Makemson Coal & Coke Co.1335
 Ayers & Lang464, 465

B
 Barren Creek Collieries Co.....1006
 Beaver Coal Company, Inc.....925
 Beccaria-Moshannon Coal & Coke
 Co.1235
 Beech Creek Coal Co.....476
 Belgian-American Coke Ovens
 Corp.126 to 135
 Benedict Coal Corporation.....928
 Berry Smithing Coal Co.....1336
 Bertha Coal Company.....717
 Big Bottom Coal Company.....975
 Big Creek Coal Co.....1045
 Big Creek Coals, Inc.....318, 319
 Big Six Coal Co.....610
 Binkley Coal Company.....320, 379
 Bixler Coal & Coke Co.....1257
 Black Hawk Colliery Co.....1045
 Blake, C. G. Company, The.....1288
 Blake, Townsend1208
 Bledsoe, Walter & Company.....
382 to 388; 1341
 Blue Beaver Coal Co.....465
 Blue Beaver Elkhorn Fuel Co.....464
 Blue Diamond Coal Sales Co.....1289
 Bluefield Coal & Coke Company...1309
 Blue Flame Fuel Co.....1047
 Bogle, W. S. & Co., Inc.....380, 381
 Borden & Lovell1209
 Bottom Creek Coal & Coke Co.....976
 Bradford, W. H. & Company.....718
 Brady Coal Corporation.....977, 1280
 Brothers Valley Coal Co.....1210
 Brown, Robt. Y.....980, 1212
 Bruner Coal Mining Co.....1308
 Brush Creek Coal Co.....1001
 Buchanan Coal Co.....998
 Buffalo Coal & Export Co.....978, 979
 Buffalo Eagle Colliery Co.....1004
 Buffalo-Thacker Coal Co.....978, 979
 Burnwell Coal & Coke Co.....1052

C
 Cable Coal Co.....610
 Cambria Coal Co.....980
 Campbell, Peacock & Kinzer, Inc.1245
 Canonsburg Gas Coal Co.....1265
 Carbon Fuel Co., The.....1290
 Caroline Mining Co.....1297
 Carter Coal Company.....981
 Castner, Curran & Bullitt, Inc.158, 159
 Central Fuel Co., The.....982, 983
 Central Pocahontas Coal Co.....
984, 985, 1326
 Central West Coal and Lumber
 Company, The461
 Chesapeake & Ohio Coal & Coke
 Co., The1044, 1211

Chesapeake & Virginian Coal Co.,
 Inc.1248
 Chicago, Wilmington & Franklin
 Coal Company322, 323
 Circle City Coal Co., Inc.....468
 Clark & Krebs, Inc.....1346
 Cleveland-Cliffs Iron Co., The.986, 987
 Clinton Block Coal Co.....728
 Clinton Coal Company.....389
 Coal Credit Agency Co.....1349
 Coaldale Mining Company, The..719
 Coalfield Fuel Co.....989
 Coalgate Coal Co.....610
 Colcord Coal Co.....1008, 1009
 Collieries & Commerce Corp.....1213
 Commercial Testing and Engi-
 neering Co.113
 Commonwealth Fuel Co.....1265
 Conemaugh Coal & Mining Co....720
 Consolidated Mining Co., The..610
 Continental Bituminous Coal Co.1270
 Copen Gas Coal Mines, Inc.....990
 Corrado Coal & Coke Interests...1271
 Cory-Mann-George Corp.....160, 161
 Cosgrove & Company.....321, 721
 Country Club Coal Co.....1265
 Crab Orchard Mining Co., The..1301
 Cratty, D. C. Coal Co.....1344
 Crozer-Pocahontas Co.....1245
 Crystal Block Coal & Coke Co...
984, 985, 1326
 Crystal Block Mining Co.....984
 Cub Fork Coal Co.....992

D
 Dalton Coal & Coke Co., Inc....1214
 Dana Coal Co.....1040
 Davis, R. M. Coal Company.....991
 Deegans Eagle Coal Co.....993
 Deegans Export Coal Agency....
992, 993
 Deegans, W. E. Coal Co.....992, 993
 Deep Vein Coal Company.....390
 Dickerman & Englis, Inc.....1215
 Dickinson Fuel Co.....1313
 Douglas Coal Co.....1022
 Drum, Harry C. Co., The.....1282
 Dykstra, J. W. Co.....465

E
 Eastern Coal & Export Corp...1250
 Eastern Fuel Co.....722, 994
 Eaton-Rhodes & Company.....1291
 Eclipse Coal Company.....1314
 Egolf Coal Mining Co.....980
 Elkhorn Star Coal Company.....466
 Emma Coal Mining Co.....980
 Emmons Coal Mining Co.....1236
 Empire Coal Mining Co.724, 725, 1237
 Empire Fuel Co.....982
 Ephraim Creek Coal & Coke Co.995
 Erie Coal and Coke Corporation
1216 to 1220
 Ernest Coal Co.....721
 Evans Coal Company.....1344
 Evans, Richards & Co.....1339

F
 Fairmont and Cleveland Coal
 Company996, 1281
 Fairview Mining Company.....1269
 Fancy Hill Coal Company.....723
 Faulkner Coal Co.....993
 Federal Coal Company.....467, 1331
 Ferguson Coal Company.....389
 Fiedler Coal & Coke Co.....1275
 Fish, F. A. Coal Co., Ltd.....1254
 Flack, D. L. & Son.....1221
 Fort Clark Coal Company.....997
 Fort Dearborn Coal Co.....998, 999
 Fort Pitt Coal & Coke Co.....728, 1269
 Froehling & Robertson.....114

G
 Gadd-Shaw Fuel Co.....1276
 Gauley Mountain Coal Co., The..
136, 1000
 Gilbert Coal Company.....1220
 Grace Coal & Coke Co.....1272
 Grazier Coal Mining Co.....721
 Great Lakes Coal & Coke Co...
324, 391
 Grider Coal Sales Agency.....1329
 Grosvenor Coal Sales Company...1001
 Gruschow-McCabe Coal Co.....488
 Guyan Valley Coal Co.....993

H
 Hall Bros. & Co., Inc.....1002
 Hammill, B. S.....1258
 Hanna, M. A. & Co.....1302
 Harco Coal Co.....721
 Harlan Co-Operative Coal Co....469
 Harman, William S.....472
 Hart Coal Corporation.....470, 471
 Harve-Mack Coal Co.....980
 Hatton, Brown & Co.....1299
 Hays, Edward F., Jr.....1347
 Hazy Eagle Collieries Company.1003
 Hendley, C. W. & Co.....1234
 Hendrickson, D. de L.....1222
 Heyward, Thomas R. & Co.....1269
 Higgins Coal Co.....1279
 Hillebrand, A. W. Co.....1223
 Hillman Coal & Coke Company..
726, 727, 1259
 Himier Coal Co.....461
 H. M. J. Coal Co.....1040
 Hooper-Mankin Fuel Company...
1003 to 1005
 Hopkins Fork Coal Co.....999
 Hornor, J. Lee, Inc.....1282
 Houston Coal Company.....1292
 Howard, Daniel & Co.....1283
 Hoyt, Clyde H. Company, The...1006
 Hudson Coal Co.....1007
 Humphrey Coal Co., The.....473
 Huntington Coal & Mining Co...1014
 Hutchinson Coal Company..1010, 1011

I
 Ideal Coal Co.....721
 Imperial Coal Corporation..729, 1224
 Imperial Coal Sales Co.1016, 1017, 1249
 Imperial Colliery Company.....1016
 Imperial Smokeless Coal Co.....1017
 Indiana and Illinois Coal Corpor-
 ation325, 392
 Indian Pocahontas Coal Co.....1022
 Indian Run Coal Company.....1019
 Indian Run Collieries Company..1018
 Industrial Coal & Coke Corp...1234
 Inland Coal Company.....735
 International Fuel & Iron Corp..1260
 Iron Trade Products Co.....1269
 Ivy White Ash Coal Company....1017

J
 Jackson Coal Mining Co.....980
 Jamison Coal & Coke Company..1015
 Jewett, Bigelow & Brooks, Inc..1343
 Jones Coal & Land Co.....1001
 Jones-Koblegard Coal Co.....1284
 Jones-Winifrede Coal Co.....1001

K
 Kanawha Valley Coal Co.....1316
 Keister-MacQuown Fuel Co., Inc.1261
 Kelly Brothers Coal Company...738
 Kemmer, M. S. & Co.....683
 Kentucky Fuel Company, The...
474, 475, 1293
 Keystone Coal and Coke Company
730 to 737
 Kirk Coal Co., The.....476
 Kirkpatrick, W. H. Fuel Co.....476

L

Lackey Mining Co.....	462
Lake & Export Coal Corp..	1020, 1021
Lake City Coal Co., The.....	1303
Lamkey, Arthur E.....	1337
Lathrop Coal Co.....	1022
Latrobe-Connellsville Coal & Coke Co.	736
Lauretta Coal Mining Co.....	1002
Lawler, John L. & Son.....	1045
Leckie Coal Company, Inc.	1022, 1023
Leckie Collieries Co.....	1023
Leckie Fire Creek Coal Co.....	1022
Leevale Coal Co.....	999
Lehigh & Wilkes-Barre Coal Co.....	683
Lenox Coal Co.....	721
Lincoln Gas Coal Company.....	739
Logan-Chilton Coal Co.....	1023
Logan & Kanawha Coal Co., The.....	1298
Logan Coal Co.....	1246
Logan-Elkhorn Coal Co.....	1318
Logan Mining Co.....	1010, 1012, 1013
Logan-Pocahontas Fuel Co.....	477
Long Flame Coal Co.....	1052
Lorain Coal & Dock Co., The.....	611, 1024, 1300
Lost Creek Coal Company, Inc.....	1025
Lumaghi Coal Company.....	326, 327
Lundale Coal Company.....	1026

Mc

McClane Mining Co.....	728
McConnell Coal Co.....	1003
McMillan, D. E. & Bro.....	328

M

Maccarr Truck Company.....	1350
Madeira, Hill & Co.....	1238
Madison Coal Co.....	1028
Madne Coal Co.....	1028
Maher-Pursglove Coal Co.....	1028
Main Island Creek Coal Co.....	1028 to 1035
Majestic Coal Co., Inc.....	1225
Manbar Coal Co.....	1003
Manhasset Coal Co.....	1316
Man Mining Co.....	983
Maple Ridge Coal Co.....	747
March Coal Co.....	1040
Margarette Coal Co.....	993
Marietta Coal Co.....	993
Marion & Pittsburgh Coal Co.....	721
Marshall, W. A. & Co.....	747, 1226, 1227
Maryland Coal & Coke Co.....	1036, 1037
Maryland New River Coal Co.....	1036, 1037
Marvel & Company.....	1266
Mason, W. C. & Co., Inc.....	1202
Maurer Coal Mining Co., Inc.....	1274
Mead, C. H. Coal Company.....	1027
Miller Pocahontas Coal Co.....	993
Minter, E. C. Coal Company.....	1038
Mohawk Coal & Coke Company.....	1039
Monro-Warrior Coal & Coke Co.....	1328
Moore & Hetzel.....	1040
Morgantown Coal Co.....	1277
Morris, H. H.....	1320
Morris Run Coal Co., Inc.....	740
Morris Run Coal Mining Co.....	740
Mt. Clare Colliery Company.....	1041
Mountain Coal Company.....	737
Mt. Jessup Coal Co., Ltd.....	683
Moxham Coal Co.....	721
Murdock, S. H.....	1232
Myers Coal & Coke Company, The.....	988

N

Nason Coal Co.....	1338
New England Coal & Coke Co.....	1043, 1199
New England Fuel & Transportation Co.	1043
New Export Coal Co., The.....	1042
New Kentucky Coal Company.....	329
New Pocahontas Coal Co.....	993
New River Collieries Co., The.....	1044
New River Export Smokeless Coal Company.....	1005

Nicholson Coal Company.....	751
Nicoll, B. & Co., Inc.....	749, 1228
Northern Coal Co.....	1200
Norton, Chas. D. Coal Co.....	1239
No. 5 Block Coal Co.....	1028

O

Oak Hill Coal Co.....	683
Oakland Coal Company, The.....	393
O'Gara Coal Company.....	330, 331
Ogle Coal Co.....	1340
Ohio & Michigan Coal Company.....	1045
Old Ben Coal Corporation.....	332
Old Dominion Coal Corp.....	1316
Omar Coal Co.....	1028
Operators Coal Sales Co.....	740
Operators Fuel Agency.....	1273
Orville Coal Co.....	992
Oxtoby, A. P. Co.....	1285

P

Panther Coal Co.....	1022
Paragon Collieries Co.....	992
Paskell Coal Co.....	610
Paynter, H. A. Coal Co.....	1330
Peabody Coal Co.....	249, 333 to 339;
394, 478, 662, 663, 741, 911, 1164, 1165	
Peabody Fuel Co.....	1262
Peck's Run Coal Co.....	980
Peerless Coal Company.....	742
Penn-Empire Coal, Inc.....	1266
Penn Lee Coal Company.....	929
Penn Mar Coal Co.....	1040
Pennsylvania Coal & Coke Corporation.....	743, 744, 745
Pennsylvania Collieries, Inc.....	746, 1229
Philadelphia & Reading Coal & Iron Co.	683
Pilling & Company.....	1230
Pioneer Coal & Coke Company.....	748
Pitt Fuel & Iron Co.....	1263
Pittsburgh Terminal Railroad & Coal Co.....	749
Pittsburgh White Oak Coal Co.....	610
Pittston Coal Mining Co.....	1247
Pletcher, J. W.....	750
Poland Coal Co.....	1264
Preston County Coke Company.....	1046
Primrose Coal Co.....	610
Proctor Coal Co.....	1028
Proctor Eagle Coal Co.....	1028
Producers Fuel Co.....	1267
Prudential Coal Sales Co., Inc.....	1253
Purity Coal Co.....	721

Q

Quaker City Coal & Coke Co.....	1240
Queen City Coal & Coke Co., Inc.....	1253

R

Raleigh Coal & Coke Co.....	1298
Raleigh Smokeless Fuel Co.....	1310, 1311
Raleigh-Wyoming Coal Co.....	1048, 1049
Reilly-Callaghan Coal & Coke Co.....	751
Reilly, W. J. Coal & Coke Co.....	751
Reilly, W. J. Sales Company.....	751
Reserve Fuel Co., The.....	1304
Rex Colliery Co.....	1006
Richards, Evans & Co.....	1339
Rich Creek Coal Co.....	1010, 1012, 1013
Robinson, Louis G. Laboratories.....	115
Rogers, Brown & Company.....	137
Rosedale Coal Company.....	1047
Rowland-Power Consolidated Collieries Co.....	395 to 399; 1342
Royal Block Coal Co.....	993
Royal Flush Mining Co.....	610

S

Salkeld Coal Co.....	754
Sanborn, J. B. Co.....	1348
Sandford Coal Co.....	721
Sauter Coal Co.....	1307
Sayers Pocahontas Coal Co.....	998
Schroeder-Kelly Coal Co.....	1307
Seneca Coal Mining Co.....	752, 1252
Shawnee & McCuneville Coal Co.....	610
Sincerity Coal Co.....	328
Sitnek Fuel Co.....	1241

Smith, Jean F.....	1347
Smith, Rudy & Co.....	116
Smokeless Fuel Company.....	1050, 1315
Snowdon, G. H. Co., The.....	1268
Southeastern Coal Co., The.....	1291
Southern Coal Corp.....	1282
Southern Fuel Co.....	1278
Southern Jellico Coal Co.....	1330
Southern Perry Coal Co.....	610
Southern States Coal Company.....	1003
South Pittsburgh Coal Co.....	991
Sprague, C. H. & Son Co.....	1291
Stearns Coal & Lumber Co.....	479
Sterling Block Coal Co.....	1003
Sterling-Midland Coal Co.....	100, 401
Stone, W. A. & Co.....	1268
Stonega Coke and Coal Co., Inc.....	926, 927
Straub-Atkinson Coal & Coke Co.....	1267
Sunrise Coal Co.....	317
Superior Coal Company.....	753
Superior Eagle Coal Co.....	1028
Superior Elkhorn Coal Co.....	462
Superior Harlan Coal Co.....	1053
Swisher, Howard L. & Co.....	1349
Sycamore Coal Company.....	1325

T

Taylor Coal Company.....	340, 341
Tierney, Laurence E. Fuel Company.....	480, 481, 1039
Tierney Mining Company.....	480, 481
Tildesley Coal Co., The.....	1297
Thermal Smokeless Coal Co.....	721
Thomas Smokeless Coal Co.....	989
Three Forks Coal Company.....	1026
Thurmond Coal Co.....	1322
Tribbey Coal Co., The.....	1298
Tuttle Corporation.....	1231, 1295
Twin States Fuel Co.....	1319

U

Union Colliery Company.....	342
Union Fuel Company.....	343
United Coal Sales Co.....	1301
United Collieries, Incorporated.....	930
Universal Coal Co., Ltd.....	1255

V

Valley Camp Coal Co.....	1305
Van Epps Coal Co.....	1307
Verner Coal & Coke Company.....	754
Victor Coal Mining Co.....	718
Virginia & Pittsburgh Coal & Coke Co., The.....	1051
Virginia Fuel Company.....	1052, 1053
Virginia Smokeless Coal Co.....	1312

W

Wallins Creek Collieries Co.....	477
War Creek Coal Co.....	998
Ward, C. S. B. & Co., Inc.....	1279
Warner, W. H. & Co.....	1306
Washington Gas Coal Co.....	1265
Watson Coal Company.....	344, 345
Watkins Coal Company.....	756, 757
Watson, C. E. Coal Co.....	1279
Weaver, J. H. & Co.....	1242
Western Coal Co.....	1296
West Kentucky Coal Co.....	482, 483
Westmoreland Coal Company.....	755
West Virginia Eagle Coal Co.....	989
West Virginia Standard Coal Co.....	1321
Wentz Company.....	926, 927, 1007, 1243
Winchester Coal Company.....	1056
Winifrede Coal Company.....	1051, 1055
Widnoon Coal Mining Co.....	1253
Wheeler Coal Company.....	434
White Oak Coal Company.....	1057 to 1059; 1324
Whitney & Kemmerer.....	683, 1244
Wood Coal Co.....	999

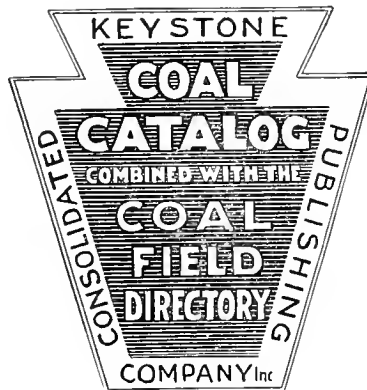
Y

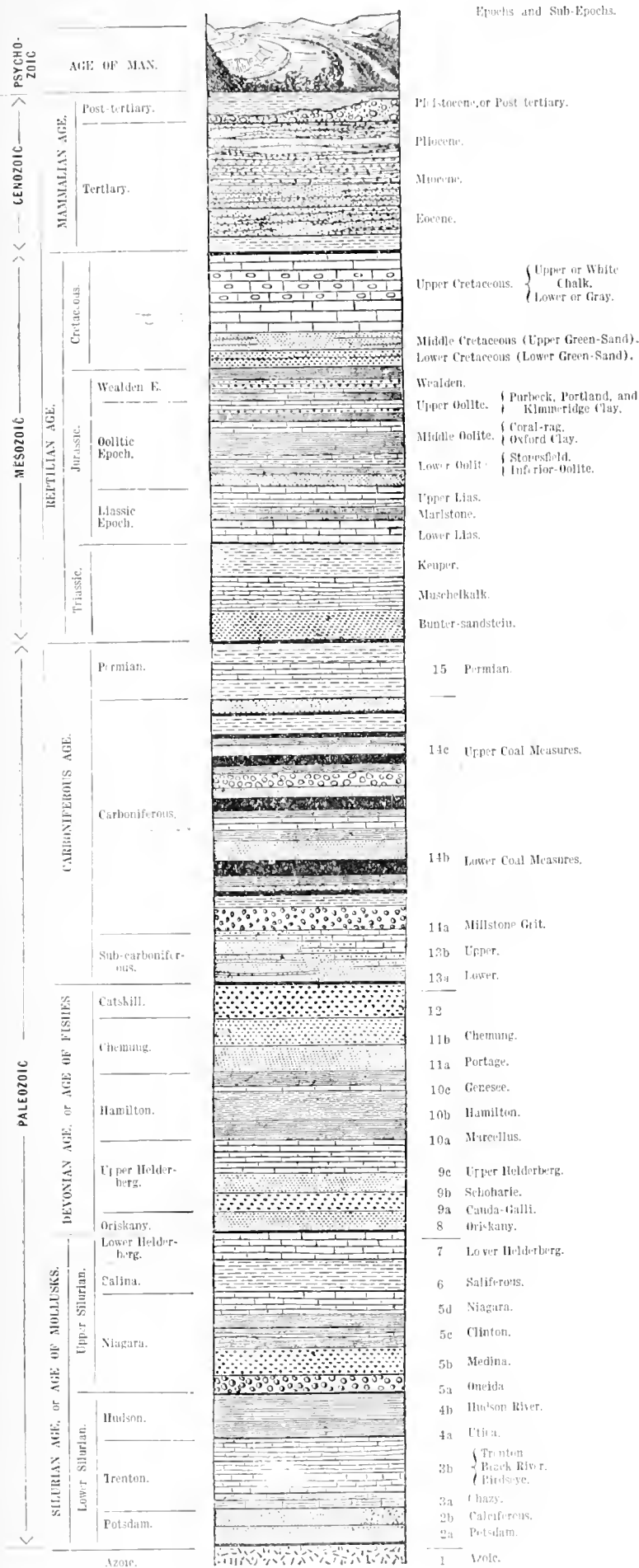
Yolande Coal & Coke Co.....	1330
Yorkshire Coal Co., Inc.....	1233
Yukon Pocahontas Coal Co.....	998

Z

Zella Mining Co.....	462
----------------------	-----

PART ONE





Divisions of Geological Time *

Geology is the history of the evolution of the earth and its inhabitants as written in hieroglyphics upon the rocks.

Like the history of the human race, this earth history is divided into certain periods, each marked by a change in the animal and plant life, as is evidenced by the fossil remains found in the rocks. The study of these fossils, which is embraced in the science of paleontology, shows that through the countless ages required for the deposition of successive formations, there have been numerous and widespread changes.

In the diagram, different rock systems are placed one on top of the other. The primary divisions, or eras, are five in number, beginning with the Eozoic, in the Archean or Primary or Laurentian system of rocks (not shown on the diagram); (2) Paleozoic, in the Paleozoic, or sometimes called transition system of rocks; (3) Mesozoic, in the Secondary system; (4) Cenozoic, in the Tertiary and Quaternary systems; (5) Psychozoic, in the present system of sediments.

A further division of the history of the earth is by ages, some of which are subdivisions of the eras, while others correspond thereto. When as subdivisions, the ages are separated usually by unconformity and by changes of organisms: They are: 1. Archean or Eozoic age, corresponding to the Eozoic era. 2. Age of Mollusks, or age of Invertebrates, corresponding to the Silurian system of rocks. 3. The age of Fishes, corresponding to the Devonian. 4. The age of Acrogens, or age of Amphibians, corresponding to the carboniferous strata. 5. The age of Reptiles, corresponding to the Mesozoic era and Secondary rocks. 6. The age of Mammals, corresponding to the Cenozoic era and the Tertiary and Quaternary rocks. 7. The age of Man, corresponding to the Psychozoic era and the present sediments.

The further subdivisions of time, known as period and epochs, are founded on more local unconformities and especially of less important changes in the species.

It must not be assumed from the generalized section that all formations are horizontal nor that the order as shown is universal nor even having a wide application. It is rather an ideal section in which the various formations are represented in chronological order. In some localities many of the formations may be entirely absent; in others they may be represented either much or below their normal thickness.

*Diagram from "Coal Fields of America," Macfarlane.

GEOLOGY OF COAL

Treats of the Vegetable Origin of Coal and the Various Theories Put Forth to Explain the Manner In Which Plants Were Accumulated; Combined Oil and Vegetation Theory; Climate of the Carboniferous Age; Formation of Anthracite Coals; Cannel Coal; Erosion of the Coal Measures; Correlation of Coal Seams.

The science of geology offers few problems more attractive than a study of the formation of our vast coal deposits. The methods which Nature used in storing away in the innermost folds of the earth such inconceivable amounts of energy as represented by our fuel beds are not entirely clear, although patient research on the part of geologists, botanists, chemists and palaeontologists has revealed some of the processes by which these wonderful accumulations of mineral wealth have been brought about.

That there is a lack of unanimity of opinion on some phases is not surprising. Investigators are generally agreed on the fundamental conceptions, such as, for instance, coal being the remains of vegetation, that the deposition of this vegetation took place in remote ages and that the original deposits have since been subjected to the modifying influences of time, heat and pressure. On other phases there are decided variances of opinion, thus, the manner in which the masses of vegetation accumulated; whether it be vegetation which grew in situ or whether it consisted of drifted material; whether the vegetation of the Carboniferous period was massive or whether small; whether all coal beds, be they lignite or anthracite, began as peat deposits; how devolatilization of anthracite seams was brought about; the length of time required for the formation of coal beds, etc., etc. These details have all produced opinions more or less in conflict. The entire range of the subject has been well covered by the many able investigators who have given much time and thought to the problem, and it is believed that a presentation of their views on this interesting topic will serve the purpose of this book and help the seeker of knowledge to a better understanding of the processes by which Nature established our bountiful coal resources.

We quote first from the series of Lectures on Coal by Professor Joseph Le Conte:*

THE ORIGIN OF COAL

"It is now universally admitted among geologists that coal is entirely of vegetable origin. There was a time, however, and that not many years ago, when the vegetable or mineral origin of coal was a question warmly contested by the best geologists; but its vegetable character is now so firmly established and so universally admitted that the history of the controversy has lost its interest. I will not, therefore, tire you with its details, but proceed to state the evidence upon which the universal belief is founded.

"First, then the enormous profusion of fossil plants, in the form of impressions of leaves, trunks and branches of trees, fruits, etc., found in immediate connection with a coal seam, affords strong

presumption in its favor. In the second place, this presumption is strengthened, and becomes, in fact, almost certainty in the case of trunks of trees retaining their external conformation, and under the microscope their internal structure even to the minutest sculpturing upon their cell walls, and yet turned to perfect coal. It might possibly be objected that it may be a substitution of one substance for another, similar to what takes place in

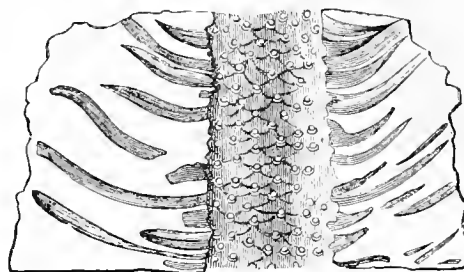


Fig. 2. *Stigmaria ficoides* (one-fourth natural size). (Nicholson's Manual of Palaeontology.)

petrification, where we find, also, the external conformation and internal structure perfectly preserved, but the organic matter all gone, that the ancient trunk having been buried in bituminous matter and thoroughly impregnated therewith, as particle by particle the woody matter was removed by decomposition the bituminous matter took its place, and thus perfectly imitated its structure. But this objection is forever set aside, when, in the third place, we subject even the most structureless coal to microscopic scrutiny. The distinguished American microscopist, Professor Bailey, of West Point, has been able to detect the unmistakable evidences of vegetable structure even in the hardest anthracite. In fact, it may be affirmed that there is no coal which, under careful examination, will not reveal a vegetable structure.

"Coal is supposed to be composed principally of the remains of four families,

viz: Ferns, *Sigillariae*, *Lepidodendrons*, and *Calamites*. The abundance of individuals belonging to these families is so great, and their size so enormous, that they must have given character to the vegetation of this period, and may therefore be taken as representatives of its flora."

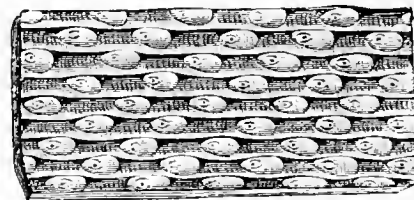


Fig. 3. Fragments of *Sigillaria Graeseri*. (Nicholson's Manual of Palaeontology.)

*This and all subsequent quotations from Le Conte are from his Lectures on Coal as contained in the Smithsonian Institute Report, 1857.

The vegetable origin of coal, as Professor Le Conte states, is now seldom disputed, though to the practical miner it has ever been a mystery that, in view of the abundance of plant remains so manifestly required, there has been so little visible evidence of organic material in the coal, for in the coal itself we see, with unaided eye, no evidence of vegetation—no trace of leaf or stem.

Dr. James Macfarlane* recognizes this fact:

"Therefore, as to the composition of the coal-slates, you must disbelieve the evidence of your own eyes to deny the presence of vegetable matter, where they had their origin, for you see in them the daguerrotyped likeness of plants, leaves, roots, trunks and branches. But, as to the coal itself, the evidence to the naked eye, of its vegetable nature, is not apparent, as it does not show impressions of plants like the slate-rocks."

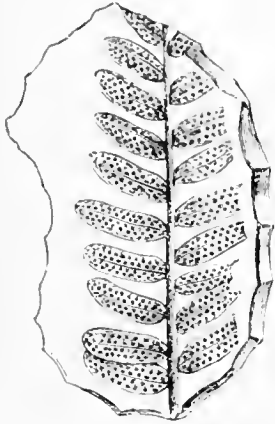


Fig. 4. *Pecopteris elliptica* (natural size). Frostberg. (Sir C. Lyell's Elements of Geology. J. Murray.)

Le Conte seizes upon this very point to sustain his theory of the manner in which vegetation has been deposited, as we shall learn later:

"I have already said that a coal seam is made up of the remains of plants, yet it is not in the coal seams themselves that we find the best preserved specimens of coal plants. On the contrary, the vegetable matter is here so thoroughly disorganized that it is only by means of the microscope that we are able to detect its original structure. It is rather in the associated shale strata that the beautiful impressions occur, particularly in the overlying black slate. Between the thin sheets of this slate the stems and leaves are as perfectly preserved, every vein and nerve, as between the leaves of the botanist's herbarium. This fact, viz., that the well-preserved plants are always found in abundance in this position, and never in the coal seam proper has, as it seems to me, an important bearing upon the theory of coal deposit."

But an additional cause of distrust arises to confound such as waver in their allegiance to the vegetation theory, this being the silicified condition of such logs or stumps as happen to be found entirely within the coal. If coal be derived from woody material, they question, how does it happen that all stumps or trees found are either entirely petrified, or else with the bark carbonized and the trunk silicified? Why this discrimination against the one fossil remain possible to recover in easily visible form?

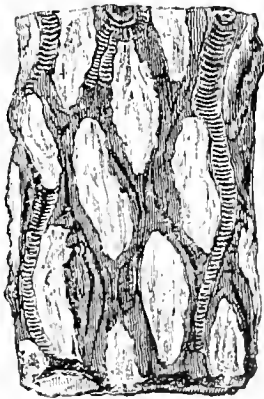


Fig. 5. *Caulopteris primaera*. (Sir C. Lyell's Elements of Geology. J. Murray.)

uncommon occurrence: "A rare specimen of petrification, a stump, found in one of the Pike county coal mines near Whitesburg, Ky., has been shipped to Washington, where it will be placed in the

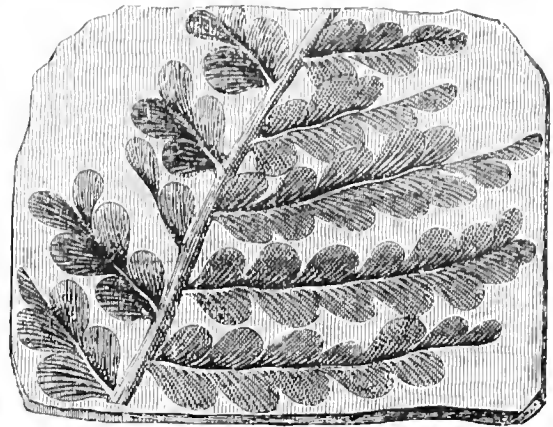


Fig. 6. *Odontopteris Schlotheimii*. (Nicholson's Manual of Palaeontology.)

Museum of Natural Science. The stump, weighing about a ton, appears to have been of oak. It is in perfect condition and can be easily distinguished, there having been little decay since the hardening process began thousands of years ago. One of the miners found the curio, and after much effort the stump was worked out of the solid body of coal."

Such findings are often reported from the lignite fields of the western states; thus, in a report on the Coals of Custer National Forest, Montana,† we observe that:

"Silicified logs were noted in many of the coal beds. Some of these logs appear as slabs representing but about one-third of the original trunk, the upper side being flat and the lower conforming to the shape of the original log. In some places the logs when partly decayed were undoubtedly crushed and flattened by the load above them, but it is possible that in others as the log lay in the bog the upper portion turned to coal while the lower under different conditions was silicified."

Leaving this phase of the question as one on which more light is needed, we may well inquire into the methods which Nature used in collecting these enormous masses of vegetation which later were to be metamorphosed into our

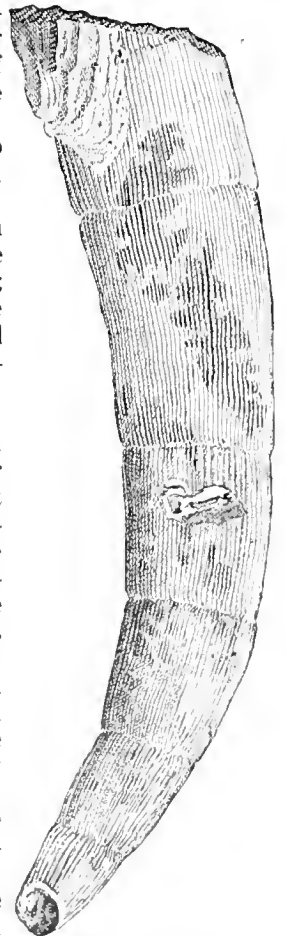


Fig. 7. *Calamites Canadensis*. (Nicholson's Manual of Palaeontology.)

*This and all subsequent quotations from Dr. Macfarlane are from his Coal Fields of America.

†Carroll H. Wegemann in Contributions to Economic Geology 1908, U. S. G. S.

The following news clipping refers to this not

productive coal beds of today. There is no point connected with coal which has been more discussed, some geologists holding that coal has resulted from vegetation which grew in situ, others that plants were drifted in the forms of rafts to great distances and deposited at the mouths of rivers. The former belief is called the "peat bog theory," the latter the "estuary theory."

PEAT BOG THEORY

Quoting again from Le Conte's lectures:

"It is well known that in many countries, particularly in moist, cool climates, and damp, low grounds, certain plants, such as ferns, mosses, etc., as well as trees which delight in moist places, if allowed to grow undisturbed from generation to generation will, by their decay, accumulate enormous masses of carbonaceous matter. Such a spot is called a peat bog. The theory of this accumulation is as follows: Plants derive all their carbon from the atmosphere. In the annual fall of leaf, and finally their own death, they return to the earth the whole of the matter thus silently extracted from the air. Undisturbed vegetation, therefore, constantly enriches the soil by adding to it what has been taken from the air. Thus worn-out lands improve by lying fallow. Thus the rich black vegetable mould found covering the ground in forests continues to increase from year to year. In all ordinary cases, however, there is a limit beyond which this accumulation will not go. By decomposition the organic matter is again returned to the atmosphere as fast as it accumulates. But if by any means this decomposition is prevented, the organic matter accumulates indefinitely. This is precisely what takes place in peat bogs. The presence of water in a great measure prevents the oxidation of the carbon. The growth of plants now continually takes carbon from the atmosphere, their death as continually deposits it upon the earth. Each generation rises, phoenix-like, from the ashes of the last, to become in its turn soil for the next. Thus the ancestral accumulation continues to increase, the funeral pile continues to rise, until pure carbonaceous matter may in time accumulate to the depth of thirty or forty feet. Such a mass of carbonaceous matter deprived of its water and compressed to the density of coal, would make a seam of perhaps three or four feet in thickness. Now, according to the peat bog theory, it is under such circumstances that the carbon of a coal seam has been accumulated.

"The arguments in favor of this theory are:

"1st. The purity of the coal. It is true that coal is often found largely mixed with earthy matter or mud. As we well know, every stage of gradation may be traced between pure coal and pure shale. But by far the larger portion of coal seems to be entirely free from foreign matter. The amount of ash is not greater than five to ten per cent; that is, not greater than might arise from the earthy matter of the plants from which the coal was derived. This purity of the coal indicates complete absence of sediment in the water in which the coal was originally laid down. Now the water of peat swamps, though discolored by organic matter in solution, is always entirely free from sediment. In fact, this seems a necessary condition of the growth of peat plants—an incursion of water containing

mud is fatal to such plants. If then, a coal seam is the result of carbonaceous matter slowly accumulated at the bottom of ancient peat swamps, the purity of the coal is completely accounted for. But if, on the contrary, it is formed by the accumulation of timber carried down to the mouths of great rivers during freshets, it should always be largely mixed with mud.

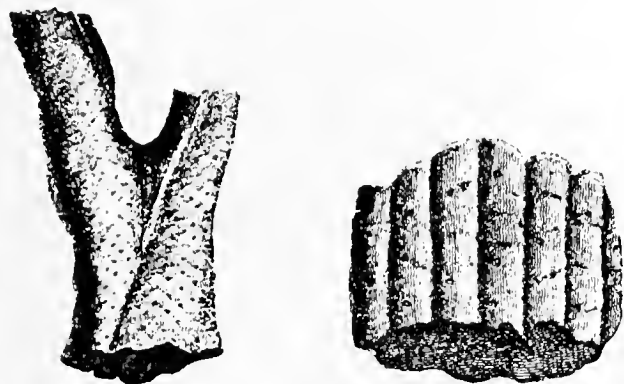
"2d. The fine preservation of the tenderest and most delicate parts of plants. We have already spoken of the profusion of finely-preserved leaves and entire fronds of ferns in the black slate overlying a coal seam. So perfect is this preservation that large and complex fronds are often entirely unbroken, and even the minutest variation of the leaves as distinct as in the living fern. This fine preservation of tender parts seems strongly to indicate that these leaves had fallen gently from the parent stem, and been preserved on the spot where they fell. It seems utterly inconsistent with the violent action of currents bearing rafts to great distances.

"3d. The position of the finely-preserved leaves, etc., always on the upper surface of the coal seam (roof of the coal mine). Precisely the same is observed in every peat swamp. The perfect leaves are to be found only on top, for the plain reason that these are the last fallen, and therefore not yet disorganized. But in the case of accumulations of vegetable matter at the mouths of rivers, there seems to be no reason why leaves should not be entangled in all parts alike.

"4th. Coal, like peat, is composed of completely disorganized carbonaceous matter, containing fragments in which vegetable structure is more distinct. This is not inconsistent with what I have already contended to be the vegetable origin of even the most structureless coal being detectable by the microscope. Plants are composed entirely of cells. Both in peat and in coal these cells are generally separated from one another. The vegetable structure is completely disorganized, but the separate cells still bear unmistakable marks of their origin; the organic structure is gone, but the organic origin is still visible. But if a coal seam was an imbedded raft, it should be composed almost entirely of fragments of trunks, branches, etc., instead of a structureless mass containing only a few such fragments.

"5th. It will be recollected that a seam of coal is overlaid by black slate and underlaid by fire-clay. In the black slate, as already said, are found the finest impressions of leaves and other tender parts; in the fire-clay, which underlies the coal seam, are found imbedded in the greatest abundance the roots of plants, and not infrequently the stumps of trees with the roots attached, precisely as they grow. And, what is still more remarkable and significant, trunks of trees are not infrequently found almost entire, standing erect, with their roots still bedded in the fire-clay, their trunks passing through the seam, and far into the overlying strata of shale and limestone. By means of evidence of this kind Lyell and Dawson have been able to make out distinctly nearly 60 planes of successive vegetation in the coal field of Nova Scotia. In many of these, viz., about 20, the trees are still in the position in which they grew; of the rest the evidence consisted in the imbedded stigmata or roots of sigillaria.

"In cases in which these trunks and roots, in situ, are found (and they are by no means common), the evidence is conclusive that the coal was formed on the spot where the trees grew; in other words, that the growth of the trees and the deposit of the coal took place simultaneously on the same spot.



Face of flattened part at top
(aa to bb). See Fig. 8.

Root or stigmara of fossil
tree. See Fig. 8.

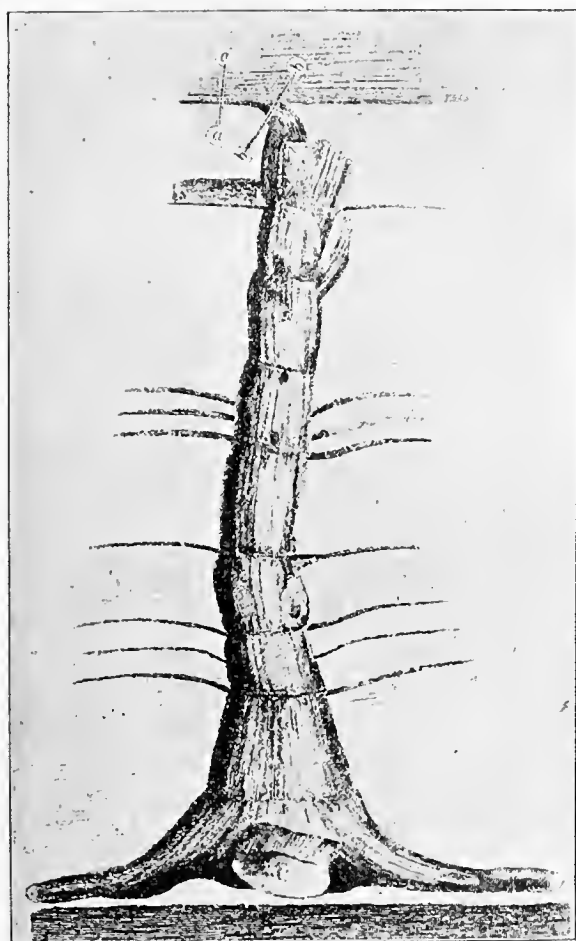


Fig. 8. Fossil tree found at a depth of 288 feet from the surface.
(Redmayne, *Modern Practice in Mining*.)

This is clearly impossible in an estuary, but is known to take place in every peat swamp.

"To recapitulate the whole argument: If we examine a peat bog which has been for many years thickly overgrown with ferns, mosses and water plants of various kinds, and shaded by many large

trees, we find the soil composed entirely of black carbonaceous matter, wholly destitute of structure but revealing its vegetable origin to the microscope, containing fragments of trunks and branches of trees lying in all possible positions, some prostrate, some inclined at all angles, many, both living and dead, still erect, their roots firmly fixed in the clay at the bottom of the bog, below the peaty matter which has slowly gathered about their lower parts, and over the whole lie thickly strewn the freshly fallen leaves. Now suppose such a peat bog to be deeply buried beneath the surface of water and overwhelmed with sediment of clay and sand, and again, after ages, elevated and exposed by section to the scrutiny of the geologist, and we shall have a complete reproduction of the phenomena of a coal seam.

"The great, and almost the only, objection which has been urged against this theory is to be found, not in the phenomena of an individual coal seam, but rather in the general phenomena of coal basins, in the repeated alternation in the same locality of coal seams with marine and fresh water strata. We have already seen that there are in the same coal basin sometimes as many as a hundred coal seams, one above the other; now, according to this theory, when the coal seam was forming the spot must have been above the surface of the sea, but when the interstratified limestones and shales were being deposited the same spot must have been beneath the sea-level. Thus, argues the objector, we are driven to the enormous assumption that the same spot has been successively upheaved above and depressed beneath the sea-level one hundred times during the carboniferous period, and, what is still more remarkable, that every time it rose above the sea it became a peat swamp; or if the intervening strata are fresh water instead of marine, the difficulty seems only to be increased."

Dr. I. C. White, State Geologist of West Virginia, is clearly an advocate of the peat bog theory, though differing from Le Conte in his conception of the manner in which the peaty deposits have been kept clean from earthy matter.*

"Of course what is now coal was once peat. These peat bogs were drained by streams, nearly free from sediment because of their flowing over sand and gravel, just like the mountain brooks that we now find in the Alleghanies or in the Blue Ridge region, which, even with hard rains, are rarely found muddy. This probably explains the remarkable purity and freedom from ash of our Middle and Lower Pottsville coal beds, because they are very much lower in impurities than the younger deposits. Except for occasional bony coal, these seams are practically pure, that is, they have no more ash than was contained in the woody material from which they were formed.

"It is quite probable that many plants which entered into the formation of coal were capable of existing in very shallow water, but judging from the evidence now at hand, we conclude that the conditions which obtained at the time of these old peat bogs, which later became our coal beds, were very much the same as we now have in the great Dismal Swamp of Virginia and North Carolina, where there

*Proceedings West Virginia Coal Mining Institute, 1910, page 200.

now is a bed of peat in process of formation. There pure peat is accumulating by the growth of vegetation which covers that region and on falling into the shallow water becomes decomposed. All that the Dismal Swamp region needs now for the production of a future coal bed is to sink below its present level, and then be covered by mud, sand and gravel brought in by the rivers. As these sedimentary strata multiply, pressure is produced on the vegetable mass, and as it continues to sink down farther and farther the heat of the earth pervades it. Thus are supplied both pressure and heat, the two factors which seem to be necessary to the change of peat into coal through the loss of volatile matter."

Macfarlane is definitely aligned with those who recognize the peat bog as the starting point of coal:

"The theory that coal was formed by the drifting of large masses of timber into bays, after the manner of the Red River rafts, now finds no advocates. The material could not have been furnished in sufficient quantity, and disposed in layers of equal thickness, extending for many miles, and so free from mud, sand, or other impurities or foreign substance. Coal of the Carboniferous age, when examined, is apparently never found to be formed of the trunks and large branches of trees. The slate-rocks above the coal were so formed, and it is on account of the size of the trees and plants that they have been converted into slate or shale instead of coal, from the introduction among them of sand, clay and mud. The too great preponderance of earthy matter renders them unfit for fuel, although containing some portion of carbon.

"The opinion now held by geologists is that the vegetation from which coal of the Carboniferous age originated was similar to that of the peat-bogs now found in nearly all parts of the world. The examination of coal does not afford evidence of its having been produced from the flattened trunks or more solid parts of trees, but it abounds in fragments of the leaves, and occasionally extremities of branches and fronds, or leaves of the kind which retain the stalk when they fall off. In anthracite coal the process of liquefaction and carbonization, or perhaps it should be called crystallization, has obliterated nearly all traces of the original vegetable matter; but, as we go farther westward, we find some kinds of bituminous coal which appear to be composed of minute leaves and fibres matted together. Large trunks or branches are not found, but thin layers resembling mineralized charcoal are found between the layers of coal when separated, and the material appears to have been of that soft description which must have flourished either in water or when the land was little elevated above the water, and when the climate was moist and warm. Certainly the vegetable matter must have been immediately covered with water as soon as it was formed, in order to be preserved from the rapid decomposition which always takes place in the open air. Sea-weeds and other marine plants are not found in coal, but the plants are all of the fresh-water species, and it has been confidently asserted by Mr. Lesquereaux that there is no coal with marks of marine origin; and, further, that there is no true peat formed entirely of sea-weed and marine plants, although the sandstone and lime-

stone layers between the seams of coal often contain marine fossils.

"The supposition that coal is a true mineral, formed only by chemical agency, and without an accumulation of vegetation grown on the surface, and buried afterward, is an hypothesis to which Nature does not give the slightest support. The analogy of formation between the peat-bogs of our times and the beds of coal of the coal-measures cannot be called a theory, it is a demonstrable fact. We can now see the coal growing up by the heaping of woody matter in the bogs. After a while we see it transformed into a dark, combustible compound that we name peat or lignite, according to its age. We then see it hardening, either by compression or by this slow burning in water. The oldest peat-bogs in Europe have at or near their bottom some plates or thin layers of hard, black matter that ocular examination or chemical analysis fails to distinguish from true coal. We find, besides, in Holland, Denmark, and Sweden, thick deposits of peat separated into distinct beds, by strata of mud and sand, giving the best possible elucidation of the process of stratification of the coal-measures."

"In Switzerland peat grows at the rate of two inches per year, a thickness reduced to one-half by compression. The trunks of trees embedded in peat are generally first softened before being hardened, as Liebig has proved by direct experiment in the process of slow decomposition, or rather slow combustion, of woody matter in water. Hence the flattening of all the stems found in coal or in the shales."—Lesquereaux.

In Bulletin No. 16, Geological Survey of Ohio, Alfred Dachnowski visualizes the occurrence of Ohio coals:

"The well marked order of arrangement, which the coal fields of Ohio present, suggest that at the beginning of the Carboniferous age, an arm of a shallow fresh water lake extended inland, and continued in an unbroken sheet up to the Cincinnati arch, which made its western boundary. Year after year, for many centuries an exceedingly dense, luxuriant growth of vegetation covered the surface of the shallow basins as scattered swamps and bog-like marshes, sometimes running into a long connected chain, and sometimes quite isolated. The vegetation was doubtless of many kinds of trees, especially giant ferns and clubmosses, with an undergrowth of shrubs and plants like grasses and sedges. There were many minor differences between the vegetation of different basins; zones of predominating lycopods alternating with ferns. The vegetation must have moved into the open water of protected bays and inland basins progressively, as groups, distinct in physiognomy and growth-form, the zones varying in width, with the definite conditions of life, and the selective action of the habitat. The plankton association must have been followed by plants nearer the margin and submerged along the gently sloping shore lines. Free floating forms similar to *Azolla*, *Salvinia*, and to various algae, must have existed in great masses, easily transported by winds and currents, at times completely covering the quiet pools. As their debris formed a slowly rising deposit in the basin, the littoral or shore association must have advanced toward the center of the water basin.

forming a mat of interwoven rhizomes and roots, harboring various societies and layers according to the light and water conditions. In time the basin became filled with this debris. In many cases the vegetation accumulated to a depth of more than fifty feet, but this great distance from the mineral substream or the deficiency of mineral substances never rendered it difficult or impossible for the plants to grow luxuriantly. Green plants utilize water and the carbon dioxide of the air to form food, the starches, sugars, fats, and proteins, necessary to their nourishment, and for the successive phases of a normal development. The mineral soil-constituents are not the food of plants; they are indispensable, but their amount is very small in organic substances, and alone they are incapable of sustaining life in plants.

"Trees standing erect within a bed of coal, their horizontal roots still imbedded in the underlying stratum, the corky bark, the wood, branches, leaves, spores, and fruits of many plants, and even the remains of fossil microorganisms,* fungi and mycorrhiza, have given their testimony of what once existed. Though not reported in the Coal Measures of Ohio, the aggregations, and often large masses of resinous substances, amber, fossil coral, and a multitude of similar substances, by their varying quantities, show the exact character of the vegetation. With the plants were many animals, and where they were most abundant, their fossil remains are found."

Dr. Heinrich Ries cites the Dismal Swamp as a possible present-day analogy to the scenes of ancient days, and suggests subsidence and re-elevation to account for a multiplicity of seams:†

"It is a well-known fact that thick deposits of vegetable matter, often covering areas of several square miles, are formed in the peat bogs that in so many places represent the last stage of lake or pond filling in cool, temperate climates. Each of these bogs would, under favorable circumstances, change to a bed of coal, and some of them are extensive enough to form coal beds of large size. But such bogs are, compared to our larger coal fields, far too limited in area to admit of the acceptance of this explanation to account for great fields without assuming far more widespread bog-forming conditions than any at present known.

"Perhaps the most perfect resemblance to coal-forming conditions is that now found on such coastal plain areas as that of southern Florida and the Dismal Swamp of Virginia and North Carolina. Both of these areas are very level, though with slight depressions in which there is either standing water or swamp conditions. In both regions there is such general interference with free drainage that there are extensive areas of swamp, and in both there are beds of vegetable accumulations. In each of these areas there is a general absence of sediment and therefore a marked variety of vegetable deposit. If either of these areas were submerged beneath the sea, the vegetable remains would be buried and a further step made toward the formation of a coal bed. Re-elevation, making a coastal plain, would permit the accumulation of another coal bed above the first, and this process might be continued again and again.

"In support of the theory that coal was accumulated in some such situation as this, are a

number of facts: (1) the coal beds occur over wide areas in sediments which were deposited near land borders and which may therefore have been again and again raised above sea level to form extensive coastal plains; (2) there are evidences of land conditions revealed in the workings of some mines; (3) the enormous area of some coal fields call for some such widespread conditions as coastal plains might provide; (4) the slight admixture of sediment indicates the absence of conditions of sediment supply, e. g., rivers, waves, tidal currents, and wind-formed currents; (5) vegetable accumulations made in such situations would require but slight changes in land level to be buried beneath sedimentary strata as the coal beds have been."

Dr. David White draws attention to several points of difference between present-day and ancient peat bogs:‡

"The processes of peat formation are essentially the same at the present moment as in the ancient epochs, but not so the general physiographic conditions prevailing in most regions of modern peat deposition. Although coal be recognized as fossilized and transformed peat, and the broad analogies or points of similarity between the formation of the coal and of peat now actually forming be considered, it must be remembered that the conditions of deposition of the coal of our great coal fields differ in some very important respects from those of the peat bogs with which most persons are today familiar. Thus it is recognized, as has been already shown, that the widespread coal of the great coal fields was laid down in vast base-level coastal swamps, most of which were at or not far above tide level, and that in most cases, at least, the substratum on which the peat was deposited was either a sinking subaerial old soil or it was so shallowly covered with water that plants, many of arborescent types, were able to take root in it and grow. The peat bogs of the temperate zones usually cited as illustrations are, on the other hand, generally at varying elevations above the sea and amid varying topographic conditions. They are usually of very limited extent, each bog being isolated. In many cases the bogs are immediately caused by locally obstructed drainage or by topographic barriers. In many regions of glacial topography, from which the greater part of the observations recorded are drawn, they occur as inward growth from the margins of kettle bottoms or small lakes between which high hills may rise, in which cases it is manifest that the understratum will not be an old soil and that the peat will not be regularly bedded nor similar in composition, structure, or thickness in passing out from the shore line. In these bogs parallelism of structure will be found generally only in very narrow concentric strips, and even in these the thickness will be constantly variable."

Reinhardt Thiessen gives his view as to the originating point with all coals.§

"It is now an absolutely established fact that coal is formed from plant substances. How they were formed, whether the plants grew where the

*Renault, B., Recherches sur les bacteriacées fossiles. Ann. des. sci. nat. bot. VIII, series, T 11: 1896, pp. 275-349.

†This and all subsequent quotations from Dr. Ries are taken from his *Economic Geology of the United States*.

‡The Origin of Coal, Bulletin No. 38, Bureau of Mines.

§Proceedings Coal Mining Institute of America, 1915.

coals are located, or whether they grew in other places and were later drifted or floated to the place where they now form the coal, is still debated by some. But to my mind, through my own observations and those of others, there is no doubt that the coal beds were formed in an identical manner as the peat bogs of the present were and are still being formed, that is, the plants grew where the coals are now found. Peat deposits, then, are of an inestimable value in teaching us much as to the composition and formation of coal. The transformation of plant substances into coal is quite another problem, and it is not altogether satisfactorily understood."

In view of the clearness of the testimony in its favor, one might be led to suppose that the peat-bog theory had a unanimous support. Daddow and

where cut off by the streams and such local and subsequent causes.

"Therefore, unless we admit that most of our coal vegetables took root deep in the water, we must assume that all the vast area of over 70,000 square miles was level and one vast marsh, which is in contradiction to all fact and in violence of every natural process that we can conceive, and those who advocate this claim an exclusive arborescent or land prodigies of Nature for every coal-seam existing, in order to reconcile their theory with the facts."

A difficulty in the theory of coal formations of course arises in accounting for the succession of strata overlying the coal bed. These consist of sandstones, shales and limestones. The first two mentioned are of fresh water origin, the latter is a



Ideal View of a Carboniferous Forest and Marsh.

Bannan, however, cannot reconcile the vastness of our coal areas with the theory:

"If we assume the vegetation to have been of the peat, or bog, order, we must admit the whole of the vast area of our Appalachian coal formation to have been level, and the gradual subsidence of the land would then conform, in part, to the requirements of the facts sustaining the theory. But even they who sustain this theory of peat-bog formation require the growth of 1,500 years to form the ten-foot Pittsburg seam.

"Our coal-beds are of vast extent, and we find some of the upper seams existing over 14,000 square miles, without a single break or discontinuation of strata, while, in all probability, the lower seams will be found to underlie the entire Allegheny coal-field, without a positive discontinuity except

salt water formation; the former two imply an inland location, the latter requires propinquity to the sea. The "estuary theory" has been formulated in an endeavor to account for the presence of marine strata.

Hugh Miller graphically describes the primeval scene:*

"We have before us a low shore thickly covered with vegetation. High trees of wonderful form stand out far into the water. There seems no intervening beach. A thick hedge of reeds, tall as the masts of pinnaces, runs along the deeper bays, like water-flags at the edge of a lake. A river of vast volume comes rolling from the interior, darkening the water for leagues with its slime and mud, and bearing with it to the open sea, reeds, and

*old Red Sandstone.

ferns, and cones of pine, and immense floats of leaves, and now and then some bulky tree, undermined and uprooted by the current. We near the coast and now enter the opening of the stream. A scarce-pentrate phalanx of reeds, that attain to the height and well nigh the bulk of forest-trees, is ranged on either hand. The bright and glossy stems seem rodded like Gothic columns, the pointed leaves stand out green at every joint, tier above tier, each tier resembling a coronal wreath or an ancient crown, with the rays turned outward; and we see atop what may be either large spikes or catkins.

"What strange forms of vegetable life appear in the forests behind! Can that be a club-moss that raises its slender height for more than fifty feet from the soil? Or can these tall, palm-like trees be actual ferns, and these spreading branches mere fronds? And then these gigantic reeds! are they not mere varieties of the common horse-tail of our bogs and morasses, magnified some sixty or a hundred times? Have we arrived at some such country as the continent visited by Gulliver, in which he found thickets of weeds and grass tall as woods of twenty years' growth, and lost himself amid a forest of corn fifty feet in height?

"The lesser vegetation of our own country, its reeds, mosses, and ferns, seem here as if viewed through a microscope: the dwarfs have sprung up into giants, and yet there appears to be no proportional increase in size among what are unequivocally its trees. Yonder is a group of what seem to be pines—tall and bulky, it is true, but neither taller nor bulkier than the pines of Norway or America; and the club-moss behind shoots up its green, hairy arms, loaded with what seem catkins, above their topmost cones.

"But what monster of the vegetable world comes floating down the stream, now circling around in eddies, now dancing on the ripple, now shooting down the rapid? It resembles a gigantic star-fish, or an immense coach-wheel divested of its rim.* There is a green, dome-like mass in the centre, that corresponds to the nave of the wheel or the body of the star-fish, and the boughs shoot out horizontally from every side, like the spokes of the nave, or rays from the central body. The diameter considerably exceeds forty feet; the branches, originally of a deep green, are assuming the golden tinge of decay; the cylindrical and hollow leaves stand out thick on every side, like prickles of the wild rose on the red, fleshy lance-like shoots of a year's growth, that will be covered two seasons hence with flowers and fruit. That strangely-formed organism presents no existing type among all the numerous families of the vegetable kingdom.

"There is an amazing luxuriance of growth all around us. Scarce can the current make its way through the thickets of aquatic plants that rise thick from the muddy bottom; and though the sunshine falls bright on the upper boughs of the tangled forest beyond, not a ray penetrates the more than twilight gloom that broods over the marshy platform below.

"The rank steam of decaying vegetation forms a thick blue haze, that partially obscures the under-wood. Deadly lakes of carbonic acid gas have

accumulated in all the hollows. There is a silence all around, uninterrupted save by the sudden splash of some reptile-fish that has risen to the surface in pursuit of its prey, or when a sudden breeze stirs the hot air and shakes the fronds of the giant ferns or the catkins of the reeds.

"The wide continent before us in a continent devoid of animal life, save that its pools and rivers abound in fish and mollusca, and that millions and tens of millions of the infusoria tribes swarm in the bogs and marshes. Here and there, too, an insect of strange form flutters among the leaves. It is more than probable that no creature furnished with lungs of the more perfect construction could have breathed the atmosphere of this early period and have lived."

Ries admits the possibility of a more luxuriant vegetation, but finds nothing to support the estuary theory:

"Streams are bringing plant remains to lakes or oceans and incorporating them in their deltas; but nowhere are such extensive accumulations now forming as to make large coal fields in this manner. Moreover, the amount of sediment brought in such places would seem to exclude the possibility of the deposit of large areas of vegetable matter free from a great admixture of sediment. The combination of marine or fresh-water swamp plants in the delta lagoons would increase the chances of the formation of coal beds by this means; but even with this addition, it seems impossible to accept this as a general theory for the formation of extensive beds of coal."

Professor Lewes† suggests that conditions could not have been uniform throughout the entire Carboniferous period, and concludes that both theories are worthy of credence:

"The vegetable deposits which the action of time, heat and pressure converted into our coal seams have many of them evidently grown in situ, as is shown by the underclay, which is loaded with fossil roots (stigmata). These seams as a rule are found extending over a large area and are generally of a uniform thickness, whilst the strata in which they occur also exhibit the same uniformity.

"Other coal-fields, however, evidently owe their origin to enormous masses of water-clogged drift, which have been brought down by great rivers and deposited in the deeper parts of primeval seas or lakes; seams formed in this way showing no fossil roots in the under strata, whilst the fossil remains of marine life are frequently found in both under and over strata.

"An examination of the seam, however, shows it to consist of not one deposit, but twelve or thirteen; very thin deposits, called 'partings,' existing in between the different parts of the seam. These partings, as the seam is traced northwards, gradually open up into wedge-shaped masses of sandstone and shale, clearly showing that the bed has been formed at the mouth of a big river, and that the various parts of the seam represent great masses of floating vegetable lumber brought down by the stream and probably deposited on the silt

*Since discovered to be the roots or base of the gigantic Sigillaria, which always grows in the fire-clays of our coal beds, and therefore could not float down the river into the coal area.

†This and all subsequent quotations from Dr. Lewes are from his work, entitled "The Carbonization of Coal."

bank at the mouth of the river, and that as it has sunk down owing to becoming denser from partial decay, a fresh deposit has formed over it."

Le Conte points out the untenable assumptions in the estuary theory and then artfully combines the acceptable features of both the peat-bog and the estuary theory into a plausible explanation of the ancient process.

"It is to meet this very difficulty, to account for this remarkable alternation of strata, that the rival theory has been proposed. An estuary is the wide open mouth of a river emptying into a tidal sea; it is occupied sometimes by fresh and sometimes by salt water. The deposit at the bottom of an estuary, in suitable positions, is, therefore, an alternation of fresh water and marine strata. In seasons of freshets the river water, loaded with sediment and perhaps bearing rafts of drifts of timber, forces back the sea water, occupies the estuary, and makes its deposit of clay and sand, containing fragments of such drift timber; in seasons of low water the ocean returns and makes its deposit, perhaps of limestone, and so on alternately. A coal field is supposed by these theorists to be the position of an ancient estuary; the limestone strata are the marine deposit, the shale and sandstone the river deposit, and the coal seam the imbedded drift timber brought down by the river from distant forests.

"The objections to this theory are all that has been said in favor of the peat-bog theory. The pureness of the coal, the fine preservation of even the tenderest parts of plants, the position of such well preserved specimens always on the upper surface of a coal seam, the structureless character of the great mass of the coal, and, above all, stumps and trunks of trees still erect, with their roots still fixed in the clay stratum below—all this seems not only unaccountable but impossible on this theory.

"In comparing these two it will be seen that the peat-bog theory explains completely the phenomena of an individual coal seam, but signally fails to explain the general phenomena of a coal basin, viz: the alternation of coal seam with marine and fresh water strata; while, on the other hand, the estuary theory explains well this alternation, but fails utterly to explain the phenomena of an individual coal seam. There is, then, real and substantial evidence in favor of each, and equally substantial objections. If this had not been the case one or the other would have been relinquished ere this. But we find, on the contrary, that they have both found strenuous advocates from the time geology commenced to exist as a science until now. In every such case of vitality in rival theories it will be found, I think, that there is a real germ of truth in both—that both are true and both are false; both true in some sense, and therefore reconcilable; and both false through narrowness of view, through exclusiveness, through mistaking a partial for a general view.

THE ESTUARY THEORY

"Now, it seems to me that the phenomena of a coal seam already enumerated prove most conclusively that the coal was formed in situ, as in the peat swamps of the present day. At the same time

the frequent alternation of seams with marine and fresh water strata prove also most conclusively that the deposit took place at the mouths of large rivers, and therefore subject to overflows by the river and occasional inundations by the sea. We are to look for analogies in existing nature, not among the bogs of Ireland, but among the river swamps of the Mississippi.

"It is well known that such peat swamps, some of them of enormous extent, exist now on the margins and in the delta of the Mississippi and probably many other large rivers, and that pure peat unmixed with mud is constantly forming in these swamps, although they are annually flooded by the river. This seems at first incredible, when we recollect that the river water is loaded with sediment, and that sediment prevents growth of peat plants, or at least would entirely destroy the purity of the peat. But this apparent anomaly has been entirely explained by Mr. Lyell. According to this high authority, although the peat swamps of the Mississippi are annually flooded by river water they are entirely untouched by river mud. These favored spots are surrounded, particularly on the side next the river, by dense vegetation, which, acting as a sieve, completely strains the water of its mud before it reaches the peat swamp. The water of these swamps is therefore pure, and pure peat has been quietly depositing there for ages.

"Let us suppose that there existed during the Carboniferous period a large river, perhaps less than the Mississippi, but with enormous swamps and delta, overgrown with rank vegetation far surpassing in luxuriance anything we know at the present day. In the midst of such swamps there would evidently occur spots of great extent, the waters of which, for the reasons already mentioned, would never be contaminated with sediment, as at (a) in the figure here shown. Here for untold ages pure carbonaceous matter would accumulate undisturbed. In the course of time the surrounding portions of the swamps (b) where the mud is detained would rise by deposit of sediment, while the peat swamp (a) would remain as a sunken

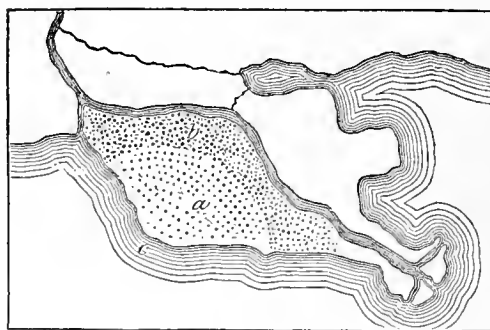


Fig. 10. Showing estuary conditions under which vegetation accumulated.

country, such as exist now in the swamps of the Mississippi. Finally, at uncertain intervals, a more than usually large freshet, or perhaps some change in the level of the land, would deluge the swamp with mud and bury the peat. Gradually the vegetation would return, and the former condition of things be restored, to pass again through the same changes. We have but one other supposition to make, viz: that the whole river swamp and delta were gradually subsiding during the whole Carbon-

iferous period. This is by no means a violent supposition, but one which we have a right in this case to make for two good reasons: 1st. We have the best evidence that many of the large deltas of the present day are thus subsiding. This is proved in the case of the Mississippi delta by cypress stumps in situ below the level of the sea. 2d. The coal strata themselves give indubitable evidence of gradual subsidence during the period of their deposit. The character of these strata and their fossils shows that they were deposited in shallow water, but their enormous thickness (nearly three miles in Nova Scotia) renders this clearly impossible, unless we suppose such subsidence; for, if the bottom was stationary, it must have been three miles below the surface of the water when the lowest stratum was deposited. Now, if such subsidence went on constantly, but slowly, so that, under ordinary circumstances, the delta could be maintained by deposit from the river, but at uncertain intervals, more rapidly than the river could build up, so that the sea would again usurp possession and make its deposit of limestone, and again more slowly, so that the area might again be reclaimed by the river, and become a peat swamp, and so on alternately, we would easily, without any violent hypothesis, account for all the phenomena of a coal basin.

"It will be observed that by this hypothesis the area of a coal basin has, indeed, been successively above and below the sea-surface, but not by successive upheaval and depression, as it has been supposed necessary on the peat bog theory, but by the contention, with various success, of opposing forces, aqueous and igneous, the river constantly building up, the igneous forces beneath as constantly striving to depress; sometimes one force predominating, sometimes the other. Of such contention we have many instances in existing nature. It is evidently going on in the delta of the Mississippi at the present time.

"It may not be possible, in the present condition of science, to picture to ourselves all the circumstances connected with this process. Perhaps I have already gone too far in this attempt; but the general facts upon which the theory rests are incontestible. Coal has almost certainly accumulated in situ in extensive peat swamps at the mouths of large rivers, upon ground which was slowly subsiding during the whole period. Under these circumstances it seems not difficult to account for all the phenomena of a coal basin. All we have to do in future is by study of the peat swamp of the Mississippi and the phenomena of delta deposit to discover the details of the process, to fill up the outline of the picture.

"There is a fact noticed by Mr. Lyell, which is strongly confirmatory of this theory. In the sandstone of the coal measures it is common to find trunks of trees but only trunks—no small branches, leaves, or tender parts. Moreover, these trunks are observed to be mostly pines, highland trees, while the trunks in the coal seam proper are *sigillaria*, *lepidodendron*, *calamites*—swamp trees. Now, when we recollect that coarse sandstone is the deposit of rapid current, does it not seem evident that the sandstone was deposited by the freshet which overwhelmed the peat swamp, and that the

pine trunks are the remains of drift timber, but how different from a coal seam!"

SARGASSO SEA THEORY

While the peat-bog theory and the estuary theory have, between them, the support of the great majority of investigators on the subject of coal formation, there are those who fail to find in either hypothesis a full explanation to some of the visible phenomena of our coal seams.

Partings bearing from a fraction of an inch to several inches, it is argued, would seem hardly sufficient to sustain a vegetable growth ample to provide the superimposed layer or bench of coal. If it be said that the new growth flourished on the remains of the old, why the lack of visible evidence in the parting? Furthermore, the total absence of a fire clay bottom to some coal seams establishes that there could have been no vegetation growing in situ. If it be assumed that the vegetation was washed in, there will need be combatted all the objections to this theory, which have already been stated. Moreover, no one specific manner of accounting for the alternation of strata is universally accepted, nor is it understood how a mass of loose earth could be spread over the accumulated plant remains without the infiltration of more dirt (ash) into the bed, than is generally found. Le Conte answers by asserting that there, unquestionably, is a commingling of dirt with the vegetation, as is proven by the gradual transition from the top of the coal (roof) down toward the center of the bed, or in other words, that there is a high ash zone at the top of the seam with a steady diminution in impurities in going toward the center. But the testimony of the miner is otherwise. He finds a clean-cut line of demarcation between the top rock and the coal, although, manifestly, the upper portion is higher in ash than the coal lying at the center of the seam. If the transition was gradual, as Le Conte avers, why is it the coal parts so readily from the roof? Isn't this in itself proof that the change from the coal to slate is abrupt?

The sargasso sea theory, according to H. W. Althouse, explains many of these moot points.

"Now, instead of our coal beds having been formed from the remains of plant growth that grew in swamps and bogs, a careful investigation into the causes and study of the formation in the coal period shows that our coal beds were formed from minute and microscopic vegetable organisms that then lived and flourished in those ancient seas, and being deposited over lengthy periods of time, became covered by sediments and other materials that are now found overlying the beds of coal.

"In the warm seas of the earth's past, the vegetable organisms that then lived were of the most primitive and simple character, and as these microscopic vegetable particles perished, they sank and formed an ooze, like that of mud, now being deposited on the floors of the deep seas, and this vegetable ooze is what formed our coal of Carboniferous age."

Dachnowski states his objections to any theory which ascribes salt water origin to the vegetable growth:

"The slight admixture of sediment, which indicates the absence of waves, tidal currents, wind-

formed currents and eroding rivers, and the fact that at present only one kind of tree, the mangrove, grows in salt water, is against the view that the coal was formed in salt water or that the characteristic structure and form of the Coal-measure plants was due to a salt water habitat. No records exist to show that in earlier ages the vegetation of the ocean differed greatly in kind from that now predominating. Ferns and mosses are entirely absent from the ocean; the principal marine vegetation is still formed by algae, often highly differentiated, which belong to diverse orders."

VEGETATION—OIL THEORY

Daddow and Bannan are amazed at current estimates on time and refuse to believe Mother Nature so slothful. The time required to accumulate sufficient plant remains to form a coal seam of even moderate thickness is far too great. Surely something must have been present to act as an accelerator, and this the writers conceive to have been oil. While their theory of coal formation is novel, it nevertheless offers a means for reducing by millions of years the time required by the usual account.*

"We have before stated that vegetable matter may, and in all probability did, aid in producing coal, but, we believe, only to a very limited extent. That vegetation grew luxuriantly during the coal era there can be no doubt; and that it grew in the deep basins in which coal was formed is likewise evident; but that the woody fibre of vegetation formed coal is not only doubtful, but contrary to all evidence, and at variance with the concidents of coal formations. It may have formed the impurities—bone and slate—of the coal, but never its pure carbon. The woody tissue supposed to be detected by microscopic examination cannot be determined in pure coal; and that found, or supposed to be found, in the ashes of coal is no criterion, since if the woody fibre of plants formed any part of a coal-seam it must have been the earthy parts thereof.

"We have rarely seen a fossil plant in the midst of a coal-bed or within the coal, but whenever found in this condition it is not coal, but slate or bone. Coal-plants of the Carboniferous era, in a fossil condition, are invariably silicious or calcareous, and partake of the lithological character of the formation in which they are found.

"But we do not intend to deny that the magnificent flora of the Carboniferous era aided in the production of coal. We believe it did, and have before so stated. That the rich and resinous calamites, coniferae, etc., which were fed by a superabundance of carbon and carbonic acid, should yield oil on pressure, there cannot be a doubt; and that they were subject to immense pressure between the rocky strata in which they now exist is evident not only by their flattened forms, but the fact that the superincumbent strata would exert such an influence and expel the resinous oils which they contained. This oil would mingle with the hydrocarbons, and, by evaporation, form bitumen; and this, enclosed in the strata of the coal-measures and subject to pressure, would produce coal.

"We do not consider any of the vegetable theories tenable. We are now positive of the fact, and state positively that all pure coal-beds are

formed from petroleum or oil, resulting from the vapors of carbon directly or indirectly, as above set forth.

"That a gradual depression of our great coal-basins did take place is not only evident from existing facts, but the natural processes of condensation and contraction. It is not, however, necessary that such must have been a condition to account for the formation of our coal-beds and the accumulation of the accompanying measures, since these beds and the rocky strata in which they exist would form as regularly and uniformly in basins of a constant depth as in those of varying depths.

"The fact, in this case, that coal-beds are invariably thin at a great depth, or more so than they are at moderate depth, is explained by the simple fact that they must have existed originally in a soft and plastic condition, and were, consequently, moved by the great pressure of water and sediment resting on them from the centre of deep basins towards their edges—a fact demonstrated in all deep basins, except that of Richmond, Va., where the irregular form of the intermediate basins prevented such a movement.

"It will be found that no conflict exists in the two theories of coal formation here presented, viz: that of vegetation and that of the condensation of naphtha, but, on the contrary, the one is an auxiliary to the other, and clears up some of the most doubtful mysteries in the practical solution of the question. It enables us to shorten our Carboniferous period some millions of years, and give Nature the credit of a rapid worker and a wonderful chemist, instead of being slothful, mutable, complex, and time-serving."

TRUE COAL VEIN FORMATION

Coal formations are frequently referred to as "coal veins." This is incorrect for the reason that the deposits are not in true fissure veins. An instance, however, of what is believed to be a true vein formation is given by William Campbell in *Transactions—The Mining Institute of Scotland*, Vol. XLI. In the province of Yauli, in the department of Junin, Peru, there are two distinct series of veins, 20 miles apart, one of these consisting of bituminous coal and the other of anthracite coal. The bituminous series is made up of three well defined veins or fissures which cut the limestone at nearly right angles to the bedding planes and have a dip of from 60 degrees to almost vertical. They vary from 12 inches to several feet in width and behave in exactly the same way as mineral veins, the coal occurring in irregular lenticular masses. The coal is splendid for domestic uses, and is also used, with a mixture of 50 per cent anthracite from the other series, for making blast furnace coke. The coal burns easily, with plenty of flame and gives off much smoke and a great amount of oil or pitch. The anthracite coal series also occurs in the limestone and is regarded as having the same origin and period as the bituminous series. Both kinds of coal are believed to be of asphaltic rather than of vegetable origin, the theory being advanced that an oil field was in existence, and due to earth move-

*This and all subsequent quotations from Daddow and Bannan are taken from "Coal, Iron and Oil, or the Practical American Miner."

ment setting up great heat, the oil was volatilized, and the ascending vapors in their passage through these open fissures in the limestone condensed or cooled, leaving solids which filled the veins.

VEGETATION OF THE CARBONIFEROUS PERIOD AND CLIMATIC CONDITIONS

The Carboniferous age, it is agreed by all, was favorable to a flourishing vegetation, for the reason, largely, that climatic conditions were conducive to great and rapid growths. Le Conte's explanation sets forth the preponderance of ferns:

"It is probable, from what evidence we have on this subject, that the climate of the coal period was characterized by greater warmth, greater humidity, and greater uniformity than now obtains, and that the air was more highly charged with carbonic acid. Of the greater warmth of the climate we have evidence in the astonishing luxuriance and universal tropical character of the vegetation of the period. One of the most marked peculiarities of the flora of coal everywhere is the great relative abundance of ferns and fernallies. In the present flora of Great Britain the ratio of ferns to flowering plants is about 1 to 35, while in the coal flora of the same country nearly one-half of all the known plants are ferns. In the American coal flora the proportion of ferns is said to be still greater. That this abundance of ferns indicates a tropical climate is shown by the fact that in the existing flora, out of about 1,500 known species of ferns, 1,200 are confined to the tropics, and as we pass from the equator towards the poles the proportion of ferns, steadily diminishes. The same may be said with reference to the club-mosses. It is worthy of remark, too, that although conifers are abundant now all over the earth's surface, still those most nearly allied to the conifers of the coal—such, for instance, as the *araucaria* and *salisburia* of the present day—are found only in tropical regions. Now, during the coal period, this tropical vegetation extended as far as 75° north latitude. Tree ferns and gigantic club-mosses covered the spot now occupied by the *Mellville* island. The evidence of remarkable humidity is no less satisfactory, for it is only in warm, moist climates that ferns and club-mosses grow in the greatest abundance and luxuriance. On some islands in the tropics and in the south seas the abundance of ferns even approaches that of the coal flora. In fact, as a condition of the growth of these plants, moisture seems even more necessary than heat.

"With reference to the highly carbonated condition of the atmosphere, we may suppose this to be the result of the greater activity of carbonic acid producing causes, or else we may refer it to the original constitution of the air—the natural process by which carbonic acid is given to the air, decomposition, combustion, respiration of animals, and volcanoes, carbonated springs, etc. It will be admitted by all that the first three may be neglected, since they return to the air only what had been previously taken from it. The carbonic acid supplied to the air by volcanoes and carbonated springs, according to Bischoff, is so inconsiderable that, unless we suppose these sources much more active than now, it would take millions of years to affect materially the constitution of the air. But even this refuge is taken away, when we recollect

that volcanoes and springs derive their carbonic acid from carbonates, and chiefly from carbonate of lime, or common limestone. But limestones, according to the testimony of all who have carefully studied them, and particularly according to the recent microscopic observations of Sorby, are entirely of animal origin, i. e., entirely made up of broken fragments of shells, corals, crinoids, sometimes recognizable under the microscope, sometimes reduced to impalpable powder. This carbonate of lime is evidently derived from sea-water. Whence, then, does sea-water derive its carbonate of lime? The lime is derived, beyond doubt, from igneous rocks, the carbonic acid probably from the atmosphere, through the animal and vegetable kingdoms, since lime exists in igneous rocks not as a carbonate but as a silicate. It would seem to follow, then, that springs and volcanoes, also, only return to the atmosphere what had been previously taken from it. The only difference between these sources and the three first is, that while decomposition, combustion and respiration return to the air what had been taken from it but a little while before, springs and volcanoes return to the air what had been taken from it during some previous geological epoch. Thus the atmosphere becomes the great original source of all the carbonic acid in the world.

"But whatever be the cause of the excess of carbonic acid in the atmosphere during the coal period, we cannot fail to see an evident and beneficent design in its removal. Carbonic acid, as is well known, is as poisonous to animals as it is nourishing to plants. Previous to the coal period there lived none but aquatic animals of low order. These, on account of low vitality, sluggish circulation, and little necessity for rapid and constant oxygenation of the blood, have great endurance of carbonic acid. But now the earth was prepared to receive air-breathing animals, the atmosphere must be purified for the purpose. This was accomplished by the astonishing vegetation of the coal period. But observe, and never cease to admire and wonder, that the self-same providential act which purified the atmosphere and rendered the earth a fit habitation for reptiles and birds, had references also to the coming of man countless ages after, and laid up materials for his use. In the carbon thus silently extracted from the atmosphere was buried a mechanical energy which, after a sleep of millions of years, was to rise again as the great physical regenerator of the human race."

The versions of A. W. Smith,* Lewes, and Daddow and Bannan now follow in the order named. While a variance in detail will be noted, the accounts are substantially in accord:

A. W. Smith—"It must be kept in mind that all the agencies which contributed to the formation of coal beds worked on a prodigiously larger scale than those which are now in activity for the formation of peat. Then, the deposits of vegetable remains were from an exceptionally exuberant vegetation, favored by the greatest possible humidity of the air, and a superabundance of carbonic acid in the atmosphere. It was a vegetation from

*This and all subsequent quotations from Mr. Smith are taken from the Report of the Anthracite Region, Penna. Geol. Survey, 1886.

which we can scarcely get an idea from anything now visible. Acrogenous plants, Ferns, Lycopods and Equisita (Horsetail) composed nearly the whole flora of the coal period. All the plants of those orders, represented by numerous genera, were then large trees, their trunks measuring from one to three feet in diameter, 40 to 100 feet tall, or even more; growing close together, and forming an impenetrable thicket of stems, branches and leaves; whereas, at the present day, the same kinds of plants are represented by mere herbage of small size, with stems and branches scarcely as thick as a goose quill, and only one or two feet high. Most of the land surface was then a vastness of swamps, in which the first growth, generally floating or creeping plants, was essentially composed of a peculiar species, the *Stigmara*, whose immensely long stems and branches, from 4 to 6 inches thick, were woven together, like the thin, matted, floating stems of the *Sphagnum* of the present age, into an immense woven mat, or thick carpet, over which the luxuriant land vegetation of the coal soon spread itself. And, of course, we must suppose that such an accumulation of ponderous material, such a mass of vegetation, sank of its own weight at times and places into the water beneath and became wholly submerged. This supposition becomes a certainty in view of the superposition of thick beds of sandstone, shale, clay, ironstone, and limestone upon the old beds of coal."

Lewes—"When the monster vegetation of the Carboniferous period grew, it is evident that, although the plant forms were of a simpler structure than is found in their descendants, the actions involved in their growth were the same as those we have considered, the great difference being in the rapidity with which they grew and the size which they attained, which may be taken roughly as twenty times that of their modern types. We know the rapidity with which in tropical regions the marsh plants spring up, attain great size, and then rot down, and it was a similar action, accentuated by heat from the cooling earth below and the richness of the atmosphere in plant food, i. e., carbon dioxide and water vapour, that induced in the vegetation of the coal age an exuberance of growth that has never been equalled since.

"The great vegetable deposits so formed rapidly accumulated, as it must be remembered that during this period decay as we now know it could not have existed—oxygen was only beginning to accumulate in the air, and the processes of slow combustion, by which nature now rids the earth of waste matter, were practically inoperative, so that nothing but what we call today 'checked decay,' i. e., changes at the expense of the combined oxygen in the vegetable matter, could take place, and deposits of a size that would be impossible with the atmospheric conditions now existing were easily formed."

Daddow and Bannan—"It was yet early in the creative periods. The 'third day,' as described by the Mosaic account, had not yet closed, and air-breathing animal life had yet no existence. The air was full of vapor and the floating dust of distant eruptions; carbonic acid loaded the waters and surcharged the air; a sulphurous and heated atmosphere everywhere encircled the earth; and

the waters were tepid with the radiating heat of cooling lava and the condensing earth.

"The temperature that then existed would be insupportable to terrestrial animals, while the carbonic acid that impregnated the air would be destructive to common air-breathing creatures. The vapors of carbon still arose from a thousand sources—smoking volcanoes and smouldering lava; and every crack and fissure of the earth still poured forth its volumes of the vapors of combustion, which here, in the contact with water, formed carburetted hydrogen, and there, with the atmosphere, formed carbonic acid.

"Such a coincidence of favorable circumstances could not fail to produce a vegetation of the most vast and magnificent description, in comparison with which the most luxuriant of the present day would be as a 'drop in the bucket.' The soft and fertile soil, made rich with the decaying matter of the ancient marine life and the resulting bitumen of the carburetted hydrogen gases; the atmosphere, warm and moist with heat and steam, and loaded with the life-giving carbon so necessary to vegetation, all tended to invigorate and give an unlimited growth to that early flora.

"This was the acme of vegetable life. Hitherto those favorable circumstances did not exist, and vegetation could only have flourished to a limited extent."

TIME REQUIRED FOR FORMATION OF COAL SEAMS

Many estimates on the time required to collect vegetation in the enormous quantities necessary to form a coal seam have been made, and of these but a few will be given here:

"In a valuable paper on the 'Maximum Rate of Deposition of Coal,' Ashley gives some most interesting deductions. He concludes that 1 foot of surface peat will at a depth of about 20 feet be reduced to 3 inches consequent to mere moisture loss; that its additional loss by partial decomposition amounts to one-fourth of the vegetable matter, whereas its specific gravity is nearly doubled, so that the original 1 foot is reduced to about $1\frac{1}{8}$ inches, a result in close agreement with Lesquereaux. Again, accepting Bischoff's deductions that one-fourth of the original matter is lost in the formation of peat, and that one-third of that remaining is sacrificed in the conversion of the peat to coal, Ashley applies Bischoff's questionable rate for the reduction of the organic matter in the peat. Thus, he takes from a cubic foot of deep peat, weighing 50 pounds and containing 30 to 40 per cent of water, one-third of the total weight for the remainder, 25 pounds, in round numbers, being regarded by him as the coal equivalent of the cubic foot of deep peat. Hence he concludes that a cubic foot of Appalachian coal weighing $87\frac{1}{2}$ pounds represents $3\frac{1}{2}$ feet of well-compressed peat. In his further computations he uses 3 feet as the thickness of 'well-compacted, deeply buried old peat necessary to produce 1 foot of bituminous coal of the general character of the Pittsburgh coal of Pennsylvania.' According to this rate, the time required for the formation of 7 feet of this remarkable bed was 2,100 years or 300 years to the foot of formation."*

*Origin of Coal, by David White.

Le Conte uses a different basis for his computation, and, as will be observed, arrives at a figure much at variance with Ashley's:

"Let us now attempt to estimate approximately the time necessary to bring about these stupendous results. I believe we should never neglect an opportunity of this kind, because the popular mind has not yet grasped the idea of illimitable time required by geology to the same extent as it has the idea of illimitable space required by astronomy; and, as I believe, this is one of the greatest difficulties with which geology has to contend.

"According to Boussingault, luxuriant vegetation at the present day takes from the atmosphere about a half ton of carbon per acre annually, or 50 tons per acre in a century. Fifty tons of carbon of the specific gravity of coal, about 1.50, spread evenly over the surface of an acre, would make a layer of less than $\frac{1}{3}$ of an inch. Humboldt makes the estimate a little higher, viz: $\frac{1}{2}$ an inch. We are willing to take the higher estimate. It appears, then, that if all the carbon taken from the air was preserved in the form of coal, our most luxuriant vegetation would make but a $\frac{1}{2}$ -inch of coal in a century. But in the coal measures the aggregate thickness of the coal seams in the same basin is sometimes 150 feet or more. In 150 feet there are 1,800 inches, or 3,600 half inches. At the present rate of vegetation, then, it would take 3,600 centuries, or 360,000 years, to accumulate this amount. But it will be objected that the vegetation of the coal period was probably much more luxuriant than the present, and the tendency of this difference would be to shorten the time. True; but it will be recollected that this estimate was made upon the ground that all the carbon was preserved. This is in the highest degree improbable, not to say impossible. Probably much more than half was returned to atmosphere in the form of carbonic acid and carburetted hydrogen. Again, we have taken no account of the enormous periods of time during which there was no carbon deposited on the spot in question, and represented by the intervening strata of limestone, sandstone and shale. The estimate we have given above, therefore, probably falls very short of the truth. Let us try another.

"According to Messrs. Lyell and Dawson the coal strata of Nova Scotia are about three miles in thickness at the South Joggins. At another point, nearly 100 miles distant (Albion mines), they found the thickness nearly the same. There is little danger, therefore, of erring on the side of excess, if we take the average thickness of the strata over the whole basin at one and a half miles. Now, the area of this coal field, according to Mr. Lyell, is about 3,600 square miles. This would give, as the solid contents of these strata, 54,000 cubic miles. But we have already seen that this enormous amount of matter was almost certainly accumulated at the mouth of a great river. Let us see how long it would take one of our great rivers to do the work. I shall select for this purpose the Mississippi and the Ganges, because they are both very large rivers, carrying vast amounts of sediment, and because accurate observations have been made as to the amount of sediment brought down by them. These observations have been made upon the Mississippi by Drs. Forshay and Reddell, of

New Orleans, and by Captain Strachey, British engineer, upon the Ganges. According to these observations it would take the Mississippi 2,000,000 years and the Ganges* 375,000 years to perform the work. And yet the period we are now discussing is probably not one-thirteenth, certainly but a small portion of the entire geological history of the earth.

"It will no doubt be objected to this estimate that it is founded upon a particular theory, and this theory may be incorrect, and the estimate thus falls to the ground. In answer to this objection it is only necessary to state that we are acquainted with no other circumstances under which strata accumulate so rapidly as at the mouths of rivers. Any other conceivable theory, therefore, would only increase the time."

Redmayne† furnishes a basis for estimation of time by citing the rate of peat-bog growth:

"The rate of growth of peat bogs is variable, and our knowledge respecting the same is somewhat indefinite; but it has been estimated that some extensive peat-bogs in Great Britain have increased in vertical thickness by 3 to 5 feet since the date of the Roman invasion."

All that is now needed to arrive at a term of years is to combine Redmayne's observation with Ries's estimate that "from 16 to 30 feet of peat are required to make one foot of true coal."

Lewes finds no modern phenomena by which the formation of thick seams can be explained:

"The conversion of vegetable matter into coal gives a loss in weight of about 75 per cent, and as the specific gravity of coal will vary from about 1.1 in the lignites to 1.4 in the anthracite, the volume of coal can be only from one-ninth to one-sixteenth the volume of the vegetable magma from which it was formed. When one considers the original depth of the vegetable deposit that gave rise to any thick coal seam—say the South Staffordshire 10-yard seam—one feels that no deposit that could form under present conditions would explain it. The Staffordshire coal would represent one-tenth to one-twelfth the volume of the original vegetation, so that the 10-yard seam represents a deposit extending over many square miles and, say, 300 feet in thickness, which, of course, even with the factor of geological time at one's disposal, would appear incredible."

We quote the following from Macfarlane:

"Our thickest beds of peat now measure scarcely 20 feet. By compression and mineralization the thickness would be reduced to one-sixth, or three feet at the most. We have beds of coal of 20 feet of thickness which would make a deposit of peat reach 120 feet. It is true, indeed, that the peat-bogs of old did not extend over the whole surface; that they were of various dimensions, separated by sandy hills or by deep lagoons; that, after the

*This amazing difference in favor of a smaller river is due to the fact that the Ganges, being a tropical river, the rains all fall during six months, and are therefore very heavy. The washing of the soil and resulting sediments are necessarily in proportion. The mountainous country in which the Ganges takes its rise contributes to the same result.

†Modern Practice in Mining, Vol. 1.

deposit of their materials, erosions caused by water or other agency have greatly diminished their size. But it is true also that beds of coal, like the Pittsburgh bed, whose average thickness is about eight feet, may be traced over surfaces more than 100 square miles in width. It is equally true that beds of coal are superposed at intervals, in the coal-measures, in such a way that at the same place a boring of a few hundred feet may successively pass through five beds of coal, or even more, of various thicknesses. So immense, indeed, are the riches of the American coal-measures, that, in their conception of the future developments of our human race, geographers, historians, philosophers, agree in this idea, that in the United States we have, especially in our coal-deposits, the elements for the greatest and most perfect development of the human race."

Daddow and Bannan compute the immense amount of time required for the formation of the Mammoth seam and do not believe that Nature was so slow in her movements:

"It might be interesting to calculate the immense amount of vegetation it would require to form a vein of coal equal to the Mammoth. If we take an average forest of our present day as the base of our calculations, we find that an acre of ground containing 65 trees, or five tons, and containing 20 per cent of carbon, will produce 65 tons of charcoal; or it would require 74 such forests to produce a bed of coal one foot thick, which contains 4,840 tons* of coal. To pursue the subject further, we may assume such a forest of white oak to have been one hundred years in coming to perfection, and we thus find that it would require 7,400 years of our present forest growth to form a bed of coal three feet thick; or 74,000 years to accumulate the mass of coal existing in our 30-foot Mammoth coal-bed.

"We may indulge in some speculation as to the relative time required to produce the same result during the ancient flora. We find the heat, the moisture, the carbon, and the water, all combining to produce an excessive growth; and we may safely assume that each year of such growth would add one foot to the thickness of the vegetable mass, as before described. This might be compressed, in the shape of coal, to one-fifth its bulk or weight, and all that it would lose in the slow combustion, or process of charring, in the bowels of the earth, would be more than supplied by the accession of carbon and hydrogen from the subterranean vapors still pervading the earth, air, and water. This would require five years to produce one foot of coal! or 180 years to form the 30-foot coal of the Mammoth.

"We cannot conceive of any other natural process by which our large veins of coal would be formed direct from vegetable matter."

THE COVERING OF VEGETATION WITH EARTH; SUCCESSION OF STRATA

The manner in which sandstone, shale and limestone strata have been deposited over the coal is one of the phases of coal geology that requires more illumination. The geologist, using lubricated phrases, and either by holocaust or by quiescent

means manages to slide or collect a protecting mantle of earth over the plant remains, in such an artful manner that there is little or no contamination of the underlying coal by the infiltrating earth; the miner, drawing upon his daily observations, accepts subsidence as an explanation of alternating layers, but, lacking details, he continues to marvel at the clean-cut separation of the coal from the overlying rock.

Le Conte's version of the formation of strata overlying the coal has already been given under the heading of "The Estuary Theory." A. W. Smith's account presupposes slow downward movements:

"To account for the succession of coal beds separated from each other by many feet or yards of rock strata, and constituting a mass of coal measures several thousand feet in total thickness, it is necessary to take into consideration those very slow downward movements of large areas of the earth's surface which have taken place in all geological ages, and were nearly continuous on a grand scale during the whole time in which the numerous formations of Middle and Western Pennsylvania were being deposited; ending with the rise of the whole region to its present height at the end of the Coal Measure age. During all the last part of the downward movement the coal vegetation flourished magnificently, but was interrupted by inroads of the sea on an equally grand scale; and these inroads which explain the intermediate sandstone, shale, limestone and iron ore beds, were precisely similar—but vastly greater and perhaps lasting for a much longer time—to those which have been described as happening in the history of the formation of the peat-bogs of our own day."

The deposition of shale immediately overlying the coal, according to Macfarlane, proceeded in a quiet orderly manner, while the higher strata may have placed by violent inundations of the sea:

"The pressure required to transform the vegetable material into coal was applied by the formation of the superincumbent strata of rock, by means of the sinking of portions of the land and the elevation of other portions. Professor Rogers, of the Pennsylvania Geological Survey, seems to attribute these to those mighty movements of the earth's surface called earthquakes, but they are now commonly accounted for by more gradual movements. The present great elevations of the mountains had not taken place, the surface of the earth was not much above the ocean, and small changes of level were sufficient to submerge the continents which were sometimes above and sometimes below the water.

"Dana teaches that contraction of the earth's crust, in cooling, was the one complete, efficient, and universal physical cause of the development of the features of the earth. Certainly, by whatever cause produced, our everyday observation proves that a considerable part of the continent of America was for a long period the bottom of the sea, and was subsequently elevated, as is shown by its abounding in sea-shells and other organic remains, and we find the stratified rocks fractured and

*These figures per foot of coal thickness in seam seem excessive; it is customary to figure 1,725 tons per foot per acre.—Editor.

raised up at various angles, just as they would have been if the crust of the earth had been broken into fragments by some mighty force acting beneath it. The elevation of a part of the earth's surface, and depression of other portions, would cause the sea to roll in against and over the continent. Where slate and sandstone occur over the coal, it is caused by the forests upon the higher ground being uprooted and strewed over the bog or swamp, before described, and the clay, sand, and earthy matter, becoming mingled with these drifting trees, they were spread in a promiscuous mass over the swampy flat.

"The great strata of sand-rock upon the slate, and sometimes directly upon the coal, were caused by more impetuous inundations of the ocean in all its might and majesty, washing away vast quantities of the soil and rock strata of the ancient continent; breaking the rocks into small fragments, carrying them to a great distance inland, and wearing them into water-worn pebbles. These rivers or oceans of sand, gravel and clay, thus deposited, in course of time became hardened into rocks, and their pressure upon the moist and rank vegetation of the coal-bogs buried beneath them has thus, by a simple and natural process, formed the strata of slate, pure coal, and sandstone. The dense, tough mass of swampy growth, with its strong network of roots, fibres, leaves and twigs, from the greater abundance and density of the vegetation, remained in its natural unmixed condition, and, no intermingling of earthy materials taking place, pure coal was formed. Being very compactly matted together, it formed a strong, spongy mass, not easily separated by a current of water flowing over it, and not pervious, or liable to be penetrated by foreign substances borne by such current."

HOW PEAT DEPOSITS WERE CHANGED TO COALS OF HIGHER RANK; PEAT TO ANTHRACITE THEORY

Once the swampy growth had become covered with earthy strata as the result of subsidence, it remains to find some plausible means whereby the woody material was converted into the successive ranks of lignite, bituminous and anthracite coal.

Le Conte explains the transformation in this wise:

"All the stages of gradation between perfect wood and perfect coal may be traced with the greatest certainty. We find the first stage of this process in the blackened semi-bituminized logs of our peat bogs and deltas of the present epoch. The next stage we find in the lignites or brown coal of the tertiary period; the next the highly bituminous coal of the coalite; then the coals of the true carboniferous; and lastly, anthracites of the same and the lower strata. Thus we may trace the whole embryology of coal from its immature to its most perfect condition—may trace and identify all the intermediate links of the chain of conditions of which wood and coal form the extreme limits. But not only in external form and appearance, but also in chemical composition we can trace these several stages. Wood consists of carbon, hydrogen and oxygen; coal consists of the same elements but in different proportions. In coal the proportion of

carbon is greater and of oxygen and hydrogen less than in wood. Now, if we compare the chemical composition of wood, peat, lignite, bituminous coal and anthracite, we find the carbon almost pure, and absolutely pure in graphite, if we acknowledge this as of similar origin. This chemical evidence, it seems to me, is absolutely demonstrative.

"Lastly, direct experiment proves that peat, which we know to be of vegetable origin, may, by strong pressure, be made to assume the hardness, the density, the general appearance and all the useful properties of coal.*

"We have already said that bituminous coal may be considered as a mechanical mixture of carbon and bitumen, and these two may easily be separated by heat. Anthracite is the residue after separation, and bitumen and naphtha is the matter separated by distillation and condensed elsewhere. As in the gas manufactories we find bituminous coal decomposed—a part remaining behind as coke (pure carbon), a part passing off as gas and a part collecting in pipes as coal tar—so in the laboratory of Nature coal beds subjected to heat give rise to the same three substances; anthracite is left behind, coal gas is discharged into the atmosphere and bitumen collects in subterranean pipes and gives rise to naphtha and bituminous springs, pitch lakes, etc. Thus, the enormous lake of boiling pitch in Trinidad is, probably, in connection with the coal strata below. If so, such coal will be left in the condition of anthracite. All the strata of the earth are subject to change under the influence of heat; limestones become marbles, clays become slate. This change is called by geologists metamorphism. Now, the proposition is that anthracite is metamorphic coal. The proofs of this proposition are as follows:

"In the first place, anthracite is never found except in regions very much disturbed by igneous agency, the strata highly inclined, contorted and broken; and even in the same coal field the coal is anthracite or bituminous, according as the region is more or less disturbed. Thus, in eastern Pennsylvania, where the coal strata are very much contorted and sometimes perpendicular, the coal is all anthracite; while in western Pennsylvania, where the strata are nearly horizontal, the coal is bituminous. The actual transition of anthracite into bituminous coal cannot be studied with advantage in Pennsylvania, because the coal strata have been carried away to such an extent that only outlying patches are left; but in Wales the same seam may be traced from the bituminous to the anthracite condition; so that there can be no doubt that, in this case at least, anthracite is metamorphic coal.

"Second. Anthracite is never found except in metamorphic rocks, and conversely all coal contained in metamorphic strata is anthracite. This universal connection of two things proves, as it seems to me, beyond doubt, their community of origin; that they have a common cause. Thus, in the lowest stratified or primary rocks, where the

*Dr. Bergius, of Hanover, in a paper on the artificial production of coal, says he heated peat and cellulose with water to a temperature of 310° C. under 100 atmospheres pressure, and found that both were converted into a substance physically and chemically identical with coal. At 340° C. the process took 8 hours, while at 310° C. it took 60 hours. He estimates, that at the temperature of the earth's crust, it would take eight million years to form coal.

rocks are altogether metamorphic, and even in the Silurian, where a less complete metamorphism is almost universal, what little coal is found is always anthracite. In the coal measures we have coal both bituminous and anthracite, but the anthracite always in altered and the bituminous in unaltered rocks. As we pass upward we find anthracite more rare, because metamorphism is more rare and local; and when metamorphism entirely disappears in the Tertiary rocks we find that anthracite disappears also.

"Third. Trap dykes, as it is well known, are formed by the outbreking and outpouring of melted rock (lava) forced up through the superincumbent stratified rocks, which are altered and rendered metamorphic by the contact. Now, when a dyke passes through coal strata the coal is always thoroughly coked by the contact; that is, it is changed into a substance identical in chemical composition with anthracite. These two substances are doubtless similar in their origin as well as in chemical composition, the great difference in their density being due only to the pressure under which the change took place. Anthracite is produced slowly under enormous pressure, while coke is produced under ordinary atmospheric pressure, and the rapid disengagement of gas renders it light and porous."

Ries attributes the origin of the heat and pressure necessary for the alteration of coal to the folding of the strata; Stevenson holds that devolatilization of anthracite coal was due to long exposure:

"Most of the anthracite coal in the United States occurs in the highly folded Appalachians of Pennsylvania. Such folding must have been productive of much heat and pressure, and that the folding has produced the anthracite is by many believed to be proved by the fact that these coal beds pass into bituminous coal when traced southward or westward into areas of less disturbances. This view is questioned by some geologists, especially J. J. Stevenson, who has argued that the anthracite has not been developed from bituminous coal by metamorphism, but that the volatile constituents were partly removed by longer exposure of the vegetable matter to oxidation before burial."

"There are some cases, as in the Cerillos coal field of New Mexico, where anthracite probably has been produced by heat. Here a bituminous coal has been deprived of its volatile matter and converted into anthracite in those portions of the bed near an intrusion of andesite. A similar change has taken place in the Crested Butte district of Colorado."

Macfarlane and Newberry are definitely lined up in support of the "peat to anthracite" theory:

"The formation of different kinds of coal, such as anthracite and semi-anthracite, semi-bituminous, and the many different varieties of bituminous coal, is supposed to be owing to the different degrees of progress made in the process of liquefaction and carbonization, and to there having been greater means for the escape of the gaseous constituents in some cases than in others. Chemists have actually converted vegetable matter into coal of all degrees of hardness, and possessing all the various qualities of that formed by Nature.

"The combinations formed by the usual affinities of the constituents of coal seem to show that all coal was first formed of the bituminous variety, and that anthracite is the result of igneous action to which it was subjected after it became coal. Anthracite is only found in metamorphic rocks, and all coal found in metamorphic rocks is anthracite."

"Coal, it may be easily demonstrated," says Dr. J. S. Newberry, "has been derived from the decomposition of vegetable tissue, and represents one of the different steps in a progressive change. In peat and lignite, we see the first step in the formation of coal. Peat is bituminous vegetation, generally mosses and other herbaceous plants, which, under favorable circumstances, accumulate in marshes called peat-bogs. Lignite is the production of a similar change effected in woody tissue, and, because it retains to a greater or less degree the form and structure of wood, has received the name it bears. Peat is the product of the present period, and lignite is found in deposits of recent geological age. In the older formations, these carbonaceous accumulations are still further changed, and form bituminous coal. When special and local causes have operated to carry the change still further, as when the beds of coal have been involved in the upheaval of mountains, and heat acted upon it, it is converted into anthracite. When this metamorphosis has been carried still further, the result is plumbago or black-lead.

"The changes referred to consist in the evolution of a portion of the carbon, hydrogen, and oxygen, in the form of water, carburetted hydrogen, carbonic acid, etc., leaving constantly a larger portion of carbon of the plant behind, with all its earthy matter.

"We find that, under peculiar circumstances, Nature has departed from her usual routine, and has locally effected the changes from lignite into anthracite, in a short space of time, as at Santa Fe, New Mexico, where a trap-dike has cut through Cretaceous strata in which are beds of soft and nearly valueless lignite, and where, over a large area, this outflow of melted rock has converted this lignite into a compact and valuable anthracite. So at Los Bronces, in Sonora, Triassic coals are converted into anthracite by the eruption of porphyritic rocks. On Queen Charlotte's Island, south of Alaska, is a Tertiary lignite changed by a similar cause into the most beautiful and brilliant anthracite."

But discordant notes come from the shores of England. Redmayne and Harger have no place in their conception for the peat to anthracite theory:

Redmayne*—"Peat is frequently, and erroneously, regarded as coal 'in the making,' whereas true coal owes its origin neither to peat bogs nor yet to the forest trees, but to forests of cryptogamic plants. Although peat, therefore, properly speaking, is not coal, nor will in the process of time become such" . . .

Harger†—"The hypothesis, once so widely used, that all coals have been derived from the same mother substance, under the same or similar con-

*Modern Practice in Mining, Vol. 1.

†"Coal and the Prevention of Explosions and Fires in Mines."

ditions, must be dismissed as unfruitful and even misleading. There is no doubt that the coal of each particular seam has its own peculiar properties, and these must be taken into account in any scientific theory of its origin. In spite of its attractive simplicity, we can no longer hold the 'peat to anthracite' theory which has, in text books at any rate, held such long sway: so many of the facts accumulated in recent years cannot be explained or related by means of this theory."

CANNEL COALS

Much interest has occurred of that class of coals characterized by their high ash and high volatile content, and known as cannel coals. Macfarlane explains formation in this wise:

"Cannel-coals have usually a more distinctly laminated structure, are finer and more compact in texture, and contain a larger percentage of volatile matter. They produce gas of greater illuminating power, but the coke made from them is of inferior quality. As to the mode of the formation of cannel-coal, Professor J. S. Newberry proved many years ago, in *Silliman's Journal*, that its peculiarities are owing to the chemical and mechanical influence of water in which it is deposited. Cannel-coals are characterized by greater homogeneity than other bituminous coals, as to their physical structure and chemical composition having a more laminated fracture, in pure specimens conchoidal across the planes of stratification. They contain more earthy and more volatile matter, less carbon, and evolve gases having a higher illuminating power.

"Cannel-coals are frequently found shading into bituminous shale, into which they are converted by accessions of earthy matter. Bituminous shale and cannel-coal may, therefore, be considered as the same substance in different degrees of purity, that is, carbonaceous paste deposited from aqueous suspension with different admixtures of earthy matter.

"Plants, when deprived of their vegetable life and exposed to the action of the air, are decomposed by a process of decay which is really a slow combustion unattended by the sensible phenomena of light and heat. Under water, the process goes on more slowly; and the more perfectly the oxygen of the air is excluded, the larger the proportion of the volatile constituents of the wood will be retained. Thin layers of cannel, alternating with others of bituminous coal, are due to the variable quantity of water, overflowing, and saturating the marshes, the cannel layers being deposited during the prevalence of high water."

Harger leaves with his reader the impression that, after all, the formation of not only cannel coal, but likewise bituminous, is far from being satisfactorily accounted for:

"The cannels differ so remarkably from bituminous (or humic) coals that it is supposed they were formed under very different conditions, namely, in inland lakes. Fish teeth and scales are sometimes found embedded in the upper portions of the seams. The fact that cannel is found in actual contact with humic coal, in some seams, adds a further difficulty to the problem of the origin of coal."

EROSION

So plentiful are the coal deposits of the United States that the resources of a state are mentioned by the billions of tons. With these vast quantities remaining, it is hopeless to conceive the original size of our coal areas, when one considers that erosion has removed as much as 95 per cent of our anthracite field alone. Le Conte assures us that most of the original deposits in Illinois have been swept away:

"Coal strata, like all other sedimentary deposits, were at the time of formation horizontal, or nearly so. Sometimes they are found nearly in this their original position, as in many of the coal fields of our own country. More generally this original horizontality has been disturbed by igneous agency, and the coal strata are found in the form of basins. Sometimes the strata are so folded as to give rise to series of basins belonging to the same original field. Whether, however, the strata retain their original horizontality, or are thrown into basins by igneous agency, seldom or never do we find the whole of the original mass deposited. A large portion has been carried away by aqueous agency. From this cause a large coal field, covering many thousands of square miles, may exist only in the form of isolated mountains or detached basins of coal strata. Thus, for instance, nearly the whole of Illinois was originally occupied by a vast coal field, but little disturbed by igneous agency, but by far the large portion of the coal strata of this immense field was carried away by denuding agencies."

Macfarlane and Lesley:

"The fragmentary character of the coal fields is evidently caused by convulsions which took place long subsequent to the formation of the whole of the coal-measures, and we now possess, or at least have only discovered some of the broken parts of a vastly greater field which once existed on this continent. Deep valleys have been formed, cutting down through the coal-regions, leaving sometimes only small patches of coal on the tops of the highest mountains, and extensive countries often lie between, where thousands of feet in thickness of the upper formations, including the coal, have been removed by some mighty agency exposing the Devonian and Silurian rocks on the surface. 'In imagination we can restore those gigantic arches which once carried the same coal-beds high through the air from one mountain across to another many miles apart, and which are now destroyed and buried up, constituting new sand, gravel, and rock deposits in the Atlantic.'—Lesley."

CORRELATION OF COAL SEAMS

The correlation of coal seams is referred to so frequently in treating the geology of the various mining states that an explanation on some of the methods used by the geologist in fixing horizons will be of interest. We quote from Bulletin No. 10 of the Illinois Coal Mining Investigation:

"The correlation of strata from place to place where the outcrops are discontinuous is accomplished by two methods. Of these two the paleontological method is the most convincing. The dis-

covery that a certain fossil or association of fossils is characteristic of a certain bed makes it possible to identify the same bed elsewhere. The presence of a certain species of *Fusulina* in the limestone over coal No. 6, but not found in limestones associated with other coal beds, definitely identifies No. 6. The shale overlying coal No. 2 carries certain fossil plants which identify this horizon from Murphysboro to the La Salle region.*

"Unfortunately our present knowledge of the 'Coal Measures' does not warrant many such definite correlations, so that for the most part we are limited to the second method of correlation, or the comparison of the physical characteristics of the coal and associated strata, to identify the coals in the different fields. Similarity of interval between coal beds is an aid to correlation. Because of the relative uniformity in dip of the Illinois 'Coal Measures' over large areas, identification of strata can commonly be made with reasonable correctness on the basis of similarity in elevation and thickness when points of observation are not separated by more than two or three miles. The greater the number of drillings the greater the safety in this method.

"Fire clays are normally associated with the coal beds, and in a carefully kept log may serve to identify the horizon of a coal, although the bed itself has been removed by erosion. These underclays in connection with the limestones mentioned above afford good key horizons for the correlations of the coals."

From the description of the lignite beds of Montana in Contributions to Economic Geology . . .

1908, we find an additional aid to correlation of seams:

"A feature of the region, especially noticeable south of Missouri River, is the clinker produced by the burning of lignite beds along their outcrops. This material, which is usually red, is an unfailing index to the position of the bed burned. It would, in many localities, be extremely difficult to meander outcrops of beds without the clinker as a guide. To some extent also the persistence and thickness of the clinker give some idea of the persistence, quality, and thickness of the burnt bed, as thick beds of good quality produce thin or impure beds. The distance back from the outcrop of a bed to which burning may take place is governed by the thickness of cover, which, if great enough, smothers the fire by preventing access of air. In this connection it is impossible to give exact figures, as no mining or prospecting has been done where it was necessary to remove the clinker to reach the lignite. To the observer, however, the width of the clinkered zone is often an obvious matter. In prospecting for lignite on an outcrop that has been burned it may be well to keep in mind the fact that the base of the clinker, which is usually well marked, is on a level with the base of the burnt bed of lignite."

The correlation of coal seams by means of examining the structure and composition of thin-ground sections under the microscope has lately been given much prominence and appears to offer the most successful and satisfactory method.†

*David White, Bulletin No. 14 Illinois Geological Survey.

†See Bulletin 117, Bureau of Mines, Structure in Paleozoic Bituminous Coals, by Reinhardt Thiessen.



EXPLANATION OF GEOLOGICAL AND MINING TERMS

In a study of the geology of any region, many terms and phrases are encountered by the lay reader, who, if unfamiliar with the terminology of the subject, finds much of the descriptive matter unintelligible. To assist the reader of the COAL CATALOG in a clearer understanding of the geology of the various mining states, as presented herein, there is here given several illustrations and definitions covering some of the terms that are commonly used in describing coal seams, with explanations to same, these being selected with a view to setting forth the phenomena of common occurrence throughout the various fields.

Unevenness of Bottom; Horse Backs—The floor of a coal seam is never a smooth surface, such as the floor of a house, but consists rather of a series of undulations of more or less vertical and horizontal extent. In some coal fields the floor is very uneven, as shown in Figure 1, undulations of an amplitude of as much as 40 feet being encountered, while in other localities the absence of noticeable

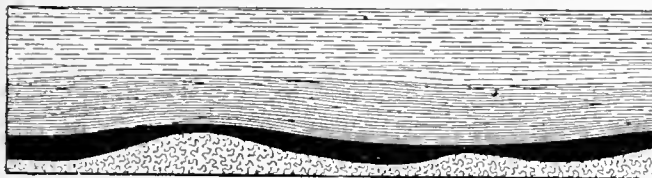


Fig. 1. Uneven character of surface upon which coal was deposited.*

irregularities is quite pronounced. The evenness of the floor underlying a seam as extensive as the Pittsburgh coal is, in fact, one of the astounding features connected with its geology.

While, ordinarily, undulations are so slight as to cause little or no inconvenience in mining the coal, occasionally these rise so high into the top of the bed as to constitute what is known to the miners as a "horseback." See Figure 2. Wherever present,

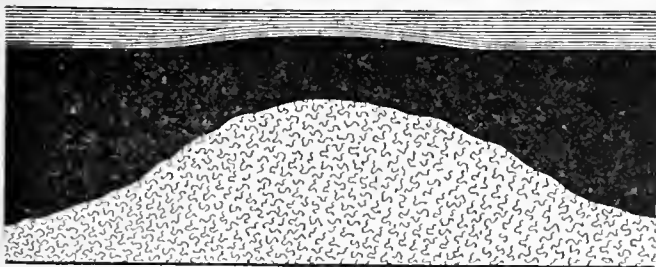


Fig. 2. "Horseback" in coal seam.*

these introduce a difficulty in undercutting the coal, in blasting, and in making a clean separation of the clay rock from the coal before loading into the mine wagons.

Conformable and Unconformable Strata—When strata have been so laid down that the series is parallel, or else if effected by movements, there will be found a similar deformation to each stratum, the formation is said to be conformable and the structure is called conformity; but if two series, each made up of a number of conformable

beds, are discontinuous, that is, where one seam, the upper, is not conformable with the lower, but rests upon its upturned edges or its eroded surface,

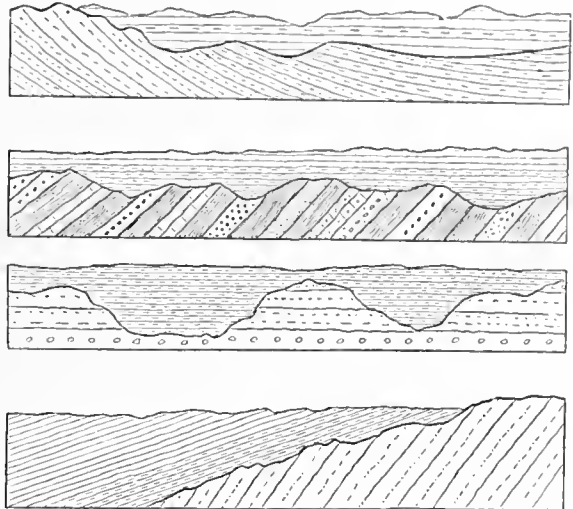


Fig. 3. Some cases of unconformity (Compend of Geology, Le Conte).†

then it is said to be unconformable and the structure is named unconformity. Figure 3 illustrates four cases of unconformity of strata.

Pinch—A local disturbance in the thickness of the coal seam and known as a "pinch" is illustrated by Figure 4. Here the bottom and top of the seam

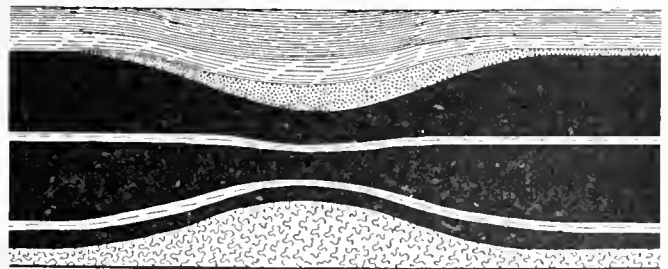


Fig. 4. Pinch in coal bed.*

are shown swung out of position, often making it necessary to remove both in the normal process of mining.

Clay Veins—These are of frequent occurrences in coal seams. Some beds are so thickly infested

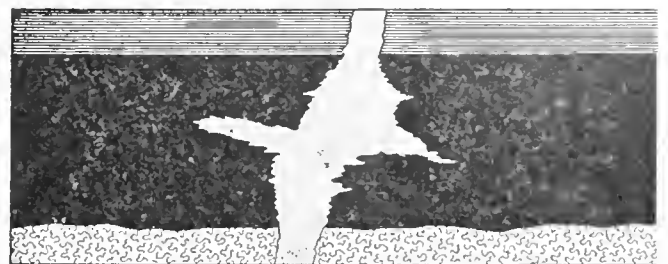


Fig. 5. Clay vein in coal seam.*

*Figures 1, 2, 4, 5, 6, 8, 13 and 14 of this article are from Vol. 19 Iowa Geological Survey.

†Figures 3 and 15 of this article are from A Compend of Geology by Le Conte.

with them as to greatly lessen the value of the coal. It is believed that they are caused by the pressure of the overlying burden forcing the soft clay underlying the coal into fissures extending from the coal seam to the strata above, these breaks having been produced by more or less violent movement of the earth or else by contraction of the earth's crust.

Faults—A fault is a break of the earth's strata, one part of the dismembered section being thrust past the other along the line of fracture. Such occurrences are fairly common and in regions which show evidence of much disturbance they are so frequently encountered, and the throw of the measures

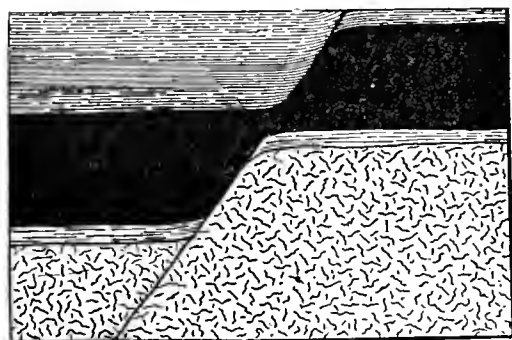


Fig. 6. Fault of small displacement.*

is so great, that it constitutes a serious obstacle to mining. Lesley mentions a fissure in Pennsylvania in which the vertical displacement is 20,000 feet and may be traced for 20 miles. Rogers describes one in southern Virginia in which the displacement is 8,000 feet and may be traced for 80 miles.

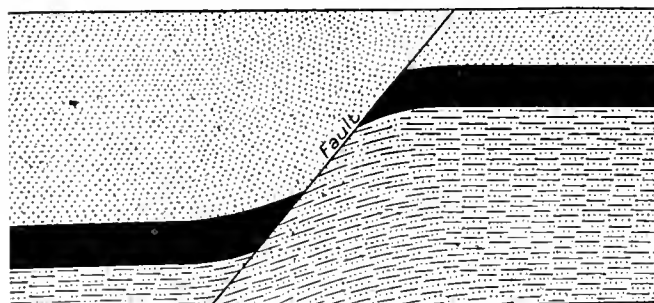


Fig. 7. Fault showing complete severance of seam.

The faults in the Appalachian basins are seldom troublesome, the dislocation of strata in nearly every case being small, as shown in Figure 6. The fault shown in Figure 7 has completely severed the seam.

Faults of Erosion, Wants, Cutouts—The miner commonly applies the term "fault" to all disturbances which have placed a barrier of rock at the horizon of the coal, whether or not there has been a fracture and consequent displacement of the strata. Where there has been no displacement of the strata and the coal is found at the same level on both sides of the intruding rock, the proper name becomes rather "fault of erosion," "want," or "cut-

out." The manner of such an occurrence may be attributed to the erosion of streams of water which



Fig. 8. The occurrence of a want in a coal seam.*

have had access to the Carboniferous peat beds. Later in the process of covering, this eroded channel became filled with sand or mud which, on the application of pressure, was subsequently consolidated into sandstone or shale.

Folding—When strata are forced out of their original horizontal position and thrown into more or less curved forms, they are said to be "folded." Folds may be divided into two principal types, called respectively synclines and anticlines. An anticline is an upward fold or arch of strata from the summit of which the limbs on both sides dip downward. The amount of dip may vary from a few to many degrees. The line along which the fold is prolonged is called the anticlinal axis. An anticline may be

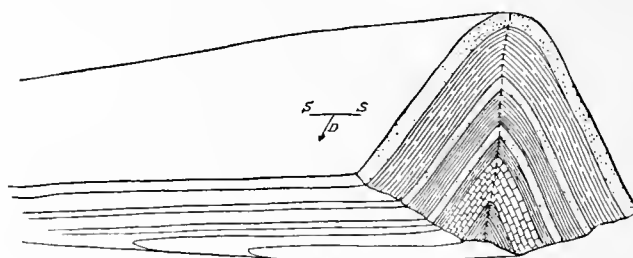


Fig. 9. Anticlinal fold (Willis).‡

scores of miles in length or possibly only a few hundred feet. The axis is not horizontal, but is more or less heavily inclined and in the course of travel, the fold disappears. In Figure 9, SS is the line of stripe, D is the line of dip, and the dotted line is the plane of the axis.

A syncline is the complement of the anticline. Here the measures dip on both sides of the trough towards its lowest point. The synclinal axis is the line of lowest depression in the trough. As with

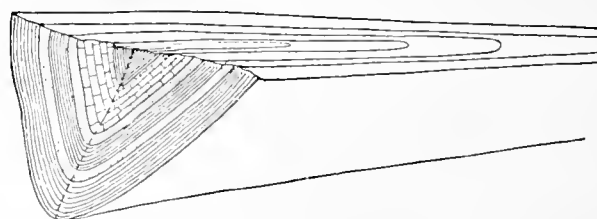


Fig. 10. Synclinal fold (Willis).‡

the anticline, the length of the syncline may be long or short and its shape ranging from the canoe-shaped valley to the saucer-shaped basin in which

‡Figures 9, 10 and 11 of this article are from *An Introduction to Geology*, by W. E. Scott.

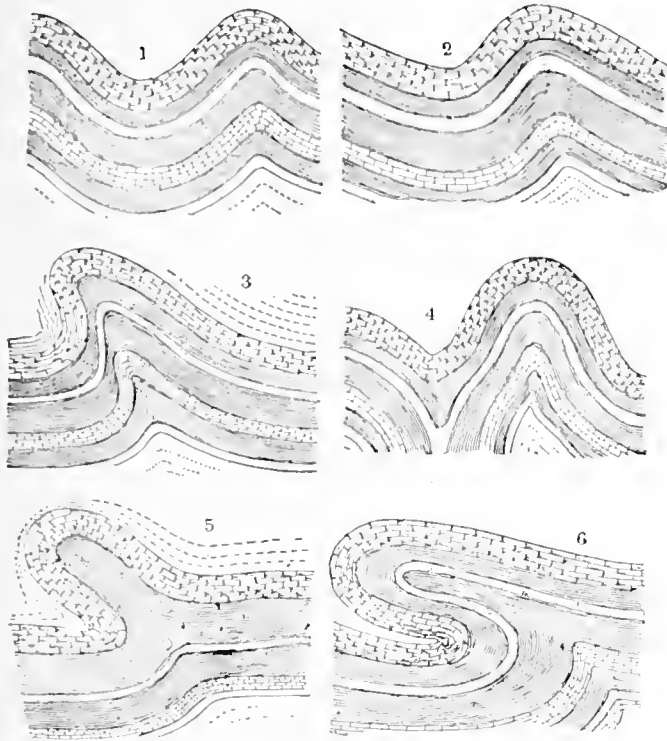


Fig. 11. Diagram of folds (Willis).†

1. Upright or symmetrical open folds.
2. Asymmetrical fold, open.
3. Asymmetrical fold, closed and overturned.
4. Symmetrical fold, closed.
5. Closed anticline, overturned.
6. Closed anticline, recumbent.

every section is synclinal. Figure 11 shows several examples of the manner in which folds may occur.

A fold frequently noted in the study of earth formation, particularly in the geology of the western states, is the monoclinial fold shown in



Fig. 12. Monoclinial fold.

Figure 12. This may be defined as a single, sharp bend which forms the connection of a continuous strata lying at different levels.

Erosion—The manner in which part of a coal seam may have been eroded has already been referred to in the explanation of the occurrence of "wants." A second type of erosion is the result of

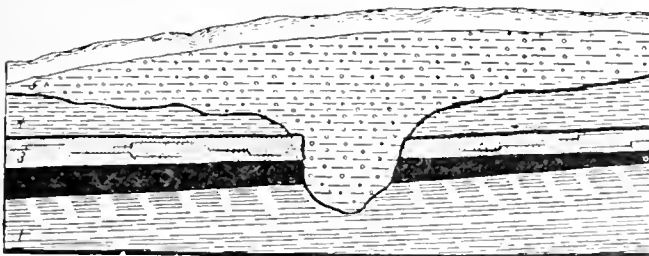


Fig. 13. Preglacial erosion: Drift occupying small gorge.*

stream action during any period which existed between the last emergence of the coal measures from the sea and the coming of glacial ice from the North. Such an erosion is shown in Figure 13, the

particular glacial channel having been filled with loose unconsolidated material during the icy period and then continuing in this state or being transformed into solid rock by the application of pressure from above.

An additional type of channel is the work of modern streams coming since glacial time. It gives rise to a form of erosion which is so easily

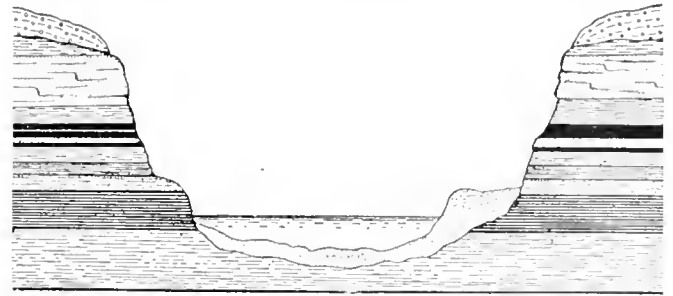


Fig. 14. Postglacial erosion: Gorge of Des Moines River at Des Moines, Iowa.

discernible in all of our coal fields. While it is true that the rivers have, in this manner, washed much of our original deposits from their original location into the sea, they have nevertheless been of some service in laying open a few of the coal beds which now outcrop along their sides.

The great extent is strikingly shown in Figure 15, where by means of the dotted lines we observe

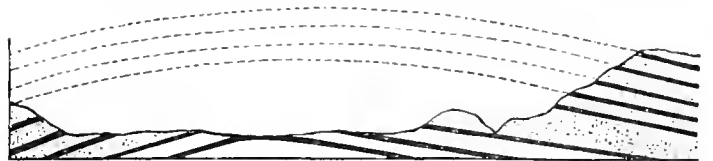


Fig. 15. Section across Middle Tennessee, showing erosion. (Compend of Geology, Le Conte.)†

the arch of a great anticline, most of which, however, has been denuded by the erosive action of streams. It is erosion on the large scale implied by this illustration that has removed over 90 per cent of the original deposit of anthracite coal and over 50 per cent of the bituminous coals of Illinois.

Intrusions of Volcanic Rock—The formation of anthracite coal is generally accepted as the result of metamorphism, the alteration in composition being due to the devolatilizing effects of the heat produced by flexing of the strata. Anthracite coal in New Mexico and Washington has been accounted for by intrusions of volcanic rock, the heat from

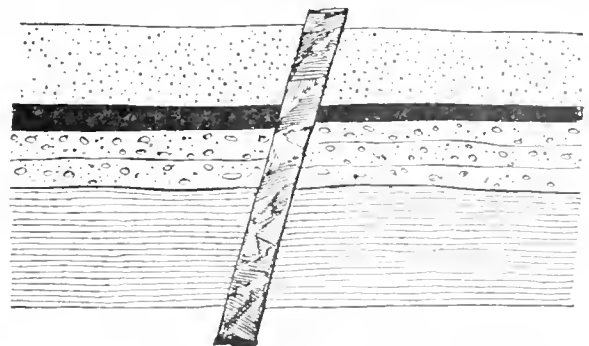


Fig. 16. Igneous intrusion through a coal seam.

which has driven off the volatile matter of the coal. Such occurrences as these are fortunately rather infrequent, though they are found in the Deep River fields of North Carolina, in Virginia, and the coal fields of New Mexico and Washington.

Split Seams—Sometimes a wedge-shaped layer of rock of varying thickness occurs interstratified in the seam as shown in Figure 17. Where the rock is thin both the upper and lower members may be worked together, though always at a considerable increase in mining cost. If the thickness of the

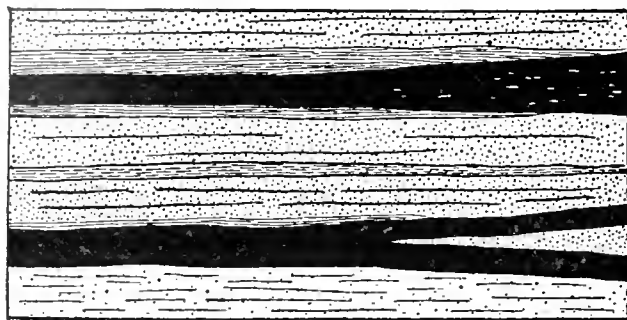


Fig. 17. Splint in seam.

rock prohibits operating both benches, the bench having the greatest quantity of coal is generally selected. Disturbances such as these are oftentimes encountered in the Beckley seam of West Virginia, the divider varying from as little as one inch in some places to as much as 120 feet in others.

Band—A thin stratum of shale, slate or other refuse interbedded with the coal.

Bed—Synonymous with Seam.

Bench—(1) When a seam of coal is made up of two or more strata of coal, as is usually the case, each layer constitutes a bench of the seam. The separating material is commonly a band of shale or other impurity. (2) A natural terrace marking the outcrop of any stratum.

Bone, Bony or Bony Coal—This refers to that part of a seam in which the coal is highly charged with ash. In contrast with good coal it has a dull appearance, often resembling cannel coal, from which it may be distinguished by the difficulty in igniting.

Cleats—The vertical cleavage planes in the coal seam are known as the cleats of the coal. Where cleavage is found in coals there are two cleats, known as the face and the butt, and placed at right angles to each other. The face cleat may be distinguished from the butt cleat by its better cleavage planes, the butt cleat being more or less irregular in fracture. Anthracite coal has no cleats and instead, is distinguished by a general conchoidal fracture. The absence of cleats extends to other coals, such as for instance that from the Big Vein of the Georges Creek district of Maryland and from a few localities in Tennessee where the coals are characterized by the absence of vertical planes.

Coal Basin—When seams dip from all directions toward a common center it forms a basin-shaped depression, or a geological basin. It may also be defined as the lowest part of a folded coal seam, that is, that part in the syncline.

Crop Coal—This term applies to the coal which lies along the line of outcrop. It is usually stained

yellow by infiltrating earth and is, therefore, higher in ash and lower in commercial value than coal from the interior of the seam.

Dikes—See Intrusions of Volcanic Rock.

Iron Pyrites—A brass-yellow colored mineral found in coal seams. Though consisting nearly one-half of iron, it is of no value as an iron ore, but is employed for making sulphur and sulphuric acid. From the Fairmont district of West Virginia, Danville district of Illinois, the eastern Ohio district of Ohio, and Cascade county, Montana, it is being shipped to acid manufactories as a by-product of the coal seam.

Marcasite—A mineral having the same chemical composition as pyrite and likewise found in coal seams. It differs from pyrite chiefly in crystallization, color and specific gravity.

Mineral Charcoal—See Mother Coal.

Mother Coal—A soft black substance resembling charcoal in appearance and found along the planes of stratification in the seam, in which the woody character of the material from which the coal has been formed is almost perfectly preserved. Also called fossil charcoal and mineral charcoal.

Parting—Same as Band. Sometimes applied to a thin band of stone in the seam of coal and termed a "dirt parting."

Rash—A soft scaly slate or earth beneath or above the coal seam, often containing much carbonaceous matter.

Roll—An inequality in the roof or floor of a mine.

Rooster Coal—A term used in the Pittsburgh district of Pennsylvania to distinguish the seam of coal lying just above the Pittsburg bed and separated from it by a stratum of rock.

Sag—A depression in the coal seam or mountain range.

Seam—Having reference to a stratum laid down in water. All coal deposits are therefore seams by definition.

Sulphur—The name commonly given by miners to the nodular concretions of iron pyrites found in coal seams.

Throw—A geological fault or displacement of the rock.

Trough—The bottom of a syncline.

Vein—A term often incorrectly applied to deposits of coal. A vein has reference to the filling of a fissure or crack by slow deposits from solution in percolating waters of material leached from the surrounding or underlying rocks.

Divisions of Coal Areas of the United States, Geographical Positions of Provinces, Regions and Fields

As a matter of convenience in considering geologic age, structure, quality of coal and transportation, the United States Geological Survey has divided the coal areas of the country into six large units called "provinces." These are shown by the map on the preceding page, as follows: the Eastern province, Interior province, Gulf province, Northern Great Plains province, Rocky Mountain province, and Pacific Coast province. A sub-division of the province is known as a "region", and the region, in turn, may be made up of smaller units, known as "fields". Some provinces contain all ranks of coal, and the fields are grouped together because of their geographic position, their structural features, or the age of the coal beds.

1. The Eastern province includes all the bituminous and semibituminous coals of the Appalachian region; the Atlantic Coast region, which includes the Triassic fields, near Richmond, and the Deep and Dan Rivers fields in North Carolina; also the anthracite regions of Pennsylvania and Rhode Island. This province contains probably nine-tenths of the high-rank coal of the country.

2. The Interior province includes all the bituminous areas of the Mississippi Valley region and the coal fields of Texas and Michigan. This province is subdivided into the Eastern, Western, Southwestern and Northern regions. The Eastern region embraces the coal fields of Illinois, Indiana and Western Kentucky. The Western region embraces the coal fields of Iowa, Missouri, Kansas, Arkansas and Oklahoma. The Southwestern region embraces the coal fields of Texas, and the Northern region includes the coal fields of Michigan. With one exception, that of Arkansas and Oklahoma, the coals are of low rank, for little

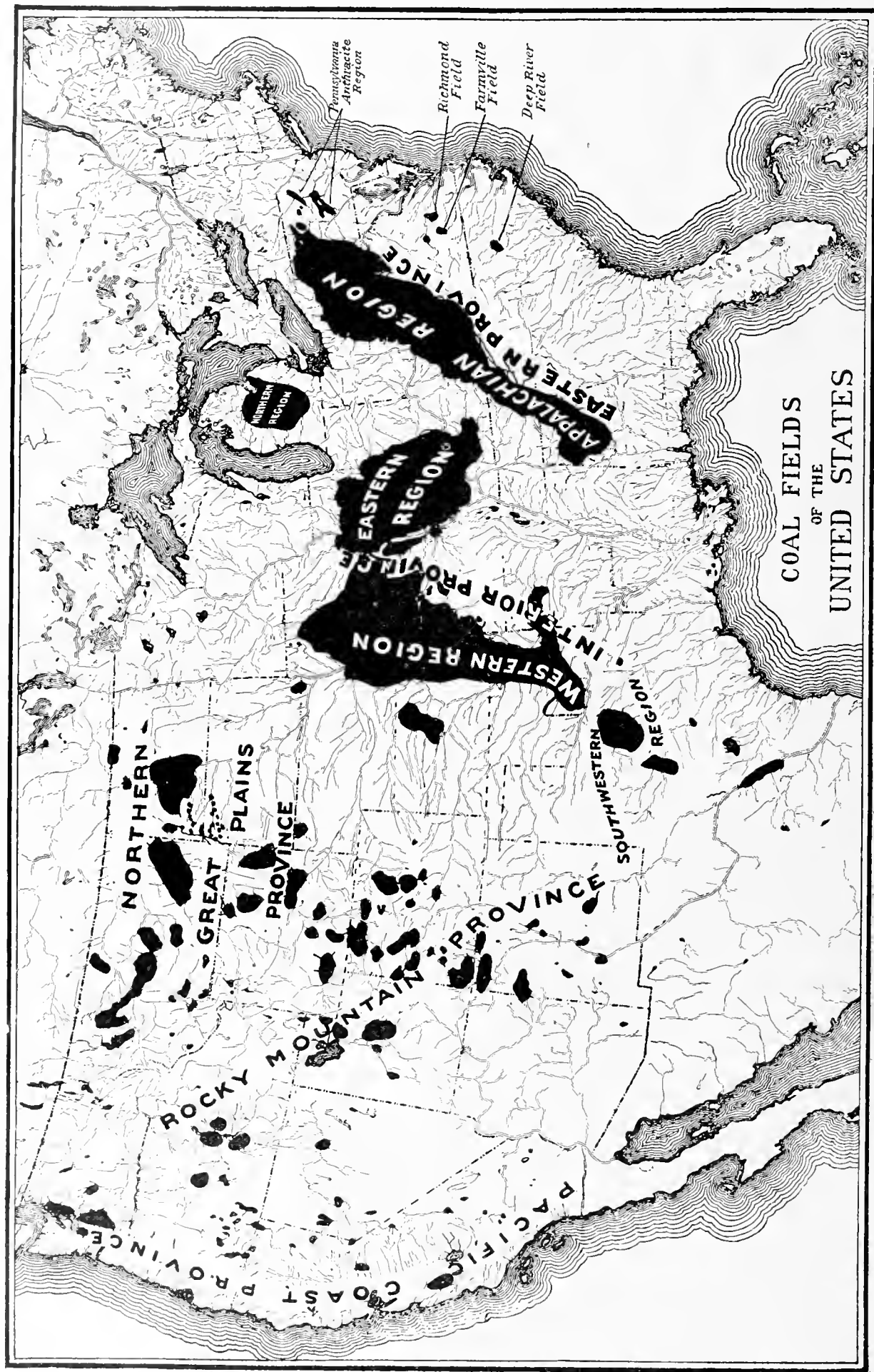
pressure has been exerted upon them. As a whole the coals are not equal in quality to those of the Eastern province.

3. The Gulf province includes the lignite fields of Alabama, Mississippi, Louisiana, Arkansas and Texas. The Gulf province is at present of slight commercial importance, mining being done at only a few points in Texas.

4. The Northern Great Plains province includes all the coal fields in the Great Plains east of the Front Range of the Rocky Mountains. Embraced in this province are the lignite areas of North and South Dakota, and the bituminous and subbituminous fields of Northeastern Wyoming and Northern and Eastern Montana. In this province the rocks generally lie flat or are but little disturbed, and in consequence the coals are of low rank, being either lignite or subbituminous, except in a few of the basins near the mountains, where the forces that caused the upheaval have locally changed the coal to higher rank.

5. The Rocky Mountain province includes the coal fields of the mountainous districts of Montana and Wyoming, and all of the coal fields of Utah, Colorado and New Mexico. This province contains a greater variety of coal than any other province in the United States. The coal-bearing formations are of Cretaceous and Tertiary age.

6. The Pacific Coast province is limited largely to the state of Washington, but includes also the small fields within the borders of California and Oregon. The coals of Washington are of bituminous and subbituminous rank, with a few localities containing anthracite coals. In California and Oregon the coal is of low rank and poor quality, and but little mining has been attempted.



From 23d Annual Report, Dept. of Geology and Natural Resources, Indiana, 1898.

PREPARATION OF COAL

The Factors Which Led to the Present Practice of Cleaning and Sizing Coal; Anthracite and Bituminous Preparation; Kinds of Equipment Used.

Factors Which Brought About Preparation

The separation of refuse from coal and the division of the valuable portion into various sizes originated in England and was first introduced into American mining practice in the anthracite regions of Pennsylvania. Here coal as mined is naturally dirty. Some of the seams are thin, making it necessary to brush the roof or take up bottom, either of which insures that much of the rock material is mixed with the coal in loading. In many localities the seams are pitching and this entails the handling of considerable rock with the coal. A further source of impurities is owing to the natural wetness of anthracite mines, the flow of water washing dirt into the coal when shot down.

It was early to be seen that the product as it came from the mines would not be acceptable to the trade and breakers came into use, wherein the impurities are removed, and the coal graded into its several sizes for shipment.

The second coal producing section, obliged to undertake the preparation of coal, embraced the states of Indiana and Illinois. Here a considerable output came from seams lying under so shallow a cover that percolating waters charged with earthy matter filtered through the seam, and greatly increased the percentage of ash. To compete with the coals shipped in from more favored localities a system of preparation was established, and the coal graded into lump, egg and nut sizes.

It will be observed that preparation and sizing were virtually forced upon the two sections named, owing to natural disadvantages in the seams mined. Sales agencies handling these coals made, as it were, a virtue out of the necessity and were quick to advertise them as specially prepared, and furthermore to emphasize at every opportunity the great bearing which sizing of coal has upon fuel economy.

Trade names were given coals from certain districts, or from certain mines within a district, many of them suggestive of the natural purity of the fuel, or the care taken in preparation to make it clean. The publicity given such fuels redounded to their benefit as the trade came to appreciate more and more those coals which professedly catered to a fine domestic and steam trade.

A survey of the coal fields of central and western Pennsylvania, as well as the Fairmont, Kanawha, New River and Pocahontas districts of West Virginia, made in the early years of their history, would show very little of real preparation and sizing. Much of the coal entered the market as mined, i. e., as run-of-mine, and, even though

heavily charged with fine coal, the high volatile content, as compared with anthracite, permitted it to be readily burned. In the course of time slack was regarded by the trade as objectionable, and at a large number of mines was eliminated at the working face by using a tined fork for loading the coal instead of a shovel. The slack remaining was cast aside into the gob and lost. Where it could be sold—often for as low as 10 cents per ton—the slack was loaded along with the lumpy coal and then separated at the tippie by running the contents of each car over a bar screen, often crudely improvised. At many mines where coke was made the slack was charged into the ovens.

Four factors, at first, served to stimulate a general improvement over this primitive fashion; first, the increasing acceptance by the trade of the statement that prepared sizes of coal are the more economically burned; second, the desire to compete successfully with the well-prepared coals from other sections; third, the rapid growth of the cement industry in America, requiring large quantities of slack coal for the burning of the clinker; and fourth, the increasing number of stoker installations using slack coal. A gradual transition was taking place to meet these changing conditions, so that in due course of time practically every mine of any importance was provided with a tippie from which could be loaded coal in sizes such as run-of-mine, 1¼" lump, ¾" lump, nut and slack. Little attention was given to the elimination of refuse, for the reason that most seams mined cleanly and the increased ash due to rock was small.

The long-discussed possibilities of foreign business in coal became a reality with the dawn of the late war, and gave rise to the fifth reason for a most careful cleaning and sizing of output. Along with the natural desire to excel in the quality of fuel was the knowledge that most of the export business demanded uniform sizing, and to the combination of these causes can be ascribed the installations of shaker screens, picking tables, loading booms, etc., whereby the integrity of the product can be the better maintained.

In the Western states a great many shipments of coal are made in box cars, one of the underlying advantages being the protection afforded from the weather. Box cars, as well as open cars, are used for transporting all sizes, these ranging from the largest size lump to egg, nut, slack, dust or any reasonable combination of these sizes. Loading into open cars is done with the customary boom, while for box car loading the coal is brought by a chute to a specially designed machine which loads the coal evenly from the ends to center of car. Washing is not much resorted to for eliminating waste in Western coals, the picking table having been found more satisfactory.

Preparation of Anthracite Coal

The structure in which anthracite coal is prepared for market is known as a breaker. This term is in reality a misnomer, for while it is true that breakers have crushers or coal breakers as a part of their equipment, it is worthy of note that all efforts in the design and operation of breaker machinery are directed against unnecessary breakage of the coal into sizes smaller than chestnut and egg.

A wonderful change has taken place in breaker construction during the past ten to twenty years. The breaker, as found at the beginning of the present century, was an all-wood structure, black and forbidding in outward appearance, extremely dusty on the inside, and poorly ventilated, heated and lighted. Much of the work of sorting slate from coal was done by hand, boys being employed in large numbers, whose duty it was to pick out rock, bone and slate as the coal traveled past them in chutes leading toward the pockets or storage bins. Due to inefficient methods, much of the coal mined in past years went to the rock pile or culm bank, some of which is being recovered in present years with the help of washeries.

Wood breakers usually end with a common fate—destruction by fire. Replacing them we find a breaker modern in every respect, permanently constructed of steel and concrete, and standing as a testimonial to the combined skill of the mechanical, electrical and mining engineer. In its external design will be found provision for beauty and symmetry of appearance, and internally there is evidence of thought for the health, safety and comfort of employes. As illustrating what constitutes a modern plant for anthracite preparation, the fol-

lowing excerpt from a recent description of the Woodward breaker, shown in Figure 1, is given:*

"Steel, glass and concrete are the materials which make up the present breaker, which is of large dimensions. The building is 213 ft. long, one half of it being 65 ft. and the other half 107 ft. wide. It rises 100 ft. above the ground at its upper end and 145 ft. at its lower end. In its construction were employed 3,000 tons of structural steel, 26,000 panes of double-thick ribbed wire glass as well as several hundred bags of cement, this material being used in the roof as well as in the floors and foundations. As the side walls of the buildings are practically all glass, it is almost as light inside the breaker as it is out of doors.

"During construction the interior of this building appeared like a network of steel beams, girders and columns. It began to take shape, however, with the laying of floors, the building of chute frames and the construction of eighteen large pockets to hold the prepared product. In this work 1,500,000 ft. of 2- and 3-in. yellow pine planking and ceiling was employed. The chute linings required 375,000 lb. of sheet steel. Along the interior sides and ends of the structure are 41,000 ft. of various sizes of wrought pipe, forming a steam-heating system that effectively warms every nook and corner of the building. This insures the safety of the equipment during freezing weather as well as provides for the bodily comfort of the employees during the cold season.

"All the machinery in this building is electrically operated, thirty-two motors being employed

*Dever C. Ashmead in *Coal Age*, Vol. 19, No. 19.

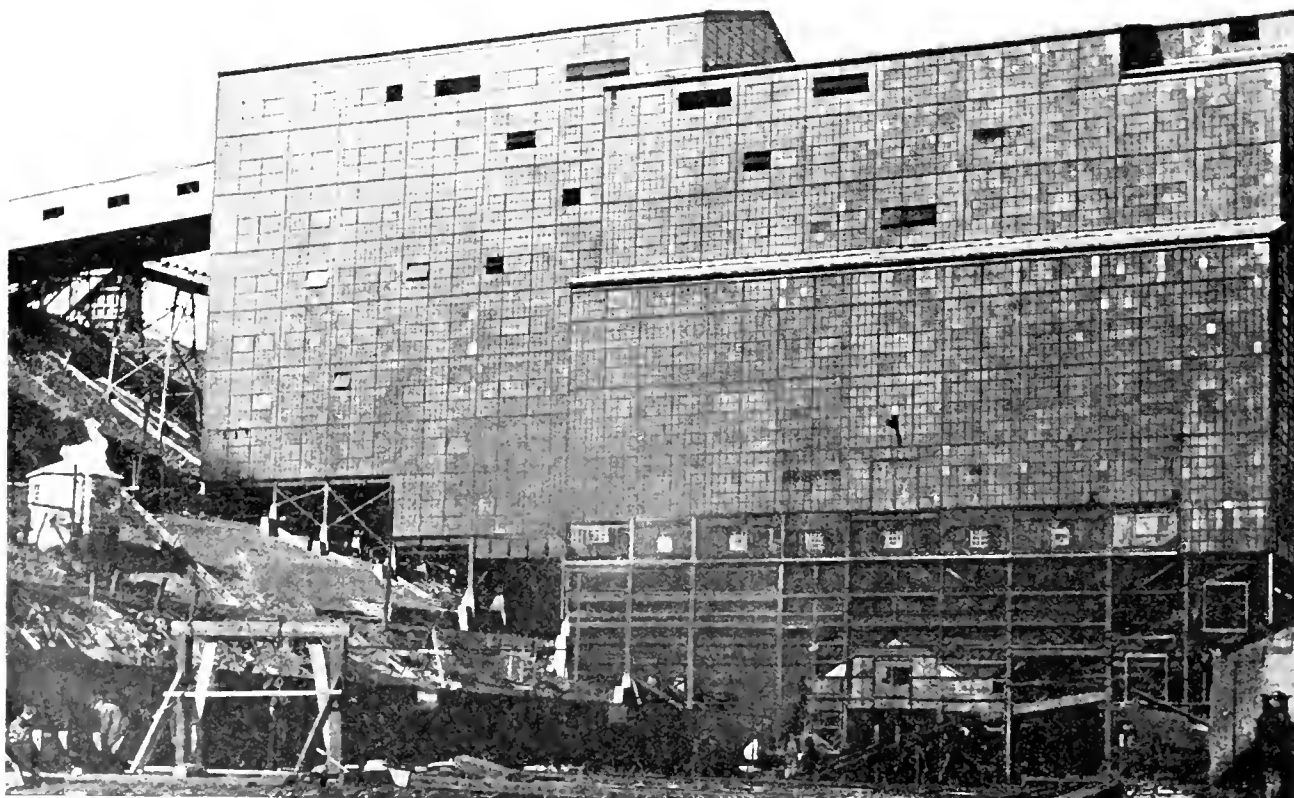


Fig. 1. Million Dollar Breaker of Delaware, Lackawanna & Western Railroad (Coal Department) at Edwarsville, Pa.

for this purpose. Each motor is provided with its own starting box and controller. A central switch-board is installed from which the entire operation of the breaker can be controlled. Fifteen thousand linear feet of conduit pipe was necessary for the wiring. The total installed power of the motors, which were all furnished by the General Electric Company, is 2,185 H. P."

This breaker, which employs the wet process of preparation, has a capacity of 6,500 tons of coal in eight hours. By its construction and the simplification of the methods of coal treatment, a saving has been effected amounting to the services of sixty-three men. The cost of the breaker was \$1,080,000.

The Three Methods of Anthracite Preparation

Dependent upon the nature of the seam and quality of coal mined, there are found in anthracite practice three methods of preparation, as follows: Dry Preparation, Dry and Wet Preparation, Wet Preparation.

Dry preparation is in use in those fields where the seam mined approaches a horizontal position, permitting a first separation by hand of impurities when shoveling the coal into the mine wagon; where the seam is dry; where the seam is practically free from impurities or where the benches of slate cleave free from the coal; where the run-of-mine contains generally not over 7 to 8 per cent of rock or slate which may be removed by hand picking or by dry mechanical separators. This system has the advantage of low cost in initial investment, operation and maintenance. Moreover, shipments of dry coal are preferable to the trade on account of the small percentage of impurities and the elimination of the possibility of freezing and the consequent trouble in unloading.

An objection to the dry process lies in the amount of dust given off in the breaker. In some cases where the coal and slate are very dry, the dust cloud is so thick and constant as to make it difficult to see, and is a detriment to the health of the employees.

Dry and wet preparation is practiced when the run-of-mine contains a high percentage of impurities, including rock, bone and slate. This may run as high as 55 per cent, but the run-of-mine must contain large lumps of pure coal, which can be handled as a separate product using the dry process. The smaller pieces are sized and cleaned with water to improve their appearance, the impurities being removed by jigging. Breakers designed for both processes retain all the advantages accruing to the dry process, but are higher in initial cost and more expensive for operation and maintenance than either wet or dry installations.

Wet preparation is adopted when the run-of-mine is high in impurities, such as results when the seams are highly inclined and the coal loaded from batteries with no opportunity for a preliminary sorting of impurities in the mine, or when the coal

shows a discoloration, as is the case when mined near the outcrop, or when the entire product comes from wet and dirty seams. Such coal must be washed to make it bright in appearance and attractive to the trade. Breakers designed for the wet process permit of no dry shipments and are higher in first cost and also more expensive to operate and maintain than a dry preparation plant. An enormous amount of water is required—in itself an item of considerable expense. Of the three processes, only the last named will be here described.

Wet Process

The wet process is found in the Southern Coal Field of Pennsylvania where the seams are highly inclined with the presence of large quantities of rock, often running up to as high as 800 pounds in weight as the coal comes from the mines. There is very little bony coal, so that the problem in preparation is largely the elimination of the rock.

M. A. Walker* has described the methods used in the Panther Creek valley from which the following is extracted: In general the preparation plant consists of two distinct buildings—the head house and the breaker proper. The function of the head house is to remove all the large pieces of rock and as much small rock as possible down to and including that of steamboat coal size; also to render the coal of suitable size and condition for reception into the breaker. The head house product is carried to the breaker, as a rule, by conveyors of either the scraper or carrier type. These are often inclined in order to gain the height at the breaker end, and frequently 250 to 300 feet in length. All jigging, final sizing and picking of the coal is confined to the breaker.

Figure 2 is a diagram showing the run of coal in a scheme of preparation typical of this region. It will be noted that the scheme of preparation in the head house is in general as follows: A disposition of the mine rock is made, when necessary, at the dump by means of a by-pass gate in the bottom of the dump chute. The coal stream from the dump is passed over a shaker or shakers having 6-inch round mesh, and a consequent separation made into two streams, one of lump size, the other of mixed steamboat and smaller sizes. Following first the lump coal stream, it is seen to descend to the picking table, which is about 20 feet long and has a pitch of 2 to 2½ inches in 12 inches. Here all the rock is removed and the cleaned lump coal which passes off is broken down in crushers to steamboat size and smaller. Steamboat size is removed by shakers which have a 4½-inch mesh, and is subsequently rebroken. All of this stream goes to that one of the two conveyors which is devoted to clean coal.

Following next the second stream, which consists of everything passing through the 6-inch mesh of the platform screens, it is found to be led over shakers having a 4½-inch round mesh. The steamboat coal thus made is hand picked, then crushed and taken to the clean-coal conveyor. Everything passing through the mesh of the

*Preparation of Anthracite Coal, Coal Age, Vol. 1, pg. 71.

shakers is led directly to what is known as the "dirty" coal conveyor, to distinguish it from its partner.

There are thus two streams of coal passing up to the head of the breaker; one cleaned, the other not cleaned, and both a mixture of broken and all smaller sizes, except when it is desired to ship steamboat size, which is done by omitting to break down that size in the head house. The clean-coal stream is usually sized over two sets of shaking screens and is passed directly to the pockets with more or less examination in the chutes.

of pure coal can thus be deflected to the pockets. Buckwheat size is jigged in a number of cases, but more often it passes directly from the screens to the pocket, as do also the rice and barley sizes.

Preparation diagrams, typical of the flow of coal in the dry process, and combined dry and wet processes are shown in Figures 3 and 4.

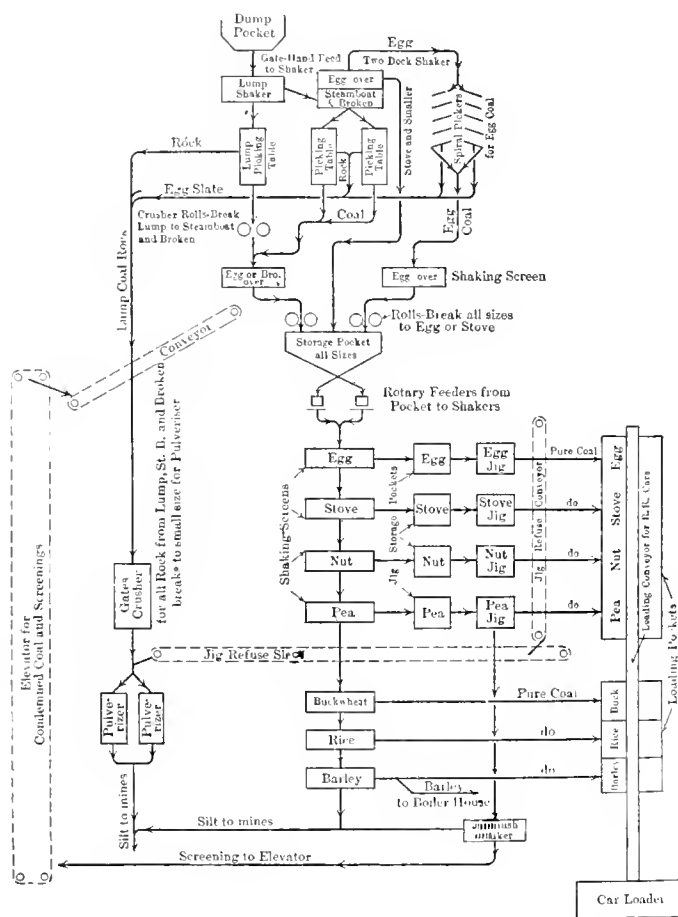


Fig. 2. Diagram showing wet preparation.

The dirty-coal stream is sized over four sets of shakers, or as a rule, double the number used for the clean coal. Broken size from these screens is usually cleaned by spiral pickers or some other mechanical device, supplemented more or less by hand picking. Occasionally it is jigged. Egg, stove, chestnut and pea sizes are usually led directly from the screens to the jigs. It is the practice in some breakers, however, to spiral or otherwise mechanically pick these sizes on the way to the jigs, and it depends a great deal on local conditions whether or not a profitable percentage

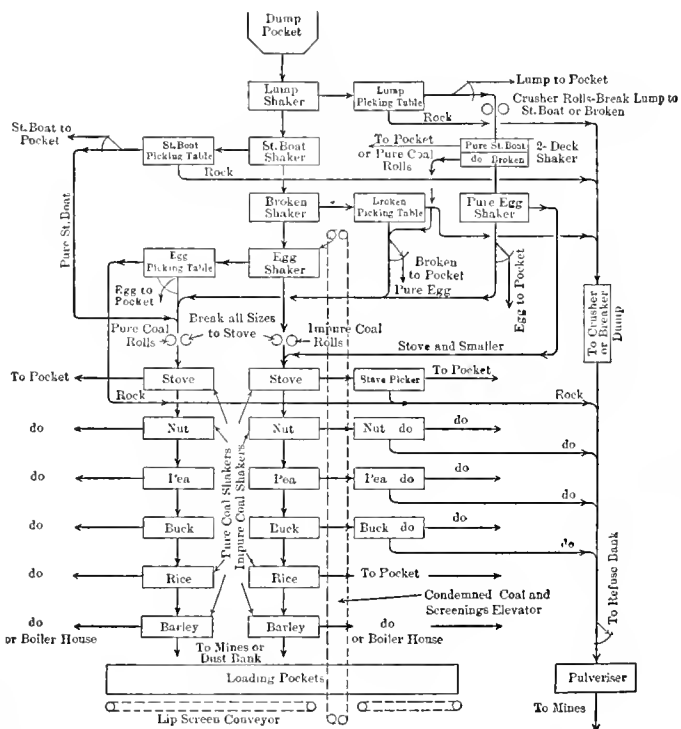


Fig. 3. Preparation diagram, showing typical run of coal during dry preparation.*

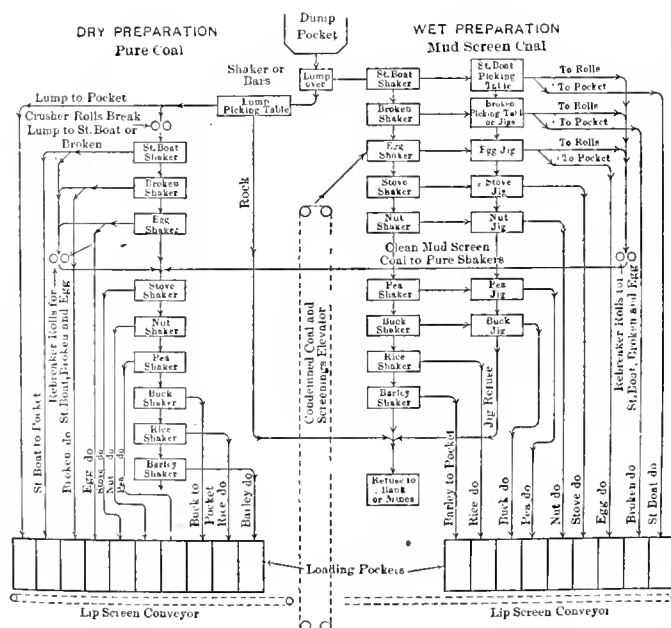


Fig. 4. Preparation diagram, showing typical run of coal during wet and dry preparation.*

*Figures 2, 3 and 4 are from the Preparation of Anthracite by Paul Sterling, Transactions A. I. M. E. Vol. 42.

Standard Sizes of Anthracite; Impurities Permitted

The following dimensions indicate standard meshes, round and square, for screening anthracite coal:

	Through		Over	
	4" square	4 1/2" round	2 3/4" square	3 1/8" round
Grate	2 3/4"	3 1/8"	2 3/4"	3 1/8"
Egg	2 3/4"	3 1/8"	2 3/4"	3 1/8"
Stove	2 3/4"	3 1/8"	2 3/4"	3 1/8"
Nut	1 3/8"	1 7/8"	1 3/8"	1 7/8"
Pea	1 3/8"	1 7/8"	1 3/8"	1 7/8"
Buckwheat	1 3/8"	1 7/8"	1 3/8"	1 7/8"
Rice	1 3/8"	1 7/8"	1 3/8"	1 7/8"
Barley	1 3/8"	1 7/8"	1 3/8"	1 7/8"

The percentages of foreign matter allowed are as follows:

Size	Slate	Bone
Broken (or Grate).....	1 per cent.	2 per cent.
Egg	2 "	3 "
Stove	4 "	5 "
Chestnut*	5 to 7 "	10 "
Pea	8 "	10 "
Buckwheat	10 "	10 "

*An allowance is made on chestnut of from 12 1/2 to 15 per cent. of pea coal.

With regard to the sizing of anthracite during the period of government control, the Fuel Administration set the following standard:

Egg, stove and chestnut coal could contain not over 5 per cent. of the larger sizes.

Chestnut, not more than 10 per cent. of pea or 5 per cent. of buckwheat.

Pea, not more than 15 per cent. of buckwheat and 5 per cent. of rice.

Buckwheat, not more than 15 per cent. of rice.

Influence of Size on Price

Anthracite coal is pre-eminently a domestic coal, and, as such, reaches millions of homes in the United States and Canada. Unlike bituminous coal, which has been lavishly bestowed by Nature throughout all sections of the United States, anthracite deposits are limited to a relatively small portion of Eastern Pennsylvania. Its superiority as a do-

mestic coal is so marked that it has no competition in the New England and Middle Atlantic states. Outside of these groups its monopoly ceases, for, due to high freight rates, more bituminous coal than anthracite is sold for domestic use west of Pittsburgh and south of Washington.

The popular sizes of anthracite for heating are egg, stove and chestnut. Sizes smaller than these, such as buckwheat, rice and barley, amounting to nearly 30 per cent. of the commercial product, are sold as steam coals and must therefore meet competition from bituminous coals in all localities. Since the small sizes of anthracite are inferior to bituminous coal, it follows that they must be priced much lower than the domestic sizes in order to insure disposing of the product. It is for competitive reasons, therefore, that practically each of the ten commercial sizes of anthracite is sold at a different price. These prices are influenced by the demand for each size and by the quantity of each produced. The table below shows the percentage of sizes produced from fresh mined, washery, and combined fresh mined and washery coal.*

PERCENTAGES OF SIZES

Size of Coal	Fresh Mined	Washery	Fresh Mined and Washery
Broken	6.8	0.4	6.2
Egg	14.6	1.2	13.5
Stove	19.6	2.3	18.2
Nut	24.7	10.1	23.5
Pea	9.1	10.0	9.2
Buckwheat	11.6	21.4	12.4
Rice (Buckwheat No. 2)...	3.2	14.9	4.2
Barley (Buckwheat No. 3)...	4.9	27.5	6.8
Boiler	3.9	8.8	4.3
Screenings	1.6	3.4	1.7
	100.0	100.0	100.0

*Anthracite Mining Costs, R. V. Norris, Trans. A. I. M. E. Vol. LXI, page 324.

Preparation of Bituminous Coal

The preparation of bituminous coal is quite simple in comparison with that prevailing in the anthracite fields. The great bulk of the production comes from seams which lie almost or quite horizontally, and, furthermore, it is unusual to find interstratification of rock in any such quantity as characterizes anthracite seams. Partings, of course, are common. Sometimes these may be disposed of by cutting out with machines and casting the dust into the gob, or the rock may be hand picked by the miner when loading his car, or else sorted out on the tippie as the coal travels along in moving conveyors. All of this is properly dry preparation, water being unnecessary, except where the coal is very dirty, or where it is prepared by washeries for such purposes as coking or the manufacture of illuminating gas.

Screens

The sizing of coal is effected by screens having openings between bars longitudinally arranged, by woven wire segments, and by openings made by punching circular, oval, square or oblong holes in the plate bottom, any of these arrangements permitting the fine coal to drop through while the larger pieces pass over the screen.

Gravity Screens

When screens are stationary and set at an angle of, say, from 27 to 35 degrees, so that the coal moves over them by the force of gravity they are known as gravity screens. Such an arrangement is shown in Fig. 6 and represents the type in general use a decade ago, and, in fact, is still quite prevalent in those fields where the coal is free from interbedded impurities and where there are no exacting demands on sizing.

The gravity screen is the cheapest and simplest which can be installed. It is, however, open to the objection that a rough separation only is usually made owing to the dumping of coal in bulk on the screen, there is excessive breakage and there is no opportunity for an inspection of the product and the removal of impurities. Installations of gravity screens have been made recently where the coal is fed to the screens by a conveyor at such a rate that there is a constant flow of coal over the screen in such quantity that effective screening is accomplished. The coal will flow differently dependent upon fracture, moisture content and quality. Weather and temperature also affect the flow. Coal will hang on the screen in the morning due to cold

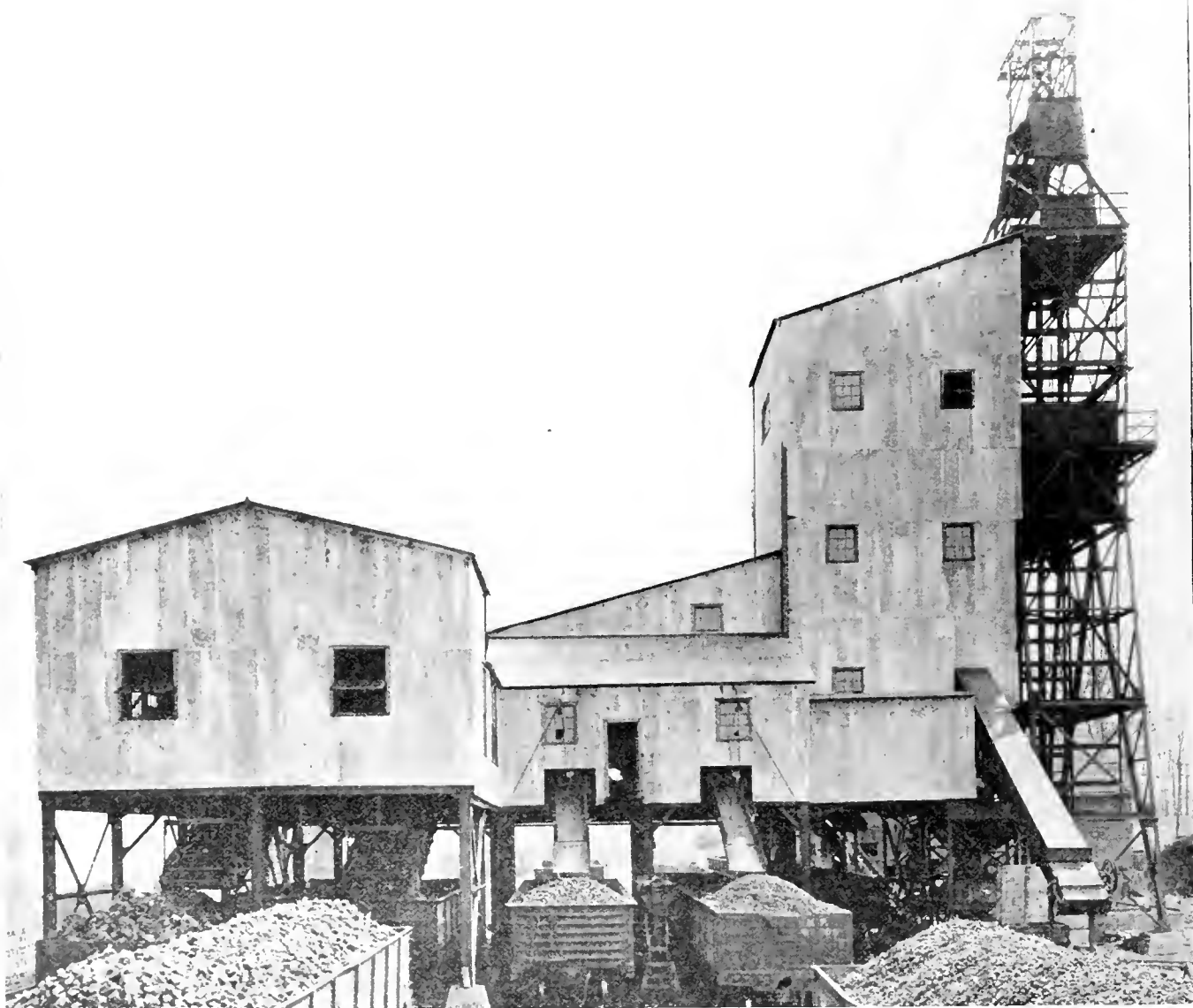


Fig. 5. A Modern Bituminous Coal Tipple.

or to the rust which has collected during the night; in the afternoon it may run too fast over the polished plates.

The size of openings varies with the grade of coal desired: $\frac{3}{4}$ -inch, $1\frac{1}{4}$ -inch, 2-inch, 3-inch, 4-

inch or 6-inch lump. Where bar screens are used the larger sizes may be obtained by the removal of alternate bars singly or in pairs. The design of the bar is such as to permit the small pieces to fall through without clogging the screen.

The standard size of screen as found in the bituminous regions of Pennsylvania, Ohio, Indiana and Illinois is 12 feet long and 6 feet wide over the screen surface. The screen consists of 6 bearing bars and 39 steel screen bars with $1\frac{1}{4}$ inch of clear space between the bars. In Iowa the same size bar is used, but the space between the bars is $1\frac{3}{8}$ inches.

Lip Screens

Lip screens are those whose perforations are oblong in shape, the upper part of the slot being narrow with a gradual increase in space toward the bottom. This enlargement prevents wedging of coal in the slot. The screen is arranged in steps so that the coal in passing down the screen is completely turned over and away from neighboring

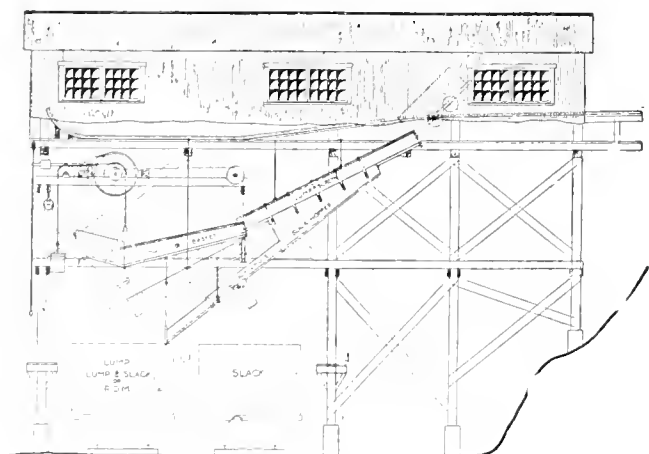


Fig. 6. Gravity Screens.

particles. See Fig. 7. This prevents the fines from riding across the screens on the lumps.

The general practice in the anthracite regions is to use slots 12 in. long and to make the distance between the bends the same length as that of the slots.

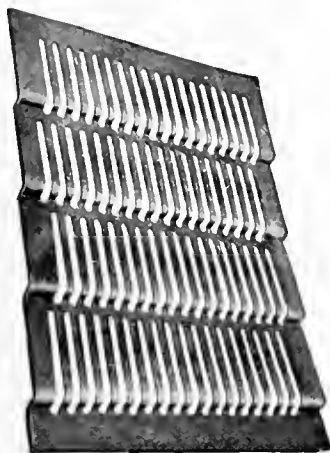


Fig. 7. Lip Screen.

When used as a slate picker the bars between the perforations are slightly turned or canted. Coal will flow readily over such a screen, but slate, which occurs in flat pieces, will turn edgewise and pass through the slots. The bend or step has the advantage of spreading the coal, thus insuring a more complete separation, and it also prevents irregular pieces of material from wedging in the perforations, thus keeping the screen from becoming clogged.

This screen can be readily adapted to meet the various different conditions which arise in the preparation of bituminous coal. In some localities the coal is very soft and breaks easily. Here the height of the step is reduced and the end of the slot is made to stop at the bottom of the bend or riser.

Again, if the coal breaks in large cubical lumps the taper of the slots may be changed to suit, and where the coal is in flat flabby chunks the length of the slots is made less, leaving a blank between the rows of perforations for the flat pieces to right themselves on, thus preventing flat over-sized pieces from passing through the screen edgewise.

Shaker Screens

To overcome the disadvantages of the gravity type, the shaker screen was introduced. Here the screens are set at a low angle of inclination, from 5 to 15 degrees, the movement of the coal being not so much dependent upon gravity as upon the forward thrust imparted by the return stroke of the screen which is kept in reciprocatory motion by means of a pair of eccentrics or by a single driving rod located as near as possible to the central axis. The openings in the screen may be made by the spacing of the bars, by cutting circular or oval holes in the bottom plate, or by lip screen. The travel of the coal is comparatively slow, and due to the motion of the screen, the lumps are separated so that no fine coal is carried over and mixed with the larger sizes.



Fig. 8. Shaker Screens in Boissevain Tippie of Pocahontas Fuel Co., Pocahontas, Va., showing discharge of Lump onto Picking Table.

Principles of Effective Screening

The principles of effective screening have been stated to be as follows:*

1. The perforations should be arranged so that each prepared size will pass through one set of perforations and over another. No coal is properly screened until it has passed over a screen.

2. The shape of perforations should be chosen with a view to the sizes to be produced and the fracture and other properties of the coal. Round perforations give the most uniform sizing, oval perforations clear themselves somewhat better, and lip screens clear themselves the best of all—in fact, the latter will screen almost anything. Dry coal having a rectangular fracture is the easiest to screen. Wet coal with a conchoidal fracture is the hardest. A little fire-clay makes the fine coal very hard to screen, and no screening process will separate the fines when the coal is wet, for the small particles stick tenaciously to the larger sizes. Lip screens cause the least breakage and abrasion and should be used where possible for very soft coal. Round and square perforations act like a nutmeg grater in making degradation.

3. The thickness of the plates for producing fine sizes should be chosen partly with reference to the sizes of perforations. When the plates are too thick, the holes will clog.

4. The length of stroke should bear a relation to the size of the largest perforations on the screen. For smaller perforations a shorter stroke can be employed, while for larger sizes it is better to use oval perforations or lip screens than to increase the stroke.

5. The speed of the shaker should be such as will keep the perforations clear and get the required tonnage over the screen.

6. The inclination of the screen should, in combination with the speed and length of stroke, allow screening on the forward as well as on the backward stroke and should be such as will produce an

*Andrew Allen, in Proceedings of Kentucky Mining Institute, 1916.

average flow of coal at a speed of about 100 feet per minute.

7. The flow of coal to the screen must be properly regulated. Roughly speaking, the capacity of a screen is practically doubled by uniform feeding. There is little to choose between types of feeder so far as uniform feeding is concerned; both the reciprocating and the apron type give good results.

8. The thickness of coal on the screen must be limited by "splitting" it where necessary. The relative proportions of the various sizes contained in the run of mine must be carefully studied in designing a screen and its width and the amount of "splitting" determined therefrom.

9. The width of screen must be chosen so as to limit the depth of the coal bed to such a thickness as can be effectively screened over the size of perforations employed. The length of the various perforated plates must be chosen so as to give the coal enough travel to screen out all the undersize without causing a needless amount of degradation. There is no hard and fast rule governing the size of screens, and the proper "splitting" of the coal and arrangements of perforations frequently requires some experimenting.

10. A little vertical as well as horizontal motion of the screen helps to keep the perforations clean. Knockers can also be used where the perforations cannot be kept clean in any other way.

Picking Tables

When merely close sizing is wanted the coal may be passed directly from the shaker screens to the railroad cars, but as preparation of the coal is of equal importance some means must be provided whereby the impurities may be sorted out. For this purpose picking tables are used. These are endless steel conveyors made up of overlapping plates mounted on roller chains at either side and

The use of the term picking tables as applied to travelling belts or conveyors is unfortunately a perversion of the term "table" as applied to the dressing of ores. Revolving tables have, however, been introduced and have been found a very successful substitute for the conveyor form. These are in reality annular rings with a width of about 4 feet and an extreme diameter of about 20 feet, this allowing sufficient circumference to place boys both on the inner and outer circles. Coal from the screen passes directly to the ring, and after completing almost 360 degrees of travel and having been hand picked, it strikes an obstruction placed obliquely to the path of travel and is swept from the revolving table and passes to the railroad cars.

The great advantage of the revolving table over the conveyor lies in the reduced maintenance cost. The conveyor has a large number of parts, such as rollers, links, bushings, etc., all of which are subject to wear and need lubrication to reduce frictional resistance; the table, on the other hand, has a minimum number of wearing parts. The disadvantage in its use would appear to be in that it cannot be applied to tipples already constructed.

The width of picking tables should not exceed 5 feet and they should not travel over 100 feet per minute. This makes it necessary to divide the coal and to use several tables in mines of large capacity. Roughly speaking, a picking table of any type should not be required to handle more than 1,000 to 1,500 tons in eight hours.

Combination Screen and Picking Table

A combination of the two units of screen and picking table is found in those horizontal types where the coal is impelled forward by a differential motion, either vertical or horizontal, and in the inclined type, such as an ordinary shaking pan placed at an angle of from 5 to 10 degrees.

In the horizontal type the screen is arranged in decks, the coal passing first to the upper deck where the nut and slack are first removed; the slack is then removed from the nut on the middle deck and carried forward to a gate in the deck through which it passes to a chute leading to the slack car. The nut passing over the slack screen on the middle deck passes down a sloping plate to the bottom deck and through a gate to the nut car. All sizes above nut are now picked on the top deck after which the egg coal is removed by the egg screen and delivered into the car on the egg track, while the lump coal passing over the egg screen is lowered by a sloping plate onto the bottom deck and passes out over the end of the screen to be loaded into a car on the lump track.

The horizontal picking table may be propelled by a special driving head, by eccentric gears or by short pendulum hangers supported ahead of the vertical. The former operates by a slow forward stroke and a quick return stroke; the latter by giving the screen a quick vertical drop at the end of the forward stroke. The eccentric method of drive is used in the balanced screen. Here there are two screens driven from the same shaft but moving in opposite directions, the object being to balance the vibration.

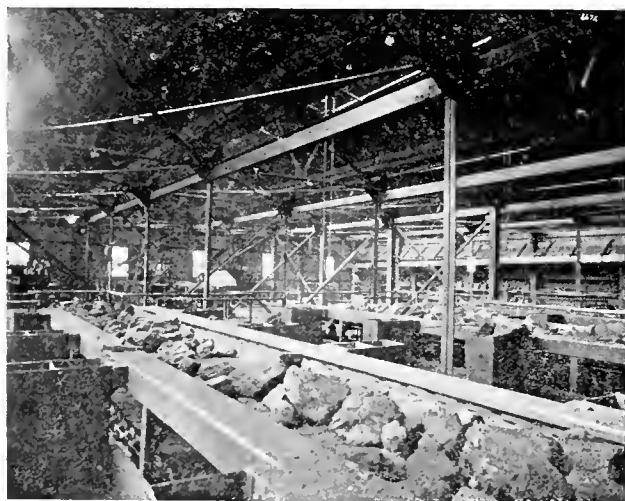


Fig. 9. Picking Room of Modern Tipple.

travelling at the rate of about 40 feet per minute. They carry the coal from the screens to the cars, are from 4 to 5 feet in width and because of their slow motion offer a fine opportunity to the men and boys stationed on either side to sort out the pieces of rock or bony coal. Belts are largely used for small sizes of coal where it is possible to run them horizontally or nearly so.

Loading Booms

With the use of gravity screens there has always been an excessive breakage in getting the coal from the screens to the cars. To reduce this tendency baskets were designed which might be raised to the edge of the screen, and after receiving one or more dumps of coal, lowered into the car and the coal discharged with a minimum of drop. When shaking screens were introduced it became necessary to combine with these some method of lowering the coal from the screens to the cars so that excessive breakage would be avoided, and for this purpose loading booms are now used.

Frequently the picking table is combined with the loading boom. The conveying picking tables may be readily hinged as a whole, in which case the pickers work on walks alongside the tables and are raised and lowered with them, or the tables may be hinged at some intermediate point, allowing a horizontal portion for picking, with a movable extension for loading.

The discharge end of the boom may be supported on a structural hinged frame or boom which is attached to an electric hoist, thus providing a means of raising and lowering the discharge of the coal to suit the cars.

Loading booms built to operate as a shaker are also employed. They are built in two sections, the

upper section being fixed as regards elevation and placed as close to the screen as operation will permit, so as to prevent any fall and breakage to the coal. The lower section is hinged at the upper end

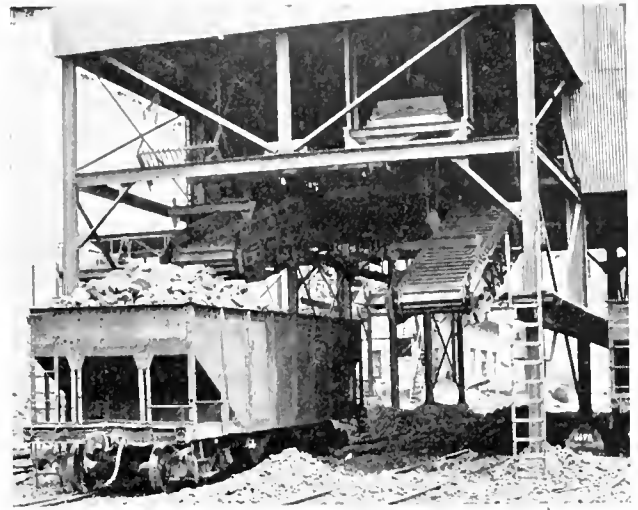
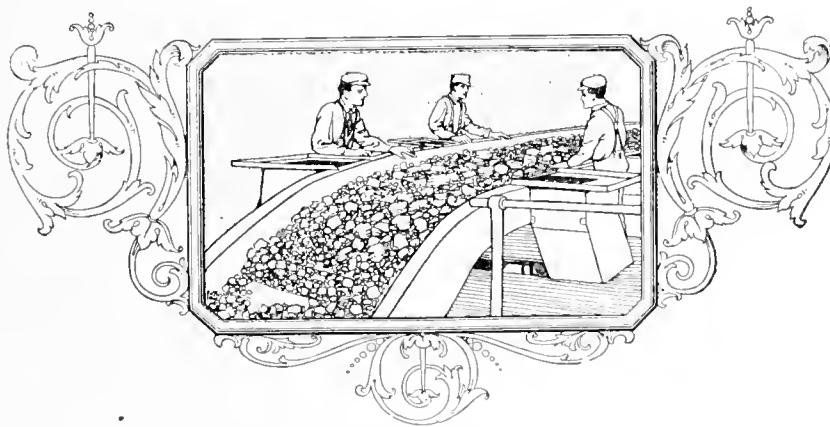


Fig. 10. View of Lump and Egg Loading Booms.

and is raised and lowered at the lowered end by a power hoist, the same as in the case of the apron type of boom. The coal may be given a final screening in the upper section by inserting a short section of perforated plate which removes the fines.



STORAGE OF COAL

How, Why and When Coal Should be Stored; Causes of Firing and Measures of Prevention; Machinery Used for Storing Coal, Etc.

By H. H. Stock*

The following conclusions and suggestions are mainly empirical and not theoretical. They are based upon an extended personal field study of coal storage practice, upon data secured from hundreds of questionnaires, and by correspondence with engineers and others storing coal in quantities varying from a few tons in the ordinary house cellar to hundreds of thousands of tons as stored along the docks of the Great Lakes and by some of the large industrial concerns such as by-product coke companies and public utilities. These questionnaires and the resulting correspondence included not only all sections of the United States, where bituminous coal is stored, but Canada and Great Britain as well. Without the cordial co-operation of many engineers it would have been impossible to prepare such conclusions, and the author wishes to express his appreciation of the cordial assistance given him in the studies which have been carried on primarily under the Engineering Experiment Station, University of Illinois, and also in co-operation with the International Railway Fuel Association and the United States Fuel Administration. Through the co-operation of Mr. W. D. Langtry, President of the Commercial Testing and Engineering Company, Chicago, Ill., excellent opportunity was afforded for studying 100 fires in coal piles in that city during the summer and fall of 1918.

The details of these several studies will be found in Circular 6 and Bulletin 116 of the Engineering Experiment Station, University of Illinois, and in the Annual Proceedings of the International Railway Fuel Association.

The theoretical considerations connected with the spontaneous combustion of bituminous coal and the results of the experimental work of Prof. S. W. Parr of the University of Illinois, Dr. J. B. Porter of McGill University, Canada, and of Messrs. H. C. Porter and F. K. Ovitiz, formerly of the U. S. Bureau of Mines, will be found in the publications of the Engineering Experiment Station, University of Illinois, of the U. S. Bureau of Mines, and of the Canadian Bureau of Mines.

Although increased consideration was given to the storage of coal during the world war period, the reasons for storage that prevailed at that time prevail with almost equal force at all times in connection with the provision of an adequate and constant fuel supply. Three parties are chiefly affected by the coal storage problem: the consumer, who uses the coal, that railroad that transports it, and the coal operator and miner, who produce it.

The Advantages and Reasons for Storing Coal Are

First. It insures the consumer a fuel supply at all times.

Second. It is often possible to purchase coal for storage at a time of low prices.

Third. It should permit the railroads to transport coal throughout the year, and thus utilize their equipment to better advantage than at the present time, when there is an excessive demand for trans-

portation of coal during the early fall and winter months and very little demand during the spring and summer. A better utilization of equipment should mean lower freight rates, and it is possible that the Interstate Commerce Commission may adopt measures permitting a lower freight rate for transporting coal during the summer months, when it can be done more cheaply by the railroads.

Fourth. It helps to maintain a uniform rate of production at the mines throughout the year and acts as a stabilizer in the daily operation of mines.

The Disadvantages of Storing Coal Are

First. The additional expense due to the additional handling.

Second. The increased breakage due to additional handling.

Third. Loss of heating value due to weathering, which is much less than is commonly supposed.

Fourth. The loss due to spontaneous combustion, which is to a very great extent avoidable.

Practicability of Coal Storage

That it is practicable to store coal is best shown by the experience of those who have tried it out. W. L. Abbott, Chief Operating Engineer, Commonwealth Edison Company of Chicago, who has stored hundreds of thousands of tons successfully, said recently:† "On the whole, I find that for general convenience and security the best coal to store is egg size, which has gone through a 6-inch screen and over a 1½-inch screen. This is a size of coal suitable for most purposes and easy to handle. It is free from fine stuff and does not break up in the handling. I have known of hundreds of thousands of tons of Illinois coal prepared in this way and put in storage in piles 25 feet high during the past 10 years, and in not a single instance has there been a case of serious heating." R. L. Havelik, Chief Engineer of a large power plant at Mooseheart, Ill., in discussing the problem of coal storage, states that since 1915 he has stored Illinois coal in large quantities with entire success.

Every year hundreds of thousands of tons of coal are stored along the Great Lakes for distribution through the Northwest. All of the by-product coke plants store coal in large quantities and the University of Illinois has for years kept from 10,000 to 15,000 tons of Illinois coal in storage with practically no loss. These instances could be multiplied indefinitely.

To be sure many failures have been recorded, but an investigation of these failures has generally shown that in the storage the most fundamental principles of coal storage, as outlined later in this article, have been neglected, such, for instance, as storing a mixture of sizes containing a large amount of dust; storing against a hot boiler or steam pipe; improperly piling the coal so that segregation of sizes takes place, etc.

*Professor of Mining Engineering University of Illinois, Urbana, Ill.

†"Factory," April 15, 1921, "Storing Up a Year of Power," by W. L. Abbott.

Special emphasis is laid on the fact that success in the storage of coal depends upon a very careful and thorough consideration of the problem in advance and attention to the details of storage. Failure to give attention to the details of storage, as outlined later, will often result in losses due to fires. Do not undertake to store coal until you know how to do it properly and safely, and before beginning to store, be sure that you have a definite plan for storage, a suitable place in which to store and adequate appliances to move the coal pile in case heating occurs.

Storage of coal is a very desirable form of insurance for the coal user, but should not be undertaken in large quantities without careful consideration of the matter and unless the party storing is prepared to give due attention to the subject. Before coal is actually stored a suitable place should be prepared for it and a policy to be followed outlined in advance so that all of those who have to do with the storage may receive definite suggestions as to how it is to be done. It is not wise to wait until the coal to be stored is placed on the railroad track at the plant and then to dump it anywhere and in any haphazard way simply so as to release the coal cars promptly. After the coal is in storage it must be watched and provision made to take care of any spontaneous combustion that may develop.

It should be understood that although there is danger of spontaneous combustion that may cause a loss through the ultimate burning of the coal, the fire hazard of stored coal is small, as the heating takes place slowly, and if suitable attention is paid it is easily detected in time to prevent loss of property from fire, excepting sometimes the destruction of the coal itself.

Very often a good storage plan of procedure is mapped out by those in authority, but not followed by those in direct charge of the unloading and storing the coal, who should have authority to reject improper coal and be held responsible for properly unloading it.

Place for Storage

To best insure the user a supply of coal, and to best equalize the transportation problem for the railroads, coal should be stored as near the point of consumption as possible. The householder can usually store in his cellar enough coal to last him through the winter months, but frequently he has not the money to pay for such a supply. A number of schemes have been proposed by banks and co-operative associations for loaning money upon stored coal as collateral, but no definite scheme of this kind seems to have been worked out thus far. The retailer frequently takes care of his customers and protects himself by charging an additional price for coal sold upon deferred payments. In the same way many of the smaller retailers are provided for by the wholesale dealers.

For the office building, hotel, store, etc., in the crowded districts of large cities the space necessary for the storage of any great amount on the property is too valuable for other purposes to be filled by a commodity of relatively low value such as coal; hence only a limited storage capacity is possible in such a building for the current demands of a day or at most of a week or two. This means

that someone should make provision for the storage of large amounts of coal on the outskirts of a city where land is not so valuable, or even outside the city limits, but near enough to be reached by auto truck or even by a short railroad haul. For instance, the Commonwealth Edison Company, in addition to a limited storage supply at each of its power plants in the city of Chicago, keeps a reserve of about 400,000 tons about eight miles from the city. Frequently there are old quarries near a city that are filled with water, and these have been often utilized for coal storage purposes.

Storage at a point intermediate between the mine and the city, either by the mining company or by the purchaser of coal, facilitates the transportation problem for the railroad, and this is recognized by some railroads in granting a through rate for coal stored between the mine and the point of use, providing such coal is not kept in storage more than six months.

A change of only 50,000,000 tons per year from winter to summer would materially help the railroads in equalizing their transportation problem.

The mine operator is interested in storage mainly so that he may operate his mine more regularly, particularly during the summer months, when many mines are compelled to be idle for a great part of the time. Storage at the mine, however, does not help the transportation problem of the railroads, nor does it help the consumer, who has no coal in case of a severe transportation tie-up due to storms or other causes, to know that there is a large amount of coal in storage at the mines. Storage at the mine acts as an operating regulator which permits the mine to run full time on days when there is only a partial car supply or when the car supply for the day is late in arriving, in which case the men are often very loath to go to work. Mine storage may also provide for the storage of sizes for which there is no immediate market. However, the mine is not the proper storage place to relieve the general unequal haulage problem of the railroads or to insure the user a supply of coal when he needs it, and neither the public nor the railroads should consider mine storage as the proper relief for the inequalities of transportation and purchase.

The three parties to be benefited by storage as outlined above should expect to share the expense if there is an increase in price, which should be expected, as it costs to place coal in storage and to take it out from 10 cents up per ton, and this cost is usually considerably more than 10 cents. Coal in storage may mean a slightly higher price to the consumer, but he should not be expected to pay all of the increased price, and this increase should be divided between the three parties benefited. The purchaser may have to pay something for increased insurance, but the railroad should grant a differential freight rate for coal hauled during the summer months and at a time when haulage is done more cheaply and when it can better utilize its equipment. The mine operator should grant a reduced price during the same season if in so doing he is able to operate his mine more regularly and thus better distribute his overhead costs. This has been done for years in the anthracite district, a reduction of 50 cents per ton being made, usually beginning April 1st, with an increase of

10 cents per ton per month until the regular price is reached in September. A similar custom has been tried out to a less extent in bituminous districts.

The Preparation of the Place of Storage

If possible a place should be chosen that is dry and well drained; if not drained naturally, drains should be provided about the storage pile, not underneath it, as a drain beneath a pile may produce an air current up through the pile and thus assist spontaneous combustion.

Coal should not be dumped on ground covered with ashes or refuse of any kind, because often in addition to furnishing flues for the admission of air, such refuse contains combustible material; furthermore, the presence of such refuse will depreciate the value of the coal when it is reclaimed from storage. If possible, the ground should be cleared of vegetation and leveled off, so that the reclaiming of the coal will be made as easy as possible, and so that, in reclaiming, dirt and refuse will not be taken up by the shovel or by other devices used. There is some justification for the objection of firemen to using coal that has been stored, because of the dirt and other refuse that are often mixed with the coal in taking it from the storage pile. A hard clay bottom thoroughly drained is desirable, if a concrete one is too expensive.

If possible, adequate space should be provided so that the coal can be moved, if heating occurs. Coal should not be piled around hot pipes, against a boiler, against hot walls, around a chimney, or in any place where it will be subjected to outside heat, because the liability to spontaneous combustion increases rapidly with a rise in temperature. Coal should not be stored above flues that will permit a current of air to enter the coal pile; hot air such as that from a sewer is particularly to be avoided.

Time of Year for Storage

In order best to equalize transportation facilities, to help stabilize mine operation, and sometimes to take advantage of lower prices, coal should be stored between the first of May and the first of September. However, as these are the hottest months of the year, special precautions should be taken both in storing and in watching the coal after it is placed in storage. Coal is a poor conductor of heat, and if coal that is already at a high temperature is covered by other coal, it retains the heat and is much more liable to spontaneous combustion than coal that is stored at a lower temperature.

Kinds of Coal That May Be Stored

All of the evidence gathered to date points to the general conclusion that all varieties of bituminous coal have been stored successfully, while it is equally true that all varieties have fired in storage. All of the evidence points to the fact that the size of the coal placed in storage, its freedom from dust, and the way in which it is piled, are much more important in avoiding the inconvenience and often the loss from fire due to spontaneous combustion than is the choice of coal from a certain mining district or even from a certain mine. Some think that there are certain inherent qualities in coal

that makes it better for storage than coal from other districts, and some even go to the extent of claiming that coal from a certain mine in a given district is better than coal from adjoining mines in the same district. Evidence does not support this opinion. This statement does not mean that all coals store equally well, as there is a difference in storage qualities in coal from different districts, and even from mines in the same district, but the point to be given chief consideration is not so much the kind of coal or the district it comes from as it is the size of coal placed in storage and the way in which it is stored. The kind of coal to be stored should be carefully considered, and if investigation shows that the coal from a certain district or even from a given mine has frequently fired, common sense suggests not buying such coal for storage if it can be avoided. The data are not available at the present time to classify coals upon the basis of their liability to spontaneous combustion, and it is doubtful if this ever can be done. If there is no choice of coal to be had, greater precautions in piling and in watching storage piles will be necessary.

Clean screened coal, as nearly uniform in size as possible, should be chosen if it is available. The larger and more uniform the lumps the better, as such lumps given an open textured pile that permits an adequate circulation of air. Coal of one size is therefore better than a mixture of sizes, and run of mine coal is the worst of all sizes for storage. Sized coal should not be stored upon a foundation of fine coal, and in the handling of coal into storage care should be taken to prevent breakage as much as possible, as breakage produces dust and also opens fresh surfaces of coal that oxidize more readily than do the weathered surfaces. If there is a choice of coal for storage, the least friable should be chosen, as there will be less breakage and dust as the result of handling such a coal.

It is commonly thought that it is inadvisable to mix coals of different varieties in storage. Although there is no theoretical reason for this, the experience of those storing coal in large quantities is against the practice, which should be avoided if possible.

While many varieties of mine run coal cannot be stored safely under ordinary conditions because of the presence of fine coal and dust, such coal has been successfully stored in small, low piles, and in storing such coal it should always be piled in layers, so as to prevent segregation.

Fine coal, slack, or screenings is more liable to spontaneous combustion than clean, sized coal; hence if placed in storage it should be very carefully watched for evidences of heating, and the only absolutely safe way to store such coal is under water. The more compact a pile of screenings can be made the better, so as to exclude the air.

Spontaneous Combustion

Why should only sized coal from which the dust has been removed be stored? The great enemy of storage is spontaneous combustion, and this is due mainly to the oxidation of the coal which takes place continuously from the time it is mined until it is used, providing the coal is in contact with air so that oxidation of the carbon in the coal is possible. This oxidation is largely superficial and con-

sequently the greater the surface area of coal exposed to air the more rapid will be the oxidation. For instance, a cube of coal 1-inch on the side has 6-square inches of surface exposed to the air; now if this cube be divided into eight equal sized cubes by three planes cutting it at right angles to the original faces there will be eight half-inch cubes and each cube will have $1\frac{1}{2}$ -square inches of face exposed to the air, a total of 12-square inches. Then if each of these smaller cubes is similarly subdivided into eight $\frac{1}{4}$ -inch cubes there will be 64 pieces and 24-square inches of surface, a rapid increase in oxidizable surface exposed to the air. Continue the process so that the coal is pulverized finely and there is practically an infinite surface exposed to the air and the liability to spontaneous combustion is thus very greatly increased.

Sulphur in Coal

Although experimentation has shown that the sulphur contained in coal in the form of pyrites is not the chief cause of spontaneous combustion, as was formerly supposed, yet the oxidation of the sulphur in the coal not only produces heat but also assists in breaking up the lumps and thus increasing the amount of fine coal in the pile. Any considerable rise in temperature from either external or internal sources promotes the oxidation of the iron pyrites. This oxidation produces heat and thus increases the liability of the coal to spontaneous combustion. It is wise to select low sulphur coals for storage if obtainable, but it must not be taken for granted that a low sulphur coal will necessarily store well.

Heating Versus Spontaneous Combustion

A distinction should be made between the heating of coal and actual spontaneous combustion or burning. A coal may heat without taking fire, and unless the temperature rises to such a degree that the composition of the coal is materially changed through the driving off of a considerable part of its volatile content or by the actual burning of a part of the coal, such slow and gradual heating may not materially affect the value of the coal. If the temperature of a coal pile is found to be rising rapidly, provision should be made to move the coal if the temperature reaches about 150 degrees and continues to rise rapidly. On the other hand, if the temperature is rising slowly the coal need not be moved until a somewhat higher temperature is reached, as it frequently happens that the temperature rises for awhile and then remains stationary or decreases.

The period of greatest liability of oxidation or spontaneous combustion is within the first three months after the coal has been mined, particularly if this is during the hot summer months. Observation of a large number of coal pile fires shows that the liability to spontaneous combustion decreases rapidly after the coal has been in storage for three months, and after a coal pile has gone through one summer without heating it is reasonably safe to conclude that it will not heat afterwards, unless it is opened up so that air can get to the inside of the pile, in which case it seems to be as liable to combustion as it was when originally laid down in the pile. This decrease in the tendency to heat is

known as "seasoning" of the coal and is probably due to the fact that the volatile gases that ignite easily are given off from the outside of the pile but not from the interior of the pile. When the pile is opened up the coal from the inside is in practically the same condition as was the freshly mined coal.

Heating may be local or general, that is, it may be confined to a small area from which the coal can be easily dug out and the small amount affected reduced in temperature by contact with the air or by the application of water, but if possible such coal should be used at once and not returned to the pile. If the heating is general throughout the pile and is approaching the dangerous temperature noted above, provision should be made to move the pile, or still better, to use the coal at once if at all possible. If it cannot be used at once it should be spread out so that the temperature may be reduced by contact with the air, unless, of course, the temperature has already reached such a point that the addition of more air will cause actual firing.

It should be understood that although there is danger of spontaneous combustion that may cause a loss through the ultimate burning of the coal, the fire hazard to buildings near the stored coal is small, as the heating takes place slowly and if suitable attention is paid to the coal pile it is easily detected in time to prevent loss of property from fire.

Moisture

The exact effect of moisture in connection with spontaneous combustion is not known, and the evidence of laboratory experiments is contradictory.

The repeated wetting and drying of coal seems to increase the tendency to spontaneous combustion. This may be due to the breaking up of the coal which such alternate wetting and drying occasions, even if there is no chemical reaction between the water and the coal. It is not wise to put wet coal into a pile, or to store on a damp base if it can be avoided. After a rain or snowstorm a coal pile should be carefully inspected and watched.

Water is an effective agent in quenching fire in a coal pile only if it can be applied in sufficient quantities to extinguish the fire and to cool the mass. The water must be applied at the source of the fire, for it can do little good if the stream is only played on the surface. To be sure that the water reaches the fire it is usually necessary to turn over the coal.

It is advisable to have water and hose available for use in case of necessity, but water should be used carefully and only as a last resort after other means, such as moving the coal, have been tried to lower the temperature. An effort should be made to determine the seat of the heating and to remove the coal affected, which should be spread out on the ground and allowed to cool off in the air, if possible. Only in case of necessity should water be used to cool it. If some of the coal is ablaze it is necessary to add water, which very often will so control the fire that the danger to surrounding buildings is reduced, and more time is allowed to move the main coal pile. Coal that has once heated should preferably be used at once and not be returned to the pile.

A fire deep down in a pile may cause the coking of the coal and the evolution of tarry material in connection with coking may form an impervious coating around the fire through which the water cannot penetrate. Such coating must be broken up before the water can reach and be at all effective in connection with the fire.

Decrease in Heating Value of Stored Coal

There is a wide difference of opinion upon this point, and it must be admitted that there is a great prejudice upon the part of many firemen against stored coal, but much of this prejudice is undoubtedly not warranted. Experiments have shown that the heating value of coal in B.t.u.'s is decreased very little by storage, but many think that storage coal burns less freely than fresh coal. This may be so in some instances, but many of those who have stored coal in large quantities report that even where this condition prevails it may be overcome by keeping a thinner bed on the grate and by regulating the draft.

The outside of a pile of stored coal undoubtedly weathers and breaks up into fine particles, so that if stored in the open there will be a certain loss from fine coal blown away, but this amount is very small. The writer has investigated a number of coal piles that have been in storage for some time, the surface of which is very unprepossessing and unfuel-like in appearance, and has found that a short distance under the surface the coal is as bright as when placed in storage. For coal stored under water the deterioration is negligible. Undoubtedly some of the justifiable prejudice against stored coal is due to the fact that in picking up the coal from storage with a clam shell bucket very often dirt and rubbish are mixed with the coal.

The coking properties of most coals seem to decrease as a result of storage, but coals vary greatly in this respect and it is difficult to tell whether any deterioration that may occur is the result simply of storage or of heating that may occur in connection with storage.

Detection of Coal Pile Fires

The common methods of detecting the heating of a coal pile are:

- (1) By watching for evidences of steaming in the pile.
- (2) By noting the odor given off; bituminous or sulphurous odors are evidences of heating.
- (3) By noting places where snow on a pile has melted.
- (4) By inserting an iron rod in the pile, and by noting its temperature with the hand after withdrawal.
- (5) By inserting thermometers into the pile and reading them directly.
- (6) By using a pyrometer or plates connected with an automatic recording device.

The first three methods are so self-evident in their application that it is unnecessary to discuss them in detail, but with a large pile, and particularly one where the heating is distant from the surface, a fire may reach an advanced stage without being detected by surface indications.

Method No. 4, by which the temperature of an iron rod is noted with the hand, is a simple test, and one well adapted to piles not over eighteen to

twenty feet deep. By this means a janitor using a poker may keep informed as to the condition of the comparatively small amounts stored in house or apartment basements.

Temperature readings with a thermometer or pyrometer furnish by far the best and most reliable method for keeping informed on the exact condition of a coal pile.

To get the temperature of the inside of a coal pile it is necessary first to provide an opening into which a thermometer or a pyrometer may be inserted. Such openings may be made after the coal is in storage by driving pipes into the pile, but it is easier to place these pipes when the coal is being stored. Pipes left permanently in a pile are a disadvantage, as they interfere with the appliances used to remove the coal. Instead of leaving the pipe in the coal pile it is sometimes necessary only to drive it and then withdraw it, the hole remaining open sufficiently to permit the insertion of the thermometer. To prevent the hole from filling with coal, an inverted funnel of paper is used in Canada.

Pipes, if used, should be plugged at the upper end, so as to exclude the outside air, for if ventilation is allowed through these pipes, a correct temperature reading of the interior of the coal pile is not obtained.

Reducing Temperature and Extinguishing Fires in Coal Piles

The following methods are employed for reducing the temperature in a coal pile:

The most effective method of combating a tendency to fire in a coal pile is by turning over the coal and exposing it to the air, so that it may be thoroughly cooled. Care must be taken in exposing hot coal to the air, for, if the temperature is too high, as soon as the hot spot is opened out the mass will burst into flame and the fire spread very rapidly. Therefore, if there is evidence of a high temperature the spot should not be opened out unless there are ample appliances at hand immediately to move the hot coal, or water sufficient to put out any fire that may start and thoroughly to cool off the mass.

Whenever the fire has reached the stage where the coal is actually ablaze, it may be necessary to use water, but, in general, water should not be used if it can be avoided.

Water should not be used upon a heating coal pile unless it has reached the flaming stage and until other means have proven ineffective.

A number of attempts have been made to utilize the smothering effect of carbon dioxide gas and solutions of bicarbonate of soda in ways somewhat similar to those used in the ordinary hand grenade or fire extinguishers of the Babcock and of similar types. The effect of CO_2 on fire is certain if it can be localized and applied where needed. The difficulty in a large coal pile is to confine the gases. The evidence as to the effectiveness of these agents in fighting fires in coal piles is by no means conclusive either for or against the method.

Ventilation of Coal Piles

The subject of the ventilation of coal piles is one upon which there is a great difference of opinion, and the evidence is very conflicting. It seems to be quite a common practice of Canadian railroads

to ventilate their coal piles with a great deal of care, and it is the opinion of Prof. J. B. Porter, of McGill University, and S. H. Pudney, Fuel Inspector of the Canadian Pacific Railroad, that by means of proper ventilation spontaneous combustion can be prevented and the temperature of coal piles regulated to a very great extent. Other correspondents in Canada do not fully agree with this opinion. The experience of the railroads in the United States seems to differ widely upon this point, to judge from the replies to questionnaires.

Attention should be called to the fact that many pipes placed in coal piles are intended merely for observing temperatures with no thought of ventilating the piles. Coal is a poor conductor of heat, and it is undoubtedly true that much of the so-called ventilation of coal piles has been inadequately done because only a few pipes have been placed irregularly throughout a pile. If ventilation is to be successful, it must be carefully done and pipes placed near together; but when so placed they interfere with rapid handling of the coal and increase the expense. The writer has not seen any of the Canadian coal piles that are reported to have been ventilated successfully, but a study of storage piles in the United States in connection with power plants has shown that the so-called ventilation is usually not well done and has been ineffective.

Sources of Coal Pile Fires

As the result of a systematic study of fires in coal piles in Chicago made in 1918 it was possible to classify the fires under three heads, as follows:

First. Those due partially if not wholly to outside sources of heat, such as piling coal around a boiler, or above a steam pipe, or above a sewer opening through which hot gases arise.

Second. Fires started by foreign materials in the coal, such as old waste, pieces of wood, etc.

Third. Fires whose origin could not be determined as coming from any outside source, and which could be explained only by the method of piling or the kind of coal used.

Fifteen fires were directly traceable to coal being piled about hot water tanks, against hot pipes, or a furnace, or a chimney, or from hot ashes being thrown into the pile. Thirty-nine fires were apparently directly traceable to materials in the coal pile, such as paper, rags, waste, wood, rosin, or to hot sewer gases rising through the pile. Of course, fires started in this way should not be confused with spontaneous combustion of the coal itself, but they are usually so reported by fire departments, etc., and the storage problem is thus confused through such inaccurate reports.

Method of Piling

(1) Coal should be so piled for storage that any part of the pile can be moved promptly if necessary.

(2) Coal should be so piled that air may circulate freely through it and thus carry off any heat generated, or else so closely packed that air cannot enter the pile, i. e., under water storage conditions should be approximated as nearly as possible.

(3) Stratification or segregation of fine and lump coal should be avoided, since an open stratum of coarse lumps provides passage for air to reach the fine coal, but not in sufficient quantity to keep down the temperature of the pile. Coal should be spread in horizontal layers and not dumped in conical piles, for in the latter case the fine coal stays in the center at the top of the pile and the lumps roll to the bottom.

(4) The depth and area of storage piles will be determined largely by the storage space available and the mechanical appliances to be used. Other conditions being equal, the deeper the pile and the greater its area the greater the difficulty in inspecting it, and in moving it quickly if necessary. Hence, a number of small piles, if practicable, are better than one large pile. Lack of space, however, usually prevents such spreading out of the coal. It is impossible to specify exact heights, as so much depends upon the kind of coal and upon local conditions.

The question is often asked: "How deep may coal be piled?" Piles five or six feet deep have taken fire and many piles fifty feet have not. Experiments in England, confirmed by experience in the United States, show that the highest temperature often occurs at a point five to ten feet below the top of the pile and that in general there is a gradual decrease in temperature downward and below this maximum point. In England a standard depth at which temperatures are tested is seven feet below the top. This depends to a considerable extent, however, upon the way in which the coal is piled, and although there are many instances of high piles that have not fired, the evidence shows that there are more fires in deep piles than in shallow, and this may be due to any one of the following reasons:

Air can circulate through a deep pile less readily and carry off the surface heat.

With a deep pile there will usually be increased breakage and fine coal, and there is also greater difficulty in watching the pile and in detecting incipient fires.

As to the effect of the quantity of coal in a storage pile, the difficulty of storing and watching a large quantity and of moving it quickly may increase the fire hazard, but a large quantity is not of itself more dangerous than a small amount. In all cases the arrangement of the pile so that it can be easily reached by an appliance for moving the coal in case of necessity is of much greater importance than the depth of the pile or the total amount in the pile.

The fundamental consideration where coal is piled by machinery is that there should be the least possible breakage and that segregation of the sizes may be avoided. To accomplish this coal should be piled in layers and not dropped at one point in the form of a cone so that the large pieces may roll to the bottom of the pile and the fine coal accumulate at the top of the pile. In a number of fires investigated in the city of Chicago the point of firing was found to be a short distance below the window through which the coal had been thrown into a bin and at a point where the currents of air rising through the lumps which had rolled to the bottom were restricted by the coating of fine

coal on the top of the pile. The method of piling recommended by the Railway Fuel Administration is shown in Fig. 1.

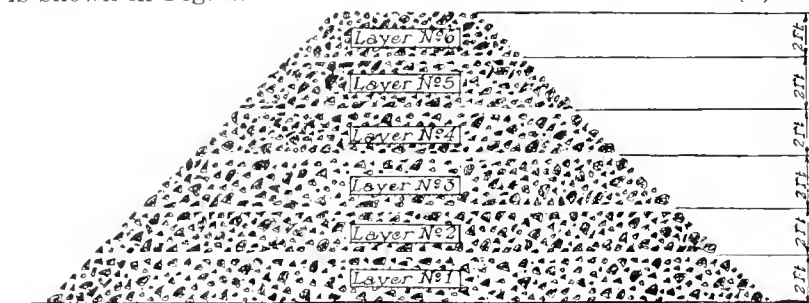


Fig. 1. Method of Building Pyramidal Pile in Layers. Level of storage pile raised two feet at a time the full length of pile, by lowering the clam-shell to a point just above the surface of the pile before discharging contents.

The breakage will be very materially lessened if the clam-shell bucket is lowered to a point just above the surface of the pile before the contents are dumped. A layer of coal 2 feet in height should be laid down to the full width of the base of the pile and over the entire length of same, the second and succeeding layers, each 2 feet in thickness, being laid down in like manner. This method of unloading will eliminate the accumulation of broken fine particles in the center of the pile, and in addition, give the coal a limited opportunity to season before being covered by the succeeding layer.

Choice of a Storage System

In the choice of a storage system the following points should be considered:

- (1) The location, size, and topography of the available storage ground.
- (2) The capacity of the desired installation, that is, the amount of coal which it is desired to load and unload in a given time.
- (3) The cost of the plant.
- (4) The cost of maintenance.
- (5) The cost of operation.
- (6) The amount of breakage to be permitted in handling the coal.
- (7) The way in which the coal is received, in open or box cars, or in boats.
- (8) The length of time the coal must be kept in storage.
- (9) Climate; in very cold countries under-water storage is impracticable for a part of the year.

The Requirements of An Ideal Plant Are

- (1) Adequate ground area, so that several sizes and varieties of coal may be stored separately. Separation into sizes has not been considered so important for bituminous as for anthracite coal, but it is becoming more important because of the increasing attention being given to preparation of coal for domestic use, and because of the fact that danger of spontaneous combustion is decreased by keeping different sizes separate in storage.
- (2) Adequate facilities for rapidly and economically transferring coal from cars or from boats into storage.
- (3) Adequate facilities for rapidly and economically reclaiming the coal and for rapidly moving any part of the pile which shows evidences of taking fire.

(4) Adequate track facilities, with gravity facilities, if possible, for handling cars.

(5) Means for preventing undue breakage in handling.

(6) Facilities for rescreening the stored coal, which, of course, increase the cost.

(7) Adequate available water supply.

(8) Low cost of installation, maintenance, and operation per ton of capacity. A storage plant is in operation very irregularly and costs are likely to be correspondingly higher because of the heavy fixed charges, especially interest and depreciation.

Few, if any, storage plants possess or require all these ideal conditions.

In a coke plant, for instance, breakage need not be considered, except in connection with spontaneous combustion, since the coal is ground fine before being charged into the ovens. Storage facilities must, of course, be adapted to the various requirements and limitations in coal yards, power plants, railroad yards, boat docks, steel plants, and other establishments.

Usually much of the storage must be done not under ideal conditions, but the fact that the prevailing conditions must be accepted does not excuse the lack of forethought too often observable in connection with storage propositions. In fact it might be said that the more unfavorable the conditions about the plant for storage the greater should be the foresight and care in planning for storage.

Storage Appliances

The simplest form of storage is where the coal is dumped from a car on a trestle into a bin, or else dumped or shoveled upon the ground and wheeled into a bin or spread out upon a pile. The cost of such storage is usually high, but on account of the small amounts handled it should be possible to easily provide against spontaneous combustion. However, some very troublesome fires have occurred in the basements or boiler houses of large buildings where only a few hundred tons have been stored, but where the coal has been piled against the boiler or against hot pipes.

Pile storage from cars which run on a track on the coal pile and which is raised from time to time is probably the method most widely used by railroads. It is also adopted to some extent by commercial plants because it is easy to apply and requires only a small expenditure of money for permanent equipment and because the track can be moved from place to place as desired.

The objections to the method are:

(a) The pyramiding effect; that is, the segregation of fine coal at the center and top of the pile, is intensified as the locomotive and loaded train crush the coal under the track.

(b) It is not practicable to divide the coal by cross-passageways so as to make a number of small piles and thus render each pile easy of access for reclaiming.

(c) When coal is piled in this way adequate track provision for moving the coal quickly is apt to be neglected until it is time to move the coal,

and a track cannot then be put in place quickly enough to save the pile. Where this method is used the track should be moved from the top of the pile to the surface alongside the pile so as to provide for the rapid loading out of the coal, if necessary. The use of a standard railroad ballast spreader to spread the coal on the pile is to be preferred to the ordinary method of dragging a tie through the coal.

Storage by truck is probably next in simplicity to hand and wheelbarrow storage, and one of the best examples of such storage is to be found at the University of Illinois, where, in connection with the central power plant, this method has been used with great success for a number of years. The annual consumption of the University is about 30,000 tons, with a daily use of from 50 to 100 tons. For several years it was customary to stock from 4,000 to 5,000 tons on the ground in piles about 12 feet high, the coal being thrown from the railroad car upon the pile, distributed by scrapers and hauled by wagons to the power house when needed. At times fires occurred in these piles. A new system adopted several years ago is illustrated in Fig. 2. The storage area is about 114 by 196 feet, and as the area was formerly used for tennis



Fig. 2. Placing the First Layer of Coal on Storage Plat at the University of Illinois.

courts, the base is an ideal one, being of firm, smooth clay. The space is surrounded by a plank fence 7 feet high, and although such a fence does not conform to the best practice, unless it is tightly sealed, very little trouble has been experienced in connection with the storage under discussion, and only a few small fires have occurred on the outside of the pile and alongside of the timber fence. The storage plant is about 1,000 feet from the power house, where the coal is received in railroad cars. It is dumped into an undertrack hopper from which it is elevated and delivered either directly into the overhead bunkers in the power house, or, if it is intended for storage, is fed into a chute down to an auto truck, which holds $3\frac{3}{4}$ tons, in which it is taken to the storage ground, where it is laid down in layers about 2 to 5 feet thick. A second layer is laid down by the truck running on top of the pile, and to permit it to do this a track is built of scrap plank, the pieces of plank being kept together by pieces of old iron cable. This track is laid down in sections 5 to 8 feet long and can easily be moved over the top of the pile. This not only serves as a track for the truck, but also permits the pile to be

compacted as the truck runs over it. This method has proven very successful and has been tried out now for a number of years. The coal is reclaimed by a portable loader, into which several men shovel and which in turn delivers it to the truck that takes the coal to the power house. Although successful, the cost of operation has been high and the latest figures show the cost of storage and reclaiming to be 40 to 45 cts. per ton.

Trestle storage, by which the coal is dumped directly from the cars into bins or upon piles, has the disadvantage of giving an exaggerated segregation of the sizes. It also requires an initial permanent investment in a structure which is used only a short time, and the legs of the trestle, if of timber, are frequently starting points for fires. The bents of the trestle also interfere with the loading out of the coal and also the cleaning out of the bin.

A combination of locomotive crane and trestle storage has been satisfactorily used in a number of cases, and probably the most generally used appliance in the storage of coal is the locomotive crane, both because it is very flexible in its operation, can be adapted to a number of uses about a plant, and furthermore many manufacturing plants are already provided with such cranes. Fig. 3 shows two systems of trestle storage and of reclaiming of coal by means of a tunnel which may

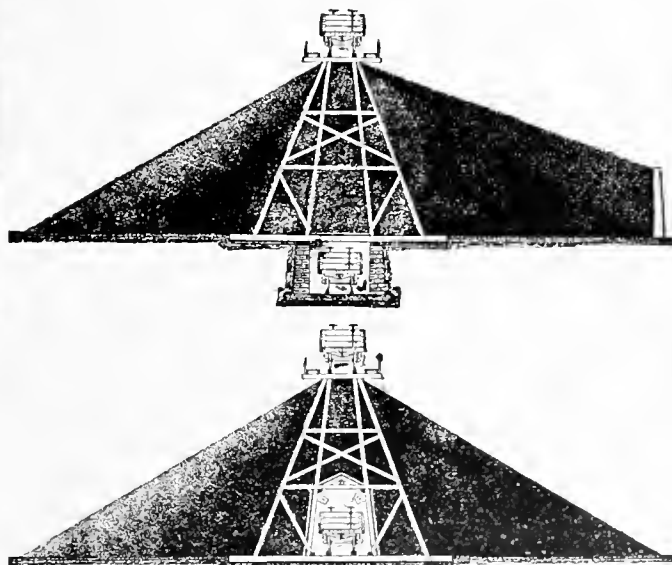


Fig. 3. Trestle and Tunnel Systems, Showing an Above-Ground and a Below-Ground Tunnel.

be either above or below the ground level, coal being fed by gravity into a car or by some form of conveyor in the tunnel. The use of a reloading tunnel decreases the cost of handling considerably, but with the tunnel above ground only 35% of the coal may be thus reloaded by gravity and in an underground tunnel only 50 to 60%. The amount of storage space may be increased by building bulk heads along the side of the pile, as shown in Fig. 3.

Where such bulk heads are used it is advantageous to make them airtight by a luting of some kind. As a result of luting such bulk heads the Milwaukee Coke and Gas Company has found the tendency to heat in its very large coal piles to be very greatly decreased.

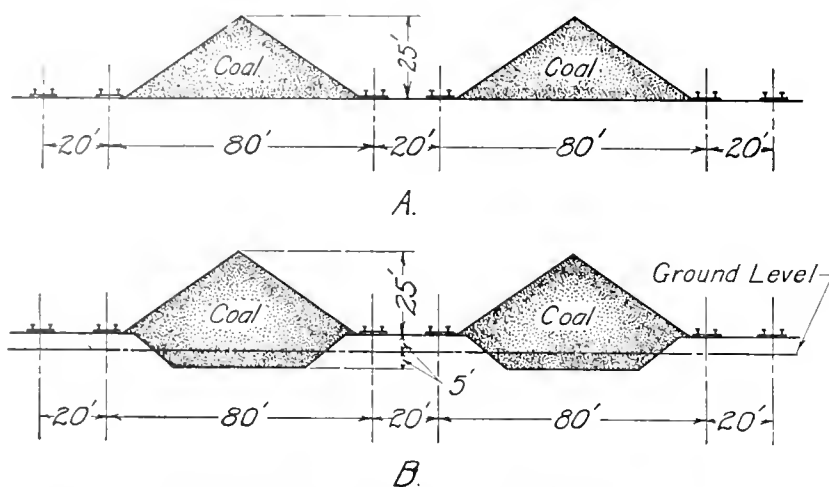


Fig. 4. Arrangement of Tracks and Storage Piles Employed by the Commonwealth Edison Company in Open Storage.

Where machinery is used for loading and unloading purposes the storage piles are:

(a) Either rectangular, relatively narrow piles continuous in length, or divided up into a number of smaller piles by cross alleys.

(b) Circular piles arranged in straight lines or else concentrically around a central pile.

Fig. 4 shows cross section of pyramidal piles as used by the Commonwealth Edison Company of Chicago, which company, under the direction

of Mr. W. L. Abbott, Chief Engineer, has stored large quantities of coal very successfully for a number of years. As shown by the sketches, the coal is piled between pairs of track which are 80 feet apart, and a crane can operate from either track while loading or unloading cars on the central track. The piles shown in the upper part of the illustration contain about 30 tons per running foot, while the lower part of the illustration shows a newer arrangement adopted by Mr. Abbott and used in the yards recently built by the Commonwealth Edison Company. As shown, the ground is excavated to a distance of 5 feet below

the surface and the soil taken from the excavation is used to raise the tracks five feet above the level, thus giving the coal pile a total depth of 35 feet and containing 45 tons per foot of length. This system, or modification of it, is used extensively in wholesale storage yards and also by a number of railroads. Fig. 5 shows a standard system of the Missouri Pacific Railroad. For coals that are liable to spontaneous combustion the alleyways across the piles are used, otherwise the piles are continuous.

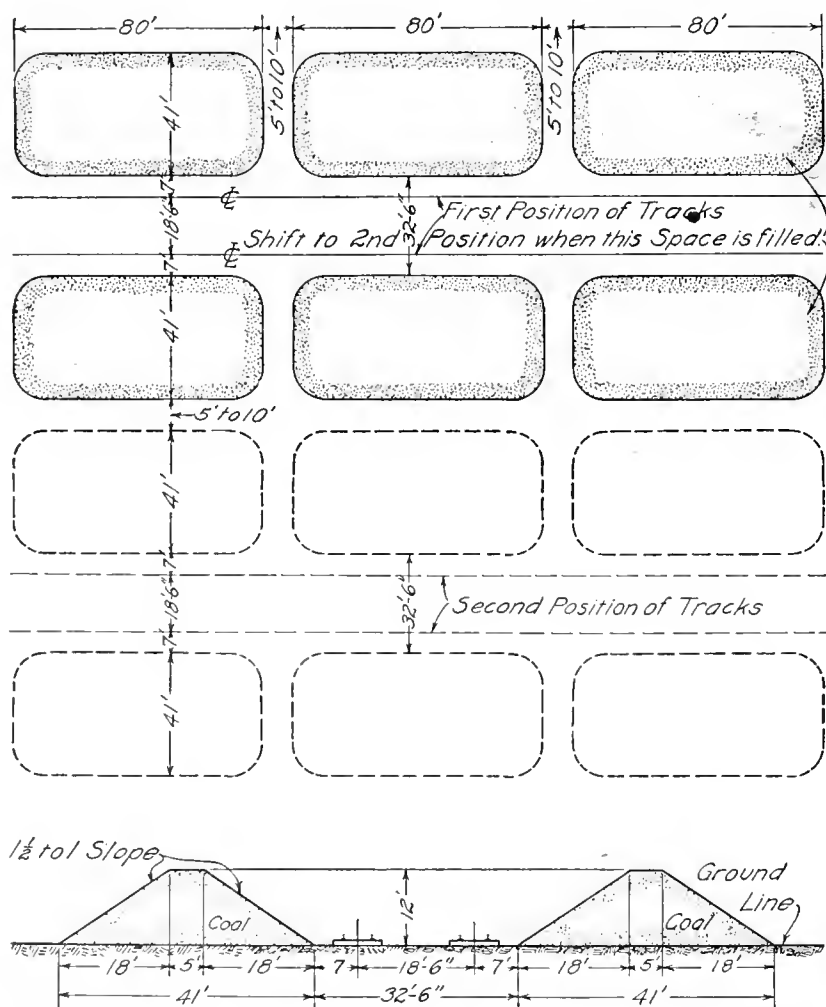


Fig. 5. Plan and Section Illustrating Coal Storage System of Missouri Pacific Railroad.

Figs. 6, 7 and 8 show a circular form of storage patented by the J. M. Dodge Company said to be particularly adapted to the operation of a locomotive crane in a circle. Coal is dumped from the railroad car into a track hopper, as shown, and from the hopper is transferred by a long radius locomotive crane operating a self-filling clam-shell bucket which transfers the coal from the hopper to a concentric circular pile about the track hopper. For reclaiming the coal the crane takes the coal from the pile and loads it directly into the cars. With such a system from 40 to 200 tons per hour can be handled, depending upon size of the bucket and crane used.

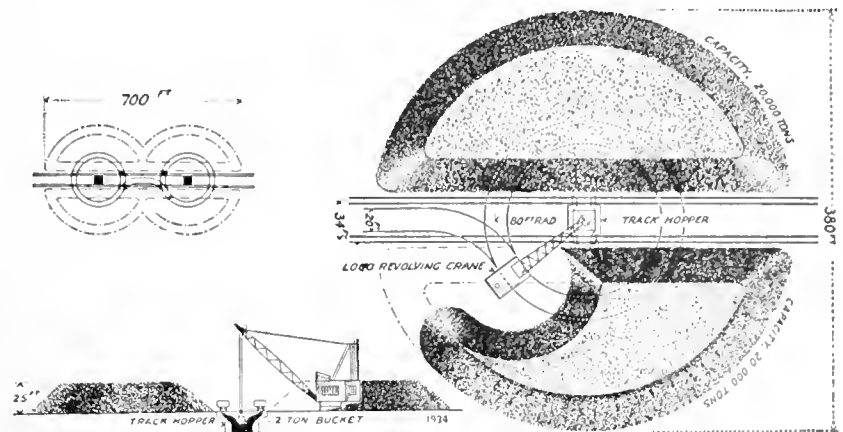


Fig. 6. Dodge Type of Circular Storage System.

To give increased capacity concentric piles may be arranged, as shown in Fig. 7, the operation of which is self-evident. By suitable arrangement of tracks a similar arrangement can be applied to elliptical or semi-circular piles where surface is available only on one side of the power house, as shown in Fig. 8.

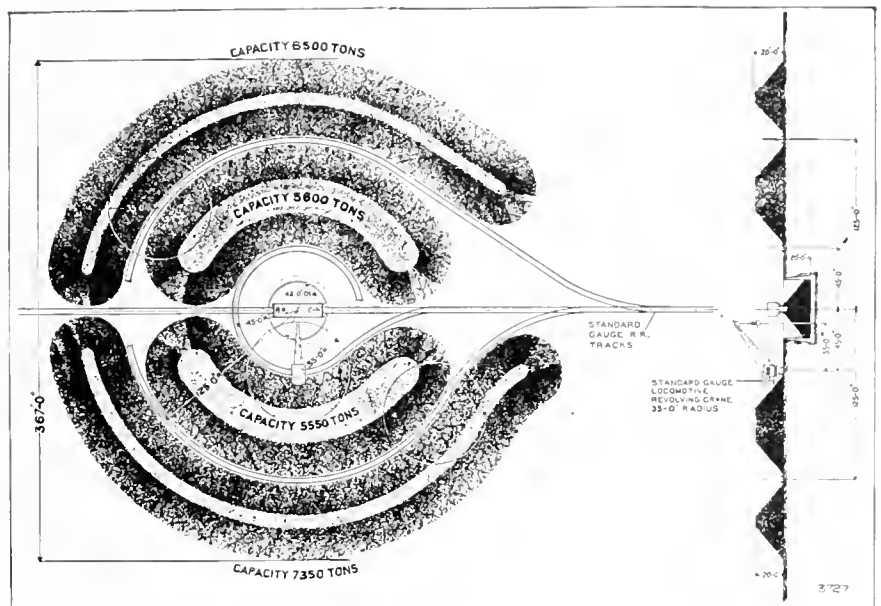


Fig. 7. Twenty-Five-Thousand-Ton Storage Plant.

Side hill storage is dependent upon the topography of the country and it gives an excessive breakage and segregation of the sizes. It has seldom been used in connection with bituminous coal, but there are a number of side hill anthracite plants.

The portable or semi-portable type of conveyor or elevator, as developed by a number of different firms, seems to be well adapted and very flexible for storage purposes and the machinery is less expensive than appliances of the crane type, either locomotive or gantry. These appliances, as illustrated in Fig. 9, consist essentially of a belt or bucket conveyor suitably supported on a framework, and either temporarily fixed on a light structure, or movable. Some of the semi-portable conveyors have one fixed or pivoted end for receiving the coal, while the other, or discharge end, can be moved about the

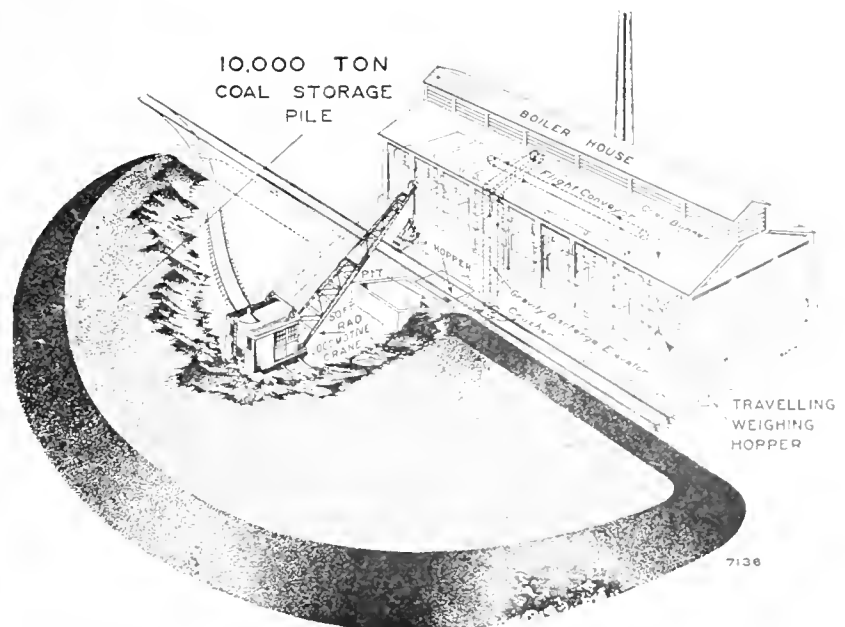


Fig. 9. Semi-Circular Storage Adapted to Locations Near Power House or Coaling Stations.

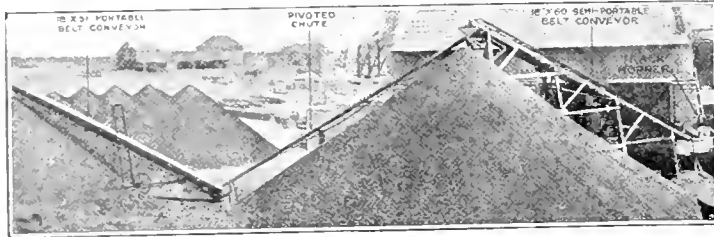


Fig. 10. Circular Method of Piling Coal. Using Both Portable and Semi-Portable Conveyors.

pivoted end, and thus build up a circular concentric pile. Fig. 9 shows the application of such portable conveyors to concentric piles, and Fig. 10 their use at Mooseheart, Ill., for building up a number of small piles concentric to a central pile. The operation of such conveyors is self-evident and does not need description.

Figure 11 is a plan and section of a coal handling plant used by the Southern Railway in which a drag bucket is employed to place the coal and later to gather it. After the coal is dropped from the railroad car into the coal hopper, it is elevated by buckets which may be dumped directly toward the storage bin or else on to a chute on which the coal passes to the coal pile. As the coal accumulates it is spread out by the use of the drag bucket, one end of which is attached by means of hitching lines to so-called pulling poles. It is easily moved into any position. When it is desired to gather up coal for the storage bin, the bucket brings the coal to the coal hopper, after which it is elevated as before explained.

Figure 12 suggests a method of utilizing a large storage space with a small outlay of machinery. The quantity that may be stored will depend on the height of the towers and the length of track upon which the movable tower runs.

Figure 13 is an elevation showing the application of trolleys to the problem of storage. The coal drops from the railroad car into a bin, from which it passes, under the control of a gate, to a standard conveying bucket. It is then elevated by means of a hoist to an overhead trolley which runs on a track held by vertical supports. The bucket can be lowered and the coal tipped at any convenient

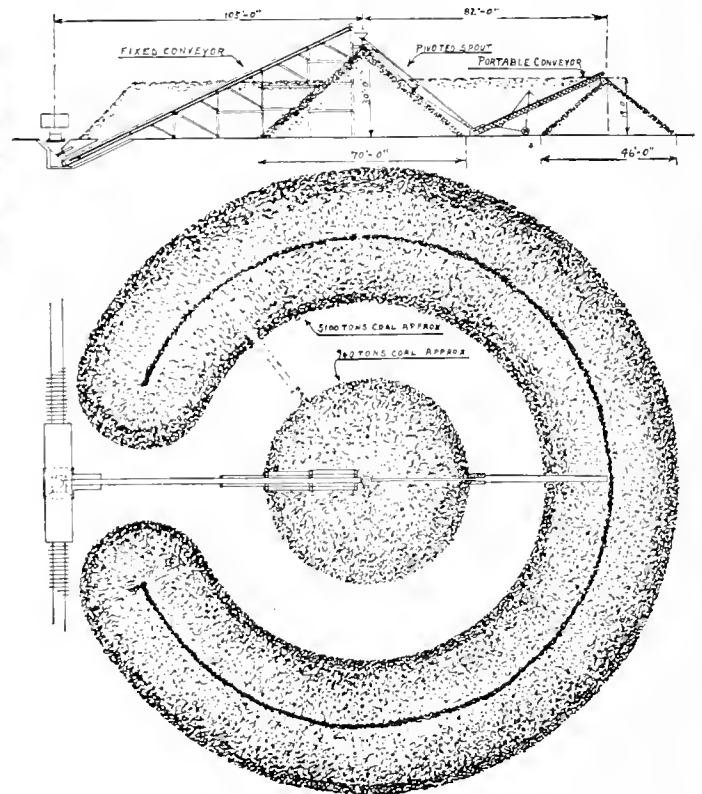


Fig. 9. Circular Method of Piling Coal. Using Both Portable and Semi-Portable Conveyors—Plan and Section.

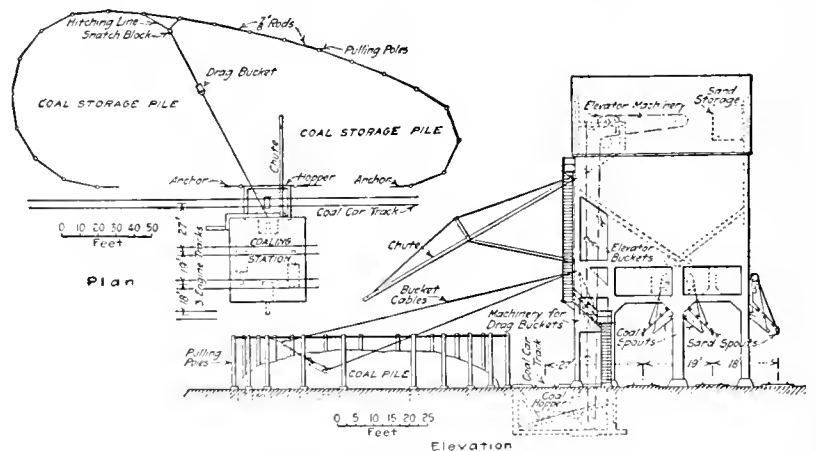


Fig. 11. Plan and Section of Coal Handling Plant of Southern Railway at Air Line Junction, Va.

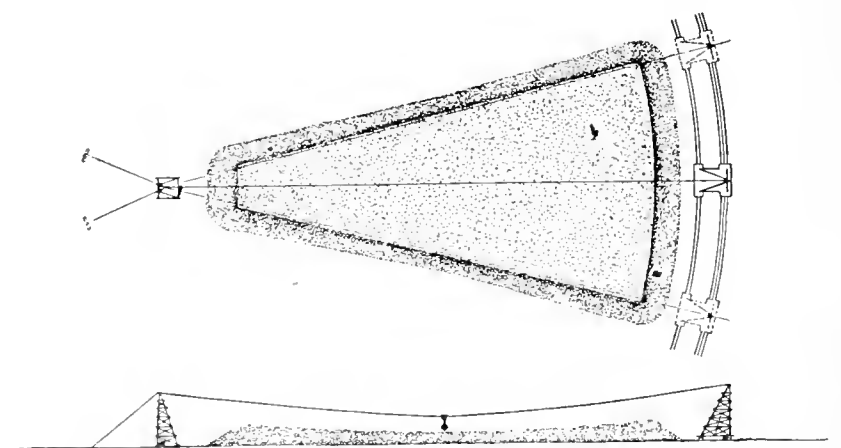


Fig. 12. Cableway System for Handling Coal—One End Tower Fixed, the Other Movable.

point. When the coal is reclaimed the trolley continues into the boiler house and the coal empties into a bin. The same conveying system may be made to remove the ashes, care being taken, however, to have the heat from these well insulated from the coal pile.

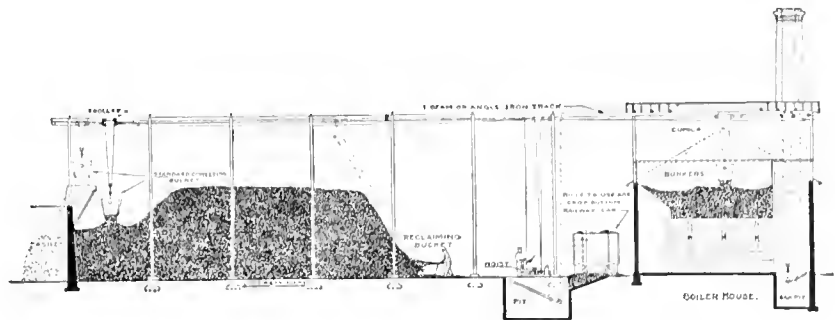
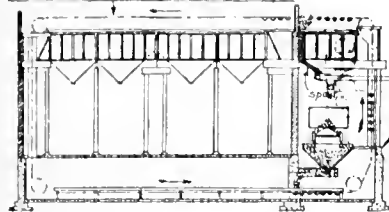


Fig. 13. Godfrey Conveyor System for Storing and Handling Coal.

Standard Pivoted-Bucket
Boiler-House Installation



Standard Conveyor
Reversible Drive

Portable Conveyors
with Chutes

Piling Coal
When Received in Excess Above Daily Requirement

Fig. 14.

Figs. 14, 15 and 16 show a method of storage in use at Mooseheart, Ill. Coal is dumped from drop-bottom cars into a hopper, from where it is carried by a pivoted bucket elevator to the boilers. Coal for storage is shunted through a spout to the combination of conveyors, by means of which the coal can be stored in piles, 12 to 15 feet in height, and so arranged that the cross sectional area is small in order to lessen the danger of fire. In the seven piles shown in the plan about 6,000 tons of coal were stored.

In reclaiming, the operation is just the reverse, as shown by the view at bottom of the figure. A mechanical loader may be added for placing the coal on the first conveyor, thus keeping labor cost at a minimum.

The idea back of this plan is to accumulate the maximum quantity of coal on the smallest base in the most economical manner, and at the same time to offer the greatest protection possible against fire.

Storage in silos, Figs. 17 and 18, built of concrete or of wooden staves, similar to those used for

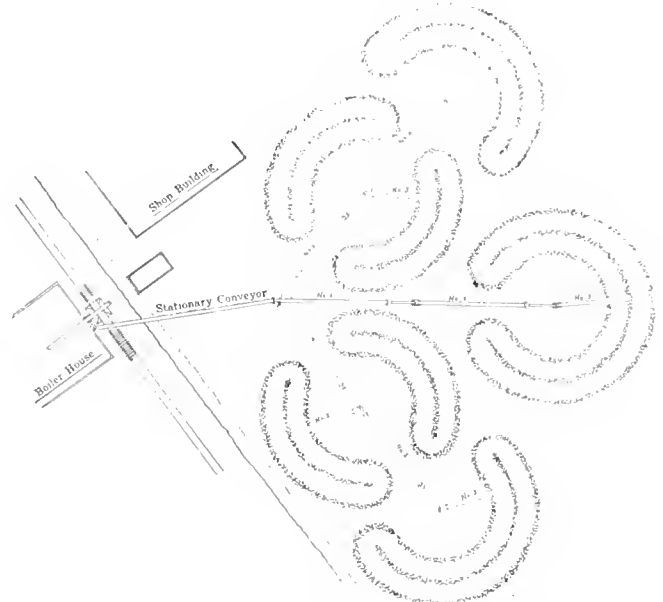
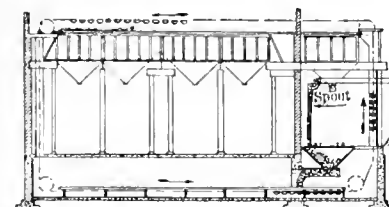


Fig. 15. Plan of Coal Storage at Mooseheart.



Reclaiming Coal As Needed
Same Equipment with Self-Feeding Bucket-Loader Added.

Fig. 16.

grain, has quite recently come into vogue and a number of such plants are now being operated successfully. If the bottom of the silo is tightly sealed when coal is not being drawn out of the silo it serves practically the same purpose as storage under water, as the pile can be made very nearly airtight. Where silos are used, however, air should not be allowed to enter the bottom, for in one instance where this occurred an explosion took place which blew off the top of the silo.

The various forms of bridges used for handling

coal, ore, etc., in large quantities, Fig. 19, are well known and are used for very extensive storage plants. Belts, either alone or in connection with bridges, are also extensively used.

Under water storage has the advantage of completely eliminating the fire risk, but it requires peculiar conditions for its installation and is generally quite expensive in the original installation. A simple example of such storage at the plant of the Western Clock Co., Peru, Ill., is shown in Fig. 20. Locomotive cranes are often used to reclaim the coal

from under water storage pits, the cranes operating either from tracks alongside the pits or running lengthwise of the pits directly above the coal. Sometimes, as at a storage plant near Kankakee, Ill., an old quarry filled with water has been utilized as a storage pit and the fine coal is pumped by centrifugal pumps from the water.

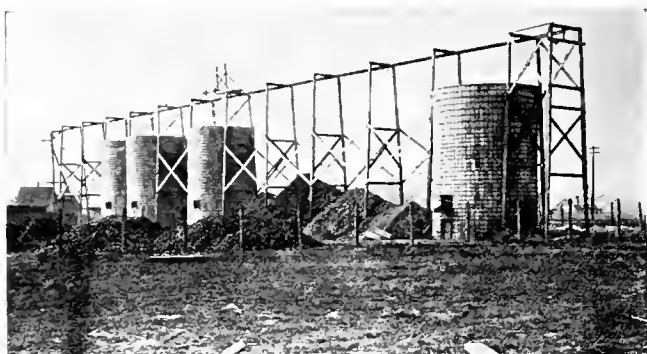
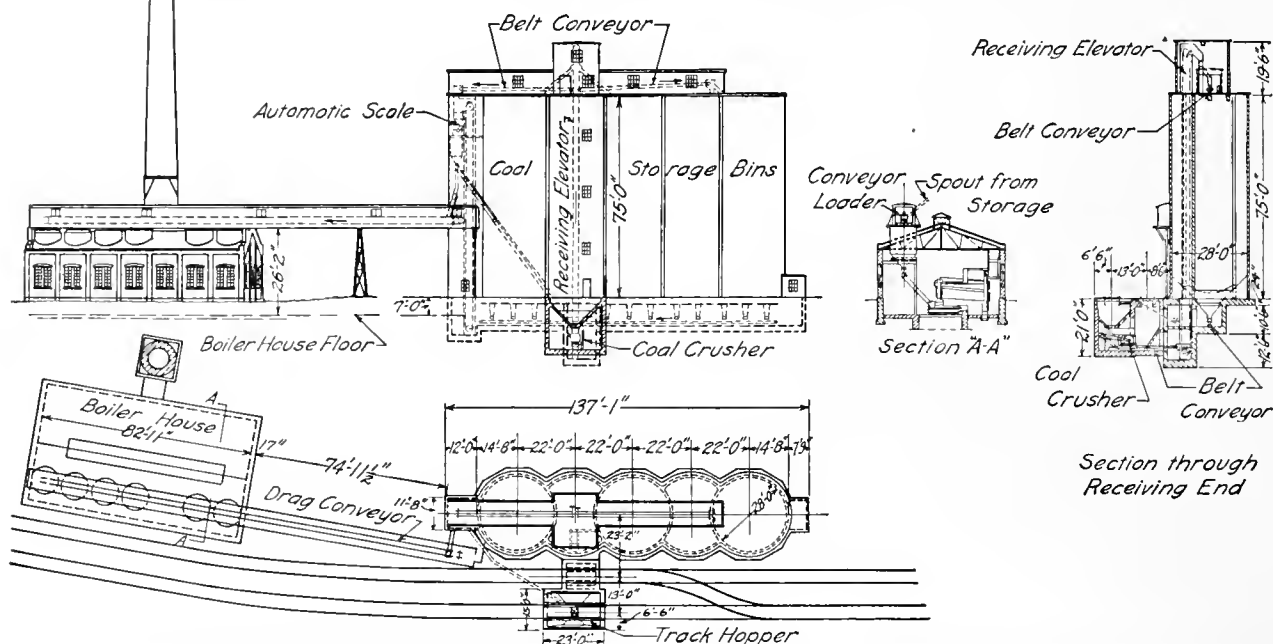


Fig. 18. Wooden-Stave Silos.



Fig. 19. Coal Handling Bridge.

Total moving Load on Bridge including Hoist, loaded Bucket and Operator's Cab - 5000*.

Link-Belt Type C2 Electric Hoist Capacity - 3000*

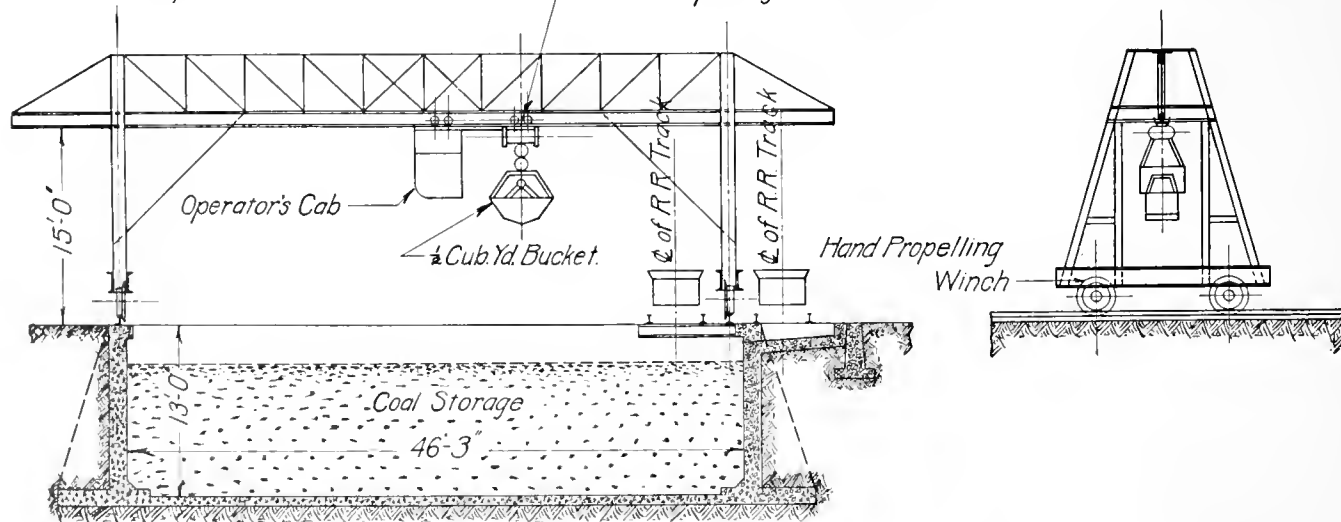


Fig. 20. Storage Pit and Bridge of the Western Clock Works.

COAL SAMPLING

Methods of Taking Mine Car, Cargo and Wagon Samples

By coal sampling is meant the process of collecting a quantity of coal, either from the seam itself or from a mass of loose coal in the course of shipment, in such a way that it shall be representative of the product. To successfully carry out the procedure requires that the person taking the sample exercises good judgment in order that it will represent fairly both the virtues and the faults of the coal. A knowledge of mining is not essential, but it is very helpful when samples are taken within the mine, as it enables one to better decide on the inclusion or exclusion of impurities.

Coal samples may be taken in several ways, the accuracy of the work, in each case, being entirely dependent upon the sampler. For this reason it is well worth while for all interested in coal to become thoroughly familiar with the various methods of sampling. Since the real purpose of coal analysis is to determine the percentage of the various elements or parts entering into the composition of coal, it is of exceeding importance that every sample should be taken in accordance with well formulated instructions, and it is always advisable, when submitting a sample, that it be accompanied by a statement of how and by whom it has been taken. Nothing is gained by having an analysis made of specially selected lumps, and by its glamour attempting to establish a reputation which the shipped product can never hope to attain. As well might the orchardist hope to perpetually hoodwink the public by artfully using perfect fruit to conceal the decay lying beneath. Far better it is for the good name of a coal, and for the peace of the producer and consumer, when samples are correctly taken, that is, with a proper inclusion of both the good and the bad. An analysis made from a sample so taken will correctly indicate the quality of the coal as shipped and as reasonably possible to be maintained.

Mine Samples

A much used method is that where samples are taken within the mine by hewing a narrow channel from the top to bottom of the seam. This method has been, and still is, much used by the United States Geological Survey, Bureau of Mines,* and the various state geological surveys. It is frequently criticised, and has undoubtedly caused trouble, for the reason that results have not been correctly interpreted. There has been an unfortunate tendency to regard an analysis made from mine samples as indicating the composition of shipped coal, whereas, in truth, it but sets forth the high degree of perfection which the coal may hope to attain. A common illustration of this misunderstanding is shown by the readiness with which shippers occasionally meet complaints by offering in refutation copies of analyses made from mine

samples, a recourse likely to be ineffectual when optical demonstration is to be had of slate, fire clay, crop coal, or bony coal plentifully found in the shipment, and of which no account had been taken in the mine sample. Coal samples taken well inside the mine usually show a better grade of coal than the average commercial shipment from the same mine, the degree of difference depending, as already suggested, upon the amount of removable impurities in the seam and the effectiveness with which they are excluded from the coal. In nearly all cases, however, the shipped coal is inferior, for the reason that the miner who is paid on the per ton basis will not exercise the same care in separating slate or band before shoveling as would the person preparing the sample.

In spite of such difficulties, due largely to a misconception of the real status of mine samples, they are, nevertheless, of much value to the operator, and it is freely recommended that they be taken in every mine, at various places therein, and at various time intervals, for it is only in this way that the operator may know what the inherent quality of his coal is, and knowing this, he can, when confronted with analyses of shipments that are inferior, at once proceed to determine the factors causing undue discrepancies between the coal in the seam and the coal as shipped, and to applying the proper remedies.

In deciding upon the section or sections where samples are to be taken, much will depend upon the development and output of the mine. The larger the mine and the more spread out it is in its development, the more samples will need be taken. Thus, a mine with a daily output of 1,000 tons derived from six active sections would require that at least six samples be taken, with additional samples to be taken in the sections under development for the purpose of indicating any variation in composition in the future sources of supply. A map of the mine will greatly assist in selecting the places to be sampled.

Having decided upon the sections and the probable number of samples to be used, the working places from which these are to be taken is next decided upon. This can be done only after an examination of the mine has been made and such working places selected as represent the average working conditions of each section. It would be obviously unfair to select a place just passing through a clay vein, or one in which water is continuously passing over the coal face. The object at all times should be to strike the average working condition. After the place is decided upon, all loose pieces of coal, stone or dirt should be brushed from the face for a width of two to three feet. The floor is then made smooth and clean and a sampling cloth, preferably of duck material, is spread and made ready to collect the broken pieces of coal produced

*See Tech. Paper No. 1, "The Sampling of Coal in the Mine," by Dr. Joseph A. Holmes.

by a vertical cut, 2 inches deep and 6 inches wide, made with a sharp pick and extending from the roof to the floor, provided the entire thickness of seam is mined. If, as is sometimes the case, top coal is permitted to remain as a protection to the roof, or part of the bottom is unmined because of its impurities, the channel would not include such parts of the seam.

A further point of great importance is that only such of the impurities, including iron pyrites, bone, slate or partings, as are actually cast out by the miner before loading, or are later removed by mechanical or hand processes in the course of preparation, are to be cast out in sampling. It is here that the personal equation enters largely into sampling and it is here that the greatest opportunity for error exists. The best guide, undoubtedly, is a familiarity with both the customs of the miners and the degree of preparation given the coal before loading into railroad cars.

After the cutting of the sample is completed, the lumpy portion is reduced by pounding with a hammer, or the flat of a shovel, until the mass is sufficiently fine to pass through a $\frac{1}{2}$ -inch screen. The sample is then thoroughly mixed, either by turning over with a shovel or by manipulating the cloth. After leveling the mass it is quartered—two opposite quarters being rejected and removed from the cloth. The remainder is thoroughly mixed as before and the method of reducing the sample by first quartering and then rejecting opposite quarters is continued until the sample is finally reduced to about three pounds, or an amount sufficient to closely fill a quart fruit jar or can of approximately the same size. The jar should be shaken to pack the coal, and, after it is well filled, it is ready for shipment to the laboratory. The receptacle used should be provided with a rubber gasket to guard against transference of moisture to or from the coal sample from the time it leaves the mine until ready for analysis, or in place of a gasket it can be sealed with adhesive tape. It is to guard against loss in moisture that reduction and quartering should always be done in the mine and not on the outside, where the coal would be subject to atmospheric influences. All jars or cans should bear a label on which is given the number of the sample. This number should be recorded in the sampler's note book, along with information on the location of the place where sample was taken, and all other details which tend to make its identification easy.

Coal samples taken in openings near the outcrop, or where the coal is more or less weathered, will usually run higher in ash and lower in volatile matter than coal lying farther in, and, wherever possible, such samples should be avoided, as they may not fairly represent the quality of coal commercially possible.

It is always advisable to have the analysis made promptly. Porter and Ovitz* have shown that samples of coal evolve methane and carbon dioxide and absorb oxygen for a period of several months. Parr has found that Illinois coals may lose in heat value from 0.5 to 1 per cent in the first ten days after mining and during the process of preparing the sample for analysis.

Car Samples

Car samples may be taken either while the railroad car is being loaded at the mine, or while being

unloaded at its destination. In either case the object is to procure a mass of coal in such a manner that it shall be a reliable representation of the total shipment. This requires that the gross sample be made up by taking portions of different parts of the mass, and such opportunity is best afforded when the coal is in the course of loading into or unloading from railroad cars. The gross sample should contain the same proportion of lump coal, fine coal, and impurities as the coal sampled.

The Bureau of Mines recommends that when the car is sampled as loaded the procedure be as follows:† “When a shipment of coal is sampled at the mine, shovelfuls or portions of coal should be taken systematically as the coal is loaded into the railroad car, and with such regularity that the sample will represent the entire carload. The frequency of collecting the portion will depend on the number of cars of coal to be represented by one gross sample. If only one carload is to be sampled, a gross sample of 1,000 pounds, or more, should be collected. If two or more cars of coal are to be represented by the sample, proportionate amounts to make up the gross sample should be taken from the coal as it is loaded into each car. The samples should be taken after the coal has been prepared for market; that is, if the coal is passed over picking tables or pickers are employed on the car to remove the impurities from the coal, the samples should be taken only after the coal has had its final preparation.”

When coal is sampled at its destination, the procedure is governed by the type of railroad equipment. If the car be of the flat-bottom type and unloaded by hand, hand shovelfuls should be taken at regular intervals as the coal is being unloaded into wagons or bins. It is usually the practice for the men doing the unloading to go straight to the bottom. Then the same procedure of starting at the bottom and proceeding to the top of the exposed surfaces should be carried over four or five different places on that one surface. This should be done in the ends and middle as the car is unloaded, so that a little coal is taken from practically all parts of the car. Sampling while unloading from drop-bottom cars is likely to be more difficult owing to the rapid flow of the coal from the car. Where possible, shovelfuls are taken at frequent intervals during the drop of the coal, or a sample may be gathered by collecting shovelfuls of coal that has overflowed on the pier or the sides of pockets.

On the size of the gross sample, we again quote from the Bureau of Mines:‡ “For run-of-mine or lump coal, the gross sample must not be less than 1,000 pounds. If the coal contains an unusual amount of impurities in pieces of considerable size, the gross sample should be about 1,500 pounds. For slack coal and small sizes of anthracite in which the impurities are in not abnormal quantities, or are not in pieces larger than three-quarter inch, a gross sample of approximately 500 pounds is sufficient. Whether the quantity of coal sampled consists of 1 ton, 500 tons, or more, the need of the gross sample being of the sizes stated is the same.”

A means sometimes referred to for taking samples of coal on the car is that of driving an iron pipe through the mass, the contents of the pipe

*Technical Paper 2, Bureau of Mines.

†Bulletin 116, “Methods of Sampling Delivered Coal,” by George S. Pope.

‡Ibid.

being used for the purpose of analysis. This method is at all times a troublesome one and is impossible of use in the case of run-of-mine or lump coal. An improved device for taking samples of coal that is 3 inches or smaller in diameter is shown in Figure 1. Figure 2, showing the sampler imbedded in the coal, makes plain that the sample is extracted from top to bottom of the coal as it lies

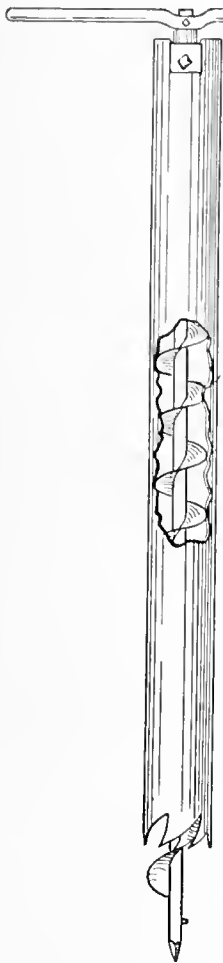


Fig. 1. Mechanical Coal Sampler.

in the car. After withdrawal, the coal is expelled from the pipe by merely reversing the spiral. The teeth at the bottom of the pipe act as "grip-pers," thus keeping the pipe from turning. These, together with the spiral, act also as a "clipper" and shear off pieces of coal that wedge between.

As many samples may be taken as thought necessary, but if two samples are taken at opposite ends of a diagonal line running from corner to corner of car, and additional samples taken at 10 to 12 feet intervals on the same diagonal line, the gross sample will fairly represent the shipment. The samples at the corners should be taken at least one foot away from the corner and side plates of the car.

Cargo Samples

The methods followed by the Bureau of Mines in sampling coal discharged into ships is as follows:* "Portions of coal should be taken in equal quantities and at frequent and regular intervals so as to represent proportionate parts of the consignment as a whole, either while the car is being loaded or unloaded.

There is no assurance that a sample or a series of samples taken from the top of the cargo represents the cargo as a whole; in fact, it is very doubtful if such samples are ever representative. The Bureau of Mines has charge of the sampling of cargo shipments of coal to the Isthmus of Panama for the Panama Railroad Company. The coal, which is loaded from piers at Hampton Roads, Norfolk and Newport News, Va., is dumped directly from railroad cars into ships carrying from 4,000 to 12,000 tons of coal. The method followed is to collect portions of coal from every railroad car dumped. From 30 to 60 pounds are taken from each car sampled, the quantity taken depending upon the size of the cargo. From 3,000 to 4,000 pounds are usually collected as a gross sample to represent a cargo. The gross samples are reduced in successive stages as collected, rather than accumulated and later reduced to quantities convenient for transmittal to the laboratory.

"The portions making up the gross samples are taken from the coal as it is discharged from the bottom-dump cars by the use of a shovel or a specially constructed ladle. Care is observed to not collect portions of the first or last coal spilling from the car, for the moisture content or proportions of foreign matter in such coal may render the sample unrepresentative."

Wagon Load Sampling

The main idea here, as in all sampling, is to get a fair average of the coal. This is best done by taking the sample from the wagon before it has been unloaded for the reason that the coal, if it is a screening or a size that is made up of different sizes of coal, will not have separated to any great extent. Each shovelful is taken by starting at the bottom of the exposed face of coal and a little taken from the bottom to the top. The number of shovelfuls taken and the loads sampled will be dependent on the number of loads which the gross sample is to represent. The gross sample should contain about the same proportion of lump coal, fine coal, and foreign matter as the coal delivered.

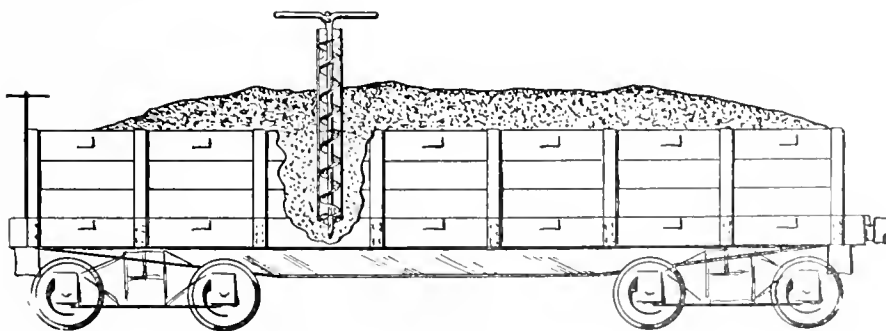


Fig. 2.† Mechanical Sampler Imbedded in Coal.

*Ibid.

†Figures 1, 2 and 3 are here reproduced by courtesy of the Commercial Testing & Engineering Company, Chicago.

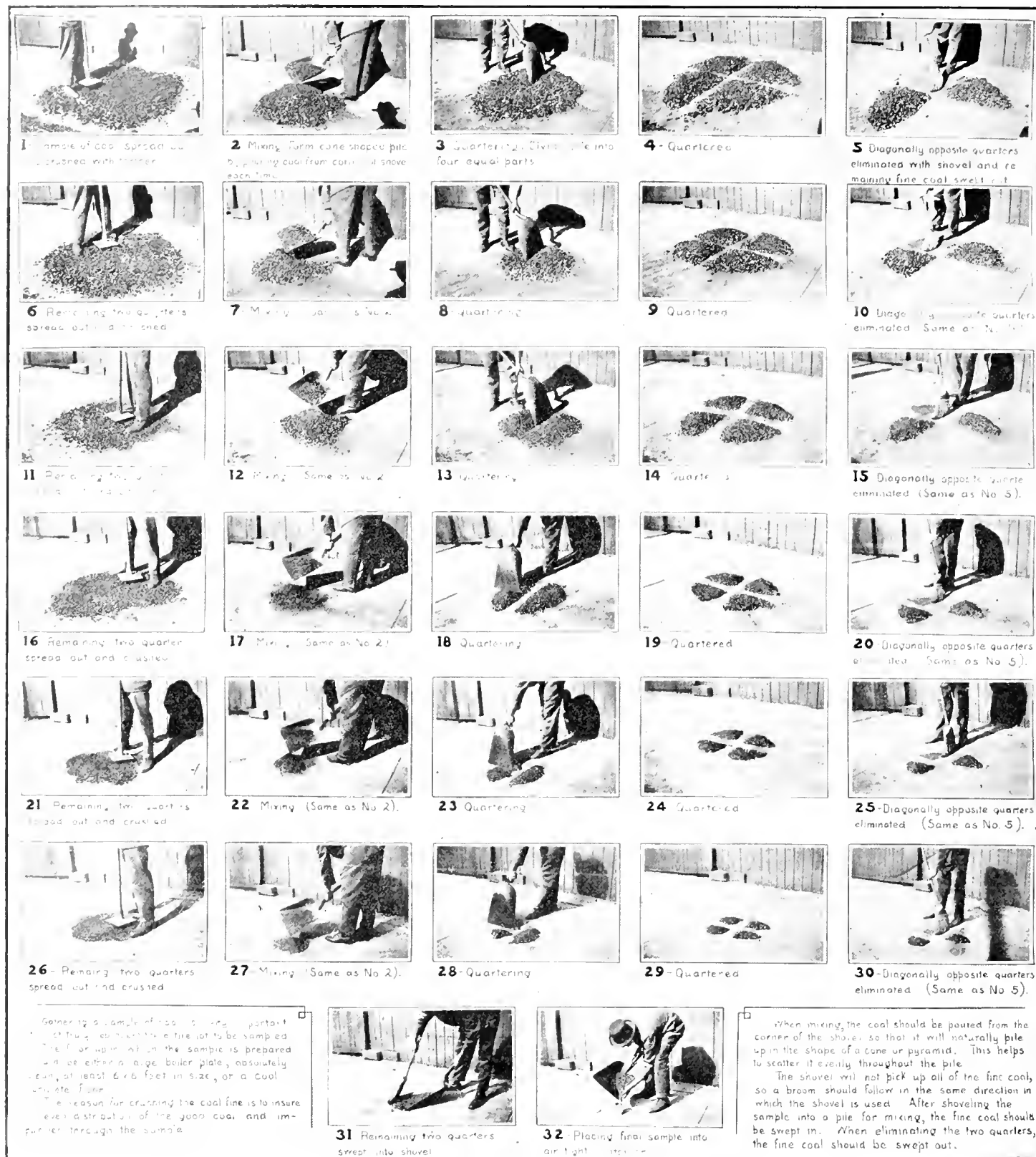


FIG. 3. PROPER METHOD OF PREPARING COAL SAMPLES.

A method of preparing samples taken of shipped, cargo or wagon coal is shown in its various stages in Figure 3. If the metal plate referred to in the instructions is not available, a concrete floor will be found equally serviceable, provided it is hard surfaced so as not to wear off in the crushing of the sample.

THE COMPOSITION OF COAL

Proximate Analysis; The Constituent Parts Entering Into the Composition of Coal; Influence of Each Part on the Generation of Heat; Reporting Analyses; Calculations Involved in Changing Bases; Ratios Used in Comparisons; Heat Value of Coals; Analyses Given in Coal Catalog.

Coal analyses are of two kinds—ultimate and proximate. The first mentioned is a strictly chemical process wherein the percentages of the various elements in coal are determined. It is principally of scientific value, although the amounts of oxygen and nitrogen present in a fuel are of interest to coke and gas makers. For general commercial purposes, however, it is of minor interest and will not be discussed here.

The proximate analysis of coals is of more importance. With the exception of the determination of sulphur, it does not involve chemical processes. Moisture is determined by heating a 1 gram sample in an oven at a temperature of 105 deg. C. for one hour and recording the loss sustained as the percentage of moisture. Volatile matter is found by heating a 1 gram sample in a closed platinum crucible for 7 minutes in the hottest flame of a Meker or Bunsen gas burner and recording the loss as volatile matter. Ash is arrived at by completely burning the sample used for the moisture determination and weighing the incombustible portion which remains. Fixed carbon is the difference between the moisture plus volatile matter plus ash, and 100. The heat units are determined by burning in an atmosphere of oxygen a 1 gram sample in a calorimeter. Sulphur alone is determined by a chemical method.

Moisture

Water in coal may be classed under two heads, first, mechanically retained, or surface, moisture, such as is present in coal loaded from wet sections of the mine, washed coal, or coal rained on; second, hygroscopic moisture, or that which is held within the pores of the coal by capillary attraction, and retained by the coal when air dried. Moisture in the first form may, or may not, be present in coal in varying quantities; in the second form it is unescapable, and it is in this form reported as moisture in coal analysis.

Hygroscopic moisture is present in all coals, ranging from 1 to 5 per cent. in coals of the Appalachian region up to 40 per cent. as found in the lignites of Texas and South Dakota. Almost every percentage between these extremes is found in considering coals throughout the United States, thus some of the Ohio coals reach as high as 7.5 per cent.; Indiana and Illinois, 15 per cent.; Iowa and Missouri, 20 per cent.; Colorado, 25 per cent. These figures represent the extremes met with and are not to be regarded as typical of the coals produced in the various states, but rather as indicative of the variations in moisture content.

The amount of surface moisture in coal varies with the kind and size, the length of time in transit, accessibility of air and also upon the relative humidity of the atmosphere. Slack coal, because of its having in the aggregate a large amount of ex-

posed surface, absorbs relatively large quantities of moisture (as much as 15 per cent. in some instances), but it readily parts with much of this under favorable atmospheric influences. Lump coal, on the other hand, does not retain a great deal of surface moisture. Run-of-mine coal is intermediate between slack and lump coal, the quantity of water taken up being dependent upon the proportion of fine coal. The loss of moisture in shipment from the time it leaves the mine until the destination is reached may vary from practically nothing in the Appalachian coals, to from nothing to 5 per cent. in Illinois coals, and up to 10 per cent. in subbituminous and lignitic coals.

Moisture is a waste product and has no heat value, in fact it is anticalorific and requires a part of the heat liberated by the coal to vaporize it. One per cent. of water represents 20 lbs. in a ton of coal and absorbs 22,380 British thermal units of heat, thereby lowering the efficiency of the coal by an equivalent amount.

Everything else being equal, the coal containing the least percentage of moisture has the highest heat value.

Volatile Matter

Volatile matter in coal comprises mainly the combustible gases, hydrogen, carbon monoxide, methane and other hydro-carbons, together with some inert gas and water formed by the decomposition of the coal, but does not include the moisture expelled in heating the coal for one hour at a temperature of 105 deg. Centigrade.

The exact nature and composition of the gases comprising volatile matter is not yet understood, but for commercial purposes it is sufficient to know that it is that part of the coal which is driven off in the form of gas when the coal is subjected to heat. This gas, in a sufficient supply of air, burns readily and produces heat, in fact, pound for pound it produces more heat than any other constituent part of the coal. It can not be argued, however, that coals highest in volatile matter are the greatest heat producers, for differences in composition of the gas may cause wide differences in the heat produced by various coals. Only a fraction, and a variable fraction at that, depending largely on the kind of coal, is combustible, and a considerable fraction, consisting of water vapor, carbon dioxide, nitrogen and other diluents, is inert or incombustible. Moreover, the rapidity with which the volatile matter is thrown off in burning and the sufficiency of air to insure complete combustion have much to do with the heat value of the coal. High volatile coals, when thrown in large quantities on the fire, produce smoke, that is, the gases have been expelled at a faster rate than they can unite with the oxygen of the air, leaving the unconsumed car-

bon to issue from the stack as black smoke. In all such cases much of the heat energy of the volatile matter is lost.

A characteristic of low volatile coals is that the gases issue forth at a slower rate, affording more opportunity for chemically uniting with oxygen, and a more complete combustion with less smoke. The theoretical heat value of these coals is therefore more nearly attainable in practice than with those of high volatile content, unless mechanical devices, as stokers, are used.

Fixed Carbon

This is the term conveniently, and somewhat loosely applied to what remains after the moisture, volatile matter and ash are accounted for. It does not represent all the carbon in the coal, as a considerable amount, combined with hydrogen, is driven out in the volatile matter, furthermore, the term "fixed carbon" includes some of the hydrogen, sulphur, oxygen and nitrogen of the coal.

Fixed carbon has a high value as a heat producer, one pound generating about 14,544 heat units. While this is low in comparison with the heat produced by one pound of hydrocarbon gas, namely 23,500 heat units, it is nevertheless true in practice that with high volatile coals more effective heat is produced by the fixed carbon than by the volatile matter. The reason for this lies in the tremendous losses of heat energy in high volatile coals, due to the incomplete burning of the gases. According to data obtained by Lord and Somermeier on seventy-eight tests conducted by the U. S. Geological Survey at St. Louis during the World's Fair, the inability to derive full heat value from volatile gases holds true of all coals having 20 per cent. or over of volatile matter; with coals having less than 20 per cent., practically all of the gases can be completely burned. In general, coals ranging from 77 to 81 per cent. in fixed carbon appear to offer the best opportunities for deriving the full heat of both the fixed carbon and the volatile matter.

Ash

Ash is the solid incombustible mineral impurity remaining after the coal is burned. All coals contain ash in varying amounts, and present in two forms, first, mineral matter derived from the original vegetation, plus that which filtered through the vegetation as silt after deposition and became intimately mixed with the other constituents. This is known as intrinsic ash. Second, as shale or fire clay derived from rock above the coal, soft bottom, or from partings within the seam. This is known as extraneous ash. Impurities in this latter form can be minimized by care in mining, casting out refuse at the working faces, or by the use of picking devices at the tippie or breaker. Bony coal, or bone, is found as a part of many seams. This is a mixture of carbonaceous and argillaceous materials, and, unless cast aside, adds considerably to the ash content of the shipment.

Ash is objectionable because it has no fuel value. Each per cent. of ash, representing 20 lbs. per ton, is so much useless matter upon which freight, unloading and cartage charges must be paid. More labor is required with high ash coals

for the removal of ashes, and more coal must be shovelled into the furnace. A further undesirable feature is that ash, in itself, is capable of forming clinkers, in spite of the general impression that sulphur alone is responsible for this mischief. Chemical analyses show that ash consists principally of alumina, Al_2O_3 , lime, CaO , silica, SiO_2 , iron oxide, Fe_2O_3 , magnesia, MgO , and sulphur S . Under the influence of heat, the basic oxides of the ash unite with the silica to form a silicate having a fusion point much lower than the fusion point of the separate constituents entering into the combination. The fusibility of this ultimate product depends largely on the ratio of the silica to the basic oxides found in the slag and also on the properties of the bases themselves. (See further discussion of slagging under the head of "Fusibility of Coal Ash.")

Sulphur

Sulphur is always present in coal, varying in amount from 0.1 per cent. up to 8 per cent. Unlike ash and moisture, it has some fuel value, equal to about one-half that of the coal it displaces. It may exist in three forms: as a sulphide in combination with iron to form iron pyrites and marcasite, in combination with calcium to form calcium sulphate or gypsum, and in more or less unknown states of combination with organic matter. The largest quantity of inorganic sulphur compound is undoubtedly in the form of iron pyrites, FeS_2 , and as such is found in thin layers along the bedding planes, as minute crystals interspersed throughout the mass, and as irregular nodules scattered through the coal. When abundant in this latter form, it is sometimes used as a source of sulphur for the manufacture of sulphuric acid.

Organic sulphur in coal is derived from the protein sulphur of plant and animal life from which coal was formed. Investigations of late date* indicate that the organic sulphur compounds form a large part of the sulphur in coal, some Ohio coals showing as much as 2 per cent. There is a possibility of sulphur existing in coal in an uncombined form as a result of the mechanical mixing of detritus with the early coal material, but sulphur in a free form is undoubtedly a small proportion of the total amount.

Sulphur combined with iron is objectionable because the compound is easily dissociated by heat, the sulphur passing off as gas, and the iron oxidizing to a ferrous state in which it readily combines with other bases to form clinkers. A discussion of this tendency will be found under the head "Fusibility of Ash."

Phosphorus

Phosphorus exists in a coal in the form of calcium phosphate. Its amount is so small that it need not be considered in any usage other than coking where the coke is to be used for metallurgical purposes. All of the phosphorus passes into the coke, and the high limit in the coal is therefore placed at 0.02 per cent. It is objectionable in iron metallurgy for the reason that it makes the steel "cold short", that is it becomes weak and brittle when cold and liable to break under shock.

*A. R. Powell and S. W. Farr, in University of Illinois Bulletin 111, "A Study of the Forms in Which Sulphur Occurs in Coal."

Reporting Analyses

Analyses of coal as reported by the analyst may be under one or more of the following forms, (1) as received, (2) air dried, (3) dry coal or moisture free, (4) moisture and ash free.

The expression "as received" is to be taken literally, and an analysis so reported means that the percentages of the component parts are based on the condition of the coal as it was received at the laboratory and without having been air dried. The condition of the coal as received at the laboratory may, or many not, be representative of the condition of the coal as received by the consumer. Much depends upon the kind of coal, its fineness and upon the weather conditions. The constituent subject to the greatest change from the time coal leaves the mine until it reaches its destination is, of course, the moisture content. The change that may be expected to take place with high-grade high-rank coals is quite small, but will be found to increase with low-rank bituminous coals, and to become quite pronounced with some of the high-moisture sub-bituminous and lignite coals. As an example of rapid moisture loss due to absorption by the atmosphere, may be cited one of the Colorado lignites which is reported losing as much as 200 pounds per wagon load while enroute from the mine to a town seven miles distant. On the other hand coal may add to its normal moisture content while in transit due to weather conditions, thus a car of slack which has been rained upon may contain as much as 15 to 20 per cent of moisture, the greater amount of this being "surface" moisture brought in by the rain. Under like conditions, lump coal would be little affected. For general all-around purposes an analysis reported on the "as received" basis is the most satisfactory.

An "air dry" sample is one that after being reduced by crushing to about 1/4-inch has been allowed to become thoroughly air dry by standing exposed to the air of the room for 36 hours or longer. The same result may be obtained in a shorter time, from six to eight hours, by placing the sample in a drier through which air at a temperature of from 10 to 15 degrees above the room temperature is circulated by means of a small fan. In either method weighings are made at intervals amounting to about one-third of the minimum estimated period for drying, and when two successive weighings show less than 1/2 per cent loss in weight, the process is completed. The total loss in weight is reported as the air drying loss.

Frequently for the purpose of comparing coals freed of all moisture, or in order to calculate the heat balance in accordance with a prescribed code, it becomes necessary to report results calculated to a "dry coal" or "moisture free" basis. This basis is also convenient in comparing boilers burning the same or similar coals.

For making comparisons of the various coal substances coal analyses are usually referred to a "moisture and ash-free" basis, by calculation from the "air dry", "as received", or "moisture-free" analyses. Where a comparison is required between individual coals for practical purposes, the ash and moisture must necessarily be included, rather than to have results calculated on the pure combustible, i. e., on the dry and ash-free basis.

Calculations Involved in Changing Basis

Assuming that the analytical determination has been made on an air dried sample, the various calculations in changing from one basis to another are here given.

Calculations from Analysis of "Air-Dried" Coal to Coal "As Received."*

$$\text{Moisture} \times \frac{(100 - \text{air-drying loss})}{100} + \text{air-drying loss} = \text{moisture "as received"}$$

$$\text{Volatile Matter} \times \frac{(100 - \text{air-drying loss})}{100} = \text{volatile matter "as received"}$$

$$\text{Fixed Carbon} \times \frac{(100 - \text{air-drying loss})}{100} = \text{fixed carbon "as received"}$$

$$\text{Ash} \times \frac{(100 - \text{air-drying loss})}{100} = \text{ash "as received"}$$

$$\text{Sulphur} \times \frac{(100 - \text{air-drying loss})}{100} = \text{sulphur "as received"}$$

$$\text{B. t. u.} \times \frac{(100 - \text{air-drying loss})}{100} = \text{B. t. u. "as received"}$$

Calculation from either "Air-Dry" or "As Received" Analysis to a "Dry Coal" or "Moisture-Free" Basis.

$$\text{Volatile Matter} \times \frac{100}{100 - \text{moisture}} = \text{volatile matter in "dry coal"}$$

$$\text{Fixed Carbon} \times \frac{100}{100 - \text{moisture}} = \text{fixed carbon in "dry coal"}$$

$$\text{Ash} \times \frac{100}{100 - \text{moisture}} = \text{ash in "dry coal"}$$

*All formulas from Wagner, Coal and Coke, pg. 63.
†All figures expressed in per cent.

$$\text{Sulphur} \times \frac{100}{100 - \text{moisture}} = \text{sulphur in "dry coal"}$$

$$\text{B. t. u.} \times \frac{100}{100 - \text{moisture}} = \text{B. t. u. in "dry coal"}$$

Calculations from "Air-Dry", "As Received", or "Dry Coal" Analysis to "Moisture and Ash-Free" Basis.

$$\text{Volatile Matter} \times \frac{100}{100 - (\text{moisture} + \text{ash})} = \text{volatile matter on a "moisture and ash-free" basis}$$

$$\text{Fixed Carbon} \times \frac{100}{100 - (\text{moisture} + \text{ash})} = \text{fixed carbon on a "moisture and ash-free" basis}$$

$$\text{Sulphur} \times \frac{100}{100 - (\text{moisture} + \text{ash})} = \text{sulphur on a "moisture and ash-free" basis}$$

$$\text{B. t. u.} \times \frac{100}{100 - (\text{moisture} + \text{ash})} = \text{B. t. u. on a "moisture and ash-free" basis}$$

Illustration of Analyses Variouslly Reported

Assuming an air-dried analysis to have been made and reported as here given, the analyses on other basis, as derived by formulas just mentioned, would be as follows:

AIR-DRIED ANALYSIS

Moisture	1.12
Volatile Matter	32.16
Fixed Carbon	59.96
Ash	6.76
	<hr/>
	100.00
Sulphur	0.84
B. t. u.	14,420
Air-drying Loss	2.40

ANALYSIS REPORTED ON AN "AS RECEIVED" BASIS

Moisture	3.49
Volatile Matter	31.39
Fixed Carbon	58.52
Ash	6.60
	<hr/>
	100.00
Sulphur	0.82
B. t. u.	14,074

ANALYSIS REPORTED ON A "DRY COAL" OR "MOISTURE FREE" BASIS

Volatile Matter	32.53
Fixed Carbon	60.64
Ash	6.83
	<hr/>
	100.00
Sulphur	0.85
B. t. u.	14,583

ANALYSIS REPORTED ON A "MOISTURE AND ASH-FREE" BASIS

Volatile Matter	34.91
Fixed Carbon	65.09
	<hr/>
	100.00
Sulphur	0.91
B. t. u.	15,653

Ratios in Use for Comparison

Two ratios, the so-called fuel ratio and the carbon-divided-by-oxygen+ash ratio, are much used in arriving at the relative rank and comparative value of coals. The term "fuel ratio" (fixed carbon divided by the volatile matter) has been used by the U. S. Geological Survey in bringing out the decrease of fixed carbon and increase in volatile matter in the several ranks of coal ranging from anthracite downward. Fuel ratio should not, however, be understood as synonymous with fuel value. Any attempt to use it in this sense is sure to lead to error. It is intended merely to designate the rank to which a given coal belongs.

The second mentioned ratio, $\frac{C}{Oxy + Ash}$, furnishes an approximate means for arriving at the relative merits of two or more fuels.

In the specimen ultimate analysis, which will be found on a preceding page, there will be noted two elements that are not combustible, viz., oxygen and nitrogen, and in addition to these, the ash, which is likewise incombustible. Oxygen is not found in coal in the free or uncombined state, as will be found stated under the next subject Heat Value of Coals. Since it has already entered into combustion with either the hydrogen or carbon in the coal, it becomes for all practical purposes just so much ash. In fact, investigation has shown that oxygen and ash are approximately of equal anticalorific value, that is the anticalorific effect of oxygen in coal is nearly equal to that of the same weight of ash. The efficiencies of coals are found to conform fairly close to the order of the ratio of their carbon to the sum of their ash plus oxygen. It will be noted that the third inert substance, nitrogen, is omitted in this ratio, the reason being that the percentage of nitrogen is so fairly constant in coals, and particularly in coals of the same rank, that to include it would be merely to increase the labor of computation without adding any benefit.

Heat Value of Coals

The heat value of a coal is usually expressed in calories or in British thermal units. Expressed in calories, it is the number of grams of water raised one degree Centigrade (from 15 deg. to 16 deg. C) by the heat resulting from the combustion of one gram of coal. Expressed in British thermal units, or as usually abbreviated, B.t.u.'s, it is the amount of heat required to raise one pound of water (at 15 deg. C., or 62 deg. F.) through one degree. Calories may be converted into British thermal units, or vice versa:

Heating value in B.t.u. = 1.8 times the heating value in calories.

Heating value in calories = 5/9 times the heating value in B.t.u.'s.

The heat derived in burning coal is brought about by the oxidation of its combustible elements, viz., carbon, hydrogen, and the unoxidized forms of sulphur and iron. The quantity of heat generated by the complete combustion of these elements is as follows:

	Calories	B.t.u.'s
1 lb. carbon to carbon dioxide.	8080	14544
1 lb. hydrogen to steam.....	34460	62028
1 lb. sulphur to sulphur dioxide	2250	4050

Based on a knowledge of the above heating values, many formulas have been devised to calculate the heat value of a coal directly from its ultimate analysis. The best known of these is Dulong's formula, which is commonly stated as follows:

Heat value (calories per gram) = $(8080 \times C) + [34460 \times (H - \frac{1}{8}O)] + (2250 \times S)$

Heat value (B.t.u.'s per lb.) = $(14544 \times C) + [62028 \times (H - \frac{1}{8}O)] + (4050 \times S)$

It is assumed in Dulong's formula that the various combustible components are completely oxidized. The results obtained, as might well be expected, vary somewhat with results obtained by the use of the calorimeter:

1. The heat value of carbon, hydrogen, and sulphur have not been definitely determined, thus, the calorific value for carbon is sometimes stated as 8100 instead of 8080, and if the higher value is taken the calculated calorific value will be raised from 10 to 15 calories per sample. Sulphur is sometimes given a value of 2220, though the higher value is the generally accepted one.

2. The heating value of a component of a chemical compound is assumed to be the same as in its free state, an assumption which is manifestly incorrect. Thus, some organic compounds, as for instance carbon bisulphide, have a decidedly higher calorific value than that derived by the combustion of equivalent amounts of the elements present. The same is true of the combustion of benzene, C_6H_6 .

3. There is a possibility that some of the oxygen is combined with carbon, and not all of it combined with hydrogen, as is generally assumed. This seems to be particularly likely in the case of high volatile and high moisture coals. Since the calorific power of hydrogen is 4.265 times that of carbon, the assumption, if correct, results in lowering the

calculated value. It is agreed that all of the oxygen in coal is in combination with one or more of the combustible elements; if it were in the free form it would enter into combination with carbon, hydrogen, and sulphur, just as the oxygen of the air does, and thus evolve heat. In Dulong's formula it is assumed that all of the oxygen is in combination with the hydrogen in the proportion to form water, that is, eight parts of oxygen to one of hydrogen. The oxygen thus renders useless one-eighth of its own weight of hydrogen, and the hydrogen which is available for combustion will be $H - \frac{1}{8}O$.

4. Since the amount of oxygen is derived by calculation, it follows that it bears the burden of any errors made in the ultimate analysis, hence its percentage as stated may be inaccurate.

Somermeier* states that the heat values obtained by the use of Dulong's formula are usually within less than 1½ per cent. of the actual value as determined by the calorimeter. About 150 analyses given in Bulletin No. 9 of the Ohio Geological Survey show that the values by Dulong's formula range from about 30 to 100 calories lower than the calorimeter values. High oxygen coals show a calculated value considerable lower than the determined value, and the calculated values, as a whole, are lower than the determined values.

The practical application of Dulong's formula with respect to an analysis of Sewell coal, as reported by the West Virginia Geological Survey,† is here given:

	Proximate		Ultimate
Moisture	1.36	Carbon	80.69
Vol. Matter..	23.14	Hydrogen ...	5.37
Fixed Carbon	70.02	Oxygen	6.49
Ash	5.48	Nitrogen	1.31
		Sulphur	0.66
	100.00	Ash	5.48
Sulphur	0.66		100.00

B.t.u. per lb.

$$= (14544 \times .8069) + [62028 \times (.0537 - \frac{.0649}{8})] + (4050 \times .0066)$$

$$= 11735.6 \quad + \quad 2828.5 \quad + \quad 26.7$$

$$= 14591$$

The calculated result varies by only 21 thermal units from the result obtained by the calorimeter, namely, 14570 B.t.u.'s.

A number of formulas have been devised for the calculation of heat values based on the proximate analysis of coal, but all of these involve the use of coefficients which fail in a wide application of the formula, hence their use is not to be recommended.

General and Supplementary Analyses in the Coal Catalog

The analyses given in this publication have been gathered from various sources, such as reports of the state geological surveys, publications of the United States Geological Survey, bulletins of the Bureau of Mines, technical and trade papers, etc. In

*Coal, pg. 10.
†Report on Fayette County, pg. 875.

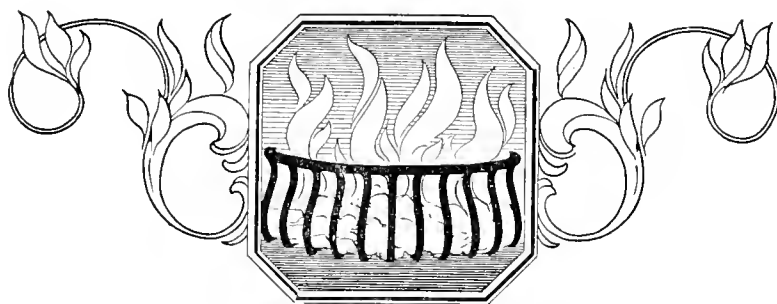
all cases it has been the intent to give only analyses of coal "as received," and when not otherwise noted, for mine samples. The general analysis of a seam or field should be regarded as being nothing more than an index to the character of the coals produced. In this an effort has been made to deal fairly with each seam, but it will be borne in mind that a general, or typical, analysis is an attempt to balance the faults and virtues of a coal, and that there will be many mines in a district capable of shipping a better coal, as well as some unable to produce a fuel equal to that indicated by the general analysis.

Following each state will be found a more or less extended list of supplementary analyses in which, wherever possible, the analysis of each seam is given by county, locality and mine. This makes it possible to arrive at a more accurate estimate of the composition of a seam, and to pick out such localities as produce a coal chemically suited to the requirements.

To those familiar with the peculiarities of coal formations, it is well known that, chemically, there may be not only a considerable variation in the coal produced at each of two adjacent mines, but a vari-

ation in analysis from day to day even at the same mine. Thus, coals lying in a basin or syncline may analyze quite differently from those of the same seam lying along an anticline or near the outcrop. In some seams this variation is so great that it affects considerably the use to which the coal may be put, while in others the range is so slight that a general analysis fairly represents the entire seam. The great Pittsburg seam is typical of those whose every constituent is subject to considerable change, while, on the other hand, the Pocahontas seam of West Virginia may be cited as one noted for its constancy.

Usually, however, changes in chemical composition are not sudden, but, instead, take place gradually in tracing the extent of a seam. Thus with the Pittsburg seam, aforementioned, the analysis of a coal in the Connellsville Basin is quite like that from adjoining mines, and the same is true of two or more mines in the Georges Creek Basin, or of a group of mines in the same seam at or near Clarksburg, W. Va., although, as illustrating that the seam itself is not of a constant composition, it will be noted that the coal at Clarksburg differs considerably from that at Connellsville, or at Frostburg, Md.



The Buying of Coal on a B. T. U. Basis

Merits and Demerits of the Specification System

Reason for Introduction of Specifications

So long as coals were produced almost entirely from high grade seams there was little question raised as to the heat value of coal from one district or seam in comparison with the heat value of coal from another district or seam. Stirred by the threatened exhaustion of some of the most favorably known seams, developments were begun in inferior beds, and as these coals gradually became more and more a factor in coal production, there arose a demand from certain quarters that, because of the marked difference in thermal content, coals should be sold on some basis of merit. The fact that coal varies in character through a thousand gradations from the anthracite of Pennsylvania to the lignites of Texas made plain that no longer could it be said "coal is coal".

The marked difference in the preparation given to coal supplied an additional and greater reason why it should be sold in some manner that would take cognizance of both the intrinsic worth of the fuel and the care taken in its mining and loading. Complaint was made that the shipper relied too much on the analysis which adorned his letter head, and too little upon intelligent oversight both inside and outside the mine. The percentage of ash was always in excess of what the consumer was lead to expect. Since ash and moisture, the two principal impurities in coal, have no thermal value, and, in addition, entail expense in the payment of useless freight, the idea was naturally evolved of devising specifications by which the purchase of coal would be based upon its chemical analysis and heat value.

Specification System Fostered by Government

The United States Government readily endorsed the movement, particularly with reference to the purchase of fuel for navy use. The first requirement was to obtain information on the various coals and coal fields of the country in order that specifications might be intelligently prepared covering purchases on a heat value basis. By the year 1907 sufficient data had been collected to start the system and purchasing of coal on specifications continued until stopped by the extraordinary conditions incident to the war in 1917. After being abandoned for almost two years, it was again put into effect by the government in July, 1919, and purchases are again being made on the B. t. u. basis.

Nature of Specifications

The purpose of specifications may be stated to be obtaining for the consumer of coal the lowest cost per million B. t. u., or expressed otherwise, to obtain the greatest number of B. t. u. for one cent. This requires an accurate knowledge of three

things, the ash content of the coal, its moisture content, and its B. t. u. value per pound. All formulae used in arriving at the price to be paid in accordance with specifications should contain these three factors. Specifications usually permit a certain maximum amount of ash and moisture and a minimum value is stated for the heat value. Penalties are laid when the coal falls short of the standards set, and premiums are paid where the requirements are exceeded. The amounts to be paid in either case should be plainly stated in the contract. In the case of ash, the loss due to excess is greater than with moisture, since in addition to being inert it involves freight, labor and cartage expense. This may amount to from 3 to 10 cents or more for each per cent of ash in excess of the stipulated amount. The actual penalty cost should be closely approximated and then stated in the contract. As an incentive to getting clean coal, the penalty in some cases is on a scale that increases rapidly as the percentage of ash increases.

John Howatt* cites two typical specifications which make provision for price adjustment to take care of the ash content in coal, as representing the latest practice in purchasing coal on a test basis. One is that used by the United States Government and the other is that used by the city of Chicago. In the specifications upon which the government is purchasing its coal this year, what is termed a standard ash value on a dry basis for the quality of coal it is intended to purchase is established. For any coal received that tests a lower percentage ash than the standard named, the contractor is allowed a bonus of two cents per ton of coal for each per cent, the ash is less than the standard. This seems to be based upon a cost of \$2 per ton for handling ash. No penalty for ash is deducted unless the ash content is more than 2 per cent, greater than the standard. Where the ash content is more than two per cent, in excess of that named as standard, deductions are made from the price to be paid for the coal on a rapidly ascending scale to compensate for the loss in efficiency in the furnaces. In the specification used by the City of Chicago a deduction of one-half cent per ton of coal for each per cent, of ash on a dry basis is made on the entire ash content. This is based upon a cost of 50 cents per ton for handling ashes and does not increase the penalty for excessive ash to compensate for the loss in furnace efficiency, and therein does not protect the purchaser against coals being delivered with a high ash content as well as does the specification used by the government. On the other hand, it makes a deduction for all the ash in the coal instead of only that in excess of the limits, and in that regard is more scientific but not as practicable in application at the present time.

*Address published in the Journal of the Western Society of Engineers.

Although moisture, like ash, is inert there is less loss to the purchaser for the reason that there is no cost in its removal. Formula used in purchasing coal as a rule provide no penalty for moisture, other than that provided by reducing the coal to a moisture-free basis. Quoting again from the address of John Howatt:

"The two typical specifications considered before, that used by the government and that used by the City of Chicago, differ in their provision for adjustment of price because of moisture only in their method of application. The government specification provides for a payment based upon the British thermal units in the coal as received, the B. t. u. per pound of coal will thus be automatically reduced in proportion to the amount of moisture in it. The City of Chicago specification provides for payment upon the British thermal units in the dry coal, but reduces the amount of coal paid for by the amount of moisture in it. The resultant number of heat units in a ton of coal and the price paid the contractor therefor would be identical under either specification."

The third important factor, the B. t. u. value of the coal, is the point about which all specifications revolve. A necessary provision in writing proposals is to name limits for B. t. u. per pound far enough apart so there will be plenty of opportunity for competitive bidding and still limiting the coal to the general quality desired. The determination of the price to be paid for the coal is a very simple matter after the analysis is known, the procedure being governed in every case by the provisions of the contract.

Advantages of the Specification System

The Bureau of Mines cites the following advantages of the system:

"1. All bidders are put on a strictly competitive basis.

"2. The field is broadened for both coal producer and consumer.

"3. The contract specifies an established standard of quality as a basis for adjusting the price.

"4. If other coal must be substituted, there is a standard for settlement.

"5. If coal is uniformly poorer than the standard set, there is a basis for cancellation.

"6. Where there is need of preparation at the mine (picking, washing, etc.,) the operator, who is largely responsible for variations in the grade of such coal, is stimulated to prepare it better. The quality of coal from a given mine may vary from time to time through the failure of the miners to reject impurities; or the physical or chemical character of the coal in a certain bed may vary from place to place. In some coal fields different beds of coal are mined at the same time and the output is mixed. When there is need of preparation, as by picking slate or other impurities, or by jigging or washing, the quality or value of the coal marketed

depends a great deal on the care taken in the processes employed. The mining companies are responsible in a large measure for variations in the grade of prepared coal. The purchase of coal under a contract that distinctly specifies its quality stimulates the operator to prepare coal better before shipping it to market."

A distinct advantage in the specification method may result to plants where boiler capacity and grate area are small, and the draft is weak. With the information received by taking bids on coals of different quality the probable saving can be determined by the making of radical changes in the plant in order that advantage may be taken of coals offered at a lower cost per million B.t.u.'s.

Reasons for Unpopularity of System

For a considerable period coal consumers were influenced by the specification method of coal purchase, and seemed to regard it as the very essence of fuel economy. That there has been a change in sentiment, more pronounced, possibly, in the East than in the Middle West, must be admitted. The fault would appear to lie almost entirely in the lack of standardization, both in sampling and analyses. One difficulty is that the coal producer is prone to regard the sample taken at the face as an actual representation of shipments, whereas, in truth, it merely sets forth the high state of perfection possible to be attained by that particular mine. That the coal may fall far short of its possibilities is a fact now well known to both the consumer, who puts in the "kick," and to the operator who receives it, but the reason for it is sometimes not clearly understood until an opportunity has been extended for a representative to examine the condemned shipment. The reason for dissatisfaction on the part of the consumer may then be quite plain. Slate or rock from the roof or gob pile may have become intermixed with the coal and loaded into the car by careless or indifferent miners, or fire clay from the bottom may have been cut into and intimately mixed with the finer coal. Plainly in such a case, which is here cited as typical of many complaints, there is much difference between the coal in the seam and the coal as it reaches the consumer, and there can be no agreement between the mine sample analyses, furnished by the operator, and that made on a car sample by the consumer, and which, if correctly taken, must stand as the correct analysis, no matter how much it may vary with the mine sample.

Maurice J. Walsh* cites a number of objections to the specification system, three of which are as follows:

First, chance for misunderstanding arises from the fact that the operator is not familiar with the qualifications of the person doing the car sampling and the related analysis, while, on the other hand, the consumer has no acquaintance with the chemist employed by the coal company—a situation which is not conducive to mutual confidence. Furthermore, it is well understood by both parties that samples can be so taken, either at the mine or at the car, that the results obtained from samples taken by two people may analyze so differently as

*Black Diamond, May 31, 1919.

to make it impossible to determine it as the same coal. Experience has proved that for a given mine there may be greater variation due to sampling than in the coal itself. The price to be determined, which is the very essence of the transaction, can, therefore, be very materially influenced by incompetence.

The second objection, frequently urged against the practice, is that owing to the variation in tests made on coal there is a constant argument between the producer and consumer. The seller of coal contends that there are entirely too many chances for discrepancies in results, and that when such occur he is more or less at the mercy of the consumer, furthermore, that when disagreements arise there follows much misunderstanding and argument between both parties to the transaction. Because of the desire to sidestep trouble there is a noticeable tendency on the part of the shipper to withhold bidding on a contract calling for coal on a specification basis.

A third objection to the use of the specification system lies in delays in settlement. The items of supplies and labor entering into the cost of coal are live charges to the producer who is obliged to meet a pay roll each fortnight, and in addition must satisfy his bills for supplies. In order to provide funds for current needs he bills his coal promptly and expects to have remittance made in a reasonable length of time. When coal is sold on the B.t.u. basis, no settlement can be arrived at until the shipment reaches its destination and each car is sampled, tested, and the proper calculations made preliminary to making payment. This involves a delay of from 30 to 60 days, and works a hardship on the operator or sales agency. If all settlements for coal were as much delayed, the financing of coal companies would become a serious matter.

Importance of Sampling

It is recognized that the correctness of a coal analysis is subject to the care taken at the mine in selecting the place for sampling, in the taking of the sample, in its preparation and sealing, and that when it reaches the laboratory it is again subject to error in reducing the sample and in making the analysis. The old saying that a chain is no stronger than its weakest link applies particularly to the successive steps in coal analysis, and it is quite likely that sampling is the weakest link of all.

Opportunity for Error

Where there is laxity in the method of sampling, calorimeter tests will likewise show a considerable variance in results, even though made by men skilled in this work, and if the chemist be inexperienced in the operation of a calorimeter, or if cheap equipment be used, there is a still further opportunity for disagreement in results, for a heat value determination is no easy thing to make with accuracy. The work should be done by a person skilled in the handling of sensitive apparatus and trained in the observation of details. Such important matters as knowing the exact water equivalent of the calorimeter; having the thermometer correctly calibrated; taking thermometer readings to 1/100 of a degree; making correction for the heat generated by the burning of the fuse wire, for the

amount of nitric and sulphuric acid formed within the bomb, and for the heat generated while the circuit is closed for the ignition of the fuse wire; making the proper application of formula to take care of the heat radiated to and from the calorimeter while readings are being taken, etc., etc., must all be taken into account, as must also the difference existing in the several makes of calorimeters themselves.

The Inconsistency of the Consumer

In the next place it has been observed that in some instances the consumer, who is loudly insistent that his fuel requirements be filled with coal of high calorific content, is, at the same time, grossly negligent in providing his power plants with efficient combustion devices. The coal salesman is plainly nettled at the attitude of the purchaser who demands exceptional value in his fuels, the while dense clouds of smoke are permitted to pour forth from the boiler stacks. He regards it as unreasonable to have a selection limited to premier coals, in face of the fact that coal is being improperly fired, and such important matters as draft and thickness of bed are not regulated in accordance with the character of coal and the design of the furnace. His stand is that a thousand B.t.u.'s made possible by furnace improvements are just as effective as so much heat made available because of the superior quality of the coal; in short, that economy to be consistent should begin at home.

The following aptly illustrates this neglect on the part of the purchaser to acquaint himself with scientific methods of firing so that the B.t.u.'s in the coal might be fully utilized: "A large manufacturer not long ago assured me that he was very particular about the purchasing of his coal, and insisted that all coal must be to a standard of 14,600 B.t.u. In looking over his steam results, I called his attention to the fact that his coal should show an evaporation of 11 pounds of water per pound of coal, but that he was obtaining only 9 pounds, and that by proper firing he would make a saving of at least 20 per cent. in the quantity of coal used."[†]

However, it must not be supposed that power plants as a rule are indifferent to the importance of utilizing to the fullest extent the potential energy in coal. In fact, owing to the curtailment in coal supply during the late war, tremendous strides have been made in the introduction of economical devices in power plants, and for such as these weightier reasons against the specification method of coal purchase must be given to have any force.

Specifications May Run Counter to Conservation

A further reason for opposing the specification method is that, in effect, it may run counter to the doctrine of conservation of our natural resources. As illustrating this we may consider the case where two or more seams are present on a property, the lowest and oldest of which has the purest coal (as is generally the case in West Virginia), and would be the most certain of a market, in accordance with the B.t.u. system of purchase. The coal operator has long since learned that a market is a prime

[†]Edwin Ludlow, April, 1918, Bulletin A. I. M. M. E.

necessity, and with working conditions nearly or altogether equal, the lower seam will quite naturally be the one chosen for operation. In line with good mining practice the engineer is directed to lay out the property so that a good recovery, say from 85 to 95 per cent., can be made. Up to this point the procedure is in harmony with the principles of conservation, but in order to attain this high figure of coal recovery it will be necessary to draw all pillars, and since this robs the overlying strata of its support, these are broken, not only to the seams above, but in all probability clear through to the surface. In the room and pillar system of mining there would be a number of such breaks at varying intervals, and all upper seams of coal are bound to be so badly fractured as to make mining not only much more difficult and hazardous, but, perhaps, impossible. It is quite evident that were all coals bought on specifications, there would be no choice left when it came to deciding between two seams of unlike quality, and equally evident that the fault should not be charged to the operator, but rather to a system which would discourage or prohibit working the upper seams, as should be done in the interest of true conservation.

Can Reputation Replace Specifications?

Strange to say, the operator with a good coal having an established reputation is the one most likely to resent the invitation to bid on a specification contract. He feels that his coal, having been on the market for a long period of years, during which it has been thoroughly tested, should be bought by the customer on its past performance record. Analyses, and all other information on their coals, are always gladly given to a prospective purchaser, and in most cases this information can be relied upon, for the responsible producer or sales agency realizes that an absolutely truthful description of its fuel is a means of instilling confidence and of insuring a profitable business relationship, and that no permanent good can result from a claim that a coal is different from what it really is.

It is true, as often contended, that specifying coal from a certain district is no guarantee, since many districts can supply coal varying easily 10 per cent. in heating value. This is noticeable in some mining sections where as many as two to four seams of coal are exposed, each differing from the other in physical and chemical properties and in thermal value, and where coal from all seams are loaded over the same tipple. But this does not generally hold true where coal from a **certain seam in a certain district or sub-district** is specified. It is well known, of course, that there will be a variation in both analyses and heat value in two samples taken at different places in the same seam and in the same district, due largely to the difference in the amount of ash, but in the case of well prepared coals such variation is usually small and would hardly be sufficient to affect the price one way or another. A large number of examples could be mentioned to establish the fact that there is a fairly consistent regularity in well prepared coals from the same seam and district.

The Real Importance of Analysis

For the reasons given, the B.t.u. method of purchase has not made much headway and is now

chiefly used only by the Federal, state and city governments in their purchases of coal. It does not follow from this, however, that a knowledge of the complete analysis of a coal is without importance. It does, in fact, have a great importance, for in most cases the available heating value of a coal varies directly with its theoretical heat value, and, other things being equal, its purchase price is governed by the total number of heat units it contains. It is, moreover, of much value to the operator. A sample taken in the mine acquaints him with the degree of quality possible to attain; a car sample shows how nearly the maximum quality is approached. But in addition to knowing the calorific value of a coal, there must also be taken into consideration such matters as the adaptability of the coal to the furnace and stokers in use. Anthracite coal, for instance, being very low in volatile matter, and hence slow burning, requires a large grate area, whereas high volatile coals, being fast burning, are best served by a small grate. Furthermore, the design of the furnace will be governed by the coal burned, and an attempt to make the same furnace serve for all types of coal results in either much smoke, or else a failure to develop the full capacity of the plant. No matter, then, how good the coal, waste is sure to result when there is a misfit of coal and plant.

The heat value of a coal is obviously one of its most important properties, especially when it is to be used for steam purposes, and although in practice it is only possible, even under the best conditions, to utilize a portion of the heat units of the fuel, it has been demonstrated conclusively in the U. S. Fuel Tests that the actual heating effect under a boiler is proportional to the calorific value of the coal, as determined in a bomb calorimeter. It becomes, therefore, a matter of prime importance that a knowledge of its B. t. u. content be known before purchase. If the coal is to be used for steam purposes, a point of equal importance is to know the fusing point of the ash, for if this be so low as to cause excessive clinkering there may result a closure of the spaces between the grate bars with a consequent shutting off of the air supply to the fire box.

Practical Method of Estimating Coal Values

In place of the specification system of coal purchasing, the following is advocated by Maurice J. Walsh as a practical measure:*

"The purchaser of coal should know coal well enough to purchase the best obtainable, taking into consideration the quality of the product, freight rates, etc. It should be produced from a well-known producing coal field and from representative companies and reliable shippers. In all well-known producing districts there is a recognized standard of quality that maintains generally.

"The best way to determine the actual value of coal, and its real worth, is by a boiler or plant test where the coal is actually burned or used. This enables the purchaser to learn its good or bad qualities and to know whether or not it is suitable for the requirements for which it is intended. It is more important to find the coal whose physical

*Black Diamond, May 31, 1919.

properties act best in a given plant, and then insist on the same grade of coal continuously. It is the practice of reliable coal companies to furnish the buyer with the coal best suited for his requirements or plant conditions. After the coal is tried and found economical and satisfactory, the right shipper will not fail to deliver what he sells the purchaser."

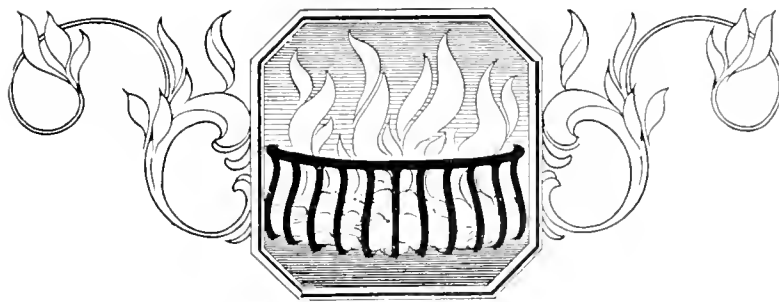
Conclusion

As is usually the case there is much to be said favorable to both sides of the controversy. It is undoubtedly true that in many instances a wrong impression has been created by the citing of analyses which can not be sustained by shipments. O. P. Hood* in referring to ash in coal shipments said recently: "The sellers of coal in a certain district talk quite freely of coal having three, four or five per cent ash as their regular output. In pre-war times this coal, as delivered at Tidewater for export, was sampled a great many times and by the most approved method. Out of 116 cargoes representing perhaps half a million tons less than 15 per cent of

the coal ran below 5 per cent in ash. Fifty-seven per cent ran between 5 and 7 per cent ash. Placing a limit of 7½ per cent ash on this coal would have included only 80 per cent of the shipments and there was as much coal above 9 per cent as there was below 4 per cent. This shows that in a district which has much to say about 4 per cent ash in coal, a much truer statement would have been that coal from this district was more likely to run between 5 and 7 per cent in ash."

Sampling, as already stated, has been one of the principal reasons for the apathy felt toward the innovation, but it must in all fairness be said that most of the disputes that have arisen over the specification method of coal purchase might have been avoided had the matter of sampling and analysis been entrusted to reliable concerns who specialize in coal analyses and who are by experience thoroughly familiar with the numerous difficulties, not readily apparent to the operator nor to the chemist in ordinary practice.

*Chief Mechanical Engineer, U. S. Bureau of Mines.



THE FUSIBILITY OF COAL ASH

Why Coal Ash Fuses; General Analysis of Ash; Relation Between Sulphur and Clinkering; How Fusion Point Is Determined; Table of Fusibilities

Fusibility of Compounds

In addition to knowing the B.t.u. value of a coal, it is also of great importance to know something of the fusibility of the ash which remains after burning. It has long been known that two compounds, each more or less infusible by themselves, may, by contact or intermixing, form a new compound having a fusing point much lower than that of the separate constituents entering into the combination. The chemical action which takes place in a blast furnace may be cited as a common illustration. The ore charged contains a large proportion of siliceous and other gangue material of a highly refractory nature, and which, in the process of smelting, must be gotten rid of by some cheap means. The problem is to effect a combination of some compound with this refractory material so that the two will form a silicate having a low fusing temperature. At the temperature encountered in blast furnace practice the resulting silicate is readily melted and forms slag. The material used as a flux in blast furnaces is limestone, CaCO_3 , which, by the time the lower zones of the furnace are reached, is reduced to CaO , by itself one of the highly refractory oxides, but which, in combination with the siliceous matter in the ore, produces an easily fusible compound.

A second illustration of the dependency of industry on the property of fusibilities is found in the manufacture of glass. Here quartz sand, SiO_2 , a highly refractory substance, is made to flow easily by mixing with it calcium, sodium, lead, or potassium oxide, according to the kind of glass desired.

An example of the pernicious effect of fusibility is frequently observable around beehive coking plants. If the earth used for filling over the crown is charged with limestone or manganese or ferrous oxides, the union of these with the silica in the crown brick produces a stringy slag, which, in time, may cause the failure of the oven due to eating away the brick.

General Analyses of Coal Ash

So much by way of establishing the easy fusibility of certain refractory substances when closely mixed. Let us now turn to coal ash and see of what substances it is composed. Probably the analyses of most samples of coal ash will come between the following limits:*

TYPICAL LIMITS OF ASH ANALYSES

Constituent	Per Cent.
SiO_2	40 to 60
Al_2O_3	20 to 35
Fe_2O_3	5 to 25
CaO	1 to 15
MgO	0.5 to 4
$\text{Na}_2\text{O} + \text{K}_2\text{O}$	1 to 4

*A. C. Fieldner, A. E. Hall and A. L. Feild in Bulletin No. 129, Bureau of Mines, page 13, "The Fusibility of Coal Ash and the Determining of the Softening Temperature."

It will be evident from the above list of constituents that coal ash contains relatively large proportions of SiO_2 and Al_2O_3 , and smaller proportions of other oxides which, when mixed with the above, as is bound to be the case with coal ash, may produce a condition favorable for fluxing, or, as more commonly expressed, the clinkering of the ash. The fusibility of ash is, however, dependent upon several factors, such as the ratio of the silica to the bases present, upon the particular bases, and upon the percentage of alumina present. Mixtures extremely high in silica, or extremely high in bases, are not readily fusible. Ash which is low in iron is usually so highly siliceous that it is not readily fusible. Ash from coals high in pyrite is necessarily high in iron and the ratio between the bases and silica is often such that easily fusible compounds may be formed.

Some coal ash has such a high fusing temperature that there are practically no fuel bed conditions that will produce troublesome clinker from it. Another ash with a little lower fusing temperature will sinter together and form a porous, spongy clinker which does not seriously obstruct the flow of air, nor is it difficult to remove. Ash with a still lower fusing temperature, say 2100 deg. F., will not only become melted in the average fire box, but it will be heated several hundred degrees above its melting temperature, in which case it runs down like overheated iron until it spreads out in a thin sheet over the grate area. Clinker in this form is hard to get rid of and while on the grates it may obstruct the flow of air so completely that the heat of the fuel bed is localized and causes burning of the grate bars.

Relation Between Sulphur and Clinkering

Sulphur, which, in combination with iron as iron pyrites, FeS_2 , is a common constituent in coal, is sometimes held solely responsible for clinkering. It is not, as a matter of fact, the element sulphur which produces the trouble but rather the element iron.

When coal containing pyrite is burned two chemical changes are possible. First, that all of the sulphur and all of the iron will be completely oxidized, thus, $2 \text{FeS}_2 + 11 \text{O} = \text{Fe}_2\text{O}_3 + 4\text{SO}_2$. That this takes place to any great extent is quite improbable owing to the insufficiency of oxygen. The most likely reaction is the second, which is that the iron bisulphide, FeS_2 , having contact with air at the high furnace temperature, loses one of its atoms of sulphur, which passes off as sulphurous oxide gas, SO_2 , and thus the bisulphide is reduced to a monosulphide (ferrous sulphide), FeS . A still further chemical change now takes place. Some of the monosulphide, in the presence of air, will replace part of its sulphur with oxygen, thus becoming oxidized to ferrous oxide, FeO . In this form there is a ready union with the silica of the ash, produc-

ing a ferrous silicate which has the property of fusing at a comparatively low temperature, thus causing clinkers.

While it is therefore the iron, and not the sulphur, which has the effect upon the fusing temperature, it is well to remember that the percentage of iron usually increases or decreases with the amount of sulphur. Even so, the fusibility of an ash should not be prejudged solely upon the presence or absence of iron pyrites, for it would be possible to have fusion where sulphur is entirely missing in an analysis. One of the lowest sulphur coals in the United States is found in Rhode Island—less than $\frac{1}{4}$ of 1 per cent.—yet the fusing temperature and the clinkering properties of this coal class it amongst the very worst. The reason for this lies in the presence of fluxes other than ferrous oxide. The amount of sulphur in a coal, as shown by analysis, is not a sufficient criterion on which to base the degree of slagging. Sulphur existing in organic combination as a sulphate is likely to be harmless, therefore, to fairly prejudge the clinkering of a coal, the amount of sulphur in its various forms should be known.

Other Factors in Fusibility

The intensity of heat in the firebox also has a considerable bearing on fusion, thus, fuels which are impossible for locomotive use for reasons of clinkering, might give very satisfactory results in the less terrific heat of a stationary steam plant. Conditions of service, grate area, methods of firing, etc., frequently determine whether or not a coal will clinker badly. Upon this point Mr. E. G. Bailey§ advises as follows: "The seller of coal cannot justly be held responsible for trouble due to clinkers when the formation is the fault of the fireman, but the purchaser can specify that the ash of the coal delivered shall not fuse below a certain desired temperature and can see that this specification is filled. This requirement is of equal and often of greater importance than the demand for a given number of British thermal units in a pound of fuel, for the formation of clinkers may retard and prevent development of heat, as clinker affects both the capacity and efficiency of the plant as well as the repairs to the furnace and its equipment."

How the Fusion Point is Determined

The manner in which the fusion point of ash is determined is of no small importance, for unless properly done the results derived may be entirely misleading. Here, as also with coal sampling and analysis, there is much opportunity for intrusion of the personal equation into the results. A common method of arriving at fusion points is by comparing the fusibility of an ash cone with that of Seger cones, the melting points of which are known. Both the ash cone and a series of Seger cones, having a progressive range of, say, 25 degrees in their

fusing points, are placed in a furnace and the heat gradually increased. The temperature at which the ash cone fuses is fixed by noting the fused Seger cone having the highest temperature, which temperature thereby becomes the point of fusibility of the ash. As may well be surmised, it is altogether important that the definition of the term "fusion point" be a commonly accepted one, rather than left to the individual judgment of each observer. The ordinary conception of the term as applied to a compound is a fixed temperature at which transition from a solid to a liquid state takes place. This conception as applied to a test on coal ash is both misleading and inapplicable. The Bureau of Mines offers a definition which tends to make the matter clear. In all laboratory tests it regards the fusion point as the temperature at which the cone has fused down to a spherical lump, as shown in cones 2 and 3 of Plate III. B, page 66 of Bulletin 129.

The pyrometer method of recording temperatures is used by the Bureau of Mines and many commercial laboratories because of its greater accuracy. Thermocouples are also in use. Recourse to these scientific devices enables a close reading in degrees, and, where exact work is a requirement, they are always to be preferred to Seger cones. The latter, however, usually meet the need of commercial work.

It is now well known that results obtained in fusibility tests will vary considerably with the atmospheric conditions under which the test is made, that is, whether made in an oxidizing, reducing or neutral atmosphere. The importance of this is emphasized by results noted by Marks,[†] who found as great a difference as 390 deg. C. in the fusing temperatures reported by two different testing laboratories on the same sample. In an atmosphere that is reducing, that is, where an excess of gas is used, the iron in the ash is reduced to the ferrous state, as already explained, and this gives the lowest temperature at which clinkering will result. If, on the other hand, the atmosphere is oxidizing, that is, where an excess of air is used, the iron is oxidized to ferric oxide and a higher softening temperature may be expected. This same condition will occur where an atmosphere is so strongly reducing as to convert the iron to the metallic state. It will be quite apparent from the foregoing that the result of a test depends largely upon the kind of atmosphere employed, and equally apparent that the most accurate test on a coal is made only after knowing to what use it is to be put, and the conditions under which it is to be burned. In recognition of this fact, the Bureau of Mines advocates‡ that a standard method of testing should be adopted in order to insure comparable results by different laboratories and to obtain the softening or fusing temperature of the ash under conditions similar to those in the fuel bed. A practical method of determining fusibility has been developed whereby the ash is caused to soften and form slags in which the iron exists in approximately the same state of oxidation as the iron in the fuel-bed clinkers.

§From paper "Fusion Temperature of Coal Ash and Its Relation to Rate of Combustion" read before Ohio Society of Mechanical, Electrical and Steam Engineers, 1911, quoted by E. B. Wilson, Proc. Coal Mining Institute of America, 1912.

[†]Marks, L. S., "The Clinkering of Coal," Power, vol. 40, pp. 32-934.

[‡]Ibid, pp. 1-2.

The Table of Fusibilities which follows is compiled from reports issued by the Bureau of Mines. The samples represented are practically all standard mine samples collected by representatives of the Bureau of Mines, the U. S. Geological Survey, or by the various state geological surveys, according to the methods used by the Bureau of Mines.

For convenience in discussion the order of fusibility of coal ash from the various coals of the country may be divided into three groups, as follows:

Class 1—Refractory ashes, softening above 2600 deg. F. Class 2—Ashes of medium fusibility softening between 2200 and 2600 deg. F. Class 3—Easily fusible ashes, softening below 2200 deg. F.

Fusibility of Coal Ash by States and Seams*

ALABAMA

LOCALITY, BED, ETC.			Number of Samples from Mine	Softening Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
Black Creek Bed								
Jefferson	Majestic	Majestic	4	2460	2730	2600	3.96	0.60
Jefferson	Pinson	Dixana No. 4	4	2460	2750	2560	2.73	0.82
Walker	Dora	Sipsey	4	2330	2580	2420	3.25	1.05
Average of Black Creek Bed			12	....	....	2530	3.31	0.83
Clark Bed								
Bibb	Marvel	Marvel	4	2180	2500	2320	7.20	0.66
St. Clair	Coal City	Vulcan No. 4	2	2350	2400	2380	10.16	1.46
Average of Clark Bed			6	....	....	2350	8.68	1.06
Coal City Bed								
St. Clair	Coal City	Coal Branch	3	2180	2330	2250	4.35	1.10
Gholson Bed								
Bibb	Marvel	Marvel	3	2180	2310	2230	9.20	0.87
Shelby	Glen Carbon	Glen Carbon	4	2150	2410	2240	4.08	0.59
Average of Gholson Bed			7	....	....	2240	6.64	0.73
Harkness Bed								
St. Clair	Pardons	Acmar	2	2650	2660	2660	11.73	0.90
St. Clair	Sanie	Margaret No. 1	3	2270	2290	2280	12.62	2.01
St. Clair	Sanie	Margaret No. 2	3	2340	2660	2450	10.19	1.81
Average of Harkness Bed			9	....	....	2460	11.51	1.57
Helena Bed								
Shelby	Helena	Acton No. 2	3	2230	2500	2360	7.80	0.53
Shelby	Robuck	Eureka No. 2	3	2400	2610	2470	10.02	0.39
Average of Helena Bed			6	....	....	2420	8.91	0.46
Jagger Bed								
Tuscaloosa	Abernant	Abernant	1	....	....	2930	9.33	0.66
Tuscaloosa	Rock Castle	Rock Castle	3	2450	2640	2550	8.90	0.66
Walker	Carbon Hill	Galloway No. 11	4	2390	2910	2600	11.19	0.69
Average of Jagger Bed			8	....	....	2690	9.81	0.67
Jefferson Bed								
Jefferson	Morris	Indio	4	2060	2220	2120	7.45	2.80
Mary Lee (Big) Bed								
Jefferson	Littleton	Banner	3	2710	2860	2770	11.32	0.84
Jefferson	Palos	Bessie	6	2790	2950	2870	10.44	0.78
Jefferson	Palos	Palos	2	2870	2930	2900	7.36	0.58
Jefferson	Sayreton	Sayreton	3	2670	2850	2770	10.47	0.77
Average of Mary Lee (Big) Bed			14	....	....	2830	9.90	0.74
Maylene Bed								
Shelby	Maylene	Climax	1	....	....	2380	8.92	0.42
Shelby	Maylene	Maylene	4	2190	2470	2320	7.66	0.48
Average of Maylene Bed			5	....	....	2350	8.29	0.45
Montevallo Bed								
Shelby	Aldrich	Aldrich	4	2090	2470	2330	7.24	0.76
Nickle Plate Bed								
Jefferson	Bessemer	Virginia	5	2470	2800	2620	4.73	0.75
Pratt Bed								
Jefferson	Mulga	Mulga	7	2290	2580	2430	5.49	1.59
Thompson Bed								
Bibb	Coleanor	Coleanor	4	2060	2150	2110	8.24	0.58
Bibb	Garnsey	Garnsey	3	2370	2400	2380	11.69	0.49
Bibb	Piper	Piper No. 1	3	2130	2320	2200	6.61	0.49
Average of Thompson Bed			10	....	....	2230	8.85	0.52

(Continued on Next Page)

*Fusibility tables here shown are from data prepared by A. C. Fieldner, W. A. Selvig, W. C. Ratliff and O. C. Brown, Bureau of Mines, and published by permission of Director Van H. Manning.

ALABAMA—Continued

LOCALITY, BED, ETC.			Number of Samples from Mine	Softening Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
Upper Straven Bed								
Shelby.....	Straven.....	Straven.....	2	2200	2490	2310	7.45	0.88
Yellow Creek Bed								
DeKalb.....	Blanche.....	Underwood Prospect.....	1	.....	.....	2280	11.46	2.74
DeKalb.....	Blanche.....	Yellow Creek.....	3	2570	2700	2620	13.41	1.44
DeKalb.....	Fort Payne.....	Beeson Gap.....	1	.....	.....	2210	16.04	4.56
Average of Yellow Creek Bed.....			5	.....	.....	2370	13.90	2.91
Youngblood Bed								
Bibb.....	Belle Ellen.....	Belle Ellen.....	5	2010	2220	2070	5.29	1.37
Bibb.....	Marvel.....	Daley.....	1	.....	.....	2190	11.96	0.78
Average of Youngblood Bed.....			6	.....	.....	2130	8.62	1.08
Miscellaneous (Not Identified) Beds								
Shelby.....	Straven.....	Montevallo.....	2	2190	2290	2240	8.34	0.86

ALASKA

Miscellaneous Seams								
Bering River.....	Wardall Ridge.....	Outerop (Seam Unnamed).....	1	.....	.....	2820	7.27	0.68
Bering River.....	Wardall Ridge.....	Outerop (Seam Unnamed).....	1	.....	.....	2410	1.27	0.70
Fairhaven District.....	Candle.....	Kugruk (Seam Unnamed).....	1	.....	.....	2410	6.44	1.51
Iditarod District.....	Iditarod.....	Prospect (Seam Unnamed).....	1	.....	.....	2380	7.35	1.12
Iditarod District.....	Tramway.....	Prospect (Seam Unnamed).....	1	.....	.....	2710	5.27	0.80
Kenai Peninsula.....	Port Graham.....	Outerop (Seam Unnamed).....	1	.....	.....	2490	15.80	1.06
Matanuska Field.....	Anthracite Ridge.....	Outerop (Seam Unnamed).....	1	.....	.....	2250	26.23	0.20
Matanuska Field.....	Anthracite Ridge.....	Outerop (Seam Unnamed).....	1	.....	.....	2960	8.02	0.50
Matanuska Field.....	Boulder Creek.....	Outerop (Seam Unnamed).....	1	.....	.....	2910	9.14	0.45
Matanuska Field.....	Chickaloon.....	Chickaloon (No. 8 Seam).....	2	2370	2840	2600	11.94	0.43
Matanuska Field.....	Chickaloon River.....	U.S.N.A.C.I.E. Tunnel B (No. 5 Seam).....	1	.....	.....	3000	9.55	0.58
Matanuska Field.....	Chickaloon River.....	U.S.N.A.C.I.E. Tunnel B (No. 5½ Seam).....	1	.....	.....	2040	8.14	0.62
Matanuska Field.....	Chickaloon River.....	U.S.N.A.C.I.E. Tunnel B (No. 6 Seam).....	1	.....	.....	2270	3.07	0.69
Matanuska Field.....	Chickaloon River.....	U.S.N.A.C.I.E. Tunnel B (No. 9 Seam).....	1	.....	.....	†3000	20.54	0.55
Matanuska Field.....	Chickaloon River.....	U.S.N.A.C.I.E. Tunnel D (D Seam).....	1	.....	.....	2980	12.23	0.54
Matanuska Field.....	Chickaloon River.....	U.S.N.A.C.I.E. Tunnel D (E Seam).....	1	.....	.....	2250	11.13	1.51
Matanuska Field.....	Chickaloon River.....	U.S.N.A.C.I.E. Tunnel 1 (No. 8 Seam).....	2	2420	2890	2650	10.19	0.64
Matanuska Field.....	Chickaloon River.....	U.S.N.A.C.I.E. Tunnel 2 (Upper No. 5 Seam).....	1	.....	.....	2980	7.89	0.57
Matanuska Field.....	Chickaloon River.....	U.S.N.A.C.I.E. Tunnel 3 (No. 3 Seam).....	1	.....	.....	2640	5.78	0.69
Matanuska Field.....	Chickaloon River.....	U.S.N.A.C.I.E. Tunnel 3 (No. 4 Seam).....	1	.....	.....	2230	9.49	0.65
Matanuska Field.....	Chickaloon River.....	U.S.N.A.C.I.E. Tunnel 4 (D Seam).....	1	.....	.....	2980	11.03	0.51
Matanuska Field.....	Coal Creek.....	Outerop (C Seam).....	1	.....	.....	2380	3.47	0.33
Matanuska Field.....	Coal Creek.....	Outerop (No. 2 Seam).....	1	.....	.....	2490	4.65	0.41
Matanuska Field.....	Coal Creek.....	Outerop (No. 2 Seam).....	1	.....	.....	2660	9.77	0.43
Matanuska Field.....	Coal Creek.....	Outerop (No. 3 Seam).....	1	.....	.....	2890	10.31	0.36
Matanuska Field.....	Coal Creek.....	Outerop (No. 3 Seam).....	1	.....	.....	2510	5.93	0.40
Matanuska Field.....	Coal Creek.....	Outerop (No. 4 Seam).....	1	.....	.....	2270	6.82	0.52
Matanuska Field.....	Coal Creek.....	Outerop (No. 5 Seam).....	1	.....	.....	3000	9.88	0.40
Matanuska Field.....	Coal Creek.....	Outerop (No. 6 Seam).....	1	.....	.....	3000	11.94	0.45
Matanuska Field.....	Coal Creek.....	Outerop (No. 6 Seam).....	1	.....	.....	2980	9.65	0.46
Matanuska Field.....	Coal Creek.....	U.S.N.A.C.I.E. Tunnel A (No. 8 Seam).....	3	2290	2520	2390	5.62	0.47
Matanuska Field.....	Coal Creek.....	U.S.N.A.C.I.E. Drift 1 (No. 1 Seam).....	1	.....	.....	2950	9.21	0.52
Matanuska Field.....	Coal Creek.....	U.S.N.A.C.I.E. Drift 2 (No. 4 Seam).....	1	.....	.....	2820	13.41	0.62
Matanuska Field.....	Emery.....	Kelly (Kelly Seam).....	2	2210	2660	2440	8.27	0.50
Matanuska Field.....	Eska.....	David (David Seam).....	1	.....	.....	2280	5.79	0.55
Matanuska Field.....	Eska.....	Emery (Emery Seam).....	1	.....	.....	2740	10.26	0.35
Matanuska Field.....	Eska.....	Eska (Eska Seam).....	1	.....	.....	2690	18.39	0.39
Matanuska Field.....	Eska.....	Maitland (Maitland Seam).....	1	.....	.....	2150	7.62	0.46
Matanuska Field.....	Eska.....	McCauley Prospect (McCauley Seam).....	1	.....	.....	†3010	9.96	0.57
Matanuska Field.....	Kings River.....	Outerop (No. 1 Seam).....	1	2570	11.18	0.51
Matanuska Field.....	Kings River.....	Outerop (No. 1 Seam).....	1	2310	8.73	0.58

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*Denotes that the true value is above that indicated.

ALASKA—Continued

LOCALITY, BED, ETC.			Number of Samples from Mine	Softening Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
Miscellaneous Seams								
Matanuska Field...	Kings River.....	Outcrop (No. 1 Seam).....	1	....	....	2610	12.76	0.20
Matanuska Field...	Kings River.....	Outcrop (No. 2 Seam).....	1	....	....	2620	16.47	0.54
Matanuska Field...	Matanuska River.....	Outcrop (Seam Unnamed).....	1	....	....	2680	20.72	0.31
Matanuska Field...	Moose Creek.....	Outcrop (Seam Unnamed).....	1	....	....	2300	9.37	0.36
Matanuska Field...	Young Creek.....	Outcrop (Seam Unnamed).....	1	....	....	2450	5.66	0.26
Nenana Field.....	California Creek.....	Outcrop (Seam Unnamed).....	1	....	....	2350	25.56	0.58
Nenana Field.....	California Creek.....	Outcrop (Seam Unnamed).....	2	2350	2390	2370	34.71	0.27
Nenana Field.....	Fault Gulch.....	Outcrop (Seam Unnamed).....	1	....	....	2450	7.18	0.22
Nenana Field.....	Healy Creek.....	Outcrop (Seam Unnamed).....	1	....	....	2450	6.10	0.22
Nenana Field.....	Healy Creek.....	Outcrop (Seam Unnamed).....	1	....	....	2400	7.53	0.32
Nenana Field.....	Igloo Creek.....	Outcrop (Seam Unnamed).....	2	2500	2540	2520	4.78	0.14
Nenana Field.....	Lignite Creek.....	Outcrop (B Seam).....	1	....	....	2340	13.30	0.24
Nenana Field.....	Lignite Creek.....	Outcrop (No. 5 Seam).....	1	....	....	2150	9.93	0.21
Nenana Field.....	Lignite Creek.....	Outcrop (Seam Unnamed).....	1	....	....	2370	16.42	0.26
Nenana Field.....	Lignite Creek.....	Outcrop (Seam Unnamed).....	1	....	....	2450	5.52	0.18
Nenana Field.....	Lignite Creek.....	Outcrop (Seam Unnamed).....	1	....	....	2210	11.07	0.25
Nenana Field.....	Lignite Creek.....	Outcrop (Seam Unnamed).....	1	....	....	2390	8.01	0.35
Nenana Field.....	Lignite Creek.....	Outcrop (Seam Unnamed).....	1	....	....	2300	15.43	0.54
Nenana Field.....	Nenana River.....	Outcrop (Seam Unnamed).....	1	....	....	2370	5.07	0.21
Nenana Field.....	Tatlanika River.....	Outcrop (Seam Unnamed).....	1	....	....	2670	22.55	0.32
Yakataga Field....	Duktoth Valley.....	Outcrop (Seam Unnamed).....	1	....	....	†3000	23.69	0.67

ARKANSAS

Denning Bed								
Franklin.....	Denning.....	Denning No. 2.....	3	2180	2230	2200	7.38	2.45
Hartshorne Bed								
Sebastian.....	Hackett.....	Branner No. 2.....	2	2310	2340	2330	17.30	1.59
Sebastian.....	Hartford.....	Central No. 4.....	1	....	....	2090	11.27	1.15
Sebastian.....	Hartford.....	Central No. 10.....	1	....	....	2000	10.07	0.82
Sebastian.....	Huntington.....	Central No. 6.....	4	2060	2120	2090	9.60	2.01
Sebastian.....	Jenny Lind.....	Jenny Lind No. 17.....	1	....	....	2110	9.70	1.42
Average of Hartshorne Bed.....			9	....	....	2120	11.59	1.40
Paris Bed								
Logan.....	Paris.....	Grand No. 1.....	3	2130	2160	2140	10.12	3.28
Shinn Basin Bed								
Pope.....	Russellville.....	Bernice.....	1	....	....	2180	10.36	2.23
Miscellaneous Beds								
Washington.....	West Fork.....	Country Bank (unnamed).....	1	....	....	2150	10.30	2.00
Washington.....	Fayetteville.....	Country Bank (unnamed).....	2	2020	2020	2020	10.73	3.41

CALIFORNIA

Miscellaneous Seams								
Mendoceno.....	Des Rios.....	Outerop (Seam Unnamed).....	1	....	....	2220	6.91	2.98
Monterey.....	Stone Canon.....	Stone Canon.....	2	2210	2470	2340	11.26	4.62

COLORADO

Miscellaneous Seams								
Adams.....	Bennett.....	Thomas (Seam Unnamed).....	1	....	....	2120	11.35	0.48
Boulder.....	Lafayette.....	Simpson (Lower Simpson Seam).....	2	2030	2130	2080	4.45	0.48
Boulder.....	Louisville.....	Acme (Lower Acme Seam).....	1	....	....	2040	5.46	0.40
Boulder.....	Louisville Jct.....	Monarch No. 2 (Seam Unnamed).....	2	1990	2030	2010	6.54	0.33
Boulder.....	Superior.....	Industrial (Seam Unnamed).....	3	2060	2140	2100	6.89	0.37
Delta.....	Bowie.....	King (King Seam).....	2	2470	2740	2600	5.06	0.60
Delta.....	Dominquez.....	Wells Gulch (Seam Unnamed).....	1	....	....	2160	6.20	1.01
El Paso.....	Calhan.....	Mosby (Mosby Seam).....	1	....	....	2520	20.77	0.45
El Paso.....	Colorado Spgs.....	El Paso (Seam Unnamed).....	3	2190	2260	2230	7.99	0.43
El Paso.....	Colorado Spgs.....	Rapson No. 2 (Lower Seam).....	1	....	....	2310	7.96	0.50
El Paso.....	Pike View.....	Pike View ("A" Seam).....	6	2070	2350	2250	7.37	0.41
El Paso.....	Ramah.....	Purdon (Purdon Seam).....	1	....	....	2510	27.45	0.48
Fremont.....	Chandler.....	Chandler (Canon Seam).....	2	2080	2130	2100	7.25	0.49
Fremont.....	Rockvale.....	Rockvale (Rockvale Seam).....	2	2080	2350	2220	10.43	0.65
Fremont.....	Williamsburg.....	Magnet (Magnet Seam).....	2	2030	2130	2080	7.90	0.99

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COLORADO—Continued

LOCALITY, BED, ETC.			Number of Samples from Mine	Softening Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
Miscellaneous Seams								
Garfield.....	New Castle.....	Vulcan (Allen Seam).....	5	2060	2370	2220	5.75	0.50
Garfield.....	South Canon.....	South Canon (Wheeler Seam)...	2	2360	2410	2380	8.78	0.58
Gunnison.....	Baldwin.....	Mount Carbon (No. 2 Seam).....	1	....	....	2310	7.30	1.05
Gunnison.....	Mount Carbon.....	Kubler (No. 2 Seam).....	1	....	....	2380	9.51	0.49
Gunnison.....	Somerset.....	Somerset (Seam Unnamed).....	2	2240	2240	2240	9.74	0.46
Huerfano.....	Camp Shumway.....	Gordon (Cameron Seam).....	2	2280	2300	2290	11.48	0.94
Huerfano.....	Camp Shumway.....	Vesta (Walsen Seam).....	1	....	....	2670	9.89	0.68
Huerfano.....	Delcarbon.....	Brennan (Robinson Seam).....	2	2180	2350	2260	8.09	0.72
Huerfano.....	Delcarbon.....	Turner (Cameron Seam).....	1	....	....	2240	7.33	0.71
Huerfano.....	Delcarbon.....	Turner (Walsen Seam).....	5	2330	2430	2330	11.29	0.66
Huerfano.....	Farr.....	Cameron (Walsen Seam).....	3	2430	2620	2510	15.43	0.50
Huerfano.....	Lester.....	Lester (Walsen Seam).....	2	2400	2640	2520	11.08	0.51
Huerfano.....	Maitland.....	Maitland (Lenox Seam).....	1	....	....	2680	13.70	0.76
Huerfano.....	Maitland.....	Maitland (Robinson Seam).....	1	....	....	2400	15.31	0.64
Huerfano.....	McGuire.....	Pinon (Cameron Seam).....	2	2300	2340	2340	10.30	0.78
Huerfano.....	Oakview.....	Oakdale (Seam Unnamed).....	3	2130	2690	2360	10.50	0.57
Huerfano.....	Oakview.....	Oakdale No. 1 (Mammoth Seam).....	1	....	....	2330	8.19	0.50
Huerfano.....	Pictou.....	Pictou (Walsen Seam).....	1	....	....	2670	11.62	0.72
Huerfano.....	Pictou.....	Pictou (Walsen and Robinson Seams).....	1	....	....	2210	10.48	0.59
Huerfano.....	Ravenwood.....	Ravenwood (Cameron Seam).....	2	2500	2520	2510	8.38	0.77
Huerfano.....	Strong.....	Sunnyside (Walsen Seam).....	2	2480	2530	2500	9.24	0.65
Huerfano.....	Tioga.....	Kobler No. 2 (Robinson Seam)...	2	2100	2150	2120	8.29	0.56
Huerfano.....	Toltec.....	Toltec (Cameron Seam).....	1	....	....	2380	10.51	1.01
Huerfano.....	Toltec.....	Toltec (Walsen Seam).....	1	....	....	2700	10.43	0.81
Huerfano.....	Walsen.....	Robinson No. 1 (Robinson Seam)...	3	2400	2440	2410	11.65	0.54
Huerfano.....	Walsen.....	Robinson No. 2 (Walsen Seam)...	3	2280	2380	2340	10.84	0.56
Huerfano.....	Walsenburg.....	Mutual (Walsen Seam).....	1	....	....	2500	15.63	0.47
Jackson.....	Coalmont.....	Riach (Riach Seam).....	1	....	....	2580	8.94	0.91
Jackson.....	Higbo.....	Mitchell (Mitchell Seam).....	1	....	....	2270	12.56	1.05
Jackson.....	Walden.....	Marr (Sudduth Seam).....	1	....	....	2440	4.31	0.19
Jackson.....	Walden.....	McCallum (Sudduth Seam).....	1	....	....	2370	7.78	0.33
Jackson.....	Walden.....	Sudduth (Sudduth Seam).....	1	....	....	2440	6.25	0.74
Jackson.....	Walden.....	Winscom (Winscom Seam).....	1	....	....	2190	14.80	0.98
Jefferson.....	Morrison.....	White Ash (Jumbo Seam).....	1	....	....	2290	8.12	1.05
La Plata.....	Durango.....	Cinder Butte ("B" Seam).....	1	....	....	†3010	19.13	0.68
La Plata.....	Durango.....	San Juan (Seam Unnamed).....	2	2990	3010	3000	7.05	0.74
La Plata.....	Durango.....	Soda Spring ("B" Seam).....	1	....	....	2550	15.74	0.72
La Plata.....	Hesperus.....	Hesperus (Hesperus Seam).....	2	2710	3000	2860	6.37	0.71
La Plata.....	Hesperus.....	Mormon (Seam Unnamed).....	1	....	....	†3010	14.18	0.90
La Plata.....	Hesperus.....	Wheeler (Upper No. 5 Seam).....	1	....	....	2950	7.12	0.62
La Plata.....	Mancos.....	Hauert (Spencer Seam).....	1	....	....	†3010	9.57	0.69
La Plata.....	Perins.....	Perins Peak (Peacock Seam).....	3	2060	2540	2320	5.88	2.42
Las Animas.....	Aguilar.....	Empire (Walsen Seam).....	1	....	....	2360	13.39	0.69
Las Animas.....	Aguilar.....	Royal (Peerless Seam).....	1	....	....	2780	11.83	0.73
Las Animas.....	Aguilar.....	Royal (Walsen Seam).....	1	....	....	2420	11.16	0.69
Las Animas.....	Bon Carbo.....	Bon Carbo (Primero Seam).....	1	....	....	2300	14.17	0.50
Las Animas.....	Brodhead.....	Temple No. 9 (Brodhead No. 4 Seam).....	1	....	....	2320	8.20	0.45
Las Animas.....	Brodhead.....	Temple No. 10 (Rugby Seam)...	1	....	....	2430	11.13	0.46
Las Animas.....	Cokedale.....	Cokedale No. 1 (Cokedale Seam)...	4	2710	2990	2920	17.74	0.54
Las Animas.....	Delagua.....	Cass (Delagua Seam).....	1	....	....	2430	8.65	0.75
Las Animas.....	Delagua.....	Delagua (Delagua Seam).....	4	2310	2480	2420	11.51	0.56
Las Animas.....	Delagua.....	Delagua No. 1 (Delagua Seam)...	3	2550	2610	2570	7.51	0.60
Las Animas.....	Delagua.....	Delagua No. 3 (Delagua Seam)...	1	....	....	2300	8.63	0.53
Las Animas.....	Forbes.....	Forbes No. 9 (Walsen Seam).....	4	2310	2580	2400	10.04	0.73
Las Animas.....	Hastings.....	Hastings (Berwind Seam).....	3	2650	2990	2770	13.11	0.75
Las Animas.....	Hastings.....	Hastings (Hastings Seam).....	3	2600	2810	2680	16.51	0.64
Las Animas.....	Morley.....	Morley (Engle-Starkville Seam)...	5	2340	2960	2660	15.01	0.78
Las Animas.....	Primero.....	Primero (Primero Seam).....	3	2370	2560	2460	13.54	0.51
Las Animas.....	Sopris.....	Piedmont (Lower Seam).....	2	2740	2930	2840	15.02	0.66
Las Animas.....	Sopris.....	Sopris No. 2 (Cameron Seam)...	1	....	....	2790	18.11	0.75
Las Animas.....	Starkville.....	Starkville (Engle-Starkville Seam).....	5	2800	2990	2890	15.31	0.60
Las Animas.....	Tollerburg.....	Toller (Berwind Seam).....	2	2530	2760	2640	12.08	0.68
Mesa.....	Cameo.....	Cameo (Cameo Seam).....	2	2710	2960	2840	9.58	0.63
Moffat.....	Axial.....	Battle Era (Seam Unnamed).....	1	....	....	2220	7.17	1.04
Moffat.....	Axial.....	Ed Collom (Seam Unnamed).....	1	....	....	2350	4.19	0.78
Moffat.....	Axial.....	James (Seam Unnamed).....	1	....	....	2380	4.37	0.61
Moffat.....	Axial.....	Joe Collom (Collom Seam).....	1	....	....	2430	2.51	0.36
Moffat.....	Axial.....	Shafer (Seam Unnamed).....	1	....	....	2300	4.50	0.68
Moffat.....	Craig.....	Blevine (Seam Unnamed).....	1	....	....	2210	7.76	0.79
Moffat.....	Craig.....	Hart (Seam Unnamed).....	1	....	....	2740	6.49	6.62
Moffat.....	Craig.....	Kimberly (Seam Unnamed).....	1	....	....	2190	5.57	0.92
Moffat.....	Craig.....	Roby (Seam Unnamed).....	1	....	....	2890	4.87	0.59
Moffat.....	Craig.....	Seick (Seam Unnamed).....	1	2010	9.29	0.85
Moffat.....	Craig.....	Walker (Seam Unnamed).....	9	2080	2090	2080	7.36	1.06

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COLORADO—Continued

LOCALITY, BED, ETC.			Number of Samples from Mine	Softening Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
Miscellaneous Seams								
Moffat.....	Lay.....	Lay (Seam Unnamed).....	1	.....	.....	2440	6.75	1.04
Moffat.....	Mount Streeter.....	Collom (Collom Seam).....	2	2230	2540	2380	2.90	0.33
Montezuma.....	Cortez.....	Cortez (Seam Unnamed).....	1	.....	.....	2980	15.42	0.62
Montezuma.....	Cortez.....	Hamilton Prospect (Seam Unnamed).....	1	.....	.....	2710	13.64	0.50
Montezuma.....	Cortez.....	Jackson (Spencer Seam).....	3	2240	2560	2370	6.36	0.54
Montezuma.....	Cortez.....	Mowry (Seam Unnamed).....	2	3110	2130	2120	16.13	7.64
Montezuma.....	Cortez.....	Todd (Spencer Seam).....	3	2190	2380	2260	7.63	0.78
Montezuma.....	Dolores.....	Prospect (Seam Unnamed).....	1	.....	.....	2810	9.11	0.59
Montezuma.....	Mancos.....	Old Spencer (Peacock Seam).....	1	.....	.....	2430	5.82	1.08
Montezuma.....	Mancos.....	Spencer (Spencer Seam).....	1	.....	.....	2510	4.80	0.66
Ouray.....	Ridgway.....	Low Creek (Low Creek Seam).....	1	.....	.....	2450	8.24	0.68
Pitkin.....	Redstone.....	Placita (Seam Unnamed).....	1	.....	.....	2370	6.75	0.50
Rio Blanco.....	Meeker.....	Black Diamond (Lord Seam).....	1	.....	.....	2990	8.95	0.55
Rio Blanco.....	Meeker.....	Cornrike (Seam Unnamed).....	1	.....	.....	2310	2.57	0.33
Rio Blanco.....	Meeker.....	Fairfield (Seam Unnamed).....	1	.....	.....	2370	6.97	0.96
Rio Blanco.....	Meeker.....	Meeker (Old Pollard Seam).....	1	.....	.....	2310	6.68	0.50
Rio Blanco.....	Meeker.....	Montgomery (Seam Unnamed).....	1	.....	.....	2210	7.00	0.81
Rio Blanco.....	Meeker.....	Sulphur Creek (Seam Unnamed).....	1	.....	.....	2780	9.26	0.66
Rio Blanco.....	Meeker.....	Wesson (Seam Unnamed).....	1	.....	.....	2730	7.02	0.95
Routt.....	Coalview.....	Routt-Pinnacle (Bear Run Seam).....	1	.....	.....	2400	7.84	0.54
Routt.....	Hayden.....	Carey (Seam Unnamed).....	1	.....	.....	2480	6.52	0.47
Routt.....	Hayden.....	Dry Creek (Seam Unnamed).....	1	.....	.....	2340	4.54	0.45
Routt.....	Hayden.....	Green (Green Seam).....	1	.....	.....	2250	5.26	0.50
Routt.....	McGregor.....	McNeil No. 1 (Wolf Creek Seam).....	1	.....	.....	2780	12.07	0.53
Routt.....	McGregor.....	McNeil No. 3 (Wadge Seam).....	1	.....	.....	2660	7.46	0.73
Routt.....	Millner.....	Elk Creek (Wolf Creek Seam).....	2	2540	2980	2760	10.72	0.50
Routt.....	Mount Harris.....	Bear River (Seam Unnamed).....	1	.....	.....	2420	5.64	0.57
Routt.....	Mount Harris.....	Colorado and Utah No. 1 (Harris Seam).....	3	2580	2870	2710	6.96	0.49
Routt.....	Mount Harris.....	International (Wolf Creek Seam).....	1	.....	.....	2710	13.98	0.49
Routt.....	Mount Harris.....	Mount Harris (Wadge Seam).....	8	2570	2940	2820	6.30	0.46
Routt.....	Mount Harris.....	Wadge (Wadge Seam).....	2	2540	2710	2620	5.94	0.49
Routt.....	Milner.....	Curtis No. 1 (Curtis Seam).....	1	.....	.....	2420	8.53	0.73
Routt.....	Milner.....	Chorgo (Wadge Seam).....	1	.....	.....	2430	6.41	0.49
Routt.....	Milner.....	Schuster (Seam Unnamed).....	1	.....	.....	2600	6.01	0.55
Routt.....	Oak Creek.....	Argo (Argo or Pinnacle Seam).....	4	2330	2520	2420	4.62	0.50
Weld.....	Frederick.....	Baum (Seam Unnamed).....	1	.....	.....	2030	5.29	0.49
Weld.....	Puritan.....	Puritan (Seam Unnamed).....	1	.....	.....	2170	4.75	0.45

IDAHO

Miscellaneous Seams								
Boise	Horse Shoe Bend	Henry (Seam Unnamed)	2	2480	2810	2640	30.90	0.49
Cassia	Oakley	Worthington (Worthington Seam)	1	....	....	2130	27.54	0.96
Fremont	Driggs	Bellent (Seam Unnamed)	1	....	....	1950	4.91	0.58
Fremont	Haden	Brown Bear (Seam Unnamed)	1	....	....	3090	4.86	0.61
Fremont	Haden	Horseshoe (Seam Unnamed)	1	....	....	2010	2.36	0.41
Fremont	Monida	Scott Buey (Seam Unnamed)	1	....	....	2270	12.80	0.87
Teton	Victor	Pine Creek Pass (Seam Unnamed)	1	....	....	2160	38.40	1.41

ILLINOIS

No. 1 Bed								
Mercer	Matherville	Alden No. 7	6	2040	2180	2110	11.74	4.86
No. 2 Bed								
Bureau	Cherry	Cherry No. 2	2	1880	1930	1910	8.97	4.51
Bureau	Marquette	Marquette No. 1	3	1990	2130	2050	8.99	2.75
Grundy	Coal City	Wilmington Star No. 7	1	....	....	1880	6.71	2.96
McLean	Bloomington	Bloomington	5	1960	2030	2000	10.82	3.32
McDonough	Industry	Burdick County Bank	2	2140	2240	2190	7.55	3.26
McDonough	Plymouth	Stoneking	2	1970	2120	2050	6.76	3.68
Average of No. 2 Bed			15	....	....	2010	9.97	3.58
No. 5 Bed								
Fulton	Cuba	Big Creek No. 3	2	1890	1960	1930	13.21	3.62
Fulton	St. David	Big Creek No. 2	5	1890	1970	1930	12.87	3.56
Gallatin	Shawneetown	Middle mine of Saline Mines	1	....	....	2010	8.55	2.91

(Continued on Next Page)

ILLINOIS—Continued

LOCALITY, BED, ETC.			Number of Samples from Mine	Softening Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
No. 5 Bed—Continued								
Menard	Athens	Wabash No. 2	2	1890	1970	1930	11.47	3.44
Peoria	Bartonville	Collier	3	1900	1970	1950	11.61	3.35
Peoria	Hanna City	Hanna City	4	1910	2030	1950	13.72	3.42
Saline	Harrisburg	O'Gara No. 4	2	2020	2020	2020	7.87	2.92
Saline	Harrisburg	O'Gara No. 9	7	1960	2210	2090	7.94	2.15
Saline	Grayson	Saline County No. 6	1	....	....	2060	10.28	4.14
Average of No. 5 Bed			27	....	....	1990	10.84	3.28
No. 6 Bed								
Christian	Pana	Springside	4	1920	2090	2000	11.37	4.58
Franklin	Buckner	No. 2	6	2080	2300	2190	9.35	1.17
Franklin	Bush	Bush No. 2	4	1920	2000	1950	11.26	3.61
Franklin	Christopher	Old Ben No. 11	4	2080	2390	2270	8.68	0.88
Franklin	Christopher	United No. 1	5	2240	2440	2290	9.20	1.03
Franklin	Christopher	Old Ben No. 10	6	2220	2530	2380	9.54	0.84
Franklin	Herrin	Possum Ridge	4	2050	2320	2210	8.39	0.82
Franklin	Orient	Orient	2	2380	2440	2410	8.99	0.93
Franklin	Orient	Orient (car sample Lump over 3 inches)	2	2120	2260	2190	9.73	1.29
Franklin	Royalton	North	6	2170	2650	2420	10.22	0.76
Franklin	Sesser	Sesser No. 1	5	2130	2260	2210	9.30	1.21
Franklin	Sesser	Sesser No. 1 (car sample of 3- inch Lump)	4	2190	2480	2360	9.84	1.22
Franklin	West Frankfort	Brazil Block No. 18	2	2150	2240	2200	8.42	2.00
Franklin	West Frankfort	Old Ben No. 8	3	2010	2170	2070	7.93	1.45
Franklin	West Frankfort	Old Ben No. 9	4	2030	2150	2080	8.68	1.50
Franklin	West Frankfort	West Frankfort No. 1	5	2140	2520	2260	8.82	1.14
Gallatin	Shawneetown	Strong	1	....	....	2060	9.77	3.13
Macoupin	Gillespie	Superior No. 1	2	2140	2160	2150	11.36	4.59
Macoupin	Gillespie	Superior No. 1 (car sample Run of Mine)	1	....	....	2040	15.11	5.76
Madison	Collinsville	Cantine No. 3	3	1970	2020	1990	10.67	4.01
Montgomery	Panama	Shoal Creek No. 1	6	2010	2170	2060	13.49	4.54
Perry	Duquoin	Paradise	18	2330	2610	2490	11.18	1.00
Perry	Duquoin	Security	4	2050	2130	2090	10.50	1.70
Perry	Pinckneyville	Ritchey No. 1	5	1920	2170	2060	11.46	3.65
St. Clair	O'Fallon	Taylor	2	1960	2030	2000	12.70	5.04
Vermillion	Danville	Schaefer	4	1990	2170	2090	10.19	3.85
Vermillion	Fairmont	Fairmont	6	1950	2150	2050	11.78	2.76
Vermillion	Georgetown	Sharon	5	2070	2160	2100	12.76	2.61
Vermillion	Steelton	Dering No. 4	8	2040	2190	2110	10.53	2.53
Vermillion	Westville	Bunsen (car sample Nut)	1	....	....	2180	10.45	1.99
Vermillion	Westville	Bunsen No. 3	1	....	....	1940	11.93	3.47
Vermillion	Westville	Little Vermillion	12	1930	2160	2070	9.84	2.52
Williamson	Herrin	Pond Creek	4	2010	2430	2220	9.43	1.01
Williamson	Herrin	Jeffrey	3	2220	2350	2280	8.26	1.38
Williamson	Herrin	Rend No. 2	5	2230	2390	2300	8.88	1.08
Williamson	Herrin	Weaver No. 2	3	1950	2280	2140	9.74	1.41
Average of No. 6 Bed			160	....	....	2160	10.27	2.30
No. 7 Bed								
Vermillion	Danville	Electric	12	1940	2180	2040	9.70	3.31
Williamson	Herrin	C. and H. (car sample Run of Mine)	1	....	....	2060	11.53	2.06
Average of No. 7 Bed			13	....	....	2050	10.62	2.69

INDIANA

No. 3 Bed								
Vermillion	Clinton	Crown Hill No. 3	4	2040	2220	2140	9.92	3.64
Vermillion	Clinton	Dering No. 1	4	1990	2070	2050	9.83	3.86
Vigo	Terre Haute	Vandalia No. 82	3	2030	2100	2080	12.08	5.51
Average of No. 3 Bed			11	....	....	2090	10.61	4.34
No. 4 Bed								
Greene	Jasonville	Gilmour No. 7	4	2570	2790	2670	8.43	1.33
Greene	Linton	Vandalia No. 24	3	2370	2710	2500	8.30	1.49
Sullivan	Cass	Vandalia No. 28	3	2300	2420	2350	7.81	1.43
Sullivan	Dugger	Ayrdale	4	2350	2710	2490	8.20	1.42
Sullivan	Dugger	Vandalia No. 10	9	2150	2390	2300	7.01	1.45
Sullivan	Dugger	Vandalia No. 22	3	2030	2340	2170	8.91	2.93
Vermillion	Clinton	Clinton No. 4	4	2250	2320	2280	8.50	1.26
Average of No. 4 Bed			30	....	....	2390	8.17	1.62

(Continued on Next Page)

INDIANA—Continued

LOCALITY, BED, ETC.			Number of Samples from Mine	Softening Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
No. 5 Bed								
Gibson	Fort Branch	Fort Branch	3	2060	2100	2080	9.72	3.83
Gibson	Oakland City	Ayrshire No. 7 (car sample Lump)	4	2480	2560	2530	6.40	1.06
Knox	Bicknell	Indian Creek	2	2040	2210	2130	10.28	4.83
Knox	Bruceville	Oliphant Johnson No. 1	6	2030	2130	2070	11.90	3.54
Sullivan	Carlisle	Viola	3	1990	2200	2090	10.29	3.27
Vanderburg	Evansville	Sunnyside	2	2080	2100	2090	10.31	2.97
Vermillion	Blanford	West Clinton No. 1	2	1890	2070	1980	10.49	3.65
Vigo	Terre Haute	Vandalia No. 82	6	1950	2090	2040	10.82	3.45
Warrick	Elberfield	Elberfield	1	....	....	2190	11.83	5.30
Average of No. 5 Bed			29	....	....	2130	10.23	3.54
No. 6 Bed								
Sullivan	Dugger	Vandalia No. 17	5	2010	2120	2040	9.91	2.65
Minshall Bed								
Vigo	Coal Bluff	Chicago No. 8	1	....	....	2120	9.60	2.99

KANSAS

Bevier Bed								
Leavenworth	Lansing	Penitentiary	3	1970	2070	2030	14.08	4.47
Leavenworth	Leavenworth	Home Riverside No. 1	3	1810	2020	1920	15.58	4.95
Average of Bevier Bed			6	....	....	1980	14.83	4.71
Cherokee Bed								
Cherokee		Mayer No. 9	4	1900	2000	1950	8.72	3.30
Crawford	Edison	Wear No. 21	1	....	....	2090	12.65	5.04
Crawford	Pittsburgh	Central (Strip Pit)	3	2170	2390	2280	6.89	1.19
Average of Cherokee Bed			8	....	....	2110	9.42	3.18
Leavenworth Bed								
Leavenworth	Leavenworth	Home Riverside No. 3	3	1860	2120	2020	18.26	5.40
Weir-Pittsburgh Bed								
Crawford	Fuller	Sheridan No. 2	3	1950	2110	2050	9.56	5.23
Crawford	Franklin	Western No. 16	1	....	....	1970	12.67	5.63
Crawford	Yale	Western No. 13	3	2000	2040	2020	12.81	5.08
Average of Weir-Pittsburgh Bed			7	....	....	2010	11.68	5.31
Miscellaneous								
Crawford	Pittsburgh	Patton (bed unnamed, upper)	1	....	....	1920	13.56	3.45

EASTERN KENTUCKY

Alum Bed								
Pike	Thacker	Little Thacker	1	....	....	2940	4.37	0.61
Elkhorn Bed								
Letcher	Fleming	Acme	2	2300	2390	2350	3.18	0.68
Letcher	Fleming	Elkhorn No. 501	4	2550	2640	2590	4.18	0.64
Letcher	Jenkins	Consolidation No. 204	2	2490	2660	2580	5.24	0.53
Letcher	Jenkins	Local	1	....	....	2520	5.92	0.85
Letcher	McRoberts	Consolidation No. 213	4	2350	2670	2500	3.42	0.56
Letcher	McRoberts	Consolidation No. 214	4	2430	2730	2540	3.79	0.60
Letcher	Mater	Elkhorn or Kona	4	2390	2510	2450	4.16	1.02
Pike	Hellier	Edgewater	1	....	....	2260	2.75	0.58
Average of Elkhorn Bed			22	....	....	2470	3.83	0.68
Fire Clay (Dean or No. 4) Bed								
Bell	Fourmile	East Jellico	2	2910	†3010	†2960	7.92	1.02
Bell	Fourmile	Magnet	3	2440	2910	2650	6.71	1.10
Knox	Bradel	Bennett No. 1	3	2840	2960	2910	6.42	0.78
Perry	Douglass	Douglass	4	2620	†3010	†2860	3.55	0.74
Perry	Hazard	Hazard	3	2910	†3010	†2940	3.64	0.63
Perry	Hazard	Hazard Dean	2	2370	2460	2420	4.12	0.86
Perry	Hazard	Ross Petrey	1	....	....	†3010	6.16	0.68
Perry	Lennut	North Fork	4	2630	†3010	†2900	4.24	0.87
Perry	Lothair	Ashless	3	2320	2610	2490	5.39	0.67
Average of Fire Clay (Dean or No. 4) Bed			25	†2790	5.35	0.82
Flag (No. 7) Bed								
Perry	Lothair	Kentucky Jewel	4	2730	2970	2880	7.52	0.83

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†Denotes that the true value is above that indicated.

EASTERN KENTUCKY—Continued

LOCALITY, BED, ETC.			Number of Samples from Mine	Softening Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
Harlan Bed								
Harlan.....	Harlan.....	Clover Fork.....	3	2510	2930	2720	2.95	0.75
Harlan.....	Harlan.....	Coxton.....	2	2520	2550	2540	3.52	0.88
Harlan.....	Harlan.....	Wood.....	3	2600	†3010	†2840	5.36	0.92
Average of Harlan Bed.....			8	....	....	†2700	3.94	0.85
Hazard (Haddix or No. 6) Bed								
Perry.....	Domino.....	Himyar.....	4	2020	3010	2460	8.56	0.79
Hickory Bed								
Bell.....	Rim.....	Rim No. 4.....	4	2020	2490	2340	5.37	1.07
Jellieo Bed								
Knox.....	Elys.....	New Hughes.....	4	2360	2590	2460	6.92	1.56
Kellioka (C) Bed								
Harlan.....	Benham.....	Benham.....	1	....	....	2230	2.21	0.49
Lower Bolling Bed								
Letcher.....	Flat Gap.....	Mullin.....	1	....	....	2880	11.65	1.01
Lower Hignite Bed								
Bell.....	Chenoa.....	Chenoa Hignite.....	3	2370	2500	2440	4.57	1.10
Lower Standiford Bed								
Letcher.....	Flat Gap.....	Local.....	1	....	....	2260	5.24	1.81
Mason Bed								
Bell.....	Chenoa.....	Log Mountain No. 1.....	4	2140	2390	2250	2.53	0.85
Bell.....	Colmar.....	Armi.....	3	2240	2390	2330	6.09	1.61
Bell.....	Tejay.....	Tegay.....	4	2320	2430	2390	3.18	0.97
Average of Mason Bed.....			11	....	....	2320	3.93	1.14
Miller Creek (No. 1) Bed								
Johnson.....	Van Lear.....	Van Lear No. 1.....	2	2010	2280	2150	3.50	1.17
Johnson.....	Van Lear.....	Van Lear No. 2.....	1	....	....	2030	3.54	1.90
Johnson.....	Van Lear.....	Van Lear No. 3.....	1	....	....	2080	3.49	1.54
Johnson.....	Van Lear.....	Van Lear No. 4.....	1	....	....	2400	2.46	0.68
Laurel.....	East Bernstadt.....	Bonar.....	4	2020	2460	2220	4.97	2.40
Laurel.....	Pittsburgh.....	Acme.....	4	1990	2120	2060	7.39	3.70
Average of Miller Creek (No. 1) Bed.....			13	....	....	2160	4.23	1.90
Poplar Lick Bed								
Bell.....	Harrison.....	Log Mountain No. 52.....	4	2440	2960	2670	5.30	1.05
Rawl (Gas or No. 2) Bed								
Pike.....	Sprig.....	Burnwell No. 2.....	1	....	....	†3010	5.25	0.64
Whitley.....	Barthell.....	No. 1 (North Main).....	1	....	....	2340	9.80	3.16
Average of Rawl (Gas or No. 2) Bed.....			2	....	....	†2680	7.53	1.90
Straight Creek Bed								
Bell.....	Arjay.....	Glendon.....	4	2100	2130	2110	3.12	0.90
Bell.....	Fox Ridge.....	Fox Ridge.....	4	1970	2070	2010	1.98	1.07
Bell.....	Kettle Island.....	Pioneer.....	4	1990	2380	2170	4.85	1.38
Bell.....	Straight Creek.....	Barker Nos. 2 and 3.....	4	2110	2170	2140	3.66	1.33
Average of Straight Creek Bed.....			16	....	....	2110	3.40	1.17
Thacker Bed								
Pike.....	Thacker.....	Little Thacker.....	1	....	....	2430	4.42	1.39
Upper Hance Bed								
Bell.....	Varilla.....	Varilla.....	4	2150	2550	2330	4.74	1.61

WESTERN KENTUCKY

No. 6 Bed								
Union.....	Sturgis.....	Crittenden.....	4	1990	2260	2130	8.81	2.97
No. 9 Bed								
Daviess.....	Owensboro.....	Fulkerson.....	2	2030	2080	2060	12.18	4.31
Daviess.....	Owensboro.....	George Rudy.....	3	2060	2190	2100	10.76	3.63
Henderson.....	Baskett.....	No. 1.....	3	2020	2100	2050	11.53	3.14
Henderson.....	Robards.....	Panama.....	2	1990	2070	2030	11.41	4.12
Hopkins.....	Earlington.....	Arnold No. 9.....	8	1980	2310	2090	9.96	3.78
Hopkins.....	St. Charles.....	Carbondale No. 1.....	6	1910	2190	2020	9.05	3.59
Hopkins.....	St. Charles.....	Fox Run.....	8	1930	2170	2030	10.03	3.43
McLean.....	Island.....	O'Neil.....	4	1980	2170	2090	10.62	3.48
Muhlenberg.....	Bevier.....	Lam.....	5	1870	2030	1950	9.83	3.98
Muhlenberg.....	Central City.....	Central.....	3	1970	2230	2090	8.34	2.87
Muhlenberg.....	Cleaton.....	Bevier.....	2	1930	1960	1950	10.41	3.05
Muhlenberg.....	Graham.....	Skibo.....	2	1970	2030	2000	10.20	3.76
Ohio.....	McHenry.....	McHenry.....	1	....	....	2120	9.51	2.91
Ohio.....	Rockport.....	Crown.....	5	2000	2120	2070	10.79	3.70
Union.....	DeKoven.....	Curlew.....	1	2000	9.69	3.63

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WESTERN KENTUCKY—Continued

LOCALITY, BED, ETC.			Number of Samples from Mine	Softening Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
No. 9 Bed—Continued								
Union.....	DeKoven.....	Ohio Valley.....	6	1990	2070	2020	12.32	3.76
Union.....	Sturgis.....	West Kentucky No. 8.....	5	1920	2050	1980	11.62	4.19
Union.....	Sturgis.....	West Kentucky No. 9.....	4	1980	2000	1990	10.62	4.03
Webster.....	Providence.....	Providence No. 3.....	6	1870	2110	1990	10.55	4.17
Webster.....	Sebree.....	Sebree.....	2	1810	2020	1920	11.09	3.85
Average of No. 9 Bed.....			78	....	....	2030	10.53	3.67
No. 10 Bed								
Union.....	DeKoven.....	Banks.....	1	....	....	1970	12.56	4.18
Union.....	DeKoven.....	Syres.....	1	....	....	2010	11.42	4.17
Average of No. 10 Bed.....			2	....	....	1990	11.99	4.18
No. 11 Bed								
Hopkins.....	Madisonville.....	Reinecke.....	9	1960	2310	2070	7.95	4.00
Hopkins.....	Nortonville.....	Norton No. 1.....	6	1950	2130	2040	7.46	3.77
Union.....	Morganfield.....	Morganfield.....	4	1840	2230	2020	11.06	4.46
Union.....	Spring Grove.....	Buchanan.....	1	....	....	1990	9.99	4.02
Union.....	Uniontown.....	River Rail.....	5	1880	2050	1970	10.33	3.96
Webster.....	Providence.....	Shamrock.....	9	1880	2110	1970	9.77	4.24
Webster.....	Wheatcroft.....	West Kentucky No. 4.....	5	2020	2390	2160	10.45	4.14
Average of No. 11 Bed.....			39	....	....	2030	9.57	4.08
No. 12 Bed								
Henderson.....	Corydon.....	Corydon.....	4	1860	2030	1970	12.72	3.39
Henderson.....	Smith Mills.....	Smith Mills.....	4	1990	2140	2070	9.41	2.03
Webster.....	Clay.....	West Kentucky No. 7.....	9	2080	2720	2410	8.47	1.49
Average of No. 12 Bed.....			17	....	....	2150	10.20	2.30
Miscellaneous Beds								
Butler.....	Morgantown.....	Gilliam (country bank, bed not classified).....	2	2020	2180	2100	8.33	3.71
Christian.....	Empire.....	Empire (Empire Bed).....	3	1880	1960	1920	5.10	2.31
Crittenden.....	Sullivan.....	Barnaby (bed not named).....	1	....	....	2160	8.05	3.59
Crittenden.....	Sullivan.....	Newcome (bed not named).....	1	....	....	2220	7.11	3.59
Hopkins.....	Nebo.....	Nebo (No. 14 Bed).....	6	1900	2380	2070	9.17	3.02
Hopkins.....	Dawson Springs.....	Workman (Dawson Bed).....	4	2000	2250	2100	5.49	3.11

MARYLAND

Bakerstown Bed								
Allegany.....	Barton.....	Moscow No. 3.....	1	....	....	2110	10.17	2.27
Allegany.....	Morrison.....	Gin Sang.....	1	....	....	2390	10.73	2.15
Garrett.....	Barton.....	Monroe No. 2.....	1	....	....	†3010	9.12	0.62
Garrett.....	Barton.....	Swanton.....	1	....	....	2620	11.22	1.99
Garrett.....	Gannon's Station.....	Washington No. 5.....	1	....	....	2660	10.08	1.47
Average of Bakerstown Bed.....			5	....	....	†2560	10.26	1.70
Bluebaugh Bed								
Allegany.....	Barrelville.....	Bond.....	1	....	....	2300	10.62	2.58
Allegany.....	Barrelville.....	Enrick No. 1.....	1	....	....	†3010	13.35	0.84
Allegany.....	Montell.....	Montell Tunnel (Morton's).....	1	....	....	†3010	15.01	1.46
Average of Bluebaugh Bed.....			3	....	....	†2770	12.99	1.63
Brush Creek Bed								
Allegany.....	Barrelville.....	Pratt.....	1	....	....	2470	9.61	1.26
Clarion (Parker) Bed								
Allegany.....	Barrelville.....	Parker.....	1	....	....	2370	5.10	1.17
Allegany.....	Franklin Station.....	Miller and Cree No. 1.....	1	....	....	2190	14.12	3.67
Average of Clarion (Parker) Bed.....			2	....	....	2280	9.61	2.42
Franklin Bed								
Allegany.....	Lonaconing.....	George's Creek Test Opening.....	1	....	....	2410	8.48	1.36
Gallitzen Bed								
Garrett.....	Oakland.....	Leighton.....	1	....	....	2130	15.14	4.91
Garrett.....	Oakland.....	Tower.....	1	....	....	2150	10.39	2.57
Garrett.....	Swallow Falls.....	Beeghly.....	1	....	....	2130	10.93	2.51
Average of Gallitzen Bed.....			3	....	....	2140	12.15	3.33
Grantsville Bed								
Garrett.....	Grantsville.....	Beachy.....	1	....	....	2490	8.23	1.22
Little Pittsburgh Bed								
Allegany.....	Barton.....	Swanton.....	1	....	....	†3010	7.95	1.18
Lower Freeport Bed								
Allegany.....	Mount Savage.....	Henry Mullaney's.....	1	....	....	2150	20.51	4.11

(Continued on Next Page)

†Denotes that the true value is above that indicated.

MARYLAND—Continued

LOCALITY, BED, ETC.			Number of Samples from Mine	Softening Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
Lower Kittanning Bed								
Allegany	Luke	Deven	1			2620	11.05	1.53
Allegany	Mortons	Mortons	5	2150	2580	2410	11.81	2.72
Allegany	Montell	Montell Tunnel (Morton's)	1			2640	8.58	1.40
Allegany	Westernport	Tacoma	1			2410	10.16	1.61
Garrett	Barnum	Monroe No. 1	1			2560	10.09	1.64
Garrett	Blain Station	Hamill No. 2	1			2200	10.17	2.5
Garrett	Bloomington	Bloomington No. 7	1			2490	12.08	2.12
Garrett	Chaffee	Chaffee	1			2510	9.61	2.06
Garrett	Crellin	Guthrie	1			2560	11.02	2.12
Garrett	Dodson	Dodson	6	2280	2680	2540	11.78	2.62
Garrett	Friendsville	McCulloh	1			2190	11.84	4.11
Garrett	Harrison	Dodson No. 3	1			2530	9.53	1.84
Garrett	Hubbard	Ajax Hocking No. 1	1			2260	13.74	2.34
Garrett	Oakland	Chisholm	1			2510	8.01	1.49
Garrett	Swallow Falls	Shaeffer	1			2190	11.86	3.85
Average of Lower Kittanning Bed			24			2440	10.76	2.26
Mercer (Mount Savage) Bed								
Allegany	Ellerslie	Ellerslie Clay	1			2450	18.13	3.89
Allegany	Mount Savage	Union Mining No. 6	1			†3010	16.15	1.32
Garrett	Oakland	John Sines	1			2410	20.13	4.62
Average of Mercer (Mount Savage) Bed			3			†2620	18.14	3.28
Pittsburgh (Big) Bed								
Allegany	Borden Shaft	Consolidation No. 12	1			3010	7.50	1.04
Allegany	Hoffman	Consolidation No. 3	1			3010	7.54	1.07
Allegany	Little Allegany	Union No. 1	1			2600	8.02	1.41
Allegany	Lord Village	Consolidation No. 7	1			2960	7.24	0.98
Allegany	Midland	Consolidation No. 8 (Tipple Samples)	6	†3010	†3010	†3010	7.34	0.82
Allegany	Ocean	Consolidation No. 1	10	2710	†3010	†2980	8.36	0.87
Average of Pittsburgh (Big) Bed			20			†2930	7.67	1.03
Quakerstown Bed								
Allegany	Ellerslie	Ellerslie Clay	1			†3010	17.03	2.92
Split-Six Bed								
Allegany & Garrett, Gannon's Station						2220	12.42	2.55
Upper Freeport Bed								
Allegany	Stanton-Short Gap	George's Creek No. 1	1			2760	9.95	1.40
Garrett	Bayard	Nethkin	1			2660	10.30	1.56
Garrett	Blaine	Peerless No. 3	1			2200	7.88	1.83
Garrett	Gorman	Strathmore	1			2710	16.82	1.42
Garrett	Oakland	Taylor Sines	1			2170	8.63	3.93
Average of Upper Freeport Bed			5			2500	10.72	2.03
Upper Kittanning Bed								
Garrett	Dodson	Dodson	1			3010	10.27	1.04
Garrett	Harrison	Dodson No. 5	1			†3010	8.72	0.68
Average of Upper Kittanning Bed			2			†3010	9.50	0.86
Upper Sewickley (Tyson) Bed								
Allegany	Eckhart	Washington No. 2	1			3010	5.76	0.91
Allegany	Frostburg	Consolidation No. 9	1			2800	8.43	1.03
Allegany	Lonaconing	George's Creek No. 3	1			2760	5.25	1.07
Allegany	Lonaconing	Kingsland	4	2850	†3010	†2730	8.30	1.31
Allegany	Mount Savage	Tyson No. 3	1			†3010	6.16	1.01
Garrett	Lonaconing	Koontz	1			2750	5.95	1.18
Average of Upper Sewickley (Tyson) Bed			9			†2840	6.65	1.09
Waynesburg Bed								
Allegany	Lonaconing	Kingsley	1			2410	13.75	2.56

MISSOURI

Bevier Bed								
Adair	Connellsville	Manufacturers No. 1	3	1870	2100	1980	14.96	4.10
Adair	Kirksville	Rocky Ford No. 1	2	1980	2030	2010	16.11	4.35
Adair	Kirksville	Star No. 1	2	1940	1950	1950	15.44	6.13
Adair	Novinger	Great Northern No. 21	3	1920	1980	1960	11.97	4.17
Adair	Novinger	Rombauer No. 3	3	1870	1950	1910	13.96	3.56
Boone	Columbia	Davis & Watson No. 1	3	1900	1950	1930	11.51	4.57
Boone	Columbia	Prather No. 1	3	1930	1970	1950	14.79	5.55
Caldwell	Hamilton	Caldwell No. 1	1	....	....	1930	16.44	6.65
Callaway	Fulton	Fulton Firebrick No. 1	3	1980	2000	1990	11.74	4.42

(Continued on Next Page)

†Denotes that the true value is above that indicated.

MISSOURI—Continued

LOCALITY, BED, ETC.			Number of Samples from Mine	Softening Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
Bevier Bed—Continued								
Johnson	Sutherland	Sutherland No. 1	2	1890	2060	1980	9.07	4.44
Macon	Bevier	Central No. 61	3	1940	2090	2030	11.27	3.83
Macon	Bevier	Northwestern No. 9	3	1920	1990	1950	11.12	4.05
Randolph	Huntsville	Carson No. 1	3	1960	1980	1970	11.67	6.11
Randolph	Huntsville	Northern Central No. 2	3	1960	1990	1970	9.95	4.46
Randolph	Ryder	Jones No. 1	3	1830	1910	1880	16.01	5.20
Sullivan	Milan	Milan No. 1	2	1850	1960	1910	19.49	6.85
Average of Bevier Bed			42	....	....	1960	13.47	4.90
Bowen Bed								
Henry	Windsor	Bowen No. 4	3	1920	1960	1940	13.18	4.61
Cherokee Bed								
Barton	Pittsburg-Kansas	Stephenson	3	2020	2260	2150	7.51	1.97
Gainesville Bed								
Harrison	Cainsville	Cainsville	3	1940	2030	1980	12.71	5.78
Jordan Bed								
Henry	Clinton	Pharis No. 1	3	1970	2160	2090	12.20	2.86
Henry	Clinton	Sheldon & Holt No. 1	3	1980	2010	1990	12.88	5.99
Henry	Deepwater	Dickey No. 1	3	1990	2040	2020	11.22	4.01
Henry	Deepwater	Hurst No. 1	3	1940	1970	1950	14.65	4.81
Average of Jordan Bed			12	....	....	2010	12.74	4.42
Lexington Bed								
Adair	Stahl	Consolidation Stahl No. 1	2	1950	1960	1960	14.62	4.62
Clay	Missouri City	Missouri City No. 1	2	1980	2030	2010	14.78	3.50
Harrison	Melbourne	Trenton No. 1	3	1950	1990	1970	7.84	3.52
Lafayette	Corder	Black Diamond	3	1960	1980	1970	13.00	5.13
Lafayette	Corder	Wilson	3	1950	1980	1970	13.25	3.94
Lafayette	Higginsville	Farmers No. 1	3	2000	2120	2040	19.02	3.76
Lafayette	Lexington	Graddy	3	1930	2070	1990	15.00	3.90
Lafayette	Napoleon	Independence	3	1990	1990	1990	16.59	3.71
Lafayette	Wellington	Labor Exchange Branch 305	3	1990	2070	2040	11.54	3.51
Putnam	Mendota	Mendota No. 2	3	1900	1940	1930	12.05	5.05
Putnam	Unionville	Anderson	2	2030	2100	2070	13.84	3.76
Ray	Richmond	Ray County No. 2	3	1930	2140	2040	15.84	4.49
Ray	Richmond	Ray County No. 50	3	1990	2030	2010	13.39	4.49
Ray	Vibbard	Vibbard No. 1	3	1990	2220	2070	7.91	3.14
Average of Lexington Bed			39	....	....	2000	13.48	4.04
Lower Rich Hill Bed								
Bates	New Home	New Home No. 1	3	1890	1900	1900	16.04	5.59
Bates	Rich Hill	Fleming Pit No. 1	3	1950	2000	1980	13.70	5.46
Bates	Rich Hill	Ritchie Pit No. 1	2	1920	1970	1950	16.43	5.24
Average of Lower Rich Hill Bed			8	....	....	1940	19.39	5.43
Lower Weir-Pittsburg Bed								
Barton	Mindenmines	Pullen No. 1	3	1920	1980	1960	9.51	3.72
Barton	Mindenmines	Pullen No. 17	3	1900	1940	1920	12.14	5.17
Average of Lower Weir-Pittsburg Bed			6	....	....	1940	10.78	4.45
Mulberry Bed								
Bates	Amsterdam	Amsterdam No. 1	3	1940	1980	1960	16.19	4.30
Bates	Hume	Holland No. 1	2	1940	2070	2010	12.96	2.05
Average of Mulberry Bed			5	....	....	1990	14.58	3.18
Mulky Bed								
Audrain	Martinsburg	Martinsburg No. 1	1	....	....	1940	11.66	5.77
Audrain	Vandalia	Standard	3	1890	1970	1920	13.68	5.41
Macon	Macon	Home	2	1950	2100	1980	10.53	4.66
Randolph	Renick	Orris No. 1	3	1870	1930	1910	9.23	5.14
Average of Mulky Bed			9	....	....	1940	11.28	5.25
Rich Hill Bed								
Vernon	Panama	Jones No. 1	3	1930	1990	1970	15.47	6.12
Tebo Bed								
Adair	Kirksville	Star	2	1990	2010	2000	11.07	5.91
Grundy	Trenton	Trenton No. 3	3	2140	2320	2260	13.64	3.61
Henry	Calhoun	Parks No. 1	3	1920	2010	1970	12.87	4.01
Henry	Clinton	Lane No. 1	3	1950	2080	2000	14.50	4.28
Henry	Lewis	Pigg No. 1	3	1960	2010	1980	14.24	4.54
Linn	Brookfield	Crandall No. 1	3	1950	2160	2040	9.51	4.97
Linn	Brookfield	Walker No. 1	3	1930	2200	2040	8.82	5.12
Linn	Marceline	Landreth No. 1	3	1960	2040	2000	8.49	4.86
Average of Tebo Bed			23	....	....	2040	11.64	4.66
Waverly Bed								
Lafayette	Waverly	Buckhorn	2	2010	2030	2020	17.43	8.29

MONTANA

LOCALITY, BED, ETC.			Number of Samples from Mine	Softening Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
Miscellaneous Seams								
Big Horn	Lodgegrass	Local Prospect (Carney Seam)	1	....	....	2180	6.52	0.39
Big Horn	Sanders	Prospect ("M" Seam)	1	....	....	2250	7.75	0.66
Blaine	Cleveland	Cook (Seam Unnamed)	1	....	....	2240	11.51	0.90
Broadwater	Lombard	Western (Seam Unnamed)	2	2350	2470	2410	24.38	8.22
Carbon	Bear Creek	International (No. 3 Seam)	3	2010	2090	2040	9.44	1.99
Carbon	Bear Creek	No. 2 (No. 2 Seam)	5	2050	2100	2080	10.46	1.79
Carbon	Bear Creek	North Side (No. 3 Seam)	1	....	....	1930	9.87	1.73
Carbon	Bear Creek	South Side (No. 3 Seam)	3	2040	2110	2080	12.50	2.40
Carbon	Red Lodge	Red Lodge No. 4 (No. 4 Seam)	4	2120	2170	2150	13.20	1.13
Carbon	Washoe	Washoe (No. 3 Seam)	4	2090	2190	2150	12.57	1.25
Chouteau	Big Sandy	Mackton (Mackton Seam)	2	2230	2230	2230	14.62	0.70
Chouteau	Virgelle	Deda (Seam Unnamed)	1	....	....	2290	13.84	0.99
Chouteau	Virgelle	Price Sexton (Seam Unnamed)	1	....	....	2200	13.54	0.74
Custer	Westmore	Prospect (Seam Unnamed)	1	....	....	2170	15.02	0.49
Custer	Perry	Cameron (Seam Unnamed)	1	....	....	2460	22.15	0.38
Dawson	Mendive	Prospect ("B" Seam)	1	....	....	2420	9.24	0.95
Dawson	Mendive	Snyder (Seam Unnamed)	1	....	....	2030	11.92	2.00
Dawson	Jordan	Foster Prospect (Seam Un- named)	1	....	....	2240	16.17	0.63
Fallon	Camp Crook	Horner (Kerr Seam)	1	....	....	2180	12.25	1.06
Fallon	Camp Crook	Kerr (Kerr Seam)	1	....	....	2000	23.73	2.62
Fergus	Hilger	Stone (Seam Unnamed)	1	....	....	2220	16.66	1.40
Fergus	Winifred	Calderwood (Seam Unnamed)	1	....	....	2270	15.25	1.06
Fergus	Winifred	Millsop (Seam Unnamed)	1	....	....	2750	20.15	1.10
Fergus	Winifred	Prospect (Seam Unnamed)	1	....	....	2530	12.58	0.70
Fergus	Winifred	Prospect (Seam Unnamed)	1	....	....	2200	19.48	0.88
Fergus	Winifred	Prospect (Seam Unnamed)	1	....	....	2240	19.33	2.47
Fergus	Winifred	Prospect (Seam Unnamed)	1	....	....	2260	18.83	0.69
Fergus	Winifred	Prospect (Seam Unnamed)	1	....	....	2150	12.58	0.87
Fergus	Winifred	Prospect (Seam Unnamed)	1	....	....	2170	14.91	1.61
Fergus	Winifred	Prospect (Seam Unnamed)	1	....	....	2370	18.09	0.80
Flathead	Flathead River	Outcrop (Seam Unnamed)	1	....	....	2210	11.41	2.92
Granite	Drummond	Prospect (Seam Unnamed)	1	....	....	2370	20.99	1.70
Hill	Havre	Prospect (Seam Unnamed)	1	....	....	2250	22.68	0.92
Hill	Havre	Prospect (Seam Unnamed)	1	....	....	2010	9.46	1.03
Hill	Havre	Prospect (Seam Unnamed)	1	....	....	2060	14.25	0.79
Hill	Havre	Prospect (Seam Unnamed)	1	....	....	2220	26.72	1.64
Hill	Havre	Wheatman (Seam Unnamed)	1	....	....	2130	20.15	1.00
Hill	Rudyard	Banks & Severn (No. 1 Seam)	1	....	....	2020	12.23	1.52
Hill	Rudyard	Outcrop (No. 1 Seam)	1	....	....	2060	20.95	1.97
Hill	Shelby	West Butte (Seam Unnamed)	1	....	....	2320	8.97	1.91
Missoula	Missoula	Hell Gate (Seam Unnamed)	2	2230	2260	2240	26.28	1.08
Musselshell	Lavina	Bennett (Seam Unnamed)	1	....	....	2220	16.79	1.97
Musselshell	Lavina	Caldwell (Seam Unnamed)	1	....	....	2910	17.91	1.93
Musselshell	Painted Rock	Sholz (Seam Unnamed)	1	....	....	2310	18.37	1.13
Musselshell	Roundup	Davis No. 4 (Roundup Seam)	1	....	....	2290	7.60	0.94
Musselshell	Roundup	Keene (Roundup Seam)	1	....	....	2420	8.99	0.59
Musselshell	Roundup	Republic No. 2 (Roundup Seam)	1	....	....	2290	7.60	0.45
Musselshell	Roundup	Roundup A (Roundup Seam)	4	2070	2310	2230	9.17	0.88
Musselshell	Roundup	Roundup No. 3 (Roundup Seam)	1	....	....	2290	8.15	0.67
Phillips	Malta	Spencer (Seam Unnamed)	1	....	....	2450	34.74	0.78
Rosebud	Bighorn	Prospect (Seam Unnamed)	1	....	....	2240	17.89	1.87
Sheridan	Daleview	Ranous (Daleview Seam)	1	....	....	2120	15.61	0.38
Sheridan	East Scobey	Coal Creek (Coal Creek Seam)	1	....	....	3240	15.74	0.90
Sheridan	Plentywood	Pierce (Richardson Seam)	1	....	....	2340	11.47	0.72
Teton	Browning	Stone Prospect (Seam Unnamed)	1	....	....	2790	13.53	1.09
Teton	Cut Bank	Allison Prospect (Seam Un- named)	1	....	....	2590	30.08	1.93
Teton	Cut Bank	Prospect (Seam Unnamed)	1	....	....	2230	21.54	0.71
Teton	Valier	Blair (Seam Unnamed)	1	....	....	2140	14.87	3.30
Valley	Antelope	Richardson (Richardson Seam)	1	....	....	2120	10.43	0.44
Valley	Bainville	Red Bank ("G" Seam)	1	....	....	2470	8.11	0.42
Valley	Culbertson	Bruegger ("E" Seam)	1	....	....	2170	13.50	1.90
Valley	Culbertson	Butterfield ("DD" Seam)	1	....	....	2290	9.70	0.51
Valley	Culbertson	Dempsey ("E" Seam)	1	....	....	2350	10.19	1.23
Valley	Culbertson	Prospect ("F" Seam)	1	....	....	2350	11.95	1.75
Valley	East Scobey	Fisher (Seam Unnamed)	1	....	....	2210	11.86	0.49
Valley	Froid	Astrope ("F" Seam)	1	....	....	2220	10.51	1.22
Valley	Froid	Prospect ("F" Seam)	1	....	....	2280	8.85	1.20
Valley	Medicine Lake	Belgon (Seam Unnamed)	1	....	....	2390	8.23	0.61
Valley	Medicine Lake	Coal Ridge (Coal Ridge Seam)	1	....	....	2250	12.60	0.65
Valley	Medicine Lake	Jones (Jones Seam)	1	....	....	2390	9.54	0.69
Valley	Medicine Lake	Young (Young Seam)	1	....	....	2360	9.46	0.87
Valley	Mondak	Open Pit ("G" Seam)	1	....	....	2230	6.99	0.63
Valley	Opheim	Baldwin Bros. (Opheim Seam)	1	....	....	2080	15.21	0.96
Valley	Opheim	Dawson (Seam Unnamed)	1	....	....	2150	13.11	0.54
Valley	Plentywood	Pierce (Richardson Seam)	1	....	....	2340	12.31	1.00

NEVADA

LOCALITY, BED, ETC.			Number of Samples from Mine	Softening, Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
Miscellaneous Seams								
Esmeralda	Coaldale	Darms ("C" Seam)	1	....	....	2480	31.16	7.33
Esmeralda	Coaldale	Nevada ("C" Seam)	2	2200	2570	2380	23.88	7.14
Mineral	Yerington	Prospect (Seam Unnamed)	1	....	....	2190	38.31	4.21

NEW MEXICO

Miscellaneous Seams								
Bernalillo	Albuquerque	Holmes (Seam Unnamed)	1	....	....	2330	31.65	3.29
Colfax	Brilliant	Brilliant (Tin Pan Seam)	1	....	....	2870	16.51	0.57
Colfax	Dawson	Dawson No. 2 (Raton Seam)	7	2530	2910	2800	13.67	0.72
Colfax	Dawson	Dawson No. 6 (Dawson Seam)	1	....	....	2850	14.95	0.58
Colfax	Gardiner	Gardiner No. 1 (Raton Seam)	1	....	....	3000	15.60	0.66
Colfax	Koehler	Koehler (Raton Seam)	1	....	....	2940	11.16	0.73
Colfax	Koehler	Koehler No. 1 (Raton Seam)	4	2710	†3000	†2880	12.45	0.65
Colfax	Koehler	Koehler No. 2 (Raton Seam)	1	....	....	3040	11.77	0.72
Colfax	Sugarite	Sugarite No. 1 (Sugarite Seam)	1	....	....	2740	9.29	0.58
Colfax	Sugarite	Sugarite No. 2 (Sugarite Seam)	1	....	....	2660	8.96	0.53
Colfax	Van Houten	Van Houten No. 1 (Raton Seam)	1	....	....	3000	11.27	0.85
Colfax	Van Houten	Van Houten No. 4 (Raton Seam)	1	....	....	†3000	12.18	0.58
Colfax	Yankee	Yankee (Yankee Seam)	1	....	....	2460	13.02	1.16
Colfax	Yankee	Yankee No. 3 (Yankee Seam)	2	2800	2850	2820	12.89	0.58
Lincoln	White Oaks	Old Abe (Old Abe Seam)	1	....	....	2380	15.07	0.85
Lincoln	White Oaks	Wild Cat (Seam Unnamed)	1	....	....	3730	17.30	0.78
McKinley	Allison	Coal Basin (Coal Basin No. 1 Seam)	2	2000	2180	2090	7.19	0.54
McKinley	Allison	Diamond (Aztec Seam)	3	2150	2440	2270	9.68	0.55
McKinley	Allison	Diamond (Diamond No. 1 Seam)	1	....	....	2210	7.75	0.53
McKinley	Allison	Diamond (Diamond No. 2 Seam)	1	....	....	2380	9.97	0.52
McKinley	Blackrock	Zuni Indian School (Seam Unnamed)	1	....	....	2890	10.34	0.93
McKinley	Gallup	Bartlett (Black Diamond Seam)	1	....	....	2950	11.79	0.74
McKinley	Gallup	Beddow (Aztec Seam)	1	....	....	2120	5.86	0.73
McKinley	Gallup	Carreto (Otero Seam)	1	....	....	2540	4.92	0.66
McKinley	Gallup	Defiance (Defiance Seam)	1	....	....	2460	7.93	0.88
McKinley	Gallup	Gallup Southwestern (Black Diamond Seam)	1	....	....	2490	7.35	0.85
McKinley	Gallup	Heaton (No. 2 Seam)	1	....	....	2370	6.68	0.70
McKinley	Gallup	Heaton (No. 3½ Seam)	1	....	....	2070	3.93	0.62
McKinley	Gallup	Jones (Defiance Seam)	1	....	....	2400	6.04	1.09
McKinley	Gallup	Myers (Myers Seam)	1	....	....	2490	8.56	0.82
McKinley	Gallup	Navajo (No. 1 Seam)	1	....	....	2670	10.49	0.49
McKinley	Gallup	Navajo (No. 2 Seam)	1	....	....	2150	4.65	0.67
McKinley	Gallup	Navajo (No. 5 Seam)	2	2350	2610	2480	8.30	0.54
McKinley	Gibson	Navajo No. 1 (No. 5 Seam)	1	....	....	2350	7.58	0.65
McKinley	Gibson	Navajo No. 2 (No. 5 Seam)	4	2600	2700	2650	9.02	0.54
McKinley	Gibson	Weaver (No. 2 Seam)	1	....	....	2060	5.64	0.57
McKinley	Gibson	Weaver (No. 3 Seam)	2	1950	2060	2000	3.92	0.58
McKinley	Gibson	Weaver (No. 3½ Seam)	1	....	....	2170	7.21	0.42
McKinley	Gibson	Weaver (No. 5 Seam)	2	2340	2720	2530	8.43	0.64
McKinley	Heaton	Heaton (No. 2 Seam)	1	....	....	2150	5.31	0.48
Rio Arriba	Lumberton	Prospect (Seam Unnamed)	1	....	....	2420	10.77	2.28
Rio Arriba	Monero	Old Simms (Upper Seam)	1	....	....	2340	5.63	0.70
San Juan	Durango	Colorado-New Mexico ("A" Seam)	1	....	....	2550	14.06	0.71
San Juan	Farmington	Bill Thomas (Carbonero Seam)	1	....	....	2940	11.68	0.67
San Juan	Farmington	Blake (Seam Unnamed)	1	....	....	2220	6.68	1.14
San Juan	Farmington	Government (Hogback Seam)	1	....	....	2230	3.46	0.72
San Juan	Farmington	Jones (Carbonero Seam)	1	....	....	2870	12.80	1.42
San Juan	Farmington	Local (Seam Unnamed)	1	....	....	2860	8.34	0.82
San Juan	Farmington	Marcelius (Carbonero Seam)	1	....	....	2850	9.13	0.68
San Juan	Farmington	Prospect (Carbonero Seam)	1	....	....	2150	14.02	2.61
San Juan	Farmington	Prospect (Carbonero Seam)	1	....	....	2290	7.68	0.53
San Juan	Farmington	Ship Rock Indian School (Seam Unnamed)	1	....	....	2270	4.64	0.95
San Juan	Fruitland	Black Diamond (Carbonero Seam)	1	....	....	2340	11.19	0.68
San Juan	Fruitland	Hendrickson (Carbonero Seam)	1	....	....	2720	10.33	0.67
San Juan	Pueblo Bonita	Pueblo Bonita (Seam Unnamed)	1	....	....	2650	8.78	1.80
Sante Fe	Madrid	Anthracite No. 4 (White Ash Seam)	1	....	....	2210	10.08	0.82
Sante Fe	Madrid	Blacksmith (Peacock Seam)	1	....	....	2500	7.97	1.33
Sante Fe	Madrid	Peacock Prospect (Peacock Seam)	1	....	....	2130	11.37	1.64
Socorro	Carthage	Government (Carthage Seam)	2	2760	2960	2860	14.35	0.85
Socorro	Magdalena	Prospect (Seam Unnamed)	1	....	....	2250	12.24	0.53
Socorro	Magdalena	Prospect (Seam Unnamed)	1	....	....	2680	13.26	0.53
Socorro	Magdalena	Prospect (Seam Unnamed)	1	....	....	2220	7.58	0.53

†Denotes that the true value is above that indicated.

NORTH DAKOTA

LOCALITY, BED, ETC.			Number of Samples from Mine	Softening Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
Miscellaneous Seams								
Adams.....	Haynes.....	Nipper & Monroe (Haynes Seam).....	1	....	....	2270	12.31	2.27
Adams.....	Haynes.....	William Pinkham (Haynes Seam).....	1	....	....	2140	12.68	2.21
Bowman.....	Amor.....	Durkin Prospect (T Cross Seam).....	1	....	....	2060	10.96	1.15
Bowman.....	Bowman.....	Open Pit (Seam Unnamed).....	1	....	....	2130	18.39	....
Bowman.....	Scranton.....	Scranton (Harmon Seam).....	1	....	....	2180	12.47	1.01
Mercer.....	Beulah.....	Beulah (Beulah Seam).....	1	....	....	2270	9.51	1.07
Mercer.....	Manhagen.....	Volmer (Manhagen Seam).....	1	....	....	2140	9.75	0.66
Mercer.....	Stanton.....	Teuber (Seam Unnamed).....	1	....	....	2390	9.02	1.10
Morton.....	Almont.....	Ramstand (Seam Unnamed).....	1	....	....	2290	9.17	0.64
Morton.....	Hebron.....	Hebron (Seam Unnamed).....	2	2030	2070	2050	13.14	1.56
Morton.....	Leith.....	Kollbank (Haynes Seam).....	1	....	....	2090	16.13	2.30
Morton.....	Leith.....	Jones (Haynes Seam).....	1	....	....	2150	13.63	1.07
Morton.....	New Salem.....	Dakota Products (Seam Unnamed).....	1	....	....	2100	11.81	2.18
Morton.....	New Salem.....	Unnamed (Seam Unnamed).....	1	....	....	2180	12.83	1.07
Ward.....	Burlington.....	Conon (Seam Unnamed).....	3	2150	2200	2150	16.63	0.40
Williams.....	Avoca.....	Bruegger ("C" Seam).....	1	....	....	2240	7.39	0.51
Williams.....	Ray.....	Pittsley (Seam Unnamed).....	2	2240	2310	2280	8.02	0.62
Williams.....	Trenton.....	Geltz (Seam Unnamed).....	1	....	....	2270	11.90	2.41
Williams.....	Wheelock.....	Monuen (Seam Unnamed).....	1	....	....	2430	14.63	2.28
Williams.....	Williston.....	Husebye (Ellithrope Seam).....	4	2000	2140	2070	11.75	1.82
Williams.....	Williston.....	Powell ("C" Seam).....	1	....	....	2190	9.28	1.24
Williams.....	Williston.....	U. S. Reclamation (Middle Seam).....	5	2190	2310	2250	10.19	0.98

OHIO

Anderson (Bakerstown) Bed								
Guernsey	Hartford	Andy Slovak	1	....	....	2120	10.86	3.92
Lower Freeport Bed								
Columbiana	East Liverpool	Kinsey	1	....	....	2300	10.86	4.66
Columbiana	East Liverpool	Moore	1	....	....	2470	12.16	3.18
Columbiana	Wellsville	Scheckler	1	....	....	2520	12.25	1.58
Jefferson	Amsterdam	Amsterdam	4	2060	2190	2120	7.66	3.03
Jefferson	Amsterdam	Eastern Ohio	3	2050	2260	2150	9.12	2.92
Jefferson	Amsterdam	Elizabeth	3	2120	2210	2170	7.91	3.12
Jefferson	Steubenville	La Belle	1	....	....	2300	7.71	1.99
Noble	Belle Valley	Noble	2	2130	2350	2240	8.71	3.15
Average of Lower Freeport Bed			16	....	....	2280	9.55	2.95
Lower Kittanning Bed								
Columbiana	East Liverpool	Malone	1	....	....	2400	11.94	8.25
Columbiana	Wellsville	Ainsworth	1	....	....	2060	5.18	3.68
Columbiana	Wellsville	Wooster	1	....	....	2060	8.92	5.87
Jefferson	Irondale	East Ohio No. 2	1	....	....	1960	10.90	5.07
Average of Lower Kittanning Bed			4	....	....	2120	9.24	5.72
Mahoning Bed								
Columbiana	Wellsville	Dangel	1	....	....	2040	6.59	3.67
Meigs Creek (Sewickley) Bed								
Belmont	Alledonia	Shipman	1	....	....	2060	18.46	4.20
Belmont	Barnesville	Davy	1	....	....	2490	11.72	3.82
Noble	Mount Ephraim	Wiley Carter	1	....	....	2320	10.81	4.32
Noble	Quaker City	Griffin	1	....	....	2460	13.17	3.77
Noble	Steamtown	Moore	1	....	....	2310	10.92	5.05
Average of Meigs Creek (Sewickley) Bed			5	....	....	2330	13.02	4.23
Middle Kittanning Bed								
Columbiana	East Liverpool	Delaney	1	....	....	2430	4.82	1.53
Columbiana	East Liverpool	Duck	1	....	....	2220	6.31	2.18
Columbiana	East Liverpool	Johnson	1	....	....	2600	7.80	1.88
Columbiana	East Liverpool	Smith	1	....	....	2420	6.51	2.72
Columbiana	Wellsville	Wooster	1	....	....	2600	11.13	0.72
Jefferson	Cream City	Cream City	1	....	....	2410	11.45	2.13
Average of Middle Kittanning Bed			6	....	....	2450	8.00	1.86
Pittsburgh (No. 8) Bed								
Belmont	Bailey Mills	Cochran No. 2	2	1960	1960	1960	9.35	4.64
Belmont	Temperanceville	Jeffries	1	....	....	2260	9.86	4.75
Guernsey	Quaker City	Sayre	1	....	....	2180	9.14	5.07
Jefferson	Brilliant	Goucher No. 2	2	2170	2190	2180	8.04	3.94
Jefferson	Empire	Culp	1	....	....	2150	9.67	4.15
Jefferson	Hopedale	Parlett	2	2160	2250	2210	8.11	2.91
Jefferson	Piney Fork	Piney Fork No. 1	1	....	....	2120	7.62	2.73

(Continued on Next Page)

OHIO—Continued

LOCALITY, BED, ETC.			Number of Samples from Mine	Softening Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
Pittsburgh (No. 8) Bed—Continued								
Jefferson	Piney Fork	Piney Fork No. 2	2	2630	2710	2670	5.33	0.85
Jefferson	Smithfield	Plum Run No. 5	1	....	....	2160	7.26	2.68
Jefferson	Yellow Creek		1	....	....	2170	10.34	4.08
Average of Pittsburgh (No. 8) Bed			14	....	....	2210	8.47	3.58
Uniontown Bed								
Belmont	Hunter	Kempton	1	....	....	2160	16.10	2.99
Monroe	Coats Station	Mobley	1	....	....	2290	16.10	4.16
Average of Uniontown Bed			2	....	....	2230	16.10	3.58
Upper Freeport (No. 7) Bed								
Columbiana	East Liverpool	Gaston	1	....	....	2050	9.44	4.23
Columbiana	New Salisbury	McClain	1	....	....	2030	11.32	4.45
Columbiana	Wellsville	Householder's	1	....	....	2440	8.73	3.98
Columbiana	Wellsville	Smith	1	....	....	2400	7.75	2.96
Columbiana	West Point	West Point	1	....	....	2240	6.29	3.79
Guernsey	Hartford	Waldhoning No. 2	2	2460	2570	2520	5.91	0.92
Guernsey	Lore City	Black Top	2	2280	2300	2290	7.92	2.01
Guernsey	Somerville	Cleveland	2	2330	2460	2400	8.43	2.02
Jefferson	Irondale	Nicholson	1	....	....	2210	8.82	2.98
Jefferson	Yellow Creek	Yellow Creek	2	2140	2330	2240	8.22	3.54
Average of Upper Freeport (No. 7) Bed			14	....	....	2280	8.48	3.09
Washington Bed								
Belmont	Alliedonia	Moore	1	....	....	2520	21.90	2.98
Waynesburg Bed								
Belmont	Alliedonia	Stoffel	1	....	....	2390	15.14	2.71
Belmont	Boston	Thomas	1	....	....	2370	15.44	3.16
Belmont	Hunter	Milhoan	1	....	....	2370	16.95	3.69
Belmont	Somerton	Brown	1	....	....	2460	16.15	3.03
Average of Waynesburg Bed			4	....	....	2400	15.92	3.15

OKLAHOMA

Dawson Bed								
Rogers	Collinsville	New State Strip Pit	1	....	....	1860	8.73	4.09
Tulsa	Dawson	Southwestern No. 1	1	....	....	1920	9.36	3.62
Tulsa	Tulsa	Hickory No. 2	1	....	....	1970	8.75	4.01
Average of Dawson Bed			3	....	....	1920	8.95	3.91
Henryetta Bed								
Okmulgee	Henryetta	Creek	1	....	....	1960	9.34	1.59
Okmulgee	Henryetta	Victoria	1	....	....	2000	6.72	1.59
Average of Henryetta Bed			2	....	....	1980	8.03	1.59
Lehigh Bed								
Coal	Lehigh	Folsom Morris No. 5	5	1950	2230	2120	12.89	4.56
Coal	Lehigh	Folsom Morris No. 8	5	1970	2240	2150	12.20	4.19
Coal	Phillips	Folsom Morris No. 6	5	2110	2240	2190	9.30	3.76
Average of Lehigh Bed			15	....	....	2150	11.46	4.17
Lower Hartshorne Bed								
Latimer	Adamson	Adamson No. 6	2	1920	1990	1960	3.21	1.38
Latimer	Gowen	Rock Island No. 40	7	1910	2070	2030	6.86	1.46
Le Flore	Hughes	Turkey Creek No. 2	1	....	....	2050	6.46	0.89
Le Flore	Williams	Williams No. 1	5	1870	2020	1970	8.85	1.02
Pittsburg	Adamson	Eclipse No. 1	2	2030	2060	2050	4.16	1.42
Pittsburg	Haileyville	Blue Creek No. 7	2	2000	2060	2030	6.02	2.31
Pittsburg	Hartshorne	Rock Island No. 8	2	1990	2030	2010	5.79	1.84
Pittsburg	Pocahontas	Pocahontas No. 1	1	....	....	2030	5.12	0.81
Pittsburg	Ridgeway	Rock Island No. 10	5	1980	2120	2050	7.77	1.70
Average of Lower Hartshorne Bed			27	....	....	2020	6.03	1.43
McAlester Bed								
Coal	Lehigh	Lehigh No. 8	1	....	....	2160	11.66	3.92
Pittsburg	Alderson	Rock Island No. 5	10	2030	2290	2190	4.92	0.71
Pittsburg	Alderson	Rock Island No. 38	8	1950	2160	2090	5.28	0.56
Pittsburg	Craig	Bolen-Darnall No. 4	2	2200	2290	2250	5.39	0.87
Pittsburg	McAlester	Busby No. 5	6	2190	2270	2230	5.40	0.58
Pittsburg	Pittsburg	McAlester Edwards No. 1	1	....	....	2180	8.97	3.38
Average of McAlester Bed			28	....	....	2180	6.94	1.67

(Continued on Next Page)

OKLAHOMA—Continued

LOCALITY, BED, ETC.			Number of Samples from Mine	Softening Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
McCurtain Bed								
Haskell	McCurtain	San Bois No. 2	6	1990	2220	2110	6.92	0.84
Panama Bed								
Haskell	McCurtain	Blue Ridge No. 4	2	2130	2250	2190	6.13	1.01
Haskell	McCurtain	Blue Ridge No. 5	2	2100	2140	2120	7.49	0.91
Average of Panama Bed			4	....	....	2160	6.81	1.46
Stigler Bed								
Haskell	Stigler	Turnip Strip Pit	1	....	....	1940	4.00	0.64
Haskell	Stigler	Strip Pit	1	....	....	2050	4.69	0.71
Haskell	Stigler	Strip Pit	1	....	....	2090	2.62	0.63
Haskell	Tamaha	Old Slope	1	....	....	1920	8.09	3.60
Haskell	Tamaha	Strip Pit	1	....	....	2250	6.25	3.95
Average of Stigler Bed			5	....	....	2050	5.13	1.91
Upper Hartshorne Bed								
Latimer	Wilburton	Degnan-McConnell No. 5	4	2020	2340	2190	5.16	0.98
Pittsburg	Buck	Buck No. 22	1	....	....	2200	4.78	1.68
Pittsburg	Haileyville	Hailey No. 2	2	2090	2130	2110	8.50	1.86
Average of Hartshorne Bed			7	....	....	2170	6.15	1.51
Miscellaneous Beds								
Craig	Bluejacket	Coates	1	....	....	2160	10.61	6.34
Craig	Estella	Boot Strip Pit	1	....	....	2050	10.68	6.39
Craig	Vinita	Heldebrand Strip Pit	1	....	....	2110	10.51	6.83
Craig	Welch	Mills Strip Pit	1	....	....	2040	12.33	6.06
Haskell	Whitefield	Ligon Strip Pit	1	....	....	2000	2.62	1.44
Le Flore	Bokoshe	Slope No. 3	2	2230	2300	2270	5.12	0.78
Pushmataha	Jumbo	Jumbo	5	2200	2510	2310	6.71	1.63
Rogers	Catale	Catale No. 1	1	....	....	2160	10.25	5.40
Rogers	Claremore	McNutt	1	....	....	2230	5.10	0.89
Sequoyah	Hanson	Bremeretal Strip Pit	1	....	....	2170	5.76	1.82
Wagoner	Broken Arrow	Arkansas Valley Strip Pit	1	....	....	1960	7.25	2.75
Wagoner	Redbird	Kirk Strip Pit	1	....	....	2080	14.21	6.79

OREGON

Miscellaneous Seams								
Clackamas	Wilhoit	Prospect (Seam Unnamed)	1	....	....	2890	22.04	0.53
Coos	Beaver Hill	Beaver Hill (Newport Seam)	1	....	....	2060	11.59	0.94
Coos	Henryville	Henryville (Newport Seam)	1	....	....	2060	9.79	0.80
Coos	West Fork	Cabin Prospect (Seam Unnamed)	1	....	....	2780	16.86	1.46
Coos	West Fork	Donnell Prospect (Seam Unnamed)	1	....	....	2790	29.71	1.14
Coos	West Fork	Everett Ass'n Prospect (Meyer Seam)	1	....	....	2500	23.93	1.52
Coos	West Fork	Hillis Prospect (Anderson Seam)	1	....	....	2280	16.92	0.70
Coos	West Fork	Meyers Prospect (Meyers Seam)	1	....	....	2490	26.69	1.85
Coos	West Fork	Pulford Prospect (Anderson Seam)	2	2480	2690	2580	32.26	0.93
Coos	West Fork	Reeves Prospect (Carter Seam)	1	....	....	2690	40.70	0.62
Grant	Dayville	Old Prospect (Seam Unnamed)	1	....	....	2250	47.65	2.16
Malheur	Nyssa	Honolulu Prospect (Seam Unnamed)	1	....	....	2420	45.63	3.82
Wheeler	Fossil	Dry Hollow Prospect (Seam Unnamed)	2	2480	2670	2580	37.60	0.54

PENNSYLVANIA BITUMINOUS

MONONGAHELA SERIES

Pittsburgh Bed								
Allegheny	Bruceton	U. S. Experimental	4	2280	2510	2400	6.82	1.23
Allegheny	Elizabeth	Patterson No. 2	2	2300	2580	2440	6.04	0.80
Allegheny	Oak Station	Oak	1	....	....	2430	6.13	1.22
Fayette	E. Millsboro	Hustead	4	2110	2440	2290	8.40	1.79
Washington	Avella	Penobscott	2	2040	2110	2080	6.36	2.12
Washington	Baird	Schoenberger	6	2310	2520	2410	5.98	1.08
Washington	Finleyville	Cincinnati	3	2350	2550	2420	6.58	1.20
Washington	Greer Station	Henderson No. 1	5	2040	2200	2120	8.12	2.26
Washington	Monongahela City	Catsburg	6	2140	2610	2420	6.58	1.17
Westmoreland	Greensburg	Jamison No. 4	1	2550	10.66	1.41
Average of Pittsburgh Bed			34	2360	7.17	1.43

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PENNSYLVANIA BITUMINOUS—Continued

LOCALITY, BED, ETC.			Number of Samples from Mine	Softening Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
CONEMAUGH SERIES								
Little Pittsburgh Bed								
Somerset	Pinehill	Consolidation No. 112	2	2350	2420	2390	8.13	1.70
ALLEGHENY SERIES								
Upper Freeport Bed								
Armstrong	Ford City	Campbell	2	2000	2030	2020	17.75	5.04
Armstrong	Logansport	Rariden	2	2140	2170	2160	10.80	3.29
Beaver	Smith's Ferry	Island Run	1	....	....	2260	5.09	1.45
Bedford	Hopewell	Cambria No. 3	5	2460	3010	2670	12.43	2.01
Blair	Glen White	Glen White No. 2	4	2120	2460	2210	7.56	1.96
Butler	Butler	Muntz	1	....	....	2030	7.75	3.07
Butler	Butler	Vogele	1	....	....	2050	9.90	3.73
Butler	Chicora	Cunningham	1	....	....	3000	8.67	1.26
Butler	Evans City	Country Bank	1	....	....	2110	5.55	3.71
Butler	Jamisonville	Victoria	2	2020	2360	2190	11.56	2.98
Butler	Jefferson Center	Weamer	1	....	....	2150	8.41	1.32
Butler	Unionville	Eagle	1	....	....	2220	6.50	2.67
Cambria	Barnesboro	Cambria No. 2½	4	2410	2490	2450	8.48	1.54
Cambria	Beaverdale	Beaver Run	6	2070	2980	2380	8.49	1.81
Cambria	Bens Creek	Wilmore No. 1	5	2140	2470	2280	6.80	2.04
Cambria	Bens Creek	Wilmore No. 3	4	1990	2490	2270	7.27	2.28
Cambria	Fallen Timber	Peerless No. 4	2	2270	2330	2300	10.05	1.78
Cambria	Gallitzin	Gallitzin	5	2280	2490	2370	6.77	1.43
Cambria	Sonman	Sonman Slope	6	2050	2280	2170	6.44	1.78
Cambria	Van Ormer	Peerless No. 1	3	2420	3010	2760	8.94	0.86
Clearfield	Brisbin	Lenore No. 1	1	....	....	2640	8.04	0.81
Clearfield	Brisbin	Lenore No. 2	2	2450	2540	2500	8.49	1.02
Indiana	Ernest	Ernest	2	2190	2240	2220	10.70	2.94
Indiana	Glen Campbell	Indiana No. 6	4	2410	2550	2490	8.58	1.28
Indiana	Homer City	Lucerne No. 1	6	2080	2590	2290	7.97	2.12
Indiana	Homer City	Lucerne No. 3	3	2190	2350	2240	8.28	1.98
Jefferson	Brockwayville	West Clarion	1	....	....	2300	9.98	1.74
Somerset	Edie	Levi Berkey	1	....	....	2680	11.22	1.57
Somerset	Somerset	Neva	1	....	....	2270	12.07	2.49
Somerset	Somerset	Sanner & Shaffer	1	....	....	2630	9.62	1.69
Somerset	Zimmerman	Ralphton No. 6	1	....	....	2600	15.61	1.52
Westmoreland	Ligonier	John Dyer	1	....	....	2450	11.90	1.99
Westmoreland	Lucesco	Lucesco	4	2000	2140	2090	10.79	3.27
Average of Upper Freeport Bed			85	....	....	2350	9.35	2.13
Lower Freeport Bed								
Armstrong	West Kittanning	Meals	2	2070	2070	2070	10.06	3.28
Armstrong	Yatesboro	Cowanshannock No. 2	2	2050	2100	2080	10.88	3.20
Cambria	Barnesboro	Cambria No. 1	5	2430	2570	2490	6.57	1.50
Cambria	Barnesboro	Delta	5	2410	2540	2490	6.70	1.52
Cambria	Beaverdale	Logan No. 6½	4	2010	2390	2250	8.49	2.73
Cambria	Hastings	Penna. No. 11	5	2430	2640	2540	7.14	1.46
Cambria	Hastings	Penna. No. 12	5	2200	2580	2380	7.63	1.86
Cambria	Spangler	Penna. No. 21	4	2240	†3010	†2550	6.49	1.32
Cambria	Spangler	Penna. No. 22	6	2530	2880	2620	6.57	1.27
Cambria	Van Ormer	Peerless No. 2	3	2330	2500	2410	10.38	2.12
Center	Clarence	Poormansite	1	....	....	2220	8.08	1.86
Center	Gillingtown	Lehigh Valley No. 15	1	....	....	2300	11.64	2.75
Clearfield	Berwindale	Reed	5	2100	2420	2200	9.36	3.47
Clearfield	Carnwarth	Carnwarth No. 1	5	2390	3010	2620	6.74	1.14
Clearfield	Carnwarth	Carnwarth No. 2	4	2140	2410	2280	7.77	2.23
Clearfield	DuBois	Eriton	1	....	....	2280	8.82	2.05
Jefferson	Brockwayville	West Clarion	1	....	....	2140	10.48	2.97
Jefferson	Punxsutawney	Eleanora	5	2120	2490	2330	7.98	2.05
Jefferson	Sykesville	Sykesville	4	2330	2720	2510	12.68	2.28
Somerset	Elklick	Eagle	1	....	....	2460	8.94	1.59
Somerset	Somerset	Stauffer No. 3	1	....	....	†3010	5.34	0.64
Average of Lower Freeport Bed			70	....	....	†2390	8.52	2.03
Upper Kittanning Bed								
Butler	Butler	Thompson	1	....	....	2230	7.33	2.09
Butler	Butler	Zenith No. 1	2	†3010	†3010	†3010	4.54	0.90
Cambria	Johnstown	Smokeless No. 1	3	2160	2260	2210	9.71	2.19
Cambria	Johnstown	Sunnyside	4	2240	2450	2340	10.40	2.47
Somerset	Confluence	Linner	1	....	....	2190	8.44	2.42
Somerset	Holsopple	Oneida	4	2120	2460	2280	11.06	2.81
Somerset	Seonor	Eureka No. 39	3	1980	2390	2190	9.20	2.24
Average of Upper Kittanning Bed			18	....	....	†2350	8.67	2.16

(Continued on Next Page)

†Denotes that the true value is above that indicated.

PENNSYLVANIA BITUMINOUS—Continued

LOCALITY, BED, ETC.			Number of Samples from Mine	Softening Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
Middle Kittanning Bed								
Butler	Claytonia	Stage	1	....	....	2130	13.97	3.89
Butler	Harmony Junction	N. Pittsburgh Realty	1	....	....	2050	11.37	4.54
Butler	Nealy	Nealy	1	....	....	1990	10.77	3.92
Clearfield	Morrisdale	Morrisdale No. 1	2	2850	†3010	†2930	8.94	1.12
Clearfield	Morrisdale	Morrisdale No. 2	2	2620	2980	2800	10.26	1.41
Average of Middle Kittanning Bed			7	....	....	†2380	11.06	2.98
Lower Kittanning (Miller) Bed								
Armstrong	Kittanning	Snyder	2	2090	2220	2160	10.38	4.22
Cambria	Beaverdale	Penna. No. 15	5	2280	†3010	†2440	7.26	1.92
Cambria	Colver	Colver	9	2450	†3010	†2820	5.75	1.14
Cambria	Dunlo	Henriette	5	†3010	†3010	†3010	4.82	0.66
Cambria	ElMora	Peerless No. 1	5	2380	†3010	†2610	6.81	1.57
Cambria	Lily	Sonman No. 2	3	†3010	†3010	†3010	6.36	0.67
Cambria	Llanfair	Scalp Level No. 2	4	2960	†3010	†3000	4.93	0.72
Cambria	Nanty Glo	Lincoln No. 1	12	2150	2480	2340	6.58	1.89
Cambria	Nanty Glo	Springfield No. 1	5	2080	2280	2210	6.68	2.18
Cambria	Portage	Miller No. 1 Shaft	10	2260	†3010	†2730	6.22	1.15
Cambria	Portage	Puritan No. 1	4	2230	2580	2380	7.65	2.07
Cambria	St. Michael	Maryland Shaft	15	2630	†3010	†2880	6.13	0.93
Cambria	Vintondale	Vinton No. 6	3	2100	2410	2310	6.95	2.08
Cambria	Windber	Eureka No. 40	8	2520	†3010	†2650	7.38	1.22
Center	Clarence	Poormansite	1	....	....	†3010	12.83	0.91
Center	Osceola Mills	Electric	4	2370	†3010	†2680	7.96	2.07
Center	Osceola Mills	Moshannon No. 10	5	2380	2550	2470	7.52	2.11
Center	Osceola Mills	Weston	3	2450	†2690	†2580	7.93	2.11
Clearfield	Boardman	Potts Run No. 2	5	2530	†3010	†2850	8.95	1.44
Clearfield	Karthus	Horseshoe	1	....	....	2440	8.97	2.23
Clearfield	Morrisdale	Morrisdale No. 1	3	2230	2320	2280	8.53	3.54
Clearfield	Morrisdale	Morrisdale No. 3	3	2500	2660	2550	7.12	1.98
Clearfield	Munson	Colorado No. 5	5	2300	3010	2600	7.87	2.08
Clearfield	Munson	Ghem	4	2300	2470	2350	9.72	3.10
Clearfield	Phillipsburg	Acme No. 2	1	....	....	2430	7.58	2.61
Clearfield	Smoke Run	Viola	3	2600	†3010	†2750	7.75	1.10
Elk	Brandy Camp	Elbon No. 5	1	....	....	2140	8.90	2.97
Elk	Byrnedale	Byrnedale No. 31	1	....	....	2350	6.49	2.59
Elk	Dagus	Dagus	1	....	....	2240	9.95	4.04
Elk	Wilmere	Dents Run No. 1	1	....	....	2050	9.66	3.56
Huntingdon	Jacobs	Barnet	1	....	....	†3010	6.38	0.83
Indiana	Robindale	Robindale	4	2440	2490	2470	7.86	2.20
Indiana	Scott Glen	Brush Valley	6	2150	2380	2240	8.10	3.00
Jefferson	Brockwayville	West Clarion	1	....	....	2120	10.60	3.45
Somerset	Cairnbrook	Loyal Hanna No. 6	2	3010	†3010	†3010	6.75	0.86
Somerset	Holsopple	Lenore	4	2210	2600	2360	8.00	2.38
Somerset	Holsopple	Haws No. 3	6	2180	2440	2370	8.18	2.48
Somerset	Windber	Loehrie Arrow	5	2320	†3010	†2520	6.79	1.45
Sullivan	Bernice	Randall & Shaad (Semianth.)	1	....	....	†3010	12.09	0.84
Average of Lower Kittanning (Miller) Bed			162	....	....	†2550	7.86	2.03
Fulton Bed								
Huntingdon	Jacobs	Jacobs	3	2770	†3010	†2880	8.64	1.63
Huntingdon	Jacobs	Starr	1	....	....	†3010	8.34	1.08
Huntingdon	Robertsdale	Robertsdale	5	2370	†3010	†2880	6.56	1.06
Huntingdon	Woodvale	Woodvale	3	†3010	†3010	†3010	5.92	0.95
Average of Fulton Bed			12	....	....	†2940	7.36	1.18
Brookville Bed								
Center	Clarence	Lehigh Valley No. 22	1	....	....	†3010	14.85	1.01
Clearfield	Karthus	Shinola	1	....	....	2390	13.48	3.13
Somerset	Cairnbrook	Hitechew or Fleagle	1	....	....	†3010	10.60	1.43
Average of Brookville Bed			3	....	....	†2800	12.98	1.86
POTTSVILLE SERIES								
Bloss Bed								
Tioga	Antrim	Annas	1	....	....	2500	12.78	2.92
Tioga	Landrus	Bear Run	1	....	....	2500	12.99	2.53
Tioga	Morris Run	New	1	....	....	2900	10.11	1.31
Average of Bloss Bed			3	....	....	2630	11.96	2.25
MISCELLANEOUS								
Morgan Bed								
Tioga	Morris Run	New	1	....	....	2620	9.39	1.76
Stoner Bed								
Somerset	Pinehill	Consolidation No. 113	1	....	....	2470	11.20	1.96

†Denotes that the true value is above that indicated.

PENNSYLVANIA ANTHRACITE REGION

LOCALITY, BED, ETC.			Number of Samples from Mine	Softening Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
NORTHERN FIELD								
Pittston District								
Luzerne.....	Pittston.....	Colliery No. 14.....	1	....	....	†3010	6.03	0.58
Plymouth District								
Luzerne.....	Kingston.....	Gaylord (Egg).....	1	....	....	†3010	12.69	0.75
Luzerne.....	Plymouth.....	Gaylord (Stove).....	6	†3010	†3010	†3010	12.35	0.92
Average of Plymouth District.....			7	....	....	†3010	12.52	0.84
Scranton District								
Lackawanna.....	Dunmore.....	Sloan.....	1	....	....	†3010	11.94	0.48
Lackawanna.....	Scranton.....	Marvine Collieries.....	2	†3010	†3010	†3010	13.99	0.80
Lackawanna.....	Scranton.....	(Chestnut).....	1	....	....	†3010	12.40	0.65
Lackawanna.....	Scranton.....	(Furnace).....	1	....	....	†3010	11.38	1.26
Lackawanna.....	Scranton.....	(Egg).....	1	....	....	†3010	14.46	0.91
Lackawanna.....	Taylor.....	Pyne (Egg).....	1	....	....	†3010	10.19	0.66
Average of Scranton District.....			7	....	....	†3010	12.39	0.79
Wilkes-Barre District								
Luzerne.....	Nanticoke.....	(Stove).....	1	....	....	†3010	15.46	0.80
Luzerne.....	Nanticoke.....	(Furnace).....	1	....	....	†3010	10.16	0.80
Luzerne.....	Nanticoke.....	Susquehanna Colliery (Egg)....	2	3010	†3010	†3010	13.89	0.79
Average of Wilkes-Barre District.....			4	....	....	†3010	13.17	0.78
EASTERN-MIDDLE FIELD								
Hazleton District								
Luzerne.....	Beaver Brook.....	(Egg).....	1	....	....	2960	14.50	0.61
WESTERN-MIDDLE FIELD								
Shamokin District								
Northumberland....	Shamokin.....	Buck Ridge (Pea).....	1	....	....	†3010	17.00	0.95
Northumberland....	Shamokin.....	Katherine.....	1	....	....	2910	16.17	0.85
Average of Shamokin District.....			2	....	....	†2960	16.59	0.90
Western Mahanoy District								
Schuylkill.....	Raven Run.....	Girard Mammoth (Buckwheat No. 1).....	1	....	....	†3010	....	....
Schuylkill.....	Shenandoah.....	Hudson (Buckwheat No. 1).....	1	....	....	†3010	....	....
Schuylkill.....	Shenandoah.....	Kehley's Run (Buckwheat).....	1	....	....	†3010	....	....
Average of West Mahanoy District.....			3	....	....	†3010	....	....
SOUTHERN FIELD								
East Schuylkill District								
Schuylkill.....	Darkwater.....	(Egg).....	1	....	....	3010	9.04	0.92
Schuylkill.....	St. Clair.....	St. Clair Colliery (Egg).....	1	....	....	2960	13.33	0.64
Average of East Schuylkill District.....			2	....	....	2990	11.19	0.78
West Schuylkill District								
Schuylkill.....	Minersville.....	Buck Run (Buckwheat No. 1)....	1	....	....	2730	18.07	0.82

SOUTH DAKOTA

Miscellaneous Seams								
Harding.....	Buffalo.....	Hilton (Seam Unnamed).....	1	....	....	2400	18.40	1.59
Harding.....	Buffalo.....	Mendenhall (Seam Unnamed)...	1	....	....	2140	17.36	0.94
Harding.....	Ralph.....	Newcomb (Widow Clark Seam)...	1	....	....	2140	13.95	1.46
Perkins.....	Lodgepole.....	Nelson (Seam Unnamed).....	1	....	....	2180	15.73	1.14
Perkins.....	Strool.....	Phillips (Seam Unnamed).....	1	....	....	2130	15.64	2.02
Perkins.....	Strool.....	Jones (Seam Unnamed).....	1	....	....	2290	13.72	3.65
Perkins.....	Strool.....	Knudsen (Seam Unnamed).....	1	....	....	2120	17.23	1.65

TENNESSEE

Angel Bed								
Bledsoe.....	Litton.....	Hale.....	1	....	....	2160	5.80	1.94
Battle Creek Bed								
Marion.....	Orme.....	Battle Creek No. 3.....	1	....	....	2620	8.77	1.09
Marion.....	Orme.....	Battle Creek No. 4.....	2	2400	2410	2410	10.59	1.94
Average of Battle Creek Bed.....			3	2520	9.68	1.52

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†Denotes that the true value is above that indicated.

TENNESSEE—Continued

LOCALITY, BED, ETC.			Number of Samples from Mine	Softening Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
Billygoat Bed								
Claiborne	Bosworth	Yellow Creek No. 3	1	....	....	2600	3.26	1.12
Blue Gem Bed								
Campbell	Elk Valley	Elkhart	1	....	....	2000	2.69	1.37
Campbell	Elk Valley	Elk Valley	2	2050	2080	2060	2.39	1.03
Campbell	Elk Valley	Perkins Branch	2	1950	2130	2040	2.04	1.04
Campbell	Jellico	Black	1	....	....	2090	4.15	1.16
Campbell	Jellico	Blue Gem	3	1990	2140	2090	2.14	1.02
Campbell	Jellico	Broughton	2	2040	2130	2080	2.12	0.98
Campbell	Jellico	Evans	2	2080	2120	2100	1.98	0.88
Blue Gem Bed—Continued								
Campbell	Jellico	Jameson Blue Gem	1	....	....	2060	2.49	0.96
Campbell	Newcomb	Italian Blue Gem	2	2090	2130	2110	2.52	0.97
Campbell	Newcomb	Washington Blue Gem	2	1970	1990	1980	1.82	0.86
Campbell	Oswego	Powhatan	2	1960	2040	2000	2.00	0.88
Morgan	Blue Gem Siding	Bottomlee	1	....	....	2110	4.18	1.66
Morgan	Blue Gem Siding	Coal Cut	1	....	....	2480	4.35	1.37
Morgan	Coalfield	Thornton	1	....	....	2140	11.62	4.56
Average of Blue Gem Bed			23	....	....	2100	3.32	1.34
Bon Air No. 2 Bed								
Fentress	Davidson	Davidson	2	2050	2080	2060	10.54	3.14
Fentress	Davidson	Highland No. 2	4	2030	2190	2120	9.91	5.25
Fentress	Wilder	Wilder No. 3	5	2210	2350	2240	10.28	2.69
Overton	Highland Junction	Overton	3	2120	2300	2190	10.57	3.15
Overton	Obey City	Ober River	1	....	....	2180	12.60	3.90
Overton	Obey City	Peacock	1	....	....	2160	10.26	3.40
Putnam	Monterey	Monterey	1	....	....	2100	10.07	3.55
White	Bon Air	Bon Air (Lower Bench)	4	2300	2420	2350	7.87	2.87
Average of Bon Air No. 2 Bed			21	....	....	2180	10.27	3.24
Castle Rock Bed								
Marion	Whiteside	Castle Rock	1	....	....	2300	10.31	2.41
Marion	Whiteside	Clements Prospect	1	....	....	2210	11.24	2.95
Average of Castle Rock Bed			2	....	....	2260	10.78	2.68
Catoosa Bed								
Morgan	Catoosa	Flatrock	3	2240	2260	2250	7.11	2.59
Coal Creek Bed								
Anderson	Briceville	Cross Mountain No. 1	5	2390	3010	2670	9.37	0.89
Anderson	Coal Creek	Black Diamond No. 1	4	2180	2400	2310	5.14	1.30
Anderson	Coal Creek	Fraterville	3	2300	2600	2440	5.90	1.04
Anderson	Coal Creek	Klondike or No. 5	4	2330	2460	2400	5.81	0.84
Anderson	Coal Creek	Middle Ridge	1	....	....	2390	4.33	0.91
Anderson	Coal Creek	Tennessee	3	2350	2460	2410	8.63	1.67
Anderson	Coal Creek	Thistle	3	2210	2320	2250	6.20	1.60
Anderson	Oliver Springs	Hall	1	....	....	2150	4.11	1.63
Anderson	Oliver Springs	Piedmont	4	2000	2230	2100	4.52	1.68
Campbell	Caryville	Bear Wallow	3	2530	2610	2570	4.39	0.94
Campbell	Coal Creek	Cambria	3	2350	2560	2400	3.95	0.83
Campbell	Vaspar	Vaspar	2	2170	2320	2240	4.24	1.19
Morgan	Coalfield	Bowing	2	2080	2170	2120	7.97	4.14
Morgan	Coalfield	Conger	3	2150	2190	2180	8.28	4.13
Morgan	Coalfield	Slope	1	....	....	2200	4.89	3.40
Morgan	Oliver Springs	Big Mountain	1	....	....	2040	6.75	4.24
Morgan	Oliver Springs	Old Mount Carbon	1	....	....	2200	3.29	1.21
Morgan	Oliver Springs	Poplar Creek	1	....	....	2040	7.16	3.97
Morgan	Oliver Springs	Prudential	4	1990	2010	2000	9.51	4.61
Morgan	Oliver Springs	Richards	2	2050	2060	2060	9.63	5.50
Morgan	Oliver Springs	Signal Mountain	1	....	....	2080	9.08	5.31
Morgan	Oliver Springs	Williams	1	....	....	2180	5.41	1.13
Average of Coal Creek Bed			53	....	....	2260	6.30	2.37
Frozen Head Bed								
Morgan	Petros	Frozen Head	1	....	....	2580	6.92	0.92
Grassy Ridge Bed								
Morgan	Christmas Siding	Grassy Ridge	1	....	....	2470	3.75	1.87
Hooper Bed								
Morgan	Christmas Siding	Harriman	1	....	....	2330	2.58	0.69
Jellico Bed								
Campbell	Anthras	Anthras	3	2400	2430	2420	3.15	0.85
Campbell	Habersham	Davis Creek	1	....	....	2390	6.83	1.50
Campbell	Jellico	Indian Mountain No. 3	4	2030	2270	2160	3.14	1.38
Campbell	Morley	Red Moon	3	2160	2450	2300	5.07	1.89
Campbell	Newcomb	Marion-Anna	3	2220	2440	2310	6.13	5.21
Campbell	Newcomb	Zochini	3	2790	2960	2890	5.10	0.87
Campbell	Oswego	Falls Branch	2	2270	2390	2330	2.11	0.98
Claiborne	Clairfield	King Mountain	2	2040	2460	2250	4.72	1.54

(Continued on Next Page)

TENNESSEE—Continued

LOCALITY, BED, ETC.			Number of Samples from Mine	Softening Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
Claiborne.....	Clairfield.....	Standard.....	2	2110	2260	2180	3.08	0.92
Claiborne.....	Eagan.....	Buffalo.....	4	2110	2570	2310	3.53	1.19
Morgan.....	Petros.....	Petros No. 5.....	3	2330	2430	2370	7.36	2.55
Morgan.....	Petros.....	State No. 3.....	4	2130	2430	2300	8.30	2.72
Morgan.....	Stephens.....	Little Brushy.....	3	2130	2350	2210	5.14	2.68
Scott.....	Newland.....	Arch Mountain.....	1	....	....	2430	5.57	1.93
Average of Jellico Bed.....			38	....	....	2350	4.95	1.87
Jordan Bed								
Campbell.....	Cotula.....	Southern.....	2	2080	2340	2210	3.58	1.22
Campbell.....	Kilsyth.....	Gem No. 2.....	2	2040	2360	2200	3.28	0.79
Campbell.....	Kilsyth.....	Gem No. 4.....	2	2420	2660	2540	3.13	0.70
Average of Jordan Bed.....			6	....	....	2320	3.33	0.90
Kelley Bed								
Marion.....	Whiteside.....	New Etna No. 1.....	1	....	....	2660	9.70	1.29
Marion.....	Whiteside.....	New Etna No. 2.....	1	....	....	2400	5.56	1.36
Average of Kelley Bed.....			2	....	....	2530	7.63	1.33
Lower Dean Bed								
Campbell.....	Caryville.....	Pee Wee.....	2	2240	2430	2340	3.69	0.72
Mingo Bed								
Claiborne.....	Bryson.....	Bryson Mountain No. 1.....	3	2460	2530	2490	4.95	1.36
Claiborne.....	Fork Ridge.....	Fork Ridge No. 1.....	4	2080	2570	2380	4.80	1.22
Claiborne.....	Hartranft.....	Reliance No. 1.....	2	2460	2470	2460	4.02	1.29
Claiborne.....	Hartranft.....	Reliance No. 2.....	2	2080	2400	2240	3.56	1.09
Claiborne.....	Pruden.....	High Cliff.....	4	2310	2600	2400	3.44	1.23
Claiborne.....	Pruden.....	Pruden.....	4	2060	2500	2360	4.73	1.45
Average of Mingo Bed.....			19	....	....	2390	4.25	1.27
Monarch Bed								
Campbell.....	Block.....	Monarch.....	4	2060	2470	2320	11.29	2.77
Morgan Springs Bed								
Bledsoe.....	Pikeville.....	McFarland.....	1	....	....	2210	10.87	3.61
Cumberland.....	Litton.....	Hale.....	1	....	....	2310	11.23	3.31
Average of Morgan Springs Bed.....			2	....	....	2260	11.05	3.46
Mud Slip Bed								
Scott.....	Robbins.....	Hughett.....	1	....	....	2640	4.21	0.92
Nelson Bed								
Rhea.....	Dayton.....	New Prospect.....	4	2460	2690	2600	18.46	0.49
Rhea.....	Graysville.....	Montague No. 1.....	2	2010	2290	2150	11.79	2.24
Rhea.....	Graysville.....	Montague No. 6.....	1	....	....	2280	25.95	0.59
Average of Nelson Bed.....			7	....	....	2340	18.73	1.11
No. 4 Bed								
Scott.....	Bear Creek Junction.....	Phillips.....	2	2190	2590	2390	6.84	2.02
Scott.....	Bear Creek Junction.....	Wilson.....	3	2050	2060	2050	11.32	5.22
Average of No. 4 Bed.....			5	....	....	2220	9.08	3.62
No. 10 Bed								
Hamilton.....	Montlake.....	Montlake.....	3	1980	2280	2150	11.42	3.14
Old Eagle Bed								
Morgan.....	Oliver Springs.....	Levan.....	1	....	....	2290	3.57	1.39
Old Etna Bed								
Marion.....	Whiteside.....	Old Edna No. 1.....	1	....	....	2140	2.63	0.76
Paint Rock Bed								
Scott.....	Huntsville.....	Cross.....	1	....	....	2050	9.05	3.78
Scott.....	Jake's Tank.....	Jake's Branch.....	1	....	....	2680	4.83	0.82
Scott.....	Jake's Tank.....	Opposum Jaw.....	1	....	....	2050	8.33	3.47
Scott.....	Stanley Junction.....	Keaton Bros.....	1	....	....	2580	4.43	0.80
Scott.....	Stanley Junction.....	Pumpkin Hollow.....	1	....	....	2600	5.08	0.84
Scott.....	Stanley Junction.....	Sexton.....	1	....	....	2580	4.48	0.74
Average of Paint Rock Bed.....			6	....	....	2420	6.03	1.74
Poplar Lick Bed								
Claiborne.....	Bryson.....	Bryson Mountain No. 2.....	1	....	....	2360	7.77	2.70
Claiborne.....	Fork Ridge.....	Fork Ridge No. 4.....	3	2690	2960	2790	6.58	0.82
Claiborne.....	Hartranft.....	Mingo No. 5.....	3	2300	2440	2370	9.56	2.87
Claiborne.....	Manring.....	Sterling.....	4	2850	† 3010	† 2930	9.54	0.96
Average of Poplar Lick Bed.....			11	....	....	† 2610	8.36	1.84
Red Ash Bed								
Campbell.....	Block.....	Pee Wee.....	2	2940	2970	2960	5.72	1.07
Campbell.....	Caryville.....	Caryville.....	4	2220	2480	2370	6.08	1.24
Campbell.....	Caryville.....	Red Ash.....	3	2400	2450	2420	6.48	1.02
Campbell.....	Caryville.....	Sun.....	4	2400	2590	2510	6.24	1.18
Average of Red Ash Bed.....			13	2570	6.15	1.13

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TENNESSEE—Continued

LOCALITY, BED, ETC.			Number of Samples from Mine	Softening Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
Rex Bed								
Campbell	La Follette	Rex No. 1	7	2020	2260	2200	5.43	1.01
Campbell	La Follette	Rex No. 2	3	2080	2450	2260	5.74	1.13
Average of Rex Bed			10	....	....	2230	5.59	1.07
Richland Bed								
Bledsoe	Litton	New Opening	1	....	....	2790	9.87	0.83
Bledsoe	Litton	Thurman	1	....	....	2610	7.52	0.53
Rhea	Dayton	North Pole	4	2250	2480	2380	14.21	1.40
Average of Richland Bed			6	....	....	2590	10.53	0.92
Rich Mountain Bed								
Campbell	Chaska	Chaska	1	....	....	2220	1.53	0.90
Campbell	Cotula	Wynn	3	2440	2460	2450	2.10	0.86
Campbell	Habersham	Remy	2	2440	2740	2590	2.13	0.72
Campbell	Habersham	Rich Mountain	3	2160	2330	2230	4.65	2.10
Campbell	Kimberly	Kimberly	3	2240	2480	2380	4.76	1.89
Average of Rich Mountain Bed			12	....	....	2370	3.03	1.29
Sandstone Parting Bed								
Claiborne	Hartranft	Sandstone Parting	1	....	....	2380	10.34	1.26
Sewanee Bed								
Bledsoe	Atpontley	Atpontley No. 6	2	2370	2440	2400	8.47	1.06
Grundy	Coalmont	Coalmont E.	1	....	....	2530	9.55	1.20
Grundy	Coalmont	Coalmont I.	1	....	....	2630	12.61	0.90
Grundy	Coalmont	Coalmont New A.	1	....	....	2460	13.19	1.21
Grundy	Coalmont	Coalmont Old A.	1	....	....	2530	10.06	1.05
Grundy	Coalmont	Coalmont South Old Hill	1	....	....	2580	9.40	0.85
Grundy	Coalmont	Flanagan	1	....	....	2420	9.15	0.74
Grundy	Coalmont	Mills Creek Prospect	2	2210	2690	2450	9.54	1.84
Grundy	Tracy City	East Fork	1	....	....	2300	10.29	2.05
Grundy	Tracy City	East Staab	1	....	....	2500	11.22	0.62
Grundy	Tracy City	Old Clouse Hill	1	....	....	2590	9.03	0.80
Grundy	Tracy City	Old Staub	1	....	....	2390	9.18	0.57
Grundy	Tracy City	Reed Hill No. 2	1	....	....	1970	11.97	3.81
Grundy	Tracy City	West Ramsey	2	2690	2930	2810	8.18	0.62
Marion	Tracy City	Long Ridge	1	....	....	2580	8.95	1.19
Marion	Tracy City	Pryor Ridge No. 1	4	1980	2670	2330	10.64	2.30
Marion	Whitewell	Whitewell No. 1	1	....	....	2560	8.53	0.60
Marion	Whitewell	Whitewell No. 5	3	2460	2490	2480	8.68	0.93
Rhea	Graysville	Montague No. 3	4	2070	2710	2400	12.35	1.28
Roane	McLean Siding	McLean	1	....	....	2400	9.81	0.81
Roane	McLean Siding	Rockwood	6	2250	2480	2340	9.50	0.54
Sequatchie	Dunlap	Douglas No. 2	3	2330	2460	2380	10.12	1.35
Average of Sewanee Bed			40	....	....	2460	10.02	1.20
Soddy Bed								
Hamilton	Rathburn	Big Soddy	1	....	....	2420	5.17	1.67
Hamilton	Rathburn	Furman	2	2570	3010	2790	6.33	0.71
Hamilton	Rathburn	Old Bunker	1	....	....	2610	4.13	0.71
Hamilton	Rathburn	Sheephead	2	2720	2960	2840	10.48	1.43
Hamilton	Rathburn	Soddy No. 1	3	2180	2260	2220	7.79	1.28
Average of Soddy Bed			9	....	....	2580	6.78	1.16
Upper Dean Bed								
Campbell	Turley	Rock Springs	3	2170	2400	2290	12.02	2.29
Walden Ridge Bed								
Morgan	Nemo	Catoosa	1	....	....	2430	7.49	1.33
Roane	Harriman	Walden Ridge	1	....	....	2730	8.85	0.50
Average of Walden Ridge Bed			2	....	....	2580	8.17	0.92
Miscellaneous (Not Identified) Beds								
Anderson	Coal Creek	Smith	1	....	....	2320	2.99	0.87
Bledsoe	Pikeville		2	2600	2600	2600	7.35	0.56
Bledsoe	Pikeville	Vaughn Prospect	2	2540	2720	2630	7.91	0.84
Campbell	Vaspar	Disney	1	....	....	2340	3.96	0.72
Cumberland	Litton	Hale	1	....	....	2850	7.81	0.59
Hamilton	Daisy	Abel	1	....	....	2100	8.95	1.53
Hamilton	Montlake	Montlake No. 4	1	....	....	2620	11.32	1.66
Morgan	Christmas Siding	Smith & Cheek	1	....	....	2590	5.51	0.80
Morgan	Coalfield	Davis	1	....	....	2390	4.65	1.47
Morgan	Lancing	Summers	1	....	....	2360	1.83	1.32
Morgan	Oliver Springs	Jackson	1	....	....	2270	2.77	1.01
Morgan	Oliver Springs	Reed	1	....	....	2300	4.25	0.72
Morgan	Stephens	Laymance	1	....	....	2070	7.26	2.80
Scott	Robbins	Clay No. 1	1	....	....	1990	9.49	3.85

(Continued on Next Page)

TENNESSEE—Continued

LOCALITY, BED, ETC.			Number of Samples from Mine	Softening Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
Miscellaneous (Not Identified) Beds								
Scott.....	Robbins.....	Hughett.....	1	....	....	2580	4.21	1.08
Scott.....	Robbins.....	Long Prospect.....	1	....	....	2210	4.26	1.25
Scott.....	Robbins.....	Newman Prospect.....	1	....	....	2500	5.71	1.08
White.....	Clifty.....	Clifty No. 1.....	8	1990	2090	2040	13.15	4.24
White.....	Ravenscroft.....	Ravenscroft.....	4	2050	2210	2140	10.78	4.19

TEXAS

Santo Tomas Bed								
Webb.....	Dolores.....	Dolores.....	1	....	....	2590	19.89	2.17
Webb.....	Laredo.....	Santo Tomas.....	1	....	....	2570	18.52	1.78
Average of Santo Tomas Bed.....			2	....	....	2580	19.21	1.98

UTAH

Miscellaneous Seams								
Carbon.....	Carbon.....	Panther (Castlegate Seam).....	1	....	....	2110	5.59	0.60
Carbon.....	Castlegate.....	Cameron No. 1 (No. 1 Seam).....	1	....	....	2230	6.40	0.41
Carbon.....	Castlegate.....	Cameron No. 2 (No. 2 Seam).....	1	....	....	2170	6.78	0.48
Carbon.....	Castlegate.....	Castlegate No. 1 ("A" Seam).....	1	....	....	2100	6.46	0.51
Carbon.....	Castlegate.....	Castlegate No. 1 ("C" Seam).....	1	....	....	2080	5.02	0.49
Carbon.....	Castlegate.....	Castlegate No. 1 ("D" Seam).....	1	....	....	2130	7.37	0.63
Carbon.....	Castlegate.....	Castlegate No. 2 ("B" Seam).....	1	....	....	2210	9.44	0.68
Carbon.....	Castlegate.....	Castlegate No. 2 ("D" Seam).....	1	....	....	2150	5.51	0.34
Carbon.....	Helper.....	Prospect (Spring Canyon No. 1 Seam).....	1	....	....	2360	7.85	0.80
Carbon.....	Helper.....	Prospect (Spring Canyon No. 1 Seam).....	1	....	....	2260	9.09	0.72
Carbon.....	Hiawatha.....	Hiawatha No. 1 (Hiawatha Seam).....	2	2140	2430	2280	6.16	0.74
Carbon.....	Hiawatha.....	Hiawatha No. 2 (Hiawatha Seam).....	2	2220	2220	2220	7.50	0.58
Carbon.....	Kenilworth.....	Aberdeen (Book Cliffs Seam).....	2	2150	2150	2150	4.64	0.35
Carbon.....	Kenilworth.....	Aberdeen Prospect (Aberdeen Seam).....	1	....	....	2130	6.68	0.43
Carbon.....	Kenilworth.....	Kenilworth (Aberdeen Seam).....	2	2120	2150	2140	5.65	0.46
Carbon.....	Kenilworth.....	Kenilworth (Kenilworth Seam).....	2	2130	2150	2140	5.52	0.50
Carbon.....	Kenilworth.....	Kenilworth (Royal Blue Seam).....	2	2150	2160	2160	4.90	0.70
Carbon.....	Kenilworth.....	Milburn Prospect (Kenilworth Seam).....	1	....	....	2130	5.86	0.56
Carbon.....	Kenilworth.....	Royal Blue (Seam Unnamed).....	1	....	....	2150	4.57	0.65
Carbon.....	Price.....	Jesse Knight Prospect (Seam Unnamed).....	1	....	....	2220	5.06	0.61
Carbon.....	Standardville.....	Standard (Castlegate Seam).....	2	2150	2150	2150	6.26	0.40
Carbon.....	Storrs.....	Spring Canyon No. 1 (Spring Canyon No. 1 Seam).....	1	....	....	2150	8.82	0.58
Carbon.....	Storrs.....	Spring Canyon No. 2 (Spring Canyon No. 2 Seam).....	1	....	....	2110	5.25	0.90
Carbon.....	Storrs.....	Spring Canyon No. 3 (Spring Canyon No. 3 Seam).....	1	....	....	2190	8.57	0.41
Carbon.....	Sunnyside.....	Prospect (Seam Unnamed).....	1	....	....	2620	5.58	1.11
Carbon.....	Sunnyside.....	Prospect (Seam Unnamed).....	1	....	....	2210	4.20	0.52
Carbon.....	Sunnyside.....	Utah No. 1 (Lower Seam).....	1	....	....	2390	7.01	1.84
Carbon.....	Sunnyside.....	Utah No. 3 (Lower Seam).....	2	2550	2980	2760	8.04	1.32
Carbon.....	Sunnyside.....	Utah No. 3 (Upper Seam).....	3	2620	†3010	†2880	7.69	0.67
Emery.....	Black Hawk.....	Black Hawk (Hiawatha Seam).....	6	2040	2430	2130	6.34	0.78
Emery.....	Emery.....	Browning ("I" Seam).....	1	....	....	2100	6.17	0.41
Emery.....	Emery.....	Casper ("C" Seam).....	1	....	....	2430	14.90	0.85
Emery.....	Emery.....	Surface Prospect ("I" Seam).....	1	....	....	2100	8.52	1.34
Emery.....	Emery.....	Williams ("I" Seam).....	1	....	....	2000	12.10	4.85
Grand.....	Thompson.....	No. 1-A ("B" Seam).....	1	....	....	2960	11.24	0.71
Grand.....	Thompson.....	Prospect ("A" Seam).....	1	....	....	2670	11.28	0.65
Morgan.....	Devils Slide.....	Heber Robinson (Seam Un- named).....	1	....	....	2500	23.47	0.77
Morgan.....	Devils Slide.....	Lucas & Smith (Seam Un- named).....	1	....	....	2560	21.59	0.56
Sanpete.....	Wales.....	Coal Creek (Seam Unnamed).....	1	....	....	2040	23.36	7.05
Sanpete.....	Wales.....	North Tunnel (Seam Unnamed).....	1	....	....	2210	19.66	3.80
Sanpete.....	Wales.....	Thomas (Seam Unnamed).....	1	....	....	2130	16.17	4.76
Sevier.....	Emery.....	Surface Prospect ("A" Seam).....	1	....	....	2470	6.83	0.50

(Continued on Next Page)

†Denotes that the true value is above that indicated.

UTAH—Continued

LOCALITY, BED, ETC.			Number of Samples from Mine	Softening Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
Miscellaneous Seams								
Sevier.....	Fremont.....	Hogan Prospect ("A" Seam)....	1	....	....	2390	13.83	3.77
Sevier.....	Salina.....	Kearns & Duggins (Duggins Seam).....	1	....	....	2320	13.07	0.47
Summit.....	Carter.....	Prospect (Seam Unnamed).....	1	....	....	2710	15.86	0.57
Summit.....	Carter.....	Prospect (Seam Unnamed).....	1	....	....	2150	10.55	5.28
Summit.....	Coalville.....	Ress-Grass Creek (Wasatch Seam).....	1	....	....	2420	3.86	2.16
Summit.....	Coalville.....	Superior (Wasatch Seam).....	1	....	....	2130	5.72	1.85
Summit.....	Coalville.....	Wasatch (Wasatch Seam).....	1	....	....	2350	4.72	1.59
Uinta.....	Vernal.....	Blue Bell (Seam Unnamed).....	1	....	....	2520	10.56	1.65
Uinta.....	Vernal.....	Green (Seam Unnamed).....	1	....	....	2370	9.03	2.59
Uinta.....	Vernal.....	Reynolds (Mancos Seam).....	1	....	....	2740	7.56	1.07
Wasatch.....	Hanna.....	Prospect (Seam Unnamed).....	1	....	....	2130	6.95	0.96
Wasatch.....	Hanna.....	Winchester Prospect (Mancos Seam).....	1	....	....	2040	3.57	0.83
Wasatch.....	Heber.....	Cummings (Seam Unnamed)....	1	....	....	2040	7.68	0.85

VIRGINIA

"B" Bed								
Henrico.....	Gayton.....	Carbon Hill.....	1	....	....	2420	17.73	2.21
Big Bed								
Montgomery.....	Blacksburg.....	Slusser.....	1	....	....	2260	15.64	0.56
Montgomery.....	Merrimac Mines.....	Merrimac.....	1	....	....	2650	20.07	0.48
Pulaski.....	Parrett.....	Parrett.....	1	....	....	2350	23.97	0.68
Average of Big Bed.....			3	....	....	2420	19.89	0.57
Big A No. 2 Bed								
Tazewell.....	Seaboard.....	Empire No. 6½.....	2	2310	2320	2320	6.34	0.60
Big Town Hill Bed								
Tazewell.....	Richlands.....	West.....	2	2190	2290	2240	11.84	0.48
"C" Bed								
Henrico.....	Gayton.....	Carbon Hill.....	2	2160	2250	2210	10.26	1.40
Clintwood Bed								
Dickenson.....	Clintwood.....	Yeates.....	1	....	....	2670	3.26	0.87
Duncan Bed								
Scott.....	Ka.....	Hagan Prospect.....	1	....	....	2160	6.65	0.88
Glamorgan Bed								
Wise.....	Glamorgan.....	Glamorgan No. 3.....	2	2130	2190	2160	5.86	1.22
Imboden Bed								
Wise.....	Dooly.....	Intermont No. 6.....	2	2540	2640	2590	10.25	0.90
Wise.....	St. Paul.....	Twin City No. 1.....	1	....	....	2240	12.69	2.22
Average of Imboden Bed.....			3	....	....	2420	11.47	1.56
Jawbone Bed								
Wise.....	St. Paul.....	Twin City No. 3.....	1	....	....	2240	19.86	1.03
Kennedy (Widow Kennedy) Bed								
Dickenson.....	Nora.....	Nora Mills.....	2	2130	2260	2200	9.79	0.74
Russell.....	Dante.....	Clinchfield No. 103.....	1	....	....	2220	7.64	1.83
Russell.....	Della.....	Flat Rock.....	2	2090	2160	2130	9.58	0.84
Russell.....	Drill.....	Drill.....	1	....	....	2230	6.94	1.03
Russell.....	Drill.....	Sandy Ridge.....	2	2070	2220	2150	5.81	1.00
Average of Kennedy (Widow Kennedy) Bed.....			8	....	....	2190	7.95	1.09
Large Bed								
Montgomery.....	Blacksburg.....	Plunkett & Wall.....	1	....	....	†3010	18.06	0.52
Montgomery.....	Blacksburg.....	Seymour-Price.....	1	....	....	2960	19.34	0.59
Montgomery.....	Blacksburg.....	Slusser.....	3	2360	2440	2410	17.55	0.60
Montgomery.....	Christiansburg.....	Lyken Hill.....	1	....	....	†3010	22.70	0.72
Pulaski.....	Parrett.....	Parrett.....	1	....	....	3010	23.28	0.69
Average of Large Bed.....			7	....	....	†2880	20.19	0.62
Little Bed								
Montgomery.....	Merrimac Mines.....	Merrimac Prospect.....	1	....	....	†3010	21.29	0.49
Little Town Hill Bed								
Tazewell.....	Richlands.....	East.....	2	2390	2500	2440	8.40	0.56
Lower Banner Bed								
Russell.....	Dante.....	Clinchfield.....	1	....	....	2350	6.59	0.66
Russell.....	Dante.....	Clinchfield No. 52.....	4	2110	2290	2180	6.61	0.69
Russell.....	Wilder.....	Clinchfield No. 55.....	3	2200	2450	2320	5.92	0.82
Average of Lower Banner Bed.....			8	....	....	2280	6.37	0.72
Lower Bolling Bed								
Wise.....	Flat Gap.....	J. Reuben Bolling.....	1	2720	8.74	1.12

(Continued on Next Page)

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VIRGINIA—Continued

LOCALITY, BED, ETC.			Number of Samples from Mine	Softening Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
Meadow Bed								
Tazewell	Richlands	Richlands No. 2	2	2300	2660	2480	12.92	0.62
Milner Bed								
Scott	Ka	Milner Prospect	1	....	....	2120	5.89	1.69
Mohawk Bed								
Buchanan	Blackey	Blackey	2	2060	2260	2160	3.49	1.32
No. 4 Bed								
Russell	Slemp	Clinchfield No. 201	3	2160	2200	2180	6.58	0.49
Pardee (Parsons) Bed								
Wise	Pardee	Pardee No. 1	2	2420	2500	2460	8.04	1.59
Pocahontas No. 3 Bed								
Tazewell	Boissevain	Big Vein No. 2	2	2410	2500	2460	4.40	0.60
Tazewell	Boissevain	Boissevain	14	2030	2560	2270	4.05	0.51
Tazewell	Pocahontas	Baby	3	2490	2580	2530	4.33	0.53
Tazewell	Pocahontas	Big Vein No. 1	5	2380	2640	2520	3.98	0.62
Tazewell	Pocahontas	West	4	2190	2500	2320	4.52	0.46
Average of Pocahontas No. 3 Bed			28	....	....	2420	4.26	0.54
Pocahontas No. 5 Bed								
Tazewell	Faraday	Altizer	1	....	....	2090	5.19	0.82
Red Ash Bed								
Tazewell	Red Ash	Raven Red Ash	2	2230	2240	2240	5.96	0.64
Small Bed								
Montgomery	Blacksburg	Clements Hollow	1	....	....	†3010	42.98	0.34
Splash Dam Bed								
Dickenson	Mart	Owen's	2	2690	2750	2720	5.77	0.65
Upper Bed								
Pulaski	Dublin	Cloyd	1	....	....	†3010	24.23	0.42
Wyth	Max Meadows	Ellison & Johnson Prospect	1	....	....	†3010	35.20	0.34
Average of Upper Bed			2	....	....	†3010	29.72	0.38
Upper Banner Bed								
Dickenson	Prater	Yellow Poplar	2	2430	2630	2530	7.02	1.08
Russell	Dante	Clinchfield No. 2	8	2080	2320	2210	6.88	0.63
Russell	Dante	Clinchfield No. 3	3	2200	2570	2350	7.88	0.63
Russell	Wilder	Clinchfield No. 6	3	2260	2360	2300	5.86	0.57
Wise	Georgel	Swansea	1	....	....	2520	5.65	0.53
Wise	Tom's Creek	Cranesnest No. 1	3	2510	2660	2580	5.28	0.55
Average of Upper Banner Bed			20	....	....	2420	6.43	0.67
Miscellaneous (Not Identified) Beds								
Buchanan	Big Rock	Oliver Elswick	1	....	....	†3010	7.23	0.69
Buchanan	Whitewood	Whitewood	1	....	....	†3010	13.74	0.73
Lee	Pockett	Reed Creek Coal Association	2	2140	2250	2200	9.14	3.59
Pulaski	Max Meadows	Summit	1	....	....	3010	25.59	0.78
Russell	Della	Jackson	1	....	....	2070	12.96	0.96
Scott	Adamar	Hagan	1	....	....	2530	29.61	1.01
Tazewell	Bandy	Christian	1	....	....	2360	4.15	1.03
Tazewell	Bandy	Patrick	1	....	....	2260	3.67	1.14
Tazewell	Jewell	Jewell Ridge No. 1	2	2500	2640	2570	5.94	0.78
Wise	Norton	Norton No. 4	1	....	....	2600	3.89	0.93

WASHINGTON

Miscellaneous Seams								
Clallam	Clallam	Fuca (Seam Unnamed)	1	....	....	1870	14.16	5.75
King	Cumberland	Rose-Marshall (Seam Unnamed)	1	....	....	2960	17.24	0.63
King	Durham	Prospect (No. 1 Seam)	1	....	....	3000	17.51	0.54
King	Durham	Prospect (No. 2 Seam)	1	....	....	2730	21.42	0.58
King	Grand Ridge	Grand Ridge (No. 3 Seam)	1	....	....	2610	11.38	0.58
King	Grand Ridge	Grand Ridge (No. 4 Seam)	1	....	....	2400	24.44	2.69
King	Grand Ridge	Grand Ridge (No. 7 Seam)	1	....	....	2640	15.01	0.45
King	Ravensdale	Ravensdale No. 1 (No. 3 Seam)	1	....	....	2380	6.91	0.37
King	Snoqualmie	Niblock (No. 3 Seam)	1	....	....	2950	11.65	0.51
King	Snoqualmie	Niblock (No. 4 Seam)	1	....	....	2930	13.21	0.94
King	Snoqualmie	Niblock (No. 5 Seam)	1	....	....	2910	25.58	1.56
Kittitas	Ellensburg	Prospect (No. 7 Seam)	1	....	....	2760	25.47	1.26
Kittitas	Ellensburg	Prospect (No. 9-C Seam)	1	....	....	2250	7.73	0.69
Kittitas	Ellensburg	Prospect (No. 10-d Seam)	1	....	....	2380	23.83	1.20
Kittitas	Ellensburg	Prospect (Seam Unnamed)	1	....	....	2580	17.73	1.59
Kittitas	Roslyn	Roslyn No. 1 (Roslyn Seam)	3	2350	2590	2440	12.99	0.40
Kittitas	Roslyn	Roslyn No. 2 (Roslyn Seam)	1	....	....	2320	11.94	0.49
Kittitas	Thorp	Wilson (Seam Unnamed)	1	....	....	2250	17.52	0.47
Lewis	Centralia	Fords Prairie (Seam Unnamed)	1	....	....	2200	11.14	0.87
Lewis	Centralia	Monarch (Seam Unnamed)	1	1990	12.16	1.37

(Continued on Next Page)

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WASHINGTON—Continued

LOCALITY, BED, ETC.			Number of Samples from Mine	Softening Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
Miscellaneous Seams								
Lewis	Chehalis	Chehalis (Seam Unnamed)	1	....	....	2290	10.83	2.50
Lewis	Chehalis	Sheldon (Seam Unnamed)	2	2340	2380	2360	8.30	0.75
Lewis	Chehalis	Superior (Superior No. 2 Seam)	1	....	....	2150	12.18	1.08
Lewis	Chehalis	Superior No. 1 (Seam Un- named)	1	....	....	2310	14.99	0.45
Lewis	Chehalis	Superior No. 2 (Seam Un- named)	1	....	....	2170	7.12	1.80
Lewis	Chehalis	Twin City (Seam Unnamed)	1	....	....	2270	14.04	0.39
Lewis	Ladd	East Creek Ladd (No. 2 Seam)	1	....	....	2240	18.05	1.31
Lewis	Ladd	East Creek Ladd (No. 3 Seam)	2	2570	2670	2620	22.54	0.73
Lewis	Ladd	East Creek Ladd (No. 4 Seam)	1	....	....	2910	26.78	0.93
Lewis	Ladd	Prospect (No. 1 Seam)	1	....	....	2710	28.73	1.17
Lewis	Ladd	Prospect (No. 5 Seam)	1	....	....	2530	50.34	0.73
Lewis	Littell	Crescent (Seam Unnamed)	1	....	....	2150	12.79	4.36
Lewis	Mendota	Mendota (Seam Unnamed)	3	2230	2350	2290	15.97	1.51
Lewis	Morton	Prospect (Edlund Seam)	1	....	....	2760	25.06	0.84
Lewis	Morton	Prospect (Seam Unnamed)	1	....	....	2970	17.40	0.73
Lewis	Morton	Prospect (Seam Unnamed)	1	....	....	2660	25.48	0.90
Pierce	Ashford	Mashel (Seam Unnamed)	2	2710	2850	2780	33.77	0.59
Pierce	Ashford	Prospect (Misqually Chief Seam)	1	....	....	2650	25.72	0.44
Pierce	Burnett	Burnett (No. 2 Seam)	1	....	....	2320	8.44	0.79
Pierce	Burnett	Burnett (No. 3 Seam)	2	2350	2420	2380	13.71	0.39
Pierce	Carbonado	Carbon Hill (No. 1 Seam)	1	....	....	2720	15.40	0.47
Pierce	Carbonado	Carbon Hill (No. 1 Coking Seam)	1	....	....	2210	18.86	3.31
Pierce	Carbonado	Carbon Hill (No. 2 Coking Seam)	1	....	....	2640	16.98	0.41
Pierce	Carbonado	Carbon Hill (No. 3 Coking Seam)	2	2640	2840	2740	17.54	0.36
Pierce	Carbonado	Carbon Hill (No. 4 Seam)	1	....	....	2350	10.77	0.33
Pierce	Carbonado	Carbon Hill (No. 5 Seam)	1	....	....	2890	16.99	0.58
Pierce	Carbonado	Carbon Hill (No. 9 Seam)	1	....	....	2640	16.10	0.54
Pierce	Carbonado	Carbon Hill (No. 11 Seam)	1	....	....	2740	20.42	0.41
Pierce	Carbonado	Carbon Hill (Wingate Seam)	2	2180	2190	2180	9.66	0.82
Pierce	Carbonado	Carbon Hill No. 6 (Wingate Seam)	1	....	....	2260	6.68	0.54
Pierce	Carbonado	Carbonado No. 4 N (Wilkeson Seam)	2	2610	2730	2670	15.04	0.34
Pierce	Fairfax	Fairfax (Blacksmith Seam)	1	....	....	2240	13.16	0.70
Pierce	Fairfax	Fairfax (No. 3 Seam)	1	....	....	2740	10.51	0.54
Pierce	Fairfax	Fairfax (No. 7 Seam)	1	....	....	2910	34.22	0.48
Pierce	Fairfax	Montezuma (No. 1 Seam)	1	....	....	2570	13.50	1.03
Pierce	Fairfax	Montezuma (No. 2 Seam)	1	....	....	2880	23.44	0.73
Pierce	Fairfax	Montezuma (No. 3 Seam)	1	....	....	2430	20.21	0.51
Pierce	Fairfax	Montezuma (No. 4 Seam)	1	....	....	2280	11.07	0.57
Pierce	Fairfax	Prospect (Montezuma Seam)	1	....	....	2980	35.15	0.57
Pierce	Fairfax	Prospect No. 1 (No. 1 Seam)	1	....	....	2370	8.46	1.19
Pierce	Fairfax	Prospect No. 2 (No. 2 Seam)	1	....	....	†3000	20.36	0.70
Pierce	Melmont	Melmont (No. 1 Seam)	1	....	....	2880	19.49	0.73
Pierce	Melmont	Melmont (No. 2 Seam)	2	2850	2910	2880	18.28	0.43
Pierce	Melmont	Melmont (No. 3 Seam)	2	2410	2750	2580	14.70	0.34
Pierce	Pittsburgh	Black Carbon (Black Carbon Seam)	1	....	....	2760	24.19	0.57
Pierce	Pittsburgh	Pittsburgh (Lady Wellington Seam)	1	....	....	†3000	19.79	0.44
Pierce	Pittsburgh	Pittsburgh (Pittsburgh Seam)	1	....	....	2960	21.38	0.58
Pierce	South Willis	South Willis (Windsor Seam)	1	....	....	2300	21.87	0.42
Pierce	Wilkeson	Brier Hill (Seam Unnamed)	1	....	....	2700	29.91	1.21
Pierce	Wilkeson	Gale Creek (No. 1 Seam)	1	....	....	2300	8.53	0.85
Pierce	Wilkeson	Gale Creek (No. 2 Seam)	1	....	....	2390	6.22	1.00
Pierce	Wilkeson	Gale Creek (Queen Seam)	1	....	....	2220	9.83	1.04
Pierce	Wilkeson	Snell (Seam Unnamed)	1	....	....	2800	18.72	0.84
Pierce	Wilkeson	Wilkeson (No. 2 Seam)	3	2720	2850	2780	17.99	0.47
Pierce	Wilkeson	Wilkeson (No. 3 Seam)	3	2240	2970	2570	14.27	0.47
Pierce	Wilkeson	Wilkeson (No. 7 Seam)	1	....	....	2380	10.38	0.44
Stevens	Valley	Valley (Seam Unnamed)	2	2040	2070	2060	22.73	2.82
Thurston	Hurn	Hannaford No. 1 (Upper Bench Seam)	1	....	....	2150	7.69	0.55
Thurston	Tenine	Black Bear (Seam Unnamed)	1	....	....	2570	27.61	1.79
Thurston	Tenine	King (Seam Unnamed)	1	....	....	2210	14.12	3.09
Thurston	Tono	Hannaford (Seam Unnamed)	2	2330	2340	2340	12.28	1.19
Whatcom	Bellingham	Bellingham (No. 1 Seam)	1	....	....	2450	18.01	0.28
Whatcom	Glacier	Discovery Tunnel (Seam Un- named)	2	2430	2510	2470	11.65	1.04
Whatcom	Glacier	Prospect (Seam Unnamed)	1	....	....	2440	8.35	1.05
Whatcom	Glacier	Prospect (Seam Unnamed)	1	2590	9.95	1.11
Whatcom	Glacier	Smith Tunnel (Seam Unnamed)	1	3000	9.56	0.97

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WEST VIRGINIA

LOCALITY, BED, ETC.			Number of Samples from Mine	Softening Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
ALLEGHENY SERIES								
Upper Freeport Bed								
Grant	Henry	Henry or No. 22	1	....	....	2190	6.17	1.97
Lower Freeport Bed								
Brooke	Steubenville	LaBelle	1	....	....	2100	7.12	1.98
Hancock	Chester	Sprout's Coal Bank	1	....	....	2070	12.55	4.29
Average of Lower Freeport Bed			2	....	....	2090	9.84	3.14
Middle Kittanning Bed								
Hancock	Chester	Line Island Coal Bank	1	....	....	2110	10.93	4.06
Lower Kittanning (No. 5 Block) Bed								
Clay	Widen	Rich Run	12	2430	†3070	†2730	7.19	0.94
Hancock	Chester	Jones Coal Bank	1	....	....	2150	6.15	4.64
Hancock	New Cumberland	Crescent	1	....	....	2280	13.65	9.20
Kanawha	Putney	Putney No. 1	5	2250	†3010	†2780	....	....
Preston	Corinth	Wills No. 3	1	....	....	2080	9.55	3.15
Preston	Kempton	Kempton or No. 42	1	....	....	2430	5.55	0.82
Tucker	Coketon	Coketon No. 36	1	....	....	3010	8.76	0.90
Average of Lower Kittanning (No. 5 Block) Bed			22	....	....	†2660	7.64	1.77
CONEMAUGH SERIES								
Mahoning Bed								
Hancock	Chester	Allison Coal Bank	1	....	....	2130	6.94	2.86
Hancock	New Cumberland	Martin Coal Bank	1	....	....	2300	4.13	1.46
Hancock	New Cumberland	McNeil-Harrin Coal Bank	1	....	....	2140	6.13	2.22
Hancock	New Cumberland	Wern's Coal Bank	1	....	....	2080	5.28	2.05
Average of Mahoning Bed			4	....	....	2160	5.62	1.89
MONONGAHELA SERIES								
Pittsburgh Bed								
Braxton	Braxton	Braxton	1	....	....	2090	8.93	3.50
Brook	Colliers	Lewis Finley No. 1	2	2070	2600	2340	6.28	1.75
Marion	Chiefton	Consolidation No. 47	6	2040	2170	2090	7.41	2.97
Marion	Fairmont	Consolidation No. 38	3	2100	2150	2130	6.97	2.29
Marion	Farmington	Consolidation No. 87	4	2010	2330	2230	6.61	1.23
Marion	Hutchinson	Consolidation No. 84	6	2010	2310	2230	7.12	1.98
Marion	Monongah	Consolidation No. 43	6	2170	2350	2270	6.27	1.07
Marion	Monongah	Consolidation No. 63	6	2200	2330	2270	5.84	1.07
Marion	Watson	Consolidation No. 26	5	2000	2260	2110	6.65	1.87
Marion	Worthington	Consolidation No. 86	4	2240	2410	2340	6.15	0.80
Marion	Worthington	Hutchinson	3	2070	2170	2130	7.70	2.25
Marshall	Benwood	Hitchman	6	1940	2000	1970	8.33	4.65
Marshall	Moundsville	Mound	2	2020	2130	2080	12.44	6.09
Marshall	Moundsville	Panama	2	2070	2090	2080	7.29	3.33
Putnam	Black Betsey	Black Betsey No. 3	7	1930	2370	2140	7.39	1.94
Average of Pittsburgh Bed			63	....	....	2170	7.20	2.24
Redstone Bed								
Harrison	Lost Creek	Calif.	4	2000	2140	2060	8.08	2.24
Harrison	Lost Creek	Righter No. 1	5	2030	2370	2180	6.07	1.66
Average of Redstone Bed			9	....	....	2120	6.96	1.92
Sewickley (Mapleton) Bed								
Marion	Montana Station	Parker Run	5	2050	2120	2080	9.61	3.99
POTTSVILLE SERIES—Kanawha Group								
Cedar Grove (Thacker) Bed								
Logan	Accoville	Island Creek	6	2520	†3010	†2690	5.82	1.28
Logan	Craneco	Lorado No. 1	5	2470	†3010	†2760	5.59	0.74
Logan	Omar	Main Island Creek No. 5	5	2390	2900	2600	5.62	0.88
Mingo	Chattaroy	Buffalo	1	....	....	2320	6.05	2.10
Mingo	Matewan	Red Jacket Junior	1	....	....	2600	3.51	0.68
Mingo	Thacker	Thacker No. 3	1	....	....	2620	7.16	1.18
Mingo	Thacker	Thacker No. 5	1	....	....	2490	6.24	1.04
Mingo	Thacker	Thacker No. 9	2	2410	2460	2440	6.35	0.73
Mingo	Thacker	Thacker No. 11	1	....	....	2520	5.01	1.49
Mingo	Williamson	Winifrede	1	....	....	2390	8.28	1.98
Average of Cedar Grove (Thacker) Bed			24	....	....	†2610	5.83	1.07
Coalburg (Buffalo Creek) Bed								
Kanawha	Ward	Kelly's Creek Colliery No. 3	6	2790	†3010	†2950	8.75	0.75
Mingo	Chattaroy	Howard	1	....	....	3030	9.12	0.84
Average of Coalburg (Buffalo Creek) Bed			7	....	....	†2960	8.80	0.70

(Continued on Next Page)

†Denotes that the true value is above that indicated.

WEST VIRGINIA—Continued

LOCALITY, BED, ETC.			Number of Samples from Mine	Softening Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
Winifrede Bed								
Mingo	Chattaroy	Buffalo	2	3010	3010	3010	10.27	0.96
Mingo	Williamson	Sternberger	1	....	....	2850	8.10	0.68
Mingo	Williamson	Winifrede	1	....	....	3000	5.11	0.71
Average of Winifrede Bed			4	....	....	2970	8.44	0.83
No. 2 Gas (Campbell Creek, Island Creek, Upper War Eagle) Bed								
Fayette	Longacre	Sunday Creek No. 114	6	2100	2520	2360	5.70	1.09
Fayette	Marting	No. 1	8	2850	†3010	†2950	6.32	0.92
Fayette	Page	Ansted	1	....	....	2430	6.61	1.81
Logan	Accoville	Big Eagle	7	2730	2960	2830	6.08	0.65
Logan	Earling	Earling No. 1	4	2850	2960	2940	5.10	0.71
Mingo	Merrimac	White Star	1	....	....	2540	3.78	0.66
Average of No. 2 Gas (Campbell Creek, Island Creek, Upper War Eagle) Bed			27	....	....	†2750	5.86	0.88
No. 1 Gas (Middle War Eagle) Bed								
Fayette	Boomer	No. 2 North	3	2900	†3010	†2940	4.40	0.77
POTTSVILLE SERIES—New River Group								
Beckley (War Creek) Bed								
McDowell	Roderfield	Davy Pocahontas No. 1	3	2520	2960	2720	11.31	1.82
McDowell	Susana Station	Yukon Pocahontas	4	2400	2620	2450	8.50	0.57
McDowell	War	John's Branch	4	2650	†3010	†2860	8.99	0.63
McDowell	War	War Creek	3	2730	2750	2740	8.62	0.72
Beckley (War Creek) Bed—Continued								
Raleigh	Affinity	Affinity	7	2690	†3090	†3000	4.19	0.56
Raleigh	Big Stick	Big Stick	11	2700	†3010	†2900	4.36	0.53
Raleigh	Eccles	Eccles No. 5	5	2550	†3010	†2920	6.44	0.78
Raleigh	McAlpin	McAlpin	2	2730	†3010	†2870	2.65	0.65
Raleigh	McQuade Station	Blue Jay	3	2730	†3020	†2830	4.38	0.75
Raleigh	Raleigh	Raleigh No. 1	2	2540	†3010	†2780	3.49	0.67
Raleigh	Raleigh	Raleigh No. 3	5	2620	2900	2720	3.82	0.74
Raleigh	Slab Fork	Slab Fork No. 1	1	....	....	2580	2.87	0.61
Raleigh	Slab Fork	Slab Fork No. 2	8	2480	†3010	†2740	3.69	0.50
Raleigh	Slab Fork	Slab Fork No. 3	7	2370	†3010	†2740	4.03	0.54
Raleigh	Slab Fork	Slab Fork No. 4	1	....	....	2960	2.39	0.55
Raleigh	Slab Fork	Slab Fork No. 5	8	2520	†3010	†2760	3.49	0.50
Raleigh	Tams Station	Tams	3	3010	†3010	†3010	4.67	0.55
Raleigh	Winding Gulf	Lynwin	7	2620	†3010	†2860	4.27	0.71
Raleigh	Winding Gulf	Winding Gulf No. 1	3	2730	†3020	†2920	3.05	0.47
Raleigh	Winding Gulf	Winding Gulf No. 2	2	2960	2990	2980	2.78	0.51
Raleigh	Wood Bay	McAlpin No. 1	8	2560	†3010	†2850	3.66	0.60
Wyoming	Alpoca	Alpha	4	2120	2540	2360	4.45	1.05
Average of Beckley (War Creek) Bed			101	....	....	†2800	4.76	0.65
Fire Creek (Quinnimont) Bed								
Fayette	Layland	Layland No. 3	11	2480	2850	2660	6.99	0.87
Fayette	Thurmand	Rock Lick No. 2	3	2210	2730	2390	4.90	0.68
Average of Fire Creek (Quinnimont) Bed			17	....	....	2540	6.60	0.84
Sewell (Davy) Bed								
Fayette	Caperton	Sewell	5	2620	†3000	†2860	2.44	0.56
Fayette	Dun Loop	Dun Loop No. 2	4	2390	2980	2620	2.64	0.55
Fayette	Elverton	Elverton	4	2350	2650	2500	2.44	0.59
Fayette	Hawk's Nest	Mill Creek	4	2370	2730	2510	4.01	0.63
Fayette	Kay Moor	Kay Moor No. 1	5	2310	2930	2690	3.17	0.56
Fayette	Kay Moor	Kay Moor No. 2	3	2430	2640	2550	3.57	0.54
Fayette	Minden	Minden No. 2	3	2280	2640	2450	3.23	0.65
Fayette	Minden	Minden No. 3	1	....	....	2600	2.86	0.56
Fayette	Minden	Minden No. 4	3	2270	2710	2550	2.57	0.43
Fayette	Minden	Minden No. 5	4	2080	2620	2340	3.13	0.88
Fayette	Minden	Rock Lick No. 4	3	2370	2620	2520	2.43	0.45
Fayette	South Nuttal	Brown	4	2580	2830	2720	2.62	0.57
Fayette	Sun	Sun No. 1	5	2070	2550	2250	6.14	1.69
Greenbrier	Richwood	Spruce Knob	1	....	....	2960	6.04	0.65
McDowell	Big Sandy	Big Sandy	2	2290	2370	2330	3.60	0.53
McDowell	Coalwood	Nora or No. 3	4	2350	2490	2420	2.95	0.74
McDowell	Coalwood	Thelma or No. 6	7	2300	2650	2440	4.32	1.03
McDowell	Davy	Blackstone	1	....	....	2130	3.48	0.54
McDowell	Davy	Cletus	1	....	....	2430	2.67	0.51
McDowell	Davy	Helena	1	....	....	2460	3.18	0.58
McDowell	Marytown	Marytown	2	2520	2670	2600	8.95	0.75
McDowell	Roderfield	Davy or Pocahontas No. 2	3	2430	2980	2776	6.43	0.89
McDowell	Twin Branch	J. B. B. No. 1	1	....	....	2440	3.10	0.55
McDowell	Twin Branch	J. B. B. No. 2	1	....	....	3010	4.40	0.55
McDowell	Twin Branch	J. B. B. No. 3	1	2540	5.27	0.76
McDowell	Twin Branch	J. B. B. No. 4	1	2550	5.20	0.85

(Continued on Next Page)

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WEST VIRGINIA—Continued

LOCALITY, BED, ETC.			Number of Samples from Mine	Softening Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
Sewell (Davy) Bed—Continued.								
McDowell	Twin Branch	J. B. B. No. 5	2	2450	2550	2500	3.00	0.55
McDowell	Twin Branch	Maheo No. 4	9	2500	2730	2620	4.41	0.71
Raleigh	Cranberry	Cranberry	2	2460	2480	2470	.....	.....
Raleigh	Oswald	Oswald No. 3	3	2190	2590	2380	4.07	0.80
Raleigh	Tamroy	Tamroy	3	2540	†3010	†2850	1.97	0.50
Randolph	Mill Creek	Tolbert and Spiker	1	.....	.....	†3010	11.43	0.52
Randolph	Spruce	Hopkins	1	.....	.....	†2730	13.85	0.99
Average of Sewell (Davy) Bed			95	.....	.....	†2560	3.93	0.72
Welch (Tug River) Bed								
McDowell	Hemphill	Welch	5	2720	2970	2840	7.41	0.62
POTTSVILLE SERIES—Pocahontas Group								
Pocahontas No. 6 Bed								
Mercer	Simmons	Buckeye No. 2	6	2290	2760	2400	2.88	0.70
Pocahontas No. 5 Bed								
McDowell	Faraday	Crockett	1	.....	.....	2350	3.09	0.55
McDowell	Lex	Central West	2	2730	†3010	†2870	7.80	0.65
Average of Pocahontas No. 5 Bed			3	.....	.....	†2700	6.23	0.62
Pocahontas No. 4 (Thin Vein Pocahontas) Bed								
McDowell	Big Four	Cirrus No. 2	1	.....	.....	2770	3.85	0.57
McDowell	Coalwood	No. 1	5	2100	2220	2170	5.29	0.67
McDowell	Coalwood	Olga	3	2030	2140	2080	6.43	0.77
McDowell	Huger	Middle States	6	2190	2730	2390	6.04	0.63
McDowell	Vivian	Carswell Shaft	3	2850	†3010	†2920	6.81	0.61
McDowell	Welch	Oregon No. 2	2	†2730	†2730	†2730	7.52	0.53
McDowell	Welch	Oregon No. 3	3	†2730	†3010	†2900	7.92	0.63
Average of Pocahontas No. 4 (Thin Vein Pocahontas) Bed			23	.....	.....	†2480	6.31	0.64
Pocahontas No. 3 (Thick Vein Pocahontas) Bed								
McDowell	Algoma	Piney	7	2180	2300	2240	4.79	0.56
McDowell	Arlington	Arlington	3	2450	2630	2520	3.80	0.43
McDowell	Bear Wallow	Roanoke	4	2190	2330	2270	6.38	0.44
McDowell	Berwind	Berwind No. 1	3	2280	2450	2360	5.17	0.90
McDowell	Berwind	Berwind No. 2	3	2170	2340	2250	7.54	0.87
McDowell	Berwind	Berwind No. 3	3	2380	2510	2460	5.90	0.88
McDowell	Berwind	Berwind No. 4	2	2300	2340	2320	5.30	0.95
McDowell	Big Four	Cirrus No. 2	4	2200	2340	2290	4.56	0.63
McDowell	Cooper	Tug River	4	2320	2690	2480	2.90	0.46
McDowell	Crystal	Crystal No. 1	2	2590	2610	2600	4.30	0.53
McDowell	Crystal	Crystal No. 2	4	2410	2520	2480	4.50	0.64
McDowell	Crystal	Godfrey	3	2370	2580	2490	3.88	0.73
McDowell	Eckman	Pulaski No. 2	16	2240	2500	2300	4.56	0.59
McDowell	Eckman	Pulaski No. 3	4	2170	2270	2210	4.31	0.63
McDowell	Eckman	Shawnee	3	2300	2380	2330	5.67	0.52
McDowell	Elkhorn	Delta	1	.....	.....	2390	.....	.....
McDowell	Elkhorn	Houston No. 1	2	2190	2240	2220	4.60	0.48
McDowell	Elkhorn	Houston No. 2	3	2120	2730	2330	5.00	0.45
McDowell	Elk Ridge	Elk Ridge	2	2410	2430	2420	5.48	0.61
McDowell	Gilliam	Gilliam	4	2180	2300	2250	6.09	0.48
McDowell	Hartwell	Berwind No. 5	3	2190	2410	2290	4.17	0.83
McDowell	Havaco	Havaco	5	2190	2640	2350	5.66	0.74
McDowell	Havaco	Havaco No. 41	1	.....	.....	2240	8.19	0.81
McDowell	Huger	Lake Superior No. 1	6	2280	2370	2310	4.66	0.73
McDowell	Huger	Middle States	1	.....	.....	2420	8.78	0.85
McDowell	Jenkinjones	Pocahontas No. 6	11	2170	2390	2240	4.92	0.51
McDowell	Jenkinjones	Pocahontas No. 6-B	2	2220	2280	2250	5.68	0.48
McDowell	Jenkinjones	Pocahontas No. 7	9	2120	2490	2270	5.62	0.53
McDowell	Jenkinjones	Pocahontas No. 7-A	1	.....	.....	2450	4.99	0.49
McDowell	Jenkinjones	Pocahontas No. 8	9	2190	2450	2320	5.16	0.59
McDowell	Kimball	King	4	2160	†3010	†2420	4.83	0.44
McDowell	Leckie	Leckie No. 1	6	2510	2830	2710	3.32	0.57
McDowell	Leckie	Leckie No. 2	5	2510	2790	2640	3.39	0.55
McDowell	Lick Branch	Delta	3	2190	2230	2210	4.30	0.45
McDowell	McDowell	McDowell	3	2420	2490	2450	3.93	0.43
McDowell	Maybeury	Norfolk	2	2690	2730	2710	10.33	0.55
McDowell	Newhall	Berwind No. 6	2	2540	3070	2810	4.90	0.63
McDowell	Newhall	Berwind No. 7	3	2520	2730	2610	4.27	0.63
McDowell	Newhall	Berwind No. 8	3	2520	2970	2690	4.43	0.65
McDowell	North Fork	Rolf	6	2220	2640	2400	4.42	0.52
McDowell	Vivian	Tidewater	3	2240	2300	2270	5.63	0.55
McDowell	Welch	Standard Pocahontas	2	2430	2470	2450	7.36	0.97
McDowell	West Vivian	King No. 98	1	.....	.....	2280	4.53	0.58
Mercer	Coaldale	Coaldale	3	2300	2540	2410	4.07	0.70
Mercer	Goodwill	Goodwill	4	2540	2710	2620	3.37	0.58
Mercer	Goodwill	Louisville No. 1	1	2280	3.43	0.59
Mercer	Goodwill	Louisville No. 2	4	2490	2710	2640	3.82	0.53

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WEST VIRGINIA—Continued

LOCALITY, BED, ETC			Number of Samples from Mine	Softening Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
Mercer	Goodwill	Louisville No. 3	1	.....	.....	2690	3.25	0.55
Mercer	McComas	Sagamore No. 1	3	2430	2600	2540	4.47	0.50
Mercer	McComas	Sagamore No. 2	3	2460	2520	2490	3.87	0.43
Mercer	Matoaka	Pawama No. 1	2	2450	2580	2820	3.85	0.77
Mercer	Matoaka	Pawama No. 2	3	2580	2660	2620	4.34	0.79
Mercer	Matoaka	Thomas No. 1	5	2440	2610	2520	5.30	0.54
Mercer	Matoaka	Thomas No. 2	4	2650	2960	2750	4.95	0.52
Mercer	Mora	Crane Creek No. 1	2	2390	2620	2500	3.88	0.59
Mercer	Mora	Crane Creek No. 2	3	2530	2730	2600	4.80	0.55
Mercer	Mora	Pinnacle	5	2350	2530	2470	3.48	0.54
Mercer	Mora	Sagamore No. 1	3	2410	2530	2460	3.93	0.56
Mercer	Mora	Sagamore No. 2	4	2470	2510	2490	4.10	0.59
Mercer	Simmons	Booth-Bowen	3	2470	2540	2500	4.40	0.58
Mercer	Simmons	Buckeye No. 1	3	2370	2530	2480	3.40	0.60
Mercer	Springton	Modoc No. 1	4	2600	3050	2740	3.66	0.59
Mercer	Springton	Modoc Nos. 2 and 3	4	2510	2720	2640	3.67	0.57
Mercer	Weyanoke	Weyanoke No. 1	9	2450	3010	2690	4.40	0.59
Mercer	Weyanoke	Weyanoke No. 2	1	.....	.....	2570	1.05	0.60
Mercer	Widemouth	Piedmont	4	2690	2890	2800	5.73	0.52
Average of Pocahontas No. 3 (Thick Vein Pocahontas) Bed			246	.....	.....	2440	4.70	0.59

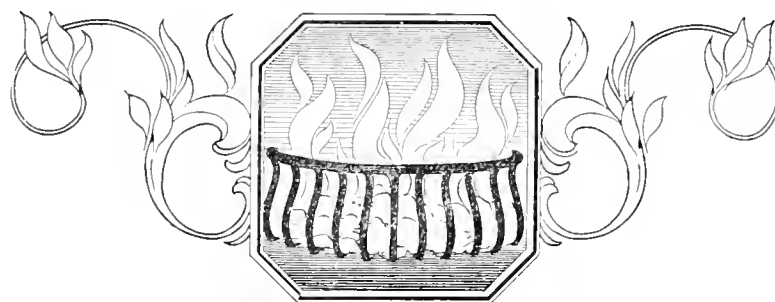
WYOMING

Miscellaneous Seams			Number of Samples from Mine	Softening Temperature, Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
Campbell	Gillette	County Bank (Seam Unnamed)	1	.....	.....	2090	14.66	2.06
Campbell	Gillette	Local ("B" Seam)	1	.....	.....	2350	11.03	1.96
Campbell	Gillette	Prospect ("A" Seam)	1	.....	.....	2230	9.31	1.76
Carbon	Hanna	Local (Seam Unnamed)	1	.....	.....	2110	5.18	1.20
Carbon	Medicine Bow	Johnson (Seam Unnamed)	1	.....	.....	2150	7.91	0.98
Carbon	Rock River	King (Seam Unnamed)	1	.....	.....	2430	9.59	1.32
Converse	Big Muddy	Big Muddy (Lower Big Muddy Seam)	1	.....	.....	2100	9.15	0.77
Converse	Big Muddy	Big Muddy (Upper Big Muddy Seam)	1	.....	.....	2240	6.37	0.97
Converse	Douglas	Outcrop (Lower Burned Seam)	1	.....	.....	2090	11.65	0.50
Converse	Glenrock	Country Bank (Seam Unnamed)	1	.....	.....	2360	6.42	0.63
Converse	Glenrock	Fairview (Seam Unnamed)	1	.....	.....	2210	7.15	0.92
Converse	Glenrock	Glenrock (Seam Unnamed)	1	.....	.....	2110	7.79	0.92
Converse	Glenrock	Prospect (Seam Unnamed)	1	.....	.....	2110	9.61	0.55
Converse	Inez	Diamond (Seam Unnamed)	1	.....	.....	2110	15.30	1.68
Converse	Inez	Inez (Seam Unnamed)	1	.....	.....	2180	11.54	0.98
Converse	Lost Spring	Harney Creek (Seam Unnamed)	1	.....	.....	1990	10.49	1.13
Converse	Lost Spring	Haynes Prospect (Seam Unnamed)	1	.....	.....	2310	7.77	1.57
Converse	Lost Spring	Onyon (Seam Unnamed)	1	.....	.....	2010	11.50	1.23
Converse	Lost Spring	Prospect ("D" Seam)	1	.....	.....	2260	5.93	0.37
Converse	Lost Spring	Resin (Seam Unnamed)	1	.....	.....	2170	13.81	1.42
Converse	Lost Spring	Sunset (Seam Unnamed)	1	.....	.....	2320	16.65	0.80
Crook	Sundance	Belshe (Seam Unnamed)	3	2150	2490	2260	14.99	6.09
Fremont	Dubois	Prospect (Seam Unnamed)	1	.....	.....	2180	15.84	4.00
Fremont	Hudson	Hickey (Seam Unnamed)	1	.....	.....	2150	5.46	0.90
Fremont	Hudson	Indian (Seam Unnamed)	7	2000	2260	2130	7.26	0.64
Fremont	Hudson	McKinley (Moss Verde Seam)	3	2080	2250	2140	9.45	1.46
Fremont	Hudson	Mitchell (Seam Unnamed)	2	2280	2310	2300	9.55	0.98
Fremont	Hudson	Proposia (Lander Seam)	2	2270	2280	2280	5.61	0.79
Fremont	Riverton	Shipton (Seam Unnamed)	1	.....	.....	2320	9.42	0.90
Hot Springs	Crosby	Big Horn (Gebo Seam)	5	2050	2380	2170	5.58	0.71
Hot Springs	Kirby	Gebo (Gebo Seam)	15	1860	2210	2020	1.40	0.65
Hot Springs	Kirby	Gwynn Prospect ("B" Seam)	1	.....	.....	2380	16.11	0.51
Hot Springs	Meeteetse	Dickie No. 1 Prospect (Seam Unnamed)	1	.....	.....	2510	11.03	0.82
Hot Springs	Thermopolis	Berry Prospect (Seam Unnamed)	1	.....	.....	2210	7.67	1.31
Johnson	Buffalo	Prospect ("B" Seam)	1	.....	.....	2180	9.37	0.79
Johnson	Casper	Prospect (Seam Unnamed)	1	.....	.....	2600	18.02	1.85
Johnson	Casper	Prospect (Seam Unnamed)	1	.....	.....	2360	9.30	0.70
Johnson	Casper	Prospect (Seam Unnamed)	1	.....	.....	2150	10.16	0.89
Johnson	Casper	Pugsley (Seam Unnamed)	1	.....	.....	2210	6.75	0.64
Lincoln	Elkol	Elkol (Elkol Seam)	2	2300	2420	2360	4.06	0.81
Lincoln	Kemmerer	Kemmerer No. 6 (Seam Unnamed)	7	2170	2310	2250	6.73	0.63
Lincoln	Sublet	Kemmerer No. 5 (No. 5 Seam)	4	2180	2240	2210	5.72	1.02
Natrona	Casper	Casper Prospect (Seam Unnamed)	1	2120	7.18	0.92
Natrona	Casper	Prospect (Seam Unnamed)	1	2360	6.79	0.53

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WYOMING—Continued.

LOCATION, BED, ETC			Number of Samples from Mine	Softening Temperature Deg. F.			Average Analysis of Dry Coal, Percentage of	
County	Town	Mine		Lowest	Highest	Average	Ash	Sulphur
Natrona	Casper	Red Ash (Seam Unnamed)	1	....	....	2290	7.60	0.67
Park	Cody	McGuffey (Seam Unnamed)	1	....	....	2670	9.49	1.08
Park	Meeteetse	Black Diamond (Seam Un- named)	1	....	....	2910	9.50	0.24
Park	Meeteetse	Greybull (Seam Unnamed)	1	....	....	2550	14.37	1.07
Park	Wiley	Eagle (Seam Unnamed)	11	....	....	2530	13.69	0.63
Park	Wiley	East Wiley (Seam Unnamed)	1	....	....	2310	9.23	1.07
Park	Wiley	West Wiley (Seam Unnamed)	1	....	....	2370	13.59	0.80
Sheridan	Acme	Acme No. 1 (Carney Seam)	16	2100	2330	2250	4.84	0.49
Sheridan	Acme	Acme No. 2 (Carney Seam)	5	2100	2150	2130	4.60	0.46
Sheridan	Carneyville	Carney (Carney Seam)	1	....	....	2150	3.68	0.43
Sheridan	Carneyville	Carney No. 1 (Carney Seam)	13	2050	2270	2140	4.48	0.47
Sheridan	Carneyville	Carney No. 2 (Carney Seam)	6	2050	2200	2140	5.00	0.51
Sheridan	Carneyville	Model (Carney Seam)	4	2120	2270	2190	9.26	0.45
Sheridan	Dietz	Dietz No. 4 (Dietz No. 2 Seam)	9	2120	2220	2180	9.03	1.30
Sheridan	Dietz	Dietz No. 7 (Dietz No. 7 Seam)	8	2040	2220	2150	6.39	0.64
Sheridan	Kooi	Hughey Prospect (Monarch Seam)	1	....	....	2150	6.48	0.41
Sheridan	Kooi	Kooi (Monarch Seam)	22	1990	2240	2080	6.36	0.83
Sheridan	Monarch	Monarch (Monarch Seam)	21	1970	2290	2190	4.85	0.56
Sheridan	Monarch	New Monarch (Monarch Seam)	8	2000	2490	2180	4.92	0.59
Sheridan	New Acme	New Acme (Monarch Seam)	4	2150	2410	2320	4.32	0.67
Sweetwater	Gunn	Gunn-Onealy "B" (No. 11 Seam)	3	1900	2030	1970	2.44	1.06
Sweetwater	Rock Springs	Prospect (Tipton Seam)	1	....	....	1980	15.33	7.52
Sweetwater	Superior	"B" (No. 1 Upper Seam)	1	....	....	2040	2.91	1.03
Sweetwater	Superior	"B" (No. 7 Seam)	4	2190	2410	2330	3.92	1.05
Sweetwater	Superior	"C" (Seam Unnamed)	4	2100	2390	2280	3.76	1.12
Uinta	Elkol	Elkol (No. 1 Seam)	2	2380	2400	2390	4.61	0.75
Uinta	Frontier	Kemmerer (No. 1 Seam)	4	2060	2190	2120	7.13	1.35
Uinta	Kemmerer	Prospect (Seam Unnamed)	1	....	....	1920	3.05	2.38
Uinta	Susie	Kemmerer No. 4 (Kemmerer No. 1 Seam)	2	2040	2270	2160	6.82	1.42
Weston	Cambria	Antelope No. 3 (Seam Un- named)	3	2600	2980	2790	18.38	5.40
Weston	Cambria	Antelope No. 4 (Seam Un- named)	3	2750	2870	2810	16.85	5.55
Weston	Moorcroft	Prospect (Seam Unnamed)	1	2400	8.13	0.76
Weston	Moorcroft	Prospect (Seam Unnamed)	1	2310	9.62	1.31



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(See Pages 65 to 68 on Proper Methods of Taking and Preparing Coal Samples)

TO THE PRODUCER OF COAL—Coal analyses made on samples taken from the face and tippie will show you whether your miners are careful in eliminating the impurities.

Knowing the quality of coal you are producing will be valuable information for your salesmen.



Coal Sampling in the Mine

Coal Sampling at Mines and Plants—Samples should be gathered so as to be representative of the gross lot of coal upon which the analysis is desired. Face samples represent the quality of coal as it lies in the seam. Samples collected at the tippie or from railroad cars at the mine or at destination represent the quality of coal shipped to the consumer. See pages 65 to 68 of this section for preparation of sample and methods of sampling.

Our trained experts can visit the mines and plants to gather the samples, or, if preferred, we can instruct one of your employees on coal sampling and mail a print showing the "Proper Methods of Preparing a Coal Sample," which will enable him to prepare representative samples.

Let Us Serve You on the Following

Proximate Analysis of Coal—Includes the percentage of moisture, ash, volatile, fixed carbon, sulphur and B.t.u. (heat units).

Fusion Temperature of Ash—This determination is most important, for it indicates at what temperature the ash or refuse in the coal begins to fuse or form clinkers. The furnace we use is so made that we get practically the same condition that exists in the fuel bed of a furnace.

Mine Investigation—We have been retained by numerous operators to go to their mines and gather samples at the face and also at the tippie as the coal passes into the railroad cars and make analyses from these samples. The difference in quality between the coal in the seam and from

railroad cars will show you whether care is being used by the miners.

Besides reporting the quality of the coal, we make a sketch showing the general make-up of the seam.

By-Product Investigation—Do not sell your coal to steam plants if it proves to be better adapted for by-product use. We have a special plant designed to carry on practical investigations showing the amount and quality of gas, ammonia, tar and coke. We are able to furnish a distillation of the tar for the oils and pitch. We also furnish with each investigation a good-sized sample of coke for examination as to physical properties, etc. About 40 to 50 pounds of coal should be sent for this test.

Ultimate Analysis of Coal—This includes determinations for moisture, carbon, hydrogen, nitrogen, oxygen, sulphur and ash.

Coal Washer Test—We are prepared to put through our laboratory, tests that will demonstrate the advisability of washing coal in order to make a cleaner and better product for the market.

Oil Analysis (Fuel and Lubricating)—Flash point, burning point, viscosity, specific gravity, etc.

TO THE CONSUMER OF COAL—The quality of coal must be known in order to obtain high efficiency in your boiler room. Representative samples should be gathered daily from cars and analyzed. (Details sent on request.)

Combustion Engineering—When coal is not giving the desired results in a plant, we are able to find out the reason for the trouble. Sometimes coal is at fault and sometimes conditions in the plant are at fault. We maintain a department that has specialized in demonstrating how coal should



Coal Sampling from Railroad Cars

be burned to the best advantage. We are able to locate the cause of the trouble and make suggestions as to how this can be remedied. We send a representative to the plant and do the actual firing when necessary in order to accomplish the desired results. We have saved trouble in plants for both the consumer and shipper of coal where difficulties have come up in the actual burning of the coal.

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Established 1881. RICHMOND TESTING LABORATORY

815 East Franklin Street, RICHMOND, VA.

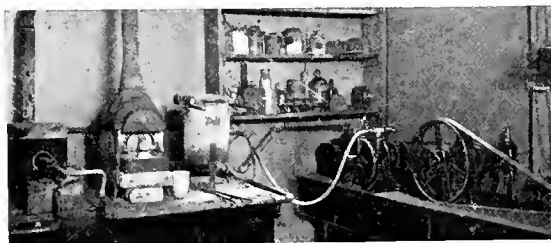
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COAL ANALYSES FOR INCREASED PROFITS

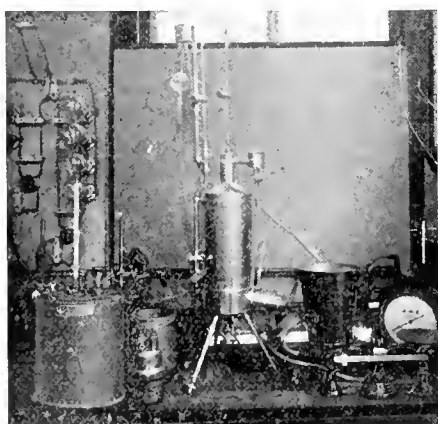
A series of coal analyses representing the output of a mine is indispensable to the operator in the economic production and disposal of his product.

For more than forty years this firm has specialized in coal analysis, following the most advanced methods and employing only modern equipment; it is therefore in position to render complete, prompt and accurate chemical service.

We make Proximate and Ultimate Analysis, determine British Thermal Unit values of Coal, Fusing Temperature of Ash of Coal, and Sample Cargoes at Tidewater.



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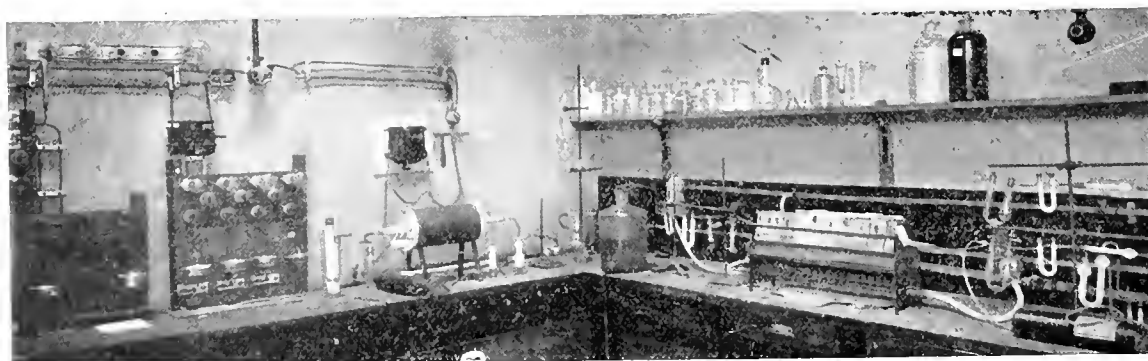


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Further, we do general analytical and research work, such as the examination of water for boiler and drinking purposes, and the analysis of ores, alloys, oils, paints and food products.

We also conduct a testing bureau for the inspection of structural and road building materials.

Your problems will receive personal study by capable experts. Information and prices on request.



Electrolytic Apparatus

Electric Corrosion
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Combustion Furnace for Ultimate Coal Analysis

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CINCINNATI, OHIO

The Chemist and the Mine Operator

The chemist, by means of his technical skill and knowledge, is able to render service in many ways to coal producers. Most frequently this service consists of **coal sampling and analyses**, and it is quite likely that this will always be the chief means of bringing the work of the chemist to the aid of coal production and salesmanship. Of this service we shall have more to say later on.

There are other ways, however, in which the analyst can serve the operator. One of the chief considerations in present day town planning is to secure an adequate supply of **pure drinking water**, water which is known to be free from disease breeding bacteria and germs. The success of a mining plant is closely bound up in the health of its employees, and a knowledge of this accounts for the very general practice among mining companies of having their drinking water analyzed at frequent intervals. The Louis G. Robinson Laboratories solicit analytical work of this kind.

In spite of the inroads of the central power station, most mines still generate their own power. One of the essentials in steam raising is to use water which is free from scale forming materials, or if such cannot be had, then it becomes of equal importance to know the ingredients of the water, so that proper correctives can be applied to stop the growth of scale, foaming, etc. It is a matter of experience that where water is taken from nearby streams, the quality of the **boiler feed water** often varies with the season of the year or the volume of water flowing. We will be glad to advise with mine officials on their feed water supply, method of taking water sample, etc., and after analysis, to recommend a proper method of water treatment.

One of the big items of expense in house maintenance is the cost of **paints and painting**. Paints vary in quality from good to bad, and in view of the number of houses in mining camps, it is a matter of economy to have your paint analyzed before final acceptance.

The Chemist and the Coal Consumer

Among the services already enumerated, the chief of these to the coal consumer, as a class, lies in the sampling and analyses of coal and coke. It is a matter of record that most coal bought today for industrial purposes is based on the chemical content of the fuel. The purchaser of coal rightly wants to know the amount of the worthless ingredients, such as **moisture and ash**, in every pound, what the **heat value** of the coal is, and whether there will be any interference with combustion through the **fusibility of the ash**.

The Louis G. Robinson Laboratories have been sampling coal deliveries and making analyses for coal consumers in many states, and guarantee satisfaction.

Coal Sampling

Coal samples may be taken (a) as a channel sample in the mine, (b) at the tippie or breaker while coal is being loaded, (c) while the coal is being unloaded at destination, (d) car or pile samples at destination. No matter how taken, the matter of sampling, let it be said here, is of such importance to the correctness of results that it should be entrusted only to an experienced and reliable person.

The Louis G. Robinson Laboratories have been taking samples and making analyses for mine operators and coal consumers for many years; we will undertake your work on the principle that the first step in the process, that of sampling, is just as vital to exactness as is the careful manipulation of the crucible, the balance or the calorimeter. We follow the methods of sampling recommended by the Bureau of Mines and in every case aim to secure a mixture which is representative of the whole.

We recommend to mine operators that channel samples be taken at various sections of the mine at regular time intervals, depending upon the rate of development or tonnage output, and, in addition, that samples at the tippie while the coal is being loaded be taken more frequently. The tippie analyses can then be checked against the channel analyses; the latter represent the perfection to which the coal may attain; the former show how nearly that perfection has been reached. Any unusual discrepancy in the two analyses enables immediate action to be taken for correction.

Coal Analyses

Our facilities and equipment for analysis are scientific and modern in every respect. Determinations of volatile matter, moisture, sulphur and phosphorus, as well as the percentages of various elements as reported in the ultimate analysis of coal, are by the methods of analyses recommended by the American Society of Testing Materials. Fusion Temperature of Ash test is done under furnace fuel bed conditions. The calorific value of coal (British thermal units) is obtained through the use of the Emerson bomb calorimeter.

Tests on Illuminating Gas and By-Product Coals

Where coals suitable for the gas or by-product industry are produced, the operator or sales agency should have on hand full data as to the coke yield, gas yield, heat value of the gas, ammonia and tar yields; also an analysis of the coke, gas, and tar. We are prepared to make all tests and analyses necessary for this information.

Reliability, Service

The first requirement on the part of an analytical laboratory is accuracy, and accuracy is the result of painstaking care. We pride ourselves on the reliability of our past work done among both the producer and consumer of coal. We stand ready to render the same quality of service to others.

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Complete Facilities, Standard Methods, Experienced Chemists, Prompt and Accurate Reports, Reasonable Charges,—THAT'S US

Smith, Rudy & Company, in their capacity as analytical chemists, offer a service to all connected with the production, distribution and consumption of coal. Our laboratories are well and completely equipped with all the necessary scientific devices to insure correct results. Our working staff consists of experienced chemists who by the use of standard methods and the benefit of proper facilities are enabled to do their work with promptness and accuracy.

Our rates are very reasonable—it's a fixed part of our policy to have them so.

Coal Sampling

Taking a coal sample carefully and correctly is as important as extreme accuracy in making the analysis. An analysis can be checked and errors detected, but it may not be possible to secure a second sample. It is well to bear in mind, therefore, that the impurities of coal are irregularly distributed throughout the mass, and both care and judgment are needed in taking the sample if it is to be representative of the coal in question and if the analysis is to be of any value. If the sample is taken in the mine we recommend that it be cut from a channel six to eight inches in width and two to four inches deep, rejecting only such portions as would be rejected in good mining practice. Samples taken while loading or in cars or piles are more dependent on the good judgment of the sampler, but the main facts to bear in mind are

that the sample should be large rather than small, and, second, that it should consist of about the same proportion of lump and fine as exists in the car or pile. After crushing and quartering, the final sample of 5 to 7 pounds should be put in an air-tight can, jar or tin bucket and sent to the chemist.

We have issued a little folder of convenient size on COAL SAMPLING in which complete instructions are given which we will be glad to send you.

Our services for sampling are available, whether for taking sample in the mine, at the tippie, from the car, from boats, or in coal yards.

Coal Analysis

When sending coal samples, it should be stated whether the **Proximate Analysis**, consisting of moisture, volatile matter, fixed carbon, ash and sulphur determinations is wanted, or the **Ultimate Analysis**, consisting of carbon, hydrogen, nitrogen, oxygen, ash and sulphur. Frequently both are desirable for the purpose of presenting more complete information on the coal.

The heat value (British thermal units) as determined in the calorimeter and the fusing temperature of the ash supply data of equal or greater importance in some cases than the proximate analysis.

Proximate Analysis

Consisting of Moisture, Volatile Matter,
Fixed Carbon, Ash and Sulphur - - -

Ultimate Analysis

Consisting of Carbon, Hydrogen, Nitrogen, Oxygen, Ash and Sulphur - - -

British Thermal Units Fusing Temperature of Ash

We also analyze Iron, Steel, Brass, Babbitt, Ores, Limestone, Clay, Lubricating Oils,
Water for Drinking or Boiler Purposes, and Many Other Materials
Beverages Tested for Wood Alcohol, Alcohol Contents, Etc.

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COKE

Furnace; Foundry; Domestic, Including Coke Derived from Gas Works, By-Product Ovens, and from Low Temperature Distillation of Coals.

Coke may be described as the carbonaceous product remaining after coal has been subjected to destructive distillation, either in the absence of air or in the presence of a limited supply, in any of the three commercial processes, viz.: beehive coking, by-product coking, gas retort coking. It contains as its chief constituent carbon, and with this minor percentages of moisture, ash, sulphur, phosphorus, and such of the volatile matter as the temperature employed failed to drive out.

The fuel originally employed for furnace use was charcoal, which, in the early days of the industry, served well because of its exceptional purity, due to the almost total absence of sulphur, and also because it satisfied the requirements for smokeless burning and infusibility. With the greater development of the blast furnace industry, charcoal became costly to secure owing to the timber supply on which it depended becoming gradually removed from the centers of iron production, and, further, because of softness of body it was incapable of standing the increased charges incidental to the use of taller stacks. Anthracite coal was also much used in the early days, and, with its natural hardness of body, was well able to sustain the pressure of the highest furnace charges, as well as to resist the dissolving action of hot carbon dioxide gas, but it was high in price and somewhat difficult to deal with in practice due to its denseness. Bituminous coal in its raw state could not be used in the blast furnaces because of its swelling, softening, and tendency to form arches which interfered with the descent of the charges and the ascent of the hot gases. Much of the heat value of the coal was also lost due to distillation of the volatile matter in the upper zones of the stack.

It is not the purpose of this article to dwell on the kinds of coal best adapted for any of the several processes, except as it may be incidental to the discussion of coke. Information referring to adaptable coals will be found under the heading "Classification of Coals—According to Use."

Furnace Coke

Furnace coke, as suggested by the name, is the fuel employed in modern blast furnace practice for the reduction of iron from the ore. A coke to meet this requirement successfully must have certain chemical and physical qualities. Chemically it must be low in ash, sulphur, and phosphorus and high in fixed carbon, which latter is the heat yielding constituent of coke. Ash is undesirable for the reason that it has no heat value, although to it is sometimes ascribed the virtue of supplying strength to the coke cells; sulphur and phosphorus are both detrimental for the reason that sulphur, being readily

absorbed by molten iron, makes the resulting steel "hot short," while phosphorus makes it "cold short."

It is largely physical structure which gives coke its advantage for metallurgical work over other forms of solid fuel. Furnace coke must be uniformly strong in order that it may withstand the weight of the furnace charge. A spongy or porous coke would become crushed and much of it lost by the dissolving action of ascending carbon-dioxide gas. The same difficulty will appear if the cell walls are thin. Fulton gives 56 per cent., the figure of Connellsville coke, as the most desirable volume of cells for American blast furnace practice. It does not follow, however, that the harder the coke the better it is for any furnace plant. By means of mixing coals it is possible to obtain a resulting coke which will be very hard, strong, dense and in large pieces. In certain type furnaces such a coke may not give good results, causing the blast pressure to drop, excessive heat in the upper zones and, worst of all, a high-sulphur iron. With a less dense coke all such troubles might be made to disappear.

Coke, in order to have the required strength, must be made from a coal suited to the coking process and must be properly burned. This requires the exercise of care and judgment on the part of the coke yard supervisor. Sometimes charges of coal are put into beehive ovens in excess of the amount which can be entirely coked in the prescribed period of 48 or 72 hours. When this coke is drawn it shows a mass of spongy-black uncoked coal at the bottom, known amongst coke men as "black butts." The same condition may be caused by careless leveling of the charges in the oven, by poor judgment in the regulation of air to the oven while the charge is being coked, or by permitting the oven to be excessively watered or otherwise chilled after a charge is drawn. Furnace men object to coke with black butts, claiming that it makes it difficult to calculate with accuracy the fuel charge for the furnace and that because of its softness such coke is too easily crushed.

Furnace coke is usually burned for 48 hours in the beehive oven and for 16 to 18 hours in the by-product oven. Coke from the former type of oven is the larger in size, has a higher percentage of cell space, and when drawn has a more silvery lustre, due to being watered in the oven, whereas by-product coke is quenched after it has been discharged from the oven and has a darker appearance. For a considerable period after the introduction of by-product coke into furnace use, a prejudice existed against it because of these differences, and it was with some difficulty that the furnace man was brought to see that it was in no wise inferior to beehive coke. In the early days some trouble was experienced owing to by-product coke

being softer and not so thoroughly carbonized, hence was too easily attacked by carbon-dioxide gas in the blast furnace; others complained that it made furnace operation difficult by preventing a rapid and continuous movement of the stock. All such prejudice and objections gradually disappeared as the usage of by-product coke was extended. It was found to be more uniform in size and harder than beehive coke, with a smaller percentage of cell spaces and, therefore, about 10 per cent. heavier bulk for bulk. W. H. Blauvelt* states that "the by-product oven, with its variable mixture of coals, variable heats, coking time, width of oven, fineness of coal discharged, and other controlling factors, permits a control of coke structure formerly impossible. The problem is to determine, first, what is the structure best adapted to standard furnace practice, while recognizing that special practice requires modification of structure; second, what conditions are necessary to produce it."

Coke used in lead, copper, and other non-ferrous blast furnaces which are run with a low-pressure should be more porous than coke used in iron furnaces.

The heating value of metallurgical coke ordinarily lies between 12,500 and 13,000 B. t. u. per pound. A fair average for a good coke may be stated as 12,900 B. t. u. per pound.

Foundry Coke

Foundry coke is used in cupolas, and since the burden here is more concentrated, larger and tougher pieces are required. The coal charge from which it is made is usually burned in the beehive oven for 72 hours, which produces a denser and stronger coke than that burned for 48 hours and used for blast furnaces.

Domestic Coke

The introduction of coke for domestic use dates back to the close of the eighteenth century, gas house coke being used in grates in England in a small way for a number of years. The use of bituminous coals there, as here, has ever been attended with the inconveniences of smoke and dirt, not only to the household, but to the entire community. The smoke "nuisance," as it is properly termed, has received the attention of investigators for many years. The monetary loss in cities is surprisingly great. According to the Bureau of Mines,† "the cost to the community has been investigated in detail in several large cities. The committee on smoke prevention of the Cleveland Chamber of Commerce in 1909 fixed the annual loss due to smoke in the city of Cleveland at \$6,000,000, or about \$12 for every man, woman and child each year. Similar investigations made by the Mellon Institute in Pittsburgh showed a total annual cost of \$10,000,000, or about \$20 per capita. This estimate does not include such items as depreciation in value of property, compulsory absence of certain industries, injury to health, or impaired mental efficiency." In addition to these losses there must be added that loss due to the waste of fuel as indicated by clouds of smoke pouring forth from stacks and chimneys—indisputable evidence of the incomplete utilization of fuel values in coal. These various sources of loss are so well understood, and have been so much

dwelt upon in recent years that there is no need to make extended references to them here. The fact that stands out prominently through all these years is that in spite of all attempts made to effect improvements in stoves, furnaces or hearths whereby high volatile coals may be burned economically, the smoke nuisance still persists. The point of attack is obviously in the raw coal itself.

Anthracite coal is everywhere recognized as the best type of smokeless fuel, as it is very clean and easy to regulate and control. It is carefully prepared in sizes well suited to all kinds of domestic service and in every respect is the premier coal for the household. An unfortunate characteristic of this coal is that it is found only in a relatively small section of Eastern Pennsylvania, hence its use is largely restricted to a district lying within reasonable freight distance of the mines.

In view of the troubles encountered in burning bituminous coal, and the inaccessability of anthracite coal, the coke industry was early turned to for relief. Gas house coke, already referred to, failed to arouse the enthusiasm of the English household. No great amount of attention was given to its quality by the manufacturer, it being regarded solely as a by-product of little value derived in the making of illuminating gas. Its softness and black dead look were also against it, but the main trouble was in its use, objections being raised against the difficulty in ignition, the dull, cheerless fire, and the fumes given off in burning. All of these troubles were brought about by lack of draught, the result being that coke as a fuel fell into disrepute.

No sustained attempt has ever been made to introduce coke made in beehive ovens into domestic use, although at various places such coke is crushed and separated into sizes for supplying domestic trade. Beehive coke is usually characterized by a hard outer skin of graphitic carbon, produced by the breaking down of the gases evolved in the process with the deposition of carbon. The skin affects the ignition point and accounts for one reason why beehive coke is not so well adapted to domestic use as is by-product coke, as with the latter this hard skin does not appear.

With the rapid growth of the by-product industry, the use of coke for heating and coking received more consideration, with the result that facilities for supplying coke to the household are now very different from what they were in the earlier days when domestic coke was produced in gas works. Coke at present supplied to the trade is derived in the ordinary procedure of coking in by-product ovens, that is, coal is coked at the usual temperature and for the usual period of time. Such valuable ingredients as gas, ammonia, liquor, and tar are distilled from the coal, leaving but a small percentage of volatile matter remaining in the coke. Great care is taken in sizing and preparing the coke for domestic use, and also in the complete removal of breeze and dirt. The following table shows approximately the usual sizes produced:‡

	Size of Square Opening on Screen	
	Through	Over
Egg Coke	3.5 in.	1.5 in.
Nut Coke	1.5 in.	1.0 in.
Pea Coke	1.0 in.	0.5 in.
Breeze	0.5 in.	... in.

*"The By-Product Coke Oven and Its Products," March, 1918, Bulletin, A. I. M. M. E.

†Tech Paper 242, Bureau of Mines, "Why and How Coke Should be Used for Domestic Heating," Henry Kreisinger and A. C. Feldner.

‡"The By-Product Oven and Its Products," W. H. Blauvelt, March, 1919, Bulletin, A. I. M. M. E.

Coke as a domestic fuel has a number of advantages over both hard and soft coal. The locality in which anthracite coal is found is irrevocably fixed, hence distance from the source of supply to the points of consumption will never be lessened. By-product coking plants, on the other hand, may be situated either at the point of coal production or else placed in thickly populated sections and coal shipped to them. Since coals suitable for by-product purposes are widely situated geographically, freight rates are correspondingly less than those applying to anthracite coal. Ton for ton coke also gives more heat than hard coal and is easier to ignite.

In comparison with soft coal, coke is much cleaner and more easily handled because of its light weight. Unless too thin a fire is carried, it will not burn out grates, and the ash produced is of a fine nature without the formation of clinker. "When burning coke a furnace requires much less attention than when burning soft coal. The time usually given to poking fires, cleaning the furnace flues and the house, can be spent much more profitably in some other way. Surely the most disagreeable work a householder is called upon to do is to clean the soot out of his furnace and flues. Moreover, the cleaning is not limited to furnace and flues alone, but extends to the entire house. With hot-air heating particularly, some of the soot may be carried into the house, necessitating more frequent house cleaning, curtain washing, and papering. The cleanliness of coke will appeal especially to the housewife."*

The ignition point of by-product coke is governed by both its chemical and physical conditions. In its manufacture the percentage of volatile matter is reduced to almost nothing, as it is distilled at the temperature employed in the production of metallurgical coke. The ignition of this coke does not depend upon its content of volatile matter, but rather upon its physical condition, that is, its cellular structure. The range of coals, and the possibilities for mixing, permitted by the by-product oven, is such as to produce coke having a very firm structure and at the same time characterized with a sufficient development of cellular space so as to permit of easy combustion. It is, moreover, free from the graphitic coating so commonly noticed in beehive coke, and which acts as a hindrance to ready ignition. Objections are sometimes urged against coke for domestic purposes, but these are based largely upon a lack of familiarity with its use. Coke is unlike both hard and soft coal, but not so much unlike either that the method of firing is difficult to understand. Its cellular structure gives it an intensity of combustion and susceptibility to chill that renders its control different from that usually employed with coals. The rules governing its burning are few in number, centering largely on thickness of fuel bed as a means of draft control, and full instructions are readily gotten, either from the companies supplying coke or from the Bureau of Mines.

Coke Made at Low Temperature

It was suggested many years ago that half-coked coal be used as a fuel supply, and numerous attempts were made to produce a commercial article

by carbonizing coal at the ordinary gas-retort temperature, drawing the charge when half the usual volume of gas had been distilled out of it. All of these attempts resulted in failure, due to the outer portion of the charge being heated to such a degree that it became hard coke and was difficult to ignite, whereas the interior of the charge received an insufficient amount of heat necessary to drive off the smoke and tar producing substances. In 1902 experiments were begun at the University of Illinois, having in mind the modification of bituminous coal in such a manner as to eliminate largely the constituents which tend to produce smoke in combustion and which would consequently give to the material the essential properties of anthracite or semi-anthracite coal.†

Coke resulting from the low temperature process has from 4 to 12 per cent. of volatile matter remaining, but since it has been heated above 750° C. there should be none of the tar constituents remaining. The behavior of this coke in an open grate has been summed up as follows:‡ "The coke ignites readily, it retains its shape through the process of combustion, a bed of glowing coals quickly results, the very indifferent provisions for draft as found in an open grate are sufficient for keeping the combustion lively, there is no smoke produced, and fire is retained over a long period of time, because the interior of the larger pieces hold the fire and continues the combustion until all of the carbonaceous material is consumed. While the temperature commonly attained by a grate fire would not furnish positive evidence as to the formation of clinker, the indications, so far as they went, were altogether favorable. A small amount of coke was at hand for the test, but so far as observations could be made, it was as favorable as the test in the open grate."

While coke made by the low temperature process has not as yet advanced beyond the experimental stages, the ideas involved promise much for the future. It has already been demonstrated that a fuel much superior to the raw coal used can be made, and if the process can be worked out to produce coke commercially on a large scale, a ready sale for the product may be safely anticipated.

Modified Method of Carbonizing at Low Temperature

During the past few years an elaborate series of experiments have been conducted at Irvington, N. J., by Chas. H. Smith in the development of a process whereby coal can be treated by low temperature distillation methods and made to yield a smokeless coal, along with a yield of tar oils double that derived from the ordinary by-product practice. The fuel derived is called Carbocoal. "The essential features of the Smith process are two distillations carried on at different temperatures, first of the raw coal and second of the raw briquets. The raw coal, after being crushed, is distilled at a relatively low temperature, 850° to 900° F., and the volatile contents are reduced to the desired point. The result of this first distillation is a large yield of gas and tar oils, and a carbonaceous product termed semi-carbocoal. The semi-carbocoal is next mixed with a certain proportion of pitch obtained from

*Tech Paper 242, "Why and How Coke Should be Used for Domestic Heating."
†University of Illinois, Bulletin No. 24, "Modification of Illinois Coal by Low Temperature Distillation," by S. W. Parr and C. K. Francis.
‡Ibid.

the tar produced in the process, and this mixture is briquetted. The briquettes are then subjected to an additional distillation at a higher temperature, approximately 1800° F., resulting in the production of carbocoal, the recovery of additional tar and gas, and a substantial yield of ammonium sulphate."[†]

The work begun at Irvington, even though of an experimental nature, was so successful that shortly after the United States became involved in the late war, and the necessity for providing a greater quantity of the by-products derived from coal for munition purposes became pressing, the Government arranged for the building of a large commercial plant at South Clinchfield, Virginia, adjacent to the coal fields. This plant began operation on the first of August, 1920. In addition to the fuel Carbocoal there is produced gas in the amount of approximately 9,000 cubic feet per ton of coal carbonized, a yield of tar more than double that obtained in the ordinary by-product coking

process, and ammonium sulphate equal in amount to that normally recovered in the ordinary by-product coking process.

Carbocoal as it comes from the high-temperature retorts is in the form of hard briquets of a density much greater than that of ordinary coke, and only slightly less than that of coal. It contains only from one and one-half per cent. to four per cent. of volatile matter, and consists mostly of fixed carbon. As a domestic fuel it compares favorably with anthracite. It has a heat value of about 13,000 B. t. u. (based on a coal with 7 per cent. ash). In combustion it is smokeless, it ignites with comparative ease and being of uniform size and quality it burns evenly and freely, leaving under proper firing conditions a clean light ash. In all cases the tendency to clinker is much less than with the coal from which the fuel is made.

[†]"Carbocoal," by Chas. T. Malcolmson, in September Bulletin, A. I. M. M. E.

BY-PRODUCTS OBTAINED FROM COKE-OVEN OPERATIONS IN 1920*

The table summarizes reports received by the Geological Survey from operators of by-product coke ovens covering the year 1920. The statistics are subject to revision on receipt of final reports from two companies for which at present complete information is not available. The total value of the by-products sold including gas used about the works for other purposes than heating by-production ovens was \$93,626,000.

To recover these by-products required the carbonization of 44,234,000 net tons of coal. The quantity of merchantable coke produced was 30,781,000 tons, indicating a yield of coke from coal of 69.6 per cent. In addition, the operators reported a recovery of 2,322,000 tons of screenings and breeze. The yield of coke including breeze was 74.9 per cent of the coal charged during the year.

Product—	Unit	Production	Sales	Value of sales
Tar	Gallons	360,000,000	172,000,000	\$7,400,000
Ammonia:				
Sulphate	Pounds	675,000,000	629,000,000	27,150,000
Ammonia liquor and anhydrous	Pounds NH ₃	65,000,000	63,000,000	8,300,000
Ammonia (a)	Pounds	935,000,000	881,000,000	35,450,000
Total sulphate equivalent	Pounds			
Gas (b)	M cu. ft.	476,000,000	227,000,000	32,050,000
Benzol products:				
Crude light oil (c)	Gallons	109,000,000	843,000	96,000
Benzol, crude	Gallons	8,960,000	1,730,000	430,000
Refined	Gallons	16,890,000	15,580,000	4,030,000
Motor fuel (d)	Gallons	55,100,000	53,200,000	12,070,000
Tolu, crude	Gallons	287,000		
Refined	Gallons	2,740,000	2,490,000	760,000
Solvent naphtha	Gallons	5,420,000	4,530,000	820,000
Naphthalene, crude	Pounds	10,710,000	10,750,000	290,000
Refined	Pounds	3,450,000	3,700,000	200,000
Other products (e)				30,000
Total value				\$93,626,000

*Preliminary figures, subject to revision.

(a) Includes anhydrous ammonia reported as such, and ammonia liquor converted to equivalent in anhydrous ammonia. Of this, the quantity sold in the form of ammonia liquor was equivalent to 19,000,000 pounds NH₃.

(b) Of the 476,000,000 M of gas produced, 237,000,000 M was used in heating coke ovens and 12,000,000 M was wasted. The distribution of the 227,000,000 M shown as "sold" was as follows:

	M cu. ft.	Value at plant
Used under boilers or other coke plant equipment	24,000,000	\$ 2,150,000
Used in steel or other affiliated plant	150,000,000	14,200,000
Distributed through city mains	53,000,000	15,700,000
	227,000,000	\$32,050,000

(c) The quantity of crude light oil reported refined on the premises was 106,000,000 gallons.

(d) The percentage of benzol reported in the motor fuel ranged from fifty to ninety.

(e) Includes coal tar, crude heavy solvent, retort carbon, pyridin oil, etc.

AVERAGE RECOVERY PER NET TON OF COAL CHARGED INTO BY-PRODUCT OVENS IN 1918, 1919 AND 1920

	1918	1919	1920
NH ₃ (all forms) expressed in terms equivalent ammonium sulphate	18.9	20.8	21.2
Tar	7.1	8.1	8.1
Crude light oil	2.4	2.7	2.7
Gas	10.4	11.6	10.8

The progress of and the fluctuations in the coke trade of the Connellsville region, during the past 41 years, or since it assumed importance as an industry, is comprehensively shown in the following tabulation. This gives the total number of available ovens at the close of each year, the annual output, the average price per ton and the gross value, as compiled and published annually in The Courier since 1880:

Year	Ovens	Shipped	Price	Revenue
1880	7,211	2,205,946	\$1.79	\$ 3,948,643
1881	8,208	2,639,002	1.63	4,301,573
1882	9,283	3,043,394	1.47	4,473,889
1883	10,176	3,552,402	1.14	4,049,738
1884	10,543	3,192,105	1.13	3,607,078
1885	10,471	3,096,012	1.22	3,777,134
1886	10,952	4,180,521	1.36	5,701,086
1887	11,923	4,146,989	1.79	7,437,669
1888	13,975	4,955,553	1.19	5,884,081
1889	14,458	5,930,428	1.34	7,974,663
1890	16,020	6,464,156	1.94	12,537,370
1891	17,204	4,760,665	1.87	8,903,454
1892	17,256	6,329,452	1.83	11,598,407
1893	17,513	4,805,623	1.49	7,141,031
1894	17,834	5,454,451	1.00	5,454,451
1895	17,947	8,244,438	1.23	10,140,658
1896	18,351	5,411,602	1.90	10,282,043
1897	18,628	6,915,052	1.65	11,409,835
1898	18,643	8,460,112	1.55	13,113,179
1899	19,689	10,129,764	2.00	20,259,528
1900	20,954	10,166,234	2.70	27,448,832
1901	21,575	12,609,949	1.95	24,589,400
1902	26,329	14,138,740	2.37	33,508,714
1903	28,092	13,345,230	3.00	40,035,906
1904	29,119	12,427,468	1.75	21,748,069
1905	30,842	17,896,526	2.26	40,446,149
1906	34,059	19,999,326	2.75	54,998,146
1907	35,697	19,029,058	2.90	55,184,268
1908	37,842	10,700,022	1.80	19,260,040
1909	39,158	17,785,832	2.00	35,571,664
1910	39,137	18,689,722	2.10	39,248,416
1911	38,904	16,334,174	1.72	28,094,780
1912	38,884	20,000,873	1.92	38,401,676
1913	39,067	20,097,901	2.95	59,288,808
1914	37,965	14,075,638	2.00	28,151,276
1915	38,986	17,921,216	1.80	32,258,188
1916	38,862	21,654,502	2.58	55,768,615
1917	39,110	17,806,187	6.25	111,288,631
1918	37,091	16,138,590	7.25	117,094,777
1919	35,758	10,254,640	4.70	48,196,808
1920	35,678	10,750,227	8.30	89,226,854

LIST OF COKE OVENS

Bee-hive, Rectangular and By-Product in the United States; Arranged Alphabetically
By States and By Companies

BEE HIVE AND RECTANGULAR

ALABAMA

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF PLANT	SHIPPING POINT	RAILROAD	NO. OF OVENS	TYPE OF OVENS
The Alabama Co.	Birmingham, Ala.	Brookwood.	Brookwood, Ala.	L. & N.	315	Bee Hive
The Alabama Co.	Birmingham, Ala.	Lewisburg (Mary Lee)	Boyles, Ala.	Mary Lee.	320	Bee Hive
The Alabama Co.	Birmingham, Ala.	Searies.	Searies, Ala.	L. & N.	250	Bee Hive
Empire Coal Co.	Birmingham, Ala.	Empire.	Empire, Ala.	Frisco.	100	Bee Hive
Gulf State Steel Co.	Birmingham, Ala.	Sayre.	Sayre, Ala.	L. & N.	150	Bee Hive
Gulf State Steel Co.	Birmingham, Ala.	Virginia.	Bessemer, Ala.	L. & N.	301	Bee Hive
Imperial Coal & Coke Co.	Birmingham, Ala.	Dixiana.	Bradford, Ala.	L. & N.	103	Bee Hive
New Castle Coal Co.	Birmingham, Ala.	New Castle.	New Castle, Ala.	L. & N.	375	Bee Hive
New Connellsville Coal & Coke Co.	Birmingham, Ala.	New Connellsville.	Birmingham, Ala. ....	.....	50	Bee Hive
Pratt Consolidated Coal Co.	Birmingham, Ala.	Dora.	Dora, Ala.	Frisco.	60	Bee Hive
Republic Iron & Steel Co. (Southern Dist.)	Birmingham, Ala.	Thomas.	N. Birmingham, Ala.	Southern.	900	Bee Hive
Republic Iron & Steel Co. (Southern Dist.)	Birmingham, Ala.	Warner.	Republic, Ala.	Southern.	100	Bee Hive
Sloss-Sheffield Steel & Iron Co.	Birmingham, Ala.	Brookside.	Brookside, Ala.	Southern.	99	Bee Hive
Sloss-Sheffield Steel & Iron Co.	Birmingham, Ala.	Flat Top.	Flat Top, Ala.	Southern.	200	Bee Hive
Sloss-Sheffield Steel & Iron Co.	Birmingham, Ala.	Ivy.	Dora, Ala.	Frisco.	200	Bee Hive
Sloss-Sheffield Steel & Iron Co.	Birmingham, Ala.	Rlossburg No. 3.	Rlossburg, Ala.	Southern.	350	Bee Hive
Sloss-Sheffield Steel & Iron Co.	Birmingham, Ala.	New Found.	Brookside, Ala.	Southern.	87	Bee Hive
Sloss-Sheffield Steel & Iron Co.	Birmingham, Ala.	Coalburg.	Coalburg, Ala.	Southern.	61	Bee Hive
Sloss-Sheffield Steel & Iron Co.	Birmingham, Ala.	Coalburg.	Coalburg, Ala.	Southern.	150	Bee Hive
Talladega Furnace Co.	411 Broad St., New York, N. Y.	Coal City.	Coal City, Ala.	Seaboard Air Line L. & N., W. & B., A. G. S., Soul., M. & O.	60	Bee Hive
Tennessee Coal, Iron & R. R. Co.	Birmingham, Ala.	Blount.	Blount, Ala.	L. & N.	2974	Bee Hive
Tennessee Coal, Iron & R. R. Co.	Birmingham, Ala.	Blue Creek.	Johns, Ala.	L. & N.		
Tennessee Coal, Iron & R. R. Co.	Birmingham, Ala.	Pratt Nos. 1 & 2.	Shafton, Ala.	Birmingham Sou.		
Tennessee Coal, Iron & R. R. Co.	Birmingham, Ala.	Pratt Nos. 3 & 4.	Easley, Ala.	Birmingham Sou.		
Tennessee Coal, Iron & R. R. Co.	Birmingham, Ala.	Pratt No. 5.	Wylam, Ala.	Birmingham Sou.	100	Bee Hive
Yolande Coal & Coke Co.	Birmingham, Ala.	No. 1.	Yolande, Ala.	L. & N.		
TOTAL.					7,308	OVENS

COLORADO

American Smelting & Refining Co.	Cokedale, Colo.	Cokedale.	Cokedale, Colo.	Colo. & Sou., D. & R. G.	350	Bee Hive
Colorado Fuel & Iron Co. (The)	Denver, Colo.	Crested Butte.	Crested Butte, Colo.	C. & W.	154	Bee Hive
Colorado Fuel & Iron Co. (The)	Denver, Colo.	Segundo.	Segundo, Colo. ....	.....	800	Bee Hive
TOTAL.					1,304	OVENS

ILLINOIS

Illinois Fuel Co. (The)	Sparta, Ill.	Sparta.	Sparta, Ill.	Illinois Sou., M. & O.	102	Bee Hive
TOTAL.					102	OVENS

KENTUCKY

Edgewater Coal Co.	Syracuse, N. Y.	Coaldale.	Hellier, Ky.	C. & O.	60	Bee Hive
Marrowbone Mining Co.	Lookout, Ky.	Marrowbone.	Reckhouse, Ky.	C. & O.	32	Bee Hive
St. Bernard Mining Co.	Earlington, Ky.	Earlington.	Earlington, Ky.	L. & N.	155	Bee Hive
Wisconsin Steel Co.	Harvester Bldg., Chicago, Ill.	Wisconsin Steel.	Benham, Ky.	L. & N.	408	Bee Hive
TOTAL.					655	OVENS

NEW MEXICO

Phelps Dodge Corporation.	Dawson, N. M.	Dawson.	Dawson, N. M.	El Paso & Southwestern.	416	Bee Hive
St. Louis, Rocky Mtn. & Pacific Co.	Raton, N. M.	Kochlin.	Kochlin, N. M.	St. L. R. M. & P.	210	Bee Hive
St. Louis, Rocky Mtn. & Pacific Co.	Raton, N. M.	Gardiner.	Gardiner, N. M.	A. T. & S. F.	374	Bee Hive
TOTAL.					1,030	OVENS

OHIO

Armstrong Coal Co.	Jackson, O.	Jackson.	Jackson, O.	D. T. & I.	125	Bee Hive
Black Diamond Co.	Columbus, O.	Black Diamond High Shaft.	Pales, O.	T. & C.	50	Bee Hive
Steubenville Coal & Mining Co.	Steubenville, O. ....	.....	Steubenville, O.	P. C. C. & St. L.	2	Bee Hive
TOTAL.					177	OVENS

OKLAHOMA

Blue Ridge Coal & Coke Co.	1116 Colcord Bldg., Okla. City, Okla.	McCurtain.	McCurtain, Okla.	F. S. & W.	200	Bee Hive
TOTAL.					200	OVENS

PENNSYLVANIA

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF PLANT	SHIPPING POINT	RAILROAD	NO. OF OVENS	TYPE OF OVENS
Alverton Coal & Coke Co.	Alverton, Pa.	Union	Alverton, Pa.	P. R. R., B. & O., P. & L. E., W. Md.	50	Bee Hive
American Manganese Mfg. Co.	Philadelphia, Pa.	Furnace	Dunbar, Pa.	P. R. R.	226	Bee Hive
American Coke Corp.	Oliver Bldg., Pittsburgh, Pa.	American No. 1	Brazzell, Pa.	P. R. R.	142	Bee Hive
American Coke Corp.	Oliver Bldg., Pittsburgh, Pa.	American No. 2	Masontown, Pa.	P. R. R.	240	Bee Hive
American Coke Corp.	Oliver Bldg., Pittsburgh, Pa.	Orient Shaft	Orient, Pa.	M. R. R.	480	Bee Hive
Atlantic Crushed Coke Co.	Greensburg, Pa.	Atlantic No. 2	Derry, Pa.	P. R. R.	120	Bee Hive
Atlas Coke Co.	Leetonia, O.	Lafayette	Helen, Pa.	P. R. R.	220	Bee Hive
Bixler Coal & Coke Co.	Edison Bldg., Pittsburgh, Pa.	Little Gem	Penns Station, Pa.	B. & O.	40	Bee Hive
Bourne-Fuller Coke Co.	Uniontown, Pa.	Scarlight	Low Phos, Pa.	Monon.	378	Bee Hive
Bowman Bros Co.	McKeesport, Pa.	Fairview	McKeesport, Pa.		6	Bee Hive
Bradenville Coal & Coke Co.	Blairsville, Pa.	Bradenville	Bradenville, Pa.	P. R. R.	244	Bee Hive
Brownfield Coal & Coke Co.	Uniontown, Pa.	Myer	Tarr, Pa.	P. R. R.	32	Bee Hive
Brush Run Coal Co.	Mt. Pleasant, Pa.	Brush Run	Mt. Pleasant, Pa.	B. & O.	30	Bee Hive
Ryrie Coal & Coke Co.	Scottsdale, Pa.	Virgie	Yukon, Pa.	P. R. R.	42	Bee Hive
Cascade Coal & Coke Co.	Buffalo, N. Y.	Sykesville	Sykes, Pa.	B. & S.	200	Bee Hive
Cascade Coal & Coke Co.	Buffalo, N. Y.	Sykesville	Sykes, Pa.	B. & S.	200	Rectangular
Cascade Coal & Coke Co.	Buffalo, N. Y.	Tyler	Tyler, Pa.	B. & S.	400	Bee Hive
Century Coke Co.	Brownsville, Pa.	Century	Simpson	Monongahela	205	Bee Hive
Champion Connellsville Coke Co.	Brownsville, Pa.	Champion	Brownsville, Pa.	Monongahela	40	Bee Hive
Champion Gas Coal Co.	Millisboro, Pa.	Champion	Champion, Pa.	P. V. & C.	257	Bee Hive
City Coal Co.	Latrobe, Pa.	Latrobe	Latrobe, Pa.	P. R. R.	65	Bee Hive
Clare Coke Co.	Greensburg, Pa.	Clare	Clare, Pa.	Penna.	150	Bee Hive
Cochran Bros	Dawson, Pa.	Spring Grove	Dawson, Pa.	B. & O.	61	Bee Hive
Colonial Iron Co.	Riddlesburg, Pa.	Colonial	Riddlesburg, Pa.	H. & B. T.	216	Bee Hive
Connellsville Coke & Fuel Co.	Connellsville, Pa.	Hazelburg	Ligonier, Pa.	P. R. R.	80	Bee Hive
Connellsville Central Coke Co.	Pittsburgh, Pa.	Herbert	Low Phos, Pa.	Penna.	210	Rectangular
Connellsville Central Coke Co.	Pittsburgh, Pa.	Low Phos.	Low Phos, Pa.	P. R. R.	250	Bee Hive
Connellsville Mutual Coke Co.	Scottsdale, Pa.	Love	Mutual, Pa.	P. R. R.	32	Bee Hive
Consolidated Coke Co.	2126 Oliver Bldg., Pittsburgh, Pa.	Donald Nos. 1 & 2	Grays Landing, Pa.	Penna.	402	Bee Hive
Consolidated Coke Co.	2126 Oliver Bldg., Pittsburgh, Pa.	Donald No. 3	Grays Landing, Pa.	Penna.	160	Bee Hive
Consolidated Coke Co.	2126 Oliver Bldg., Pittsburgh, Pa.	Sterling	Masontown, Pa.	Penna.	310	Bee Hive
Donohoe Coke Co.	Greensburg, Pa.	Donohoe	Greenwald, Pa.	P. R. R.	193	Bee Hive
East Connellsville Coke Co.	Connellsville, Pa.	Hilltop	Newcomer, Pa.	Penna.	52	Bee Hive
Eastern Bituminous Coal Mining Bonds	Altoona, Pa.	Frugality		P. R. R.	99	Bee Hive
Ellsworth Collieries Co.	Lackawanna, N. Y.	Ellsworth	Ellsworth, Pa.	P. R. R.	205	Bee Hive
Ellsworth Collieries Co.	Lackawanna, N. Y.	Cokeburg	Cokeburg, Pa.	P. R. R.	285	Bee Hive
Etna-Connellsville Coke Co.	Connellsville, Pa.	Garwood	Simpson, Pa.	P. R. R.	122	Bee Hive
Fairchance Coal & Coke Co.	Uniontown, Pa.	Fairchance	Fairchance, Pa.	B. & O.	6	Bee Hive
Fayette Coke Co.	New Salem, Pa.	Shamrock	New Salem, Pa.	M. R. R.	260	Bee Hive
Franklin Coke Co.	Vanderbilt, Pa.	Leon	Smock, Pa.	Penna.	30	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Adelaide	Adelaide, Pa.	P. & L. E.	150	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Baggaley	Baggaley, Pa.	P. R. R.	122	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Bitner	Bitner, Pa.	Penna.	300	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Bridgeport	Brownsville, Pa.	P. & L. E.	190	Rectangular
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Boffington	New Salem, Pa.	P. R. R.	126	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Calumet	Calumet, Pa.	P. R. R.	260	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Collier	Collier, Pa.	P. R. R., B. & O.	400	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Colonial No. 1	Smock, Pa.	P. R. R.	156	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Colonial No. 3	Rowes Run, Pa.	P. R. R.	300	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Colonial No. 4	Grindstone, Pa.	P. R. R.	400	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Continental No. 1	Continental Wks. No. 1, Pa.	P. R. R., B. & O.	326	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Continental No. 2	Walnut Hill, Pa.	P. R. R., B. & O.	120	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Crossland	Crossland, Pa.	Penna., B. & O.	233	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Davidson	Davidson, Pa.	P. R. R., B. & O.	250	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Dearth	Low Phos, Pa.	P. R. R.	400	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Footdale	Footdale, Pa.	Penna.	272	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Hecla No. 1	Hecla, Pa.	P. R. R.	200	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Hecla No. 2	Tranger, Pa.	P. R. R.	300	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Hecla No. 3	Hecla, Pa.	P. R. R.	249	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Juniata	Juniata, Pa.	B. & O., O. & B.	306	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Kyle	Fairchance, Pa.	P. R. R.	499	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Leisenring No. 1	Leisenring, Pa.	P. R. R., B. & O.	496	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Leisenring No. 2	Rute, Pa.	P. R. R.	502	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Leisenring No. 3	Monarch, Pa.	P. R. R.	304	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Leith	Leith, Pa.	P. R. R., B. & O.	227	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Lemont No. 1	Lemont Owens, Pa.	P. R. R.	350	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Lemont No. 2	Lemont, Pa.	P. R. R.	350	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Mammoth	Mammoth, Pa.	P. R. R.	299	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Marguerite	Marguerite, Pa.	Penna.	195	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Mutual	Mutual, Pa.	Penna.	256	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Oliphant	Oliphant Furnace, Pa.	P. R. R.	400	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Phillips	Vance Mill Junction, Pa.	Penna.	443	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Redstone	Brownfield, Pa.	B. & O.	250	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	South West No. 1	Morewood Coke Works, Pa.	P. R. R.	60	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	South West No. 3	Tarr, Pa.	P. R. R.	901	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Standard	Standard, Pa.	B. & O.	464	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Trotter	Trotter, Pa.	P. R. R., B. & O.	350	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	United	United, Pa.	P. R. R.	300	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Wynn	Wynn Works, Pa.	Penna.	500	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	York Run	York Run, Pa.	P. R. R.	245	Bee Hive
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Youngstown	Stambaugh, Pa.	P. R. R., B. & O.	58	Bee Hive
Genuine Connellsville Coke Co.	Waltersburg, Pa.	Park Hill	Waltersburg, Pa.	P. R. R., P. V. & C.	101	Bee Hive
Gilmore Coke Ovens	Uniontown, Pa.	Gilmore	Smiley, Pa.	B. & O.	96	Bee Hive
Glen White Coal & Lumber Co.	Baltimore, Md.	Glen White No. 2	Kittanning Point, Pa.	P. R. R.	202	Bee Hive
Gracetown Coal & Coke Co.	50 E. 42nd St., New York, N. Y.	Gracetown	Gracetown, Pa.	P. R. R.	128	Bee Hive
Greensburg-Connellsville Coal & Coke Co.	First Natl. Bank Bldg., Pittsburgh, Pa.	Old Colony	North Ligonier, Pa.	P. R. R.	50	Bee Hive
Hastings Coal & Coke Co.	Kinsport, Pa.	Isabella	Isabella, Pa.	Monongahela	124	Bee Hive
Hecla Coal & Coke Co.	Pittsburgh, Pa.	Isabella	Isabella, Pa.	Monongahela	136	Rectangular
Hecla Coal & Coke Co.	Pittsburgh, Pa.	Griffin No. 1	Held, Pa.	P. R. R.	200	Rectangular
Hecla Coal & Coke Co.	Pittsburgh, Pa.	Griffin No. 2	Held, Pa.	Monongahela	196	Bee Hive
Hecla Coal & Coke Co.	Pittsburgh, Pa.	Crystal	Gans, Pa.	B. & O.	118	Bee Hive
Hope Coke Co.	Uniontown, Pa.	Hope	Hope, Pa.	B. & O.	38	Bee Hive
Hostetter Connellsville Coke Co.	629 Union Arcade, Pittsburgh, Pa.	Hostetter	Hostetter, Pa.	P. R. R.	355	Bee Hive
Hostetter Connellsville Coke Co.	629 Union Arcade, Pittsburgh, Pa.	Whitney	Whitney, Pa.	P. R. R.	352	Bee Hive
Humphries Coal & Coke Co.	Greensburg, Pa.	Humphries	Tranger, Pa.	Penna.	145	Bee Hive
Humphries, E. A. Coal & Coke Co.	Scottsdale, Pa.	Chester No. 2	Bradenville, Pa.	P. R. R.	50	Rectangular
Hustad-Semans Coal & Coke Co.	Uniontown, Pa.	Hustad	East Millsboro, Pa.	P. R. R.	100	Bee Hive
Hustad-Semans Coal & Coke Co.	Uniontown, Pa.	Hustad	East Millsboro, Pa.	P. R. R.	95	Rectangular
Jamison Coal & Coke Co.	Oliver Bldg., Pittsburgh, Pa.	Jamison No. 1	Lavor, Pa.	P. R. R.	401	Bee Hive
Jamison Coal & Coke Co.	Oliver Bldg., Pittsburgh, Pa.	Jamison No. 2	Hannastown, Pa.	P. R. R.	516	Bee Hive
Jamison Coal & Coke Co.	Oliver Bldg., Pittsburgh, Pa.	Jamison No. 4	Crabtree, Pa.	P. R. R.	492	Bee Hive
Jefferson & Clearfield Coal & Iron Co.	Indiana, Pa.	Ernest	Ernest, Pa.	B. R. & P.	278	Bee Hive
Jefferson & Clearfield Coal & Iron Co.	Indiana, Pa.	Soldier	Raynoldsville, Pa.	B. R. & P.	393	Bee Hive

(Continued on Next Page)

PENNSYLVANIA—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF PLANT	SHIPPING POINT	RAILROAD	NO. OF OVENS	TYPE OF OVENS
Johnetta Brick & Coal Co.	Pittsburgh, Pa.	Johnetta.	Johnetta, Pa.	Penna.	24	Bee Hive
Keystone Coal & Coke Co.	Huff Bldg., Greensburg, Pa.	Haron.	Allsworth, Pa.	P. R. R.	100	Rectangular
Keystone Coal & Coke Co.	Huff Bldg., Greensburg, Pa.	Salem.	Allsworth Station, Pa.	Penna.	282	Bee Hive
LaBelle Coke Co.	Greensburg, Pa.	LaBelle.	LaBelle, Pa.	Monongahela	200	Bee Hive
Latrobe Connellsville Coal & Coke Co.	Greensburg, Pa.	Connellsville.	Bradenville, Pa.	P. R. R.	208	Bee Hive
Latrobe Connellsville Coal & Coke Co.	Greensburg, Pa.	Derry No. 1.	Bradenville, Pa.	P. R. R.	293	Bee Hive
Lincoln Coal & Coke Co.	Scottdale, Pa.	Lincoln.	Helen, Pa.	P. V. & C.	400	Bee Hive
Luzerne Coal & Coke Co.	Oliver Bldg., Pittsburgh, Pa.	Luzerne.	Luzerne Siding, Pa.	Monon.	74	Bee Hive
McKeeley Coal Co.	Lectonia, O.	Geneva.	Martin, Pa.	Monongahela.	202	Bee Hive
Mahoning Coal & Coke Co.	Connellsville, Pa.	Peerless.	Alverton, Pa.	Penna.	32	Bee Hive
Marlatta Connellsville Coke Co.	Connellsville, Pa.	Marlatta.	Ligonier, Pa.	Ligonier Valley.	40	Bee Hive
Mt. Pleasant Connellsville Coke Co.	Greensburg, Pa.	Mt. Pleasant.	Hecla, Pa.	P. R. R.	210	Rectangular
Mt. Pleasant Connellsville Coke Co.	Greensburg, Pa.	Mt. Pleasant.	Hecla, Pa.	P. R. R.	100	Bee Hive
Oak Ridge Coal & Coke Co.	Hastings, Pa.	Hastings.	Hastings, Pa.	P. R. R.	100	Bee Hive
Old Connellsville Coke Co.	Connellsville, Pa.	Liberty.	Outcrop, Pa.	B. & O.	31	Bee Hive
Oliver & Snyder Steel Co.	Pittsburgh, Pa.	Oliver.	Redstone Junction, Pa.	P. R. R., B. & O., P. & L. E.	1108	Bee Hive
Parshall, W. J.	Uniontown, Pa.	Old Home.	Leckrone, Pa.	P. R. R., P. & L. E., B. & O.	100	Bee Hive
Pennsylvania Salt Mfg. Co.	Wilmer Bldg., Philadelphia, Pa.	Natrona.	Natrona, Pa.	P. R. R.	8	Bee Hive
Pittsburgh Steel Co.	Allegha, Pa.	Allegha.	Allegha, Pa.	Monongahela.	400	Rectangular
Poland Coal Co.	Pittsburgh, Pa.	Poland No. 1.	Poland, Pa.	Penna. R. R.	161	Rectangular
Potter Coal & Coke Co.	Greensburg, Pa.	Potter.	Potter, Pa.	P. R. R.	300	Bee Hive
Provident Coke & Mining Co.	Kelly Station, Pa.	Provident.	Kelly Station, Pa.	Penna.	27	Bee Hive
Puritan Coke Co.	Uniontown, Pa.	Puritan.	Leckrone, Pa.	P. R. R.	202	Bee Hive
Rainey, W. J.	Uniontown, Pa.	Allison.	Allison Works, Pa.	P. R. R.	493	Rectangular
Rainey, W. J.	Uniontown, Pa.	Elm Grove.	Elm Siding, Pa.	B. & O.	100	Bee Hive
Rainey, W. J.	Uniontown, Pa.	Mount Braddock.	Mount Braddock, Pa.	B. & O., P. R. R.	372	Rectangular
Rainey, W. J.	Uniontown, Pa.	Paul.	Dickerson Run, Pa.	P. & L. E.	100	Bee Hive
Rainey, W. J.	Uniontown, Pa.	Revere.	Revere Works, Pa.	P. R. R.	500	Rectangular
Rockstone Coal & Coke Co.	Pittsburgh, Pa.	Thompson No. 1.	Republic, Pa.	Monon.	400	Bee Hive
Reilly-Peabody Fuel Co.	Braznell, Pa.	American No. 1.	Linn, Pa.	Penna.	142	Bee Hive
Reilly-Peabody Fuel Co.	Masontown, Pa.	American No. 2.	Martin, Pa.	Monon, R. R.	240	Bee Hive
Reilance Coke Co.	514 Frick Bldg., Pittsburgh, Pa.	Dumbo.	Dumbo, Pa.	Penna.	236	Rectangular
R. public Coal & Coke Co.	Connellsville, Pa.	Freedom.	Atchison, Pa.	B. & O.	100	Bee Hive
Republic Iron & Steel Co.	Youngstown O.	Martin.	Martin, Pa.	P. R. R.	244	Bee Hive
Republic Iron & Steel Co.	Youngstown O.	R. public.	R. public, Pa.	P. R. R.	400	Bee Hive
Rich Hill Coke Co.	Uniontown, Pa.	Rich Hill.	Smithfield, Pa.	B. & O.	120	Bee Hive
Rochester & Pittsburgh Coal & Iron Co.	Punxsutawney, Pa.	Adrian No. 1.	Delaney, Pa.	B. & P.	508	Bee Hive
Rochester & Pittsburgh Coal & Iron Co.	Punxsutawney, Pa.	Eleanora No. 2.	Eleanora, Pa.	B. R. & P.	201	Bee Hive
Rochester & Pittsburgh Coal & Iron Co.	Punxsutawney, Pa.	Helvetia-Stanley.	Stanley, Pa.	B. R. & P.	40	Bee Hive
Rochester & Pittsburgh Coal & Iron Co.	Punxsutawney, Pa.	Walston.	Walston, Pa.	B. R. & P.	647	Bee Hive
Sackett, H. B. Coal & Coke Co.	Smithfield, Pa.	Sackett.	Emma Siding, Pa.	B. & O.	30	Bee Hive
Saxman Coal & Coke Co.	Latrobe, Pa.	Ligonier No. 2.	Herry, Pa., R. E. D.	P. R. R.	50	Bee Hive
Shenango Furnace Co.	812 Oliver Bldg., Pittsburgh, Pa.	Wilpen.	Wilpen, Pa.	P. R. R.	167	Bee Hive
Snowden Coke Co.	Pittsburgh, Pa.	Mt. Hope.	Linn Station, Pa.	Penna.	300	Rectangular
Southern Connellsville Coke Co.	Connellsville, Pa.	Marion.	Cheat Haven, Pa.	B. & O.	64	Bee Hive
St. m Coal & Coke Co.	Uniontown, Pa.	Eleanor.	Uniontown, Pa.	P. R. R.	132	Bee Hive
St. wart Furnace Co.	Sharon, Pa.	Stewart.	Uniontown, Pa.	B. & O.	80	Bee Hive
Summit Connellsville Coal & Coke Co.	Connellsville, Pa.	Franklin.	Owensdale, Pa.	P. R. R., P. & L. E.	20	Bee Hive
Taylor & McCoy Coal & Coke Co.	Baltimore, Md.	Gallitzin.	Gallitzin, Pa.	P. R. R.	212	Bee Hive
Thompson-Connellsville Coke Co.	Pittsburgh, Pa.	Thompson No. 2.	Republic, Pa.	Penna.	400	Bee Hive
Thropp, Joseph E.	Evrett, Pa.	Melrose.	Melrose, Pa.	H. & B. T.	90	Bee Hive
Thropp, Joseph E.	Evrett, Pa.	Kearney Barnett.	Kearney, Pa.	H. & B. T.	170	Bee Hive
Thropp, Joseph E.	Evrett, Pa.	Gordon.	Melrose, Pa.	P. R. R.	160	Rectangular
Thropp, Joseph E.	Evrett, Pa.	Saxton.	Saxton, Pa.	P. R. R.	180	Bee Hive
Tower Hill Connellsville Coke Co.	Uniontown, Pa.	Tower Hill No. 1.	Republic, Pa.	Monon.	208	Rectangular
Tower Hill Connellsville Coke Co.	Uniontown, Pa.	Tower Hill No. 1.	Republic, Pa.	Monon.	112	Bee Hive
Tower Hill Connellsville Coke Co.	Uniontown, Pa.	Tower Hill No. 2.	Republic, Pa.	Monon.	254	Rectangular
Tower Hill Connellsville Coke Co.	Uniontown, Pa.	Tower Hill No. 2.	Republic, Pa.	Monon.	140	Bee Hive
Union Coal & Coke Co.	Johnstown, Pa.	Marianna.	Marianna, Pa.	Penna.	160	Bee Hive
Union Coal & Coke Co.	Johnstown, Pa.	Aene.	Bentleyville, Pa.	Penna.	300	Rectangular
Union Connellsville Coke Co.	Uniontown, Pa.	Katharine.	Simpson, Pa.	Monon.	140	Rectangular
Unity-Connellsville Coke Co.	Greensburg, Pa.	Elizabeth.	Latrobe, Pa.	P. R. R.	100	Bee Hive
Vanderbilt Coal & Coke Co.	Connellsville, Pa.	Clarissa.	Dickerson Run, Pa.	P. & L. E.	86	Bee Hive
Veteran Coal Co.	Greensburg, Pa.	Veteran.	Udell Station, Pa.	P. R. R.	80	Bee Hive
Vinton Colliery Co.	50 E. 42nd St., New York, N. Y.	Vinton No. 6.	Vintondale, Pa.	Penna., B. R. & P.	152	Bee Hive
Waltersburg Coke Co.	Uniontown, Pa.	Edna.	Waltersburg, Pa.	P. R. R.	150	Bee Hive
Washington Coal & Coke Co.	Dawson, Pa.	Washington No. 1.	Star Junction, Pa.	Washington Run, P. & L. E.	500	Bee Hive
Washington Coal & Coke Co.	Dawson, Pa.	Washington No. 2.	Star Junction, Pa.	P. & L. E., Washington Run	500	Bee Hive
Weaver, John W.	Smithfield, Pa.	Lillian.	Smithfield, Pa.	B. & O.	80	Bee Hive
West Penn By-Product Coal Co.	Pittsburgh, Pa.	Marion.	Udell, Pa.	Penna.	33	Bee Hive
Westmoreland-Connellsville Coal & Coke Co.	514 Frick Bldg., Pittsburgh, Pa.	Fort Palmer No. 1.	Ligonier, Pa.	P. R. R.	160	Rectangular
Westmoreland-Fayette Coal & Coke Co.	Greensburg, Pa.	Ada.	Cheat Haven, Pa.	B. & O.	40	Bee Hive
Whycl Coke Co.	Uniontown, Pa.	Ellen No. 2.	Whitney, Pa.	P. R. R.	50	Bee Hive
Whycl Coke Co.	Uniontown, Pa.	Yukon.	Yukon, Pa.	P. R. R.	36	Bee Hive
Whycl Coke Co.	Uniontown, Pa.	Thomas.	Smiley, Pa.	B. & O., P. R. R.	40	Bee Hive
Wineland-Gilmore Coal & Coke Co.	Uniontown, Pa.	Winmore.	Smithton, Pa.	B. & O.	60	Bee Hive
TOTAL					39,662	OVENS

TENNESSEE

Bon Air Coal & Iron Corp.	Nashville, Tenn.	Eastland.	Eastland, Tenn.	N. C. & St. L.	200	Bee Hive
Brushy Mountain Coal Mines.	Petros, Tenn.	Brushy Mountain.	Petros, Tenn.	L. & N., Southern.	140	Bee Hive
Chattanooga Iron & Coal Corp.	Chattanooga, Tenn.	Dunlap.	Dunlap, Tenn.	N. C. & St. L.	268	Bee Hive
Durham Coal & Iron Co.	Chattanooga, Tenn.	Soddy.	Ratthurn, Tenn.	C. N. O. & T. P.	211	Bee Hive
Durham Coal & Iron Co.	Chattanooga, Tenn.	Graysville.	Graysville, Tenn.	C. N. O. & T. P.	75	Bee Hive
Durham Coal & Iron Co.	Chattanooga, Tenn.	Durham.	Durham, Ga.	C. of Ga.	204	Bee Hive
Knox Mining Co.	Rockwood, Tenn.	Beane.	Rockwood, Tenn.	Southern.	275	Bee Hive
La Follette Coal & Iron Co.	La Follette, Tenn.	Box No. 1.	La Follette, Tenn.	L. & N.	200	Bee Hive
Sewanee Fuel & Iron Co.	Chattanooga, Tenn.	Coalmont.	Coalmont, Tenn.	N. C. & St. L.	90	Bee Hive
Tennessee Coal, Iron & Railroad Co.	Birmingham, Ala.	Whitwell.	Whitwell, Tenn.	N. C. & St. L.	100	Bee Hive
Tennessee Consolidated Coal Co.	Tracy City, Tenn.	Tracy City.	Tracy City, Tenn.	N. C. & St. L.	60	Bee Hive
Waldensia Coal & Coke Co.	Waldensia, Tenn.	Waldensia.	Waldensia, Tenn.	T. C.	90	Bee Hive
TOTAL					2,110	OVENS

UTAH

Utah Fuel Co.	Salt Lake City, Utah.	Sunnyside.	Sunnyside, Utah.	D. & R. G.	819	Bee Hive
TOTAL					819	OVENS

(Continued on Next Page)

VIRGINIA

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF PLANT	SHIPPING POINT	RAILROAD	NO. OF OVENS	TYPE OF OVENS
Blackwood Coal & Coke Co.	Blackwood, Wise Co., Virginia.	Blackwood.	Roaring Fork, Va.	Southern, Interstate.	282	Bee Hive
Carter Coal Co.	Alfredton, Va.	Seaboard.	Seaboard, Va.	N. & W.	100	Bee Hive
Esser, J. A. Coke Co.	Essersville, Va.	Essersville.	Essersville, Va.	Interstate.	122	Bee Hive
Intermont Coal & Iron Corp.	Big Stone Gap, Va.	Josephine.	Dorchester Jet., Va.	L. & N.	110	Bee Hive
Norton Coal Co.	Norton, Va.	Norton.	Norton, Va.	N. & W., L. & N.	150	Bee Hive
Stonoga Coal & Coke Co.	Stone Gap, Va.	Stonoga.	Stonoga, Va.	Interstate.	450	Bee Hive
Stonoga Coal & Coke Co.	Stone Gap, Va.	Osaka.	Osaka, Va.	Interstate.	400	Bee Hive
Stone Gap Colliery Co.	Glamorgan, Va.	Glamorgan.	Glamorgan, Va.	Interstate.	350	Bee Hive
Virginia Iron, Coal & Coke Co.	Roanoke, Va.	Toms Creek.	Toms Creek, Va.	N. & W.	800	Bee Hive
Virginia Iron, Coal & Coke Co.	Roanoke, Va.	Inman.	Appalachia, Va.	V. S. W.	176	Bee Hive
Wise Coal & Coke Co.	Dorchester, Va.	Dorchester.	Dorchester, Va.	Interstate.	400	Bee Hive
TOTAL					3,340	OVENS

WASHINGTON

American Smelting & Refining Co.	120 Broadway, New York, N. Y.	Fairfax.	Fairfax, Wash.	N. P.	60	Bee Hive
Carbon Hill Coal Co.	Carbonado, Wash.	Carbon Hill.	Crocker and Wingate, Wash.	N. P.	139	Bee Hive
Wilkeson Coal & Coke Co.	Tacoma, Wash.	Wilkeson.	Wilkeson, Wash.	N. P.	100	Bee Hive
TOTAL					299	OVENS

WEST VIRGINIA

Algoma Coal & Coke Co.	Algoma, W. Va.	Algoma.	North Fork, W. Va.	N. & W.	28	Bee Hive
Arlington Coal & Coke Co.	McDowell, W. Va.	Drift.	North Fork, W. Va.	N. & W.	159	Bee Hive
Ashland Coal & Coke Co.	Ashland, W. Va.	Ashland.	Crumpler, W. Va.	N. & W.	410	Bee Hive
Austen Coal & Coke Co.	Austen, W. Va.	Austen.	Austen, W. Va.	B. & O.	167	Bee Hive
Babcock Coal Co.	Frick Bldg., Pittsburgh, Pa.	Cliff Top No. 4.	Sewell, W. Va.	C. & O.	197	Bee Hive
Beury Bros. Coal & Coke Co.	Beury, W. Va.	Echo.	Beury, W. Va.	C. & O.	50	Bee Hive
Branch Coal & Coke Co.	Elverton, W. Va.	Elverton.	Elverton, W. Va.	C. & O.	60	Bee Hive
Buckannon River Coal & Coke Co.	Adrian, W. Va.	Florence No. 2.	Adrian, W. Va.	C. & C.	36	Bee Hive
Cornellville Basin Coke Co.	Harrisburg, Pa.	Rock Forge.	Rock Forge, W. Va.	M. & K.	200	Bee Hive
Consolidation Coal Co.	Continental Bldg., Baltimore, Md.	Consolidation No. 45.	Consolidation No. 45, W. Va.	B. & O.	46	Bee Hive
Consolidation Coal Co.	Continental Bldg., Baltimore, Md.	Consolidation No. 24.	Consolidation No. 24, W. Va.	B. & O.	150	Bee Hive
Consolidation Coal Co.	Continental Bldg., Baltimore, Md.	Consolidation No. 38.	Consolidation No. 38, W. Va.	B. & O.	36	Bee Hive
Consolidation Coal Co.	Continental Bldg., Baltimore, Md.	Consolidation No. 21.	Consolidation No. 21, W. Va.	B. & O.	80	Bee Hive
Consolidation Coal Co.	Continental Bldg., Baltimore, Md.	Consolidation No. 55.	Consolidation No. 55, W. Va.	B. & O.	50	Bee Hive
Consolidation Coal Co.	Continental Bldg., Baltimore, Md.	Consolidation No. 43.	Monongah, W. Va.	B. & O.	171	Bee Hive
Consolidation Coal Co.	Continental Bldg., Baltimore, Md.	Consolidation No. 63.	Monongah, W. Va.	B. & O.	99	Bee Hive
Crozer Coal & Coke Co.	North American Bldg., Philadelphia, Pa.	Elkhorn.	Elkhorn, W. Va.	N. & W.	200	Bee Hive
Crystal Coal & Coke Co.	Bramwell, W. Va.	Crystal.	McComas, W. Va.	N. & W.	92	Bee Hive
Cumberland Coal Co.	Baltimore, Md.	Douglas.	Douglas, W. Va.	Western Maryland.	125	Bee Hive
Elkhorn Coal & Coke Co.	Mayheury, W. Va.	Elkhorn.	Krag, W. Va.	N. & W.	135	Bee Hive
Fire Creek Coal & Coke Co.	Staunton, Va.	Fire Creek.	Fire Creek, W. Va.	C. & O.	96	Bee Hive
Gage Coal & Coke Co.	Pittsburgh, Pa.	Gage.	Gage, W. Va.	W. Md.	60	Bee Hive
Gaugly Mountain Coal Co.	Ansted, W. Va.	Ansted.	Ansted, W. Va.	C. & O.	152	Bee Hive
Gilliam Coal & Coke Co.	Gilliam, W. Va.	Gilliam.	Northfolk, W. Va.	N. & W.	217	Bee Hive
Greenbrier Coal & Coke Co.	McDowell, W. Va.	Greenbrier.	Crumpler, W. Va.	N. & W.	100	Bee Hive
Greenwood Coal Co.	Lantow, W. Va.	Greenwood.	Brownwood, W. Va.	C. & O.	50	Bee Hive
Hiorra Coke Co.	Uniontown, Pa.	Vulcan.	Hiorra, W. Va.	B. & O.	100	Bee Hive
Houston Coal & Coke Co.	Union Trust Bldg., Cincinnati, O.	Houston.	Elkhorn, W. Va.	N. & W.	210	Bee Hive
Houston Collieries Co.	1522 Union Trust Bldg., Cincinnati, O.	Maitland.	Maitland, W. Va.	N. & W.	160	Bee Hive
Hutchinson Coal Co.	Fairmont, W. Va.	Hutchinson.	Byron, W. Va.	B. & O.	20	Bee Hive
Jamison Coal & Coke Co.	Greensburg, Pa.	Jamison No. 8.	Underwood, W. Va.	B. & O.	103	Bee Hive
Kanawha & Hocking Coal & Coke Co.	Cleveland, O.	No. 111.	Carbondale, W. Va.	K. & M.	102	Bee Hive
Kanawha & Hocking Coal & Coke Co.	Cleveland, O.	No. 112.	Carbondale, W. Va.	K. & M.	200	Bee Hive
Kanawha & Hocking Coal & Coke Co.	Cleveland, O.	No. 114.	Longacre, W. Va.	K. & M.	115	Bee Hive
Kanawha & Hocking Coal & Coke Co.	Cleveland, O.	No. 116.	Harwood, W. Va.	K. & M.	166	Bee Hive
Logan Mining Co.	Fairmont, W. Va.	Earling.	Earling, W. Va.	C. & O.	10	Bee Hive
Louisville Coal & Coke Co.	Goodwill, W. Va.	Louisville.	Goodwill, W. Va.	N. & W.	75	Bee Hive
Low Moor Iron Co. of Va.	Kay Moor, W. Va.	Kay Moor.	Kay Moor, W. Va.	C. & O.	202	Bee Hive
Lynchburg Coal & Coke Co.	Kyle, W. Va.	Lynchburg.	Northfork, W. Va.	N. & W.	90	Bee Hive
McClernan Coal Co.	Uniontown, Pa.	Winona.	Coffman, W. Va.	B. & O.	30	Bee Hive
McDowell Coal & Coke Co.	McDowell, W. Va.	McDowell.	Crumpler, W. Va.	N. & W.	100	Bee Hive
Meriden Smokeless Coal Co.	Meriden, W. Va.	Meriden.	Meriden, W. Va.	B. & O.	50	Bee Hive
Mill Creek Coal & Coke Co.	Coopers, W. Va.	Mill Creek.	Coopers, W. Va.	N. & W.	60	Bee Hive
New England Fuel & Trans. Co.	11 Devonshire St., Boston, Mass.	Federal.	Grant Town, W. Va.	B. & O.	60	Bee Hive
New River & Pocahontas Consolidated Coal Co.	Philadelphia, Pa.	Berwind.	Berwind, W. Va.	N. & W.	200	Bee Hive
Page Coal & Coke Co.	1503 North American Bldg., Phila., Pa.	Page.	Pagetown, W. Va.	N. & W.	100	Bee Hive
Penneco Coal Co.	McWhorter, W. Va.	McWhorter.	McWhorter, W. Va.	B. & O.	20	Bee Hive
Preston County Coke Co.	Cascade, W. Va.	Cascade.	Cascade, W. Va.	M. & K.	194	Bee Hive
Pulaski Iron Co.	Pulaski, W. Va.	Pulaski.	Eckman, W. Va.	N. & W.	448	Bee Hive
Roanoke Coal & Coke Co.	Worlb, W. Va.	Roanoke.	Crumpler, W. Va.	N. & W.	50	Bee Hive
Saxman Coal & Coke Co.	1414 Commonwealth Bldg., Philadelphia.	Saxman.	Fenwick, W. Va.	B. & O.	50	Bee Hive
Scottia Coal & Coke Co.	Charleston, W. Va.	Brooklyn.	Brooklyn, W. Va.	C. & O.	61	Bee Hive
Superior Connellville Coke Co.	Opekiska, W. Va.	Opekiska.	Opekiska, W. Va.	B. & O.	40	Bee Hive
Thomas Coal & Coke Co.	Bramwell, W. Va.	Thomas.	Mora, W. Va.	N. & W.	146	Bee Hive
Turkey Knob Coal Co.	Charleston, W. Va.	Turkey Knob.	Turkey Knob, W. Va.	C. & O.	100	Bee Hive
United Pocahontas Coal Co.	Worlb, W. Va.	Indian Ridge.	Crumpler, W. Va.	N. & W.	50	Bee Hive
United States Coal & Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	No. 1.	Gary, W. Va.	N. & W.	360	Bee Hive
United States Coal & Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	No. 2.	Gary, W. Va.	N. & W.	350	Bee Hive
United States Coal & Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	No. 3.	Gary, W. Va.	N. & W.	300	Bee Hive
United States Coal & Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	No. 4.	Gary, W. Va.	N. & W.	209	Bee Hive
United States Coal & Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	No. 6.	Gary, W. Va.	N. & W.	308	Bee Hive
United States Coal & Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	No. 5.	Gary, W. Va.	N. & W.	102	Bee Hive
United States Coal & Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	No. 7.	Gary, W. Va.	N. & W.	350	Bee Hive
United States Coal & Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	No. 8.	Gary, W. Va.	N. & W.	158	Bee Hive
Virginia & Pittsburgh Coal & Coke Co.	Fairmont, W. Va.	Kingmont.	Kingmont, W. Va.	B. & O.	67	Bee Hive
West Virginia Coal & Coke Co.	Elkins, W. Va.	Coalton No. 1.	Coalton, W. Va.	C. & O.	250	Bee Hive
West Virginia Coal & Coke Co.	Elkins, W. Va.	Harding No. 2.	Harding, W. Va.	W. Md.	85	Bee Hive
West Virginia Coal & Coke Co.	Elkins, W. Va.	Junior No. 4.	Junior, W. Va.	W. Md.	51	Bee Hive
TOTAL					9,071	OVENS

LIST OF BY-PRODUCT OVENS

Showing Location, Number, Type, and Estimated Amount of Coal Consumed
and Coke Produced

As of May 1, 1921

FIRM	LOCATION	No. Ovens	TYPE	Estimated Monthly Coal Consuming Capacity	Estimated Annual Coal Consuming Capacity	Estimated Annual Coke Producing Capacity
Alabama By-Products Coke Co.	Birmingham, Ala.	50	Koppers	27,917	335,000	235,000
Algoma Steel Corp., Ltd.	Sault Ste. Marie, Ont.	110	Koppers			
Algoma Steel Corp., Ltd.	Sault Ste. Marie, Ont.	50	Wilputte	74,333	892,000	600,000
Allegheny By-Product Coke Co.	Glassport, Pa.	120	Otto	21,900	262,800	195,200
American Steel & Wire Co.	Cleveland, O.	180	Koppers	90,000	1,080,000	750,000
Bethlehem Steel Co.	Sparrows Point, Md.	360	Koppers	182,500	2,190,000	1,576,000
Bethlehem Steel Co.	Steelton, Pa.	60	Koppers			
Bethlehem Steel Co.	Steelton, Pa.	120	Solvay	73,000	876,000	621,500
Bethlehem Steel Co.	S. Bethlehem, Pa.	424	Koppers	200,000	2,400,000	1,920,000
Bethlehem Steel Co.	Lebanon, Pa.	90	Solvay	73,917	887,000	638,000
Brier Hill Steel Co.	Youngstown, O.	84	Koppers	43,333	520,000	379,000
By-Products Coke Corp.	Chicago, Ill.	280	Solvay	108,333	1,300,000	975,000
Cambria Steel Co.	Johnstown, Pa.	210	Otto			
Cambria Steel Co.	Johnstown, Pa.	92	Koppers	153,250	1,839,000	1,226,000
Cambria Steel Co.	Johnstown, Pa.	190	Cambrian-Belgian			
Camden Coke Co.	Camden, N. J.	150	Otto	30,000	360,000	220,000
Carnegie Steel Co.	Clairton, Pa.	768	Koppers	400,000	4,800,000	3,360,000
Carnegie Steel Co.	Farrell, Pa.	212	Otto	69,166	830,000	581,000
Central Indiana Gas Co.	Muncie, Ind.	22	Klönne	3,310	40,000	28,000
Central Iron & Coal Co.	Holt, Ala.	60	Semet-Solvay	24,167	290,000	220,400
Chattanooga Gas & Coal Prod. Co.	Chattanooga, Tenn.	24	Solvay	14,583	175,000	125,000
Chicago By-Product Coke Co.	Chicago, Ill.	100	Koppers	55,600	667,000	467,000
Citizens Gas Co.	Indianapolis, Ind.	41	Semet-Solvay			
Citizens Gas Co.	Indianapolis, Ind.	100	Otto	68,500	822,000	591,800
Citizens Gas Co.	Indianapolis, Ind.	40	Wilputte			
Coal Products Mfg. Co.	Joliet, Ill.	35	Koppers			
Coal Products Mfg. Co.	Joliet, Ill.	18	Wilputte	28,333	346,000	238,000
Colorado Fuel & Iron Co.	Pueblo, Colo.	120	Koppers	60,000	720,000	550,000
Domestic Coke Corp.	Fairmont, W. Va.	60	Koppers	33,333	400,000	260,000
Dominion Iron & Steel Co., Ltd.	Sydney, N. S.	620	Otto			
Dominion Iron & Steel Co., Ltd.	Sydney, N. S.	120	Koppers	60,000	720,000	500,000
Donner Union Coke Co.	Buffalo, N. Y.	150	Koppers	83,333	1,000,000	650,000
Empire Coke Co.	Geneva, N. Y.	46	Solvay	12,167	146,000	102,200
Ford Motor Co.	Pearhorn, Mich.	120	Solvay	72,000	864,000	662,000
Gulf States Steel Co.	Alabama City, Ala.	37	Koppers	19,750	237,000	175,000
Hamilton Otto Coke Co.	Hamilton, O.	100	Otto	20,531	246,375	164,200
Illinois Steel Co.	Joliet, Ill.	280	Koppers	125,000	1,500,000	1,200,000
Illinois Steel Co.	Gary, Ind.	700	Koppers	366,667	4,400,000	3,480,000
Indiana Coke & Gas Co.	Terre Haute, Ind.	30	Koppers			
Indiana Coke & Gas Co.	Terre Haute, Ind.	30	Gas Machinery	24,333	292,000	205,000
Inland Steel Co.	Indiana Harbor, Ind.	130	Koppers	74,167	890,000	666,800
International Harvester Co.	S. Chicago, Ill.	88	Wilputte	48,167	578,000	376,000
Ironton Solvay Coke Co.	Ironton, O.	60	Solvay	36,000	432,000	311,000
Jones & Laughlin Steel Co.	Pittsburgh, Pa.	300	Koppers	166,666	2,000,000	1,300,000
Kentucky Solvay Co.	Ashland, Ky.	108	Solvay	66,667	800,000	600,000
La Belle Iron Works	Follansbee, W. Va.	94	Koppers	50,833	610,000	445,000
Lackawanna Steel Co.	Buffalo, N. Y.	94	Otto			
Lackawanna Steel Co.	Buffalo, N. Y.	282	Rothberg	113,000	1,356,000	972,000
Lackawanna Steel Co.	Buffalo, N. Y.	60	Semet-Solvay			
Laclede Gas Light Co.	St. Louis, Mo.	56	Koppers	26,667	320,000	240,000
McKinney Steel Co.	Cleveland, O.	204	Koppers	108,333	1,300,000	960,000
Michigan Alkali Co.	Wyandotte, Mich.	54	Otto	7,835	94,000	65,800
Milwaukee Coke & Gas Co.	Milwaukee, Wis.	150	Koppers	83,340	1,000,000	650,000
Milwaukee Coke & Gas Co.	Milwaukee, Wis.	120	Solvay	83,333	1,000,000	750,000
Minnesota By-Product Coke Co.	St. Paul, Minn.	65	Koppers	33,333	400,000	300,000
Minnesota Steel Co.	Duluth, Minn.	90	Koppers	50,000	600,000	450,000
National Tube Co.	Benwood, W. Va.	120	Solvay	22,500	270,000	189,000
National Tube Co.	Lorain, O.	208	Koppers	100,000	1,200,000	850,000
New England Gas & Coke Co.	Everett, Mass.	400	Otto	54,167	650,000	455,000
North Shore Gas Co.	Waukegan, Ill.	13	Solvay	4,745	56,940	38,000
Otis Steel Co.	Cleveland, O.	100	Solvay	37,500	450,000	337,500
Penn Iron & Coal Co.	Dover, O.	21	Roberts	12,000	144,000	100,000
Philadelphia S. G. & E. Co.	Chester, Pa.	40	Solvay	10,417	125,000	87,500
Pittsburgh Crucible Steel Co.	Midland, Pa.	100	Koppers	55,583	667,000	435,000
Portsmouth Solvay Co.	Portsmouth, O.	108	Solvay	64,167	770,000	559,000
Providence Gas Co.	Providence, R. I.	40	Koppers	20,000	240,000	165,000
Rainey-Wood Coke Co.	Swedeland, Pa.	110	Koppers	66,667	800,000	600,000
Republic Iron & Steel Co.	Youngstown, O.	143	Koppers	85,000	1,020,000	741,600
Seaboard By-Product Co.	Jersey City, N. J.	165	Koppers	100,000	1,200,000	900,000
Seattle Lighting Co.	Seattle, Wash.	20	Klönne	2,000	24,000	18,000
Semet-Solvay Co.	Dunbar, Pa.	110	Solvay	20,714	248,560	165,700
Semet-Solvay Co.	Detroit, Mich.	215	Solvay	111,917	1,343,000	1,009,000
Semet-Solvay Co.	Buffalo, N. Y.	60	Solvay	32,169	386,000	289,500
Semet-Solvay Co. (T. C. I. & R. Co.)	Ensley, Ala.	240	Solvay	63,333	760,000	530,000
Sloss-Shethfield S. & I. Co.	Birmingham, Ala.	120	Semet-Solvay	72,000	864,000	622,000
Solvay Process Co.	Delray, Mich.	215	Solvay	62,719	752,630	501,800
Solvay Process Co.	Syracuse, N. Y.	40	Solvay	5,417	65,000	45,000
St. Louis Coke & Chemical Co.	Granite City, Ill.	80	Roberts	33,333	400,000	250,000
Steel & Tube Co. of America	Indiana Harbor, Ind.	120	Solvay	72,000	864,000	622,000
Steel & Tube Co. of America	Mayville, Wis.	108	Otto	26,667	320,000	230,100
Steel Company of Canada	Hamilton, Ont.	80	Wilputte	12,983	155,800	112,000
Tennessee Coal, Iron & Railway Co.	Fairfield, Ala.	434	Koppers	213,333	2,560,000	1,920,000
Toledo Furnace Co.	Toledo, O.	94	Koppers	46,667	560,000	408,800
United Furnace Co.	Canton, O.	47	Koppers	23,333	280,000	204,100
Wickwire Steel Co.	Buffalo, N. Y.	60	Solvay	32,850	394,200	263,000
Woodward Iron Co.	Woodward, Ala.	170	Koppers			
Woodward Iron Co.	Woodward, Ala.	60	Wilputte	110,833	1,330,000	997,200
Youngstown Sheet & Tube Co.	Youngstown, O.	306	Koppers	171,000	2,050,000	1,425,000
Zenith Furnace Co.	Duluth, Minn.	65	Otto	13,333	160,000	112,000
Total		12,573	Totals	5,356,074	64,718,505	46,387,300

BELGIAN-AMERICAN COKE OVENS CORPORATION

OFFICES

25 Broad Street, NEW YORK, N. Y.
686 East Catalan Street, ST. LOUIS, MO.

Piette System Belgian By-Product Coke Ovens

With or Without Recuperation or Regeneration

The Belgian-American Coke Ovens Corporation was organized in 1921 by a group of American business men for the purpose of introducing on this side of the Atlantic a thoroughly modern and economical system of by-product oven and recovery plant construction.

This company has acquired all the patents and rights in the United States and Canada from the Franco-Belgian Coke Ovens Corporation of Brussels, Belgium, for the construction of its several types of Piette System By-Product Coke Ovens and Recovery Plants.

The Piette oven is firmly established by virtue of its successful and economical operation. It is not new by any means. It has been extensively used in Europe for the past thirty years and during

the past decade more than 1,500 ovens have been built in Belgium, Russia, France and Mexico. Some of the installations in France are operated by Schneider & Company, the well known steel manufacturers.

During the year 1920 a demonstration battery of eight Piette ovens was erected at the coke station of the Laclede Gas Light Company, St. Louis, Mo., and is now being successfully operated by the latter company.

After the ovens had been in regular operation for three months, very careful tests and measurements of yield were made for a period of thirty days. Information on the remarkable results obtained will be found on a succeeding page. The public is invited to inspect this demonstration plant.

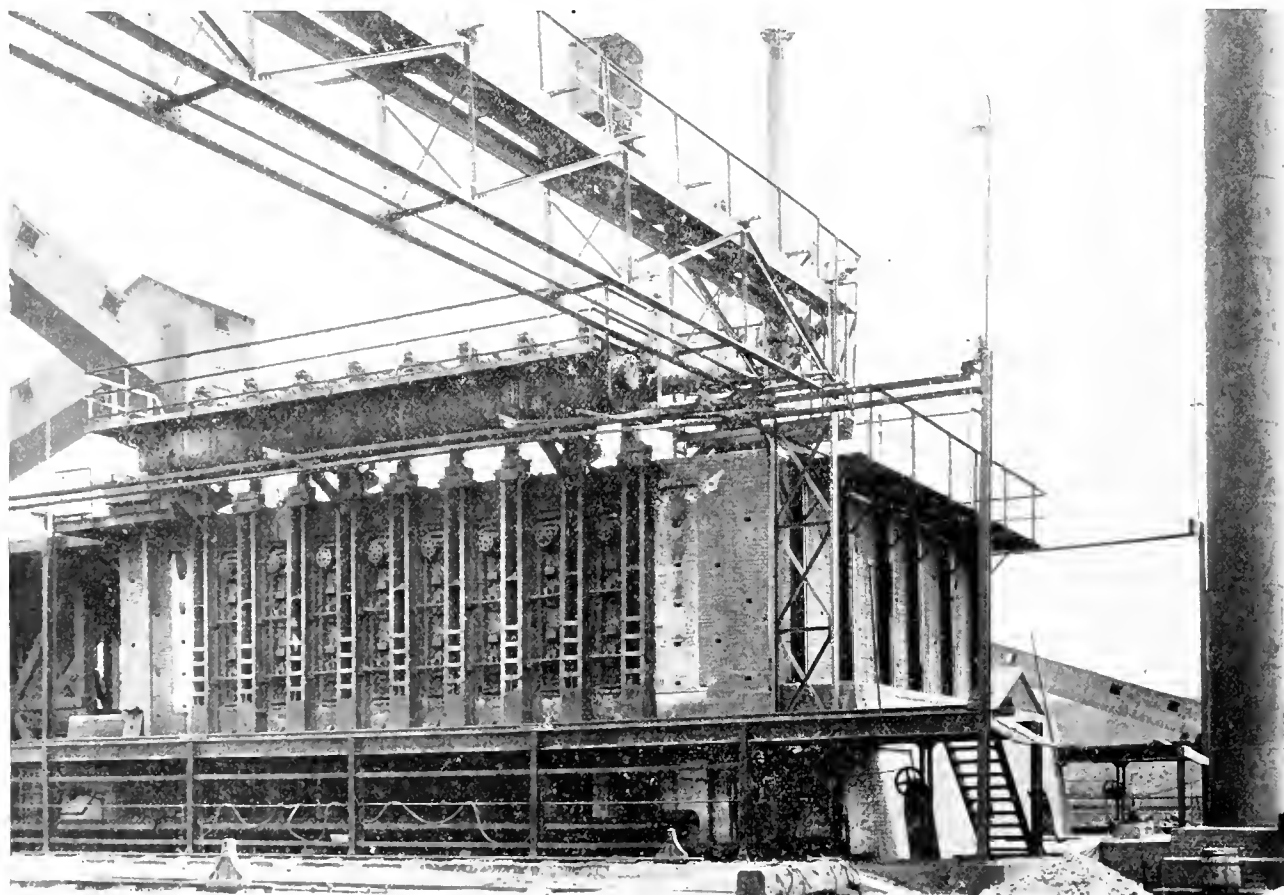


Fig. 1. View of Piette Ovens at St. Louis From Pusher Side.

Principal Characteristics of Piette Ovens

1. The ovens are of the horizontal type with vertical flues, transverse regenerators and reversing arrangement.

2. The construction is very simple and less shape bricks are required than with other constructions.

3. The ovens are built on an absolutely rigid monolithic block, thus assuring a maximum stability.

4. The method of feeding the heating gas by regulation tuyeres permits a distribution at every point of the oven walls of the exact amount of gas required for perfect coking.

5. The regulation sections for the control of the gaseous currents are calculated before construction and exclude the need of numerous dampers and sliding bricks. The simplicity of regulation for these ovens has been nowhere exceeded.

6. The checkerwork of the regenerators, situated in the longitudinal galleries, are crossed transversely by either the waste gases or air, thus securing the equalization of the temperature in the

whole battery and also permitting the isolation of any one oven in case of stoppage.

7. The arrangement of galleries in the foundations for the incoming air enables the extraction of heat from the waste gases, besides reducing the loss of heat by radiation.

The St. Louis Demonstration Plant

Since the methods of coking, the operation of ovens, the silica used in the brick work and the qualities of American coals are somewhat different from those met with in European practice, it was decided to make a demonstration of the technical processes involved in the construction and operation of the Piette ovens in order to prove their adaptability to American conditions.

The Laclede Gas Light Company kindly consented to the construction of the eight demonstration ovens at their coking plant at St. Louis. Numerous tests conducted have shown conclusively that the Piette type of oven is adapted to American conditions, that they respond to every requirement of manufacture, and that they are able to compete with any other oven.

During the thirty-day test, already referred to, the following mixture of coal was charged: Sixty-five per cent. of Elkhorn coal and thirty-five per

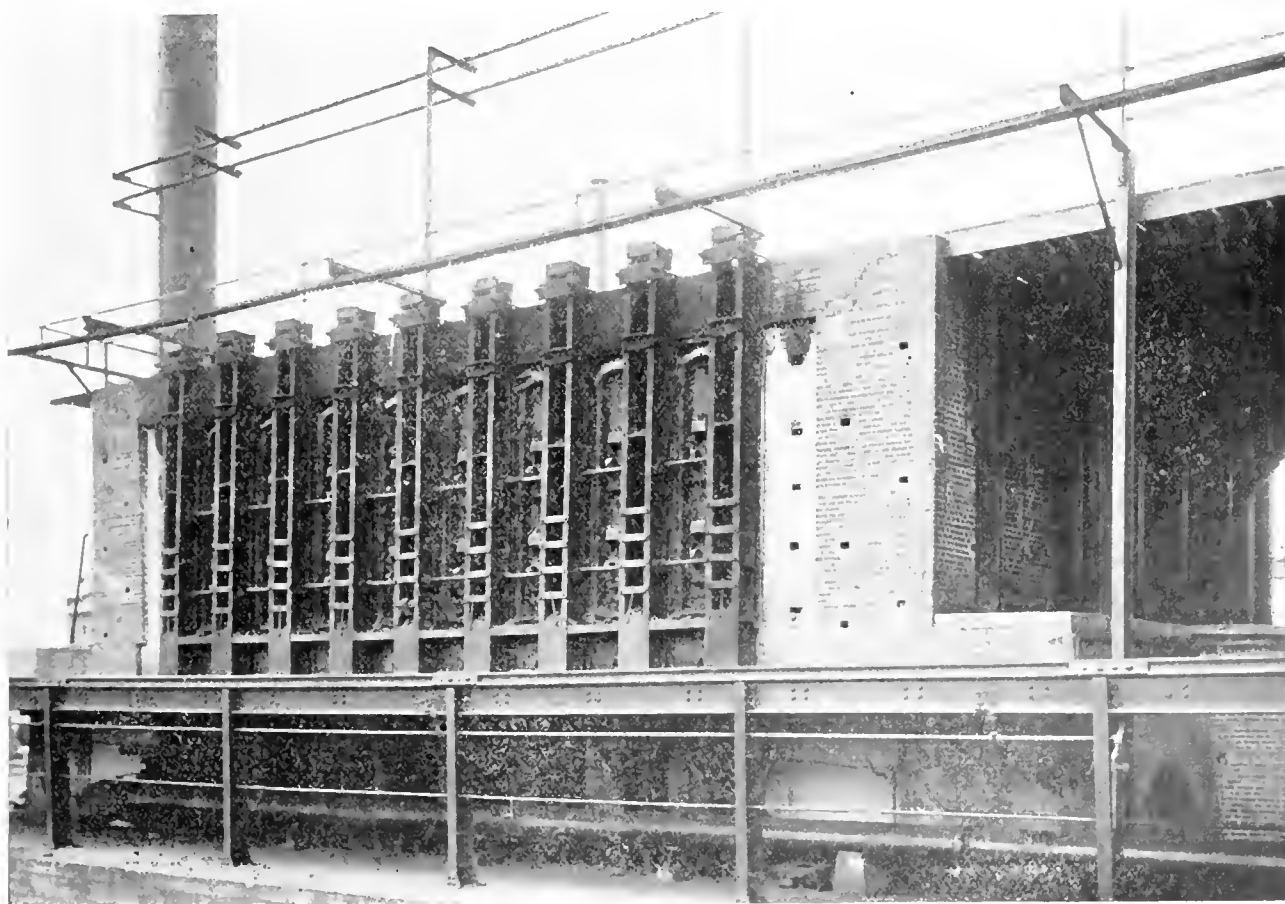


Fig. 2. View of Piette Ovens at St. Louis From Coke Discharge Side.

cent. of Pocahontas coal. The analysis of this mixture was as follows:

Moisture	4.43	Dry Basis
Volatile Matter	30.42	
Fixed Carbon	64.20	
Ash	5.38	

This battery has been making coke since the beginning of 1921. It is not too much to say that its yields in coke, gas and by-products are remarkably good. The efficiency of the ovens and the accurate control of the heat have been in no way impaired, although, due to the fluctuations in the demand for coke, the battery has been operated at times on very short coking hours, and sometimes on long hours. It is general opinion that this kind of oven, due to its yield and ease of operation, is called a great development in the United States.

Results of Tests Made at St. Louis

The following tables summarize the results obtained in the tests conducted for thirty days:

A—OVENS AND COAL:

Number of ovens charged and pushed	282
Average coking time.....	20 hrs. 18 min.
Average load per oven.....	26,770 lbs.
Total quantity coal charged in 30 days	7,549,400 lbs.
Quantity of coal charged in 24 hours per one oven.....	31,455 lbs.
Average temperature of the smoke at the outlet of the heat regenerators corresponding to 3.8 per cent. oxygen or an excess of 25% of air.....	642° F.

B—COKE:

	Pct.	
Total yield in coke (coal mixture included and dry coke).....	69.19	
Proportion of foundry coke in the total coke	38.15	
Proportion of domestic coke in the total coke	61.85	
Average analysis of the total coke obtained:	Pct.	Pct.
Moisture	1.936	
On dry coke—		
Ashes	6.900	
Fixed carbon	92.110	
Volatile matter	0.990	100.00
Specific gravity—		
Apparent	0.973	
Real	1.906	
Shatter test	55.57	
Porosity—		
Coke substance by volume	51.03	
Air spaces by volume...	48.97	
Total quantity of coke produced in 24 hours in one oven.....	21,764 lbs.	

C—HEATING GAS:

Volume of gas burnt during the 30 days in cubic feet at 30 in. pressure and 60 degrees F....	20,332,000
Volume of gas burnt per pound of coal charged.....	2,693
Heating value of this gas (B. t. u. per cu. ft.).....	479.3
Consumption in B. t. u. per pound of coal charged.....	1,290.7

D—GAS PRODUCED AND B. T. U. AVAILABLE:

Total volume gas produced during the 30 days in cu. ft. at 30 in. pressure and 60 degrees F....	44,159,000
Volume of gas produced per pound of coal charged cu. ft.....	5,849
Average calorific value of this gas (B. t. u. per cu. ft.).....	564.5
Total quantity of B. t. u. available per pound of coal charged (non-debenzozized gas)	3,301.7
B. t. u. available per pound of coal treated	2,011.0
Average analysis of the gas produced by volume:	

CO ₂	1.703%
CnHm	3.357%
O	0.453%
H	51.817%
CO	6.063%
CH ₄	29.757%
N	6.850%
	100%

Average specific gravity at 30 in. and 60 degrees F.....	0.3888
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F—YIELDS IN BY-PRODUCTS PER TON OF COAL CARBONIZED:

Ammonia in pounds.....	5.632
Tar in gallons	7.009
Benzol (product distilling below 200° C.)	3.416

The above figures show that the yield of available B. t. u. per pound of coal treated is 60.9 per cent. of the total quantity of B. t. u. produced. This already very satisfactory proportion does not, however, represent the real power of this system of ovens.

It will, of course, be well understood that a small number of ovens cannot give the same yields as a bigger battery of, say, 50 to 60 ovens of the same type. In the case of a big battery the heat lost by radiation in the end walls is distributed over a larger number of ovens, and, as a matter of course, over a larger quantity of coal distilled.

If this heat loss is distributed over a battery of 50 to 60 ovens, which is the average number in a modern battery, the reduction in heat loss, over the figures here quoted, is 6 per cent. Taking this into account, the calorific balance sheet of the Piette ovens under the operating conditions at St. Louis is:

	Per Cent.
B. t. u. produced....	3301.7
B. t. u. per cu. ft....	564.5
B. t. u. in the available gas	2088.4
B. t. u. consumed in the heating gas..	1213.3
	36.75

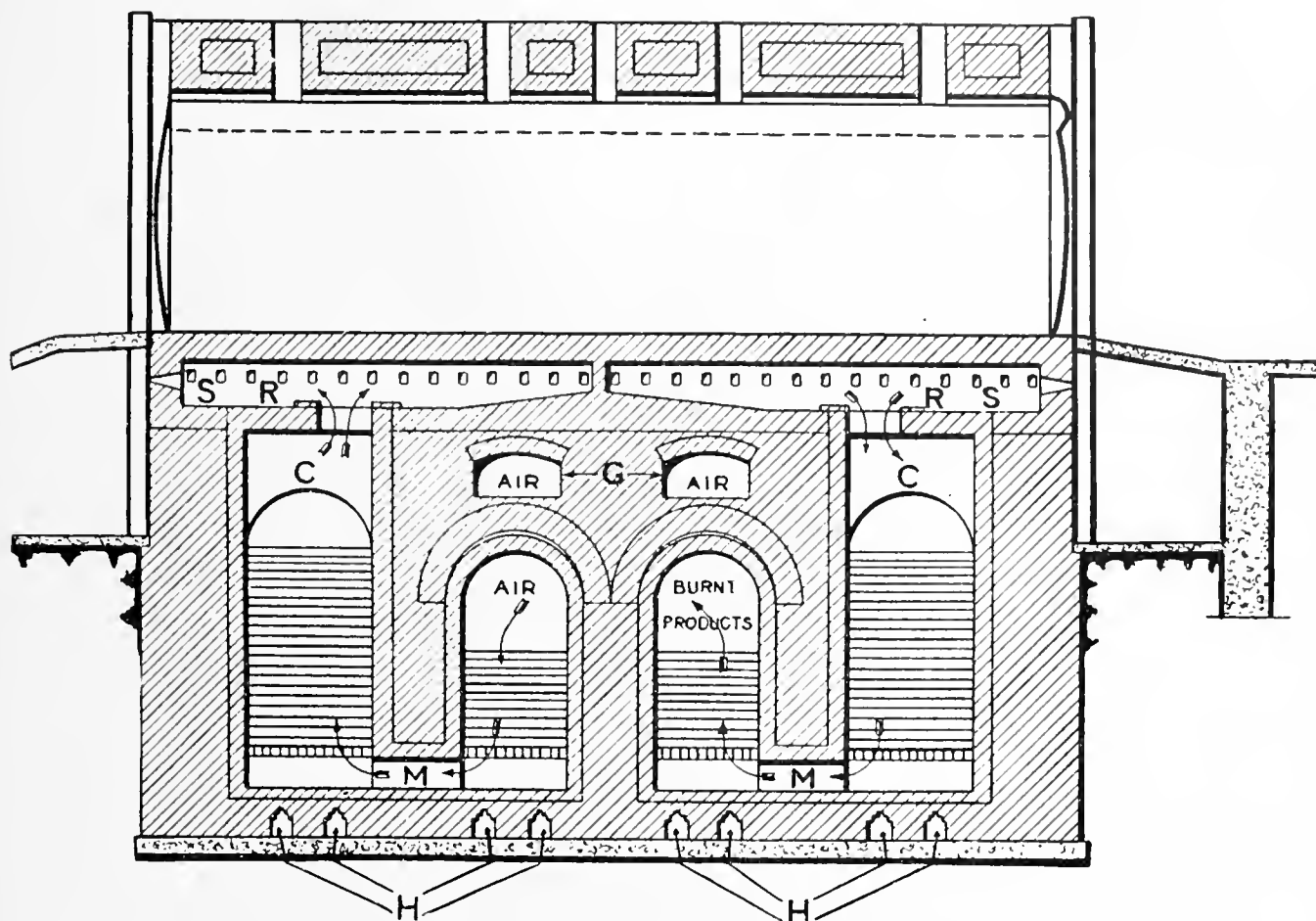


Fig. 2. Section Through Oven Chamber.

This consumption is the smallest yet realized in the United States, considering the conditions imposed by the tests.

Features of Construction

The ovens built for demonstration purposes at the Laclede Gas Coke Station in St. Louis are the Regenerative-By-Product Oven.

The general appearance of the battery is pleasing. Simplicity and strength is shown in the complete plant as well as in the details.

The foundation is formed by four galleries, running the length of the battery, with wide division and side walls and heavily arched tops. (See Figs. 3 and 4.) The whole forms a structure having a rigidity equal to that of a mass foundation and forms a huge grill to carry the oven walls which run at right angles to the gallery walls.

The galleries in the foundation are the regenerators. They contain checker brick work designed for the efficient absorption of heat. The two outside galleries run the length of the battery and are called the "Primary Regenerators." The two inside galleries run the length of the battery and beyond where they connect to a gallery leading

to the base of the stack. These inside galleries have somewhat less checker brick work than the outside galleries and are called "Secondary Regenerators."

The Primary and Secondary Regenerators on the same side of the longitudinal center line of the batteries are connected through channels (M) in the base of their dividing walls. The sectional area of these channel openings vary, being so designed that each passes an equal quantity of air, even though they are located at different distances from the stack.

The oven proper, or distilling chamber, is 9' 10" high, 37' long between doors and has an average width of 19 $\frac{3}{4}$ '. The oven walls diverge slightly from the pusher toward the discharge side, to facilitate pushing of the coke. Great care has been taken in the design throughout that the oven may give long service and remain leak-proof.

Directly under the distilling chambers are the sole-flues (S). These sole-flues are provided two for each oven, each half of the same oven having its own sole-flue. Each sole-flue (S) connects directly to the primary regenerator on its side of the battery, through a slit in the arch top of the regenerator gallery. (See Fig. 5.)

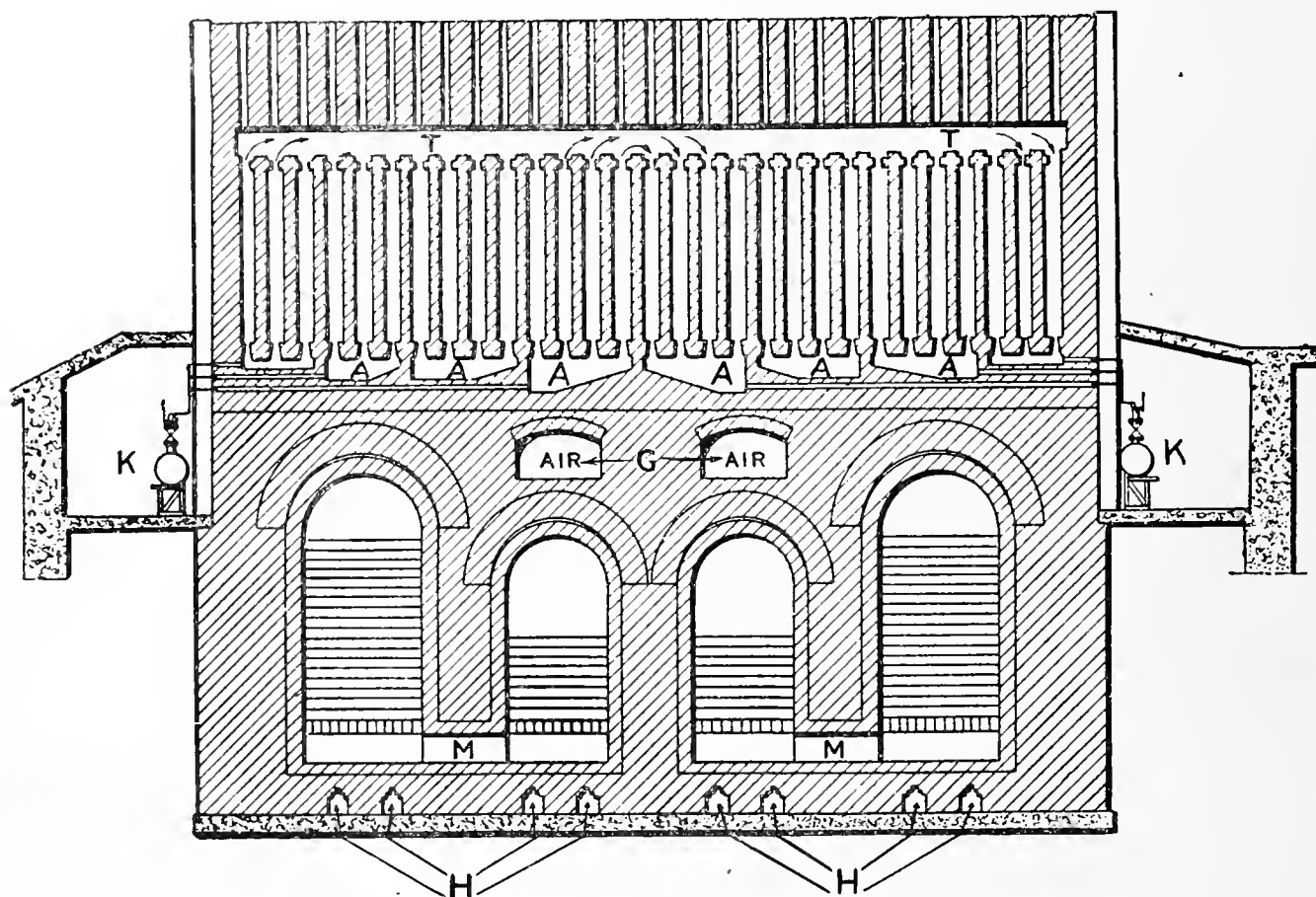


Fig. 4. Section Through Heating Flues.

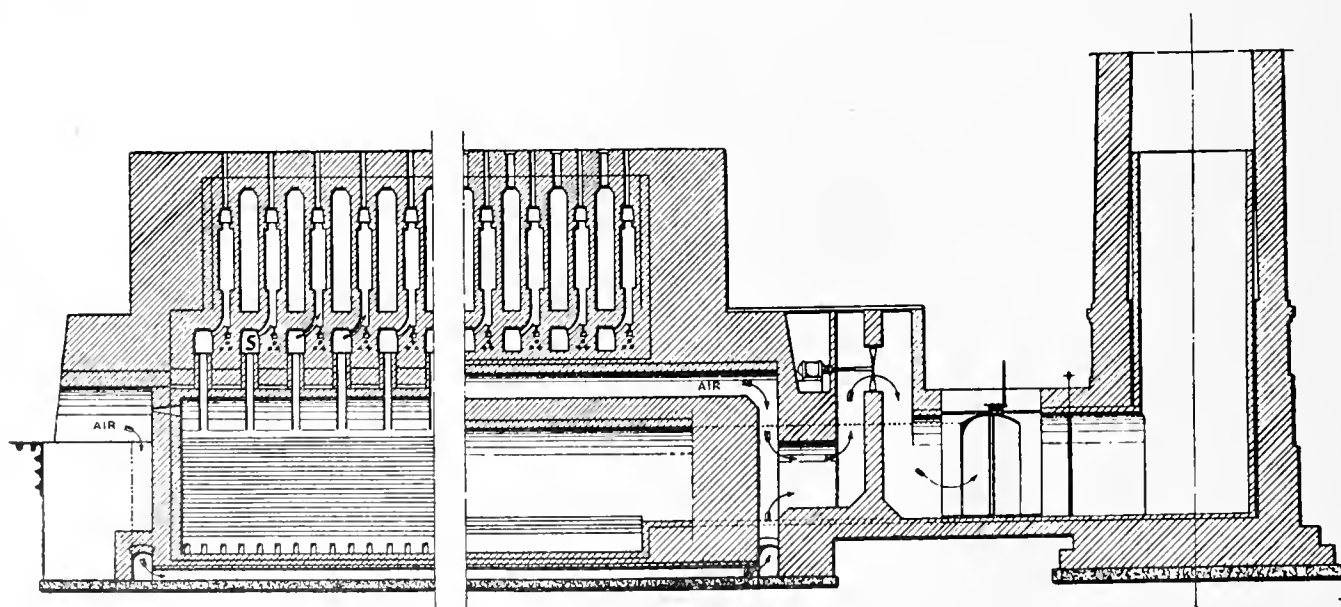


Fig. 5. Longitudinal Section Through
Primary Regenerator Secondary Regenerator

The sole-flues connect to the vertical oven wall flue system on the right of the distilling chamber under which they are located, but it will be well to first describe the construction of the oven walls.

The oven walls seat firmly on the foundation, which has already been described. The lower part of the wall, corresponding to the space occupied by the sole-flues beneath the distilling chamber, is termed the sub-wall; the rest of the wall above the sub-wall is the wall proper. The design gives a very rigid wall compared to other types of ovens, as the only unsupported height of wall is just equal to the height of the distilling chamber.

In the wall proper are the vertical flues. The gas is brought to these flues through a system of four small conduit openings (A), built in the brick work of the sub-wall. (See Fig. 4.) Each conduit carries gas to its allotment of either three or four vertical flues, into which the gas passes through carefully calibrated nozzles in the base of each. In the vertical flues, just above the gas nozzles and very close to them, are the openings from the sole-flues.

The top of all the vertical flues open into a header (T) built in the wall. (See Fig. 4.) These headers form the only means of passage for the gases from one system of regenerators and flues on one side of the battery to the second system on the other side. This will be made clear in the discussion of the method of operation which follows.

From without, the battery is supplied with gas and air. Lean gas from the recovery plant is carried by large mains (K) to both sides of the battery. These mains in turn supply gas to four burners, with individual control valves, to the four gas conduits (A) in the sub-wall of each oven, which in turn carry it to the vertical heating flues, as already explained.

A feature of the design is the method employed to utilize the intake air, before it reaches the regenerator, for absorbing heat that otherwise would have been lost through radiation; as in the case of the air channels (H), which pass beneath the regenerators. The intake air is further used to give an insulating effect between sole-flues and secondary regenerators; as in the case of intake canals (G), which run over top of the secondary regenerators and below the sole-flues.

All the air canals (G) and (H) conduct air to a common gallery near the stack end of the battery, from which it is delivered through a fan and reversing mechanism first to one regenerator and then to the other.

Method of Operation

As stated in the description of the ovens, there are vertical flues, regenerators and a reversing arrangement. It is also shown that the regenerators are constructed in longitudinal galleries. However, they operate transversely. This may be clearly shown by following through one cycle of the heating operation.

Consider the reversing damper in position shown in Fig. 6. The air is drawn in through the intake canals, (G) and (H), to the fan. It is then deflected by the damper into the extension of the gallery of the secondary regenerator on the left side of the battery. The air passes back in this gallery and over the top of the hot checker brick work. (In the open part of the secondary regenerator gallery is the only place we find air or burnt gases moving longitudinally.) Now the air passes down through the checker work of the secondary regenerator, transversely to the left through the channels (M) in the base of the dividing wall and up through the checker work of the primary re-

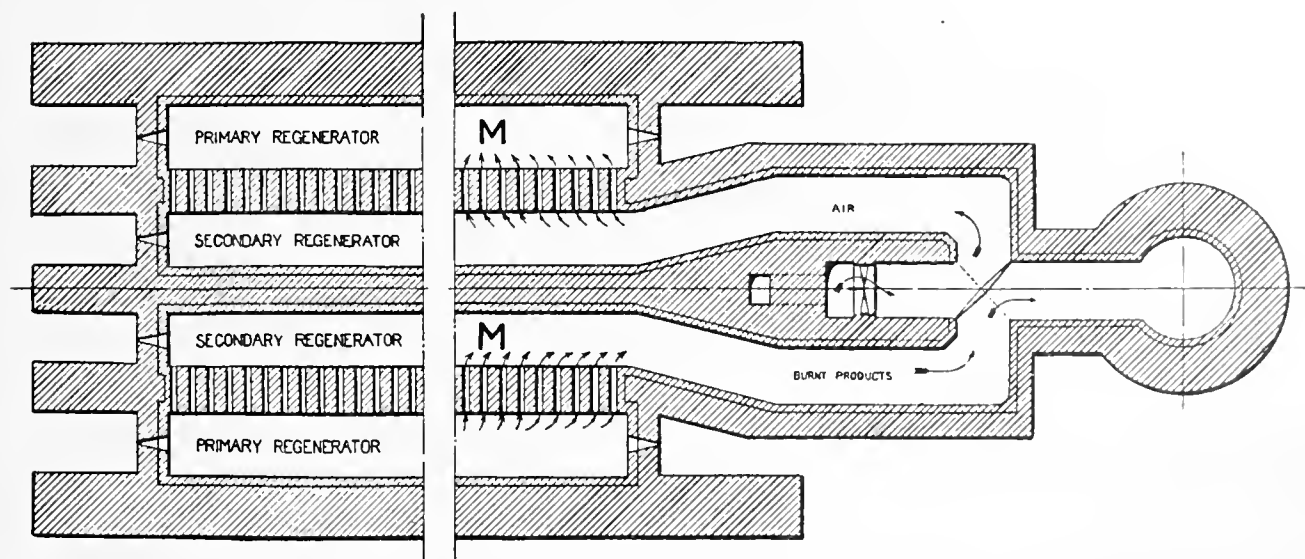


Fig. 6. Plan of Regenerators.

generator. The air, which is now heated to a very high temperature, passes directly up through the slits in the top arch of the primary gallery into the sole-flues (S) under the left half of the ovens. There the air divides and passes up into the vertical heating flues in portions as determined by the sectional area of the opening into each individual flue. At the same time gas is being fed to these flues through a nozzle in the base of each. The burning mixture passes up through the vertical flue into the header (T), moves transversely to the right in the header and passes down through the vertical flues in the right half of the oven wall, down into the corresponding right hand sole-flues and on down through the arch and checker brick work of the primary regenerator, moving transversely to the left through the channels (M) in the base of the dividing wall and up through the checker brick work of the secondary regenerator. Now having given up most of its heat, the spent gases pass longitudinally out through the open spaces of the secondary regenerator galleries and up the stack.

When the heating is reversed, the path followed by the air and gases is unchanged, merely the direction of flow is reversed, the air coming in through the right hand regenerator system, sole-flues and vertical flues and down through the left hand system and out of the stack.

The same mechanism which operates the deflecting damper also opens and stops the supply of gas to the burners on either side of the battery.

Advantages of the Piette Oven System

This system has many advantages derived from the design of oven as well as from the method of operation.

Some of the principal ones are:

(1) This oven uses in its construction fewer special brick than any other type of its class. This means a great saving in first cost and upkeep.

(2) The design combines the advantage in construction, of the longitudinal type of the regenerator, with the operating efficiency of the transverse type of regenerator. Both of these advantages are most generally admitted, due to the strength and freedom from expansion stresses in the construction of the longitudinal type, as well as the lower water gauge required to operate the transverse type, which makes for less leakage as the oven becomes older.

(3) Due to the carefully calculated sections of the openings into the sole-flues as well as at the bottom and top of the vertical flues, dampers are

practically eliminated. Dampers warp and stick in usage, and allow tampering by unauthorized persons.

(4) The chance of the short circuiting of the burning gases in the heating flues is avoided, as the gases are carried up in all the flues in one half of the oven wall and returned down the flues far removed in the other half. Another advantage of this same operation is that the gases more completely give up their heat to the oven wall.

(5) The recovery of heat in the intake canals is considerable, as is shown by the fact that the air in passing through the canals alone is raised to a temperature of from 200° to 280° F. This saving is clearly shown in the tests of these ovens.

(6) The ovens are easily operated and watched. Many loopholes are provided and conveniently placed to permit of inspection all along the route of flame and gases. Loopholes on each vertical flue (see Fig. 5) allows the corresponding nozzle to be inspected through an opening starting at the top of the oven. Loopholes are also provided for each half sole-flue and for each primary regenerator gallery.

(7) There is remarkable stability to the construction. The regenerators are longitudinal to the axis of the battery and therefore perpendicular to the axis of the oven walls and arches of the oven. It is this intersection of the walls of the oven which give to the mass of the battery its maximum stability.

(8) The expansion of the linings and of the arches of the regenerators, as well as of the flues connecting the primary regenerators with the sole-flue, is rendered completely independent of the general sustaining mass of the battery. The result is that the refractory material which constitutes the sole-oven walls and the ovens are built on an absolutely monolithic block which cannot be deformed. This is a worth-while advantage with the high-expansion silica brick used so freely in the United States.

Complete Plants Constructed

The Belgian-American Coke Ovens Corporation is prepared to contract for the building of Piette By-Product Recovery Coke Ovens, with or without recovery of heat, also for plants for the condensation and distillation of tar, production of sulphate of ammonia or concentrated liquor, recovery of benzol and carbolic acid, manufacturing of pure products, volatile alkali, benzene, toluene, xylene, naphthalene, phenol.

USAGES OF BY-PRODUCT COKE

The by-product coke industry has grown rapidly in the United States during the past five years. Much of this may rightly be attributed to contingencies created by the World's War, but it is recognized by all students of conservation methods that the wasteful methods of coking in bee-hive ovens were bound to cease, and that the by-product system was destined to supplant these because of its economies.

By-product coke is suitable for all purposes where a bee-hive coke has been successfully employed, such as for blast furnaces, foundries, smelting, power plants, domestic use, paint and varnish plants, chemical works, construction work, street car heating, bakeries, lime burning, etc.

By-Product Coke for Blast Furnaces

Not many years ago the coke made by the wasteful bee-hive oven was preferred by the average blast furnace man. Now it is generally recognized in American practice that by-product coke gives better results. This has been due, not merely to a change of attitude on the part of the blast furnace man, but also to the marked improvements in the quality of the by-product coke. It is now found to be more uniform in size and harder than bee-hive coke, with a smaller percentage of cell spaces, and therefore about 10 per cent. heavier, bulk for bulk.

Another point worthy of note in favor of the by-product system is that it is possible, as a result of research and experimenting, to increase its quality and thus, in turn, make it possible to attain still further improvement in blast furnace practice. Mixing of coals, variable coking temperatures, design of oven, size of coal charged and the coking time are all subject to change and offer attractive fields for investigation.

New and untried coals may be tested in the by-product oven with a view to making the best possible coke. If they respond favorably to laboratory tests, such coals should be given careful study to determine the conditions best adapted for usage. The results of such investigations are of the utmost importance to the owner and producer of coal, and to the public at large from the standpoint of fuel economy and conservation.

By-Product Coke for Foundry and Smelting Uses

By-product coke is in successful use for copper, lead and nickel smelting and for general foundry purposes, particularly brass and aluminum.

By-Product Coke for Steam Plants

By-product coke for steam generation is not common in American practice, although such plants are in operation and are giving highly satisfactory results. As illustrating the tendency in England,

where fuel conservation is now receiving a great amount of attention, we quote from an article written by E. W. Nicol for the "Colliery Guardian," issue of October 7, 1921:

"During the recent three months coal stoppage, this accumulated experience in firing steam boilers with coke was of very considerable service in maintaining essential public services and industries, and the extent to which coke was used in this connection is probably not fully realized. One of the largest sugar refineries, unable to obtain coke of the size necessary for use with mechanical stokers, accepted supplies of ordinary coke and graded it to the required size by passing it through the sugar crushers; and many express railway locomotives were, to a large extent, fired with coke, thus briefly reverting to the fuel for the use of which the locomotive boiler was originally intended.

"The introduction of coke in the lieu of coal, and of modern coke burning appliances, by the London Coke Committee, has raised many hand-fired steam plants to a relatively high degree of thermal efficiency, and their attendants to a position of comparative comfort and freedom from the unwelcome and often unpractical attention of the smoke inspector. Some 500 sets of this apparatus, each capable of consuming 500 tons of coke per annum, have been made and fixed to hand-fired boiler furnaces, with a view to enable steam users to eliminate entirely the use of crude coal. In the case of a London hospital recently dealt with, the saving effected by using coke in place of coal is at the rate of over \$2,000 per annum.

"The chief difficulty in introducing coke as fuel for steam raising has been in adapting boiler furnaces and automatic stoking appliances primarily designed for use with coal. By supplementing the usually adequate chimney draught with mechanical draught, many of these boilers have readily been adapted to use coke efficiently. A recent invention which facilitates the cleaning of hand-fired furnaces, and prevents loss of fuel and steam pressure during this operation, should tend materially to improve the average efficiency obtained and incidentally to facilitate the use of coke for boiler firing. A very serious disadvantage of the mechanical stoker which did not transpire in the discussion before the Mechanical Engineers, is its inherent limitation to bituminous coal. Steam users whose boilers are so equipped are unable to take full advantage of relatively cheap coke or breeze, however plentiful or cheap, or to realize the bargaining advantage of an alternate fuel.

"Electric power stations almost invariably are equipped with water tube boilers and chain grate stokers. This type of stoker is, like most others, designed on a bituminous coal basis, and is, ordinarily, quite unsuitable for use with coke, or even any considerable admixture of coke with coal. It therefore formed a very serious obstacle to opening up business relations between gas and electric supply undertakings for the supply of coke as fuel. Early in 1913 the author was, however, able to institute experiments at an important power station in Yorkshire, with a view to adapting the chain grate mechanical stoker to use coke and coal slack. Admixtures of coke up to 75 per cent. were used quite satisfactorily with very inferior coal slack. Now known as the "sandwich system," this invention has since been adopted as a permanent institution at some of the largest power stations. It has been the

means of opening up important business relations with public utility undertakings, public authorities, and large power users. Three or four of these undertakings in London, whose boilers are only partially equipped with the "sandwich system," are already consuming over 100,000 tons of coke per annum.

"The introduction of coke as fuel for electric power stations by the London Coke Committee promises to have a far-reaching effect upon the future development of the electric supply industry, and also upon the better utilization and the conservation of the country's coal resources. The invention of the "sandwich system" of firing coke has enabled existing coal burning mechanical stokers in many important electric power stations in London and the provinces to use up to 75 per cent. of coke in conjunction with relatively inferior coal slack. One London power station now uses over 40,000 tons of coke per annum. In this case alone, the gain to the country in by-products recovered from an equivalent quantity of coal is represented by some 800,000 gals. of tar, from which pitch, dyes, drugs, fuel oils, motor spirit, and high explosives are produced; and, in addition, over 800 tons of sulphate of ammonia, which is used by farmers as a fertilizer for the land."

are first broken up and then run over screens that prepare it in convenient forms for domestic use. In the case of by-product coke, it is pushed from the oven mechanically and, after being quenched, is run over screens, the larger pieces being shipped for furnace and foundry uses, and the balance being screened into egg, stove and nut sizes.

A comparative analysis from U. S. government reports on the two fuels is given below:

	Anthracite	By-Product Coke
Moisture	3.30	1.96
Volatile Matter.....	3.80	0.99
Fixed Carbon.....	81.50	90.15
Ash	11.40	6.90
B. t. u.	13,000	13,679
Specific gravity.....	1.66	1.90
Efficiency in burning.	66.30	75.43

As will be noted from the above comparison, anthracite coal has a large percentage of inert



Truckload of Domestic Coke.

By-Product Coke for Domestic Use

Many discussions on the subject of the use of coke as a domestic fuel have appeared of late, and it is quite evident that its use as a substitute for both anthracite and bituminous coal is a matter of growing interest.

In most discussions coke is compared with anthracite coal, which it closely resembles in several respects. Anthracite coal, in the early stages of its formation, had a high volatile content which later was lost by the enormous pressure developed by the folding of the strata. At the same time the coal lost its cellular structure. By-product coke likewise is low in volatile matter, but unlike anthracite coal, the cells are retained.

Anthracite coal comes from the mines in a mixture of large and small pieces. The large pieces

material in the form of ash. The percentage given is, if anything, much lower than what the average anthracite contains today, whereas the percentage of ash in by-product coke, owing to the bountiful supply of low-ash coals, need not go beyond the percentage quoted for many years to come. A practical demonstration on the amount of ash in the burning of 200 pounds of each fuel, made in St. Louis, shows the following results:

	—Ash in 200 Pounds Burned—	
	Pounds	Per Cent. Loss
Anthracite	29½	14¾
Coke	11½	5¾

Taking into consideration the higher cost of anthracite coal, the money loss due to ash was 3¾ times as large as the loss with coke.

In a Bulletin issued by the University of Illinois Experiment Station, the results of tests of different house heating fuels are given and show that by-product coke has an actual heating value $11\frac{1}{2}$ per cent. higher than anthracite.

In comparison with bituminous coal the percentage is much greater. Technical paper No. 242 issued by the Bureau of Mines states that $7\frac{3}{4}$ tons of coke will deliver as much heat as 10 tons of the best soft coal, besides having the great advantage of being clean.

By-product coke in tests made at the Sheffield Scientific School of Yale University, along with both hard and soft coal, showed the highest results for coke, with the highest efficiency ever reported.

Methods of Burning

The furnace size of coke is usually specified for hot air, hot water and steam furnaces; egg and stove sizes for base burners and air-tight heaters; pea and nut sizes for self-feeding furnaces and water heaters.

Successful coke burning depends on proper draft regulation. As all furnaces and flues do not work alike, each user should experiment with his dampers to get the best results. In all cases, however there should be a damper inside of the smoke pipe; when the draft is shut off this damper should be nearly closed and when the draft is turned on it should be opened only part way. As an aid to combustion, some air must be admitted over the top of the fire at all times through the damper in the fire door. Coke being lighter than coal, a correspondingly larger body of fuel should be carried in the furnace.

A coke fire is easy to start. The drafts should not be opened too far and as soon as the fire is well started they should be closed and a uniform, steady heat thus maintained. Instead of shaking the grate bars, run the poker through the fire from the fire door so as to loosen it and let the air through. Coke is no harder on the furnace than any other fuel.

We quote from Technical Paper No. 242, Bureau of Mines:

"When burning coke a furnace requires much less attention than when burning soft coal. The time usually given to poking fires, cleaning the furnace flues and the house, can be spent much more profitably in other ways. The cleanliness of coke will appeal especially to the housewife.

"Coke offers the best means of making our large cities smokeless. Where soft coal is burned for domestic heating about 60% of all the smoke in the atmosphere is made in the residential section, in house heating furnaces. Substituting coke for soft coal will eliminate this 60% of smoke.

"Coke does not make any soot, consequently the cleaning of boilers, smoke pipes and flues is eliminated. Soot is poor conductor of heat; when it is deposited on the heating surfaces of the boiler or furnace, much less heat is

utilized in heating the house, and a large part of the heat passes up the chimney. All formation of soot means a direct loss, because it represents that much unburned coal.

"Soft coal can never be burned in house-heating furnaces with such completeness of combustion as coke. The coal is first reduced to coke by driving off the volatile matter, most of which escapes unburned; then the coke burns in the furnace and heats the house.

"The results obtained thus far show that coke can be burned in house-heating furnaces much more efficiently than soft coal."

Disposal of Coke and By-Products

Our attention has been called to the fact that in a large number of cases where gas producing companies have had under consideration the question of installing by-product coke ovens for their supply of gas, the controlling objections have been:

First. That it was not possible to market the coke produced by the ovens.

Second. That the other principal by-products, namely, tar and ammonia, would soon fall to such a low price by stimulation of production that they could not be considered as stable producers of revenue.

The first objection, as to marketing the coke, may be due partly to the fact that their experience has been confined to the sale of ordinary gas house or retort coke, an entirely different fuel from the coke produced by by-product ovens, and their conclusions may have been reached by not having the territory available for shipment of high grade metallurgical and domestic coke, such as is produced by by-product ovens, thoroughly canvassed by men experienced in marketing this grade of coke.

The results obtained and the methods used in reaching results in Boston, St. Paul, Milwaukee, Chicago, St. Louis, Indianapolis and Terre Haute, and various other cities, would aid largely in removing the wrong impression as to the marketability of this grade of coke.

The second question is raised as to the future of the market for ammonia and tar. Ammonia, being the base of one of our most valuable fertilizers, has become a standard commodity having a world-wide market. Tar can be considered in the same way. While like any other standard commodity, prices may vary with general conditions, the growth of the use of both commodities would naturally increase in the same proportion as the use of coal and steel, and further, it is possible to make contracts for the sale of these commodities before the erection of the plant on a basis that would insure fairly stable conditions of income.

The organization of the Belgian-American Coke Ovens Corporation will be very glad to aid you in the matter of investigations of the possibilities of marketing coke in your territory, as well as the other by-products.

THE GAULEY MOUNTAIN COAL CO.

General Office
ANSTED, WEST VIRGINIA

Sales Office

523-524 American National Bank Building, Richmond, Virginia. E. Vawter, Sales Mgr.

Manufacturers and Shippers of Gauley Mountain Foundry Coke

Ovens Located on the Chesapeake & Ohio Railroad at Ansted, Fayette County, West Virginia.

For use in Foundries, for the manufacture of Water Gas, for Pot Linings and special metallurgical uses requiring a low sulphur, low ash, non-clinkering fuel.

For over a quarter of a century Gauley Mountain Foundry Coke has been used by discriminating foundrymen.

This coke is manufactured in Bee-Hive ovens from finely crushed coal, and is burned 72 and 96 hours. The ovens are hand drawn and the coke carefully forked in loading. It is of hard, dense structure, silver gray in color, carries a high shatter test, and is capable of supporting a heavy burden.

FOUNDRY COKE

Foundry Coke—A Typical Analysis		Representative Sample of 200 Tons Supplies to the U. S. Government	
	%		%
Volatile Matter	0.62	Volatile Matter	0.61
Fixed Carbon	90.85	Fixed Carbon	91.06
Ash	8.53	Ash	8.33
	100.00		100.00
Sulphur	0.66	Sulphur	0.67
Phosphorus	0.002		

Average Ash and Sulphur Determination Made of Samples Taken from 8 Cars.

Samples Taken and Analyses Made by the
U. S. Government.

	%
Ash	8.35
Sulphur	0.692

SPECIAL COKE

Special Coke Yielding the Following Analyses Has Been Manufactured for Particular
Metallurgical Uses

	%		%
Ash	5.50	Volatile Matter	0.82
SiO ₂	2.67	Fixed Carbon	92.36
Fe ₂ O ₃	0.60	Ash	6.82
			100.00
		Sulphur	0.62
		Phosphorus	0.007

Fusing Point of Ash = 2700° F.

ROGERS, BROWN & COMPANY

PIG IRON • COKE

SMITHING COAL

A trial will prove that RALEIGH BLACK KNIGHT SMITHING COAL is unsurpassed in quality. For heavy welds, it is pre-eminent.

Average analysis of samples taken by a user from three cars in accordance with the approved methods of the U. S. Geological Survey. Analysis by F. C. Broeman & Co., Cincinnati.

Moisture (Dry Basis)	1.21%
Volatile	18.66%
Fixed Carbon.....	76.90%
Ash	4.44%
Sulphur	0.53%
B.T.U.	15,219
Fusing Point of Ash.....	.....2780° and better.

Read what one user has to say:

"I am glad to advise you that we have been using RALEIGH BLACK KNIGHT for a number of years, and it has proven very satisfactory for our blacksmithing work."

NEWPORT NEWS SHIP-BUILDING AND DRY DOCK COMPANY.



What the Government Says About Coke

From Technical Paper No. 242, Dept. of Interior

"When burning coke a furnace requires much less attention than when burning soft coal. The time usually given to poking fires, cleaning the furnace flues and the house, can be spent much more profitably in some other way. The cleanliness of coke will appeal especially to the housewife.

"Coke offers the best means of making our large cities smokeless. Where soft coal is burned for domestic heating, about 60% of all the smoke in the atmosphere is made in the residential section, in house-heating furnaces. Substituting coke for soft coal will eliminate this 60% of smoke.

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"The results obtained thus far show that coke can be burned in house-heating furnaces much more efficiently than soft coal."

Upon request, our nearest office will send a booklet giving further extracts from this paper. These booklets are furnished free to dealers who purchase their coke from us, for distribution to their customers.

The consumer is the judge. Dealers who handle a dependable brand of by-product coke find that THEY COME BACK FOR MORE.



COKE

Many people consider coke simply as something to burn. They do not discriminate. The truth is that there are good and bad cokes. Furthermore, a coke pronounced the "best ever" by one user may be condemned by another in the same line of business. The reasons are many. Cokes, like people, have their individual characteristics.

We offer 29 Brands (Beehive and By-Product) representing practically every producing center, for the following purposes:

Foundry
Domestic Heating
Smelting and Refining
Sugar Refinery
Blast Furnace
Gas Producers
Bakery
Paint and Varnish Plants
Steam Plant (under proper condition)

You know your requirements.

Our salesmen know the characteristics of our brands.

At least one of the 29 brands will exactly meet your needs.

"EVERY POSSIBLE KIND FOR EVERY POSSIBLE PURPOSE"

ALUMINUM
FERRO ALLOYS

FLUOR SPAR
ORES

SPIEGELEISEN
FERRO SILICON

ROGERS, BROWN & COMPANY

PIG IRON • COKE

NEW YORK.
CLEVELAND.

PHILADELPHIA.
CHICAGO.

CINCINNATI

BUFFALO.
BOSTON

PITTSBURGH
ST. LOUIS

PART I.—THE EXPORT OF COAL

Gradual Development of English and American Export Trade; Review of Exports During 1920 and 1921; Future of American Coal Trade in South America, Europe and Other Countries; England Our Chief Competitor; American Export Coals, Their Origin, Pools and Analyses.

F. R. WADLEIGH*

Historical

The beginnings of the coal export trade, as far as we have record, date back to 1325, when a ship from Pontoise, France, brought a cargo of corn to Newcastle-on-Tyne and returned with a cargo of "charboun de meer," or sea coal. In 1362 the foreign export of coal was prohibited, an exception having been made in 1367 in favor of Calais, which at that time was the only continental port to which British commodities were allowed to be shipped.

In the sixteenth century exportation of coal had attained such importance that the question of its prohibition came up before Parliament as a measure to injure the French manufacturers.

During the reign of Edward III. and Queen Elizabeth a tax on all coal exports was imposed by the Crown, which continued in effect to 1578.

The growing importance of the export coal trade in the seventeenth century was shown by a writer of about 1615: "Besides our own ships (400 in number) thither even to the mines' mouth, come all our neighboring nations with their ships continually. The French sail thither in whole fleets of fifty sail together."

At Liverpool the first record of coal exports shows in 1617, 1,879½ "chaldrons" of coal having been shipped abroad in that year (a chaldron was originally about 2,000 pounds or three one-horse cartloads).

The first record of exports from South Wales seem to be in 1617, when 1,992½ chaldrons were shipped from Swansea and Milford. In 1799, 3,000 vessels were loaded at Swansea, the total amount exported having been 33,228 tons.

At Cardiff as late as 1540 coal was not even used; in 1698 we find records of coal having been brought from Sir Humphrey Mackworth's mines at Neath to the Waterside at Cardiff.

In 1828 records of exports from South Wales ports were:

	Tons
Cardiff	32,109
Newport	422,878
Swansea	339,411
Slavelly	92,144
Milford	18,354
Total	904,896

The steady growth of British coal exports is shown by the following table:

	Tons
1821	260,314
1831	508,697
1841	1,848,294
1851	3,468,545
1861	7,855,115
1871	12,549,874
1881	19,174,753
1891	30,356,328
1901	42,684,752
1911	64,599,266
1913	73,400,118
1918	31,752,904
1920	24,931,853

This table does not include coke or briquettes.

Among the Continental European countries there were doubtless small and unimportant interchanges of coal going on as far back as the eighteenth century, but overseas exports had their beginning in Great Britain, which for several centuries had a monopoly of the trade.

United States

While exports of coal to Canada had been going on for many years, overseas coal export trade from the United States practically started in 1897, although occasional cargoes had been shipped to foreign countries at various times previous to that date. In the year 1897, however, the first real and systematic effort started, looking to the permanent establishment of an overseas market for our coals.

To the firm of Castner & Curran must be given, we think, the credit for this effort and for making known in foreign countries the good qualities of the coal (Pocahontas) which they handled exclusively at that time; for a long time Pocahontas was the only American coal about which anything was known abroad.

In that year and in 1898 several cargoes of Pocahontas coal were shipped to the East coast of South America, two sales managers were sent from this country and a resident agent appointed at Rio de Janeiro. Tests were made on several railroads and at industrial plants, from which gratifying results were obtained, in the face of great difficulties, it being found necessary to send an engineer from this country to look after the tests. This promising attempt to obtain a footing for our coals failed and was a loss financially owing to mistakes and misunderstandings.

*Since writing this article, Mr. Wadleigh has been appointed Chief of Coal Section, Fuel Division, Department of Commerce, Washington, D. C., and Commercial Engineer-Fuels, U. S. Bureau of Mines, Washington, D. C.

Previous to this time a considerable tonnage of United States coals had been shipped to the West Indies, principally for use as steamship fuel at coaling stations, and in 1898 a cargo of Pocahontas coal was shipped to Jamaica, for test by the State Railways, which resulted in the continued use of our coal by the Railways. In 1902 the British miners' strike gave us a monopoly of the West Indies markets and we have held it ever since, a not inconsiderable factor in our overseas coal trade. In 1911 it amounted to 1,812,000 gross tons, which had increased in 1920 to 2,168,000 gross tons.

To the West Coast of South America our coal exports practically began in 1902, when at least three cargoes were shipped to Chile, two to Valparaiso for the State Railways, and one to Antofagasta to the Peruvian Corporation. Of the two cargoes to Valparaiso, one was Pocahontas and the other a high volatile coal from Northern West Virginia. Tests of these coals were made on locomotives against Australia and native coals, but results were not satisfactory for various reasons and costs were not comparable, the United States coals being more expensive, so that no further business was developed at that time. The cargo of Pocahontas coal shipped to Antofagasta gave good results both on locomotives and at the nitrate works; some of it was carried on mule or llama back to the Huanchaca silver mines, then 40 miles from the railway.

About this time (1902-3) efforts were made to secure some business from the Italian State Railways, and one or two trial cargoes were shipped, but no success followed, as the coal was too friable and could not be used successfully on the Italian locomotives owing to their grates and smokebox arrangements not being suitable.

Another attempt on the French market was also made by supplying Pocahontas coal for use on the small canal tugs used in that country. Tests in this use were successful, but the difference in delivered prices as compared with British coals was too great to be overcome.

In 1906 the Italian Navy sent two of its colliers, the S. S. Sterope and the S. S. Bronte, to Hampton Roads for trial cargoes and bunkers of Pocahontas and New River coals. The coals obtained gave excellent results and it is probable that this was the beginning of the use of these coals by the Italian State-owned passenger lines, a use which has continued to this day.

To European countries a few occasional cargoes had been shipped previous to 1905, especially during the 1902 British miners' strike, but no systematic export efforts resulted, although what was done proved sufficient to make British shippers take notice. In 1909 and 1910 more serious efforts were made to enter the overseas export trade; several of the larger coal companies sent men abroad, with the result that in 1911 (fiscal year) our exports to Europe, South America and the West Indies amounted to 670,800 gross tons, and in 1912 (partly owing to the British miners' strike) they had increased to 929,412 tons.

Spasmodic and generally unsuccessful attempts were made to get West Coast business up to the breaking out of the War, since which time we have gradually increased our exports to Chile the only market of any consequence on the West Coast.

Previous to 1902, United States coals, mainly Pocahontas, had been shipped to Colon for use by the Panama Railroad, then a privately owned concern, for use on their locomotives and for supplying bunker coal, both at Panama and Colon. In that year the cargo and passenger ships of the two Pacific Coast lines began to use Pocahontas coal, supplied to them at Panama.

In 1911 the only concerted intelligent systematic effort to obtain a permanent export market for our coals failed, through jealousy, prejudice and ignorance.

Ever since it has been a go-as-you-please race between individual companies, many of them knowing little or nothing about either coal or shipping, but still successful as regards increased tonnage, largely owing to conditions; culminating in the maximum overseas export of 22,296,000 net tons in 1920. (See Table 1.)

TABLE 1. BITUMINOUS EXPORTS FOR THIRTY YEARS

The following table, recently issued by the Geological Survey, shows exports of bituminous coal for the past 30 years, and showing Canada separately. These figures are for net tons:

Year	To Canada	To All Other Countries	Total
Fiscal years—			
1890	613,874	658,522	1,272,396
1891	796,134	855,560	1,651,694
1892	939,772	973,784	1,904,556
1893	1,113,945	872,437	1,986,382
1894	1,615,367	824,352	2,439,719
1895	1,882,148	777,839	2,659,987
1896	1,875,786	640,052	2,515,838
1897	1,947,655	722,502	2,670,157
1898	2,103,958	900,346	3,004,304
1899	2,345,927	1,552,067	3,897,994
1900	4,110,491	1,950,198	6,060,689
1901	3,688,759	2,766,326	6,455,085
1902	3,743,733	2,305,044	6,048,777
1903	4,157,704	1,677,556	5,835,260
1904	4,964,488	2,242,390	7,206,878
1905	5,237,875	2,274,848	7,512,723
1906	5,499,133	2,515,120	8,014,253
1907	6,891,173	2,978,639	9,869,812
1908	7,673,310	3,397,841	11,071,151
1909	7,297,726	2,803,405	10,101,131
1910	8,126,400	3,536,652	11,663,052
1911	9,663,319	3,596,472	13,259,791
1912	11,952,620	5,111,821	17,064,441
1913	13,419,216	4,690,857	18,010,073
1914	12,849,085	4,740,477	17,589,562
Calendar years—			
1915	9,357,000	9,420,000	18,777,000
1916	13,260,000	7,995,000	21,255,000
1917	18,117,000	5,723,000	23,840,000
1918	18,134,000	4,217,000	22,351,000
1919	11,950,000	8,176,000	20,126,000
1920	16,221,000	22,296,000	38,517,000

Data for 1881 to 1914 cover fiscal years ending June 30; for 1915-1920, calendar years.

Table 2 shows production, imports, and exports of anthracite and bituminous coals from 1913 to 1920 inclusive.

TABLE 2. PRODUCTION, EXPORTS, IMPORTS AND HOME CONSUMPTION OF ANTHRACITE AND BITUMINOUS COAL, 1913-20.

(Calendar years, net tons. Data on production, consumption and stocks drawn chiefly from reports of United States Geological Survey on imports and exports from records of Bureau of Foreign and Domestic Commerce.)

	1913	1914	1915	1916	1917	1918	1919 *	1920*
Tonnage—								
Anthracite—								
Production	91,525,000	90,822,000	88,995,000	87,578,000	99,612,000	98,826,000	88,092,000	89,100,000
Imports	†2,000	†9,000	†14,000	6,000	13,000	37,000	83,000	32,000
Exports—								
To Canada & Mexico	4,573,000	4,220,000	3,854,000	4,558,000	5,917,000	4,910,000	4,871,000	5,404,000
To Other Countries	80,000	70,000	111,000	108,000	90,000	58,000	106,000	
Consumption in U. S.‡	87,472,000	84,041,000	88,144,000	87,118,000	94,068,000	92,775,000	83,198,000	83,728,000
Bituminous—								
Production	478,436,000	422,701,000	442,622,000	502,523,000	551,787,000	579,386,000	458,063,000	556,563,000
Imports	1,583,000	1,546,000	1,709,000	1,714,000	1,448,000	1,457,000	1,012,000	1,245,000
Exports—								
To Canada & Mexico	15,650,000	10,674,000	9,670,000	13,481,000	18,324,000	18,316,000	12,064,000	16,448,000
To Other Countries	4,495,000	4,784,000	9,107,000	7,774,000	5,506,000	4,034,000	8,050,000	22,069,000
Consumption in U. S.‡	459,874,000	408,789,000	425,554,000	493,982,000	529,405,000	530,593,000	478,861,000	499,291,000
Values§								
Anthracite—								
Average per gross ton¶	2.39	2.32	2.32	2.58	3.19	3.81	4.62	.....
Average per gross ton¶	5.29	5.28	5.21	5.39	5.76	6.56	8.25	9.44
Bituminous—								
Average per net ton¶...	1.18	1.17	1.13	1.32	2.26	2.58	About 2.55\$	About 3.50\$
Average per net ton¶...	2.26	2.20	2.28	2.16	3.34	3.52	4.16	7.90

*As records for 1920 are not yet complete, many of the figures shown for the year are estimates.

†Fiscal year ended June 30.

‡Production plus imports minus exports, taking into consideration changes in stocks where available.

§In comparing values at mine and of the coal exported, it is essential to remember that the mine value is an average of all coal produced, including mine fuel (often coal otherwise wasted), local sales, and coal coked at the mine, and does not include selling expenses. The export value is the declared value at the port, and supposedly includes selling expenses and transportation charges from mine to port. The two figures are not comparable.

§Geological Survey statistics not yet complete.

Exports Prior to the War

As showing our position, prospects and possibilities at the beginning of the War, the following editorial (by the writer) which appeared in "Coal Age," October 10, 1914, will be of interest and much that is said will apply to today's conditions:

The Export Coal Trade

"Let us say first that any coal company or selling agency, with coal of the necessary quality, that is prepared to give extended credit can get foreign business, but it is doubtful if it will always get its money.

"There is now plenty of good coal available and there are ships to be had, at a price, but the financial end of the business is far from satisfactory. At present our exporters or those who would be exporters, know but little about ocean freights and charters, port charges, unloading conditions, etc., and will only sell coal f. o. b. tidewater, requiring cash against documents before they will allow their coal to be actually shipped. They know that the financial situation, in the countries needing our coal, is generally bad and will take no risks.

"Exporters must realize that the essence of the export coal business is transportation, and that before they can get any large share of the world's foreign coal trade they must learn the devious ways of ocean transportation and provide the required facilities.

"Our competition in the export coal trade, in the past, has been due to opportunities that have come about through outside causes. The British coal strike in 1902 gave us the West Indies markets, which we have never lost, not because we had better coal, but because, in addition to cheaper mining costs, we found iron ore and sugar for return cargoes.

"The British strike of 1912 did us little good, because we failed to take advantage of the oppor-

tunity offered us to increase our exports, getting only such additional business as was offered, but which we failed to retain when British shipping returned to normal conditions.

"Even now, with the chance given by the war, there has been no organized, systematic effort to increase our coal exports; it is all spasmodic, each company for itself after its own plans, usually based on insufficient knowledge of conditions, either of transportation or of finances and credits.

"To capture and retain the foreign coal markets, we must follow the example of Great Britain's exporting companies and understand the basis on which they have worked.

"They have coal of first-grade quality; we also have coals equally as good in heating value.

"They mine and prepare their coal to suit the wishes and needs of the consumer; we prepare our coal as we think best or do not prepare it at all.

"They have the necessary loading facilities that will handle coal with the least possible breakage; we load our coal into ships much more quickly, but with little attention to breakage.

"They build and own their own colliers; we are entirely dependent on other nations for ocean transportation.

"They have established or control their own agencies; we have now but local agents, who often handle British coals and over whom we have no control.

"They build or obtain dock and storage facilities and coaling stations; we have nothing of the kind at foreign ports.

"They have created and maintained banking and financial agencies in foreign countries; we are entirely dependent on foreign banks.

"They meet the consumers' or buyers' views as to sales conditions and credits; we generally refuse to do so and insist on our own conditions, or no sales.

"To sum up, the export coal trade is a business in itself and to succeed in it, it must be studied and learned like any other business; every factor in it (and there are many) must be allowed for and made a part of the whole, otherwise we shall never succeed in obtaining and holding our share of it."

1920 the Banner Export Year

The trend of exports throughout the various Atlantic seaboard ports, while somewhat irregular during the year 1920, was such as to prove very gratifying. During December, 1919, exports had fallen to the low figure of less than 200,000 tons, but from this point there was an increase in each month's shipments, excepting only February and July, until by the month of October a tonnage in excess of 2,400,000 was reached. Succeeding months saw a constant decline up to April, 1921.

The reason for the great increase of our overseas export trade during 1920 lies chiefly in the heavy cut in production in the war-torn countries, due to the physical destruction of the mines, as in France; the drain upon man power, as in Germany; the economic and social disorganization, as in England. The output in France in 1920 (exclusive of the Saar and Alsace-Lorraine regions) was forty-six per cent. less than in 1913, the last year before

the war. Using the same basis for comparison, the decline in Great Britain was twenty per cent.; in Germany (also exclusive of the Saar and Alsace-Lorraine regions) the output of bituminous coal decreased twenty-four per cent. In Central and Western Europe the breakdown was even greater than in Western Europe and the decline in output was proportionately larger.

While practically all non-belligerent countries from Spitzbergen to China helped to fill the void, the largest factor was, of course, the United States. Fortunately the coal production of our country had increased from 38.5 per cent. of the total for the world in 1913 to 45.1 per cent. in 1920, which increase is reflected in our overseas exports amounting to 22,500,000 tons, a quantity five times larger in 1920 than in 1913.

The detailed compilation of exports of bituminous coal from the United States for the calendar year 1920, with comparisons for the year 1919, are shown in the tabular statement. This shows a total of 34,179,559 gross tons of bituminous coal exported as compared with 17,975,090 tons exported in 1919.

Detailed exports by countries for the two years show as follows:

ACROSS ATLANTIC

Destination—	1920	1919
Azores and Madeira Islands.....	47,462	32,846
Austria	11,770	212
Belgium	274,573	200
British Africa	14,105	10,333
Canary Islands	60,276	19,587
Denmark	867,365	88,903
Dutch East Indies.....	1,103	13,221
Egypt	626,548	37,543
England	33,488	8,038
Finland	27,883	.....
France	3,646,359	532,222
French West Africa	238,156	52,001
Germany	76,791	8,740
Greece	219,434	48,120
Gibraltar	96,243	20,293
Hungary	5,194	.....
Italy	2,287,733	1,632,995
Netherlands	2,146,337	722,190
Norway	736,270	159,843
Poland	6,762	.....
Portugal	134,344	45,178
Portuguese Africa	32,418	43,880
Roumania	7,246	.....
Russia in Europe.....	61,713	.....
Russia in Asia.....	5	3
Sweden	1,247,070	252,891
Switzerland	812,332	528,575
Scotland	13,010	.....
Spain	65,453	18,623
Turkey in Europe.....	97,053	4,205
Turkey in Asia.....	11,746	.....
Total	13,906,644	4,280,642

TO SOUTH AMERICA

Destination—	1920	1919
Argentina	1,718,494	453,389
Brazil	965,020	644,109
British Guiana	15,934	3,746
Chile	494,120	123,860
Colombia	6,318	11,835
Dutch Guiana	2,896	1,001
Ecuador	4,226	2,918
Paraguay	6,945	.....
Peru	35,382	45,819
Uruguay	267,807	194,996
Venezuela	2,825	496
Total	3,531,967	1,481,703

WEST INDIES AND NEARBY COUNTRIES

Destination—	1920	1919
Bermuda	49,053	19,438
British Honduras	1,347	601
Barbados	87,461	103,423
Other British West Indies.....	47,747	28,038
Cuba	1,332,632	971,399
Costa Rica	13,707	1,717
Dominican Republic	11,260	13,687
Danish West Indies.....	2,212	14,616
Dutch West Indies.....	40,377	25,503
French West Indies.....	45,455	23,933
Guatemala	1,048	3,893
Honduras	14,761	8,357
Jamaica	82,445	33,088
Mexico	202,991	101,535
Nicaragua	919	2,020
Panama	155,042	72,097
Salvador	8,835	2,243
Trinidad and Tobago.....	28,437	41,321
Virgin Islands	42,371	469
Total	2,168,099	1,467,378

TO BRITISH NORTH AMERICA

Destination—	1920	1919
Canada	14,182,829	10,670,190
Newfoundland and Labrador.....	26,081	8,418
Total	14,509,910	10,678,608

MISCELLANEOUS

Destination—	1920	1919
Aden	8,512	.....
China	10	.....
Falkland Islands	3,073	15,208
Greenland	1,052	1,217
Iceland and Faroe Islands.....	7,152	.....
Kamerun, etc.	6,396	.....
Miquelon, etc.	2,000	.....
New Zealand	35,641	50,024
Other British Oceania	3	.....
Total	63,839	66,159

1921 to Date (September)

The curve of coal exports for the first eight months of the year 1921 is irregular and the indications are that the total tonnage shipped overseas for the calendar year will not exceed 10,000,000 tons, or less than half that of the preceding year.

Beginning with April, exports began to increase, due to the British miners' strike, reaching a maximum in June of 1,600,000 tons, most of the increase going to Great Britain. Because of the long duration of shut-down of the British mines—over three months—it was the belief of many that American coals would be plentifully used in the affected countries by manufacturing, railroad and public utility companies, and that our coals would be needed on the Continent because of the stoppage of the Welsh and English supply. While undoubtedly American coals were drawn upon in the emergency, nevertheless great quantities were not required owing to the stagnation in trade and the large supplies of coal on hand previous to the strike. The same paucity of demand existed in France, it having developed that, owing to trade depression, the usual sources of supply were ample for all needs. Additional factors which influenced the lack of orders from foreign countries were financial conditions and the large stocks available as a result of indiscriminate purchases in the previous months.

Future of Our Export Coal Trade

What will be the future of our coal export trade? What must we do to increase it? Do we want an export trade? Where are permanent foreign markets for our coal likely to be found?

First. Should we have an export trade?

The general consensus of opinion is undoubtedly in the affirmative, provided it can be made remunerative and of sufficient volume to be attractive. But there is more to it than the financial side. We are today in many respects the leading nation in the world, and we mean to remain so, but, in order to make our position more commanding we must give up the old idea, still strongly held by some, of being a world to ourselves and of not interfering with or increasing our commercial, political or economic relationship with other countries. Either we must mingle with the world's affairs and take a leading part in them or we must be content to withdraw from them as far as possible.

To many of us, the latter position is unthinkable, a reversion and unmoral; those who take that position must, and no doubt will be, made to see their lack of understanding and perspective.

We do want and need an export coal trade, all that we can get and keep, both to help our position in the world's affairs, to help our general trade and to assist in making our ships and shipping what they should be, besides, perhaps first, improving our relationships with our neighbors and assisting them also to greater development economically; all of which will help us as well as them, from a material standpoint.

Second. What must we do to increase our export trade?

"The export coal trade is a business in itself, and to succeed in it, it must be studied and learned

like any other business; every factor in it (and there are many) must be allowed for and made a part of the whole."

"The essence of the coal export trade is transportation; we must mine and prepare our coals to suit the uses of the consumer."

At home we must have:

1. Coals of the requisite quality; give them the best preparation.
2. We must have railroad freight rates that will enable us to compete.
3. We must have sufficient coal docks or piers and handling facilities.
4. We must have ships of our own and be able to operate them efficiently and at a reasonable cost.

Abroad we must have:

1. Our own local agents.
2. Our own docks and storage facilities.
3. Financial connections.
4. Credit facilities and agencies.
5. The kind and quality of coal the users want, not what we want them to use.
6. Facilities for giving instructions and advice regarding our coals and their use.
7. The investment of United States capital in foreign enterprises and securities and the establishment of branch banks.

Concerted group, not individual, organizations should be established, either—

(1) A national export coal exchange or body, similar to those in other trades, with real classification or grading and inspection at the mines (not at tidewater), or

(2) A group organization of the larger companies, with suitable coals from each field, owning its own ships, foreign sales agencies and docks.

Where are our permanent markets likely to be found?

South America

While the coal imports and consumption of South American countries has often been overestimated (the total imports in 1913 were 8,946,800 tons), great industrial and transportation developments are certain to come in the future. In this direction would appear to be our best chances for a permanent export market.

The introduction of American coals in quantity to the countries on the east coast, such as Argentina, Uruguay and Brazil, may be said to date from March, 1912, when, due to a miners' strike in Britain, exporters were obliged to turn to American coals. While this did not result in permanent business, it served to introduce our fuels and enable comparisons with the Welsh coals. The effect of the Great War on our coal exports to the aforementioned countries is strikingly shown by a comparison of British and American imports which in 1913 bore a ratio of fifteen to one, while in 1920 the ratio had so changed as to stand more than five to one in our favor.

Exports for the first six months of 1921 show favorably for American coals, but since the settlement of the miners' strike British interests have exerted every influence to regain and hold their former supremacy, and in this they are greatly helped by their large investments in all kinds of enterprises in these countries, particularly in the

railroads, which in Argentine, for example, furnish 75 per cent. of the total demand for coal in that country. Another factor in favor of England is that trade exchange is more favorable to them. Argentine and Uruguay have agricultural products to sell, which England needs and the United States does not need, because we also have the same things for sale. Trade exchange with us is more favorable in Brazil owing to the vast amount of coffee and rubber products consumed in the United States.

Since the opening of the Panama Canal, Chile has taken increased quantities of coal from this country, and based on yearly figures it would appear that American coal is quite solidly entrenched there. Peru, like Chile, mines some of their fuel requirements, but not in sufficient quantity to take care of all needs. Until 1914 all imported coal came from England and Australia. A point in favor of American trade there is that return cargoes can consist of sugar and ores.

American Coal Trade in Europe

Our best opportunities for a permanent trade in Europe lie undoubtedly with the Mediterranean countries, especially Italy, which of all overseas countries has been the largest user of American coals over a period of years antedating and following the war. In 1913 Italy imported 10,873,608 tons of coal, nearly all of which was supplied by England. During the year 1920 the imports from England were about 2,900,000 tons, while the United States shipped about 2,300,000 tons. The indications are for a lesser amount of American coal during 1921, due to the depreciation of the Italian lire and the prolonged industrial depression prevailing in Italy.

For geographic reasons, we can scarcely hope to compete with British coals in Norway, Sweden, Denmark and Holland. Previous to the war our exports to these countries were negligible, and while in recent years they have received considerable American coal, trade can be looked for only under exceptional circumstances. Competitive prices will doubtless be a deciding factor in the future coal supply of these countries, and in the face of conditions the matter of price is uncertain.

With a pre-war consumption of 60,000,000 tons and a production of 40,000,000 tons annually, France has long been an importer of coal. Most of this came from Great Britain, the balance being obtained from Belgium and Germany. Exports from the United States began in 1910, a few single cargoes having been shipped as far back as 1904, but from this period up to 1919 yearly shipments had not reached a total of 180,000 tons and averaged much less. During the calendar year 1919 we exported to France 532,222 tons, and during 1920 this was increased to 3,646,359 tons.

Exports of American coals to France for the first six months of the present year (1921) show a decided falling off from the 1920 rate, this being due to lack of activity in industry, to the rapid improvement of her own coal production, to large stocks of coal on hand, to an unfavorable money exchange, and to the fall in British prices and freights. It is only right to state here that another probable cause for the falling off in our French trade is the poor preparation given much

of the American coal shipped them during 1920, the responsibility for which rests largely upon the many inexperienced, and, in some cases, unprincipled concerns which sprang into existence during the exporting heydays. If American exporters will bear in mind that France has been accustomed to receive three-fifths of her imported coal from England, and that the Welsh coals will always be the basis on which the preparation of our coals will be judged, it will help materially in overcoming an unfavorable impression of our fuel.

Nor does it seem that we will have much in the way of a market in France, at least not after the next two to three years, say after 1925.

Spain, Portugal, Greece, North Africa and the Atlantic coaling stations may be classed as possibilities. Turkey appears to offer a growing market for American coal, and such coal as has been tried there has been pronounced satisfactory.

American Coal Trade in Other Countries

Other overseas countries in which American coals have been tried and retained are Egypt and French West Africa. Most of the American coal entering Egypt is used on the railroads, while that shipped to French West Africa is used for bunkers.

Mexico draws largely on the United States for its foreign coal, though, due to her abundant supplies of petroleum, coal is not in such general use as formerly.

With the countries already enumerated and the West Indies markets, which we cannot lose, it would seem that there is sufficient inducement to make strong efforts for a permanent export trade.

England Our Chief Competitor

For economic reasons England has long been an exporter of coal. Never a great country in an agricultural sense, she has nevertheless become one of the greatest manufacturing centers on earth, and in the accomplishment of this has, through a long period of years, made good use of her abundant coal resources. This coal, which is practically the only raw material supplied in abundance by Nature to England, has been used as a basis of trade or exchange with countries scattered in all quarters of the globe. Cargoes of English coal were always readily accepted in exchange for cargoes of fruits, ores and timber by European and African countries, and in exchange for grains by South American countries. Traffic in coal with South American and other countries enabled British vessels to make cheap delivery in England of hides, sugar, etc., and of American corn and raw cotton. In this way England not only provided for her physical wants and comforts, but, in addition, accumulated vast stores of raw materials which were turned into finished products by her mills and factories, and which were, in turn, also subject to export.

Thus it will readily be seen that the influence and might of Great Britain in world's affairs are based primarily on the one article—coal. Since this is the only product which might serve as a medium of exchange, it follows that any destruction or even serious disarrangement to England's coal exports would tend to reduce her prestige to that of a second or third class power.

It may safely be predicted, therefore, that in spite of all handicaps brought about by the war and the arrogant attitude of labor, England means to remain the chief coal exporting nation of the world. In retaining this position she has some undoubted advantages over the United States, one of these being the much shorter haul from the mines to tidewater. British mines shipping coal for export are located within a few miles, 30 to 40 at the outside, from tidewater shipping points; some of their mines are directly at the water's edge, with workings extending out under the sea. Coal from the United States, on the other hand, has to be hauled from 275 to 475 miles, and while freight rates per ton mile are much lower than in England or any other coal exporting country, the greater distance is a decided obstacle in the way of low prices.

An advantage of long standing with England over America lies in her better shipping facilities. Prior to the war the United States had very little in the way of a merchant marine; we were not an exporting nation in the sense as understood in England. This difficulty would appear easy of solution in view of the large number of ships available through the Shipping Board, but it is likely that there must also be some remedial legislation before our shipping can be operated with equal facility as England's.

The British Position Today on American Coal Exports

While England enjoys a considerable advantage as a coal exporting country over the United States, the following extracts from an editorial that appeared in "The Colliery Guardian," the leading British coal trade publication, under date of July 29, 1921, is of considerable interest as showing the British opinion on American competition:

"This discrepancy (between American capacity and demand) is a matter of much moment to the British coal trade, for the natural remedy for over production is to increase external trade. The remedy is so obvious that we should credit American coal operators with little acumen if we refused to believe that they have examined it in all its facets.

"The obstacles, however, are numerous: they may be briefly stated as follows: (a) inexperience in dealing with foreign consumers; (b) disparity in exchange; (c) lack of co-ordinating agencies; (d) absence of a return freight; (e) inadequate transport facilities from mine to tidewater.

"It is clear that the United States cannot hope to build up a great coal export trade if the latter is regarded merely as a stop-gap for the home trade; firm business connections cannot be erected on so unstable a basis.

"Consequently, the validity of an export policy depends upon simultaneous efforts to stabilize the home demand and upon a deliberate and concerted effort to maintain a permanent and constant margin between the output and the home consumption. So powerful are the agencies on the other side of the Atlantic tending toward inflated production that a growth of the American export trade may be regarded as being practically assured, notwithstanding the impediments that have been enumerated.

"The fact that coal operators of the United States have a clear insight into the defects that

harass their own industry should not be ignored by our own coal owners and exporters, who from now henceforth must keep a watchful eye on the American coal trade."

Foreign Trade in Bunker Coal

Foreign bunker trade started at a much earlier period in the United States than cargo shipments. In 1882 over 100 ships were bunkered with New River coal at Newport News, a bunkering agency having been started in that year by Belloni & Company of New York. In 1884 the Norfolk & Western Railroad started to build its first pier at Lamberts Point, Norfolk, although bunkers had been supplied at Norfolk for some time previous, at first with coal brought by barge from Baltimore, and afterwards with Pocahontas coal, the first shipment of the latter coal to tidewater having been made in March, 1883.

Bunker coals from the Pennsylvania and Maryland fields had been shipped at New York, Philadelphia and Baltimore as far back as 1870.

The table below gives shipments of foreign bunker coal in gross tons from 1914 to 1920, inclusive:

TABLE 3. FOREIGN BUNKER COAL, UNITED STATES, GROSS TONS

	New York	Philadelphia	Baltimore	Hampton Roads	Total	Total All Ports in U. S.
1914...	4,129,443	518,482	839,965	1,042,832	6,080,722	.....
1915...	3,273,884	427,671	583,629	1,703,506	5,988,640	.....
1916...	3,405,994	440,098	392,443	2,961,709	7,200,254	.....
1917...	2,529,444	287,687	433,634	1,967,332	5,218,107	6,883,176
1918...	2,258,446	247,036	244,989	1,238,413	4,018,884	5,626,125
1919...	2,912,891	539,042	524,970	1,779,482	7,342,734	7,342,734
1920...	3,254,920	525,301	707,905	2,780,449	7,268,575	9,362,178

American Coals for Export

All of the coal mining districts from which come the United States coals available and suitable for export overseas, are in the Appalachian coal field of the Eastern United States.

For convenience, the districts have been divided into groups, as served by the various coal shipping ports.

At present nearly all of the bituminous coal shipped to tidewater from the Atlantic coast ports shipped to tidewater is handled through the following ports:

New York
Philadelphia } By individual export agencies.
Baltimore }

Hampton Roads } By: Lambert's Point Coal Exchange.
Newport News Coal Exchange, Inc.
Sewalls Point Coal Exchange.

Editor's Note—Since this article was written the Tidewater Coal Exchange, Inc., which handled shipments at the ports of New York, Philadelphia and Baltimore, has been discontinued, all shipments now being made by the individual exporter or exporting agencies. As a matter of record, however, we have thought it well worth while to include information on the various coals which are shipped through these ports, keeping the old pool numbers for the purpose of identification.

GROUP I

Anthracite

Shipping Ports

New York, Philadelphia, Baltimore.
Mined only in Eastern Pennsylvania.

Average Range of Analyses

Comparison Between Welsh and Pennsylvania Anthracites

SIZES AND ANALYSES

Pennsylvania Anthracite— Sizes of	Over	Through
Broken	3¼"	4½"
Egg	2¼"	3¼"
Stove	1½"	2¼"
Nut	¾"	¾"
Pea	½"	½"
Buckwheat No. 1	¼"	¼"
Buckwheat No. 2 (Rice) ..	3/16"	3/16"
Buckwheat No. 3 (Barley) ..	1/16"	.....

All screening through circular perforations.

Welsh Anthracite— Sizes of	Over	Through
Machine Made Cobbles....	2¼"	3½"
Screened Cobbles	1¼"	3 "
Stove Nuts	¾"	2 "
Paris Nuts	¾"	2¼"
French Nuts	1¾"	2¼"
Pea Nuts	½"	1¼"
Beans	½"	1 "
Peas	¼"	⅝"
Grains	⅛"	¼"

Rubby Culm—All coal up to 1¼", from first screening.

Duff, Breaker—Small and dust left after extraction of large cobbles, nuts, beans and peas.

Duff, Billy—Fine small coal left after extraction of cobbles, nuts, peas and beans from Rubby Culm.

All screening through longitudinal bars.

Anthracite Coals

Corresponding sizes of Welsh and Pennsylvania coals:

British	Pennsylvania
Machine Cobbles	Egg
Screened Cobbles	Stove
Stove Nuts	Nut
Paris Nuts	Stove and Nut
French Nuts	Stove

Range of Analyses, Pennsylvania Anthracite Coals, as Shipped

	Ash %	Fixed Carbon %	Volatile Matter %	Moisture %	Sulphur %
Broken	7-10	81-84	4 to 6	1 to 2	0.7
Egg	8-11	80-83	4 to 6	1 to 2	0.7
Stove	9-12	79-81	4 to 6	1 to 2	0.7
Nut	10-13	77-80	4 to 6	3 to 4	0.7
Pea	13-15	76-78	4 to 6	3 to 4	0.7
Buckwheat .	16-20	71-75	4 to 6	3 to 4	0.7
Buckwheat No. 2.....	18-22	69-73	4 to 6	3 to 4	0.7
Buckwheat No. 3.....	20-25	66-71	4 to 6	4 to 6	0.7

GROUP II

Pennsylvania Coals

Shipping Ports

New York, Philadelphia, Baltimore.

(a) LOW VOLATILE COALS, 15 to 25 PER CENT.

These coals all come from Central Pennsylvania, Cambria, Clearfield and Somerset counties. They are classed as steam coals.

Considerable variations in quality are found in these coals, as shown by the range of analyses. For Tidewater shipment they are not screened, all being shipped as run-of-mine or "thro" and "thro."

ANALYSES

	Per Cent.
Moisture	1 to 3
Volatile Matter	15 to 25
Fixed Carbon	78 to 81
Ash	6 to 11
Sulphur	0.7 to 2.50
B.t.u., dry	13500 to 14600
Ash Fusing Temp., F..	2200 to 2900

These coals were included in the following pools:

Pool 1—Navy Standard.

Pool 9—High Grade South Fork and Somerset County.

Pool 71—Supplemental Navy Standard.

Pool 10—Superior Steam.

Pool 11—Good Steam.

Pool 18—Fair Steam.

(b) MEDIUM VOLATILE COALS, 25 to 29 PER CENT.

These coals also come from the Central Pennsylvania districts.

Coals of this description are harder than the low volatile coals and are screened, to some extent; they are largely used for making coke and as locomotive fuel, besides being good steam coals.

ANALYSES

	Per Cent.
Moisture	1 to 3.5
Volatile Matter	25 to 29
Fixed Carbon	66 to 75
Ash	7 to 11
Sulphur	0.7 to 1.50
B.t.u., dry	14400 to 13600
Ash Fusing Temp., F..	2720 to 2190

Pool classifications:

Pool 15—Medium Volatile Coals.
 Pool 12—Superior Medium Volatile Coals.
 Pool 14—Medium Volatile Coals.

(c) HIGH VOLATILE COALS, 30 to 37 PER CENT.

These coals come from several counties in Western Pennsylvania, mainly from the Pittsburgh, Youghiogheny and Westmoreland districts, and from the Pittsburgh bed.

Harder and with a cubical fracture, they stand transportation well and are shipped both screened and as run-of-mine.

Among them are some of the best gas coals in the country; they are also good steam-making coals and are very largely used for locomotive fuel as well as for use in both by-product and beehive coke ovens.

From this field come the well-known Westmoreland and Youghiogheny gas coals and the Connellsville coking coal.

ANALYSES	
	Per Cent.
Moisture	1 to 4
Volatile Matter	30 to 37
Fixed Carbon	62 to 57
Ash	6.5 to 10.5
Sulphur	0.7 to 2.00
B.t.u., dry	14400 to 13500
Ash Fusing Temp., ° F..	2100 to 2600

Pool classifications:

Pool 39— $\frac{3}{4}$ " Screened, Greensburg High Volatile Coals.
 Pool 40—Run-of-Mine Greensburg High Volatile Coals.
 Pool 60— $\frac{3}{4}$ " Screened, Westmoreland, Youghiogheny Gas Coals.
 Pool 61—Run-of-Mine, Westmoreland, Youghiogheny Gas Coals.
 Pool 30— $\frac{3}{4}$ " Screened, Low Sulphur Gas Coals, Pittsburgh District.
 Pool 31—Run-of-Mine, Low Sulphur Gas Coals, Pittsburgh District.

Standard Gas and Coking Coals

	(Gas) Westmoreland	(Gas) Youghiogheny	Connellsville Coking
Moisture	2.15	1.15	1.26
Volatile Matter...	33.80	35.10	31.80
Fixed Carbon....	57.50	57.65	59.79
Ash	6.55	6.10	7.16
Sulphur	0.97	0.78	0.53
B.t.u., dry	14301	14151	Phos. .024
Gas yield, cu. ft. per ton.....	10860	10800	....
B.t.u. Gas per cu. ft.	625	615	....
Coke yield, coal as charged	70.00	....	....

GROUP III

Northern West Virginia and Maryland Coals

Shipping Ports

Baltimore and Philadelphia.

The coals in this group show wide variations in both character and quality, comprising both low and high volatile coals.

(a) LOW VOLATILE COALS, 15 to 25 PER CENT.

These coals are practically all shipped for export as run-of-mine; they are used as steam coals, as steamship fuel and for coke-making when low in sulphur.

ANALYSES	
	Per Cent.
Moisture	1 to 3
Volatile Matter	15 to 25
Fixed Carbon	77 to 60
Ash	7 to 12
Sulphur	0.7 to 2.50
B.t.u., dry	13700 to 14600
Ash Fusing Temp., ° F..	2400 to 3100

Pool classifications:

Pool 1—U. S. Navy Standard.
 Pool 9—High Grade Steam.
 Pool 11—Good Low Volatile.
 Pool 18—Fair Low Volatile.

(b) HIGH VOLATILE COALS, 30 TO 38 PER CENT.

Wide variations in character and quality will be found in these coals, from excellent gas and by-product coking coals to inferior steam coals; many of them are also good locomotive fuels. The well-known Fairmont Gas Coal is included in this group.

ANALYSES	
	Per Cent.
Moisture	1.5 to 3.50
Volatile Matter	40.00 to 38.00
Fixed Carbon	48.00 to 56.00
Ash	6.5 to 11.00
Sulphur	0.9 to 3.50
B.t.u., dry	13200 to 14250
Ash Fusing Temp., ° F..	2010 to 2410

Standard Fairmont Gas Coals

Moisture	1.15
Volatile Matter	36.60
Fixed Carbon	55.88
Ash	6.27
Sulphur	0.876
B.t.u., dry	14300
Gas yield, cu. ft. per ton.....	10740
B.t.u., Gas per cu. ft.....	635
Coke yield, coal as charged.....	69.9
Tar yield, gals. per ton, dry coal.....	14.39
Ammonia Sulphate, lbs. per ton dry coal..	7.08

GROUP IV

Southern West Virginia Coals

Shipping Ports

Norfolk, Va.—Lamberts Point, Norfolk & Western Railway; Sewalls Point, Virginian Railway.

Newport News, Va.—Chesapeake & Ohio Railway.

The coals in this group vary widely in both character and analyses; they are suitable for many and varied uses as all-round steam coals, gas and coke making, chemical and metallurgical furnaces, house heating, etc., generally. The group contains the highest grade bituminous coals mined in the United States, including the Pocahontas and New River steam coals and the Kanawha steam, locomotive, gas and by-product coking coals.

(a) LOW VOLATILE COALS, 16 to 25 PER CENT.

ANALYSES	Per Cent.
Moisture	1 to 3
Volatile Matter	16 to 25
Fixed Carbon	79 to 64
Ash	4 to 8
Sulphur	0.5 to 1.25
B.t.u., dry	14400 to 15000
Ash Fusing Temp., ° F..	2200 to 2900

Coal Beds—Principal

Pocahontas No. 3 }
 Pocahontas No. 4 } Pocahontas—McDowell, Mer-
 Pocahontas No. 6 } cer, Wyoming and Raleigh
 Davy-Sewell } counties, West Virginia.
 Welsh }
 War Creek }

Sewell }
 Beckley } New River—Fayette, Raleigh and
 Fire Creek } Wyoming Counties, West Vir-
 ginia.

Analyses

Standard Pocahontas and New River coals, as shipped; averages of 2369 analyses; analyzed and sampled by the U. S. Bureau of Mines.

	Pocahontas	New River
Moisture, as received.....	2.64	2.58
Volatile Matter, dry basis..	18.56	20.32
Fixed Carbon	74.80	74.10
Ash	6.14	5.58
Sulphur	0.68	0.82
B.t.u.	14800	14825

Ash-fusing temperatures, Bureau of Mines reports, mine samples:

	Pocahontas	New River
No. of Mines.....	73	38
No. of Samples.....	269	148
Fusing Temp., ° F..	2100 to 3010	2080 to 3000
Average	2440	2540

Pool classifications:

- Pool 1—Standard Low Volatile (Mines as Navy List) Run-of-Mine.
 Pool 2—Other High Grade Low Volatile Coals.
 Pool 3—Low Volatile Slack.
 Pool 4—Medium Grade Low Volatile Coals.

(b) MEDIUM VOLATILE COALS, 25 to 30 PER CENT.

The coals in this sub-group are limited in extent and production, but are all of excellent quality for steam making and for use in coke ovens.

ANALYSES	Per Cent.
Moisture	1.00 to 3.50
Volatile Matter	25.50 to 29.00
Fixed Carbon	66.00 to 62.00
Ash	4.00 to 8.00
Sulphur	0.7 to 1.6
B.t.u., dry basis	14400 to 14700
Ash Fusing Temp., ° F..	2360 to 2960
Phosphorus .....	.005 to .010

(c) HIGH VOLATILE COALS, 30 to 38 PER CENT.

This sub-group is very large, in point of production, and contains coals suitable for every purpose. Excellent steam coals and the best locomotive coals in the country, if not in the world; especially good by-product coals, etc.

The quality of these coals varies considerably, as does their structure and physical character. The range of analyses given below will show the variation in quality, but there is like variation in structure, from rather soft "Gas" coals, with cubical fracture, to the very hard "Splint" coals, of laminated structure.

It should be noted that the term "Kanawha Gas Coals," as generally used, does not necessarily refer to their suitability for the manufacture of gas, but usually to their physical character and appearance. Many of the so-called "Kanawha Gas Coals," including a number classified by the Tidewater Exchanges in Pool No. 5, are not at all suitable for gas making, but are steam coals.

The Kanawha "Splint" coals, so called from their supposed resemblance to the Scotch Splints, are included in this sub-group. These are not suitable for either gas or coke making, but are excellent steam and locomotive coals and are much used for metallurgical purposes and for domestic heating, as they are very hard and stand screening and transportation with little breakage. Coals for this group are mined from a number of beds covering a large area, principally in Kanawha, Logan, Fayette and Mingo counties, West Virginia. There is also a considerable tonnage actually mined in Pike county, Kentucky, but shipped over the Norfolk & Western Railway to Hampton Roads and included in the pool classifications as Kanawha coal.

	ANALYSES "Gas" Coals	"Splint" Coals
Moisture	1.0 to 3.5	
Volatile Matter.	32 to 36	34 to 38
Fixed Carbon...	57 to 62	56 to 54
Ash	4 to 9	7 to 10
Sulphur	0.6 to 1.60	0.5 to 1.4
B.t.u., dry	13900 to 14600	13700 to 14300
Ash Fusing Temp., ° F...	2200 to 2850	2410 to 3010

Note—The term "Gas" coals refers to character, structure—not to suitability for gas manufacture.

TYPICAL ANALYSES, COAL AS SHIPPED

	Best Kanawha Gas Making	Best Loco- motive	Best By- Product Coking	Best Splint
Moisture, as received...	2.07	1.60	3.72	1.47
Volatile Matter, dry	34.20	32.22	29.38	36.23
Fixed Carbon, dry	60.12	60.62	65.47	56.53
Ash, dry	5.68	6.24	5.14	7.24
Sulphur, dry...	0.60	1.40	0.9	0.57
Phosphorus, dry	....	....	.0045	....
B.t.u.	14354	14480	14370	14303
Ash Fusing Temp., Mine Sample, ° F...	....	2690	....	2960

Existing Tidewater Exchange classifications:

- Pool 5—High Volatile Gas, Run-of-Mine.
 Pool 6—High Volatile Steam, Run-of-Mine.
 Pool 7—High Volatile By-Product, Run-of-Mine.
 Pool 56—Medium Grade High Volatile Steam, Run-of-Mine.

GROUP V

Southwest Virginia (not West Virginia) and Eastern Kentucky Coals.

Shipping Ports

Norfolk, Va.—Lamberts Point, Norfolk & Western Railway.

Newport News—Chesapeake & Ohio Railway.

Charleston, S. C.

Small tonnages are also shipped from Savannah, Ga., and Jacksonville, Fla.

The coals in this group are all Medium and High Volatile, from 28 to 40 per cent., but differ considerably in structure and character. Among them are found some of the best gas making and by-product coking coals in the world; many of them are excellent steam and locomotive fuels; others are much used as domestic fuels.

Most of these coals are hard and stand handling well. They are shipped as both screened and run-of-mine.

Note—The Pocahontas beds are mined in Southwest Virginia, but the production is comparatively small. The coal is of the same character as in West Virginia.

ANALYSES

Per Cent.

Moisture	1.5 to 4.0
Volatile Matter	28 to 40
Ash	3 to 10
Sulphur	0.5 to 1.7
B.t.u., dry	13450 to 14500
Ash Fusing Temp., ° F...	2180 to 2940

TYPICAL ANALYSES, COAL AS SHIPPED

	Elkhorn Coking	Clinchfield Steam	Harlan Gas
Moisture, as received...	2.46	2.65	2.69
Volatile Matter, dry....	31.97	35.50	35.70
Fixed Carbon, dry....	61.62	57.45	59.97
Ash, dry	6.41	7.05	4.33
Sulphur, dry	0.44	0.68	0.85
B.t.u., dry .....	....	14100	14344
Ash Fusing Temp., ° F.	2470	2420	2700
Phosphorus .....	.001	....	....
Gas Yield, cu. ft. per ton, dry	10580	....	11098
Gas, B.t.u. per cu. ft...	5.29	....	6.37
Coke Yield, coal as charged	71.10	....	73.0
Dry Tar Yield, gals. per ton	17.2	....	17.64
Ammonium Sulphate, lbs. per ton.....	5.21	....	4.54

GROUP VI

Alabama Coals

Shipping Ports

Mobile, Pensacola, New Orleans, Jacksonville.

Exports of these coals are as yet small and most of the shipments have gone to Cuba, West

Indies, Mexico and small tonnage to South America.

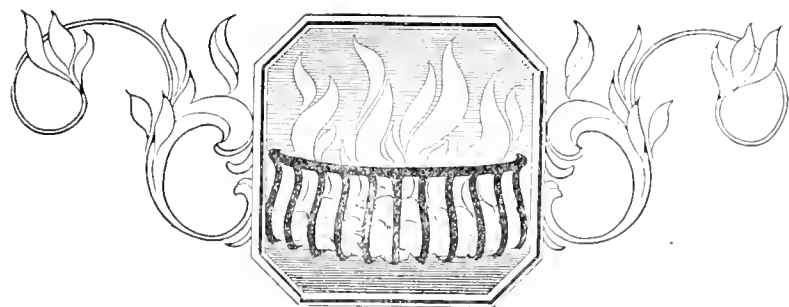
Coals in this group vary from medium to high volatile. There are marked differences in character and structure. Most of the coals exported are rather hard and stand handling and transpor-

tation. The softer coals are generally the medium volatile and are used mainly for coke making, usually requiring washing, but making excellent coke both in beehive and by-product ovens. The high volatile coals are suitable for locomotives and as general steam coals. While used to some extent for gas making they are not as good for this purpose as the West Virginia, Eastern Kentucky and Pennsylvania gas coals.

ANALYSES	
	Per Cent.
Moisture	2 to 5
Volatile Matter	26 to 35
Fixed Carbon	60 to 53
Ash	6.5 to 12
Sulphur	0.70 to 2.7
B.t.u., dry	14400 to 12840
Ash Fusing Temp., F.	2180 to 2950

TYPICAL ANALYSES, COAL AS SHIPPED

	Best Black Creek Steam	Cahaba Steam	Pratt Coking	Blue Creek Coking
Moisture, as received ..	1.30	3.50	2.70	2.85
Volatile Matter, dry	33.70	32.50	27.50	26.60
Fixed Carbon, dry	61.25	54.69	63.25	60.90
Ash, dry	3.75	9.40	6.55	9.65
Sulphur	1.15	1.00	1.20	0.70
B.t.u., dry	14400	13200	14150	13500
Ash Fusing Temp., ° F...	2530	2420	2430	2690



PART II.--COAL EXCHANGES AND POOLS

Factors Which Prompted Their Organization; The Function of an Exchange; Where They Operate; Classification of Coals Into Pools; Description of Pools; List of Mines in the Various Pools; Operating Companies; Seams Worked; Railroads and Mining Districts.

Organization of Coal Exchanges

Pooling of coal at Atlantic ports by individual concerns is a practice of long standing. Prior to the war all coal shipped to dumping piers was consigned to the shipper's order at the port, and as it frequently happened that each shipper had several classes of coal, each designated with a classification number, it meant that there were hundreds of different consignments of cars which had to be kept separated by the railroads, and subject to the shipper's order. This required much handling and a great deal of track space. Also it was productive of many delays since each shipper's coal remained at the terminals until ordered to be loaded.

When the war put a special strain on car supply, the Council of National Defense suggested that all coal be pooled as a means of increasing the efficiency of transportation and of effecting a quicker release of equipment. Their plan was to classify every mine into one of the various pools and then to have all coal of each kind shipped to one consignment instead of a hundred or more. This meant the forming of agencies for management at each port, and from this necessity was born in June, 1917, the Tidewater Coal Exchange, a voluntary organization, composed of trans-shippers and railroads handling bituminous coal at the tidewater ports of New York, Philadelphia, Baltimore and Hampton Roads, which took over the handling of all coal at tidewater, classified the mines, inspected the coal and supervised the loading of vessels with coal from the proper pool.

The Exchange started operation on August 1, 1917, and by November 11th of the same year its advantages were so apparent that pooling, under government operation, was made compulsory. This arrangement continued until February 28, 1919, at which time the Exchange again became a voluntary organization and so continued until February 25, 1920, when compulsory pooling was once more required. This remained in effect until April 30, 1920, when the railroads notified the coal trade that they would no longer operate the Exchange.

The visible benefits of pooling were such that it was decided to continue the practice through the organization of Exchanges at the various ports, these to be managed by a co-operative agreement between the shippers and the railroads. In this way was formed the Tidewater Coal Exchange, Incorporated, which looked after the interests of its members at Baltimore, Philadelphia and New York; and the Newport News Coal Exchange, Incorporated, the Lamberts Point Coal Exchange and the Sewalls Point Coal Exchange, all of which operate at Hampton Roads, Norfolk, Va. An Exchange is also being formed at Charleston, S. C., to handle shipments in Virginia, Eastern Kentucky and Tennessee.

The Function of a Coal Exchange

Coal exchanges, when efficiently operated, render a service to the producer of coal, the railroads which carry it to seaboard, and the consumers who burn it. Since the purpose of their organization is to effect the quick release and expeditious handling of rolling stock, and to promote the increased use of railroad facilities, it follows that one of their benefits should be to reduce costs. Pooling of coal is one of the principal functions of an exchange, and, whether this is done by private distributors or by an exchange, it is beneficial for the following reasons: (a) it greatly reduces the time which would be required for a single mine to produce sufficient coal for an entire cargo, (b) it reduces the delays to vessels while waiting for cargoes, (c) it makes it possible to practically wipe out demurrage charges on loaded cars at ports and to similarly affect vessel demurrage, (d) it simplifies car movements at tidewater and greatly reduces the congestion at terminals.

Members of an exchange are credited with shipments to certain pools when the coal leaves the mines and the total daily consignments of all the members provide a working stock of coal at port. This stock of coal enables the members to anticipate the arrival of their individual shipments in loading vessels up to the extent of their credit, withdrawals being replenished by the constant arrival of coal.

Classification of Coal Into Pools

The first classification of mines into pools was made in the summer of 1917 by a group of men thoroughly familiar with the coals shipped to the various Atlantic ports and the mines which produced them. Although the work was done under pressure and no time was available for the collection of extensive data or for examination where data was lacking, the original grouping of the mines was well done. The basis for this first classification was a separation of all mines into low, medium and high volatile groups, with a second classification based on the limits of ash and sulphur, and the heating value of the coal.

Rumors of complaints on the quality of coal shipped abroad during the war have been many, and it is no doubt true that unfit coal was loaded into many cargoes. One of the main difficulties in keeping shipments up to the standards lay in inadequate inspection, a trouble that will be readily appreciated when the number of mines and extent of territory is considered.

The classifications adopted by the various exchanges now in operation are similar to those first used, but the methods of inspections are vastly improved. The effect of this is that at some of the ports the quality of the coal in certain pools can

be forecasted with certainty. Where inspection is lax it may be expected that at some operations the coal will be mined with care and well prepared, while at other mines the reverse will be true. A lack of uniformity in quality is the result, and it is this inconsistency in shipments which the exchange management would avoid. Uniformity may be attained by designating fixed limits to the constituent parts of coal belonging to each pool, and then by means of chemical analyses made on actual shipments, it is possible to group mines in those pools to which they are chemically fitted to belong. Where it is understood that mines are subject to promotion or demotion in accordance with the variation in their analyses, the system serves as a

stimulus for the exercise of constant vigilance on the part of the mine management.

Regions Tributary to Tidewater

All in all about 4,000 mines have outlets to foreign and bunker trade through the various outlets along the Atlantic coast and the Gulf of Mexico. These mines are almost entirely located in the Appalachian region and within 300 to 400 miles of seaport. Figure 1 shows the geographical location of the regions contributing to oversea and bunker trade, with lines indicating the port or ports through which shipments are made. Table 2 gives the distances in nautical miles from American seaport points to the principal coaling ports of the world.

TABLE 2. DISTANCES IN NAUTICAL MILES FROM SEAPORT POINTS TO COALING PORTS OF THE WORLD*

	From Hampton Roads	From Baltimore	From Philadelphia	From Charleston	From New Orleans	Time from Hampton Roads	
						Days	Hours
Aberdeen	3,248	3,372	3,216	3,528	5,078	13	15
Adelaide	10,177	10,401	10,343	10,071	9,785	47	6
Aden	6,657	6,781	6,634	6,908	7,846	30	20
Alexandria	5,144	5,208	5,121	5,395	6,333	23	21
Antwerp	3,478	3,602	3,446	3,810	4,801	16	2
Bahia	3,994	4,118	4,092	4,010	4,475	18	12
Barbadoes	1,699	1,823	1,828	1,630	2,115	7	21
Barcelona	3,872	3,996	3,849	4,123	5,061	17	22
Bordeaux	3,417	3,541	3,401	3,649	4,671	15	20
Bremen	3,727	3,851	3,694	4,059	5,050	17	6
Buenos Aires	5,774	5,898	5,870	5,790	6,225	26	17
Cherbourg	3,233	3,357	3,201	3,565	4,531	14	23
Colon	1,772	1,896	1,938	1,566	1,380	8	5
Constantinople	5,165	5,289	5,142	5,416	6,354	23	22
Copenhagen	3,722	3,846	3,690	4,002	5,228	17	6
Genoa	4,208	4,332	4,185	4,459	5,397	19	12
Gibraltar	3,360	3,484	3,337	3,611	4,549	15	14
Glasgow	3,126	3,250	3,094	3,498	4,447	14	11
Hamburg	3,745	3,869	3,712	4,077	5,068	17	8
Havana	988	1,112	1,158	605	588	4	13
Havre	3,299	3,423	3,267	3,631	4,622	15	7
Honolulu	6,533	6,657	6,699	6,327	6,141	30	5
Jamaica	1,257	1,381	1,423	1,051	1,115	5	18
Lisbon	3,177	3,301	3,156	3,378	4,676	14	16
Liverpool	3,211	3,335	3,149	3,548	4,532	14	21
London	3,428	3,562	3,406	3,770	4,761	15	22
Madeira	2,908	3,032	2,880	3,270	4,056	13	11
Malta	4,345	4,469	4,322	4,596	5,534	20	3
Manila	11,215	11,339	11,381	11,009	10,823	51	23
Marseilles	4,050	4,174	4,027	4,301	5,239	18	18
Montevideo	5,659	5,783	5,757	5,675	6,140	26	5
Naples	4,330	4,454	4,307	4,581	5,519	20	1
Oporto	3,092	3,216	2,969	3,360	4,344	14	8
Panama	1,822	1,946	1,988	1,616	1,430	8	10
Para	2,836	2,960	2,947	2,760	3,136	13	3
Pernambuco	3,520	3,738	3,712	3,630	4,095	16	7
Port Said	5,260	5,384	5,237	5,511	6,449	24	9
Riga	4,175	4,299	4,154	4,400	5,226	19	8
Rio de Janeiro	4,590	4,808	4,782	4,700	4,813	21	6
St. Thomas	1,291	1,415	1,425	1,194	1,590	6	0
St. Vincent	2,956	3,110	3,023	3,080	3,870	13	19
San Francisco	5,099	5,223	5,265	4,893	4,707	23	15
Stockholm	4,128	4,252	4,036	4,329	5,574	19	3
Suez	5,149	5,471	5,324	5,598	6,536	23	21
Tenerife	3,050	3,174	3,049	3,260	4,181	14	3
Trinidad	1,890	1,924	1,928	1,605	2,081	8	8
Valparaiso	4,437	4,561	4,603	4,231	4,045	20	13
Vera Cruz	1,783	1,907	1,953	1,400	790	8	6

*F. R. Wadleigh in Coal Age, Vol. 7, page 377.

THE THREE NORTHERN PORTS New York, Philadelphia, Baltimore

When the railroads definitely decided to withdraw from the operation of the coal exchanges, conferences on the possibilities of perpetuating the machinery for pooling were held between representatives of the northern coal trade. With the help of the local associations at the three northern ports—New York, Philadelphia and Baltimore—the Tidewater Coal Exchange, Incorporated, was organized and began business on May 1st, 1920.

At the time this is being written, October 1st, 1921, the trade papers report that the Exchange is

to cease functioning. The principal reason, according to rumor, for discontinuing the Exchange is difficulty between the members and the railroads over the question of car demurrage.

It may be remarked here that many large shippers, who under the government requirements were members of the original Exchange, have steadfastly refused to join the voluntary Exchange. Their refusal is based on the belief that the foreign trade prefers to designate a certain brand of coal for shipment, and that membership in the Ex-



Fig. 2. Dumping Piers at Arlington, Staten Island, New York.

change means burying the identity of their fuel.

Because of the likelihood that in the event of reorganization of an exchange, changes would be made in the pool classifications, as announced by the Tidewater Coal Exchange, Incorporated, the lists of mines by pools is omitted in this issue of the Coal Catalog.

Dumping Piers Over Which Coal Consigned to the Ports of New York, Philadelphia and Baltimore is Handled*

NEW YORK		
Railroad and Pier	Kind of Coal	Daily Capacity Tons
Baltimore & Ohio		
St. George	Bituminous	8,000
Arlington	Bituminous	10,000
Central of New Jersey		
Communipaw	Anthracite & Bituminous	7,500
Port Liberty	Bituminous	5,500
Port Johnson	Anthracite	7,500
Elizabethport	Anthracite & Bituminous	1,000
Delaware, Lackawanna & Western		
Hoboken	Anthracite	15,000
Erie		
Undercliff	Anthracite & Bituminous	12,500
Lehigh Valley		
Perth Amboy	Anthracite	12,500
Pennsylvania		
Harsimus	Bituminous	5,500
South Amboy	Anthracite & Bituminous	12,500
Greenville	Bituminous	1,500
Philadelphia & Reading		
Port Reading	Anthracite & Bituminous	22,500
New York, Ontario & Western		
Weehawken	Anthracite	7,500
PHILADELPHIA		
Railroad and Pier	Kind of Coal	Daily Capacity Tons
Philadelphia & Reading		
Port Richmond	Anthracite & Bituminous	30,000
Pennsylvania		
Greenwich	Anthracite & Bituminous	12,500
BALTIMORE		
Railroad and Pier	Kind of Coal	Daily Capacity Tons
Baltimore & Ohio		
Curtis Bay	Bituminous	25,000
Western Maryland		
Port Covington	Bituminous	7,500
Pennsylvania		
Canton	Anthracite & Bituminous	6,000

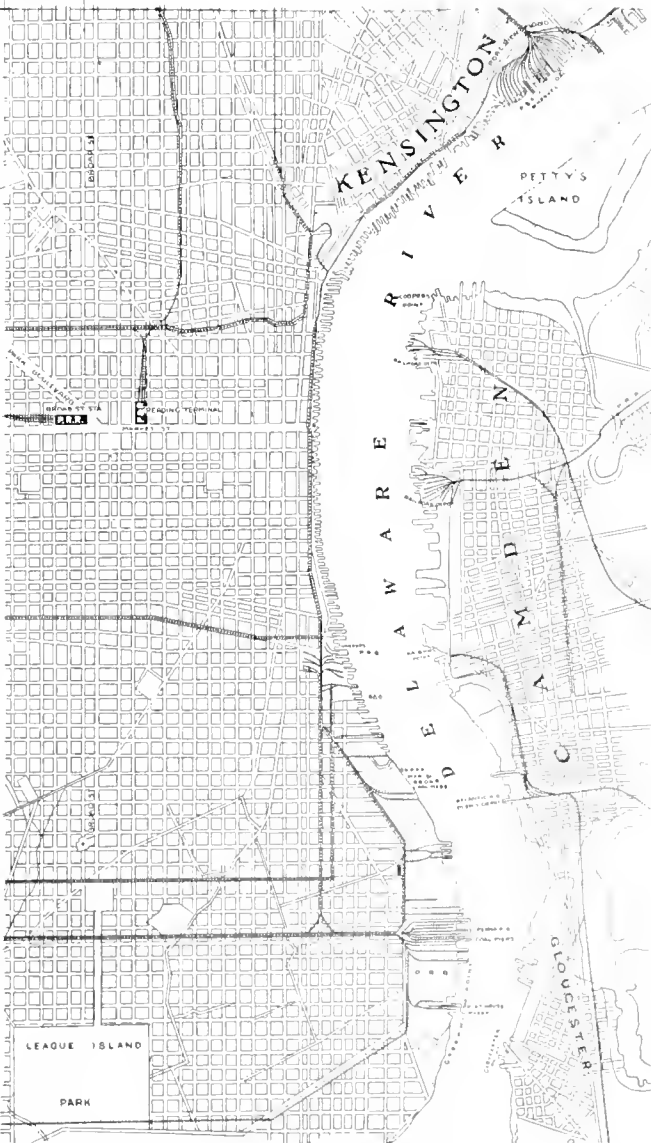
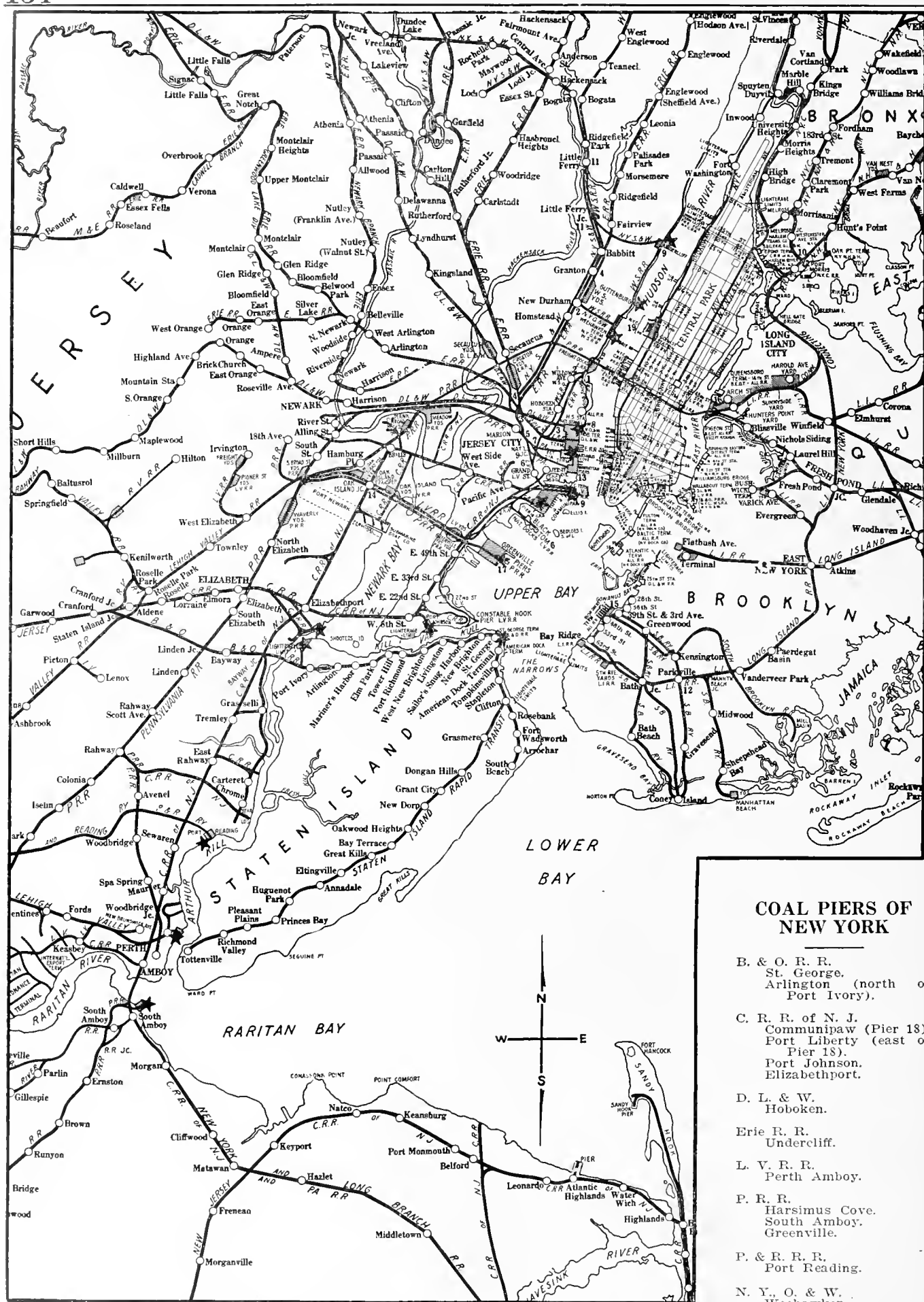


Fig. 3. Map Showing Dumping Piers at Port of Philadelphia. By Courtesy of Pennsylvania Railroad.

*From Seward's Annual, 1921.



COAL PIERS OF NEW YORK

- B. & O. R. R.
St. George.
Arlington (north of Port Ivory).
- C. R. R. of N. J.
Communipaw (Pier 18).
Port Liberty (east of Pier 18).
Port Johnson.
Elizabethport.
- D. L. & W.
Hoboken.
- Erie R. R.
Undercliff.
- L. V. R. R.
Perth Amboy.
- P. R. R.
Harsimus Cove.
South Amboy.
Greenville.
- P. & R. R. R.
Port Reading.
- N. Y., O. & W.
Weehawken.

Fig. 4. Map Showing Coal Dumping Piers of New York.
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116 W. 39th St., New York, N. Y.

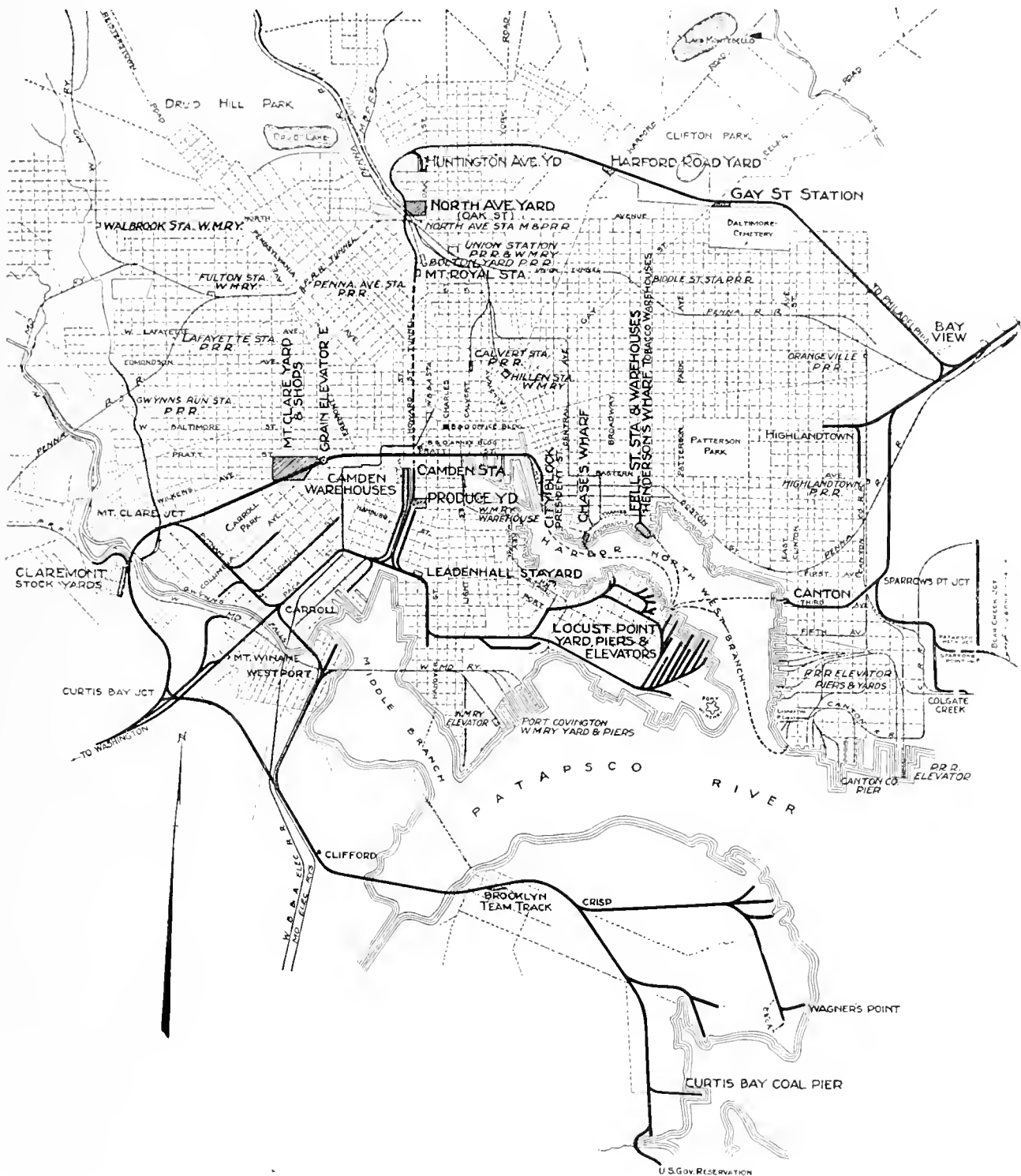


Fig. 5. Map Showing Dumping Piers at Baltimore.
By Courtesy of Baltimore & Ohio Railroad.

Advances in Pier Dumping Equipment

The Curtis Bay pier of the Baltimore & Ohio Railroad, two views of which are shown on the next page, represents recent advances in pier construction and marks a new departure in the adoption of facilities to overcome breakage and to attain speed in loading.

It is built of concrete and steel and is electrically operated. The functions of the pier are interlocked and controlled electrically, with push-buttons located every 20 feet on each conveyor belt runway. By pushing a button all movable parts of the belts, towers and feeders are stopped. It has a capacity of 12,000,000 tons a year, or 4,000 tons per working hour. The original cost to the railroad was \$2,500,000.

The loading tower, shown in Figure 6, is equipped with a cage supporting a shuttle ram. The cage is raised or lowered to suit the height of the vessel being loaded, thus providing further precaution against breakage of the coal. The cage has a variation in height of 27 feet, the minimum

height above the water being 15 feet. The shuttle ram, which can be run out on either side of the pier, has a maximum reach of 45 feet.

In order to maintain the pier's operation in wintry weather, thawing sheds were built to cover the tracks leading to the car dumpers. The sheds



Fig. 6. The belts in use at Curtis Bay are 60 inches in width, with a capacity of 1,500 tons of coal an hour, running at 500 feet per minute. The loading tower shown in center travels along the pier in a horizontal direction and the shuttle ram (with little houses at either end for the operator) working in and out at right angles to the travel of the towers will load a hatch uniformly and reduce trimming to a minimum.



Fig. 7. View of modern dumping pier at Curtis Bay. Car dumpers are shown at left and loading towers on the pier at right. The balancing bin is interposed between the car dumpers and the pier.

have a capacity of 22 cars. A temperature of 180 degrees for 30 minutes thaws the coal sufficiently to allow it to free itself.

This pier has broken all records for fast loading of coal into vessels, having loaded 2,076, 2,548

and 3,670 tons per hour on different occasions. In addition to these records, the pier made a new high mark for a 24-hour period on October 25th, 1920, when it dumped 1,082 cars of coal, exceeding by 6,000 tons the former Curtis Bay record for volume handled in one day.

HAMPTON ROADS

Newport News Lamberts Point Sewalls Point

From the time of the organization of the Tidewater Coal Exchange in June, 1917, up to its disbanding in March, 1920, all coal shipped from the tidewater ports of New York, Philadelphia, Baltimore and Hampton Roads was handled by this single agency. When the Exchange ceased to exist, on account of the cancellation of the compulsory order of the United States Fuel Administration and the discontinuance of Federal control of the rail-

roads, it led to the organization of separate exchanges by the three coal carrying roads with terminals at Hampton Roads. The three exchanges have since been working with great satisfaction to the mine operator, the railways, the shipper and all others concerned.

As will be noted in Figure 8, the Chesapeake & Ohio terminal is located on the Newport News side of Hampton Roads, while the other two terminals are on the Norfolk side. The coal dumped at these piers comes largely from the smokeless and high volatile fields of southern West Virginia, with smaller amounts from Virginia and Eastern Kentucky. The tonnage of coal transshipped is greater at these three ports than at any other locality in the United States. Not all of this coal, however, is for export, as a considerable portion is used for bunkers and for shipments to the New England states.

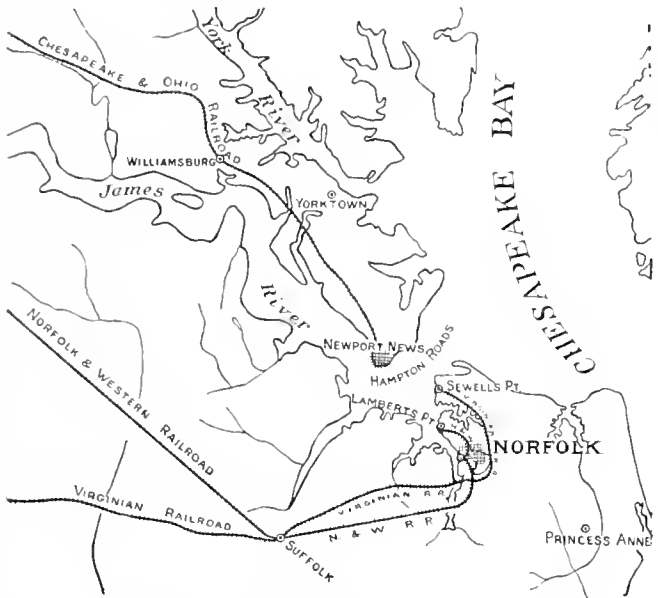


Fig. 8. Map of Hampton Roads Showing the Three Seaboard Terminals.

Dumping Piers Over Which Coal Consigned to Hampton Roads is Handled

Railroad and Pier	Kind of Coal	Daily Capacity Tons
Norfolk & Western... Lamberts Point...	Bituminous & Semibituminous	40,000
Chesapeake & Ohio Newport News...	Bituminous & Semibituminous	30,000
Virginian Sewalls Point....	Bituminous & Semibituminous	20,000

SOUTHERN PORTS

Charleston Savannah Jacksonville
Pensacola Mobile New Orleans

In comparison with the amount of export and bunker coal loaded at the three northern ports and at Hampton Roads, the quantity of coal which passes through the six Southern points is small. Charleston, however, has possibilities through the use of Virginia and Eastern Kentucky coals for the development of cargo business. It is also quite likely that some of the favorably situated Illinois coals will be shipped in the future through New Orleans. There are no exchanges in operation at any of these ports, all shipments being made by and through individual companies.

CASTNER, CURRAN & BULLITT, Inc.

Cable Address: Castner

DISTRIBUTORS OF COAL

MAIN OFFICE, NUMBER ONE BROADWAY, NEW YORK, N. Y.

CITIZENS' BANK BLDG., NORFOLK, VA.
131 STATE STREET, BOSTON, MASS.
PROVIDENCE, RHODE ISLAND

1 LLOYD'S AVE., LONDON, ENG.

FIRST NAT'L BK. BLDG., ROANOKE, VA.
UNION TRUST BLDG., CINCINNATI, O.
PEOPLES GAS BLDG., CHICAGO, ILLS.

Sole Agent for

C. C. B. Pocahontas
SmokelessCinderella
SovereignC. C. B. New River
Smokeless

FOR EXPORT—BUNKERS—STEAM—DOMESTIC—GAS—BY-PRODUCT

The coal strike and other conditions of the past five years have demonstrated the vast importance to both producer and consumer of proper and efficient means of distributing the country's coal supply. During this period many consumers, and in fact operators, had occasion to learn for the first time that the distribution of coal is a highly specialized business, the improper management of which results disastrously for both consumer and producer, sometimes with a far-reaching effect on the business of the country as a whole.

The highest efficiency in the distribution of coal is attainable only when this important function of the coal business is entrusted to specially trained men comprising an organization suitably financed and equipped to meet all of the demands that are likely to be made upon it.

Castner, Curran & Bullitt, Inc., is an example of such an organization and since this subject has become of such wide-spread interest it is believed that a description of the methods employed and services rendered by this old and successful distributing agency, will be helpful to readers of the Coal Catalog.

Organization

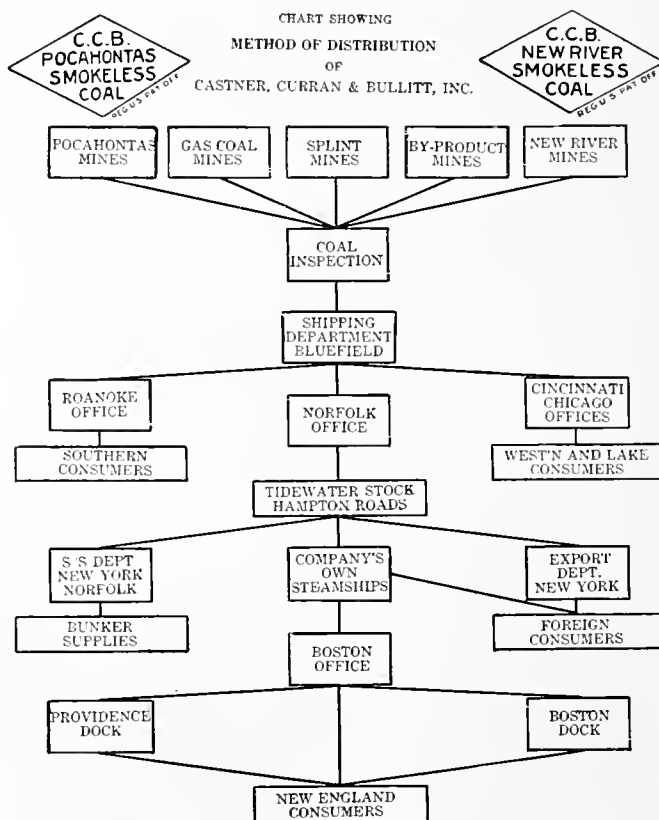
The headquarters of Castner, Curran & Bullitt, Inc. is maintained in New York from which point of vantage the directing head is enabled to keep in intimate touch with the general business situation of the country and the export markets of the world.

In order to visualize the organization of Castner, Curran and Bullitt, Inc., the accompanying chart has been prepared to show the manner in which the coals, customarily handled by the Company, flow through the various departments to the consumer.

As will be seen from the chart, branch offices are located at strategic points in the markets served by the Norfolk and Western, Chesapeake and Ohio, and Virginian Railways, as well as New England where the Company also maintains its own discharging wharves and storage plants for the convenience of its customers.

The Company has always made a special feature of tidewater business embracing Export Bunker Supplies and Coastwise Shipments over the Hampton Roads Piers located at Lambert's Point, Sewall's Point and Newport News, Virginia. It maintains at all times large stocks at Hampton Roads of C. C. B. Pocahontas, C. C. B. New River and other coals. The quality of coal shipped from the mines is backed by its own inspection department as well as the reputation of the Company.

When the world war presaged a shortage of ships, the Company acquired a fleet of its own colliers through the construction of modern steel steamships of 9,000 to 12,000 tons deadweight capacity, many of which were on the ways before



the U. S. Shipping Board had been organized. The Company now owns outright, and has engaged in the foreign and coastwise coal trade, over 50,000 tons carrying capacity of modern steamships.

Policy

This Company has back of it the experience of 37 years gained entirely in the distribution of coal which began with the introduction of Pocahontas coal to the markets of the world by the original firm of Messrs. Castner & Curran and their successors, Castner, Curran & Bullitt, of Philadelphia, and which through all the turmoil and trouble of war strikes and government control has proven of inestimable value in guiding its policies.

A reputation is made by doing the same thing well over and over again, and the prestige which Castner, Curran & Bullitt, Inc. enjoys in the trade has been gained largely from the policy steadfastly adhered to of sticking strictly to the distribution of coal and leaving the operation and ownership of mines to others who have specialized in that branch of the industry.

In fact, this is the cardinal principal inherited from the founders of the Company, on which the whole policy and organization is based as the management of this Company has always worked under the conviction that it could only serve impartially the mine owners whose coal it sells by having no self-interest financially or otherwise in any coal property of its own.

The relations of Castner, Curran & Bullitt, Inc. with the mining companies, whose coal it sells, is generally that of sole agent under a contract entered into for a period of years.

Standard of Quality

The copyrighted trade names "C. C. B. Pocahontas," "C. C. B. New River" or simply "C. C. B. Coal," on which the very valuable goodwill of the Company has been built, have much more than ordinary significance. These trade-marks are only applied to coal from mines which have been added to the C. C. B. list after the strictest investigation and all shipments of which have been loaded by the Company's own inspectors.

When a mining company offers its output to Castner, Curran & Bullitt, Inc., experts are sent to the property to make a careful investigation for the purpose of determining whether the coal is of the proper quality to measure up to the C. C. B. standard. If arrangements are made to take the entire output, an inspector employed by Castner, Curran & Bullitt, Inc., and reporting solely to the

Company's chief inspector, is stationed at the mine and personally loads every ton of coal shipped under the C. C. B. trademark. The inspector works under a set of fixed rules of the Company and besides supervising the preparation of the coal sees that all cars are in suitable condition for loading, tags the cars for shipment and reports daily to the chief inspector and shipping office on the loading and condition of coal.

This system is not only of great assistance to the mine management in the preparation and shipment of coal, but has been found to be the best system for maintaining a high standard of uniform preparation.

Coals Handled

Castner, Curran & Bullitt, Inc. have always made a point of handling only the best coals obtainable for steaming and other purposes, and are constantly on the lookout for new coals and new developments in the coal regions which might prove advantageous both to the producer and to the consumer served by them in a great variety of coal consuming industries here and abroad.

While Castner, Curran & Bullitt, Inc., are known primarily as sole agents for C. C. B. Pocahontas and C. C. B. New River coals, both of which are Navy Standard Quality, and in constant use by the U. S. Navy, they also sell high volatile steam, gas, by-product, domestic, and splint coals of the highest grade.

The quality of the coals handled by this Company is so well known to the consumer in the markets served by C. C. & B., Inc. that it is deemed unnecessary to give here detailed descriptions and analyses of these fuels. Any of the offices of the Company will be pleased to furnish to those interested such information upon request.



S. S. "Sewalls Point" Discharging Cargo at C. C. B. Wharf, Boston, Mass.

CORY MANN GEORGE CORPORATION

General Offices: 26 Beaver Street, NEW YORK, N. Y.

Cable Address, All Offices "COREMAN"

Branch Offices

NEWPORT NEWS, VA.
PHILADELPHIA, PA.

BALTIMORE, MD.
NORFOLK, VA.

EXPORTERS ALL RAIL COAL

BUNKERING CONTRACTORS ALL PORTS IN THE WORLD

The ability of the Cory Mann George Corporation, incorporated under the laws of the State of New York, to supply unlimited quantities of the best grades of coal at the principal ports of the Eastern Hemisphere has placed this company among the recognized leaders in exporting of coals, bunkering of steamships and for all rail delivery.

This company is the American representatives for the British firms of Wm. Cory & Son, Ltd., and Mann, George & Co., Ltd., of London, England. These companies, while separate organizations, together operate, each in their special line, as coal exporters, foreign coaling contractors, coal depot proprietors, fuel oil contractors and steamship brokers. They are contractors to the British Admiralty and other navies and the principal steamship lines.

With these connections Cory Mann George Corporation becomes allied to what is probably the world's largest coal exporting and bunkering organization.

Quotations on export coal and all rail deliveries will be furnished upon request at any of its branch offices.

This company also has facilities for supplying the best grade of coals for bunkering purposes at the current market price at the following ports:

UNITED STATES

Astoria, Ore.
Boston, Mass.
Baltimore, Md.
Charleston, S. C.
Galveston, Texas
Gulf Port, Miss.
Jacksonville, Fla.
Los Angeles, Cal.
Mobile, Ala.
New York, N. Y.
Newport News, Va.
Norfolk, Va.

New Orleans, La.
Philadelphia, Pa.
Portland, Ore.
Pensacola, Fla.
Seattle, Wash.
San Diego, Cal.
San Francisco, Cal.
Savannah, Ga.
Sewalls Point, Va.
Tampa, Fla.
Tacoma, Wash.

HAWAII

Honolulu

PANAMA

Balabo
Colon

CANADA

Comox (Union Bay, Vancouver Harbor), B. C.
Halifax, N. S.
Louisburg, N. S.
Montreal, Que.
N. Sydney, C. B. N. S.
Sydney, C. B. N. S.
St. John, N. B.
Quebec, Que.

SOUTH AMERICA	UNITED KINGDOM	AFRICA
ARGENTINA	ENGLAND	Beira Capetown Dakar Delagoa Djibouti Freetown (Sierra Leone) Perim
Buenos Aires Bahia Blanca La Plata Rosario	Avonmouth Dartmouth Falmouth Gravesend Hull Liverpool London Newport (Mon) Newcastle-on-Tyne Portland Sunderland Southampton	EGYPT
BRAZIL		Port Said
Bahia Pernambuco Rio de Janeiro Santos		TURKEY
CHILE		Constantinople
Coronel Lota	WALES	ARABIA
URAGUAY	Barry Cardiff Penarth Swansea	Aden
Montevideo		INDIA
BERMUDA	SCOTLAND	Bombay Calcutta Karachi
Bermuda	Glasgow Leith	CEYLON
WEST INDIES		Colombo
Barbadoes St. Lucia St. Thomas Trinidad		STRAITS SETTLEMENT
AZORES		Singapore
Fayal St. Michaels	PORTUGAL	CHINA
PORT LOUIS	Lisbon	Dahny Hongkong Kelung
Mauritius	FRANCE	JAPAN
ATLANTIC ISLANDS	Marseilles	Karatsu Kope Moji Nuroran Nagasaki Otaru Yokohama
Las Palmas Madeira St. Vincent, C. V. Teneriffe	ITALY	
Gibraltar	Genoa Naples	
Malta	ALGERIA (AFRICA)	
	Algiers Oran	

Mr. E. D. Enney is the President and principal executive of the Cory Mann George Corporation, assisted by Mr. Wm. Shirden, Secretary; Mr. H. W. Frey, Treasurer, and Mr. J. B. Reifkin, Sales Manager, with general offices at 26 Beaver street, New York City, and branch offices located in the Royster Building, Norfolk, Va.; Hogshire Building, Newport News, Va.; Garrett Building, Baltimore, Md., and 121 Walnut street, Philadelphia, Pa.

TIDEWATER COAL EXCHANGE, Inc.

Although the above exchange no longer supervises export shipments at the ports of New York, Philadelphia, and Baltimore, it has been thought advisable to preserve the pool numbers and descriptions as a matter of convenience to the trade.

These are as follows:

Pool No. 1

Description: American standard low-volatile run-of-mine coal. Includes all mines on the Navy List. For many years the United States Navy bought their coal on a guaranteed analysis basis, the requirements of which were as follows:

DRY BASIS	Volatile Matter (maximum)	22 per cent
	Fixed Carbon (minimum)	73 per cent
	Ash (maximum)	7 per cent
	Sulphur (maximum)	1 per cent
	B.t.u. (minimum)	14,700

To be placed on this list, and in position to supply the Navy with coal, a mine had to pass an inspection by the Navy Department. This has established what is now known as the Navy Acceptable List.

Seams Mined: "B" or Miller; Fulton; Georges Creek Big Vein.

Pool No. 4

Description: Superior low-volatile (under 24 per cent) run-of-mine coal from mines on the New York Central, Pittsburgh and Susquehanna, and Cambria and Indiana railroads.

Seams Mined: "B", Miller, or Lower Kittanning.

Pool No. 9

Description: Superior low-volatile (under 24 per cent) run-of-mine coal loaded on railroads other than those given under Pool No. 4.

Seams Mined: "C" Prime or Upper Kittanning; "B", Miller, or Lower Kittanning.

Pool No. 10

Description: High-grade low-volatile (under 24 per cent) run-of-mine coal loaded on all railroads.

Seams Mined: "E" or Upper Freeport; "D" or Lower Freeport; "C" or Middle Kittanning; "B" or Lower Kittanning; Clarion.

Pool No. 11

Description: Fair low-volatile (under 24 per cent) run-of-mine coal loaded on all railroads.

Seams Mined: "E" or Upper Freeport; "D" or Lower Freeport; "C" or Middle Kittanning; "B" or Lower Kittanning; Clarion.

Pool No. 14

Description: Medium-grade medium-volatile (between 24 and 31 per cent) run-of-mine coal loaded on all railroads.

Seams Mined: "E" or Upper Freeport; "D" or Lower Freeport; "C" or Middle Kittanning; "B" or Lower Kittanning; Pittsburgh.

Pool No. 15

Description: Other medium-volatile (between 24 and 31 per cent) run-of-mine coal loaded on all railroads.

Seams Mined: "E" or Upper Freeport; "D" or Lower Freeport; "B" or Lower Kittanning; Pittsburgh.

Pool No. 18

Description: Other low-volatile (under 24 per cent) run-of-mine coal loaded on all railroads.

Seams Mined: "E" or Upper Freeport; "D" or Lower Freeport; "C Prime" or Upper Kittanning; "C" or Middle Kittanning; "B" or Lower Kittanning; "A" or Brookville; Bakerstown; Big Vein Georges Creek.

Pool No. 20

Description: Slack coal from low-volatile mines (under 24 per cent) listed in Pools 1-4-9-10-11.

Seams Mined: See seams mentioned in Pools 1-4-9-10-11.

Pool No. 21

Description: High-volatile (over 31 per cent) by-product run-of-mine coal from mines on the Pennsylvania Railroad.

Seam Mined: Pittsburgh.

Pool No. 30

Description: Low-sulphur $\frac{3}{4}$ -inch lump gas coal from the Pittsburgh district. Maximum sulphur $1\frac{1}{4}$ per cent.

Seam Mined: Pittsburgh.

Pool No. 31

Description: Low-sulphur run-of-mine gas coal from the Pittsburgh district. Maximum sulphur $1\frac{1}{4}$ per cent.

Seam Mined: Pittsburgh.

Pool No. 32

Description: Slack coal from Pools 31 and 61. Maximum sulphur $1\frac{1}{4}$ per cent.

Seam Mined: Pittsburgh.

Pool No. 33

Description: High-volatile (over 31 per cent) $\frac{3}{4}$ -inch lump steam coal from the Pittsburgh and Fairmont districts.

Seam Mined: Pittsburgh.

Pool No. 35

Description: Slack coal from Pools 34, 38, 44, 54 and 64.

Seams Mined: All high volatile seams.

Pool No. 37

Description: Marion County (Fairmont) low-sulphur $\frac{3}{4}$ "-lump gas coal.

Seam Mined: Pittsburgh.

Pool No. 38

Description: Marion County (Fairmont) low-sulphur run-of-mine gas coal.

Seam Mined: Pittsburgh.

Pool No. 39

Description: Greensburg basin high-volatile (over 31 per cent) $\frac{3}{4}$ "-lump coal.

Seam Mined: Pittsburgh.

Pool No. 40

Description: Greensburg basin high-volatile (over 31 per cent) run-of-mine coal.

Seam Mined: Pittsburgh.

Pool No. 43

Description: High-volatile (over 31 per cent) $\frac{3}{4}$ "-lump steam coal.

Seams Mined: Upper Kittanning; Lower Kittanning; Upper Freeport; Lower Freeport; Pittsburgh; Sewickley; Waynesburg.

Pool No. 44

Description: High-volatile (over 31 per cent) run-of-mine steam coal.

Seams Mined: Upper Kittanning; Lower Kittanning; Upper Freeport; Lower Freeport; Sewickley and Waynesburg.

Pool No. 53

Description: Superior high-volatile (over 31 per cent) $\frac{3}{4}$ "-lump coal.

Seams Mined: Upper Kittanning; Lower Kittanning; Upper Freeport; Lower Freeport; Sewickley; Waynesburg and Pittsburgh.

Pool No. 54

Description: Superior high-volatile (over 31 per cent) run-of-mine coal.

Seams Mined: Upper Kittanning; Lower Kittanning; Upper Freeport; Lower Freeport; Sewickley, and Pittsburgh.

Pool No. 60

Description: Westmoreland (Irwin basin) and Youghiogheny low-sulphur $\frac{3}{4}$ "-lump gas coal.
Seam Mined: Pittsburgh.

Pool No. 61

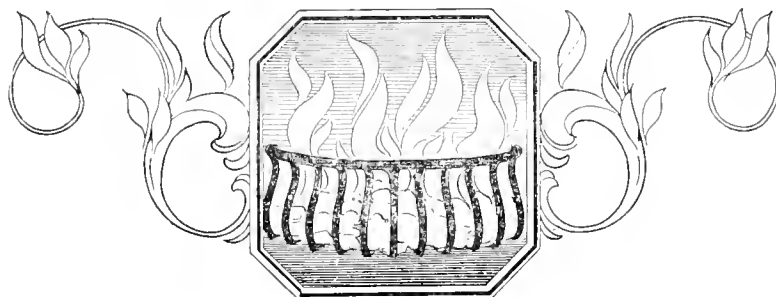
Description: Westmoreland (Irwin basin) and Youghiogheny low-sulphur run-of-mine gas coal.
Seam Mined: Pittsburgh.

Pool No. 63

Description: Hard-structure high-volatile (over 31 per cent) $\frac{3}{4}$ "-lump coal. Maximum sulphur 2 per cent.
Seams Mined: Pittsburgh and Redstone.

Pool No. 64

Description: Hard-structure high-volatile (over 31 per cent) run-of-mine coal. Maximum sulphur 2 per cent.
Seams Mined: Pittsburgh and Redstone.



THE NEWPORT NEWS COAL EXCHANGE, INCORPORATED

Organization, Railroads, Dumping Piers, Description of Pools, Seams Mined,
List of Mines by Pools

OFFICERS

W. C. Hull, President, Roanoke, Va.
J. L. Moon, Vice-President, Roanoke, Va.
M. C. Selden, Commissioner, Newport News, Va.
J. F. Shaffer, Asst. Commissioner, Newport News, Va.
F. H. Wilson, Deputy Commissioner, Newport News, Va.
W. S. Bronson, General Counsel, Roanoke, Va.
W. K. Black, Chief Inspector, Newport News, Va.

The Newport News Coal Exchange came into being on May 1, 1920, and was incorporated on July 8, 1920. It is operated entirely by the railroad.

The Exchange maintains an inspection force at Newport News, as well as field inspectors, to insure that the quality and preparation of all coal handled through it comes up to its proper standards. This coal originates in the New River, Kanawha, Coal River and Logan districts of West Virginia and the Princess, Paintsville, Elkhorn and Redwine districts of Kentucky.

Railroads

Inasmuch as all coal reaches Newport News over one railroad, the Chesapeake and Ohio, this information in the pool lists is supplanted with the name of the mining districts. The Chesapeake and Ohio Railroad alone serves the New River, Coal River and Logan districts and is the originating road of most of the Kanawha district coal. The Kanawha and Michigan Railway, a connecting road, also serves the Kanawha district. Most of the coal from the Kentucky districts originates on the Chesapeake and Ohio, the balance being delivered to it

by connecting roads, the Ashland Coal and Iron Railway, Big Sandy and Kentucky Railway, Eastern Kentucky Railway, and the Morehead and North Fork Railroad.

Dumping Piers

Pier No. 9 at Newport News is of all steel construction and has a capacity of 1,000,000 tons monthly. This pier will accommodate six vessels at one time—three on either side. The coal is dumped from the railroad car into a pier car which passes over the scales enroute to the pocket through which the coal is delivered to the vessel, thereby insuring accurate weights.

Pier No. 12 is an auxiliary to Pier No. 9 and is for the accommodation of bunkers and small craft.

Authority For List of Mines

The list of mines here given has been taken from the Newport News Coal Exchange Classification as of date October 15, 1921. Inasmuch as changes in classification may be made at any time, we do not guarantee the lists, nor are we responsible for inaccuracies.

Pool No. 1

Description: Standard New River low-volatile run-of-mine coal.

Volatile Matter (range) 17 to 20 per cent
Fixed Carbon (range) 75 to 79 per cent
Ash (range) 5 to 7.5 per cent
Sulphur 1 per cent and less
B.t.u. (range) 15,000 to 15,500

Seams Mined: Pocahontas No. 3, Pocahontas No. 4, Sewell, Beckley and Fire Creek.

WEST VIRGINIA MINES

NAME OF COMPANY	NAME OF MINE	DISTRICT	NAME OF COMPANY	NAME OF MINE	DISTRICT
Ballinger Coal Co.	Ballinger	New River District	Gulf Smokeless Coal Co.	Tams No. 2	New River District
Beckley Smokeless Coal Co.	Beseco	New River District	Hemlock Hollow Coal & Coke Co.	Hemlock Hollow	New River District
Beechwood Coal & Coke Co.	Beechwood No. 1	New River District	Hindson Coal Co.	Dun Glen	New River District
Big Bend Coal Co.	Big Bend	New River District	Lauri Creek Coal Co.	Laurel	New River District
Blue Jay Lumber Co.	Blue Jay No. 5	New River District	Lillybrook Coal Co.	Lillybrook No. 1	New River District
Blume Coal & Coke Co.	Blume	New River District	Lillybrook Coal Co.	Lillybrook No. 2	New River District
Branch Coal & Coke Co.	Elverton	New River District	Lilly and Hornbrook Coal Co.	Lilly Hornbrook No. 3	New River District
Coal Run Coal Co.	Coal Run	New River District	Low Moor Iron Co. of Virginia	Kaymoor No. 1	New River District
East Gulf Coal Co.	East Gulf No. 3	New River District	Low Moor Iron Co. of Virginia	Kaymoor No. 2	New River District
East Gulf Coal Co.	East Gulf No. 4	New River District	Low Volatile Coal Co.	Rock Lick No. 2	New River District
Elkhorn Piney Coal Mining Co.	Piney No. 1	New River District	MacAlpin Coal Co.	MacAlpin	New River District
Elkhorn Piney Coal Mining Co.	Piney No. 3	New River District	McKell Coal & Coke Co.	Derryhale	New River District
Elkhorn Piney Coal Mining Co.	Piney No. 4	New River District	McKell Coal & Coke Co.	Kilsyth	New River District
Elkhorn Piney Coal Mining Co.	Piney No. 6	New River District	McKell Coal & Coke Co.	Oswald	New River District
Ephraim Creek Coal & Coke Co.	Buffalo	New River District	McKell Coal & Coke Co.	Tamroy	New River District
Greenwood Coal Co.	Greenwood	New River District	Maryland New River Coal Co.	Boone	New River District
Gulf Smokeless Coal Co.	Tams No. 1	New River District	Maryland New River Coal Co.	Dunbro	New River District

(Continued on Next Page)

NOTE—For further information on mines here listed see the Directory Section, which follows each state.

POOL NO. 1—WEST VIRGINIA MINES—Continued

NAME OF COMPANY	NAME OF MINE	DISTRICT	NAME OF COMPANY	NAME OF MINE	DISTRICT
Maryland New River Coal Co.	Rosedale	New River District	Scotia Coal & Coke Co.	Rush Run	New River District
Maryland New River Coal Co.	Smokeless	New River District	Sewell Smokeless Coal Co.	Caperton	New River District
Mead, C. H. Coal Co.	Mead	New River District	South Side Coal Co.	South Side	New River District
Mead-Toliver Coal Co.	Kilharney	New River District	Star Coal & Coke Co.	Star	New River District
Meadow Fork Fuel Co.	Meadow Fork	New River District	Stover Coal Co.	Brown	New River District
New River Collieries Co.	Eccles No. 3	New River District	Sugar Creek Coal & Coke Co.	Sugar Creek	New River District
New River Collieries Co.	Eccles No. 5	New River District	Sunset Mining Co.	Sunset	New River District
New River Collieries Co.	Eccles No. 6	New River District	Tolbert Smokeless Coal Co.	Tolbert No. 1	New River District
New River Collieries Co.	Sun No. 1	New River District	Tolbert Smokeless Coal Co.	Tolbert No. 2	New River District
New River Collieries Co.	Sun No. 2	New River District	Turkey Knob Coal Co.	Turkey Knob	New River District
New River Export Coal Co.	Lookout	New River District	White, E. E. Coal Co.	Glen White	New River District
New River Export Coal Co.	Michigan	New River District	White, E. E. Coal Co.	Stoteshury No. 3	New River District
New River & Pocahontas Con. Coal Co.	Layland No. 1	New River District	White Oak Coal Co. (New River Co.)	Beckley	New River District
New River & Pocahontas Con. Coal Co.	Layland No. 2	New River District	White Oak Coal Co. (New River Co.)	Collins	New River District
New River & Pocahontas Con. Coal Co.	Layland No. 3	New River District	White Oak Coal Co. (New River Co.)	Cranberry No. 1	New River District
New River & Pocahontas Con. Coal Co.	Minden No. 2	New River District	White Oak Coal Co. (New River Co.)	Cranberry No. 2	New River District
New River & Pocahontas Con. Coal Co.	Minden No. 3	New River District	White Oak Coal Co. (New River Co.)	Cranberry No. 3	New River District
New River & Pocahontas Con. Coal Co.	Minden No. 4	New River District	White Oak Coal Co. (New River Co.)	Dun Loop	New River District
New River & Pocahontas Con. Coal Co.	Minden No. 5	New River District	White Oak Coal Co. (New River Co.)	Harvey	New River District
Nichol Colliery Co.	Nichol	New River District	White Oak Coal Co. (New River Co.)	Lochelly	New River District
Pemberton Fuel Co.	Pemberton	New River District	White Oak Coal Co. (New River Co.)	Mabscott	New River District
Pickshin Coal Co.	Pickshin	New River District	White Oak Coal Co. (New River Co.)	Macdonald	New River District
Price Hill Colliery Co.	Price Hill	New River District	White Oak Coal Co. (New River Co.)	Oakwood	New River District
Ragland Coal Co.	Ragland	New River District	White Oak Coal Co. (New River Co.)	Prudence	New River District
Raleigh Coal & Coke Co.	Raleigh No. 1	New River District	White Oak Coal Co. (New River Co.)	Scarboree	New River District
Raleigh Coal & Coke Co.	Raleigh No. 3	New River District	White Oak Coal Co. (New River Co.)	Summerlee	New River District
Raleigh Coal & Coke Co.	Raleigh No. 6	New River District	White Oak Coal Co. (New River Co.)	Whipple	New River District
Scotia Coal & Coke Co.	Brooklyn	New River District	Winding Gulf Colliery Co.	Winding Gulf No. 2	New River District
Scotia Coal & Coke Co.	Red Ash	New River District	Wood-Sullivan Coal Co.	Vanwood	New River District

Pool No. 2

Description: Other high-grade New River low-volatile run-of-mine coal. The analysis of coal in this pool is about the same as in Pool No. 1, except that ash will be somewhat higher, ranging from 6 to 8.50 per cent.

Seams Mined: Pocahontas No. 3, Pocahontas No. 4, Sewell, Beckley and Fire Creek.

WEST VIRGINIA MINES

NAME OF COMPANY	NAME OF MINE	DISTRICT	NAME OF COMPANY	NAME OF MINE	DISTRICT
Aileen Coal Co.	Aileen	New River District	Lywin Coal Co.	Diehl	New River District
Ajax Coal Co.	Ajax	New River District	Maryland New River Coal Co.	Rosedale	New River District
Atlantic Coal & Iron Co.	Atlantic No. 1	New River District	Maryland New River Coal Co.	Smokeless	New River District
Atlantic Coal & Iron Co.	Atlantic No. 2	New River District	Meadow Fork Fuel Co.	Meadow Fork	New River District
Rabcock Coal & Coke Co.	Cliff Top No. 3	New River District	Mill Creek Collieries Co.	Mill Creek	New River District
Rabcock Coal & Coke Co.	Cliff Top No. 4	New River District	Minter, E. C. Coal Co.	Minter	New River District
Rabcock Coal & Coke Co.	Cliff Top No. 6	New River District	MT. Hope Coal & Coke Co.	Baby	New River District
Beckley Vein Coal Co.	Beckley Vein	New River District	MT. Hope Land Co.	Minnie Belle	New River District
Reury Bros. Coal & Coke Co.	Echo	New River District	New Export Coal Co.	Lookout	New River District
Blue Jay Lumber Co.	Blue Jay No. 6	New River District	New River & Pocahontas Con. Coal Co.	Weirwood	New River District
Cadle Ridge Coal Co.	Cadle Ridge No. 1	New River District	Nuttallburg Smokeless Coal Co.	Nuttallburg	New River District
Cadle Ridge Coal Co.	Cadle Ridge No. 2	New River District	Phoenix Coal Co.	Phoenix	New River District
Cadle Ridge Coal Co.	Cadle Ridge No. 3	New River District	Princeton Wick Coal Co.	Princeton Wick	New River District
Calloway, C. P.	Cepec	New River District	Rhianore Coal & Coke Co.	Big "U"	New River District
Calloway Coal Co.	Calloway	New River District	Rhodell Coal Co.	Fayette	New River District
City Coal Co.	City Coal No. 2	New River District	Rhodell Coal Co.	Rhodell No. 1	New River District
Clay Coal Co.	Clay	New River District	Rhodell Coal Co.	Rhodell No. 2	New River District
Cook-Carter Coal Co.	Terry No. 1	New River District	Royal Coal Co.	Royal No. 1	New River District
Cook-Carter Coal Co.	Terry No. 2	New River District	Royal Coal Co.	Royal No. 2	New River District
Crab Orchard Fuel Co.	Crab Orchard	New River District	Sullivan Coal & Coke Co.	Sullivan	New River District
DeWitt Fuel Co.	DeWitt	New River District	Vassey, V. S. Coal Co.	Hi Top	New River District
Elmo Mining Co.	Elmo	New River District	Viacova Smokeless Coal Co.	Viacova	New River District
Export Coal Co.	Export	New River District	West Virginia Coal Co.	Stone Cliff	New River District
Fay-Ral Coal Co.	Fay-Ral	New River District	West Virginia Mining Co.	Griffiths	New River District
Fire Creek Coal & Coke Co.	Fire Creek	New River District	Weewin Coal Co.	Weewin	New River District
Fire Creek Smokeless Coal Co.	Lego	New River District	White Stick Coal Co.	White Stick	New River District
Gaymont Coal & Coke Co.	Gaymont	New River District	Wood-Park Coal Co.	Wood-Park	New River District
Lanark Coal Co.	Lanark No. 5	New River District	Wright Coal & Coke Co.	Wright No. 1	New River District
Lee Coal Co.	Lee	New River District	Wright Coal & Coke Co.	Wright No. 2	New River District
Tally Mining Co.	Whorley	New River District			

Pool No. 3

Description: Standard and other high-grade New River low-volatile nut and slack coal.

Seams Mined: Pocahontas No. 3, Pocahontas No. 4, Sewell, Beckley and Fire Creek.

WEST VIRGINIA MINES

For list of mines in this Pool, see Pool No. 44, the mines in which are identical with those in Pool No. 3.

Pool No. 5

Description: High-volatile run-of-mine gas coal, fulfilling the following requirements:

Volatile Matter (Range)	32 to 36 per cent
Fixed Carbon (Minimum)	55 per cent
Ash (Maximum)	8 per cent
Sulphur (Range)	1.1 to 1.3 per cent
Coke Yield	60 per cent
Gas Yield	10,500 cu. ft.
B.t.u.	14,200

Seams Mined: No. 2 Gas, Eagle, Chilton, Little Eagle, Cedar Grove, Island Creek, Alma and Elkhorn.

(Continued on Next Page)

NOTE—For further information on mines here listed see the Directory Section, which follows each state.

WEST VIRGINIA MINES

NAME OF COMPANY	NAME OF MINE	DISTRICT	NAME OF COMPANY	NAME OF MINE	DISTRICT
Alexander Coal Co.	Alexander	Kanawha District	Hoghton Coal Co.	Hoghton	Kanawha District
Alexander, W. A. Coal Co.	Walnut Hill	Kanawha District	Illinois Commercial & Mining Co.	Illinois No. 1	Logan District
American Eagle Colliery Co.	American Eagle	Kanawha District	Illinois Commercial & Mining Co.	Illinois No. 2	Logan District
American Rolling Mill Co.	Martins No. 1	Kanawha District	Imperial Colliery Co.	Imperial No. 1	Kanawha District
Amherst Coal Co.	Amherst No. 1	Logan District	Imperial Colliery Co.	Imperial No. 3	Kanawha District
Amherst Coal Co.	Amherst No. 2	Logan District	Imperial Colliery Co.	Imperial No. 4	Kanawha District
Amherst Coal Co.	Amherst No. 3	Logan District	Indian Run Collieries Co.	Elkridge No. 1	Kanawha District
Amherst Fuel Co.	Tony's Fork	Logan District	Indian Run Collieries Co.	Elkridge No. 2	Kanawha District
Aracoma Coal Co.	Aracoma Eagle	Logan District	Indian Run Collieries Co.	Elkridge No. 3	Kanawha District
Argyle Coal Co.	Argyle No. 1	Logan District	Indian Run Collieries Co.	Kimbriy	Kanawha District
Argyle Coal Co.	Argyle No. 2	Logan District	Johnson, W. R. Coal Co.	Oakland	Kanawha District
Ashford Coal & Coke Co.	Ashford	Coal River District	Jones Coal Land Co.	Isabelle No. 1	Logan District
Avila, H. C. Coal Co.	Avila	Logan District	Jones Coal Land Co.	Isabelle No. 2	Logan District
Beech Glen Coal Co.	Beech Glen	Kanawha District	Kanawha & Hocking Coal & Coke Co.	Kanawha & Hocking No. 111	Kanawha District
Bengal Coal Co.	Bengal	Logan District	Kanawha & Hocking Coal & Coke Co.	Kanawha & Hocking No. 112	Kanawha District
Birchfork Coal Co.	Birchfork No. 2	Coal River District	Kanawha & Hocking Coal & Coke Co.	Kanawha & Hocking No. 113	Kanawha District
Black Hawk Colliery Co.	Black Hawk	Logan District	Kanawha & Hocking Coal & Coke Co.	Kanawha & Hocking No. 115	Kanawha District
Boone County Coal Corp.	Boone No. 1	Coal River District	Kanawha City Coal Co.	Kanawha City	Kanawha District
Boone County Coal Corp.	Boone No. 2	Coal River District	Kanawha Rail & River Coal Co.	Diamond	Kanawha District
Boone County Coal Corp.	Boone No. 3	Coal River District	Kanawha Rail & River Coal Co.	Edgewater	Kanawha District
Boone County Coal Corp.	Boone No. 6	Coal River District	Kanawha Rail & River Coal Co.	Mecca No. 2	Kanawha District
Boone County Coal Corp.	Boone No. 9	Coal River District	Laurel Branch Coal Co.	Laurel Branch	Coal River District
Boone County Coal Corp.	Boone No. 10	Coal River District	Lewiston Block Coal Co.	Fred	Coal River District
Bradley Mining Co.	Bradley No. 3 (Gas)	Coal River District	Litz-Smith Coal Co.	Litz-Smith No. 3	Logan District
Britton, J. M. Coal Co.	Peerless	Kanawha District	Logan Eagle Mining Co.	Logan Eagle No. 1	Logan District
Brush Creek Coal Co.	Brush Creek No. 5	Coal River District	Logan Eagle Mining Co.	Logan Eagle No. 2	Logan District
Brush Creek Coal Co.	Brush Creek No. 7	Coal River District	Logan Elkhorn Coal Co.	Huff Creek	Logan District
Brush Creek Coal Co.	Brush Creek No. 9	Coal River District	Logan Mining Co.	Earling	Logan District
Buffalo Eagle Coal Co.	Buffalo Eagle No. 1	Logan District	Logan Mining Co.	Manitoba	Logan District
Buffalo-Thacker Coal Co.	Monte No. 1	Coal River District	Logan Mining Co.	Wanda	Logan District
Buffalo-Thacker Coal Co.	Monte No. 2	Coal River District	Logan Thin Vein Coal Co.	Grenvont	Logan District
Buffalo-Thacker Coal Co.	Monte No. 3	Coal River District	Logan Thin Vein Coal Co.	Stollings	Logan District
Bull Creek Mining Co.	Bull Creek	Coal River District	London Gas Coal Co.	London Gas	Kanawha District
Cabin Creek Consol. Coal Co.	Relleclaire	Kanawha District	Long Flame Coal Co.	Long Flame	Logan District
Cabin Creek Consol. Coal Co.	Black Tulip	Kanawha District	Lorain Coal & Dock Co.	Lorado No. 1	Logan District
Cabin Creek Consol. Coal Co.	Buckeye	Kanawha District	Lorain Coal & Dock Co.	Lorado No. 2	Logan District
Cabin Creek Consol. Coal Co.	Cherokee	Kanawha District	Lory Coal & Coke Co.	Lory	Coal River District
Cabin Creek Consol. Coal Co.	Empire	Kanawha District	Low Ash Coal Co.	Low Ash	Logan District
Cabin Creek Consol. Coal Co.	Holly	Kanawha District	Ludate Coal Co.	Ludate	Logan District
Cabin Creek Consol. Coal Co.	Rayford	Kanawha District	Lundale Coal Co.	Lundale	Logan District
Cabin Creek Consol. Coal Co.	Quarrier	Kanawha District	Lundale Coal Co.	Lundale Stock Pile	Logan District
Cabin Creek Consol. Coal Co.	Raccoon No. 1	Kanawha District	Lynchburg Collieries Co.	Lynchburg (No. 2 Gas)	New River District
Cabin Creek Consol. Coal Co.	Red Warrior	Kanawha District	MacBeth Coal Co.	MacBeth	Logan District
Cabin Creek Consol. Coal Co.	Shamrock	Kanawha District	MacGregor Coal Co.	MacGregor No. 1	Logan District
Cabin Creek Consol. Coal Co.	Thistle	Kanawha District	McCall Coal Co.	McCall	Logan District
Cabin Creek Consol. Coal Co.	United No. 1	Kanawha District	Madne Coal Co.	Madne North	Logan District
Carbon Fuel Co.	Carbon No. 1	Kanawha District	Madne Coal Co.	Madne South	Logan District
Carbon Fuel Co.	Carbon No. 2	Kanawha District	Madison Coal Co.	Madison	Coal River District
Carbon Fuel Co.	Carbon No. 4	Kanawha District	Main Island Creek Coal Co.	Nos. 16-22	Logan District
Carbon Fuel Co.	Carbon No. 6	Kanawha District	Mallory Coal Co.	Mallory No. 1	Logan District
Carbon Fuel Co.	Carbon No. 7	Kanawha District	Marsh Fork Coal Co.	Marsh Fork	Kanawha District
Carbon Fuel Co.	Carbon No. 9	Kanawha District	Manbar Coal Co.	Manbar	Logan District
Carbon Fuel Co.	North Carbon	Kanawha District	Maxine Coal Co.	Maxine	Coal River District
Carbon Fuel Co.	South Carbon	Kanawha District	Miami Coal & Coke Co.	Miami	Kanawha District
Carters Coal Mining Co.	Carters	Kanawha District	Milburn Coal Co.	Milburn No. 1	Kanawha District
Chilton Eagle Coal Co.	Chilton Eagle	Logan District	Mount Morris Coal Co.	Mount Morris	Kanawha District
Christian Colliery Co.	Christian	Kanawha District	Nellis Coal Co.	Nellis	Coal River District
Christian Colliery Co.	Myhan	Kanawha District	New Eagle Gas Coal Co.	Eagle Gas	New River District
Cleveland Cliff Iron Co.	Ethel No. 1	Logan District	New Export Coal Co.	New Export	Kanawha District
Cleveland Cliff Iron Co.	Ethel No. 2	Logan District	No. 2 Gas Coal Co.	Black Gem	Kanawha District
Cleveland Cliff Iron Co.	Ethel No. 3	Logan District	Oakland Coal Co.	Crescent No. 1	Kanawha District
Coal River Coal & Coke Co.	Dobra	Coal River District	Opperman Coal Co.	Opperman No. 1	Coal River District
Coalburg Mining Co.	Coalburg	Kanawha District	Orange Gas Coal Co.	Orange	Coal River District
Coalburg Colliery Co.	Ronda No. 2	Kanawha District	Orville Coal Co.	Orville	Logan District
Colcord Coal Co.	Mont Coal	Kanawha District	Paint Creek Coal Mining Co.	Detroit	Kanawha District
Coleman Coal Co.	Coleman	Kanawha District	Paint Creek Coal Mining Co.	Greenbrier	Kanawha District
Columbia Coal Co.	Columbia	Kanawha District	Paint Creek Coal Mining Co.	Gross	Kanawha District
Consolidated By-Products Coal Co.	Edgewater	Kanawha District	Paint Creek Coal Mining Co.	Hickory Camp	Kanawha District
Cooper, J. M. Coal Co.	Cooper	Kanawha District	Paragon Colliery Co.	Paragon	Logan District
Cronin, A. D. Coal Co.	Buttner	Logan District	Peytona Mining Co.	Peytona No. 1	Coal River District
Cub Fork Coal Co.	Cub Fork	Logan District	Peytona Mining Co.	Peytona No. 2	Coal River District
Cunningham, Miller & Enslow	Dion No. 2	Kanawha District	Phillips Mining Co.	Phillips	Logan District
Cunningham, Miller & Enslow	Sekay	Logan District	Phillips & Dixon	Becky-Jane	Kanawha District
Cunningham, Miller & Enslow	Trinity	Coal River District	Preston Eagle Coal Co.	Preston Eagle	Logan District
Dana Coal Co.	Dana	Kanawha District	Procktor Coal Co.	Procktor Winifrede	Logan District
Dartmouth Coal Co.	Dartmouth	Coal River District	Procktor Eagle Coal Co.	Procktor Eagle	Logan District
Deegans Eagle Coal Co.	Deegans Eagle	Logan District	Raleigh-Wyoming Coal Co.	Edwight No. 1	Kanawha District
Deitz Colliery Co.	Deitz No. 2 (Gas)	New River District	R-d Campbell Coal Co.	R-d Campbell	Logan District
Donald Coal Co.	Donald	Logan District	Rich Creek Coal Co.	Lyburn	Logan District
Draper Coal & Coke Co.	Draper No. 1	Logan District	Rich Creek Coal Co.	Wilburn	Logan District
Draper Coal & Coke Co.	Draper No. 2	Logan District	Sandberg Coal & Land Co.	Carlin	Kanawha District
Dry Branch Coal Co.	Dry Branch No. 2	Kanawha District	St. Clair Coal Mining Co.	Eagle	Kanawha District
Eagle By-Product Coal Co.	Krebs No. 1	Kanawha District	Sharrow Gas Coal Co.	Sharrow No. 1	Coal River District
Eagle Coal Co.	Eagle "B"	Kanawha District	Signal Knob Coal Co.	Signal Knob	New River District
Eagle Island Coal Co.	Eagle Island No. 1	Logan District	Smith, Otto Co.	Otto Smith	Kanawha District
Eagle Island Coal Co.	Eagle Island No. 2	Logan District	Solvay Collieries Co.	Kingston	Kanawha District
Easley Coal Co.	Easley No. 1	Coal River District	Solvay Collieries Co.	Westerly	Kanawha District
Easley Coal Co.	Easley No. 3	Coal River District	Spruce River Coal Co.	Spruce River No. 2	Coal River District
East Bank Mining Co.	East Bank	Kanawha District	Spruce River Coal Co.	Spruce River No. 3	Coal River District
Elkhorn Piney Coal Mining Co.	Eagle No. 4	Kanawha District	Sovereign Coal Co.	Sovereign No. 1	Coal River District
Elkhorn Piney Coal Mining Co.	Piney No. 3	New River District	Sovereign Coal Co.	Sovereign No. 2	Coal River District
Elkhorn Piney Coal Mining Co.	Pluto	Kanawha District	Standard Eagle Coal Co.	Standard Eagle	Coal River District
Elkhorn Piney Coal Mining Co.	Powellton No. 2	Kanawha District	Standard Island Creek Coal Co.	Loma No. 1	Logan District
Elkhorn Piney Coal Mining Co.	Powellton No. 5	Kanawha District	Standard Island Creek Coal Co.	Loma No. 2	Logan District
Elkhorn Piney Coal Mining Co.	Posellton, Stock Pile	Kanawha District	Standard Island Creek Coal Co.	Loma No. 3	Logan District
Elkhorn Piney Coal Mining Co.	Vulcan	Kanawha District	Sterling Colliery Co.	Hickory Ash	Logan District
Empire Fuel Co.	Armburn	Kanawha District	Steel & Tube Co. of America	Bum Creek No. 1	Logan District
Eureka Coal Co.	Eureka No. 1	Kanawha District	Steel & Tube Co. of America	Bum Creek No. 5	Logan District
Eureka Coal Co.	Eureka No. 6	Kanawha District	Sunbeam Coal Co.	Sunbeam	Logan District
Faulkner Coal Co.	Faulkner	Logan District	Superior Eagle Coal Co.	Superior Eagle	Coal River District
Fayette-Kanawha Coal Co.	No. 2 Gas	Kanawha District	Three Forks Coal Co.	Three Forks	Logan District
Fort Branch Coal Corp.	Fort Branch	Logan District	Three Forks Coal Co.	Three Forks Stock Pile	Logan District
Ft. Defiance Coal & Coke Co.	Ft. Defiance	New River District	Trumload Coal Co.	Thurmond	Logan District
Gauley Mountain Coal Co.	Buck Run No. 1	New River District	Thomas, D. C. Coal Co.	Thomas Nos. 1 and 2	Coal River District
Gauley Mountain Coal Co.	Rich Creek No. 1	New River District	Tompkins By-Product Coal Co.	Tompkins	Logan District
Gauley Mountain Coal Co.	Rich Creek No. 2	New River District	Valco Coal Co.	Valco	Coal River District
Georges Creek Coal Co.	Georges Creek	Logan District	Walnut Hill Fuel Co.	Walnut Hill	New River District
Glen Ferris Coal Co.	Glen Ferris	Kanawha District	Wake Forest Mining Co.	Wake Forest	Kanawha District
Glen Ferris Coal Co.	Stiekens No. 10	Logan District	West Virginia Eagle Coal Co.	West Virginia Eagle	Kanawha District
Gloceoria Coal Co.	Godby Branch	Logan District	Whit Branch Mining Co.	Whit Branch No. 1	Kanawha District
Godby By-Product Coal Co.	Godby	Logan District	Wittaker-Glesner Coal Co.	Mitting No. 1	Coal River District
Guyan Colliery Corp.	Guyan	Logan District	Wilson, H. T. Coal Co.	Wilson	Logan District
Guyan Valley Coal Co.	Guyan Valley	Logan District	Winifrede Coal Co.	Arbuckle	Kanawha District
Haleon Coal Co.	Haleon	Coal River District	Wolf Pen Coal Co.	Nelson	Kanawha District
Hazy Eagle Coal Co.	Hazy Eagle	Kanawha District	Wood Coal Co.	Frieze Fork	Logan District
Helen Catharine Coal & Coke Co.	Helen C.	Kanawha District	West Coal Co.	Laing	Kanawha District
Holford Coal Co.	Spruce Valley	Coal River District			

(Continued on Next Page)

NOTE—For further information on mines here listed see the Directory Section, which follows each state.

KENTUCKY MINES

NAME OF COMPANY	NAME OF MINE	DISTRICT	NAME OF COMPANY	NAME OF MINE	DISTRICT
Anchor Coal Co.	Anchor.	Paintsville District	Lackey Mining Co.	Lackey.	Paintsville District
Beaver Creek Coal Co.	Beaver Creek.	Paintsville District	Lackey Mining Co.	Liberty.	Paintsville District
Big Elkhorn Coal Co.	No. 1.	Paintsville District	Liberty Coal Corp.	Liberty.	Paintsville District
Big Run Coal Co.	Big Run.	Princess District	Long Branch Coal Co.	Long Branch.	Paintsville District
Collins Mining Co.	Collins No. 1.	Paintsville District	Northern Elkhorn Coal Co.	Polly.	Paintsville District
Cumberland Coal & Coke Co.	Cumberland No. 1.	Paintsville District	Paragon-Elkhorn Collieries Co.	Paragon.	Elkhorn District
Edgewater Coal Co.	Lookout.	Elkhorn District	Praise-Elkhorn.	Praise-Elkhorn.	Elkhorn District
Elkhorn Coal Corp.	Garrett No. 1.	Paintsville District	Printer-Elkhorn Coal Co.	Printer-Elkhorn.	Paintsville District
Elkhorn Coal Corp.	Garrett No. 2.	Paintsville District	Purity Cannel Coal Co.	Purity Cannel.	Paintsville District
Elkhorn Coal Corp.	Garrett No. 3.	Paintsville District	Shelby Coal Mining Co.	Shelby.	Elkhorn District
Goodin Barney Coal Co.	Barney.	Paintsville District	Standard-Elkhorn Coal Co.	Standard.	Paintsville District
Hatcher, James Coal Co.	Big Sheshe.	Elkhorn District	Stover-Elkhorn Coal Co.	Holly.	Paintsville District
Huntington By-Product Co.	By-Product.	Elkhorn District	Superior-Elkhorn Coal Co.	Georgia.	Paintsville District
Kentucky Beaver Collieries Co.	Kentucky Beaver.	Paintsville District	Wells-Elkhorn Coal Co.	Bosco.	Paintsville District
Keyser Coal Co.	Keyser No. 1.	Elkhorn District	Zella Mining Co.	Loreda.	Paintsville District
King Elkhorn Coal Co.	King Elkhorn.	Elkhorn District			

Pool No. 6

Description: High-volatile run-of-mine splint steam coal fulfilling the following requirements:

Volatile Matter (Range)	36 to 40 per cent
Fixed Carbon (Range)	54 to 57 per cent
Ash (Maximum)	8.50 per cent
Sulphur (Range)	1.1 to 2.0 per cent
Gas	10,000 cu. ft.
B.t.u.	14,500

Seams Mined: No. 5 Block, Coalburg, Stockton-Lewiston, Winifrede, Island Creek, Eagle, Alma and Elkhorn.

WEST VIRGINIA MINES

NAME OF COMPANY	NAME OF MINE	DISTRICT	NAME OF COMPANY	NAME OF MINE	DISTRICT
Albert Coal Co.	Albert.	Logan District	Illini Coal Co.	Illini.	Kanawha District
Aldridge Coal Co.	Aldridge.	Logan District	Ivy Branch Coal Co.	Ivy Branch.	Coal River District
Alenma Coal Co.	Alenma.	Logan District	Ivy White Ash Coal Co.	Ivy White Ash No. 1.	Coal River District
Anchor Coal Co.	Anchor No. 1.	Kanawha District	Ivy White Ash Coal Co.	Ivy White Ash No. 2.	Coal River District
Anchor Coal Co.	Anchor No. 2.	Kanawha District	Kanawha Collieries Co.	Swisa.	Kanawha District
Aracoma Coal Co.	Aracoma.	Logan District	Kanawha & Hocking Coal & Coke Co.	Kanawha & Hock'g No. 104.	Kanawha District
Beech Glen Coal Co.	Beech Glen.	New River District	Kanawha & Hocking Coal & Coke Co.	Kanawha & Hock'g No. 105.	Kanawha District
Biddison, E. G. & Co.	Rock Bottom.	Coal River District	Kanawha & Hocking Coal & Coke Co.	Kanawha & Hock'g No. 108.	Kanawha District
Big Bottom Coal Co.	Big Bottom.	Kanawha District	Kanawha & Hocking Coal & Coke Co.	Kanawha & Hock'g No. 114.	Kanawha District
Big Creek Coal Co.	Lincoln.	Logan District	Kanawha & Hocking Coal & Coke Co.	Kanawha & Hock'g No. 116.	Kanawha District
Big Creek Coal Co.	Big Creek.	Logan District	Kelleys Creek Coal Co.	Kelleys Creek Nos. 1 to 7.	Kanawha District
Big Six Coal Co.	Big Six.	Kanawha District	Leevale Coal Co.	Leevale.	Kanawha District
Birchfork Coal Co.	Birchton No. 1.	Coal River District	Lewiston Block Coal Co.	Lewiston.	Kanawha District
Black Band Cons. Coal Co.	Knickerbocker.	Coal River District	Lincoln Coal & Coke Co.	Macco.	Coal River District
Black Band Cons. Coal Co.	Olcott No. 1.	Coal River District	Litz-Smith Island Creek Coal Co.	Litz-Smith No. 4.	Logan District
Black Band Cons. Coal Co.	Olcott No. 2.	Coal River District	Logan Mining Co.	Mona.	Logan District
Black Band Cons. Coal Co.	Reynolds No. 5.	Coal River District	Logan Mining Co.	Rossmore.	Logan District
Boone Block Mining Co.	Boone Block.	Coal River District	Lynchburg Collieries Co.	Lynch'g (No. 5 B'l'k).	New River District
Boone County Coal Corp.	Boone No. 4.	Coal River District	McConnell Coal Co.	McConnell.	Logan District
Boone County Coal Corp.	Boone No. 5.	Kanawha District	Main Island Creek Coal Co.	Josephine No. 1.	Logan District
Boone County Coal Corp.	Boone No. 6.	Coal River District	Main Island Creek Coal Co.	Josephine No. 2.	Logan District
Boone County Coal Corp.	Boone No. 7.	Coal River District	Main Island Creek Coal Co.	Maio Island Creek Nos. 1 to 9.	Logan District
Boone County Coal Corp.	Boone No. 8.	Coal River District	Main Island Creek Coal Co.	Main Island Creek No. 10.	Logan District
Boone County Coal Corp.	Boone County No. 11.	Coal River District	Main Island Creek Coal Co.	Main Island Creek No. 11.	Logan District
Boone County Coal Corp.	Boone County No. 12.	Coal River District	Main Island Creek Coal Co.	Main Island Creek No. 14.	Logan District
Bregle Coal Co.	Bregle.	Kanawha District	Malleable Coal Co.	Malleable.	Coal River District
Buffalo Kanawha Coal Corp.	Buffalo Kanawha.	Kanawha District	Marmet Coal Co.	Marmet.	Kanawha District
Cabin Creek Cons. Coal Co.	Aeme.	Kanawha District	Marmet-Oliver Coal Co.	Shrewsbury.	Kanawha District
Cabin Creek Consol. Coal Co.	Davis.	Kanawha District	Marsh Fork Coal Co.	Marsh Fork.	Kanawha District
Cabin Creek Consol. Coal Co.	Racon No. 2.	Kanawha District	Meadow Lick Coal Co.	Meadow Lick.	Coal River District
Cabin Creek Consol. Coal Co.	Rose.	Kanawha District	Merrill Coal Mines, Inc.	Merrill.	Logan District
Cabin Creek Consol. Coal Co.	Ruby.	Kanawha District	Midvale Coal & Coke Co.	Midvale.	New River District
Cabin Creek Consol. Coal Co.	United No. 2.	Kanawha District	Monitor Coal & Coke Co.	Monitor.	Logan District
Cannelton Coal & Coke Co.	Cannelton Nos. 1 to 6.	Kanawha District	Mordue Collieries Co.	Mordue.	Coal River District
Carbon Fuel Co.	Carbon No. 3.	Kanawha District	Morrisvale Coal Co.	Morrisvale.	Coal River District
Carbon Fuel Co.	Carbon No. 5.	Kanawha District	Number Five Block Coal Co.	Number Five Block.	Coal River District
Carbon Fuel Co.	Carbon No. 11.	Kanawha District	Oakland Coal Co.	Oakland No. 4.	Kanawha District
Charleston Co-operative Co.	Black Hawk.	Kanawha District	Oakland Coal Co.	Oakland No. 5.	Kanawha District
Chesapeake Mining Co.	Chesapeake.	Kanawha District	Omar Coal Co.	Omar No. 1.	Logan District
Climax Coal Co.	Climax.	Kanawha District	Omar Coal Co.	Omar No. 2.	Logan District
Coal Fork Mining Co.	Coal Fork.	Kanawha District	Paint Creek Coal Mining Co.	Banner.	Kanawha District
Coalhill Coal Co.	Dunbar.	New River District	Paint Creek Coal Mining Co.	Paint Creek.	Kanawha District
Coalhill Coal Co.	Lynn.	New River District	Paint Creek Coal Mining Co.	Scranton.	Kanawha District
Coalhill Coal Co.	Trees.	New River District	Paint Creek Coal Mining Co.	Wacomah.	Kanawha District
Coalburg Colliery Co.	Ronda No. 1.	Kanawha District	Peach Creek Coal Co.	Peach Creek.	Logan District
Coalburg Kanawha Mining Co.	Coalburg, A, B and C.	Kanawha District	Proctor Coal Co.	Proctor.	Logan District
Colcord Coal Co.	Mill Hollow.	Kanawha District	Quincy Coal Co.	Quincy Nos. 1, 2 & 3.	Kanawha District
Crown Hill Coal Co.	No. 8.	Kanawha District	Ranger Coal Co.	Ranger.	Logan District
Cunningham Miller & Enslow.	Don No. 1.	Kanawha District	St. Clair Coal Mining Co.	Archer.	Kanawha District
Daisy Coal Co.	Daisy.	Logan District	Seng Creek Coal Co.	Seng Creek.	Kanawha District
Davenport Coal Co.	Davenport.	Kanawha District	Sequoi Coal Co.	Sequoi.	Coal River District
Dayle Mining Co.	Dayle.	Logan District	Shamrock Coal Co.	Litz-Smith No. 1.	Logan District
Deitz Colliery Co.	Deitz No. 5.	New River District	Shamrock Coal Co.	Litz-Smith No. 2.	Logan District
Dry Branch Coal Co.	Dry Branch No. 1.	Kanawha District	Snow Hill Coal Co.	Snow Hill.	Kanawha District
Eureka Coal Co.	Eureka No. 3.	Kanawha District	Southwestern Splint Fuel Co.	Black Cat.	Kanawha District
Eureka Coal Co.	Eureka No. 4.	Kanawha District	Standard Island Creek Coal Co.	Cora.	Logan District
Payette-Kanawha Coal Co.	Montgomery No. 1.	Kanawha District	Steel & Tube Co. of America.	Rum Creek No. 3.	Logan District
Gayley Concord Coal Co.	Greendale.	Coal River District	Sterling Block Coal Co.	Sterling Block.	Coal River District
Gay Coal & Coke Co.	Gay No. 1.	Coal River District	Stone Branch Coal Co.	Litz-Smith No. 5.	Logan District
Great Lakes Coal Co.	Great Lakes.	Coal River District	Webb Coal Mining Co.	Webb.	Kanawha District
Guyan River Coal Co.	Branchland.	Logan District	West Virginia Coal & Mfg. Co.	Cedar Grove No. 1.	Kanawha District
Guyan River Coal Co.	Guyan River.	Logan District	Western Pocahontas Fuel Co.	Dorothy.	Kanawha District
Guyandotte Coal Co.	Guyandotte.	Logan District	Western Pocahontas Fuel Co.	Eunice.	Kanawha District
Hackett Coal Co.	Hackett No. 1.	Kanawha District	Western Pocahontas Fuel Co.	Sarita.	Kanawha District
Horse Creek Block Coal Co.	No. 1.	Coal River District	Wet Branch Mining Co.	Wet Branch No. 2.	Kanawha District
Indian Run Collieries Co.	Columbia.	Kanawha District	Winifrede Coal Co.	Stewart, South.	Kanawha District
Island Creek Coal Co.	Island Creek Nos. 1 to 13.	Logan District	Winifrede Coal Co.	Winifrede North.	Kanawha District
Island Creek Coal Co.	Island Creek No. 14.	Logan District	Wyatt Coal Co.	West.	Kanawha District
Island Creek Coal Co.	Island Creek No. 15.	Logan District	Wyatt Coal Co.	Horton.	Kanawha District
Island Creek Coal Co.	Island Creek No. 16.	Logan District	Youghiogheny & Ohio Coal Co.	Oakley.	Kanawha District
Island Creek Coal Co.	Island Creek No. 17.	Logan District	Yuma Coal & Coke Co.	Y & O.	Coal River District
Island Creek Coal Co.	Island Creek No. 18.	Logan District		Yuma.	Logan District
Island Creek Collieries Co.	Switzer No. 1.	Logan District			
Island Creek Collieries Co.	Switzer No. 2.	Logan District			

(Continued on Next Page)

NOTE—For further information on mines here listed see the Directory Section, which follows each state.

KENTUCKY MINES

NAME OF COMPANY	NAME OF MINE	DISTRICT	NAME OF COMPANY	NAME OF MINE	DISTRICT
Ashland Iron & Mining Co.	A. 1 M. Co. No. 8.	Princess District	Johns Run Coal Co.	Johns Run No. 1.	Princess District
Ashland Iron & Mining Co.	A. 1 M. Co. No. 11.	Princess District	Kearl Coal Co.	Elkhorn No. 1.	Elkhorn District
Ashland Iron & Mining Co.	Colton.	Princess District	Kentucky Elkhorn Coal Corp.	Federal.	Elkhorn District
Ashland Iron & Mining Co.	Rush No. 12.	Princess District	Kentucky Gas Coal Co.	Kentucky Gas.	Princess District
Ayers & Lasing.	Sandy River.	Paintsville District	Layne Coal Mining Co.	Layne.	Princess District
Balley Thacker Coal Co.	Superior.	Paintsville District	Lick Creek Coal Co.	Lick.	Princess District
Big Hollow Coal Co.	Big Hollow.	Elkhorn District	Little Fork Coal Co.	Kouns.	Princess District
Black Diamond Coal Co.	Black Diamond.	Elkhorn District	Logan Elkhorn Coal Co.	Logan Elkhorn.	Elkhorn District
Blue Beaver Coal Co.	Auxler.	Paintsville District	Greasy Creek.	Elkhorn District.	Elkhorn District
Blue Beaver Coal Co.	Beaver Pond.	Paintsville District	Wolf Pit.	Elkhorn District.	Elkhorn District
Broad Bottom Mining Co.	Broad.	Elkhorn District	Malone Elkhorn Coal Co.	Malone Elkhorn.	Paintsville District
Bucks Branch Coal Co.	Bucks Branch.	Paintsville District	Marrowbone Mining Co.	Marrowbone No. 1.	Elkhorn District
Cliff Coal Co.	Cliff.	Paintsville District	Martha Leslie Coal Co.	Martha Leslie.	Paintsville District
Coal Run Mining Co.	Coal Run.	Elkhorn District	Martin Coal Co.	Martin.	Redwine District
Colman Coal Co.	Colman.	Paintsville District	Meadows Coal Co.	Meadows.	Redwine District
Colonial Coal & Coke Co.	Colonial.	Paintsville District	Middle Creek Coal Co.	Middle Creek.	Paintsville District
Consolidation Coal Co.	No. 151.	Paintsville District	Mile Branch Coal Co.	Bail y.	Princess District
Consolidation Coal Co.	No. 152.	Paintsville District	Messy Bottom Mining Co.	Messy Bottom.	Princess District
Consolidation Coal Co.	No. 153.	Paintsville District	Nats Creek Mining Co.	Junbo.	Paintsville District
Consolidation Coal Co.	No. 154.	Paintsville District	North East Coal Co.	North East No. 15.	Paintsville District
Consolidation Coal Co.	No. 155.	Paintsville District	Northern Elkhorn Coal Co.	Polly.	Paintsville District
Cow Creek Coal Co.	Cow Creek.	Paintsville District	Panody Coal Co.	No. 28.	Elkhorn District
Crystal Block Coal Co.	Crystal Block.	Paintsville District	Pine Ridge Coal Mining Co.	Meek.	Elkhorn District
Denver Coal Co.	No. 1.	Paintsville District	Prairie Elkhorn Coal Co.	Elkhorn City.	Elkhorn District
Dry Fork Coal Co.	Dry Fork.	Paintsville District	Prestonburg Coal Co.	Prestonburg No. 1.	Elkhorn District
Duval Coal Co.	Duval.	Paintsville District	Princess Coal Co.	Bart II.	Princess District
Edgewater Coal Co.	Big Branch.	Elkhorn District	Princess.	Princess.	Princess District
Edgewater Coal Co.	Pauldine.	Elkhorn District	Purity Cannel.	Purity Cannel.	Paintsville District
Edgewater Coal Co.	Henry Clay.	Elkhorn District	Redwine Cannel Coal Co.	Redwine.	Redwine District
Elkhorn Black Diamond Mng. Co.	Kewanee.	Paintsville District	Redwine Cannel Coal Co.	R. g. Block.	Paintsville District
Elkhorn Coal Corp.	No. 325.	Paintsville District	Royal Collieries Co.	Royal Collieries.	Paintsville District
Elkhorn Coal Corp.	No. 326.	Paintsville District	Rush Branch Coal Co.	Cann I.	Redwine District
Elkhorn Coal Corp.	No. 327.	Paintsville District	St. Paul Coal Co.	St. Paul.	Paintsville District
Elkhorn Coal Corp.	Elkhorn Nos. 328, 329, 330.	Paintsville District	Salt Lick Coal Co.	Salt Lick.	Paintsville District
Funk Coal Co.	Funk.	Elkhorn District	Shilby Coal Mining Co.	Shilby.	Elkhorn District
General Refractories Co.	Hutchins.	Paintsville District	Steel Coal Co.	Steel.	Elkhorn District
Greenough Coal Co.	Greenough.	Elkhorn District	Stover Elkhorn Coal Co.	Holly.	Paintsville District
Harbison-Walker Refractories Co.	Denton.	Princess District	Superior Elkhorn Coal Co.	Georgia.	Paintsville District
Harold Coal & Coke Co.	Harold.	Paintsville District	Surbern Coal Co.	Peach Orchard.	Paintsville District
Hatcher Coal Co.	Hatcher.	Elkhorn District	Thayer, N. Estate of.	Last Creek.	Princess District
H. B. Hickory Cannel Coal Co.	Meadows.	Redwine District	Torchlight Coal Co.	Torchlight.	Paintsville District
Jennies Creek Coal Co.	Jennies Creek.	Paintsville District	Waldron Coal Co.	Waldron.	Paintsville District
Jennies Creek Block Coal Co.	Jennies Creek Block.	Paintsville District	Winston Elkhorn Coal Co.	Winston.	Elkhorn District

Pool No. 7

Description: Standard high-volatile by-product run-of-mine coal fulfilling the following requirements:

Volatile Matter (Range)	28 to 33 per cent
Fixed Carbon (Minimum)	58 per cent
Ash (Maximum)	7.5 per cent
Sulphur (Maximum)	1 per cent
Coke Yield	68 per cent
Gas Yield	10,300 cu. ft.
B.t.u.	14,200

Seams Mined: No. 2 Gas, Eagle, Chilton, Little Eagle, Cedar Grove, Island Creek, Alma and Elkhorn.

WEST VIRGINIA MINES

NAME OF COMPANY	NAME OF MINE	DISTRICT	NAME OF COMPANY	NAME OF MINE	DISTRICT
Alexander Coal Co.	Alexander.	Kanawha District	Coal Valley Mining Co.	Coal Valley Nos. 1 & 2.	Coal River District
Alexander, W. A. Coal Co.	Walnut Hill.	Kanawha District	Conburg Colliery Co.	Ronda No. 2.	Kanawha District
American Eagle Colliery Co.	American Eagle.	Coal River District	Coleord Coal Co.	Mont Coal.	Kanawha District
American Rolling Mill Co.	Marting No. 1.	Kanawha District	Columbia Coal Co.	Columbia.	Kanawha District
Amherst Coal Co.	Amherst No. 1.	Logan District	Cromin, A. D. Coal Co.	Raffner.	Logan District
Amherst Coal Co.	Amherst No. 2.	Logan District	Cub Fork Coal Co.	Cub Fork.	Logan District
Amherst Coal Co.	Amherst No. 3.	Logan District	Cunningham, Miller & Enslow.	Don No. 2.	Kanawha District
Amherst Fuel Co.	Amherst.	Logan District	Cunningham, Miller & Enslow.	Skay.	Logan District
Aracoma Coal Co.	Aracoma.	Logan District	Dana Coal Co.	Dana.	Kanawha District
Argyle Coal Co.	Argyle No. 1.	Logan District	Degans Eagle Coal Co.	Degans Eagle.	Logan District
Argyle Coal Co.	Argyle No. 2.	Logan District	Draper Coal Co.	Draper No. 1.	Logan District
Ashford Coal & Coke Co.	Ashford.	Coal River District	Draper Coal Co.	Draper No. 2.	Logan District
Avis, H. C. Coal Co.	Avis.	Logan District	Dry Branch Coal Co.	Dry Branch No. 2.	Logan District
Belva Coal Co.	Greenview.	Kanawha District	Eagle By-Product Coal Co.	Krebs No. 1.	Kanawha District
Bengal Coal Co.	Bengal.	Logan District	Eagle Coal Co.	Eagle "B".	Kanawha District
Black Hawk Colliery Co.	Black Hawk.	Logan District	East Bank Mining Co.	East Bank.	Kanawha District
Boone County Coal Corp.	Boone County No. 1.	Coal River District	Elkhorn Piney Coal Mining Co.	Pluto.	Kanawha District
Boone County Coal Corp.	Boone County No. 2.	Coal River District	Elkhorn Piney Coal Mining Co.	Powellton.	Kanawha District
Boone County Coal Corp.	Boone County No. 3.	Coal River District	Elkhorn Piney Coal Mining Co.	Vulcan.	Kanawha District
Boone County Coal Corp.	Boone No. 6.	Coal River District	Empire Fuel Co.	Arnburn.	Kanawha District
Boone County Coal Corp.	Boone No. 9.	Coal River District	Eureka Coal Co.	Eureka No. 1.	Kanawha District
Boone County Coal Corp.	Boone No. 10.	Coal River District	Eureka Coal Co.	Eureka No. 2.	Kanawha District
Boone County Coal Corp.	Dobra.	Coal River District	Gaulley Mountain Coal Co.	Austad.	New River District
Brush Creek Coal Co.	Brush Creek No. 5.	Coal River District	Gaulley Mountain Coal Co.	Buck Run No. 1.	New River District
Brush Creek Coal Co.	Brush Creek No. 7.	Coal River District	Gaulley Mountain Coal Co.	Rich Creek No. 2.	New River District
Brush Creek Coal Co.	Brush Creek No. 9.	Coal River District	Gorges Creek Coal Co.	Gorges Creek.	Logan District
Buffalo Eagle Coal Co.	Buffalo Eagle No. 1.	Logan District	Glen Ferris Fuel Co.	Glen Ferris.	Kanawha District
Buffalo Eagle Coal Co.	Buffalo Eagle No. 2.	Logan District	Glogoria Coal Co.	Stickney No. 10.	Kanawha District
Buffalo Eagle Coal Co.	Buffalo Eagle No. 3.	Logan District	Guyan Valley Coal Co.	Guyan Valley.	Logan District
Buffalo-Thacker Coal Co.	Monte No. 1.	Coal River District	Guyan Mining Co.	Rita.	Logan District
Buffalo-Thacker Coal Co.	Monte No. 2.	Coal River District	Haleon Coal Co.	Haleon.	Coal River District
Buffalo-Thacker Coal Co.	Monte No. 3.	Coal River District	Hazy Eagle Coal Co.	Hazy Eagle.	Kanawha District
Cabin Creek Consol. Coal Co.	Quarrier.	Kanawha District	Helen Catharine Coal & Coke Co.	Helen C.	Kanawha District
Cabin Creek Consol. Coal Co.	Thistle.	Kanawha District	Hildred Coal Co.	Spruce Valley.	Coal River District
Cabin Creek Consol. Coal Co.	United No. 1.	Kanawha District	Hugheson Coal Co.	Hugheson.	Kanawha District
Carbon Fuel Co.	Carbon No. 1.	Kanawha District	Illinois Commercial & Mining Co.	R & No. 1.	Logan District
Carbon Fuel Co.	Carbon No. 4.	Kanawha District	Imperial Coal & Mining Co.	Res No. 2.	Logan District
Carbon Fuel Co.	Carbon No. 6.	Kanawha District	Imperial Colliery Co.	Imperial No. 1.	Kanawha District
Carbon Fuel Co.	North Carbon.	Kanawha District	Imperial Colliery Co.	Imperial No. 3.	Kanawha District
Carbon Fuel Co.	South Carbon.	Kanawha District	Imperial Colliery Co.	Imperial No. 4.	Kanawha District
Christian Colliery Co.	Christian.	Kanawha District	Indian Run Collieries Co.	Elbridge No. 1.	Kanawha District
Christian Colliery Co.	Mahon.	Kanawha District	Indian Run Collieries Co.	Elbridge No. 2.	Kanawha District
Coal River Coal & Coke Co.	Dobra.	Coal River District	Indian Run Collieries Co.	Elbridge No. 3.	Kanawha District
			Indian Run Collieries Co.	Elbridge.	Kanawha District

(Continued on Next Page)

NOTE—For further information on mines here listed see the Directory Section, which follows each state.

POOL NO. 7—WEST VIRGINIA MINES—Continued

NAME OF COMPANY	NAME OF MINE	DISTRICT	NAME OF COMPANY	NAME OF MINE	DISTRICT
Johnson, W. R. Coal Co.	Oakland.	Kanawha District	Opperman Coal Co.	Opperman No. 1.	Coal River District
Jones Coal Land Co.	Isabell No. 1.	Logan District	Opperman Coal Co.	Opperman No. 2.	Coal River District
Jones Coal Land Co.	Isabell No. 2.	Logan District	Orange Gas Coal Co.	Orange.	Coal River District
Kanawha City Coal Co.	Kanawha City.	Kanawha District	Paint Creek Coal Mining Co.	Detroit.	Kanawha District
Kanawha Rail & River Coal Co.	Edgewater.	Kanawha District	Paint Creek Coal Mining Co.	Greenbrier.	Kanawha District
Kanawha Rail & River Coal Co.	Diamond.	Kanawha District	Paint Creek Coal Mining Co.	Gross.	Kanawha District
Kanawha Rail & River Coal Co.	Mecca No. 2.	Kanawha District	Paint Creek Coal Mining Co.	Hickory Camp.	Kanawha District
Laurel Branch Coal Co.	Laurel Branch.	Coal River District	Paragon Colliery Co.	Paragon.	Logan District
Lewiston Block Coal Co.	Fred.	Kanawha District	Phillips & Dixon Coal Co.	Becky Jane.	Kanawha District
Litz-Smith Coal Co.	Litz-Smith No. 3.	Logan District	Proctor Eagle Coal Co.	Proctor Eagle.	Logan District
Logan Eagle Mining Co.	Logan Eagle No. 1.	Logan District	Raleigh-Wyoming Coal Co.	Edwight No. 1.	Kanawha District
Logan Eagle Mining Co.	Logan Eagle No. 2.	Logan District	Rich Creek Coal Co.	Lyburn.	Logan District
Logan Elkhorn Coal Co.	Logan Elkhorn.	Logan District	Rich Creek Coal Co.	Wilburn.	Logan District
Logan Mining Co.	Earling.	Logan District	Rock Creek Coal Co.	Rock Creek.	Coal River District
Logan Thin Vein Coal Co.	Greenmont.	Logan District	St. Clair Coal Mining Co.	Eagle.	Kanawha District
Logan Twin V in Coal Co.	Stollings.	Logan District	Sandberg Coal & Land Co.	Carkin.	Kanawha District
London Gas Coal Co.	London Gas.	Kanawha District	Sharlow Gas Coal Co.	Sharlow No. 1.	Coal River District
Long Flame Coal Co.	Long Flame.	Logan District	Smith, Orie Co.	Otto Smith.	Kanawha District
Lorain Coal & Dock Co.	Lorado No. 1.	Logan District	Solvay Collieries Co.	Kirgston.	Kanawha District
Lorain Coal & Dock Co.	Lorado No. 2.	Logan District	Solvay Collieries Co.	Westerly.	Kanawha District
Low Ash Coal Co.	Low Ash.	Logan District	Sovereign Coal Co.	Sovereign No. 1.	Coal River District
Lundale Coal Co.	Latrobe.	Logan District	Sovereign Coal Co.	Sovereign No. 2.	Coal River District
Lundale Coal Co.	Lundale.	Logan District	Spruce River Coal Co.	Spruce River Nos. 2 & 3.	Coal River District
Lundale Coal Co.	Lundale Stock Pile.	Logan District	Standard Eagle Coal Co.	Standard Eagle.	Coal River District
Lynchburg Colliery Co.	Lynchburg (No. 2 Gas).	New River District	Standard Island Creek Coal Co.	Loma No. 1.	Logan District
MacBeth Coal Co.	MacBeth.	Logan District	Steel & Tube Co. of America.	Rum Creek No. 1.	Logan District
Madne Coal Co.	Madne, North.	Logan District	Steel & Tube Co. of America.	Rum Creek No. 5.	Logan District
Madne Coal Co.	Madne, South.	Logan District	Superior Eagle Coal Co.	Superior Eagle.	Coal River District
Manbar Coal Co.	Manbar.	Logan District	Thomas Coal & Coke Co.	Thomas No. 1.	Coal River District
Marsh Fork Coal Co.	Marsh Fork.	Kanawha District	Thomas Coal & Coke Co.	Thomas No. 2.	Coal River District
Maxine Coal Co.	Maxine.	Coal River District	Three Forks Coal Co.	Three Forks.	Logan District
Miami Coal & Coke Co.	Miami.	Kanawha District	Three Forks Coal Co.	Three Forks Stock Pile.	Logan District
Milburn By-Products Coal Co.	Milburn No. 1.	Kanawha District	Thurmond Coal Co.	Thurmond.	Logan District
Mount Morris Coal Co.	Mount Morris.	Kanawha District	Valco Coal Co.	Valco.	Coal River District
Nellis Coal Co.	Nellis.	Coal River District	Wake Forest Mining Co.	Wake Forest.	Kanawha District
New Eagle Gas Coal Co.	Eagle Gas.	New River District	West Virginia Eagle Coal Co.	West Virginia Eagle.	Kanawha District
New Export Coal Co.	New Export.	Kanawha District	Whittaker-Glessner Coal Co.	Miffling No. 1.	Coal River District
No. 2 Gas Coal Co.	Black Gem.	Kanawha District	Wilson, H. T. Coal Co.	Wilson.	Logan District
Oakland Coal Co.	Crescent No. 1.	Kanawha District	Wyatt Coal Co.	Laing.	Kanawha District

Pool No. 12

Description: Meadow River and other low volatile run-of-mine coals. The analysis of this coal will compare favorably with Pools Nos. 1 and 2, but will average a much higher per cent. of slack and fines.

Seams Mined: Fire Creek; Pocahontas No. 3; Pocahontas No. 6; Sewell.

WEST VIRGINIA MINES

NAME OF COMPANY	NAME OF MINE	DISTRICT	NAME OF COMPANY	NAME OF MINE	DISTRICT
Beelick Knob Coal Co.	Beelick Knob.	New River District	Hawley Coal Co.	Hawley.	New River District
City Coal Co.	City Coal No. 2.	New River District	Lincoln Smokeless Coal Co.	Lincoln No. 1.	New River District
Clyde Pocahontas Coal Co.	Clyde.	New River District	Meadow River Coal Co.	Alamond.	New River District
Dorkent Coal Co.	Dorkent.	New River District	Piney Pocahontas Coal Co.	Pinepoca.	New River District
Greenbrier Colliery Co.	Bellwood.	New River District	Swell Valley Coal Co.	Benytown.	New River District
Griffith, W. E. Coal Co.	Griffith, W. E.	New River District	Thomas Smokeless Coal Co.	Thomas No. 1.	New River District
Harmon, W. S. Coal Co.	Springdale.	New River District			

Pool No. 32

Description: High-volatile nut and slack gas coal.

Seams Mines: No. 2 Gas, Eagle, Chilton, Little Eagle, Cedar Grove, Island Creek, Alma and Elkhorn.

WEST VIRGINIA AND KENTUCKY MINES

For list of mines in this Pool, see Pool No. 5, the mines in which are identical with those in Pool No. 32.

Pool No. 35

Description: High-volatile nut and slack splint steam coal.

Seams Mined: No. 5 Block, Coalburg, Stockton-Lewiston, Winifrede, Island Creek, Eagle, Alma and Elkhorn.

WEST VIRGINIA AND KENTUCKY MINES

For list of mines in this Pool, see Pool No. 6, the mines in which are identical with those in Pool No. 35.

Pool No. 41

Description: High-volatile lump and egg (screened) splint steam coal fulfilling the following requirements:

Volatile Matter (Range)	36 to 41 per cent
Fixed Carbon (Range)	54 to 58 per cent
Ash (Maximum)	7 per cent
Sulphur (Range)	1 to 1.75 per cent
B.t.u.	14,700

Seams Mined: No. 5 Block, Coalburg, Stockton-Lewiston, Winifrede, Island Creek, Eagle, Alma and Elkhorn.

WEST VIRGINIA AND KENTUCKY MINES

For list of mines in this Pool, see Pool No. 6, the mines in which are identical with those in Pool No. 41.

Pool No. 42

Description: Medium-grade low-volatile run-of-mine New River coal. Coal in this pool will run over 8.5 per cent in ash, and have a B.t.u. value ranging from 14,500 to 15,200.

Seams Mined: Pocahontas No. 3, Pocahontas No. 4, Sewell and Fire Creek.

WEST VIRGINIA MINES

NAME OF COMPANY	NAME OF MINE	DISTRICT	NAME OF COMPANY	NAME OF MINE	DISTRICT
Hoo Hoo Coal Co.	Hoo Hoo	New River District	Snider & Porter	Catharine	New River District
Laurel Smokeless Coal Co.	Laurel No. 1	New River District	Very Top Seam Coal Co.	Very Top Seam	New River District
Laurel Smokeless Coal Co.	Laurel No. 2	New River District			

Pool No. 43

Description: High-volatile lump and egg (screened) gas coal, fulfilling the following requirements:

Volatile Matter (Range)	28 to 35 per cent
Fixed Carbon (Range)	58 to 62 per cent
Ash (Range)	7 to 7.5 per cent
Sulphur (Range)	1 to 1.6 per cent
Coke Yield	68 per cent
Gas Yield	10,500 cu. ft.
B.t.u.	14,500

Seams Mined: No. 2 Gas, Eagle, Chilton, Little Eagle, Cedar Grove, Island Creek, Alma and Elkhorn.

WEST VIRGINIA AND KENTUCKY MINES

For list of mines in this Pool, see Pool No. 5, the mines in which are identical with those in Pool No. 43.

Pool No. 44

Description: Standard and other high grade low-volatile lump and egg (screened) New River coal.

Seams Mined: Pocahontas No. 3, Pocahontas No. 4, Sewell, Beckley and Fire Creek.

WEST VIRGINIA MINES

NAME OF COMPANY	NAME OF MINE	DISTRICT	NAME OF COMPANY	NAME OF MINE	DISTRICT
Alleen Coal Co.	Alleen	New River District	McKell Coal & Coke Co.	Kilbath	New River District
Alax Coal Co.	Alax	New River District	McKell Coal & Coke Co.	Oswald	New River District
Atlantic Coal & Iron Co.	Atlantic No. 1	New River District	McKell Coal & Coke Co.	Tamroy	New River District
Atlantic Coal & Iron Co.	Atlantic No. 2	New River District	MacAlpin Coal Co.	MacAlpin	New River District
Rabeck Coal & Coke Co.	Cliff Top No. 3	New River District	Maryland New River Coal Co.	Boone	New River District
Ballinger Coal Co.	Ballinger	New River District	Maryland New River Coal Co.	Debre	New River District
Ratloff Coal Co.	Ratloff	New River District	Maryland New River Coal Co.	Rosdale	New River District
Beechwood Coal & Coke Co.	Beechwood No. 1	New River District	Maryland New River Coal Co.	Smokeless	New River District
Beechwood Coal & Coke Co.	Beechwood No. 2	New River District	Mead, C. H. Coal Co.	C. H. Mead	New River District
Beckley Smokeless Coal Co.	Beechwood	New River District	Mead-Tolliver Coal Co.	Mead-Tolliver	New River District
Beckley Vein Coal Co.	Beckley Vein	New River District	Mill Creek Collieries Co.	Kilgus	New River District
Boury Bros. Coal & Coke Co.	Echo	New River District	Mill Creek Collieries Co.	Mill Creek	New River District
Big Bend Coal Co.	Big Bend	New River District	Miller, E. C. Coal Co.	Miller	New River District
Blue Jay Lumber Co.	Blue Jay No. 5	New River District	Mr. Hope Coal & Coke Co.	Baby	New River District
Blue Jay Lumber Co.	Blue Jay No. 6	New River District	Mr. Hope Land Co.	Mount Bell	New River District
Blume Coal & Coke Co.	Blume	New River District	New River & Pocahontas Con. Coal Co.	Layland No. 1	New River District
Branch Coal & Coke Co.	Elverton	New River District	New River & Pocahontas Con. Coal Co.	Layland No. 2	New River District
Cadle Ridge Coal Co.	Cadle Ridge No. 1	New River District	New River & Pocahontas Con. Coal Co.	Layland No. 3	New River District
Cadle Ridge Coal Co.	Cadle Ridge No. 2	New River District	New River & Pocahontas Con. Coal Co.	Mund n No. 2	New River District
Cadle Ridge Coal Co.	Cadle Ridge No. 3	New River District	New River & Pocahontas Con. Coal Co.	Munden No. 3	New River District
Calloway, C. P.	Copce	New River District	New River & Pocahontas Con. Coal Co.	Munden No. 4	New River District
Calloway Coal Co.	Calloway	New River District	New River & Pocahontas Con. Coal Co.	Munden No. 5	New River District
City Coal Co., The	City No. 3 (Kaleigh No. 5)	New River District	New River & Pocahontas Con. Coal Co.	Weirwood	New River District
Clay Coal Co.	Clay	New River District	New River Collieries Co.	Eccles No. 3	New River District
Coal Run Coal Co.	Coal Run	New River District	New River Collieries Co.	Eccles No. 5	New River District
Cook & Carter Coal Co.	Terry No. 1	New River District	New River Collieries Co.	Eccles No. 6	New River District
Cook & Carter Coal Co.	Terry No. 2	New River District	New River Collieries Co.	Sun No. 1	New River District
Crab Orchard Fuel Co.	Crab Orchard	New River District	New River Export Coal Co.	Lookout	New River District
DeWitt Fuel Co.	DeWitt	New River District	New River Export Coal Co.	Machigan	New River District
East Gulf Coal Co.	East Gulf No. 3	New River District	Newlyn Coal Co.	Newlyn	New River District
East Gulf Coal Co.	East Gulf No. 4	New River District	Nichol Colliery Co.	Nichol	New River District
Elkhorn Piney Coal Mining Co.	Piney Nos. 1, 3 and 6	New River District	Nuttallburg Smokeless Fuel Co.	Nuttallburg	New River District
Elmo Mining Co.	Elmo	New River District	Pemberton Fuel Co.	Pemberton	New River District
Ephraim Creek Coal & Coke Co.	Buffalo	New River District	Phonix Coal Co.	Phonix	New River District
Export Coal Co.	Export	New River District	Plekshin Coal Co.	Plekshin	New River District
Fay-Ral Coal Co.	Fay-Ral	New River District	Price Hill Colliery Co.	Price Hill	New River District
Fire Creek Coal & Coke Co.	Fire Creek	New River District	Prince Wick Coal Co.	Prince Wick	New River District
Fire Creek Smokeless Fuel Co.	Lego	New River District	Quinnont Coal Co.	Big O	New River District
Gaymont Coal & Coke Co.	Gaymont	New River District	Ragland Coal Co.	Ragland	New River District
Greenwood Coal Co.	Greenwood	New River District	Raleigh Coal & Coke Co.	Raleigh No. 1	New River District
Gulf Smokeless Coal Co.	Tams No. 1	New River District	Raleigh Coal & Coke Co.	Raleigh No. 2	New River District
Hemlock Hollow Coal & Coke Co.	Hemlock Hollow	New River District	Raleigh Coal & Coke Co.	Raleigh No. 6	New River District
Hindson Coal Co.	Dun Glen	New River District	R-Hamer Coal & Coke Co.	Fayville	New River District
Lanark Coal Co.	Lanark No. 1	New River District	Rhodell Coal Co.	Rhodell No. 1	New River District
Laurel Creek Coal Co.	Laurel	New River District	Rhodell Coal Co.	Rhodell No. 2	New River District
Lee Coal Co.	Lee No. 2	New River District	Royal Coal Co.	Royal No. 1	New River District
Lilly Mining Co.	Whorley No. 2	New River District	Scotia Coal & Coke Co.	Brooklyn	New River District
Lilly & Hornbrook Coal Co.	Lilly-Hornbrook No. 3	New River District	Scotia Coal & Coke Co.	Red A-B	New River District
Lillybrook Coal Co.	Lillybrook Nos. 1 and 2	New River District	Scotia Coal & Coke Co.	Rush Run	New River District
Low Moor Iron Co. of Virginia	Kaymoor No. 1	New River District	Sewell Smokeless Coal Co.	Caperton	New River District
Low Moor Iron Co. of Virginia	Kaymoor No. 2	New River District	South Side	South Side	New River District
Low-Volatile Coal Co.	Rick Lick No. 2	New River District	Star Coal & Coke Co.	Star	New River District
Lynwin Coal Co.	Duill	New River District	Stover Coal Co.	Brown	New River District
McKell Coal & Coke Co.	Dorrell	New River District	Sugar Coal Co.	Sugar	New River District

(Continued on Next Page)

NOTE—For further information on mines here listed see the Directory Section, which follows each state.

POOL NO. 44—WEST VIRGINIA MINES—Continued

NAME OF COMPANY	NAME OF MINE	DISTRICT	NAME OF COMPANY	NAME OF MINE	DISTRICT
Sullivan Coal & Coke Co.	Sullivan	New River District	White Oak Coal Co.	Cranberry No. 3	New River District
Sunset Mining Co.	Sunset	New River District	White Oak Coal Co.	Dunloop	New River District
Tolbert Smokeless Coal Co.	Tolbert No. 1	New River District	White Oak Coal Co.	Harvey	New River District
Tolbert Smokeless Coal Co.	Tolbert No. 2	New River District	White Oak Coal Co.	Lochelly	New River District
Turkey Knob Coal Co.	Turkey Knob	New River District	White Oak Coal Co.	Mabscott	New River District
Veasey, V. S.	Hi Top	New River District	White Oak Coal Co.	Macdonald	New River District
Very Top Seam Coal Co.	Very Top Seam	New River District	White Oak Coal Co.	Oakwood	New River District
Viacova Smokeless Fuel Co.	Viacova	New River District	White Oak Coal Co.	Prudett	New River District
West Virginia Coal Co.	Stone Cliff	New River District	White Oak Coal Co.	Scarbro	New River District
West Virginia Mining Co.	Griffith	New River District	White Oak Coal Co.	Summerlee	New River District
Weewin Coal Co.	Weewin	New River District	White Oak Coal Co.	Whipple	New River District
White, E. E. Coal Co.	Glen White	New River District	White Stick Coal Co.	White Stick	New River District
White, E. E. Coal Co.	Stotesbury No. 3	New River District	Winding Gulf Colliery Co.	Winding Gulf No. 2	New River District
White Oak Coal Co.	Beckley	New River District	Wood-Peck Coal Co.	Wood-Peck	New River District
White Oak Coal Co.	Oilins	New River District	Wood-Sullivan Coal Co.	Vanwood	New River District
White Oak Coal Co.	Cranberry No. 1	New River District	Wright Coal & Coke Co.	Wright No. 1	New River District
White Oak Coal Co.	Cranberry No. 2	New River District	Wright Coal & Coke Co.	Wright No. 2	New River District

Pool No. 56

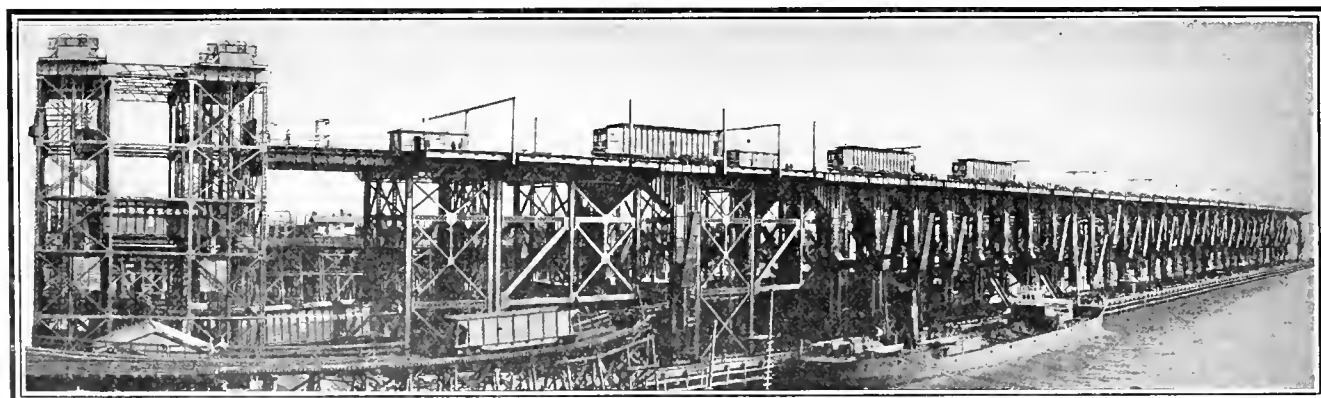
Description: Medium-grade high-volatile run-of-mine steam coal, running over 8 per cent ash in channel sample, excluding all impurities. B.t.u. ranges from 13,000 to 14,000.

Seams Mined: No. 5 Block, Winifrede, Coalburg and Elkhorn.

WEST VIRGINIA MINES

NAME OF COMPANY	NAME OF MINE	DISTRICT	NAME OF COMPANY	NAME OF MINE	DISTRICT
Altman Coal Co.	Altman	Coal River District	Left Fork Coal Co.	Left Fork (Leas Creek)	Kanawha District
Black Betsey Consol. Coal Co.	Black Betsey	Kanawha District	Lewis Coal & Coke Co.	Lewis	Kanawha District
Cave, Peter Coal Co.	Cabell	Coal River District	Paint Creek Coal Mining Co.	Standard	Kanawha District
Cronin, A. D.	Franklin	Coal River District	Plymouth Coal Mining Co.	Plymouth	Kanawha District
Davis Creek Coal & Land Co.	Davis Creek	Kanawha District	Rich Block Coal Co.	Rich Block	Coal River District
Deep Hollow Coal Co.	Deep Hollow	Kanawha District	Royal Block Coal Co.	Royal Block	Coal River District
Holstead Coal Co.	Arter Ogla	Kanawha District	Royal White Ash Coal Co.	A'kol	Coal River District
Holt Fuel Co.	Holt	Kanawha District	Scott Coal Co.	Scott	Coal River District
Huddleston, E. F. Coal Co.	Huddleston	Kanawha District	South Ruffner Coal Co.	South Ruffner	Kanawha District
Jones Guyan Coal Co.	Russell	Logan District	U. S. Block Coal Co.	U. S. Block	Coal River District
Julian Coal Co.	Julian	Coal River District	West Virginia White Ash Coal Co.	Peter Cave	Coal River District

NOTE—For further information on mines here listed see the Directory Section, which follows each state.



Dumping Pier of Newport News Coal Exchange, Incorporated, Newport News, Va.

LAMBERTS POINT COAL EXCHANGE

OFFICERS

D. E. Spangler, Chairman Executive Committee,
Roanoke, Va.
W. H. Johnson, Manager, Norfolk, Va.
W. P. Bugg, Asst. Manager, Norfolk, Va.
John Stewart, In Charge of Inspection,
Bluefield, W. Va.

EXECUTIVE COMMITTEE

D. E. Spangler, Norfolk & Western Ry.
D. W. Allen, W. C. Atwater & Co.
A. G. Bailey, Castner, Curran & Bullitt.
Kuper Hood, Houston Coal Co.
G. W. St. Clair, Virginia Smokeless Coal Co.
W. H. Johnson, Manager of Exchange.

Lamberts Point, near Norfolk, Virginia, is the seaboard outlet for coal originating on the Norfolk and Western Railway and its connections, including the Carolina, Clinchfield and Ohio, the Interstate, and the Norton and Northern railroads. The Norfolk and Western handles all coal originating in the Pocahontas fields of Virginia and West Virginia and the Tug River, Thacker and Kenova fields of West Virginia. In connection with the other roads above mentioned it provides shipment for coal from the Clinch Valley and Southwestern Virginia coal fields of Virginia and the Elkhorn field of Kentucky.

The Norfolk and Western Railway has a double track, modernly equipped, railroad from the coal fields which it serves to its tidewater terminal. Partly because of its trackage facilities and because of the use of railroad cars having double the capacity of those generally used, it is able to provide quick movement for coal tonnage in great volume. The large trackage at its Norfolk terminals enables it to give extraordinary service in the handling of coal for vessel trans-shipment.

Dumping Piers

The Norfolk and Western Railway has at Lamberts Point three coaling piers, having berthing space for fourteen vessels to receive coal at one time.

Pier No. 4, the largest coal pier, is 90 feet high and 1,200 feet long, and is used primarily for delivering cargo coal, although bunker coal is also delivered when necessary over this pier.

Piers Nos. 2 and 3, each about 800 feet long, are used to deliver principally bunker coal and as a relief to Pier No. 4.

Pier No. 4 is served by scales, dumpers and elevators, all in duplicate and interchangeable, so as to insure uninterrupted delivery of coal. This pier has a rated capacity of 60 cars an hour, or a

total, if handling exclusively the large 100-ton cars, of 6,000 tons of coal in one hour. Actual performance has shown that it can dump and deliver as many as 66 cars an hour, the rate of delivery depending on vessel construction and the proportion of cargo coal and bunker coal taken. Under favorable working conditions the capacity of the pier is 50 cars per hour, and this rate has been maintained for a continuous stretch of eight or ten hours.

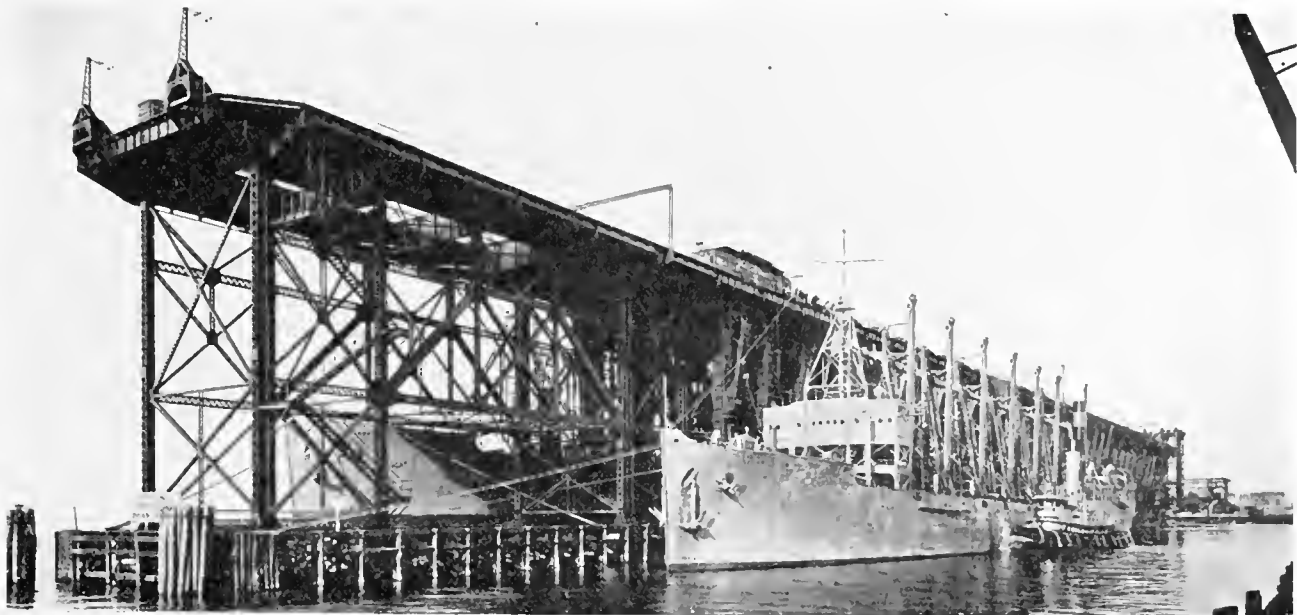
Pier No. 4 alone, in one twenty-four hour period delivered 43,287 tons of coal to vessels. In one day of twenty-four hours a total of 47,985 tons of coal was dumped at this terminal and in one month 863,403 tons were dumped.

Lamberts Point Coal Exchange

The management of the Lamberts Point Coal Exchange is vested in an official appointed by the Norfolk and Western Railway, who agree to pay his salary and expenses of his office. Membership in the Exchange is open to all shippers who subscribe to and observe the rules of the organization. The grading of coals and classification in designated pools is under the direction of the Executive Committee. This body is also charged with the duty of protecting the quality of coal shipped into the pool, through the Manager and a system of inspection, and analysis, if necessary in their opinion, and may at any time suspend shipments from any mine when in their judgment the quality or preparation of such coal is below the present standard. The cost of inspection service is borne by the Railway.

Authority for List of Mines

The list of mines here given has been taken from the Lamberts Point Coal Exchange Classification A, as of date November 15th, 1920. Inasmuch as changes in classification may be made at any time, we do not guarantee the list here given, nor are we responsible for inaccuracies.



Pier No. 4 Lamberts Point Has a Record of 47,985 Tons in One Day.

Pool No. 1

Description: American standard low volatile run-of-mine coal. Includes all mines on the Navy Acceptable List. For many years the United States Navy bought their coal on a guaranteed analysis basis, the requirements of which were as follows:

DRY BASIS	Volatile Matter	(maximum)	22 per cent
	Fixed Carbon	(minimum)	73 per cent
	Ash	(maximum)	7 per cent
	Sulphur	(maximum)	1 per cent
	B. t. u.	(minimum)	14,700

To be placed on this list, and in position to supply the Navy with coal, a mine had to pass an inspection by the Navy Department. This has established what is now known as the Navy Acceptable List.

Seams Mined: Pocahontas No. 3; Pocahontas No. 4; Sewell-Davy.

WEST VIRGINIA MINES

NAME OF COMPANY	NAME OF MINE	FIELD	NAME OF COMPANY	NAME OF MINE	FIELD
Algoma Coal & Coke Co.	Algoma	Pocahontas Field	New River & Pocahontas Con. Coal Co.	No. 4	Pocahontas Field
Algonquin Coal Co.	Algonquin	Pocahontas Field	New River & Pocahontas Con. Coal Co.	No. 6	Pocahontas Field
American Coal Co. of Allegany Co.	Crane Creek	Pocahontas Field	New River & Pocahontas Con. Coal Co.	No. 7	Pocahontas Field
Ashland Coal & Coke Co.	Ashland	Pocahontas Field	New River & Pocahontas Con. Coal Co.	No. 8	Pocahontas Field
Ashland Coal & Coke Co.	Graeber	Pocahontas Field	Page Coal & Coke Co.	Page No. 1	Pocahontas Field
Booth Bowen Coal & Coke Co.	Booth Bowen	Pocahontas Field	Page Coal & Coke Co.	Page No. 2	Pocahontas Field
Bottom Creek Coal & Coke Co.	Bottom Creek No. 1	Pocahontas Field	Page Coal & Coke Co.	Page No. 3	Pocahontas Field
Buckeye Coal & Coke Co.	Buckeye No. 1	Pocahontas Field	Patterson, S. J. Pocahontas Coal Co.	Arista No. 1	Pocahontas Field
Buckeye Coal & Coke Co.	Buckeye No. 2	Pocahontas Field	Patterson, S. J. Pocahontas Coal Co.	Arista No. 2	Pocahontas Field
By-Products Pocahontas Co.	Cirrus	Pocahontas Field	Pawama Coal & Coke Co.	Pawama	Pocahontas Field
By-Products Pocahontas Co.	Virginia	Pocahontas Field	Peerless Coal & Coke Co.	Peerless No. 1	Pocahontas Field
Carter Coal Co.	No. 3	Tug River Field	Peerless Coal & Coke Co.	Peerless No. 2	Pocahontas Field
Carter Coal Co.	Oiga	Tug River Field	Pocahontas Fuel Co., Inc.	Cherokee	Pocahontas Field
Carter Coal Co.	Thelma No. 6	Tug River Field	Pocahontas Fuel Co., Inc.	Delta	Pocahontas Field
Central Pocahontas Coal Co.	No. 1	Pocahontas Field	Pocahontas Fuel Co., Inc.	Lick Branch	Pocahontas Field
Central Pocahontas Coal Co.	No. 2	Pocahontas Field	Pocahontas Fuel Co., Inc.	Norfolk	Pocahontas Field
Crozier Coal & Coke Co.	No. 1	Pocahontas Field	Pocahontas Fuel Co., Inc.	Pocahontas No. 6	Pocahontas Field
Crozier Coal & Coke Co.	No. 2	Pocahontas Field	Pocahontas Fuel Co., Inc.	Pocahontas No. 7	Pocahontas Field
Elkhorn Coal & Coke Co.	Elkhorn	Pocahontas Field	Pocahontas Fuel Co., Inc.	Pocahontas No. 8	Pocahontas Field
Elk Ridge Coal & Coke Co.	Elk Ridge	Pocahontas Field	Pocahontas Fuel Co., Inc.	Rolfe	Pocahontas Field
Empire Coal & Coke Co.	Empire	Pocahontas Field	Pocahontas Fuel Co., Inc.	Sagamore	Pocahontas Field
Eureka Coal & Coke Co.	Eureka	Pocahontas Field	Pocahontas Fuel Co., Inc.	Shamokin	Pocahontas Field
Fall River Pocahontas Collieries Co.	Fall River	Tug River Field	Powhatan Coal & Coke Co.	Powhatan	Pocahontas Field
Gilliam Coal & Coke Co.	Gilliam	Pocahontas Field	Premier Pocahontas Colliery Co.	Premier Pocahontas No. 1	Tug River Field
Greenbrier Coal & Coke Co.	Greenbrier	Pocahontas Field	Premier Pocahontas Colliery Co.	Premier Pocahontas No. 2	Tug River Field
Houston Coal & Coke Co.	Houston	Pocahontas Field	Premier Pocahontas Colliery Co.	Premier Pocahontas No. 3	Tug River Field
Houston Collieries Co.	Carswell	Pocahontas Field	Pulaski Iron Co.	Pulaski	Pocahontas Field
Houston Collieries Co.	Maitland	Pocahontas Field	Ranoke Coal & Coke Co.	Ranoke	Pocahontas Field
J. B. B. Coal Co.	J. B. Coal No. 1	Tug River Field	Superior Pocahontas Coal Co.	Clutus	Tug River Field
J. B. B. Coal Co.	J. B. Coal No. 2	Tug River Field	Superior Pocahontas Coal Co.	Hazy Crockett	Tug River Field
J. B. B. Coal Co.	J. B. Coal No. 3	Tug River Field	Thomas Coal Co.	Thomas No. 1	Pocahontas Field
J. B. B. Coal Co.	J. B. Coal No. 4	Tug River Field	Tidewater Coal & Coke Co.	Tidewater No. 1	Pocahontas Field
Keystone Coal & Coke Co.	Keystone	Pocahontas Field	Turkey Gap Coal & Coke Co.	Modoc	Pocahontas Field
Louisville Coal & Coke Co.	Louisville	Pocahontas Field	Turkey Gap Coal & Coke Co.	Turkey Gap No. 2	Pocahontas Field
Lynchburg Coal & Coke Co.	Lynchburg	Pocahontas Field	Turkey Gap Coal & Coke Co.	Wenonah No. 1	Pocahontas Field
McDowell Coal & Coke Co.	McDowell	Pocahontas Field	United Pocahontas Coal Co.	Indian Ridge	Pocahontas Field
Marine Smokeless Coal Co.	Marine No. 2	Tug River Field	United Pocahontas Coal Co.	Zenith	Pocahontas Field
Mill Creek Coal & Coke Co.	Coadale	Pocahontas Field	Upland Coal & Coke Co.	Upland No. 1	Pocahontas Field
Mill Creek Coal & Coke Co.	Mill Creek	Pocahontas Field	Wyanoke Coal & Coke Co.	Wyanoke	Pocahontas Field
Mill Creek Coal & Coke Co.	Ruth	Pocahontas Field			
New River & Pocahontas Con. Coal Co.	Berwind No. 3	Pocahontas Field			
New River & Pocahontas Con. Coal Co.	Haraco	Pocahontas Field			

VIRGINIA MINES

NAME OF COMPANY	NAME OF MINE	FIELD	NAME OF COMPANY	NAME OF MINE	FIELD
Big Vein Pocahontas Co.	No. 2	Pocahontas Field	Pocahontas Fuel Co., Inc.	Boisvertain	Pocahontas Field
Pocahontas Fuel Co., Inc.	Angle	Pocahontas Field	Pocahontas Fuel Co., Inc.	Pocahontas	Pocahontas Field

Pool No. 2

Description: Other high-grade, low-volatile, run-of-mine coal from the Pocahontas and Tug River fields.

Seams Mined: Pocahontas No. 3; Pocahontas No. 4; Sewell-Davy; Welch and War Creek.

WEST VIRGINIA MINES

NAME OF COMPANY	NAME OF MINE	FIELD	NAME OF COMPANY	NAME OF MINE	FIELD
American Coal Co. of Allegany Co.	Piedmont	Pocahontas Field	Hampton Roads Collieries Co., Inc.	Hampton	Tug River Field
American Coal Co. of Allegany Co.	Pinnacle	Pocahontas Field	Hubbard Coal Co.	Hubbard No. 85	Tug River Field
Atlantic Smokeless Coal Co.	Atlantic	Tug River Field	Johns Branch Coal Co.	No. 1	Tug River Field
Beech Fork Coal Co.	Beech Fork	Pocahontas Field	Johns Branch Coal Co.	No. 2	Tug River Field
Bradshaw Coal Co., Inc.	Bradshaw	Tug River Field	Lake Superior Coal Co.	No. 1	Pocahontas Field
Buchanan Coal Co.	Buchanan	Tug River Field	Litz-Smith Pocahontas Coal Co.	Litz-Smith	Pocahontas Field
Carter Coal Co.	Nora No. 8	Tug River Field	Louisville Coal & Coke Co.	Goodwill No. 1	Pocahontas Field
Central Pocahontas Coal Co.	No. 3	Pocahontas Field	Louisville Coal & Coke Co.	Louisville No. 2	Pocahontas Field
Central Pocahontas Coal Co.	No. 4	Tug River Field	Louisville Coal & Coke Co.	Northwest	Pocahontas Field
Colonial Pocahontas Coal Co.	Columbus	Pocahontas Field	Marine Smokeless Coal Co.	Marine No. 1	Tug River Field
Crystal Coal & Coke Co.	Crystal No. 1	Pocahontas Field	New Pocahontas Coal Co.	New Pocahontas No. 1	Tug River Field
Crystal Coal & Coke Co.	Crystal No. 2	Pocahontas Field	New River & Pocahontas Con. Coal Co.	Berwind No. 1	Pocahontas Field
Dry Fork Colliery Co.	Dry Fork	Tug River Field	New River & Pocahontas Con. Coal Co.	Berwind No. 2	Pocahontas Field
Eclipse Pocahontas Coal Co.	Eclipse Pocahontas No. 1	Tug River Field	New River & Pocahontas Con. Coal Co.	No. 5	Pocahontas Field
Ennis Coal Co.	Hiawatha	Pocahontas Field	Perkins Coal Co.	Perkins	Tug River Field
Exon-Jor Pocahontas Coal Co.	Exon-Jor No. 2	Tug River Field	Pocahontas Domestic Coal Co.	No. 1	Tug River Field
Flannagan Coal Co.	Flannagan No. 2	Tug River Field	Purity Pocahontas Coal Co.	Purity-Pocahontas	Tug River Field
Flat Top Coal Mining Co.	Thomas	Tug River Field	Sayers Pocahontas Coal Co.	Sayers	Tug River Field
Fortune Hunter Coal Co.	Fortune Hunter	Pocahontas Field	Shawnee Coal & Coke Co.	Shawnee	Pocahontas Field
Garland Pocahontas Coal Co.	Garland-Pocahontas	Tug River Field	Smokeless Coal & Coke Co.	Smokeless	Pocahontas Field
Gen. Pocahontas Coal Co.	Gen. Pocahontas	Tug River Field	Solow Collieries Co.	Big Sandy	Tug River Field

(Continued on Next Page)

For further information on companies here listed, see the Directory given with each state.

WEST VIRGINIA MINES—Continued

NAME OF COMPANY	NAME OF MINE	FIELD	NAME OF COMPANY	NAME OF MINE	FIELD
Solvay Collieries Co.	Exeter	Tug River Field	Turkey Gap Coal & Coke Co.	Josephine	Pocahontas Field
Solvay Collieries Co.	Harvard	Tug River Field	United States Coal & Coke Co.	No. 1 to 12 inclusive	Pocahontas Field
Solvay Collieries Co.	Marytown	Tug River Field	Van Wert Coal Co.	Louie Jack	Tug River Field
Solvay Collieries Co.	Oakey	Tug River Field	War Creek Coal Co.	War Creek	Tug River Field
Solvay Collieries Co.	Spring	Pocahontas Field	Warrior Pocahontas Coal Co.	Warrior	Tug River Field
Solvay Collieries Co.	Warwick	Tug River Field	West Virginia Pocahontas Coal Co.	Leekie No. 1	Pocahontas Field
Thomas Coal Co.	Thomas No. 2	Pocahontas Field	West Virginia Pocahontas Coal Co.	Leekie No. 2	Pocahontas Field
Tidewater Coal & Coke Co.	Tidewater No. 2	Pocahontas Field	Williams Pocahontas Coal Co.	Howard	Tug River Field
Tony Pocahontas Coal Co.	Drift	Tug River Field	Yukon-Pocahontas Coal Co.	No. 1	Tug River Field
Turkey Gap Coal & Coke Co.	Joanna	Pocahontas Field	Yukon-Pocahontas Coal Co.	No. 2	Tug River Field

VIRGINIA MINES

NAME OF COMPANY	NAME OF MINE	FIELD
Jewell Ridge Coal Corp.	Jewell Ridge	Clinch Valley Field

Pool No. 3

Description: Low-volatile slack coal from the Pocahontas and Tug River fields.

Seams Mined: Pocahontas No. 3; Pocahontas No. 4; Sewell-Davy; Welch and War Creek.

WEST VIRGINIA AND VIRGINIA FIELDS

For list of mines in this Pool, see Pool No. 2, the mines in which are identical with those in Pool No. 3.

Pool No. 4

Description: Medium-grade, low-volatile, run-of-mine coal from the Pocahontas and Tug River fields.

Seams Mined: Pocahontas No. 4; War Creek.

WEST VIRGINIA MINES

NAME OF COMPANY	NAME OF MINE	FIELD	NAME OF COMPANY	NAME OF MINE	FIELD
Carter Coal Co.	Caretta No. 5	Tug River Field	Lake Superior Coal Co.	No. 2	Pocahontas Field
Excelsior Pocahontas Coal Co.	Excelsior No. 1	Tug River Field	Marine & Commerce Pocahontas Corp.	No. 1	Tug River Field
Flannagan Coal Co.	Flannagan No. 1	Tug River Field	Marine & Commerce Pocahontas Corp.	No. 2	Tug River Field

Pool No. 5

Description: High-volatile run-of-mine gas coal.

Seams Mined: Upper Banner; Lower Banner; Imboden; Pardee; No. 5; Alma; Pond Creek-Freeburn; Elkhorn.

VIRGINIA MINES

NAME OF COMPANY	NAME OF MINE	FIELD	NAME OF COMPANY	NAME OF MINE	FIELD
Banner Raven Coal Corp.	No. 1	Clinch Valley Field	Mohawk Coal Mining Co.	Mohawk	Southwestern Virginia Field
Banner Raven Coal Corp.	No. 2	Clinch Valley Field	Norton Coal Co.	Norton	Southwestern Virginia Field
Beaver Coal Corp.	Beaver	Southwestern Virginia Field	Old Virginia Coal Co.	Monarch	Southwestern Virginia Field
Black Mountain Coal Co.	No. 1	Southwestern Virginia Field	Pot Branch Coal Co.	Pot Branch	Southwestern Virginia Field
Black Mountain Coal Co.	No. 2	Southwestern Virginia Field	Shop Ridge Coal Co.	Drift	Southwestern Virginia Field
Blackwood Coal & Coke Co.	Pardee	Southwestern Virginia Field	Stonega Coke & Coal Co.	Arno	Southwestern Virginia Field
Blackwood Coal & Coke Co.	Roaring Fork	Southwestern Virginia Field	Osaka	Osaka	Southwestern Virginia Field
Clinchfield Coal Corp.	Cranes Nest	Southwestern Virginia Field	Stonega Coke & Coal Co.	Stonega	Southwestern Virginia Field
Clinchfield Coal Corp.	No. 2	Southwestern Virginia Field	Stone Gap Colliery Co.	Glamorgan No. 8	Southwestern Virginia Field
Clinchfield Coal Corp.	No. 3	Southwestern Virginia Field	United Collieries Co., Inc.	Bondurant No. 1	Southwestern Virginia Field
Clinchfield Coal Corp.	No. 6	Southwestern Virginia Field	United Collieries Co., Inc.	Bondurant No. 2	Southwestern Virginia Field
Clinchfield Coal Corp.	No. 7	Southwestern Virginia Field	United Collieries Co., Inc.	Dominion	Southwestern Virginia Field
Consumers Coal Mining Co.	Pot Branch	Southwestern Virginia Field	United Fuel Corp.	United	Southwestern Virginia Field
Culberson Coal Co.	Upper Banner No. 1	Southwestern Virginia Field	Virginia Iron, Coal & Coke Co.	Cueburn	Southwestern Virginia Field
Esser, J. A. Coke Co.	Esserville	Southwestern Virginia Field	Virginia Iron, Coal & Coke Co.	Inman	Southwestern Virginia Field
Fleming, Robt. & Co.	Upper Banner No. 1	Southwestern Virginia Field	Virginia Iron, Coal & Coke Co.	Lee	Southwestern Virginia Field
Garden Coal Co.	Banner No. 1	Clinch Valley Field	Virginia Iron, Coal & Coke Co.	Landon	Southwestern Virginia Field
Hawthorne Coal Corp.	Hawthorne No. 1	Southwestern Virginia Field	Virginia Iron, Coal & Coke Co.	Marion	Southwestern Virginia Field
Hawthorne Coal Corp.	Hawthorne No. 2	Southwestern Virginia Field	Virginia Iron, Coal & Coke Co.	Sutton and Thelma	Southwestern Virginia Field
Hawthorne Coal Corp.	Hawthorne No. 3	Southwestern Virginia Field	Virginia Iron, Coal & Coke Co.	Swansea and Pine Run	Southwestern Virginia Field
Hawthorne Coal Corp.	Hawthorne No. 4	Southwestern Virginia Field	Virginia Lee Co., Inc.	Virginia Lee	Southwestern Virginia Field
Interstate Coal Co.	Lower Banner	Southwestern Virginia Field	Wise Coal & Coke Co.	No. 2	Southwestern Virginia Field

WEST VIRGINIA MINES

NAME OF COMPANY	NAME OF MINE	FIELD	NAME OF COMPANY	NAME OF MINE	FIELD
Burnwell Coal & Coke Co.	Burnwell	Thacker Field	Orinoco Mining Co.	Orinoco	Thacker Field
Crystal Block Coal & Coke Co.	No. 2	Thacker Field	Panther Coal Co.	Panther	Thacker Field
Crystal Block Coal & Coke Co.	No. 3	Thacker Field	Smith Pond Creek Coal Co.	Smith Pond Creek	Thacker Field
Glen Alum Coal Co.	No. 1	Thacker Field	Stone Mountain Coal Corp.	Marvin	Thacker Field
Glen Alum Coal Co.	No. 2	Thacker Field	Triangle Coal Co.	Triangle No. 2	Thacker Field
Glen Alum Coal Co.	No. 3	Thacker Field	Triangle Coal Co.	Triangle	Thacker Field
Lathrop Coal Co.	Lathrop	Thacker Field	War Eagle Coal Co.	Myphisto	Thacker Field
Mohawk Coal & Coke Co.	Mohawk	Thacker Field	White Star Mining Co.	No. 1	Thacker Field
New Howard Coal Co.	No. 1	Thacker Field	White Star Mining Co.	No. 2	Thacker Field
New Howard Coal Co.	No. 2	Thacker Field	Wilhemina Coal Co.	Wilhemina	Thacker Field

(Continued on Next Page)

For further information on companies here listed, see the Directory given with each state.

KENTUCKY MINES

NAME OF COMPANY	NAME OF MINE	FIELD	NAME OF COMPANY	NAME OF MINE	FIELD
Bailey Fuel Co.	Bailey	Thacker Field	Pond Creek Coal Co.	No. 4	Thacker Field
Banner Pond Creek Coal Co.	Banner Pond Creek	Thacker Field	Pond Creek Coal Co.	No. 5	Thacker Field
Black Gem Coal Co.	Black Gem	Thacker Field	Pond Creek Coal Co.	No. 6	Thacker Field
Carry-On Coal Co.	Carry-On	Thacker Field	Pond Creek Coal Co.	No. 7	Thacker Field
Elkhorn Gas Coal Co.	Elkhorn	Thacker Field	Pond Creek Coal Co.	No. 8	Thacker Field
Leckie Collieries Co.	No. 1	Thacker Field	Portsmouth Solvay Coke Co.	Freeburn No. 1	Thacker Field
Majestic Collieries Co.	Majestic	Thacker Field	Portsmouth Solvay Coke Co.	Freeburn No. 3	Thacker Field
Marietta Coal Co.	Marietta	Thacker Field	Sharon Coal & Coke Co.	Sharon	Thacker Field
Mud Lick Coal Co.	Mud Lick	Thacker Field	Solvay Collieries Co.	Tolland	Thacker Field
P. M. C. Coal Co.	P. M. C.	Thacker Field	Sudduth Coal Co.	Sudduth	Thacker Field
Pond Creek Coal Co.	No. 1	Thacker Field	Sullivan Pond Creek Coal Co.	Pond Creek No. 1	Thacker Field
Pond Creek Coal Co.	No. 2	Thacker Field	Tierney Mining Co.	Tierney	Thacker Field
Pond Creek Coal Co.	No. 3	Thacker Field	Victor Coal Co.	Victor	Thacker Field

Pool No. 6

Description: High-volatile run-of-mine steam coal.

Seams Mined: Number 1; Number 2; Number 5; Upper Banner; Lower Banner; Imboden; Raven-Red Ash; Alma; Thacker; Winifrede; No. 5 Block; No. 2 Gas.

VIRGINIA MINES

NAME OF COMPANY	NAME OF MINE	FIELD	NAME OF COMPANY	NAME OF MINE	FIELD
Appalachian Coal Corp.	No. 502 Lower Banner	Clinch Valley Field	Kennedy Coal Corp.	No. 2	Clinch Valley Field
Benedict Coal Corp.	Benedict	Southwestern Virginia Field	Kennedy Coal Corp.	No. 4	Clinch Valley Field
Blue Ridge Coal Co.	Blue Ridge	Southwestern Virginia Field	Kennedy Coal Corp.	No. 5	Clinch Valley Field
Carter Coal Co.	Seaboard No. 1	Clinch Valley Field	Matz, Sam'l L. Coal Corp.	Dixie No. 1	Clinch Valley Field
Carter Coal Co.	Seaboard No. 2	Clinch Valley Field	Matz, Sam'l L. Coal Corp.	Domestic No. 2	Clinch Valley Field
Carter Coal Co.	Seaboard No. 3	Southwestern Virginia Field	Norton Coal Co.	Norton	Southwestern Virginia Field
Clinchfield Coal Corp.	No. 52	Southwestern Virginia Field	O'Donnell, C. V.	O'Donnell No. 7	Southwestern Virginia Field
Clinchfield Coal Corp.	No. 55	Southwestern Virginia Field	Odle Coal Corp.	Greco	Southwestern Virginia Field
Clinchfield Coal Corp.	No. 201	Southwestern Virginia Field	Penn Lee Coal Co.	Penn Lee	Southwestern Virginia Field
Crest Coal Co.	No. 1	Southwestern Virginia Field	Powell River Coal Co.	Powell No. 1	Southwestern Virginia Field
Crest Coal Co.	No. 2	Southwestern Virginia Field	Raven Red Ash Coal Co.	Red Ash	Clinch Valley Field
Crest Coal Co.	No. 3	Southwestern Virginia Field	Russell Fork Coal Mining Co., Inc.	Burton Ford	Southwestern Virginia Field
Daw Coal Co.	Red Ash	Clinch Valley Field	Russell Fork Coal Mining Co., Inc.	Upper Banner	Southwestern Virginia Field
Excelsior R. J. Ash Coal Co.	Banner No. 2	Clinch Valley Field	Splash Dam Coal Corp.	Splash Dam No. 1	Southwestern Virginia Field
Garden City Coal Co.	Hawthorne No. 1	Southwestern Virginia Field	Splash Dam Coal Corp.	Splash Dam No. 2	Southwestern Virginia Field
Hawthorne Coal Co.	Hawthorne No. 2	Southwestern Virginia Field	Steinman Development Co.	Bent Ridge	Southwestern Virginia Field
Hawthorne Coal Co.	Hawthorne No. 3	Southwestern Virginia Field	Steinman Development Co.	Big Ridge	Southwestern Virginia Field
Hawthorne Coal Co.	Hawthorne No. 4	Southwestern Virginia Field	Tomb Coal Co.	Crockett	Clinch Valley Field
Indian Fuel Co.	Indian	Southwestern Virginia Field	Virginia Banner Coal Corp.	Virginia Banner	Southwestern Virginia Field
Intermont Coal & Iron Corp.	Josephine	Southwestern Virginia Field	Virginia Iron, Coal & Coke Co.	Imperial	Southwestern Virginia Field
Interstate Coal Co.	Interstate	Southwestern Virginia Field	Wis Coal & Coke Co.	No. 3	Southwestern Virginia Field
J. S. T. Coal Co.	J. S. T.	Southwestern Virginia Field	Wis Coal & Coke Co.	No. 5	Southwestern Virginia Field
Kennedy Coal Corp.	No. 1	Clinch Valley Field			

WEST VIRGINIA MINES

NAME OF COMPANY	NAME OF MINE	FIELD	NAME OF COMPANY	NAME OF MINE	FIELD
Bailey Thacker Coal Co.	Superior No. 2	Thacker Field	Leckie Collieries Co.	No. 2	Thacker Field
Bailey Thacker Coal Co.	Superior No. 3	Thacker Field	R. d. Jacket Junior Coal Co.	Junior	Thacker Field
Borderland Coal Co.	No. 1	Kenova Field	Red Jacket Con. C. & C. Co., Inc.	Grapevine	Thacker Field
Borderland Coal Co.	No. 2	Kenova Field	Red Jacket Con. C. & C. Co., Inc.	Mitchell	Thacker Field
Buffalo-Thacker Coal Co.	Buffalo	Kenova Field	Red Jacket Con. C. & C. Co., Inc.	No. 32	Thacker Field
Burning Creek Coal Co.	Burning Creek	Kenova Field	Red Jacket Con. C. & C. Co., Inc.	Rutherford	Thacker Field
Chattahoochee Coal Co.	Mary Helen	Thacker Field	Standard-Thacker Coal Co.	No. 1	Kenova Field
Crystal Block Coal & Coke Co.	No. 1	Thacker Field	Screamers Coal Co.	Cinderella	Thacker Field
Dolphus-West Virginia Coal Co.	Cedar	Thacker Field	Thacker Coal & Coke Co.	No. 2	Thacker Field
East Lynn Coal Co.	Dixie Lynn	Kenova Field	Thacker Coal & Coke Co.	No. 11	Thacker Field
Fall Branch Coal Co.	Fall Branch	Kenova Field	Thacker Coal & Coke Co.	No. 18	Thacker Field
Grey Eagle Coal Co.	Grey Eagle No. 1	Kenova Field	Thacker Coal Mining Co.	Thacker	Thacker Field
Grey Eagle Coal Co.	Grey Eagle No. 2	Kenova Field	War Eagle Coal Co.	Papoose	Thacker Field
Grey Eagle Coal Co.	Grey Eagle No. 3	Kenova Field	Wigarb Mining Co.	Wigarb	Kenova Field
Himler Coal Co.	Himler	Kenova Field	Williamson Fuel Co.	Williamson	Thacker Field
Leckie Collieries Co.	No. 1	Thacker Field	Winifrede-Thacker Coal Co.	Winifrede-Thacker	Kenova Field

KENTUCKY MINES

NAME OF COMPANY	NAME OF MINE	FIELD	NAME OF COMPANY	NAME OF MINE	FIELD
Alburn Coal Corp.	Alburn	Thacker Field	Alma Thacker Fuel Co.	No. 5	Thacker Field
Alma Thacker Fuel Co.	No. 1	Thacker Field	Kanawha-Elkhorn Colliery Co.	Bentley	Elkhorn Field
Alma Thacker Fuel Co.	No. 2	Thacker Field	Kanawha-Elkhorn Colliery Co.	Corsin	Elkhorn Field
Alma Thacker Fuel Co.	No. 3	Thacker Field	Portsmouth Solvay Coke Co.	Freeburn No. 2	Thacker Field
Alma Thacker Fuel Co.	No. 4	Thacker Field			

Pool No. 7

Description: High-volatile run-of-mine by-product coal.

Seams Mined: Number 5; Upper Banner; Lower Banner; Imboden; Pardee; Alma; Pond Creek-Freeburn; Elkhorn.

VIRGINIA MINES

NAME OF COMPANY	NAME OF MINE	FIELD	NAME OF COMPANY	NAME OF MINE	FIELD
Banner Raven Coal Corp.	No. 1	Clinch Valley Field	Clinchfield Coal Corp.	Cran's Nest	Southwestern Virginia Field
Banner Raven Coal Corp.	No. 2	Clinch Valley Field	Clinchfield Coal Corp.	No. 2	Southwestern Virginia Field
Beaver Coal Corp.	Beaver	Southwestern Virginia Field	Clinchfield Coal Corp.	No. 3	Southwestern Virginia Field
Black Mountain Coal Co.	No. 1	Southwestern Virginia Field	Clinchfield Coal Corp.	No. 6	Southwestern Virginia Field
Black Mountain Coal Co.	No. 2	Southwestern Virginia Field	Clinchfield Coal Corp.	No. 7	Southwestern Virginia Field
Blackwood Coal & Coke Co.	Pardee	Southwestern Virginia Field	Consumers Coal Mining Co.	Pot Branch	Southwestern Virginia Field
Blackwood Coal & Coke Co.	Roaring Fork	Southwestern Virginia Field			

(Continued on Next Page)

For further information on companies here listed, see the Directory given with each state.

POOL No. 7—VIRGINIA MINES—Continued

NAME OF COMPANY	NAME OF MINE	FIELD	NAME OF COMPANY	NAME OF MINE	FIELD
Esser, J. A. Coke Co.	Esserville	Southwestern Virginia Field	Stone Gap Colliery Co.	Glamorgan No. 3	Southwestern Virginia Field
Fleming, Robt. & Co.	Upper Banner No. 1	Southwestern Virginia Field	United Collieries Co., Inc.	Bondurant No. 1	Southwestern Virginia Field
Gardn Coal Co.	Banner No. 1	Clinch Valley Field	United Collieries Co., Inc.	Bondurant No. 2	Southwestern Virginia Field
Hawthorne Coal Corp.	Hawthorne No. 1	Southwestern Virginia Field	United Collieries Co., Inc.	Dominion	Southwestern Virginia Field
Hawthorne Coal Corp.	Hawthorne No. 2	Southwestern Virginia Field	United Fuel Corp.	United	Southwestern Virginia Field
Hawthorne Coal Corp.	Hawthorne No. 3	Southwestern Virginia Field	Virginia Iron, Coal & Coke Co.	Corburn	Southwestern Virginia Field
Hawthorne Coal Corp.	Hawthorne No. 4	Southwestern Virginia Field	Virginia Iron, Coal & Coke Co.	Inman	Southwestern Virginia Field
Interstate Coal Co.	Lower Banner	Southwestern Virginia Field	Virginia Iron, Coal & Coke Co.	Lee	Southwestern Virginia Field
Mohawk Coal Mining Co.	Mohawk	Southwestern Virginia Field	Virginia Iron, Coal & Coke Co.	Lindon	Southwestern Virginia Field
Old Virginia Coal Co.	Monarch	Southwestern Virginia Field	Virginia Iron, Coal & Coke Co.	Marion	Southwestern Virginia Field
Pot Branch Coal Co.	Pot Branch	Southwestern Virginia Field	Virginia Iron, Coal & Coke Co.	Sexton and Thelma	Southwestern Virginia Field
Stonaga Coke & Coal Co.	Arno	Southwestern Virginia Field	Virginia Iron, Coal & Coke Co.	Swans and Pine Run	Southwestern Virginia Field
Stonaga Coke & Coal Co.	Osaka	Southwestern Virginia Field	Virginia Lee Co., Inc.	Virginia Lee	Southwestern Virginia Field
Stonaga Coke & Coal Co.	Stonaga	Southwestern Virginia Field	Wise Coal & Coke Co.	No. 2	Southwestern Virginia Field

WEST VIRGINIA MINES

NAME OF COMPANY	NAME OF MINE	FIELD	NAME OF COMPANY	NAME OF MINE	FIELD
Crystal Block Coal & Coke Co.	No. 2	Thacker Field	Orinoco Mining Co.	Orinoco	Thacker Field
Crystal Block Coal & Coke Co.	No. 3	Thacker Field	Smith Pond Creek Coal Co.	Smith Pond Creek	Thacker Field
Glen Alum Coal Co.	No. 1	Thacker Field	Stone Mountain Coal Corp.	Marvin	Thacker Field
Glen Alum Coal Co.	No. 2	Thacker Field	Traders Coal Co.	Traders No. 2	Thacker Field
Glen Alum Coal Co.	No. 3	Thacker Field	War Eagle Coal Co.	Mphisto	Thacker Field
Mohawk Coal & Coke Co.	Mohawk	Thacker Field	White Star Mining Co.	No. 1	Thacker Field
New Howard Coal Co.	No. 1	Thacker Field	White Star Mining Co.	No. 2	Thacker Field
New Howard Coal Co.	No. 2	Thacker Field	Wilhemina Coal Co.	Wilhemina	Thacker Field

KENTUCKY MINES

NAME OF COMPANY	NAME OF MINE	FIELD	NAME OF COMPANY	NAME OF MINE	FIELD
Bailey Fuel Co.	Bailey	Thacker Field	Pond Creek Coal Co.	No. 6	Thacker Field
Black G m Coal Co.	Black Gem	Thacker Field	Pond Creek Coal Co.	No. 7	Thacker Field
Carry-On Coal Co.	Carry-On	Thacker Field	Pond Creek Coal Co.	No. 8	Thacker Field
Leckie Collieries Co.	No. 1	Thacker Field	Portsmouth Solvay Coke Co.	Freeburn No. 1	Thacker Field
Majestic Collieries Co.	Majestic	Thacker Field	Portsmouth Solvay Coke Co.	Freeburn No. 3	Thacker Field
P. M. C. Coal Co.	P. M. C.	Thacker Field	Sharon Coal & Coke Co.	Sharon	Thacker Field
Pond Creek Coal Co.	No. 1	Thacker Field	Solvay Collieries Co.	Tolland	Thacker Field
Pond Creek Coal Co.	No. 2	Thacker Field	Sudduth Coal Co.	Sudduth	Thacker Field
Pond Creek Coal Co.	No. 3	Thacker Field	Sullivan Pond Creek Coal Co.	Pond Creek No. 1	Thacker Field
Pond Creek Coal Co.	No. 4	Thacker Field	Tierney Mining Co.	Tierney	Thacker Field
Pond Creek Coal Co.	No. 5	Thacker Field			

Pool No. 26

Description: High-volatile run-of-mine domestic coals from the Clinch Valley district.

Seams Mined: Lower Banner; Raven; Widow Kennedy.

VIRGINIA MINES

NAME OF COMPANY	NAME OF MINE	FIELD	NAME OF COMPANY	NAME OF MINE	FIELD
Camilla Red Ash Coal Co.	Camilla No. 1	Clinch Valley Field	Moyers Coal Corp.	Moyers	Clinch Valley Field
Camilla Red Ash Coal Co.	Camilla No. 2	Clinch Valley Field	Raven Red Ash Coal Co.	No. 5	Clinch Valley Field
Camilla Red Ash Coal Co.	Camilla No. 3	Clinch Valley Field	Russell Coal Corp.	Russell	Clinch Valley Field
Lewis Creek Banner Coal Co.	Widow Kennedy	Clinch Valley Field	Virginia City Coal Co.	Virginia City No. 1	Southwestern Virginia Field
Longley Coal Corp.	Longley	Clinch Valley Field			

Pool No. 32

Description: High-volatile gas slack coal.

Seams Mined: Number 5; Upper Banner; Lower Banner; Imboden; Pardee; Alma; Pond Creek-Freeburn; Elkhorn.

VIRGINIA AND KENTUCKY MINES

For list of mines in this Pool, see Pool No. 43, the mines in which are identical with those in Pool No. 32.

Pool No. 35

Description: High-volatile steam slack coal.

Seams Mined: Number 1; Number 2; Number 5; Upper Banner; Lower Banner; Imboden; Raven-Red Ash; Alma; Thacker; Winifrede; No. 5 Block; No. 2 Gas.

VIRGINIA AND WEST VIRGINIA MINES

For list of mines in this Pool, see Pool No. 41, the mines in which are identical with those in Pool No. 35.

Pool No. 40

Description: High-volatile run-of-mine Virginia coal.

Seam Mined: Taggart.

VIRGINIA MINES

NAME OF COMPANY	NAME OF MINE	FIELD	NAME OF COMPANY	NAME OF MINE	FIELD
Stonaga Coke & Coal Co.	Roda	Southwestern Virginia Field	Virginia Iron, Coal & Coke Co.	Laura	Southwestern Virginia Field

For further information on companies here listed, see the Directory given with each state.

Pool No. 41

Description: High-volatile lump steam coal.

Seams Mined: Number 1; Number 2; Number 5; Upper Banner; Lower Banner; Imboden; Raven-Red Ash; Alma; Thacker; Winifrede; No. 5 Block; No. 2 Gas.

VIRGINIA MINES

NAME OF COMPANY	NAME OF MINE	FIELD	NAME OF COMPANY	NAME OF MINE	FIELD
Appalachian Coal Corp.	No. 502 Lower Banner	Clinch Valley Field	Kennedy Coal Corp.	No. 2	Clinch Valley Field
Benedict Coal Corp.	Benedict	Southwestern Virginia Field	Kennedy Coal Corp.	No. 4	Clinch Valley Field
Blue Ridge Coal Co.	Blue Ridge	Southwestern Virginia Field	Kennedy Coal Corp.	No. 5	Clinch Valley Field
Carter Coal Co.	Seaboard No. 1	Clinch Valley Field	Matz, Sam'l L. Coal Corp.	Dixie No. 1	Clinch Valley Field
Carter Coal Co.	Seaboard No. 2	Clinch Valley Field	Matz, Sam'l L. Coal Corp.	Domestic No. 2	Clinch Valley Field
Carter Coal Co.	Seaboard No. 3	Southwestern Virginia Field	Norton Coal Co.	Norton	Southwestern Virginia Field
Clinchfield Coal Corp.	No. 52	Southwestern Virginia Field	O'Donnell, C. V.	O'Donnell No. 7	Southwestern Virginia Field
Clinchfield Coal Corp.	No. 55	Southwestern Virginia Field	Odle Coal Corp.	Greeno	Southwestern Virginia Field
Clinchfield Coal Corp.	No. 201	Southwestern Virginia Field	Penn Lee Coal Co.	Penn Lee	Southwestern Virginia Field
Crest Coal Co.	No. 1	Southwestern Virginia Field	Powell River Coal Co.	Powell No. 1	Southwestern Virginia Field
Crest Coal Co.	No. 2	Southwestern Virginia Field	Raven Red Ash Coal Co.	Red Ash	Clinch Valley Field
Crest Coal Co.	No. 3	Southwestern Virginia Field	Russell Fork Coal Mining Co., Inc.	Burton Ford	Southwestern Virginia Field
Daw Coal Co.		Southwestern Virginia Field	Standard Coal Co.	Upper Banner	Southwestern Virginia Field
Excelsior R d Ash Coal Co.	Red Ash	Clinch Valley Field	Splash Dam Coal Corp.	Splash Dam No. 1	Southwestern Virginia Field
Garden City Coal Co.	Banner No. 2	Clinch Valley Field	Splash Dam Coal Corp.	Splash Dam No. 2	Southwestern Virginia Field
Hawthorne Coal Co.	Hawthorne No. 1	Southwestern Virginia Field	Steinman Development Co.	Bent Ridge	Southwestern Virginia Field
Hawthorne Coal Co.	Hawthorne No. 2	Southwestern Virginia Field	Steinman Development Co.	Rig Ridge	Southwestern Virginia Field
Hawthorne Coal Co.	Hawthorne No. 3	Southwestern Virginia Field	Tomb Coal Co.	Crockett	Clinch Valley Field
Hawthorne Coal Co.	Hawthorne No. 4	Southwestern Virginia Field	Virginia Banner Coal Corp.	Virginia-Banner	Southwestern Virginia Field
Indian Fuel Co.	Indian	Southwestern Virginia Field	Virginia Iron, Coal & Coke Co.	Imperial	Southwestern Virginia Field
Intermont Coal & Iron Corp.	Josephine	Southwestern Virginia Field	Wiss Coal & Coke Co.	No. 3	Southwestern Virginia Field
Interstate Coal Co.	Interstate	Southwestern Virginia Field	Wiss Coal & Coke Co.	No. 5	Southwestern Virginia Field
J. S. T. Coal Co.	J. S. T.	Southwestern Virginia Field			
Kennedy Coal Corp.	No. 1	Clinch Valley Field			

WEST VIRGINIA MINES

NAME OF COMPANY	NAME OF MINE	FIELD	NAME OF COMPANY	NAME OF MINE	FIELD
Bailey Thacker Coal Co.	Superior No. 2	Thacker Field	Leckie Collieries Co.	No. 2	Thacker Field
Bailey Thacker Coal Co.	Superior No. 3	Thacker Field	Red Jacket Junior Coal Co.	Junior	Thacker Field
Borderland Coal Co.	No. 1	Kenova Field	Red Jacket Con. C. & C. Co., Inc.	Grapevine	Thacker Field
Borderland Coal Co.	No. 2	Kenova Field	Red Jacket Con. C. & C. Co., Inc.	Mitchell	Thacker Field
Buffalo-Thacker Coal Co.	Buffalo	Kenova Field	Red Jacket Con. C. & C. Co., Inc.	No. 32	Thacker Field
Burning Creek Coal Co.	Burning Creek	Kenova Field	Red Jacket Con. C. & C. Co., Inc.	Rutherford	Thacker Field
Chattahoochee Coal Co.	Mary Helen	Kenova Field	Standard-Thacker Coal Co.	No. 1	Kenova Field
Crystal Block Coal & Coke Co.	No. 1	Thacker Field	Sycamore Coal Co.	Cinderella	Thacker Field
Delphos-West Virginia Coal Co.	Cedar	Thacker Field	Thacker Coal & Coke Co.	No. 2	Thacker Field
East Lynn Coal Co.	Dixie Lynn	Kenova Field	Thacker Coal & Coke Co.	No. 11	Thacker Field
Fall Branch Coal Co.	Fall Branch	Kenova Field	Thacker Coal & Coke Co.	No. 18	Thacker Field
Grey Eagle Coal Co.	Grey Eagle No. 1	Kenova Field	Thacker Coal Mining Co.	Thacker	Thacker Field
Grey Eagle Coal Co.	Grey Eagle No. 2	Kenova Field	War Eagle Coal Co.	Papoose	Thacker Field
Grey Eagle Coal Co.	Grey Eagle No. 3	Kenova Field	Wigarb Mining Co.	Wigarb	Kenova Field
Himler Coal Co.	Himler	Kenova Field	Williamson Fuel Co.	Williamson	Thacker Field
Leckie Collieries Co.	No. 1	Thacker Field	Winifrede-Thacker Coal Co.	Winifrede-Thacker	Kenova Field

KENTUCKY MINES

NAME OF COMPANY	NAME OF MINE	FIELD	NAME OF COMPANY	NAME OF MINE	FIELD
Alburn Coal Corp.	Alburn	Thacker Field	Alma Thacker Fuel Co.	No. 5	Thacker Field
Alma Thacker Fuel Co.	No. 1	Thacker Field	Kanawha-Elkhorn Colliery Co.	Bentley	Elkhorn Field
Alma Thacker Fuel Co.	No. 2	Thacker Field	Kanawha-Elkhorn Colliery Co.	Corsin	Elkhorn Field
Alma Thacker Fuel Co.	No. 3	Thacker Field	Portsmouth Solvay Coke Co.	Freeburn No. 2	Thacker Field
Alma Thacker Fuel Co.	No. 4	Thacker Field			

Pool No. 43

Description: High-volatile lump gas coal.

Seams Mined: Number 5; Upper Banner; Lower Banner; Imboden; Pardee; Alma; Pond Creek-Freeburn; Elkhorn.

VIRGINIA MINES

NAME OF COMPANY	NAME OF MINE	FIELD	NAME OF COMPANY	NAME OF MINE	FIELD
Banner Raven Coal Corp.	No. 1	Clinch Valley Field	Mohawk Coal Mining Co.	Mohawk	Southwestern Virginia Field
Banner Raven Coal Corp.	No. 2	Clinch Valley Field	Norton Coal Co.	Norton	Southwestern Virginia Field
Beaver Coal Corp.	Beaver	Southwestern Virginia Field	Old Virginia Coal Co.	Monarch	Southwestern Virginia Field
Black Mountain Coal Co.	No. 1	Southwestern Virginia Field	Pot Branch Coal Co.	Pot Branch	Southwestern Virginia Field
Black Mountain Coal Co.	No. 2	Southwestern Virginia Field	Shop Ridge Coal Co.	Drift	Southwestern Virginia Field
Blackwood Coal & Coke Co.	Pardee	Southwestern Virginia Field	Stonega Coke & Coal Co.	Arno	Southwestern Virginia Field
Blackwood Coal & Coke Co.	Roaring Fork	Southwestern Virginia Field	Stonega Coke & Coal Co.	Osaka	Southwestern Virginia Field
Clinchfield Coal Corp.	Crano's Nest	Southwestern Virginia Field	Stonega Coke & Coal Co.	Stonega	Southwestern Virginia Field
Clinchfield Coal Corp.	No. 2	Southwestern Virginia Field	Stone Gap Colliery Co.	Glamorgan No. 3	Southwestern Virginia Field
Clinchfield Coal Corp.	No. 3	Southwestern Virginia Field	United Collieries Co., Inc.	Bondurant No. 1	Southwestern Virginia Field
Clinchfield Coal Corp.	No. 6	Southwestern Virginia Field	United Collieries Co., Inc.	Bondurant No. 2	Southwestern Virginia Field
Clinchfield Coal Corp.	No. 7	Southwestern Virginia Field	United Collieries Co., Inc.	Domination	Southwestern Virginia Field
Consumers Coal Mining Co.	Pot Branch	Southwestern Virginia Field	United Fuel Corp.	United	Southwestern Virginia Field
Culberson Coal Co.	Upper Banner No. 1	Southwestern Virginia Field	Virginia Iron, Coal & Coke Co.	Coeburn	Southwestern Virginia Field
Esser, J. A. Coke Co.	Esserville	Southwestern Virginia Field	Virginia Iron, Coal & Coke Co.	Inman	Southwestern Virginia Field
Fleming, Robt. & Co.	Upper Banner No. 1	Southwestern Virginia Field	Virginia Iron, Coal & Coke Co.	Lee	Southwestern Virginia Field
Gardn Coal Co.	Banner No. 1	Clinch Valley Field	Virginia Iron, Coal & Coke Co.	Lindn	Southwestern Virginia Field
Hawthorne Coal Corp.	Hawthorne No. 1	Southwestern Virginia Field	Virginia Iron, Coal & Coke Co.	Marion	Southwestern Virginia Field
Hawthorne Coal Corp.	Hawthorne No. 2	Southwestern Virginia Field	Virginia Iron, Coal & Coke Co.	Sexton and Thelma	Southwestern Virginia Field
Hawthorne Coal Corp.	Hawthorne No. 3	Southwestern Virginia Field	Virginia Iron, Coal & Coke Co.	Swansea and Pine Run	Southwestern Virginia Field
Hawthorne Coal Corp.	Hawthorne No. 4	Southwestern Virginia Field	Virginia-Lee Coal Co., Inc.	Virginia-Lee	Southwestern Virginia Field
Interstate Coal Co.	Lower Banner	Southwestern Virginia Field	Wiss Coal & Coke Co.	No. 2	Southwestern Virginia Field

(Continued on Next Page)

For further information on companies here listed, see the Directory given with each state.

WEST VIRGINIA MINES

NAME OF COMPANY	NAME OF MINE	FIELD	NAME OF COMPANY	NAME OF MINE	FIELD
Burnwell Coal & Coke Co.	Burnwell	Thacker Field	Orinoco Mining Co.	Orinoco	Thacker Field
Crystal Block Coal & Coke Co.	No. 2	Thacker Field	Paithor Coal Co.	Paithor	Thacker Field
Crystal Block Coal & Coke Co.	No. 3	Thacker Field	Smith Pond Creek Coal Co.	Smith Pond Creek	Thacker Field
Glen Alum Coal Co.	No. 1	Thacker Field	Stone Mountain Coal Corp.	Marlin	Thacker Field
Glen Alum Coal Co.	No. 2	Thacker Field	Traders Coal Co.	Traders No. 2	Thacker Field
Glen Alum Coal Co.	No. 3	Thacker Field	Triangle Coal Co.	Triangle	Thacker Field
Lathrop Coal Co.	Lathrop	Thacker Field	War Eagle Coal Co.	Mephysto	Thacker Field
Mohawk Coal & Coke Co.	Mohawk	Thacker Field	White Star Mining Co.	No. 1	Thacker Field
New Howard Coal Co.	No. 1	Thacker Field	White Star Mining Co.	No. 2	Thacker Field
New Howard Coal Co.	No. 2	Thacker Field	Wilhemina Coal Co.	Wilhemina	Thacker Field

KENTUCKY MINES

NAME OF COMPANY	NAME OF MINE	FIELD	NAME OF COMPANY	NAME OF MINE	FIELD
Bailey Fuel Co.	Bailey	Thacker Field	Pond Creek Coal Co.	No. 5	Thacker Field
Banner Pond Creek Coal Co.	Banner Pond Creek	Thacker Field	Pond Creek Coal Co.	No. 6	Thacker Field
Black Gem Coal Co.	Black Gem	Thacker Field	Pond Creek Coal Co.	No. 7	Thacker Field
Carry On Coal Co.	Carry On	Thacker Field	Pond Creek Coal Co.	No. 8	Thacker Field
Leckie Collieries Co.	No. 1	Thacker Field	Portsmouth Solvay Coke Co.	Frederick No. 1	Thacker Field
Majestic Collieries Co.	Majestic	Thacker Field	Portsmouth Solvay Coke Co.	Frederick No. 2	Thacker Field
Marietta Coal Co.	Marietta	Thacker Field	Sharon Coal & Coke Co.	Sharon	Thacker Field
Mud Lick Coal Co.	Mud Lick	Thacker Field	Solvay Collieries Co.	Stallard	Thacker Field
P. M. C. Coal Co.	P. M. C.	Thacker Field	Sudduth Coal Co.	Sudduth	Thacker Field
Pond Creek Coal Co.	No. 1	Thacker Field	Sullivan Pond Creek Coal Co.	Pond Creek No. 1	Thacker Field
Pond Creek Coal Co.	No. 2	Thacker Field	Tierney Mining Co.	Tierney	Thacker Field
Pond Creek Coal Co.	No. 3	Thacker Field	Victor Coal Co.	Victor	Thacker Field
Pond Creek Coal Co.	No. 4	Thacker Field			

Pool No. 44

Description: Low-volatile lump coal from the Pocahontas and Tug River fields.

Seams Mined: Pocahontas No. 3; Pocahontas No. 4; Sewell-Davy; Welch and War Creek.

WEST VIRGINIA MINES

NAME OF COMPANY	NAME OF MINE	FIELD	NAME OF COMPANY	NAME OF MINE	FIELD
Algoma Coal & Coke Co.	Algoma	Pocahontas Field	New River & Pocahontas Con. Coal Co.	Berwind No. 3	Pocahontas Field
Algonquin Coal Co.	Algonquin	Pocahontas Field	New River & Pocahontas Con. Coal Co.	Berwind No. 4	Pocahontas Field
American Coal Co. of Allegany Co.	Crane Creek	Pocahontas Field	New River & Pocahontas Con. Coal Co.	Berwind No. 5	Pocahontas Field
Crystal Block Coal & Coke Co.	Piedmont	Pocahontas Field	New River & Pocahontas Con. Coal Co.	Berwind No. 6	Pocahontas Field
American Coal Co. of Allegany Co.	Pinnacle	Pocahontas Field	New River & Pocahontas Con. Coal Co.	Berwind No. 7	Pocahontas Field
Ashland Coal & Coke Co.	Ashland	Pocahontas Field	New River & Pocahontas Con. Coal Co.	Berwind No. 8	Pocahontas Field
Ashland Coal & Coke Co.	Graeber	Pocahontas Field	New River & Pocahontas Con. Coal Co.	Havaco	Pocahontas Field
Atlantic Smokeless Coal Co.	Atlantic	Tug River Field	New River Pocahontas Coal Co.	New Pocahontas No. 1	Tug River Field
Beech Fork Coal Co.	Beech Fork	Pocahontas Field	Page Coal & Coke Co.	Page No. 1	Pocahontas Field
Booth-Bowen Coal & Coke Co.	Booth-Bowen	Pocahontas Field	Page Coal & Coke Co.	Page No. 2	Pocahontas Field
Bottom Creek Coal & Coke Co.	Bottom Creek No. 1	Pocahontas Field	Page Coal & Coke Co.	Page No. 3	Pocahontas Field
Bradshaw Coal Co. Inc.	Bradshaw	Tug River Field	Patterson, S. J. Pocahontas Co.	Arista	Pocahontas Field
Buckeye Coal & Coke Co.	Buckeye No. 1	Pocahontas Field	Pawama Coal & Coke Co.	Pawama	Pocahontas Field
Buckeye Coal & Coke Co.	Buckeye No. 2	Pocahontas Field	Peerless Coal & Coke Co.	Peerless No. 1	Pocahontas Field
By-Product Pocahontas Co.	Cirrus	Pocahontas Field	Peerless Coal & Coke Co.	Peerless No. 2	Pocahontas Field
By-Product Pocahontas Co.	Virginia	Pocahontas Field	Perkins Coal Co.	Perkins	Tug River Field
Buchanan Coal Co.	Buchanan	Tug River Field	Pocahontas Fuel Co. Inc.	Caswell	Pocahontas Field
Carter Coal Co.	Carter No. 3	Tug River Field	Pocahontas Fuel Co. Inc.	Cherokee	Pocahontas Field
Carter Coal Co.	Nora No. 8	Tug River Field	Pocahontas Fuel Co. Inc.	Boyle	Pocahontas Field
Carter Coal Co.	Olga	Tug River Field	Pocahontas Fuel Co. Inc.	Lick Branch	Pocahontas Field
Central Pocahontas Coal Co.	Thelma No. 6	Tug River Field	Pocahontas Fuel Co. Inc.	Norfolk	Pocahontas Field
Central Pocahontas Coal Co.	No. 1	Pocahontas Field	Pocahontas Domestic Coal Co.	No. 1	Tug River Field
Central Pocahontas Coal Co.	No. 2	Pocahontas Field	Pocahontas Domestic Coal Co.	No. 2	Tug River Field
Central Pocahontas Coal Co.	No. 3	Pocahontas Field	Pocahontas Fuel Co. Inc.	Pocahontas No. 6	Pocahontas Field
Central Pocahontas Coal Co.	No. 4	Tug River Field	Pocahontas Fuel Co. Inc.	Pocahontas No. 7	Pocahontas Field
Colonial Pocahontas Coal Co.	Columbus	Tug River Field	Pocahontas Fuel Co. Inc.	Pocahontas No. 8	Pocahontas Field
Crozier Coal & Coke Co.	No. 1	Pocahontas Field	Pocahontas Fuel Co. Inc.	Rolfe	Pocahontas Field
Crozier Coal & Coke Co.	No. 2	Pocahontas Field	Pocahontas Fuel Co. Inc.	Sagamore	Pocahontas Field
Crystal Coal & Coke Co.	Crystal No. 1	Pocahontas Field	Pocahontas Fuel Co. Inc.	Shamokin	Pocahontas Field
Crystal Coal & Coke Co.	Crystal No. 2	Pocahontas Field	Pocahontas Fuel Co. Inc.	Powhatan	Pocahontas Field
Dry Fork Colliery Co.	Dry Fork	Tug River Field	Premier Pocahontas Colliery Co.	Premier Pocahontas No. 1	Tug River Field
Elipse Pocahontas Coal Co.	Elipse Pocahontas No. 1	Pocahontas Field	Premier Pocahontas Colliery Co.	Premier Pocahontas No. 2	Tug River Field
Elkhorn Coal & Coke Co.	Elkhorn	Pocahontas Field	Premier Pocahontas Colliery Co.	Premier Pocahontas No. 3	Tug River Field
Elk Ridge Coal & Coke Co.	Elk Ridge	Pocahontas Field	Premier Pocahontas Colliery Co.	Premier Pocahontas No. 4	Tug River Field
Empire Coal & Coke Co.	Empire	Pocahontas Field	Pulaski Iron Co.	Pulaski	Pocahontas Field
Ennis Coal Co.	Hawatha	Pocahontas Field	Purity Pocahontas Coal Co.	Purity Pocahontas	Tug River Field
Euroka Coal & Coke Co.	Euroka	Pocahontas Field	Roads Coal & Coke Co.	Roads	Pocahontas Field
Excelsior Pocahontas Coal Co.	Excelsior No. 2	Tug River Field	Sayers Pocahontas Coal Co.	Sayers	Tug River Field
Fall River Pocahontas Collieries Co.	Fall River	Tug River Field	Shannon Coal & Coke Co.	Shannon	Pocahontas Field
Flanagan Coal Co.	Flanagan No. 2	Tug River Field	Smokeless Coal & Coke Co.	Smokeless	Pocahontas Field
Flat Top Coal Mining Co.	Thomas	Tug River Field	Solvay Collieries Co.	Solvay	Tug River Field
Fortune Hunter Coal Co.	Fortune Hunter	Pocahontas Field	Solvay Collieries Co.	Solvay	Tug River Field
Garland Pocahontas Coal Co.	Garland Pocahontas	Tug River Field	Solvay Collieries Co.	Solvay	Tug River Field
Gem-Pocahontas Coal Co.	Gem	Pocahontas Field	Solvay Collieries Co.	Solvay	Tug River Field
Gilliam Coal & Coke Co.	Gilliam	Pocahontas Field	Solvay Collieries Co.	Solvay	Tug River Field
Greenbrier Coal & Coke Co.	Greenbrier	Pocahontas Field	Solvay Collieries Co.	Solvay	Tug River Field
Hampton Roads Collieries Co. Inc.	Hampton	Tug River Field	Solvay Collieries Co.	Solvay	Tug River Field
Houston Collieries Co.	Carswell	Pocahontas Field	Superior Pocahontas Coal Co.	Superior	Tug River Field
Houston Collieries Co.	Maitland	Pocahontas Field	Superior Pocahontas Coal Co.	Superior	Tug River Field
Houston Coal & Coke Co.	Houston	Pocahontas Field	Thomas Coal Co. The	Thomas No. 1	Pocahontas Field
Hubbard Coal Co.	Hubbard No. 85	Tug River Field	Thomas Coal Co. The	Thomas No. 2	Pocahontas Field
I. B. B. Coal Co.	J. B. Coal No. 1	Tug River Field	Tidewater Coal & Coke Co.	Tidewater No. 1	Pocahontas Field
I. B. B. Coal Co.	J. B. Coal No. 2	Tug River Field	Tidewater Coal & Coke Co.	Tidewater No. 2	Pocahontas Field
I. B. B. Coal Co.	J. B. Coal No. 3	Tug River Field	Tony Pocahontas Coal Co.	Tony	Tug River Field
I. B. B. Coal Co.	J. B. Coal No. 4	Tug River Field	Turkey Gap Coal & Coke Co.	Turkey Gap	Pocahontas Field
Johns Branch Coal Co.	No. 1	Tug River Field	Turkey Gap Coal & Coke Co.	Turkey Gap	Pocahontas Field
Johns Branch Coal Co.	No. 2	Tug River Field	Turkey Gap Coal & Coke Co.	Turkey Gap	Pocahontas Field
Keystone Coal & Coke Co.	Keystone	Pocahontas Field	Turkey Gap Coal & Coke Co.	Turkey Gap No. 2	Pocahontas Field
Lake Superior Coal Co.	No. 1	Pocahontas Field	Turkey Gap Coal & Coke Co.	Wenonah No. 1	Pocahontas Field
Litz-Smith Pocahontas Coal Co.	Litz-Smith	Pocahontas Field	United Pocahontas Coal Co.	Indian Ridge	Pocahontas Field
Louisville Coal & Coke Co.	Goodwill No. 1	Pocahontas Field	United Pocahontas Coal Co.	Zenith	Pocahontas Field
Louisville Coal & Coke Co.	Goodwill No. 2	Pocahontas Field	United States Coal & Coke Co.	No. 1 to 12 incl. (var.)	Pocahontas Field
Louisville Coal & Coke Co.	Louisville	Pocahontas Field	Upland Coal & Coke Co.	Upland No. 1	Pocahontas Field
Louisville Coal & Coke Co.	Northwest	Pocahontas Field	Van Wert Coal Co.	Long Jack	Tug River Field
Lynchburg Coal & Coke Co.	Lynchburg	Pocahontas Field	War Creek Coal Co.	War Creek	Tug River Field
McBowell Coal & Coke Co.	McBowell	Pocahontas Field	Warrior Pocahontas Coal Co.	Warrior	Tug River Field
Marine Smokeless Coal Co.	Marine No. 1	Tug River Field	West Virginia Pocahontas Coal Co.	Lick No. 1	Pocahontas Field
Marine Smokeless Coal Co.	Marine No. 2	Tug River Field	West Virginia Pocahontas Coal Co.	Lick No. 2	Pocahontas Field
Mill Creek Coal & Coke Co.	Canfield	Pocahontas Field	Weymoke Coal & Coke Co.	Weymoke	Pocahontas Field
Mill Creek Coal & Coke Co.	Mill Creek	Pocahontas Field	Williams Pocahontas Coal Co.	Williams	Tug River Field
New River & Pocahontas Con. Coal Co.	Berwind No. 1	Pocahontas Field	Yabon-Pocahontas Coal Co.	No. 1	Tug River Field
New River & Pocahontas Con. Coal Co.	Berwind No. 2	Pocahontas Field	Yabon-Pocahontas Coal Co.	No. 2	Tug River Field

For further information on companies here listed, see the Directory given with each state.

Pool No. 51**Description:** High-volatile egg steam coal.**Seams Mined:** Number 1; Number 2; Number 5; Upper Banner; Lower Banner; Imboden; Raven-Red Ash; Alma; Thacker; Winifrede; No. 5 Block; No. 2 Gas.**VIRGINIA AND WEST VIRGINIA MINES**

For list of mines in this Pool, see Pool No. 41, the mines in which are identical with those in Pool No. 51.

Pool No. 53**Description:** High-volatile egg gas coal.**Seams Mined:** Number 5; Upper Banner; Lower Banner; Imboden; Pardee; Alma; Pond Creek-Freeburn; Elkhorn.**VIRGINIA AND KENTUCKY MINES**

For list of mines in this Pool, see Pool No. 43, the mines in which are identical with those in Pool No. 53.

Pool No. 54**Description:** Low-volatile egg coal from the Pocahontas and Tug River fields.**Seams Mined:** Pocahontas No. 3; Pocahontas No. 4; Sewell-Davy; Welch and War Creek.**WEST VIRGINIA MINES**

For list of mines in this Pool, see Pool No. 44, the mines in which are identical with those in Pool No. 54.

Pool No. 56**Description:** Other high-volatile run-of-mine steam coal.**Seams Mined:** Widow Kennedy; Lower Banner; No. 2; Auxier.**VIRGINIA MINES**

NAME OF COMPANY	NAME OF MINE	FIELD	NAME OF COMPANY	NAME OF MINE	FIELD
Bandy & Trinkle.....	Clear Creek.....	Southwestern Virginia Field	Dixie Splint Coal Co.....	No. 2.....	Southwestern Virginia Field
Bandy & Trinkle.....	Trinkle.....	Southwestern Virginia Field	Gladeville Coal Co.....	No. 2.....	Southwestern Virginia Field
Benedict Coal Corp.....	Benedict.....	Southwestern Virginia Field	Gladeville Coal Co.....	No. 3.....	Southwestern Virginia Field
Bradley Coal Co.....	No. 1.....	Southwestern Virginia Field	Hill Creek Coal Co.....	Hill Creek.....	Clinch Valley Field
Charleroi Coal Co.....	Kilgore.....	Southwestern Virginia Field	Laurel Branch Coal Co.....	Laurel Branch.....	Southwestern Virginia Field
Corder Coal Co.....	Corder.....	Southwestern Virginia Field	North Fork Coal Co.....	North Fork.....	Southwestern Virginia Field
Dixie Splint Coal Co.....	No. 1.....	Southwestern Virginia Field			

WEST VIRGINIA MINES

NAME OF COMPANY	NAME OF MINE	FIELD
Mitta—Co-Operative Coal Co.....	Himler.....	Kenova Field

KENTUCKY MINES

NAME OF COMPANY	NAME OF MINE	FIELD	NAME OF COMPANY	NAME OF MINE	FIELD
Kentucky Elkhorn Coal Co.....	Federal.....	Elkhorn Field	Praise Elkhorn Coal Co.....	Elkhorn City.....	Elkhorn Field

Pool No. 61**Description:** High-volatile nut steam coal.**Seams Mined:** Number 1; Number 2; Number 5; Upper Banner; Lower Banner; Imboden; Raven-Red Ash; Alma; Thacker; Winifrede; No. 5 Block; No. 2 Gas.**KENTUCKY, VIRGINIA AND WEST VIRGINIA MINES**

For list of mines in this Pool, see Pool No. 41, the mines in which are identical with those in Pool No. 61.

Pool No. 63**Description:** High-volatile nut gas coal.**Seams Mined:** Number 5; Upper Banner; Lower Banner; Imboden; Pardee; Alma; Pond Creek-Freeburn; Elkhorn.**WEST VIRGINIA, VIRGINIA AND KENTUCKY MINES**

For list of mines in this Pool, see Pool No. 43, the mines in which are identical with those in Pool No. 63.

For further information on companies here listed, see the Directory given with each state.

Pool No. 64

Description: Low-volatile nut coal from the Pocahontas and Tug River fields.
Seams Mined: Pocahontas No. 3; Pocahontas No. 4; Sewell-Davy; Welch and War Creek.

WEST VIRGINIA MINES

For list of mines in this Pool, see Pool No. 44, the mines in which are identical with those in Pool No. 64.

Pool No. 84

Description: Low-volatile pea coal from the Pocahontas and Tug River fields.
Seams Mined: Pocahontas No. 3; Pocahontas No. 4; Sewell-Davy; Welch and War Creek.

WEST VIRGINIA MINES

For list of mines in this Pool, see Pool No. 44, the mines in which are identical with those in Pool No. 84.

Pool No. 103

Description: Low-volatile slack coal from the Pocahontas and Tug River fields.
Seams Mined: Pocahontas No. 3; Pocahontas No. 4; Sewell-Davy.

VIRGINIA AND WEST VIRGINIA MINES

For list of mines in this Pool, see Pool No. 1, the mines in which are identical with those in Pool No. 103.



Fleet of Railroad Cars with Export Coal Ready for Dumping at Lamberts Point.

SEWALLS POINT COAL EXCHANGE

INCORPORATED

Organization, Railroad, Method of Classification, Pools and Their Specifications, Standard Analyses, Seams Worked, List of Mines

OFFICERS

G. H. CAPERTON, President, Charleston, W. Va.
 W. P. TAMS, Jr., Vice-President, Tams, W. Va.
 S. T. SNEAD, Secretary-Treasurer and Commissioner, 517 Flatiron Bldg., Norfolk, Va.
 H. H. SMITH, Deputy Commissioner, Norfolk, Va.
 J. S. BURROWS, Consulting Engineer, Norfolk, Va.

The Sewalls Point Coal Exchange was organized in June, 1920, to provide a means for pooling of coal at the Sewalls Point Pier of the Virginian Railway. The Exchange is run entirely by coal operators who ship to this point. From the terminus to the nearest mines, where the Virginian enters the eastern part of the Pocahontas field in Mercer county, West Virginia, is about 400 miles. The Virginian Railway was built primarily as a coal carrying road. It serves the greater portion of the famous New River field, a small portion of the Pocahontas field and a few mines located in the marginal territory of the Kanawha field.

This railroad is unusually well situated, by reason of its down grade to the seaboard and its large capacity coal cars, to handle an immense tonnage in one load. Recently it hauled what is claimed by the management to have been the longest coal train ever handled over the tracks of any railroad, the load consisting of one hundred 120-ton cars of coal, making a train one and one-tenth miles in length.

Method of Classification

The pool to which a mine belongs is fixed by the chemical analysis of its coal. Mines are given a classification based on the results of an analysis made on samples collected at the tippie during loading, in conjunction with data on the method of mining and preparing the coal. There is no assurance, however, that the classification which a mine receives is a permanent one, as its continuance in the pool assigned depends upon the quality of its daily shipments. Mines that do not ship coal within the standard limits are demoted as soon as it is ascertained that their shipments are falling below the standard in quality. On the other hand, mines which by reason of improvement are running ahead of the standard of the pool may be promoted. This system provides an incentive for betterment and likewise a strong reason for watchfully maintaining the quality of coal as fixed in the standardization test.

The method of testing the performance of mines is by means of sampling and analyzing daily shipments. For the purpose of sampling commercial shipments in quantities, the Exchange has provided a specially designed plant, consisting of three units, as follows: The dumper, which is separate from the main dumper of the pier, with its own tracks and connections to the pier; the riffle car of sixty tons capacity, which is self propelled; and the sampling and crusher station.

The operation of the plant is as follows: A car of coal to be sampled is run up into the dumper under which the riffle car is standing. The coal from the railroad car is rolled and mixed in passing through the dumper and falls in a wide stream into the riffle car. The body of the riffle car is arranged like a laboratory riffle and the separate compartments cut out a portion of the stream of fifty to sixty tons of the coal flowing in from the dumper.

When loaded the riffle car is run down to the sampling station and ten thousand pounds of coal is discharged from the compartments through a feeder, crusher and bucket elevator, in which it is finally carried to the top of the station, where an automatic device cuts out a portion of the gross sample, which is further reduced to laboratory size as it passes through the plant. The balance of the sample is all returned to the riffle car, which when the sampling is completed proceeds to the top of the pier, discharges and returns to the dumper for the next sample. All sampling and analysis done for the Exchange is under the supervision of the Bureau of Mines.

Authority For List of Mines

The list of mines here given has been taken from Circular No. 116-E, issued by the Virginian Railway Company as of date June 1, 1921. Inasmuch as changes may be made at any time, we do not guarantee the lists, nor are we responsible for inaccuracies.

Pool No. 1

Description: Standard low-volatile run-of-mine coal.

Specification:

Low-volatile run-of-mine coal from mines which on the average of all tests of the Sewalls Point Coal Exchange for a given mine show more than 15,500 B.t.u. per pound of moisture and ash free coal and which maintain a standard of ash in the dry coal analysis of not more than 7.50 per cent of ash as determined by tests of the Exchange. Coal with respect to size, coarseness and preparation thereof shall not be detrimental to the pool.

Seams Mined: Sewell, Beckley, Fire Creek, Pocahontas No. 3, Pocahontas No. 6.

	Moisture 2.50	Dry Basis
	Volatile Matter	18.50
	Fixed Carbon	75.50
	Ash	6.00
Standard Analysis:	Sulphur	0.75
	B.t.u.	14,700

List of Mines: For reasons already stated, the arrangement of low-volatile mines by pools is subject to constant change. The mines belonging to this pool will be found in the list which follows.

Pool No. 2

Description: Standard low-volatile run-of-mine coal.

Specification:

Low-volatile run-of-mine coal from mines which on the average of all tests of the Sewalls Point Coal Exchange for a given mine show more than 15,500 B.t.u. per pound of moisture and ash free coal and which maintain a standard of ash in the dry coal analysis of not more than 8.50 per cent of ash as determined by tests of the Exchange. Coal with respect to size, coarseness and preparation thereof shall not be detrimental to the pool.

Seams Mined: Sewell, Beckley, Fire Creek, Pocahontas No. 3, Pocahontas No. 6.

	Moisture 2.50	Dry Basis
	Volatile Matter	17.50
	Fixed Carbon	74.50
Standard Analysis:	Ash	8.00
	Sulphur	0.75
	B.t.u.	14,400

List of Mines: The mines belonging to this pool will be found in the list which follows.

Pool No. 3

Description: Low-volatile slack coal.

Specification: None.

Seams Mined: Sewell, Beckley, Fire Creek, Pocahontas No. 3, Pocahontas No. 6.

Standard Analysis: None.

List of Mines: The mines belonging to this pool will be found in the list which follows.

Pool No. 4

Description: Standard low-volatile run-of-mine coal.

Specification:

Low-volatile run-of-mine coal from mines which on the average of all tests of the Sewalls Point Coal Exchange for a given mine show more than 15,500 B.t.u. per pound of moisture and ash free coal and which maintain a standard of ash in the dry coal analysis of more than 8.50 per cent of ash but not more than 12.50 per cent of ash as determined by test of the Exchange. Coal with respect to size, coarseness and preparation thereof shall not be detrimental to the pool.

Seams Mined: Sewell, Beckley, Fire Creek, Pocahontas No. 3, Pocahontas No. 6.

	Moisture 2.50	Dry Basis
	Volatile Matter	17.00
	Fixed Carbon	73.00
Standard Analysis:	Ash	10.00
	Sulphur	0.75
	B.t.u.	14,100

List of Mines: The mines belonging to this pool will be found in the list which follows.

Pool No. 8

Description: Standard medium-volatile run-of-mine coal.

Specification:

Medium-volatile run-of-mine coal from mines which on the average of all tests of the Sewalls Point Coal Exchange for a given mine show not less than 15,400 B.t.u. per pound nor more than 32.50 per cent volatile, both on a moisture and ash free basis, and which maintain a standard of ash in the dry coal analysis of not more than 8.50 per cent of ash as determined by test of the Exchange. Coal with respect to size, coarseness and preparation thereof shall not be detrimental to the pool.

Seam Mined: Eagle.

	Moisture 2.50	Dry Basis
	Volatile Matter	28.75
	Fixed Carbon	63.25
Standard Analysis:	Ash	8.00
	Sulphur	0.90
	B.t.u.	14,300

List of Mines in Both Low Volatile and Medium Volatile Pools

LOW-VOLATILE MINES

POOLS No. 1, 2, 3 AND 4

NAME OF COMPANY	NAME OF MINE	DISTRICT	NAME OF COMPANY	NAME OF MINE	DISTRICT
Algonquin Coal Co.	Algonquin	Pocahontas District	New River & Pocahontas Consoli-	Weirwood	New River District
Alpha Pocahontas Coal Co.	Alpha	Pocahontas District	dated Coal Co.	Eccles No. 3	New River District
American Coal Co.	Pinnacle	Pocahontas District	New River Collieries Co.	Eccles No. 5	New River District
Amigo Coal Co.	Amigo	New River District	New River Collieries Co.	Eccles No. 6	New River District
Barkers Creek Coal Co.	Barkers Creek No. 1	Pocahontas District	New River Collieries Co.	Sun No. 1	New River District
Barkers Creek Coal Co.	Barkers Creek No. 2	Pocahontas District	New River Collieries Co.	Sun No. 2	New River District
Beard Smokeless Coal Co.	Beard No. 1	New River District	Nichol Colliery Co.	Affinity	New River District
Beckley Fire Creek Coal Co.	Sullivan	New River District	Pemberton Coal & Coke Co.	Big Stick	New River District
Beckley Pocahontas Coal Co.	Beckley Pocahontas	New River District	Pemberton Coal & Coke Co.	Philips	New River District
Blake, N. S.	Clyde	New River District	Pemberton Fuel Co.	Pemberton Fuel	New River District
Boyer Smokeless Coal Co.	Blake	New River District	Pickshin Coal Co.	Pickshin	New River District
Callaway, C. P.	Royer	New River District	Piney Creek Coal Co.	No. 1	New River District
City Coal Co.	Cepee	New River District	Pocahontas Fuel Co.	Itmann No. 17	Pocahontas District
City Coal Co.	City Coal No. 1	New River District	Pocahontas Fuel Co.	Itmann No. 18	Pocahontas District
City Coal Co.	City Coal No. 2	New River District	Price Hill Colliery Co.	Price Hill	New River District
Crab Orchard Fuel Co.	Crab Orchard	New River District	Prince-Wick Coal Co.	Prince-Wick	New River District
Devils Fork Coal Co.	Devils Fork	New River District	Raleigh Coal & Coke Co.	Raleigh No. 1	New River District
Douglas Coal Co.	Douglas No. 1	New River District	Raleigh Coal & Coke Co.	Raleigh No. 3	New River District
Douglas Coal Co.	Douglas No. 2	New River District	Raleigh Coal & Coke Co.	Raleigh No. 6	New River District
Elkhorn Piney Coal Co.	Elkhorn Piney	New River District	Raleigh Fire Creek Coal Co.	Raleigh Fire Creek No. 1	New River District
Fay-Ral Coal Co.	Fay-Ral	New River District	Raleigh Fire Creek Coal Co.	Raleigh Fire Creek No. 2	New River District
Fire Creek Smokeless Coal Co.	Legs	New River District	Rhodell Coal Co.	Rhodell No. 1	New River District
Flat Top Pocahontas Coal Co.	Flat Top	Pocahontas District	Rhodell Coal Co.	Rhodell No. 2	New River District
Glencoe Coal Co.	Glencoe	New River District	Slab Fork Coal Co.	Slab Fork No. 1	New River District
Gulf Coal Co.	No. 1	New River District	Slab Fork Coal Co.	Slab Fork No. 2	New River District
Gulf Coal Co.	No. 2	New River District	Smith-Pocahontas Coal Co.	Smith-Pocahontas	New River District
Gulf Coal Co.	No. 4	New River District	Sugar Creek Coal & Coke Co.	Sugar Creek	New River District
Gulf Smokeless Coal Co.	Tams No. 1	New River District	Summit Coal Co.	Summit	New River District
Gulf Smokeless Coal Co.	Tams No. 2	New River District	Sunset Mining Co.	Sunset	New River District
Gulf Smokeless Coal Co.	Tams No. 3	New River District	Thermo-Pocahontas Coal Co.	Thermo	Pocahontas District
Gulf Smokeless Coal Co.	Tams No. 4	New River District	Trace Fork Coal Co.	Trace Fork No. 1	New River District
Harty Coal Co.	Harty	Pocahontas District	Vacova Smokeless Fuel Co.	Vacova	New River District
Iroquois Coal Mining Co.	Iroquois	New River District	Virginia Smokeless Fuel Co.	Corinne	Pocahontas District
Leckie Fire Creek Coal Co.	Leckie No. 1	New River District	White, E. E. Coal Co.	Glen White	New River District
Leckie Fire Creek Coal Co.	Leckie No. 2	New River District	White, E. E. Coal Co.	Stotesbury	New River District
Lee Coal Co.	Lee No. 2	New River District	White Oak Coal Co.	Beckley	New River District
Lillybrook Coal Co.	Lillybrook No. 1	New River District	White Oak Coal Co.	Cranberry No. 1	New River District
Lillybrook Coal Co.	Lillybrook No. 2	New River District	White Oak Coal Co.	Cranberry No. 2	New River District
Lynwin Coal Co.	Lynwin	New River District	White Oak Coal Co.	Cranberry No. 3	New River District
MacAlpin Coal Co.	MacAlpin	New River District	White Oak Coal Co.	Dun Loop	New River District
McKell Coal & Coke Co.	Derryhale	New River District	White Oak Coal Co.	Lochgelly	New River District
McKell Coal & Coke Co.	Kilsyth	New River District	White Oak Coal Co.	Mahscott	New River District
McKell Coal & Coke Co.	Oswald	New River District	White Oak Coal Co.	Oakwood	New River District
McKell Coal & Coke Co.	Tamroy	New River District	White Oak Coal Co.	Seabrook	New River District
Mead, C. H. Coal Co.	East Gulf No. 1	New River District	White Oak Coal Co.	Summers	New River District
Mead, C. H. Coal Co.	East Gulf No. 2	New River District	White Oak Coal Co.	Whipple	New River District
Mead, C. H. Coal Co.	East Gulf No. 3	New River District	Willis Branch Coal Co.	Willis Branch	New River District
Mead, C. H. Coal Co.	East Gulf No. 4	New River District	Wilton Smokeless Coal Co.	Wilton	New River District
Mead-Pocahontas Coal Co.	Mead	Pocahontas District	Winding Gulf Colliery Co.	Winding Gulf No. 1	New River District
Mead-Toliver Coal Co.	Killarney	New River District	Winding Gulf Colliery Co.	Winding Gulf No. 2	New River District
Miller-Pocahontas Coal Co.	Miller-Pocahontas	Pocahontas District	Winding Gulf Colliery Co.	Winding Gulf No. 3	New River District
Minter, E. C. Coal Co.	Minter	New River District	Wood-Sullivan Coal Co.	Wood-Sullivan	New River District
Morris Smokeless Coal Co.	No. 1	Pocahontas District	Wyco	Wyco	New River District
Neal Coal Co.	Neal	New River District			

MEDIUM-VOLATILE MINES

POOL No. 8

NAME OF COMPANY	NAME OF MINE	DISTRICT
Ingram Branch Coal Co.	Ingram Branch	Kanawha District
Lick Fork Coal Co.	Lick Fork	Kanawha District
Long Branch Coal Co.	Long Branch	Kanawha District
Loup Creek Colliery Co.	Loup Creek No. 1	Kanawha District

For further information on companies here listed, see the Directory Section of West Virginia.

THE SPECIFIC GRAVITY OF COAL

Two Methods of Determining: Table of Specific Gravities and Weights of Loose Coal for Coals of the United States and Foreign Countries

Specific Gravity—How Found

By the term specific gravity of coal is meant its weight compared with a like volume of water. Thus coal said to have a specific gravity of 1.30 means that it is 1.30 times as heavy as an equal bulk of water. Since the weight of water is usually taken as 62.5 pounds per cubic foot, a like volume of coal would weigh 1.30×62.5 pounds, or 81.25 pounds.

There are various methods of determining specific gravities, but only the two most commonly in use are here described. The first requires the use of a small scale or balance. A clean lump of coal is selected and weighed, preferably by slipping over it a noose of light cord and suspending it from one of the scale pans. The lump is now immersed in water and its apparent weight again noted. The specific gravity is then arrived at by use of the

formula, $\text{Sp. gr.} = \frac{W_a}{W_a - W_w}$, in which W_a = weight

of coal in air; W_w = the apparent weight of coal in water.

The second method involves the use of a stout flask of about 250 cc capacity and having a long and slender neck.* Make a mark by file or etching at the base of neck and carefully determine the capacity of the flask in cubic centimeters up to this mark. This is best done by using a pipette of 100 cc capacity and a burette of similar capacity graduated in 0.2 cc.

Take 100 grams of coal which has been crushed to about 4 mesh, weighing this accurately to .1 of a gram. Place the coal in the flask and add 100 cc of water. Shake the bottle gently in order to disengage all air bubbles entangled in the coal. When air bubbles cease rising, water is run in from the burette. But, before the flask is filled to the mark, 5 c. c. of oil is added from a small pipette. This 5 c. c. of oil must be accurately measured and is, therefore, best added from a 5 c. c. "delivery pipette," or, if desired, a "capacity pipette" may be used. In that case, however, the same pipette should be used in calibrating the flask. After adding the oil, fill the flask to the mark with water. The results may be calculated in accordance with the formula

$\text{Sp. gr.} = \frac{100}{V_o - V_i}$, where 100 equals the weight of

the coal; V_o equals volume of the flask in cc of water to the mark on neck; V_i equals number of cc required to bring water to the mark when coal is in the flask.

As an example, 100 grams of anthracite coal were taken; the volume of the flask, V_o was 262 cc; and the volume of water added to the coal, V_i was 197.

$$\text{Sp. gr.} = \frac{100}{262 - 197} = \frac{100}{65} = 1.54$$

The advantage in using an even 100 units of weight for each test will be apparent as the answer can then be readily read off from a table of reciprocals. Duplicate determinations with the flask method show an accuracy of 0.02 unit of specific gravity.

Practical Value of Information

A knowledge of the specific gravity of coal is important in several ways, one of which is in arriving at the contents of an acre of coal. A difference of merely .01 in the specific gravity makes a difference of 13.6 short tons of solid coal per acre foot, or in the case of a 7½-foot seam this would amount to over 100 tons per acre. In the next place the specific gravity of a coal may help to identify it as coming from a certain seam or locality. Perhaps the most common usage of specific gravities is as an index to its quality, since it bears a definite relation to the ash content of the coal, thus from a given mine coal samples having approximately the same specific gravity will have approximately the same ash content. Fulton† gives the following specific gravities for clean coal and associated impurities:

	Specific Gravity
Water	1.00
Clean coal	1.25 to 1.50
Bone coal	1.45 to 1.80
Slate	2.25 to 2.50
Coal or slate with pyrites...	3.20 to 3.60
Pyrites	5.00 to 5.20

A. G. Blakeley‡ states that for anthracite coal an increase of 1 per cent. in the ash content will correspond to an increase in specific gravity of approximately 0.01. If a coal from a certain mine shows a specific gravity of 1.61, corresponding to 13 per cent. ash content, and a second sample from the same mine shows a specific gravity of 1.80, it may safely be assumed that the second sample will have an ash content of approximately 32 per cent. Averages of hundreds of results on many different coals form the basis on which this statement is made. The specific gravity of a coal, therefore, can be used as a quick means for determining its quality, provided it is known what the average specific gravity of coal from a certain mine or region should be.

In the following table, specific gravities have been given wherever available; in the absence of specific gravity the weight of loose coal is given instead:

*Extracted from a description of the flask method by A. G. Blakeley and E. M. Chance in *Journal of Industrial & Engineering Chemistry*, 1909.

†Coke, second edition, pg. 56.
‡Coal Age, vol. 14, pg. 1078.

ALABAMA

SEAM OR MINE	COUNTY	LOCATION	Specific Gravity	Number Cu. Ft. Per Ton of 2,000 Lbs.		Average Weight Lbs. Per Cubic Foot	
				Solid Coal	Loose Coal	Solid Coal	Loose Coal
*Acton.....	Shelby.....	Acton.....	...	....	37.74	....	53.00 (Nut, Slack & Nut)
*Blocton.....	Bibb.....	Blocton.....	...	....	43.96	....	45.5 (Domestic)
*Corona.....	Walker.....	Corona.....	...	....	37.74	....	53.00 (Lump, Slack & Nut)
Harkness.....	Bibb.....	Lilly Shoals.....	1.35	23.70	....	84.38	....
Harkness.....	Bibb.....	Lilly Shoals.....	1.56	20.51	....	97.50	....
Harkness.....	Bibb.....	Lilly Shoals.....	1.51	21.19	....	94.38	....
*Jagger.....	Walker.....	Townley.....	...	....	39.22	....	51.0
†Jagger.....	Walker.....	Carbon Hill.....	1.37	23.36	....	85.63	....
*Pratt.....	Jefferson.....	Emsley.....	...	....	37.04	....	54.00 (Run of Mine)
Pratt.....	Jefferson.....	Hill Creek.....	1.43	22.38	....	89.38	....
Pratt.....	Jefferson.....	Hill Creek.....	1.41	22.69	....	88.13	....
Pratt.....	Jefferson.....	Hill Creek.....	1.49	21.47	....	93.13	....
Thompson.....	Bibb.....	Hill Creek.....	1.34	23.87	....	83.75	....
Wadsworth.....	Bibb.....	Ardela.....	1.30	24.62	....	81.25	....
Underwood.....	Bibb.....	Garnsey.....	1.38	23.19	....	86.25	....
Wadsworth.....	Bibb.....	Ardela.....	1.48	21.62	....	92.50	....
Youngblood.....	Bibb.....	Belle Ellen.....	1.32	24.24	....	82.50	....

ARKANSAS

*Denning.....	Franklin.....	Denning.....	...	....	33.55	....	59.00 (Run of Mine)
*Denning.....	Franklin.....	Denning.....	...	....	37.74	....	53.00 (Lump)
†Hartshorne.....	Sebastian.....	Midland.....	1.44	22.22	....	90.00	....
*Spadra.....	Johnson.....	Clarksville.....	...	....	38.83	....	51.5

COLORADO

*D.....	Garfield.....	South Canyon.....	...	....	40.82	....	49.0 (Lump, Nut & Slack)
*Crested Butte.....	Gunnison.....	Floresta.....	...	....	38.83	....	51.5 (Lump)
*Trinidad Field.....	Las Animas.....	Aguilar.....	...	....	39.60	....	50.50 (Lump)
*Primrose.....	Las Animas.....	Rugby.....	...	....	40.40	....	49.5
*Smith Anthracite Mine	Gunnison.....	Crested Butte.....	...	....	40.00	....	50.00 (Egg)
*Wheeler.....	Garfield.....	South Canyon.....	...	....	38.01	....	52.5 (Lump)

ILLINOIS

†No. 1.....	Mercer.....	County average.....	1.30	24.62	....	81.25	....
†No. 2.....	Grundy.....	So. Wilmington.....	...	....	40.9	....	48.8 (W., Nut & Pea)
†No. 2.....	Grundy.....	County average.....	1.33	24.06	....	83.13	....
†No. 2.....	La Salle.....	County average.....	1.28	25.0	....	80.0	....
*No. 2.....	La Salle.....	La Salle.....	...	....	44.44	....	45.0 (Lump, Nut & Slack)
†No. 2.....	Jackson.....	County average.....	1.32	24.24	....	82.50	....
†No. 2.....	Marshall.....	County average.....	1.28	25.0	....	80.0	....
*No. 5.....	Fulton.....	St. David.....	...	....	43.01	....	46.5 (Lump, Nut & Slack)
†No. 5.....	Fulton.....	Cuba.....	...	....	37.6	....	53.6 (Screenings)
*No. 5.....	La Salle.....	Cedar Point.....	...	....	43.48	....	46.0 (Lump, Nut & Slack)
†No. 5.....	Logan.....	Lincoln.....	1.31	24.42	....	81.88	....
†No. 5.....	Logan.....	County average.....	1.31	24.42	....	81.88	....
†No. 5.....	Saline.....	Harrisburg.....	...	....	37.9	....	52.8 (Screenings)
*No. 5.....	Saline.....	Harrisburg.....	...	....	43.01	....	46.5 (Lump, Nut & Slack)
*No. 5.....	Saline.....	Eldorado.....	...	....	40.0	....	49.5 (Lump)
†No. 5.....	Sangamon.....	County average.....	1.30	24.62	....	81.25	....
*No. 5.....	Sangamon.....	Andrew.....	...	....	41.67	....	48.0 (Lump, Nut & Slack)
†No. 6.....	Christian.....	Central Illinois Field.....	1.29	24.8	....	80.63	....
†No. 6.....	Christian.....	County average.....	1.31	24.42	....	81.88	....
†No. 6.....	Franklin.....	Zeigler District.....	...	....	44.3	....	45.9 (Range)
†No. 6.....	Franklin.....	Christopher.....	...	....	46.3	....	43.5 (Small Egg)
†No. 6.....	Franklin.....	Christopher.....	...	....	41.8	....	47.9 (Large Egg)
†No. 6.....	Franklin.....	Christopher.....	...	....	41.8	....	47.8 (6" Lump)
†No. 6.....	Franklin.....	Christopher.....	...	....	39.9	....	50.1 (Screenings)
†No. 6.....	Franklin.....	County average.....	1.30	24.62	....	81.25	....
†No. 6.....	Madison.....	County average.....	1.30	24.62	....	81.25	....
*No. 6.....	Madison.....	Maryville.....	...	....	40.0	....	49.5 (Lump)
*No. 6.....	Madison.....	Du Quoin.....	...	....	40.82	....	49.0 (Dom. Lump)
†No. 6.....	Madison.....	Donkville.....	1.26	25.40	....	78.75	....
†No. 6.....	Montgomery.....	County average.....	1.30	24.62	....	81.25	....
†No. 6.....	Perry.....	County average.....	1.33	24.06	....	83.13	....
*No. 6.....	St. Clair.....	Belleville.....	...	....	40.0	....	49.5 (Dom. Lump)
†No. 6.....	Sangamon.....	Auburn.....	1.28	25.0	....	80.0	....
†No. 6.....	Sangamon.....	Thayer.....	...	....	39.9	....	50.1 (Washed Egg)
*No. 6.....	Williamson.....	Carterville.....	...	....	36.04	....	55.5 (Run of Mine)
*No. 6.....	Williamson.....	Herrin.....	...	....	40.82	....	49.0
†No. 6.....	Williamson.....	County average.....	1.31	24.42	....	81.88	....
†No. 6.....	Williamson.....	Bush.....	1.33	24.06	....	83.13	....
†No. 6.....	Williamson.....	Johnson City.....	...	....	43.2	....	46.3 (6x4 Egg)
†No. 7.....	Williamson.....	Danville Field.....	1.28	25.0	....	80.0	....
*No. 7.....	Williamson.....	Marion.....	...	....	41.24	....	48.5 (Lump)
*No. 7.....	Williamson.....	Marion.....	...	....	43.01	....	46.5 (No. 2 Washed)
*No. 7.....	Williamson.....	Johnson City.....	...	....	36.70	....	54.5 (Run of Mine)
†Marysville.....	Williamson.....	Marysville.....	1.29	24.80	....	80.63	....

*Bureau of Mines.
†Commercial Testing & Engineering Co., Chicago, Ill.
‡State Reports.

§Coal Miners' Pocketbook, 11th Edition.
§U. S. Geological Survey.

INDIANA

SEAM OR MINE	COUNTY	LOCATION	Specific Gravity	Number Cu. Ft. Per Ton of 2,000 Lbs.		Average Weight Lbs. Per Cubic Foot	
				Solid Coal	Loose Coal	Solid Coal	Loose Coal
*No. 2.....	Vigo.....	W. Terre Haute.....	...	...	45.45	...	44.0 (Lump, Nut & Slack)
†No. 4.....	Greene.....	Linton.....	...	...	37.5	...	53.3 (Run of Mine)
*No. 4.....	Greene.....	Jasonville.....	...	...	45.45	...	44.0 (Lump)
*No. 4.....	Greene.....	Linton.....	...	...	44.44	...	45.0 (Lump, Nut & Slack)
*No. 4.....	Greene.....	Jasonville.....	...	...	41.24	...	48.5 (Lump, Nut & Slack)
†No. 4.....	Pike.....	.....	...	...	43.8	...	45.7 (Washed Nut)
†No. 4.....	Sullivan.....	Hymera.....	1.39	23.02	...	86.88	...
†No. 4.....	Sullivan.....	Dugger.....	1.30	24.62	...	81.25	...
*No. 4.....	Vermilion.....	Clinton.....	...	...	45.45	...	44.0 (Lump, Nut & Slack)
†No. 5.....	Knox.....	.....	...	...	40.0	...	49.9 (Screenings)
*No. 5.....	Knox.....	Bicknell.....	...	...	40.82	...	49.0 (Lump, Nut & Slack)
*No. 5.....	Knox.....	Bicknell.....	...	...	42.11	...	47.5 (Lump, Nut & Slack)
†No. 5.....	Pike.....	Littles.....	1.40	22.86	...	87.50	...
†No. 5.....	Pike.....	.....	...	...	37.6	...	53.2 1¼" Screenings)
†No. 5.....	Pike.....	Hartwell.....	1.32	24.24	...	82.50	...
†No. 5.....	Sullivan.....	Hymera.....	1.42	22.55	...	88.75	...
*No. 5.....	Sullivan.....	Shelburn.....	...	...	41.67	...	48.0
†No. 5.....	Vigo.....	.....	...	...	46.5	...	43.0 (Run of Mine)
†No. 6.....	Park.....	Rosedale.....	1.29	24.80	...	80.63	...
†No. 7.....	Vigo.....	Terre Haute.....	1.30	24.62	...	81.25	...
†No. 7.....	Vigo.....	Macksville.....	1.36	23.53	...	85.00	...
*.....	Greene.....	Sullivan.....	...	...	44.94	...	44.5 (Lump, Nut & Slack)

IOWA

*Mystic.....	Appanoose.....	Centerville.....	...	...	43.0	...	46.5 (Lump, Nut & Slack)
†Iowa No. 3.....	Boone.....	Ogden.....	1.28	25.0	...	80.0	...
†High Bridge Mine.....	Dallas.....	High Bridge.....	1.28	25.0	...	80.0	...
†Willow Grove Mine.....	Greene.....	Angus.....	1.26	25.4	...	78.75	...
†Colfax No. 8 Mine.....	Jasper.....	Colfax.....	1.25	25.6	...	78.13	...
†Armstrong Mine.....	Keokuk.....	What Cheer.....	1.26	25.4	...	78.75	...
†Bolton No. 2 Mine.....	Mahaska.....	Bolton.....	1.30	24.62	...	81.25	...
†Crescent No. 5 Mine.....	Mahaska.....	White City.....	1.26	25.40	...	78.75	...
*No. 7 Mine.....	Monroe.....	Lovilla.....	...	...	42.11	...	47.5 (Lump, Nut & Slack)
†Hawkeye Mine.....	Marion.....	Knoxville.....	1.29	24.80	...	80.63	...
†Wapello No. 4 Mine.....	Monroe.....	Hiteman.....	1.27	25.2	...	79.38	...
†Blyth Mine.....	Mahaska.....	Rose Hill.....	1.30	24.62	...	81.25	...
†Keystone Mine.....	Polk.....	Des Moines.....	1.26	25.4	...	78.75	...
†Bennett Mine.....	Polk.....	Des Moines.....	1.28	25.0	...	80.0	...
†Enterprise No. 2 Mine.....	Polk.....	Enterprise.....	1.30	24.62	...	81.25	...
†Campbell No. 1 Mine.....	Taylor.....	New Market.....	1.27	25.2	...	79.38	...
†Bear Creek Mine.....	Wapello.....	Ottumwa.....	1.27	25.2	...	79.38	...
†Rutledge No. 5 Mine.....	Wapello.....	Rutledge.....	1.29	24.8	...	80.63	...

KANSAS

*Leavenworth.....	Leavenworth..	Leavenworth.....	...	...	40.0	...	50.0 (Lump, Nut & Slack)
*Leavenworth.....	Leavenworth..	Leavenworth.....	...	...	36.04	...	55.5 (Lump, Nut & Slack)
†Weir-Pittsburg.....	Linn.....	Jewett.....	1.34	23.88	...	83.75	...

KENTUCKY

†Amburgy.....	Letcher.....	Smoot Creek.....	1.40	22.86	...	87.50	...
†Amburgy.....	Letcher.....	Elkhorn Branch.....	1.33	24.06	...	83.13	...
*Bituminous.....	Whitley.....	Red Ash.....	...	...	42.55	...	47.0 (Lump, Nut & Slack)
†Cannel.....	Clay.....	Manchester.....	1.60	20.00	...	100.00	...
*Colvin Mine.....	Magoffin.....	.....	1.24	25.81	...	77.50	...
†Dean.....	.....	.....	...	...	40.2	...	49.8 (Lump)
†Dean.....	.....	.....	...	...	40.5	...	49.7 (Egg)
†Dean.....	Knox.....	.....	...	...	38.3	...	52.2 (Nut & Slack)
†Elkhorn.....	Letcher.....	Fleming.....	1.29	24.80	...	80.63	...
†Elkhorn.....	Letcher.....	Seco.....	1.28	25.0	...	80.0	...
†Elkhorn.....	Letcher.....	Camp Branch.....	1.30	24.62	...	81.25	...
†Fire Clay.....	Clay.....	Manchester.....	1.29	24.80	...	80.63	...
†Fire Clay.....	Letcher.....	Daniels Branch.....	1.27	25.2	...	79.38	...
†Fire Clay.....	Letcher.....	Holcomb Branch.....	1.28	25.0	...	80.0	...
†Fire Clay.....	Letcher.....	Turkey Creek.....	1.30	24.62	...	81.25	...
†Flagg.....	Breathitt.....	Fifteen Mile Creek...	1.34	23.87	...	83.75	...
†Flagg.....	Letcher.....	Doty Branch.....	1.29	24.80	...	80.63	...
†Flagg.....	Letcher.....	Shipley Fork.....	1.30	24.62	...	81.25	...
†Haddix.....	Breathitt.....	Sixteen Mile Creek...	1.30	24.62	...	81.25	...
*Haddix Mine.....	Breathitt.....	Haddix.....	1.21	26.44	...	75.63	...
†Haddix.....	Letcher.....	Cornett Branch.....	1.32	24.24	...	82.50	...
†Hamlin.....	Letcher.....	Kingdom Come Creek..	1.28	25.0	...	80.0	...

(Continued on Next Page)

*Bureau of Mines.
†Commercial Testing & Engineering Co., Chicago, Ill.

‡State Reports.
§Coal Miners' Pocketbook, 11th Edition.

KENTUCKY—Continued

SEAM OR MINE	COUNTY	LOCATION	Specific Gravity	Number Cu. Ft. Per Ton of 2,000 Lbs.		Average Weight Lbs. Per Cubic Foot	
				Solid Coal	Solid Coal	Solid Coal	Loose Coal
†Harlan.....	Harlan.....	Howard Mine.....	1.30	24.62	....	81.25	....
†Harlan.....	Harlan.....	.....	...	....	40.8	....	49.0 (Nut & Slack)
†Harlan.....	Harlan.....	.....	...	....	45.0	....	44.4 (Lump)
†Hazard.....	.....	Baker Mine.....	1.26	25.40	....	78.75	....
†Hazard.....	Letcher.....	Elk Creek.....	1.33	24.06	....	83.13	....
†Hazard.....	Perry.....	Staub.....	1.30	24.62	....	81.25	....
†Hazard.....	Perry.....	Typo.....	1.35	23.70	....	84.38	....
†High Splint.....	Harlan.....	Big Black Mt.....	1.30	24.62	....	81.25	....
†Hindman.....	Letcher.....	Daniels Branch.....	1.33	24.06	....	83.13	....
†Imboden.....	Letcher.....	Franks Creek.....	1.32	24.24	....	82.50	....
*Jellico.....	Knox.....	Wilton.....	...	....	42.11	....	47.5 (Lump)
*Jellico.....	Whitley.....	Mountain Ash.....	...	....	46.51	....	43.0 (Lump, Nut & Slack)
*Jellico.....	Whitley.....	Williamsburg.....	...	....	44.44	....	45.0 (Lump)
†Keokee.....	Letcher.....	Big Looney Creek....	1.20	26.67	....	75.0	....
*Little's Mine.....	.....	Quicksand Creek.....	1.39	23.00	....	86.88	....
†Manchester.....	Clay.....	Oneida.....	1.29	24.80	....	80.63	....
†No. 1.....	Johnson.....	Paintsville.....	1.28	25.0	....	80.0	....
†No. 9.....	Hopkins.....	Dawson Springs Quad.	1.34	23.87	....	83.75	....
*No. 9.....	Muhlenburg.....	Central City.....	1.44	22.22	....	90.0	....
*No. 9.....	Union.....	Sturgis.....	...	....	40.4	....	49.5 (Lump, Nut & Slack)
*No. 9.....	Webster.....	Clay.....	...	....	43.01	....	46.5 (Lump, Nut & Slack)
*No. 9.....	Webster.....	Clay.....	...	....	38.83	....	51.5 (Lump, Nut & Slack)
†Penny.....	Letcher.....	Pine Creek.....	1.26	25.4	....	78.75	....
†Shelby Gap.....	Letcher.....	Shelby Gap.....	1.29	24.80	....	80.63	....
†Straight Creek.....	Bell.....	Big Hill Mine.....	1.26	25.40	....	78.75	....
†Straight Creek.....	Bell.....	Pineville.....	1.32	24.24	....	82.50	....
†Straight Creek.....	Bell.....	Pineville.....	1.27	25.2	....	79.38	....
†Straight Creek.....	Bell.....	Cainy Creek.....	1.28	25.0	....	80.0	....
†Straight Creek.....	Bell.....	Howard Branch.....	1.27	25.2	....	79.38	....
†Straight Creek.....	Bell.....	Straight Creek.....	1.40	22.86	....	87.50	....
*Straight Creek.....	Bell.....	Kettle Island.....	...	....	43.96	....	45.5 (Lump)
*Straight Creek.....	Bell.....	Cary.....	...	....	36.7	....	54.5 (Lump, Nut & Slack)
*Straight Creek.....	Bell.....	Arjay.....	...	....	43.96	....	45.5 (Lump, Nut & Slack)
*Straight Creek.....	Bell.....	Straight Creek.....	...	....	45.45	....	44.0 (Lump, Nut & Slack)
†Whitesburg.....	Letcher.....	Camp Branch.....	1.27	25.2	....	79.38	....
†.....	Bell.....	Fox Ridge.....	...	....	37.4	....	53.4 (Nut & Slack)
†.....	Bell.....	Fox Ridge.....	...	....	45.0	....	44.4 (Lump)
*.....	Breathitt.....	Troublesome Creek...	1.27	25.2	....	79.38	....
*.....	Breathitt.....	Nichols Fork.....	1.18	27.12	....	73.75	....
*.....	Carter.....	Boghead.....	1.14	28.07	....	71.25	....
*.....	Greenup.....	Chinns Branch.....	1.33	24.06	....	83.13	....
*.....	Harlan.....	Martins Fork.....	1.51	21.2	....	94.38	....
*.....	Jackson.....	Horselick Creek.....	1.32	24.24	....	82.50	....
*.....	Johnson.....	Lick Branch.....	1.29	24.80	....	80.63	....
*.....	Osley.....	Booneville.....	1.16	27.58	72.50

MARYLAND

†Kittanning, Lower....	Garrett.....	Westernport.....	1.41	22.7	81.13
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MISSOURI

†.....	Randolph.....	Huntsville.....	1.36	23.53	85.00
†Cannel.....	Bunceton.....	1.19	26.9	74.38
†Cannel.....	Moniteau.....	Versailles.....	1.12	28.57	....	70.0	....
†Cannel.....	Morgan.....	Ouachita Mine.....	1.64	19.51	....	102.50	....
†Cannel.....	Morgan.....	Barnett.....	1.38	23.18	....	86.25	....
†Cannel.....	.....	Wainwright.....	1.38	23.18	....	86.25	....

MONTANA

*No. 3.....	Carbon.....	Bear Creek.....	...	....	38.46	....	52.0 (Lump, Nut & Slack)
*.....	Cascade.....	Sand Coulee.....	...	....	38.01	....	52.5 (Lump, Nut & Slack)

NEW MEXICO

*Navajo Mine.....	McKinley.....	Gibson.....	...	....	43.01	....	46.5 (Lump, Nut & Slack)
†Raton.....	Colfax.....	Blossburg.....	1.35	23.70	....	84.38	....
†Brilliant Mine.....	Colfax.....	Brilliant.....	1.39	23.00	....	86.88	....
†Van Houten Mine.....	Colfax.....	Van Houten.....	1.37	23.36	....	85.63	....

NORTH DAKOTA

†Lignite.....	McLean.....	Wilton.....	1.23	26.01	....	76.88	....
†Lignite.....	Stark.....	Lehigh.....	1.44	22.22	....	90.0	....

*Bureau of Mines.

†Commercial Testing & Engineering Co., Chicago, Ill.

‡State Reports.

‡Coal Miners' Pocketbook, 11th Edition.

OHIO

SEAM OR MINE	COUNTY	LOCATION	Specific Gravity	Number Cu. Ft. Per Ton of 2,000 Lbs.		Average Weight Lbs. Per Cubic Foot	
				Solid Coal	Loose Coal	Solid Coal	Loose Coal
*Freeport, Upper.....	Guernsey.....	Cambridge.....	....	43.01	....	46.5	(Lump, Nut & Slack)
*Freeport, Upper.....	Guernsey.....	Klondyke.....	....	43.5	....	46.0	(Lump, Nut & Slack)
*Kittanning, Middle.....	Athens.....	Nelsonville.....	....	40.82	....	49.0	(Lump, Nut & Slack)
†No. 4.....	Jackson.....	Wellston.....	1.35	23.70	....	84.38	....
†No. 4.....	Vinton.....	Clarion.....	1.36	23.53	....	85.00	....
†No. 5.....	Jackson.....	Wellston.....	1.36	23.53	....	85.00	....
†No. 6.....	Perry.....	Shawnee.....	1.33	24.06	....	83.13	....
†No. 6.....	Perry.....	Dixie.....	1.42	22.55	....	88.75	....
†No. 7.....	Guernsey.....	Danford.....	1.34	23.87	....	83.75	....
†No. 7.....	Hocking.....	....	....	39.8	....	50.2	(Lump)
†No. 8.....	Jefferson.....	Rush Run.....	1.33	24.06	....	83.13	....
†No. 8.....	Jefferson.....	Bradley.....	1.39	23.00	....	86.88	....
*Pittsburgh.....	Jefferson.....	Piney Fork.....	....	42.11	....	47.5	(Lump, Nut & Slack)
†.....	Jackson.....	....	....	36.9	....	54.2	(Lump)

OKLAHOMA

*Hartshorne.....	Pittsburg.....	Buck.....	....	43.91	....	45.5	....
*Henryetta.....	Okmulgee.....	Henryetta.....	....	41.24	....	48.5	(Lump, Nut & Slack)
*Henryetta.....	Okmulgee.....	Dewar.....	....	40.0	....	50.0	(Lump, Nut & Slack)
*Henryetta.....	Okmulgee.....	Dewar.....	....	40.0	....	50.0	(Lump, Nut & Slack)

PENNSYLVANIA—Anthracite

*Big Diamond.....	Schuylkill.....	Phoenix Pk. No. 2 Clry	1.52	21.05	....	95.00	....
*Black Heath.....	Luzerne.....	Franklin Colliery.....	1.53	20.90	....	95.63	....
*Black Heath.....	Schuylkill.....	Otto Colliery.....	1.61	19.88	....	100.63	....
*Black Heath.....	....	Swatara Colliery.....	1.58	20.25	....	98.75	....
*Buck Mountain.....	Schuylkill.....	Middle Creek Clry.....	1.55	20.64	....	96.88	....
*Buck Mt., Bottom.....	Luzerne.....	Franklin Colliery.....	1.52	21.05	....	95.0	....
*Buck Mt., Top.....	Luzerne.....	Franklin.....	1.50	21.33	....	93.75	....
*Buck Mountain.....	....	Western-Middle Field.....	1.67	19.16	....	104.38	....
*Buch Run Anth.....	....	....	....	37.38	....	53.5	(Pea)
*D. & H. Anth.....	....	....	....	36.7	....	54.5	(Pea)
*D. & H. Anth.....	....	....	....	35.1	....	57.0	(Egg)
*D. L. & W. Anth.....	....	....	....	34.5	....	58.0	(Egg)
*D. L. & W. Anth.....	....	....	....	38.46	....	52.0	(Furnace)
*D. L. & W. Anth.....	....	....	....	35.4	....	56.5	(Chestnut)
*D. L. & W. Anth.....	....	....	....	36.0	....	55.0	(Furnace)
*D. L. & W. Anth.....	Schuylkill.....	....	....	34.5	....	58.0	(Egg)
*Holmes.....	Schuylkill.....	Middle Creek Clry.....	1.55	20.64	....	96.88	....
*Hazelton Anth.....	Luzerne.....	Beaver Brook.....	....	35.71	....	56.0	(Egg)
*Anthracite.....	Lackawanna.....	Seranton.....	....	38.10	....	52.5	(Chestnut)
*Anthracite.....	Lackawanna.....	Lackawanna Dist.....	....	37.04	....	54.0	(Egg)
*Anthracite.....	Luzerne.....	Nanticoke.....	....	36.7	....	54.5	(Furnace)
*Anthracite.....	Luzerne.....	Wilkes-Barre.....	....	36.7	....	54.5	(Furnace)
*Anthracite.....	Luzerne.....	Wilkes-Barre.....	....	34.8	....	57.5	(Egg)
*Leader, Top.....	Luzerne.....	Franklin Colliery.....	1.54	20.8	....	96.25	....
*Lykens Val. No. 2.....	....	Heits Colliery.....	1.50	21.33	....	93.75	....
*Lykens Val. No. 5.....	Schuylkill.....	E. Brookside Clry.....	1.44	22.22	....	90.00	....
*Lykens Val. No. 5.....	Schuylkill.....	W. Brookside Clry.....	1.46	21.92	....	91.25	....
*Lykens Val. No. 6.....	Schuylkill.....	Lincoln Colliery.....	1.47	21.77	....	91.88	....
*Lykens Val. No. 4.....	Schuylkill.....	Lincoln Colliery.....	1.42	22.55	....	88.75	....
*Lykens Val. No. 3.....	Schuylkill.....	Lincoln Colliery.....	1.45	22.07	....	90.63	....
*Lykens Val. No. 1.....	Schuylkill.....	Lincoln Colliery.....	1.48	21.62	....	92.50	....
*Lykens Val. No. 6.....	....	Katmia Colliery.....	1.40	22.86	....	87.50	....
*Lykens Val. No. 5.....	....	Katmia Colliery.....	1.48	21.62	....	92.50	....
*Lykens Val. No. 4.....	....	Katmia Colliery.....	1.43	22.38	....	89.38	....
*Lykens Val. No. 2.....	....	Katmia Colliery.....	1.45	22.08	....	90.63	....
*Lykens Val. No. 1.....	Luzerne.....	Franklin Colliery.....	1.50	21.33	....	93.75	....
*Mammoth.....	....	Northern Field.....	1.58	20.25	....	98.75	....
*Mammoth.....	....	Southern Field.....	1.63	19.63	....	101.88	....
*Mammoth.....	....	Western-Middle Field.....	1.66	19.28	....	103.75	....
*Mammoth, Bottom.....	....	Colket Colliery.....	1.51	21.19	....	94.38	....
*Mammoth, Bottom.....	Schuylkill.....	Otto Colliery.....	1.59	20.12	....	99.38	....
*Mammoth, Bottom.....	Schuylkill.....	Rausch Colliery.....	1.49	21.47	....	93.13	....
*Mammoth, Top.....	....	Colket Colliery.....	1.51	21.19	....	94.38	....
*Mammoth, Top.....	Schuylkill.....	Middle Creek Clry.....	1.57	20.38	....	98.13	....
*Mammoth, Top.....	Schuylkill.....	Otto Colliery.....	1.57	20.38	....	98.13	....
*Mammoth, Top.....	Schuylkill.....	Rausch Colliery.....	1.50	21.33	....	93.75	....
*Mammoth, Top.....	....	Swatara Colliery.....	1.54	20.8	....	96.25	....
*P. & R. Anth.....	....	....	....	37.04	....	51.0	(Pea)
*Primrose.....	....	Colket.....	1.54	20.8	....	96.25	....
*Primrose.....	Luzerne.....	Franklin Colliery.....	1.57	20.38	....	98.13	....
*Primrose.....	Schuylkill.....	Middle Creek Clry.....	1.51	21.19	....	94.38	....
*Primrose.....	Schuylkill.....	Otto Colliery.....	1.56	20.51	....	97.50	....
*Primrose.....	Schuylkill.....	Phoenix Pk. No. 2 Clry	1.56	20.51	....	97.50	....
*Primrose.....	Schuylkill.....	Southern Field.....	1.58	20.25	....	98.75	....
*Primrose.....	....	Swatara Colliery.....	1.58	20.25	....	98.75	....

(Continued on Next Page)

*Bureau of Mines.

†Commercial Testing & Engineering Co., Chicago, Ill.

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PENNSYLVANIA—Anthracite—Continued

SEAM OR MINE	COUNTY	LOCATION	Specific Gravity	Number Cu. Ft. Per Ton of 2,000 Lbs.		Average Weight Lbs. Per Cubic Foot	
				Solid Coal	Loose Coal	Solid Coal	Loose Coal
§ Primrose.....		Western-Middle Field.	1.65	19.39	....	103.13	....
° Rough Vein.....	Schuylkill.....	Middle Creek Clry....	1.73	18.5	....	108.13	....
° Rough Vein.....	Schuylkill.....	Otto Colliery.....	1.53	20.90	....	95.63	....
° Rough Vein.....		Swatara Colliery.....	1.58	20.25	....	98.75	....
† Anthracite.....	Lackawanna.....	Scranton.....	....	....	35.0	....	57.1 (Large Egg)
† Anthracite.....	Lackawanna.....	Scranton.....	....	....	35.3	....	56.6 (Small Egg)
† Anthracite.....	Lackawanna.....	Scranton.....	....	....	36.7	....	54.5 (Range)
† Anthracite.....	Lackawanna.....	Scranton.....	....	....	34.8	....	57.4 (Chestnut)
† Anthracite.....	Lackawanna.....	Scranton.....	....	....	34.7	....	57.6 (Buckwheat)
† Anthracite.....	Schuylkill.....	.....	....	....	37.2	....	53.7 (Large Egg)
† Anthracite.....	Schuylkill.....	.....	....	....	36.4	....	55.0 (Small Egg)
† Anthracite.....	Schuylkill.....	.....	....	....	34.1	....	58.6 (Chestnut)
† Anthracite.....	Schuylkill.....	.....	....	....	34.2	....	58.5 (Range)
† Anthracite.....	Schuylkill.....	.....	....	....	33.6	....	59.6 (Buckwheat)
† Anthracite.....	Schuylkill.....	.....	....	....	36.4	....	55.0 (Pea)
§ Seven Foot.....		Western-Middle Field.	1.65	19.38	....	103.13	....
° Skidmore.....	Luzerne.....	Franklin Colliery.....	1.59	20.12	....	99.38	....
° Skidmore.....	Schuylkill.....	Valley View Clry....	1.44	22.22	....	90.0	....
* Susquehanna Anth.....	Luzerne.....	.....	....	....	38.10	....	52.5 (Chestnut)
† Susquehanna Anth.....	.....	.....	....	....	36.6	....	54.7 (Large Egg)
† Susquehanna Anth.....	.....	.....	....	....	36.0	....	55.5 (Small Egg)
† Susquehanna Anth.....	.....	.....	....	....	36.2	....	55.2 (Range)
† Susquehanna Anth.....	.....	.....	....	....	35.7	....	56.1 (Chestnut)
† Susquehanna Anth.....	.....	.....	....	....	36.6	....	54.6 (Pea)
† Susquehanna Anth.....	.....	.....	....	....	37.1	....	53.9 (Buckwheat)
§ Wharton.....		Eastern-Middle Field.	1.62	19.75	....	101.25	....

PENNSYLVANIA—Bituminous

* Freeport, Lower.....	Cambria.....	Saxman.....	....	....	38.46	....	52.0 (Lump, Nut & Slack)
* Freeport, Lower.....	Clearfield.....	Du Bois.....	....	....	37.74	....	53.0 (Lump, Nut & Slack)
* Freeport, Lower.....	Clearfield.....	Jefferson Line.....	....	....	39.22	....	51.0 (Lump, Nut & Slack)
* Freeport, Lower.....	Clearfield.....	Du Bois.....	....	....	36.7	....	54.5 (Lump, Nut & Slack)
* Freeport, Lower.....	Clearfield.....	Carnwarth.....	....	....	40.0	....	49.5 (Lump, Nut & Slack)
* Freeport, Lower.....	Clearfield.....	Curwensville.....	....	....	39.22	....	51.0 (Lump, Nut & Slack)
* Freeport, Lower.....	Elk.....	Dagus Mines.....	....	....	40.0	....	50.0 (Lump, Nut & Slack)
* Freeport, Lower.....	Elk.....	Crenshaw.....	....	....	38.84	....	51.5 (Lump, Nut & Slack)
* Freeport, Lower.....	Jefferson.....	Brockwayville.....	....	....	38.46	....	52.0 (Lump, Nut & Slack)
* Freeport, Lower.....	Jefferson.....	Pardus.....	....	....	40.0	....	49.5 (Lump, Nut & Slack)
* Freeport, Lower.....	Jefferson.....	Reynoldsville.....	....	....	39.6	....	50.5 (Lump, Nut & Slack)
* Freeport, Upper.....	Armstrong.....	Yatesboro.....	....	....	40.0	....	49.5 (Lump, Nut & Slack)
* Freeport, Upper.....	Armstrong.....	Sagamore.....	....	....	39.6	....	50.5 (Lump, Nut & Slack)
* Freeport, Upper.....	Armstrong.....	Seminole.....	....	....	39.6	....	50.5 (Lump, Nut & Slack)
* Fulton.....	Huntingdon.....	Robertsdale.....	....	....	37.04	....	54.0 (Lump, Nut & Slack)
* Kittanning, Lower.....	Armstrong.....	Leechburg.....	....	....	40.0	....	50.0 (Lump, Nut & Slack)
* Kittanning, Lower.....	Cambria.....	Portage.....	....	....	38.84	....	51.5 (Lump, Nut & Slack)
* Kittanning, Lower.....	Cambria.....	Dunlo.....	....	....	38.46	....	52.0 (Lump, Nut & Slack)
* Kittanning, Lower.....	Cambria.....	Expedit.....	....	....	38.46	....	52.0 (Lump, Nut & Slack)
* Kittanning, Lower.....	Cambria.....	South Fork.....	....	....	39.22	....	51.0 (Lump, Nut & Slack)
* Kittanning, Lower.....	Cambria.....	Twin Rocks.....	....	....	38.10	....	52.5 (Lump, Nut & Slack)
* Kittanning, Lower.....	Cambria.....	Ehrenfeld.....	1.36	23.53	....	85.00	....
* Kittanning, Lower.....	Clearfield.....	Madera.....	....	....	38.46	....	52.0 (Lump, Nut & Slack)
* Kittanning, Lower.....	Clearfield.....	Madera.....	....	....	38.46	....	52.0 (Lump, Nut & Slack)
* Kittanning, Lower.....	Clearfield.....	Hawk Run.....	....	....	40.0	....	49.5 (Lump, Nut & Slack)
* Kittanning, Lower.....	Clearfield.....	Osceola Mills.....	....	....	38.10	....	52.5 (Lump, Nut & Slack)
* Kittanning, Lower.....	Jefferson.....	Summerville.....	....	....	40.0	....	49.5 (Lump, Nut & Slack)
* Kittanning, Lower.....	Somerset.....	McDonaldton.....	....	....	38.1	....	52.5 (Lump, Nut & Slack)
* Kittanning, Lower.....	Somerset.....	McDonaldton.....	....	....	38.46	....	52.0 (Lump, Nut & Slack)
* Kittanning, Lower.....	Somerset.....	Kimmelton.....	1.39	23.00	....	86.88	....
* Kittanning, Upper.....	Cambria.....	Portage.....	....	....	38.84	....	51.5 (Lump, Nut & Slack)
* Kittanning, Upper.....	Fayette.....	Rogers Mills.....	....	....	42.55	....	47.0 (Lump, Nut & Slack)
* Kittanning, Upper.....	Somerset.....	Somerset.....	....	....	37.74	....	53.0 (Lump, Nut & Slack)
* Kittanning, Upper.....	Somerset.....	Holsopple.....	....	....	36.0	....	55.0 (Lump, Nut & Slack)
* Kittanning, Upper.....	Somerset.....	Ralplhton.....	....	....	37.38	....	53.5 (Lump, Nut & Slack)
* Kittanning, Upper.....	Somerset.....	Ralplhton.....	....	....	38.46	....	52.0 (Lump, Nut & Slack)
* Kittanning, Upper.....	Somerset.....	Boswell.....	....	....	36.0	....	55.0 (Lump, Nut & Slack)
* Pittsburgh.....	Allegheny.....	Epton.....	....	....	43.01	....	46.5 (Lump)
* Pittsburgh.....	Allegheny.....	Bruceton.....	1.36	23.53	....	85.00	....
* Pittsburgh.....	Washington.....	Wyano.....	....	....	40.0	....	49.5 (Lump, Nut & Slack)
* Pittsburgh.....	Washington.....	Atlasburg.....	....	....	41.24	....	48.5 (Lump, Nut & Slack)
* Pittsburgh.....	Washington.....	Shoring.....	....	....	36.7	....	54.5 (Lump)
* Pittsburgh.....	Washington.....	Ellsworth.....	1.33	24.06	....	83.13	....
* Pittsburgh.....	Washington.....	Ellsworth.....	1.31	24.42	....	81.88	....
* Pittsburgh.....	Westmoreland.....	Ligonier.....	1.41	22.69	....	88.13	....
* Pittsburgh.....	Westmoreland.....	E. Millsboro.....	1.33	24.06	....	83.13	....
* Pittsburgh.....	Westmoreland.....	Greensburg.....	1.35	23.70	....	84.38	....
* Wilson No. 2 Mine.....	Clarion.....	Clarion.....	....	....	42.55	....	47.0 (Lump, Nut & Slack)

*Bureau of Mines.

†Commercial Testing & Engineering Co., Chicago, Ill.

‡Coal Miners' Pocketbook, 11th Edition.

§U. S. Geological Survey.

°J. J. Tierney, Philadelphia, Pa.

TENNESSEE

SEAM OR MINE	COUNTY	LOCATION	Specific Gravity	Number Cu. Ft. Per Ton of 2,000 Lbs.		Average Weight Lbs. Per Cubic Foot	
				Solid Coal	Loose Coal	Solid Coal	Loose Coal
*Blue Gem.....	Campbell.....	Jellico.....	...	....	42.55	....	47.0 (Lump, Nut & Slack)
*Blue Gem.....	Campbell.....	Woodridge.....	...	....	44.0	....	45.5 (Lump, Nut & Slack)
†Bon Air.....	Fentress.....	Wilder.....	1.39	23.00	....	86.88	....
*Coal Creek.....	Anderson.....	Briceville.....	...	....	43.5	....	46.0 (Lump, Nut & Slack)
†Coal Creek.....	Roane.....	Oliver Springs.....	1.37	23.36	....	85.63	....
*Hiawatha Mine.....	Rhea.....	Hiawatha.....	...	....	45.0	....	44.5 (Lump, Nut & Slack)
*Jellico.....	Campbell.....	Woodridge.....	...	....	44.44	....	45.0 (Lump, Nut & Slack)
†Log Mountain.....	Campbell.....	Gatliff.....	1.33	24.06	....	83.13	....
*Mingo.....	Claiborne.....	Bryson.....	...	....	42.11	....	47.5 (Lump, Nut & Slack)
†Regal Block.....	Campbell.....	Gatliff.....	1.32	24.24	....	82.5	....
*Rich Mountain.....	Campbell.....	Westbourne.....	...	....	44.44	....	45.0 (Lump, Nut & Slack)
*Richland No. 5.....	Rhea.....	Graysville.....	...	....	39.22	....	51.0 (Lump, Nut & Slack)
†Sewanee, Lower.....	Cumberland.....	Waldensia.....	1.31	24.42	....	81.88	....
*Sewanee.....	Marion.....	Whitwell.....	...	....	40.0	....	50.0 (Lump, Nut & Slack)
†Sewanee.....	White.....	Clifty.....	1.37	23.36	....	85.63	....
*Soddy No. 7.....	Hamilton.....	Soddy.....	...	....	40.4	....	49.5 (Lump, Nut & Slack)

TEXAS

†Lignite.....	Milan.....	Olsen.....	1.25	25.6	....	78.13	....
†Lignite.....	Wood.....	Hoyte.....	1.26	25.4	....	78.75	....

VIRGINIA

†Banner, Upper.....	Wise.....	Tom's Creek.....	1.28	25.0	....	80.0	....
§Barr's Deep Run.....	...	Richmond Area.....	1.38	23.19	....	86.25	....
§Chesterfield.....	Chesterfield...	Richmond Area.....	1.30	24.62	....	81.25	....
§Clover Hill.....	...	Richmond Area.....	1.29	24.80	....	80.63	....
§Crouch & Sneads.....	...	Richmond Area.....	1.45	22.07	....	90.63	....
†High Splint.....	Wise.....	Pardee.....	1.31	24.42	....	81.88	....
†McConnell.....	Lee.....	Crab Orchard.....	1.37	23.36	....	85.63	....
§Midlothian.....	Chesterfield...	Richmond Area.....	1.29	24.80	....	80.63	....
†No. 5.....	Lee.....	Darby.....	1.28	25.0	....	80.0	....
†Wilson.....	Lee.....	Crab Orchard.....	1.32	24.24	....	82.50	....

WASHINGTON

†Lignite.....	King.....	Renton.....	1.33	24.06	....	83.13	....
*Roslyn.....	Kittitas.....	Roslyn.....	...	....	37.38	....	53.5 (Lump, Nut & Slack)
†Roslyn.....	Kittitas.....	Roslyn.....	1.39	23.00	....	86.88	....
*.....	Rhea.....	Black Diamond.....	...	....	47.86	....	42.0 (Briquets)

WEST VIRGINIA

†Bakerstown.....	Preston.....	Bretz.....	1.41	22.69	....	88.13	....
*Beckley.....	Raleigh.....	Winding Gulf.....	...	....	48.8	....	41.0 (Briquets)
†Cedar Grove.....	Mingo.....	Glen Alum.....	1.34	23.87	....	83.75	....
†Coalburg.....	Kanawha.....	Acme.....	1.34	23.87	....	83.75	....
†Eagle.....	Fayette.....	Page.....	1.28	25.0	....	80.0	....
†Freeport, Upper.....	Preston.....	Bretz.....	1.35	23.70	....	84.38	....
†No. 2 Gas.....	Fayette.....	Ansted.....	1.30	24.62	....	81.25	....
*Pocahontas No. 3.....	McDowell.....	Davy.....	...	....	37.74	....	53.0 (Lump, Nut & Slack)
*Pocahontas No. 3.....	McDowell.....	...	...	....	35.4	....	56.5
*Pocahontas No. 3.....	Mercer.....	Freeman.....	...	....	36.36	....	55.00 (Lump, Nut & Slack)
†Pittsburgh.....	Harrison.....	Clarksburg.....	1.31	24.42	....	81.88	....
†Pittsburgh.....	Marion.....	Monongah.....	1.35	23.70	....	84.38	....
†Sewell.....	Fayette.....	McDonald.....	1.38	23.18	....	86.25	....
†Winifrede.....	Kanawha.....	Winifrede.....	1.34	23.87	....	83.75	....

WYOMING

*Blairtown Mine.....	Sweetwater...	Rock Springs.....	...	....	39.60	....	50.5 (Lump, Nut & Slack)
†Cambria Mine.....	Weston.....	Cambria.....	1.37	23.36	....	85.63	....
*E Mine.....	Sweetwater.....	Superior.....	...	....	42.55	....	47.0 (Lump, Nut & Slack)
*Gebo.....	Hot Springs.....	Gebo.....	...	....	38.1	....	52.5
†Hanna Mine.....	Carbon.....	Hanna.....	1.35	23.70	....	84.38	....
*Monarch.....	Sheridan.....	Kooi.....	...	....	44.0	....	45.5
†Stillwell Mine.....	Crook.....	Aladdin.....	1.40	22.86	....	87.50	....
†.....	Sweetwater.....	Rock Springs.....	1.30	24.62	....	81.25	....
†.....	Campbell.....	Brooks Mine.....	1.44	22.22	....	90.0	....

*Bureau of Mines.
†State Reports.

†Coal Miners' Pocketbook, 11th Edition.
§U. S. Geological Survey.

FOREIGN COUNTRIES

NORTH AMERICA

LOCATION	NAME OF COAL	Specific Gravity	No. of Cu. Ft. per Ton of 2,000 Lbs. Solid Coal	Wt. Per Cu. Ft. of Solid Coal
GREENLAND				
Atanikerdluk.....	*Cretaceous	1.38	23.18	86.25
Rittenbenks Kulbrud.....	*Tertiary	1.40	22.86	87.50

EUROPE

ENGLAND				
Derbyshire, Birley.....	‡Silkstone Seam (Gas).....	1.28	25.03	79.9
Lancashire, Wigan.....	‡Deep Arley (Gas, House).....	1.28	25.00	80.00
Staffordshire, Apedale.....	‡7 Ft. Seam (Gas, Steam, House).....	1.276	28.08	79.75
ITALY				
Alpes.....	*Anthracite.....	2.11	15.09	131.88
Alpes.....	*Anthracite.....	2.02	15.84	126.25
Alpes.....	*Anthracite.....	1.92	16.67	120.00
Alpes.....	*Anthracite.....	1.82	17.58	113.75
Alpes.....	*Anthracite.....	1.91	16.74	119.38
RUSSIA				
Dombrova Basin.....	*Reden Seam.....	1.32	24.24	82.50
Dombrova Basin.....	*Reden Seam.....	1.31	24.42	81.88
Dombrova Basin.....	*Reden Seam.....	1.36	23.53	85.00
Dombrova Basin.....	*Reden Seam.....	1.28	25.00	80.00
Dombrova Basin.....	*Reden Seam.....	1.33	24.06	83.13
Verckchala River.....	*Sub-Reden Seam.....	1.28	25.00	80.00
Volchansky Mine.....	*Lignite.....	1.32	24.24	82.50
Volchansky Mine.....	*Lignite.....	1.36	23.53	85.00
		1.34	23.88	83.75
SCOTLAND				
Ayrshire, Caprington.....	‡Anthracite.....	1.37	23.53	85.00
Clackmannan, Alboa.....	‡Alboa (Steam).....	1.26	25.48	78.50
Dumfriesshire, Fauldhead.....	‡Coking (House, Steam).....	1.21	26.36	75.88
Edinburgh, Armiston.....	‡Cannel (Gas).....	1.29	26.87	74.50
Edinburgh, Dalkeith.....	‡Great Seam (Splint, Gas).....	1.25	25.70	77.81
Edinburgh, Penicuik.....	‡Corbie Jewel (House).....	1.21	26.32	76.00
Fifeshire, Glencraig.....	‡Lochgelly (Steam, House).....	1.31	24.43	81.87
Fifeshire, Lochgelly.....	‡Cannel (Gas).....	1.32	24.24	82.50
Haddington, Preston Links.....	‡Ft. Crown Hartley Jewel.....	1.29	25.00	80.00
Lanark, Aikenhead.....	‡Aikenhead Cannel (Gas).....	1.27	25.16	79.50
Lanark, Cadzow.....	‡Cadzow Cannel (Gas).....	1.255	25.50	78.44
Lanark, Cadzow.....	‡Cadzow Hartley Splint (Gas).....	1.20	26.63	75.10
Lanark, Coalburn.....	‡Auchlochan 6 Ft. Cannel.....	1.26	25.40	78.75
Lanark, Coalburn.....	‡Auchlochan (Steam).....	1.28	24.94	80.20
Lanark, Coalburn.....	‡9 Ft. Seam (Auchlochan Splint).....	1.25	25.60	78.12
Lanark, Coalburn.....	‡6 Ft. Seam (Auchlochan Splint).....	1.30	26.64	81.18
Lanark, Drumbrowie Sta.....	‡Anthracite.....	1.29	71.94	27.80
Lanark, Longriggend.....	‡Darngavil Anthracite.....	1.35	23.71	84.57
Lanark, Lonriggend.....	‡W. Longrigg Navigation.....	1.36	23.48	85.18
Lanark, Morningside.....	‡Chapel and Watsonfoot (Gas).....	1.27	25.16	79.50
Lanark, Motherwell Sta.....	‡Broomside Cannel.....	1.29	24.86	80.44
Lanark, Whiterigg.....	‡Darngavil Greyrigg.....	1.30	.....	.....
Lanark, Wishaw.....	‡Glenclelland Caking.....	1.28	24.92	80.25
Linlithgow, Bathgate.....	‡Riddochhill (Gas).....	1.28	25.00	80.00
Stirlingshire, Dennyloanhead.....	‡Jewel Seam (Gas).....	1.23	26.06	76.75
Stirlingshire, Plean Sta.....	‡Bannockburn (Coking).....	1.28	25.10	79.68
WALES				
Denbigh, Ruabon.....	‡Quaker (Gas, House).....	1.25	25.66	77.93
Glamorgan.....	‡Cory's Aberdale Merthyr.....	1.29	24.80	80.63
Glamorgan.....	‡Cory's Merthyr (Steam).....	1.31	24.42	81.88
Glamorgan.....	‡Rheola Merthyr.....	1.34	23.88	83.75
Glamorgan, Penygraig.....	‡Naval Seam.....	1.31	24.42	81.88
Glamorgan, Pontycymmer.....	‡Oriental Merthyr.....	1.30	24.62	81.25

(Continued on Next Page)

*Coal Resources of the World, International Geological Congress (12th) Toronto, 1913.
 ‡Analyses of British Coals and Cokes.

ASIA

LOCATION	NAME OF COAL	Specific Gravity	No. of Cu. Ft. per Ton of 2,000 Lbs. Solid Coal	Wt. Per Cu. Ft. of Solid Coal
CHINA				
Chang-ch'iu C. F., Fu-ch'uan.....	*Carboniferous	1.37	23.36	85.63
Chi-ming-pao C. F., Hsuan-hau-fu.....	*Carboniferous	1.49	21.48	93.13
Ching-Hsing C. F.....	*Carboniferous	1.30	24.62	81.25
Hsi-Chan C. F., Fang-shan-hsien.....	*Carboniferous	1.77	18.08	110.63
Hsin-ch'iu C. F., Hsin-min-fu.....	*Carboniferous	1.33	24.06	83.13
K'ai-ping C. F., Lin-shi.....	*Carboniferous	1.29	24.80	80.63
K'ai-ping C. F., Ma-chia-kou.....	*Carboniferous	1.36	23.53	85.00
Lin-Ch'eng C. F., Ch'i-ts'un.....	*Carboniferous	1.27	25.20	79.38
Po-shan C. F., Tsu-Ch'uan.....	*Carboniferous	1.27	25.20	79.38
Ping-hsiang C. F.....	*Carboniferous	1.36	23.53	85.00
Wei-hsien C. F., Wei-hsien.....	*Carboniferous	1.41	22.69	88.13
JAPAN				
Aburato C. F.....	*Bituminous	1.37	23.36	85.63
Amakusa C. F.....	*Mesozoic Semianthracite.....	1.41	22.69	88.13
Central Honshu, Akatani.....	*Tertiary Bituminous.....	1.30	24.62	81.25
Chikuho C. F.....	*Mesozoic Bituminous.....	1.33	24.06	83.13
Horonobu C. F.....	*Tertiary Lignite.....	1.36	23.53	85.00
Ishikari C. F., Ashpet.....	*Tertiary Bituminous.....	1.32	24.24	82.50
Ishikari C. F., Otaushinai.....	*Tertiary Bituminous.....	1.30	24.62	81.25
Ishikari C. F., Yuparo.....	*Tertiary Bituminous.....	1.28	25.00	80.00
Joban C. F.....	*Tertiary Lignite.....	1.38	23.18	86.25
Karatsu C. F.....	*Miocene Bituminous.....	1.32	24.24	82.50
Kayanuma C. F.....	*Bituminous	1.30	24.62	81.25
Notoro C. F.....	*Miocene Bituminous.....	1.31	24.42	81.88
Onoda C. F.....	*Tertiary Lignite.....	1.40	22.86	87.50
Rikuchu Province.....	*Miocene Lignite.....	1.79	17.88	111.88
Soya C. F.....	*Cretaceous Lignite.....	1.36	23.53	85.00
Taiwan C. F., Formosa.....	*Bituminous	1.28	25.00	80.00
Taka-Shima C. F.....	*Bituminous	1.30	24.62	81.25
Teshio Prov., Formosa.....	*Bituminous	1.26	25.40	78.75
Uryu-Rumoi C. F.....	*Tertiary Bituminous.....	1.32	24.24	82.50
KOREA				
Au-Jyu C. F.....	*Mesozoic	1.32	24.24	82.50
Kiu-Baboi C. F.....	*Anthracite	1.95	16.41	121.88
Kyong-Syong C. F., Na-Nam.....	*Tertiary Lignite.....	1.43	22.38	89.38
Phong-Yang C. F.....	*Jurassic Anthracite.....	1.98	16.16	123.75
Phong-Yang C. F.....	*Jurassic Semibituminous.....	1.47	21.77	91.88
Pho-uon C. F., Kun-san.....	*Anthracite	1.95	16.41	121.88
Ul-san C. F.....	*Tertiary Lignite.....	1.40	22.86	87.50
Yong-il C. F.....	*Tertiary Lignite.....	1.42	22.55	88.75
MANCHURIA				
*Ch'ang-ch'un C. F.....	Jurassic Bituminous, Upper Seam.....	1.48	21.62	92.50
*Ch'ang-ch'un C. F.....	Jurassic Bituminous, Lower Seam.....	1.48	21.62	92.50
*Ch'ang-ch'un C. F.....	Jurassic Bituminous, Upper Seam.....	1.31	24.42	81.88
*Erh-fo-miao.....	Semibituminous.....	1.35	23.70	84.38
*Fu-shun C. F.....	Tertiary Bituminous.....	1.36	23.53	85.00
*Fu-shun C. F.....	Tertiary Bituminous.....	1.35	23.70	84.38
*Fu-shun C. F.....	Tertiary Bituminous.....	1.27	25.20	79.38
*Fu-shun C. F.....	Tertiary Bituminous.....	1.23	26.01	76.88
*Fu-shun C. F.....	Tertiary.....	1.30	24.62	81.25
*Fu-shun C. F.....	Tertiary Bituminous.....	1.32	24.24	82.50
*Hsiao-Shieh C. F.....	Carb. Anthracite.....	1.75	18.28	109.38
*Hsi-kou-tzu.....	Semianthracite.....	1.53	20.90	95.63
*Hung-lo-hsien C. F.....	Semianthracite.....	1.61	19.88	100.63
*Kang-hao-kou.....	Semibituminous.....	1.35	23.70	84.38
*Nuan-ti-t'ang.....	Semibituminous.....	1.56	20.51	97.50
*Niu-Hsin-Tai.....	Permo-Carb. Anthracite.....	1.49	21.47	93.13
*Pai-tsao-shu-kou.....	Semibituminous.....	1.47	21.77	91.88
*Pen-Hsi-Hu Dist.....	Permo-Carboniferous.....	1.32	24.24	82.50
*Sha-ho-tzu C. F.....	Jurassic Bituminous.....	1.35	23.70	84.38
*Sha-kuo-t'un.....	Semibituminous.....	1.50	21.33	93.75
*Shan-sung-kang C. F.....	Semibituminous.....	1.44	22.22	90.00
*Shan-sung-kang C. F.....	Bituminous.....	1.30	24.62	81.25
*Shih-men-chai.....	Tertiary Bituminous.....	1.52	21.05	95.00
*Ssu-P'ing-chieh Dist.....	Bituminous.....	1.32	24.24	82.50
*Ta-t'ai-shan.....	Jurassic Bituminous.....	1.43	22.38	89.38
*T'ung-hua Dist.....	Carb. Semibituminous.....	1.65	19.39	103.13
*K'au-Ch'ang.....	Carb. Semianthracite.....	1.50	21.33	93.75
*Wa-fang-tien.....	Bituminous.....	1.61	19.88	100.63
*Wu-hu-Tsui C. F.....	Carb. Semianthracite.....	1.53	20.90	95.63
*Wu-lung-t'un.....	Bituminous.....	1.41	22.69	88.13
*Yen-t'ai C. F.....	Carb. Semianthracite.....	1.39	23.02	86.88

*Coal Resources of the World, International Geological Congress (12th), Toronto, 1913.
C. F.—Coal Field.

ANALYSES OF COALS IN ALASKA AND FOREIGN COUNTRIES

ALASKA

LOCATION	SEAM OR KIND OF COAL	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.
Anthracite Ridge.	†		1.12	13.03	75.67	10.18	0.64	13,562
Anthracite Ridge.	†		3.59	6.83	64.29	25.29	0.19	10,268
Barrett Creek....	*First Bed.....		3.63	15.37	73.95	7.05	1.18	13,116
Barrett Creek....	*Second Bed.....		2.05	14.10	72.60	11.25	1.02	13,244
Barrett Creek....	*Third Bed.....		1.55	12.67	65.03	20.75	1.14	11,839
Barrett Creek....	*Fourth Bed.....		2.88	14.24	72.83	10.05	0.67	12,976
Canyon Creek....	†	Prospect.....	7.77	7.40	75.59	9.24	0.66	12,569
Carbon Mt.....	†12 Ft. Bed.....	No. 1.....	5.65	15.05	76.10	3.20	0.66	13,001
Charley Creek...	†No. 2.....	Henderson.....	2.10	20.81	53.99	23.10	0.62	11,230
Chicago Creek...	†	Chicago Creek.....	39.66	25.38	31.07	3.89	0.68	.....
Chickaloon Creek.	†	Tunnel No. 4.....	0.80	19.75	67.75	11.70	0.58	13,604
Chickaloon River.	†E.....	U. S. N. C. I. E.....	2.60	21.48	65.08	10.84	1.47	13,356
Chickaloon River.	*Lower 5.....	U. S. N. C. I. E.....	1.96	19.18	69.50	9.36	0.57	13,873
Chickaloon River.	*No. 6.....	U. S. N. C. I. E.....	1.89	20.47	74.63	3.01	0.68	14,904
Chickaloon River.	*No. 8.....	U. S. N. C. I. E.....	1.91	21.15	68.07	8.87	0.62	13,851
Chignik Bay.....	†	Alaska Packers.....	7.06	31.48	36.98	21.78	1.30	9,846
Chignik Bay.....	†	Hook Bay.....	5.07	27.24	42.42	25.27	2.26	.....
Chignik Bay.....	†	Warner.....	2.33	34.82	46.75	16.10	0.65	11,928
Chignik Bay.....	*Whalers Creek.....	Whalers Creek.....	5.02	34.28	45.45	15.25	1.75	11,241
Glacier Creek....	†Anthracite.....		2.68	7.37	88.37	1.58	0.54	14,708
Herendeen Bay...	†	Johnson.....	8.01	33.53	51.35	7.11	0.41	11,785
Kachemak Bay...	†		18.12	42.77	23.61	15.50	0.43	7,895
Kushtaka Ridge...	†		5.43	13.12	79.65	1.80	0.67	14,445
Leeper Creek....	†		4.01	12.46	77.47	6.06	1.11	14,171
Matanuska River.	†	O'Brien.....	2.70	25.72	64.46	7.12	0.50	13,385
Matanuska River.	†	O'Brien.....	1.08	24.04	66.78	8.10	0.55	13,942
Mt. Hamilton....	†		1.03	15.97	65.02	17.98	2.38	12,525
Mt. Ann.....	†		3.65	9.20	84.58	2.57	0.60	14,182
Murder Cove....	†		5.68	30.26	46.95	17.11	0.26	11,203
Port Graham....	†		19.96	35.88	29.18	14.99	0.41	8,053
St. Mary's Creek.	†	Hartline No. 7.....	2.55	9.45	76.60	11.40	0.93	13,073
Trout Creek....	†	Cunningham.....	1.18	17.41	78.39	3.02	0.66	15,003
Williams Creek..	*No. 3.....		19.75	33.13	22.72	24.40	0.17	6,266
Young Creek....	†12 Ft. Bed.....		10.57	33.80	50.57	5.06	0.23	11,225
.....	†	Hartline No. 5.....	1.65	8.03	68.62	21.70	0.55	11,620
.....	†	Hartline No. 1.....	6.45	16.75	73.45	3.35	0.57	12,534

NORTH AMERICA

DOMINION OF CANADA

LOCATION	SEAM OR KIND OF COAL	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.
Alberta								
Big Horn River...	*Lower Cret. Bit.....	Outcrop Sample.....	0.99	23.17	68.24	7.60	0.57	13,448
Blackstone Creek.	*Lower Cret. Bit.....	Outcrop Sample.....	1.18	23.18	71.08	4.56	0.52	14,068
Blairmore.....	†No. 1 Crowsnest Pass	Greenhill.....	1.20	23.10	56.20	19.50	0.50	11,750
Cascade C. F.....	*Lower Cret. Semi-Bit	Bankhead.....	1.10	12.60	73.30	14.10	0.60	13,080
Cascade C. F.....	*Lower Cret. Semi-Bit	Canmore.....	1.20	17.20	70.50	12.30	0.80	13,210
Coalspur.....	†Yellowhead Pass.....		3.70	33.20	51.70	11.40	0.20	11,400
Coleman.....	*Lower Cret. No. 2....		2.00	25.10	55.10	19.80	0.40	11,720

(Continued on Next Page)

*Coal Resources of the World, International Geological Congress (12th), Toronto 1913.

†Bulletins Canada Dept. of Mines.
‡Bureau of Mines Bulletins.

NORTH AMERICA—Dominion of Canada—Continued

LOCATION	SEAM OR KIND OF COAL	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.
Commerce.....	‡Lethbridge-McGrath.	No. 1 Seam.....	9.60	32.80	47.80	9.80	0.50	10,640
Crowfoot Creek..	*Tertiary Bituminous.	.....	11.25	35.59	47.24	5.92	...	.....
Edmonton.....	‡Yellowhead Pass....	Silkstone Seam.....	4.40	31.40	53.90	10.30	0.10	11,410
Frank.....	‡No. 1 Crownsnest Pass	Franco-Canadian.....	1.20	26.00	56.30	16.50	0.60	12,330
Hillcrest.....	*Lower Cret. Bit.....	Bellevue.....	0.90	26.70	56.90	15.50	0.80	12,386
Hillcrest.....	*Lower Cret. Bit.....	Hillcrest.....	3.00	26.30	55.40	15.30	0.60	12,460
Mountain Park...	‡No. 1.....	Mountain Park.....	0.90	29.90	63.80	5.40	0.40	14,310
Nordegg.....	‡No. 2 Seam.....	Brazeau.....	0.80	15.10	69.60	14.50	0.50	13,110
Passburg.....	*Lower Cret. Bit.....	Leitch.....	1.90	25.10	55.10	17.90	0.60	12,240
Pembina River...	*Tertiary Bituminous.	.....	4.32	34.07	56.47	5.14	...	.....
Rosedale.....	‡Drumheller Area....	Rosedale.....	16.50	33.60	43.40	6.50	0.40	9,650
Tofield.....	‡Tofield Area.....	Tofield.....	25.00	29.80	36.70	8.50	0.30	7,990
Wabamun.....	‡Pembina-Wabamun...	Upper Seam.....	6.70	34.80	46.80	11.70	0.10	9,650
Williams Creek..	*Tertiary Bituminous.	.....	4.97	36.87	54.05	4.11	...	.....
British Columbia								
Cauldrey Creek..	‡Flathead.....	.....	23.90	39.60	19.20	17.30	...	.....
Crowsnest Dist..	*Lower Cret. Bit.....	Coal Creek No. 2....	2.20	26.30	64.70	9.00	0.50	13,820
Crowsnest Dist..	*Lower Cret. Bit.....	Michel No. 3.....	1.40	24.80	62.70	12.50	0.50	13,270
Crowsnest Dist..	*Lower Cret. Bit.....	Michel No. 8.....	3.00	24.10	65.70	10.20	0.60	13,480
Crowsnest Dist..	*Lower Cret. No. 8....	Hosmer.....	4.00	28.00	64.50	7.50	0.60	13,990
Cumberland.....	‡Comox Area.....	Comox.....	1.10	29.60	58.10	11.20	0.50	12,960
Nicola Valley...	*Triassic Bit.....	Middlesboro No. 2...	2.90	39.00	48.10	12.90	0.70	12,170
Queen Char. Islds.	*Cret. B Seam.....	British Pacific.....	6.85	5.43	66.32	21.40	...	.....
Queen Char. Islds.	*Cretaceous.....	Camp Robertson....	0.80	23.27	51.39	24.54	...	.....
Queen Char. Islds.	*Cretaceous.....	Camp Wilson.....	2.44	35.96	48.64	12.96	...	.....
Queen Char. Islds.	*Cret. 6-ft. Seam....	Cowgitz.....	1.60	5.02	83.09	8.76	1.53	.....
Slate Creek.....	‡Graham Isld. Area...	British Pacific.....	5.30	5.30	65.20	24.20	0.20	.....
Suquash.....	‡Suquash Area.....	Suquash.....	...	34.30	42.70	23.00	1.00	11,100
Vancouver Isld..	*Douglas.....	S. Wellington.....	1.54	33.30	56.23	8.44	0.49	13,400
Vancouver Isld..	*Wellington.....	Extension Nos. 1, 2, 3.	1.16	40.47	50.04	7.80	0.53	13,400
Vancouver Isld..	*Wellington.....	E. Wellington No. 1..	1.65	43.25	45.52	9.24	1.24	13,000
New Brunswick								
Minto.....	‡Grand Lake Area....	Rapids.....	1.20	31.70	53.80	13.30	6.60	13,020
Pokemouche.....	‡Gloucester Area....	Prospect.....	5.90	33.20	40.30	20.60	6.10	.....
St. John Co.....	*Bituminous.....	King's.....	1.30	32.20	53.40	14.40	5.80	.....
Newfoundland								
Aldery Brook....	*.....	.....	10.22	24.39	48.51	15.72	1.16	.....
Aldery Brook....	*.....	.....	5.80	31.44	57.86	4.08	0.82	.....
Aldery Brook....	*.....	.....	15.78	30.30	45.29	8.08	0.55	.....
Aldery Brook....	*.....	.....	7.41	30.73	53.49	7.71	0.66	.....
Aldery Brook....	*.....	.....	4.32	16.84	72.66	5.33	0.85	.....
Bay St. George...	*Cleary Seam.....	.....	3.55	30.90	55.23	6.38	3.95	.....
Bay St. George...	*Howley Seam.....	.....	2.78	29.27	54.47	10.43	3.05	.....
Bay St. George...	*Jukes Seam.....	.....	3.04	30.34	60.14	4.52	1.96	.....
Bay St. George...	*Shears Seam.....	.....	4.90	33.12	58.38	3.16	0.44	.....
Coal Brook.....	*.....	.....	5.02	31.25	54.03	8.66	1.04	.....
Coal Brook.....	*.....	.....	9.93	24.01	49.15	16.14	0.77	.....
Kelvin Brook....	*.....	.....	8.44	28.54	50.07	11.53	1.42	.....
N. W. Territories								
Cape Murchison..	*Tertiary.....	Outcrop.....	2.01	15.49	75.49	6.49	0.52	.....
Melville Isld....	*Carboniferous.....	Outcrop.....	1.52	44.88	24.43	29.17	...	.....
Nova Scotia								
Cape Breton Co..	*Emery 5/8" Lump....	Sidney Coal Field....	4.00	35.10	53.80	11.10	2.50	13,120
Cape Breton Co..	*Gowrie 5/8" Lump....	Sidney Coal Field....	2.80	34.70	53.00	12.30	6.40	12,620
Cape Breton Co..	*Harbour 5/8" Lump...	Sidney Coal Field....	2.40	38.60	55.50	5.90	3.70	14,000
Cape Breton Co..	*Hub 5/8" Lump.....	Sidney Coal Field....	3.50	36.50	57.60	5.90	2.40	13,860
Cape Breton Co..	*Lingan 3/4" Lump....	Sidney Coal Field....	4.90	37.30	57.90	4.80	1.80	13,790
Cape Breton Co..	*Main.....	Sidney Coal Field....	5.40	39.00	54.30	6.70	2.50	13,680
Cape Breton Co..	*Phelan 5/8" Lump....	Sidney Coal Field....	3.40	35.00	59.50	5.50	1.80	14,040
Cumberland Co...	*Carbon. Screened....	No. 2.....	2.80	32.30	58.50	9.20	1.60	13,370
Cumberland Co...	*Screened Coal.....	Chignecto.....	3.60	41.00	45.70	13.30	6.40	12,150
Cumberland Co...	*Screened Coal.....	Joggins.....	1.30	36.60	44.80	18.60	5.40	11,590
Cumberland Co...	*Screened Coal.....	Minudie.....	3.80	35.70	48.80	15.50	6.70	11,830
Glengarry Valley.	‡Richmond Area.....	.....	3.90	32.60	48.70	14.80	1.30	11,930
Inverness Co....	*Carb. 5/8" Lump....	Inverness.....	9.30	40.00	49.60	10.40	6.00	12,150
Inverness Co....	*Carbon. 5/8" Lump...	Port Hood.....	4.70	27.10	48.30	14.60	7.90	11,770
Inverness Co....	‡Upper Bench.....	Inverness.....	3.50	37.50	45.60	13.10	5.70	11,540
Pictou Co.....	*Carbon. R.O.M.....	Albion.....	3.60	31.40	58.10	10.50	0.90	13,180
Pictou Co.....	*Carbon. 3/4" Lump...	Acadia.....	1.80	26.00	64.80	9.20	0.90	13,860
Pictou Co.....	*Carbon. 3/4" Lump...	Allan.....	3.60	33.30	55.40	11.30	0.60	13,230
Pictou Co.....	*Carbon. 3/4" Lump...	Drummond.....	1.40	24.70	60.80	14.50	2.50	12,960
Pictou Co.....	*Carbon. 3/4" Lump...	Valc.....	2.10	32.10	50.60	17.30	1.00	12,020
Pictou Co.....	*Third.....	Albion.....	2.00	29.80	55.50	14.70	1.40	12,580
Springhill.....	‡Springhill Area....	Edison.....	9.20	31.00	56.00	3.80	1.10	11,600

(Continued on Next Page)

*Coal Resources of the World, International Geological Congress (12th), Toronto, 1913.
‡Bulletins Canada Dept. of Mines.

NORTH AMERICA—Dominion of Canada—Continued

LOCATION	SEAM OR KIND OF COAL	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.
Saskatchewan								
Estevan Area.....	*Lignite.....	Estevan.....	30.90	40.00	43.20	16.80	0.50	9,650
Estevan Area.....	*Lignite.....	Taylorton.....	28.60	42.90	49.00	8.10	0.60	10,690
Willowbunch Area....	†.....	Eidness.....	7.30	38.40	36.20	18.10	...	.....
Willowbunch Area....	†.....	Treleaven.....	8.10	38.20	42.30	11.40	...	.....
Willowbunch Area....	†.....	Appleby.....	9.10	41.20	32.70	17.00	...	.....
Wood Mountain Area..	†Non-coking.....	Open Pit.....	13.80	38.30	37.30	10.60	...	.....
Wood Mountain Area..	†Non-coking.....	Sturgeon.....	12.00	33.60	29.20	25.20	...	.....
Wood Mountain Area..	†Non-coking.....	Blood's.....	13.50	36.90	35.80	13.80	...	.....
Yukon								
Coal Creek.....	*Tertiary.....	Sour Dough.....	17.10	34.50	38.40	10.00	...	.....
Kluane Div.....	†Non-coking.....	Granite Creek.....	11.20	40.90	42.50	5.40	...	.....
Kluane Div.....	†Non-coking.....	Burwash Creek.....	10.20	42.00	38.70	9.10	...	.....
Kluane Div.....	†Non-coking.....	Shop Creek.....	10.90	41.00	38.50	9.60	...	.....

MEXICO

LOCATION	NAME OF COAL	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.
Coahuila	*Barroteran	0.42	21.83	69.84	7.91	0.70	.....
Coahuila	*Eagle Pass Sub-Bit.....	3.67	39.42	41.70	15.20	0.81	.....
Coahuila	*Sabinas Bit.....	....	21.20	64.20	14.60	...	.....
Coahuila	*Santa Tomas Sub-Bit.....	3.20	37.35	33.90	25.55	...	.....
Presidio Del Norte.....	*.....	0.52	21.18	49.72	28.58	1.34	.....
Tezoatlan	*Anthracite	1.00	5.50	73.50	20.00	0.06	.....

CENTRAL AMERICA

GUATEMALA								
Coban	*Lignite	13.40	36.20	22.10	28.30	...	.....
Coban	*Lignite	16.80	39.00	35.10	9.10	...	.....
Izabel	*Lignite	15.10	34.80	39.90	10.20	...	.....
Izabel	*Lignite	3.20	32.00	63.30	1.50	...	.....
PANAMA								
Bocas del Toro.....	*	3.60	46.79	36.69	12.92	6.36	.....
Popa Island.....	*Lignite	25.58	43.02	29.73	1.67	0.33	

WEST INDIES

Trinidad	*Lignite	13.70	27.84	34.00	19.40	5.06	7,900
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SOUTH AMERICA

BRAZIL							
Imbausinho.....	†.....	7.68	17.62	48.94	25.76	3.14	8,098
Parana	†.....	2.62	29.54	38.62	29.22	11.80	10,420
Pernambuco	*.....	1.90	18.82	58.73	20.52	0.32	.....
Quebra Dentes	†.....	2.40	32.95	43.86	20.79	8.66	10,808
Rio Grande do Sul.....	†.....	3.43	27.28	37.52	31.77	12.96	10,095
Rio Grande do Sul.....	†.....	4.87	27.89	44.20	23.04	0.60	11,117
Rio Grande do Sul.....	†.....	6.05	29.09	41.33	23.53	4.00	10,715
Santa Catharina	†.....	1.64	14.25	38.17	54.94	3.05	8,731
Santa Catharina	†.....	1.25	19.46	39.59	39.42	5.40	10,083
Santa Catharina	†.....	1.24	19.98	44.34	34.44	3.60	10,296
Santa Catharina	†.....	1.05	19.17	35.45	44.33	3.34	9,351
Santa Catharina	†.....	0.79	17.50	32.55	49.16	5.49	8,281
Santa Catharina	†.....	1.18	17.45	33.08	48.29	2.68	8,483
Santa Catharina	†.....	1.34	25.76	38.87	34.03	12.99	9,893
Santa Catharina	†.....	1.44	24.84	35.34	38.38	10.49	9,599
Santa Catharina	†.....	1.02	25.22	38.98	34.78	2.28	10,420
Santa Catharina	†.....	1.01	15.80	50.94	32.25	11.42	9,862
Santa Catharina	†.....	1.21	26.00	47.88	24.88	6.41	11,970
Santa Catharina	†.....	1.06	7.64	54.63	36.67	1.58	9,397
Santa Catharina	†.....	5.34	29.68	38.71	26.23	3.90	9,692
Santa Catharina	†.....	0.46	25.73	41.27	32.54	8.90	10,157
Satto Apparado	†.....	2.37	15.83	58.66	23.14	7.95	10,711

(Continued on Next Page)

*Coal Resources of the World, International Geological Congress (12th), Toronto, 1913.

†Bulletins Canada Dept. of Mines.

‡"Coal of Brazil," by Dr. I. C. White. From Proceedings of Second Pan-American Scientific Congress.

SOUTH AMERICA—Continued

LOCATION	NAME OF COAL	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.
CHILE							
Arauco.....	*Alta	2.16	42.83	49.79	5.20	3.52	13,700
Arauco.....	*Doble	3.92	39.13	51.66	5.27	0.85	13,400
Arauco.....	*Doble	4.52	35.00	56.74	3.62	0.44	13,400
Concepcion Prov.....	*Alta	14.99	38.62	44.34	2.04	...	11,300
Concepcion Prov.....	*Chica	3.93	34.42	59.59	2.05	0.68	13,700
Concepcion Prov.....	*.....	8.30	34.33	50.09	7.26	2.86	11,400
Concepcion Prov.....	*.....	3.80	37.80	56.26	2.13	0.25	14,000
Lota	*Doble	4.73	34.85	58.35	2.05	0.43	13,400
VENEZUELA							
Araquita	*Bituminous.....	0.95	35.26	62.02	1.77	0.98	.....
Araquita	*Bituminous.....	10.20	39.80	48.00	2.00	...	.....
Araquita	*Bituminous.....	5.50	43.90	47.60	3.00	...	.....
Araquita	*Bituminous.....	6.00	43.00	45.00	6.00	...	.....
Araquita	*Bituminous.....	5.30	39.90	51.40	3.40	...	.....
Araquita	*Bituminous.....	1.72	31.12	65.10	1.63	0.43	.....
Araquita (panela).....	*Bituminous.....	2.70	32.85	59.50	4.95	0.83	.....
Orilla (derecha).....	*Bituminous.....	3.80	33.25	58.70	4.25	...	.....
Simplicio	*Bituminous.....	3.80	25.70	66.25	4.25

ANTARCTIC REGION

Ross Quadrant.....	*Bituminous	3.16	14.57	68.84	13.43	0.27
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EUROPE

BOSNIA & HERZEGOVINA							
Grahovo	*Triassic.....	1.90	14.10	50.40	30.60	3.00	8,300
Majevica	*Oligocene.....	5.65	22.35	66.10	5.90	4.63	7,600
Nevesinje	*Oligo-Miocene.....	7.10	30.37	59.98	2.55	...	9,900
Snjegotina	*Oligo-Miocene.....	10.75	25.80	60.10	3.35	...	9,600
Ugljevik	*Miocene.....	20.13	16.47	46.37	14.22	2.81	7,100
Zemica	*Oligo-Miocene.....	16.90	17.41	45.16	15.90	2.48	8,700
BULGARIA							
Balkan Basin.....	*Amelia Groupe.....	2.04	34.02	54.89	8.42	...	10,200
Balkan Basin.....	*Amelia Groupe.....	0.86	30.35	64.07	4.72	...	14,800
Bobovdol Basin.....	*Ste Sophie.....	11.96	41.61	42.30	4.07	2.15	8,700
Boronschitzza	*.....	0.72	36.05	56.43	5.30	3.01	12,600
Crebikol	*Crebikol	9.98	40.53	44.21	5.28	2.08	9,700
Danube Basin.....	*Ouspech	13.64	40.46	26.79	16.11	...	7,300
Isker Valley.....	*Anthracite	5.57	2.78	73.45	18.20	...	10,200
Isker Valley.....	*Anthracite	5.00	3.57	81.01	9.82	...	10,000
Isker Valley.....	*Anthracite	4.81	1.50	72.07	21.61	0.57	9,300
Nadejda	*.....	1.55	15.55	79.55	3.75	...	14,800
Pernik Basin.....	*Humni-dol	14.31	39.29	40.72	5.68	...	10,800
Pernik Basin.....	*Humni-dol	15.38	37.62	38.80	8.20	...	9,700
Pernik Basin.....	*Koula	14.29	38.04	40.18	7.49	2.50	10,800
Pernik Basin.....	*Koula	16.00	35.50	39.08	9.42	2.00	10,300
Stoertzi	*Badaschte	1.52	38.03	56.80	3.65	...	11,900
Tcham-dere Basin.....	*Tcham-dere	11.99	33.49	47.91	6.61	1.47	8,600
Tcham-dere Basin.....	*Tcham-dere	7.43	22.85	65.10	4.62	1.28	10,600
Tcham-dere Basin.....	*Tcham-dere	7.43	21.51	50.58	18.35	0.96	8,100
Tcham-dere Basin.....	*Tcham-dere	12.50	33.70	37.25	12.95	4.10	7,900
Traquil Basin.....	*Maritza	19.68	36.77	31.57	11.98	...	7,000
ENGLAND							
Cumberlandwhitehaven.....	‡Main Band Seam.....	2.90	32.04	62.96	1.46	0.64	.....
Cumberland, Alston.....	‡Little Limestone (Mfg.).....	3.73	12.93	76.88	6.47	...	.....
Durham.....	‡New Leverson's (Gas).....	1.44	30.64	60.66	5.81	1.45	.....
Durham.....	‡Sherburn (Gas).....	1.35	27.19	61.59	8.21	1.66	.....
Durham, Brancepeth.....	‡Busty Seam (Coking).....	1.20	25.61	67.31	5.10	0.78	.....
Durham, Brancepeth.....	‡Busty Seam (St., Gas and C.)...	0.84	26.85	68.44	3.10	0.77	.....
Durham, Brancepeth.....	‡Harvey Seam (Gas & Coking)...	1.10	27.40	65.75	4.08	1.67	.....
Durham, Brancepeth.....	‡Hutton Seam.....	0.70	23.94	70.13	4.45	0.78	.....
Durham, Carterthorne.....	‡Main Seam (Gas).....	1.80	27.73	67.17	2.25	1.05	.....
Durham, Hamsterly.....	‡Coking Coal.....	0.58	25.50	71.57	2.93	0.71	.....
Durham, Horden.....	‡Low Main (Screened Steam)...	1.50	34.68	59.15	3.80	0.87	13,330
Durham, Horden.....	‡Main Seam (Coking & Gas).....	1.52	33.66	59.40	4.20	1.22	.....
Durham, Horden.....	‡No. 2 Seam (Gas).....	1.73	44.30	49.80	2.48	1.69	.....
Durham, Lambton.....	‡Lambton (Gas).....	1.50	28.94	60.43	7.57	1.56	.....
Durham, Low Beechburn.....	‡Harvey Seam (Gas).....	1.46	27.87	66.97	2.55	1.55	.....
Durham, Middleburn.....	‡Busty Seam (Gas).....	0.86	27.73	65.33	5.30	0.78	.....
Durham, Shotton.....	‡Hutton Seam (Coking).....	1.22	24.20	66.79	5.65	2.14	.....
Durham, W. Brancepeth.....	‡Coking Coal.....	1.20	21.40	72.00	6.50	1.23	.....
Durham, W. Stanley.....	‡N. Pelton (Gas).....	0.93	28.59	68.10	1.20	1.18	.....

(Continued on Next Page)

*Coal Resources of the World, International Geological Congress (12th), Toronto, 1913.
 ‡Analyses of British Coals and Cokes.

EUROPE—England—Continued

LOCATION	NAME OF COAL	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.
Durham, W. Stanley.....	W. Stanley (Coking).....	1.00	24.73	69.84	3.80	0.63	.....
Durham, Wallsend.....	Wallsend (Gas).....	3.11	32.16	60.95	3.12	0.66	.....
Durham, Wingate Grange.....	Harvey Seam (Gas).....	1.17	29.80	62.61	4.68	1.74	.....
Derbyshire, Birley.....	Silkstone Seam (Gas).....	1.93	33.47	61.87	1.79	0.94	.....
Derbyshire, Mapperley.....	Kilburn Seam (House).....	1.16	42.24	52.84	2.83	0.93	.....
Lancashire, Bamfurlong.....	Trencherbone Seam (G., St., H.)	2.40	34.80	60.00	1.90	0.90	.....
Lancashire, Burnley.....	Gas Coal.....	1.14	36.26	58.97	3.63	2.26	.....
Lancashire, Golborne.....	7 Feet Seam (Steam & Gas)....	4.10	34.60	58.20	2.20	0.90	.....
Lancashire, Haydock.....	6 Feet Seam (Steam).....	4.80	31.90	58.40	3.80	1.10	.....
Lancashire, Haydock.....	Princess Rushy Park (G.&H.)..	4.10	33.90	59.10	2.00	0.90	.....
Lancashire, Rishton.....	Steam, Coking and House.....	2.13	20.04	73.73	3.24	0.86	.....
Lancashire, Wigan.....	Deep Arley (Gas & House)....	1.13	33.49	60.01	3.45	1.92	.....
Lancashire, Wigan.....	6 Feet Seam (St., Gas, House)..	2.80	33.40	60.40	2.20	1.20	.....
Leicester, Nailstone.....	Upper Main Seam (Steam).....	13.22	30.99	50.52	5.27	1.25	13,170
Nottingham, Bestwood.....	Top Hard Seam (Steam).....	8.26	31.15	55.80	4.79	0.73	.....
Nottingham, Sherwood.....	Top Hard (Steam & House)....	9.50	34.24	54.18	2.08	1.21	.....
Staffordshire, Apedale.....	7 Feet Seam (Gas, St., House)..	1.28	37.07	57.44	2.12	2.09	.....
Staffordshire, Talk-o'-th'-Hill..	Banbury (Gas).....	1.67	35.51	60.21	1.36	1.25	.....
Staffordshire, Talk-o'-th'-Hill..	8 Feet Cockshead Seam (Steam)	1.90	31.30	64.30	1.50	1.00	14,402
Staffordshire, Whitfield.....	Lane Seam (House).....	3.40	31.60	62.60	1.60	0.80	.....
Shropshire, Donnington.....	Flint Coal (House).....	10.76	37.07	45.59	5.36	1.22	.....
Warwick, Arley.....	Slate Coal (House).....	12.17	32.36	52.70	2.02	0.75	11,115
Warwick, Newdigate.....	9 Feet Seam (Steam).....	7.10	37.60	50.60	3.90	0.80	11,400
Yorkshire, Auckland Park.....	Harvey (Gas).....	1.36	29.51	64.59	3.75	0.79	.....
Yorkshire, Dalton Main.....	Barnsley Seam (Gas, St., H'se).	0.68	35.28	62.95	2.46	0.63	14,358
Yorkshire, Dearne Valley.....	Shafton Seam (Steam & House)	8.44	37.01	51.19	2.00	1.36	13,397
Yorkshire, Denby Grange.....	Flockton (Gas).....	0.64	36.14	61.65	1.57	0.59	.....
Yorkshire, Garforth.....	Beeston Seam (St. & House)....	8.75	34.37	55.95	0.93	0.83	.....
Yorkshire, Leasingthorne.....	Brockwell Seam (Steam).....	1.99	27.81	66.32	3.04	0.84	.....
Yorkshire, Lofthouse.....	Silkstone Seam (Gas).....	1.88	33.45	56.92	7.75	3.50	.....
Yorkshire, Low Moor.....	Black Bed (Gas & Steam).....	1.92	32.36	63.08	1.44	1.20	.....
Yorkshire, Mirfield.....	Black Bed (Gas).....	0.60	27.61	66.32	3.55	1.92	.....
Yorkshire, Old Silkstone.....	Stanhope (Gas).....	0.70	33.40	63.40	1.60	0.90	.....
Yorkshire, Pildacre.....	Pildacre (Gas).....	0.61	43.37	46.35	9.67	2.07	.....
Yorkshire, Primrose Main.....	Winter Seam (Gas & House)....	5.14	32.20	59.20	2.40	1.06	.....
Yorkshire, Tankersley.....	Wharnccliffe Silkstone (Gas)....	1.50	34.87	61.18	2.45	1.55	.....
Yorkshire, Waleswood.....	Flockton (Gas).....	4.15	32.34	58.67	4.29	0.55	.....
GERMANY							
Dohlener Dist.....	*Gas Coal.....	6.01	30.56	56.37	7.06	0.85	12,600
Dohlener Dist.....	*Smithing Coal.....	5.41	31.30	53.53	9.75	1.70	12,300
Lausitz Saxony.....	*Brown Coal.....	51.31	25.80	17.97	4.92	4.66	4,300
Lugua-Oelsnitzer Dist.....	*Bituminous.....	12.87	21.75	63.52	1.86	0.42	12,100
Lugua-Oelsnitzer Dist.....	*Gas Coal.....	9.76	36.29	52.99	0.96	0.94	12,600
Lugua-Oelsnitzer Dist.....	*Pitch Coal.....	7.22	35.97	55.33	1.48	0.63	13,200
N. W. Saxony.....	*Brown Coal.....	55.52	21.60	19.07	3.81	1.87	3,800
N. W. Saxony.....	*Brown Coal.....	53.12	25.31	18.08	3.49	0.90	4,500
N. W. Saxony.....	*Brown Coal.....	53.73	23.21	18.08	4.98	4.12	4,100
Rhenish Westphalia.....	†Anthracite.....	0.90	7.20	89.80	2.10	...	14,823
Rhenish Westphalia.....	†Gas Coal.....	0.80	27.50	66.09	4.80	...	13,882
Rhenish Westphalia.....	†Gas Coal.....	1.60	26.40	60.60	11.40	...	12,728
Rhenish Westphalia.....	†Gas Coal.....	2.40	...	79.20	4.80	...	13,598
Rhenish Westphalia.....	†Hard Coal.....	1.60	...	78.30	8.80	...	13,536
Rhenish Westphalia.....	†Hard Coal.....	2.30	10.60	79.70	7.40	...	13,694
Rhenish Westphalia.....	†Hard Coal.....	1.50	9.60	84.00	4.90	...	14,270
Rhenish Westphalia.....	†Hard Coal.....	2.60	9.70	81.40	6.30	...	13,833
Rhenish Westphalia.....	†Soft Coal.....	2.10	21.80	62.90	13.20	...	12,483
Rhenish Westphalia.....	†Soft Coal.....	1.70	23.70	69.20	5.40	...	13,990
Rhenish Westphalia.....	†Soft Coal.....	1.40	22.00	73.00	3.60	...	14,409
Rhenish Westphalia.....	†Soft Coal.....	2.20	...	75.30	11.90	...	12,933
Rhenish Westphalia.....	†Soft Coal.....	0.90	23.00	68.70	7.40	...	13,676
Saar and Lorraine.....	†Gas Coal.....	3.20	29.30	57.50	10.00	...	12,766
Saar and Lorraine.....	†Gas Coal.....	9.70	31.80	48.70	9.80	...	11,043
Saar and Lorraine.....	†Gas Coal.....	3.60	33.60	45.80	17.00	...	10,481
Upper Silesia.....	.....	8.30	33.30	51.60	6.80	...	.....
Upper Silesia.....	.....	4.00	31.60	58.40	6.00	...	.....
Upper Silesia.....	.....	3.00	31.00	60.00	6.00	...	.....
Zwickauer Dist.....	*Bituminous.....	12.10	26.22	59.73	1.95	1.12	12,300
Zwickauer Dist.....	*Gas Coal.....	5.60	35.00	56.94	2.46	0.65	13,300
Zwickauer Dist.....	*Pitch Coal.....	8.17	35.93	53.75	2.15	0.85	12,600
ITALY							
Alpes.....	*Anthracite.....	5.05	1.18	48.55	45.22	...	7,100
Alpes.....	*Anthracite.....	6.28	3.06	55.11	35.55	...	8,000
Alpes.....	*Anthracite.....	6.66	2.42	69.84	21.07	...	10,200
Alpes.....	*Anthracite.....	4.01	3.81	79.75	12.43	...	11,700
Alpes.....	*Anthracite.....	5.98	3.39	71.38	19.25	...	10,400
Arno Valley.....	*Lignite.....	40.50	31.60	23.50	4.40	0.60	7,200

(Continued on Next Page)

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†Analyses of British Coals and Cokes.

EUROPE—Continued

LOCATION	NAME OF COAL	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.
RUMANIA							
Comanesti Basin.....	*Lignite.....	12.46	39.46	40.04	8.04	1.36	9,900
Dambovitza Dist.....	*Brandus.....	4.18	21.05	72.49	5.48	0.98	12,500
Gorj Dist.....	*Anthracite.....	6.23	3.84	88.37	1.56	0.33	.....
SCOTLAND							
Ayrshire, Caprington.....	*Anthracite.....	1.80	11.10	83.90	3.20	0.54	.....
Ayrshire, Caprington.....	*McNaught Seam (St., House)...	6.86	36.65	51.56	1.14	0.79	12,422
Ayrshire, Caprington.....	*Parrot Seam (Cannel, Gas)....	5.80	36.84	48.50	8.30	0.56	.....
Ayrshire, Springhill.....	*Springhill Ell (Gas).....	8.20	34.40	52.47	4.48	0.45	.....
Clackmannan, Alloa.....	*Alloa (Steam).....	5.72	36.93	55.61	1.16	0.58	.....
Dumfriesshire, Gateside.....	*Splint Seam (Gas, Steam).....	4.76	35.49	56.04	3.33	0.38	.....
Dumfriesshire, Fauldhead.....	*Coking (House, Steam).....	8.23	34.28	54.44	2.51	0.54	.....
Edinburgh, Arniston.....	*Cannel (Gas).....	1.32	52.19	42.70	3.10	0.69	.....
Edinburgh, Dalkeith.....	*Great Seam (Splint, Gas).....	9.42	35.82	50.51	3.69	0.56	.....
Edinburgh, Newbattle.....	*Steam.....	9.87	31.32	55.02	3.43	0.36	12,915
Edinburgh, Penicuik.....	*Corbie Jewel (House).....	9.50	33.59	53.38	2.94	0.59	13,041
Edinburgh, Whitehill.....	*Splint (Gas, Steam, House)....	10.28	38.55	48.78	2.16	0.23	.....
Fifeshire, Dundonnald.....	*Mynheer (Gas, Steam, House)...	9.92	37.34	49.40	2.72	0.62	.....
Fifeshire, Dunnikier.....	*5 Ft. Seam (Coking, Gas).....	3.52	31.76	59.47	4.90	0.35	.....
Fifeshire, Glencraig.....	*Glencraig Cannel (Gas).....	5.40	32.33	54.38	7.31	0.58	.....
Fifeshire, Glencraig.....	*Lochgelly (Steam).....	6.12	36.49	53.37	3.45	0.57	.....
Fifeshire, Kelty.....	*Aitken Navigation (Steam)....	2.28	24.47	70.61	1.94	0.70	.....
Fifeshire, Lochgelly.....	*Cannel (Gas).....	3.43	33.59	56.66	5.75	0.58	.....
Fifeshire, Muirbeath.....	*3 Ft. Seam (Cannel, Gas).....	2.50	46.95	42.82	7.27	0.46	.....
Haddington, Preston Links....	*Ft. Crown Hartley Jewel.....	4.28	30.67	58.56	5.78	0.71	.....
Haddington, Preston Links....	*Ft. Crown Hartley Jewel.....	9.98	32.84	52.13	4.65	0.40	12,100
Lanark, Aikenhead.....	*Aikenhead Cannel (Gas).....	8.70	39.84	47.92	2.70	0.84	.....
Lanark, Cadzow.....	*Cadzow Cannel (Gas).....	7.10	36.22	51.84	4.05	0.79	.....
Lanark, Cadzow.....	*Cadzow Hartley Splint (Gas)...	7.20	34.71	52.31	5.07	0.71	.....
Lanark, Cadzow.....	*Cadzow Ell (Steam, House)....	12.05	34.03	52.90	0.95	0.07	.....
Lanark, Cadzow.....	*Cadzow "Oak" (House).....	9.34	34.20	51.38	4.58	0.50	.....
Lanark, Cadzow.....	*Cadzow Splint (Gas, Steam)...	7.52	35.51	52.26	4.09	0.62	.....
Lanark, Carluke Sta.....	*Castlehill (Steam).....	8.25	33.52	55.12	2.43	0.68	.....
Lanark, Coalburn.....	*6 Ft. Cannel (Gas).....	3.10	43.00	36.87	16.22	0.81	.....
Lanark, Coalburn.....	*6 Ft. Seam (Auchlochan Br.Spt.)	6.90	38.32	48.55	5.32	0.91	.....
Lanark, Coalburn.....	*6 Ft. Seam (Auchlochan Splint)	8.30	36.66	49.96	4.26	0.82	.....
Lanark, Coalburn.....	*9 Ft. Seam (Auchlochan Splint)	8.70	36.33	51.77	2.40	0.80	.....
Lanark, Coalburn.....	*Steam Coal Seam.....	7.50	31.56	56.68	4.04	0.22	13,690
Lanark, Drumbrowie Sta.....	*Anthracite.....	2.75	9.43	85.22	1.77	0.83	.....
Lanark, Drumbrowie Sta.....	*Upper Drumgray (Smokeless)...	2.59	22.07	70.53	3.67	1.14	.....
Lanark, Harthill Sta.....	*Parrot (Gas).....	1.19	22.80	57.31	17.24	1.46	.....
Lanark, Longriggend.....	*Darngavil Anthracite.....	1.95	7.29	87.89	2.25	0.62	.....
Lanark, Longriggend.....	*W. Longrigg Navigation.....	1.76	14.44	80.48	2.70	0.62	.....
Lanark, Meikle Earnock Sta....	*Eddlewood Cannel.....	7.60	36.31	53.57	2.72	0.80	.....
Lanark, Morningside.....	*Chapel and Watsonfoot.....	10.86	34.98	52.21	1.44	0.51	.....
Lanark, Motherwell Sta.....	*Broomside Cannel.....	6.70	35.50	51.01	6.11	0.68	.....
Lanark, Salisbury.....	*Upper Drumgray (Splint).....	8.20	35.75	51.98	3.40	0.67	.....
Lanark, Uddingston Sta.....	*Blantyreferme (House).....	10.11	36.39	49.61	3.89	0.00	.....
Lanark, Viewpark.....	*Splint (Gas).....	6.74	37.61	49.54	4.55	1.56	.....
Lanark, Whiterigg.....	*Darngavil Greyrigg.....	1.59	18.00	75.86	4.02	0.53	.....
Lanark, Wishaw.....	*Glenclelland Caking.....	7.60	35.80	52.70	3.38	0.52	.....
Lanark, Wishaw Sta.....	*Glenclelland Shale.....	2.40	37.48	31.93	27.26	0.93	.....
Linlithgow, Bathgate.....	*Riddochhill (Gas).....	7.50	33.41	55.69	2.72	0.68	.....
Stirlingshire, Bonnybridge.....	*Splint (Gas).....	6.15	33.92	55.73	3.58	0.62	.....
Stirlingshire, Dennyloanhead..	*Jewel Seam (Gas).....	6.75	32.60	58.11	2.18	0.34	.....
Stirlingshire, Denny Sta.....	*Herbertshire Navigation.....	1.28	20.30	73.71	4.02	0.69	.....
Stirlingshire, Plean Sta.....	*Bannockburn (Coking).....	3.75	31.77	60.86	3.08	0.56	.....
Stirlingshire, Plean Sta.....	*Wallsend (House).....	2.25	29.10	66.50	2.10	0.05	.....
Stirlingshire, Stirling.....	*Hartley Seam (Steam).....	1.44	10.76	84.26	2.89	0.65	.....
SERVIA							
Dobra.....	*Lias. & Kreide Coal.....	3.05	30.90	63.37	2.68	...	12,900
Dobra Sreca.....	*Lias. & Kreide Coal.....	1.27	29.43	51.32	17.90	1.00	11,730
Marganci.....	*Lias. & Kreide Coal.....	3.82	40.73	42.07	13.41	1.72	11,300
Murstapic Mischlenovac.....	*Stone Coal.....	0.95	17.17	75.92	5.95	...	13,900
Ossipaonica.....	*Stone Coal.....	1.34	18.39	66.54	17.37	...	13,000
Ranvoac.....	*Stone Coal.....	7.20	25.58	45.63	21.59	0.16	8,090
St. Stefan.....	*Lias. & Kreide Coal.....	2.00	22.20	68.25	7.15	...	14,200
WALES							
Aberdare Merthyr.....	*Dry Steam Coal, Large.....	1.16	10.25	84.72	3.87	0.70	14,553
Amman District.....	*Anthracite, Large.....	2.73	5.84	88.31	3.12	0.79	14,482
Cardiff Coals.....	*Second Admiralty, Large.....	1.04	17.17	76.53	5.26	0.86	14,479
Cardiff.....	*Patent Fuel.....	1.46	16.35	72.48	9.71	0.91	13,500
Gwendraeth District.....	*Anthracite, Large.....	2.12	6.19	89.23	2.46	0.74	14,697

(Continued on Next Page)

*Coal Resources of the World, International Geological Congress (12th), Toronto, 1913.

†Analyses of British Coals and Cokes.

EUROPE—Wales—Continued

LOCATION	NAME OF COAL	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	termed T. U.
Loughbor & Llanelly District..	†Anthracite, Large.....	2.30	5.24	90.40	2.06	0.78	14,569
Monmouthshire, East. Valley..	†Bituminous, Large.....	1.06	29.86	62.76	6.32	1.40	14,083
Monmouthshire, Newport.....	†Bituminous, Large.....	1.29	27.86	65.84	5.01	0.92	14,439
Monmouthshire, West. Valley..	†Bituminous, Large.....	1.76	25.24	66.19	6.81	1.21	14,071
Neath District.....	†Anthracite, Large.....	1.83	7.47	86.82	3.88	0.79	14,574
No. 2 Rhondda.....	†Semibituminous, Large.....	1.32	16.01	77.54	5.13	1.21	14,350
No. 2 Rhondda.....	†Semibituminous, Large.....	1.64	22.76	69.52	6.08	2.09	14,256
No. 2 Rhondda.....	†Bituminous, R. of M.....	3.28	29.76	55.20	11.76	1.39	13,615
No. 2 Rhondda.....	†Semibituminous, R. of M.....	1.48	22.46	65.47	10.59	2.19	13,982
No. 2 Rhondda.....	†Steam, R. of M.....	1.67	16.99	70.80	10.54	1.89	13,831
No. 3 Rhondda.....	†Bituminous, Large.....	1.32	26.09	66.99	5.60	1.03	14,267
No. 3 Rhondda.....	†Bituminous, Large.....	1.68	32.42	60.78	5.12	0.79	14,233
No. 3 Rhondda.....	†Semibituminous, Large.....	1.17	22.52	71.59	4.72	0.66	14,474
Pembrokeshire District.....	†Anthracite, Large.....	4.05	6.18	87.61	2.16	1.21	14,346
Pembrokeshire District.....	†Anthracite, Large.....	2.93	5.09	90.40	1.58	1.46	14,672
Port Talbot & Swansea Dist....	†Dry Steam, Large.....	1.26	11.96	82.65	4.13	1.44	14,656
Port Talbot & Swansea Dist....	†Dry Steam, R. of M.....	2.41	11.65	70.49	15.45	1.01	13,124
Port Talbot & Swansea Dist....	†Steam, R. of M.....	1.25	14.83	73.72	10.20	1.33	13,705
Rhondda & L. Aberdare Valleys	†First Admiralty, Large.....	1.06	13.60	80.80	4.54	0.89	14,897
Swansea District.....	†Anthracite, Large.....	2.42	6.74	86.38	4.46	1.29	14,522
Swansea.....	†Patent Fuel.....	2.70	16.13	72.73	8.44	1.07	13,240
BRITISH NORTH BORNEO							
Brooketon	*Tertiary Lignite.....	11.48	40.24	46.70	1.58	0.36	12,000

ASIA

LOCATION	NAME OF COAL	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.
CHINA							
*Anhui, Chi Cho C. F.....	.....	13.00	....	73.00	14.00	...	.....
*Chekiang, Tung Lu C. F.....	Anthracite.....	2.10	4.41	70.74	22.74	...	.....
*Chihli, Chai' Tong C. F.....	Jurassic Anthracite.....	3.62	5.31	84.93	6.13	0.43	.....
*Chihli, Chai' Tong C. F.....	Jurassic Bituminous.....	1.20	21.54	71.14	6.11	1.05	.....
*Chihli, Ching Hsing C. F.....	Permo-Carb. Bituminous.....	0.89	27.97	61.04	9.64	1.45	.....
*Chihli, Fang Shan C. F.....	Permo-Carb. Anthracite.....	5.11	6.83	72.14	15.91	0.17	.....
*Chihli, Hsin Chiu C. F.....	Permo-Carb. Bituminous.....	9.97	32.41	45.78	11.84	1.91	.....
*Chihli, Hsuan Hua C. F.....	Anthracite.....	1.16	3.21	83.19	12.43	0.10	.....
*Chihli, Hsuan Hua C. F.....	Semibituminous.....	3.49	15.93	72.49	8.07	0.10	.....
*Chihli, K'ai Ping C. F.....	Permo-Carb. Bituminous.....	1.00	26.00	58.00	15.00	1.00	.....
*Chihli, Nan P'iao C. F.....	Permo-Carb. Bituminous.....	2.50	31.00	57.50	6.50	...	.....
*Chihli, Pei P'iao C. F.....	Permo-Carb. Bituminous.....	3.25	32.00	58.65	6.10	...	.....
*Chihli Ping, K'ou C. F.....	Tertiary Subbituminous.....	....	48.00	46.00	6.00	0.76	.....
*Chihli, Wang P'ing C. F.....	Permo-Carb. Anthracite.....	2.67	4.08	82.64	10.59	0.36	.....
*Chih-li-sheng, Ching Hsing C. F...	Carb. Anthracite.....	0.65	28.20	63.81	7.34	0.72	13,662
*Chih-li-sheng, Hsi-shan C. F.....	Carb. Bituminous.....	2.48	4.01	75.09	18.24	0.28	.....
*Chih-li-sheng, Hsuan-ch'eng C.F...	Carb. Bituminous.....	1.65	19.39	55.20	23.77	2.21	.....
*Chih-li-sheng, K'ai-ping C. F.....	Carb. Bituminous.....	0.64	22.27	71.55	5.54	0.98	.....
*Chih-li-sheng, K'ai-ping C. F.....	Carb. Bituminous.....	1.13	22.49	66.69	9.69	0.52	12,956
*Chih-li-sheng, Lin Ch'eng C. F.....	Carb. Bituminous.....	1.71	33.49	54.80	10.00	1.27	12,434
*Chih-li-sheng, Pai-sha C. F.....	Carb. Anthracite.....	5.25	3.20	68.87	22.68	2.23	.....
*Chih-li-sheng, Ping Hsiang C. F...	Carb. Bituminous.....	0.94	22.39	69.96	6.71	0.52	.....
*Chih-li-sheng, Shao-wu C. F.....	Carb. Anthracite.....	4.50	4.75	86.90	3.85	2.02	10,593
*Chih-li-sheng, Tung-Ch'uan C. F...	Carb. Bituminous.....	0.50	15.10	65.74	18.67	0.40	.....
*Chih-li-sheng, Tzu-chuan C. F.....	Carb. Bituminous.....	0.44	15.61	69.77	14.18	0.54	12,276
*Chih-li-sheng, Tzu-chuan C. F.....	Carb. Bituminous.....	0.48	17.88	73.01	8.63	1.16	13,086
*Chih-li-sheng, Wei-hsien C. F.....	Carb. Bituminous.....	2.80	30.70	51.80	14.70	0.97	11,088
Fu-ch'uan, Chang-ch'iu.....	Carb. Bituminous.....	0.43	18.13	66.86	14.58	0.50	12,276
*Fu-hsin-hsien, Hsin-Ch'iu C. F...	Mesozoic Bituminous.....	1.06	35.35	53.17	10.42	2.81	10,494
*Honan, Chang Ho C. F.....	Semibituminous.....	0.79	14.16	75.09	9.95	0.58	.....
*Honan, Jai-mei-sen C. F.....	Permo-Carb. Anthracite.....	....	6.50	84.50	10.00	...	.....
*Hsuan-hua-fu, Chi-ming pao C. F..	Mesozoic Bituminous.....	2.68	26.30	56.06	14.96	0.37	10,404
*Hunan, Mei T'ien C. F.....	Anthracite.....	1.84	6.32	82.58	9.26	0.73	.....
*Kuang Tung, Che Ku Sheck C.F....	Anthracite.....	1.07	7.63	85.25	6.04	0.89	.....
*Kuang Tung, Lieu Chou C. F.....	Permo-Carb. Bituminous.....	1.09	15.00	66.46	17.44	3.07	.....
*Kuang Tung, Mei Shan C. F.....	Anthracite.....	0.79	9.34	83.45	6.41	1.06	.....
*Kuang Tung, Tung Shui C. F.....	Permo-Carb. Bituminous.....	0.80	10.47	67.62	21.11	4.37	.....
*Kueichou, S. W. Kueichou.....	Palaeozoic.....	0.80	9.50	54.70	35.00	...	.....
*Kueichou, near Kouei Yang.....	Rhaetic.....	0.60	12.80	77.80	8.80	...	.....
*Kuei-Chow-Sheng, Kuei Yang C. F	Permo-Trias. Bituminous...	0.35	18.88	72.33	5.84	2.60	.....
*Shansi, Ch'in Shui C. F.....	Permo-Carb. Bituminous...	1.28	9.79	89.06	11.60	1.80	.....
*Shansi, P'ing Yao C. F.....	Bituminous.....	0.49	17.81	57.70	23.98	2.80	.....

(Continued on Next Page)

*Coal Resources of the World, International Geological Congress (12th), Toronto, 1913.

C. F.—Coal Field.

†South Wales Coals, Llewellyn J. Davies.

ASIA—China—Continued

LOCATION	NAME OF COAL	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.
*Shansi, Saratsi C. F.	Bituminous.....	1.16	29.38	69.46	6.97	0.78	.....
*Shansi, TaTung C. F.	Jurassic Bituminous.....	4.45	30.17	65.38	4.06	1.29	.....
*Shansi, Tse Chou C. F.	Permo-Carb. Anthracite.....	2.26	3.43	84.66	9.63	0.36	.....
*Shansi, Yang Chuan C. F.	Anthracite.....	1.78	7.62	80.93	9.66	1.40	.....
*Shantung, Yi Hsien C. F.	Bituminous.....	0.52	28.60	63.31	7.05	0.52	.....
*Ssu-ch'uan-sheng, Chi-Chiang C. F.	Mesozoic Anthracite.....	1.60	10.15	76.45	11.80	1.64	.....
*Ssu-ch'uan-sheng, Kuan C. F.	Mesozoic Bituminous.....	1.83	32.69	63.84	1.64	0.42	.....
*Ssu-ch'uan-sheng, P'eng C. F.	Mesozoic Bituminous.....	2.34	37.78	58.23	1.65	0.15	.....
*Wu-Chia C. F.	Mesozoic Bituminous.....	17.94	34.30	43.59	4.17	0.48	9,108
FEDERATED MALAY STATES							
Rantau Forest Reserve.....	*Tertiary.....	21.00	38.70	39.26	1.04	0.50	9,777
Rantau Forest Reserve.....	*Tertiary.....	18.23	35.50	41.19	5.08	0.38	9,839
INDIA							
.....	†Alkura No. 13.....	0.60	24.62	57.96	16.82	...	.....
.....	†Alkura No. 13.....	0.89	19.32	63.13	16.66	...	.....
.....	†Alkura No. 13.....	0.82	19.77	61.60	17.61	...	.....
.....	†Barraree No. 13.....	0.86	22.10	63.52	17.48	...	.....
.....	†Barraree No. 13.....	1.25	22.76	60.57	15.42	...	.....
.....	†Barraree No. 13.....	1.18	22.22	58.27	18.33	...	.....
.....	†Barraree No. 14.....	1.42	23.10	65.16	10.32	...	.....
.....	†Buggutdeh No. 14.....	0.96	25.42	59.80	13.82	...	.....
.....	†Buggutdeh No. 14.....	0.95	19.42	65.67	13.96	...	.....
.....	†Chanch.....	1.76	24.76	60.65	12.83	...	.....
.....	†Choitideh No. 14.....	0.94	19.37	57.24	22.45	...	.....
.....	†Choitideh No. 14.....	0.94	17.95	59.99	21.12	...	.....
.....	†Choitidih No. 14.....	0.45	23.55	55.00	21.00	...	.....
.....	†Choitidih No. 15.....	0.67	25.43	59.35	14.55	...	.....
.....	†Choitidih No. 15.....	1.01	20.31	63.68	15.00	...	.....
.....	†Choitidih No. 15.....	1.01	19.40	64.88	14.71	...	.....
.....	†Javodova No. 17.....	0.95	30.80	56.30	11.95	...	.....
.....	†Javodova No. 17.....	1.85	24.15	61.75	12.25	...	.....
.....	†Layabod No. 14.....	0.26	23.56	57.06	19.12	...	.....
.....	†Layabod No. 14.....	0.94	17.39	62.96	18.71	...	.....
.....	†Layabod No. 14.....	1.00	16.67	62.99	19.34	...	.....
.....	†Layabod No. 15.....	1.19	18.96	64.67	15.18	...	.....
.....	†Layabod No. 15.....	1.09	18.69	61.74	18.48	...	.....
.....	†Londa No. 13.....	1.00	27.66	57.12	14.22	...	.....
.....	†Londa No. 13.....	1.25	22.05	63.31	13.39	...	.....
.....	†Londa No. 14.....	1.18	23.36	63.85	11.61	...	.....
.....	†Londa No. 14.....	1.35	23.35	65.25	10.05	...	.....
.....	†Moodideh No. 14.....	0.25	13.97	59.60	16.28	...	.....
.....	†Moodideh No. 14.....	0.63	17.70	64.12	17.55	...	.....
.....	†Moodideh No. 15.....	0.80	18.20	61.33	19.67	...	.....
.....	†Moodideh No. 15.....	0.78	18.43	64.18	16.61	...	.....
.....	†Moodideh No. 15.....	0.35	23.95	60.15	15.55	...	.....
JAPAN							
*Aburatsubo C. F., Honshu.....	Mesozoic Bituminous.....	3.92	33.27	46.69	16.12	0.95	12,870
*Amakusa C. F.	Mesozoic Semianthracite.....	2.17	10.66	80.63	6.54	...	12,380
*Ashpet C. F., Hokkaido.....	Mesozoic Bituminous.....	3.35	36.86	50.03	9.76	0.45	11,890
*Central C. F., Karafuto.....	Tertiary Bituminous.....	5.67	40.15	46.86	7.32	0.40	.....
*Central Honshu, Akatani.....	Tertiary Bituminous.....	5.24	41.88	45.30	7.58	2.18	.....
*Chihuko C. F., Chikuzen.....	Miocene Bituminous.....	4.21	42.92	45.71	7.33	0.68	12,965
*Fukushima C. F., Hyuga.....	Tertiary Semibituminous.....	0.68	23.06	57.35	18.01	3.50	.....
*Haporo C. F., Teshio.....	Tertiary Lignite.....	14.29	42.95	40.13	2.63	0.27	9,801
*Horonubo C. F., Teshio.....	Mesozoic Bituminous.....	11.51	39.79	40.29	8.31	0.47	9,669
*Joban C. F., Honshu.....	Mesozoic Lignite.....	12.24	40.61	36.11	11.04	1.02	9,759
*Kado C. F., Prov. of Rikuchu...	Mesozoic Lignite.....	6.91	27.58	23.33	42.18	0.40	.....
*Karatsu C. F., Hizen.....	Tertiary Bituminous.....	3.03	42.71	46.15	8.11	2.51	12,662
*Kayanuma C. F., Kayanuma...	Mesozoic Bituminous.....	1.97	34.88	53.05	10.10	1.81	12,053
*Kumano C. F., Kii Prov.	Mesozoic Anthracite.....	5.75	4.72	81.99	7.56	1.94	.....
*Kushiro C. F., Kushiro.....	Mesozoic Bituminous.....	8.44	39.92	42.91	8.73	0.45	.....
*Makunpet C. F., Iitaka.....	Mesozoic Lignite.....	13.74	39.20	39.06	8.00	1.28	.....
*Miike C. F., Chikugo-Iiigo....	Eocene Bituminous.....	0.66	41.74	48.24	9.36	3.61	13,427
*Nobi C. F., Honshu.....	Mesozoic Lignite.....	14.77	39.77	27.82	17.64	0.28	.....
*Noborippu C. F., Noto Peninsula	Mesozoic Semibituminous.....	11.13	22.87	58.91	7.09	0.53	.....
*Noto C. F., Noto Peninsula	Mesozoic Bituminous.....	12.36	36.28	43.06	8.30	0.45	.....
*Omine C. F., Nagato.....	Mesozoic Semianthracite.....	3.66	8.63	64.70	23.01	0.58	.....
*Onada C. F., Nagato Prov.	Mesozoic Lignite.....	7.97	43.08	35.55	13.40	1.46	.....
*Otaushinai C. F., Hokkaido....	Mesozoic Bituminous.....	2.11	39.06	52.65	6.18	0.53	12,552
*Poronai C. F., Noto Peninsula	Mesozoic Anthracite.....	10.92	38.03	45.74	5.31	0.43	.....
*Sasebo C. F., Prov. of Hizen...	Tertiary Bituminous.....	3.41	36.67	44.24	15.68	1.40	10,699

(Continued on Next Page)

*Coal Resources of the World, International Geological Congress (12th), Toronto, 1913.
 †"Green Book," Green Engineering Co.
 C. F.—Coal Field

ASIA—Japan—Continued

LOCATION	NAME OF COAL	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.
*Serutonai C. F. Notoro Pénin..	Mesozoic Semibituminous.....	2.94	27.47	66.93	2.65	0.89	.....
*Soya C. F., Teshio.....	Mesozoic Bituminous.....	13.57	40.08	38.14	8.21	0.54	.....
*Taka-Shima C. F., Prov. of Hizen	Tertiary Bituminous.....	1.16	38.83	54.43	5.58	0.82	12,979
*Tawain C. F., Tawain.....	Tertiary Bituminous.....	3.92	38.97	52.05	5.06	1.99	12,190
*Tsubuta C. F. Nagato.....	Mesozoic Anthracite.....	5.78	3.40	75.24	15.58	0.17	11,780
*Uryu Rumoi C. F., Teshio.....	Mesozoic Bituminous.....	5.62	40.05	46.74	7.59	0.74	11,689
*Yuparo C. F., Hokkaido.....	Mesozoic Bituminous.....	2.74	41.05	50.65	5.56	0.40	13,274
KOREA							
Kai-chhyon C. F.....	*Palaeozoic Anthracite.....	5.21	5.89	83.53	5.57	0.25	.....
Kui-baboi C. F.....	*Palaeozoic Anthracite.....	9.78	8.29	58.02	24.91	0.38	.....
Kyong-syong C. F.....	*Tertiary Subbituminous.....	9.61	43.84	31.95	14.60	4.44	8,316
O-no-chlon C. F.....	*Tertiary Subbituminous.....	13.07	43.77	40.13	3.03	...	10,890
Pho-uon C. F.....	*Jurassic Anthracite.....	7.13	7.82	69.09	15.96	0.32	.....
Phyong-yang C. F.....	*Jurassic Anthracite.....	3.25	5.51	62.66	28.58	0.34	.....
Phyong-yang C. F.....	*Jurassic Bituminous.....	19.32	26.90	35.03	18.75	...	.....
Phyong-yang C. F.....	*Mesozoic Semibituminous.....	6.45	15.08	74.77	3.70	0.37	.....
Sam-ka-pho C. F.....	*Mesozoic Bituminous.....	0.47	13.62	61.26	24.65	...	.....
Sa-ri-uon C. F.....	*Palaeozoic Bituminous.....	18.95	36.17	36.04	7.64	1.23	9,916
Tai-myong C. F.....	*Palaeozoic Anthracite.....	1.00	3.72	55.40	39.88	...	.....
Ul-san C. F.....	*Tertiary Lignite.....	7.55	46.33	35.42	10.70	9.05	9,765
Yong-il C. F.....	*Tertiary Lignite.....	8.94	29.49	50.94	10.63	0.91	13,460
MANCHURIA							
Ch'ang-ch'un C. F.....	*Jurassic Bituminous.....	9.22	31.88	58.90	9.34	0.87	.....
Ch'ang-ch'un C. F.....	*Jurassic Bituminous.....	8.50	34.68	50.04	6.78	0.71	.....
Ch'ang-ch'un C. F.....	*Jurassic Bituminous.....	3.11	36.83	54.76	5.30	0.55	12,078
Ch'ien-chin-chai C. F.....	*Tertiary Bituminous.....	8.28	38.37	40.63	12.72	1.02	10,494
Erh-fo-miao C. F.....	*Carb. Semibituminous.....	2.00	20.00	59.70	18.30	5.38	12,364
Hsiao-shieh C. F.....	*Carb. Anthracite.....	8.74	1.72	80.71	8.83	0.50	13,001
Hsi-kou-tzu C. F.....	*Carb. Semibituminous.....	8.12	15.20	47.78	28.90	11.68	13,102
Hung-o-hsien C. F.....	*Carb. Semibituminous.....	7.60	15.60	41.90	34.90	14.16	.....
Huo-shih-ling C. F.....	*Jurassic Bituminous.....	15.79	32.43	51.78	7.75	0.96	9,292
K'an-ch'ang Dist.....	*Carb. Semibituminous.....	1.95	14.35	77.12	6.58	0.95	11,385
Kang-yao-kou C. F.....	*Carb. Bituminous.....	6.25	22.50	56.05	15.20	6.87	12,159
Lao-hu-t'ai C. F.....	*Tertiary Bituminous.....	7.90	40.20	44.25	7.65	4.14	11,682
Lao-hu-t'ai C. F.....	*Tertiary Bituminous.....	6.71	41.87	47.20	4.22	1.73	12,870
Mu-lo-yu-tzu C. F.....	*Carb. Semianthracite.....	2.00	16.90	62.20	18.90	1.50	11,707
Niu-hsin-t'ai C. F.....	*Carb. Anthracite.....	1.19	7.16	73.71	17.94	2.07	10,296
Nuan-ti-t'ang C. F.....	*Carb. Semibituminous.....	13.47	21.53	41.30	23.70	1.93	11,261
Oyama C. F.....	*Tertiary.....	3.24	46.09	48.63	2.04	0.68	13,860
Pai-tsao-shu-kou C. F.....	*Carb. Semibituminous.....	7.30	20.10	50.40	22.20	0.51	12,247
Pen-hsi-hu Dist.....	*Carb. Bituminous.....	0.69	21.70	72.03	5.58	0.45	13,068
Sai-ma-chi C. F.....	*Mesozoic Semibituminous.....	1.49	22.11	70.42	5.98	0.40	.....
San-tao-yang-ch'a C. F.....	*Carb. Anthracite.....	1.50	5.00	76.40	16.10	1.00	12,893
Shao-ho-tzu C. F.....	*Jurassic Bituminous.....	7.43	32.03	50.34	10.20	0.91	10,692
Sha-kuo-t'un C. F.....	*Carb. Semibituminous.....	4.10	20.30	58.00	17.60	1.93	11,281
Shan-sung-kang C. F.....	*Carb. Semibituminous.....	1.70	22.20	61.61	14.49	0.72	11,880
Shih-men-chai C. F.....	*Tertiary Bituminous.....	5.66	32.40	36.93	25.01	0.87	9,306
Ssu-p'ing-chieh C. F.....	*Carb. Bituminous.....	0.90	28.30	64.91	5.89	2.85	13,662
Ta-tai-shan C. F.....	*Jurassic Bituminous.....	10.56	29.68	46.54	13.20	1.52	12,217
Togo C. F.....	*Tertiary.....	4.88	41.59	49.02	4.52	0.83	12,652
T'ung-hua Dist.....	*Carb. Bituminous.....	1.02	17.42	62.26	19.30	0.50	9,900
Wa-fang-tien C. F.....	*Carb. Bituminous.....	3.43	23.61	34.68	38.28	0.55	7,920
Wu-hu-tsui C. F.....	*Carb. Semibituminous.....	6.46	18.20	65.08	10.26	0.65	9,504
Wu-lung-t'un C. F.....	*Jurassic Bituminous.....	10.11	25.95	45.96	17.98	0.44	9,356
Yang-pai-pao C. F.....	*Tertiary Bituminous.....	6.02	38.56	52.40	3.02	0.58	12,078
Yen-t'ai C. F.....	*Carb. Semianthracite.....	1.12	13.55	72.65	12.68	1.59	.....
Yuan-lai-yao C. F.....	*Carb. Bituminous.....	2.05	30.31	55.86	11.78	1.02	11,682
SIBERIA							
Irkutsk Basin, Chere-mkovo C. F.	*Jurassic.....	....	49.24	47.72	3.04	0.60	.....
Irkutsk Basin, Chere-mkovo C. F.	*Jurassic.....	....	40.17	46.37	13.46	0.20	.....
Sakhalien, West Coast.....	*Cretaceous Bit.....	1.77	25.37	54.41	20.22	0.22	.....
Sakhalien, West Coast.....	*Miocene Bit.....	2.21	37.66	60.01	2.33	0.29	.....
Sakhalien, West Coast.....	*Miocene Bit.....	5.35	38.24	60.18	1.58	2.11	.....
Sakhalien, West Coast.....	*Miocene Bit.....	3.91	41.80	54.56	3.64	1.76	.....
Sakhalien, West Coast.....	*Miocene Bit.....	0.39	27.02	70.11	2.87	0.27	.....
Sakhalien, West Coast.....	*Miocene Bit.....	1.18	28.58	67.55	3.87	1.07	.....
Sakhalien, West Coast.....	*Oligocene.....	1.29	24.42	71.03	4.55	0.74	.....
Trans Baikal Prov. Malinovo	*Jurassic Lignite.....	13.08	38.46	42.52	5.94	0.91	8,300
Upper Bureia, Dublikan.....	*Jurassic Bit.....	11.54	39.85	42.77	5.84	0.70	.....
Upper Bureia, Umalta River..	*Jurassic Semibit.....	5.58	22.12	24.56	47.74	0.45	.....
Upper Bureia, Ust-Niman.....	*Jurassic Semibit.....	2.31	9.39	71.23	17.07	0.31	.....
ASIA MINOR—TURKEY							
Mesepsif Valley.....	*Lignite.....	...	32.60	45.40	12.60	...	.....

(Continued on Next Page)

*Coal Resources of the World, International Geological Congress (12th), Toronto, 1913.
C. F.—Coal Field.

PHILIPPINE ISLANDS

LOCATION	NAME OF COAL	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.
Batan Is. Calanaga.....	*Tertiary Lignite.....	13.28	39.10	39.13	8.49	1.93	9,398
Batan Is. East Batan.....	*Tertiary Lignite.....	18.32	36.53	36.60	8.55	1.02	8,312
Batan Is. Liguian.....	*Tertiary Subbit.....	5.81	39.39	49.71	5.09	0.12	11,444
Cebu Is. Camanasi.....	*Tertiary Subbit.....	7.49	44.18	43.90	4.43	2.40	11,284
Cebu Is. Camujumayan.....	*Tertiary Subbit.....	12.49	41.63	42.41	3.47	0.65	10,370
Cebu Is. Mt. Licos.....	*Tertiary Subbit.....	8.10	40.73	48.21	2.96	0.42	11,563
Cebu Is. Uling.....	*Tertiary Subbit.....	14.90	38.63	41.91	4.56	0.35	.....
Masbate, Cataingan.....	*Tertiary Subbit.....	4.87	46.50	44.18	4.45	.....	.....
Mindanao Is. Sibuguey.....	*Tertiary Bit.....	5.32	46.17	46.65	1.86	0.43	12,152
Mindoro Is. Bulalacao.....	*Tertiary Lignite.....	17.57	42.43	31.49	8.51	2.54	8,926
Polillo Is. Polillo.....	*Tertiary Bit.....	3.76	43.58	48.60	4.06	0.32	12,195

AFRICA

EAST AFRICAN PROTECTORATE

Mwele.....	*Pleistocene Bituminous.....	13.05	27.80	43.08	16.07	0.03	7,954
Mwele.....	*Pleistocene Bituminous.....	10.38	26.17	59.95	3.50	...	10,225

Nigeria, Southern

Azata Valley.....	*Cretaceous Subbituminous.....	5.62	38.18	48.41	7.79	0.76	12,600
Ibusa.....	*Tertiary Lignite.....	9.44	47.01	31.18	12.37	1.61	10,150
Ibusa.....	*Tertiary Lignite.....	9.79	45.94	36.22	8.05	0.68	11,050
Issele-Asaba.....	*Tertiary Lignite.....	11.81	44.86	29.48	13.85	1.10	9,760
Mballa.....	*Tertiary Lignite.....	10.00	40.26	29.25	20.49	2.35	9,150
Moroko.....	*Tertiary Lignite.....	9.44	36.56	42.83	11.17	...	10,620
Obompa.....	*Tertiary Lignite.....	11.92	48.13	35.68	4.27	1.24	10,820
Obompa.....	*Tertiary Lignite.....	9.12	39.25	29.38	22.25	2.14	8,400
Obweti Valley.....	*Cretaceous Subbituminous.....	7.04	37.36	48.18	7.42	1.15	11,900
Okpanam Dist.....	*Tertiary Lignite.....	7.88	52.71	31.90	7.51	1.28	11,120
Okpanam Dist.....	*Tertiary Lignite.....	9.14	50.82	31.61	8.43	1.17	10,898
Okpanam Dist.....	*Tertiary Lignite.....	11.81	44.86	29.48	13.85	1.10	9,760
Okpanam Dist.....	*Tertiary Lignite.....	7.55	50.50	32.23	9.72	1.85	10,800
Omodimi.....	*Tertiary Lignite.....	12.23	42.32	32.29	13.16	0.78	9,050
Omodimi.....	*Tertiary Lignite.....	12.46	47.25	31.26	9.03	0.65	10,180
Omodimi.....	*Tertiary Lignite.....	13.41	45.64	32.87	8.08	1.97	10,200
Onitsha.....	*Tertiary Lignite.....	7.09	47.00	23.60	22.31	0.79	9,125
Onitsha.....	*Tertiary Lignite.....	10.88	48.17	29.83	11.12	1.08	10,200
Udi.....	*Cretaceous Subbituminous.....	4.15	46.98	43.53	5.34	1.61	13,400
Udi.....	*Cretaceous Subbituminous.....	5.65	36.56	45.32	12.47	0.62	11,400
Udi.....	*Cretaceous Subbituminous.....	5.13	40.78	39.57	14.52	1.28	11,600

Nyasaland

Kasante Area, Kasante.....	*Karoo System.....	8.89	23.73	47.91	19.47	...	7,400
Lower Shire Area, Nachipere.....	*Karoo System.....	2.58	12.24	70.15	15.03	...	.....
Lower Shire Area, Sumbu.....	*Karoo System.....	1.06	31.70	20.41	46.83	...	.....
Lower Shire Area, Sumbu.....	*Karoo System.....	1.38	9.92	47.17	41.53	...	.....
Lufira Area, Mwenemgune.....	*Karoo System.....	6.00	27.73	47.63	18.64	0.49	10,000
Mt. Waller Area, Rumpi River.....	*Karoo System.....	1.25	28.11	59.76	10.88	0.64	14,260
Mt. Waller Area, Zindira River.....	*Karoo System.....	1.30	23.80	56.92	17.98	0.59	12,300
Mwapo Area.....	*Karoo System.....	3.46	20.38	39.86	36.30	...	8,050
Nkana Area, Kanjoka.....	*Karoo System.....	8.95	27.05	35.91	28.09	...	7,400
Nkana Area, Mandengo.....	*Karoo System.....	6.61	27.75	43.89	21.74	...	9,500
West Nyika Area, Chimanga.....	*Karoo System.....	2.03	28.02	57.36	12.59	1.05	11,864

South Africa

.....	†.....	1.20	27.03	57.61	14.16	...	12,087
.....	†.....	0.04	20.01	55.34	24.61	...	9,573
.....	†.....	0.85	22.84	63.85	12.46	...	12,552
.....	†.....	1.13	22.68	62.59	13.60	...	12,271
.....	†.....	3.92	23.33	60.50	12.25	...	11,807
.....	†.....	2.68	37.87	53.58	5.87	...	13,538
.....	†.....	3.33	20.30	52.46	23.91	...	9,805
.....	†.....	3.29	17.39	58.91	20.41	...	10,859
.....	†.....	3.75	19.43	58.71	18.11	...	11,149
.....	†.....	1.92	24.48	56.95	16.65	...	11,904
.....	†.....	1.10	18.22	54.83	25.85	...	9,389
.....	†Delagoa Bay.....	1.29	24.32	59.35	15.04	...	12,450
.....	†Douglas.....	2.58	25.37	58.26	13.79	...	12,360
.....	†Herold No. 1.....	4.78	34.31	46.87	14.04	...	11,100
.....	†Middleberg.....	1.51	25.16	58.68	14.65	...	12,580
.....	†Premier.....	1.57	22.14	59.21	12.67	...	12,200
.....	†Transvaal Heidelberg.....	4.25	21.57	61.07	13.11	...	11,400
.....	†Transvaal Middleberg.....	2.38	24.35	57.19	16.08	...	12,080
.....	†Transvaal Middleberg.....	1.88	27.16	54.48	16.48	...	11,950
.....	†Transvaal Middleberg.....	2.63	22.55	58.85	15.97	...	12,000
.....	†Transvaal Vereening.....	4.45	27.57	52.10	15.88	...	11,180
.....	†Whitbank.....	0.60	25.37	61.94	12.09	...	12,620
.....	†Vereening.....	5.08	17.66	47.71	29.55	...	8,950

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*Coal Resources of the World, International Geological Congress (12th), Toronto, 1913.

†"Green Book," Green Engineering Co.

AFRICA—Continued

LOCATION	NAME OF COAL	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.
MADAGASCAR							
Benenitra.....	*Bituminous.....	2.42	31.68	47.66	18.24	*1.30	11,700
Benenitra.....	*Bituminous.....	3.40	29.00	44.36	23.24	0.76	10,400
Benenitra.....	*Bituminous.....	4.02	27.38	43.36	25.24	1.08	10,200
Benenitra.....	*Bituminous.....	7.58	31.42	43.26	17.74	1.78	11,500

AUSTRALASIA

AUSTRALIA							
.....	†Broadwood.....	1.46	34.99	55.70	7.85	...	13,107
.....	†Broadwood.....	1.20	31.46	53.25	14.09	...	12,604
.....	†Clifton.....	1.20	22.30	64.20	12.30	...	...
.....	†Duckenfield.....	2.48	26.06	57.96	13.50	...	12,060
.....	†Duckenfield.....	2.40	31.46	59.44	6.70	...	13,439
.....	†Duckenfield.....	2.77	27.11	61.04	9.08	...	12,375
.....	†Excelsior.....	1.40	18.60	66.10	13.90	...	...
.....	†Invincible.....	3.10	32.50	47.90	16.50	...	...
.....	†Irondale.....	3.40	32.70	46.30	17.60	...	...
.....	†Kimble.....	1.30	22.70	62.90	13.10	...	...
.....	†Lithgaw.....	3.00	32.70	46.70	17.60	...	...
.....	†Metropolitan.....	1.30	20.30	66.80	11.60	...	...
.....	†N. Bolli.....	1.60	25.00	60.60	12.80	...	...
.....	†Seaham.....	1.23	30.76	56.96	11.05	...	12,580
.....	†Seaham.....	1.05	31.36	48.79	18.80	...	11,583
.....	†S. Clifton.....	1.64	29.54	58.17	10.65	...	12,720
.....	†S. Clifton.....	0.75	19.94	68.13	11.18	...	12,375
.....	†S. Clifton.....	1.10	17.10	72.80	9.00	...	12,672
.....	†S. Clifton.....	0.96	17.70	72.31	9.03	...	12,663
.....	†W. Wallsen.....	2.05	29.93	55.27	12.75	...	12,523
.....	†W. Wallsen.....	1.82	30.99	56.09	11.10	...	12,969
.....	†W. Wallsen.....	0.82	32.02	50.22	16.94	...	11,682
New South Wales							
Northern Coal Field.....	*Greta Coal Measure.....	1.84	41.61	49.52	7.03	1.29	.....
Northern Coal Field.....	*Newcastle Coal Measure.....	2.01	36.01	53.27	8.71	0.47	.....
Northern Coal Field.....	*Tomago Coal Measure.....	1.88	35.71	52.77	9.64	1.86	.....
New Zealand							
Central Otago, Bannockburn..	*Lignite.....	26.12	43.83	23.75	6.30	0.32	7,724
Coalbrookdale, Dennison....	*Bituminous.....	2.37	40.08	55.73	1.82	0.55	14,261
Dennison, Ironbridge Mine....	*Bituminous.....	0.91	41.14	57.67	0.28	4.62	14,806
Fox River, S. of Westport....	*Anthracite.....	0.23	11.07	82.42	6.28	0.35	.....
Fox River, S. of Westport....	*Anthracite.....	0.80	5.10	90.90	3.20	...	.....
Greymouth, Paparoa Mine....	*Semi-Anthracite.....	0.70	16.68	77.67	4.95	0.30	14,915
Greymouth, Paparoa Mine....	*Semi-Anthracite.....	0.40	16.93	78.90	3.77	0.37	15,190
Greymouth, Brunner Mine....	*Bituminous.....	0.34	36.93	57.16	5.57	2.35	14,445
Greymouth, State No. 2.....	*Bituminous.....	1.27	42.36	54.24	2.13	0.23	14,894
Greymouth, State No. 1.....	*Semi-Bituminous.....	8.22	41.50	49.71	0.57	0.45	12,812
Kaitangata, Otago.....	*Brown Coal.....	18.22	39.96	38.00	3.82	0.40	9,995
Mokau, Mangapapa Mine....	*Brown Coal.....	11.34	43.29	38.65	6.72	2.71	10,615
N. Auckland, Kiripaka.....	*Semi-Bituminous.....	4.65	44.79	43.08	7.48	1.03	11,846
Nightcaps.....	*Brown Coal.....	24.80	39.24	31.04	4.92	0.23	8,581
Puponga, N. W. Nelson.....	*Semi-Bituminous.....	6.05	39.99	50.95	3.01	0.50	12,357
Southland, Gore.....	*Lignite.....	30.92	40.42	25.34	3.32	0.45	7,551
Springfield.....	*Brown Coal.....	23.88	35.13	34.74	6.25	0.45	9,369
Waikato, Taupi Extd. Mine....	*Brown Coal.....	11.72	42.12	43.73	2.43	0.32	11,032
Queensland							
Brisbane, Beaudesert Area....	*Trias-Jura.....	5.00	33.00	45.00	17.00	...	12,244
Brisbane, Dalby Area.....	*Trias-Jura.....	5.40	39.60	42.50	12.50	...	12,645
Brisbane, Ipswich Area.....	*Trias-Jura.....	1.50	27.00	58.50	14.00	...	13,440
Brisbane, Ipswich (Walloon)..	*Trias-Jura.....	6.00	39.00	44.00	11.00	...	12,772
Brisbane, Nundah.....	*Trias-Jura.....	1.50	28.50	51.00	19.00	...	12,609
Brisbane, Toowoomba Area....	*Trias-Jura.....	4.50	38.00	41.00	16.50	...	...
Brisbane, Warwick Area.....	*Trias-Jura.....	4.50	41.00	40.50	14.00	...	12,210
Cooktown, Cooktown Field....	*Trias-Jura.....	2.50	24.00	59.50	14.00	...	13,048
Cooktown, Little River.....	*Trias-Jura.....	1.50	11.50	75.00	12.00	...	13,693
Emerald, Clermont Area.....	*Permo-Carb.....	4.50	32.00	57.50	6.00	...	13,907
Gladstone, Callide Creek....	*Trias-Jura.....	7.50	26.50	54.00	12.00	...	12,692
Maryborough, Barrum Area....	*Trias-Jura.....	2.00	27.00	66.00	5.00	...	14,542
Maryborough, Tiaro Area....	*Trias-Jura.....	4.40	20.00	61.80	13.80	...	12,664
McKay, Nebo Area.....	*Permo-Carb.....	3.00	10.50	73.00	13.50	...	13,165
Rockhampton, Mackenzie River.	*Permo-Carb.....	1.50	14.00	77.00	7.50	...	14,570
Rockhampton, Waterpark Cr..	*Permo-Carb.....	10.50	41.00	41.00	7.50	...	12,298
St. Lawrence, Styx River....	*Trias-Jura.....	2.00	29.00	63.00	6.00	...	14,460
Townsville, Hughenden Area..	*Cretaceous.....	9.50	31.00	50.50	9.00	...	12,707
South Australia							
Leigh's Creek.....	*Jurassic Subbituminous.....	18.55	33.88	38.48	8.69
Leigh's Creek.....	*Jurassic Subbituminous.....	17.50	26.90	41.40	14.20

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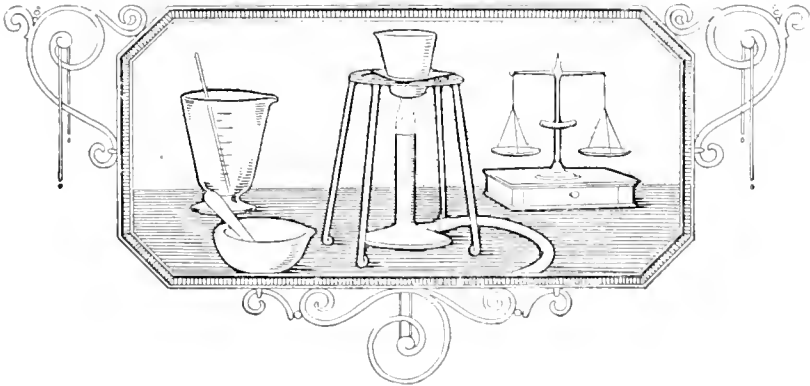
*Coal Resources of the World. International Geological Congress (12th), Toronto, 1913.

†"Green Book," Green Engineering Co.

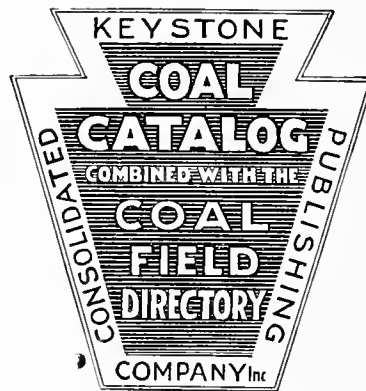
AUSTRALASIA—Continued

LOCATION	NAME OF COAL	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined R. T. U.
Tasmania							
Avoca C. F., Catamaran.....	*Mesozoic Bit.....	4.00	24.50	67.80	3.70	...	.....
Avoca C. F., Douglas River.....	*Mesozoic Bit.....	5.50	30.90	50.80	12.30	0.50	.....
Avoca C. F., Fingal.....	*Mesozoic Bit.....	4.28	28.40	57.50	9.28	0.54	.....
Avoca C. F., Fingal.....	*Mesozoic Bit.....	3.86	31.02	55.00	9.56	0.56	.....
Avoca C. F., Hamilton.....	*Mesozoic Bit.....	6.40	24.27	52.95	15.80	0.58	.....
Avoca C. F., Hamilton.....	*Mesozoic Bit.....	5.30	25.60	53.87	14.20	1.03	.....
Avoca C. F., Ida Bay.....	*Mesozoic.....	3.80	12.90	58.00	25.30	...	.....
Avoca C. F., Llandaff.....	*Mesozoic Bit.....	2.40	34.70	50.20	12.00	0.70	.....
Avoca C. F., Longford.....	*Mesozoic Bit.....	13.00	27.30	47.10	12.60	0.55	.....
Avoca C. F., Mt. Rex.....	*Jurassic Bit.....	1.20	35.06	54.50	8.50	0.80	.....
Avoca C. F., Nicholas Range.....	*Mesozoic.....	6.20	29.20	45.60	18.90	...	.....
Avoca C. F., Rigneys.....	*Mesozoic Bit.....	2.00	24.00	62.00	12.00	0.001	12,062
Avoca C. F., St. Marys.....	*Mesozoic Bit.....	0.80	30.70	55.40	13.10	...	.....
Avoca C. F., York Plains.....	*Mesozoic.....	2.70	13.00	67.40	16.20	0.70	.....
Mersey and Don Fields, Preyton...	*Permo-Carb.....	12.40	41.20	36.60	9.80	...	.....
Mersey and Don Fields, Tarleton...	*Permo-Carb.....	12.90	46.60	36.50	4.00	...	.....
Mt. Cygnet C. F., Mt. Cygnet.....	*Permo-Carb.....	0.90	13.20	63.90	22.00	...	.....
West. Highlands C. F., Barnbluff..	*Permo-Carb. Kero. Shale..	0.20	52.80	42.40	4.30	0.70	.....
West. Highlands C. F., Mt. Pelton.	*Permo-Carb.....	0.80	19.60	52.00	17.10	10.50	.....
Wynyard C. F.....	*Permo-Carb. Splint.....	0.92	43.40	50.61	5.07	...	.....
Wynyard C. F.....	*Permo-Carb. Bit.....	0.90	41.10	52.50	5.50	...	.....
Wynyard C. F.....	*Permo-Carb. Kero. Shale..	0.50	76.20	21.00	2.30	...	.....
Wynyard C. F.....	*Permo-Carb. Bright Coal..	1.27	42.45	51.46	4.82	...	.....
Wynyard C. F., Camp Creek.....	*Permo-Carb.....	1.10	47.90	42.20	8.80	...	.....
Wynyard C. F., Fault Creek.....	*Permo-Carb.....	1.20	43.40	45.70	9.70	...	.....

*Coal Resources of the World, International Geographical Congress (12th), Toronto, 1913.
C. F.—Coal Field.



PART TWO



CLASSIFICATION OF COALS

I. ACCORDING TO RANK *

Methods of Classification; Description of Anthracite, Semianthracite, Semibituminous, Bituminous, Cannel, Subbituminous, Lignite, With a List of Seams Producing Each of the Ranks Named; Comparison of Different Ranks.

To serve the purposes of this book coals have been classified in three ways: first, according to rank; second, according to their commercial use; third, according to their trade name or physical structure. The classifications will be treated in the order named.

Methods of Classification

In this book the word "rank" will be used to designate those differences in coal that are due to the progressive change from lignite to anthracite, a change marked by the loss of moisture, of oxygen, and of volatile matter. This change is generally accompanied by an increase of fixed carbon, of sulphur, and probably of ash. When, however, one coal is distinguished from another by the amount of ash or sulphur it contains, this difference is said to be one of grade. Thus "a high-grade coal" means merely one that is relatively pure, whereas "a high-rank coal" means one that is high in the scale of coals, or, in other words, one that has suffered devolatilization and that now contains a smaller percentage of volatile matter, oxygen, and moisture than it contained before the change occurred.

Within the boundaries of the United States there are all ranks of coal, from the coarse, woody lignite of North Dakota and eastern Montana, to the highest rank of anthracite in the fields of eastern Pennsylvania. From the earliest days of coal mining in this country it has been recognized that coals differ greatly, not only in the percentage of ash which they contain, but also in their inherent composition. Although the latter distinction was recognized, little or no attempt was made to determine the reason for the difference or the criteria for fixing the limits of different groups of coals. The first serious attempt in this country to devise a scientific basis for the classification of coals was made by Persifer Frazer, Jr., of the Second Geological Survey of Pennsylvania, under the direction of J. P. Lesley. Frazer† listed most of the commercial coals of the State and then compared the trade distinctions with the "fuel ratio" (the quotient of the fixed carbon divided by the volatile matter of the proximate analysis). He found that there were in use at that time the rank names of anthracite, semianthracite, semibituminous, and bituminous. He found that in practice the fuel ratios of the coals of the different groups overlapped, but he concluded that these ranks might be established with the following limits:

	Fuel ratio.
Anthracite	100 to 12
Semianthracite	12 to 8
Semibituminous	8 to 5
Bituminous	5 to 0

These ranks, with the boundaries fixed provisionally by Frazer, serve very well for Pennsylvania and for the coals of the great Appalachian trough, extending from northern Pennsylvania to central Alabama, but they do not apply to the great mass of western coals, which at that time were of little or no importance. Most of those persons who were instrumental in developing the coal fields of the West originally came from the East, and they carried with them ideas of coal obtained in the eastern fields, which contained high-rank fuel. Not only that, but most of the coals in the Appalachian region and those in the upper Mississippi Valley are of Carboniferous age and hence are very old; but the coals of the West are Cretaceous and even Tertiary in age and hence, when compared with Appalachian coals, are very young indeed. A difference in character was recognized, and as the western coals are generally inferior they were lumped together and called merely "lignite." The term "lignite" is undoubtedly appropriate for many of the low-rank coals of the West, but it is certainly not appropriate for black, shiny coals that show little trace of woody texture and are capable of producing a coke of fairly good quality. Nevertheless such coals are called lignite and relegated to the lowest rank among coals.

Several persons have attempted to devise schemes of classification based upon chemical composition by which a certain coal could be referred to its proper place merely by means of its chemical analysis, but so far no scheme of this kind has been devised that is applicable to all ranks of coal. Some scheme like Frazer's suits admirably one part of the column but cannot be made to fit the other part. Schemes of this kind are so unsatisfactory that the

*The description of coals according to rank has been extracted from Professional Paper 100-A, "The Coal Fields of the United States", by Marius R. Campbell, by permission of the United States Geological Survey, George Otis Smith, Director. (The Survey is not responsible for the list of seams which follow each rank, these being based on information derived from sources other than the Professional Paper referred to.—Editor.)

†Pennsylvania Second Geol. Survey Rept. MM. p. 143, 1879.

United States Geological Survey has finally decided that it is practically impossible to classify all ranks of coal according to their chemical composition, and that it is necessary to supplement chemical by other criteria. Accordingly, Frazer's scheme, with some necessary modification to make it agree more closely with modern trade practices, has been adopted for the higher ranks of coals, and physical characteristics have been used for the lower ranks. Thus, in the West no one questions that there is coal of the rank of lignite, but it is difficult, if not impossible, to specify what a lignite is in terms of its chemical constituents. Similarly in the Rocky Mountain region, where the low-rank coals are abundant, there is no question that there is a difference between brown, woody, or amorphous lignite and shiny, black subbituminous coal, but this difference is one that is not clearly defined by available chemical criteria. There is, however, a marked physical difference, although there is no sharp line of demarcation between them. Thus subbituminous coal is black and shiny, whereas lignite is dull and generally woody in texture; subbituminous coal has a greater heating value and carries less moisture than lignite. Altogether the difference between the two is so marked that they are known by different names in the trade, and for that reason, if for no other, they should be classed differently.

In a like manner the distinction between subbituminous and bituminous is not sharp and does not show in a chemical analysis. Subbituminous

coal generally carries more moisture than bituminous, but there are so many exceptions to this rule that it has very little value as a means of distinction. There is, however, one marked difference by which they can always be separated, and that is the difference in their behavior under weathering, and as this difference has a marked effect upon their commercial value and use it seems to be a legitimate criterion for separating them into the two ranks, subbituminous and bituminous. The difference in the effect of weathering is due primarily to a difference in the percentage of moisture in the coal, but, as stated above, the percentage of moisture is variable. Subbituminous coals, however, in general contain more moisture than bituminous coal, and on weathering lose their moisture readily. This loss of moisture results in shrinkage and the formation of incipient cracks, which do not conform to the few joint faces but tend to run irregularly. On the other hand, the bituminous coals generally contain a smaller percentage of moisture, so that they shrink very little when they are suddenly dried. They may be very highly jointed and may fall to pieces readily when mined and handled, but their breakage is due to the inherent weakness of the coal, and the cracks almost invariably correspond with the joint faces.

By using these criteria (part chemical and part physical) it is possible to classify coals and not only to define the general characters of the different groups but to delimit them with considerable accuracy. The United States Geological Survey recognizes the ranks indicated below.

ANTHRACITE

Anthracite is generally well known and may be defined as a hard coal having a fuel ratio (fixed carbon divided by the volatile matter) of not more than 50 to 60 and not less than 10. Most of it is mined in eastern Pennsylvania, where its peculiar quality is due to regional metamorphism—that is, to the crushing stresses that affected the crust of the earth when the rocks were thrown into the great folds that characterize this region. Small areas of anthracite occur in the West, but generally these coals have been converted to anthracite by the heat of some mass of igneous rock that was thrust into the other rocks while it was in a molten condition. Many such masses take the form of thin sheets, which were forced in between the beds of the other rocks, and consequently for some

distance they may lie parallel with the coal beds. If a coal bed is cut by the igneous rock, it may be burned to ashes, made into coke, or converted to anthracite. The product will depend on the presence of air, the intensity of the heat, and the length of time the coal was subjected to the influence of the heated mass. Anthracite is an almost ideal domestic fuel, but it is not well adapted to steam raising unless an absolutely smokeless coal is needed. Many people believe that anthracite has greater heating value than any of the other ranks, but this is not true, as can be seen by reference to the figure shown farther on under the head of Comparison of Different Ranks. Largely on account of its low heating power anthracite is not an economical fuel for steam raising or for use in general manufacturing.

LIST OF ANTHRACITE COAL SEAMS

Page References						Page References					
Seam, County or Field	State	For Description	Supplementary Analysis	List of operators	Directory of Mines	Seam, County or Field	State	For Description	Supplementary Analysis	List of operators	Directory of Mines
Gunnison County.....	Colo.	289	291	295	298	Southern Field.....	Penna.	681	...	687	689
Routt County.....	Colo.	288	293	297	298	Western-Middle Field....	Penna.	679	...	686	689
Lincoln County.....	N. Mex.	586	587	588	589	Iron and Washington Cos.	Utah	909	910	...	913
Santa Fe County.....	N. Mex.	585	587	588	589	Lewis County.....	Wash.	947	949	953	954
Eastern-Middle Field.....	Penna.	680	...	686	689	Whateom County.....	Wash.	947	952	953	954
Northern Field.....	Penna.	678	...	684	689						

SEMIANTHRACITE

Semianthracite is also a hard coal, but it is not so hard as true anthracite. It is high in fixed carbon, but not so high as anthracite. It may be defined as a hard coal having a fuel ratio ranging from 6 to 10. The lower limit is uncertain, as it is difficult to say where the line should be drawn to separate "hard" from "soft" coal and at the same time to divide the two ranks according to their fuel ratio. Some hard coals of the anthracite type have a fuel ratio as low as 6.5 or 7, whereas some of the soft coals have a fuel ratio as high as 7 or perhaps more. For this reason it is probable that fuel ratio

alone can not be depended upon to separate these two ranks, but that physical properties also may have to be taken into consideration. The change of ordinary soft coal to semianthracite is due to the same causes that produced anthracite, except that the process has not been carried so far in semianthracite, possibly because the action has not been so intense. There is very little semianthracite in this country, so it is only a small factor in the coal trade. Such semianthracite as is mined reaches the consumer generally under the name "anthracite" and is masquerading under false colors.

LIST OF SEMIANTHRACITE COAL SEAMS

Seam, County or Field	State	Page References				Seam, County or Field	State	Page References			
		For Description	Supplementary Analyses	List of Operators	Directory of Mines			For Description	Supplementary Analyses	List of Operators	Directory of Mines
Denning Seam.....	Ark.	268	269	270	271	Washington County.....	Utah	909	910	...	913
Shinn Basin Seam.....	Ark.	268	269	270	271	Montgomery-Pulaski Counties.....	Va.	919	923	933	934
Santa Fe County.....	N. Mex.	585	587	588	589	Lewis County.....	Wash.	947	949	953	954
Sullivan County.....	Penna.	682	...	688	689						

SEMIBITUMINOUS

The name "semibituminous" is exceedingly unfortunate, as literally it implies that this coal is half the rank of bituminous, whereas it is applied to a kind of coal that is of higher rank than bituminous—really superbituminous. Semibituminous coal may be defined as coal having a fuel ratio ranging from 3 to 7. Its relatively high percentage of fixed carbon makes it nearly smokeless when it is burned properly, and consequently most of these coals go into the market as "smokeless coals." The best coal of this type has a heating value greater than that of any of the other ranks and is consequently best adapted to raising steam and to general manufacturing that requires a high degree of heat. It is regarded as the best coal for steamship and especially for naval use, as it is nearly smokeless and requires less bunker space per unit of heat

than other coals. The coal is generally minutely jointed and is therefore tender and friable. In fact, it is so friable that in mining a large percentage of fine coal is produced, and in transportation many of the lumps are broken to pieces, so that by the time it reaches the consumer, especially if it has been transshipped, it is generally in small pieces. This fineness is by many regarded as detrimental, because the public is accustomed to lump coal which will stand transportation without crushing, but when this coal is used with mechanical stokers and with a grate adapted to its use the fineness of the coal is not disadvantageous. The great bulk of this kind of coal is in the eastern fields, but some is found in the West, where it has been subjected to a slight amount of regional metamorphism or has been heated by some igneous mass.

LIST OF SEMIBITUMINOUS COAL SEAMS

Seam, County or Field	State	Page References				Seam, County or Field	State	Page References			
		For Description	Supplementary Analyses	List of Operators	Directory of Mines			For Description	Supplementary Analyses	List of Operators	Directory of Mines
Hartshorne Seam.....	Ark.	268	269	270	271	Fulton Seam.....	Penna.	709	714	766	782
Denning Seam.....	Ark.	268	269	270	271	Kelly Seam.....	Penna.	710	714	766	782
Paris Seam.....	Ark.	268	269	270	271	Kittanning, Upper Seam..	Penna.	707	715	772	782
Spadra Seam.....	Ark.	268	269	270	271	Kittanning, Middle Seam..	Penna.	708	715	771	782
Gunnison County.....	Colo.	289	291	295	298	Kittanning, Lower Seam..	Penna.	708	714	767	782
Pitkin County.....	Colo.	289	292	...	298	Lemon Seam.....	Penna.	706	...	763	782
Bakerstown Seam.....	Md.	536	539	540	542	Mercer Group Seams.....	Penna.	711	716	...	782
Brookville Seam.....	Md.	538	539	540	542	Miller Seam.....	Penna.	708	...	767	782
Clarion Seam.....	Md.	538	539	540	542	Moshannon Seam.....	Penna.	707	...	760	782
Freeport, Lower Seam...	Md.	537	539	540	542	Philson Seam.....	Penna.	706	716	...	782
Freeport, Upper Seam...	Md.	537	539	540	542	Pittsburgh Seam.....	Penna.	704	716	774	782
Kittanning, Lower Seam..	Md.	537	539	541	542	Price Seam.....	Penna.	705	...	...	782
Kittanning, Upper Seam..	Md.	537	539	541	542	Redstone Seam.....	Penna.	704	...	780	782
Pittsburgh (Big) Seam...	Md.	536	539	541	542	Iron and Washington Cos.	Utah	909	910	...	913
Sewickley, Upper Seam...	Md.	536	539	541	542	Pocahontas No. 3 Seam...	Va.	920	924	932	934
Lincoln County.....	N. Mex.	586	587	588	589	Lewis County.....	Wash.	947	949	953	954
Santa Fe County.....	N. Mex.	585	587	588	589	Beckley Seam.....	W. Va.	963	966	1061	1080
Hartshorne, Lower Seam..	Okla.	659	661	664	667	Fire Creek Seam.....	W. Va.	964	968	1064	1080
Hartshorne, Upper Seam..	Okla.	659	661	664	667	Freeport, Upper Seam...	W. Va.	959	969	1065	1080
Barnett Seam.....	Penna.	710	712	758	782	Kittanning, Lower Seam..	W. Va.	960	969	1064	1080
Berlin Seam.....	Penna.	705	712	758	782	Pocahontas No. 3 Seam...	W. Va.	964	973	1073	1080
Blossburg Seam.....	Penna.	709	...	758	782	Pocahontas No. 4 Seam...	W. Va.	964	972	1073	1080
Brookville Seam.....	Penna.	710	712	759	782	Pocahontas No. 6 Seam...	W. Va.	964	972	1073	1080
Cement Seam.....	Penna.	707	...	772	782	Sewell Seam.....	W. Va.	963	973	1075	1080
Freeport, Upper Seam...	Penna.	706	713	763	782	Welch Seam.....	W. Va.	963	974	1078	1080

BITUMINOUS

The term "bituminous," as generally understood, is applied to a group of coals having a maximum fuel ratio of about 3, and hence it is a kind of coal in which the volatile matter and the fixed carbon are nearly equal; but this criterion can not be used without qualification, for the same statement might be made of subbituminous coal and lignite. As noted before, the distinguishing feature which serves to separate bituminous coal from coals of lower rank is the manner in which it is affected by weathering. Bituminous coal is only slightly affected chemically by weathering unless it is exposed for many years, and then, although it consists of small particles, each particle is a prismatic fragment, whereas coals of lower rank break into thin plates parallel with the bedding.

The definition given above might not indicate that the bituminous rank is a large one, but when it is examined critically it is found to contain a great variety of coals—coals having really little in common with one another. Many attempts have been made to subdivide this great group, but so far no scheme proposed has met with general approval. Many of the better coals of this group will coke or are being coked, but coking coals are not limited to the bituminous rank, for some of the best coke made in the United States is produced from semibituminous coal. Not only is the upper limit of the coking group uncertain, but the lower limit is equally difficult to determine. If the coking property had some definite relation to the chemical composition of the coal as it is at present determined there might be some hope of establishing a class of coking coals by chemical analysis, but no one can say just why a coal will coke, so an actual test in an oven is required to determine whether or not a coal will coke.

Gas coals have been in great demand and such coals must be high in volatile matter, so as to make on distillation a large volume of gas; and as this gas must be relatively free from sulphur the coal from which it is made must contain a very small percentage of that element. In recent years the making of gas for illuminating and heating has undergone a great change, water gas largely taking the place of the gas distilled from coal; and as this gas requires no particular quality of coal, the demand for "gas coals" has been greatly reduced and probably in the near future will disappear.

Cannel coal is very rich in volatile matter, is generally high in hydrogen, and therefore burns with a great heat and a long flame. It is essentially a gas-making coal and in the early days was used extensively for this purpose, as well as for the distillation of oil. As a source of oil it could not compete with petroleum derived from wells, and soon after oil was discovered in the earth in 1859 the business of distilling oil from coal in this country was discontinued. Cannel coal owes its richness to the fact that it is composed almost entirely of the spores, spore cases, seed coats, and resinous or

waxy products of such plants as lived at the time of the existence of the coal swamp. In such swamps, as in those of today, there was doubtless in places open water, into which the spores and seed cases floated and, becoming water-logged, sank to the bottom and in time produced cannel coal. The absence of woody material in such coal gives it a regular texture and grain that are not found in any other coals. As a result, it breaks like glass, with a conchoidal or shell-like fracture, and owing to its richness in inflammable material the best of it will ignite readily when a lighted match is held in contact with a small splinter of it. As the nature of cannel coal is due to the kind of material of which it is composed, it follows that there may be all kinds of cannels, corresponding in a general way with the various ranks of coals. Ashley* has recently proposed the following classification of cannel coal:

1. Subcannel coal:
 - (a) Brown subcannel, of brown coal or lignite rank.
 - (b) Black subcannel, of subbituminous rank.
2. Cannel coal, of bituminous rank:
 - (a) Boghead cannel (fuel ratio less than 0.5).
 - (b) Typical cannel (fuel ratio between 0.5 and 1).
 - (c) Lean cannel or semicannel (fuel ratio more than 1).
3. Canneloid, semibituminous coal, semianthracite, anthracite.

Cannels which are of the rank above bituminous have lost their original richness and therefore do not deserve to be called cannels.

Other kinds of coal, such as "block" and "splint," are recognized in the trade, but the characteristics of these coals are physical and are found in only a small group of coals. Some of the "block" and "splint" coals are very hard, almost as hard as anthracite, but they are generally woody in texture and contain much mineral charcoal. They are valuable coals in the market, but usually their development is so local that they are not of much importance in a general classification of coal.

(The list of cannel seams includes those which are cannel only in part and at irregular intervals. Thus, cannel coal is found only at times in the top portion of the Cedar Grove and Chilton seams in West Virginia. In the eastern part of Kentucky cannel coal sometimes constitutes the entire seam, but is more generally found as a bench or portion of the main seam.—Editor.)

*Ashley, G. H., Cannel coals in the United States: U. S. Geol. Survey Bull.—(In preparation.)

LIST OF BITUMINOUS (CANNEL) COAL SEAMS

Seam, County or Field	State	Page References				Seam, County or Field	State	Page References			
		For Description	Supplementary Analyses	List of Operators	Directory of Mines			For Description	Supplementary Analyses	List of Operators	Directory of Mines
Cannelton Seam.....	Ind.	376	...	402	405	Bakerstown Seam.....	Penna.	705	...	...	782
Bell County.....	Ky.	455	...	...	496	Kittanning, Upper Seam..	Penna.	707	715	772	782
Harlan Seam.....	Ky.	452	458	489	496	Newcomb Seam.....	Tenn.	976	...	...	886
Johnson County.....	Ky.	455	458	486	496	Laredo Field					
Keokee Seam.....	Ky.	453	459	490	496	(Webb County).....	Texas	897	899	901	902
Leonard Seam.....	Ky.	453	459	492	496	Lewis County.....	Wash.	947	949	953	954
Morgan County.....	Ky.	455	...	486	496	Cedar Grove Seam.....	W. Va.	961	966	1061	1080
Morgan County.....	Mo.	562	...	...	563	Chilton Seam	W. Va.	961	967	1062	1080
Kittanning, Middle Seam..	Ohio	603	607	614	621	Stockton-Lewiston Seam..	W. Va.	960	974	1077	1080

LIST OF BITUMINOUS COAL SEAMS

Seam, County or Field	State	Page References				Seam, County or Field	State	Page References			
		For Description	Supplementary Analyses	List of Operators	Directory of Mines			For Description	Supplementary Analyses	List of Operators	Directory of Mines
America Seam.....	Ala.	...	...	251	255	No. 3 Seam.....	Ind.	375	377	402	405
Belmont Seam.....	Ala.	...	...	254	255	No. 4 Seam.....	Ind.	375	377	403	405
Big Seam.....	Ala.	245	...	251	255	No. 5 Seam.....	Ind.	375	375	403	405
Black Creek Seam.....	Ala.	245	247	251	255	No. 6 Seam.....	Ind.	374	378	404	405
Blue Creek Seam.....	Ala.	245	247	252	255	No. 7 Seam.....	Ind.	374	378	404	405
Brookwood Seam.....	Ala.	...	...	252	255	Miscellaneous Seams*....	Iowa	422	426	427	430
Carter Seam.....	Ala.	245	247	252	255	Mystic Seam.....	Iowa	422	426	427	430
Clark Seam.....	Ala.	...	247	250	255	Cherokee Seam.....	Kan.	439	441	442	444
Climax Seam.....	Ala.	244	...	...	255	Leavenworth Seam.....	Kan.	440	441	443	444
Coal City Seam.....	Ala.	244	247	254	255	Osage Seam.....	Kan.	440	441	443	444
Corona Seam.....	Ala.	245	...	252	255	Weir-Pittsburg, Upper					
Eureka Seam.....	Ala.	244	...	...	255	Seam.....	Kan.	440	441	...	444
Garnsey Seam.....	Ala.	...	247	...	255	Alma Seam.....	Ky.	451	...	486	496
Gholson Seam.....	Ala.	244	247	250	255	Amburgy Seam.....	Ky.	451	...	485	496
Gould Seam.....	Ala.	...	247	251	255	Auxier Seam.....	Ky.	...	...	485	496
Harkness Seam.....	Ala.	245	247	254	255	Blue Gem Seam.....	Ky.	...	...	458	485
Helena Seam.....	Ala.	244	...	250	255	Cornett Seam.....	Ky.	454	458	488	496
Henryellen Seam.....	Ala.	244	...	250	255	Dean Seam.....	Ky.	454	458	486	496
Horse Creek Seam.....	Ala.	245	247	...	255	Elkhorn Seam.....	Ky.	450	458	486	496
Jagger Seam.....	Ala.	245	247	252	255	Fire Clay Seam.....	Ky.	454	458	488	496
Jefferson Seam.....	Ala.	245	247	253	255	Flag Seam.....	Ky.	454	458	488	496
Mary Lee Seam.....	Ala.	245	247	253	255	Freeburn Seam.....	Ky.	451	...	488	496
Milldale Seam.....	Ala.	245	247	253	255	Harlan Seam.....	Ky.	452	458	489	496
Montevallo Seam.....	Ala.	244	247	250	255	Hazard Seam.....	Ky.	454	458	489	496
Mt. Carmel Seam.....	Ala.	245	...	253	255	High Split Seam.....	Ky.	453	459	492	496
Nickelplate Seam.....	Ala.	245	...	253	255	Hignite Seam.....	Ky.	...	458	490	496
Pratt Seam.....	Ala.	245	247	254	255	Jellico Seam.....	Ky.	452	459	490	496
Thompson Seam.....	Ala.	244	247	250	255	Keokee Seam.....	Ky.	453	459	490	496
Underwood Seam.....	Ala.	244	...	250	255	Leonard Seam.....	Ky.	453	459	492	496
Wadsworth Seam.....	Ala.	...	247	250	255	Mannington Seam.....	Ky.	457	...	495	496
Woodstock Seam.....	Ala.	244	...	251	255	Millers Creek Seam.....	Ky.	451	459	490	496
Youngblood Seam.....	Ala.	244	247	250	255	Pond Creek Seam.....	Ky.	451	...	491	496
Hartshorne Seam.....	Ark.	268	269	270	271	Straight Creek Seam.....	Ky.	452	460	491	496
Archuleta County.....	Colo.	286	290	...	298	Thacker Seam.....	Ky.	451	...	491	496
Delta County.....	Colo.	289	290	294	298	Wallins Seam.....	Ky.	452	460	491	496
Fremont County.....	Colo.	286	290	294	298	Miscellaneous Seams,					
Garfield County.....	Colo.	289	290	294	298	Eastern*.....	Ky.	455	...	492	496
Gunnison County.....	Colo.	289	291	295	298	Miscellaneous Seams,					
Huerfano County.....	Colo.	285	291	295	298	Western*.....	Ky.	...	...	495	496
La Plata County.....	Colo.	286	291	295	298	Nebo Seam.....	Ky.	457	...	495	496
Las Animas County.....	Colo.	285	291	296	298	No. 9 Seam.....	Ky.	456	459	493	496
Mesa County.....	Colo.	289	292	296	298	No. 11 Seam.....	Ky.	456	460	494	496
Montezuma County.....	Colo.	286	292	296	298	No. 12 Seam.....	Ky.	455	460	495	496
Pitkin County.....	Colo.	289	292	...	298	Miscellaneous Seams*....	Mich.	551	554	555	556
Rio Blanca County.....	Colo.	289	292	297	298	Saginaw Seam.....	Mich.	551	554	555	556
Routt County.....	Colo.	288	293	297	298	Verne Seam.....	Mich.	551	554	555	556
No. 1 Seam.....	Ill.	313	314	346	351	Bevier Seam.....	Mo.	560	563	564	566
No. 2 Seam.....	Ill.	312	314	346	351	Cainsville Seam.....	Mo.	561	563	...	566
No. 5 Seam.....	Ill.	311	314	347	351	Jordan Seam.....	Mo.	561	563	564	566
No. 6 Seam.....	Ill.	310	315	348	351	Lexington Seam.....	Mo.	561	563	564	566
No. 7 Seam.....	Ill.	309	316	350	351	Montserrat Seam.....	Mo.	561	...	...	566
Block, Lower Seam.....	Ind.	376	377	402	405	Mulberry Seam.....	Mo.	562	563	...	566
Block, Upper Seam.....	Ind.	376	377	402	405	Mulky Seam.....	Mo.	562	563	565	566
Minshall Seam.....	Ind.	376	377	402	405	Rich Hill, Lower Seam....	Mo.	561	563	565	566

*Consisting of seams of minor importance

(Continued on Next Page)

BITUMINOUS—Continued

Seam, County or Field	State	Page References				Seam, County or Field	State	Page References			
		For Description	Supplementary Analyses	List of Operators	Directory of Mines			For Description	Supplementary Analyses	List of Operators	Directory of Mines
Tebo Seam.....	Mo.	562	563	565	566	Sewanee Seam.....	Tenn.	878	882	884	886
Waverly Seam.....	Mo.	562	563	...	566	Wilder Seam.....	Tenn.	873	882	...	886
Weir-Pittsburg, Lower Seam.....	Mo.	561	563	565	566	Carbon County.....	Utah	908	910	912	913
Cascade County.....	Mont.	574	576	578	579	Emery County.....	Utah	909	910	912	913
Colfax County.....	N. Mex.	584	587	588	589	Grand County.....	Utah	909	910	912	913
Lincoln County.....	N. Mex.	586	587	588	589	Iron County.....	Utah	909	910	...	913
Rio Arriba County.....	N. Mex.	585	587	588	589	Summit County.....	Utah	909	910	912	913
Santa Fe County.....	N. Mex.	585	587	588	589	Uinta County.....	Utah	909	910	912	913
Socorro County.....	N. Mex.	585	587	588	589	Washington County.....	Utah	909	910	...	913
Brookville Seam.....	Ohio	604	607	612	621	Banner, Lower Seam.....	Va.	921	923	931	934
Clarion, Upper Seam.....	Ohio	604	607	612	621	Banner, Upper Seam.....	Va.	921	923	931	934
Freeport, Lower Seam....	Ohio	603	607	612	621	Clintwood Seam.....	Va.	...	923	...	934
Freeport, Upper Seam....	Ohio	603	607	612	621	Darby Seam.....	Va.	922	923	931	934
Kittanning, Lower Seam..	Ohio	604	607	613	621	Glamorgan Seam.....	Va.	...	923	...	934
Kittanning, Middle Seam..	Ohio	603	607	614	621	Imboden Seam.....	Va.	921	923	932	934
Meigs Creek Seam.....	Ohio	602	608	...	621	Kennedy Seam.....	Va.	922	923	932	934
Mercer, Lower Seam.....	Ohio	605	608	617	621	Raven Seam.....	Va.	920	924	933	934
Pittsburg Seam.....	Ohio	602	608	617	621	Taggart Seam.....	Va.	922	...	...	934
Quakertown Seam.....	Ohio	605	609	619	621	Miscellaneous Seams*....	Va.	919	924	933	934
Redstone Seam.....	Ohio	602	609	620	621	Triassic Seams.....	Va.	919	...	...	934
Sharon Seam.....	Ohio	605	609	620	621	King Co. (McKay Seam)...	Wash.	945	949	953	954
Cavalan Seam.....	Okla.	660	661	...	667	Kittitas County					
Dawson Seam.....	Okla.	660	661	664	667	(Roslyn Seam).....	Wash.	944	949	953	954
Hartshorne Seam.....	Okla.	659	661	664	667	Lewis County.....	Wash.	947	949	953	954
Hartshorne, Lower Seam..	Okla.	659	661	664	667	Pierce County.....	Wash.	946	949	953	954
Hartshorne, Upper Seam..	Okla.	659	661	664	667	Skagit County.....	Wash.	...	...	953	954
Henryetta Seam.....	Okla.	660	661	665	667	Alma Seam.....	W. Va.	962	966	1060	1080
McAlester Seam.....	Okla.	659	661	665	667	Bakerstown Seam.....	W. Va.	959	966	1060	1080
Witteville Seam.....	Okla.	659	...	666	667	Cedar Grove Seam.....	W. Va.	961	966	1061	1080
Brookville Seam.....	Penna.	710	712	759	782	Chilton Seam.....	W. Va.	961	967	1062	1080
Clarion Seam.....	Penna.	709	712	759	782	Coalburg Seam.....	W. Va.	961	967	1062	1080
Freeport, Lower Seam....	Penna.	707	712	760	782	Eagle Seam.....	W. Va.	962	968	1063	1080
Freeport, Upper Seam....	Penna.	706	713	763	782	Freeport, Lower Seam....	W. Va.	960	969	1064	1080
Kittanning, Lower Seam..	Penna.	708	714	767	782	Freeport, Upper Seam....	W. Va.	959	969	1065	1080
Kittanning, Middle Seam..	Penna.	708	715	771	782	Iaeger Seam.....	W. Va.	963	969	1066	1080
Kittanning, Upper Seam..	Penna.	707	715	772	782	Kittanning, Lower Seam..	W. Va.	960	969	1066	1080
Pittsburgh Seam.....	Penna.	704	716	774	782	No. 2 Gas Seam.....	W. Va.	962	970	1068	1080
Redstone Seam.....	Penna.	704	...	780	782	No. 5 Block Seam.....	W. Va.	960	970	1067	1080
Sewickley Seam.....	Penna.	704	...	780	782	Pittsburg Seam.....	W. Va.	959	971	1069	1080
Washington Seam.....	Penna.	703	...	...	782	Powellton Seam.....	W. Va.	962	973	1074	1080
Waynesburg Seam.....	Penna.	704	...	781	782	Redstone Seam.....	W. Va.	958	973	1075	1080
Blue Gem Seam.....	Tenn.	876	880	883	886	Sewickley Seam.....	W. Va.	958	974	1076	1080
Bon Air Seam.....	Tenn.	879	880	883	886	Stockton-Lewiston Seam..	W. Va.	960	974	1077	1080
Brushy Mountain Seam...	Tenn.	877	880	...	886	Thacker Seam.....	W. Va.	961	...	1077	1080
Coal Creek Seam.....	Tenn.	877	880	883	886	Waynesburg Seam.....	W. Va.	958	974	1078	1080
Dean Seam.....	Tenn.	877	881	...	886	Winifrede Seam.....	W. Va.	961	974	1078	1080
Jellico Seam.....	Tenn.	876	881	884	886	Carbon County.....	Wyo.	1160	1162	1166	1167
Mingo Seam.....	Tenn.	876	881	884	886	Lincoln County.....	Wyo.	1159	1162	1168	1167
Miscellaneous Seams*....	Tenn.	875	881	885	886	Sweetwater County					
Rex Seam.....	Tenn.	875	881	...	886	(Almond Coal).....	Wyo.	1158	1163	1166	1167
Rich Mountain Seam.....	Tenn.	876	881	884	886	Sweetwater County					
						(Rock Springs Coal)...	Wyo.	1158	1163	1166	1167

*Consisting of seams of minor importance.

SUBBITUMINOUS

The term "subbituminous" is adopted by the Geological Survey for what has generally been called "black lignite," a term that is objectionable because the coal is not lignitic in the sense of being distinctively woody, and because the use of the term seems to imply that this coal is little better than the brown, woody lignite of North Dakota, whereas many coals of this rank approach in excellence the lowest grade of bituminous coal. Subbituminous coal is generally distinguishable from lignite by its black color and its apparent freedom from distinctly woody texture and structure, and from bituminous coal by its loss of moisture and the consequent breaking down or "slacking" that it undergoes when subjected to alternate wetting and

drying. As the percentage of moisture is an important matter in buying and shipping coal, and as the slacking on exposure to the weather makes it necessary to ship in box cars and to guard carefully against spontaneous ignition, there is a great commercial difference in these two kinds of coal which the Geological Survey has recognized by putting them in different ranks. Despite the many drawbacks in the shipment and use of subbituminous coal it has found a ready market in much of the western country, because it is a very clean domestic fuel and ignites with little difficulty.

Subbituminous coals differ considerably in chemical composition and in physical appearance. Some are banded like much of the bituminous coal,

and some are essentially cannel in physical and chemical make-up. In general, the Cretaceous and younger coals of the West contain a smaller percentage of sulphur than the older coals of the East,

and as some of them are high in volatile matter they would doubtless be excellent coals for making gas, either illuminating gas or producer gas for generating power.

LIST OF COUNTIES AND FIELDS PRODUCING SUBBITUMINOUS COAL

Seam, County or Field	State	Page References				Seam, County or Field	State	Page References			
		For Description	Supplementary Analyses	List of Operators	Directory of Mines			For Description	Supplementary Analyses	List of Operators	Directory of Mines
Adams County.....	Colo.	288	290	...	298	Washington County.....	Utah	909	910	...	913
Boulder County.....	Colo.	288	290	294	298	King County.....	Wash.	945	949	953	954
Delta County.....	Colo.	289	290	294	298	Lewis County					
El Paso County.....	Colo.	288	290	294	298	(Mendota Seam).....	Wash.	947	949	953	954
Fremont County.....	Colo.	286	290	294	298	Thurston County.....	Wash.	947	952	953	954
Jefferson County.....	Colo.	288	291	295	298	Carbon County.....	Wyo.	1160	1162	1166	1167
La Plata County.....	Colo.	286	291	295	298	Fremont County.....	Wyo.	1161	1162	...	1167
Routt County.....	Colo.	288	293	297	298	Hot Springs County.....	Wyo.	1160	1162	...	1167
Weld County.....	Colo.	288	293	297	298	Sheridan County.....	Wyo.	1159	1163	1166	1167
Carbon County.....	Mont.	573	576	578	579	Sweetwater County					
Musselshell County.....	Mont.	574	577	578	579	(Black Butte Coal).....	Wyo.	1158	1163	1166	1167
McKinley County.....	N. Mex.	584	587	588	589	Sweetwater County					
Eagle Pass Field.....	Texas	897	899	901	902	(Knobs-Cherokee Coal).	Wyo.	1158	1163	1166	1167
Laredo Field.....	Texas	897	899	901	902	Uinta County.....	Wyo.	1161	1163	...	1167
North Central Field.....	Texas	896	899	901	902	Weston County.....	Wyo.	1161	1163	...	1167
Summit County.....	Utah										

LIGNITES

The term "lignite," as used by the Geological Survey, is restricted to those coals which are distinctly brown and either markedly woody or clay-like in their appearance. They are intermediate in quality and in development between peat and subbituminous coal. As the moisture of lignite as it comes from the mine generally ranges from 30 to 40 per cent, its heating value is low; and the consumer can not afford to pay freight for any great distance on so much water. Also it parts with much of this moisture very readily when exposed to the weather and so falls to pieces or slacks much more readily and completely than subbituminous coal. On this account it is more likely to ignite spontaneously and must be handled even more carefully than subbituminous coal and stored in a place where it will not be exposed to alternate wetting and drying. Lignite is mainly marketed near the mine, as a domestic fuel, but at a few places in North Dakota and Texas it is shipped to near-by towns and used for general manufacturing purposes.

At the Government testing plant at the St. Louis Exposition, North Dakota lignite was found to be an excellent fuel for making producer gas, and probably in the future it will be much more largely used for producing power than it has been in the past. Just how this will be accomplished is difficult to determine, but it is possible that large producer plants may be erected at the mines and the lignite converted into electric energy and delivered by long-distance transmission lines to towns within a radius of 200 miles or to the railroads in this region or in contiguous territory. Lignite has recently been used in powdered form, and it may possibly be better utilized in this way. As some of the Texas and Arkansas lignites are in effect undeveloped cannel coals, it seems possible that when the supply of petroleum is much less than the demand, the lignite may be used for the distillation from it of oil and the various by-products that are now obtained in Scotland from oil shale. Lignite can also be manufactured into hard briquets, which make an excellent fuel, but so far the cost of manufacture has been prohibitive.

LIST OF COUNTIES AND FIELDS PRODUCING LIGNITE COAL

Seam, County or Field	State	Page References				Seam, County or Field	State	Page References			
		For Description	Supplementary Analyses	List of Operators	Directory of Mines			For Description	Supplementary Analyses	List of Operators	Directory of Mines
Ouachita County.....	Ark.	268	...	...	271	Custer County.....	Mont.	575	576	...	579
Jackson County.....	Colo.	287	291	295	298	Dawson County.....	Mont.	575	576	...	579
Jefferson County.....	Colo.	288	291	295	298	Valley County.....	Mont.	...	577	...	579
Montezuma County.....	Colo.	286	292	296	298	Lignite Beds.....	N. Dak.	594	596	597	597
Montrose County.....	Colo.	287	...	...	298	San Juan County.....	N. Mex.	584	587	...	589
Weld County.....	Colo.	288	293	297	298	Twelve Producing					
Cretaceous Coals.....	Kan.	440	...	...	444	Counties.....	Texas	898	900	901	902

COMPARISON OF THE DIFFERENT RANKS

Figure 2 is a graphic representation of the proximate chemical composition of the various ranks of coal and of their heat-producing values. The lower diagram shows the fairly regular increase in fixed carbon from lignite to anthracite, though it must not be supposed that the lines for all coals are as simple as those shown in the diagram. The analysis upon which the diagram is based are, however, actual analyses. No. 1 represents the analysis of a typical North Dakota lignite which as it comes out of the mine has a moisture content of about 40 per cent. It also contains about 5.5 per cent of ash, but as ash varies irregularly without regard to the rank of the coal the analysis has been recalculated to the ash-free basis, thus eliminating ash from consideration. All the other analyses have been similarly recalculated. No. 2 represents a subbituminous coal from Wyoming, having

a moisture content of 23.4 per cent; Nos. 3, 4, and 5 represent various ranks of bituminous coal, the lowest one being from Indiana, the second from Ohio, and the third, or highest, from the Pittsburgh district of Pennsylvania; Nos. 6 and 7 represent semibituminous coal from the Windber district of Pennsylvania; No. 8 represents semianthracite, and No. 9 represents some of the best anthracite of the Pennsylvania region. The diagram shows clearly that the fixed carbon increases very markedly from lignite to anthracite; that the moisture of the higher-rank coals is small and about the same quantity in each, but increases rapidly from medium-rank bituminous coal to lignite; and that the greatest development of volatile matter is not at either end of the series but in the lower ranks of bituminous coal.

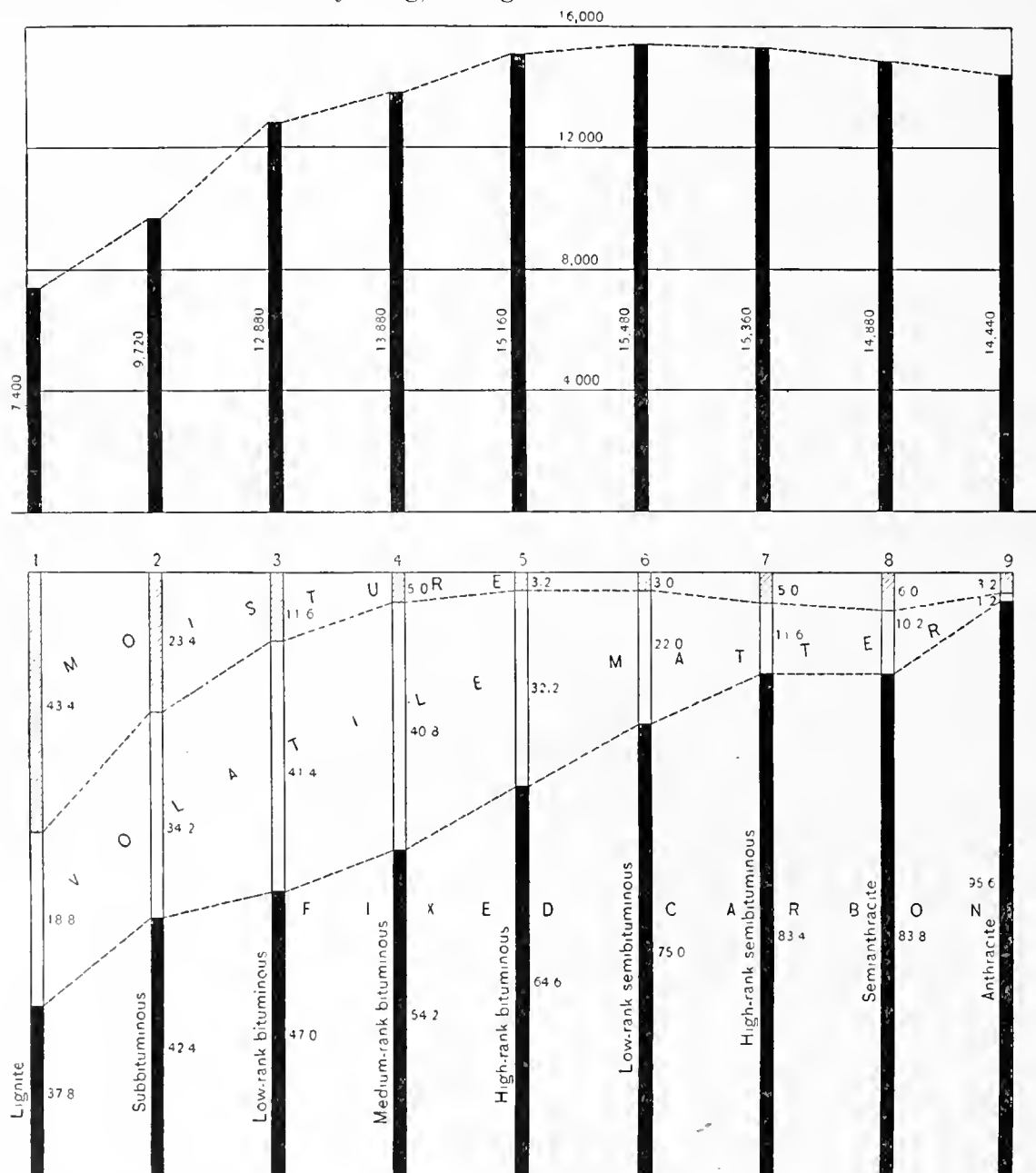


Figure 2—Diagrams showing the chemical composition and heat efficiency of the several ranks of coal. Upper diagram: Comparative heat value of the samples of coal represented in the lower diagram, computed on the ash-free basis. Lower diagram: Variation in the fixed carbon, volatile matter, and moisture of coals of different ranks, from lignite to anthracite, computed on samples as received, on the ash-free basis. Figures on lower diagram represent percentages.

The upper diagram represents the heat value of the same coals on a similar ash-free basis. There is a very general misconception regarding the heat value of anthracite as compared with that of lower-rank coals. Many persons think that because anthracite commands a higher price it must necessarily be a better heating coal than the soft varieties, but this diagram shows conclusively that it is not and that the best coal for heat production is No. 6, or low-rank semibituminous coal. Anthracite commands a higher price than soft coal because of its suitability for domestic use and because of its freedom from smoke, soot and waste.

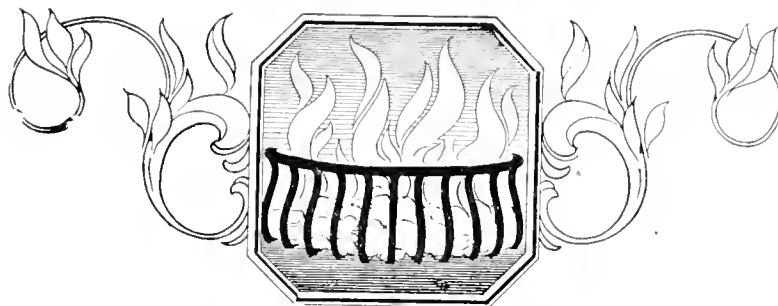
From the diagram it might be inferred that the heat value of a coal depends directly upon the amount of fixed carbon that it contains, but this can not be true, for the heat value of pure carbon is only 14,580 British thermal units,* whereas coal No. 6 has a heat value of 15,480 British thermal units. Coal derives its heat value mainly from two elements, carbon and hydrogen, the carbon having a heat value of 14,580 British thermal units and the

hydrogen a heat value of 62,000 British thermal units.* The greater heating power of the low-rank coals as compared with anthracite is due to the fact that these coals contain a considerable quantity of available hydrogen,† which when burned produces a much greater heat than the same weight of carbon.

Either diagram well illustrates the slight value of lignite as compared with the higher-rank coals and makes it possible to understand that Pennsylvania and West Virginia coal can be hauled by rail to Lake Erie, shipped by vessel to Duluth or Superior, hauled 400 to 500 miles inland, and then sold in direct competition with lignite mined in the vicinity.

*Richards, J. W., *Metallurgical Calculations*, p. 16, 1906.

†W. S. Parr (*The Composition and Character of Illinois Coals*; Illinois Geol. Survey Bull. 2, p. 37, 1906) defines available hydrogen as follows: "By available hydrogen is meant that part of the hydrogen content which is free to enter into combination with oxygen for the production of heat, as distinct from that hydrogen present which already has *** the necessary equivalent oxygen for the formation of water, and consequently [is] noncombustible."



CLASSIFICATION OF COALS

II. ACCORDING TO USE

Methods of Classification; Qualifications of Coals Which Are Adaptable for Beehive Coking, Bunkering, By-Product Coking, Cement Burning, Domestic, Export, Illuminating Gas, Locomotive Fuel, Melting, Pulverizing, Producer Gas, Smithing, Steam, Tile and Pottery Burning and Water Gas Usages;
List of Seams Producing Coals Fitted for Each Use.

Growth In Usages of Coal

The year 1215 may be safely taken as the time in which coal mining became established in England. In the United States this industry has been in operation about 170 years.

Mining advanced slowly up to the year 1710. There was only one usage to which coal could be put, that of "house" coal, and the shallow workings of those early days easily furnished sufficient fuel to meet all demands. When James Watt, in 1763, began experimenting on steam, and improving the construction of engines, it drew the attention of a number of men, more or less familiar with mechanics, to the steam engine. It is interesting to note that the first application of Watt's invention was for pumping water from a coal mine.

George Stephenson's first locomotive, the "Rocket," made its initial trip from Stockton to Darlington, England, in 1825, while in the United States a short time later, in 1839, the "Tom Thumb", constructed by Peter Cooper, had its first run on the Baltimore and Ohio Railroad. The steam engine was rapidly introduced into all industries and its almost general adoption brought forth cries for coal from all quarters. It was evident that the industry had to expand greatly to meet the demands for steam, domestic and locomotive fuel.

Coal was first coked for blast furnace use in England in 1750. In the United States charcoal was in general use for making iron owing to the abundant timber supplies, so that no sustained attempt was made to carbonize coal until 1850. The first successful steamer was launched by Robert Fulton in 1807, thus providing an outlet for bunker coals and stimulating the possibilities in export trade. Murdock, after years of experimenting with gas distilled from coal, introduced gas lights in an English factory in 1803; street lights burning gas were used in Baltimore as early as 1817.

Thus it happened that increased production of coal, plus the insatiable desire of man to devise new processes or else to perfect old ones, steadily contributed new uses to which the fuel might be put. Some of these are of fairly recent origin. During the early years of the cement industry in this country, oil was employed by spraying it into the lower end of the furnace. The price of oil increased so rapidly that by the year 1900 it had to yield its place to pulverized coal, which has ever since remained the standard fuel for all plants except those located in the rich oil fields of the West. A more recent change still is found in the range

of fuels suitable for the manufacture of water gas. Whereas anthracite coal and coke once held undisputed sway, late years have brought forward some of the medium grade coals as a successful contender for preferment.

Methods of Classification

The classification of coals, According to Use, is based on (1) the requirements as stated under the head of qualifications for each usage; (2) the general and supplementary analyses of each coal; (3) the results of a questionnaire sent to several hundred sales agencies requesting their recommendation on coals for each specific usage; (4) the advertisements and trade literature of producers and sales agencies in which certain coals have been cited as adaptable for certain uses; (5) a search of mining, trade and institutional publications wherein mention is made of coals found acceptable for definite uses.

Considerable weight has been given to the last three mentioned aids, inasmuch as usage is the supremest test of a coal. Where reliable information on usage has not been obtainable dependence has been placed upon the chemical analyses. It must be understood, however, that the mention of a seam under any usage, other than the very general ones, is not meant to imply that the seam in all its localities, is fitted for a particular use. This may or may not be true. The only sure course is to consult the Supplementary Analyses, which follow the states, in each case, by means of which the favorable localities may be selected. Difficulties in classification have been met mostly with the coals of lesser reputation, many of which have never been called upon to meet the specifications for a special purpose, and on such as these no information could be forthcoming.

It is recognized that in any comprehensive classification of coals differences in opinion will arise, in some cases due to a too liberal inclusion of seams unworthy or untried, in others to a too conservative exclusion of some coals worthy of preferment. Special request is made of all users of the COAL CATALOG that they notify the publishers of any error, whether of omission or commission, in the tabulation of coals. Instances of successful or unsuccessful usage should be cited and mention made of the name of the seam, locality at which the coal is mined, the proximate analysis (as received) of the coal and the name and address of the user of the coal.

QUALIFICATIONS OF A COAL FOR BEEHIVE COKING

Coking coals are those which, when placed in the oven and distilled with a limited supply of air, soften, become pasty and swell into a spongy mass. During the process of coking the volatile matter is expelled from the coal, leaving a coherent cellular mass of coke. If the coal is non-coking there is little or no coherence of the particles and there remains in the oven a sandy residue.

The question as to what constitutes a coking coal has been, and still is, much discussed. The original theory that coking depended upon the coal having a goodly percentage of volatile matter has been clearly disproved by such coals as the Pocahontas of West Virginia, which contain about 16 per cent. of volatile matter and produce a celebrated coke, while, on the other hand, coals having as much as 34 per cent. volatile matter have failed to cohere. To further confute this theory it has been found that with two coals of approximately the same analyses, but coming from different seams, one produced a satisfactory coke while the other was sandy, weak bodied and totally unfit for use. The fact is that the proximate analysis of a coal is far from being conclusive proof of its coking or non-coking qualities. It is the experience of years that most of the Appalachian region coals, containing from 17 to 37 per cent. of volatile matter, may be made to yield a satisfactory coke, physically considered.

Investigators, in search for an explanation why some coals coke and others do not, have turned their attention to the ratios existing between carbon and oxygen; oxygen, hydrogen and carbon; hydrogen and oxygen, etc., as revealed by the ultimate analysis of the fuel. Lewes† states, as a generalization, that "coals having an oxygen content above 10 per cent. or below 4 per cent. means bad coke or non-coking."

Broadly speaking, it may be said that most coals of bituminous or semibituminous rank will coke in the oven, but the product of some seams will be found far superior to others. From a physical standpoint it has been demonstrated that coals having in the neighborhood of 32 per cent. volatile matter give the best results, and that with coals of this composition the proportion of gaseous content is about what is needed to maintain the heat of the oven, thus preserving the fixed carbon and showing a high yield of coke to coal used; those having a higher volatile content produce a coke

which is brittle or spongy, lacking strength for metallurgical purposes, and show a low yield of coke to coal used; those having a lower volatile content produce a coke which is porous and weak, and at a reduced yield, owing to some of the fixed carbon of the coal being burned to supply the necessary heat to the oven. It is certain that as coals approach the lignites on the one hand, and anthracite on the other, no tendency to coke is observed.

Since the great portion of coke produced in beehive ovens is used for metallurgical purposes, it follows that the adaptability of a coal for coking depends not alone on the physical structure of the coke produced, but also upon the absence of the two impurities—sulphur and phosphorus, both of which elements are objectionable to the furnace man. Everything else being equal, coals containing the least percentage of these impurities yield the best metallurgical coke. Not all the sulphur in the coal is transferred to the coke, as a certain proportion of that in the form of sulphide is volatilized in the oven. Assuming a coal of about 33 per cent volatile matter, so that there is required about $1\frac{1}{2}$ tons of coal to produce a ton of coke, it will be found that the resulting coke usually contains a slightly reduced percentage of sulphur over that found in the raw coal. The phosphorus in the coal is not affected in the process and remains in the coke.

The ash in coal is, of course, inert, and, based on thermal values, would, along with moisture, be preferably omitted. In using coke for blast furnaces, however, a requirement is that it have sufficient strength, or body, to enable it to bear without crushing the superimposed burden of ore and limestone. To ash is sometimes ascribed the virtue of strength, it being quite probable that much of it is fused to a silicate in the high heat of the oven, and that this gives strength or body to the product. It does not, however, follow that the strength of a coke is in proportion to the quantity of ash present.

In brief, it may be stated that coals best adapted to beehive coking are those in which the—
volatile matter is about 32 per cent.
ash is about 7 per cent.
sulphur is less than $1\frac{1}{2}$ per cent.
phosphorus is less than .02 per cent.

Coals that are high in sulphur and ash may be brought within the limits by such eliminating devices as washers, jigs or breakers, and with the gradual disappearance of the best coking coals recourse to these will need be more general in years to come.

†The Carbonization of Coal, pg. 179.

METHOD OF CLASSIFICATION

The following classification has been based both on analyses and usage. It is probably a safe statement that all coals in the Appalachian region, whether bituminous or semibituminous, will fuse and form coke in the oven. Strictly speaking, therefore, all seams found in this division should be included. The very abundant supply of coking coal, however, has restricted usage to those that meet the requirements chemically, and for this reason seams which must needs be washed to reduce the percentage of sulphur and ash have not been included amongst those of the highly favored fields, unless such washing is presently being done, as in the case of the coked coals of Alabama.

(Continued on Next Page)

In the Eastern Interior field, where the coals are characterized by a high sulphur content, the long haul required for bringing Connellsville coke to the furnaces early encouraged the installation of wash-eries, tables, etc., by means of which the excess impurities in the coal could be eliminated. Thus, by reason of present use, some of the coals of Western Kentucky and Illinois are classified as coking coals, while equally good or superior coals, such as the Sewickley and Redstone seams of the Appalachian region, have been omitted. The classification of coking coals in the Rocky Mountain province is based entirely on present usage and accepted coking tests.

The analysis of a coal is not a convincing proof of its coking quality. Other than its freedom from sulphur and ash, it tells little of its satisfactory quality as a coke, which is dependent largely upon physical characteristics. Barrel tests are likewise not conclusive, inasmuch as the heat supplied to the enclosed sample is derived from a coal different from that being tested. Coal, to be a good coking coal, must supply sufficient heat to store in the crown so as to ignite and coke the succeeding charges.

LIST OF SEAMS PRODUCING COAL SUITABLE FOR BEE-HIVE COKING

Seam, County or Field	State	Page References				Seam, County or Field	State	Page References			
		For Description	Supplementary Analyses	List of Operators	Directory of Mines			For Description	Supplementary Analyses	List of Operators	Directory of Mines
Big Seam.....	Ala.	245	...	251	255	Pittsburgh Seam.....	Penna.	704	716	774	782
Black Creek Seam.....	Ala.	245	247	251	255	Brushy Mountain Seam...	Tenn.	877	880	...	886
Blue Creek Seam.....	Ala.	245	247	252	255	Coal Creek Seam.....	Tenn.	877	880	883	886
Mary Lee Seam.....	Ala.	245	247	253	255	Dean Seam.....	Tenn.	877	881	...	886
Pratt Seam.....	Ala.	245	247	254	255	Durham No. 5 Seam.....	Tenn.	...	...	885	886
Gunnison County.....	Colo.	289	291	295	298	Rex Seam.....	Tenn.	875	881	...	886
La Plata County						Richland Seam.....	Tenn.	...	...	885	886
Bituminous.....	Colo.	286	291	295	298	Sewanee Seam.....	Tenn.	878	882	884	886
Las Animas County						Soddy No. 7 Seam.....	Tenn.	...	882	885	886
Bituminous.....	Colo.	285	291	296	298	Wildier Seam.....	Tenn.	873	882	...	886
Pitkin County Bituminous.	Colo.	289	292	...	298	Carbon County					
No. 2 Seam.....	Ill.	312	314	346	351	(Castlegate Seam).....	Utah	908	910	912	913
No. 5 Seam.....	Ill.	311	314	346	351	Banner, Lower Seam.....	Va.	921	923	931	934
No. 6 Seam.....	Ill.	310	315	348	351	Banner, Upper Seam.....	Va.	921	923	931	934
Alma Seam.....	Ky.	451	...	486	496	Clintwood Seam.....	Va.	...	923	...	934
Amburgy Seam.....	Ky.	451	...	485	496	Darby Seam.....	Va.	922	923	931	934
Auxier Seam.....	Ky.	...	...	485	496	Glamorgan Seam.....	Va.	...	923	...	934
Dean Seam.....	Ky.	454	458	486	496	Imboden Seam.....	Va.	921	923	931	934
Elkhorn Seam.....	Ky.	450	458	486	496	Kennedy Seam.....	Va.	922	923	932	934
Fireclay Seam.....	Ky.	454	458	488	496	Miscellaneous High					
Flag Seam.....	Ky.	454	458	488	496	Volatile Seams*.....	Va.	919	924	933	934
Freeburn Seam.....	Ky.	451	...	488	496	Pocahontas No. 3 Seam...	Va.	920	924	932	934
Harlan Seam.....	Ky.	452	458	489	496	Taggart Seam.....	Va.	922	...	...	934
High Splint Seam.....	Ky.	453	459	492	496	Pierce County.....	Wash.	946	949	953	954
Hignite Seam.....	Ky.	...	458	490	496	Roslyn Seam (Western)...	Wash.	944	949	953	954
Jellico Seam.....	Ky.	452	459	490	496	Alma Seam.....	W. Va.	962	966	1060	1080
Keokee Seam.....	Ky.	453	459	490	496	Beckley Seam.....	W. Va.	963	966	1061	1080
Leonard Seam.....	Ky.	453	459	492	496	Cedar Grove Seam.....	W. Va.	961	966	1061	1080
Millers Creek Seam.....	Ky.	451	459	490	496	Chilton Seam.....	W. Va.	961	967	1062	1080
Pond Creek Seam.....	Ky.	451	...	488	496	Eagle Seam.....	W. Va.	962	968	1063	1080
Poplar Lick Seam.....	Ky.	...	460	402	496	Fire Creek Seam.....	W. Va.	964	968	1064	1080
Straight Creek Seam.....	Ky.	452	460	491	496	Freeport, Upper Seam...	W. Va.	960	969	1064	1080
Thacker Seam.....	Ky.	451	...	491	496	Kittanning, Lower Seam..	W. Va.	960	969	1066	1080
Wallins Seam.....	Ky.	452	460	491	496	No. 2 Gas Seam.....	W. Va.	962	970	1068	1080
No. 9 Seam.....	Ky.	456	459	493	496	Pittsburg Seam.....	W. Va.	959	971	1069	1080
No. 11 Seam.....	Ky.	456	460	494	496	Pocahontas No. 3 Seam...	W. Va.	964	973	1073	1080
Colfax County.....	N. Mex.	584	587	588	589	Pocahontas No. 4 Seam...	W. Va.	964	972	1073	1080
Socorro County.....	N. Mex.	585	587	588	589	Pocahontas No. 6 Seam...	W. Va.	964	972	1073	1080
Freeport, Lower Seam...	Penna.	707	712	760	782	Powellton Seam.....	W. Va.	962	973	1074	1080
Freeport, Upper Seam...	Penna.	706	713	763	782	Sewell Seam.....	W. Va.	963	973	1075	1080
Kittanning, Lower Seam..	Penna.	708	714	767	782	Lincoln County					
Kittanning, Upper Seam..	Penna.	707	715	772	782	(Willow Creek).....	W. Va.	1159	1162	1168	1167

*Consisting of seams of minor importance

QUALIFICATIONS OF A COAL FOR BUNKER USE

A characteristic of ship service is that the boiler load is quite constant, a feature which is best met by fuels having the property of delivering their heat at a uniform rate. Anthracite coals answer this specification better than all others, and at one time were extensively used by steamship companies, but their high cost turned attention to other high grade fuels.

An important consideration in this service is that the amount of space in the hold of the vessel allowable for coal storage is limited. If a coal running high in ash and moisture—both incombustibles—and low in heat units were selected it would require a greater tonnage of fuel, and therefore more bunker space, than if a high-grade coal were used.

Low volatile, or smokeless, coals running high in thermal value and delivering the heat units at a uniform rate answer all the specifications for a bunker coal, and are preferably used. They run low in ash and sulphur, amply meeting the requirements, which may be stated as approximately under 10 per cent in ash and 2 per cent in sulphur. These smokeless coals are delivered as run-of-mine, in which form they may contain as much as two-thirds small coal. This fine coal is not objected to, as would be the case for locomotive

service, since the draft in vessel service is less than that found in railroad practice, and the fine coal is not blown out of the stack.

In considering fuel for war vessels, where disclosing their presence is to be avoided, the amount of smoke produced is of great importance, and for this additional reason low volatile coals are used.

High volatile coals, which are naturally quick firing and better suited for steam generation where loads are variable, have in late years come into use for bunker service.

METHOD OF CLASSIFICATION.

Coals in this classification are of the low-volatile high-heat type, a requirement best met with coals of semibituminous rank. Pennsylvania, West Virginia, Maryland and Virginia supply the Eastern terminals, while Washington meets some of the demands on the Pacific Coast.

A list of high volatile coals suitable for bunkering use will be found given under the list of seams producing coals suitable for Export.

LIST OF SEAMS PRODUCING COAL SUITABLE FOR BUNKERING

Seam, County or Field	State	Page References			
		For Description	Supplementary Analyses	List of Operators	Directory of Mines
Bakerstown Seam.....	Md.	536	539	540	542
Brookville Seam.....	Md.	538	539	540	542
Freeport, Lower Seam....	Md.	537	539	540	542
Freeport, Upper Seam....	Md.	537	539	540	542
Kittanning, Lower Seam..	Md.	537	539	541	542
Pittsburg (Big) Seam....	Md.	536	539	541	542
Sewickley, Upper Seam...	Md.	536	539	541	542
Barnett Seam.....	Penna.	710	712	758	782
Berlin Seam.....	Penna.	705	712	758	782
Cement Seam.....	Penna.	707	...	772	782
Fulton Seam.....	Penna.	709	714	766	782
Kelly Seam.....	Penna.	710	714	766	782
Kittanning, Lower Seam..	Penna.	708	714	767	782
Kittanning, Middle Seam..	Penna.	708	715	771	782
Kittanning, Upper Seam..	Penna.	707	715	772	782
Lemon Seam.....	Penna.	706	...	763	782
Miller Seam.....	Penna.	708	...	767	782
Moshannon Seam.....	Penna.	707	...	760	782
Pittsburgh Seam.....	Penna.	704	716	774	782
Price Seam.....	Penna.	705	...	...	782
Banner, Upper Seam.....	Va.	921	923	931	934
Pocahontas No. 3 Seam...	Va.	920	924	932	934
Pierce County.....	Wash.	946	949	953	954
Roslyn Seam.....	Wash.	944	949	953	954
Beckley Seam.....	W. Va.	963	966	1061	1080
Fire Creek Seam.....	W. Va.	964	968	1064	1080
Kittanning, Lower Seam..	W. Va.	960	969	1066	1080
Pocahontas No. 3 Seam...	W. Va.	964	973	1073	1080
Pocahontas No. 4 Seam...	W. Va.	964	972	1073	1080
Pocahontas No. 6 Seam...	W. Va.	964	972	1073	1080
Sewell Seam.....	W. Va.	963	973	1075	1080
Welch Seam.....	W. Va.	963	974	1078	1080

QUALIFICATIONS OF A COAL FOR BY-PRODUCT COKING

When coal is coked in by-product ovens a true distillation takes place. Unlike the process with the bee-hive oven, there is no access of air to the coking mass and no wasting of the distilled gases. Heat for distillation is generated by burning, in flues surrounding the retort, a mixture of the lean fuel gases, derived as a part of the process, with air which has been pre-heated by passing through regenerators on its way to the ovens. The volatile gases expelled from the coal are collected in mains located over the oven and led to the recovery plant where, by suitable processes, the ammonia, tars and gases are separated as by-products.

The best test of a by-product coal is, of course, usage. The quality and quantity of the by-products enter into consideration, as well as the kind of coal produced. The first requirement obviously is that only coking coals be used. If the plant be located near a city, the intent evidently is to supply gas for domestic lighting and heating, while the coke may be sold for such purposes as domestic use, manufacture of water gas, heating salamanders, etc. The coal selected will be one that produces a high yield of gas and of by-products. If there

is a special demand for toluol, as was the case during the war, this would also result in the use of high-volatile coals, unmixed, in order to increase its yield.

By-product plants located at steel mills place the greatest stress on the quality of coke produced, and not on the by-products. The coke and gases are utilized in various ways about the mill for the production of heat and power, the tars and ammonia being disposed of in bulk. Coals for such uses must, therefore, be low in sulphur and phosphorus, and reasonably low in ash, as explained under the head of Bee-hive Coking. The percentage of volatile matter, according to present day practice, is preferably from 25 to 33 per cent., a range which, strange to say, fits but few of the coking seams of the country. Mixing of coals is, therefore, generally practiced, that is, a low volatile coal is mixed in such proportions with a high volatile coal as to bring the resulting mass to the desired percentage of volatile matter.

One fortunate feature of this mixing has been to make available, as coking coals, seams which, though otherwise well adapted, were either too low

or too high in volatile content to produce a coke of hard body and with a satisfactory yield. At this writing over 60 per cent. of the metallurgical coke used in this country is being produced in by-product ovens, making the value of coals suitable for this purpose readily apparent.

In general, the chemical qualifications of a bitu-

minous coal well adapted for by-product coking may be said to be:

volatile matter 17 to 38 per cent. (this range provides for mixing)
ash 4 to 8 per cent.
sulphur not more than $1\frac{1}{2}$ per cent.
phosphorus not more than .02 per cent.

METHOD OF CLASSIFICATION

The list of coals here given will be found closely parallel to those mentioned in the tabulation for bee-hive coking, for the reason that a coal which cokes in the bee-hive oven will do likewise in the closed retort. In fact it is doubtless true that more coals may, with justice, be classified as by-product coking coals than bee-hive coking coals. The comparative newness of the industry, and its early dependence upon such well known coals as the Pittsburgh seam of Pennsylvania, the Eagle and Pocahontas seams of West Virginia, the Elkhorn seam of Kentucky and the No. 6 seam of Illinois gave these an exclusive and well-deserved preeminence as by-product coals. However, it must appear from a consideration of the remarkably pure coals of Eastern Kentucky that practically all seams in that field will be found excellent for by-product usage, and, although many of these have never undergone an actual test, it is believed safe from the nature of these deposits to include them in the list.

In like manner the same may be said of such coals of West Virginia as are characterized by low sulphur, and if washing be assumed, then the list is subject to further enlargement. No assumption as to washing, however, has been made, as this will hardly be necessary while the industry is so centered that there is an abundance of pure coals at hand to meet all demands. Where washed coals are now being utilized, as is the case in Alabama and Illinois, such seams are included in the tabulation.

LIST OF SEAMS PRODUCING COAL SUITABLE FOR BY-PRODUCT COKING

Seam, County or Field	State	Page References				Seam, County or Field	State	Page References			
		For Description	Supplementary Analyses	List of Operators	Directory of Mines			For Description	Supplementary Analyses	List of Operators	Directory of Mines
Big Seam.....	Ala.	245	...	251	255	Richland Seam.....	Tenn.	...	...	885	886
Black Creek Seam.....	Ala.	245	247	251	255	Sewanee Seam.....	Tenn.	878	882	884	886
Blue Creek Seam.....	Ala.	245	247	252	255	Soddy No. 7 Seam.....	Tenn.	...	882	885	886
Mary Lee Seam.....	Ala.	245	247	253	255	Banner, Lower Seam.....	Va.	921	923	931	934
Pratt Seam.....	Ala.	245	247	254	255	Banner, Upper Seam.....	Va.	921	923	931	934
No. 2 Seam.....	Ill.	312	314	346	351	Clintwood Seam.....	Va.	...	923	...	934
No. 6 Seam.....	Ill.	310	315	348	351	Darby Seam.....	Va.	922	923	931	934
Alma Seam.....	Ky.	451	...	486	496	Glamorgan Seam.....	Va.	...	923	...	934
Amburgy Seam.....	Ky.	451	...	485	496	Imboden Seam.....	Va.	921	923	932	934
Auxier Seam.....	Ky.	...	...	485	496	Kennedy Seam.....	Va.	922	923	932	934
Dean Seam.....	Ky.	454	458	486	496	Miscellaneous High					
Elkhorn Seam.....	Ky.	450	458	486	496	Volatile Seams*.....	Va.	919	924	933	934
Fire Clay Seam.....	Ky.	454	458	488	496	Pocahontas No. 3 Seam...	Va.	920	924	932	934
Flag Seam.....	Ky.	454	458	488	496	Taggart Seam.....	Va.	922	...	...	934
Freeburn Seam.....	Ky.	451	...	488	496	Alma Seam.....	W. Va.	962	966	1060	1080
Harlan Seam.....	Ky.	452	458	489	496	Beckley Seam.....	W. Va.	963	966	1061	1080
High Splint Seam.....	Ky.	453	459	492	496	Cedar Grove Seam.....	W. Va.	961	966	1061	1080
Hignite Seam.....	Ky.	...	458	490	496	Chilton Seam.....	W. Va.	961	967	1062	1080
Jellico Seam.....	Ky.	452	459	490	496	Coalburg Seam.....	W. Va.	961	967	1062	1080
Keokee Seam.....	Ky.	453	459	490	496	Eagle Seam.....	W. Va.	962	968	1063	1080
Leonard Seam.....	Ky.	453	459	492	496	Fire Creek Seam.....	W. Va.	964	968	1064	1080
Millers Creek Seam.....	Ky.	451	459	490	496	Freeport, Upper Seam...	W. Va.	959	969	1065	1080
Pond Creek Seam.....	Ky.	451	...	488	496	Kittanning, Lower Seam..	W. Va.	960	969	1066	1080
Straight Creek Seam....	Ky.	452	460	491	496	No. 2 Gas Seam.....	W. Va.	962	970	1068	1080
Thacker Seam.....	Ky.	451	...	491	496	Pittsburg Seam.....	W. Va.	959	971	1069	1080
Wallins Seam.....	Ky.	452	460	491	496	Pocahontas No. 3 Seam...	W. Va.	964	973	1073	1080
Freeport, Lower Seam....	Penna.	708	714	767	782	Pocahontas No. 4 Seam...	W. Va.	964	972	1073	1080
Freeport, Upper Seam....	Penna.	706	713	763	782	Pocahontas No. 6 Seam...	W. Va.	964	972	1073	1080
Kittanning, Lower Seam..	Penna.	708	714	767	782	Powellton Seam.....	W. Va.	962	973	1074	1080
Kittanning, Upper Seam..	Penna.	707	715	772	782	Sewell Seam.....	W. Va.	963	973	1075	1080
Pittsburgh Seam.....	Penna.	704	716	774	782	Stockton-Lewiston Seam..	W. Va.	960	974	1077	1080
Brushy Mountain Seam...	Tenn.	877	880	...	886	Thacker Seam.....	W. Va.	961	...	1077	1080
Coal Creek Seam.....	Tenn.	877	880	883	886	Welch Seam.....	W. Va.	963	974	1078	1080
Dean Seam.....	Tenn.	877	881	...	886	Winifrede Seam.....	W. Va.	961	974	1078	1080
Durham No. 5 Seam.....	Tenn.	...	...	...	886						

*Consisting of seams of minor importance

QUALIFICATIONS OF A COAL FOR CEMENT BURNING

Since in the burning of cement the ash of the coal becomes a part of the clinker, it is allowable to use coals having a medium ash content, as the impurities of the coal are approximately of the same composition as the cement. Sulphur has not been closely limited, as it does not enter into combination with the cement so long as the proper kiln temperatures are maintained.

Practically all the cement produced in the United States, outside of the natural gas and oil fields, is burned with coal in rotary kilns. The coal

is commonly shipped from the mine in slack sizes, and is reduced to a powder just before usage. This manner of firing is admirably adapted to the securing of high temperatures in long hearths.

The principal requirements of a fuel for this purpose are that it have a high heating value and that it shall be rich in volatile matter, so as to ignite readily and produce a long flame. The best bituminous coals naturally have the preference in the East, but low quality coal is used at places with success. Mills in the West usually buy the most accessible coal.

METHOD OF CLASSIFICATION

Two qualifications necessary for coals in this list are, a percentage of 31 or over in volatile matter and a B. T. U. value of 12,000 or over. Exceptions to this rule have been made in one or two instances of western coals where isolation from the sources of better coals would naturally permit the use of a fuel lower in calorific intensity. From the tabulation it will appear that 20 out of 24 states can furnish a grade of coal satisfactory to the demands of the industry.

LIST OF SEAMS PRODUCING COAL SUITABLE FOR CEMENT BURNING

Seam, County or Field	State	Page References				Seam, County or Field	State	Page References			
		For Description	Supplementary Analyses	List of Operators	Directory of Mines			For Description	Supplementary Analyses	List of Operators	Directory of Mines
America Seam.....	Ala.	...	...	251	255	Block, Lower Seam.....	Ind.	376	377	402	405
Belmont Seam.....	Ala.	...	...	254	255	Block, Upper Seam.....	Ind.	376	377	402	405
Big Seam.....	Ala.	245	...	251	255	No. 3 Seam.....	Ind.	375	377	402	405
Black Creek Seam.....	Ala.	245	247	251	255	No. 4 Seam.....	Ind.	375	377	403	405
Blue Creek Seam.....	Ala.	245	247	252	255	No. 5 Seam.....	Ind.	375	377	403	405
Brookwood Seam.....	Ala.	...	...	252	255	No. 6 Seam.....	Ind.	374	378	404	405
Carter Seam.....	Ala.	245	247	252	255	Miscellaneous Seams*....	Iowa	422	426	427	430
Clark Seam.....	Ala.	...	247	250	255	Mystic Seam.....	Iowa	422	426	427	430
Climax Seam.....	Ala.	244	...	...	255	Cherokee Seam.....	Kan.	439	441	442	444
Coal City Seam.....	Ala.	244	247	254	255	Alma Seam.....	Ky.	451	...	486	496
Corona Seam.....	Ala.	245	...	252	255	Amburgy Seam.....	Ky.	451	...	485	496
Eureka Seam.....	Ala.	244	...	...	255	Auxier Seam.....	Ky.	...	...	485	496
Garnsey Seam.....	Ala.	...	247	...	255	Cornett Seam.....	Ky.	454	458	488	496
Gholson Seam.....	Ala.	244	247	250	255	Dean Seam.....	Ky.	454	458	486	496
Gould Seam.....	Ala.	...	247	251	255	Elkhorn Seam.....	Ky.	450	458	486	496
Harkness Seam.....	Ala.	245	247	251	255	Fire Clay Seam.....	Ky.	454	458	488	496
Helena Seam.....	Ala.	244	...	250	255	Flag Seam.....	Ky.	454	458	488	496
Henryellen Seam.....	Ala.	244	...	251	255	Freeburn Seam.....	Ky.	451	...	488	496
Horse Creek Seam.....	Ala.	245	247	...	255	Harlan Seam.....	Ky.	452	458	489	496
Jagger Seam.....	Ala.	245	247	252	255	Hazard Seam.....	Ky.	454	458	489	496
Jefferson Seam.....	Ala.	245	247	253	255	High Splint Seam.....	Ky.	453	459	492	496
Mary Lee Seam.....	Ala.	245	247	253	255	Hignite Seam.....	Ky.	...	458	490	496
Milldale Seam.....	Ala.	245	247	253	255	Jellico Seam.....	Ky.	452	459	490	496
Montevallo Seam.....	Ala.	244	247	251	255	Keokee Seam.....	Ky.	453	459	490	496
Mt. Carmel Seam.....	Ala.	245	...	253	255	Leonard Seam.....	Ky.	453	459	492	496
Nickelplate Seam.....	Ala.	245	...	253	255	Mannington Seam.....	Ky.	457	...	495	496
Pratt Seam.....	Ala.	245	247	254	255	Millers Creek Seam.....	Ky.	451	459	490	496
Straven, Upper Seam.....	Ala.	...	247	...	255	Pond Creek Seam.....	Ky.	451	...	491	496
Thompson Seam.....	Ala.	244	247	250	255	Straight Creek Seam.....	Ky.	452	460	491	496
Underwood Seam.....	Ala.	244	...	250	255	Thacker Seam.....	Ky.	451	...	491	496
Wadsworth Seam.....	Ala.	...	247	250	255	Wallins Seam.....	Ky.	452	460	491	496
Woodstock Seam.....	Ala.	244	...	...	255	Miscellaneous Seams,					
Youngblood Seam.....	Ala.	244	...	...	255	Eastern*.....	Ky.	455	...	492	496
Garfield County.....	Colo.	289	290	294	298	Miscellaneous Seams,					
Gunnison County						Western*.....	Ky.	...	...	495	496
Bituminous.....	Colo.	289	290	295	298	Nebo Seam.....	Ky.	457	...	495	496
Huerfano County.....	Colo.	285	291	295	296	No. 9 Seam.....	Ky.	456	459	493	496
La Plata County						No. 11 Seam.....	Ky.	456	460	494	496
Bituminous.....	Colo.	286	291	295	298	No. 12 Seam.....	Ky.	455	460	495	496
Las Animas County.....	Colo.	285	291	296	298	Miscellaneous Seams*....	Mich.	551	554	555	556
Mesa County.....	Colo.	289	292	296	298	Mulky Seam.....	Mo.	562	563	565	566
Montezuma County						Weir-Pittsburgh, Lower					
Bituminous.....	Colo.	286	292	296	298	Seam.....	Mo.	561	563	565	566
Routt County Bituminous.	Colo.	288	292	297	298	Colfax County.....	N. Mex.	584	587	588	589
No. 2 Seam.....	Ill.	312	314	346	351	Lincoln County					
No. 5 Seam.....	Ill.	311	314	346	351	Bituminous.....	N. Mex.	586	587	588	589
No. 6 Seam.....	Ill.	310	315	348	351	Rio Arriba County.....	N. Mex.	585	587	588	589

*Consisting of seams of minor importance

(Continued on Next Page)

LIST OF SEAMS PRODUCING COAL SUITABLE FOR CEMENT BURNING—Continued

Seam, County or Field	State	Page References				Seam, County or Field	State	Page References			
		For Description	Supplementary Analyses	List of Operators	Directory of Mines			For Description	Supplementary Analyses	List of Operators	Directory of Mines
Santa Fe County						North Central Field.....	Texas	896	899	901	902
Bituminous.....	N. Mex.	585	587	588	589	Carbon County.....	Utah	908	910	912	913
Socorro County.....	N. Mex.	585	587	588	589	Emery County.....	Utah	909	910	912	913
Brookville Seam.....	Ohio	604	607	612	621	Banner, Lower Seam.....	Va.	921	923	931	934
Clarion, Upper Seam.....	Ohio	604	607	612	621	Banner, Upper Seam.....	Va.	921	923	931	934
Freeport, Lower Seam.....	Ohio	603	607	612	621	Clintwood Seam.....	Va.	...	923	...	934
Freeport, Upper Seam.....	Ohio	603	607	612	621	Darby Seam.....	Va.	922	923	931	934
Kittanning, Lower Seam..	Ohio	604	607	613	621	Glamorgan Seam.....	Va.	...	923	...	934
Kittanning, Middle Seam..	Ohio	603	607	614	621	Imboden Seam.....	Va.	921	923	932	934
Meigs Creek Seam.....	Ohio	602	608	...	621	Kennedy Seam.....	Va.	922	923	932	934
Mercer, Lower Seam.....	Ohio	605	608	617	621	Miscellaneous High					
Pittsburg Seam.....	Ohio	602	608	617	621	Volatile Seams*.....	Va.	919	924	933	934
Quakertown Seam.....	Ohio	605	609	619	621	Raven Seam.....	Va.	...	...	...	934
Redstone Seam.....	Ohio	602	609	620	621	King Co. (McKay Seam)..	Wash.	945	949	953	954
Sharon Seam.....	Ohio	605	609	620	621	Pierce County					
Hartshorne, Lower Seam..	Okla.	659	661	664	667	(High Volatile).....	Wash.	946	949	953	954
Hartshorne, Upper Seam..	Okla.	659	661	664	667	Roslyn Seam.....	Wash.	944	949	953	954
Henryetta Seam.....	Okla.	660	661	665	667	Alma Seam.....	W. Va.	962	966	1060	1080
McAlester Seam.....	Okla.	659	661	665	667	Bakerstown Seam.....	W. Va.	959	966	1060	1080
Brookville Seam.....	Penna.	710	712	759	782	Cedar Grove Seam.....	W. Va.	961	966	1061	1080
Clarion Seam.....	Penna.	709	712	759	782	Chilton Seam.....	W. Va.	961	967	1062	1080
Freeport, Lower Seam....	Penna.	707	712	760	782	Coalburg Seam.....	W. Va.	961	967	1062	1080
Freeport, Upper Seam....	Penna.	706	713	763	782	Eagle Seam.....	W. Va.	962	968	1063	1080
Kittanning, Lower Seam..	Penna.	708	714	767	782	Freeport, Lower Seam...	W. Va.	960	969	1064	1080
Kittanning, Upper Seam..	Penna.	707	715	772	782	Kittanning, Lower Seam..	W. Va.	960	969	1066	1080
Pittsburgh Seam.....	Penna.	704	716	774	782	No. 2 Gas Seam.....	W. Va.	962	970	1068	1080
Redstone Seam.....	Penna.	704	...	780	782	No. 5 Block Seam.....	W. Va.	960	970	1067	1080
Sewickley Seam.....	Penna.	704	...	780	782	Pittsburg Seam.....	W. Va.	959	971	1069	1080
Bon Air Seam.....	Tenn.	879	880	883	886	Powellton Seam.....	W. Va.	962	973	1074	1080
Blue Gem Seam.....	Tenn.	876	880	883	886	Redstone Seam.....	W. Va.	958	973	1075	1080
Coal Creek Seam.....	Tenn.	877	880	883	886	Sewickley Seam.....	W. Va.	958	974	1076	1080
Jellico Seam.....	Tenn.	876	881	884	886	Stockton-Lewiston Seam..	W. Va.	960	974	1077	1080
Mingo Seam.....	Tenn.	876	881	884	886	Thacker Seam.....	W. Va.	961	...	1077	1080
Miscellaneous Seams*....	Tenn.	875	881	885	886	Winifrede Seam.....	W. Va.	961	974	1078	1080
Rich Mountain Seam.....	Tenn.	876	881	884	886	Carbon County.....	Wyo.	1160	1162	1166	1167
Sewanee Seam.....	Tenn.	878	882	884	886	Lincoln County.....	Wyo.	1159	1162	1168	1167

*Consisting of seams of minor importance

QUALIFICATIONS OF A COAL FOR DOMESTIC USE

It is difficult to define the requirements of a house coal, since every kind of coal is used for this purpose, depending somewhat upon locality. Where open grates are found a bright cheerful fire is wanted, burning at such a rate as to produce an even amount of heat with a minimum of attention. High volatile coals, because of the long flame and better burning qualities, are preferred although much gas may escape unburned and the effective heat be low. Coals high in sulphur are productive of sulphurous fumes when the draft conditions are bad, and these tarnish picture frames and silverware and also corrode the grate and fuel bowl.

A good house coal should be selected for its free-burning qualities and low ash content. Coals which give off much smoke are objectionable in closely settled communities, and in many cities their use is regulated by ordinances. A coal which readily becomes pasty and spreads into a coked mass, needing a frequent breaking up to promote the passage of air through the fuel bed, is undesirable, especially for self-feeding stoves or base burners. The ash produced in burning should be small in quantity, gray and cindery as compared with the soft white powdery ash characteristic of a good steam coal. A reasonable amount of porous clinker is desirable, as it prevents the fine coal from falling through the grate.

The matter of size is all important in the consideration of a domestic coal. One of the first requirements is that the coal be hard, firm and lumpy. It must be loaded clean and free from slack, in large sizes, as lump, egg or nut, and stand shipping without excessive degradation. Impurities such as slate, bony coal and nodules of iron pyrite are now generally removed on the tippie or breaker by picking. In bituminous regions, the coal on leaving the screens is led to a travelling belt, with boys or men on either side to sort out the waste material. The travelling belt and loading boom may be installed as one unit, the latter serving to lower the large lumps into the car without excessive breakage. Coals prepared in this careful manner are highly regarded as domestic coals. Much fine coal is objected to, as it interferes with the draft and necessitates constant attention.

Anthracite coals are the standard domestic fuels, and as such have held priority for years, commanding a price much in excess of the best bituminous coals. In the Eastern states the domestic sizes are stove and chestnut for ranges and small heaters, and egg for use in furnaces. They are high in calorific value and give off their heat at a uniform rate; do not become pasty in burning; need little attention; lend themselves to easy draft regulation; are smokeless, and produce a small

amount of pulverulent ash, if the coal has been properly prepared.

As a remedy for the smoke nuisance, coke and semi-coked coal are gradually coming into favor. Although gas-coke is admittedly more difficult to burn than bituminous coal, there is no reason why stoves and furnaces should not be constructed so as to overcome the difficulty by providing a good draught. Semi-coked coal retains sufficient volatile matter to make combustion easy, while, at the same time, it produces little smoke owing to the large amount of the volatile gases driven off in the distillation process.

Briquets for Domestic Use

The briquetting of coal has been going on in Europe for over 50 years. It has been developed more rapidly and successfully in Germany than any other country. In the United States the industry has had a slow growth largely because of the abundance of excellent coals throughout the country with which the briquet would need to compete.

Medium hard coals are best adapted to the production of fuel briquets. Gas and coking coals produce briquets that melt in the fire. Hard coals, as a rule, will require more binding material than the softer varieties, hence it is often possible to mix various coals with the object of obtaining a mixture with a low ash content and of such a nature that it will briquet readily without the use of too much binding material. The average ash content of the coal should not exceed 12 per cent. when pitch is used as the binding material, and

when other binding material is used it should be less. Washed coal may be used, but will need be dried before compressing.

Briquets or "boulets", as they are known to the trade, from anthracite culm, Buckwheat No. 4 or dust, and of a size about equal to stove coal, are being made in the anthracite region and shipped to the western states for household purposes. Before mixing with the binder, the moisture in the culm, which, as it comes from the bank, varies from 10 to 16 per cent, is reduced in driers to about 2 per cent. The ash content is relatively high, but 18 per cent. is regarded as the maximum.

A great deal of experimenting has been done for the purpose of finding a satisfactory binder to hold the particles of coal firmly in the briquet. Rosin, pine tar, sulphite liquor, starch, tars, pitches, molasses, slaughter-house refuse, brewers' waste, tanning liquor, naphthalene, asphaltic residuum, emulsion of water, starch and asphaltum, magnesia, magnesia cement, plaster of paris, portland cement, water glass and slag cement have all been used with varying degrees of success.

The requirements of a good briquet for fuel are as follows: (1) it must be strong, hard and tough so as to withstand hard usage in handling and in shipping; (2) it must be able to withstand heat and atmospheric weathering; (3) it must retain its form in burning as reverting to the original fine pieces would obstruct the draft; (4) it must ignite readily and burn without producing smoke or odor.

The advantages of anthracite briquets as a household fuel are said to arise from their rapid and complete combustion, the lack of clinkers in the fire, and the lesser attention needed for the fire.

METHOD OF CLASSIFICATION

All coals on our records have been included in this tabulation for the reason that all coals are used for domestic purposes, though obviously some are better adapted than others. The matter of allegiance to a coal for domestic purposes is based largely on price and propinquity. The New Englander accustomed to the luxury of anthracite would shun a high grade West Virginia bituminous, but the esteem in which anthracite is held in the East is no greater than that accorded to subbituminous coal by the plainsmen of Wyoming or to the moisture-laden lignites by the farmers of North Dakota. Considerable assistance in differentiating good domestic coals from the indifferent or bad may be gained by consulting the Directory Section, where will be found mentioned, for most of the mines, the equipment used in the preparation and sizing of coal.

LIST OF SEAMS PRODUCING COAL SUITABLE FOR DOMESTIC USE

Seam, County or Field	State	Page References				Seam, County or Field	State	Page References			
		For Description	Supplementary Analysis	List of Operators	Directory of Mines			For Description	Supplementary Analysis	List of Operators	Directory of Mines
America Seam.....	Ala.	...	...	251	255	Henryellen Seam.....	Ala.	244	...	251	255
Belmont Seam.....	Ala.	...	...	254	255	Horse Creek Seam.....	Ala.	245	247	...	255
Big Seam.....	Ala.	245	...	251	255	Jagger Seam.....	Ala.	245	247	252	255
Black Creek Seam.....	Ala.	245	247	251	255	Jefferson Seam.....	Ala.	245	247	253	255
Blue Creek Seam.....	Ala.	245	247	251	255	Mary Lee Seam.....	Ala.	245	247	253	255
Brookwood Seam.....	Ala.	...	...	252	255	Milldale Seam.....	Ala.	245	247	253	255
Carter Seam.....	Ala.	245	247	252	255	Montevallo Seam.....	Ala.	244	247	251	255
Clark Seam.....	Ala.	...	247	250	255	Mt. Carmel Seam.....	Ala.	245	...	253	255
Climax Seam.....	Ala.	244	...	...	255	Nickelplate Seam.....	Ala.	245	...	253	255
Coal City Seam.....	Ala.	244	247	254	255	Pratt Seam.....	Ala.	245	247	254	255
Corona Seam.....	Ala.	245	...	252	255	Thompson Seam.....	Ala.	244	247	250	255
Eureka Seam.....	Ala.	244	...	...	255	Underwood Seam.....	Ala.	244	...	250	255
Garnsey Seam.....	Ala.	...	247	...	255	Wadsworth Seam.....	Ala.	...	247	250	255
Gholson Seam.....	Ala.	244	247	250	255	Woodstock Seam.....	Ala.	244	...	...	255
Gould Seam.....	Ala.	...	247	251	255	Youngblood Seam.....	Ala.	244	247	251	255
Harkness Seam.....	Ala.	244	...	250	255	Denning Seam.....	Ark.	268	269	270	271
Helena Seam.....	Ala.	244	...	251	255	Hartshorne Seam.....	Ark.	268	269	270	271

(Continued on Next Page)

LIST OF SEAMS PRODUCING COAL SUITABLE FOR DOMESTIC USE—Continued

Seam, County or Field	State	Page References				Seam, County or Field	State	Page References			
		For Description	Supplementary Analyses	List of Operators	Directory of Mines			For Description	Supplementary Analyses	List of Operators	Directory of Mines
Paris Seam.....	Ark.	268	269	270	271	Freeport, Lower Seam....	Md.	537	539	540	542
Spadra Seam.....	Ark.	268	269	270	271	Freeport, Upper Seam....	Md.	537	539	540	542
Boulder County.....	Colo.	288	290	294	298	Kittanning, Lower Seam..	Md.	537	539	541	542
Delta County.....	Colo.	289	290	294	298	Kittanning, Upper Seam..	Md.	537	539	541	542
El Paso County.....	Colo.	288	290	294	298	Pittsburg (Big) Seam....	Md.	536	539	541	542
Fremont County.....	Colo.	286	290	294	298	Sewickley, Upper Seam....	Md.	536	539	541	542
Garfield County.....	Colo.	289	290	294	298	Miscellaneous Seams*....	Mich.	551	554	555	556
Gunnison County.....	Colo.	289	290	295	298	Saginaw Seam.....	Mich.	551	554	555	556
Huerfano County.....	Colo.	285	291	295	298	Verne Seam.....	Mich.	551	554	555	556
Jackson County.....	Colo.	287	291	295	298	Bevier Seam.....	Mo.	560	563	564	566
Jefferson County.....	Colo.	288	291	295	298	Cainsville Seam.....	Mo.	561	563	...	566
La Plata County.....	Colo.	286	291	295	298	Jordan Seam.....	Mo.	561	563	564	566
Las Animas County.....	Colo.	285	291	296	298	Lexington Seam.....	Mo.	561	563	564	566
Mesa County.....	Colo.	289	292	296	298	Montserrat Seam.....	Mo.	561	...	...	566
Montezuma County.....	Colo.	286	292	296	298	Mulberry Seam.....	Mo.	562	563	...	566
Montrose County.....	Colo.	287	...	...	298	Mulky Seam.....	Mo.	562	563	565	566
Pitkin County.....	Colo.	289	292	...	298	Rich Hill, Lower Seam....	Mo.	561	563	565	566
Routt County.....	Colo.	288	292	297	298	Tebow Seam.....	Mo.	562	563	565	566
Weld County.....	Colo.	288	293	297	298	Waverly Seam.....	Mo.	562	563	...	566
No. 1 Seam.....	Ill.	313	314	346	351	Weir-Pittsburg, Lower					
No. 2 Seam.....	Ill.	312	314	346	351	Seam.....	Mo.	561	563	565	566
No. 5 Seam.....	Ill.	311	314	346	351	Carbon County.....	Mont.	573	576	578	579
No. 6 Seam.....	Ill.	310	315	348	351	Cascade County.....	Mont.	574	576	578	579
No. 7 Seam.....	Ill.	309	316	350	351	Musselshell County.....	Mont.	574	577	578	579
Block, Lower Seam....	Ind.	376	377	402	405	Colfax County.....	N. Mex.	584	587	588	589
Block, Upper Seam....	Ind.	376	377	402	405	Lincoln County.....	N. Mex.	586	587	588	589
Cannelton Seam.....	Ind.	376	...	402	405	McKinley County.....	N. Mex.	584	587	588	589
Minshall Seam.....	Ind.	376	377	402	405	Rio Arriba County.....	N. Mex.	585	587	588	589
No. 3 Seam.....	Ind.	375	377	402	405	Santa Fe County.....	N. Mex.	585	587	588	589
No. 4 Seam.....	Ind.	375	377	403	405	Socorro County.....	N. Mex.	585	587	588	589
No. 5 Seam.....	Ind.	375	377	403	405	Lignite Seams.....	N. Dak.	594	596	597	597
No. 6 Seam.....	Ind.	374	378	404	405	Brookville Seam.....	Ohio	604	607	612	621
No. 7 Seam.....	Ind.	374	378	404	405	Clarion, Upper Seam....	Ohio	604	607	612	621
Miscellaneous Seams....	Iowa	422	426	427	430	Freeport, Lower Seam....	Ohio	603	607	612	621
Mystic Seam.....	Iowa	422	426	427	430	Freeport, Upper Seam....	Ohio	603	607	612	621
Cherokee Seam.....	Kan.	439	441	442	444	Kittanning, Lower Seam..	Ohio	604	607	613	621
Leavenworth Seam....	Kan.	440	441	443	444	Kittanning, Middle Seam..	Ohio	603	607	614	621
Osage Seam.....	Kan.	440	441	443	444	Meigs Creek Seam.....	Ohio	602	608	...	621
Weir-Pittsburg, Upper						Mercer, Lower Seam.....	Ohio	605	608	617	621
Seam.....	Kan.	440	441	...	444	Pittsburg Seam.....	Ohio	602	608	617	621
Alma Seam.....	Ky.	451	...	486	496	Quakertown Seam.....	Ohio	605	609	619	621
Amburgy Seam.....	Ky.	451	...	485	496	Redstone Seam.....	Ohio	602	609	620	621
Auxier Seam.....	Ky.	...	...	485	496	Sharon Seam.....	Ohio	605	609	620	621
Blue Gem Seam.....	Ky.	...	458	485	496	Cavanal Seam.....	Okla.	660	661	...	667
Cornett Seam.....	Ky.	454	458	488	496	Dawson Seam.....	Okla.	660	661	664	667
Dean Seam.....	Ky.	454	458	486	496	Hartshorne, Lower Seam..	Okla.	659	661	664	667
Elkhorn Seam.....	Ky.	450	458	486	496	Hartshorne, Upper Seam..	Okla.	659	661	664	667
Fire Clay Seam.....	Ky.	454	458	488	496	Henryetta Seam.....	Okla.	660	661	665	667
Flag Seam.....	Ky.	454	458	488	496	McAlester Seam.....	Okla.	659	661	665	667
Freeburn Seam.....	Ky.	451	...	488	496	Witteville Seam.....	Okla.	659	...	666	667
Harlan Seam.....	Ky.	452	458	489	496	Eastern-Middle Field					
Hazard Seam.....	Ky.	454	458	489	496	Anthracites.....	Penna.	680	...	686	689
High Splint Seam.....	Ky.	453	459	492	496	Northern Field					
Hignite Seam.....	Ky.	...	458	490	496	Anthracites.....	Penna.	678	...	684	689
Jellico Seam.....	Ky.	452	459	490	496	Southern Field					
Keokee Seam.....	Ky.	453	459	490	496	Anthracites.....	Penna.	681	...	687	689
Leonard Seam.....	Ky.	453	459	492	496	Western-Middle Field					
Mannington Seam.....	Ky.	457	...	495	496	Anthracites.....	Penna.	679	...	686	689
Millers Creek Seam....	Ky.	451	459	490	496	Sullivan County					
Pond Creek Seam.....	Ky.	451	...	491	496	Semianthracites.....	Penna.	682	...	688	689
Straight Creek Seam....	Ky.	452	460	491	496	Barnett Seam.....	Penna.	710	712	758	782
Thacker Seam.....	Ky.	451	...	491	496	Berlin Seam.....	Penna.	705	712	758	782
Wallins Seam.....	Ky.	452	460	491	496	Brookville Seam.....	Penna.	710	712	759	782
Miscellaneous Seams,						Cement Seam.....	Penna.	707	...	772	782
Eastern*.....	Ky.	455	...	492	496	Clarion Seam.....	Penna.	709	712	759	782
Miscellaneous Seams,						Freeport, Lower Seam....	Penna.	707	712	760	782
Western*.....	Ky.	...	...	495	496	Freeport, Upper Seam....	Penna.	706	713	763	782
Nebo Seam.....	Ky.	457	...	495	496	Fulton Seam.....	Penna.	709	714	766	782
No. 9 Seam.....	Ky.	456	459	493	496	Kelly Seam.....	Penna.	710	714	766	782
No. 11 Seam.....	Ky.	456	460	494	496	Kittanning, Lower Seam..	Penna.	708	714	767	782
No. 12 Seam.....	Ky.	455	460	495	496	Kittanning, Middle Seam..	Penna.	708	715	771	782
Bakerstown Seam....	Md.	536	539	540	542	Kittanning, Upper Seam..	Penna.	707	715	772	782
Brookville Seam.....	Md.	538	539	540	542	Lemon Seam.....	Penna.	706	...	763	782
Clarion Seam.....	Md.	538	539	540	542	Mercer Group Seams.....	Penna.	711	716	...	782

*Consisting of seams of minor importance

(Continued on Next Page)

DOMESTIC—Continued

Seam, County or Field	State	Page References				Seam, County or Field	State	Page References			
		For Description	Supplementary Analysis	List of Operators	Directory of Mines			For Description	Supplementary Analysis	List of Operators	Directory of Mines
Miller Seam.....	Penna.	708	...	767	782	Raven Seam.....	Va.	920	924	933	934
Moshannon Seam.....	Penna.	707	...	760	782	Triassic Seams.....	Va.	919	...	...	934
Philson Seam.....	Penna.	706	716	...	782	King County.....	Wash.	945	949	953	954
Pittsburgh Seam.....	Penna.	704	716	774	782	Lewis County.....	Wash.	947	949	953	954
Price Seam.....	Penna.	705	...	...	782	Pierce County.....	Wash.	946	949	953	954
Redstone Seam.....	Penna.	704	...	780	782	Roslyn Seam.....	Wash.	944	949	953	954
Sewickley Seam.....	Penna.	704	...	780	782	Skagit County.....	Wash.	...	...	593	954
Washington Seam.....	Penna.	703	...	...	782	Thurston County.....	Wash.	947	952	953	954
Waynesburg Seam.....	Penna.	704	...	781	782	Alma Seam.....	W. Va.	962	966	1060	1080
Blue Gem Seam.....	Tenn.	876	880	883	886	Bakerstown Seam.....	W. Va.	959	966	1060	1080
Bon Air Seam.....	Tenn.	879	880	883	886	Beckley Seam.....	W. Va.	963	966	1061	1080
Brushy Mountain Seam...	Tenn.	877	880	...	886	Cedar Grove Seam.....	W. Va.	961	966	1061	1080
Coal Creek Seam.....	Tenn.	877	880	883	886	Chilton Seam.....	W. Va.	961	967	1062	1080
Dean Seam.....	Tenn.	877	881	...	886	Coalburg Seam.....	W. Va.	961	967	1062	1080
Jellico Seam.....	Tenn.	876	881	884	886	Eagle Seam.....	W. Va.	962	968	1063	1080
Mingo Seam.....	Tenn.	876	881	884	886	Fire Creek Seam.....	W. Va.	964	968	1064	1080
Miscellaneous Seams*....	Tenn.	875	881	885	886	Freeport, Lower Seam...	W. Va.	960	969	1064	1080
Rex Seam.....	Tenn.	875	881	...	886	Freeport, Upper Seam...	W. Va.	959	969	1065	1080
Rich Mountain Seam.....	Tenn.	876	881	884	886	Iaeger Seam.....	W. Va.	963	969	1066	1080
Sewanee Seam.....	Tenn.	878	882	884	886	Kittanning, Lower Seam..	W. Va.	960	969	1066	1080
Wildor Seam.....	Tenn.	873	882	...	886	No. 2 Gas Seam.....	W. Va.	962	970	1068	1080
Eagle Pass Field.....	Texas	897	899	901	902	No. 5 Block Seam.....	W. Va.	960	970	1067	1080
Laredo Field.....	Texas	897	899	901	902	Pittsburg Seam.....	W. Va.	959	971	1069	1080
Lignite Field.....	Texas	898	899	901	902	Pocahontas No. 3 Seam...	W. Va.	964	973	1073	1080
North Central Field.....	Texas	896	899	901	902	Pocahontas No. 4 Seam...	W. Va.	964	972	1073	1080
Carbon County.....	Utah	908	910	912	913	Pocahontas No. 6 Seam...	W. Va.	964	972	1073	1080
Emery County.....	Utah	909	910	912	913	Powellton Seam.....	W. Va.	962	973	1074	1080
Grand County.....	Utah	909	910	912	913	Redstone Seam.....	W. Va.	958	973	1075	1080
Iron County.....	Utah	909	910	...	913	Sewell Seam.....	W. Va.	963	973	1075	1080
Summit County.....	Utah	909	910	912	913	Sewickley Seam.....	W. Va.	958	974	1076	1080
Uinta County.....	Utah	909	910	912	913	Stockton-Lewiston Seam..	W. Va.	960	974	1077	1080
Washington County.....	Utah	909	910	...	913	Thacker Seam.....	W. Va.	961	...	1077	1080
Banner, Lower Seam.....	Va.	921	923	931	934	Waynesburg Seam.....	W. Va.	958	974	1078	1080
Banner, Upper Seam.....	Va.	921	923	931	934	Welch Seam.....	W. Va.	963	974	1078	1080
Clintwood Seam.....	Va.	...	923	...	934	Winifrede Seam.....	W. Va.	961	974	1078	1080
Darby Seam.....	Va.	922	923	931	934	Carbon County.....	Wyo.	1160	1162	1166	1167
Glamorgan Seam.....	Va.	...	923	...	934	Fremont County.....	Wyo.	1161	1162	...	1167
Imboden Seam.....	Va.	921	923	932	934	Hot Springs County.....	Wyo.	1160	1162	...	1167
Kennedy Seam.....	Va.	922	923	932	934	Lincoln County.....	Wyo.	1159	1162	1168	1167
Miscellaneous High Volatile Seams*.....	Va.	919	924	933	934	Sheridan County.....	Wyo.	1159	1163	1166	1167
Montgomery-Pulaski Counties.....	Va.	919	923	933	934	Sweetwater County.....	Wyo.	1158	1163	1166	1167
Pocahontas No. 3 Seam...	Va.	920	924	932	934	Uinta County.....	Wyo.	1161	1163	...	1167
						Weston County.....	Wyo.	1161	1163	...	1167

*Consisting of seams of minor importance

QUALIFICATIONS OF A COAL FOR EXPORT

Due to causes both economic and political the exporting of American coals to foreign countries has greatly increased during the past six years. Exchanges organized to facilitate shipments at the principal seaboard points and to exercise a supervision over the quality of coals shipped are some of the indications of the zeal with which foreign trade is being sought. However, our successful

invasion of foreign fields does not depend altogether on the high qualities of the coals we ship. So many factors are involved and the matter is of such importance that the subject of Export Coals will be found treated, along with full information on the Tidewater Exchanges with which it is closely linked, in another part of the COAL CATALOG, beginning with page 138.

METHOD OF CLASSIFICATION

Most of the coals exported in ship bottoms is loaded at such points as New York, Philadelphia, Baltimore, Hampton Roads and Charleston. The coals acceptable to foreign trade are those high in heat value and low in both sulphur and ash. High volatile, low volatile and anthracite coals are exported and a list of these is here given. Canada is supplied largely by rail from the mines of Pennsylvania, practically all of the anthracite which is exported being shipped there.

LIST OF SEAMS PRODUCING COAL SUITABLE FOR EXPORTING

Seam, County or Field	State	Page References				Seam, County or Field	State	Page References			
		For Description	Supplementary Analyses	List of Operators	Directory of Mines			For Description	Supplementary Analyses	List of Operators	Directory of Mines
Alma Seam.....	Ky.	451	...	486	496	Freeport, Upper Seam....	Penna.	707	715	772	782
Amburgy Seam.....	Ky.	451	...	485	496	Kittanning, Lower Seam..	Penna.	708	714	767	782
Auxier Seam.....	Ky.	...	...	485	496	Kittanning, Upper Seam..	Penna.	707	715	772	782
Blue Gem Seam.....	Ky.	...	458	485	496	Lemon Seam.....	Penna.	706	...	763	782
Dean Seam.....	Ky.	454	458	486	496	Miller Seam.....	Penna.	708	...	767	782
Elkhorn Seam.....	Ky.	450	458	486	496	Moshannon Seam.....	Penna.	707	...	760	782
Fire Clay Seam.....	Ky.	454	458	488	496	Pittsburgh Seam.....	Penna.	704	716	774	782
Flag Seam.....	Ky.	454	458	488	496	Price Seam.....	Penna.	705	...	...	782
Freeburn Seam.....	Ky.	451	...	488	496	Northeastern Field.....	Tenn.	875	881	885	886
Harlan Seam.....	Ky.	452	458	489	496	Banner, Lower Seam.....	Va.	921	923	931	934
Hazard Seam.....	Ky.	454	458	489	496	Banner, Upper Seam.....	Va.	921	923	931	934
High Splint Seam.....	Ky.	453	459	492	496	Clintwood Seam.....	Va.	...	923	...	934
Hignite Seam.....	Ky.	...	458	490	496	Darby Seam.....	Va.	922	923	931	934
Jellico Seam.....	Ky.	452	459	490	496	Glamorgan Seam.....	Va.	...	923	...	934
Keokee Seam.....	Ky.	453	459	490	496	Imboden Seam.....	Va.	921	923	932	934
Leonard Seam.....	Ky.	453	459	492	496	Kennedy Seam.....	Va.	922	923	932	934
Millers Creek Seam.....	Ky.	451	459	490	496	Miscellaneous High					
Pond Creek Seam.....	Ky.	451	...	491	496	Volatile Seams*.....	Va.	919	924	933	934
Straight Creek Seam.....	Ky.	452	460	491	496	Pocahontas No. 3 Seam...	Va.	920	924	932	934
Thacker Seam.....	Ky.	451	...	491	496	Raven Seam.....	Va.	920	924	932	934
Wallins Seam.....	Ky.	452	460	491	496	Roslyn Seam.....	Wash.	944	949	953	954
Miscellaneous Seams,						Alma Seam.....	W. Va.	962	966	1060	1080
Eastern*.....	Ky.	455	...	492	496	Beckley Seam.....	W. Va.	963	966	1061	1080
Bakerstown Seam.....	Md.	536	539	540	542	Cedar Grove Seam.....	W. Va.	961	966	1061	1080
Brookville Seam.....	Md.	538	539	540	542	Chilton Seam.....	W. Va.	961	967	1062	1080
Freeport, Lower Seam....	Md.	537	539	540	542	Coalburg Seam.....	W. Va.	961	967	1062	1080
Freeport, Upper Seam....	Md.	537	539	540	542	Eagle Seam.....	W. Va.	962	968	1063	1080
Kittanning, Lower Seam..	Md.	537	539	541	542	Fire Creek Seam.....	W. Va.	964	968	1064	1080
Pittsburgh Seam.....	Md.	536	539	541	542	Freeport, Lower Seam....	W. Va.	960	969	1064	1080
Sewickley, Upper Seam...	Md.	536	539	541	542	Freeport, Upper Seam....	W. Va.	959	969	1065	1080
Eastern-Middle Field						Kittanning, Lower Seam..	W. Va.	960	969	1066	1080
Anthracites.....	Penna.	680	...	686	689	No. 2 Gas Seam.....	W. Va.	962	970	1068	1080
Northern Field						No. 5 Block Seam.....	W. Va.	960	970	1067	1080
Anthracites.....	Penna.	678	...	684	689	Pittsburg Seam.....	W. Va.	959	971	1069	1080
Southern Field						Pocahontas No. 3 Seam...	W. Va.	964	973	1073	1080
Anthracites.....	Penna.	681	...	687	689	Pocahontas No. 4 Seam...	W. Va.	964	972	1073	1080
Western-Middle Field						Pocahontas No. 6 Seam...	W. Va.	964	972	1073	1080
Anthracites.....	Penna.	679	...	686	689	Powellton Seam.....	W. Va.	962	973	1074	1080
Sullivan County						Sewell Seam.....	W. Va.	963	973	1075	1080
Semianthracites.....	Penna.	682	...	688	689	Stockton-Lewiston Seam..	W. Va.	960	974	1077	1080
Berlin Seam.....	Penna.	705	712	758	782	Thacker Seam.....	W. Va.	961	...	1077	1080
Cement Seam.....	Penna.	707	...	772	782	Welch Seam.....	W. Va.	963	974	1078	1080
Freeport, Lower Seam....	Penna.	707	712	760	782	Winifrede Seam.....	W. Va.	961	974	1078	1080

*Consisting of seams of minor importance

QUALIFICATIONS OF A COAL FOR THE MANUFACTURE OF ILLUMINATING GAS

In the early days of the industry the process of manufacture of illuminating gas was by the distillation of bituminous coal in retorts. Up to the time of the invention of the Welsbach mantle, in 1893, the predominant use of coal gas was for lighting purposes. Open flame burners were used, the union of the gas with air taking place in a thin film, forming the outer surface of the flame. The yellow luminosity of the flame, upon which its success for lighting depended, was due to the incandescence of solid particles of carbon, and possibly also of very dense hydrocarbons. The prime object of the early gas manufacturers was to obtain a gas rich in heavy hydrocarbons, which readily decomposed under the influence of heat and produced carbon. Cannel coal was much used as an enricher because of its large yield of gas of high illuminating power.

When the Welsbach mantle came into use the gas industry gained a new lease of life. This mantle consists of a cotton or other fabric saturated with a mixture of nitrates of thorium and cerium and has the power of emitting light when in a state of incandescence. With this mantle in use the need

of a gas rich in illuminants suddenly disappeared. Another noticeable tendency at this period was the increasing use of gas for domestic purposes. These new conditions call for heating quality in the gas, and is resulting in the gradual displacement of illuminating gas by water gas.

When made in ovens or retorts, the coal gas resulting is the main product, coke being the by-product, and being used for domestic, steam and water gas purposes, gas producers, etc. Distillation is done in fire clay retorts fired with coal, coke, or producer gas.

Two characteristics govern the selection of a coal to be used in the production of illuminating gas, the first being physical quality and the second chemical composition. Under the first caption the gas value will depend upon whether the coal is friable or liable to slack during handling. This is of importance for the reason that the time required for carbonizing depends somewhat upon the size of the coal, small coal needing a longer period than large or lump coal, and showing a lesser yield. Also when large-sized coal is used the gas is evolved

more freely and is of better quality, since it is less subject to decomposition. In its chemical composition the coal should analyze high in volatile matter and low in moisture, ash and sulphur. In England it is generally considered that the nearer the ratio O:H in the coal substance approximates to 2.0 the better the results obtained.* As in the case of coking operations, sulphur is the element which precludes the use of many coals for gas manufacture. A great quantity of coal in the United States would satisfy the requirements, were it not for the high sulphur content. Two per cent. sulphur coals have been used, but it is difficult to purify gas made from high sulphur coals, and consumers rightfully object to the hydrogen sulphide gas produced by the chemical union of sulphur with hydrogen, which is not only ill smelling and dangerous, but readily tarnishes picture frames, silverware, etc. For such reasons some of the largest users of gas coals limit the sulphur to $1\frac{1}{4}$ per cent., and, of course, high volatile coals having a lesser per cent. are the more highly regarded. Frequently the capacity of a plant to purify gas limits the selection of coal. It should be as free as possible from such impurities as iron pyrites and slate. The percentage of ash should be merely such as will produce a coke of commercial value.

The most valuable gas coal is the one that will yield in the form of gas, the greatest proportion of its calorific value. An additional criterion of its value is the length of time required to carbonize the coal, because the longer this period the lesser will be the output and the greater the expense.

Generally speaking, the older coals gasify at the slowest rate and the younger coals most rapidly. The Western Pennsylvania gas coals have been for years the standard gas coals of the country.

The comparative value of coals for the manufacture of illuminating gas can be best determined by actual test in the retorts, since many of the properties are more or less directly dependent upon the temperature of distillation, size of the charge, type of retort and other factors. Chemical analyses, so far as gas manufacture is concerned, affords very little information as to the relative value of coals for this purpose.†

Cannel coal used alone is unsuited to the present-day requirements of gas making. It is rich in resinic bases and frequently analyzes as high as 50 per cent. of volatile matter, but it yields a poor quality of powdery coke which is practically useless for fuel purposes. Cannel coal is much used, however, as an enricher to the ordinary gas coals, with a yield, in exceptional cases, of over 14,000 cubic feet of gas.

A good gas coal should be able to meet the following conditions:

Volatile matter, 32 to 37 per cent.

Ash, 6 to 8 per cent.

Sulphur, not more than $1\frac{1}{4}$ per cent.

Gas yield from 10,000 to 12,000 cubic feet per ton of coal.

Coke yield from 65 to 70 per cent.

*Bone, Coal and Its Scientific Uses, pg. 277.
†S. W. Parr in Bulletin No. 20, U. S. G. S.

METHOD OF CLASSIFICATION

Three essentials stand out prominently in the class of coal for gas making: (1) It must be low in sulphur, (2) high in volatile matter, and (3) must yield coke in the retort. In the following tabulation some of the coals, as for instance those of West Virginia and Kentucky, have been included on the strength of their analyses; Alabama and Washington coals have been limited to such that have been reported successfully used; Pennsylvania coals are limited for the reason that the coals from the Youghiogheny and Irwin districts are predominant as the gas coals of the State. If washing of coals is to be presumed, many additional seams or localities will be able to meet the demand because of the removal of much of the objectionable sulphur.

LIST OF SEAMS PRODUCING COAL SUITABLE FOR THE MANUFACTURE OF ILLUMINATING GAS

Seam, County or Field	State	Page References				Seam, County or Field	State	Page References			
		For Description	Supplementary Analysis	List of Operators	Directory of Mines			For Description	Supplementary Analysis	List of Operators	Directory of Mines
Jagger Seam.....	Ala.	245	247	252	255	Harlan Seam.....	Ky.	452	458	489	496
Montevallo Seam.....	Ala.	244	247	251	255	High Splint Seam.....	Ky.	453	459	492	496
Straven, Upper Seam.....	Ala.	...	247	...	255	Hignite Seam.....	Ky.	...	458	490	496
Thompson-Underwood Seam.....	Ala.	244	247	250	255	Jellico Seam.....	Ky.	452	459	490	496
No. 6 Seam.....	Ill.	310	315	348	351	Keokee Seam.....	Ky.	453	459	490	496
Cannelton (as enricher)...	Ind.	376	...	402	405	Leonard Seam.....	Ky.	453	459	492	496
No. 4 Seam.....	Ind.	375	377	403	405	Millers Creek Seam.....	Ky.	451	459	490	496
Alma Seam.....	Ky.	451	...	486	496	Pond Creek Seam.....	Ky.	451	...	491	496
Amburgy Seam.....	Ky.	451	...	485	496	Straight Creek Seam.....	Ky.	452	460	491	496
Auxier Seam.....	Ky.	...	...	485	496	Thacker Seam.....	Ky.	451	...	491	496
Cannel Seams (as enricher).....	Ky.	455	458	486	496	Wallins Seam.....	Ky.	452	460	490	496
Dean Seam.....	Ky.	454	458	486	496	Miscellaneous Seams, Eastern*.....	Ky.	455	...	492	496
Elkhorn Seam.....	Ky.	450	458	486	496	Colfax County.....	N. Mex.	584	587	588	589
Fire Clay Seam.....	Ky.	454	458	488	496	Socorro County.....	N. Mex.	585	587	588	589
Flag Seam.....	Ky.	454	458	488	496	Freeport, Lower Seam....	Penna.	707	712	760	782
Freeburn Seam.....	Ky.	451	...	488	496	Kittanning, Lower Seam..	Penna.	708	714	767	782
						Kittanning, Upper Seam..	Penna.	707	715	772	782

*Consisting of seams of minor importance
(Continued on Next Page)

ILLUMINATING GAS—Continued

Seam, County or Field	State	Page References				Seam, County or Field	State	Page References			
		For Description	Supplementary Analyses	List of Operators	Directory of Mines			For Description	Supplementary Analyses	List of Operators	Directory of Mines
Pittsburgh Seam.....	Penna.	704	716	774	782	Pierce County.....	Wash.	946	949	953	954
Dean Seam.....	Tenn.	877	881	...	886	Roslyn Seam.....	Wash.	944	949	953	954
Rex Seam.....	Tenn.	875	881	...	886	Alma Seam.....	W. Va.	962	966	1060	1080
Banner, Lower Seam.....	Va.	921	923	931	934	Cedar Grove Seam.....	W. Va.	961	966	1061	1080
Banner, Upper Seam.....	Va.	921	923	931	934	Chilton Seam.....	W. Va.	961	967	1062	1080
Clintwood Seam.....	Va.	...	923	...	934	Eagle Seam.....	W. Va.	962	968	1063	1080
Darby Seam.....	Va.	922	923	931	934	No. 2 Gas Seam.....	W. Va.	962	970	1068	1080
Imboden Seam.....	Va.	921	923	932	934	No. 5 Block Seam.....	W. Va.	960	970	1067	1080
Miscellaneous High Volatile Seams*.....	Va.	919	924	933	934	Pittsburg Seam.....	W. Va.	959	971	1069	1080
						Powellton Seam.....	W. Va.	962	973	1074	1080

*Consisting of seams of minor importance

QUALIFICATIONS OF A COAL FOR LOCOMOTIVE FUEL

Almost all kinds of fuel—liquid and solid—have been, and still are, used by railroads for the generation of steam. To a considerable extent this is due to the practice of transportation companies buying coal from various mining companies along the route of travel, the result being that coal varying in composition and in grades of preparation are made to serve. Factors which determine largely the most efficient type of coal for locomotive service are the type of locomotive, kind of service, design of grate and fire-box, intensity of draft, grades encountered and loads hauled.

Certain types of locomotives will demand certain kinds of fuel; one type, for example, will show greater economy with gas coals, while another type will respond better with splint coals. Many Eastern roads burn anthracite in the smallest grades with a percentage of soft coal intermixed. Where hard coal is used the grate area must be made large owing to the relatively slow rate at which anthracite coal gives off its heat.

Necessarily the fire-box of a locomotive is restricted and small as compared with the capacity of the boiler, therefore the coal burned per square foot of grate area per hour is much larger than is required in ordinary stationary practice. This requires a quick-burning fuel—that is, one in which the gaseous matter is readily evolved from the coal, a characteristic found in those having a high volatile content, which, it has been observed, liberate about one-third of their total heat within two minutes after firing, the remaining coke maintaining a constant temperature by its practically uniform rate of combustion. It is true, of course, that with the use of high volatile coals there is considerable waste in the form of unburnt gases, and that there is less efficiency and more smoke than with anthracite.

Another peculiarity of locomotive service is that the draft is stronger than in ordinary steam practice. To resist the lifting effect of the inrushing air, whereby the fine coal is carried unconsumed through the tubing and on out the boiler stack, entailing the loss of so much fuel, there is required a coal which has sufficient coking quality to coalesce the small coal into a solid mass of sufficient size to stay in place. It is in this respect that semibituminous coals may fail to meet the requirements of heavy locomotive service, although, as is well known, they are unsurpassed for steam

purposes. These coals in mining produce about two-thirds of the slack sizes, and as they are not as strongly coking in the fire-box as the high volatiles, a considerable portion of the fine coal is blown away. Where much smoke is objectionable, as in the case of the well-advertised fast trains, or prohibited by smoke laws, as in city districts, anthracite or the so-called smokeless coals are the ideal fuels.

Ordinarily the use of high volatile coals is accompanied by much smoke, this depending largely upon the manner of firing, the condition of the locomotive, and the size of coal. Three-quarter-inch gas coals in many cases are used with very satisfactory results and almost smokeless combustion. Considerable discussion has ensued on the best sizes of coal. Most authorities agree that the ideal fuel for hand-fired locomotives would be one with lumps of a maximum size of from 3 to 5 inches, which would allow the fireman to shovel without taking his time to break lumps; and of a minimum size of about $\frac{1}{2}$ inch, which would lessen losses through the grates and prevent the draft drawing the fine fuel out of the stack. It is sometimes stated that for best results the size of lump coal should be restricted to a 3-inch cube, the reasons given being, first, that lumps of this smaller size have more surface exposed to the air, weight for weight, than is the case with the larger lumps, and second, the air has a freer passage than with the smaller sizes, and therefore a more rapid combustion takes place, serving to meet rapidly the maximum variation in the demands for steam.

It is not to be understood that slack is objectionable, but there should not be more than 30 per cent fine coal under 1 inch. Coking coals can stand more slack than non-coking coals, as the former fuse together and resist being blown out the tubes. Automatic stokers have been successfully introduced for the burning of lower priced screenings.

From the standpoint of absolute efficiency a number of railroad tests made with run-of-mine versus various sized coals do not show conclusively that it is cheaper to use a closely sized fuel for this work.*

While high ash coal is not especially desirable for locomotive fuel, it can be and is used with very satisfactory results, due to the readiness with which the ashes can be removed from the fire-box

*University of Illinois Bulletin No. 88, Dry Preparation of Illinois Coal at Illinois Mines, E. A. Holbrook.

as well as the increased grate surface with which locomotives of recent design are provided. Bony coal, slate and rash are the usual forms of impurities; the first two are productive of clinkers; the latter fill up the fire-box. For locomotive fuel

sulphur in coal need be given no serious consideration.

In concluding this discussion it may be stated that the ultimate test of fitness for locomotive purposes is a trial under the actual conditions of service.

METHOD OF CLASSIFICATION

Here, as in the case of domestic coal, every coal in the country may be listed, with the proviso, however, that not all coals are satisfactory coals for railroad use. The very nature of railroad operation requires that they depend on local sources for their supply, and due to this contingency all ranks from anthracite to lignite are used. In the case of lignite, however, it is generally mixed with other coals, this practice obtaining, for instance, in Texas.

For Seams Suitable for Locomotive Use, See List Given Under Domestic Coals.

QUALIFICATIONS OF A COAL FOR MELTING (METALLURGICAL FUEL)

Metallurgical operations must necessarily be accompanied by a high heat. This requires that only fuels of high calorific value be used. In the case of the reverberatory furnace, coal is burned on a grate, the flame of the burning gas passing through the furnace and over the hearth on its way to the stack. The resulting heat effects a melting down of the metal.

One essential requirement of a fuel for this purpose is that it be high in volatile matter. When used in the reverberatory furnace for the smelting of iron or for refining copper it should be low in sulphur; for the smelting of copper ores sulphur is not detrimental. (See discussion of Powdered Coal—For Metallurgical Use.)

METHOD OF CLASSIFICATION

All high-grade high-volatile coals are entitled to this classification, and in addition many of the pure coals belonging to subbituminous rank found in the western states. Thus the bituminous coals of Lincoln county, Wyoming, and the subbituminous coals of Montana are used in the smelters at Anaconda and Butte, while the bituminous coals of Carbon and Emery counties, Utah, are used in the smelters of that state.

LIST OF SEAMS PRODUCING COAL SUITABLE FOR METALLURGICAL USE

Seam, County or Field	State	Page References				Seam, County or Field	State	Page References			
		For Description	Supplementary Analysis	List of Operators	Directory of Mines			For Description	Supplementary Analysis	List of Operators	Directory of Mines
Jagger Seam.....	Ala.	245	247	252	255	Thacker Seam.....	Ky.	451	...	491	496
Montevallo Seam.....	Ala.	244	247	251	255	Wallins Seam.....	Ky.	452	460	491	496
Straven, Upper Seam.....	Ala.	...	247	...	255	Miscellaneous Seams,					
Thompson-Underwood						Eastern*.....	Ky.	455	...	492	496
Seam.....	Ala.	244	247	250	255	Carbon County.....	Mont.	573	576	578	579
Garfield County.....	Colo.	289	290	294	298	Cascade County.....	Mont.	574	576	578	579
La Plata County.....	Colo.	286	291	295	298	Musselshell County.....	Mont.	574	577	578	579
Las Animas County.....	Colo.	285	291	296	298	Colfax County.....	N. Mex.	584	587	588	589
Mesa County.....	Colo.	289	292	296	298	Lincoln County					
No. 2 Seam.....	Ill.	312	314	346	351	Bituminous.....	N. Mex.	586	587	588	589
No. 6 Seam.....	Ill.	310	315	348	351	Santa Fe County					
Block, Lower Seam.....	Ind.	376	377	402	405	Semibituminous.....	N. Mex.	585	587	588	589
Block, Upper Seam.....	Ind.	376	377	402	405	Socorro County.....	N. Mex.	585	587	588	589
No. 4 Seam.....	Ind.	375	377	403	405	Quakerstown Seam.....	Ohio	605	609	619	621
Alma Seam.....	Ky.	451	...	486	496	Sharon Seam.....	Ohio	605	609	620	621
Amburgy Seam.....	Ky.	451	...	485	496	Hartshorne, Lower Seam..	Okla.	659	661	664	667
Auxier Seam.....	Ky.	...	...	485	496	Hartshorne, Upper Seam..	Okla.	659	661	664	667
Blue Gem Seam.....	Ky.	...	458	485	496	McAlester Seam.....	Okla.	659	661	665	667
Dean Seam.....	Ky.	454	458	486	496	Freeport, Lower Seam....	Penna.	707	712	760	782
Elkhorn Seam.....	Ky.	450	458	486	496	Freeport, Upper Seam....	Penna.	706	713	763	782
Fire Clay Seam.....	Ky.	454	458	488	496	Kittanning, Lower Seam..	Penna.	708	714	767	782
Flag Seam.....	Ky.	454	458	488	496	Kittanning, Upper Seam..	Penna.	707	715	772	782
Freeburn Seam.....	Ky.	451	...	488	496	Pittsburgh Seam.....	Penna.	704	716	774	782
Harlan Seam.....	Ky.	452	458	489	496	Blue Gem Seam.....	Tenn.	876	880	883	886
Hazard Seam.....	Ky.	454	458	489	496	Brushy Mountain Seam...	Tenn.	877	880	...	886
High Splint Seam.....	Ky.	453	459	492	496	Coal Creek Seam.....	Tenn.	877	880	883	886
Hignite Seam.....	Ky.	...	458	490	496	Dean Seam.....	Tenn.	877	881	...	886
Jellico Seam.....	Ky.	452	459	490	496	Mingo Seam.....	Tenn.	876	881	884	886
Keokee Seam.....	Ky.	453	459	490	496	Miscellaneous Seams*....	Tenn.	875	881	885	886
Leonard Seam.....	Ky.	453	459	492	496	Rex Seam.....	Tenn.	875	881	...	886
Millers Creek Seam.....	Ky.	451	459	490	496	Rich Mountain Seam.....	Tenn.	876	881	884	886
Pond Creek Seam.....	Ky.	451	...	491	496	Sewanee Seam.....	Tenn.	878	882	884	886
Straight Creek Seam.....	Kv.	452	460	491	496	Carbon County.....	Utah	908	910	912	913

*Consisting of seams of minor importance
(Continued on Next Page)

COAL SUITABLE FOR METALLURGICAL USE—Continued

Seam, County or Field	State	Page References				Seam, County or Field	State	Page References			
		For Description	Supplementary Analysis	List of Operators	Directory of Mines			For Description	Supplementary Analysis	List of Operators	Directory of Mines
Emery County.....	Utah	909	910	912	913	Coalburg Seam.....	W. Va.	961	967	1062	1080
Banner, Lower Seam....	Va.	921	923	931	934	Eagle Seam.....	W. Va.	962	968	1063	1080
Banner, Upper Seam.....	Va.	921	923	931	934	Fire Creek Seam.....	W. Va.	964	968	1064	1080
Clintwood Seam.....	Va.	...	923	...	934	Freeport, Lower Seam....	W. Va.	960	969	1064	1080
Darby Seam.....	Va.	922	923	931	934	Kittanning, Lower Seam..	W. Va.	960	969	1066	1080
Imboden Seam.....	Va.	921	923	932	934	No. 2 Gas Seam.....	W. Va.	962	970	1068	1080
Miscellaneous High Volatile Seams*.....	Va.	919	924	933	934	No. 5 Block Seam.....	W. Va.	960	970	1067	1080
King County (McKay Seam).....	Wash.	945	949	953	954	Pittsburg Seam.....	W. Va.	959	971	1069	1080
Pierce County (High Volatile).....	Wash.	946	949	953	954	Pocahontas No. 3 Seam...	W. Va.	964	973	1073	1080
Roslyn Seam.....	Wash.	944	949	953	954	Pocahontas No. 4 Seam...	W. Va.	964	972	1073	1080
Alma Seam.....	W. Va.	962	966	1060	1080	Pocahontas No. 6 Seam...	W. Va.	964	972	1073	1080
Beckley Seam.....	W. Va.	963	966	1061	1080	Powellton Seam.....	W. Va.	962	973	1074	1080
Cedar Grove Seam.....	W. Va.	961	966	1061	1080	Sewell Seam.....	W. Va.	963	973	1075	1080
Chilton Seam.....	W. Va.	961	967	1062	1080	Stockton-Lewiston Seam..	W. Va.	960	974	1077	1080
						Thacker Seam.....	W. Va.	961	...	1077	1080
						Winifrede Seam.....	W. Va.	961	974	1078	1080
						Lincoln County.....	Wyo.	1159	1162	1168	1167

*Consisting of seams of minor importance

QUALIFICATIONS OF A COAL FOR USE AS A POWDERED FUEL

Powdered or pulverized coal, as the name suggests, is coal that has been reduced by crushing to the fineness of dust. The purpose in this reduction is to secure better combustion of the fuel by bringing each particle of coal into contact with a sufficient supply of air. It is well understood that a considerable loss of heat energy takes place with the ordinary method of hand firing, due to such causes as the chilling of the furnace while coal is being shovelled on the fire, the checking of the draft through the grate bars by the mass of newly placed coal, and the insufficiency of air to burn completely the large volume of gases released by the destructive distillation of the green coal. If some method of admitting coal to the furnace could be found that is constant rather than intermittent, that does not require opening of doors with its objectionable cooling of flame, that places the coal in regulated quantities instead of en masse, and that keeps each particle of coal surrounded with sufficient air to insure its complete combustion, then a great advance in obtaining effective heating would be made. Combustion would be instantaneous and the smoke nuisance would disappear.

Powdered coal meets all of the requirements just mentioned. First, however, it must be prepared before it is ready for use in the furnace. This requires the use of special apparatus to accomplish what has been found necessary for the use of coal in powdered form, namely, drying, crushing, pulverizing and conveying.

First. Theoretically the less moisture there is in the coal, the better the results. It is therefore often stated that coal should first be dried so that it will not contain over 1 per cent. of moisture. Recent experiments indicate that it is not necessary to dry the coal down to 1 per cent. of moisture in order to get good boiler efficiency and that most of the Eastern coals can be pulverized and burned with good results without drying. Coals which are not low in moisture should be dried by passing through a revolving shell, the temperature of which is maintained at a point high enough to evaporate the moisture in the crushed fuel.

Second. The coal must be pulverized to a high degree of fineness so that the contact surface be-

tween the coal and air may be greatly increased. The underlying principle is well illustrated by assuming a 1-inch solid cube of coal wherewith there is exposed 6 square inches of surface. If this same volume be divided into a thousand cubes of 0.1 inch they will now have an exposed area of 60 square inches, and if the division be carried to one million cubes 0.01 of an inch on a side, the exposed area is increased to 600 square inches. If the million cubes were further reduced to dust spheres 1/200-in. in diameter there would result 216,000,000 grains of dust having a total exposed area of 1152 square feet.

It has been freely stated that in order to get good results the coal should be pulverized to a fineness which will pass at least 95 per cent. through a 100-mesh screen; at least 85 per cent. through a 200-mesh screen and at least 70 per cent. through a 300-mesh screen. Unquestionably the coal must be thoroughly and uniformly pulverized, but recent tests seem to indicate that extreme fineness is not necessary to get good combustion and good efficiency. Complete combustion appears to be more a matter of proper furnace and burner design and the right way of supplying air than of the extreme fineness of the coal.

Third. Where the coal is not used as rapidly as pulverized, or where the supply of fuel is purchased, the reserve supply is stored in bins. Such storage bins should not be placed in a position where they might become heated from furnaces, steam pipes or hot flues owing to the danger from fire. Spontaneous combustion of the coal has taken place under such conditions and will need be guarded against at all times.

Fourth. The coal must be projected into a chamber hot enough to cause instant deflagration. The powdered fuel is conveyed directly to the furnace, either by a system of screw conveyors or by air pressure. It is fed to the burners through a nozzle under light air pressure.

Fifth. It must be supplied with air sufficient to yield the oxygen necessary to burn the carbon of the coal at once to carbon dioxide. The quantity of air supplied is of great importance in the results

attained. This is susceptible to close regulation, being added in proper volume and at the same time mixed with the fuel. If in overabundance, the flame is cooled, smoking ensues and there is a loss of efficiency; if in undersupply, the volatile matter in the dust is burned, while the remainder is coked and unconsumed.

Coals Suitable for Powdering

Because the cement industry, the earliest user of powdered fuel in quantity, required a high volatile coal, the impression grew that such coals only were fitted for pulverizing. In the same way the belief long prevailed that low grade coals could not be utilized in this process. During the past ten years considerable experimenting has revealed that all ranks of coal from peat to anthracite, and all grades of coal may be successfully used in the powdered form. High volatile coals give the best results, and low-moisture, low-ash coals are always to be preferred. Coals running very high in ash may be used, but they frequently cause difficulty, either by the scattering of fine ashes over the surrounding neighborhood or by part of the ash falling into and blocking the back connection. A further difficulty will be experienced if the ash is easily fusible owing to its coating the cold surfaces of the water tubes and the linings of the furnace chamber.

For Steam Plants

An attractive feature of the process for steam purposes is that there can be utilized mine refuse, run-of-mine, screenings or slack grades of coal. The quality of the coal is not of great importance. Inferior coals, as subbituminous, lignite and peat, are applicable. Coals analyzing 25 per cent. ash and 5 per cent. sulphur have caused no trouble in boiler use, while the lignites and subbituminous coals of Washington have proved especially suitable and have shown a much higher evaporative power than when the same coal has been used with stokers.

For Locomotive Use

Inferior coals may also be used for locomotive service. As illustrating the possibilities may be cited the coals of Brazil, which range from 26 to 30 per cent. in ash, and are unusually high in both sulphur and moisture. This coal in a powdered form is being used successfully for locomotive service.

The Swedish government has recently conducted a successful series of experiments in the use of powdered peat as locomotive fuel. Carefully conducted tests between engines of the same class, one burning pulverized coal and the other hand fired, have shown a saving of as much as 23 per cent. in fuel burned when using pulverized coal. But an even greater point in favor of powdered coal is the ability to shut off the fire entirely when standing still, making powdered coal particularly

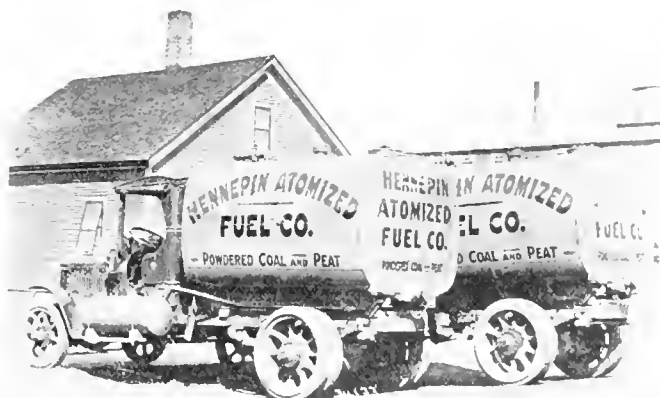
desirable for switching locomotives. The cost of preparing powderer coal plus that incident to its usage may make the final comparison favorable to hand or stoker firing, but some of the heavy cost items are being gradually overcome.

For Metallurgical Use

Powdered coal for metallurgical use dates back about 90 years. It is now used in practically all branches of the industry where a high heat is required, one company alone having 77 furnaces in operation. C. J. Gadd[†] states the following as the requirements for this work: "Powdered coal used in heating and puddling furnaces should have not less than 30 per cent volatile matter, nor less than 50 per cent fixed carbon. Its moisture should not exceed 1.25 per cent, its ash 9.50 per cent and its sulphur 1 per cent. The requirements for open hearth furnaces are more rigid. The volatile content should be higher and not under 36 per cent. The fixed carbon should be at least 52 per cent. The moisture and sulphur may still be 1.25 and 1 per cent respectively, but the ash must fall below 6 per cent. This is because there is apt to be slagging in the combustion chamber, in the hearth and in the flues. In powdered coal sulphur, when present only in small quantities, has no ill effect in heating and annealing furnaces, but it should be given careful attention when used in the reduction and refining of metals or ores."

Other Uses for Powdered Fuel

One of the very recent developments in powdered fuel is its delivery by trucks in cities for such purposes as heating office buildings, hotels, apartments, etc. It is customary to deliver a day's supply, unless storage is provided for larger quantities. The pulverizing is done at a plant located in the city. One enterprising coal company in the state of Washington has the pulverizing station located at the mine, and makes shipments of the fine coal in specially designed cars to Seattle.



Powdered Coal Ready for Delivery.

(Journal of the Franklin Institute)

METHOD OF CLASSIFICATION

In this classification the use has been limited to metallurgical purposes. For the generation of steam the list given under the head of Domestic Coals may be referred to inasmuch as all coals are applicable. For metallurgical use no seam has been intentionally listed having less than 30 per cent. of volatile combustible and preference has been given to those having a high content of gaseous matter. As in the case of melting, if the coal is wanted for iron or steel metallurgy, it must needs be low in sulphur. If for copper, it may be high in sulphur, but in either case a coal of high heat value and long flame is desirable. The moisture content should preferably be low, though coals may analyze high in moisture, say up to 8 per cent, provided they are dried before using so as not to have over 1 to 2 per cent.

LIST OF SEAMS PRODUCING COAL SUITABLE FOR POWDERED (METALLURGICAL) USE

Seam, County or Field	State	Page References				Seam, County or Field	State	Page References			
		For Description	Supplementary Analyses	List of Operators	Directory of Mines			For Description	Supplementary Analyses	List of Operators	Directory of Mines
Jagger Seam.....	Ala.	245	247	252	255	Freeport, Lower Seam....	Penna.	707	712	760	782
Montevallo Seam.....	Ala.	244	247	251	255	Freeport, Upper Seam....	Penna.	706	713	763	782
Thompson-Underwood						Kittanning, Lower Seam..	Penna.	708	714	767	782
Seam.....	Ala.	244	247	250	255	Kittanning, Upper Seam..	Penna.	707	715	772	782
Garfield County.....	Colo.	289	290	294	298	Pittsburgh Seam.....	Penna.	704	716	774	782
Las Animas County.....	Colo.	285	291	296	298	Blue Gem Seam.....	Tenn.	876	880	883	886
La Plata County.....	Colo.	268	291	295	298	Brushy Mountain Seam...	Tenn.	877	880	883	886
Mesa County.....	Colo.	289	292	296	298	Coal Creek Seam.....	Tenn.	877	880	883	886
No. 2 Seam.....	Ill.	312	314	346	351	Dean Seam.....	Tenn.	877	881	...	886
No. 6 Seam.....	Ill.	310	315	348	351	Mingo Seam.....	Tenn.	876	881	...	886
Block, Lower Seam.....	Ind.	376	377	402	405	Miscellaneous Seams*....	Tenn.	875	881	885	886
Block, Upper Seam.....	Ind.	376	377	402	405	Rex Seam.....	Tenn.	875	881	...	886
No. 4 Seam.....	Ind.	375	377	403	405	Rich Mountain Seam.....	Tenn.	876	881	884	886
Alma Seam.....	Ky.	451	...	486	496	Sewanee Seam.....	Tenn.	878	882	884	886
Amburgy Seam.....	Ky.	451	...	485	496	Carbony County.....	Utah	908	910	912	913
Auxier Seam.....	Ky.	...	...	485	496	Emery County.....	Utah	909	910	912	913
Blue Gem Seam.....	Ky.	...	458	485	496	Banner, Lower Seam....	Va.	921	923	931	934
Dean Seam.....	Ky.	454	458	486	496	Banner, Upper Seam....	Va.	921	923	931	934
Elkhorn Seam.....	Ky.	450	458	486	496	Clintwood Seam.....	Va.	...	923	...	934
Fire Clay Seam.....	Ky.	454	458	488	496	Darby Seam.....	Va.	922	923	931	934
Flag Seam.....	Ky.	454	458	488	496	Imboden Seam.....	Va.	921	923	932	934
Freeburn Seam.....	Ky.	451	...	488	496	Miscellaneous High					
Harlan Seam.....	Ky.	452	458	489	496	Volatile Seams*.....	Va.	919	924	933	934
Hazard Seam.....	Ky.	454	458	489	496	King County					
High Splint Seam.....	Ky.	453	459	492	496	(McKay Seam).....	Wash.	945	949	953	954
Hignite Seam.....	Ky.	...	458	490	496	Roslyn Seam.....	Wash.	944	949	953	954
Jellico Seam.....	Ky.	452	459	490	496	Pierce County					
Keokee Seam.....	Ky.	453	459	490	496	(High Volatile).....	Wash.	946	949	953	954
Leonard Seam.....	Ky.	453	459	492	496	Alma Seam.....	W. Va.	962	966	1060	1080
Millers Creek Seam.....	Ky.	451	459	490	496	Bakerstown Seam.....	W. Va.	959	966	1060	1080
Pond Creek Seam.....	Ky.	451	...	491	496	Cedar Grove Seam.....	W. Va.	961	966	1061	1080
Straight Creek Seam....	Ky.	452	460	491	496	Chilton Seam.....	W. Va.	961	967	1062	1080
Thacker Seam.....	Ky.	451	...	491	496	Coalburg Seam.....	W. Va.	961	967	1062	1080
Wallins Seam.....	Ky.	452	460	491	496	Eagle Seam.....	W. Va.	962	968	1063	1080
Coffax County.....	N. Mex.	584	587	589	589	Freeport, Lower Seam....	W. Va.	960	969	1064	1080
Lincoln County						Freeport, Upper Seam....	W. Va.	959	969	1065	1080
Bituminous.....	N. Mex.	586	587	588	589	Kittanning, Lower Seam..	W. Va.	960	969	1066	1080
Santa Fe County						No. 2 Gas Seam.....	W. Va.	962	970	1068	1080
Semibituminous.....	N. Mex.	585	587	588	589	No. 5 Block Seam.....	W. Va.	960	970	1067	1080
Socorro County.....	N. Mex.	585	587	588	589	Pittsburg Seam.....	W. Va.	959	971	1069	1080
Quakertown Seam.....	Ohio	605	609	619	621	Powellton Seam.....	W. Va.	962	973	1074	1080
Sharon Seam.....	Ohio	605	609	620	621	Stockton-Lewiston Seam..	W. Va.	960	974	1077	1080
Hartshorne, Lower Seam..	Okla.	659	661	664	667	Thacker Seam.....	W. Va.	961	...	1077	1080
Hartshorne, Upper Seam..	Okla.	659	661	664	667	Winifrede Seam.....	W. Va.	961	974	1078	1080
McAlester Seam.....	Okla.	659	661	665	667	Lincoln County.....	Wvo.	1159	1162	1168	1167

*Consisting of seams of minor importance

THE QUALIFICATIONS OF A COAL FOR THE MANUFACTURE OF PRODUCER GAS

The manufacture of producer gas is carried out in one of the many forms of producers, consisting essentially of a cylindrical furnace lined with fire-brick, with an outer mild steel casing, and usually water sealed at the bottom. The process consists of passing a mixture of air and steam continuously through the fuel which has been charged into the producer, and in such proportions as will maintain its temperature conditions as nearly constant as possible, so that the gas which is continuously generated will be of uniform composition.

Bituminous coal, coke or anthracite may be completely gasified. When a fresh charge of coal is dropped into the producer, it first of all undergoes, in the uppermost layers of the fire, a process of destructive distillation, whereby hydrogen, methane, tarry hydrocarbons, oxides of carbon, together with some steam and also small quantities of ammonia and sulphuretted hydrogen are evolved, probably in much the same proportions as in the high temperature distillation of coal. The coked residue is

rapidly gasified as it descends through the incandescent fuel bed by the upward flowing air-steam blast, yielding chiefly the oxides of carbon and hydrogen, together with small quantities of both methane and ammonia. These gases, in addition to nitrogen, make up the crude producer gas which passes out of the furnace and which contains between 40 and 45 per cent. of combustible constituents.† It is used for metallurgical purposes, production of power, burning of clay products and lime, manufacture of glass, etc.

Any coal whether of high or low grade, or of any rank from peat to anthracite may be used in the producer, although all coals are not used with equal facility. The best gas-producer coals are those which do not cake, or only slightly so, in the furnace. Caking coals tend to obstruct the draft and oftentimes must be broken up by rods operated from the top of the producer. For the same reason coal which has an ash of low fusion point should be

†Excerpts from Bone, Coal and its Utilization.

avoided. Gas produced from anthracite is of a uniformly rich and almost tar-free quality. There is little likelihood of clinkering troubles when anthracite is used. Buckwheat No. 1 appears to be the most suitable size, but a surer method is to specify that not more than 5 per cent. of the coal shall pass through a 1/16-inch mesh screen. Furthermore the coal should not contain more than 2 per cent. of sulphur, nor more than 12 per cent. of ash.

In the case of bituminous coals and lignite, and with special reference to the double flow producer, the percentages of ash and sulphur are the determining factors. The fusibility of the ash should be carefully examined, in fact this quality is often the one factor that will exclude a coal as a producer fuel. The size of the coal is also important. As a general rule, coarse mine run coal does not make the best producer material. The larger pieces work down through the distillation bed and tend to make unequal blow distributions on both the hand poked and mechanical types. Egg and nut, being nearly free of fines, make the most easily handled material. Slack coal can be successfully gasified. Several additional factors must be considered. The producer is capable of utilizing bituminous and lignite fuels of a moisture content of, but not exceeding, 25 per cent. If the moisture content exceeds this amount it becomes difficult to maintain proper temperatures in the upper fuel bed. It is also evident that the fixed carbon content should exceed the volatile content.

If the volatile content exceeds the carbon too much work must be done in the upper fuel bed, and it becomes difficult to maintain proper conditions for gas-making in the lower fuel bed. Caking coals require more labor than non-caking coals. One ton of Pittsburgh coal will produce 150,000 cubic feet of producer gas.

For metallurgical purposes a bituminous high-volatile coal is to be preferred. E. B. Guenther* states the requirements of coals for this purpose as follows: The generation of gas is dependent in a large measure upon the contact of the blast with the combustible of the fuel. Excessive ash prevents this contact, and also renders the fuel bed more or less compact, while the labor of operation is increased.

High sulphur is objectionable. If it exists in combination with other elements it is apt to form clinker formation, which requires labor for its removal. If the sulphur passes off as a gas, sulphur dioxide, it has a corrosive action on all metal parts with which it comes in contact.

The size of coal determines the percentage of voids in the fuel bed. Lumps which are too large allow the blast to pass through the fuel bed too rapidly, whereas coal which is too fine offers too much resistance to the blast, and, in addition, is apt to contain a great amount of impurities. Nut or pea coal gives the best results.

*Proceedings Coal Mining Institute of America, 1912, pg. 321.

METHOD OF CLASSIFICATION

All coals have been included in this classification, though results obtained with each coal may be vastly different. Owing to troubles met with in operation, practice has proved that some coals are used only with difficulty. However, actual tests are needed to demonstrate the true worth of a coal for producer purposes, and in lieu of this, each coal has been accepted as usable until proved otherwise. The prime requirements are that a coal should not coke excessively and should be easily handled. If it shrinks and has a tendency to part from the wall of the producer it allows the blast to rush through the bed and make bad holes, making it necessary to break the fuel against the wall at close intervals. Also it should not clinker excessively, but if it does the clinker should be such as will permit breaking from the top of the producer.

For Seams Suitable for the Manufacture of Producer Gas, See List Given Under Domestic Coals.

QUALIFICATIONS OF A COAL FOR SMITHING USE

While most coals can be used with some degree of success at the forge, it is recognized that some coals are better adapted than others; in fact, a good smithing coal commands a premium. The requirements of a high-grade smithing coal are, first, it should be low in sulphur, not exceeding 1 per cent; second, it should ignite easily; third, it should form a large firm coke arch on the forge sufficient to accommodate the largest work; fourth, it should be high in heat value; fifth, it should be economical in use.

Semibituminous coals, being both high in heat and low in ash, and coking readily, have been the standard smithing coals for years, especially at plants where a considerable quantity of such coal is used. Other coals are, however, in common use,

thus some of the medium volatile coals from Tennessee and West Virginia have supplied markets with smithing coals for many years. In this usage, as in many others, distance from the source of best supply, often dictates the substitution of less adaptable coal.

Blossburg smithing coal was for years the standard for this usage in the East. An average analysis of this coal was as follows:

	Blossburg
Moisture	2.25
Volatile Matter	20.20
Fixed Carbon	71.15
Ash	6.40
Sulphur	0.55

METHOD OF CLASSIFICATION

In this classification semibituminous coals principally has been listed, such coals having by years of usage demonstrated their great adaptability for smithing purposes. The Eagle and Sewanee seams have demonstrated by years of usage their excellent qualities as smithing coals.

LIST OF SEAMS PRODUCING COAL SUITABLE FOR SMITHING USE

Seam, County or Field	State	Page References				Seam, County or Field	State	Page References			
		For Description	Supplementary Analyses	List of Operators	Directory of Mines			For Description	Supplementary Analyses	List of Operators	Directory of Mines
Bakerstown Seam.....	Md.	536	539	540	542	Price Seam.....	Penna.	705	...	...	782
Brookville Seam.....	Md.	538	539	540	542	Sewanee Seam.....	Tenn.	878	882	884	886
Freeport, Lower Seam....	Md.	537	539	540	542	Pocahontas No. 3 Seam...	Va.	920	924	932	934
Freeport, Upper Seam....	Md.	537	539	540	542	Pierce County					
Kittanning, Lower Seam..	Md.	537	539	541	542	(Lower Seams).....	Wash.	946	949	953	954
Pittsburgh Seam.....	Md.	536	539	541	542	Beckley Seam.....	W. Va.	963	966	1061	1080
Sewickley, Upper Seam...	Md.	536	539	541	542	Eagle Seam.....	W. Va.	962	968	1063	1080
Berlin Seam.....	Penna.	705	712	758	782	Fire Creek Seam.....	W. Va.	964	968	1064	1080
Blossburg Seam.....	Penna.	709	...	758	782	Kittanning, Lower Seam..	W. Va.	960	969	1064	1080
Cement Seam.....	Penna.	707	...	772	782	Pocahontas No. 3 Seam...	W. Va.	964	973	1073	1080
Lemon Seam.....	Penna.	706	...	763	782	Pocahontas No. 4 Seam...	W. Va.	964	972	1073	1080
Miller Seam.....	Penna.	708	...	767	782	Pocahontas No. 6 Seam...	W. Va.	964	972	1073	1080
Moshannon Seam.....	Penna.	707	...	760	782	Sewell Seam.....	W. Va.	963	973	1075	1080
Pittsburgh Seam.....	Penna.	704	716	774	782	Welch Seam.....	W. Va.	963	974	1078	1080

QUALIFICATIONS OF A COAL FOR STEAM PURPOSES

The conditions under which coal is used for the generation of steam are many, and practically every rank, grade and size are utilized for this purpose, dependent upon locality, freight rate, etc. It will, therefore, be of interest under this heading to discuss the efficient use of coals, along with the kinds of fuel adaptable.

In general there are two kinds of steam generating installations: (1) stationary heating plants, (2) stationary power plants. A characteristic of the first type is that the load is comparatively steady and the demands made upon the steam capacity do not fluctuate greatly. For such service anthracite coal is well adapted.

With the second type, stationary power plants, the demand may be either steady or variable, depending upon the use for which the power is generated. In the case of power plants furnishing electric power the demands are usually variable and sudden, and this in turn requires a flexible fire. Anthracite coal does not meet this need as well as semibituminous or bituminous coal, which, owing to their higher volatile content, can be burned more rapidly and are therefore to be preferred. Once the gaseous matter is consumed and the additional heat given quickly to the boilers, the remaining fixed carbon of the coal maintains the even supply.

The shortage of fuel throughout the country, due to causes closely connected with the World War, served to drive home the fact that there was an enormous waste in the steam plants of the country, brought about by careless and uneconomical methods of firing. Every stack pouring forth smoke represents so much dissipated energy, but the amount of combustible matter in smoke as it passes from the stack is small, possibly from one to three per cent. of the fuel. The real loss from soot occurs in the boiler settings, due to the deposit on the boiler heating surfaces of soot, which is generally recognized as a most effective agency in preventing the interchange of heat from the furnace to the water in the boiler. As an indication of how serious this loss is, investigations of the U. S. Geological Survey show that it amounts to \$50,000,000 a year in territories where high volatile coals are used.

It is an established fact that high volatile coals are hard to burn economically by the ordinary hand methods of firing. The gaseous matter is evolved freely when the coal is thrown on the fire, and much of it escapes unburnt because of an insufficient supply of air. With some coals the heat value of the volatile matter is greater than that of the fixed carbon, hence the possible loss of energy in the usage of such coals can readily be appreciated.

The employment of stokers, whereby the coal is fed to the furnace at a slow and steady rate, together with the use of forced draft, whereby air in proper proportions can be supplied to the fire, has done much to eliminate smoke and increase the efficiency of the plant. The supply of coal to the fire is evenly regulated, affording sufficient time for the burning of the gases distilled. Furthermore, there is no necessity to open doors and cool the furnace, as is the case with hand firing. Inferior coals, running high in ash or bony coal, can be used with success where ample grate area is provided.

A decision on the fuel to be used is a prerequisite to the selection of boilers. If anthracite coal is used there will need be a larger grate area than with bituminous coals. The conditions of service should also be well understood so that if fluctuations in steam demands are anticipated these contingencies can be successfully met. Constan and Schlapfer are stated by J. S. S. Brame to have investigated the influence of volatile matter on combustion and to have found that coals containing about 20 per cent. (calculated on the combustible) yield the highest temperature and thermal efficiency. With too high volatile matter, the gases escape unburnt and excessive air must be admitted above the grate; and, on the other hand, with low volatile matter, an excessive air supply is requisite for the fuel on the grate. The highest economic efficiency will be attained, therefore, with coals of medium to low volatile content, say from 16 to 23 per cent.

The relative value of coals for steaming purposes depends so largely upon the method of usage, equipment, etc., that full dependence can not be

placed upon chemical composition nor upon records of performance unless all conditions, such as grate area, draft supplied, rate of demand, etc. are well understood. A coal showing by calorimeter tests a high thermal value may prove unsatisfactory in service for reasons utterly unfair to the fuel, while, on the other hand, a coal of lower calorific value may give splendid results at a plant where its use was anticipated and provision made accordingly. With this reservation in mind the following classification by rank according to their steam value is given:*

Relative Value of Steam Coals.	
Semibituminous	100
Semianthracite	93
Anthracite	91
Bituminous (Eastern)	89
Bituminous (Western)	67
Lignite	45

Evaporative Power of Coal

In order to generate steam it is necessary to transfer heat to water, the universally used medium for this transfer being the boiler. The result of the application of heat is to increase the warmth of the water until a temperature of 212 degrees Fahrenheit is reached. Here we find a critical point. However much heat we may apply, the water cannot be heated any hotter, but changes on the addition of heat to steam. In evaporating a pound of water at 212 degrees to steam at 212 degrees, at atmospheric pressure, there are expended 970.4 B. t. u. The heat so utilized is called the **latent heat of evaporation** and is the heat which apparently disappears in causing the substance to pass from a liquid to a gaseous state. This latent heat is not lost, however, but reappears whenever the steam passes through a reverse cycle, from a gaseous to a liquid state. The heat is merely lost to thermometric measurement when the molecular constitution of the water is being changed.

The heat necessary to raise one pound of water from 32 degrees Fahrenheit to the point of ebullition is called the **heat of the liquid**. The sum of the heat of the liquid and the latent heat of evaporation makes the **total heat of the steam**.

*Coal, by J. F. Cosgrove.

The heating power of a coal depends upon its constituent parts, but a pound of coal has a definite heat producing capacity and is capable of evaporating a definite quantity of water under given conditions. It is the function of Steam Tables to give the total quantity of heat which belongs to steam, and the latent heat of evaporation at different pressures, and it will be apparent that if the calorific power in heat units of any coal be divided by the heat units resident in a pound of steam at the pressure in question, the quotient will be the number of pounds of water which will be evaporated, theoretically, by one pound of coal having the given calorific power. Rarely will a fuel be found which will evaporate over 15 pounds of water per pound of coal, and, furthermore, practice with the limitations imposed makes it very unusual to reach 12 pounds of water per pound of coal. Ten pounds is excellent practice, and from ten down to seven is perhaps the most usual experience.

For the purpose of illustration we will assume the following problem: How many pounds of water, fed into the boiler at 60 degrees Fahrenheit, will a pound of coal having a calorific value of 14,200 B. t. u. evaporate into steam at 160 pounds gauge pressure? According to steam tables, steam at 160 pounds steam pressure (equivalent to 174.8 pounds absolute pressure) has a temperature of approximately 371 degrees Fahrenheit. Since the water is fed to the boiler at 60 degrees, each pound must have $371 - 60 = 311$ B. t. u. added to it to increase its temperature to 371 degrees, which increase must take place before the water can be converted into steam.

The amount of heat required, according to steam tables, is in excess of 311 B. t. u. and is stated to be 315.2. This is because slightly more than one B. t. u. is required to raise the temperature of one pound of water one degree at the higher temperatures. Accepting the figure 315.2 B. t. u. as the correct expression for the heat of the liquid, and adding it to 852.7 (taken from steam tables), the latent heat of evaporation, we have a total of 1167.9 B. t. u. as the amount of heat required to raise one pound of water from 60 to 371 degrees and to convert it into steam at 160 pounds steam pressure. Inasmuch as the coal under consideration has a heating value of 14,200 B. t. u. it should be able, theoretically, to evaporate $14,200 \div 1167.9 = 12.2$ pounds of water.

METHOD OF CLASSIFICATION

Since any coal can be used for the generation of steam, all coals may be listed as usable for this purpose. Manufactories, like railroad and domestic users, are often constrained to draw upon the nearest sources for their fuel. An industrial enterprise in Texas would assuredly not use Pittsburgh (Pa.) steam coal, but rather would draw from a source of supply compatible with economic operations. The fact that fuel can be moved only at a high cost for haulage has created industrial centers close to the sources of supply.

For Seams Suitable for Steam Purposes. See List Given Under Head of Domestic Coals.

QUALIFICATIONS OF A COAL FOR TILE AND POTTERY BURNING

In general there are two classes of products from clay burning plants, first, those whose sale would be affected by imperfections in the color and texture of the ware, and second, those which are strictly utilitarian in purpose and do not require a particular color or texture.

Included in this latter class are common brick, which is burned to a temperature of 1,500 to 1,900 deg. F.; drain tile, which is burned to 1,800 deg. F.; hollow tile, which needs a temperature of 1,800 to 2,000 deg. F., and fire brick and other refractories, which are burned to 2,200 to 2,600 deg. F. The

burning of these requires a coal high in volatile matter and producing a flame of long length, so as to penetrate through the kiln and insure uniform burning. Non-coking coals are especially suited for this purpose, although almost any coal sufficiently high in volatile matter and calorific value will suffice, as sulphur and other impurities in the coal are not of great importance, other than the amount of ash and clinker formed.

Included in the finer grade of products may be mentioned pottery, usually burned to a temperature varying from 2,000 to 2,500 deg. F.; terra cotta, burned to 2,300 to 2,400 deg. F.; sewer pipe, fired to a temperature of 2,100 to 2,300 deg. F., and face brick, which is fired to a temperature of 1,800 to 2,100 deg. F. The requirements here are identical to those just given for the burning of common brick, with the exception of the sulphur and ash, since coal for these purposes must be as

free as possible from impurities that tend to mar or discolor the materials. The coal should be high in heat value and low in sulphur, as the sulphurous fumes may form sulphuric acid, which unites with the bases of the soluble salts to make sulphates, causing white spots on the ware, and it may also interfere with the brilliancy of the glaze. Wherever possible plant owners use a 1½ to 3 or 3 to 6 inch size coal. Coal for these purposes should be low in ash, especially if the ash clogs the grates with clinkers, necessitating frequent cleaning, with the consequent danger of the fine ash being carried into the kiln and lodging on the ware. Clinkering coal is especially objectionable where flat grates are used. Coal of this variety will often cake upon the grate to such an extent that shaking is impossible, and removing the clinker is possible only by the use of slice bars and hooks. In dead bottom furnaces a clinkering variety of coal may not be objectionable.

METHOD OF CLASSIFICATION

In this list only such coals as are low in sulphur and ash and high in volatile matter and heat value have been included. The washing of coal has been assumed only where our information shows it being done at the present time. For coals suitable for brick burning the tabulation under the head of Cement Burning should be consulted.

LIST OF SEAMS PRODUCING COAL SUITABLE FOR TILE AND POTTERY BURNING

Seam, County or Field	State	Page References				Seam, County or Field	State	Page References			
		For Description	Supplementary Analysis	List of Operators	Directory of Mines			For Description	Supplementary Analysis	List of Operators	Directory of Mines
Jagger Seam.....	Ala.	245	247	252	255	Sharon Seam.....	Ohio	605	609	620	621
Montevallo Seam.....	Ala.	244	247	251	255	Hartshorne, Lower Seam..	Okla.	659	661	664	667
Straven, Upper Seam....	Ala.	...	247	...	255	Hartshorne, Upper Seam..	Okla.	659	661	664	667
Thompson-Underwood						Freeport, Lower Seam....	Penna.	707	712	760	782
Seam.....	Ala.	244	247	250	255	Freeport, Upper Seam....	Penna.	706	713	763	782
Garfield County.....	Colo.	289	290	294	298	Kittanning, Lower Seam..	Penna.	708	714	767	782
La Plata County.....	Colo.	286	291	295	298	Kittanning, Upper Seam..	Penna.	707	715	772	782
Las Animas County.....	Colo.	285	291	295	298	Pittsburgh Seam.....	Penna.	704	716	774	782
Mesa County.....	Colo.	289	292	296	298	Blue Gem Seam.....	Tenn.	876	880	883	886
No. 2 Seam.....	Ill.	312	314	346	351	Coal Creek Seam.....	Tenn.	877	880	883	886
No. 6 Seam.....	Ill.	310	315	348	351	Mingo Seam.....	Tenn.	876	881	884	886
No. 4 Seam.....	Ind.	375	377	403	405	Miscellaneous Seams*....	Tenn.	875	881	885	886
Block, Lower Seam.....	Ind.	376	377	402	405	Rich Mountain Seam.....	Tenn.	876	881	884	886
Block, Upper Seam.....	Ind.	376	377	402	405	Sewanee Seam.....	Tenn.	878	882	884	886
Alma Seam.....	Ky.	451	...	486	496	Carbon County.....	Utah	908	910	912	913
Amburgy Seam.....	Ky.	451	...	485	496	Emery County.....	Utah	909	910	912	913
Auxier Seam.....	Ky.	...	...	485	496	Banner, Lower Seam.....	Va.	921	923	931	934
Dean Seam.....	Ky.	454	458	486	496	Banner, Upper Seam.....	Va.	921	923	931	934
Elkhorn Seam.....	Ky.	450	458	486	496	Clintwood.....	Va.	...	923	...	934
Fire Clay Seam.....	Ky.	454	458	488	496	Darby Seam.....	Va.	922	923	931	934
Flag Seam.....	Ky.	454	458	488	496	Imboden Seam.....	Va.	921	923	932	934
Freeburn Seam.....	Ky.	451	...	488	496	Miscellaneous High					
Harlan Seam.....	Ky.	452	458	489	496	Volatile Seams*.....	Va.	919	924	933	934
Hazard Seam.....	Ky.	454	458	489	496	King County					
High Splint Seam.....	Ky.	453	459	492	496	(McKay Seam).....	Wash.	945	949	953	954
Hignite Seam.....	Ky.	...	458	490	496	Pierce County.....	Wash.	946	949	953	954
Jellico Seam.....	Ky.	452	459	490	496	Roslyn Seam.....	Wash.	944	949	953	954
Keokee Seam.....	Ky.	453	459	490	496	Alma Seam.....	W. Va.	962	966	1060	1080
Leonard Seam.....	Ky.	453	459	492	496	Cedar Grove Seam.....	W. Va.	961	966	1061	1080
Millers Creek Seam.....	Ky.	451	459	490	496	Chilton Seam.....	W. Va.	961	967	1062	1080
Pond Creek Seam.....	Ky.	451	...	491	496	Coalburg Seam.....	W. Va.	961	967	1062	1080
Straight Creek Seam....	Ky.	452	460	491	496	Eagle Seam.....	W. Va.	962	968	1063	1080
Thacker Seam.....	Ky.	451	...	491	496	Freeport, Lower Seam....	W. Va.	960	969	1064	1080
Wallins Seam.....	Ky.	452	460	491	496	Kittanning, Lower Seam..	W. Va.	960	969	1066	1080
Miscellaneous Seams,						No. 5 Block Seam.....	W. Va.	960	970	1067	1080
Eastern*.....	Ky.	455	...	492	496	No. 2 Gas Seam.....	W. Va.	962	970	1068	1080
Colfax County.....	N. Mex.	584	587	588	589	Pittsburg Seam.....	W. Va.	959	971	1069	1080
Santa Fe County						Stockton-Lewiston Seam..	W. Va.	960	974	1077	1080
Semibituminous.....	N. Mex.	585	587	588	589	Thacker Seam.....	W. Va.	961	...	1077	1080
Socorro County.....	N. Mex.	585	587	588	589	Winifrede Seam.....	W. Va.	961	974	1078	1080
Quakertown Seam.....	Ohio	605	609	619	621						

*Consisting of seams of minor importance.

QUALIFICATIONS OF A COAL FOR MANUFACTURE OF WATER GAS

Water gas, which is a mixture of carbon monoxide and hydrogen in nearly equal proportions, is generated on a large scale by passing steam, preferably superheated, through a body or column of fuel maintained at a temperature of 1000 deg. C. or upwards. Unlike the method used in the manufacture of producer gas, the two gasifying agents, the air and the steam, are admitted alternately, each for a definite period, and the products of the action of each are kept separate. The steam is dissociated into hydrogen and oxygen, the latter of which later unites with carbon to form carbon monoxide gas, CO, the hydrogen passing through unattached. The heat required to break up the steam tends to cool the mass—that is, the process is endothermic—and when the heat falls below the point where the desired change will take place, the process must be suspended and the heat of the furnace restored by passing air alone through the bed.

The original fuels used were coke, anthracite coal and charcoal, the first two mentioned still remaining in general use. The use of bituminous coal would permit savings to be made, these being as a general proposition the difference between the cost of coke and coal, with an additional saving of about 10 per cent. in the amount of oil required for enrichment when coal is used for generator fuel instead of coke. The reasons why bituminous coal has not supplanted the use of coke in the water gas generator have been stated as follows:*

1. Bituminous coal on burning yields tar which gums the valves, charging doors, etc., with the result that valves stick and doors leak.
2. Freshly charged fuel can not be raised in temperature rapidly because of its containing moisture and volatile matter.
3. Upon coking the fuel mats together and obstructs the passage of air and steam so that blow-holes form in the fuel bed.
4. Capacity is decreased, chiefly by 2 and 3.
5. The zone of incandescent fuel in the generator is smaller because of the presence of coking coal.
6. The proportion of CO₂ in the gas is increased as the smaller size of the hot zone lessens the time of contact of the steam and hot fuel.
7. More heat (as heat of combustion) enters the blast gas than is required to heat the checker chambers.

8. The difficulty of using waste-heat boilers, wherein the sensible heat of the finished gas is utilized, is increased by the larger production of tar, as flues of the waste-heat boilers rapidly become clogged with tar and carbon.

9. Checker chambers are overheated when the blast gas is all burned within the set.

10. Most bituminous coal is friable, readily breaking into smaller pieces on handling.

11. Much bituminous coal has a higher sulphur content than coke.

During the past few years generators have been designed which overcome some of the difficulties named and it is quite probable that as more experience is had with the use of bituminous coal as fuel, the principal obstacles will be overcome and the use of high volatile coal become general. One company has already placed on the market a generator especially designed for bituminous coal, and they report it in successful use in different parts of the United States.

Usages of Water Gas

Water gas is well adapted for operations requiring intense local heat, as in steel welding. Its principal use, however, is in cities and towns where it is employed for street lighting, and domestic uses, such as in heaters, ranges, water heaters and lighting. For purposes of public supply it is usually mixed with illuminating gas, in proportions of one part of illuminating gas with anything up to five or six parts by volume of water gas. The following figures show the relative proportions of each gas contained in the public supplies of a number of American cities.†

City	Percentage of Illuminating Gas	Water- Gas
Baltimore, Md.....	46.2	53.8
Boston, Mass.....	44.5	55.5
Chicago, Ill.....	17.5	82.5
St. Louis, Mo.....	71.0	29.0
Rochester, N. Y.....	17.0	83.0
Springfield, Mass.....	47.5	52.5
Washington, D. C.....	00.0	100.0
Worcester, Mass.....	61.0	39.0
New York and Brooklyn Area.....	13.4	86.6

*Technical Paper 246, Bureau of Mines, Water Gas Apparatus and the Use of Central District Coal as Generator Fuel, by W. W. Odell.

†From Bone, Coal and Its Scientific Uses.

METHOD OF CLASSIFICATION

Anthracite coal and coke remain the chief fuels for use in the water gas process, so that no classification beyond these will be attempted. Any of the seams given under the head of Domestic Coals may be considered eligible, though a thorough test should precede final judgment.

CLASSIFICATION OF COALS

III. ACCORDING TO } TRADE NAME PHYSICAL STRUCTURE

Smokeless, Block and Splint Coals. Qualifications of Coals and List of Seams Fulfilling Each Designation.

Methods of Classification

The third classification of coals, that in accordance with its trade name or physical structure, has been formulated in the attempt to designate coals by means of some marked characteristic. The term "smokeless" coal has proved an excellent method for bringing the New River, Pocahontas, Georges Creek, Moshannon and like

coals to the favorable notice of the public. The very word "block" brings to the mind a picture of a mass of large cubical lumps, and there are, in fact, mines in Kentucky and West Virginia producing coal of cubical shape, whose corners, to all appearances, are right angles. The meaning of "splint" coal is not so easily derivable but the word no doubt has come to us from Scotland, and long usage has made it widely known to the trade.

SMOKELESS COALS—A TRADE NAME

The term "smokeless" is a relative one, since all coals give off more or less unconsumed carbon in burning. It is a fixed rule with ordinary hand firing methods that the higher the volatile content of the coal, the freer burning it is and the more smoke it will produce. The use of mechanical appliances in the power house may convert a fuel, which by tendency produces a dense smoke, into one which gives off very little. For instance, a high volatile coal burned as a powdered coal in a

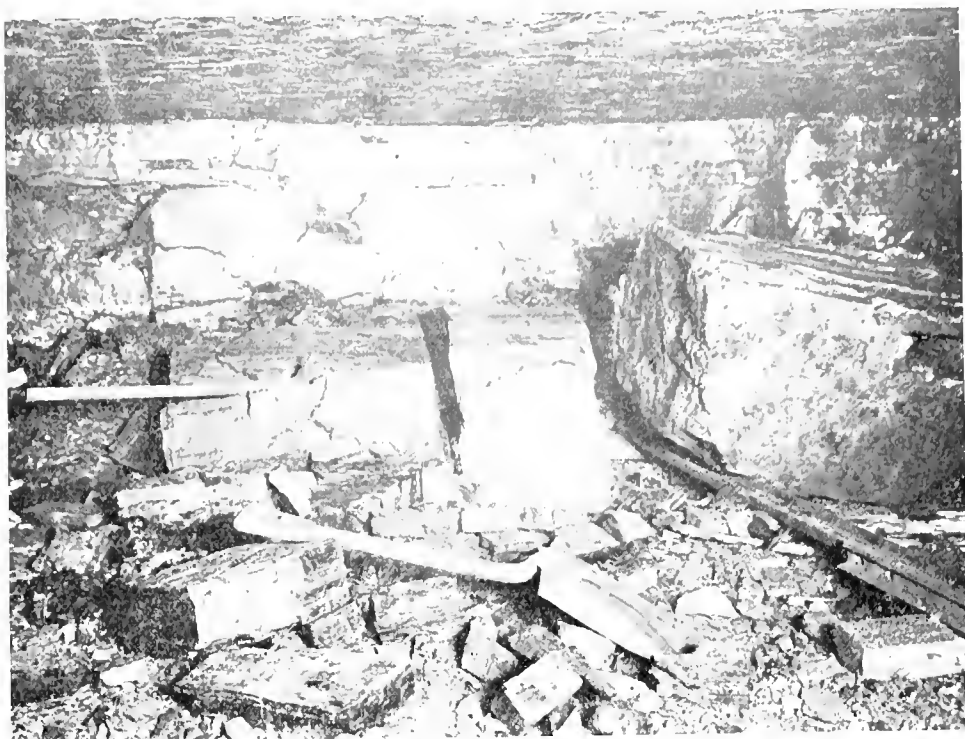
sufficient supply of air will yield little or no smoke, as is also true with the use of stokers on locomotives, stationary power plants, etc., burning high volatile coals. In the same way coals ranking as semibituminous, semianthracite and anthracite are smokeless by comparison with high volatile coals. Amongst the trade, however, the term "smokeless" is restricted to the semibituminous coals because of the little smoke given off during combustion.

LIST OF SMOKELESS COAL SEAMS

Seam, County or Field	State	Page References				Seam, County or Field	State	Page References			
		For Description	Supplementary Analysis	List of Operators	Directory of Mines			For Description	Supplementary Analysis	List of Operators	Directory of Mines
Denning Seam.....	Ark.	268	269	270	271	Fulton Seam.....	Penna.	709	714	766	782
Hartshorne (Sebastian Co.) Seam.....	Ark.	268	269	270	271	Kelly Seam.....	Penna.	710	714	766	782
Spadra Seam.....	Ark.	268	269	270	271	Kittanning, Lower Seam..	Penna.	708	714	767	782
Bakerstown Seam.....	Md.	536	539	540	542	Kittanning, Middle Seam..	Penna.	708	715	771	782
Brookville Seam.....	Md.	538	539	540	542	Kittanning, Upper Seam..	Penna.	707	715	772	782
Clarion Seam.....	Md.	538	539	540	542	Lemon Seam.....	Penna.	706	...	763	782
Freeport, Lower Seam....	Md.	537	539	540	542	Mercer Group Seams.....	Penna.	711	716	...	782
Freeport, Upper Seam....	Md.	537	539	540	542	Miller Seam.....	Penna.	708	...	767	782
Kittanning, Lower Seam..	Md.	537	539	541	542	Moshannon Seam.....	Penna.	707	...	760	782
Kittanning, Upper Seam..	Md.	537	539	541	542	Pittsburgh Seam.....	Penna.	704	716	774	782
Pittsburg (Big) Seam....	Md.	536	539	541	542	Pocahontas No. 3 Seam...	Va.	920	924	932	934
Sewickley, Upper Seam...	Md.	536	539	541	542	Beckley Seam.....	W. Va.	963	966	1061	1080
Santa Fe County.....	New Mex	585	586	588	589	Fire Creek Seam.....	W. Va.	964	968	1064	1080
Hartshorne Seam.....	Okla.	659	661	664	667	Freeport, Upper Seam....	W. Va.	959	969	1065	1080
Barnett Seam.....	Penna.	710	712	758	782	Kittanning, Lower Seam..	W. Va.	960	969	1064	1080
Berlin Seam.....	Penna.	705	712	758	782	Pocahontas No. 3 Seam...	W. Va.	964	973	1073	1080
Blossburg Seam.....	Penna.	709	...	758	782	Pocahontas No. 4 Seam...	W. Va.	964	972	1073	1080
Cement Seam.....	Penna.	707	...	772	782	Pocahontas No. 6 Seam...	W. Va.	964	972	1073	1080
Freeport, Upper Seam....	Penna.	706	713	763	782	Sewell Seam.....	W. Va.	963	973	1075	1080
						Welch Seam.....	W. Va.	963	974	1078	1080

BLOCK COALS—PHYSICAL STRUCTURE

The following is extracted from the Twenty-third Annual Report, Department of Geology, Indiana: Bituminous coal is sometimes called "block coal," from its property of commonly breaking up into cubical blocks. These blocks are the result of the existence in the coal of vertical cracks or joints, combined with a tendency of coal to split or break parallel with its bedding. In some coal these joint faces are only a few square inches or even less in area; in others they extend the whole depth of the coal and may have a lateral extent of scores of yards. In the first case the coal is apt to mine in small cubes of from a cubic inch up to a cubic foot or more. In the latter case the coal may be mined in great blocks the full depth of the coal bed, and too heavy to be handled. These joint faces may show no regularity of direction, or they may have nearly fixed directions for a hundred square miles. They would appear to be due to different causes.



Block Coal in an Eastern Kentucky Mine

Such joint faces are very common in other rocks in nature, especially being well developed in very fine grained rocks, as shales or limestones. The finer the grain, as a rule, the more perfect and regular the system of joints. Where well developed these joints have been observed all over the coal area, and are known at other places to extend entirely through beds of shale 100 feet or more thick, so that the bed will look as though some gigantic cleaver had cut it into cubes or blocks of up to thousands of cubic feet capacity.

Where such joints in rocks are very perfectly and regularly developed, it is found that there are two sets of joints, more or less, at right angles to each other. If the rock has a dip or downward slope it is found that one set of joints have the direction of the dip, and are known as the "dip joints," or as the "end" or "butt," while the others are at right angles to the dip, and since they follow

the "strike" of the rock are known as "strike joints" or as the "face," "slyne," "cleat" or "bord." It is found that strike joints and dip joints differ in this that, while the strike joint may be continuous for hundreds of feet, the dip joints commonly

only extend from one strike joint to the next. In the coal of Indiana it is found that over most of the field the coal is broken up by joints of irregular extent so that it mines out in irregular cubes of from a cubic foot or a little over, down.

Over a much smaller area, principally confined to the eastern margin of the coal field, these joints are developed in great perfection and with great regularity. In this State (Indiana) the term "block coal" is commonly restricted to such coal, and coal in which the joints are not regular is locally known as "bituminous."

Block coal may be a coking coal, a non-caking or splint coal, or cannel coal. It is most commonly a splint coal, and the two are sometimes, though erroneously, regarded as synonymous. When struck with a hammer the board-like blocks sound much as when a piece of wood is struck.

LIST OF BLOCK COAL SEAMS

Seam, County or Field	State	Page References			
		For Description	Supplementary Analyses	List of Operators	Directory of Mines
Block, Lower Seam.....	Ind.	376	377	402	405
Block, Upper Seam.....	Ind.	376	377	402	405
Mystic Seam.....	Iowa	422	426	427	430
Flag Seam.....	Ky.	454	458	488	496
Harlan Seam.....	Ky.	452	458	489	496

Seam, County or Field	State	Page References			
		For Description	Supplementary Analyses	List of Operators	Directory of Mines
Hignite Seam.....	Ky.	458	459	490	496
Keokee Seam.....	Ky.	453	459	490	496
Millers Creek Seam.....	Ky.	451	459	490	496
Sharon Seam.....	Ohio	605	609	620	621
Cedar Grove.....	W. Va.	961	966	1061	1080

SPLINT COALS—PHYSICAL STRUCTURE

This term refers to those coals which break in mining into solid oblong blocks. They are dull black in color, naturally hard and when struck of their block-like nature they are in demand for gas producers, and being high volatile coals, answer well for ordinary steam purposes and as a locomotive fuel. (See also discussion under Pottsville Series—Kanawha Group, Upper Division, West Virginia section.)



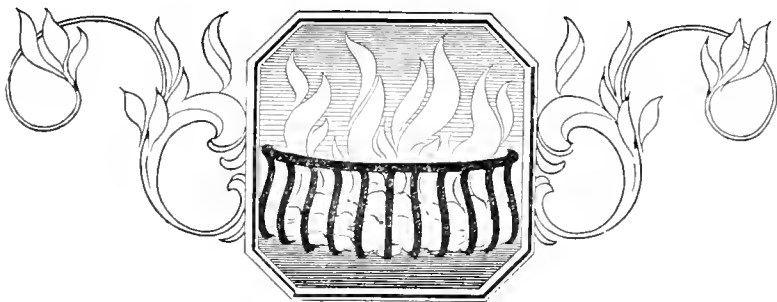
Typical West Virginia Splint Coal

emit a metallic sound. Splint coals are highly prized for domestic purposes, as they produce a hot and cheerful fire in the grate and need little attention. Upon heating they tend to splinter. Because

tive fuel. (See also discussion under Pottsville Series—Kanawha Group, Upper Division, West Virginia section.)

LIST OF SPLINT COAL SEAMS

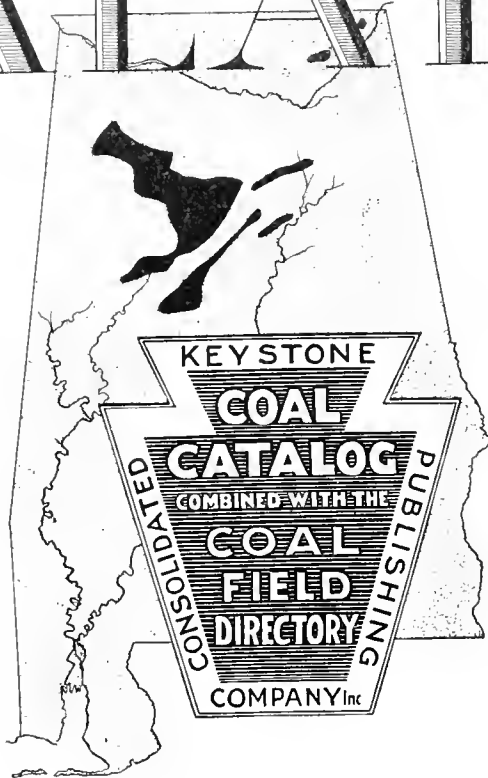
Seam, County or Field	State	Page References				Seam, County or Field	State	Page References			
		For Description	Supplementary Analyses	List of Operators	Directory of Mines			For Description	Supplementary Analyses	List of Operators	Directory of Mines
Flag Seam.....	Ky.	454	458	488	496	Cedar Grove.....	W. Va.	961	966	1061	1080
Harlan Seam.....	Ky.	452	458	489	496	Coalburg Seam.....	W. Va.	961	967	1062	1080
Hazard Seam.....	Ky.	454	458	489	496	No. 2 Gas Seam.....	W. Va.	962	970	1068	1080
High Splint Seam.....	Ky.	453	459	492	496	No. 5 Block Seam.....	W. Va.	960	970	1067	1080
Keokee Seam.....	Ky.	453	459	490	496	Stockton-Lewiston Seam..	W. Va.	960	974	1077	1080
Millers Creek Seam.....	Ky.	451	459	490	496	Winifrede Seam.....	W. Va.	961	974	1078	1080



PART THREE

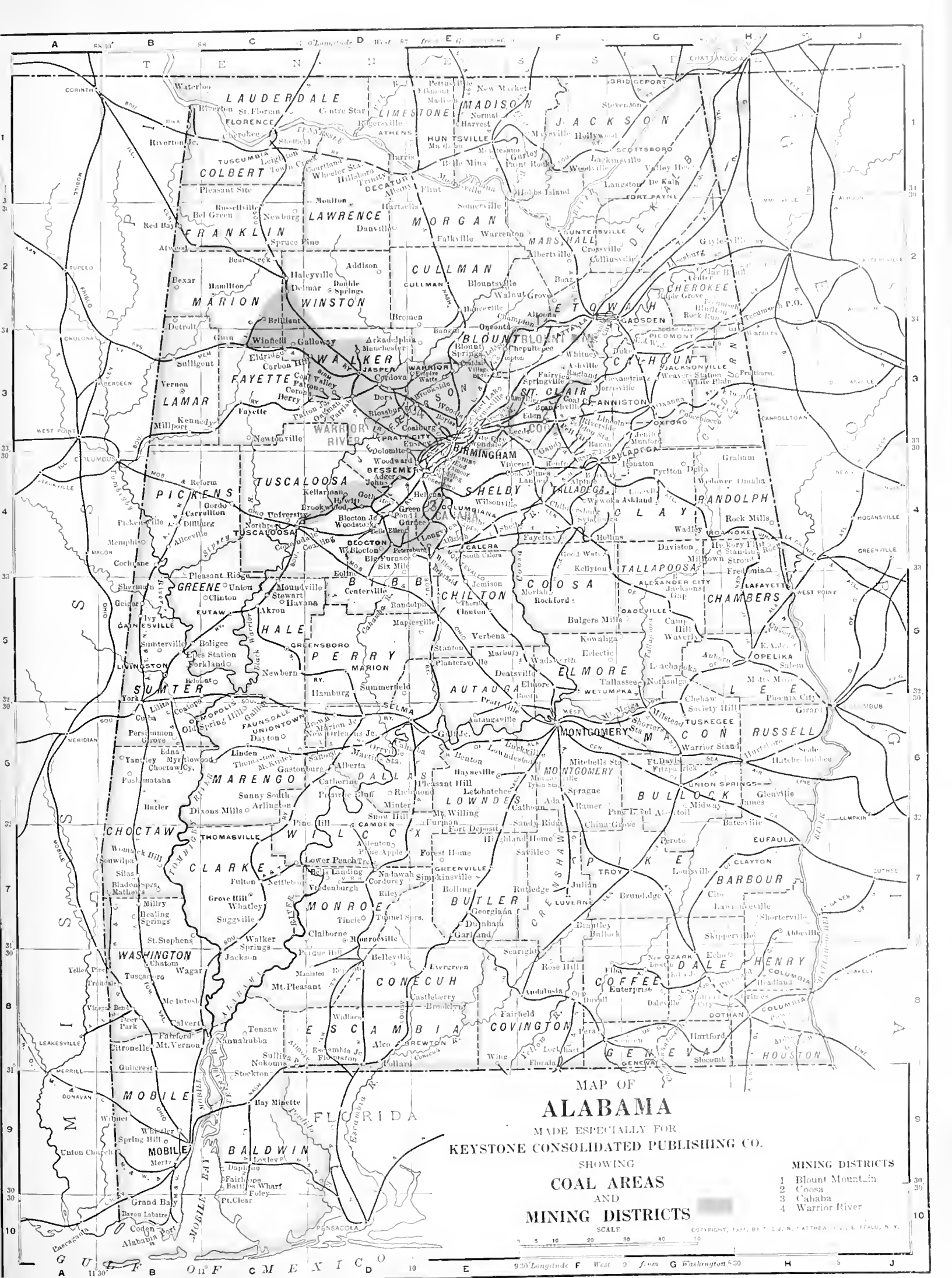


ALABAMA

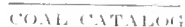


CONTENTS

Map of Mining Fields.....	Opp. 242
Sectional View of Coal Formations.....	Opp. 243
General Description of Coal Resources.....	243
Coosa Basin.....	244
Cahaba Basin.....	244
Blount Mountain Basin.....	245
Warrior Basin.....	245
Preparation and Sizing of Coal.....	246
Supplementary Analyses.....	247, 248
Descriptive Advertisements	249
List of Mines by Seams.....	250 to 254
Alphabetical Directory of Coal Mines....	255 to 264



Along Warrior River of field (next to edge of
(near center of field). anticlinal valley).



ALABAMA*

General Description of the Geology of the State; Treats of the Four Mining Districts, With a Map Showing Their Location; Railroads Entering the Coal Fields; Kinds of Coal Produced, General Analysis, List of Operations, Etc., Etc.

The coal bearing formations of Alabama are all of Carboniferous age. Most, if not all, of the rocks correspond in age with the lowest subdivision of the Pennsylvania section, namely the Pottsville. The thickening of this series is very marked in Alabama, and it appears probable that the five or six thousand feet of coal bearing rocks in the Birmingham district represent the same time interval as the few hundred feet in Western Pennsylvania. The group of rocks consisting of heavy beds of conglomerate or coarse sandstone with more or less cross-bedded sandstone and shale below, is here known as the Millstone Grit. Above this group is a great series of shales, sandstones and occasional conglomerate lenses with numerous beds of coal. Throughout the entire field a rapid diminution in thickness is noticeable in passing from the eastern margin westward. Thus in the Jellico district, Tennessee, the beds of this group decrease in thickness from 3,000 feet at the eastern margin to 1,750 feet within a distance of 50 miles. In the Chattanooga district, Tennessee, the decrease is from 1,200 feet to 300 feet in about the same distance, and in the Birmingham district from 1,700 to 1,300 feet in 25 miles. This westward thinning of the formation suggests that these sediments were derived from land to the eastward, and that the surface on which deposition took place was depressed most rapidly where the material deposited was most abundant—that is, nearest the source of supply.

From the figures given above it will be noted that this upper group of coal bearing rocks is much thicker at either end of the field than in the central portion. Thus on a section along the eastern margin of the field the group decreased from a maximum of nearly 6,000 feet in the Cahaba basin to 1,200 feet in the Walden basin, and then increased to 3,000 feet in the Wartburg basin, Tenn. This extreme variation is due in part, at least, to the fact that only the lower members have been removed by erosion. In addition to this cause, however, there is probably a decided thickening of the formations both north and south, the present greater depth of the basins at the extremes of the field corresponding in part to an original more rapid deposition.

The larger part of the workable coal of the field occurs in this upper group of strata. The more important beds will be enumerated in the descriptions of the several basins. In a general way the coal shows an increase in number and thickness of beds corresponding to the increase in thickness of the inclosing formations. Hence the largest amount of coal to a given area is found along the eastern margin of the field.

The coals of Alabama occur in what is known as the Birmingham district extending from a line connecting the southern point of Lookout Mountain and the great bend of the Tennessee River southwest to the southern limit of the coal field. It includes the Warrior basin, which is the southern portion of the Cumberland Plateau, the Blount Mountain basin, the Cahaba basin, and the Coosa basin. The Blount Mountain basin is a synclinal spur, connected at the north with the Walden syncline, and separated from the Warrior basin on the west by Murfrees Valley. The Cahaba and Coosa basins are long, narrow synclines, entirely isolated from the larger areas of coal-bearing formations to the west by still narrower anticlinal and fault valleys.

The yearly production of coal varies from 16 to 20 million tons, of which from 4 to 6 million tons are used in the manufacturing of coke. The greater portion of the coke thus produced is used in the blast furnaces of the Birmingham district, although a large amount is shipped to the smelters in Mexico. The coal used for coke making comes almost entirely from the Mary Lee and Pratt seams of the Warrior coal field.

The coals of Alabama, although bituminous, are of various kinds and are used for steam, heating, gas and coke making. The greater portion of the output is consumed within the state.

The railroads traversing the coal regions are the Southern; Louisville & Nashville; Central of Georgia; St. Louis & San Francisco; Northern Alabama; Mary Lee; Illinois Central; Mobile & Ohio; Seaboard Air Line; Atlanta, Birmingham and Atlantic; Alabama Central; Birmingham Southern; and Nashville, Chattanooga & St. Louis.

*We are largely indebted to the 22nd Annual Report, Part 3, of the United States Geological Survey for the information here given on the geology of Alabama and descriptions of coal basins.

COOSA BASIN

The Coosa basin is the easternmost of the four which are included in the Birmingham district. It is about 40 miles in length and from 4 to 10 miles in breadth. This basin is cut by separate faults which make acute angles with the axis of the syncline. A short number of faults cross the syncline transversely and separate it into several small basins, the greater portion of the coal bearing rocks upon these cross faults having been eroded. By reason of the folding and faulting which the rocks have undergone, the coal is much disturbed and the workable beds are found in comparatively small isolated areas. Due to these conditions, the development of the coal is attended by unusual uncertainty and expense. The coal is generally somewhat softer than that of the Warrior field and hence it does not bear transportation so well. It

is, however, well adapted for coking, containing small percentages of sulphur and ash and giving a good yield in coke of excellent quality. Although at least 12 coal beds, 36 inches and over in thickness, are reported in this basin, but two of these, namely, the Coal City and Eureka seams, are at present being worked at only one point, namely, Coal City, in St. Clair County.

GENERAL ANALYSIS

Moisture	3.00
Volatile Matter	31.50
Fixed Carbon	59.70
Ash	5.80
Sulphur	1.15
B. T. U.	14,400

CAHABA BASIN

The Cahaba basin is a field 68 miles in length with an average width of 5.8 miles and an area of 395 square miles. It is drained by the Cahaba River and its tributaries. This basin lies next west of the Coosa basin, from which it is separated by a long, narrow strip of Devonian and Silurian rocks. It has a structure very similar to that of the Coosa basin; it is a long, narrow syncline, whose eastern edge is sharply upturned and, for the most part, cut off by a fault which brings the Cambrian and Silurian formations in contact with the Coal Measures. About midway of its length the syncline is interrupted by a cross fold which lifts the lower portion of the Coal Measures above drainage level, and from which the greater part of the coal-bearing rocks has been removed by erosion. North-east of this cross fold the syncline is very regular, the beds having a uniform gentle dip toward the southeast nearly to the margin of the basin, where they are sharply upturned and cut off by a fault.

The sandstones and heavy conglomerates which occupy the lower portion of the Coal Measures form a series of parallel ridges throughout the western half of the syncline. The coal beds outcrop in parallel lines between these ridges, and in the lower land occupy the eastern part of the syncline, which is underlain by the upper and softer portions of the coal-bearing formations.

The southern half of the Cahaba basin is much less regular than the northern portion above described. It is broken up into a number of subordinate basins by transverse folds and by a faulted zone which branches from the eastern marginal fault and separates the southern half of the basin into two nearly equal portions. This faulted zone is merely a sharp, broken anticline, and its effect is to duplicate the outcrops of the coal beds, each of which, in the northern half of the basin, reaches the surface only along a single line. According to Squire, the total thickness of the Coal Measures in this basin is about 5,500 feet, which is slightly less than in the Coosa basin, although higher measures are found here, which have been removed by erosion from the basin to the east. The workable coal beds show an increase in number and

thickness for the same reason. The total area of the Cahaba field underlain by workable coal is about 270 square miles, and the aggregate average thickness of workable coal is about 21 feet. The Cahaba field is divided by the transverse fold and the faulted zone above mentioned into three distinct basins, two of which are further subdivided into several subordinate basins by less pronounced transverse folds.

The Henryellen basin embraces the northern half of the Cahaba field.

The Blocton basin, including also the minor Acton and Cahaba basins, occupies the southwestern portion of the field.

The Montevallo basin occupies the southeastern portion of the field. It includes the following minor basins: Helena, Eureka, Dry Creek, Lolley, Montevallo, and Daily creeks.

In all of these basins, except along their eastern margins, the rocks have a rather steep southeasterly dip, averaging about 15 degrees. They are also disturbed by many local folds and faults, and the methods of mining are quite different from those employed in undisturbed horizontal beds. When properly engineered and worked, however, the coal can be mined from these inclined beds with nearly the same facility as from horizontal beds of the same thickness.

The seams mined in this field are known as the Gholson, Helena, Henryellen, Climax, Montevallo, Thompson, Underwood, Harkness, Woodstock, and Youngblood, mined in Bibb, Shelby and St. Clair counties. The coals from the Henryellen basin are fine for coking; those from the southern portion of the Cahaba basin are greatly prized for domestic purposes.

GENERAL ANALYSIS

Moisture	3.50
Volatile Matter	32.50
Fixed Carbon	54.60
Ash	9.40
Sulphur	1.00
B. T. U.	13,200

BLOUNT MOUNTAIN BASIN

Blount Mountain is a spur of the Cumberland Plateau extending southwestward between the Coosa Valley on the southeast and Murfrees Valley on the northwest. It has the form of a broad, gentle synclinal trough bounded by Straight Mountain on the northwest and Blount Mountain on the southeast. These are formed by the outcropping edges of the heavy beds of conglomerate near the base of the Coal Measures. This syncline forms a marked contrast to most of the synclines in the Appalachian region in that its steep dips are along the western margin and its gentle dips along the eastern margin. The reverse is generally the case.

According to Gibson 34 coal beds have been discovered in this basin, of which 16 are of workable thickness. Of these the Holt, or Big, seam is reported as having locally a thickness of 12½ feet.

The field contains an area of approximately 100 square miles underlain by workable coal, and the average aggregate thickness of the beds over 2 feet is about 20 feet. It is practically undeveloped, only a few small mines having been operated intermittently for supplying local demands.

The seams mined in this basin are known as the Black Creek, and Underwood, and are found in Etowah and Blount counties. The coal is largely used for steam purposes.

GENERAL ANALYSIS

Moisture	1.30
Volatile Matter	33.70
Fixed Carbon	61.25
Ash	3.75
Sulphur	2.50
B. T. U.	14,400

WARRIOR BASIN

This is the most important of the several basins which are included in the Birmingham district. It contains a larger area of workable coal than the other three combined, and by reason of its structure the coal can be mined generally more economically than in the others.

The basin has a somewhat irregularly triangular shape. Its southeastern margin is formed by the sharp Murfrees Valley anticline from which the coal-bearing rocks have been removed by erosion. Its northern margin is formed by a broad transverse uplift which crosses the entire field and on which only the lower portions of the Coal Measures remain, the higher and more productive measures having been removed by erosion. The region occupied by this transverse uplift is not entirely devoid of workable coal, but its beds are so much less important than those higher up in the series that for present purposes they may be entirely neglected.

From this transverse uplift the rocks dip southward, bringing below the erosion surface successively higher beds down to the extreme southern margin of the basin. This northern border is, therefore, very irregular. The lower coals extend farthest north, occupying the highest land between the streams. These gradually pass below drainage southward, while the higher beds come in on the hilltops and in turn pass below drainage toward the south. The highest coals, therefore, are confined to the hilltops in the southern portion of the basin.

The southwestern border is also indefinite. A few small remnants of Tertiary and Cretaceous clays and gravels are found on the hilltops near the center of the basin. These remnants suggest that these formations were at one time continuous, at least this far north, but their outer margins have been deeply dissected and only occasional fragments of the originally continuous beds remain. These patches of gravel and clay become more abundant toward the southwest and finally cover the whole surface except in the river channels. The larger streams remain upon the Coal Measures to the vicinity of Tuscaloosa, beyond which the whole of the surface is formed by these later deposits.

Hence the southwestern margin of the coal basin is occupied by a zone in which the surface is formed partly by the underlying Coal Measures, and partly by the overlying sand and gravel. The proportion of the former increases toward the northeast and the latter toward the southwest.

As already indicated, there is a marked decrease in thickness of the coal-bearing formations observable in passing westward from the Coosa to the Cahaba basin. Although exact correlations have not yet been made between the coal beds of the Cahaba and Warrior basins, the equivalence of various groups of coal beds has been determined with sufficient accuracy to indicate that the thinning is even more rapid between the Cahaba and Warrior basins than farther east. The coal-bearing rocks in the Cahaba basin down to the basal conglomerate have a thickness of something over 4,000 feet. Along the eastern margin of the Warrior basin the same formations have decreased to about 1,500 feet, and from this eastern margin the westward thinning is observable entirely across the basin. Accompanying the decrease in thickness of the coal-bearing formations there is a corresponding decrease in number and thickness of the coal beds themselves.

The seams worked in this field are known as the Pratt, Nickel Plate, Mt. Carmel, Mildale, New-castle, Mary Lee, Carter, Blackwood, Blue Creek, Horse Creek, Black Creek, Morgan, Corona, Harkness, Jagger and Jefferson.

The Pratt seam covers an area of about 1,500 square miles, and varies from 3 to 16 feet in thickness. Ordinarily it is about 4 feet thick and has one slate parting. The coal from this bed is washed and makes an excellent quality of coke.

The Big seam of coal belongs to the same geological horizon as those locally known as the New-castle, Horse Creek, Blue Creek, Mary Lee, Jagger, etc. These seams are extensively mined and used for coking. The Big seam, varying from 6 to 12 feet in thickness, is inclined to be dirty, carrying numerous slate partings as well as irregular lenses of slate and requires washing to make a satisfactory grade of coke.

The Black Creek seam is the most uniform in this field. Commonly, it is without partings but

in places occurs in two benches which are some times separated by 12 to 15 feet of rock interval. The seam varies from 4 to 6 feet in thickness with an average of 5 feet. The Warrior basin, as above defined, comprises parts of the counties of Jefferson, Winston, Marion, Fayette, Blount and Tuscaloosa and all of Walker.

GENERAL ANALYSIS			
	Jagger.	Mary Lee.	Pratt.
Moisture	2.00	2.85	2.70
Volatile Matter	25.20	26.60	27.50
Fixed Carbon	65.80	60.90	63.25
Ash	7.00	9.65	6.55
Sulphur . . . . .	.70	.70	1.20
B. T. U.	14,200	13,500	14,150

PREPARATION OF COAL

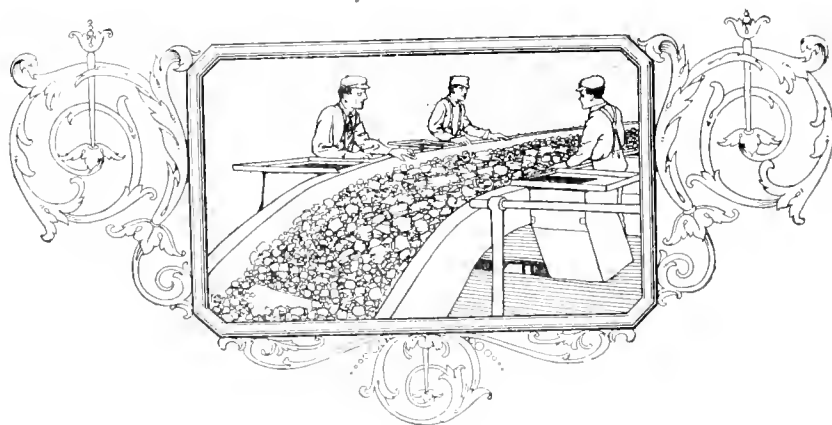
Practically all of the modern devices used in the preparation of coal are found at the mines of Alabama.

Many of the earlier workings have about reached their boundaries and are on the retreat, and at such mines, in many instances, bar screens still prevail; at the newer mines shaker screens, pickling tables and loading booms are being generally installed.

The nature of coal preparation depends considerably upon the characteristics of the seam and the use to which the coal is put. At mines where rash occurs immediately over the coal, or those having a soft shale in the roof so that the impurities mingle with the coal, washing is resorted to, this

being accomplished by jigs. At a number of mines where coal is being coked, washeries are also used to reduce the percentage of ash and sulphur contained in the coke.

Ordinarily, the screens are so arranged as to load either three or four sizes of coal. Where three sizes are shipped, all the coal which goes through 1-inch perforations is designated as nut and slack, and all over 1-inch and under 5-inch is marketed as fancy lump. When four sizes are prepared, all passing through a 4-inch screen and over a 2-inch screen is designated as nut; all passing through the 2-inch screen is known as pea coal, while all that passes over the 4-inch screen is classed as lump.



Analyses of Alabama Seams by Counties and Localities

(ALL ANALYSES MADE ON MINE SAMPLES "AS RECEIVED")

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile matter	Fixed Carbon	Ash	Sulphur	Det. mined B. T. U.	Carbon	RATIOS	
										oxy. + ash	F. C. V. M.
*Black Creek.....	Blount, Lehigh.....	No. 2.....	2.93	29.06	65.28	2.73	0.65	14.693	66.58	9.92	5.26
*Black Creek.....	Blount, Lehigh.....	No. 2.....	5.59	25.05	53.28	16.08	1.40	11.906	66.58	9.97	2.55
*Black Creek.....	Jefferson, 3 mi. n. of Pinson.....	Dixana No. 4.....	2.57	31.84	62.87	2.72	0.80	14.634	82.67	6.65	8.82
*Black Creek.....	Jefferson, Pratt City.....	.....	1.53	28.87	61.70	9.43	1.08	13.665	.....	.....	2.14
*Black Creek.....	Walker, 3 mi. n. e. of Dora.....	Stpsey.....	3.63	34.77	58.58	3.04	1.06	14.074	79.13	9.69	1.68
*Blue Creek.....	Jefferson, Johns.....	Johns.....	3.37	25.77	61.21	9.65	0.94	13.648	.....	.....	2.38
*Carier.....	Tuscaloosa, Brookwood.....	Brookwood No. 10.....	3.85	30.80	59.70	5.65	0.78	.....	.....	.....	1.93
*Clark.....	Bibb, Marvel.....	Marvel.....	3.34	33.55	55.09	8.02	1.04	13.498	74.76	9.69	1.64
*Clark.....	Bibb, Marvel.....	Marvel.....	4.65	33.19	55.07	7.09	0.69	13.387	74.85	11.16	1.66
*Coal City.....	St. Clair, Coal City.....	Vulcan No. 4.....	3.94	28.14	58.59	9.33	1.46	13.496	75.71	7.08	2.08
*Coal City.....	St. Clair, Coal City.....	Vulcan No. 4.....	3.54	29.04	59.20	8.22	1.36	.....	.....	.....	2.04
*Coal City.....	St. Clair, Coal City.....	Coal Branch.....	2.38	33.31	60.00	4.31	1.07	14.648	81.85	6.04	1.80
*Coal City.....	St. Clair, Coal City.....	Coal Branch.....	2.41	33.72	60.65	3.22	0.81	14.785	.....	.....	1.80
*Coal City.....	St. Clair, Coal City.....	Coal Branch.....	2.79	32.92	60.28	4.01	1.10	14.495	.....	.....	1.83
Garnsey.....	Bibb, Garnsey.....	.....	3.83	32.53	55.46	12.01	1.52	12.842	.....	.....	1.70
*Gholson.....	Shelby, Glen Carbon.....	Glen Carbon.....	2.95	32.60	60.10	4.35	0.61	14.251	80.65	7.60	1.84
*Gholson.....	Bibb, Marvel.....	Marvel.....	3.77	33.46	53.79	8.98	0.85	13.291	74.20	9.53	1.61
*Gholson.....	Bibb, Marvel.....	Marvel.....	6.62	28.85	46.93	17.60	1.28	11.477	63.37	11.76	1.63
*Gould.....	Jefferson, near Lowick.....	Rutliffe.....	1.98	30.66	58.95	8.41	1.09	13.613	76.03	7.85	1.92
*Harkness.....	St. Clair, Davis.....	Margaret No. 1.....	3.39	30.69	57.08	8.84	2.34	13.363	73.81	8.30	1.86
*Horse Creek.....	Walker, 1 1/2 mi. w. of Horse Creek.....	No. 8.....	1.22	31.53	54.44	12.81	0.71	.....	.....	.....	1.72
*Jagger.....	Tuscaloosa, Abertant.....	Abertant.....	2.60	24.18	64.11	9.09	0.64	13.729	77.52	6.55	2.66
*Jagger.....	Tuscaloosa, Abertant.....	Abertant.....	1.60	24.98	68.55	4.87	0.51	14.697	.....	.....	2.74
*Jagger.....	Walker, 3/4 mi. n. w. of Carbon Hill.....	Chickasaw No. 5.....	3.95	30.70	50.76	14.59	1.12	11.785	66.21	12.02	1.65
*Jagger.....	Walker, 3/4 mi. n. w. of Carbon Hill.....	Chickasaw No. 5.....	2.25	35.70	53.01	9.04	1.09	13.133	.....	.....	1.50
*Jagger.....	Tuscaloosa, Rock Castle.....	Rock Castle.....	1.73	26.37	64.96	6.94	0.89	.....	.....	.....	2.46
*Jagger.....	Tuscaloosa, Rock Castle.....	Rock Castle.....	2.70	25.77	62.87	8.66	0.69	13.844	78.39	5.61	2.44
*Jefferson.....	Jefferson, 4 mi. e. of Morris.....	Indio.....	1.95	30.88	59.40	7.77	2.45	13.925	.....	.....	1.92
*Jefferson.....	Jefferson, 4 mi. e. of Morris.....	Indio.....	1.83	30.54	61.11	6.52	2.68	14.171	.....	.....	2.00
*Jefferson.....	Jefferson, 4 mi. e. of Morris.....	Indio.....	2.23	30.96	59.91	6.90	2.56	14.090	.....	.....	1.93
*Jefferson.....	Jefferson, 4 mi. e. of Morris.....	Indio.....	1.95	30.66	60.04	7.35	2.75	13.963	77.71	5.56	1.96
*Jefferson.....	Jefferson, Seloca.....	Seloca.....	3.23	29.00	56.74	11.03	2.58	13.163	72.43	7.57	1.96
*Jefferson.....	Jefferson, Warrior.....	Watt.....	2.18	31.71	63.32	2.79	1.07	14.816	80.86	7.11	2.00
*Mary Lee.....	Jefferson, Littleton.....	Thomas.....	3.35	26.92	59.01	10.72	0.67	13.264	.....	.....	2.19
*Mary Lee.....	Jefferson, near Littleton.....	Banner.....	2.53	26.94	59.48	11.05	0.79	13.286	74.14	7.33	2.21
*Mary Lee.....	Jefferson, Palos.....	Palos.....	1.55	31.39	59.94	8.67	1.95	13.866	.....	.....	1.91
*Mary Lee.....	Jefferson, Palos.....	Palos.....	2.69	25.93	64.16	7.22	0.61	13.993	78.80	6.44	2.47
*Milldale.....	Tuscaloosa, Brookwood.....	Brookwood No. 7.....	1.96	31.55	60.96	5.53	1.11	14.364	.....	.....	1.93
*Montevallo.....	Shelby, Aldrich.....	Aldrich.....	2.39	36.01	52.50	9.10	0.79	13.351	74.33	9.56	1.46
*Montevallo.....	Shelby, Straven.....	Straven.....	31.35	31.35	54.30	10.56	0.67	12.892	.....	.....	1.73
*Pratt.....	Jefferson, Blossburg.....	.....	1.42	29.67	62.15	8.18	1.54	13.976	.....	.....	2.10
*Pratt.....	Jefferson, 1 mi. w. of Cardiff.....	No. 16.....	2.88	29.56	59.61	10.65	2.04	13.459	.....	.....	2.02
*Pratt.....	Jefferson, Dorena.....	Dorena.....	1.66	30.43	63.29	4.62	1.40	14.605	81.53	5.77	2.08
*Pratt.....	Jefferson, Dolomite.....	No. 2.....	3.16	25.40	67.75	3.69	0.56	14.616	82.28	7.06	2.67
*Pratt.....	Jefferson, Dolomite.....	No. 2.....	2.81	26.52	67.16	3.51	0.59	14.643	.....	.....	2.53
*Pratt.....	Jefferson, Dolomite.....	No. 2.....	3.23	26.16	63.90	6.71	0.61	14.074	78.33	7.94	2.44

*Bulletins Bureau of Mines. ‡State Geological Survey Reports.

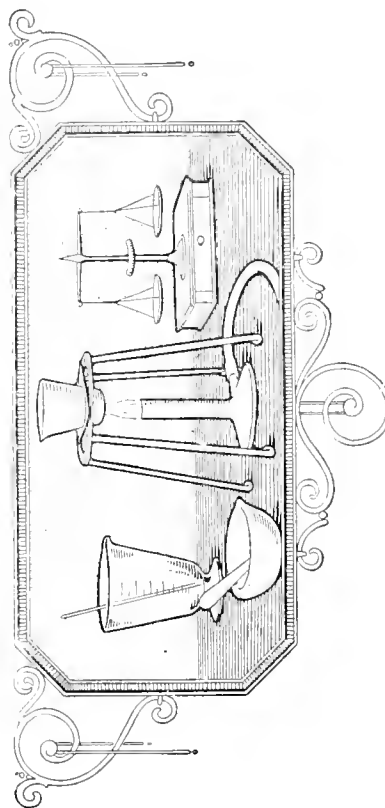
(Continued on Next Page)

COAL CATALOG

ANALYSES OF ALABAMA SEAMS BY COUNTIES AND LOCALITIES—Continued

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Inherent B. T. I	Carbon	RATIOS		
										Oxygen	Carbon Oxy. + Ash	F. C. V. M.
Pratt.....	Jefferson, Edgewater.....	Pratt No. 1.....	0.99	29.82	64.12	6.06	1.68	14.481	.....	.....	.....	2.15
Pratt.....	Jefferson, Easley.....	.....	1.05	31.70	62.15	6.15	1.38	14.377	.....	.....	.....	1.96
Pratt.....	Jefferson, Mineral Springs.....	.....	1.45	28.81	59.90	11.29	1.65	13.419	.....	.....	.....	2.08
Pratt.....	Jefferson, 2½ mi. n. e. of Mulga.....	Edgewater.....	2.20	28.83	62.88	6.09	1.62	14.236	79.89	5.74	6.75	2.18
Pratt.....	Jefferson, Mulga.....	Mulga.....	2.38	25.90	66.84	4.88	1.46	14.487	81.68	5.29	8.03	2.58
Pratt.....	Jefferson, Pratt City.....	.....	1.99	30.24	62.26	7.50	1.26	14.053	.....	.....	.....	2.06
Straven, Upper.....	Shelby, Straven.....	Straven.....	3.05	35.64	53.33	7.97	0.59	13.172	.....	.....	.....	1.49
Straven, Upper.....	Shelby, Straven.....	Straven.....	3.61	36.80	53.15	6.44	1.10	13.505	.....	.....	.....	1.44
Straven, Upper.....	Shelby, Straven.....	Straven.....	3.83	32.03	58.66	5.48	0.97	13.799	77.26	9.75	5.07	1.83
Thompson.....	Bibb, Blocton.....	Blocton No. 7.....	2.29	36.52	57.66	5.82	0.73	13.852	.....	.....	.....	1.58
Thompson.....	Bibb, 1¼ mi. e. of Blocton.....	Coalmont.....	3.21	32.05	60.79	3.95	0.60	14.024	77.91	10.82	5.28	1.90
Thompson.....	Shelby, Coalmont.....	No. 1.....	2.75	32.56	58.46	6.23	0.87	13.858	76.55	10.15	4.67	1.80
Thompson.....	Bibb, Garnsey.....	No. 1.....	3.03	30.94	55.31	10.72	0.49	13.034	.....	.....	.....	1.80
Thompson.....	Shelby, 4½ mi. n. e. of Helena.....	Piper No. 1.....	2.72	29.16	53.46	14.36	0.55	12.461	69.99	9.41	2.94	1.81
Thompson.....	Bibb, Piper.....	Star-Cahaba No. 2.....	3.59	33.18	58.67	4.56	1.08	14.049	77.57	10.43	5.17	1.77
Thompson.....	Shelby, 1 mi. w. of Toccoa.....	Belle Ellen No. 2.....	3.1	35.0	55.8	6.1	0.43	13.560	76.23	10.71	4.53	1.59
Wadsworth.....	Bibb, Belle Ellen.....	Cane Creek No. 2.....	3.65	33.74	58.86	3.75	0.48	14.537	80.12	8.66	6.46	1.74
Youngblood.....	Bibb, 3 mi. n. of Belle Ellen.....	Belle Ellen No. 2.....	3.12	31.41	59.70	5.77	1.24	14.031	.....	.....	.....	1.90
Youngblood.....	Bibb, Belle Ellen.....	.....	6.43	28.56	52.09	12.92	1.08	12.395	69.07	10.52	2.94	1.82
Youngblood.....	Bibb, Belle Ellen.....	.....	3.16	31.05	59.56	6.23	1.20	14.141	78.28	7.59	5.66	1.92

*Bullethins Bureau of Mines.



PEABODY COAL COMPANY

CHICAGO, ILL.

BRANCHES

CINCINNATI, OHIO
PINEVILLE, KENTUCKY
ST. LOUIS, MISSOURI
KANSAS CITY, MISSOURI

MINNEAPOLIS, MINNESOTA
SPRINGFIELD, ILLINOIS
PEORIA, ILLINOIS

OMAHA, NEBRASKA
DEADWOOD, SOUTH DAKOTA
SHERIDAN, WYOMING
SPOKANE, WASHINGTON

Operating Thirty-Six Bituminous Mines in Eleven Districts with Annual Capacity of 18,000,000 Tons

COAL MINE MANAGEMENT

Peabody Coal Mine Management is the development of thirty-eight years' experience in the ownership and operation of coal properties. Having first ascertained practical and successful methods of operating our own mines, we have expanded our organization to include the partial or complete management of coal properties for others. Below is a brief summary of the various forms of service rendered, further details of which will be found on pages indicated.

Operating Manager

We operate mines owned by others for their account or for the joint account of the owners and ourselves. We operate mines owned by large consumers of coal, supply them with their requirements and market the remainder of the output, if any, for their account. See Page 333.

Consulting Engineer

We examine undeveloped coal properties, advise as to their commercial value and prepare plans for opening and developing them. We examine active operations and make recommendations for improvements or changes to increase output and lower cost.

We act in an examining and advisory capacity for banks, trust companies and bond houses having interest in coal properties. See Page 394.

Construction Engineer

We sink or open new mines, lay out top works, design and erect mine buildings, tipplers, washers, coke ovens, machinery and power plants, install water works and fire protection systems, etc. See Page 478.

Sales Agent

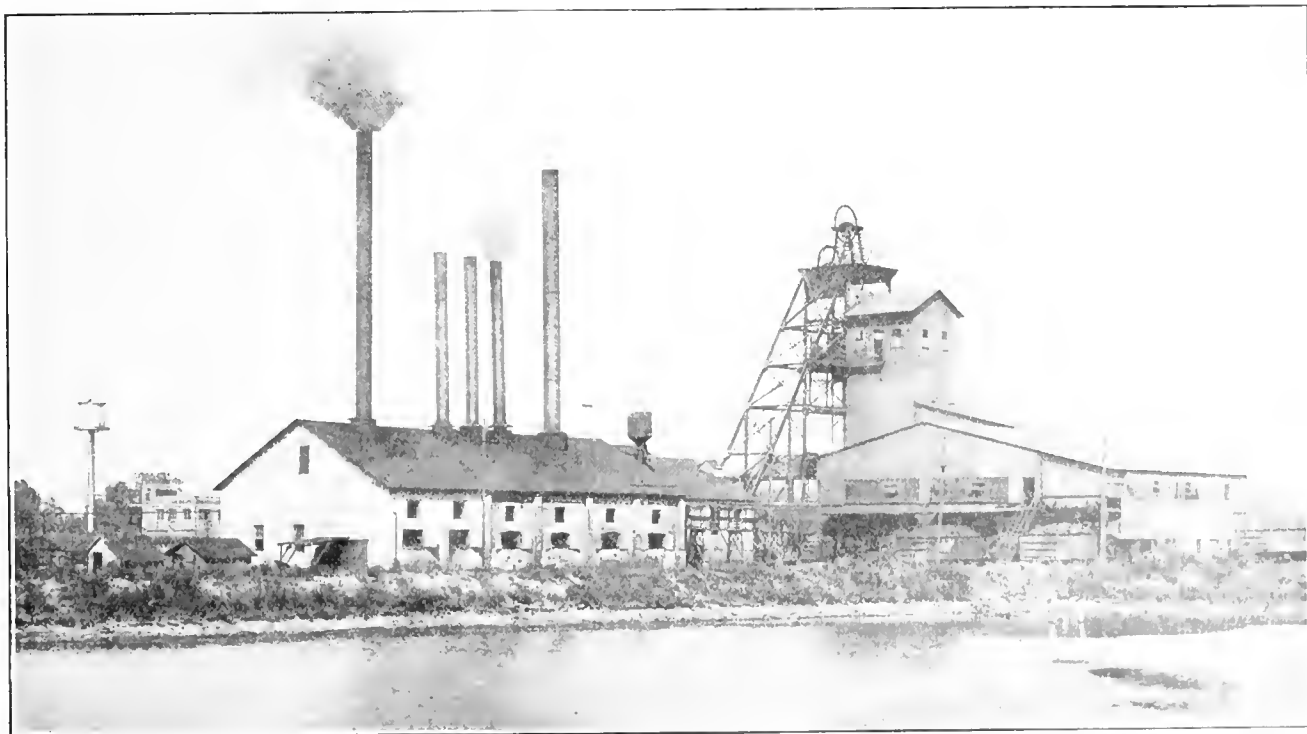
We undertake the sale of the output of a single mine or a group of mines, with or without an operating arrangement. See Page 741.

Purchasing Agent

We purchase mine supplies, equipment and machinery for clients whose properties we operate. See Page 911.

Auditor and Accountant

We act as Treasurer and Auditor for mines we operate, set up cost sheets, accounting records, pay payrolls and furnish essential data as to daily, weekly and monthly mining costs and results. See Page 911.



Mine No. 19 at West Frankfort, Franklin County, Illinois, owned by the By-Products Coke Corporation and managed by Peabody Coal Company under operating and selling arrangement.

List of Mines By Seams, Including Name of Company, General Office Address,
County, Railroad and Shipping Point

ALABAMA

BLOUNT MOUNTAIN BASIN COALS

Mined in Blount and Etowah Counties. Bituminous rank. Suitable for Steam, Domestic, Railroad,
Cement Burning and Producer Gas purposes.

BLACK CREEK SEAM

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Cherokee Coal Co.	Altoona, Ala.	Cherokee	Etowah	L. & N.	Altoona, Ala.
Moss & McCormack	1801 American Tr. Bldg., Birmingham, Ala.	Liberty	Blount	L. & N.	Nyoto and Carbon, Ala.
Moss & McCormack	1801 American Tr. Bldg., Birmingham, Ala.	Carbon	Blount	L. & N.	Nyoto and Carbon, Ala.

MISCELLANEOUS SEAMS

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Altoona Coal Co.	Gadsden, Ala.	Vanzandt	Etowah	L. & N.	Altoona, Ala.
Gulf State Steel Co.	Birmingham, Ala.	Altoona	Etowah	L. & N.	Altoona, Ala.

CAHABA BASIN COALS

Mined in Bibb, Jefferson, St. Clair and Shelby Counties. Bituminous rank. Suitable, according to seam
and locality, for Steam, Railroad, Domestic, Cement Burning, Producer Gas, Illuminating Gas,
Bee-hive Coking, Melting, Powdered and Tile and Pottery Burning uses.

CLARK SEAM

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Brookside-Pratt Mining Co.	Birmingham, Ala.	Coalmont	Shelby	L. & N., A. B. & A.	Coalmont, Ala.
Roden Coal Co.	Marvel, Ala.	No. 2	Bibb	L. & N., Sou.	Marvel, Ala.
Roden Coal Co.	Marvel, Ala.	No. 3	Bibb	L. & N., Sou.	Marvel, Ala.
Southern Coal & Coke Co.	Boothton, Ala.	No. 1	Shelby	Southern	Boothton, Ala.
Southern Coal & Coke Co.	Boothton, Ala.	No. 2	Shelby	Southern	Boothton, Ala.
Southern Coal & Coke Co.	Boothton, Ala.	No. 3	Shelby	Southern	Boothton, Ala.

GHOLSON SEAM

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Sellers Coal Co.	Birmingham, Ala.	Sellers	Shelby	Southern	Bamford, Ala.
Southern Coal & Coke Co.	Boothton, Ala.	No. 1	Shelby	Southern	Boothton, Ala.
Southern Coal & Coke Co.	Boothton, Ala.	No. 2	Shelby	Southern	Boothton, Ala.
Southern Coal & Coke Co.	Boothton, Ala.	No. 3	Shelby	Southern	Boothton, Ala.

HELENA SEAM

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Alabama Fuel & Iron Company	Birmingham, Ala.	Acton	Shelby	L. & N.	Acton, Ala.
Eureka Coal Co.	Birmingham, Ala.	No. 2	Shelby	L. & N., A. B. & A.	Falliston, Ala.
Eureka Coal Co.	Birmingham, Ala.	No. 3	Shelby	L. & N., A. B. & A.	Falliston, Ala.
West Helena Coal Co.	Birmingham, Ala.	Sicard	Shelby	Southern	Sicard, Ala.

THOMPSON SEAM

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Alabama-Blount Coal Co.	Blount, Ala.	Old Blount No. 3	Bibb	Sou. & L. & N.	Blount, Ala.
Bessemer Coal, Iron & Land Co.	Birmingham, Ala.	Belle-Ellen No. 1	Bibb	L. & N., Sou.	Belle-Ellen, Ala.
Bessemer Coal, Iron & Land Co.	Birmingham, Ala.	Belle-Ellen No. 7	Bibb	L. & N., Sou.	Belle-Ellen, Ala.
Blount Cahaba Coal Co.	Coleman, Ala.	Coleman	Bibb	Southern, L. & N.	Coleman, Ala.
Blount Export Coal Co.	Blount, Ala.	Tico	Bibb	L. & N., Southern	Blount, Ala.
Brookside-Pratt Mining Co.	Birmingham, Ala.	Coalmont	Shelby	L. & N., A. B. & A.	Coalmont, Ala.
Eureka Coal Co.	Birmingham, Ala.	Eureka No. 4	Shelby	L. & N., A. B. & A.	Falliston, Ala.
Little Cahaba Coal Co.	Piper, Ala.	Piper No. 1	Bibb	Southern, L. & N.	Piper, Ala.
Little Cahaba Coal Co.	Piper, Ala.	Piper No. 2	Bibb	Southern, L. & N.	Piper, Ala.
Tennessee Coal, Iron & Railroad Co.	Birmingham, Ala.	Blount No. 2	Bibb	L. & N., W. & B., A. G. S., Sou. M. & O.	Blount, Ala.
Tennessee Coal, Iron & Railroad Co.	Birmingham, Ala.	Blount No. 3	Bibb	L. & N., W. & B., A. G. S., Sou. M. & O.	Blount, Ala.
Tennessee Coal, Iron & Railroad Co.	Birmingham, Ala.	Blount No. 7	Bibb	L. & N., W. & B., A. G. S., Sou. M. & O.	Blount, Ala.
Tennessee Coal, Iron & Railroad Co.	Birmingham, Ala.	Blount No. 8	Bibb	L. & N., W. & B., A. G. S., Sou. M. & O.	Blount, Ala.

WADSWORTH SEAM

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Cahaba Red Ash Coal Co.	West Blount, Ala.	Weleb	Bibb	Southern	Blount, Ala.
Donaldson-Stubert Coal Co.	534 Brown Marx Bldg., Birmingham, Ala.	D. S.	Jefferson	C. of Ga.	Henryellen, Ala.
Pacoba Coal Mining Co.	Belle-Ellen, Ala.	Lens	Jefferson	C. of Ga.	Henryellen, Ala.

(Continued on Next Page)

CAHABA BASIN COALS—Continued

WOODSTOCK SEAM

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Blacton Mining Co.	West Blacton, Ala.	Howell's	Bibb	A. G. S., L. & N., Sou. M. & O.	Blacton, Ala.
Red Eagle Coal Co.	Birmingham, Ala.	Red Eagle	Bibb	Mobile & Ohio	Weatherford, Ala.
Hills Creek Mining Co.	West Blacton, Ala.	Hills Creek	Bibb	L. & N. M. & O., Sou. A. G. S.	Blacton, Ala.

MISCELLANEOUS SEAMS

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Alabama Fuel & Iron Co.	Birmingham, Ala.	Acmar	St. Clair	Cent. of Georgia	Acmar, Ala.
Alabama Fuel & Iron Company	Birmingham, Ala.	Margaret	St. Clair	Cent. of Georgia	Margaret, Ala.
Bessemer Coal, Iron & Land Co.	Birmingham, Ala.	No. 2	Bibb	L. & N., Southern	Belle Elow, Ala.
Bessemer Coal, Iron & Land Co.	Birmingham, Ala.	No. 8	Bibb	L. & N., Southern	Mascena, Ala.
Bibb Coal Co.	Birmingham, Ala.	Norris	Bibb	M. & O.	Norris, Ala.
Cahaba Red Ash Coal Co.	West Blacton, Ala.	Welch	Bibb	Woodstock & Blacton	Acmo Spur, Ala.
Donaldson-Stobert Coal Co.	540 Brown-Marx Bldg., Birmingham, Ala.	Donaldson-Stobert	Jefferson	Central of Ga.	Henry Ellen, Ala.
Little Gem Coal Co.	Birmingham, Ala.	Dogwood	Shelby	Southern	Dogwood, Ala.
Montevallo Mining Co.	1903 Amer. Trust Bldg., Birmingham, Ala.	Aldrich	Shelby	Southern	Aldrich, Ala.
Montevallo Straven Coal Co.	Straven, Ala.	Straven No. 2	Sh. lby.	Southern	Maylene, Ala.
Red Feather Coal Co.	Blacton, Ala., R. F. D. No. 1	Red Feather	Bibb	M. & O.	Blacton, Ala.
Roden Coal Co.	Marvel, Ala.	Marvel No. 1	Bibb	Sou. L. & N.	Marvel, Ala.
Roden Coal Co.	Marvel, Ala.	Marvel No. 3	Bibb	Sou. L. & N.	Marvel, Ala.
Sellers Coal Co.	Birmingham, Ala.	Sellers	Shelby	Southern	Bamford, Ala.
Yellow Leaf Coal Co.	420 Chamber of Com. Bldg., Birmingham, Ala.	Yellow Leaf	Shelby	A. B. & A.	Chelsea, Ala.

WARRIOR RIVER BASIN COALS

Mined in Blount, Jefferson, Marion, Tuscaloosa, Walker and Winston Counties. Bituminous rank. Suitable, according to seam and locality, for Steam, Railroad, Domestic, Cement Burning, Producer Gas, Illuminating Gas, Bee-hive Coking, By-Product Coking, Melting. Powdered and Tile and Pottery Burning uses.

AMERICA SEAM

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
American Mining Co.	Jasper, Ala.	Standard	Walker	Southern	America Junction, Ala.
O'Kear, Guy V. Coal Co., Inc.	Jasper, Ala.	O'Kear	Walker	Southern	Parrish, Ala.
Sloss-Sheffield Steel & Iron Co.	Birmingham, Ala.	Drifton	Walker	Southern	Leespeer, Ala.
Stith Coal Co.	America, Ala.	Stith	Walker	Southern	Leespeer, Ala.
Winona Coal Co.	Brown-Marx Bldg., Birmingham, Ala.	Winona	Walker	Southern	America, Ala.

BIG SEAM

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Birmingham-Trussville Iron Co.	Birmingham, Ala.	Labuco	Jefferson	L. & N.	Volta, Ala.
Brilliant Coal Co.	Birmingham, Ala.	Calumet	Walker	Northern Alabama	Calumet, Ala.
North Birmingham Coal Co.	Saverton, Ala.	No. 1	Jefferson	Southern	N. Birmingham, Ala.
Southern Fuel Co.	Jasper, Ala.	Norvell	Walker	Southern	Jasper, Ala.

BLACK CREEK SEAM

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Birmingham Clay Products Co.	Birmingham, Ala.	Langley No. 1	Jefferson	L. & N.	Warrior, Ala.
Birmingham Clay Products Co.	Birmingham, Ala.	Langley No. 2	Jefferson	L. & N.	Warrior, Ala.
Black Creek Coal Co.	Nauvoo, Ala.	No. 1	Walker	Southern	Nauvoo, Ala.
Black Creek Coal Co.	Nauvoo, Ala.	No. 2	Walker	Southern	Nauvoo, Ala.
Brilliant Coal Co.	Birmingham, Ala.	Brilliant	Marion	I. C.	Brilliant, Ala.
Crescent Coal Co.	15th Fl., American Trust Bldg., Birmingham, Ala.	Seloca No. 1	Jefferson	L. & N.	Seloca, Ala.
De Bardeleben Coal Co., Inc.	Brown-Marx Bldg., Birmingham, Ala.	Sispy	Walker	St. L. & S. F.	Sispy, Ala.
Empire Coal Co.	Birmingham, Ala.	Empire	Walker	St. L. & S. F.	Empire, Ala.
Etter, G. D., Jr.	Warrior, Ala.	Etter	Jefferson	L. & N.	El Vista, Ala.
Glen Mary Coal Co.	2908 Jefferson Co. Bk. Bldg., Birmingham, Ala.	Mary Etta	Winston	Northern	Glen Mary, Ala.
Gore, D. B. Co.	735 Brown-Marx Bldg., Birmingham, Ala.	Tafts Gap	Blount	L. & N.	Tafts Gap, Ala.
Imperial Coal & Coke Co.	Birmingham, Ala.	Bradford	Jefferson	L. & N.	Bradford, Ala.
Imperial Coal & Coke Co.	Birmingham, Ala.	Dixiana	Jefferson	L. & N.	Bradford, Ala.
Leeton Mining Co.	Johns, Ala.	Black Creek	Jefferson	L. & N.	Johns, Ala.
Lehigh Coal Co.	Lehigh, Ala.	Lehigh	Blount	L. & N.	Lehigh, Ala.
Lynn Coal Mining Co.	Jasper, Ala.	Pareo	Walker	N. A.	Lynn, Ala.
Mabel Mining Co.	Warrior, Ala.	El Vesta	Jefferson	L. & N.	Trafford, Ala.
Majestic Coal Co.	Birmingham, Ala.	Majestic	Jefferson	L. & N.	Majestic, Ala.
Norco-Warrior Coal & Coke Co.	1903 12 Jefferson Bk. Bldg., Birmingham, Ala.	Sterling	Walker	Southern	Nauvoo, Ala.
Natural Bridge Coal Co.	Birmingham, Ala.	Eclipse No. 1	Marion	Southern	Natural Bridge, Ala.
Natural Bridge Coal Co.	Birmingham, Ala.	Eclipse No. 2	Marion	Southern	Natural Bridge, Ala.
Riley Taylor Coal Co.	Campbell, Ala.	Riley Taylor	Franklin	Northern Ala.	Phil Campbell, Ala.
Robbins Coal Co.	Lynn, Ala.	Chinkipen	Winston	Northern Ala.	Lynn, Ala.
Shackelford Coal Mining Co.	Nauvoo, Ala.	Davis	Walker	Northern Ala.	Nauvoo, Ala.
Sispy Coal Mining Co.	R. F. D. No. 1, Empire, Ala.	Dilworth	Walker	St. L. & S. F.	Dilworth, Ala.
Southern Clay Mfg. Co.	Chattanooga, Tenn.	Coaldale	Jefferson	L. & N.	Coaldale, Ala.
Stout's Mountain Coal Co.	Hanceville, Ala.	Stout's Mountain	Cullman	L. & N.	Hanceville, Ala.
Waldron & Kirkwood	Dora, Ala.	Summit	Walker	St. L. & S. F.	Summit and Dora, Ala.

(Continued on Next Page)

WARRIOR RIVER BASIN COALS—Continued

BLUE CREEK SEAM

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Ajax Coal & Mining Co.	Birmingham, Ala.	Ajax	Jefferson	L. & N.	Johns, Ala.
American Fuel Co.	Beltone, Ala.	Beltone	Jefferson	L. & N.	Beltone, Ala.
Davis-Creek Coal & Coke Co.	Rockcastle, Ala.	Rockcastle No. 1	Tuscaloosa	L. & N.	Rockcastle, Ala.
Davis-Creek Coal & Coke Co.	Rockcastle, Ala.	Rockcastle No. 3	Tuscaloosa	L. & N.	Rockcastle, Ala.
Jenifer Iron Co.	Jenifer, Ala.	Weller	Jefferson	L. & N.	Weller, Ala.
Self, J. W. Coal Co.	Carbon Hill, Ala.	S. H.	Walker	St. L. & S. F.	Carbon Hill, Ala.
Weller Coal Co.	Birmingham, Ala.	Weller	Jefferson	L. & N.	Aubrey, Ala.
Yolande Coal & Coke Co.	Birmingham, Ala.	Kennabunk	Tuscaloosa	L. & N.	Yolande, Ala.
Yolande Coal & Coke Co.	Birmingham, Ala.	No. 1	Tuscaloosa	L. & N.	Yolande, Ala.
Yolande Coal & Coke Co.	Birmingham, Ala.	Yolande No. 2	Tuscaloosa	L. & N.	Yolande, Ala.

BRILLIANT No. 7 SEAM

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Carbon Hill Coal & Mining Co.	Gary, Ind.	Carbon Hill No. 1	Walker	St. L. & S. F.	Carbon Hill, Ala.
Carbon Hill Coal & Mining Co.	Gary, Ind.	Carbon Hill No. 2	Walker	St. L. & S. F.	Carbon Hill, Ala.
Thomas Creek Coal Co.	Carbon Hill, Ala.	Thomas Creek	Walker	St. L. & S. F.	Carbon Hill, Ala.

BROOKWOOD SEAM

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Alabama Co. (The)	Birmingham, Ala.	Brookwood	Tuscaloosa	L. & N.	Brookwood, Ala.
Blair Coal Co.	Tuscaloosa, Ala.	Blair	Tuscaloosa	M. & O.	Tuscaloosa, Ala.
Cannon-Shepherd Coal Co., Inc.	Tuscaloosa, Ala.	Brookwood	Tuscaloosa	M. & O.	Shiras, Ala.
Central Iron & Coal Co.	Holt, Ala.	Kellerman	Tuscaloosa	M. & O. and Southern	Kellerman, Ala.
Daniels Creek Coal Co.	Birmingham, Ala.	Woodrow	Tuscaloosa	M. & O.	Searles, Ala.
Liberty Coal Co.	504 American Tr. Bldg., Birmingham, Ala.	Liberty	Tuscaloosa	M. & O.	Searles, Ala.

CARTER SEAM

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Alabama Co. (The)	Birmingham, Ala.	Brookwood	Tuscaloosa	L. & N.	Brookwood, Ala.
Calboun Land & Mining Co.	Jacksonville, Ala.	No. 1 Mine	Tuscaloosa	A. G. S.	Coaling, Ala.
Calboun Land & Mining Co.	Jacksonville, Ala.	No. 2 Mine	Tuscaloosa	A. G. S.	Coaling, Ala.
Riverview Coal Co.	Tuscaloosa, Ala.	Marble	Tuscaloosa	M. & O.	Northport, Ala.

CORONA SEAM

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Pertha Coal Co., Inc.	R. No. 2, Parrish, Ala.	Amiss	Walker	Southern	R. No. 2, Oakman, Ala.
Ctbert Coal Co.	Corona, Ala.	West Corona	Walker	Southern	Corona, Ala.
Corona Coal Co.	Birmingham, Ala.	Coal Valley No. 10	Walker	Southern	Coal Valley, Ala.
Corona Coal Co.	Birmingham, Ala.	Coal Valley No. 11	Walker	Southern	Coal Valley & Oakman, Ala.
Corona Coal Co.	Birmingham, Ala.	Corona No. 12	Walker	Southern	Corona, Ala.
Corona Coal Co.	Birmingham, Ala.	Patton No. 13	Walker	Southern	Patton, Ala.
Corona Coal Co.	Birmingham, Ala.	South Corona	Walker	Southern	Corona, Ala.
Corry Coal Mining Co.	Oakman, Ala.	Gaslight	Walker	Southern	Oakman, Ala.
Deer Creek Coal Co.	Marietta, Ala.	Deer Creek	Walker	Southern	Patton Jet. & Gayosa, Ala.
Deer Creek Coal Co.	Marietta, Ala.	Gayosa	Walker	Southern	Patton Jet. & Gayosa, Ala.
Oakman Mining Co.	Oakman, Ala.	Lenora	Walker	Southern	Oakman, Ala.
Parrish Coal Co.	Parrish, Ala.	Bayosa No. 2	Walker	Southern	Parrish, Ala.
South Corona Coal Co.	Corona, Ala.	South Corona	Walker	Southern	Corona, Ala.
Tuscaloosa Mining Co.	Oakman, Ala.	Tuscaloosa	Walker	Southern	Oakman, Ala.
Wabash Coal Mining Co., Inc.	Oakman, Ala.	Gravlee No. 1	Walker	Southern	Oakman, Ala.
West Alabama Coal Co.	Jasper, Ala.	Gayosa	Walker	Southern	Gayosa, Ala.

JAGGER SEAM

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Brookside Pratt Mining Co.	Birmingham, Ala.	Carbon Hill	Walker	St. L. & S. F.	Carbon Hill, Ala.
Carbon Hill Water & Light Co.	Carbon Hill, Ala.	No. 1	Walker	St. L. & S. F.	Carbon Hill, Ala.
Carbon Hill Consolidated Coal Co.	Carbon Hill, Ala.	Carbon Hill	Walker	St. L. & S. F.	Carbon Hill, Ala.
Corona Coal Co.	Birmingham, Ala.	Townley No. 1	Walker	St. L. & S. F.	Townley, Ala.
Corona Coal Co.	Birmingham, Ala.	Townley No. 2	Walker	St. L. & S. F.	Townley, Ala.
Davis Creek Coal & Coke Co.	Rockcastle, Ala.	Rockcastle No. 2	Tuscaloosa	L. & N.	Rockcastle, Ala.
Galloway Coal Co.	Memphis, Tenn.	No. 10 1/2	Walker	St. L. & S. F.	Carbon Hill, Ala.
Galloway Coal Co.	Memphis, Tenn.	No. 11	Walker	St. L. & S. F.	Carbon Hill, Ala.
Galloway Coal Co.	Memphis, Tenn.	No. 15	Walker	St. L. & S. F.	Townley, Ala.
Inland Coal & Iron Co.	Birmingham, Ala.	Inland	Blount	L. & N.	Inland, Ala.
Jagger Coal Co.	Birmingham, Ala.	Jagger	Walker	N. A.	Jagger, Ala.
Keystone Coal Co.	Kansas, Ala.	Nos. 1, 2, 3	Walker	St. L. & S. F.	Carbon Hill, Ala.
Little Black Warrior Coal Co.	Birmingham, Ala.	Fairchild	Blount	L. & N.	Inland, Ala.
Pocahontas Coal & Mining Co.	Carbon Hill, Ala.	Pocahontas	Walker	St. L. & S. F.	Carbon Hill, Ala.
Self, J. W. Coal Co.	Carbon Hill, Ala.	Self	Walker	St. L. & S. F.	Carbon Hill, Ala.
Supreme Mining Co.	Birmingham, Ala.	Supreme	Walker	St. L. & S. F.	Townley, Ala.
Thomas Creek Coal Co.	Carbon Hill, Ala.	Thomas Creek	Walker	St. L. & S. F.	Carbon Hill, Ala.

(Continued on Next Page)

WARRIOR RIVER BASIN COALS—Continued

JEFFERSON SEAM

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
American Fuel Co.	Beltone, Ala.	Beltone	Jefferson	L. & N.	Beltone, Ala.
Pig Four Coal Co.	Birmingham, Ala.	Pig Four	Jefferson	Southern	N. Birmingham, Ala.
Central Alabama Coal Co.	Kimberly, Ala.	Kimberly No. 2	Jefferson	L. & N.	Kimberly, Ala.
Central Alabama Coal Co.	Kimberly, Ala.	Kimberly No. 3	Jefferson	L. & N.	Kimberly, Ala.
Crescent Coal Co.	Birmingham, Ala.	Schoen	Jefferson	L. & N.	Schoen, Ala.
Rogers-Talty Coal Co.	Warrior, Ala.	Pritchett	Jefferson	L. & N.	Warrior, Ala.
Waldron & Kirkwood	Dora, Ala.	Summit	Walker	St. L. & S. F.	Summit and Dora, Ala.

MARY LEE SEAM

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Alabama Co. (The)	Birmingham, Ala.	Lewisburg (Mary Lee)	Jefferson	L. & N.	Lewisburg, Ala.
Bankhead Coal Co.	Bankhead, Ala.	Bankhead	Walker	Northern Alabama	Bankhead, Ala.
Barney Coal Co.	Cordova, Ala.	Barney	Walker	Southern	Cordova, Ala.
Benoit Coal Mining Co.	Birmingham, Ala.	Benoit	Walker	St. L. & S. F.	Benoit, Ala.
Burnwell Coal Mining Co.	Burnwell Mines, Ala.	Burnwell	Walker	Southern	Burnwell Mines, Ala.
Burnwell Coal Mining Co.	Burnwell Mines, Ala.	Samoset	Walker	St. L. & S. F., Ill. Cent.	Samoset, Ala.
Franklin Coal Mining Co.	Birmingham, Ala.	Powhatan	Jefferson	L. & N.	Powhatan, Ala.
Galloway Coal Co.	Memphis, Tenn.	No. 10	Walker	St. L. & S. F.	Carbon Hill, Ala.
Galloway Coal Co.	Memphis, Tenn.	No. 12	Walker	St. L. & S. F.	Carbon Hill, Ala.
Galloway Coal Co.	Memphis, Tenn.	No. 17	Walker	St. L. & S. F.	Carbon Hill, Ala.
Gulf State Steel Co.	Birmingham, Ala.	Sayre	Jefferson	L. & N.	Sayre, Ala.
Kershaw Mining Co.	Birmingham, Ala.	Kershaw	Walker	St. L. & S. F.	Dora, Ala.
New Castle Coal Co.	Birmingham, Ala.	No. 2	Jefferson	L. & N.	New Castle, Ala.
New Castle Coal Co.	Birmingham, Ala.	No. 6	Jefferson	L. & N.	New Castle, Ala.
Pratt Consolidated Coal Co.	American Trust Bldg., Birmingham, Ala.	Banner	Jefferson	L. & N.	Littleton, Ala.
Pratt Consolidated Coal Co.	American Trust Bldg., Birmingham, Ala.	Clipper	Walker	Southern	Dora & Clipper, Ala.
Pratt Consolidated Coal Co.	American Trust Bldg., Birmingham, Ala.	Dora Group (5 Mines)	Walker	St. L. & S. F., Sou.	Dora, Ala.
Pratt Consolidated Coal Co.	American Trust Bldg., Birmingham, Ala.	Flat Creek Group	Jefferson	L. & N.	Calta, Ala.
Pratt Consolidated Coal Co.	American Trust Bldg., Birmingham, Ala.	Gamble	Walker	Southern	Gamble Mines, Ala.
Pratt Consolidated Coal Co.	American Trust Bldg., Birmingham, Ala.	Praco	Jefferson	L. & N.	Praco, Ala.
Pratt Consolidated Coal Co.	American Tr. Bldg., Birmingham, Ala.	Ruby	Walker	Southern	Cordova, Ala.
Railway Fuel Co.	1300 Penna. Ave., Washington, D. C.	Railway Fuel	Walker	Southern	Parrish, Ala.
Republic Iron & Steel Co.	Youngstown, O.	Risco	Jefferson	Southern	Palus & Risco, Ala.
Republic Iron & Steel Co. (Sou. Dist.)	Youngstown, O.	Sayreton	Jefferson	Thomas & Sayreton	North Birmingham, Ala.
Rosamond, E. P.	Birmingham, Ala.	Powell	Jefferson	L. & N.	Praco, Ala.
Saragossa Mining Co.	Saragossa, Ala.	Saragossa	Walker	Southern	Saragossa, Ala.
Sloss-Sheffield Steel & Iron Co.	Birmingham, Ala.	Bessie	Jefferson	Sou. & St. L. & S. F.	Bessie, Ala.
Sloss-Sheffield Steel & Iron Co.	Birmingham, Ala.	Flat Top	Jefferson	Southern	Flat Top, Ala.
Sloss-Sheffield Steel & Iron Co.	Birmingham, Ala.	Ivy	Walker	St. L. & S. F.	Dora, Ala.
Victory Coal Mining Co., The	Dora, Ala.	Victory Mine	Walker	St. L. & S. F.	Dora, Ala.
Warrior Pratt Coal Co.	Birmingham, Ala.	Porter	Jefferson	Southern	Porter, Ala.

MILDALE SEAM

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Alabama Co. (The)	Birmingham, Ala.	Brookwood	Tuscaloosa	L. & N.	Brookwood, Ala.
Big Sandy Iron & Steel Co.	623 First Natl. Bk. Bldg., Birmingham, Ala.	Cedar Cove	Tuscaloosa	Southern	Coaling, Ala.
Central Iron & Coal Co.	Holt, Ala.	Kellerman	Tuscaloosa	M. & O. and Southern	Kellerman, Ala.
Daniels Creek Coal Co.	Birmingham, Ala.	Woodrow	Tuscaloosa	M. & O.	Seafers, Ala.
Kellerman Coal Co.	614 B. M. Bldg., Birmingham, Ala.	Kellerman	Tuscarawas	M. & O.	Kellerman, Ala.
Yolande Coal & Coke Co.	Birmingham, Ala.	No. 1	Tuscaloosa	L. & N.	Yolande, Ala.
Yolande Coal & Coke Co.	Birmingham, Ala.	No. 3	Tuscaloosa	L. & N.	Yolande, Ala.

MT. CARMEL SEAM

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Borden Coal Co.	620 Woodward Bldg., Birmingham, Ala.	Borden	Walker	Southern	Cordova, Ala.
Cordova Warrior Coal Co.	Cordova, Ala.	Cordova Warrior	Walker	St. L. & S. F.	Cordova, Ala.
Disney Coal Co.	Cordova, Ala.	Bed Oak	Walker	St. L. & S. F.	Cordova, Ala.
Dora Fuel Co.	Dora, Ala.	Dora Fuel	Walker	St. L. & S. F.	Dora, Ala.
Flat Creek Mining Co.	Route No. 3, Quinton, Ala.	Flat Creek	Jefferson	L. & N.	Cotta, Ala.
Indian Head Mills of Alabama	Cordova, Ala.	Indian Head	Walker	St. L. & S. F.	Cordova, Ala.
Mt. Carmel Coal Co.	609 American Tr. Bldg., Birmingham, Ala.	Riection	Walker	St. L. & S. F.	Cordova, Ala.
Nelson Coal Corp.	708 Brown-Marx Bldg., Birmingham, Ala.	Red Star	Walker	Southern	Dora, Ala.
Pratt Fuel Co.	715 American Trust Bldg., Birmingham, Ala.	No. 1	Walker	St. L. & S. F.	Dora, Ala.
Pratt Fuel Co.	715 American Trust Bldg., Birmingham, Ala.	No. 2	Walker	St. L. & S. F.	Dora, Ala.
Pratt Fuel Co.	715 American Trust Bldg., Birmingham, Ala.	No. 3	Walker	St. L. & S. F.	Dora, Ala.
Regal Coal Corp.	708 Brown-Marx Bldg., Birmingham, Ala.	Royal	Walker	Southern	Red Star, Ala.
Southern Fuel Co.	Jasper, Ala.	Norvell	Walker	Southern	Jasper, Ala.
Sulphur Springs Coal Co.	Cordova, Ala.	Sulphur Springs	Walker	Southern	Cordova, Ala.

NICKLEPLATE SEAM

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Blue Ridge Coal Co.	Jasper, Ala.	Big Ridge Mine	Walker	Southern	America, Ala.
Brookside-Pratt Mining Co.	Birmingham, Ala.	Pinckney No. 1	Jefferson	Southern	Cardiff, Ala.
Brookside-Pratt Mining Co.	Birmingham, Ala.	Pinckney No. 2	Jefferson	Southern	Cardiff, Ala.
Brookside-Pratt Mining Co.	Birmingham, Ala.	Cardiff No. 1	Jefferson	Southern	Cardiff, Ala.
Brookside-Pratt Mining Co.	Birmingham, Ala.	Cardiff No. 2	Jefferson	Southern	Cardiff, Ala.
Gulf State Steel Co.	Birmingham, Ala.	Virginia	Jefferson	L. & N.	Virginia Mines, Ala.
Sartain Coal Co.	Jasper, Ala.	Sartain	Walker	Southern	Drifton, Ala.
Sloss-Sheffield Steel & Iron Co.	Birmingham, Ala.	New Found	Jefferson	Southern	Brookside, Ala.
Sloss-Sheffield Steel & Iron Co.	Birmingham, Ala.	Crocker Hollow	Jefferson	Southern	Cardiff, Ala.
Sloss-Sheffield Steel & Iron Co.	Birmingham, Ala.	Cardiff	Jefferson	Southern	Cardiff, Ala.
Sloss-Sheffield Steel & Iron Co.	Birmingham, Ala.	No. 2	Jefferson	Southern	Blossburg, Ala.
Sloss-Sheffield Steel & Iron Co.	Birmingham, Ala.	No. 4 Blossburg	Jefferson	Southern	Blossburg, Ala.

(Continued on Next Page)

WARRIOR RIVER BASIN COALS—Continued

PRATT SEAM

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
American Mining Co.	Jasper, Ala.	Standard.	Walker.	Southern.	American Junction, Ala.
Blue Ridge Coal Co.	Jasper, Ala.	Big Ridge Mine.	Walker.	Southern.	America, Ala.
Brookside-Pratt Mining Co.	Birmingham, Ala.	Coalbury.	Jefferson.	Southern.	Coalburg, Ala.
Brookside-Pratt Mining Co.	Birmingham, Ala.	Pinckney No. 1.	Jefferson.	Southern.	Cardiff, Ala.
Daniel-Duffee Coal Co.	Birmingham, Ala.	Daniel-Duffee.	Walker.		High Level, Ala.
De Bardeleben Coal Co.	Brown-Marx Bldg., Birmingham, Ala.	Payne Bend.	Walker.	Warrior River.	Cordova, Ala.
East Pratt Coal Co.	621-23 Cham. of Com. Bldg., Birmingham, Ala.	Clift.	Jefferson.	L. & N.	Clift, Ala.
North Pratt Coal Co.	1306 American Trust Bldg., Birmingham, Ala.	Hillhouse.	Jefferson.	L. & N.	Udora, Ala.
Parrish Coal Co.	Parrish, Ala.	Parrish No. 1.	Walker.	Southern.	Parrish, Ala.
Pratt Consolidated Coal Co.	Birmingham, Ala.	Arcadia.	Jefferson.	L. & N.	Arcadia, Ala.
Pratt Consolidated Coal Co.	Birmingham, Ala.	Crocker.	Jefferson.	L. & N.	Crocker, Ala.
Pratt Consolidated Coal Co.	Birmingham, Ala.	Eldorado.	Jefferson.	L. & N.	Eldorado, Ala.
Pratt Consolidated Coal Co.	American Trust Bldg., Birmingham, Ala.	Erskine.	Jefferson.	L. & N.	Yasmar, Ala.
Pratt Consolidated Coal Co.	Birmingham, Ala.	Maxine.	Jefferson.	Southern.	Maxine, Ala.
Pratt Consolidated Coal Co.	Birmingham, Ala.	Mineral Springs Group (10 mines).	Jefferson.	L. & N.	Mineral Springs, Ala.
Pratt Consolidated Coal Co.	Birmingham, Ala.	New Pratt.	Jefferson.	Southern.	Blossburg, Ala.
Republic Iron & Steel Co.	Youngstown, O.	Thompson.	Jefferson.	T. & S.	N. Birmingham, Ala.
Republic Iron & Steel Co. (Sou. Dist.)	Birmingham, Ala.	Warner No. 1.	Jefferson.	Southern.	Republic, Ala.
Sartain Coal Co.	Jasper, Ala.	Sartain.	Walker.	Southern.	Drafton, Ala.
Sloss-Sheffield Steel & Iron Co.	Birmingham, Ala.	Coalburg.	Jefferson.	Southern.	Coalburg, Ala.
Sloss-Sheffield Steel & Iron Co.	Birmingham, Ala.	No. 3 Blossburg.	Jefferson.	Southern.	Blossburg, Ala.
South Pratt Coal Co.	Blossburg, Ala.	Hillhouse.	Jefferson.	Southern.	Blossburg, Ala.
Tennessee Coal, Iron & Railroad Co.	Birmingham, Ala.	Edgewater.	Jefferson.	Birmingham Sou.	Edgewater, Ala.
Tennessee Coal, Iron & Railroad Co.	Birmingham, Ala.	Docena.	Jefferson.	Birmingham Sou.	Docena, Ala.
Tennessee Coal, Iron & Railroad Co.	Birmingham, Ala.	Blossburg "A".	Jefferson.	Southern.	Blossburg, Ala.
Tennessee Coal, Iron & Railroad Co.	Birmingham, Ala.	Blossburg "B".	Jefferson.	Southern.	Blossburg, Ala.
Tennessee Coal, Iron & Railroad Co.	Birmingham, Ala.	Blossburg "E".	Jefferson.	Southern.	Blossburg, Ala.
Tennessee Coal, Iron & Railroad Co.	Birmingham, Ala.	Pratt No. 1.	Jefferson.	Birmingham Sou.	Shafter and Ridgefield, Ala.
Tennessee Coal, Iron & Railroad Co.	Birmingham, Ala.	Pratt No. 2.	Jefferson.	Birmingham Sou.	Shafter and Ridgefield, Ala.
Tennessee Coal, Iron & Railroad Co.	Birmingham, Ala.	Pratt No. 10.	Jefferson.	Birmingham Sou.	Shafter and Ridgefield, Ala.
Tennessee Coal, Iron & Railroad Co.	Birmingham, Ala.	Pratt No. 3.	Jefferson.	Birmingham Sou.	Ensley, Ala.
Tennessee Coal, Iron & Railroad Co.	Birmingham, Ala.	Pratt No. 4.	Jefferson.	L. & N.	Ensley, Ala.
Tennessee Coal, Iron & Railroad Co.	Birmingham, Ala.	Pratt No. 5.	Jefferson.	Birmingham Sou.	Wylam and Brynton, Ala.
Tennessee Coal, Iron & Railroad Co.	Birmingham, Ala.	Pratt No. 8.	Jefferson.	Birmingham Sou.	Wylam and Brynton, Ala.
Tennessee Coal, Iron & Railroad Co.	Birmingham, Ala.	Pratt No. 7.	Jefferson.	Birmingham.	Laketon and Thompson, Ala.
Tennessee Coal, Iron & Railroad Co.	Birmingham, Ala.	Pratt No. 11.	Jefferson.	Birmingham.	Laketon and Thompson, Ala.
Winona Coal Co.	Brown-Marx Bldg., Birmingham, Ala.	Winona.	Walker.	Southern.	America, Ala.
Woodward Iron Co.	Woodward, Ala.	Dolomite No. 1.	Jefferson.	A. B. & A.	Dolomite, Ala.
Woodward Iron Co.	Woodward, Ala.	Dolomite 3.	Jefferson.	A. B. & A.	Dolomite, Ala.
Woodward Iron Co.	Woodward, Ala.	Mulga No. 1.	Jefferson.	A. B. & A.	Mulga, Ala.

MISCELLANEOUS SEAMS

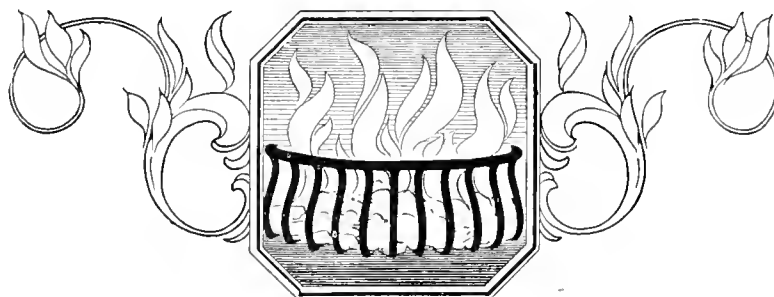
NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Aetna Coal Co.	Birmingham, Ala.	Aetna.	Tuscaloosa.	M. & O.	Searles, Ala.
Alabama Co. (The).	Birmingham, Ala.	Searles.	Tuscaloosa.	L. & N.	Searles, Ala.
Birmingham Water Works, (The).	Birmingham, Ala.	Cahaba.	Jefferson.	St. L. & S. F.	Birmingham, Ala.
Childers, S. J. & Son.	Jasper, Ala.	Childers.	Walker.	Sou. & Frisco.	Jasper, Ala.
Kershaw & Company.	610 Woodward Bldg., Birmingham, Ala.	Cedron.	Walker.	St. L. & S. F.	Townley, Ala.
Liberty Coal Co.	504 American Trust Bldg., Birmingham, Ala.	Liberty.	Tuscaloosa.	M. & O.	Searles, Ala.

JACKSON COUNTY COALS

Bituminous rank. Suitable for Steam, Railroad, Domestic, Cement Burning and Producer Gas purposes.

BELMONT SEAM

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Pierce Development Co.	Bridgeport, Ala.	Pierce.	Jackson.	Southern.	Lim Rock, Ala.



ALABAMA

Alphabetical Directory of Coal Mines, Giving Complete Detailed Information Covering Each Mine

For List of Abbreviations See Page 13.

AARON & SANFORD COAL COMPANY

General Office, Birmingham, Ala.
PR—J. B. Robinson, Birmingham, Ala.
VP—J. Molton Smith, Birmingham, Ala.
TR—J. B. Robinson, Birmingham, Ala.
GM—J. Molton Smith, Birmingham, Ala.
STPT—W. E. Brown, Seales, Ala.
PA—O. M. Cross, Birmingham, Ala.
EM—R. E. Burk, Birmingham, Ala.
SCO—Actna Supply Co., Buyer, Henry J. Smith, Seales, Ala.
SA—J. B. Robinson & Co., Birmingham, Ala.

Actna Mine; Drift and Slope; Seales Seam; 72 in. thick.
PO—Seales, Ala.; SP—Same; CTY—Tuscaloosa; RR—M. & O.
S of H—Mules, rope. Track gage 36 in.
S of M—Hand.
PP—2 fire tube boilers, 125 H. P., 5 pumps.
EMP—135. Last years tonnage 113,862.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

AJAX COAL & MINING COMPANY

General Office, Birmingham, Ala.
PR—D. H. Brown, Birmingham, Ala.
VP—Paul Lanier, Birmingham, Ala.
TR—Paul Lanier, Birmingham, Ala.
GM—D. H. Brown, Birmingham, Ala.
STPT—J. J. Cahalan, Johns, Ala.
PA—L. C. Heck, Birmingham, Ala.
EM—A. H. Witt, Birmingham, Ala.
SCO—Address the Company, Buyer, I. C. Heck, Birmingham, Ala.
SA—D. H. Brown & Co., Birmingham, Ala.

Ajax Mine; Slope; Blue Creek Vertical Seam; 84-108 inches thick.
PO—Johns, Ala.; SP—Same; CTY—Jefferson; RR—L. & N.
MS—N. B. Patterson, Johns, Ala.
SM—J. W. Lanier, Johns, Ala.
S of H—Mules and rope. Track gage 36 inches.
S of M—Hand.
PP—2 fire tube boilers, 200 H. P., 4 pumps.
EMP—60. Daily tonnage 200.
SIZES SHIPT—Run of mine, slack, nut, lump.
PREP. EQUIPT—Bar Screens, Washery.

ALABAM-BLOCTON COAL COMPANY

General Office, Blocton, Ala.
PR—John G. Cooke, Marietta, Ala.
TR—M. T. Harper, Marietta, Ala.
GM—John G. Cooke, Marietta, Ala.
STPT—Wm. Evans, Blocton, Ala.
PA—John G. Cooke, Marietta, Ala.
EM—J. Miller, Birmingham, Ala.
SA—T. H. Renner & Co., Birmingham, Ala.

Old Blocton No. 3 Mine; Drift and Slope; Thomson Seam, 72 in. thick.
PO—Blocton, Ala.; SP—Same; CTY—Bibb; RR—Southern and L. & N.
S of H—Mules and steam locos. Track gage 36 in.
S of M—Hand.
PP—2-60 H. P. fire tube boilers, 1-10 H. P. water tube boilers.
EMP—50. Daily tonnage 225.
SIZES SHIPT—Run of Mine.

ALABAMA CO. (THE)

General Office, Birmingham, Ala.
PR—E. N. Bich, Baltimore, Md.
VP—H. W. Coffin, Birmingham, Ala.
TR—W. J. Davis, Birmingham, Ala.
GM—W. J. Porter, Birmingham, Ala.
STPT—E. C. Morgan, Birmingham, Ala.
PA—E. B. Heiser, " "
CE—Jas. E. Strong, Birmingham, Ala.
EM—C. D. Jenkins, Birmingham, Ala.
SCO—A. J. Honeycutt, Birmingham, Ala.
SA—R. Heiser, Birmingham, Ala.

Brookwood Mine; Slope and Drifts; Brookwood, Muldale & Carter Seams; 32 to 46 in. thick; operate washery.
PO—Brookwood, Ala.; SP—Same; CTY—Tuscaloosa; RR—L. & N.
SM—S. J. Williams, Brookwood, Ala.
MS—A. S. Tubbs, Brookwood, Ala.
S of H—Mules and rope. Track gage 36 in.
S of M—Hand.
PP—Purchase power, transformer 22, 000-2300 220 volts A. C., 2 100

H. P. fire tube boilers, 3 150 H. P. water tube boilers, 8 pumps.
Daily output, 600 tons. Coke ovens, 315 Bee Hive.
SIZES SHIPT—Slack, Pea, Nut.
PREP. EQUIPT—Revolving Screens and Washeries.

Lewisburg (Mary Lee) Mine, Slope, Mary Lee Seam; 5 to 6 ft. thick; operate washery.
PO—Louisburg, Ala.; SP—Same; CTY—Jefferson; RR—L. & N.
MS—F. G. Word, Lewisburg, Ala.
S of H—Mules, rope and gasoline locos. Track gage, 36 in.
S of M—Hand.
PP—Purchase power, transformer 22, 000-2300 220 volts A. C., 3 150 H. P. fire tube boilers, 8 pumps.
Daily output, 1,600 tons. Coke ovens, 320 Bee Hive.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Washeries.

Seales Mine; Drift; Seales Seam, 80 to 84 in. thick.
PO—Seales, Ala.; SP—Same; CTY—Tuscaloosa; RR—L. & N., Tuscaloosa Br.
MS—J. H. Taylor, Seales, Ala.
S of H—Mules, rope and gasoline locos. Track gage, 36 in.
S of M—Hand.
PP—Purchased power, transformer 22, 000-2300 220 volts A. C., 4 100 H. P. fire tube boilers, 1 150 H. P. water tube boiler, 7 pumps.
Daily output, 1,200 tons. Coke ovens 250 Bee Hive.
SIZES SHIPT—Slack, Pea, Nut.
PREP. EQUIPT—Revolving and Shaker Screens, Washeries.

ALABAMA FUEL & IRON CO.

General Office, Birmingham, Ala.
PR—J. M. Overton, Nashville, Tenn.
VP—Chas. F. DeBardleben, Birmingham, Ala.
TR—W. W. Fulghum, Birmingham, Ala.
GM—Chas. F. DeBardleben, " "
STPT—F. R. Bell, " "
PA—R. F. Culvahouse, Birmingham, Ala.
EM—P. L. Dryer, " "
EE—Julian L. Mason, Acmar, Ala.
SCO—Address The Company, Buyer, R. F. Culvahouse, Birmingham, Ala.
SA—Adams, Rower & Norman, Birmingham, Ala.

Margaret Mine; Slope; Harkness Seam, 77 in. thick.
PO—Margaret, Ala. SP—Same. CTY—St. Clair. BR—Central of Georgia Ry., Margaret Br.
MS—Chas. F. DeBardleben, Jr., Supt., Margaret, Ala.
SM—W. A. Walker, Margaret, Ala.
S of H—Mules and rope, 1 elec. and steam loco. Track gauge, 42 in.
S of M—Hand.
PP—Generate power.
EMP—168. Last years tonnage 253,409.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables and Washeries.

Acmar Mine; Slope; Mammoth or Henry Ellen Seam, 144 in. thick.
PO—Acmar, Ala.; SP—Same; Parson's, Ala.; CTY—St. Clair; RR—Central of Georgia, Margaret Br.
MS—F. M. House, Acmar, Ala.
SM—J. W. Thomason, " "
S of H—Mules and rope, elec. and steam loco, track gauge, 42 in.
S of M—Hand.
EMP—370. Last years tonnage 354,064.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Washeries.

Acton Mine; Slope; Helena Seam, 66 in. thick.
PO—Acton, Ala. SP—Same. CTY—Shelby. RR—L. & N., Acton Br.
MS—R. A. Sansing, Acton, Ala.
SM—C. A. Jones, " "
S of H—Mules and rope, steam loco. Track gauge, 42 in.
S of M—Hand.
PP—Generate power.
EMP—204. Last years tonnage 43,980.
SIZES SHIPT—Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Washeries.

ALABAMA SEMI CANNEL COAL CO.

Now Corry Coal Mining Co.

ALTOONA COAL COMPANY.

General Office—Altoona, Ala.
Vanzandt Mine; Drift; Underwood Seam, 32 in. thick.
EMP—30.
STPT—H. L. Gruman, Altoona, Ala.
MF—J. O. Vernon, Altoona, Ala.

AMERICAN FUEL COMPANY

General Office, Beltona via Warrior, Ala.
PR—C. B. Teasley, Montgomery, Ala.
TR—W. C. Scott, Beltona via Warrior, Ala.
JGS—J. D. Haper, Beltona via Warrior, Ala.
Beltona Mines; drift; Jefferson and Blue Creek Seam; 30 inches thick.
PO—Beltona via Warrior, Ala.; SP—Same; CTY—Jefferson; RR—L. & N.
S of H—Mules.
S of M—Hand.
EMP—259; Last fiscal year output 200,000 tons.
SIZES SHIPT—Run of mine.
Formerly operated by Beltona Coal & Mining Co.

AMERICAN MINING CO.

PR—G. D. O'Rear, Jasper, Ala.
PA—G. D. O'Rear, " "
GM—Cain O'Rear, " "
GS—Cain O'Rear, " "
EM—L. C. Britton, " "
SCO—Address The Company, Buyer, G. D. Sales Agent, F. A. Grider Coal Co., Birmingham, Ala.
O'Rear, Jasper, Ala.

Standard Mines; Drifts; Pratt & America Seams; 36 to 48 in. thick.
PO—America, Ala.; SP—America Junction, Ala.; CTY—Walker; RR—Southern.
MS—J. A. Love, America, Ala.
SM—Maynard O'Rear, " "
S of H—Mules. Track gauge 42 in.
S of M—Hand.
EMP—50. Last fiscal year output, 31,399 tons.
SIZES SHIPT—Run of Mine.
Old information.

ATLANTIC COAL & COKE CO.

Now Crescent Coal Co.
BANKHEAD COAL CO.
General Office, Bankhead, Ala.
GM—W. D. Leake, Bankhead, Ala.
EM—A. H. Witt, Birmingham, Ala.
SCO—Address the Company, Buyer W. Mosley, Bankhead, Ala.

Bankhead Mine; Shaft; Mary Lee Seam; 72 inches thick.
PO—Bankhead, Ala.; SP—Same; CTY—Walker; RR—No. Ala.
MS—W. H. Catha, Bankhead, Ala.
SM—W. Mosley, Bankhead, Ala.
S of H—Mules and elec. locos. Track gage 42 in.
S of M—1 Electric Cutoff.
PP—Power purchased, 3 water tube boilers, 5 pumps.
EMP—200. Last year's tonnage 178,230.
SIZES SHIPT—Run of mine, slack, lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.
Note—Successors to Caledonia Coal Co.

BARNEY COAL CO.

General Office, Cordova, Ala.
PR—T. N. Koehler, Chicago, Ill.
VP—Frank P. Koehler, Chicago, Ill.
TR—M. G. Hubbard, Cordova, Ala.
GM—Geo. C. Lewis, Cordova, Ala.
GS—J. S. Waldrop, Cordova, Ala.
PA—Geo. C. Lewis, Cordova, Ala.
CE—L. H. Sator, Cordova, Ala.
SCO—Address the company. Buyer, Oscar J. Wright, Cordova, Ala.
SA—Grider Coal Sales Agency, Birmingham, Ala.

Barney Mine; Slope; Mary Lee Seam, 36 inches thick.
PO—Cordova, Ala.; SP—Same; CTY—Walker; RR—Southern.
S of H—Mules and elec. loco. Track gage 42 in.
S of M—3 Machines.
PP—Power purchased. Transformer 2,300 to 250 volts A. C.
EMP—75. Last years tonnage 56,690.

BELTONA COAL & MINING COMPANY

Now American Fuel Company.

BENOIT COAL MINING COMPANY

General Office, 1927 Jeff. Co., Bank Bldg., Birmingham, Ala.
PR—R. H. Palmer, Jasper, Ala.
VP—Dr. E. J. Bissell, Rochester, N. Y.
TR—H. E. Bissell, Birmingham, Ala.
GM—C. S. Bissell, Birmingham, Ala.
SCO—Address the company. Buyer G. B. Rush, Benoit, Ala.
SA—Black Diamond Coal Mining Co., Birmingham, Ala.

Benoit Mine; Slope; Mary Lee Seam, 34 inches thick.
PO—Benoit, Ala.; SP—Same; CTY—Walker; RR—St. L. & S. F.
MS—Dan. McLevett, Benoit, Ala.
S of H—2 trolley pole type locos. Track gage, 42 inches.
S of M—3 shortwall machs.
PP—Power purchased. Transformer 2,200 to 550 volts A. C., M. G. set, 150 K. W., 250 volts D. C., 5 pumps.
EMP—85. Last fiscal year output 63,769 tons.
SIZES SHIPT—Run of Mine, Slack, Pea Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Washeries.

BERTHA COAL COMPANY, INC.

General Office, Parrish, Ala., R. No. 2.
PR—L. B. Musgrove, Jasper, Ala.
VP—T. J. Amis, Jasper, Ala.
TR—C. N. Atkins, Parrish, Ala., R No. 2.
GM—T. J. Amis, Jasper, Ala.
EM—C. B. Stalnaker, Jasper, Ala.
SCO—Address the Company, Buyer, C. N. Atkins, Parrish, Ala., R No. 2.

Amis Mine; Drift; Corona Seam; 30 inches thick.
PO—Parrish, Ala., R. No. 2; SP—Oakman, Ala.; CTY—Walker; RR—Southern.
MS—Sam. Robbins, Parrish, Ala., R No. 2.
S of H—Mules.
S of M—Hand.
EMP—50. Last years tonnage 21,228.
SIZES SHIPT—Run of Mine, Slack and Lump.
PREP. EQUIPT—Bar Screens.

BESSEMER COAL, IRON & LANO CO.

General Office, Birmingham, Ala.
1312 American Trust Bldg.
PR—H. L. Badham, 1312 American Trust Bldg., Birmingham, Ala.
VP—R. E. Evans, Birmingham, Ala.
TR—W. A. Reed, Birmingham, Ala.
GM—W. C. Hutcheson, " "
PA—W. C. Hutcheson, " "
GS—J. R. Pratt, Belle Ellen, Ala.
EM—D. G. Cummings, Belle Ellen, Ala.
EE—E. J. Stallard, Belle Ellen, Ala.
SCO—Address the Company, Buyer, T. L. Cowser, Belle Ellen, Ala.
SA—Grider Coal Sales Agency, Birmingham, Ala.

Belle-Elton No. 2 Mine; Slope; Youngblood Seam, 33 in. thick.
PO—Belle-Elton, Ala. SP—Same. CTY—Bibb. RR—L. & N. and Southern.
S of H—Mules and rope. Track gauge, 36 in.
S of M—Hand.
PP—3 water tube boilers, total 900 H. P., 2 gen. units, 2,200 volts A. C., 9 pumps.
EMP—300. Last years tonnage 148,610.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT.—Washery.

Belle-Elton No. 8 Mine; Drift; Youngblood Seam, 36 in. thick.
PO—Belle-Elton, Ala. SP—Masena, Ala. CTY—Bibb. RR—Sou. L. & N.
S of H—Mules and rope; track gauge, 42 in.
S of M—Hand.
EMP—100. Last years tonnage 47,506.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT.—Washery.

Belle-Elton No. 1 and 7 Mine; Drift and Slope; Thompson Seam, 60 in. thick.
PO—Belle-Elton, Ala. SP—Same. CTY—Bibb. RR—L. & N. and Sou.
S of H—Mules and rope, 1 elec. loco. Track gauge, 42 in.
S of M—Hand.
PP—2,200 volts A. C., 250 volts D. C. EMP—50. Last years tonnage 39,012.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT.—Bar Screens.

HIBB COAL CO.

General Office, 504 American Trust Bldg Birmingham, Ala.
 PR—J. B. Robinson, Birmingham, Ala.
 TR—J. B. Robinson, Birmingham, Ala.
 GM—C. C. Huckabee, Blocton, Ala.
 GS—C. C. Huckabee, Blocton, Ala., R. F. D. No. 2.
 PA—B. M. Cross, Birmingham, Ala.
 EM—C. C. Huckabee, Blocton, Ala.
 SCO—Address the Company, Buyer, R. B. Carter, Blocton, Ala., R. F. D. No. 2.
 SA—J. B. Robinson & Co., Birmingham, Ala.

Norris Mine; Slope; Yessies Seam; 36 in. thick.
 PO—Blocton, Ala.; SP—Norris, Ala.; CTY—Bibb; RR—L. & N., Southern.
 S of H—Rope. Track gage 36 in.
 PP—1 125 H. P. fire tube boiler, 3 pumps.
 EMP—75. Last years tonnage 12,342.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

BIG FOUR COAL COMPANY

General Office, 404-6 Brown Marx Bldg. Birmingham, Ala.
 PR—E. P. Kidd, Birmingham, Ala.
 VP—S. V. Shelburne, Birmingham, Ala.
 TR—E. P. Kidd, Birmingham, Ala.
 GM—W. M. Kelly, Birmingham, Ala.
 GS—C. A. Holt, North Birmingham, Ala.
 PA—S. V. Shelburne, Birmingham, Ala.
 SA—S. V. Shelburne Sales Co., 404-6 Brown Marx Bldg., Birmingham, Ala.

Big Four Mine; Slope; Jefferson Seam, 48 inches thick.
 PO—North Birmingham, Ala.; SP—Same. CTY—Jefferson; RR—Southern.
 S of H—Mules and main and tail rope. Track gage 36 inches.
 S of M—Hand.
 PP—Power purchased, 3 pumps.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

BIG RIDGE COAL COMPANY.

Now Blue Ridge Coal Company.

BIG SANDY IRON & STEEL CO.

General Office, 623 First National Bank Bldg., Birmingham, Ala.
 PR—G. O. H. Howard, 62 Cedar St. New York, N. Y.
 VP—W. E. Leake, Birmingham, Ala.
 ASST. TR—A. W. Reed, Coaling, Ala.
 PA—A. W. Reed, Coaling, Ala.
 CE—H. M. McFarland, Birmingham, Ala.
 EM—Brooks Miller, Coaling, Ala.
 SCO—Cedar Cove Store, Buyer, J. T. Kizziah, Coaling, Ala.
 SA—D. H. Brown & Co., Birmingham, Ala.
 Cedar Cove Mine; Slope; Mildale Seam; 30 inches thick.
 PO—Coaling, Ala.; SP—Same; CTY—Tuscaloosa; RR—Southern.
 MS—A. W. Reed, Coaling, Ala.
 S of H—Mules, rope and comp. air locos. Track gage 48 inches.
 S of M—Comp. air punchers.
 PP—2 100 H. P. fire tube boilers, 3 pumps.
 EMP—72. Last years tonnage 31,103.
 SIZES SHIPT—Run of Mine.

BIG WARRIOR COAL COMPANY

Now Mt. Carmel Coal Co.

BIRMINGHAM CLAY PRODUCTS CO.

General Office, Woodward Bldg., Birmingham, Ala.
 PR—E. J. Lee Rust, Birmingham, Ala.
 VP—Guy S. Amos, Birmingham, Ala.
 TR—E. J. Lee Rust, Birmingham, Ala.
 GM—Guy S. Amos, Birmingham, Ala.
 GS—E. J. G. Putman, Birmingham, Ala.
 PA—J. G. Putman, Birmingham, Ala.
 CE—Motley & Dryer, Birmingham, Ala.
 EM—Motley & Dryer, Birmingham, Ala.
 EE—Geo. R. Houston, Birmingham, Ala.
 SCO—Address the Company, Buyer, W. G. Phillips, S.K. R.F.D. No. 3, Warrenton, Ala.
 GEN. SALES MGR—I. W. Sibley, Birmingham, Ala.

Langley Nos. 1 and 2 Mine; Drift; Black Creek Seam, 24-36 inches thick.
 PO—Warrior, Ala.; SP—Same. CTY—Jefferson; RR—L. & N., Southern.
 MS—Will Gibbs, R.F.D. No. 3, Warrenton, Ala.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 PP—Generate power. 3 fire tube boilers, 400 H. P., 2 gen. units.
 EMP—35. Last years tonnage 15,000.
 SIZES SHIPT—Run of Mine.

BIRMINGHAM-TRUSSVILLE IRON CO.

General Office, Birmingham, Ala.
 PR—E. A. Shedd, Chicago, Ill.
 TR—C. C. Shedd, Birmingham, Ala.
 GM—C. C. Shedd, Birmingham, Ala.
 Labuco Mine; Drift; Big Seam, 58 in. thick.
 PO—Labuco, Ala.; SP—Colta, Ala.; CTY—Jefferson; RR—L. & N.
 MS—A. Coats, Labuco, Ala.

S of H—Mules and elec. loco. Track gage 40 inches.
 S of M—Elec. punchers and shortwall machs.
 PP—3 fire tube boilers, total 375 H. P. 180 K. W. gen. unit, 250 vol. D. C.
 EMP—250. Daily tonnage 700.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Washeries.

BIRMINGHAM TULCALOOSA COAL CO.

Operations abandoned.

BIRMINGHAM WATER WORKS (THE)

General Office, 2114 First Ave., Birmingham, Ala.
 PR—M. F. Riley, 50 Broad St., New York, N. Y.
 VP—H. H. Horner, Birmingham, Ala.
 TR—H. H. Horner, Birmingham, Ala.
 GM—J. H. Purdy, Pittsburgh, Pa.
 GS—H. H. Horner, Birmingham, Ala.
 PA—H. F. Barnard, 50 Broad St., New York, N. Y.

Cahaba Mine; Slope; Harkness Seam, 36 to 48 in. thick.
 PO—R. F. D. No. 4, Birmingham, Ala.; SP—Same; CTY—Jefferson.
 MS—J. A. Yandaveer, R. F. D. No. 4, Birmingham, Ala.
 S of H—Mules, Rope and 2 steam locos. Track gage 32 in.
 PP—2 return tubular boilers 50-80 H. P. Motor driven fan 440 volts D. C. 1 pump.
 EMP—30. Last years tonnage 31,820.

BLACK CREEK COAL CO.

General Office, Nauvoo, Ala.
 PR—T. L. Sharpe, Nauvoo, Ala.
 VP—J. B. Whitfield, Demopolis, Ala.
 TR—T. L. Sharpe, Nauvoo, Ala.
 GM—Wm. Cook, Nauvoo, Ala.
 GS—Wm. Cook, Nauvoo, Ala.
 PA—T. L. Sharpe, Nauvoo, Ala.
 CE—A. H. Witt, Birmingham, Ala.
 EM—Wm. Cook, Nauvoo, Ala.
 SCO—Address the Company, Buyer, T. L. Sharpe, Nauvoo, Ala.
 SA—Grider Coal Sales Agency, Birmingham, Ala.

No. 1 Mine; Drift; Black Creek Seam, 36 in. thick.
 PO—Nauvoo, Ala.; SP—Same; CTY—Walker; RR—Southern.
 S of H—Mules. Track gage, 40 in.
 S of M—3 comp. air punchers.
 PP—2 90 H. P. fire tube boilers, 2 pumps.
 EMP—75. Last years tonnage 26,931 (for both mines).
 SIZES SHIPT—Run of Mine, Steam Lump.
 PREP. EQUIPT—Shaker Screens.
 No. 2 Mine; Drift; Black Creek Seam, 26 in. thick.
 PO—Nauvoo, Ala.; SP—Same; CTY—Walker; RR—Southern.
 S of H—Mules. Track gage, 40 in.
 S of M—3 comp. air puncher machs.
 PP—3 fire tube boilers, 170 H. P., 3 pumps.
 SIZES SHIPT—Run of mine, Steam Lump.
 PREP. EQUIPT—Shaker Screens.

BLAIR COAL CO.

General Offices—Tuscaloosa, Ala.
 PR—F. G. Blair, Tuscaloosa, Ala.
 TR—E. L. Clarkson, " "
 GM—F. G. Blair, Tuscaloosa, Ala.
 GS—S. W. Boyd, R. F. D. No. 4, Tuscaloosa, Ala.
 PA—F. G. Blair, Tuscaloosa, Ala.
 CE—C. M. Ayers, Holt, Ala.
 SCO—Address the company, Buyer, F. G. Blair, Tuscaloosa, Ala.
 Blair Mine; Drift; Brockwood Seam; 42 in. thick.
 PO—Tuscaloosa, Ala.; SP—Same; CTY—Tuscaloosa; RR—M. & O.
 S of H—Mules. Track gage 30 in.
 S of M—Hand.
 EMP—12. Last years tonnage 3,600.
 SIZES SHIPT—Run of Mine.

BLOCTON CAHABA COAL CO.

General Office, Coleanor, Ala.
 VP—W. E. Henley, Piper, Ala.
 TR—W. E. Henley, Piper, Ala.
 GM—W. E. Henley, Piper, Ala.
 GS—Jas. Wilcox, Piper, Ala.
 PA—B. E. Sherrod, Coleanor, Ala.
 EE—W. P. Randle, Coleanor, Ala.
 SCO—Address the Company, Buyer, F. N. Watts, Coleanor, Ala.
 SA—H. S. Hall, Birmingham, Ala.
 Coleanor Mine; Slope; Thompson Seam, 60 in. thick.
 PO—Coleanor, Ala.; SP—Same; CTY—Bibb; RR—L. & N., Southern.
 MS—Jas. Wilcox, Piper, Ala.
 S of H—Mules.
 S of M—Hand.
 PP—Power purchased.
 EMP—175.
 SIZES SHIPT—Run of Mine, Slack, Pca, Nut, Egg, Lump.
 PREP. EQUIPT—Shaking Screens and Washer.

BLOCTON EXPORT COAL COMPANY

General Office, Blocton, Ala.
 PR—G. W. Randal, Blocton, Ala.
 VP—J. M. Duncan, Blocton, Ala.
 TR—W. R. Young, West Blocton, Ala.
 GM—J. M. Duncan, Blocton, Ala.
 GS—J. M. Duncan, Blocton, Ala.
 PA—G. W. Randal, Blocton, Ala.
 EM—R. A. Burge, Birmingham, Ala.
 SA—E. O. Richardson, Okolona, Miss.

Tico Mine; Slope; Thompson Seam; 60 inches thick.
 PO—Blocton, Ala.; SP—Same; CTY—Bibb; RR—L. & N., Southern.
 S of H—2 mules, rope. Track gage 36 inches.
 S of M—Hand.
 PP—1 64 H. P., 1 80 H. P. fire tube boilers, 3 pumps.
 EMP—40.
 SIZES SHIPT—Run of Mine, Lump.
 PREP. EQUIPT—Bar Screens.

BLOCTON MINING COMPANY

General Office, West Blocton, Ala.
 PR—G. W. Randal, West Blocton, Ala.
 VP—W. R. Young, West Blocton, Ala.
 TR—W. R. Young, West Blocton, Ala.
 GM—Pat Shannan, West Blocton, Ala.
 GS—J. H. Lawrence, West Blocton, Ala.
 PA—W. R. Young, West Blocton, Ala.
 EE—W. J. Lawrence, West Blocton, Ala.
 SA—T. H. Benners & Co., Birmingham, Ala.

Howell's (or Klondyke) Mine; Shaft; Woodstock Seam, 32 inches thick.
 PO—Blocton, Ala.; SP—Same; CTY—Bibb; RR—A. G. S. L. & N., Sou., M. & O.
 S of H—Mules and elec. loco.
 S of M—Hand.
 PP—Power purchased. Transformer 2300 to 220 volts A. C.
 EMP—75. Last years tonnage 33,138.
 SIZES SHIPT—Run of Mine.
 NOTE—Formerly operated by Howell Mining Co.

BLUE RIDGE COAL COMPANY

General Office, Jasper, Ala.
 PR—J. S. Freeman, Jasper, Ala.
 VP—J. P. Mosgrove, Jasper, Ala.
 TR—W. S. Freeman, Jasper, Ala.
 GM—J. S. Freeman, Jasper, Ala.
 GS—W. M. Mason, Jasper, Ala., R. F. D. No. 5.
 PA—F. B. Layne, Jasper, Ala., R. F. D. No. 5.
 SCO—Address the Company, Buyer, F. B. Layne, Jasper, Ala.

Big Ridge Mine; Drift; Pratt & Nickel Plate Seam; 20-40 inches thick.
 PO—Jasper, Ala., R. F. D. No. 5; SP—America, Ala.; CTY—Walker; RR—Southern.
 S of H—Mules and 1 7-ton steam loco. Track gage 40 in.
 S of M—Hand.
 PP—1 water tube boiler.
 EMP—50. Daily output, 150 tons.
 SIZES SHIPT—Run of Mine.
 Old Information.

BORDEN COAL COMPANY.

General Office, 620 Woodward Bldg., Birmingham, Ala.
 PR—J. W. Lewis, Birmingham, Ala.
 VP—Norman Gunn, Birmingham, Ala.
 TR—Joshua Lewis, " "
 GM—J. W. Lewis, " "
 GS—T. W. Capps, Cordova, Ala.
 PA—J. W. Lewis, Birmingham, Ala.
 CE—W. L. Turner, Birmingham, Ala.
 EM—W. L. Turner, Birmingham, Ala.
 EE—W. L. Turner, Birmingham, Ala.
 SCO—Address the Company, Buyer, W. L. Cary, Cordova, Ala.
 SA—Litchman Coal & Trading Co., Birmingham, Ala.

Borden Mint; Shaft; Mt. Carmel Seam; 30 in. thick.
 PO—Cordova, Ala.; SP—Same; CTY—Walker, RR—Southern.
 S of H—Mules. Track gage, 42 in.
 S of M—Shortwall machs.
 PP—Power purchased, transformer 2,380 to 220 volts, A. C. 2 pumps.
 EMP—50. Last years tonnage 40,000.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

BRILLIANT COAL CO.

General Office, Birmingham, Ala.
 PR—David Roberts, Jr., Birmingham, Ala.
 VP—E. W. Rucker, Birmingham, Ala.
 GM—David Roberts, Jr., " "
 TR—William Beall, " "
 CE—Sumter Lea, Jr., " "
 EM—Sumter Lea, Jr., " "
 EE—Chas. Berrhill, Brilliant, Ala.
 SA—Eugene Grider Coal Co., Birmingham, Ala.

Brilliant Mine; Drift; Black Creek Seam, 20 to 30 in. thick.
 PO—Brilliant, Ala.; SP—Same. CTY—Marion, RR—Illinois Central.
 MS—W. J. Hinz, Brilliant, Ala.
 S of H—Trolley pole type loco. Track gage 36 inches.
 S of M—16 Comp. air and 3 shortwall mach.
 PP—2 fire tube boilers, 300 H. P. and

2 water tube boilers, 300 H. P.
 2—150 K. W. gen. units, 250 volts D. C., 9 pumps.
 EMP—150. Last years tonnage 50,127.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

Calumet Mine; Slope; Big Seam, 48 to 96 in. thick.
 PO—Jasper, Ala.; SP—Calumet, Ala.; CTY—Walker; RR—Northern Ala.
 MS—S. W. Jackson, Jasper, Ala.
 S of H—Mules. Elec. trolley pole type locos. Track gage 36 in.
 S of M—Hand.
 PP—Power purchased. 2 pumps.
 EMP—150. Last year tonnage 94,113.
 SIZES SHIPT—Run of Mine, Lump.
 PREP. EQUIPT—Bar Screens, Picking Tables.

BROOKSIDE-PRATT MINING COMPANY.

General Office, Birmingham, Ala.
 PR—Jas. Bonnyman, Birmingham, Ala.
 VP—A. R. Long, Birmingham, Ala.
 TR—John Bonnyman, Birmingham, Ala.
 GM—A. R. Long, Birmingham, Ala.
 GS—A. R. Long, Birmingham, Ala.
 PA—John Bonnyman, Birmingham, Ala.
 CE—H. H. Gary, Birmingham, Ala.
 EM—H. H. Gary, Birmingham, Ala.
 SCO—Address the Company, Buyer, John Bonnyman, Birmingham, Ala.
 SA—Adams, Rowe & Norman, Inc., Birmingham, Ala.

Coalmont Mine; Drift; Clark & Thompson Seams, 54 in. thick.
 PO—Maylene, Ala.; SP—Coalmont, Ala.; CTY—Shelby; RR—L. & N., A. B. & A.
 MS—Frank Long, Maylene, Ala.
 SM—L. P. Robinson, Maylene, Ala.
 S of H—Mules and rope. Track gage, 36 in.
 S of M—Hand.
 PP—Power purchased. 6 pumps.
 EMP—131. Last years tonnage 59,405.
 SIZES SHIPT—Slack, Lump.
 PREP. EQUIPT—Washeries.

Carbon Hill Mine; Stripping; Jagger Seam, 60 in. thick.
 PO—Carbon Hill, Ala.; SP—Same; CTY—Walker; RR—St. L. & S. F.
 MS—H. P. Culligan, Carbon Hill, Ala.
 SM—P. N. Lee, Carbon Hill, Ala.
 S of H—Mules and steam loco. Track gage, 36 inches.
 S of M—Hand.
 PP—Power purchased. 5 pumps.
 EMP—100. Last years tonnage 115,338.
 SIZES SHIPT—Egg, Lump, Steam.

Cardiff No. 3 Mine; Drift; Pratt & Nickel Plate Seam, 48 in. thick.
 PO—Cardiff, Ala.; SP—Same; CTY—Jefferson; RR—Southern.
 MS—F. T. Palmer, Cardiff, Ala.
 SM—H. E. Sykes, Cardiff, Ala.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 EMP—30. Last years tonnage 12,061.
 SIZES SHIPT—Run of Mine.

Pinckney No. 1 Mine; Drift; Nickle Plate & Pratt Seam, 52 in. thick.
 PO—Cardiff, Ala.; SP—Same; CTY—Jefferson; RR—Southern.
 MS—F. T. Palmer, Cardiff, Ala.
 SM—H. E. Sykes, Cardiff, Ala.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 EMP—27. Last years tonnage 10,617.
 SIZES SHIPT—Run of Mine.

Cardiff No. 1 Mine; Drift; Nickle Plate Seam, 32 in. thick.
 PO—Cardiff, Ala.; SP—Same; CTY—Jefferson; RR—Southern.
 MS—F. T. Palmer, Cardiff, Ala.
 SM—H. E. Sykes, Cardiff, Ala.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 EMP—37. Last years tonnage 7,220.
 SIZES SHIPT—Run of Mine.

Cardiff No. 2 Mine; Drift; Nickle Plate Seam, 34 in. thick.
 PO—Cardiff, Ala.; SP—Same; CTY—Jefferson; RR—Southern.
 MS—F. T. Palmer, Cardiff, Ala.
 SM—H. E. Sykes, Cardiff, Ala.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 EMP—17. Last years tonnage 23,140.
 SIZES SHIPT—Run of Mine.

Pinckney No. 2 Mine; Drift; Nickle Plate Seam, 30 in. thick.
 PO—Cardiff, Ala.; SP—Same; CTY—Jefferson; RR—Southern.
 MS—F. T. Palmer, Cardiff, Ala.
 SM—H. E. Sykes, Cardiff, Ala.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 EMP—48. Last years tonnage 14,322.
 SIZES SHIPT—Run of Mine.

Pinckney No. 4 Mine; Drift; Pratt Seam, 32 in. thick.
 PO—Cardiff, Ala.; SP—Same; CTY—Jefferson; RR—Southern.

(Continued on Next Page)

Brookside-Pratt Mining Co.—Cont.
MS—F. T. Palmer, Cardiff, Ala.
SM—H. E. Syme, Cardiff, Ala.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
EMP—50. Last years tonnage 44,112.
SIZES SHIPT—Run of Mine.

Coalburg Mine; Drift; Pratt Seam, 42 in. thick.
PO—Coalburg, Ala.; SP—Same; CTY—Jefferson, RR—Southern.
MS—J. C. Neill, Coalburg, Ala.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
EMP—16. Last years tonnage 10,030.
SIZES SHIPT—Run of Mine.

BROOKWOOD MINING COMPANY
Out of Business.

BRYAN COAL CORPORATION.
Now being operated by the Nelson Coal Corporation.

BURNWELL COAL MINING CO.
General Office, Burnwell Mines, Ala.
PR—S. L. Yerkes, Birmingham, Ala.
VP—P. A. Grider, Birmingham, Ala.
TR—P. A. Grider, Birmingham, Ala.
GM—H. E. Fleetwood, Burnwell Mines, Ala.
GS—H. E. Wooten, Burnwell Mines, Ala.
SECY—H. E. Fleetwood, Burnwell Mines, Ala.
AUOITOR—J. F. Fleetwood, Burnwell Mines, Ala.
PA—H. E. Fleetwood, Burnwell Mines, Ala.
EE—Sam. Miller, Samoset, Ala.
SCO—Address the Company, Buyer, H. E. Fleetwood, Burnwell Mines, Ala.
SA—Grider Coal Sales Agency, Birmingham, Ala.

Burnwell Mine; Slope; Mary Lee Seam, 36 to 72 in. thick.
PO—Burnwell Mines, Ala. SP—Same. CTY—Walker, RR—Southern.
MS—J. C. Wooten, Burnwell Mines, Ala.
SM—A. J. Clark, Burnwell Mines, Ala.
S of H—Mules and Rope. Track gage, 36 in.
S of M—Hand.
PP—Power purchased, 550 volts A. C. EMP—75. Last years tonnage 30,000.
SIZES SHIPT—Run of Mine.

Samoset Mine; Slope; Mary Lee Seam, 33 to 84 in. thick.
PO—Samoset, Ala. SP—Same. CTY—Walker, RR—Frisco, Ill. Central MS—Sam. Miller, Samoset, Ala.
SM—J. W. Brasfield, Samoset, Ala.
S of H—Rope. Track gage, 36 in.
S of M—Hand.
PP—Power purchased, 550 volts A. C. EMP—75. Last years tonnage 30,000.
SIZES SHIPT—Run of Mine.
Note—This mine formerly, Samoset Coal Company.

BUTTAHATCHEE COAL CO.
Now Glen Mary Coal Co.

BYNON, WILLIAM.
Now Thomas Creek Coal Co.

CAHABA RED ASH COAL CO.
General Office, West Blocton, Ala.
PR—L. R. Kitchum, Birmingham, Ala.
VP—J. D. Welch, West Blocton, Ala.
TR—F. A. Payne, Brookside, Ala.
GM—J. D. Welch, West Blocton, Ala.
GS—J. D. Welch, West Blocton, Ala.
PA—J. D. Welch, West Blocton, Ala.
CE—J. D. Welch, West Blocton, Ala.

Welch Mine; Drift; Wadsworth Seam; 20-40 inches thick.
PO—West Blocton, Ala.; SP—Blocton, Ala.; CTY—Bibb; RR—Southern.
S of H—Mules. Track gage, 36 inches.
S of M—Hand.
SIZES SHIPT—Run of Mine.

CALEDONIA COAL COMPANY.
Now Bankhead Coal Company.

CALHOUN LAND & MINING COMPANY
General Office, Jacksonville, Ala.
PR—W. J. Greenleaf, Jacksonville, Ala.
VP—T. J. Waldrep, Coaling, Ala.
TR—H. V. Weaver, Jacksonville, Ala.
GM—T. J. Waldrep, Coaling, Ala.
GS—T. J. Waldrep, Coaling, Ala.
PA—T. J. Waldrep, Coaling, Ala.
EM—T. J. Waldrep, Coaling, Ala.

Nos. 1 & 2 Mine; Drift; Carter Seam; 32 inches thick.
PO—Coaling, Ala.; SP—Same; CTY—Tuscaloosa; RR—A. G. S.
MS—W. M. Smith, Coaling, Ala.
S of H—Mules. Steam loco. Track gage 30 and 36 inches.
S of M—Hand, shortwall mach.
PP—Power purchased, Transformer 500 to 220 volts A. C. M. G. Set, 1—50 K. W., 250 volts D. C., 2 pumps.
EMP—60. Last years tonnage 9,000.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by the Minola Coal Company,

CANON-SHEPHERD COAL CO.
General Office, Tuscaloosa, Ala.
PR—Murray Cannon, Tuscaloosa, Ala.
VP—Fleewood Rice, Tuscaloosa, Ala.
TR—Mrs. J. W. Road, Tuscaloosa, Ala.
GM—J. L. Harris, Cottondale, R. F. D. 2, Ala.
GS—Richard Gray, Cottondale, R. F. D. 2, Ala.
PA—T. E. Diekey, Cottondale, Ala.
CE—A. M. Ayers, Tuscaloosa, Ala.
SCO—Address the Company, Buyer, T. E. Diekey, Cottondale, Ala., R. F. D. 2.
SA—Adams, Rowe and Norman, Birmingham, Ala.

Gilmore Mine; Drift; Brookwood Seam; 42 in. thick.
PO—Cottondale, R. F. D. 2, Ala.; SP—Shiras, Ala.; CTY—Tuscaloosa; RR—M. & O.
S of H—Mules and steam locos. Track gage 40 inches.
S of M—Hand.
PP—1-30 H. P. water tube boiler, 2 pumps.
EMP—75. Last years tonnage 39,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—R-volving Screens, Picking Tables, Washeries.

CARBON HILL COAL & MINING CO.
General Office, 212 Gary Bldg., Gary, Ind.
PR—Joseph W. Ferman, Gary, Ind.
VP—S. H. Hackett, Leffers Ford, Ind.
TR—E. O. Barger, Gary, Ind.
GM—E. O. Barger, Gary, Ind.
GS—John Smith, Carbon Hill, Ala.
PA—Joseph W. Ferman, Gary, Ind.
CE—J. W. Jeffries, Pittsburgh, Pa.
EM—J. W. Jeffries, Pittsburgh, Pa.

Carbon Hill Nos. 1 and 2 Mines; Drift and Slope; Brilliant No. 7 Seam; 42 inches thick.
PO—Carbon Hill, Ala.; SP—Same; CTY—Walker; RR—St. L. & S. F.
S of H—Mules and rope, gasoline loco. Track gage 36 inches.
S of M—Hand, chain breast mach.
EMP—50. Daily output, 300 tons.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Bar and Shaker Screens. Old Information.

CARBON HILL CONSOLIDATED COAL CO.
General Office, Carbon Hill, Ala.
PR—Harry Michael, Carbon Hill, Ala.
TR—G. A. Kropp, Carbon Hill, Ala.
PA—G. A. Kropp, Carbon Hill, Ala.

Carbon Hill Mine; Drifts; Slopes; Strip-ping; Jagger Seam, 42 in. thick.
PO—Carbon Hill, Ala. SP—Same. CTY—Walker, RR—Frisco.
MS—J. B. Rose, Carbon Hill, Ala.
S of H—Mules and dunkey loco. Track gage 36 inches.
S of M—Hand.
PP—1 100 H. P. boiler, 2 pumps.
EMP—90.
SIZES SHIPT—Run of Mine.
Note—Successors to J. A. Perry Coal Co., and Williams & Fowler Coal Co.

CARBON HILL WATER & LIGHT CO.
PR—A. C. Ramsey, Carbon Hill, Ala.
TR—L. C. Smith, " "
MS—L. C. Smith, " "

No. 1 Mine; Drift; Cager Seam, 54 in. thick.
PO—Carbon Hill, Ala. SP—Same. CTY—Walker, RR—Frisco.
S of H—Mules.
S of M—Hand.
PP—2 gen. units, 2300 volts A. C., 3 phase, 60 cycles.
Last fiscal year output, 1800 tons.
SIZES SHIPT—Run of Mine.
Note—Mine for own use only.
Old information.

CENTRAL ALABAMA COAL CO.
General Office, Kimberly, Ala.
PR—H. L. Falk, New Orleans, La.
TR—J. P. Pearson, Kimberly, Ala.
GM—J. P. Pearson, " "
PA—J. P. Pearson, " "
EM—A. H. Witt, Birmingham, Ala.
MS—J. O. Duocan, Kimberly, Ala.
SCO—Address the Company, Buyer, J. W. Morris, Kimberly, Ala.

Kimberly No. 2 Mine; Slope; Jefferson Seam, 34 in. thick.
PO—Kimberly, Ala. SP—Same. CTY—Jefferson, RR—L. & N.
SM—J. W. Morris, Kimberly, Ala.
S of H—Mules and 2 elec. locos. Track gage, 36 in.
S of M—Hand.
PP—Purshas power, 250 volts D. C., 6 pumps.
EMP—95. Last fiscal year output, 54,729 tons.
SIZES SHIPT—Run of Mine.
Kimberly No. 3 Mine; Slope; Jefferson Seam, 34 in. thick.
PO—Kimberly, Ala. SP—Same. CTY—

Jefferson, RR—L. & N.
MS—S. W. Nordan, Kimberly, Ala.
S of H—Mules and 2 elec. storage locos. Track gage, 26 in.
S of M—Hand.
PP—Purchase power, 250 volts D. C., water tube boiler, 3 pumps.
EMP—30. Last fiscal year output, 81,938 tons.
Old Information

CENTRAL IRON & COAL CO
General Office, Holt, Ala.
PR—Geo. A. Harder, New York, N. Y.
First VP—R. R. Rust, New York, N. Y.
GM—L. I. Briondall, Holt, Ala.
GS—E. C. Morgan, Holt, Ala.
PA—W. M. Joyner, Holt, Ala.
EM—T. Burke, Kellerman, Ala.
SCO—Kellerman Store, Buyer, T. E. Tillery, Kellerman, Ala.

Kellerman Mine; Drift; Brookwood and Middle Seam; 48 to 84 in. thick.
PO—Kellerman, Ala.; SP—Frt. Same; Exp. Searles, Ala.; CTY—Tuscaloosa; RR—M. & O.
MS—C. E. Crandall, Kellerman, Ala.
S of H—14 elec., 4 trolley, 7 comb. trolley and storage battery and 3 storage battery locos. Track gage 41 in.
S of M—Hand.
PP—Power purchased, transformer 2,300 volts A. C. rotary converter, 110-220 volts D. C. & A. C. 13 pumps.
EMP—400. Last years tonnage 350,000.
COKE OVENS—60 By-Product.
SIZES SHIPT—Run of Mine, Slack.
PREP. EQUIPT—Crusher, Screens.

CHABERT COAL COMPANY
General Office, Corona, Ala.
PR—C. P. Chabert, Oakman, Ala.
VP—L. E. Chabert, Ludlow, Ky.
TR—Glen E. Hill, Corona, Ala.
GM—C. P. Chabert, Oakman, Ala.
GS—E. G. Gibson, Corona, Ala.
PA—B. H. Richardson, Corona, Ala.
CE—P. S. Haley, Corona, Ala.
EM—P. S. Haley, Corona, Ala.
SCO—Address the Company, Buyer, B. H. Richardson, Corona, Ala.
SA—Jasper Land Co., Jasper, Ala.

West Corona Mine; Slope; West Corona Seam; 34 inches thick.
PO—Corona, Ala.; SP—Same; CTY—Walker; RR—Southern.
SM—B. H. Richardson, Corona, Ala.
S of H—Mules, rope, comp. air and steam locos. Track gage 36 in.
S of M—10 comp. air machs.
PP—3 fire tube boilers, air compressors, 5 pumps.
EMP—110.
SIZES SHIPT—Run of Mine, lump.
PREP. EQUIPT—Picking Tables.

CHEROKEE COAL COMPANY
PR—Lee W. Murphy, Gadsden, Ala.
Cherokee Mine; Altoona Block Creek Seam, 42 in. thick.
PO—Altoona, Ala.; SP—Same; CTY—Etowah; RR—L. & N., Birmingham Div.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine.
Old Information.

CHILDERS, S. J. & SON
General Office, Jasper, Ala.
PR—D. J. Childers, Jasper, Ala.
VP—T. M. Childers, Jasper, Ala.
TR—S. J. Childers & Son, Jasper, Ala.
GM—T. M. Childers, Jasper, Ala.
PA—S. J. Childers, Jasper, Ala.
SA—S. J. Childers, Jasper, Ala.
Childers Mine; Drift; Coal City Seam; 60 inches thick.
PO—Jasper, Ala.; SP—Same; CTY—Walker; RR—Sou. & Frisco.
S of H—Mule. Track gage 36 inches.
S of M—Hand.
EMP—5. Last years tonnage 3,000.

CLIMAX COAL COMPANY
Operations abandoned.

COMMERCIAL COAL CO.
Out of Business.

COOSA PORTLAND CEMENT CO.
Out of business.

CORDOVA WARRIOR COAL COMPANY
General Office, Cordova, Ala.
PR—Dr. J. M. Miller, Cordova, Ala.
VP—E. W. Long, Jasper, Ala.
TR—J. F. Raigauer, Cordova, Ala.
GM—S. D. Kilgore, Cordova, Ala.
GS—S. D. Kilgore, Cordova, Ala.
PA—S. D. Kilgore, Cordova, Ala.
EM—C. B. Stalnaker, Jasper, Ala.
SA—S. D. Kilgore, Cordova, Ala.

Cordova Warrior Mine; Shaft; Mt. Carmel Seam; 30 inches thick.
PO—Cordova, Ala.; SP—Same; CTY—Walker; RR—St. L. & S. F.
S of H—Mules. Track gage 36 inches.
S of M—Hand.

PP—Power purchased, transformer 2,200 to 220 volts A. C. 2 pumps.
EMP—38. Last years tonnage 25,391.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.

CORONA COAL COMPANY.
General Office, Birmingham, Ala.
PR—Morris Adler, Birmingham, Ala.
VP—L. L. Adler, Birmingham, Ala.
TR—J. E. Adler, Birmingham, Ala.
MGR—G. M. Powell, Coal Valley, Ala.
Traffic Manager—A. W. Vogtle, Birmingham, Ala.
PA—H. D. Patecock, Coal Valley, Ala.
EM—P. S. Haley, Coal Valley, Ala.
CE—Martin J. Lide, Birmingham, Ala.
SCO—Address the company Buyer, J. W. Porter, Corona, Ala.

Townley No. 1 Mine; Shaft; Jagger Seam, 60 in. thick.
PO—Townley, Ala. SP—Same. CTY—Walker, RR—St. L. & S. F.
SM—L. L. Allison, Allison, Ala.
S of H—Mules. Track gage, 10 in.
S of M—18 comp. air machs.
PP—8 fire tube boilers, total H. P., 4 air comp., 1 10 K. W. gen unit, 110 volts D. C., lightning oil, 7 pumps.
EMP—270. Last years tonnage 203,198.
SIZES SHIPT—Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Washeries, Loading Booms.

Townley No. 2 Mine; Shaft; Jagger Seam, 60 in. thick.
PO—Townley, Ala. SP—Same. CTY—Walker, RR—St. L. & S. F.
SM—L. L. Allison, Townley, Ala.
S of H—Mules and Rope. Track gage, 36 in.
S of M—11 comp. air machs.
PP—6 fire tube boilers, total 600 H. P., 2 air comp., 7 pumps.
EMP—165. Last years tonnage 96,008.
SIZES SHIPT—Slack, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Washeries.

Corona No. 12 Mine; Slope; Corona Seam; 42 in. thick.
PO—Corona, Ala.; SP—Same; CTY—Walker; RR—Sou.
MS—R. S. Villadsen, Corona, Ala.
SM—W. A. Martin, Corona, Ala.
S of H—Mules, rope. Track gage 36 in.
S of M—6 comp. air punchers.
Last years tonnage 59,220.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

Patton No. 13 Mine; Drift; Corona Seam; 38 in. thick.
PO—Patton, Ala. SP—Same. CTY—Walker, RR—Southern.
MS—T. E. Davidson, Patton, Ala.
SM—W. D. Allison, Patton, Ala.
S of H—2 elec. locos. Track gage 36 in.
S of M—2 elec. machs.
PP—8 pumps.
EMP—200. Last years tonnage 77,277.
SIZES SHIPT—Slack, Pea, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

Coal Valley No. 11 Mine; Drift; Corona Seam, 34 in. thick.
PO—Coal Valley, Ala.; SP—Same and Oakman, Ala.; CTY—Walker; RR—Southern.

MS—Robert S. Shook, Coal Valley, Ala.
SM—R. S. McLendon, Coal Valley, Ala.
S of H—Mules and 6 trolley pole type locos. Track gage, 42 in.
S of M—12 shortwall machs.
PP—Power purchased, transformer 44-000 to 2300 volts A. C., M. G. sets, 250 volts D. C., 8 pumps.
EMP—500. Last years tonnage 197,403.
SIZES SHIPT—Run of Mine, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms, Washeries.

Coal Valley No. 10 Mine; Drift; Corona Seam, 42 in. thick.
PO—Coal Valley, Ala.; SP—Frt. Coal Valley; Exp. Oakman, Ala.; CTY—Walker; RR—Southern.
MS—Robert S. Shook, Coal Valley, Ala.
SM—R. H. McLinden, Coal Valley, Ala.
S of H—Mules and 1 trolley pole type loco. Track gage, 36 in.
S of M—1 shortwall mach.
PP—Power purchased, transformer 44-000-2300 volts A. C., motor gen. sets, 250 volts D. C., 4 pumps.
EMP—40. Last years tonnage 17,143.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

South Corona Mine; Slope; Corona Seam, 46 in. thick.
PO—Corona, Ala.; SP—Same; CTY—Walker; RR—Southern.
MS—Robert S. Shook, Corona, Ala.
S of H—Mules, main and tall rope. Track gage 36 in.
S of M—5 comp. air machs.
PP—2 150 H. P. fire tube boilers, 6 pumps.
EMP—75. Daily tonnage 150.
SIZES SHIPT—Run of mine.

CORRY COAL MINING COMPANY.

OWNER—B. P. Corry, Oakman, Ala.
 GM—B. P. Corry, Oakman, Ala.
 GS—J. M. Corry, Oakman, Ala.
 PA—J. M. Corry, Oakman, Ala.
 CE—P. S. Haley, " "
 EM—P. S. Haley, " "
 SCQ—Address the Company, Buyer, B. P. Corry, Oakman, Ala.

Gaslight Mine; Drift; Corona Split Seam, 32 in. thick.

PO—Oakman, Ala. SP—Same. CTY—Walker, RR—Southern, Coal Valley Br.

MS—Claude Clements, Oakman, Ala.

S of H—Mules.

S of M—Hand.

SIZES SHIPT—Run of Mine.

Note—Successors to Alabama Semi-Canal Coal Co.

CRESCENT COAL COMPANY.

General Office, 15th floor, American Trust Bldg., Birmingham, Ala.

PR—Robert Neill, Birmingham, Ala.

VP—A. C. DeShazo, R. No. 2, Warrior, Ala.

TR—S. N. Gore, Birmingham, Ala.

GM—A. C. DeShazo, R. No. 2, Warrior, Ala.

GS—A. C. DeShazo, R. No. 2, Warrior, Ala.

PA—A. C. DeShazo, R. No. 2, Warrior, Ala.

EM—A. H. Witt, Birmingham, Ala.

EE—J. T. Woford, R. No. 2, Warrior, Ala.

SCQ—Address the company—Buyer, James McClendon, R. No. 2, Warrior, Ala.

SA—S. N. Gore, Birmingham, Ala.

Seloca No. 1 Mine; Slope; Jefferson & Black Creek Seams.

PO—R. No. 2, Warrior, Ala.; SP—Seloca, Ala.; CTY—Jefferson; RR—L. & N., Warrior Branch.

S of H—Mules, Track gage 33 inches.

S of M—Hand.

PP—3 phase, 60 cycle, 220 volts A. C. 3 pumps.

EMP—65. Daily tonnage 250.

SIZES SHIPT—Run of Mine.

Note—Successors to Atlantic Coal & Coke Company.

Old Information.

DANIEL-DUFFEE COAL COMPANY.

General Office, Birmingham, Ala.

PR—R. L. Daniel, Birmingham, Ala.

VP—W. G. Duffee, Birmingham, Ala.

TR—C. G. Duffee, Birmingham, Ala.

GM—R. L. Daniel, Birmingham, Ala.

GS—John Goldsmith, Paines Bend, Ala.

Daniel-Duffee Mine; Drift; Pratt Seam; 34 inches thick.

PO—Paines Bend, Ala.; SP—High Level, Ala.; CTY—Walker.

S of H—Mules, Compressed Air and Steam Locos; Track gage 36 in.

S of M—Hand and comp. air puncher.

PP—1 40 H. P. water tube boiler.

SIZES SHIPT—Run of Mine.

DANIELS CREEK COAL CO.

General Office, Birmingham, Ala.

PR—Carr McCormack, Birmingham, Ala.

VP—Harold McDermott, Birmingham, Ala.

TR—Harold McDermott, Birmingham, Ala.

GM—Harold McDermott, Birmingham, Ala.

EM—A. S. Pow, Birmingham, Ala.

SA—Harold McDermott, Birmingham, Ala.

Woodrow Mine; Drift; Brookwood-Mildale Seam; 72 inches thick.

PO—Scarles, Ala.; SP—Same; CTY—Tuscaloosa; RR—M. & O.

MS—A. J. Waldrop, Scarles, Ala.

S of H—Mules; 2 locos 1 hoist engine. Track gage 36 inches.

S of M—Hand.

PP—2 fire tube boilers, 120 H. P., 3 pumps.

EMP—95. Last years tonnage 59,753

SIZES SHIPT—Run of Mine.

DAVIS CREEK COAL & COKE CO.

General Office, Rockcastle, Ala.

PR—J. C. Mahen, Sr., New York, N. Y.

VP—J. C. Mahen, Jr., Birmingham, Ala.

TR—J. C. Mahen, Jr., Birmingham, Ala.

GM—J. C. Mahen, Jr., Birmingham, Ala.

GS—W. P. Smith, Rockcastle, Ala.

PA—W. P. Smith, Rockcastle, Ala.

CE—M. J. Lide, Birmingham, Ala.

EM—A. H. Witt, Birmingham, Ala.

EE—M. J. Lide, Birmingham, Ala.

SCQ—Address the company, Buyer, W. L. D. Shazo, Rockcastle, Ala.

SA—Adams, Rowe & Norman, Birmingham, Ala.

Rockcastle No. 1 Mine; Slope; Blue Creek Seam; 84 inches thick.

PO—Rockcastle, Ala.; SP—Frt. to Rockcastle, Ala.; Exp. to Yolande, Ala.

CTY—Tuscaloosa; RR—L. & N.

S of H—Mules and rope. Track gage 36 inches.

S of M—Hand.

PP—Power purchased, transformer 2,400 to 220 volts A. C., 3 fire tube boilers, total 350 H. P., 4 pumps.

EMP—19. Last years tonnage 6,612.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.

Rockcastle No. 2 Mine; Slope; Little Jagger Seam, 40 in. thick.

PO—Rockcastle, Ala.; SP—Frt. to Rockcastle, Ala.; Exp. to Yolande, Ala.

CTY—Tuscaloosa; RR—L. & N.

S of H—Mules and rope. Track gage 36 inches.

S of M—Hand.

PP—Power purchased, transformer 2,400 to 220 volts A. C., 2 pumps.

EMP—34. Last years tonnage 11,683.

SIZES SHIPT—Run of Mine.

Rockcastle No. 3 Mine; Slope; Rock-Creek Seam; 84 inches thick.

PO—Rockcastle, Ala.; SP—Frt. to Rockcastle, Ala.; Exp. to Yolande, Ala.

CTY—Tuscaloosa; RR—L. & N.

S of H—Mules and rope. Track gage 36 inches.

S of M—Hand.

PP—Power purchased, transformer 2,400-220 volts A. C., 1 pump.

EMP—77. Last years tonnage 50,681.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Gravity Screens.

DE BARDELEBEN COAL COMPANY.

General Office, Brown-Marx Bldg., Birmingham, Ala.

PR—H. T. DeBardeleben, Birmingham, Ala.

VP—Milton H. Fies, Sipsey, Ala.

GM—Milton H. Fies, Sipsey, Ala.

GS—Milton H. Fies, Sipsey, Ala.

PA—G. M. Bowers, Birmingham, Ala.

CE—Martin J. Lide, Birmingham, Ala.

EM—L. H. Harville, Sipsey, Ala.

EE—M. T. McGowan, Birmingham, Ala.

SCQ—Address the Company, Buyer, A. J. McDaniel, Sipsey, Ala.

Sipsey Mine; Drift; Black Creek Seam, 36 in. thick.

PO—Sipsey, Ala.; SP—Same; CTY—Walker, RR—St. L. & S. F.

MS—W. R. Payne, Sipsey, Ala.

SM—A. J. McDaniel, Birmingham, Ala.

S of H—7 trolley pole type locos. Track gage 42 inches.

S of M—13 shortwall machs.

PP—3 return tubular boilers, total 450 H. P., 500 K. W. turbo-generator, 250 volts D. C., 5 pumps.

EMP—450. Last years tonnage 365,321.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Boom, Washeries.

Payne Bend Mine; Drift; Pratt Seam; 36 inches thick.

PO—Payne Bend, Ala.; SP—Cordova, Ala.; CTY—Walker; RR—Warrior River.

MS—R. H. Franklin, Payne Bend, Ala.

SM—C. B. Terry, Payne Bend, Ala.

S of H—Mules and trolley pole type loco. Track gage 42 inches.

S of M—3 shortwall machs.

PP—Power purchased, Transformer 44,000 to 3,300 volts, motor gen. sets, 250 volts, 1 pump.

EMP—100. Last years tonnage 67,000.

SIZES SHIPT—Run of Mine.

Note—Formerly operated by Payne Bend Warrior Coal Co.

DEER CREEK COAL COMPANY.

General Office, Marietta, Ala.

Owner—Jno. G. Cooke, Marietta, Ala.

EM—Motley & Dwyer, Birmingham, Ala.

SCQ—Address the Company, Buyer, T. A. Willingham, R. R. 2, Parrish, Ala.

Deer Creek and Gayoso Mines; Drifts; Seams 30 to 48 in. thick.

PO—Marietta, Ala. SP—Patton Junction and Gayoso, Ala. (Prepay). CTY—Walker; RR—Southern.

S of H—Mules.

S of M—Hand.

Last fiscal year output, 8000 tons.

SIZES SHIPT—Run of Mine.

Old Information.

DISNEY COAL CO.

General Office, Cordova, Ala.

PR—A. R. Disney, Cordova, Ala.

VP—Nellie Disney, Cordova, Ala.

TR—R. P. Wyatt, Cordova, Ala.

GM—A. R. Disney, Cordova, Ala.

EM—L. V. Harvill, Cordova, Ala.

EE—Herman Little, Cordova, Ala.

SCQ—Shaw Grocery Co. Buyer, C. A. Shaw, Cordova, Ala.

SA—U. S. Fuel Co., Birmingham, Ala.

R-d Oak Mine; Slope; Mt. Carmel Seam; 30 inches thick.

PO—Cordova, Ala.; SP—Same; CTY—Walker; RR—St. L. & S. F.

MS—R. P. O'Brian, Cordova, Ala.

S of H—Trolley pole type loco. Track gage 36 inches.

S of M—1 shortwall mach.

PP—Power purchased, Transformer 2,300 to 220 volts A. C., motor generator sets, 220 volts D. C., 4 pumps.

EMP—60. Last years tonnage 26,135.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.

OIXIE COAL MINING CO.

Out of Business.

DONALDSON-STOBERT COAL CO.

General Office, 534 Brown-Marx Bldg., Birmingham, Ala.

PR—J. M. Donaldson, Birmingham, Ala.

VP—Thomas Berry, Birmingham, Ala.

TR—Thomas Stobert, Birmingham, Ala.

GS—W. A. Spruell, Henryville, Ala.

PA—A. C. Payne, Birmingham, Ala.

EM—A. B. Mitchell, Birmingham, Ala.

SCQ—Address the Company, Buyer, A. C. Payne, Birmingham, Ala.

D-S. Mine; Drift and Slope; Wadsworth Seam, 48 in. thick.

PO—Henryville, Ala.; SP—Same; CTY—Jefferson; RR—C. of Ga.

S of H—Mules rope, and steam locos. Track gage, 36 in.

S of M—Hand.

PP—Fire tube boilers, 3 pumps.

EMP—40. Daily tonnage 175.

SIZES SHIPT—Run of Mine.

Old Information.

DORA FUEL COMPANY

FR—F. C. Morgan, Dora, Ala.

TR—V. H. Carmichael, Dora, Ala.

GS—T. J. McCabe, Dora, Ala.

EM—C. L. Cabiness, Dora, Ala.

Dora Fuel Mine; Drift; Mt. Carmel Seam; 40 inches thick.

PO—Dora, Ala.; SP—Same; CTY—Walker; RR—St. L. & S. F.

S of H—Mules.

S of M—Hand.

SIZES SHIPT—Run of Mine.

Old Information.

EAGLE COAL COMPANY.

Out of business.

EAST PRATT COAL CO.

General Office, 621-623 Chamber of Commerce Bldg., Birmingham, Ala.

PR—T. W. Morgan, Birmingham, Ala.

VP—E. C. Morgan, Birmingham, Ala.

TR—T. W. Morgan, Birmingham, Ala.

GM—T. W. Morgan, Birmingham, Ala.

PA—T. W. Morgan, Birmingham, Ala.

SCQ—Address the company, Buyer, G. F. Stevenson, Box 135—R 7, Birmingham, Ala.

Clift Mine, Drift; Pratt Seam; 36 in. to 44 in. thick.

PO—R. 7, Box 135, Birmingham, Ala.; SP—Clift, Ala.; CTY—Jefferson; RR—L. & N.

MS—F. H. Bates, R. 7, Box 135, Birmingham, Ala.

S of H—Mules, and 1 gasoline loco; track gage 36 in.

S of M—Hand.

EMP—80. Daily tonnage 200.

SIZES SHIPT—Run of Mine.

Old Information.

ELOORAOO COAL CO.

Now a part of the Sloss-Sheffield Steel & Iron Co.

EMPIRE COAL CO.

General Office, Birmingham, Ala.

PR—Walter Moore, Birmingham, Ala.

TR—W. B. Harper, Birmingham, Ala.

GS—Chas. F. Moore, Empire, Ala.

PA—J. T. Upshaw, Empire, Ala.

EM—W. D. Armstrong, Empire, Ala.

SCQ—Address the Company, Buyer, J. T. Upshaw, Empire, Ala.

Empire Mine; Drift; Black Creek Seam, 28 to 36 in. thick; operate washery.

PO—Empire, Ala.; SP—Same; CTY—Walker; RR—Frisco.

S of H—Mules and 3 gasoline locos. Track gage 36 in.

S of M—28 comp. air and 20 chain breast type machs.

PP—Power purchased, transformer 2300 to 250 volts A. C., M. G. set, 250 volts D. C.

EMP—450. Last fiscal year output, 233,660 tons.

SIZES SHIPT—Slack, Nut, Egg, Lump.

PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms, Washeries.

Old Information.

ETTER, G. D., JR.

Operator—G. D. Etter, Jr., Warrior, Ala.

CE—A. H. Witt, Birmingham, Ala.

SA—D. H. Brown & Co., Birmingham, Ala.

Etter Mine; Black Creek Seam; 30 to 36 inches thick.

PO—Warrior, Ala.; SP—El Vista, Ala.; CTY—Jefferson; RR—L. & N., Linton Branch.

MS—D. S. Edds, Warrior, Ala.

S of H—Mules. Track gage 36 in.

S of M—Hand.

EMP—35. Last years tonnage 12,000.

SIZES SHIPT—Run of Mine.

Old Information.

EUREKA COAL CO.

General Office, Birmingham, Ala.

PR—G. W. Connors, Birmingham, Ala.

Franklin Coal Mining Co.—Cont.
 PP—2 water tube boilers 160 H. P. each, 2 boilers 250 H. P. each, gen. units 250 volts D. C., 6 pumps.
 EMP—150. Last years tonnage 54,386.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Washers, Shaker Screens, Picking Tables.

GALLOWAY COAL COMPANY.
 General Office, Memphis, Tenn.
 PR—F. N. Fisher, Memphis, Tenn.
 VP—R. B. Henderson, Memphis, Tenn.
 TG—M. C. Adams, Memphis, Tenn.
 GM—F. N. Fisher, Memphis, Tenn.
 ASST. GEN. MGR—R. E. Galloway, Carbon Hill, Ala.
 GS—James Nicol, Jr., Carbon Hill, Ala.
 PA—R. E. Galloway, Carbon Hill, Ala.
 EM—W. F. Cobb, Carbon Hill, Ala.
 EE—D. C. Johnson, Carbon Hill, Ala.
 SCO—Address the Company, Buyer, R. E. Galloway, Carbon Hill, Ala.
 SA—Memphis Coal Co., Memphis, Tenn., and Gridler Coal Sales Agency, Birmingham, Ala.

No. 10½ Mine; Stripping; Jagger Seam, 54 in. thick.
 PO—Carbon Hill, Ala. SP—Same. CTY—Walker, RR—St. L. & S. F.
 MS—R. G. Wheeler, Carbon Hill, Ala.
 S of H—Mules. Track gage 40 in.
 S of M—Hand.
 PP—1 30 H. P. fire tube boiler.
 EMP—18. Daily tonnage 80.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

No. 11 Mine; Slope; Jagger Seam; 42 in. thick.
 PO—Carbon Hill, Ala.; SP—Same; CTY—Walker; RR—St. L. & S. F.
 MS—V. West, Carbon Hill, Ala.
 SM—R. H. Gibson, Carbon Hill, Ala.
 S of H—Trolley Pole Type Locos.
 Track gage 40 in.
 S of M—3 shortwall machs.
 PP—Power purchased, 1 80 H. P. water tube boiler, transformer 44,000 to 2,300 volts A. C., 2 M. G. Sets, 250 volts D. C., 8 pumps.
 EMP—320. Daily tonnage 1,000.
 SIZES SHIPT—Slack, Pea, Nut, Lump.
 PREP. EQUIPT—Revolving and Shaker Screens, Picking Tables, Washeries.

No. 12 Mine; Slope; Mary Lee Seam, 39 in. thick.
 PO—Carbon Hill, Ala. SP—Same. CTY—Walker, RR—St. L. & S. F.
 MS—J. M. Townley, Carbon Hill, Ala.
 S of H—Mules. Track gage 40 inches.
 S of M—Hand.
 PP—2 return tubular boilers, total 70 H. P., 1 pump.
 EMP—50. Daily tonnage 200.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

No. 14 Mine. Abandoned.
 No. 17 Mine; Drift; Mary Lee Seam, 36 in. thick.
 PO—Carbon Hill, Ala. SP—Same. CTY—Walker, RR—St. L. & S. F.
 MS—J. B. Moore, Carbon Hill, Ala.
 SM—R. H. Gibson, Carbon Hill, Ala.
 S of H—Mules. Track gage 36 in.
 S of M—Hand.
 EMP—30. Daily tonnage 120.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

Great Elk Mine. Abandoned.
 No. 15 Mine; Slope; Jagger Seam, 50 in. thick.
 PO—Townley, Ala. SP—Same. CTY—Walker, RR—St. L. & S. F.
 MS—J. West, Townley, Ala.
 SM—Ed. Jones, Townley, Ala.
 S of H—Trolley Pole type locos. Track gage 40 in.
 S of M—5 shortwall machs.
 PP—Power purchased, 1 80 H. P. fire tube boiler, transformer 44,000 to 2,300 volts A. C., M. G. Sets, 250 volts D. C., 5 pumps.
 EMP—230. Daily tonnage 800.
 SIZES SHIPT—Egg and lumps.
 PREP. EQUIPT—Revolving and shaker screen, picking tables and loading beams.

No. 10 Mine; Stripping; Mary Lee Seam, 40 in. thick.
 PO—Carbon Hill, Ala.; SP—Same; CTY—Walker; RR—Frisco.
 MS—O. D. Brewy, Carbon Hill, Ala.
 S of H—Steam locos. Track gage 36 in. S of M—Hand.
 PP—1 80 H. P. water tube boiler, 1 pump.
 EMP—25. Daily tonnage 160.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

GILLIAM COAL CO.
 Out of Business.

GLEN MARY COAL COMPANY
 General Office, 1908 Jefferson County Bank Bldg., Birmingham, Ala.
 PR—Monro B. Lanier, Birmingham, Ala.
 VP—Opie Gamble, Delmar, Ala.
 TR—Monro B. Lanier, Birmingham, Ala.
 GM—H. B. Robinson, Birmingham, Ala.
 GS—J. H. Crane, Glenmary, Ala.
 PA—H. B. Robinson, Birmingham, Ala.
 CE—A. H. Whit, Birmingham, Ala.
 SCO—J. H. Crane Store, Buyer, J. H. Crane, Glenmary, Ala.
 SA—Monro Warrior Coal & Coke Co., Birmingham, Ala., and Chicago, Ill.

Mary Ella Mine; Drift; Black Creek Seam, 30 inches thick.
 PO—Delmar, Ala.; SP—Glenmary, Ala.; CTY—Winston; RR—Northern Ala. (Branch of Southern).
 S of H—Mules and main and tail rope. Track gage 36 inches.
 S of M—Hand.
 EMP—23.
 SIZES SHIPT—Run of Mine, Slack, Lump, Block.
 PREP. EQUIPT—Gravity Screens.

GORE, D. B. Co.
 General Office—1016 Woodward Bldg., Birmingham, Ala.
 PR—A. C. Wuerpel, Metropolitan Bank, New Orleans, La.
 VP—D. B. Gore, Birmingham, Ala.
 TR—J. M. Gore, Jr., New Orleans, La.
 GM—D. B. Gore, Birmingham, Ala.
 GS—G. C. George, Altoona, Ala.
 PA—T. C. Strong, Birmingham, Ala.
 SCO—Address the Company, Buyer, F. R. Pomerooy, Jr., Altoona, Ala.
 SA—Lou-Ala Coal Co., Birmingham, Ala.

Tait's Gap Mine; Stripping; Seam, 32 inches thick.
 PO—Altoona, Ala.; R. F. D. No. 4; SP—Tait's Gap, Ala.; CTY—Blount; RR—L. & N.
 S of H—Rope and steam locos. Track gage 36 in.
 S of M—Hand.
 EMP—75. Last years tonnage 36,000.
 SIZES SHIPT—Run of Mine.

GULF STATE STEEL CO.
 General Office, Birmingham, Ala.
 PR—C. A. Moffitt, Birmingham, Ala.
 VP (in charge of Sales)—H. Sanborn Smith, Birmingham, Ala.
 VP—A. R. Forsyth, Birmingham, Ala.
 PA—B. F. Tyler, " "
 EM—C. E. Bowron, " "
 SCO—Address the company—Buyer, B. F. Tyler, Birmingham, Ala.
 SALES AGENT—C. C. Brown, Birmingham, Ala.

Virginia Mine; Slope; Nickel Plate Seam, 50 in. thick.
 PO—Bessemer, Ala. SP—Virginia Mine, Ala.; CTY—Jefferson; RR—L. & N.
 MS—W. M. Mason, " "
 S of H—Mules and electric loco. Track gage, 36 in.
 S of M—Hand.
 PP—3 return tubular boilers, total 900 H. P., 2 air compressors.
 EMP—275. Last years tonnage 119,250.
 SIZES SHIPT—Run of Mine.

Altoona Mine; Drift; Underwood Seam, 32 in. thick.
 PO—Altoona, Ala. SP—Same. CTY—Etawah, RR—L. & N.
 MS—A. L. Rankin, Altoona, Ala.
 S of H—Mules, 2 steam locos. Track gage, 40 in.
 S of M—Hand.
 PP—3 return tubular boilers, total 150 H. P., 1 air compressor.
 EMP—240. Last years tonnage 104,104.
 SIZES SHIPT—Run of Mine.
 Sayre Mine; Slope; Mary Lee Seam, 55 in. thick.
 PO—Sayre, Ala. SP—Same. CTY—Jefferson, RR—L. & N.
 MS—G. W. Burger, Sayre, Ala.
 S of R—Mules, 1 elec. loco. Track gage 42 inches.
 S of M—3 shortwall machs.
 PP—6 return tubular boilers, total 600 H. P., 2 gen. units, 220 volts D. C.
 EMP—141. Last years tonnage 61,174.
 SIZES SHIPT—Run of Mine.
 Note—This mine formerly operated by Sayre Mining & Mfg. Co.

HILLS CREEK MINING CO.
 General Office, West Blocton, Ala.
 PR—W. R. Young, West Blocton, Ala.
 VP—G. W. Randall, West Blocton, Ala.
 GM—P. Shannan, West Blocton, Ala.
 GS—W. R. Ray, Blocton, Ala.
 PA—W. R. Young, West Blocton, Pa. —
 CE—A. H. Witt, Birmingham, Ala.
 EE—W. J. Lawrence, Blocton, Ala.
 SCO—Hills Creek Mercantile Co., Buyer, M. Martin, Blocton, Ala.
 SA—T. H. Benners & Co., Birmingham, Alabama.

Hills Creek Mine; Slope; "Woodstock" Seam; 32 inches thick.
 PO—West Blocton, Ala.; SP—Blocton, Ala.; CTY—Bibb; RR—Sou., A. S. M. & O. L. & N.
 S of H—Mules, elec. hoist. Track gage 36 inches.
 S of M—Hand, solid shooting.
 PP—Power purchased. Transformer 2,300 to 550 volts A. C., 3 pumps.
 EMP—240. Last years tonnage 62,890.
 SIZES SHIPT—Run of Mine, Lump, Steam.
 PREP. EQUIPT—Shaker Screens.

IMPERIAL COAL & COKE CO.
 General Office, 1712 American Trust Bldg., Birmingham, Ala.
 PR—M. W. Bush, Birmingham, Ala.
 VP—H. Hammond, Birmingham, Ala.
 TR—H. Hammond, Birmingham, Ala.
 GS—J. O. Colley, Pinson, Ala.
 PA—E. J. Crandall, Pinson, Ala.
 CE—E. G. Toler, Pinson, Ala.
 EE—H. G. Skinner, Pinson, Ala.
 SCO—Bradford Commissary, Buyer, E. J. Crandall, Pinson, Ala.
 SA—Hammond Byrd Iron Co., Birmingham, Ala.

Bradford & Dixiana Mine; Slopes; Black Creek Seam; 30 in. thick.
 PO—Dixiana, Ala.; SP—Bradford, Ala.; CTY—Jefferson; RR—L. & N.
 SM—E. J. Crandall, Dixiana, Ala.
 S of H—Mules, rope. 5 trolley pole type locos. Track gage 30 and 40 in.
 S of M—Hand.
 PP—Power purchased, 2—15 K. W. gen. units, 250 volts D. C., 9 pumps.
 SIZES SHIPT—Run of Mine, Pea, Lump.

INDIAN HEAD MILLS OF ALABAMA.
 General Office, Cordova, Ala.
 GM—W. B. Earnest, Cordova, Ala.
 GS—W. B. Earnest, Cordova, Ala.
 PA—W. B. Earnest, Cordova, Ala.

Indian Head Mine; Slope; Mt. Carmel Seam, 32 in. thick.
 PO—Cordova, Ala.; SP—Same; CTY—Walker; RR—Southern, St. L. & S. F.
 S of H—Mules and steam loco. Track gage 36 inches.
 S of M—Hand.
 EMP—8. Last years tonnage 6,000.
 Note—Consume entire output.

INLAND COAL & IRON CO.
 General Office, Inland, Ala.
 RECEIVER—R. H. Eggleston, Birmingham, Ala.
 AGENT (in charge of Property)—J. G. Rowell, Inland, Ala.

Inland No. 1 Mine; Drift; Jagger Seam; 42 inches thick.
 PO—Inland, Ala.; SP—Same; CTY—Blount; RR—L. & N.
 MS—J. G. Rowell, Inland, Ala.
 S of H—Trolley pole type electric loco. Track gage 36 inches.
 S of M—2 shortwall machs.
 PP—2 return tubular boilers, total 250 H. P., 1 150 K. W. gen. unit, 8 pumps.
 EMP—30. Last years tonnage 9,815.
 SIZES SHIPT—Run of Mine.

JAGGER COAL CO.
 General Office, Birmingham, Ala.
 PR—J. C. Patterson, Birmingham, Ala.
 VP—E. P. Rosamond, Birmingham, Ala.
 TG—J. C. Patterson, " "
 GM—E. P. Rosamond, " "
 SCO—Address the company—Buyer, W. A. Slaughter, Prospect, Ala.
 SA—W. A. Horne, Birmingham, Ala.

Jagger Mine; Slope; Jagger Seam, 54 to thick.
 PO—Prospect, Ala.; SP—Jagger, Ala.; CTY—Walker; RR—Northern Ala.
 MS—H. M. Johnstone, Prospect, Ala.
 S of H—Mules and rope. Track gage, 36 in.
 S of M—Comp. air mach.
 PP—2 fire tube boilers, 250 H. P., 4 pumps.
 EMP—75. Last years tonnage 38,088.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables.

JENIFER IRON COMPANY
 General Office, Jenifer, Ala.
 PR—W. Aubrey Thomas, Jenifer, Ala.
 VP—J. M. Thomas, Milwaukee, Wis.
 TR—T. E. Thomas, Niles, O.
 GS—T. A. Heath, Jenifer, Ala.
 PA—J. O. Orson, Jenifer, Ala.
 CE—Mudley & Bryce, Birmingham, Ala.
 SCO—Weller Mines Store, Buyer, D. A. Faenin, Aubrey, Ala.
 Weller Mine; Slope; Blue Creek Seam, 84 inches thick.

PO—Aubrey, Ala.; SP—Weller, Ala.; CTY—Jefferson; RR—L. & N.
 MS—T. M. Byram, Aubrey, Ala.
 S of H—Rope and steam locos. Track gage 36 inches.
 S of M—Hand.
 PP—1 water tube boiler.
 EMP—75. Daily tonnage 300.
 SIZES SHIPT—Run of Mine, Old Information

KELLERMAN COAL COMPANY
 General Office, 611 R. M. Bldg., Birmingham, Ala.
 PR—F. J. Smith, Birmingham, Ala.
 TR—McFarlin, Searles, Ala.
 GM—C. McFarlin, Searles, Ala.
 PA—C. McFarlin, Searles, Ala.
 SA—M. A. Wyatt and J. B. Robinson & Co., Birmingham, Ala.

Kellerman Mine; Drift; Milldale Seam; 38 in. thick.
 PO—Searles, Ala.; SP—Kellerman, Ala.; CTY—Tusculum; RR—M. & O.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 EMP—30. Daily tonnage 100.
 SIZES SHIPT—Run of Mine.

KERSHAW & COMPANY.
 General Office, 610 Woodward Bldg., Birmingham, Ala.
 PA—T. M. Porterfield, Birmingham, Ala.
 SA—National Coal & Coke Co., Birmingham, Ala.

Cedron Mine; Stripping; Cedron Seam, 29 in. thick.
 PO—Carbon Hill, Ala. SP—Townley, Ala. CTY—Walker; RR—St. L. & S. F.
 MS—Sam Alread, Carbon Hill, Ala.
 S of H—2 steam locos. Track Gage 36 in.
 PP—3 pumps.
 Daily tonnage 250.
 SIZES SHIPT—Run of Mine, Nut, Egg, Lump.
 PREP. EQUIPT—Revolving and shaker screens, Washeries.

KERSHAW MINING COMPANY
 General Office, 610 Woodward Bldg., Birmingham, Ala.
 PR—C. G. Kershaw, Birmingham, Ala.
 TR—T. M. Porterfield, Birmingham, Ala.
 SFTT—B. A. Carl, Dora, Ala.
 PA—T. M. Porterfield, Birmingham, Ala.

Kershaw Mine; Drift; Mary Lee Seam; 38 inches thick.
 PO—Dora, Ala.; SP—Same; CTY—Walker; RR—St. L. & S. F.
 SM—W. F. Clements, Dora, Ala.
 S of H—Mules. Track gage 42 inches.
 S of M—Hand and shortwall mach.
 PP—Power purchased. Transformer 2200 volts A. C., M. G. Sets, 220 volts D. C., 4 pumps.
 Daily tonnage 300.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

KEYSTONE COAL COMPANY
 General Office, Kansas, Ala.
 PR—A. S. Threadgill, Carbon Hill, Ala.
 VP—J. J. Tirrey, Kansas, Ala.
 TR—E. O. Cunningham, Kansas, Ala.
 GM—E. O. Cunningham, Kansas, Ala.
 GS—W. W. Cunningham, Eldridge, Ala.
 PA—E. O. Cunningham, Kansas, Ala.
 CE—Frank Cobb, Carbon Hill, Ala.
 SA—E. O. Cunningham, Kansas, Ala.

Nos. 1, 2 and 3 Mines; Slopes; Jagger Seam, 54 inches thick.
 PO—Kansas, Ala.; SP—Carbon Hill, Ala. CTY—Walker; RR—St. L. & S. F.
 MS—J. J. Tirrey, Kansas, Ala.
 S of H—Mules. Track gage 40 inches.
 S of M—Hand.
 PP—2 pumps.
 EMP—40. Daily tonnage 150.
 SIZES SHIPT—Run of Mine.

KINGS MOUNTAIN COAL COMPANY.
 Operations abandoned.

LEETON MINING COMPANY
 General Office, Johns, Ala.
 PR—W. A. Upton, Rd Star, Ala.
 VP—Thos. L. Upton, Johns, Ala.
 TR—R. K. Lee, Birmingham, Ala.
 GM—Thos. L. Upton, Johns, Ala.
 GS—Thos. L. Upton, Johns, Ala.
 PA—Thos. L. Upton, Johns, Ala.

Black Creek Mine; Slope; Black Creek Seam, 34 inches thick.
 PO—Johns, Ala.; SP—Same; CTY—Jefferson; RR—L. & N.
 MS—W. W. Keeton, Johns, Ala.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 EMP—25. Daily tonnage 100.
 SIZES SHIPT—Run of Mine.
 Note—Formerly operated by the Nelson Smith Mining Co.

LEHIGH COAL CO.

General Office, Lehigh, Ala.
PR—Priestley Toulmin, Lehigh, Ala.
VP—John A. Rathford, Lehigh, Ala.
TR—Priestley Toulmin, Lehigh, Ala.
GS—Priestley Toulmin, Jr., Lehigh, Ala.
TA—Priestley Toulmin, Jr., Lehigh, Ala.
SCO—Lehigh Commissary, Buyer, J. H. Rinef, Lehigh, Ala.

Lehigh Mine; Drift; Black Creek Seam, 26 in. thick.
PO—Lehigh, Ala.; SP—Same; CTY—Blount; RR—L. & N.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
EMP—120. Last years tonnage 41,000.
SIZES SHIPT—Run of Mine.

LIBERTY COAL COMPANY

General Office, 564 American Trust Bldg., Birmingham, Ala.
PR—J. B. Robinson, Birmingham, Ala.
VP—J. Molton Smith, Birmingham, Ala.
TR—J. B. Robinson, Birmingham, Ala.
GM—J. Molton Smith, Birmingham, Ala.
GS—W. B. Brown, Seales, Ala.
PA—O. M. Cross, Birmingham, Ala.
EM—Ralph E. Burg, Birmingham, Ala.
SCO—Actna Mercantile Co., Seales, Ala.
Buyer, Henry J. Smith, Birmingham, Ala.
SA—J. B. Robinson & Co., Birmingham, Ala.

Liberty Mine; Slope; Brookwood and Mildon Seams, 48 and 16-26 inches thick.
PO—Seales, Ala.; SP—Same; CTY—Tuscaloosa; RR—Mobile and Oblo.
S of H—Mules and steam locos. Track gage 36 inches.
S of M—Hand.
PP—1 100 H. P. water tube boiler.
EMP—65. Last years tonnage 53,591.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

LITTLE BLACK WARRIOR COAL CO.

General Office, Birmingham, Ala.
PR—W. J. Penhalligon, Birmingham, Alabama.
VP—W. B. Hillhouse, Birmingham, Ala.
TR—D. H. Brown, Birmingham, Ala.
GM—W. B. Hillhouse, Birmingham, Ala.
GS—S. A. Woolbert, Inland, Ala.
PA—D. H. Brown, Birmingham, Ala.
CE—W. J. Penhalligon, Birmingham, Ala.
SCO—Address the company. Buyer, D. H. Brown, Birmingham, Ala.
SA—D. H. Brown, Birmingham, Ala.

Fairchild Mine; Slope; Jagger Seam; 36 inches thick.
PO—Inland, Ala.; SP—Same; CTY—Blount; RR—L. & N.
S of H—Mules and tail rope.
S of M—Hand.
PP—1 60 H. P. fire tube boiler, 1 pump.
SIZES SHIPT—Run of Mine.

LITTLE CAHABA COAL CO.

General Office, Piper, Ala.
VP—W. E. Henley, Piper, Ala.
TR—W. E. Henley, " "
GM—W. E. Henley, " "
GS—Jas. Wilcox, Piper, Ala.
PA—C. N. Watts, Piper, Ala.
EE—P. R. Randall, Piper, Ala.
SCO—Address the company. Buyer, F. N. Watts, Piper, Ala.
SA—H. S. Hall, American Trust Bldg., Birmingham, Ala.

Piper Nos. 1 and 2 Mines.
PO—Piper, Ala.; SP—Same; CTY—Bibb; RR—Southern, L. & N.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine; Lump.
PREP. EQUIPT—Shaker Screens, Pickling Tables.

LITTLE GEM COAL COMPANY

General Office, Birmingham, Ala.
PR—J. M. Smith, Birmingham, Ala.
VP—J. B. Robinson, Birmingham, Ala.
TR—J. B. Robinson, Birmingham, Ala.
GM—J. M. Smith, Birmingham, Ala.
GS—Samuel John, Underwood, Ala.
PA—O. M. Cross, Birmingham, Ala.
EM—Ralph E. Burg, Birmingham, Ala.
SCO—Actna Mercantile Co. Buyer, Henry J. Smith Birmingham, Ala.
SA—J. B. Robinson Co., Birmingham, Ala.

Dogwood Mine; Slope; Cahaba Seam, 72 inches thick.
PO—Underwood, Ala.; SP—Dogwood, Ala. CTY—Shelby; RR—Southern.
S of H—Steam loco.
S of M—Hand.
PP—1 150 H. P. water tube boiler, power purchased, 220 volts A. C.
EMP—75. Last years tonnage 4,748.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

LYNN COAL MINING COMPANY.

PR—J. L. Clark, Jasper, Ala.
GM—J. L. Clark, " "
GS—J. L. Clark, " "
TR—T. R. Simmons, " "
PA—T. R. Simmons, " "
CE—D. K. Carter, " "

Parco Mine; Slope; Black Creek Seam, 32 in. thick.
PO—Jasper, Ala. SP—Lynn. CTY—Walker. RR—N. A.
S of H—Mules.
S of M—Hand.
PP—Total 50 H. P.
SIZES SHIPT—Run of Mine.
Old information.

MABEL MINING COMPANY.

General Office, Warrior, Ala.
LESSEE—G. D. Etter, Jr., Warrior, Ala.

El Vesta Mine; Drift; Black Creek Seam, 30 to 36 in. thick.
PO—Warrior, Ala. SP—Trafford, Ala. CTY—Jefferson. RR—L. & N. Warrior Mineral Br.
MS—D. S. Ead, Warrior, Ala.
SM—Son Clay Mfg. Co., Warrior, Ala.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—2 fire tube boilers, 75 H. P., 1 pump.
EMP—75. Last years tonnage 12,000.
SIZES SHIPT—Run of Mine.

MAJESTIC COAL COMPANY

General Office, Trust Bldg., Birmingham, Ala.
PR—M. W. Bush, Birmingham, Ala.
VP—Albert P. Bush, Mobile, Ala.
TR—H. Hammond, Birmingham, Ala.
GM—M. W. Bush, Birmingham, Ala.
GS—G. H. Howell, R. F. D. No. 2, Morris, Ala.
Sales Agents, Hammond Byrd Son Co., Birmingham, Ala.

Majestic Mine; Shaft; Black Creek Seam, 40 in. thick.
PO—R. F. D. No. 2, Morris, Ala.; SP—Majestic, Ala.; CTY—Jefferson; RR—L. & N.
MS—G. H. Howell, Morris, Ala.
SM—Fred Collar, Morris, Ala.
S of H—Mules and 2 storage battery locos. Track gage, 36 in.
S of M—Hand.
SIZES SHIPT—Run of Mine.
Note—Successors to De Sota Coal Mining & Development Co.

MINNIE COAL COMPANY.

Now Calhoun Land & Mining Co.

MONRO-WARRIOR COAL & COKE CO.

General Office, 1903-12 Jefferson Bank Bldg., Birmingham, Ala.
PR—Monroe S. Lanier, Birmingham, Ala.
VP—Sterling S. Lanier, Jr., Nortonville, Ky.
TR—Sterling S. Lanier, Jr., Nortonville, Ky.
GM—Sterling S. Lanier, Jr., Nortonville, Ky.
PA—H. B. Robinson, Birmingham, Ala.
CE—Sterling S. Lanier, Jr., Nortonville, Ky.
EM—A. H. Witt, Birmingham, Ala.
EE—Chas. Blanchard, Nauvoo, Ala.
SA—Monro-Warrior Coal & Coke Co., Birmingham, Ala., and Chicago, Ill.

Sterling Mine; Slope; Black Creek Seam, 28-30 inches thick.
PO—Nauvoo, Ala.; SP—Same; CTY—Walker; RR—Southern.
MS—Chas. Blanchard, Nauvoo, Ala.
MF—Ed. Martin, Nauvoo, Ala.
S of H—Mules, rope and steam locos. Track gage 36 inches.
S of M—3 shortwall machs.
PP—2 water tube boilers, total 300 H. P., 1—75 H. P. fire tube boiler, 1—150 K. W. gen. units, 250 volts D. C.
EMP—125. Daily tonnage 500.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Pickling Tables, Loading Booms, Washeries.

MONTEVALLO MINING CO.

General Office, Birmingham, Ala.
PR—W. S. Lovell, Birmingham, Ala.
VP—D. A. Thomas, Aldrich, Ala.
TR—W. S. Lovell, Birmingham, Ala.
GM—D. A. Thomas, Aldrich, Ala.
PA—J. M. Chapman, Birmingham, Ala.
CE—J. S. Chalmers, Aldrich, Ala.
EM—O. A. Chalfoux, Aldrich, Ala.
SCO—Address the Company, Buyer, George Yessick, Aldrich, Ala.
SA—D. G. Lovell, Birmingham, Ala.

Aldrich Mine; Slope; Montevallo Seam 32 in. thick.
PO—Aldrich, Ala.; SP—Same; CTY—Shelby; RR—Sou.
MS—R. S. Wildsmith, Aldrich, Ala.
S of H—5 trolley pole type locos, Track gage 36 in.

S of M—13 Longwall machs, and 8 Longwall conveyors.
PP—Power purchased. Transformer 6600 to 2200 volts A. C., M. G. set, 250 volts D. C., 7 water tube boilers, 900 H. P., 11 pumps.
EMP—360. Last years tonnage 134,593.
SIZES SHIPT—Slack, Pea, Nut, Lump
PREP. EQUIPT—Rolling and Shaker Screens, Washeries.

MONTEVALLO-SHELBY COAL CO.

Now Montevallo-Straven Coal Co.

MONTEVALLO STRAVEN COAL CO.

PR—F. E. Dunlap, Straven, Ala.
TR—C. A. Killian, Straven, Ala.
GS—F. E. Dunlap, Straven, Ala.
EM—F. E. Dunlap, Straven, Ala.
SCO—Address the Company, Buyer, C. A. Killian, Straven, Ala.
SA—Keystone Coal & Coke Co., Birmingham, Ala.

Straven No. 2 Mine; Slope; Montevallo No. 3 Seam; 72 inches thick.
PO—Straven, Ala.; SP—Maylene, Ala.; CTY—Shelby; RR—Sou.
MS—William Murray, Straven, Ala.
S of H—Mules, rope, electric loco. Track gage 36 inches.
S of M—2 shortwall machs.
PP—Power purchased. Transformer 44,000 to 550 and 220 volts A. C., 4 pumps.
EMP—130. Last years tonnage 25,377.
SIZES SHIPT—Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Pickling Tables, Loading Booms, Washeries.
Note—Successors to Montevallo-Shelby Coal Co.

MT. CARMEL COAL COMPANY.

General Office, 609 American Trust Bldg., Birmingham, Ala.
PR—Chas. E. Rice, Birmingham, Ala.
VP—Walker Moore, Birmingham, Ala.
TR—H. E. Bennett, Birmingham, Ala.
GM—Chas. E. Rice, Birmingham, Ala.
CE—A. B. Mitchell, Birmingham, Ala.
EM—C. H. Owens, Cordova, Ala.
EE—A. S. Gable, Cordova, Ala.
SCO—Address the Company, Birmingham, Ala.

Riceton Mine; Drift; Mt. Carmel Seam, 30 in. thick.
PO—Cordova, Ala.; SP—Same; CTY—Walker; RR—St. L. & S. F.
MS—C. N. Milam, Cordova, Ala.
S of H—Mules. Track gage 36 in.
S of M—4 shortwall machs.
PP—Purchase power, M. G. Sets 250 volts D. C.
EMP—200. Daily tonnage 500.
SIZES SHIPT—Run of Mine, Lump.

MOSS & McCORMACK

General Office, 1801 American Trust Bldg., Birmingham, Ala.
PARTNERSHIP—C. L. Moss, Birmingham, Ala.; G. B. McCormack, Jr., Birmingham, Ala.
GM—C. L. Moss, Birmingham, Ala.
GS—G. P. Moore, Warrior, Ala.
PA—C. L. Moss, Birmingham, Ala.
EM—A. H. Witt, Birmingham, Ala.
SCO—Address the Company. Buyer, B. W. Hoskins, Warrior, Ala.
SA—D. H. Brown & Co., Birmingham, Ala.

Liberty & Carbon Mines; Drifts; Black Creek Seam, 30 inches thick.
PO—Warrior, Ala.; Exp—Nyoto & Carbon, Ala.; RR—Nyoto, Ala.; CTY—Blount; RR—L. & N.
S of H—Mules and rope. Track gage 36 inches.
S of M—Hand.
PP—2 120 H. P. horizontal tubular boilers, 6 pumps.
EMP—702. Last years tonnage 189,324.
PREP. EQUIPT—Shaker, Bar and Revolving Screens, Washeries.
NOTE—Successors to Warrior Black Creek Coal Company.

NATURAL BRIDGE COAL COMPANY

General Office, Birmingham, Ala.
PR—E. P. Kidd, Birmingham, Ala.
VP—S. V. Shelburne, Birmingham, Ala.
TR—S. V. Shelburne, Birmingham, Ala.
GM—W. M. Holt, Birmingham, Ala.
GS—W. M. Holt, Birmingham, Ala.
PA—S. V. Shelburne, Birmingham, Ala.
EM—C. B. Stalnaker, Jasper, Ala.
SCO—Address the Company, Buyer, W. M. Holt, Birmingham, Ala.
SA—S. V. Shelburne, Birmingham, Ala.

Eclipse Nos. 1 and 2 Mines; Slope; Black Creek Seam; 30 inches thick.
PO—Natural Bridge, Ala.; SP—Same; CTY—Marion; RR—Sou.
MS—C. A. Kelly, Natural Bridge, Ala.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—1 water tube boiler, 35 H. P.
EMP—45. Last fiscal year output, 16,000 tons.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Bar Screens.
Old Information.

NELSON COAL CORPORATION

General Office, 708 Brown-Marx Bldg., Birmingham, Ala.
PR—Frank Nelson, Jr., Birmingham, Ala.
VP—T. L. Nelson, Birmingham, Ala.
TR—T. K. Lee, Birmingham, Ala.
GM—W. A. Upton, Red Star, Ala.
GS—W. A. Upton, Red Star, Ala.
PA—W. A. Upton, Red Star, Ala.
CE—T. L. Nelson, Birmingham, Ala.
EM—Chas. Halst-in, Red Star, Ala.
EE—D. H. Sargent, Red Star, Ala.
SCO—Address the Company, Buyer, D. G. Meadow, Red Star, Ala.
SA—Nelson Coal Corp., Red Star, Ala.

Red Star Mine; Drift; Mt. Carmel Seam, 32 in. thick.
PO—Red Star, Ala.; SP—Dora, Ala.; CTY—Walker; RR—Southern.
S of H—Mules and tail rope.
S of M—3 elec. chain machs.
PP—Power purchased, 550 and 220 volts D. C., 3 pumps.
EMP—175. Last years tonnage 60,000.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by the Bryan Coal Corp.

NEW CASTLE COAL CO.

General Office, Birmingham, Ala.
PR—C. McCormack, New Castle, Ala.
VP—A. C. Ramsay, Birmingham, Ala.
TR—H. Mcdermott, Birmingham, Ala.
GM—C. McCormack, New Castle, Ala.
PA—W. E. Hendrick, New Castle, Ala.
EM—A. S. Pow, Birmingham, Ala.
SCO—Address the company. Buyer, W. E. Hendrick, New Castle, Ala.
SA—H. Mcdermott, Birmingham, Ala.

New Castle No. 2 and 6 Mines; Slopes, Mary Lee Seam, 72 inches thick.
PO—New Castle, Ala.; SP—Same; CTY—Jefferson; RR—L. & N.
MS—M. G. Launius, New Castle, Ala.
S of H—Mules and 5 steam locos. Track gage 36 inches.
S of M—Hand.
PP—8 water tube boilers, total 900 H. P., 7 pumps.
EMP—400. Last years tonnage 225,000. Coke Ovens, 374 Beehive.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Shaker Screens, Washeries.

NORTH BIRMINGHAM COAL COMPANY.

PR—F. G. Morris, Sayretton, Ala.
TR—R. E. Butler, " "
PA—F. G. Morris, " "
CE—R. E. Butler, " "

No. 1 Mine; Slope; Blg Seam 82 in. thick.
PO—Sayretton, Ala. SP—N. Birmingham. CTY—Jefferson. RR—Southern.
MS—Owen O'Hare, Sayretton, Ala.
S of H—Mules.
S of M—Hand.
Daily capacity 75 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.

NORTH PRATT COAL CO.

General Office, 1306 American Trust Bldg., Birmingham, Ala.
PR—J. D. Hillhouse, 1306 Amer. Trust Bldg., Birmingham, Ala.
VP—W. B. Hillhouse, 1306 Amer. Trust Bldg., Birmingham, Ala.
TR—W. B. Hillhouse, 1306 Amer. Trust Bldg., Birmingham, Ala.
GS—R. D. Hillhouse, Adamsville, Ala.
PA—J. D. Hillhouse, 1306 Amer. Trust Bldg., Birmingham, Ala.
SCO—Address the Company, Buyer, J. D. Hillhouse, 1306 Amer. Trust Bldg., Birmingham, Ala.
SA—Black Diamond Coal Mining Co., Birmingham, Ala.

Hillhouse Mine; Drift; Pratt Seams, 38 in. thick.
PO—Adamsville, Ala.; SP—Udora; CTY—Jefferson; RR—L. & N.
SM—H. C. Hillhouse, Adamsville, Ala.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
Last years tonnage 12,653.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

NORTHPORT COAL COMPANY.

Now the Riverview Coal Co.

OAKMAN MINING CO.

General Office, Oakman, Ala.
PR—Geo. B. Hooper, Oakman, Ala.
GM—Geo. B. Hooper, " "
PA—Geo. B. Hooper, " "
EM—H. Collier, Oakman, Ala.

Leonora Mine; Drift; Corona Seam, 30 to 36 in. thick.
PO—Oakman, Ala.; SP—Same; CTY—Walker; RR—Southern.
MS—D. M. Watts, Oakman, Ala.
S of H—Mules. Track gage 36 in.
S of M—Hand.

O'REAR, GUY V.

General Office, Jasper, Ala.
 GM—Guy V. O'Rear, Jasper, Ala.
 PA—T. H. Naramore, Parrish, Ala.
 CE—A. H. Witt, Birmingham, Ala.
 EM—A. H. Witt, Birmingham, Ala.
 SCO—Address the Company, Buyer, T. H. Naramore, Drifton, Parrish, Ala.
 SA—Grider Coal Co., Birmingham, Ala.

O'Rear Mine; Drift; American Seam, 32 48 inches thick.
 PO—Parrish, Ala.; SP—Same; CTY—Walker; RR—Southern.
 MS—J. B. Craft, Parrish, Ala.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 PP—2 pumps.
 EMP—45. Last years tonnage 40,000.
 SIZES SHIPT—Run of Mine.

PACOWA COAL MINING CO., INC.

General Office, Henryellen, Ala.
 PR—A. C. Payne, Henryellen, Ala.
 VP—W. A. Spruill, Henryellen, Ala.
 GM—A. C. Payne, Henryellen, Ala.
 GS—W. A. Spruill, Henryellen, Ala.
 PA—C. M. Goddy, Henryellen, Ala.
 EM—A. B. Mitchell, Henryellen, Ala.
 SCO—Address the Company, Buyer, C. M. Goddy, Henryellen, Ala.
 SA—Donaldson Stobert Coal Co., Henryellen, Ala.

Lens Mine; Slope; Wadsworth Seam, 52 in. thick.
 PO—Henry Ellen, Ala.; SP—Same; CTY—Jefferson; RR—C. of G.
 S of H—Mules, rope. Track gage 36 in.
 S of M—Hand.
 PP—1 pump.
 EMP—40. Last years tonnage 20,000.
 SIZES SHIPT—Run of Mine.
 Old Information.

PARRISH COAL COMPANY

General Office, Parrish, Ala.
 PR—John Kilgore, Jasper, Ala.
 VP—R. B. Kilgore, Jasper, Ala.
 TR—J. B. Bell, Parrish, Ala.
 GM—J. B. Bell, Parrish, Ala.
 GS—J. B. Bell, Parrish, Ala.
 PA—Ben Kirk, Parrish, Ala.
 CE—J. D. Walker, Parrish, Ala.
 EM—J. D. Walker, Parrish, Ala.
 SCO—Address the Company, Buyer, J. E. Earnest, Parrish, Ala.

Parrish No. 1 and Gayosa No. 2 Mines; Drifts; Pratt No. 2 and Corona Seams, 29-36 inches thick.
 PO—Parrish, Ala.; SP—Same; CTY—Walker; RR—Southern.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 PP—2 pumps.
 EMP—30. Daily tonnage 50.
 SIZES SHIPT—Run of Mine.

PEERLESS COAL & MINING CO.

Now Shackelford Coal Mining Company.

PIERCE COAL AND LUMBER CO.

Now Pierce Development Company.

PIERCE DEVELOPMENT COMPANY

General Office, Bridgeport, Ala.
 PR—Ralph W. Pierce, 663 Main St., Buffalo, N. Y.
 VP—F. D. Pierce, Bridgeport, Ala.
 TR—V. M. Pierce, 66 Main St., Buffalo, N. Y.
 GM—F. D. Pierce, Bridgeport, Ala.

Pierce Mine; Drift; Belmont Seam, 40 inches thick.
 PO—Limrock, Ala.; SP—Same; CTY—Jackson; RR—Southern.
 S of H—Mules. Track gage 36 inches.
 S of M—2 elec. and 3 puncher macs.
 PP—2 150 H. P. boilers, gen. unit, 250 volts D. C.
 SIZES SHIPT—Run of Mine.
 NOTE—Formerly operated by the Pierce Coal & Lumber Co.

POCAHONTAS COAL & MINING CO.

General Office, Carbon Hill, Ala.
 PR—Chas. B. Teasley, Carbon Hill, Ala.
 TR—Luther Slides, " "
 GM—G. L. Wakefield, " "
 PA—G. L. Wakefield, " "
 GS—L. W. Slides, " "
 MS—J. D. Mays, " "
 EM—F. W. Cobb, " "
 SCO—Address the Company, Buyer, G. L. Wakefield, Carbon Hill, Ala.
 Sales Agency, T. H. Boners & Co., Birmingham, Ala.

Pocahontas Mine; Slope and Stripping; Jagger Seam, 54 in. thick.
 PO—Carbon Hill, Ala.; SP—Same; CTY—Walker; RR—Frisco.
 S of H—Mules.
 S of M—Hand.
 SIZES SHIPT—Run of Mine.

PRATT CONSOLIDATED COAL CO.

General Office, American Trust Bldg., Birmingham, Ala.
 PR—J. B. McCormack, Birmingham Ala.
 VP—Erskine Ramsay, Birmingham, Ala.
 TR—J. A. Shook, " "
 SECY—J. A. Shook, Birmingham, Ala.
 GM—H. E. McCormack, " "

GS—E. P. Rosamond, Birmingham, Ala.
 GS—E. B. Pennington, Birmingham, Ala.
 PA—R. N. Magill, " "
 CHIEF ENGR. Erskine Ramsay, Birmingham, Ala.
 ASST CHIEF ENGR.—Andrew C. Ramsay, Birmingham, Ala.
 EM—A. C. Pow, Birmingham, Ala.
 SCO—Address the Company, Buyer, R. N. Magill, Birmingham, Ala.
 Sales agent, K. A. Conville, Birmingham, Ala.

Aracida Mine; Drift; Pratt Seam, 36 in. thick.
 PO—R. F. D. No. 7, Birmingham, Ala.; SP—Aracida, Ala.; CTY—Jefferson; RR—L. & N.
 SM—W. D. Leatherwood, Birmingham, Ala.
 S of H—Mules. Track gage, 42 in.
 EMP—66. Last years tonnage 52,876.
 SIZES SHIPT—Run of Mine.

Banner Mine; Shaft; Mary Lee Seam; 108 in. thick. Operate washery.
 PO—Littleton, Ala.; Frt.—Littleton, Ala.; Exp.—Banner, Ala.; CTY—Jefferson; RR—L. & N.
 MS—H. L. Smith, Littleton, Ala.
 SM—R. R. Looney, Littleton, Ala.
 S of H—Mules and 5 trolley pole type locos. Track gage, 42 in.
 S of M—13 shortwall macs.
 PP—10 150 H. P. fire tube boilers, 1 175 K. W., 1 210 K. W., 1 550 K. W. gen. units, 250 volts D. C., 7 pumps.
 EMP—335. Last years tonnage 301,755.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Revolving and Shaker Screens, Picking Tables, Washeries.

Chipper Mine; Slope; Mary Lee Seam, 48 to 84 in. thick.
 PO—Dora, Ala.; SP—Same, and Chipper, Ala.; CTY—Walker; RR—Southern.
 MS—C. S. Ramsay, Dora, Ala.
 SM—C. E. Gravelle, Dora, Ala.
 S of H—Mules and rope. Track gage, 36 in.
 S of M—Hand.
 PP—3 fire tube boilers, total 400 H. P., 1 110 K. W. gen. unit, D. C., 6 pumps.
 EMP—114. Last years tonnage 78,728.
 SIZES SHIPT—Run of Mine.

Crocker Mine; Drift Pratt Seam, 36 in. thick.
 PO—R. F. D. No. 1, Morris, Ala.; SP—Crocker, Ala.; CTY—Jefferson; RR—L. & N.
 MS—E. B. Pennington, Birmingham, Ala.
 SM—J. M. McMillan, Morris, Ala.
 S of H—Mules. Track gage, 42 in.
 S of M—Hand.
 EMP—70. Last years tonnage 34,419.
 SIZES SHIPT—Run of Mine.

Dora Group (5 mines); Drift and Slope; Mary Lee Seam, 48 to 84 in. thick. Operate washery.
 PO—Dora, Ala.; SP—Same; CTY—Walker; RR—St. L. & S. F., Southern.

MS—C. S. Ramsay, Dora, Ala.
 SM—E. A. Creilly, Dora, Ala.
 S of H—Mules and 7 trolley pole type locos. Track gage, 36 in.
 S of M—Hand.
 PP—6 boilers, total 900 H. P., 1 150, 1 110 K. W. gen. units, 250 volts D. C., 1 pump.
 EMP—600. Last years tonnage 155,436.
 SIZES SHIPT—Run of Mine, Slack, Nut, Peg, Egg, Lump.
 PREP. EQUIPT—Gravity, Revolving and Shaker Screens, Picking Tables, Loading Booms, and Washeries.

Eldorado Mine; Slope; Pratt Seam, 36 in. thick.
 PO—Watson, Ala.; SP—Frt. Eldorado, Ala.; Exp. Mineral Springs, Ala.; CTY—Jefferson; RR—L. & N.
 MS—E. B. Pennington, Birmingham, Ala.
 SM—Henry Holmes, Watson, Ala.
 S of H—Mules and rope. Track gage, 42 in.
 S of M—Hand.
 PP—1 40 and 1 30 H. P. fire tube boilers.
 EMP—58. Last years tonnage 39,490.
 SIZES SHIPT—Run of Mine.

Erskine Mine; Drift; Pratt Seam, 36 in. thick.
 PO—R. F. D. No. 1, Adamsville, Ala.; SP—Yasmar, Ala.; CTY—Jefferson; RR—L. & N.
 MS—E. B. Pennington, Birmingham, Ala.
 SM—J. H. Dobbs, Adamsville, Ala.
 S of H—Mules. Track gage, 42 in.
 S of M—Hand.
 EMP—64. Last years tonnage 43,860.
 SIZES SHIPT—Run of Mine.
 Flat Creek Group Mine; 3 Drift, 3 Slope; Mary Lee Seam, 72 in. thick.

PO—R. F. D. No. 3, Quinton, Ala.; SP—Catta, Ala.; CTY—Jefferson; RR—L. & N.
 MS—J. D. Hollis, Quinton, Ala.
 SM—W. L. McCormack, Quinton, Ala.
 S of H—Mules, rope and trolley pole type locos. Track gage, 42 in.
 S of M—Hand.
 PP—6 150 H. P. fire tube boilers, 1 150 K. W., 1 500 K. W., 1 200 K. W. gen. units, 250 volts D. C., 10 pumps.
 EMP—390. Last years tonnage 183,967.
 SIZES SHIPT—Run of Mine, Slack.
 PREP. EQUIPT—Shaker Screens, Washeries.

Gamble Mines; Slope and Stripping; Mary Lee Seam; 60 in. thick.
 PO—Gamble Mines, Ala.; SP—Same; CTY—Walker; RR—Southern.
 MS—J. A. Brakelield, Gamble Mines, Ala.
 SM—E. P. Wilkins, Gamble Mines, Ala.
 S of H—Mules and rope. Track gage, 36 in.
 S of M—Hand.
 PP—1 150 H. P. fire tube boilers, 4 pumps.
 EMP—11. Last years tonnage 111,375.
 SIZES SHIPT—Run of Mine, Lump.
 PREP. EQUIPT—Gravity Screens.

Maxine Mine; Slope and Drift; "Pratt" and American Seam; 36 to 48 in. thick. Operate washery.
 PO—R. F. D. No. 3, Quinton, Ala.; Frt.—Maxine; Exp.—Praco, Ala.; CTY—Jefferson; RR—Southern.
 MS—J. F. Webb, Quinton, Ala.
 SM—Frank Harrell, R. F. D. 3, Quinton, Ala.
 S of H—Mules and 2 trolley pole type locos. Track gage, 42 in.
 S of M—Hand.
 PP—2 boilers, total 300 H. P., 1 175 K. W. gen. unit, 250 volts D. C.
 EMP—106. Last years tonnage 70,580.
 SIZES SHIPT—Slack, Run of Mine.
 PREP. EQUIPT—Shaker Screens, Washeries.

Mineral Springs Group (10 mines); Drift; "Pratt" Seam, 36 to 42 in. thick.
 PO—Watson, Ala.; SP—Mineral Springs; CTY—Jefferson; RR—L. & N.
 MS—J. G. Burgin, Watson, Ala.
 SM—J. S. Barnett, Watson, Ala.
 S of H—Mules. Track gage, 42 in.
 S of M—Hand.
 EMP—101. Last years tonnage 48,229.
 SIZES SHIPT—Run of Mine.

New Pratt Group (3 mines); Drift; "Pratt" Seam, 36 to 42 in. thick.
 PO—Blossburg, Ala.; SP—Same; CTY—Jefferson; RR—Southern.
 MS—J. T. Massengale, Blossburg, Ala.
 SM—J. G. Dobbs, Blossburg, Ala.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 EMP—161. Last years tonnage 102,910.
 SIZES SHIPT—Run of Mine.

Praco Mine; Drift; Mary Lee Seam, 90 in. thick.
 PO—R. F. D. No. 3, Quinton, Ala.; SP—Praco, Ala.; CTY—Jefferson; RR—L. & N.
 MS—J. F. Massengale, Quinton, Ala.
 SM—J. C. Calloway, Quinton, Ala.
 S of H—Mules. Track gage, 42 in.
 S of M—Hand.
 EMP—87. Last years tonnage 64,479.

Boby Mine; Slope; Mary Lee Seam; 32 to 48 in. thick.
 PO—Cordova, Ala.; SP—Same; CTY—Walker; RR—Southern.
 MS—C. J. Hager, Cordova, Ala.
 S of H—Mules.
 S of M—Hand.
 EMP—100. Last years tonnage 28,000.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens, Washeries.

PRATT FUEL COMPANY

General Office, 715 American Trust Bldg., Birmingham, Ala.
 PR—R. L. Moore, Birmingham, Ala.
 TR—W. B. Harper, Birmingham, Ala.
 GM—C. P. Moore, Empire, Ala.
 GS—C. P. Moore, Empire, Ala.
 EM—A. B. Mitchell, Birmingham, Ala.
 SCO—Address the Company, Buyer, J. W. Armstrong, Dora, Ala.

No. 1 Mine; Drift; Mt. Carmel Seam, 34 in. thick.
 PO—Dora, Ala.; SP—Same; CTY—Walker; RR—Frisco.
 MS—T. J. Payne, Dora, Ala.
 S of H—Mules. Track gage 36 in.
 S of M—Hand.
 PP—1 pump.
 EMP—65. Daily tonnage 225.
 SIZES SHIPT—Run of Mine.
 No. 2 Mine; Drift; Mt. Carmel Seam, 34 in. thick.
 PO—Dora, Ala.; SP—Same; CTY—Walker; RR—Frisco.
 MS—T. J. Payne, Dora, Ala.

S of H—Mules. Track gage 36 in.
 S of M—Hand.
 EMP—35. Daily tonnage 150.
 SIZES SHIPT—Run of Mine.
 No. 3 Mine; Drift; Mt. Carmel Seam, 34 in. thick.
 PO—Dora, Ala.; SP—Same; CTY—Walker; RR—Frisco.
 MS—T. J. Payne, Dora, Ala.
 S of H—Mules. Track gage 36 in.
 S of M—2 shortwall macs.
 PP—Power purchased, M. G. Set 250 volts D. C., 1 pump.
 EMP—75. Daily tonnage 500.
 SIZES SHIPT—Run of Mine.

RAILWAY FUEL COMPANY

General Office, 1300 Puma Ave., Washington, D. C.
 PR—Fairfax Harrison, Washington, D. C.
 VP—F. S. Wynn, Washington, D. C.
 VP—W. E. Leake, 623 First Nat'l Bank Bldg., Birmingham, Ala.
 TR—E. T. Farham, Washington, D. C.
 PA—W. R. Collessier, Washington, D. C.
 EM—O. L. Lockwood, Parrish, Ala.
 EE—O. M. Kling, Parrish, Ala.

Railway Fuel Mine; Slope; Mary Lee Seam, 72 inches thick.
 PO—Parrish, Ala.; SP—Same; CTY—Walker; RR—Southern.
 MS—Dan MacDonald, Parrish, Ala.
 S of H—Main and slope rope, 8 trolley pole type and 3 storage battery locos.
 S of M—7 shortwall and 1 arcwall mach.
 PP—Power purchased 3 M. G. Sets, 250 volts D. C., 3 pumps.
 EMP—300. Last years tonnage 257,501.
 SIZES SHIPT—Run of Mine.

RED EAGLE COAL COMPANY.

General Office, Birmingham, Ala.
 PR—Hampton S. Smith, Birmingham, Ala.
 GS—H. G. Goodwin, Blocton, Ala.
 PA—E. W. Suttle, Birmingham, Ala.
 NM—R. F. Thompson, " "
 CE—A. E. Eud, Birmingham, Ala.
 EE—C. W. Turner, Blocton, Ala.

Sales Agents, F. A. Grider, Birmingham, Ala.
 Red Eagle Mine; Slope; Woodstock Seam, 28 to 60 in. thick.
 PO—Blocton, Ala.; SP—Weatherford, Ala.; CTY—Blair; RR—Mobile & Ohio, Blocton Br.
 S of H—Mules, rope, elec. and steam locos. Track gage 42 in.
 S of M—Hand.
 PP—Power purchased. Transformer 2,200-550 volts A. C., 2 boilers, total 300 H. P., 10 pumps.
 EMP—175. Daily tonnage 350 tons.
 SIZES SHIPT—Run of Mine, Lump.
 PREP. EQUIPT—2 Jig Washeries.
 Old Information.

RED FEATHER COAL CO.

General Office, Blocton, Ala.; R. F. D. No. 1.
 PR—H. W. Perry, Blocton, Ala.
 TR—T. B. Perry, Birmingham, Ala.
 GM—H. W. Perry, Blocton, Ala.
 PA—Chas. B. Carter, Blocton, Ala.
 EM—Ralph Burg, Birmingham, Ala.
 SCO—Address the company, Buyer, Chas. R. Carter, Blocton, Ala.
 SA—Southern Coal Co., Memphis, Tenn.

Red Feather Mine; Slope; Cahaba No. 11 Seam, 42 in. thick.
 PO—Blocton, Ala.; No. 1; SP—Exp. Same and Red B. Feather, Ala.; CTY—Ribs; RR—M. & O.
 S of H—Mules and rope, steam loco.
 S of M—Hand.
 PP—3 water tube boilers.
 EMP—125. Last years tonnage 42,500.
 SIZES SHIPT—Run of Mine, Lump.
 PREP. EQUIPT—Shaker Screens.

REPUBLIC IRON & STEEL COMPANY.

General Office, Youngstown, O.
 PR—T. J. Bray, Youngstown, O.
 1ST VP—H. L. Rowland, Youngstown, O.
 TR—H. M. Hurd, Youngstown, O.
 MGR—Sou. Dis.—C. T. Fairbairn, Birmingham, Ala.
 GS (Coal Mines Sou. Dis.)—F. G. Morris, Sayreton, Ala.
 PA (Sou. Dis.)—S. B. Slater, Birmingham, Ala.
 SCO—Address the company, Buyer, G. W. Edwards, Birmingham, Ala.

Sayreton Mine; Slope; Mary Lee Seam, 66 to 90 in. thick.
 PO—Sayreton, Ala.; SP—North Birmingham, Ala.; CTY—Jefferson; RR—Thomas & Sayreton.
 MS—J. E. Meagher, Sayreton, Ala.
 SM—R. E. Hesse, " "
 S of H—Mules and 5 elec. locos. Track gage 42 in.
 S of M—2 shortwall mach.
 PP—4 return tubular boilers, total 568 H. P., Transformer, 2,200 volts and 550 volts A. C., 3 phases, 60 cycle, 250 volts D. C., 6 pumps.
 Power from Central Plant.

(Continued on Next Page)

Republic Iron & Steel Co.—Cont.
 EMP—322. Last years tonnage 430,-
 177.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Rolling and Shaker
 Screens, Picking Tables, Washeries.

Thompson Mine; Slope; Pratt Seam, 42
 to 60 inches thick.

PO—Sayreton, Ala.; SP—North Birming-
 ham, Ala.; CTY—Jefferson; RR—
 Thomas & Sayreton.

MS—J. G. Meagher, Sayreton, Ala.
 SM—R. E. Hesse.
 S of H—Mules and 1 engine plane. Track
 gauge, 36 in.

S of M—Hand.
 PP—1 fire tube boiler, 125 H. P., power
 from central plant, 250 volts D. C.,
 1 pump.

EMP—61. Last years tonnage 64,158.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

Warner No. 1 Mine; Slope; Pratt Seam,
 30 to 58 in. thick.

PO—Republic, Ala.; SP—Same; CTY—Jef-
 ferson; RR—Sou.

MS—J. S. Loyd, Republic, Ala.
 SM—C. P. Peller, Republic, Ala.
 S of H—Mules and 10 elec. locos. Track
 gauge 36 in.

S of M—Hand.
 PP—2 fire tube boilers, 125 H. P.,
 power from central plant, 2,200
 volts and 550 volts A. C., 250
 volts D. C.

EMP—192. Last years tonnage 151,-
 077.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Washeries.

Warren No. 2 Mine abandoned.

Risco Mine; Slope; Mary Lee Seam, 120
 to 144 inches thick.

PO—Palos, Ala.; EX—Same; FRT—Same
 and Risco, Ala.; CTY—Jefferson;
 RR—Southern.

MS—W. T. Burgess, Palos, Ala.
 SM—L. O. Stewart, Palos, Ala.
 S of H—Mules and elec. hoist. Track gauge
 42 inches.

S of M—5 shortwall machs.
 PP—1 fire tube boiler, 125 H. P.,
 power from central plant, 2,200
 volts A. C., 250 volts D. C.

EMP—86. Last years tonnage 47,919.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Rolling and Shaker
 Screens, Picking Tables, Washeries.

Central power plant and Thomas Fur-
 naces, Birmingham, Ala. 2,150
 K. W. gen. units, 6,600 volts A.
 C., 2,200 volts D. C.

RILEY TAYLOR COAL COMPANY

General Office, Phil Campbell, Ala.
 PR—Chas. Benson, Belgreen, Ala.
 VP—Riley Taylor, Phil Campbell, Ala.

Riley Taylor Mine; Black Creek Seam;
 36 in. thick.

PO—Phil Campbell, Ala.; SP—Same;
 CTY—Franklin; RR—Northern Ala.
 NOTE—Just started development.

RIVERVIEW COAL CO.
 General Office, Tuscaloosa, Ala.

PR—Jos. Burchfield, Tuscaloosa, Ala.
 TR—J. M. Burchfield, Tuscaloosa, Ala.
 GM—J. A. Onares, Northport, Ala.

GS—Geo. Kuppers, Tuscaloosa, Ala.
 PA—Jos. A. Searcy, Tuscaloosa, Ala.
 CE—C. M. Avers, Holt, Ala.

EM—C. J. Reed, Vance, Ala.
 SA—J. Searcy, Tuscaloosa, Ala.

Marble Mine; Shaft; Carter Seam, 22
 to 24 in. thick.

PO—Northport, Ala.; SP—Same; CTY—
 Tuscaloosa; RR—M. & O., Mont-
 gomery Br.

S of H—Mules.
 S of M—12 comp. air machs.
 PP—2 return tubular boilers, total 300
 H. P., 2 air compressors.

EMP—35.
 SIZES SHIPT—Nut, Lump.
 NOTE—Successors to the Northport
 Coal Co.

ROBBINS COAL CO.
 General Office, Lynn, Ala.

OPERATOR—S. O. Robbins, Lynn, Ala.
 SA—T. E. Bradford, Lynn, Ala.

Chickipen Mine; Drift; Black Creek Seam,
 28 inches thick.

PO—Lynn, Ala.; SP—Same; CTY—Win-
 ston; RR—N. A.

MS—S. O. Robbins, Lynn, Ala.
 S of H—Mules. Track gauge, 36 in.
 S of M—Hand.

EMP—5. Last years tonnage 400.
 PREP. EQUIPT—Gravity Screens.
 Old Information.

ROBSON CONTRACTING COMPANY
 Out of business.

RODEN COAL CO.
 General Office, Marvel, Ala.

PR—B. F. Roden, Marvel, Ala.
 VP—C. C. Rowman, Pittston, Pa.
 TR—O. E. Ellis, Marvel, Ala.

GM—B. F. Roden, Marvel, Ala.
 GS—B. F. Roden, Marvel, Ala.

PA—B. F. Roden, Marvel, Ala.
 CE—M. J. Lide, Birmingham, Ala.
 EM—W. B. McMurtrav, Marvel, Ala.

EE—J. R. Liddle, Marvel, Ala.
 SCO—Address the company. Buyer, G.
 E. Ellis, Marvel, Ala.

SA—Boden Coal Co., Birmingham, Ala.
 No. 2 Mine; Slope; Clark Seam; 48
 inches thick.

PO—Marvel, Ala.; SP—Same; CTY—
 Bibb; RR—L. & N. and Sou.

MS—C. C. McGraw, Marvel, Ala.
 S of H—Mules. Track gauge 42 inches.

PP—Power purchased. Transformer 44,-
 000 to 2,200 volts, 3 water tube
 boilers, 900 H. P., 2 gen. units,
 1—250 K. W. and 1—150 K. W.

EMP—250. Last fiscal year output, 168,-
 361 tons.
 SIZES SHIPT—Slack, Pea, Nut, Egg,
 Lump.

PREP. EQUIPT—Shaker Screens, Pick-
 ing Tables, Loading Rooms, Wash-
 eries.

No. 3 Mine; Slope; Clark Seam; 48
 inches thick.

PO—Marvel, Ala.; SP—Same; CTY—
 Bibb; RR—L. & N. and Sou.

MS—A. H. Verchot, Marvel, Ala.
 S of H—Mules. Track gauge 42 inches.

S of M—Hand.
 PP—Power purchased. Transformer 44,-
 000 to 2,200 volts A. C., 2—150
 H. P. fire tube boilers, 8 pumps.

EMP—150. Last fiscal year output, 54,-
 233 tons.
 SIZES SHIPT—Slack, Pea, Nut, Egg,
 Lump.

Note—Coal handled over tippie of No. 2
 mine.

ROGERS-TALY COAL CO.

General Office, Warrior, Ala.
 PR—C. P. Rogers, Jr., Warrior, Ala.

TR—W. A. Rogers, Warrior, Ala.
 GM—C. P. Rogers, Jr., Warrior, Ala.

GS—Wm. Winham, Warrior, Ala.
 PA—W. A. Rogers, Warrior, Ala.
 EM—Motley & Dry, Birmingham, Ala.

SCO—Address the company. Buyer, W.
 A. Rogers, Warrior, Ala.
 SA—W. A. Rogers, Warrior, Ala.

Pritchett Mines; Drift; Jefferson Seam,
 34 in. thick.

PO—Warrior, Ala.; SP—Same; CTY—
 Jefferson; RR—L. & N.

S of H—Mules. Track gauge 36 in.
 S of M—Hand.

PP—Power purchased, M. G. Sets, 1
 100 H. P. fire tube boiler.
 EMP—325. Daily tonnage 600 tons.
 SIZES SHIPT—Run of Mine.

ROSAMOND, E. P.
 General Office, Birmingham, Ala.

PA—E. P. Rosamond, Birmingham, Ala.
 TR—J. A. Shook, Birmingham, Ala.

GS—Wm. Crooks, Quinton, Ala.
 EMP—50. Daily tonnage 200.

SA—K. A. Conville, Birmingham, Ala.

Powell Mine; Drift; Mary-Lee Seam; 42
 inches thick.

PO—Quinton, Ala.; SP—Praco, Ala.
 CTY—Jefferson; RR—L. & N.

S of H—Mules. Track gauge 42 inches.
 S of M—Hand.

SIZES SHIPT—Run of Mine.

ROYAL COAL CORP.
 General Office, 708 Brown Marx Bldg.,
 Birmingham, Ala.

PB—Frank Nelson, Jr., Birmingham,
 Ala.

VP—T. L. Nelson, Jr., Birmingham,
 Ala.

TR—T. K. Lee, Birmingham, Ala.
 GM—W. A. Upton, Red Star, Ala.

GS—W. A. Upton, Red Star, Ala.
 PA—W. A. Upton, Red Star, Ala.

FM—Chas. Holstein, Red Star, Ala.
 SCO—Nelson Coal Corp., Buyer, D. G.
 Meadows, Red Star, Ala.

SA—Nelson Coal Corp., Birmingham,
 Ala.

Royal Mine; Drift; Mt. Carmel Seam,
 32 in. thick.

PO—Red Star, Ala.; SP—Same; CTY—
 Walker; RR—Southern.

MS—Lee Vinston, Red Star, Ala.
 S of H—Mules and rope, steam locos.
 Track gauge, 36 in.

S of M—1 chain mach.
 PP—Power purchased, 550-220 volts A.
 C., 2 pumps. 1—80 H. P. water
 tube boiler.

EMP—50. Last years tonnage 20,000.
 SIZES SHIPT—Run of Mine.

SAMOSSET COAL CO.
 Now part of Burnwell Coal Mng. Co.

SARAGOSSA MINING COMPANY
 General Office, Saragossa, Ala.

PR—J. B. Collins, Memphis, Tenn.

VP—B. E. Smith, Birmingham, Ala.

TR—A. Philbrick, Saragossa, Ala.

GM—A. Philbrick, Saragossa, Ala.

PA—A. Philbrick, Saragossa, Ala.
 EM—A. Philbrick, Saragossa, Ala.

SCO—Address the company. Buyer, T.
 B. Thompson, Saragossa, Ala.

SA—Southern Coal Co., Memphis, Tenn.

Saragossa Mine; Stripping; Mary Lee
 Seam; 28 inches.

PO—Saragossa, Ala.; SP—Same; CTY—
 Walker; RR—Southern.

S of H—Mules. Track gauge 36 in.
 S of M—Steam shovel.

EMP—54. Last years tonnage 30,000.
 SIZES SHIPT—Run of Mine, Lump.

PREP. EQUIPT—Shaker Screens and
 Washeries.

SARTAIN COAL COMPANY

General Office, Jasper, Ala.
 PR—E. F. Guy, Jasper, Ala.

TR—O. F. Cobb, Jasper, Ala.
 GM—C. M. Sartain, Jasper, Ala.

GS—J. L. Perry, Parrish, Ala.
 PA—E. F. Guy, Jasper, Ala.

CE—L. C. Britton, Jasper, Ala.
 SCO—Address the company. Buyer, E. F.
 Guy, Jasper, Ala.

Sartain Mine; Drift; Nickel Plate and
 Pratt Seams, 36-46 inches thick.

PO—Parrish, Ala.; SP—Driton, Ala.;
 CTY—Walker; RR—Southern.

SM—J. L. Sartain, Parrish, Ala.
 S of H—Mule. Track gauge 36 inches.

S of M—Hand.
 PP—1 pump.

EMP—150. Last years tonnage 75,000.
 SIZES SHIPT—Run of Mine.
 Old Information.

SAYRE MINING & MFG. CO.
 Now Gulf State Steel Co.

SELF, J. W. COAL CO.
 General Office, Carbon Hill, Ala.

PR—L. J. Self, Carbon Hill, Ala.
 TR—A. B. Brown, " " "

GM—J. W. Self, " " "
 GS—C. M. Self, " " "
 PA—J. W. Self, " " "
 CE—J. W. Self, " " "

SCO—Address the company. Buyer, J. W.
 Self, Carbon Hill, Ala.

Self Mine; Slope; Jagger and Blue Creek
 Seams, 36 and 54 in. thick.

PO—Carbon Hill, Ala.; SP—Same; CTY—
 Walker; RR—S. L. & S. F.

S of H—Mules.
 S of M—Hand.

SIZES SHIPT—Run of Mine.
 Old information.

SELLERS COAL COMPANY.
 General Office—1112 Empire Bldg.,
 Birmingham, Ala.

PR—W. D. Sellers, Birmingham, Ala.
 VP—Mrs. E. M. Sellers, Birmingham,
 Ala.

TR—W. D. Sellers, Birmingham, Ala.
 GM—W. D. Sellers, Birmingham, Ala.

GS—W. D. Sellers, Birmingham, Ala.
 PA—W. D. Sellers, Birmingham, Ala.

Sellers Mine; Slope; Gould Seam, 32
 in. thick.

PO—Ramford, Ala.; SP—Same; CTY—
 Shelby, RB—Sou., BBB Br.

S of H—Steam loco.
 S of M—Hand.

SIZES SHIPT—Run of Mine.

SHACKELFORD COAL MINING CO.
 General Office, Nauvoo, Ala.

PR—H. F. Shackelford, Nauvoo, Ala.
 TR—H. L. Shackelford, Nauvoo, Ala.

GM—H. F. Shackelford, Nauvoo, Ala.
 PA—H. F. Shackelford, Nauvoo, Ala.

SCO—Address the company. Buyer, L.
 M. Johnson, Nauvoo, Ala.

SA—T. H. Benner & Co., Birmingham,
 Ala.

Davis Mine; Drift; Black Creek Seam, 30
 inches thick.

PO—Nauvoo, Ala.; SP—Same; CTY—
 Walker; RR—Northern Ala.

S of H—Mules. Track gauge 40 inches.
 S of M—Hand.

PP—1 pump.
 EMP—60. Last years tonnage 21,800.
 SIZES SHIPT—Run of Mine.

NOTE—Formerly operated by the Peer-
 less Coal & Mining Co.

SHIRAS COAL COMPANY
 Out of business.

SIPSEY COAL MINING CO.
 General Office, R. F. D. No. 1, Empire,
 Ala.

PR—John E. Dilworth, R. D. No. 1, Empire, Ala.

TR—John E. Dilworth, R. D. No. 1, Empire, Ala.

PA—John E. Dilworth, R. D. No. 1, Empire, Ala.

CE—Motley & Dryer, Birmingham, Ala.

EM—Motley & Dryer, Birmingham, Ala.

EE—John Barron, Birmingham, Ala.

SCO—Address the company. Buyer, S. H.
 Dilworth, Birmingham, Ala.

Sales Agent, Grider Coal Sales, Inc.,
 Birmingham, Ala.

Dilworth Mine; Drift; Black Creek Seam;
 26 to 30 in. thick. Operate wash-
 ery.

PO—Empire, Ala.; SP—Dilworth, Ala.;
 CTY—Walker; RR—Frisco, Empire
 Br.

MS—J. E. Dilworth, R. F. D., Empire,
 Ala.

S of H—Mules. Track gauge, 42 in.
 S of M—Hand, 2 elec. machs.

PP—1 water tube boiler, total 50 H. P.
 220 volts A. C. Purchase power.

EMP—75. Last fiscal year output 21,-
 000 tons.

SIZES SHIPT—Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens and
 Washeries.

Old Information.

SLOSS-SHEFFIELD STEEL & IRON CO.
 General Office, Birmingham, Ala.

PR—J. W. McQueen, Birmingham, Ala.
 VP—Hugh Morrow, Birmingham, Ala.

TR—Russell Hunt, Birmingham, Ala.
 GS—H. J. Thomas, Birmingham, Ala.

Auditor—H. Franklin, " " "
 Fur Mgr—J. P. Dovel, " " "

PA—W. B. Powell, " " "
 CE—Martin J. Lide, Birmingham, Ala.

EM—E. E. Sutton, Birmingham, Ala.
 EE—A. F. Elliott, Birmingham, Ala.

SCO—Address the company. Buyer, J. D.
 Glasgow, Birmingham, Ala.

New Found Mine; Slope; Nickle Plate
 Seam, 36 in. thick.

PO—Brookside, Ala.; SP—Same; CTY—
 Jefferson, RR—Sou.

MS—C. B. Tutwiler, Brookside, Ala.
 SM—T. C. Hutto, Brookside, Ala.

S of H—Rope and mules. Track gauge
 36 in.

S of M—Hand.
 PP—Transformer 44,000 and 2,300
 volts A. C. 1 pump.

EMP—78. Last years tonnage 42,125.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Washeries.

Brookside No. 1 Mine Abandoned.

Crocker Hollow and Cardiff Mines;
 Drift; Nickle Plate Seam, 36 in.
 thick.

PO—Cardiff, Ala.; SP—Same; CTY—
 Jefferson, RR—Sou.

MS—C. B. Tutwiler, Brookside, Ala.
 SM—Allen Everidge, Brookside, Ala.

S of H—Mules. Track gauge 36 in.
 S of M—Hand.

EMP—165. Last years tonnage 63,649.
 SIZES SHIPT—Run of Mine.

Flat Top Mine; Slope; Mary Lee
 Seam, 10 ft. thick. Operate
 Washery.

PO—Flat Top; SP—Frt., Flat Top;
 Exp. Palos, Ala.; CTY—Jefferson;
 RR—Southern.

MS—W. L. Turner, Flat Top, Ala.
 SM—W. L. White, " " "

S of H—Mules, main and tail rope, 9
 trolley pole type and 3 storage
 battery locos. Track gauge 42 in.

S of M—7 shortwall machs.
 PP—1 water tube boilers, 460 H. P.,
 transformer 44,000 and 2,300
 volts A. C., rotary converters, 250
 volts D. C., 2 300 K. W. gen.
 units, 13 pumps.

EMP—385. Last years tonnage 365,-
 798.

SIZES SHIPT—Slack.
 PREP. EQUIPT—Shaker screens, wash-
 eries.

Bessie Mine; Slope; Mary Lee Seam,
 108 in. thick.

PO—Maben, Ala.; SP—Frt. Bessie, Exp.
 Palos, Ala.; CTY—Jefferson; RR—
 Sou. and Frisco.

MS—Edmund Ewing, Maben, Ala.
 MS—J. N. Holt, " " "

S of H—Rope, 8 trolley type and 3
 storage battery locos. Track gauge 42
 in.

S of M—5 shortwall machs.
 PP—1 water tube boiler 220 H. P.,
 transformer 44,000-2,300 volts
 A. C., gen. units 250 volts D. C.,
 9 pumps.

EMP—415. Last years tonnage 394,-
 420.

Sloss-Sheffield Steel & Iron Co.—Cont.
Orion Mine, Drift; America Seam; 4 ft. thick.
PO—Parrish, R. F. D. No. 1, Ala.; SP—Frt. Lee Spear, Ala.; Exp. American Junction, Ala.; CTY—Walker; RR—Southern.
MS—R. G. Culverhouse, Parrish, R. F. D. No. 1, Ala.
SM—John F. Currington, Parrish, Ala.
S of H—Mules. Track gauge 36 in.
S of M—Hand.
PP—2 pumps.
EMP—75. Last years tonnage 32,468.
SIZES SHIPT—Run of Mine.

Blossburg No. 3 Mine; Drift; Pratt Seam, 36 in. thick.
PO—Blossburg, Ala.; SP—Same; CTY—Jefferson; RR—Southern.
MS—A. W. Evans, Blossburg, Ala.
SM—John Gibson, Blossburg, Ala.
S of M—Mules and 2 gasoline locos. Track gauge 36 in.
S of M—Hand.
PP—2 fire tube boilers, 300 H. P., Transformer, 44,000-2,300 volts A. C., rotary converters, 250 volts D. C., 1 150 K. W. gen. unit 250 volts D. C., 3 pumps.
EMP—95. Last years tonnage 42,374.
SIZES SHIPT—Run of Mine.

Nos. 2 & 4 Blossburg Mines; Drifts; Nickel Plate Seam, 35 inches thick.
PO—Blossburg, Ala.; SP—Same; CTY—Jefferson; RR—Southern.
MS—A. W. Evans, Blossburg, Ala.
SM—John Gibson, Blossburg, Ala.
S of M—Mules. Track gauge 36 in.
PP—Transformer, 6,600-440 volts A. C., 2 pumps.
EMP—90. Last years tonnage 40,905.
SIZES SHIPT—Run of Mine.
Coalburg Mine; Drift; Pratt Seam.
PO—Coalburg, Ala.; SP—Frt. Coalburg, Ala.; Exp. Republic, Ala.; CTY—Jefferson; RR—Southern.
MS—C. B. Tutwiler, Brookside, Ala.
SM—J. S. Phillips, Coalburg, Ala.
S of H—Mules. Track gauge 36 in.
S of M—Hand.
EMP—40. Last years tonnage 16,906.
SIZES SHIPT—Run of Mine.

SOUTH BRILLIANT COAL COMPANY.

Operations Abandoned.
SOUTH CORONA COAL COMPANY
General Office, Corona, Ala.
SCO—Address the Company. Buyer, J. W. Porter, Corona, Ala.
SA—Corona Coal Company, Birmingham, Ala.

South Corona Mine; Slope; Corona Seam, 46 inches thick.
PO—Corona, Ala.; SP—Same; CTY—Walker; RR—Southern.
MS—Robert S. Shook, Coal Valley, Ala.
S of H—Mules and main and tail rope. Track gauge 36 inches.
S of M—5 comp. air machs.
PP—2 150 H. P. fire tube boilers, 6 pumps.
EMP—75. Daily tonnage 150.
SIZES SHIPT—Run of Mine.

SOUTH PRATT COAL COMPANY.

PR—W. H. Hillhouse, Blossburg, Ala.
TR—Hugh Hillhouse, " "
GS—Hugh Hillhouse, " "
GM—W. H. Hillhouse, " "
PA—W. H. Hillhouse, " "
EM—J. L. Burke, " "
SM—Hugh Hillhouse, " "
Hillhouse Mine; Drift; Pratt Seam.
PO—Brookside, Ala.; SP—Blossburg, Ala.
CTY—Jefferson; RR—Southern.
S of H—Mules, gasoline loco. Track gauge 36 in.
EMP—65. Last fiscal year output, 40,000 tons.
SIZES SHIPT—Run of Mine.

SOUTHERN CLAY MFG. CO.

General Office, Chattanooga, Tenn.
One Mine in Alabama, 1 mine in Tennessee.
PR—W. M. Lasley, Chattanooga, Tenn.
VP—W. C. Brown, Chattanooga, Tenn.
TR—W. C. Brown, " "
GM—J. D. Harvey, " "
GS—O. S. Adams, Star Route, Box 122, North Birmingham, Ala.
PA—E. Britton, Chattanooga, Tenn.
EM—Chas. F. Wheelock, Jr., American Trust Bldg., Birmingham, Ala.
SCO—Address the Company. Buyer, J. H. Hagroves Robbins, Tenn.
SA—J. D. Harvey, Chattanooga, Tenn.
Coaldale Mine, Drift; Black Creek Seam, 20 to 30 in. thick.
PO—R. F. D. 1, Warrior, Ala.; SP—Coaldale, Ala.; CTY—Jefferson; RR—L. & N., Linton, Ala.
MS—B. McCarty, Warrior, Ala.
SM—John McCarty, Warrior, Ala.
S of H—Mules. Track gauge 36 in.
S of M—Hand.
PP—3 fire tube boilers, 450 H. P., M. G. sets, 220 volts A. C.
EMP—150. Last years tonnage 7500.
SIZES SHIPT—Run of Mine.

SOUTHERN COAL & COKE COMPANY.

General Office, Boothton, Ala.
PR—G. F. Peter, Boothton, Ala.
TR—E. T. Hunter, Boothton, Ala.
GM—J. R. Hunter, Boothton, Ala.
PA—J. R. Hunter, Boothton, Ala.
EM—Floyd Atkinson, Boothton, Ala.
SCO—Southern Coal & Coke Co., Boothton, Ala.
Nos. 1, 2 and 3 Mines; Slopes; Ghodson and Clark seams, 36-52 in. thick.
PO—Boothton, Ala.; SP—Same; CTY—Shelby; RR—Sou., Blocton Br of L. & N.
MS—J. S. Kellum, Boothton, Ala.
SM—J. R. Hunter, Boothton, Ala.
S of H—Mules and rope. Track gauge, 36 in.
S of M—Hand, comp. air and electric machs.
PP—2 boilers, total 550 H. P., 2 air comp., 7 pumps.
EMP—250. Last years tonnage 78,000.
SIZES SHIPT—Lump, Slack.
PREP. EQUIPT—Shaker Screens.

SOUTHERN FUEL COMPANY.

General Office, Jasper, Ala.
PR—T. L. Long, Jasper, Ala.
VP—J. S. Freeman, Jasper, Ala.
TR—J. L. Ely, Jasper, Ala.
GM—J. S. Freeman, " "
GS—J. S. Freeman, " "
PA—J. S. Freeman, " "
CE—A. H. Witt, Birmingham, Ala.

Norvell Mine; Drift; Hlg Seam and Mt. Carmel, 30-72 in. thick.
PO—Jasper, Ala.; SP—Same. CTY—Walker, RR—Southern.
S of H—Mules. Track gauge 40 in.
S of M—Hand.
PP—1 fire tube boiler, 2 pumps.
EMP—25.
SIZES SHIPT—Run of Mine.
Old Information.

STITH COAL COMPANY.

General Office, America, Ala.
PR—J. P. Bimmick, Montgomery, Ala.
TR—A. B. Aldridge, Birmingham, Ala.
GM—A. B. Aldridge, Birmingham, Ala.
GS—A. B. Aldridge, Birmingham, Ala.
PA—A. B. Aldridge, Birmingham, Ala.
CE—J. L. Burke, Birmingham, Ala.
EM—W. L. Turner, " "
SCO—Address the Company. Buyer, A. L. Hayley, America, Ala.

Stith Mine; Drift; America Seam, 44 inches thick.
PO—America, Ala.; SP—Leespeer. CTY—Walker, RR—Sou.
MS—J. T. Foreman, America, Ala.
SM—A. L. Taylor, America, Ala.
S of H—Mules and 4 trolley pole type locos. Track gauge 36 inches.
S of M—4 shortwall machs.
PP—Power purchased. Transformer, 44,000-2,300 volts A. C. Gen. Units, 1—150 K. W. 250 volts D. C., 3 pumps.
EMP—135. Last years tonnage 126,475.
SIZES SHIPT—Run of Mine, Slack, Nut Egg, Lump.
PREP. EQUIPT—Revolving and Shaker Screens, Picking Tables, Washeries.

STOUT'S MOUNTAIN COAL CO

General Office, Hanceville, Ala.
PR—F. A. Kearny, Hanceville, Ala.
VP—P. P. Wilbert, Hanceville, Ala.
TR—F. P. Wilbert, Hanceville, Ala.
GM—S. H. Smith, Hanceville, Ala.
PA—S. H. Smith, Hanceville, Ala.
CE—A. H. Witt, Birmingham, Ala.
SA—United States Fuel Corp., Birmingham, Ala.

Stouts Mountain Mine; Drift; Black Creek Seam, 36 in. thick.
PO—Hanceville, Ala.; SP—Same; CTY—Cullman; RR—L. & N.
MS—J. C. Lillick, Hanceville, Ala.
S of H—Mules and gasoline locos. Track gauge 36 inches.
S of M—Hand.
PP—2 fire tube boilers, 2 pumps.
EMP—150. Daily tonnage 300.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Gravity Screens, Picking Tables.

SULPHUR SPRINGS COAL COMPANY

General Office, Cordova, Ala.
PR—Monroe Aaron, Cordova, Ala.
GM—Z. R. Jones, Cordova, Ala.
GS—Monroe Aaron, " "
PA—Monroe Aaron, " "
EM—L. V. Harvil, Cordova, Ala.
Sulphur Springs Mine; Drifts; Mt. Carmel Seam, 30 to 32 in. thick.
PO—Cordova, Ala.; SP—Same; CTY—Walker; RR—Southern.
S of H—Mules. Track gauge 36 in.
S of M—Hand.
PP—1 40 H. P. fire tube boiler, 3 pumps.
EMP—75. Last years tonnage 26,000.
SIZES SHIPT—Run of Mine, Slack
Old Information.

SOMMIT COAL COMPANY

Operations leased to Waldron & Kirk wool.

SUNLIGHT MINING CO

See Kentucky Data.

SOPREME MINING CO.

General Office, Birmingham, Ala.
PR—James Bonnyman, Birmingham, Ala.
VP—A. R. Long, Birmingham, Ala.
TR—John Bonnyman, Birmingham, Ala.
GM—A. R. Long, Birmingham, Ala.
GS—A. R. Long, Birmingham, Ala.
PA—John Bonnyman, Birmingham, Ala.
EM—H. H. Gary, Birmingham, Ala.
EE—H. H. Gary, Birmingham, Ala.
SCO—Address the Company. Buyer, John Bonnyman, Birmingham, Ala.
SA—Adams, Rowe & Norman, Birmingham, Ala.

Supreme Mine; Slope; Jagger Seam, 51 in. thick.
PO—Townley, Ala.; SP—Same; CTY—Walker; RR—St. L. & S. F.
MS—J. M. Powell, Townley, Ala.
SM—J. F. Averyt, Townley, Ala.
S of H—Mules. Track gauge, 36 in.
S of M—2 chain breast machs.
PP—Power purchased, 1 200 K. W. rotary converter 250 volts, D. C. 2 pumps.
EMP—100. Last years tonnage 84,529.
SIZES SHIPT—Egg, Lump.
PREP. EQUIPT—Picking Tables, Jig Washer.

TENNESSEE COAL, IRON & RAILROAD COMPANY

General Office, Birmingham, Ala.
20 Mines in Alabama and 1 mine in Tennessee.
PR—Geo. G. Crawford, Birmingham, Ala.
VP—H. C. Ryding, Birmingham, Ala.
TR—L. T. Beecher, " "
Mine Mgr.—Edwin Ball, " "
PA—Geo. H. Gray, " "
SM—Geo. H. Gray, " "
GS—(Coal Dept.)—J. M. McHugh, Ensley, Ala.
AUDITOR—F. B. Winslow, Birmingham, Ala.

GENERAL MANAGER OF SALES—WILLARD WILSON, Birmingham, Ala.

Pratt No. 1, 2 and 10 Mines; Shaft and Slope.
"Pratt" Seam, 45 to 46 in. thick. Operate washery.
PO—Pratt City, Ala.; SP—Shafton and Ridgfield, Ala.; CTY—Jefferson; RR—Birmingham Southern.
S of H—Electric Locomotive and rope.
S of M—Hand and Electric Machines.
PP—Boilers, gen. units, 500 volts D. C.

Pratt No. 3 Mine; Slope; Pratt Seam, 48 in. thick. Operate washery.
PO—Ensley, Ala.; SP—Same. CTY—Jefferson, RR—Birmingham Sou.
S of H—Elec. loco. and rope.
S of M—Elec. mach. and hand.
PP—6,600 volts A. C. Power from Central Station.

Pratt No. 4 Mine; Slope, Pratt Seam, 48 in. thick. Operate washery.
PO—Ensley, Ala.; SP—Same. CTY—Jefferson.
MS—J. R. Brown, Ensley, Ala.
S of H—Elec. loco. and rope.
S of M—Elec. mach. and hand.
PP—6,600 A. C. from Central station.

Pratt No. 5 and 8; Slope; Pratt Seam, 48 and 49 in. thick. Operate washery.
PO—Wylam, Ala.; SP—Same and Bryon-ton, Ala. RR—Birmingham Sou.
MS—J. R. Brown, Ensley, Ala.
S of H—Elec. loco. and rope.
S of M—Elec. mach. and hand.
PP—6,600 volts A. C. From Central station.

Pratt No. 7 and 14, Slope and drift. Pratt Seam, 48 in. thick.
PO—Pratt City, Ala.; SP—Laketon and Thompson, Ala. CTY—Jefferson, RR—Birmingham Sou.
S of H—Elec. loco. mules and rope.
S of M—Hand.
PP—700 volts D. C.

Doceana Mine Shaft; Pratt Seam, 42 in. thick.
PO—Adamsville Ala. R. D. No. 4 SP—Birmingham Sou.
MS—W. H. Striffling, Adamsville, Ala.
S of H—Elec.
S of M—Elec. and hand.
PP—250 volts D. C.

Edgewater Mine; Shaft; Pratt Seam, 52 in. thick.
PO—Wylam, Ala.; SP—Edgewater, Ala. CTY—Jefferson, RR—Birmingham Sou.
MS—Robt. Flynn, Wylam, Ala.

S of H—Elec.
S of M—Elec. and hand.
PP—250 volts D. C.

Blocton Nos. 2, 3, 7 and 8, Slope, Thompson Seam, 66 to 70 in. thick.
PO—Blocton, Ala.; SP—Same. CTY—Bibb, RR—L. & N. W. & B; A. G. S. Sou., M & O.
MS—James Stewart, Blocton, Ala.
S of H—Mules and rope.
S of M—Hand.
PP—2,300 volts A. C.

Blossburg "A" "B" and "E"; Drift, Pratt Seam, 42 in. thick. Operate washery.
PO—Blossburg, Ala.; SP—Same. CTY—Jefferson; RR—Sou.
MS—Harry McCarrle, Blossburg, Ala.
S of H—Mules.
S of M—Hand.
EMP—At all mines, 3,837. Last fiscal year output at all mines, 3,358,354 tons. Total number of coke ovens at all mines, Bee Hive, 2,974; By-Product, 280.
Old Information.

THOMAS CREEK COAL COMPANY

General Office, Carbon Hill, Ala.
PR—Wm. Bynon, Carbon Hill, Ala.
VP—Charles B. Trosby, Montgomery, Ala.
TR—Charles B. Trosby, Montgomery, Ala.
GM—Wm. Bynon, Carbon Hill, Ala.
GS—Wm. Bynon, Carbon Hill, Ala.
PA—Wm. Bynon, Carbon Hill, Ala.
CE—Wm. Bynon, Carbon Hill, Ala.
EM—M. McKintosh, Carbon Hill, Ala.
EE—W. E. Swatt, Carbon Hill, Ala.
SA—T. H. Benner & Co., Birmingham, Ala.

Thomas Creek Mine; Slope and Drift; Jagger and No. 7 Seams 42-44 in. thick.
PO—Carbon Hill, Ala.; SP—Same; CTY—Walker; RR—Frisco.
S of H—Mules and rope, trolley pole locos. Track gauge 36 inches.
S of M—2 mining machs.
PP—Power purchased, 1—150 K. W. gen. unit, M. G. sets, 250 volts D. C., 2 boilers, 7 pumps.
EMP—116. Daily tonnage 300.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens and Washeries.

TUSCALOOSA MINING COMPANY.

General Office, Oakman, Ala.
OWNER—Geo. B. Hooper, Oakman, Ala.
GS—S. L. Brown, Oakman, Ala.
EM—P. S. Haley, Oakman, Ala.

Tuscaloosa Mine; Drift; Corona Seam, 3 inches thick.
PO—Oakman, Ala.; SP—Same; CTY—Walker; RR—Southern.
S of H—Mules. Track gauge 36 in.
S of M—Hand.
EMP—75. Last fiscal year output 21,223 tons.
SIZES SHIPT—Run of Mine.

VICTORY COAL MINING COMPANY, THE

General Office, Dora, Ala.
PR—J. R. Baird, Dora, Ala.
TR—C. I. Jones, Dora, Ala.
SA—Pratt Con. Coal Co., Birmingham, Ala.
Victory Mine; Mary Lee Seam; 36 inches thick.
PO—Dora, Ala.; SP—Same; CTY—Walker; RR—St. L. & S. F.
MS—J. R. Baird, Dora, Ala.
S of H—Mules.
S of M—Hand.
EMP—35. Daily output, 150 tons.
SIZES SHIPT—Run of Mine.
Old Information.

WABASH COAL MINING COMPANY, INC.

General Office, Oakman, Ala.
PR—W. L. Graybe, Oakman, Ala.
VP—C. C. Graybe, Oakman, Ala.
TR—C. C. Graybe, Oakman, Ala.
GM—Wm. L. Graybe, Jr., Oakman, Ala.
GS—Wm. L. Graybe, Jr., Oakman, Ala.
PA—C. C. Graybe, " "
EM—P. S. Haley, Oakman, Ala.
SCO—Graybe Bros., Buyer, C. C. Graybe, Oakman, Ala.
SA—Black Diamond Coal Mng. Co., Birmingham, Ala.

Graybe No. 1 Mine; Drift; Corona Seam; 20 in. thick.
PO—Oakman, Ala.; SP—Same; CTY—Walker; RR—Southern.
S of H—Mules. Track gauge 42 in.
S of M—Hand.
PP—1 pump.
EMP—25. Last years tonnage 7,600.
SIZES SHIPT—Run of Mine.
Old Information.

WALDRON & KIRKWOOD.

General Office, Dora, Ala.
 PR—J. M. Kirkwood, Corona, Ala.
 GM—C. M. Waldron, Dora, Ala.
 SCO—Address the Company, Buyer, C. M. Waldron, Dora, Ala.
 SA—Summit Coal Co., 340 Brown Max Bldg., Birmingham, Ala.

Summit Mine; Slope; Black Creek and Jefferson Seams; 30 in. thick.
 PO—Dora, Ala.; SP—Summit and Dora, Ala.; CTY—Walker; RR—St. L. & S. F.
 MS—James Cooke, Dora, Ala.
 S of H—Mules and rope. Track gage, 40 in.
 S of M—2 shortwall machs.
 PP—Power purchased, transformers 44,000-550-250 volts A. C.
 EMP—50. Last years tonnage 12,000.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Shaker Screens, Washeries.
 Note—Lease operations of Summit Coal Co.
 Old Information

WARRIOR-BLACK CREEK COAL CO.

Now Moss & McCormack.

WARRIOR PRATT COAL CO.

General Office, Birmingham, Ala.
 PR—Harold R. Sanson, Birmingham, Ala.
 TR—Daniel Pierson, Jr., Newark, N. J.
 GM—Harold Sanson, Birmingham, Ala.
 GS—H. R. Sanson, 1411 American Tr. Bldg., Birmingham, Ala.
 PA—Geo. C. Walter, Birmingham, Ala.
 EM—A. H. Witt, " "
 CE—A. H. Witt, " "
 SCO—Address the Company, Buyer, E. R. Fiker, Porter, Ala.
 Sales Mgr.—T. A. Grider, Birmingham, Ala.

Porter Mine; Slope; Mary Lee Seam, 72 to 132 in. thick.
 PO—Porter, Ala.; SP—Same; CTY—Jefferson; RR—Son.
 S of H—Rope and mules, comp. air and steam loco. Track gauge, 42 in.
 S of M—Hand and 11 comp. air machs.
 PP—4 boilers, total 600 H. P., 2 air compressors, 7 pumps.
 EMP—150. Last fiscal year output, 104,000 tons.
 SIZES SHIPT—Run of Mine.

WELLER COAL COMPANY

General Office, Birmingham, Ala.
 PR—J. M. Donaldson, Birmingham, Ala.
 VP—M. K. Stobert, Birmingham, Ala.
 TR—Tom Stobert, Birmingham, Ala.

Weller Mine; Slope; Blue Creek Seam, 84 inches thick.

PO—Aubrey, Ala.; SP—Same; CTY—Jefferson; RR—L. & N.
 MS—R. L. Clark, Aubrey, Ala.
 S of H—Mules and rope. Track gage 36 inches.
 S of M—Hand
 EMP—25. Daily tonnage 100.
 SIZES SHIPT—Run of Mine.

WEST ALABAMA COAL COMPANY.

PR—T. J. Norris, Jasper, Ala.
 TR—G. O. Johnson, " "
 GM—G. O. Johnson, " "
 GS—G. O. Johnson, " "
 PA—G. O. Johnson, " "
 CE—C. B. Stonaker, " "
 SCO—Address the Company, Buyer, T. A. Willingham, Jasper, Ala.
 Sales Agent, O. F. Cobb, Jasper, Ala.

Gayosa Mine; Drift; Corona Seam, 40 in. thick.
 PO—Jasper, Ala.; SP—Gayosa; CTY—Walker; RR—Southern.
 S of H—Mules.
 S of M—Hand.
 Daily output 75 tons.
 SIZES SHIPT—Run of Mine.
 Old information.

WEST HELENA COAL COMPANY.

General Office, 2016 American Trust Bldg., Birmingham, Ala.
 PR—A. Seward, Seward, Ala.
 VP—J. C. Patterson, Birmingham, Ala.
 TR—J. C. Patterson, Birmingham, Ala.
 CE—Alex. Powe, Birmingham, Ala.
 SCO—Address the Company, Buyer, R. C. Cobb, Jr., Seward, Ala.
 SA—W. A. Horne, Birmingham, Ala.

Seward Mine; Slope; Helena Seam, 36 in. thick.
 PO—Seward, Ala. SP—Same. CTY—Shelby. RR—Southern, Mobile Div.
 S of H—Mules and rope. Track gage 36 inches.
 S of M—Room and Pillar, 1 coal cutter.
 PP—Purchase power. Transformer 2,300 to 220 volts, 2 pumps.
 EMP—65. Last years tonnage 31,533
 SIZES SHIPT—Run of Mine.

WINONA COAL COMPANY

General Office, Brown-Marx Bldg., Birmingham, Ala.
 PR—A. B. Aldridge, Birmingham, Ala.
 TR—M. Randall, Birmingham, Ala.
 GM—A. B. Aldridge, Birmingham, Ala.
 GS—E. P. Randle, America, Ala.
 PA—E. P. Randle, Gorgas, Ala.
 EM—Daubney Lausner, Gorgas, Ala.
 EE—Jno. Rodgers, Gorgas, Ala.
 SCO—Address the Company, Buyer, W. A. Turner, Gorgas, Ala.

Winona Mine; Drift; America and Pratt Seam, 40 inches thick.
 PO—Gorgas, Ala.; SP—America, Ala.; CTY—Walker; RR—Southern.
 S of H—3 5 ton, 1 8 ton, 2 6 ton locos. Track gage 36 in.
 S of M—5 shortwall machs.
 PP—Power purchased. Transformer 44,000 to 2300 volts A. C., M. G. Sets, 250 volts D. C.
 EMP—150. Last years tonnage 120,000.
 SIZES SHIPT—Run of Mine.

WOODWARD IRON CO.

General Office, Woodward, Ala.
 PR—F. H. Crookard, Woodward, Ala.
 Secy.—Herbert E. Smith, " "
 TR—D. E. Wilson, " "
 Chairman—A. H. Woodward, Woodward, Ala.
 GM—A. J. Boynton, Woodward, Ala.
 PA—J. H. Leonard, " "
 EM—E. T. Miller, Woodward, Ala.
 EE—E. P. Winters, " "

Dolomite Nos. 1 and 3 Mines; Slope; Pratt Seam, 54 in. thick.
 PO—Dolomite, Ala.; SP—Same; CTY—Jefferson; RR—A. R. & A.
 MS—J. E. Thomas, Dolomite, Ala.
 SM—J. R. Wilson, " "
 S of H—Elec. locos.
 S of M—Hand.
 EMP—720. Last fiscal year output 623,565 tons.
 Coke Ovens, 230 By-Products.
 Mine for own use only.

Mulga No. 1 Mine; Shaft; Pratt Seam 3½ ft. thick.
 PO—Mulga, Ala.; SP—Same; CTY—Jefferson; RR—A. R. & A.
 MS—J. E. Thomas, Dolomite, Ala.
 S of H—Elec. locos.
 S of M—Mach.
 EMP—395. Last fiscal year output 255,606 tons.
 Mine for own use only.

YELLOW LEAF COAL COMPANY

General Office, 420 Chamber of Commerce Bldg., Birmingham, Ala.
 PR—R. E. McGee, Birmingham, Ala.
 GM—R. E. McGee, " "
 GS—R. E. McGee, " "
 TR—W. D. Britt, " "

Yellow Leaf Mine; Slope; Martin Seam, 84 in. thick.
 PO—Chelsea, Ala.; SP—Same; CTY—Shelby; RR—A. B. & A.
 S of H—1 steam loco.
 S of M—Hand.
 PP—1 return tubular boiler, total 80 H. P.
 SIZES SHIPT—Run of Mine.

YOLANDE COAL & COKE CO.

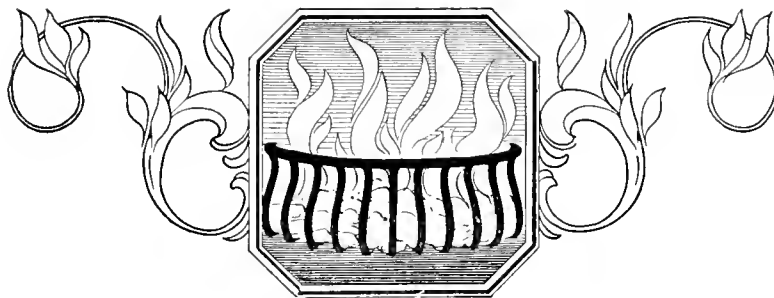
General Office, Birmingham, Ala.
 PR—J. B. McClary, Birmingham, Ala.
 TR—H. S. Madge, Birmingham, Ala.
 GM—J. B. McClary, Birmingham, Ala.
 PA—J. B. McClary, Birmingham, Ala.
 CE—A. H. Witt, Birmingham, Ala.
 EM—A. H. Witt, Birmingham, Ala.
 EE—J. T. Caples, Birmingham, Ala.
 SCO—Yolande Store, Buyer, Thos. W. Moore, Yolande, Ala.

No. 1 Mine; Slope; Mildale and Blue Creek Seams; 33-72 inches thick.
 PO—Yolande, Ala.; SP—Same; CTY—Tuscaloosa; RR—L. & N.
 MS—E. L. Elliott, Yolande, Ala.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 PP—Power purchased. Transformer 2,300 to 550 volts A. C., 5 fire tube boilers, 625 H. P., motor gen. sets 2,300 and 550 volts, D. C., 4 pumps.
 EMP—112.
 Coke Ovens—100 Bee Hive.
 PREP. EQUIPT—Revolving and Shaker Screens, Picking Tables, Loading Booms.

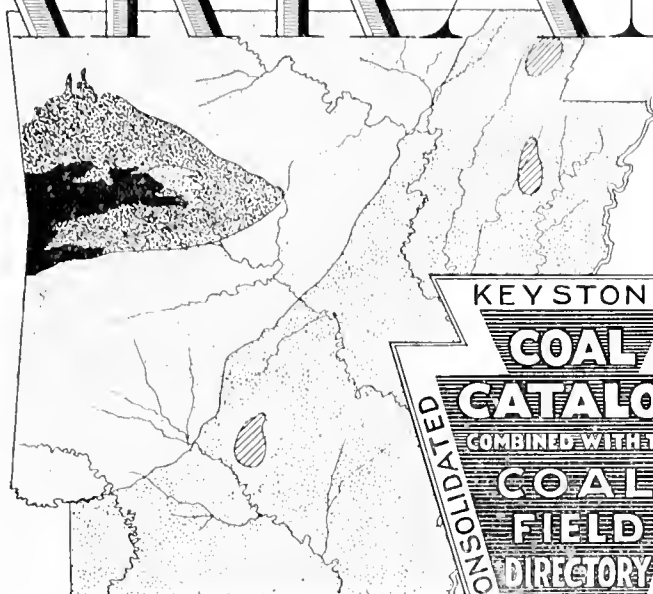
No. 2 Mine; Slope; Blue Creek Seam; 71 inches thick.
 PO—Yolande, Ala.; SP—Same; CTY—Tuscaloosa; RR—L. & N.
 MS—E. L. Elliott, Yolande, Ala.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 PP—Power purchased. Transformer 2,300 to 550 volts A. C., 3 fire tube boilers, 575 H. P., motor gen. sets, 2,300 and 550 volts, D. C., 6 pumps.
 EMP—88.

No. 3 Mine; Slope; Mildale Seam; 32 inches thick.
 PO—Yolande, Ala.; SP—Same; CTY—Tuscaloosa; RR—L. & N.
 MS—E. L. Elliott, Yolande, Ala.
 S of H—Mules.
 PP—Power purchased. Transformer 2,300 to 550 volts, A. C., 1 pump.
 EMP—60.
 SIZES SHIPT—Run of Mine.

Kennebunk Mine; Slope; Blue Creek Seam; 72 inches thick.
 PO—Yolande, Ala.; SP—Same; CTY—Tuscaloosa; RR—L. & N.
 MS—E. L. Elliott, Yolande, Ala.
 S of H—Mules. Track gage 40 inches.
 S of M—Hand.
 PP—Power purchased.
 Note—Mine just being developed.



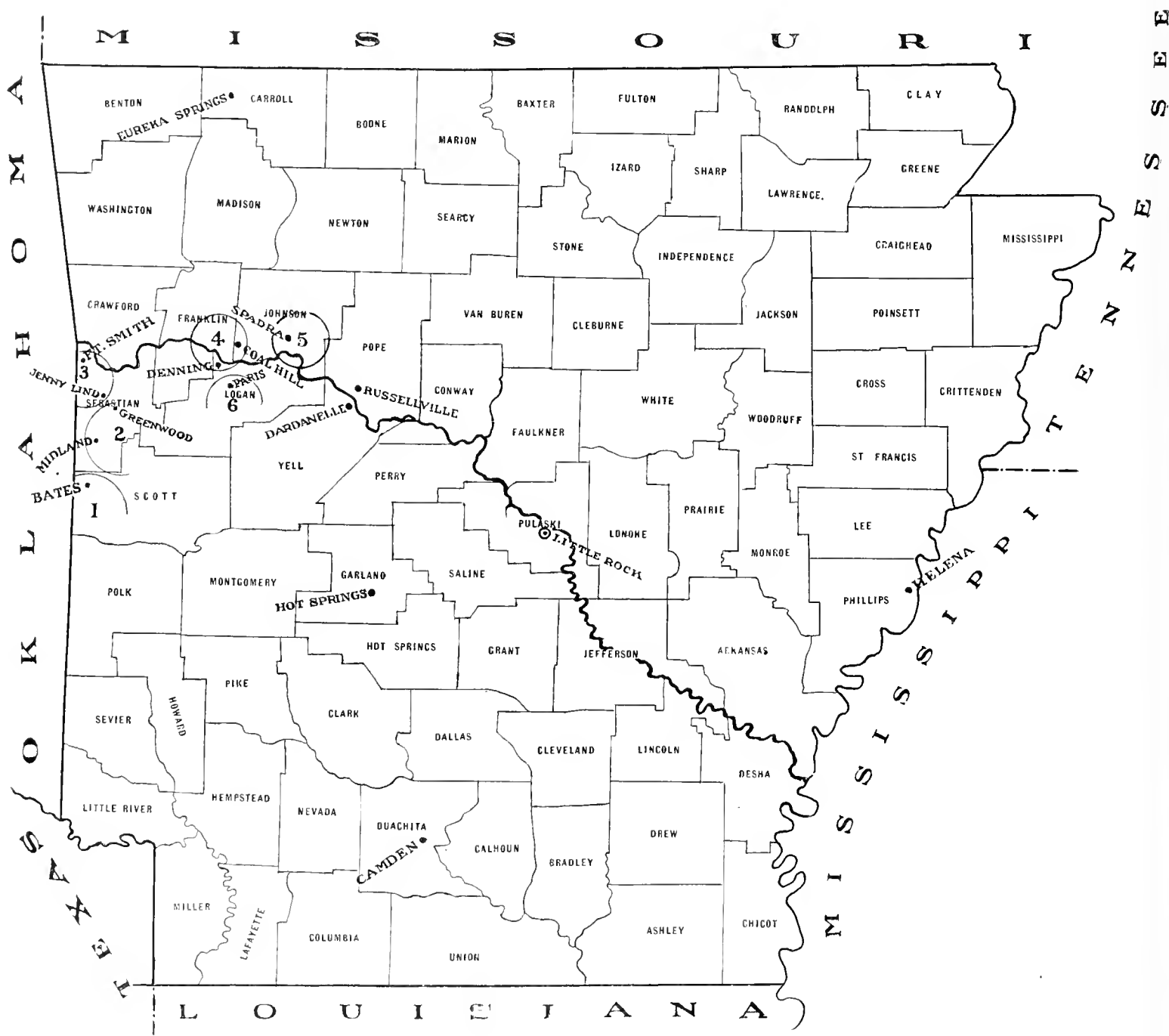
ARKANSAS



CONTENTS

Map of Mining Districts.....	266
General Description of Coal Resources.....	267
Hartshorne Seam.....	268
Paris Seam.....	268
Lignite Coals.....	268
Preparation and Sizing of Coal.....	268
Supplementary Analyses.....	269
List of Mines by Seams.....	270
Alphabetical Directory of Coal Mines.....	271 to 273

Map of Mining Districts ARKANSAS



MINING DISTRICTS OF ARKANSAS

No. 1—Bates-Coaldale.
No. 2—Greenwood-Huntington.

No. 3—Bonanza-Jenny Lind.
No. 4—Denning-Coal Hill.

No. 5—Spadra.
No. 6—Paris.

ARKANSAS

General Description of the Geology of the Field With the Ranks of Coal Produced
Treats of the Mining Districts, With a Map Showing Their Location, All
Seams Lying Within the Territory, and the Railroads Serving Same;
Description of the Producing Seams Showing Their Geological
Order. Kinds of Coal, General Analysis, Etc

The Arkansas coal field lies in the valley of the Arkansas River, between the western border of the state and Russellville. It is about 33 miles wide and 60 miles long. The area of the region is about 2000 square miles, comprising six counties, viz: Sebastian, Franklin, Johnson, Scott, Logan and Pope. The first three named are the chief producers. It is only in the eastern and western parts of the coal field that the Hartshorne coal is probably thick enough or sufficiently free from partings to be of economic importance.

All of the Arkansas true coal was deposited during the geological period known as the Pennsylvanian. Since the coal was buried, the region has been raised and lowered at different times. During this process, the rock layers, including the coal seams, which were originally practically flat, have been gently folded up into anticlines and down into synclines. As a result they are now seldom level, but have a dip or pitch occasionally as much as 18 degrees from the horizontal, but generally less than 6 to 7 degrees.* One result of the disturbances which this field has undergone is that the coals in many places have become partially devolatilized, thus we find coals ranking as semianthracite, semibituminous and bituminous, all in the same seam, though separated geographically.

Arkansas produces around 2,000,000 tons of coal yearly. This relatively small production is due chiefly to the sharp competition of cheap oil and gas from the great fields of Texas, Oklahoma and Louisiana. The principal market for run of mine, which had always been as a locomotive fuel, is now largely supplied by oil. The railroads, however, continue to be the chief consumers of the output, using practically all of the lump coal produced. There is little industrial development within the state. Some of the harder coal from the thin seams is sold at good prices for domestic use.

The railroads traversing the mining districts are the following: Missouri Pacific; Kansas City Southern; Chicago, Rock Island and Pacific; St. Louis and San Francisco; St. Louis, Iron Mountain and Southern; Arkansas Central; Arkansas Western; Midland Valley; Dardanelle and Russellville.

MINING DISTRICTS OF ARKANSAS

- 1 Bates-Coaldale. Seam mined is the Hartshorne. Coal is used for railroad and steam purposes. Railroad serving is the Kansas City Southern.
- 2 Greenwood-Huntington. Seam mined is the Hartshorne, known locally as the Huntington and Mammoth. The coal is known to the trade as "Arkansas semianthracite", and is used for railroad, steam and domestic purposes. Railroads serving are the St. Louis and San Francisco; Midland Valley; Chicago, Rock Island and Pacific; and Arkansas Central.
- 3 Bonanza-Jenny Lind. Seam mined is the Hartshorne, known here as the Jenny Lind, the output going into railroad and steam uses. Railroads serving are the Missouri Pacific, St. Louis and San Francisco, Kansas City Southern, and St. Louis, Iron Mountain and Southern.
- 4 Denning-Coal Hill. Seam mined is the Hartshorne of semibituminous and semianthracite ranks. Known locally as the Denning. The output is used chiefly for railroad, steam and domestic purposes. Railroads serving are Missouri Pacific and St. Louis, Iron Mountain and Southern.
- 5 Spadra. Seam mined is the Hartshorne, known locally as the Spadra, and producing a semianthracite coal used for railroad, steam, domestic and metallurgical purposes. Coal from this district is known to the trade as "Arkansas anthracite". Railroads serving are the St. Louis, Iron Mountain and Southern, Missouri Pacific, and Dardanelle and Russellville.
- 6 Paris. Seam mined is the Paris of semibituminous rank, the output going into railroad and steam uses. Railroads serving are the Kansas City Southern, Missouri Pacific, and Arkansas Central.

*Coal Mining in Arkansas, by A. A. Steel.

Hartshorne Seam. (Known also as the Mammoth and Huntington in Sebastian county; the Jenny Lind in the Bonanza-Jenny Lind district; the Denning in the Denning-Coal Hill district; the Spadra in the Spadra district; the Shinn Basin in Pope county. Coal from points where the volatile matter is low is known to the trade as "Arkansas anthracite".) (Mined in all districts except the the Paris.)

The Hartshorne is an extension of the Oklahoma seam of the same name, and is the great producing bed of the state. It is of Carboniferous (Allegheny) age. In the Greenwood-Huntington district of Sebastian county the seam is either semibituminous or semianthracite in rank. The coal at most places is soft and friable, and since much of it is shot from the solid, and the Arkansas mining law calls for payment to the miner on a run of mine basis, a great deal of fine coal results, making it difficult to use as a domestic fuel. A great deal of the output is used for engine fuel and much of the slack is sold for stationary steam uses. Very little gas is encountered in the mines.

Sebastian county produces the famous Arkansas smokeless coals which burn with a short sootless flame and make little smoke. They can be stored for months with little depreciation. The mining conditions in the county are good. The coal is overlaid with a hard tough sandstone, making a firm roof. The measures lie in the form of a syncline, the sides having a pitch varying from 10 per cent. on the south to 6 per cent. on the north. The coal is worked on the room and pillar system, openings being made by shafts, slopes, drifts and strippings. The thickness of the seam is 8 feet 6 inches, but this includes two layers of shale 12 and 4 inches thick respectively. Unless care is taken, slate and impurities are likely to become mixed with the coal, making separation difficult without washing. The cleanest product is obtained where mining is done by the three bench method.

From Coronado mine to the southwest for a distance of 10 miles the coal has a good thickness, but carries a dirt band 10 to 12 inches thick. The upper bench averages 3 to 3½ feet; the bottom bench 3½ to 4 feet. The two benches are in close proximity.

The Hartshorne seam in the Bates-Coaldale district is of bituminous rank. In the Bonanza-Jenny Lind district it is semibituminous and thinner than that about Huntington, varying from 2 feet 6 inches to 4 feet, with an average of about 3 feet.

In the Denning-Coal Hill district it is both semianthracite and semibituminous. In the Spadra district, the coal is harder and lower in volatile matter, giving rise to the name "Arkansas anthracite", though in reality it is of the semianthracite rank. The larger sizes are used entirely for domestic purposes. It is free burning, produces a uniform heat and stocks well. The slack is used as a reducing material in the retorts of the zinc smelters.

GENERAL ANALYSIS

	Denning-Coal Hill
Moisture	2.25
Volatile Matter	14.25
Fixed Carbon	74.00
Ash	9.50
Sulphur	1.90
B. T. U.	14,000

Paris Seam. (Mined in the Paris district.)

This seam lies from 1000 to 1400 feet vertically above the Hartshorne horizon and is of considerable importance, although there are but few operations, and these of small size. The seam is of semibituminous rank and ranges from 20 to 30 inches in thickness.

GENERAL ANALYSIS

Moisture	2.75
Volatile Matter	14.70
Fixed Carbon	73.50
Ash	9.05
Sulphur	2.80
B. T. U.	13,775

Lignite Coals. (Mined in Ouachita county.)

The lignites of Arkansas are of Tertiary age. They contain so much water that they are not now commercially valuable for direct burning, although the beds are very thick and used to a slight extent for making gas. The coal slacks quickly and will not stand storage nor transportation.

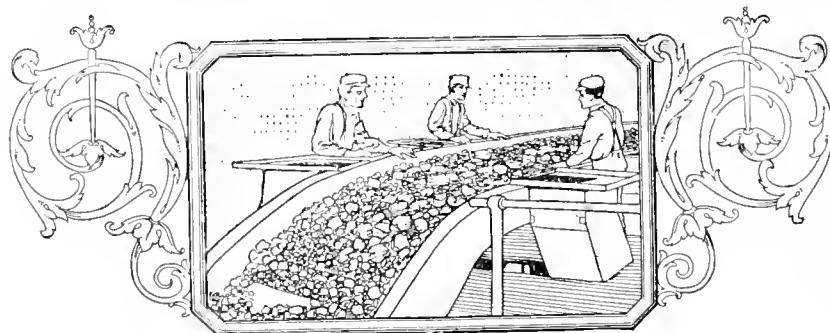
GENERAL ANALYSIS

Moisture	39.45
Volatile Matter	26.50
Fixed Carbon	24.35
Ash	9.70
Sulphur	0.50
B. T. U.	6,350

PREPARATION OF COAL

The usual manner of preparing Arkansas coal is by passing the run of mine over shaker screens. Four sizes are generally made, the slack passing through a ¾-inch to 5/8-inch screen; the pea through a 1¼-inch screen, and the nut through a

2½-inch screen. At some of the larger mines the slate is separated by mechanical slate pickers. In the Spadra district revolving screens are found at several mines, but as the coal is quite soft and much breakage results, these are being gradually displaced by bar or shaker screens.

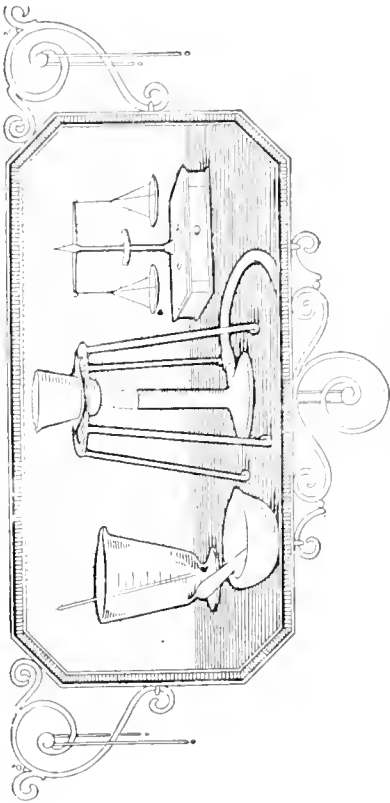


Analyses of Arkansas Seams by Counties and Localities

(ALL ANALYSES MADE ON MINE SAMPLES "AS RECEIVED")

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fix'd Carbon	Ash	Sulphur	Heating Value, B. T. U.	Carbon	RATIOS		
										Hydrogen	Carbon	F. C.
										oxy. + Ash		V. M.
*Denning.....	Franklin, Denning.....	Denning No. 2.....	3.64	15.32	73.88	7.16	2.43	13,743	79.81	4.67	6.75	4.82
*Hartshorne (Denning).....	Franklin.....	No. 2.....	0.84	16.46	75.32	7.38	1.91	14,645	.....	.....	.....	4.58
*Hartshorne (Denning).....	Johnson.....	No. 4.....	2.36	12.68	72.88	12.08	1.99	13,259	76.44	4.30	4.67	5.73
*Hartshorne (Spadra).....	Johnson.....	Anth. No. 1.....	3.12	11.39	77.03	8.46	1.84	13,793	72.13	7.22	4.62	7.60
*Hartshorne (Shinn Basin).....	Johnson, 2 mi. s. of Clarkville.....	Brooks.....	1.72	10.46	79.50	8.32	2.49	13,867	.....	.....	.....	6.32
*Hartshorne (Shinn Basin).....	Pope, 2½ mi. s. w. of Russellville.....	Bernice.....	2.79	11.90	75.24	10.07	2.17	13,356	78.28	4.13	5.51	8.03
*Hartshorne (Lower Bench).....	Pope.....	Southern.....	2.97	9.81	78.82	9.30	1.74	13,702	80.28	3.59	6.23	2.72
*Hartshorne.....	Scott.....	Seymour.....	3.37	24.44	66.40	5.79	0.87	.....	.....	.....	.....	3.75
*Hartshorne.....	Sebastian, Bonanza.....	No. 26.....	5.26	14.71	55.22	24.81	1.00	10,451	59.87	9.18	1.76	4.90
*Hartshorne.....	Sebastian, Greenwood.....	Greenwood No. 1.....	3.21	14.84	72.66	9.29	3.12	13,588	78.37	3.95	3.62	4.17
*Hartshorne.....	Sebastian, Hackett.....	Brammer No. 2.....	3.55	15.73	65.56	15.16	1.67	12,541	72.56	4.88	.....	4.32
*Hartshorne.....	Sebastian, Huntington.....	No. 3.....	3.53	16.66	72.04	7.77	1.29	14,017	.....	.....	.....	0.92
*Lignite.....	Onachita.....	Lester No. 2.....	39.43	26.49	24.37	9.71	0.49	6,356	36.33	45.81	0.66	5.00
*Paris.....	Logan.....	Paris.....	2.77	14.69	73.47	9.97	2.79	13,774	78.71	3.95	6.05	4.08
*Paris.....	Logan, 1 mi. n. e. of Paris.....	Grand No. 1.....	2.41	17.23	70.35	10.01	3.21	13,523	77.97	3.12	5.94	.....

*Bullietins Bureau of Mines.



List of Mines By Seams. Including Name of Company, General Office Address, County, Railroad and Shipping Point

ARKANSAS

HARTSHORNE SEAM (Known also as the **MAMMOTH** and **HUNTINGTON** in Sebastian County; the **JENNY LIND** in the Bonanza-Jenny Lind District; the **DENNING** in the Denning-Coal Hill District; the **SPADRA** in the Spadra District; the **SHINN BASIN** in Pope County.)

Mined in Bates-Coaldale, Greenwood-Huntington, Bonanza-Jenny Lind, Denning-Coal Hill and Spadra districts. Bituminous, semibituminous and semianthracite ranks. Suitable for Locomotive Fuel, Steam, Producer Gas and Domestic Uses. Low volatile coals known as Smokeless.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Actus Coal Co.	Huntington, Ark.	Pleck Diamond	Sebastian	Mo. Pac.	Jenny Lind, Ark.
Alix Coal Co.	Alix, Ark.	Superior	Franklin	Mo. Pac.	Alix, Ark.
American Smokeless Coal Co.	Muskogee, Okla.	Fidelity	Sebastian	Midland Valley	Greenwood, Ark.
Arkoal Smokeless Coal Co.	Huntington, Ark.	Jasper	Sebastian	St. L. & S. F.	Huntington, Ark.
Backbone Coal Co.	McAllister, Okla.	Jon S.	Sebastian	Midland Valley	Excelsior, Ark.
Baldwin Peacock Coal Company	Baldwin, Ark.	Haldwin	Washington	A. T. & S. F.	Leith, Ark.
Bates Smokeless Coal Co.	McAllister, Okla.	Rat's No. 2	Scott	Arkansas & Western	Bates, Ark.
Blue Hills Coal Co.	Coal Hill, Ark.	Wallis-McKinney	Johnson	Mo. Pac.	Denning Yards, Ark.
Central Coal & Coke Co.	Kansas City, Mo.	No. 2	Sebastian	St. L. & S. F.	Huntington, Ark.
Central Coal & Coke Co.	Kansas City, Mo.	No. 3	Sebastian	St. L. & S. F.	Huntington, Ark.
Central Coal & Coke Co.	Kansas City, Mo.	No. 4	Sebastian	C. R. I. & P.	Hartford, Ark.
Central Coal & Coke Co.	Kansas City, Mo.	No. 6	Sebastian	St. L. & S. F.	Huntington, Ark.
Central Coal & Coke Co.	Kansas City, Mo.	No. 10	Sebastian	C. R. I. & P.	Hartford, Ark.
Central Coal & Coke Co.	Kansas City, Mo.	No. 11	Sebastian	Midland Valley	Hartford, Ark.
Central Coal & Coke Co.	Kansas City, Mo.	No. 15	Sebastian	C. R. I. & P.	Hartford, Ark.
Clarksville Anthracite Coal Co.	Clarksville, Ark.	Clarksville An. Mine	Johnson	Mo. Pac.	Clarksville, Ark.
Douglas Coal Co.	Alix, Ark.	Sadire	Johnson	Mo. Pac.	Denning Yards, Ark.
Excello Coal Company	Greenwood, Ark.	Excello	Sebastian	M. P. M. V.	Greenwood, Ark.
Fernwood Mining Co.	Scranton Life Bldg., Scranton, Pa.	Fernwood No. 1	Johnson	Mo. Pac.	Clarksville, Ark.
Fernwood Mining Co.	Scranton Life Bldg., Scranton, Pa.	Fernwood No. 2	Johnson	Mo. Pac.	Montana, Ark.
Franklin Coal Co.	Coal Hill, Ark.	Franklin	Johnson	Mo. Pac.	Coal Hill, Ark.
Greenwood Coal Co.	Greenwood, Ark.	No. 1	Sebastian	Midland Valley	Greenwood, Ark.
Greenwood Coal Co.	Greenwood, Ark.	No. 2	Sebastian	Midland Valley	Greenwood, Ark.
Harper Coal & Coke Co.	Bates, Ark.	Packard No. 1	Scott	K. C. So.	Bates, Ark.
Hartford Valley Fuel Co.	Hartford, Ark.	No. 2	Sebastian	Midland Valley	Hartford, Ark.
Jones Coal Co.	Greenwood, Ark.	Jones	Sebastian	Mo. Pacific	Greenwood, Ark.
Katy Coal Co.	Midland, Ark.	Midland No. 6	Sebastian	Midland Valley	Midland, Ark.
McAdoo, S. A. Coal Co.	Barling, Ark.	McAdoo	Sebastian	Arkansas Central	Jenny Lind, Ark.
Majestic Coal Mining Company	Fort Smith, Ark.	Majestic	Sebastian	Midland Valley	Midland, Ark.
Majestic Coal Mining Company	Fort Smith, Ark.	Majestic	Sebastian	Midland Valley	Midland, Ark.
New Coronado Coal Company	Huntington, Ark.	New Coronado	Sebastian	St. L. & S. F.	Huntington, Ark.
Quita Coal Mining Company	Russellville, Ark.	Quita	Pope	Mo. Pacific	Russellville, Ark.
Packard Consolidated Coal Co.	Bates, Ark.	Packard No. 2	Scott	K. C. So.	Bates, Ark.
Petty & McGehee	Jenny Lind, Ark.	Stripping	Sebastian	Mo. Pacific	Jenny Lind, Ark.
Security Coal Co.	Hackett, Ark.	Dallas No. 8	Sebastian	St. L. & S. F.	Huntington, Ark.
Semi-Anthracite Mining Co. (The)	Coal Hill, Ark.	Sandhoe	Franklin	Mo. Pac.	Denning Yards, Ark.
Southern Anthracite Coal Mining Co.	Russellville, Ark.	Bernice No. 1	Pope	D. & R.	Russellville, Ark.
Southern Anthracite Coal Mining Co.	Russellville, Ark.	Bernice No. 2	Pope	D. & R.	Russellville, Ark.
Turnipseed Coal Co.	Midland, Ark.	Montreal Smokeless	Sebastian	St. L. & S. F.	Midland, Ark.
Woodson-Barr Coal Company	Bonanza, Ark.	No. 135	Sebastian	St. L. & S. F.	Bonanza, Ark.

DENNING SEAM

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Clark, McWilliams & Co.	Spadra, Ark.	Igo-Deep	Johnson	Mo. Pacific	Spadra, Ark.
Collier Dunlap Coal Company	Clarksville, Ark.	Collier Dunlap	Johnson	Mo. Pacific	Hartman, Ark.
Denning Smokeless Coal Company	Altus, Ark.	Red Devil	Franklin	Mo. Pacific	Altus, Ark.
Dodson, George E., Coal Co.	Alix, Ark.	Dodson No. 1	Franklin	Mo. Pac.	Denning Yard, Ark.
Dodson, George E., Coal Co.	Alix, Ark.	Dodson No. 2	Franklin	Mo. Pac.	Denning Yard, Ark.
Grand Prairie Coal Co.	Fort Smith, Ark.	Radiant Mine	Franklin	Ark. Central	Branch, Ark.
McWilliams, Ward & Co.	Spadra, Ark.	McWilliams-Ward	Johnson	I. M. S.	Spadra, Ark.
Rafter Coal Co.	Kansas City, Mo.	No. 1	Johnson	Mo. Pac.	Coal Hill, Ark.
Smokeless Coal Co.	Clarksville, Ark.	Victory	Johnson	Mo. Pacific	Spadra, Ark.
Western Coal & Mining Co.	St. Louis, Mo.	No. 2	Franklin	Mo. Pac.	Denning, Ark.
Western Coal & Mining Co.	St. Louis, Mo.	No. 6	Franklin	Mo. Pac.	Denning, Ark.

SPADRA SEAM

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Lucas Mardis Coal Co.	Clarksville, Ark.	Lucas Mardis "Eureka"	Johnson	Mo. Pacific	Spadra, Ark.
Nichols-King-Laser Coal Co.	Clarksville, Ark.	Nichols-King-Laser	Johnson	Mo. Pac.	Clarksville, Ark.
Spadra Creek Coal Co.	Clarksville, Ark.	Needmore	Johnson	Mo. Pacific	Spadra, Ark.
Spadra Coal Co.	Montana, Ark.	Sunshine	Johnson	Mo. Pacific	Spadra, Ark.
Sterling Anthracite Coal Co.	Clarksville, Ark.	Sterling	Johnson	Mo. Pac.	Clarksville, Ark.

PARIS SEAM

Mined in the Paris District. Semibituminous rank. Suitable for Locomotive Fuel, Domestic, Producer Gas and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Dennis Coal Co.	Paris, Ark.	Grand Nos. 1 & 2	Logan	Arkansas Central	Paris, Ark.
Jewell Coal Co.	Paris, Ark.	Paradise	Logan	Ark. Central	Paris, Ark.
Liberty Coal Co.	Paris, Ark.	Liberty	Logan	Arkansas Central	Paris, Ark.
New Union Coal Co.	Paris, Ark.	New Union	Logan	Arkansas Central	Paris, Ark.
Shilaco Coal Co.	Scranton, Ark.		Logan		Scranton, Ark.

ARKANSAS

Alphabetical Directory of Coal Mines, Giving Complete Detailed Information Covering Each Mine

For List of Abbreviations See Page 13.

ACTUS COAL COMPANY

General Office, Huntington, Ark.
PR—C. C. Woodson, Huntington, Ark.
TR—C. R. Holbrook, Huntington, Ark.
GS—C. C. Woodson, Huntington, Ark.

Black Diamond Mine; Slope; Hunting-
ton Seam, 54 in. thick.
PO—Jenny Lind, Ark.; SP—Same; CTY
—Sebastian; RR—Mo. Pac.
MS—Mr. Newberry, Jenny Lind, Ark.
S of H—Mules. Track gage 35½ inches.
S of M—Hand.
PP—1 fire tube boiler, 40 H. P.
EMP—30. Daily tonnage 300.
SIZES SHIPT—Stark, Egg, Lump.
PREP. EQUIPT—Bar Screens.
NOTE—Formerly operated by the Jenny
Lind Smokeless Fuel Co.

ALIX COAL COMPANY

General Office, Alix, Ark.
PR—Dr. J. L. Ross, Altus, Ark.
VP—J. A. Lewis, Alix, Ark.
TR—E. E. Coffey, Alix, Ark.
GM—J. A. Lewis, Alix, Ark.
GS—J. A. Lewis, Alix, Ark.
EM—Lewis & Noel, Fort Smith, Ark.
SA—Midland Coal Co., Kansas City, Mo.

Superior Mine; Slope; Hartshorne Seam,
45 inches thick.
PO—Alix, Ark.; SP—Same; CTY—
Franklin; RR—Mo. Pac.
S of H—Mules and main and tail rope.
Track gage 36 inches.
S of M—Hand.
PP—Power purchased. Transformer 2300-
220 volts A. C., 2 water tube boilers,
150 H. P., 6 pumps.
EMP—125. Daily tonnage 400.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Gravity Screens.
NOTE—Successors to Superior Coal Co.

AMERICAN SMOKELESS COAL CO.

General Office, Muskogee, Okla.
PR—J. W. Dougherty, c/o Metals &
Commerce Corp., 120 Broadway,
New York, N. Y.
VP—H. B. Barling, Muskogee, Okla.
TR—Max Breitung, c/o Metals & Com-
merce Corp., 120 Broadway, New
York, N. Y.
GM—H. B. Barling, Muskogee, Okla.
PA—H. B. Barling, Muskogee, Okla.
SA—National Fuel Co., Mutual Bldg.,
Kansas City, Kan.

Fidelity Mine; Slope; Hartshorne Seam,
54-60 in. thick.
PO—Greenwood, Ark.; SP—Same; CTY—
Sebastian; RR—Midland Valley.
MS—Frank Johnson, Greenwood, Ark.
S of H—Mules, steam hoist. Track gage
40 inches.
S of M—Hand.
PP—Power purchased. Transformer 2,300
to 440 volts A. C., 4 fire tube
boilers, 300 H. P., 6 pumps.
EMP—108. Last years tonnage 46,000.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Shaker Screens.

ARKOAL SMOKELESS COAL CO.

General Office, Huntington, Ark.
PR—John W. Jasper, Huntington, Ark.
VP—Otto Mitchell, Ft. Smith, Ark.
TR—H. R. Rean, Huntington, Ark.
GM—John W. Jasper, Huntington, Ark.
GS—J. L. Burns, Huntington, Ark.
PA—John W. Jasper, Huntington, Ark.
EM—Dan H. Cadmus, Hackett, Ark.

Jasper Mine; Drift; Lower Vein Seam
in. thick.
PO—Huntington, Ark.; SP—Same; CTY
—Sebastian; RR—Frisco.
S of H—Mules and gasoline locos.
Track gage 36 in.
S of M—Hand.
PP—1 pump.
EMP—10. Last fiscal year output 3,000
tons.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by Jasper
Coal Co.

BACKBONE COAL COMPANY

General Office, McAlester, Okla.
PR—J. G. Puterbaugh, McAlester, Okla.
TR—E. P. Joyner, McAlester, Okla.
GM—W. H. McCauley, Greenwood, Ark.
GS—S. K. Smith, McAlester, Okla.
PA—E. P. Joyner, McAlester, Okla.
EM—V. C. Robbins, McAlester, Okla.
SA—McAlester Fuel Co., McAlester,
Okla.

"Jones" Mine; Shaft; Upper Hartshorne
Seam; 34 inches thick.
PO—Greenwood, Ark.; SP—Exp., Green-
wood, Frl., Excelsior, CTY—Sebas-
tian; RR—Midland Valley.
S of H—Mules. Track gage 30 inches.
S of M—Hand.
PP—Power purchased. 2 200 H. P. fire
tube boilers.
EMP—125. Daily output, 11,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut.
PREP. EQUIPT—Bar Screens, Loading
Booms.

BALDWIN PEACOCK COAL COMPANY.

General Office, Baldwin, Ark.
PR—J. R. Stanberry, Baldwin, Ark.
GM—Geo. Stanberry, Baldwin, Ark.

Baldwin Mine; Drift; Semi-Anthracite
Seam, 14 in. thick.
PO—Baldwin, Ark.; SP—Leith, Ark.;
CTY—Washington; RR—A. T. &
S. F.
S of H—Mules. Track gage, 24 in.
S of M—Hand.
SIZES SHIPT—Slack, Pea, Nut and
Lump.

BATES SMOKELESS COAL CO.

General Office, McAlester, Okla.
PR—J. G. Puterbaugh, McAlester,
Okla.
TR—E. F. Joyner, McAlester, Okla.
GM—W. D. Puterbaugh, McAlester,
Okla.
GS—S. K. Smith, McAlester, Okla.
PA—E. P. Joyner, McAlester, Okla.
EM—V. C. Robbins, McAlester, Okla.
SA—The McAlester Fuel Co., McAlester
Okla.

No. 2 Mine; Slope; Seam, 36 inches
thick.
PO—Bates, Ark.; SP—Same; CTY—
Scott; RR—Arkansas Western.
MS—Ben Evans, Bates, Ark.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—2 pumps.
EMP—70.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Shaker Screens.

BLUE HILLS COAL COMPANY

PR—H. C. Parmelee, Coal Hill, Ark.
TR—E. P. Joyner, McAlester, Okla.
GM—H. C. Parmelee, Coal Hill, Ark.
GS—H. C. Parmelee, Coal Hill, Ark.
PA—H. C. Parmelee, Coal Hill, Ark.
CE—H. O. Lewis, Fort Smith, Ark.

Wallis-McKinney Mine; Shaft; Lower
Hartshorne Seam, 44 inches thick.
PO—Coal Hill, Ark.; SP—Denning Yards,
Ark.; CTY—Johnson; RR—Mo. Pac.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—Power purchased, transformer 2,300
to 220 volts A. C., 2 fire tube
boilers, 3 pumps.
EMP—40. Last years tonnage 20,000.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Shaker Screens.

BORDER COAL COMPANY.

Now Hackett Coal Co.

CENTRAL COAL & COKE COMPANY

General Office, Kansas City, Mo. Opera-
tions in Arkansas, Kansas, Missouri,
Oklahoma and Wyoming.
PR—C. S. Keith, Kansas City, Mo.
VP—H. M. Taylor, Kansas City, Mo.
TR—E. E. Riley, Kansas City, Mo.
GS—Wm Harkes, Kansas City, Mo.
PA—Thos. Mackie, Kansas City, Mo.
EM—J. S. O'Flaherty, Kansas City, Mo.

No. 2 Mine; Shaft; Hartshorne Seam; 78
inches thick.
PO—Huntington, Ark.; SP—Same; CTY
—Sebastian; RR—St. L. & S. F.
MS—W. H. Risher, Huntington, Ark.
S of H—Rope. Track gage 36 inches.
S of M—Hand.
PP—Power purchased. Transformers 2-
300 to 220 volts A. C., rotary con-
verters, 220 volts D. C., 2 fire tube
boilers, 160 H. P., 5 pumps.
EMP—40. Last years tonnage 31,532.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Shaker Screens, Wash-
eries.

No. 3 Mine; Shaft; Hartshorne Seam;
72 inches thick.
PO—Huntington, Ark.; SP—Same; CTY
—Sebastian; RR—St. L. & S. F.
MS—W. H. Risher, Huntington, Ark.
S of H—Mules and rope. Track gage 36
inches.
S of M—Hand.
PP—Power purchased. Transformers 2-
300 to 220 volts A. C., rotary con-
verters, 220 volts A. C., 5 fire tube
boilers, 2 80 H. P., 3 100 H. P.,
8 pumps.
EMP—141. Last years tonnage 126-
055.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Shaker Screens, Wash-
eries.

No. 4 Mine; Slope; Hartshorne Seam; 48
inches thick.
PO—Hartford, Ark.; SP—Same; CTY—
Sebastian; RR—C. R. I. & P.
MS—Robert Boyd, Hartford, Ark.
S of H—Mule and rope. Track gage 36
inches.
S of M—10 shortwall marks.
PP—Power purchased. Transformers 2-
300 volts A. C., M. G. set, 300
K. W., 220 volts D. C., 2 100
H. P. fire tube boilers, 6 pumps.
EMP—125. Last years tonnage 35,604.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Gravity Screens.

No. 6 Mine; Shaft; Hartshorne Seam, 72
inches thick.
PO—Huntington, Ark.; SP—Same; CTY
—Sebastian; RR—St. L. & S. F.
MS—W. H. Risher, Huntington, Ark.
S of H—Mules and rope, trolley pole type
loco. Track gage 36 inches.
S of M—Hand.
PP—1 100 H. P. and 1 200 H. P.
fire tube boilers, Gen. unit 400 K.
W., 250 volts D. C., 5 pumps.
EMP—350. Last years tonnage 169-
526.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Shaker Screens, Picking
Tables, Loading Booms, Washeries.

No. 10 Mine; Slope; Hartshorne Seam;
48 inches thick.
PO—Hartford, Ark.; SP—Same; CTY—
Sebastian; RR—C. R. I. & P.
MS—Robert Boyd, Hartford, Ark.
S of H—Mules and rope. Track gage 36
inches.
S of M—10 shortwall marks.
PP—Power purchased. Transformers 2-
300 to 220 volts A. C., 1 M. G.
set, 100 K. W., 220 volts D. C.,
1 fire tube boiler, 40 H. P., 5
pumps.
EMP—120. Last years tonnage 127-
003.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Gravity Screens.

No. 11 Mine; Shaft; Hartshorne Seam;
48 inches thick.
PO—Hartford, Ark.; SP—Same; CTY—
Sebastian; RR—Midland Valley.
MS—J. A. McCurry, Hartford, Ark.
S of H—Rope, storage battery loco. Track
gage 36 inches.
S of M—4 marks.
PP—Power purchased. Transformers 2-
300 to 220 volts A. C., 1 M. G.
set, 35 K. W., gen. unit, 375
K. W., 220 volts A. C., 3 fire tube
boilers, 999 H. P., 5 pumps.
EMP—20. Last years tonnage 114-
742.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Shaker Screens, Picking
Tables, Loading Rooms.

No. 15 Mine; Slope; Hartshorne Seam;
48 inches thick.
PO—Hartford, Ark.; SP—Same; CTY—
Sebastian; RR—C. R. I. & P.
MS—Robt. Boyd, Hartford, Ark.
S of H—Rope. Track gage 36 inches.
S of M—5 shortwall marks.
PP—Power purchased. Transformers 2-
300 to 220 volts A. C., 1 M. G.
set, 100 K. W., 220 volts D. C.,
1 fire tube boiler, 40 H. P., 4
pumps.
EMP 206. Last years tonnage 68,470
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Gravity Screens.

CLARK, McWILLIAMS & CO

General Office, Spadra, Ark.
TR—A. S. Logan, Clarksville, Ark.
GM—T. M. Clark, " "
GS—N. R. Clark, " "
PA—T. M. Clark, Clarksville, Ark.
Sales Agency, Spadra-Clarkville Coal
Clarksville, Ark.

Igo-Deep Shaft Mine; Shaft; Anthracite
Seam, 36 in. thick.
PO—Spadra, Ark.; SP—Same; CTY—
Johnson; RR—Mo. Pacific.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—2 boilers, total 225 H. P., 1 pump.
EMP 175. Last fiscal year output, 57-
542 tons.
SIZES SHIPT—Slack, Pea, Egg, Grate.
PREP. EQUIPT—Shaker Screens.
Old Information.

CLARKVILLE ANTHRACITE COAL CO.

General Office, Clarksville, Ark.
PR—W. N. Cunningham, Clarksville, Ark.
TR—R. G. Johnson, Clarksville, Ark.
GM—W. N. Cunningham, Clarksville, Ark.
GS—R. G. Johnson, Clarksville, Ark.

Clarkville Anthracite Mine; Shaft
Hartshorne Seam; 40 inches thick.
PO—Clarksville, Ark.; SP—Same; CTY—
Johnson; RR—Mo. Pac.
S of H—Mules. Track gage 36 inches.
S of M—Shortwall marks.
PP—Power purchased. Transformer 2,300
to 220 volts A. C.
SIZES SHIPT—Slack, Pea, Nut, Egg,
Lump.
PREP. EQUIPT—Bar and Shaker Screens.

COLLIER DUNLAP COAL COMPANY.

General Office, Clarksville, Ark.
PR—W. F. Collier, Clarksville, Ark.
VP—D. W. Dunlap, Clarksville, Ark.
TR—H. W. Collier, " "
GM—H. W. Collier, " "
GS—H. W. Collier, " "
PA—H. W. Collier, " "
EM—H. O. Lewis, Ft. Smith, Ark.
SCO—Address the Company, Rayer, H. W.
Collier, Clarksville, Ark.
SA—Spadra Clarkville Coal Co., Clark-
ville, Ark.

Collier Dunlap Mine; Shaft; Ark. Anthra-
cite Seam; 36 in. thick.
PO—Clarksville, Ark.; SP—Hartman,
Ark.; CTY—Johnson; RR—Mo. Pa-
cific.
S of H—Mules. Track gage 36 in.
S of M—Shortwall machines.
PP—Purchase power. Transformer 2,300
to 220 volts A. C., 1 fire tube boil-
er, 150 H. P., 6 pumps.
EMP—125. Last years tonnage 35,000.
SIZES SHIPT—Slack, Pea, Nut, Egg,
Grate, Buckwheat.
PREP. EQUIPT—Shaker Screens, Picking
Tables, Washeries.

DENNING SMOKELESS COAL COMPANY.

General Office, Altus, Ark.
PR—W. G. Stiths, Altus, Ark.
VP—D. E. Klein, Altus, Ark.
TR—Ed. Higdon, Altus, Ark.
EE—John Jackson, Altus, Ark.
SA—McAlester Fuel Company, McAlts-
ter, Okla.

Red Devil Mine; Slope; Seam 54 in.
thick.
PO—Altus, Ark.; SP—Same; CTY—
Franklin; RR—Mo. Pac.
MS—W. G. Stiths, Altus, Ark.
S of H—Mules. Track gage 36 in.
PP—Power purchased 2 pumps.
EMP—18. Last fiscal year output
4,125 tons.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Gravity Screens.

DENNIS COAL COMPANY

General Office, Paris, Ark.
PR—A. M. Smith, Paris, Ark.
VP—W. A. Tinsley, Paris, Ark.
TR—W. H. Arzo, Paris, Ark.
GM—W. A. Tinsley, Paris, Ark.
GS—J. C. Patton, Paris, Ark.
PA—W. A. Tinsley, Paris, Ark.
LE—O. H. Lewis, Fort Smith, Ark.
SA—Paris Fuel Co., Paris, Ark.

Grand No. 1 and No. 2 Mine; Shaft
and Slope; P. S. A. Seam, 24½ in.
thick.
PO—Paris, Ark.; SP—Same; CTY—
Logan; RR—Arkansas Central.
S of H—Mules and rope. Track gage
28 in.

(Continued on Next Page)

Dennis Coal Co.—Cont.
S of M—3 longwall machs.
PP—Purchase power. Transformer, 2300-220 volts A. C., Gen. units, 4—25 K. W., 12 pumps.
EMP—20. Daily tonnage 150.
SIZES SHIPT—Block

DODSON, GEORGE E. COAL COMPANY.
General Office, Alix, Ark.
OPERATOR—Geo. E. Dodson, Alix, Ark.
EM—H. O. Lewis, Ft. Smith, Ark.
SCO—George E. Dodson, General Merchandise. Buyer, Geo. E. Dodson, Alix, Ark.
SA—Midland Coal Co., Kansas City, Mo.; Southern States Coal Co., Little Rock, Ark.

Dodson No. 1 Mine; Shaft; Denning Semi-Anthracte Seam, 42 to 48 in. thick.
PO—Alix, Ark.; SP—Denning Yard, Ark.; CTY—Franklin; RR—Mo. Pacific.
SM—A. Elser, Alix, Ark.
S of H—Mules, rope and steam locos. Track gage 36 in.
S of M—Hand.
PP—3 water tube boilers, 365 H. P., 5 pumps.
EMP—20. Last years tonnage 1,308.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

Dodson No. 2 Mine; Shaft; Denning Semi-Anthracte Seam, 42 to 48 in. thick.
PO—Alix, Ark.; SP—Denning Yard, Ark.; CTY—Franklin; RR—Mo. Pacific.
SM—A. Elser, Alix, Ark.
S of H—Mules, rope and steam locos. Track gage 36 in.
S of M—Hand.
PP—1 65 H. P. water tube boiler, 4 pumps.
EMP—20. Last years tonnage 4,678.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens
Old information.

DOUGLAS COAL CO.
General Office, Alix, Ark.
GM—Ben Douglass, Coal Hill, Ark.
GS—Ben Douglass, Coal Hill, Ark.
PA—Ben Douglass, Coal Hill, Ark.
EM—Lewis & Noel, Ft. Smith, Ark.
SA—Sinclair Coal Co., Kansas City, Mo.

Saffire Mine; Shaft; Hartshorne Seam, 45 in. thick.
PO—Alix, Ark.; SP—Denning Yard, Ark.; CTY—Johnson; RR—Mo. Pac.
S of H—4 mules, elec. locos. Track gage 36 in.
S of M—Hand.
PP—Power purchased, transformer 2300-220 volts A. C., 1 150 H. P. water tube boiler, 3 pumps.
EMP—150. Last years tonnage 20,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

EUREKA MINING CO.
Now Lucas Mardis Coal Co.

EXCELLO COAL COMPANY
General Office, Greenwood, Ark.
PR—Jas. P. Hoye, Ft. Smith, Ark.
TR—J. K. Coleman, Greenwood, Ark.

Exello Coal Mine; Slope; Excelsior Seam; 32 inches thick.
SP—Greenwood, Ark.; CTY—Sebastian; RR—M. P., M. V.
S of H—Rope and electric loco. Track gage 36 inches.
S of M—Hand, chain belt and short-wall machs.
PP—Power purchased.
Not operating.

EXCELSIOR COAL COMPANY
Out of business.

FERNWOOD MINING COMPANY
General Office, Scranton Life Bldg., Scranton, Pa.
PR—E. W. Gearhart, Scranton, Pa.
TR—H. Denman, Clarksville, Ark.
GM—H. Denman, " " " "
GS—H. Denman, " " " "
EM—H. O. Lewis, Fort Smith, Ark.
EE—Ray Malloy, Clarksville, Ark.
PA—H. Denman, Clarksville, Ark.
SCO—Arkansas Store Co. Buyer, John Clark, Clarksville, Ark.
SA—McAlester Fuel Co., McAlester, Okla.

Fernwood No. 1 Mine; Shaft; Lower Hartshorne Seam, 30 in. thick.
PO—Clarksville, Ark.; SP—Same and Spadra, Ark. CTY—Johnson. RR—Mo. Pacific.
MS—W. A. Partin, Clarksville, Ark.
S of H—Mules, Steam loco. Track gage 42 in.
S of M—Hand.
PP—Power purchased, transformer 2300-220 volts A. C. 1—100 K. W. gen. unit, 250 volts D. C. 2—150 H. P. Fire tube boilers, 6 pumps

EMP—80. Daily tonnage 175.
SIZES SHIPT—Slack, Pea, Nut, Egg, Lump, No. 4 Grate.
PREP. EQUIPT—Shaker Screens, Loading Booms, Washeries.
Fernwood No. 2 Mine; Shaft; Lower

Hartshorne Seam, 42 in. thick.
PO—Montana, Ark. SP—Same. CTY—Johnson. RR—Mo. Pac.
S of H—Mules and steam locos.
S of M—Hand.
PP—2 return tubular boilers, total 300 H. P., 2 pumps.
EMP—80. Daily tonnage 200.
SIZES SHIPT—Slack, Pea, Egg, Lump, No. 4, Buckwheat.
PREP. EQUIPT—Shaker Screens, Picking Tables.

FRANKLIN COAL COMPANY

PR—H. C. Parmelee, Coal Hill, Ark.
TR—E. P. Joyner, McAlester, Okla.
GM—H. C. Parmelee, Coal Hill, Ark.
GS—H. C. Parmelee, Coal Hill, Ark.
PA—H. C. Parmelee, Coal Hill, Ark.
CE—H. O. Lewis, Fort Smith, Ark.

Franklin Mine; Shaft and Stripping; Hartshorne Seam, 48 in. thick.
PO—Coal Hill, Ark.; SP—Same; CTY—Johnson; RR—Mo. Pac.
S of H—1 gasoline loco. Track gage 38 inches.
S of M—Hand.
PP—1 pump.
EMP—30. Daily tonnage 250.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

GRAND COAL COMPANY.
Now part of the Dennis Coal Co.

GRAND PRAIRIE COAL COMPANY
General Office, Ft. Smith, Ark.
PR—S. C. Aubrey, Ft. Smith, Ark.
VP—E. D. Packard, Houston, Tex.
TR—D. M. Sutor, St. Louis, Mo.
GM—Allen Pinkerton, Branch, Ark.
GS—Gus Lindberg, Branch, Ark.
PA—Allen Pinkerton, Branch, Ark.
EM—W. T. Cardwell, Branch, Ark.
SA—Radiant Coal Co., Branch, Ark.

Radiant Mine; Stripping; Seam 16 inches thick.
PO—Branch, Ark.; SP—Same; CTY—Franklin; RR—Ark. Central.
S of H—Steam Locos. Track gage 36 inches.
S of M—Stripping.
PP—Air Compressor.
EMP—25. Daily tonnage 150.
SIZES SHIPT—Run of Mine, Block, Lump.

GREENWOOD COAL COMPANY

General Office, Greenwood, Ark.
PR—J. G. Putterbaugh, McAlester, Okla.
VP—W. D. Putterbaugh, McAlester, Okla.
TR—E. P. Joyner, McAlester, Okla.
GM—R. A. Young, Greenwood, Ark.
GS—R. A. Young, Greenwood, Ark.
PA—R. A. Young, Greenwood, Ark.
CE—H. O. Lewis, Ft. Smith, Ark.
EE—Ed Parks, Greenwood, Ark.
SCO—Geo. L. Ware & Sons, Greenwood, Ark.
SA—The McAlester Fuel Co., McAlester, Okla.

Nos. 1 and 2 Mines; Slope; Greenwood Seam; 60 in. thick.
PO—Greenwood, Ark.; SP—Same; CTY—Sebastian; RR—Midland Valley.
S of H—Mules, rope. Track gage 36 in.
S of M—Hand.
PP—Power Purchased. Transformer 2300-220 volts A. C., 3 100 H. P. fire tube boilers, 5 pumps.
EMP—250.
SIZES SHIPT—Run of Mine, Slack, Nut.
PREP. EQUIPT—Shaker Screens.

HACKETT COAL COMPANY
Out of business.

HAFPER COAL AND COKE COMPANY.
OPERATOR—I. R. Packard, Little Rock, Ark.

Packard No. 1 Mine; Slope; Hartshorne Seam, 50 to 66 in. thick.
PO—Rates Ark.; SP—Same; CTY—Scott; RR—K. C. So.
S of H—Steam loco. Track gage 36 in.
S of M—Hand.
PP—2 return tubular boilers, total 8. H. P., 1 pump.
EMP—85.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.

HARTFORD VALLEY FUEL CO.

General Office, Hartford, Ark.
PR—John M. Young, Pittsburg, Kan.
VP—H. W. Reinhard, Hartford, Ark.
TR—T. W. Butler, Hartford, Ark.
SECY—T. W. Butler, Hartford, Ark.
GM—John M. Young, Pittsburg, Kan.
GS—John M. Young, Pittsburg, Kan.
PA—Thomas Mackie, Pittsburg, Kan.
SA—Mackie-Clemens Fuel Co., Kansas City, Mo.

No. 2 Mine; Shaft; Semi Anth. Seam; 48 inches thick.
PO—Hartford, Ark.; SP—Same; CTY—Sebastian; RR—Midland Valley.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—Power purchased, 220 volts, A. C., 2 150 H. P. water tube boilers, 4 pumps.
EMP—60. Daily output, 200 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.

HILL, W. A. COAL COMPANY
Out of business.

JASPER COAL COMPANY
Now Arkcoal Smokeless Coal Co.

JENNY LIND SMOKELESS FUEL CO.
Now Actus Coal Co.

JEWELL COAL MINING COMPANY

General Office, Paris, Ark.
PR—R. R. Beatty, Paris, Ark.
VP—R. R. Beatty, Jr., Kansas City, Mo.
GM—R. R. Beatty, Paris, Ark.
GS—C. A. Garthner, Paris, Ark.
PA—R. R. Beatty, Paris, Ark.
FE—D. S. Dickey, Paris, Ark.
SA—Beatty Coal Co., Kansas City, Mo.

Pendleton Mine; Shaft; Paris Seam, 24 inches thick.
PO—Paris, Ark.; SP—Same; CTY—Logan; RR—Ark. Central.
S of H—Mules. Track gage 20 in.
S of M—3 longwall machs.
PP—Power purchased. 250-275 volts D. C. M. G. Sets. 1—150 K. W., 2 return tubular boilers 60 H. P. each, 3 pumps.
SIZES SHIPT—Lump.
PREP. EQUIPT—Gravity Screens.
NOTE—Formerly operated by the Paris Coal Company.

JONES COAL CO.

General Office, Greenwood, Ark.
PR—Henry Jones, Greenwood, Ark.
TR—Harry Cline, Greenwood, Ark.
PA—Harry Cline, Greenwood, Ark.
SA—W. H. Argo, Paris, Ark.

Jones Mine; Slope; Excelsior Seam, 38-40 in. thick.
PO—Greenwood, Ark.; SP—Same; CTY—Sebastian; RR—Mo. Pac.
S of H—Mules, rope and 25 H. P. engine. Track gage 28 1/2 in.
S of M—Hand.
PP—1 40 H. P. fire tube boiler, 2 pumps.
EMP—9. Last years tonnage 1,800.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

KATY COAL COMPANY.

General Office, Midland, Ark.
PR—Horace F. Rogers, Midland, Ark.
VP—(Mrs.) Stella Rogers, Fort Smith, Ark.
TR—J. L. Finney, Midland, Ark.
GM—H. F. Rogers, Midland, Ark.
PA—J. L. Finney, Midland, Ark.
EM—Lewis & Welch, Fort Smith, Ark.
EE—P. C. Finney, Midland, Ark.
SA—McAlester Fuel Co., McAlester, Okla.

Midland Six Mine; Shaft; Hartshorne Seam, 36 in. thick.
PO—Midland, Ark. SP—Same. CTY—Sebastian. RR—Midland Valley.
S of H—Mules and main and tail rope. Track gage 35 inches.
S of M—Hand, 1 shortwall and 1 longwall mach.
PP—Purchase power. Transformer 3,300 to 220 volts, 2 fire tube boilers, 150 H. P., 6 pumps.
EMP—100. Last years tonnage 33,300.
SIZES SHIPT—Slack, Lump.
PREP. EQUIPT—Shaker Screens.

LASER COAL CO.

General Office, Clarksville, Ark.
GM—Alvin Laser, Clarksville, Ark.
GS—A. Bohannon, Clarksville, Ark.
PA—Alvin Laser, Clarksville, Ark.
SA—Midland Coal Co., Clarksville, Ark.

Sterling Mine; Shaft; Spadra Seam, 34 in. thick.
PO—Clarksville Park; SP—Same; CTY—Johnson; RR—Mo. P.
S of H—Mules and rope. Track gage 36 inches.
S of M—Longwall machs.

PP—Purchase power. Transformer 2200-220 volts A. C., 3 pumps, 1—100 H. P. water tube boiler.
EMP—60. Last years tonnage 12,000.
SIZES SHIPT—Slack, Pea, Egg, Lump, Grate.
PREP. EQUIPT—Gravity and Shaker Screens, Picking Tables.

LIBERTY COAL COMPANY.

General Office, Paris, Ark.
PR—Chas. Wahl, Jr., Paris, Ark.
VP—bas. Wahl, Jr., Paris, Ark.
TR—Chas. Wahl, Jr., Paris, Ark.
GM—Chas. Wahl, Jr., Paris, Ark.
GS—J. A. Shaffer, Paris, Ark.
PA—Chas. Wahl, Jr., Paris, Ark.
SA—Paris Fuel Company, Paris, Ark.

Liberty Mine; Slope; Seam 28 in. thick.
PO—Paris, Ark.; SP—Same; CTY—Logan. RR—A. C. & R. I.
S of H—Mules and elec. hoist. Track gage 28 in.
S of M—Elec. machs.
PP—Power purchased, transformer 220 volts A. C. 2 pumps.
EMP—9. Last years tonnage 3,433.
SIZES SHIPT—Slack, Lump.
PREP. EQUIPT—Screens and cutting machs.

LUCAS-MARDIS COAL CO.

Now St. Louis, Spadra Coal Co.

McADOO, S. A. COAL CO.

General Office, Barling, Ark.
OPERATOR—S. A. McAdoo, Barling, Ark.
SA—S. A. McAdoo, Barling, Ark.

McAdoo Mine; Slope; Hartshorne Seam, 40 to 48 in. thick.
PO—Barling, Ark.; SP—Jenny Lind, Ark.; CTY—Sebastian; RR—Arkansas Central.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
PP—1 pump.
EMP—8. Daily tonnage 40.
SIZES SHIPT—Slack, Lump, Run of Mine, Nut.
FBEP. EQUIPT—Gravity Screens.

McWILLIAMS, WARD & CO.

PA—H. G. Clark, Spadra, Ark.
MS—H. G. Clark, " " " "

Shaft Mine; Arkansas Anthracite Seam, 48 in. thick.
PO—Spadra, Ark.; SP—Same; CTY—Johnson; RR—I. M. S.
S of H—Mules.
S of M—Hand.
PP—1 water tube boiler, total 100 H. P.
EMP—89. Last fiscal year output 27,519 tons.
SIZES SHIPT—Slack, Pea, Nut, Egg, Lump.
FBEP. EQUIPT—Screens.
Old information.

MAJESTIC COAL COMPANY

Now Majestic Coal Mining Company.

MAJESTIC COAL MINING COMPANY.

General Office, Fort Smith, Ark.
PR—Grant Stauffer, Kansas City, Mo.
TR—E. C. Estes, Joplin, Mo.
GM—E. M. Douthat, Fort Smith, Ark.
EM—H. O. Lewis, Fort Smith, Ark.
SA—Sinclair Coal Co., Kansas City, Mo.

Majestic Mine; Hackett and Excelsior Seam, 36 in. thick.
PO—Midland, Ark.; SP—Same; CTY—Sebastian; RR—Midland Valley.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—Power purchased. 220 volts A. C. 2 pumps.
EMP—100. Daily tonnage 225.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

NEW CORONA COAL COMPANY.

General Office, Huntington, Ark.
VP—C. E. McKoin, Huntington, Ark.
GM—C. E. McKoin, Huntington, Ark.
CE—H. O. Lewis, Ft. Smith, Ark.
SA—McAlester Fuel Co., McAlester, Okla.

New Coronado Mine; Slope; Arkcoal Seam; 78 inches thick.
PO—Huntington, Ark.; SP—Same; CTY—Sebastian; RR—St. L. & S. F.
MS—B. J. Maloney, Huntington, Ark.
S of H—Mules and elec. locos. Track gage 35 in.
S of M—Hand.
PP—Power purchased. 220 volts A. C., 2 pumps.
EMP—75. Last years tonnage 87,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker and Shdhe Screens.

NEW UNION COAL COMPANY.

General Office, Paris, Ark.
PR—A. M. Smith, Paris, Ark.
TR—Geo. M. Zeller, " "
GM—A. M. Smith, Paris, Ark.
GS—H. S. Foster, " "
PA—Geo. M. Zeller, " "
SCO—Geo. M. Zeller Co., Boyer, Geo. M. Zeller, Paris, Ark.
SA—W. H. Argo, Paris Fuel Co., Paris, Ark.
 New Union Mine; Slope; Paris Seam, 20 in. thick.
PO—Paris, Ark.; **SP**—Same; **CTY**—Logan; **RR**—A. C.
S of H—Mules, rope and steam loco. Track gauge 36 in.
S of M—Hand and 5 longwall machs.
PP—Power purchased. Transformer 2,300-220 volts. A. C. 2 fire tube boilers 150 H. P. 2 pumps.
EMP—100. Daily tonnage 150.
SIZES SHIPT—Slack, Lump.
PREP. EQUIPT—Gravity Screens.

NICHOLS-KING-LASER COAL CO.

General Office, Clarksville, Ark.
PR—T. E. Nichols, Clarksville, Ark.
VP—Jos. B. King, Clarksville, Ark.
TR—Alvin Laser, Clarksville, Ark.
GM—Jos. B. King, Clarksville, Ark.
GS—Jos. B. King, Clarksville, Ark.
PA—Jos. B. King, Clarksville, Ark.
SCO—Alvin Laser & Co., Buyer, Alvin Laser, Clarksville, Ark.
SA—Midland Coal Co., Clarksville, Ark.
 Branch Office, Kansas City, Mo.
 Nichols King Laser Mine; Shaft; Spadra Seam; 32 inches thick.
PO—Clarksville, Ark.; **SP**—Same; **CTY**—Johnson; **RR**—Mo. Pac.
S of H—Mules. Track gauge 36 inches.
S of M—Hand; shortwall mach.
PP—Power purchased. Transformer 2,200 and 220 volts A. C.
SIZES SHIPT—Slack, Lump.
PREP. EQUIPT—Bar Screens.

QUITTA COAL MINING COMPANY.

General Office, Russellville, Ark.
PR—A. M. Mars, Russellville, Ark.
TR—B. V. Lewis, " "
GM—C. B. Lewis, " "
GS—B. V. Lewis, " "
EE—J. A. Mars, " "
SA—Huerfano Agency Co., Wichita, Kan.
 Quita Mine; Shaft; Quita Seam; 24 in. thick.
PO—Russellville, Ark.; **SP**—Same; **CTY**—Pope; **RR**—M. O. P.
S of H—Elec. locos. Track gauge 28 in.
S of M—Room and pillar machs.
PP—30 H. P., 220 volts A. C. 3 phase, 60 cycles, 1 pump. Purchase power.
EMP—35. Last years tonnage 3,006.
SIZES SHIPT—Slack, Pea, Nut, Egg, Grate.
PREP. EQUIPT—Shaker and Rotary Screens.
 Old Information.

OZARK COAL & MINING COMPANY

Now operated by the Denning Smokeless Coal Company.

PACKARD CONSOLIDATED COAL CO.

OPERATOR—I. K. Packard, Little Rock, Ark.
 Packard No. 2 Mine; Slope; Hartshorne Seam, 96 in. thick.
PO—Bates, Ark.; **SP**—Same; **CTY**—Scott; **RR**—K. C. So.
S of H—1 steam loco. Track gauge 36 in.
S of M—Hand.
PP—1 return tubular boiler, total 60 H. P., 1 gen. unit, 1 pump.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

PARIS COAL COMPANY.

Mine leased to the Jewell Coal Mining Co.

PETTY & McGEHEE.

PR—W. G. McGehee, Jenny Lind, Ark.
GM—G. F. Petty, Jenny Lind, Ark.
 Stripping Mine; 48 to 60 in. thick.
PO—Jenny Lind, Ark.; **SP**—Same; **CTY**—Sebastian; **RR**—Mo. Pacific.
S of H—Mules.
S of M—Hand.
EMP—12. Last fiscal year output, 4,506 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
 Old Information.

RAFTER COAL CO.

General Office, Kansas City, Mo.
PR—W. C. Shank, Pittsburg, Kan.
VP—H. D. Buchanan, Kansas City, Mo.
TR—H. D. Buchanan, Kansas City, Mo.
GM—W. C. Shank, Pittsburg, Kan.
GS—H. C. Farmer, Coal Hill, Ark.
SA—Cherokee Fuel Co., Kansas City, Mo.
 Rafter No. 1 Mine; Shaft; Denning Seam, 46 inches thick.
PO—Coal Hill, Ark.; **SP**—Same. **CTY**—Johnson; **RR**—Mo. Pacific.
MS—Geo. Heibelbeck, Coal Hill, Ark.
S of H—Mules. Track gauge 36 inches.
S of M—Hand.
PP—Power purchased. Transformer 66,000 to 440 volts A. C., 2 pumps, 1 fire tube boiler, 60 H. P.
EMP—50. Last years tonnage 14,000.
SIZES SHIPT—Run of Mine Slack, Lump.
PREP. EQUIPT—Gravity Screens.

SECURITY COAL COMPANY

General Office, Hackett, Ark.
PR—D. H. Cadmus, Hackett, Ark.
VP—Earl Cobb, Amarillo, Texas.
TR—R. E. Hanson, Amarillo, Texas.
GM—D. H. Cadmus, Hackett, Ark.
GS—D. H. Cadmus, Hackett, Ark.
PA—D. H. Cadmus, Hackett, Ark.
CE—D. H. Cadmus, Hackett, Ark.
 Dallas No. 8 Mine; Drift; Upper Hartshorne Seam, 38 inches thick.
PO—Hackett, Ark.; **SP**—Huntington, Ark.
CTY—Sebastian; **RR**—St. L. & S. F.
S of H—Mules and elec. hoist Track gauge 36 inches.
S of M—Room and pillar machs.
PP—Power purchased, 220 volts A. C.
EMP—25. Last years tonnage 14,500.
SIZES SHIPT—Run of Mine.

SEMI-ANTHRACITE MINING CO., THE

PR—H. C. Parmelee, Coal Hill, Ark.
TR—E. P. Joyner, McAlester, Okla.
GM—H. C. Parmelee, Coal Hill, Ark.
GS—H. C. Parmelee, Coal Hill, Ark.
PA—H. C. Parmelee, Coal Hill, Ark.
CE—H. O. Lewis, Fort Smith, Ark.
 Sandhoe Mine; Shaft; Lower Hartshorne Seam, 42 inches thick.
PO—Coal Hill, Ark.; **SP**—Denning Yards.
AR—CTY—Franklin; **RR**—M. P.
S of H—Mules. Track gauge 36 inches.
S of M—Hand.
PP—Power purchased. Transformer 2300-220 volts A. C. 2 fire tube boilers, 200 H. P., 4 pumps.
EMP—45. Last years tonnage 20,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

SMOKELESS COAL CO.

General Office, Clarksville, Ark.
PR—J. E. James, Clarksville, Ark.
VP—J. E. Nichols, Clarksville, Ark.
TR—C. Lensing, Scranton, Ark.
GM—J. E. James, Clarksville, Ark.
GS—J. E. James, Clarksville, Ark.
PA—J. E. James, Clarksville, Ark.
SA—Midland Coal Co., J. E. Nichols, Clarksville, Ark.
 Victory Anthracite Mine; Shaft; Semi-Anthracite Seam, 36 in. thick.
PO—Clarksville, Ark.; **SP**—Spadra, Ark.; **CTY**—Johnson; **RR**—Mo. Pac.
S of H—Mules, rope. Track gauge 36 in.
S of M—Hand.
PP—Power purchased, transformer 3,300-220 volts A. C., 1—125 H. P. fire tube boiler.
EMP—120.
PREP. EQUIPT—Shaker Screens.

SOUTHERN ANTHRACITE COAL MINING COMPANY.

General Office, Russellville, Ark.
PR—J. G. Putterbaugh, McAlester, Okla.
VP—W. D. Putterbaugh, McAlester, Okla.
TR—E. P. Joyner, McAlester, Okla.
GM—E. W. Hogan, Russellville, Ark.
GS—E. P. Joyner, McAlester, Okla.
PA—E. P. Joyner, McAlester, Okla.
CE—H. A. Everest, 1108 N. Geary St., Oklahoma City, Okla.
SC—C. Robbins, McAlester, Okla.
ED—Address the company. Buyer, H. D. Burson, Russellville, Ark.
SA—McAlester Fuel Co., McAlester, Okla.

No. 1 Mine; Shaft; Hartshorne Seam; 42 inches thick.
PO—Russellville, Ark.; **SP**—Same; **CTY**—Pope; **RR**—Dardanelle & Russellville.
MS—J. H. Anderson, Russellville, Ark.
S of H—Mules and main rope, trolley pole type loco. Track gauge 32 inches.
PP—Power purchased. Transformer 6,600 to 220 volts A. C., motor gen. sets, 250 volts D. C., 3 water tube boilers, 550 H. P., 5 pumps.
EMP—190. Last years tonnage 83,000.
SIZES SHIPT—Slack, Pea, Egg, Grate, Stove.
PREP. EQUIPT—Gravity and Shaker Screens, Picking Tables.
 No. 2 Mine; Slope; Hartshorne Seam; 38 inches thick.
PO—Russellville, Ark.; **SP**—Same; **CTY**—Pope; **RR**—Dardanelle & Russellville.
MS—J. C. Fencher, Russellville, Ark.
S of H—Mules and rope, gasoline and steam locos. Track gauge 36 inches.
PP—Power purchased. Transformer 6,600 to 220 volts A. C., 1 pump.
EMP—105. Last years tonnage 67,000.
PREP. EQUIPT—At No. 2 Mine.

SPADRA COAL COMPANY

General Office, Montana, Ark.
GM—D. A. McKinney, Montana, Ark.
GS—D. A. McKinney, Montana, Ark.
SA—Spadra Clarksville Coal Company, Clarksville, Ark.
 Sunshine Mine; Shaft; Spadra Seam; 42 inches thick.
PO—Montana, Ark.; **SP**—Spadra, Ark.; **CTY**—Johnson; **RR**—Mo. P.
S of H—Mule, rope. Track gauge 36 inches.
S of M—Hand.
PP—2 fire tube boilers, 225 H. P., 2 pumps.
EMP—40. Last years tonnage 4,199.
SIZES SHIPT—Slack, Egg, Pea, Grate.
PREP. EQUIPT—Gravity and Shaker Screens.

SPADRA CREEK COAL CO.

General Offices, Clarksville, Ark.
PR—C. M. Jackson, Whiteita, Kan.
VP—A. H. Jackson, Altus, Okla.
TR—P. P. Mardis, Clarksville, Ark.
GM—P. P. Mardis, Clarksville, Ark.
GS—P. P. Mardis, Clarksville, Ark.
PA—P. P. Mardis, Clarksville, Ark.
SC—Mardis Mercantile Co., Buyer, C. L. Block, Spadra, Ark.
SA—Spadra-Clarksville Coal Co., Clarksville, Ark.
 Needmore Mine; Shaft; Semi-Anthracite Seam; 36 in. thick.
PO—Spadra, Ark.; **SP**—Same; **CTY**—Johnson; **RR**—Mo. Pac.
MS—R. N. Grilth, Spadra, Ark.
SM—Chas. Quillian, Spadra, Ark.
S of H—Mules and rope track gauge 36 in.
S of M—Hand.
PP—1—150 H. P. boiler, 2 pumps.
EMP—100. Last years tonnage 18,931.
SIZES SHIPT—Slack, Nut, Pea, Egg, Lump.
PREP. EQUIPT—Shaker Screens.
 Old Information.

STERLING ANTHRACITE COAL CO.

Now Laser Coal Co.

ST. LOUIS-SPADRA COAL CO.

General Office, Clarksville, Ark.
PR—Earle J. Mardis, Clarksville, Ark.
VP—P. D. Stebbins, Conway, Ark.
TR—P. J. Lowelling, Conway, Ark.
PA—Earle J. Mardis, Clarksville, Ark.
CE—C. S. Christian, Texarkana, Ark.
SC—Mardis Mercantile Co., Clarksville, Ark.
SA—Spadra Clarksville Coal Co., Clarksville, Ark.
 St. Louis Spadra Mine; Stripping; Spadra Seam, 40 in. thick.
PO—Clarksville, Ark.; **SP**—Same; **CTY**—Johnson; **RR**—Mo. P.

MS—Clyde Lacy, Clarksville, Ark.
S of H—Rope, Track gauge 36 in.
S of M—Stripping.
PP—Purchase power. Transformer 2300-220 volts A. C.
SIZES SHIPT—Slack, Pea, Nut, Egg, Grate.

SUBIACO COAL COMPANY.

General Office, Scranton, Ark.
OPERATOR—C. N. Alexander, Scranton, Ark.
EM—H. O. Lewis, Ft. Smith, Ark.
SA—McAlester Fuel Co., McAlester, Okla.
 Subiaco Coal Co. Mine; Shaft & Stripping 34 to 60 in. thick.
PO—Scranton, Ark.; **SP**—Same; **CTY**—Logan; **RR**—S. & E. Ft. S. Br.
S of H—Mules. Track gauge 36 in.
S of M—Hand.
PP—3 pumps.
EMP—45. Daily tonnage 125.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

SUPERIOR COAL CO.

Now Alix Coal Company.

TURNIPSEED, C. C. COAL COMPANY

General Office, Midland, Ark.
OPERATOR—C. C. Turnipseed, Midland, Ark.

Montreal Smokeless Mine; Slope; Hartshorne Seam, 36 in. thick.
PO—Midland, Ark.; **SP**—Same; **CTY**—Sebastian; **RR**—St. L. & S. F. Mansfield Br.
S of H—Mules. Track gauge 36 in.
S of M—Hand.
EMP—20. Last years tonnage 7,000.
SIZES SHIPT—Run of Mine.

WESTERN COAL & MINING CO.

General Office, 1166 Railway Exchange Bldg., St. Louis, Mo.
 4 mines in Missouri, 8 mines in Kansas, 1 mine in Illinois, 3 mines in Arkansas.
PR—W. P. Hawkins, St. Louis, Mo.
VP—A. F. Barnes, St. Louis, Mo.
TR—E. S. Johnson, " "
GM—W. P. Hawkins, " "
GS—A. W. Dickinson, St. Louis, Mo.
PA—M. A. Bush, " "
EM—A. W. Dickinson, " "
SC—Address the company—Buyer, M. A. Bush, St. Louis, Mo.
 General Sales Manager—Geo. J. Wulf, Kansas City, Mo.

No. 2 and 6 Mines; Shaft; Denning Field Seam, 42 in. thick.
PO—Denning, Ar.; **SP**—Same; **CTY**—Johnson and Franklin; **RR**—Mo. Pac.
MS—Wm. Eadie, Denning, Ark.
S of H—Mule, 2 trolley pole locos. Track gauge 36 in.
S of M—Hand.
PP—6 100 H. P. each fire tube boilers, 1—175 K. W. gen. unit, 250 volts H. C., 5 pumps.
EMP—201. Last years tonnage 116,584.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Bar Screens.

WOODSON-BARR COAL COMPANY.

General Office, Bonanza, Ark.
PR—R. J. Barr, Bonanza, Ark.
VP—H. W. Reinhard, Hartford, Ark.
TR—John Barr, Ft. Smith, Ark.
SECY—J. C. Reinhard, Bonanza, Ark.
GM—R. J. Barr, Bonanza, Ark.
PA—H. W. Reinhard, Hartford, Ark.
SA—Central Coal & Coke Co., Kansas City, Mo.

No. 135 Mine; Slope; Semi-Anthracite Seam, 44 inches thick.
PO—Bonanza, Ark. **SP**—Same. **CTY**—Sebastian. **RR**—Frisco.
MS—R. J. Barr, Bonanza, Ark.
S of H—Mules, and rope. Track gauge 36 inches.
S of M—Hand.
PP—2 fire tube boilers, 4 pumps.
EMP—105. Last years tonnage 62,200.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens

CANADA

Alphabetical Directory of Coal Mines, Giving Complete Detail
Information Covering Each Mine

For List of Abbreviations See Page 13.

ACADIA COAL COMPANY.

General Office, Stellarton, N. S., Can.
PR—Sir Montague Allan, Montreal, Que., Canada.
VP—Col. D. H. McDougall, Stellarton, N. S., Canada.
TR—Colin Campbell, Montreal, Que., Canada.
ASST GM—J. J. McDougall, Stellarton, N. S., Canada.
PA—Q. S. Mitchell, Stellarton, N. S., Can.
SA—J. A. Cunningham, New Glasgow, N. S., Canada.

Acadia No. 1 Mine; Slope; Acadia No. 1 Seam; 84 inches thick.
PO—Stellarton, N. S., Can.; SP—Same; RR—Canadian National R.Y.S.
MS—Wm. Arthrell, Stellarton, N. S., Can.
S of H—Mules and donkey engines. Track gage 26 in.
S of M—19 comp. air punchers.
PP—2 water tube boilers, total 250 H. P., gen. units, transformer 3,150 to 550-110 volts A. C., 2 pumps.
EMP—260. Last years tonnage 67,873.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

Acadia No. 3 Mine; Slope; Six Foot Seam; 48 to 72 in. thick.
PO—Thorburn, N. S., Can.; SP—Same; RR—Canadian National R.Y.S.
MS—J. J. McDougall, Stellarton, N. S., Can.
S of H—Mules and donkey engines. Track gage 30 in.
S of M—Hand.
PP—4 water tube boilers, total 1,000 H. P., transformer 11,000 to 3,150-550-110 volts A. C., 2 pumps.
EMP—290. Last years tonnage 100,055.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.

Albion Mine; Slope; Cage and Third Seams; 240-168 in. thick.
PO—Stellarton, N. S., Can.; SP—Same; RR—Canadian National R.Y.S.
MS—Wm. Arthrell, Stellarton, N. S., Can.
S of H—Mules and donkey engines. Track gage 36 in.
S of M—3 comp. air punchers.
PP—Generate power, transformer 3,150 to 525-110 volts A. C.
EMP—499. Last years tonnage 158,769.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

Allan Mine; Shaft; Foord, Cage and Third Seams; 40-20-14 ft. thick.
PO—Stellarton, N. S., Can.; SP—Same; RR—Canadian National R.Y.S.
MS—E. C. Riley, Stellarton, N. S., Canada.
S of H—Mules and donkey engines. Track gage 30 in.
S of M—10 comp. air punchers.
PP—6 water tube boilers, total 2,700 H. P., 1 4000 K. W. and 2 1,500 K. W. gen. units, 2,150 volts A. C., 6 pumps.
EMP—312. Last years tonnage 109,771.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

McGregor Mine; Slope; McGregor and Flemming Seams; 56 to 240 and 48 to 72 in. thick.
PO—Stellarton, N. S., Can.; SP—Same; RR—Canadian National R.Y.S.
MS—Wm. Arthrell, Stellarton, N. S., Can.
S of H—Mules and donkey engines. Track gage 26 in.
S of M—4 comp. air punchers.
PP—Generate power, transformer 3,150 to 525-110 volts A. C., 2 pumps.
EMP—229. Last years tonnage 80,395.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

ALBERTA BLOCK COAL CO., LTD.

General Office, Drumbeller, Alberta, Can.
PR—G. N. Coyle, Drumbeller, Alberta, Can.
TR—Jesse Gouge, Drumbeller, Alberta, Can.
GS—D. A. Macauley, Drumbeller, Alberta, Can.
MM—J. W. A. Drummond, Drumbeller, Alta. Can.
CE—D. A. Macauley, Drumbeller, Alberta, Can.
EM—D. A. Macauley, Drumbeller, Alberta, Can.
Sales Agency, North Western Fuel Supply Co., Ltd., Drumbeller, Alta., Can.

A. B. C. Mine; Shaft; New Castle Seam, 60 in. thick.
PO—Drumbeller, Alberta, Canada; SP—Same; RR—C. N. R.
S of H—Mules. Track gage, 36 in.
S of M—6 shortwall mchcs.
PP—Boilers, 450 H. P., 1 300 and 1 150 K. W. generators, 2,000 volts D. C., 1 pump.
EMP—155. Last years tonnage 122,000.
SIZES SHIPT—Slack, Nut, Egg, Lump.
PREP. EQUIPT—Bar and Revolving Screens.

ALBERTA COAL MINING CO., LTD.

General Office, 59 Bank of Montreal Bldg., Edmonton, Alta.
PR—Jas. L. Bell, Edmonton, Alta.
VP—Walter L. Carter, Miami, Fla.
TR—Geo. S. Montgomery, Edmonton, Alta.
GM—Geo. S. Montgomery, Edmonton, Alta.
PA—Geo. S. Montgomery, Edmonton, Alta.

The Alberta Mine; Slope; Seam 122 in. thick.
PO—Cardiff, Alta.; SP—Same; RR—Canadian Northern.
MS—E. S. Bishop, Cardiff, Alta.
S of H—Mules and main and tail rope. Track gage 32 in.
S of M—Hand.
PP—4 water tube boilers, total 260 H. P., 5 pumps.
EMP—125. Daily tonnage 500.
SIZES SHIPT—Slack, Nut, Egg, Lump.
PREP. EQUIPT—Gravity Screens.

BEAVER COAL CO., LTD.

General Office, Castor, Alta., Canada.
PR—J. E. Woods, Castor, Alta., Can.
GM—F. M. Steel, Castor, Alta., Can.

Beaver Mine; Slope; Lignite Seam, 54 in. thick.
PO—Castor, Alta., Can.; SP—Same; RR—C. P.
MS—D. Shaw, Castor, Alta., Can.
S of H—Rope, Gasoline. Track gage 30 in.
S of M—Hand.
EMP—10. Daily tonnage 25.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar, Screens.

BIENFAIT MINE.

GM—W. L. Hamilton, Bienfait, Sask.
GS—R. J. Hassard, " "
Sales Agency, Great West Coal Co., Brandon, Man.

Bienfait Mine; Slope; Lignite Seam, 108 in. thick.
PO—Bienfait, Can. SP—Same. PROV.—Sask. RR—C. N. & C. P.
S of H—Horse, rope. Track gage, 42 in.
S of M—Elec. mchcs.
PP—Return tubular boilers, total 300 H. P., 1 gen. unit, 250 volts D. C., 4 pumps.
EMP—100. Last fiscal year output, 77,360 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Bar and Shaker Screens. Old information.

BIG VALLEY COLLIERIES, LTD.

General Office, Big Valley, Alta.
PR—John Gillespie, Edmonton, Alta.
VP—S. L. Smith, Winnipeg, Man.
GM—A. Albertson, Big Valley, Alta.
GS—A. Albertson, " "
PA—A. Albertson, " "
EN—Norman Fraser, Edmonton, Alta.

Big Valley Colliery Mine; Slope; Flat Seam, 78 in. thick.
PO—Big Valley, Alta.; SP—Same; RR—C. N. R.
MS—Thos. Mather, Big Valley, Alta.
S of H—1 Steam loco. and mules; track gage 31 in.
S of M—Hand.
PP—Fire tube boiler 150 H. P., 4 pumps.
EMP—190. Last fiscal year output, 32,008 tons.
SIZES SHIPT—Run of Mine, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

BLUE DIAMOND COAL CO., LTD.

General Office, Brule Mines, Alta., Can.
PR—J. Bickell, Standard Bank Bldg., Toronto, Alta., Can.
VP—W. J. Sheppard, Standard Bank Bldg., Toronto, Alta., Can.
SECY—H. G. Laux, Toronto, Alta.
GM—Gordon F. Dickson, Brule Mines, Alta.
GS—W. G. Heeley, Brule Mines, Alta.
SCO—Address the Company, Buyer, F. J. Lindsay, Brule Mines, Alta., Can.

Blue Diamond Mine; Drift and Slope; Upper Cretaceous Seam, 108 in. thick.
PO—Brule Mines, Alta.; SP—Same; RR—Canadian National.
S of H—Rope, Compressed air and Steam locos. Track gage 30 in.
S of M—Hand.
PP—5 fire tube boilers, total 600 H. P., 2 water tube boilers, total 500 H. P., Gen. units, 200 K. W. and 110 K. W.
EMP—550. Last years tonnage 126,420.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Shaker screen and picking table.

BRADLEY, J. J.

General Office, Lucky Strike, Alberta.
Bradley Mine; Slope; Seam, 48 in. thick.
PO—Lucky Strike, Alta., Can.; SP—For most, Alta., Can.; RR—C. P. R.
S of H—Mules. Track gage 30 in.
S of M—Comp. Air Punchers.
EMP—12.
SIZES SHIPT—Run of Mine, Nut, Lump.
PREP. EQUIPT—Bar Screens.
NOTE—Mine undeveloped.

BRAS D'OR COAL COMPANY, LTD.

General Office, Little Bras d'or, N. S.
PR—A. B. M. Boulton, Quebec, Can.
VP—W. J. Curry, Montreal, Que.
TR—R. Blane, North Sydney, N. S.
GM—G. B. Burchell, Little Bras d'or, N. S.

PA—G. B. Burchell, Little Bras d'or, N. S.
EE—John L. McDonald, Florence, N. S.
Colonial No. 4 Mine; Slope; Colonia Seam, 60 in. thick.
PO—Little Bras d'or Bridge, N. S.; SP—Same; RR—C. N. R.
MS—John Murphy, Little Bras d'or, N. S.
S of H—Rope. Track gage, 36 in.
S of M—10 compressed air mchcs.
PP—Power purchased, transformer 22,000 to 220 volts, A. C., 1 100 H. P. water tube boiler, 2 pumps.
EMP—202. Last years tonnage 90,291.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Revolving Screens.

Beaver Hat Mine; Slope; Mackay Seam 42 inches thick.
PO—North Sydney, N. S. SP—Same. RR—C. G.
MS—Jas. McDonald, North Sydney, N. S.
S of H—Rope. Track gage, 36 in.
S of M—Compressed air mchcs.
PP—Power purchased, transformer 22,000 to 220 volts, A. C.
EMP—28. Last years tonnage 20,237.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Gravity Screens.

BRAZEAU COLLIERIES, LTD.

General Office, Nordagg, Alberta, Can.
PR—Sir Wm. McKenzie, Toronto, Can.
VP—G. T. Clarkson, Toronto, Can.
TR & SECY—H. S. Ganshy, Toronto, Can.
GM—John Shanks, Nordagg, Alberta, Can.

GS—J. M. Stewart, Nordagg, Alberta, Can.
SCO—Bighorn Trading Co., Ltd., Buyer, Stuart Kidd, Nordagg, Alberta, Can.

Nordagg Mine; Drift.
PO—Nordagg, Alta., Can.; SP—BrazEAU, Alta., Can.; RR—Canadian Nat.
S of H—Mules, storage battery locos. Track gage 30 in.
S of M—Hand.
EMP—550. Last years tonnage 412,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.

BRITISH COLUMBIA SKEENA COAL CO., LTD.

General Office, 111 Mountain Hill, Quebec.
PR—James G. Scott, Quebec.
TR—Alex. Hardy, " "
VP—John Theodore, Ross, Quebec.
CE—R. C. Campbell-Johnston, Vancouver, B. C.
Controls 30,000 acres anthracite coal lands.
Developed eight tunnels on eight different seams, not yet producing coal.

BURNS, P., COAL MINES CO., LTD.

PR—P. Burns, Calgary, Alta.
SECTY—W. E. Corlett, Calgary, Alta.
GS—John Brown, Calgary, Alta.
EM—John Brown, Calgary, Alta.

P. Burns Mine; Drift; Semianthracite Seam 4 to 38 feet thick.
PO—Okotoks, Alta.; SP—Same.
S of H—Mules. Track gage 26 inches.
S of M—Comp. air punchers.
PP—2 water tube boilers, 40 H. P.
EMP—25.
SIZES SHIPT—Run of Mine.

CADOMIN COAL CO., LTD.

General Office, Cadomin Bldg., Winnipeg, Can.
PR—F. L. Hammond, Winnipeg, Can.
VP—E. M. Powley, Winnipeg, Can.
TR—E. M. Powley, Winnipeg, Can.
GM—W. S. Henderson, Winnipeg, Can.
PA—W. S. Henderson, Winnipeg, Can.
EM—A. L. Clement, Winnipeg, Can.
SA—Cadomin Coal Co., Ltd., Cadomin Bldg., Winnipeg, Can.

Cadomin Mine; Drift; Kootenai Seam, 34 ft. thick.
PO—Cadomin, Alta., Can.; SP—Same; RR—Canadian National.
MS—Edward Coupland, Cadomin, Alta., Can.
S of H—Horses. Track gage 42 in.
S of M—Shortwall mchcs.
PP—2-250 H. P. fire tube boilers. 1-80 K. W. gen. unit.
EMP—120. Last fiscal year output 150,000 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens, Picking Tables.

CAMBERIAN COAL CO., LTD.

PR—Wm. R. Hughes, Barrowell, Alta.
VP—John McKee Mathews, Regina, Sask.
TR—W. H. Butters, 715 Centre St., Calgary, Alta.
GM—Wm. R. Hughes, Barrowell, Alta.
PA—W. H. Butters, 715 Centre St., Calgary, Alta.
EM—E. S. H. Huntrods, Taber, Alta.
SA—Great West Coal Co., Ltd., Lancaster Bldg., Calgary, Alta.

Cambrian Mine; Shaft; Belly River Seam, 40 inches thick.
PO—Barrowell, Alta.; SP—Same; RR—Can. Pacific.
MS—Wm. R. Hughes, Barrowell, Alta.
S of H—Mules. Track gage 30 inches.
S of M—1 comp. air mach.
PP—2 pumps.
EMP—12.
SIZES SHIPT—Nut, Lump.
PREP. EQUIPT—Gravity Screens.
NOTE—Not operating.

CANADA WEST COAL CO., LTD. (THE).

General Office, Taber, Alta.
PR—J. S. Hough, Winnipeg, Alta.
VP—I. R. Howard, Taber, Alta.
GM—J. R. Howard, " "
GS—E. S. F. Huntrods, " "
PA—J. R. Howard, " "
EM—E. S. F. Huntrods, " "
EE—F. Henry, Taber, Alta.
SA—Durham Coal Co., Ltd., Winnipeg, Man., Can.

(Continued on Next Page)

Canada: West Coal Co., Ltd.—Cont.

Canada West Mine; Slope; Betty River Seam, 30 to 60 in. thick.
PO—Taber, Alta.; SP—Same; RR—Canadian Pacific, Crows Nest Pass.
S of H—Mules and 5 trolley pole type locos. Track gage, 36 in.
S of M—Hand and 1 elec. and 21 comp. air mchs.
PP—7 water tube boilers, 1300 H. P., 3 A. C., 700 K. W. gen. units, 2 D. C., 300 K. W. gen. units, 250 volts A. C. and D. C., 6 pumps.
EMP—250. Last years tonnage 115,000.
SIZES SHIPT—Pea, Nut, Lump.
PREP. EQUIPT—Bar and Shaker Screens, Picking Tables.

CANADIAN COLLIERIES, (Dunsmuir) LTD.

General Office, Victoria, B. C.
PR—F. P. Perry, Montreal, Que.
VP—H. R. Walker, Montreal, Que.
TR—Sey. H. S. Adlington, Montreal.
Asst. Secy.—P. S. Fagan, Victoria, B. C.
GM—J. M. Savage, Victoria, B. C.
GS—Thos. Graham, Cumberland, B. C.
PA—D. C. MacFarlane.
EM—A. C. Lymn, Cumberland, B. C.
EE—R. R. Stacey, Cumberland, B. C.
Sales Agency, Wellington-Conox Agency, Ltd., Victoria, B. C.
General Sales Agent, C. E. Thomas, Victoria, B. C.

Wellington District.

Oist. Supt.—T. A. Spratton, Ladysmith, B. C.
Wellington Nos. 1, 2, 3 Mines; connected by tunnel; Slope; Wellington Seam, 61 in. thick.
PO—Ladysmith, B. C.; SP—Same; RR—Wellington Colliery Ry.
S of H—Mules and rope, 3 trolley pole type locos.
S of M—Hand.
PP—Generate power.
EMP—560. Daily output, 1,100 tons.
SIZES SHIPT—Pea, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

No. 5 Wellington Mine; Slope; Wellington Seam.
PO—South Wellington, B. C.; SP—Same; RR—Esquimalt & Nanaimo.
S of H—Rope.
S of M—Hand.
EMP—220. Daily output, 400 tons.
SIZES SHIPT—Pea, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

Conox District.

Oist. Supt.—Chas. Graham, Cumberland, B. C.
Conox Nos. 4, 5, 6, 7 Mine; Shaft; Conox Seam; 31 inches thick.
PO—Cumberland, B. C.; SP—Union Bay, B. C.; CTV—Wellington Colliery.
S of H—Mules, rope and 4 storage battery locos, 1 longwall mach.
S of M—4 shortwall mchs.
PP—Hydro elec. plant 12,000 H. P.; all mines electrically equipped.
EMP—1,700. Daily tonnage 2,500.
200 Bee Hive Coke Ovens at Union Bay, B. C.
SIZES SHIPT—Pea, Nut, Lump.

CANADIAN DINANT COAL CO. LTD.

General Office, Dinant, Alberta, Can.
PA—R. Shortreed, Dinant, Alta., Can.
EM—M. Cranston, Dinant, Alta., Can.

Canadian Dinant Mine; Slope; Seam 84 in. thick.
PO—Dinant, Alta., Can.; SP—Same; RR—G. T. P.
MS—M. Cranston, Dinant, Alta., Can. S of H—Mules. Track gage 30 in.
S of M—Hand.
EMP—60. Last years tonnage 25,000.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PBEP. EQUIPT—Shaker Screens.

CANADIAN PACIFIC RAILWAY DEPT. OF NATURAL RESOURCES.

General Office, Montreal, Quebec.
PR—E. W. Beatty, Montreal, Que.
VP—Grant Hall, Montreal, Que.
TR—H. E. Suckling.
GM—P. L. Nasmith, Calgary, Alta.
GS—Lewis Stockert, Calgary, Alta., Can.
PA—E. C. P. Cushing, Calgary, Alta.
EM—B. L. Thorne, Calgary, Alta.
SA—B. T. Coon, Calgary, Alta.

Bankhead Mine; Drift; Seam 30 to 108 in. thick.
PO—Bankhead, Alta.; SP—Same; RR—C. P.
MS—D. G. Wilson, Bankhead, Alta. S of H—8 comp. air locos. Track gage 36 in.
S of M—Hand.
PP—9 return tubular boilers, total 1350 H. P., 2 gen. units, 150 K. W., 2,200 volts A. C., 3 phase, 60 cycle, 3 air compressors, 4 pumps.
EMP—277. Last years tonnage 120,594.
SIZES SHIPT—Broken, Egg, Stove, Nut, Pea, Bankhead, Brignettes.
PREP. EQUIPT—Shaker Screens, Picking Tables.

Galt No. 3 Mine; Shaft; Seam, 42 to 60 in. thick.
PO—Lethbridge, Alta.; SP—Same; RR—C. P.
MS—Robt. Livingstone, Lethbridge, Alta.
S of H—Horses and rope. Track gage 26 in.
S of M—11 comp. air mchs.
PP—10 return tubular boilers, total 1,000 H. P., 2,200 volts A. C., 29 pumps.
EMP—189. Last years tonnage 98,092.
SIZES SHIPT—Nut, Lump, Slack.
PBEP. EQUIPT—Bar Screen, Picking Table, Box Car Loader.

Galt No. 6 Mine; Shaft; Seam 42 to 60 in. thick.
PO—Lethbridge, Alta.; SP—Same; RR—C. P.
MS—Robt. Livingstone, Lethbridge, Alta.
S of H—Horses and rope. Track gage 36 in.
S of M—35 comp. air mchs.
PP—8 water tube boilers, total 2000 H. P., 2 gen. units, 200 K. W., 2,200 volts A. C., 2 phase, 60 cycles, 2 air compressors, 23 pumps.
EMP—511. Last years tonnage 260,495.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT—Gravity and Shaker Screens, Picking Tables, Spirals, Box Car Loader.

CANADIAN WESTERN FUEL CO. LTD.
 Now Western Fuel Corp. of Canada, Ltd.

CANMORE COAL COMPANY.

General Office, Canmore, Alta.
PR—James B. Neale, Minersville, Pa.
VP—F. E. Weyerhaeuser, St. Paul, Minn.
TR—S. B. Thorne, 17 Battery Place, New York, N. Y.
GM—Mont. B. Morrow, Canmore, Alta.
PA—W. H. Evans, Canmore, Alta.
EM—R. G. Elliott, Canmore, Alta.
SCO—Runde Mountain Trading Co. Buyer, A. B. Lattimer, Canmore, Alta.
Sales Agents, The Bimble Lumber & Coal Co., Calgary, Alta.

No. 2 Mine; Slope; Upper Cretaceous Series; 36 to 120 in. thick.
PO—Canmore, Alta.; SP—Same; RR—C. P.
S of H—Mules and comp. air locos. Track gage 26 1/4 in.
S of M—Hand.
PP—7 water tube boilers, 1,050 H. P., 2 260 K. W. gen. units, transformer 2,200 to 110-440 volts A. C., 12 pumps.
EMP—500. Daily tonnage 1,000.
SIZES SHIPT—Run of Mine, Slack, Lump, Furnace.
PREP. EQUIPT—Shaking Screens, Picking Tables.

CARBON COAL COMPANY

General Office, Box 166, Carbon, Alta., Canada.
GM—Jas. Fraser, Carbon, Alta., Can.
Fuller Mine; Slope; Upper Lignite Seam, 48 in. thick.
PO—Carbon, Alta., Canada; SP—Same; RR—C. P. B.
MS—Jas. Fraser, Carbon, Alta., Can. S of H—Mules. Track gage 25 in.
S of M—Hand.
EMP—30.
SIZES SHIPT—Lump.
PREP. EQUIPT—Bar Screens.

CARDIFF COLLIERIES, LTD.

General Office, Cardiff, Alta.
PR—J. M. de C. O'Grady, Winnipeg, Man.
VP—A. D. Chisholm, Winnipeg, Man.
TR—A. Cooper.
GM—J. M. de C. O'Grady, Winnipeg, Man.
GS—E. I. Roberts, Cardiff, Alta.
PA—L. A. Leonard, Cardiff, Alta.
EE—A. W. Nelson, Cardiff, Alta.

Cardiff Coll. Mine; Slope; Seam, 84 in. thick.
PO—Cardiff, Alta.; SP—Same; BR—C. N. R.
S of H—Mules, rope and 1 steam loco. Track gage, 44 in.
S of M—3 longwall mchs.
PP—4 fire tube boilers, gen. units, 550 H. P., 250 volts D. C., 10 pumps.
EMP—125. Last years tonnage 90,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

CELTIC COAL CO. LTD.

General Office, Wayne, Alta., Can.
PR—P. Allen, Wayne, Alta., Can.
VP—H. Grover, Wayne, Alta., Can.
TR—W. C. Allen, Wayne, Alta., Can.
GM—W. C. Allen, Wayne, Alta., Can.
CE—P. Allen, Wayne, Alta., Can.
EM—P. Allen, Wayne, Alta., Can.
EE—H. Grover, Wayne, Alta., Can.
SA—Bawman-Thayer, United, Limited, Winnipeg, Man.

Celtic Mine; Slope; No. 2 Seam, 38 in. thick.
PO—Wayne, Alta.; SP—Same; RR—Canadian National.
MS—W. C. Allen, Wayne, Alta., Can. S of H—Mules, Rope, Steam loco. Track gage 24 in.
S of M—Electric Punchers, Longwall mach.
PP—Purchase power transformer 2,200-220 Volts, A. C., 1 Fire Tube Boiler, 100 H. P.
EMP—12.
SIZES SHIPT—Slack, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

CHIMNEY CORNER MINE.

General Office, Chimney Corner, Nova Scotia, Canada.
GM—P. J. Danect, Chimney Corner, N. S., Can.
Chimney Corner Mine; Slope; Evans Seam, 48 in. thick.
PO—Chimney Corner, N. S.; SP—Inverness Station, Can.; RR—Inverness.
MS—P. J. Danect, Chimney Corner, N. S., Canada.
SM—H. McPherson, Chimney Corner, N. S., Can.
S of H—Mules, comp. air mchs. and steam engines. Track gage 28 in.
S of M—Hand.
PP—1—100 H. P. Fire tube boiler 3 pumps.
EMP—10. Last fiscal year output 4,000 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity and revolving screens.

CHINOOK COAL CO. LTD.

General Office, Lethbridge, Alta.
PR—Wm. A. Wood, Hamilton, Ont.
VP—Miller Lash, Toronto, Ont.
TR—Miller Lash, Toronto, Ont.
GM—H. W. Crawford, Lethbridge, Alta.
PA—H. W. Crawford, Lethbridge, Alta.
EM—Moses Johnson, Commerce, Alta.
EE—John Simpson, Commerce, Alta.
SA—H. W. Crawford, Lethbridge, Alta.

Chinook Mine; Shaft; Sub-Bituminous Seam, 54 in. thick.
PO—Commerce, Alta.; SP—Klpp, Alta.; RR—C. P.
MS—Moses Johnson, Commerce, Alta.
SM—A. Kealey, Commerce, Alta.
S of H—Rope and mules. Track gage 3 ft. 6 in.
S of M—14 comp. air mchs.
PP—Return tubular boilers, total 900 H. P., 2 A. C. generators, 2300 volts A. C., 60 cycles, 3 phase, 6 pumps.
EMP—20. Daily tonnage 4400.
SIZES SHIPT—Slack, Pea, Nut, Lump.
PREP. EQUIPT—Gravity and shaker Screens, picking tables.

CHU-CHUA COAL COMPANY.

General Office, 100 Central Bldg., Seattle, Wash.
PR—Richard Ready, Everett, Wash.
VP—W. H. Glass, Seattle, Wash.
TR—H. S. Hodgson, Seattle, Wash.
GM—O. A. Thomas, Seattle, Wash.
GS—James Gray, Chu Chua, B. C.
PA—James Gray, Chu Chua, B. C.
CE—Geo. C. Westly, Kamloops, B. C.
EM—Geo. C. Westly, Kamloops, B. C.
SA—C. E. Max, Kamloops, B. C.

Chu Chua Mine; Drift and Slope; Thomas-Smith-Gray Seam, 48-36-78 in. thick.
PO—Chu Chua, B. C.; SP—Same; RR—C. N.
S of H—Mules and comp. air mchs. Track gage 30 in.
S of M—Hand, comp. air punchers and longwall mchs.
PP—Generated units, 9 K. W., 225 D. C.
EMP—30. Last fiscal year output 1,200 tons.
SIZES SHIPT—Run of Mine, Nut, and Lump.
PREP. EQUIPT—Bar screens and picking tables.

CLOVER BAR MINE COAL CO.

General Office, Box 180, Beverly, Alta., Canada.
GM—C. H. Bilson, Beverly, Alta.
GS—C. H. Bilson, Beverly, Alta.
PA—C. H. Bilson, Beverly, Alta.
EM—C. H. Bilson, Beverly, Alta.

Clover Bar Mine; Shaft; Clover Bar Seam, 78 in. thick.
PO—Beverly, Alta., Can.; SP—Edmonton, Can.; RR—C. T. P.
S of H—Mules and mule and tail rope. Track gage 24 inches.
S of M—Hand.
PP—2 return tubular boilers, total 200 H. P., 1 gen. unit, 1 pump.
EMP—65.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screen.

COALMONT COLLIERIES COMPANY

General Office, Coalmont, B. C.
PR—W. J. Blake Wilson, Vancouver, B. C.
VP—J. W. Steward, Vancouver, B. C., Can.
TR—N. Hindersy, Calgary, Alberta, Canada.
GM—J. Brown, Coalmont, B. C.
GS—D. McLeon, Coalmont, B. C.
PA—L. S. Davidson, Coalmont, B. C.
CE—A. Sharp, Vancouver, B. C.
EM—C. McLeon, Coalmont, B. C.
EE—G. McEachern, Coalmont, B. C.

Coalmont Collieries Mine; Drift; Oleguerre Seam, 120 in. thick.
PO—Coalmont, B. C.; SP—Same; RR—Kettle Valley.
S of H—Mules, comp. air and trolley pole type locos. Track gage 36 in.
S of M—Comp. air punchers.
PP—2 42 H. P. fire tube boilers; 2—225 H. P. water tube boilers, transformers 10,000-550 volts A. C. R. Converters 250 volts D. C. M. G. Sets, 1 500 K. W. and 1 50 K. W. 2 pumps.
EMP—160. Last years tonnage 10,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker screens and picking tables.

CORDIN COAL AND COKE COMPANY.

General Office, Spokane, Wash.
PR—Rush Taggart, New York, N. Y.
VP—J. K. O. Sherrard, New York, N. Y.
TR—Wm. Weaver Heaton, New York, N. Y.
PA—A. M. Allen, Spokane, Wash.
GM—R. S. Ord.
GS—E. L. Warburton, Corbin, B. C.
EM—F. Roger Corbin, B. C.
SCO—Flathead Trading Co., Corbin, B. C.

No. 4 Mine; Drift; 10 to 250 ft. thick.
PO—Corbin, B. C.; SP—Same; RR—E. B. C.
MS—E. L. Warburton, Corbin, B. C.
S of H—Mules and steam incline. Track gage, 30 in.
S of M—Hand.
PP—3 fire tube boilers, total 340 H. P., air compressor, generate power, A. C., 4 pumps.
EMP—150. Last years tonnage 60,000.
SIZES SHIPT—Run of Mine, Slack.
PREP. EQUIPT—Screen.
No. 3 Mine; Stripping; 200 ft. thick.
PO—Corbin, B. C.; SP—Same; RR—E. B. C.
MS—E. L. Warburton, Corbin, B. C.
S of H—2 steam locos. Track gage, 30 in.
PP—1 fire tube boiler.
EMP—175. Last years tonnage 68,000.
SIZES SHIPT—Run of Mine, Slacks.
PREP. EQUIPT—Screen.

CROWN COAL COMPANY, LTD.

General Office, 11351 82nd St., Edmonton, Alberta, Can.
PR—R. C. Marshall, Lorraine Apt., Calgary, Can.
VP—J. H. Dowdell, Edmonton, Alberta, Can.
TR—J. B. Starky, Edmonton, Alberta, Can.
GM—J. B. Starky, Edmonton, Alberta, Can.
GS—Jas. Clyne, Edmonton, Alberta, Can.
CE—C. C. Sutherland, Edmonton, Alberta, Can.
EM—Joe Moore, Edmonton, Alberta, Can.
SA—Crown Coal Co., Edmonton, Alberta, Can.

Crown Mine; Shaft; Seam 60 inches thick.
PO—Edmonton, Alberta, Can.; SP—Same; BR—Canadian National.
S of H—Rope. Track gage 30 inches.
S of M—Hand and underminding.
PP—Purchase power Transformer, 2,200-220 volts A. C.
EMP—60. Daily tonnage 100.
PRODUCES—Steam, Domestic.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Bar and revolving screens.

CROWS NEST PASS COAL CO. LTD.

General Office, Fernie, B. C.
PR—W. R. Wilson, Fernie, B. C.
VP—H. R. McWhirter, Ottawa, Ont.
TR—A. Klauer, Fernie, B. C.
GM—W. R. Wilson, Fernie, B. C.
PA—M. Whitlaw, Fernie, B. C.
CE—W. R. Wilson, Fernie, B. C.
EM—H. P. Wilson, Fernie, B. C.
EE—K. Johnstone, Coal Creek, B. C.
SCU—Address the Company, Buyer, M. Whitlaw, Fernie, B. C.
SA—J. S. Irvine, Fernie, B. C.

(Continued on Next Page)

Crows Nest Pass Coal Co., Ltd.—Cont.

Michel Colliery; Drift; No. 3, Top 3 and No. 8 Seams; 60 to 84, 120 to 108, and 96 to 210 in. thick.

PO—Michel, B. C.; SP—Same; RR—C.

P. R. G. N.

MS—Robert Banar, Michel, B. C.

S of H—Pillar and stall, 6 comp. air

locos and rope. Track gage 36 in.

PP—11 fire tube boilers, 1175 H. P.

2 250 K. W. gen. units D. C.

20 pumps.

EMP—660. Last years tonnage 296,-

343. Coke Ovens 486 bve hive.

SIZES SHIPT—Run of Mine, Slack, Nut,

Lump.

PREP. EQUIPT—Shaker Screens, Picking

Tables.

Coal Creek Colliery; Drift; Nos. 1, 2

and "B" Seams; 144, 60 to 108,

and 48 to 60 in. thick.

PO—Coal Creek, B. C.; SP—Same; RR—

C. P. G. N. M. F. & M.

MS—R. G. G. Coal Creek, B. C.

S of H—Pillar and stall, 6 comp. air

locos and rope. Track gage 36 in.

S of M—Hand.

PP—16 fire tube boilers, 2000 H. P.

1 225 H. P. water tube boilers,

5 100 K. W. gen. units, 220 volts

D. C., 25 pumps.

EMP—950. Last years tonnage 483,-

599. Coke Ovens 454 bve hive.

PREP. EQUIPT—Shaker Screens, Picking

Tables.

DAWSON COAL CO. (TRE), LTD.

General office, Edmonton, Alta.

PR—R. Secord, ... Edmonton, Alta.

GM—C. A. Hyndman, " "

TR—C. A. Hyndman, " "

Dawson Mine; Shaft; Seam 72 in. thick.

PO—Edmonton, Alberta

S of H—Mules. Track gage 22½ in.

PP—1 fire tube boiler, 170 H. P., 6

pumps.

SIZES SHIPT—Slack, Pea, Egg, Lump.

PREP. EQUIPT—Gravity Screens.

DOBELL COAL CO., LTD., THE.

General office, 138 St. Peter St.,

Quebec, Can.

PR—W. M. Dobell, ... Quebec, Canada.

VP—A. E. Doucet, Quebec, Can.

TR—F. O. Judge, " "

GM—T. R. H. Anderson, ... Toftld, Alta.

EM—T. R. H. Anderson, Toftld, Alb. rta.

Dobell Mine; Stripping; Belly River

Seam, 96 in. thick.

PO—Toftld, Alta.; SP—Same; RR—C.

N. Rys.

S of H—2 Steam locos. Track gage

24 in.

S of M—1 steam shovel.

PP—2 water tube boilers, 25 H. P., 2

pumps.

EMP—50. Last years tonnage 29,000.

SIZES SHIPT—Run of Mine, Lump.

DOMINION COAL COMPANY, LTD.

General Office, Glace Bay, N. S., Can.

PR—Roy M. Wolvin, 112 St. James St.,

Montreal, Que., Can.

VP—H. H. McDougall, Montreal, Can.

TR—C. S. Cameron, Montreal, P. Q.

GM—E. P. Merrill, Sydney, N. S.

ASST GM—H. J. McCann, Glace Bay,

N. S.

PA—D. S. Hines, Sydney, N. S.

EM—M. E. Murphy, Glace Bay, N. S.

EM—Walter Herd, Glace Bay, N. S.

SCO—Address the Company, Buyer, D.

S Hines, Sydney, N. S.

SA—Alexander Dick, 112 St. James St.,

Montreal, Que., Can.

Dominion No. 1 Mine; Shaft; Phalen

Seam; 84 in. thick.

PO—Dominion No. 1, N. S.; SP—Same;

RR—Sydney & Louisburg.

MS—John Monroe, Dominion No. 1,

N. S.

SM—Earl Smith, Dominion No. 1,

N. S.

S of H—Mules, endless main and tail

rope, comp. air loco. Track gage

26 in.

S of M—32 Comp. air punchers.

PP—7 water tube boilers, total 1,475

H. P., power from central station,

550 volts A. C., 22 pumps.

EMP—493. Last years tonnage 338,934.

SIZES SHIPT—Run of Mine, Slack,

Lump.

PREP. EQUIPT—Gravity Screens, Picking

Tables.

Dominion No. 2 Mine; Shaft; Phalen

Seam; 84 in. thick.

PO—Dominion No. 2, N. S.; SP—Glace

Bay, N. S.; RR—Sydney & Louis-

burg, Glace Bay.

MS—W. S. McDonald, Dominion No. 2,

N. S.

SM—Robt. McPhee, Dominion No. 2,

N. S.

S of H—Mules, endless main and tail

rope, comp. air locos. Track gage

30 in.

S of M—57 comp. air punchers.

PP—20 water tube boilers, 7,000 H.

P. Transformer, 22,000 to 550

volt A. C., 3 500 K. W., 1—1,000

K. W., 2—500 K. W. gen. units,

22 pumps.

EMP—911. Last years tonnage 550,-

370.

SIZES SHIPT—Run of Mine, Slack,

By Product.

PREP. EQUIPT—Shaker Screens, Picking

Tables.

Dominion No. 4 Mine; Shaft; Phalen

Seam; 84 in. thick.

PO—Dominion No. 4, Caledonia, N. S.;

SP—Glace Bay, N. S.; RR—Sydney

& Louisburg.

MS—J. R. Dunn, Dominion No. 4,

N. S.

SM—A. McVicar, Dominion No. 4,

N. S.

S of H—Mules, endless main and tail

rope, comp. air loco. Track gage

23½ inches.

S of M—54 comp. air punchers.

PP—6 water tube boilers, total 1,790

H. P., 19 pumps.

EMP—435. Last years tonnage 329,-

980.

SIZES SHIPT—Run of Mine, Slack,

PREP. EQUIPT—Shaker Screens, Picking

Tables.

Dominion No. 5 Mine; Slope; Phalen

Seam; 84 in. thick.

PO—Dominion No. 5, N. S.; SP—Same;

RR—Sydney & Louisburg.

MS—W. G. Ross, Reserve, N. S.

SM—P. Doolan, Reserve, N. S.

S of H—Mules, endless rope, comp. air

loco. Track gage 26 in.

S of M—3 comp. air punchers.

PP—7 water tube boilers, total 1,875

H. P., 14 pumps.

EMP—141. Last years tonnage 105,-

836.

SIZES SHIPT—Run of Mine, Slack,

PREP. EQUIPT—Shaker Screens, Picking

Tables.

Dominion No. 6 Mine; Slope; Phalen

Seam; 84 in. thick.

PO—Dominion No. 6, N. S.; SP—Same;

RR—Sydney & Louisburg.

MS—N. T. Chew, Dominion No. 6, N. S.

SM—Earle C. Prowse, Dominion No. 6,

N. S.

S of H—Mules, main and tail rope.

Track gage 36 in.

S of M—33 comp. air punchers.

PP—6 water tube boilers, total 1,500

H. P., 16 pumps.

EMP—368. Last years tonnage 227,025.

SIZES SHIPT—Run of Mine, Slack,

Lump.

PREP. EQUIPT—Shaker Screens, Picking

Tables.

Dominion No. 9 Mine; Shaft; Harbour

Seam; 60 in. thick.

PO—New Aberdeen, N. S.; SP—Glace

Bay, N. S.; RR—Sydney & Louisburg.

MS—John J. McNeill, New Aberdeen,

N. S.

S of H—Mules, endless main and tail

rope. Track gage 36 in.

S of M—55 comp. air punchers.

PP—Power from Dominion No. 2 Mine,

14 pumps.

EMP—151. Last years tonnage 277,-

666.

SIZES SHIPT—Run of Mine, Slack,

Lump.

PREP. EQUIPT—Gravity Screens; Picking

Tables.

Dominion No. 10 Mine; Shaft; Emory

Seam; 54 in. thick.

PO—Reserve, N. S.; SP—Dominion, N.

S.; RR—Sydney & Louisburg.

MS—Thos. McDonald, Reserve, N. S.

SM—F. Doolan, Reserve, N. S.

S of H—Endless, main and tail rope.

Track gage 26 inches.

S of M—21 comp. air punchers.

PP—Power from Dominion No. 5 Mine,

5 pumps.

EMP—231. Last years tonnage 125,-

068.

SIZES SHIPT—Run of Mine, Slack,

Lump.

PREP. EQUIPT—Shaker Screens, Picking

Tables.

Dominion No. 11 Mine; Slope; Emory

Seam; 54 in. thick.

PO—No. 3 Post Office, N. S.; SP—

Glace Bay, N. S.; RR—Sydney &

Louisburg, Glace Bay.

MS—W. A. McDonald, Glace Bay, N. S.

SM—I. J. McKinnon, Glace Bay, N. S.

S of H—Endless, main and tail rope.

Track gage 26 in.

S of M—25 comp. air punchers.

PP—2 water tube boilers, total 950

H. P., 1 500 K. W. gen. unit,

connected to power station, 9

pumps.

EMP—284. Last years tonnage 174,-

822.

SIZES SHIPT—Run of Mine, Slack,

Lump.

PREP. EQUIPT—Gravity Screens, Picking

Tables.

Dominion No. 12 Mine; Slope; Victoria

Seam; 72 in. thick.

PO—New Waterford, N. S.; SP—Same;

RR—Sydney & Louisburg.

MS—A. K. McDonald, New Waterford,

N. S.

SM—E. G. Gates, New Waterford, N. S.

S of H—Main, elec. haulage. Track gage

30 in.

S of M—39 comp. air punchers.

PP—4 water tube boilers, total 925

H. P., power supplied from central

station, transformer 22,000 to 550

volts A. C., 10 pumps.

EMP—359. Last years tonnage 178,-

881.

SIZES SHIPT—Run of Mine, Slack, Nut,

Lump.

PREP. EQUIPT—Shaker Screens, Picking

Tables.

Dominion No. 14 Mine; Slope; Victoria

Seam; 72 in. thick.

PO—New Waterford, N. S.; SP—Same;

RR—Sydney & Louisburg, Glace B.y.

MS—W. A. McLeod, New Waterford,

N. S.

SM—James McMullin, New Waterford,

N. S.

S of H—Mules, main rope, elec. haulage.

Track gage 30 in.

S of M—30 comp. air punchers.

PP—1 30 H. P. fire tube boiler

Fleming Coal Co., Ltd.—Cont.

S of H—Mules and Rope. Track gage 36 in.
S of M—Hand.
PP—1 return tubular boiler, total 150 H. P., 1 g.n. unit, 115 volts, D. C., 6 pumps.
EMP—15. Last years tonnage 40,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Grav. Screens. Formerly Inland Coal & Coke Co.

FOOTBILLS COLLIERIES, THE, LTD.

General Office, Winnipeg, Man.
PR—W. A. Windatt, Winnipeg, Man.
VP—E. H. Ernest, Winnipeg, Man.
TR—C. D. Shepard, Winnipeg, Man.
GS—W. B. Onions, Footbills, Alta.
PA—W. B. Onions, Footbills, Alta.
SCO—Address the Company, Buyer, W. B. Onions, Footbills, Alta.
SA—Windatt Coal Co., Winnipeg, Man.
Footbills Collieries; Slope; Seam 108 inches thick.
PO—Footbills, Alta.; SP—Same; RR—G. T. P.
S of H—Mules, rope. Track gage 30 inches.
S of M—3 comp. air punches.
PP—2 water tube boilers, 200 H. P., 4 pumps.
EMP—65. Daily tonnage 200.
MNG. DIST.—Rocky Mountain.
PREP. EQUIPT—Gravity, Revolving and Shaker Screens.

CIRSON MINE

Drumheller, Alta., Can. No. report.

GRANBY CONSOLIDATED MNG., SMELTING & POWER CO., LTD.

General Office, Vancouver, B. C.
PR—Dr. Wm. H. Nichols, New York, N. Y.
VP—Col. J. T. Crabbs, 25 Broad St., New York, N. Y.
TR—Valentine Quinn, 813 Birks Bldg., Vancouver, B. C.
GM—H. S. Monroe, Anxox, B. C.
RES MGR—C. M. Campbell, Cassidy, B. C.
PA—K. Racey, 813 Birks Bldg., Vancouver, B. C.
Granby No. 1 Colliery; Slope; Douglas Seam; 120 inches thick.
PO—Cassidy, B. C.; SP—Ladysmith, B. C.; RR—Esquimalt & Nanaimo.
S of H—Slope hoist, 2 elec. locos. Track gage 36 inches.
S of M—Hand.
PP—2 water tube boilers, total 520 H. P., transformer, 2300 volts A. C., 1 450 K. W., 1 250 K. W. gen. units, 220 volts D. C., 6 pumps.
EMP—400. Daily tonnage 1,000.
MNG. DIST.—Vancouver Island, B. C., Canada.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Loading Booms, Washeries.

GRAND LAKE COAL CO., LTD.

Out of business.

GREAT WEST COAL CO., LTD.

General Office, Edmonton, Alta.
PR—James C. Dunn, Edmonton, Alta., Can.
TR—Thos. S. Campbell, Edmonton, Alta.
GM—W. S. Cupples, Edmonton, Alta.
GS—A. C. Dunn, Clover Bar, Alta., Can.
PA—A. C. Dunn, Clover Bar, Alta.
EM—A. C. Dunn, " " " " " "
EE—A. Biamonte, Clover Bar, Alta.
Sales Agent, James C. Dunn, P. O. Box 1866, Edmonton, Alta., Can.
Black Diamond Mine; Drift and Slope; Edmonton Series Seam; 78 in. thick.
PO—Clover Bar, Alta.; SP—Same; RR—C. N. R.
S of H—Mules, main and tail rope, storage battery locos. Track gage 21 in.
S of M—3 shortwall machs.
PP—3 fire tube boilers, 370 H. P., 1—150 K. W., 1—125 K. W. and 1—25 K. W. Gen. units, 230 volts D. C., 10 pumps.
EMP—175. Last years tonnage 105,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Gravity, Revolving and Shaker Screens.

GREAT WEST COAL COMPANY, LTD.

General Office, Winnipeg, Man., Can.
PR—John R. Brodie, Brandon, Man., Can.
VP—J. G. Gibson, Winnipeg, Man., Can.
TR—J. G. Gibson, Winnipeg, Man., Can.
GM—John R. Brodie, Brandon, Man., Can.
GS—J. D. Thomas, Aerial, Alberta, Can.
PA—J. D. Thomas, Aerial, Alberta, Can.
EM—J. D. Thomas, Aerial, Alberta, Can.
Star Mine; Horizontal Tunnel; Lower Edmonton Series Seam, 60 in. thick.
PO—Aerial, Alta., Can.; SP—Boisdale, Can.; RR—Canadian Nat.

S of H—Mules. Track gage 30 in.
S of M—Chain breast type machs.
PP—1 S of H P. water tube boiler, gen. units, 250 volts D. C., 1 pump.
EMP—100. Daily tonnage 250.
SIZES SHIPT—Slack, Pea, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

GREY EAGLE COAL COMPANY

Out of business.

HALKIRK COAL CO.

General Office, Halkirk, Alta., Can.
Halkirk Mine; Drift; Seam 72 inches thick.
PO—Halkirk, Alta.; RR—C. P. R.
MS—R. Roseve, Halkirk, Alta., Can.
S of H—Mules. Track gage 24 in.
S of M—Hand.
PP—Gen. Power.
EMP—10. Last fiscal year output 2,000 tons.
SIZES SHIPT—Nut, Lump.
PREP. EQUIPT—Bar Screens.

HILLCREST COLLIERIES, LTD.

General Office, Montreal, Que.
PR—Sir Charles Gordon, G. B. E., Montreal, Que.
MGR—J. M. Mackie, Montreal, Que.
VP—C. Meredith, Montreal, Que.
TR—Frank J. Smith, Hillcrest, Alta.
GM—Wm. Stevenson, Jr., Hillcrest, Alta.
PA—Frank J. Smith, " "
CE—Robert G. Drinnan, Edmonton, Alta.
EM—David S. Hutchison, Hillcrest, Alta.
EE—A. Blackey, Hillcrest, Alta.

Hillcrest Mine; Slope; No. 1 Seam, 72 to 108 in. thick.
PO—Hillcrest, Alta.; SP—Same; RR—Can. Pac.; Crow's Nest Pass Div.
MS—Director S. McDonald, Hillcrest, Alta.
S of B—2 steam locos. and rope Track gage 36 in.
S of M—Hand.
PP—6 water tube boilers, total 900 H. P., gen. unit, 2,300 volts A. C., 3 phase, 60 cycle, 1 air comp., 8 pumps.
EMP—400. Last years tonnage 331,857.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Screens.

THE HUMBERSTONE COAL CO., LTD.

General Office, 201 McLeod Bldg., Edmonton, Alta.
PR—Mrs. Beata Humberstone, Beverly, Alta.
TR—Mrs. Beata Humberstone, Beverly, Alta.
GM—C. G. Sheldon, 201 McLeod Bldg., Edmonton, Alta.
GS—John R. MacDonald, 6013 Jasper Ave., Edmonton, Alta.
PA—C. G. Sheldon, Edmonton, Alta.
EM—John R. MacDonald, Edmonton, Alta.
EE—Colin MacGillivray, Edmonton, Alta.
Surveyor—R. H. Coutley, Edmonton, Alta.
SCO—Address the Company, Buyer, Alvin Day, Drawer 506, Beverly, Alta.

Humberton Mine; Shaft; Lignite Seam; 82 inches thick.
PO—Box 200 Beverly, Alta.; SP—Clover Bar, Alta.; RR—G. T. P.
MS—W. G. Heeley, Beverly, Alta.
S of H—14 horses, rope, 2 comp. air locos. Track gage 22 inches.
S of M—6 comp. air machs.
PP—4 return tubular boilers, total 400 H. P., 1 air compressor, 1 g.n. unit, 220 volts, D. C., 2 pumps.
EMP—240. Last years tonnage 102,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Egg, Lump.
PREP. EQUIPT—Shaker Screens.
Old Information.

HYDE, MARCUS L., LTD.

General Office, Edmonton, Alta., Can.
PR—M. L. Hyde, Edmonton, Alta., Can.
GS—E. E. Chappell, Redds, Alta., Can.
SA—North West Coal Co., Edmonton, Alta., Can.
Regal Colliery Mine; Stripping; Roundhill Seam, 78 inches thick.
PO—R. R. No. 3, Tofteld, Alta., Can.; SP—Dods, Alta., Can.; RR—Canadian National.
S of H—1 gasoline loco.
S of M—Hand.
PP—2 pumps.
EMP—40. Last years tonnage 15,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
NOTE—Formerly operated by the North American Collieries, Ltd.
Old Information.

HY-GRADE COAL CO., LTD.

General Office, Drumheller, Alta.
PR—H. McConkey, Drumheller, Alta.
VP—J. J. Best, 398 Wardlaw, Winnipeg, Alta.

TR—H. McConkey, Drumheller, Alta.
GM—H. McConkey, Drumheller, Alta.
PA—H. McConkey, Drumheller, Alta.
VE—H. McConkey, Drumheller, Alta.
EM—H. McConkey, Drumheller, Alta.
EE—H. McConkey, Drumheller, Alta.
SCO—Address the Company, Buyer, H. McConkey, Drumheller, Alta.
SA—Resent Coal Co., Ltd., Calgary, Alta.

Hy-Grade Mine; Slope; New castle Seam; 62 7/8 inches thick.
PO—Drumheller, Alta.; SP—Same; RR—Canadian National.
MS—H. McConkey, Drumheller, Alta.
S of H—Mules. Track gage 30 inches.
S of M—5 chain breast type machs.
PP—Power purchased. 220 volts A. C., 3 phase, 60 cycle, 3 pumps.
EMP—140. Last years tonnage 163,000.
SIZES SHIPT—Slack, Nut, Egg, Block.
PREP. EQUIPT—Bar Screens.

IDEAL COAL COMPANY, LTD.

General Office, Room 21 Central Bldg., Calgary, Can.
PR—Thos. M. McTuckie, 107 First St., East Calgary, Can.
VP—B. A. McKen, Drumheller, Alta., Can.
TR—Wm. A. Ross, Central Bldg., Calgary, Can.
SECV—Wm. A. Ross, Central Bldg., Calgary, Can.
GM—Thos. M. McTuckie, 107 First St., East Calgary, Can.
PA—W. A. Ross, Central Bldg., Calgary, Can.
EM—Thos. M. McTuckie, East Calgary, Can.
EE—Norman A. Kane, Calgary, Alta.
SCO—Ideal Trading Company, Calgary, Can.

No. 1 Mine; Slope; Lower Drumheller Seam, 96 inches thick.
PO—Wayne, Can.; SP—Same; RR—Canadian National, C. P. R.
S of H—Mules and rope, elec. and steam locos. Track gage 36 inches.
S of M—Hand.
PP—Power purchased. Transformer 2300 220 volts A. C.
EMP—20.
SIZES SHIPT—Pea, Nut, Egg, Lump.
PREP. EQUIPT—Revolving Screens Picking Tables.

INLAND COAL & COKE CO.

Now Fleming Coal Co., Ltd., The, Merritt, B. C.

INTERCOLONIAL COAL MINING CO., LTD.

General Offices, Westville, N. S.
PR—Charles Fergie, Montreal, Que.
VP—R. McD. Paterson, Montreal, Que.
GM—William Maxwell, Westville, N. S.
GS—M. C. Richardson, Westville, N. S.
PA & Comptroller—G. Percy Gordon, Westville, N. S.
Drummond Nos. 1, 2, 3 and 4 Mines; Slopes; Main and Scott Seam, 144 to 180 in. thick.
PO—Westville, N. S.; SP—Same; RR—C. N.
S of H—Mules and rope.
S of M—Room and pillar and longwall machs., 11 coal cutters.
PP—16 water tube boilers, total 2,600 H. P., 2—100 K. W. generators, 1 air compressor.
EMP—580. Last years tonnage 108,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Bar and Shaker Screens, Picking Tables.

INTERNATIONAL COAL & COKE CO. LTD.

General Office, Coleman, Alta., Can.
PR—A. C. Flumerfelt, Victoria, B. C.
VP—H. Davidson, Vancouver, B. C.
TR—Joseph Emmerson, Coleman, Alta.
GM—O. E. S. Whiteside, " "
GS—D. Davies, " "
PA—W. S. Bosworth, " "
CE—L. Lindoe, Coleman, Alta.
EM—L. Lindoe, Coleman, Alta.
EE—R. M. Cosgrove, Coleman, Alta.
SCO—Address the Company; Buyer, W. S. Bosworth, Coleman, Alta.
SA—W. S. Bosworth, Coleman, Alta.

International Mine; Drift and Slope; Dennison Seam.
PO—Coleman, Alta.; SP—Same; RR—Canadian Pacific, Crow's Nest Branch.
SM—E. McDonald, Coleman, Alta.
S of H—10 compressed air loco. Track gage, 36 in.
S of M—Hand.
PP—10 return tubular boilers, total 1370 H. P. gen. units, 220 volts D. C., 8 pumps.
EMP—300. Last years tonnage 149,971.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Picking Tables.

INTERNATIONAL CONSTRUCTION & MINING CO.

General Office, Box 178, Carbon, Alta., Can.
PR—G. J. Davis & Mike Ayello, Carbon, Alta.
VP—R. Armstrong, Carbon, Alta.
TR—G. J. Davis, Carbon, Alta.
Step Mine; Slope; Seam, 48 inches thick.
PO—Carbon, Alta.; SP—Same; RR—C. P. R.
MS—Mike Ayello, Carbon, Alta., Can.
S of H—Mules and rope. Track gage 26 in.
S of M—Hand.
PP—Water tube boiler.
EMP—12. Daily output 200 tons.
SIZES SHIPT—Pea, Egg and Lump.
PREP. EQUIPT—Bar Screens.

INVERNESS RAILWAY & COAL CO.

General Office, Inverness, N. S.
COMPTROLLER—R. E. MacLeod, Inverness, N. S.
GM—L. Kidan, Inverness, N. S.
PA—R. C. Hamilton, Inverness, N. S.
EM—T. C. Farnsworth, Inverness, N. S.
EE—Vance Macleod, Inverness, N. S.
SCO—Address the Company, Buyer, R. C. Hamilton, Inverness, N. S.
SA—S. G. Davis, Port Hastings, N. S.
Inverness Mine; Slope; Inverness Seam, 84 in. thick.
PO—Inverness, N. S.; SP—Same; RR—1 R & C, Ltd.
MS—Hugh MacLennan, Inverness, N. S.
S of H—Mules and rope. Track gage 28 in.
S of M—Hand.
PP—8 water tube boilers, 1,750 H. P., generate power for lighting only, 125 volts D. C., 3 pumps.
EMP—600. Last fiscal year output 150,665 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Picking tables.

JAMES BROS.

General Office, Forestburg, Alta., Can.
Ever Ready Mine; Shaft; Lignite Flat, 8 am 8 ft. 6 inches thick.
PO—Forestburg, Alta., Can.; SP—Same; RR—C. P. R.
MS—Albert J. James, Forestburg, Alta., Can.
S of H—Mules. Track gage 28 in.
S of M—Hand, shortwall mach.
EMP—10. Last fiscal year output 2,000 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.

JASPER PARK COLLIERIES, LTD.

General Office, Alworth Bldg., Duluth, Minn.
Jasper Mine; Drift; Kootenai Seam, 96 in. thick.
PO—Pocahontas, Alta.; SP—Same; RR—Grand Trunk Pacific.
MS—John Jess, Pocahontas, Alta., Can.
S of H—3 Comp. air locos. Track gage 42 inches.
S of M—Hand.
PP—4 water tube boilers, 1—75 and 1—185 K. W. A. C. gen. units, 6 pumps.
Last fiscal year output, 400,000 tons.
MNG. DIST.—Edmonton.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Shaker Screens, Picking Tables.
NOTE—Formerly operated by the Jasper Park Collieries, Ltd.

JEWELL COLLIERIES, LTD.

General Office, Wayne, Alta.
PR—W. S. Henderson, Calgary, Alta.
TR—P. H. Purcell, Wayne, Alta.
GM—P. H. Purcell, Wayne, Alta.
EM—Alex. Higgins, Wayne, Alta.
EE—Alex. Higgins, Wayne, Alta.
SA—Halliday Bros., Ltd., Winnipeg, Alta.
Jewel Collieries Mine; Shaft; Drumheller Seam; 96 in. thick.
PO—Wayne, Alta.; SP—Same; RR—C. N.
MS—Alex. Higgins, Wayne, Alta.
S of H—Mules. Track gage 30 in.
S of M—Electric puncher and shortwall mach.
PP—Power purchased. Transformer 2300 220 volts A. C., 1 100 H. P. fire tube boiler.
EMP—100. Last years tonnage 52,000.
SIZES SHIPT—Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

JONES COAL MINES.

General Office, Bulls-killville, Alta., Can.
Jones Coal Mine; Drift; 8 am, 5 1/2 ft. thick.
PO—Box 18, Ailsa, Alta., Can.; SP—Same; RR—Grand Trunk Pacific.
MS—W. Jones, Box 78, Ailsa, Alta., Can.
S of H—Mules. Track gage 30 in.
S of M—Hand.
PP—Purchase Power.
SIZES SHIPT—Nut, Lump.
PREP. EQUIPT—Revolving and Shaker Screens.

KEYSTONE COLLIERIES.

General Office, 1919 8th Ave., Lethbridge, Alta., Canada.
 FR—Thos. Whitelaw, Alta., Canada.

Keystone Collieries Mine; Drift; Lignite Seam, 54 in. thick.
 PO—Lethbridge, Alta.; SP—Same; RR—C. P. R.
 S of H—Mules. Track gage 32 in.
 S of M—Hand.
 PP—Power purchased.
 SIZES SHIPT—Run of Mine, Black.
 PREP. EQUIPT—Bar screens.

KING, G. H.

PR—G. H. King, Minto, N. B.
 TR—G. H. King, " "
 GM—G. H. King, " "
 MS—Henry Bauer, Minto, N. B.
 MM—Thos. Swift
 SCO—King Lumber Co., Ltd. Buyer, E. D. King, Minto, N. B.

G. H. King Mine; Shaft; Seam 22 to 30 in. thick.
 PO—Minto, N. B.; SP—Same; CTY—Sunbury; RR—Fredericton & Grand Lake.
 S of H—Steam hoists. Track gage 30 in.
 S of M—Hand.
 PP—1 water tube boiler, 1 gen. unit.
 EMP—35. Last fiscal year output, 13,117 tons.
 Old information.

KLEENBORN COLLIERIES, LTD.

General Office, Bow City, Eyremore, Alta., Canada.
 PR—James Balfour, Regina, Sask., Can.
 VP—W. W. Willis, Eyremore, Alta.
 TR—C. R. Wetgate, Eyremore, Alta., Canada.
 GM—C. R. Wetgate, Eyremore, Alta., Canada.

Bow City Mine; Drift; Seam 60 inches thick.
 PO—Eyremore, Alta.; SP—Brooks, Alta.; RR—C. P.
 S of H—Mules.
 S of M—Hand and shortwall machs.
 EMP—10. Last fiscal year output, 5,600 tons.
 SIZES SHIPT—Lump.

LAKEVIEW COAL, LTD.

General Office, Tegler Bldg., Edmonton, Alta., Can.
 TB—W. W. McBain, Edmonton, Alta., Can.
 GM—W. W. McBain, Edmonton, Alta., Can.
 GS—A. B. Hunter, Wabamun, Can.

Lakeview Mine; Drift; Seam, 25 ft. thick.
 PO—Wabamun, Can.; SP—Same; RR—Grand Trunk.
 S of H—Mules.
 S of M—Hand.
 PP—1 Fire Tube Boiler, 80 H. P. Transformer, 220 Volts, A. C.
 EMP—75.

MCGILLIVRAY CREEK COAL & COKE CO., LTD.

General Office, Coleman, Alta.
 PB—James A. Nowell, St. Paul, Minn.
 VP—L. A. Campbell, Rosedale, B. C.
 TR—A. F. Short, Coleman, Alta.
 GM—Geo. Kellock, Coleman, Alta.
 GS—D. Davidson, Coleman, Alta.

Carbondale Mine; Slope; Bituminous Seam, 96 in. thick.
 PO—Coleman, Alta.; SP—Same; RR—C. P.
 S of H—Mules and 3 storage battery locos. Track gage 42 in.
 S of M—Hand.
 PP—5 water tube boilers, total 675 H. P., 3 transformers, 5 pumps.
 EMP—420. Last years tonnage 212,500.
 MNG. DIST—Crows Nest Pass.
 SIZES SHIPT—Run of Mine, Slack, Nut.
 PREP. EQUIPT—Picking Tables, and Shaker Screens.

MAPLE LEAF COAL CO.

General Office, Spokane, Wash., U.S.A.
 PO—Bellevue, Alta.
 Now a part of Sunbeam Collieries Ltd.

MARCUS COLLIERIES CO., LTD.

General Office, 10414 100th St., Edmonton, Alberta
 PR—Hugh C. Anderson, Edmonton, Alta., Can.
 TR—Levi Parker, Clover Bar, Alta.
 GM—Hugh C. Anderson, Edmonton (S) Alta.
 PA—Leonard C. Stevens, Clover Bar, Alta.
 CE—Leonard C. Stevens, Clover Bar, Alta.
 Marcus Collieries Mine; Shaft; Clover Bar Seam, 49 in. thick.
 PO—Clover Bar, Alta.; SP—Same; RR—G. T. P.
 MS—Levi Parker, Clover Bar, Alta.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 PP—1 100 H. P. fire tube boiler, 3 pumps.

EMP—35. Last fiscal year output, 11,884 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.
 Formerly Edmonton Collieries Co., Ltd.

MARITIME COAL, RAILWAY & POWER CO., LTD.

General Office, Joggins Mines, N. S.
 PR—Wm. Hanson, Montreal, Quebec.
 VP—Hon. Wm. Mitchell, Montreal, Can.
 TR—E. Wilson, Jr., Montreal, Quebec.
 GM—James Cumberland, Joggins Mines, N. S.
 PA—N. T. Avar, Joggins Mines, N. S.
 SCO—Address the Company; Buyer, J. Howard Cummings, Joggins Mines, N. S.
 SA—N. T. Avar, Joggins Mines, N. S.
 Joggins Mine; Slope; Joggins Main Seam, 36-39 in. thick.
 PO—Joggins Mines, N. S.; SP—Same; RR—Company Railroad.
 MS—C. J. Kent, Joggins Mines, N. S.
 S of H—Electric driven rope haulage.
 S of M—4 rotary bar machs.
 PP—Power purchased, transformer 11,000-2200-220 volts A. C., 6 pumps.
 EMP—450. Last fiscal year output, 200,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Screened.
 PREP. EQUIPT—Picking Tables.

St. George Mine; Slope; Seam, 60 in. thick.
 PO—Chignecto, N. S.; SP—Maccan, N. S.
 RR—Company Railroad.
 MS—James Wass, Chignecto, N. S.
 S of H—Electric driven rope haulage.
 S of M—Hand.
 PP—Power purchased, transformer 220 volts A. C., 3 pumps.
 EMP—60. Last fiscal year output, 25,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Pea, Screened.
 PREP. EQUIPT—Picking Tables.

Maple Leaf Mine; Slope; Joggins Mines Seam, 32 in. thick.
 PO—Joggins Mines, N. S.; SP—Same; RR—Company Railroad.
 MS—James Fairlie, Joggins Mines, N. S.
 S of H—Electric driven rope haulage.
 S of M—Hand.
 PP—Purchase power, 220 volts A. C. Last fiscal year output, 8,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Screened.

MERRITT COLLIERIES, LTD.

PR—Robert Brown, Merritt, B. C.
 TR—Robert Brown, " "
 EM—W. H. Hall, " "
 SCO—Brown, Fraser & Co., Ltd., Vancouver, B. C.

Merritt Collieries Mine; 48 to 60 in. thick.
 PO—Merritt, B. C.; SP—Same; RR—C. P. and Kettle Valley.
 S of H—Steam. Track gage 30 in.
 S of M—Hand.
 PP—300 H. P. boiler.
 MNG. DIST—Vale.
 Note—Formerly operated by the Diamond Vale Collieries, Ltd.
 Not operating Sept. 1, '21.

MIDDLESBORO COLLIERIES CO.

General Office, Middlesboro, B. C., Can.
 PR—E. W. Hamber, Vancouver, B. C.
 GS—Robert Fairbairn, Middlesboro, B. C., Can.
 PA—F. B. Gissing, Middlesboro, B. C.
 SCO—Address the company Buyer, E. B. Gissing, Middlesboro, B. C., Can.

No. 4, 7 and 8 Mine; Slope; Seam 36-96 inches thick.
 PO—Middlesboro, B. C.; SP—Merritt, B. C.; RR—Canadian Pacific.
 S of H—Mules and main and tail rope, comp. air and steam locos. Track gage 36 inches.
 S of M—Hand.
 PP—4 fire tube boilers, total 600 H. P., 1-25 K. W. gen. unit, 6 pumps.
 EMP—160. Last fiscal year output, 85,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
 PREP. EQUIPT—Revolving and Shaker Screens, Picking Tables and Washeries.

MIDLAND COLLIERIES, LTD.

General Office, Midlandvale, Alta.
 PR—T. G. McMullen, Truro, N. S.
 TR—A. Fraser, " "
 GM—S. Lent McMullen, Midlandvale, Alta.
 EM—F. Aspinall, Midlandvale, Alta.
 PA—Chas. A. Brodigan, Calgary, Alta.
 MM—E. J. Ward, Drumbeller, Alta.
 Midland Collieries Mine; Slope; Lignite Seam, 84 in. thick.
 PO—Midlandvale, Alta. SP—Drumbeller, RR—Canadian Northern.
 MS—F. Aspinall, Midlandvale, Alta.

S of H—Mules. Track gage 26 in.
 S of M—Comp. air machs.
 PP—3 fire tube boilers, 375 H. P., gen. units, 220 volts D. C., 8 pumps.
 EMP—220. Last years tonnage 100,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables.

MINTO COAL COMPANY, LTD., THE

General Office, Minto, N. B.
 PR—Sir Thomas Tait, Montreal, Que.
 GM—Chas. J. Coll, Minto, N. B.
 PA—Chas. J. Coll, Minto, N. B.
 CE—C. H. Coll, Minto, N. B.
 Minto Mine; Shaft; Stripping; Grand Lake Seam, 26 in. thick.
 PO—Minto, N. B.; SP—Same; RR—Canadian Pacific.
 MS—A. D. King, Minto, N. B.
 S of H—Steam hoists, track gage 30 in.
 S of M—Hand and machs.
 EMP—350. Daily tonnage 500.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

MINUDIE COAL COMPANY, LTD.

General Office, 519 Transportation Bldg., PR—James Robinson, 184 McGill St., Montreal, Que.
 VP—P. K. Brown, 202 Southam Bldg., Montreal, Que.
 TREAS—George H. Bissler 519 Transportation Bldg., Montreal, Quebec.
 GM—Jno. J. Johnston, River Hebert, N. S.
 GS—Jno. J. Johnston, River Hebert, N. S.
 PA—Jno. J. Johnston, River Hebert, N. S.
 SCO—Address the Company, Buyer, Jno. J. Johnston, River Hebert, N. S.
 SA—Jno. D. LeBlanc, Ironton, N. B.
 Minudie Mine; Slope; Victoria Seam, 30 in. thick.
 PO—River Hebert, N. S.; SP—Same; RR—Maritime Coal & Power Co.
 MS—Geo. Stevenson, River Hebert, N. S.
 S of H—Rope and 1 steam loco. Track gage 26 in.
 S of M—Hand.
 PP—2 return tubular boilers, 300 H. P., 220 volts D. C., 2 pumps.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

MOONLIGHT COAL CO., LTD.

General Office, Rosedale Station, Alta.
 PR—S. F. Antonio, Rosedale Station, Alta.
 TR—S. F. Crandall, Rosedale Station, Alta.
 GM—D. Aschini, Rosedale Station, Alta.
 GS—J. Berlando, Rosedale Station, Alta.
 PA—S. F. Crandall, Rosedale Station, Alta.
 SA—Wholesale Fuel Co., Saskatoon, Sask.
 Moonlight Mine; Slope; Bottom Seam, 72 in. thick.
 PO—Rosedale Station, Alta.; SP—Same; RR—C. N.
 S of H—Mules. Track gage 36 in.
 S of M—Hand.
 PP—Power purchased.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Bar Screens.

MOUNTAIN PARK COAL CO., LTD.

General Office, 708 Tegler Bldg., Edmonton, Alta., Can.
 PR—Alex. Mitchell, Scotland.
 VP—H. C. Bremow, Edmonton, Alta.
 MANAGING DIRECTOR—R. G. Drinnan, and J. C. Dunn, Edmonton, Alta.
 SECY—E. M. Anderson, Edmonton, Alta.
 GS—A. N. Scott, Mountain Park, Alta.
 EM—J. T. Carthew, Mt. Park, Alta.
 EE—J. Gittman, Mountain Park, Alta.
 SCO—M. P. Co-operative Store; Buyer, W. Fortman, Mt. Park, Alta.
 Mountain Park Mine; Drift and Slope; Seam 25 ft. thick.
 PO—Mountain Park, Alta.; SP—Same; RR—G. T. P.
 S of H—Mules and main rope. Track gage 36 in.
 S of M—Hand.
 PP—7 fire tube boilers, total 650 H. P., Gen. unit, 250 volts D. C., 5 pumps.
 EMP—300. Last years tonnage 180,085.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

NEW CASTLE COAL CO., LTD.

General Office, Drumbeller, Alta.
 PR—Jesse Gouge, Drumbeller, Alta., Can.
 VP—W. Gouge, Drumbeller, Alta.
 TR—G. N. Coyle, Drumbeller, Alta.
 GS—D. A. Macaulay, Drumbeller, Alta., Can.

MM—J. W. A. Drummond, Drumbeller, Alta., Can.
 CE—D. A. Macaulay, Drumbeller, Alta., Can.
 EE—J. M. Drummond, Drumbeller, Alta.
 SA—North Western Fuel Supply Co., Drumbeller, Alta.

New Castle Mine; Slope; New Castle Seam, 60 in. thick.
 PO—Drumbeller, Alta.; SP—Same; RR—C. N. R.
 S of H—Mules. Track gage 26 in.
 S of M—6 cutting machs.
 PP—2 125 H. P. return tubular boilers, 1 pump.
 EMP—130. Last years tonnage, 58,000.
 SIZES SHIPT—Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Bar and rotary screens.

NORTH AMERICAN COLLIERIES, LTD.

General Office, 905 Union Trust Bldg., Winnipeg, Man.
 PR—H. A. Lovett, K. C., Montreal, Quebec.
 VP—Hugh Mackay, Montreal, Quebec.
 TR—W. W. Berridge, Edmonton, Alta.
 GM—W. J. Dick, Winnipeg, Man.
 PA—Thos. C. Boyd, Edmonton, Alta.
 CE—R. C. Drinnan, Edmonton, Alta.
 SA—Coal Sellers, Ltd., 905 Union Trust Bldg., Winnipeg, Man.

Lethbridge Colliery Mine; Shaft; Lethbridge Seam, 49 in. thick.
 PO—Coalhurst, Alta.; SP—Kipp, Alberta; RR—C. P.
 MS—D. H. Quigley, Coalhurst, Alta.
 S of M—Mules and rope. Track gage, 36 in.
 S of M—42 comp. air punchers.
 PP—6 water tube boilers, 1500 H. P., 1 200 Kva., 1 250 K. W. gen. units, transformers, 2200-110 volts, 440 volts A. C., haulage 440 volts A. C., 18 pumps.
 EMP—400. Daily output, 1,000 tons.
 MNG. DIST—Lethbridge.
 SIZES SHIPT—Slack, Pea, Nut, Lump.
 PREP. EQUIPT—Gravity and Shaker Screens, Picking Tables.

Monarch Colliery Mine; Shaft; Lower Drumbeller Seam, 60 in. thick.
 PO—Nacmiche, Alta.; SP—Drumbeller, Alta.; RR—Canadian National.
 MS—J. B. de Hart, Nacmiche, Alta.
 S of H—Mules and rope. Track gage 36 in.
 S of M—Comp. air punchers.
 PP—4 return tubular boilers, total 700 H. P., 125 K. V. A., 110 volts, gen. units, A. C., 6 pumps.
 EMP—95. Daily tonnage 800.
 SIZES SHIPT—Slack, Pea, Nut, Stove, Lump.
 PREP. EQUIPT—Gravity and Shaker Screens, Picking Tables.

Pacific Colliery Mine closed down.

Pembina Colliery Mine; Shaft; Seam, 84 in. thick.
 MS—J. A. McLeod, Evansburg, Alta., Can.
 PO—Evansburg, Alta.; SP—Same; RR—C. N. R., G. T. P.
 S of H—Trolley pole and storage battery electric locos. Track gage, 42 in.
 S of M—Elec. shortwall mach.
 PP—5 water tube boilers, 500 H. P., 1 50 K. W., 1 75 K. W. gen. units, 240 volts D. C., 6 pumps.
 EMP—110. Daily tonnage 800.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Gravity and Shaker Screens, Picking Tables.

Regal Colliery Mine operated by M. L. Hyde, Edmonton, Alta., Can.

NORTHFIELD COAL CO., LTD.

Out of business.

NOVA SCOTIA STEEL & COAL CO., LTD.

General Office, Sydney Mines, N. S.
 PR—D. H. McDougall, New Glasgow, N. S.
 VP—W. D. Ross, Toronto, Can.
 TR—Archibald McColl, New Glasgow, N. S.
 GM—D. H. McDougall, New Glasgow.
 GS—Thos. Brown, Sydney Mines, N. S.
 PA—A. M. Seely, New Glasgow, N. S.
 CE—Geo. D. McDougall, New Glasgow, N. S.
 EM—A. S. MacNeil, Sydney Mines, N. S.
 EE—W. H. Pickles, Sydney Mines, N. S.
 SCO—Address the Company; Buyer, J. W. Ratchford, Sydney Mines, N. S.
 SA—W. Litbrow, New Glasgow, N. S.

Princess Mine; Shaft; Sydney Main Seam, 60 in. thick.
 PO—Sydney Mines, N. S.; SP—Same; RR—I. R. C.
 MS—D. H. McLean, Sydney Mines, N. S.
 SM—Neil McLellan, Sydney Mines, N. S.

(Continued on Next Page)

Nova Scotia Steel & Coal Co., Ltd.—Cont.

S of H—Mules, rope and comp. air.
Track gage, 30 in.
S of M—19 comp. air mchrs.
PT—Central plant, transformer 2300-220 volts A. C., 8 water tube boilers, 232 H. P. each, 7 pumps.
EMP—598. Last years tonnage 166,135.
SIZES SHIPT—Run of Mine, Slack, Nut.
PREP. EQUIPT—Shaker Screens, Picking Tables, Washeries.

Florence Mine; Slope; Sydney Main Seam, 60 in. thick.
PO—Florence, N. S.; SP—Same; RR—1, R. C.
MS—Geo. R. McNeill, Sydney Mines, N. S.
SM—Neil McLellan, Sydney Mines, N. S.
S of H—Mules, rope and comp. air.
Track gage, 30 in.
S of M—17 comp. air and 10 shortwall mchrs.
PP—6 water tube boilers, 250 H. P. each, gen. units, 130 K. W., 13 pumps.
EMP—571. Last years tonnage 187,668.
SIZES SHIPT—Run of Mine, Slack.
PREP. EQUIPT—Shaker Screens, Picking Tables.

Scotia Mine; Slope; Sydney Main Seam, 60 in. thick.
PO—Florence, N. S.; SP—Same; CTY—Cape Breton; RR—1, R. C.
MS—Robert Dickson, Sydney Mines, N. S.
SM—Neil McLellan, Sydney Mines, N. S.
S of H—Mules and rope. Track gage, 30 in.
S of M—Electric punchers and 4 chain breast and shortwall mchrs.
PP—Power purchased, transformer 2300 volts, M. G. sets, 250 volts D. C., 7 pumps.
EMP—197. Last years tonnage 83,582.
SIZES SHIPT—Run of Mine, Slack.
PREP. EQUIPT—Shaker Screens, Picking Tables.

Jubilee Mine; Shaft; Jubilee Main Seam; 36 in. thick.
PO—Sydney Mines, N. S.; SP—Same; CTY—Cape Breton; RR—1, R. C.
MS—John Murphy, Sydney Mines, N. S.
SM—Neil McLellan, Sydney Mines, N. S.
S of H—Mules, rope, comp. air and storage battery locos. Track gage, 30 in.
S of M—21 comp. air mchrs.
PP—Power purchased, transformer 2300-250 volts, M. G. sets, 250 volts D. C., 4 fire tube boilers, 75 H. P. each, 4 pumps.
EMP—361. Last years tonnage 114,659.
SIZES SHIPT—Run of Mine, Slack.
PREP. EQUIPT—Shaker Screens, Picking Tables.
Old Information.

OLIPHANT-MUNSON COLLIERIES, Ltd.
Now Sterling Collieries, Ltd.

PACIFIC COAST COAL MINES, LTD.
General Office, Victoria, B. C., Can.
PR—James Carrothers, Montreal, Can.
VP—J. H. Palne, Victoria, B. C., Can.
TR—D. D. Muir.
Mgr. Director—J. H. Palne, Victoria, B. C.

GS—Geo. Wilkinson, Victoria, B. C.
MM—John Leech, South Wellington, B. C., Canada.
EM—J. T. Hopburn, South Wellington, B. C., Canada.
Mine Mgr.—W. Roper, South Wellington, B. C.

No. 3 Morlan Mine; Shaft.
PO—South Wellington, B. C., Canada.
SP—Same. RR—C. P. E. & N. R.
S of H—Mules and rope. Track gage 36 in.
S of M—Hand.
PP—8 return tubular boilers, total 1,000 H. P., 1 air comp., 2 gen. units.
EMP—250. Last years tonnage 68,243.
SIZES SHIPT—Slack, Pea, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Washeries.

PALISADE COAL COMPANY, THE
General Office, Three Hills, Alta., Can.
PR—Samuel McVicar, Three Hills, Alta., Can.
VP—G. A. Johnson, Three Hills, Alta., Can.
TR—J. W. Townsend, Three Hills, Alta., Can.
GS—S. McVicar, Three Hills, Alta., Can.
EE—Jas. T. Duffie, Three Hills, Alta., Can.

Palisade Mine; Slope; Seam, 62 inches thick.
PO—Three Hills, Alta.; SP—Same; CTY—Alberta; RR—Grand Trunk Pac.
S of H—Mules. Track gage 36 inches.
S of M—1 comp. air puncher.
PP—2 150 water tube boilers, 21 pumps.
EMP—30. Last years tonnage 9,855.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Gravity Screens.

PEABODY COAL COMPANY

Property returned to Jasper Park Collieries Co.

PIONEER COAL CO.
General Office, Tofield, Alta., Can.
GM—J. J. McDevitt, Tofield, Alta.
EM—C. C. Sutherland, Edmonton, Alta.

Pioneer Mine; Shaft; Tofield Seam, 72-108 in. thick.
PO—Tofield, Alta.; Box 118; SP—Same; RR—Grand Trunk Pacific.
MS—J. J. McDevitt.
S of H—Mules. Track gage 24 in.
S of M—Hand.
PP—2 fire tube boilers, 36 H. P., 2 pumps.
MNG. DIST.—Edmonton.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

PRINCETON COAL & LAND CO., LTD.
General Office, Princeton, B. C.
PR—George Hammsley, London, Eng.
GM—Ernest Waterman, Princeton, B. C.
GS—Francis Glover, Princeton, B. C.
PA—P. Hampton, Princeton, B. C.
CE—Francis Glover, Princeton, B. C.
EM—Francis Glover, Princeton, B. C.
EE—Wm. Houston, Princeton, B. C.
SCO—Address the Company, Buyer, Francis Glover, Princeton, B. C.
SA—E. A. Quigley, 10-123 Hamilton, So. Vancouver, B. C.

No. 1 Mine; Slope; 288 inches thick.
PO—Princeton, B. C.; SP—Same; RR—Kettle Valley, C. P.
S of H—Mules.
S of M—Hand.
PP—Power purchased.
EMP—80. Last years tonnage, 20,560.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

REDCLIFF BRICK & COAL COMPANY, Ltd
General Office, Redcliff, Alta.
PR—Dr. C. H. Kohler, Minneapolis, Minn.
VP—P. H. Peterson, Minneapolis, Minn.
TR—F. Hoidale, Minneapolis, Minn.
GM—E. H. Selthorn, Redcliff, Alta.
GS—Wm. Riddell, " "
PA—E. H. Selthorn, " "
EM—James Stratton, Red Cliff, Alta.
EE—P. LaValle, Red Cliff, Alta.
SA—E. Hurd, 736 King St., Regina, Sask.

No. 1 Mine Redcliff, Drift; Lignite Seam; 4 ft. 10 in. to 5 ft. thick.
PO—Redcliff, Alta.; SP—Same; Prov. Alberta; RR—C. P. R., Main Line.
MS—James Stratton, Red Cliff, Alta.
SM—W. Riddell, Red Cliff, Alta.
S of H—Mules and rope. Track gage 30 in.
S of M—5 comp. air punchers.
PP—2 return tubular boilers, total 300 H. P., 1 comp.
EMP—40. Last years tonnage 14,500.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
PREP. EQUIPT—Bar Screens.

REGAL COLLIERIES, LTD.
General Office, Taber, Alta.
PR—Richard G. Lambrecht, Detroit, Mich.
VP—Frank P. Wallace, Detroit, Mich.
TR—W. R. Carnegie, Detroit, Mich.
GM—E. M. LeBlanc, Taber, Alta.
PA—E. M. LeBlanc, Taber, Alta.
EM—E. M. LeBlanc, Taber, Alta.
SCO—Regal Collieries Store; Buyer, E. M. LeBlanc, Taber, Alta.
SA—A. F. Krapfel, Medicine Hat, Alta.

Regal Collieries Mine; Shaft; High Grade Domestic Seam; 54 in. thick.
PO—Taber, Alta.; Canada; SP—Same, RR—C. P. R.
MS—E. M. LeBlanc, Taber, Alta.
S of H—Mules and 1 steam loco. Track gage, 30 in.
S of M—6 comp air punchers, 1 longwall mach.
PP—3 fire tube and 1 water tube boilers, total 450 H. P., rotary converters, 75 K. W., 250 volts D. C., 6 pumps.
EMP—100. Last years tonnage 25,000.
SIZES SHIPT—Slack, Pea, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Box Car Loader.
Old Information.

ROCK SPRINGS COAL & BRICK CO., LTD.
General Office, Taber, Alta.
PR—B. K. Bullock, Taber, Alta.
GM—B. K. Bullock, " "
TR—F. Watkins, " "
PA—F. Watkins, " "
GS—B. Nugent, Elean, Alta.
Sales Agency, E. V. Camplon & Co. Weyburn, Sask.

Rock Springs Mine Drift Seam; 40 in. thick.
PO—Elean, Alta. SP—Taber, Alta. RR—C. P. R.
S of H—Mules Track gage 30 inches.
S of M—4 comp. air mchrs.

PP—4 fire tube boilers, 525 H. P., 1 K. W., 125 volts, D. C., 2 gen. units, 2 pumps.
EMP—70. Last fiscal year output, 23,233 tons.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Old Information.

ROSEDALE COAL COMPANY, LTD.
General Office, 13 Victoria St., Toronto, Ont.
PR—R. G. O. Thomson, Toronto, Ont.
VP—W. C. Robertson, Can. Life Bldg., Calgary, Alta.
TR—H. S. Gansley, Toronto, Ont.
GS—W. A. Davidson, Rosedale, Alta.
MM—A. Grant.
SCO—Address the Company.
Sales Agents, Great West Coal Co., Brandon, Man.

Rosedale Mine; Shaft; Lower Seam; 84 in. thick.
PO—Rosedale, Alberta. SP—Same. RR—C. N. R., Goose Lake Br.
MS—T. O'Donnell, Rosedale, Alta.
S of H—Mules. Track gage 36 in.
S of M—1 Arcwall and 2 shortwall mchrs.
PP—3 water tube boilers, total 450 H. P., 2 gen. units, 220 volts D. C., 3 pumps.
EMP—225.
SIZES SHIPT—Slack, Pea, Egg, Lump.
PREP. EQUIPT—Picking Tables, Screens.

ROSEDEER COAL MINING CO., LTD.
General Office, Calgary, Alta.
PR—C. S. Smith, Calgary, Alta.
TR—L. A. Tupper, Calgary, Alta.
SECY—L. A. Tupper, Calgary, Alta.
GM—Geo. V. Tupper, Wayne, Alta.
GS—G. V. Tupper, Wayne, Alta.
PA—Geo. V. Tupper, Wayne, Alta.
CE—John Forbes, Wayne, Alta.
EM—Peter Allen, Wayne, Alta.
EE—H. Grover, Wayne, Alta.
SCO—Wayne Supply Company, Ltd.; Buyer, L. A. Tupper, Calgary, Alta.
SA—W. B. Doyle, Saskatoon, Sask.

Rosedeer Mine; Slope; Drumbeller Seam, 30 in. thick.
PO—Wayne, Alta. SP—Same. RR—C. N. and G. L. & Calgary.
MS—Peter Allen, Wayne, Alta.
S of H—Mules, rope and steam loco. Track gage 42 in.
S of M—2 comp. air mchrs.
PP—Power purchased, transformer 2,300 to 220-110 volts A. C. 1 pump.
EMP—160. Last years tonnage 101,430.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Store, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

ROTHWELL COAL CO., LTD.
General Office, Rothwell, N. B. Can.
PR—H. C. Schofield, St. John, N. B.
VP—H. J. Evans, St. John, N. B.
GS—W. B. Evans, Rothwell, N. B. Can.
CE—G. G. Murdoch, St. John, N. B.

Rothwell Mine; Shaft; Grand Lake Seam; 20 inches thick.
PO—Rothwell; SP—Minto, N. B. Can.; RR—C. N. & G. L.
S of M—Hand.
PP—45 H. P. and 1 25 H. P. fire tube boilers, 3 pumps.
EMP—35. Last fiscal year output, 6,000 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

ROUND HILL COLLIERIES, LTD.
PR—J. Tuomey, Camrose, Alta., Can.
TR—J. Tuomey, Round Hill, Alta., Can.
PA—J. Tuomey, " "
GM—Edw. Wilcott, " "
Sales Agents, Bowman Thayer, 911 Confederation Life Bldg., Winnipeg, Man.

Round Hill No. 1 and 2 Mines; Slope and Stripping; Lignite Seam, 72 in. thick.
PO—Round Hill, Alta.; Can. SP—Same. RR—C. N., Calgary Br.
MS—B. S. Williamson, Round Hill, Alta.
S of H—Mules. Track gage, 30 in.
S of M—Hand.
PP—1 return tubular boiler, total 50 H. P., 1 pump.
EMP—35. Last fiscal year output, 18,000 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Bar Screens.
Old Information.

RUSCOE, RICHARD
General Office, Halkirk, Alta., Can.
GM—Richard Ruscoe, Halkirk, Alta., Canada.

Halkirk Mine; Drift; S am, 72 inches thick.
PO—Halkirk, Canada; SP—Same; RR—C. P. R.
S of H—Mules. Track gage 24 in.
S of M—Hand.

SIZES SHIPT—Lump.
PREP. EQUIPT—Bar Screens.

ST ROSE MINING COMPANY
PR—Wm. Roache, St. John's, N. S.
GM—P. J. McKay, St. Rose, N. S.
GS—Geo. V. Evans, " "
MS—Geo. V. Evans, " "
EE—A. Arens, " "
Iverness, N. S.

St. Rose Mine; Shaft and Slope; Bituminous Seam, 96 in. thick.
PO—St. Rose, N. S.; SP—Same; RR—1, R. C.
PP—1 water tube boiler, total 35 H. P., 1 gen. unit.
SIZES SHIPT—Run of Mine.
Old Information.

SCRANTON COAL CO., LTD.
General Office, Drumheller, Alta., Can.
TR & SECY—Fred Watkins, Taber, Alta., Can.
GM—B. K. Bullock, Taber, Alta., Can.
PA—J. S. Bowdon, Drumheller, Alta., Can.
EM—William Watson, Drumheller, Alta., Can.
EE—C. Townsend, Drumheller, Alta., Can.
SA—Western Fuel Co., Saskatoon, Sask., Can.; Naylor & Heston, Calgary, Alta., Can.

Scranton Mine; Shaft; Lignite Seam, 105 ft. and 7 1/2 ft. thick.
PO—Drumheller, Alta.; SP—Same; RR—Canadian National.
MS—Wm. Watson, Drumheller, Alta., Can.
S of H—Mules and horses. Track gage 30 in.
S of M—Electric, Overcenter mchrs.
PP—Purchase power, 2,200-220 volts A. C. 3—200 H. P. fire tube boilers.
EMP—130. Last years tonnage 46,000.
SIZES SHIPT—Slack, Egg, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables.

STAR MINE
Aerial, Alta., Canada. No. report.

STERLING COAL COMPANY, LTD.
Out of business.

STERLING COLLIERIES, LTD.
General Office, 508 McLeod Bldg., Edmonton, Alta., Can.
VP—R. H. Munson, York Harbor, Maine.
TR—C. B. Munson, Edmonton, Alta.
GM—R. M. Halpinay, Edmonton, Alta.
GS—G. E. Winkler, Edmonton, Alta.
PA—C. B. Munson, Edmonton, Alta.
CE—R. G. Drinnan, Edmonton, Alta.
SCO—Address the Company, Buyer, C. B. Munson, Edmonton, Alta.
SA—Patterson & Roorer, 811 McLeod Bldg., Edmonton, Alta.

Sterling Collieries Mine; Mile 47 Seam 720 in. thick.
PO—Basing, Alta.; SP—Same; RR—Canadian National.
MS—W. F. Stevenson, Basing, Alta.
MF—R. L. Armstrong, Basing, Alta.
S of H—3 locos.
S of M—Steam shovels.
PP—2 150 H. P. boilers, 1 50 K. W. Generator.
EMP—80. Last years tonnage 238,659.
SIZES SHIPT—Run of Mine, Slack, Lump.
NOTE—Formerly known as the Oliphant-Munson Collieries, Ltd.

STURGEON CONSOLIDATED COLLIERIES, LTD.
General Office, 206 Agency Bldg., Edmonton, Alta., Can.
PR—D. M. Duggan, Edmonton, Alta.
TR—J. J. Duggan, " "
GM—D. M. Duggan, " "
GS—D. Artley, Namajo, Alta.
CE—D. Jones, " "
NM—J. Johnston, " "

Sturgeon Mine; Shaft; Sturgeon Seam, 60 in. thick.
PO—Namajo, Alta. SP—Carbondale Junction, RR E. D. & B. C., and A. G. W.
S of H—Rope and 1 steam loco. Track gage, 24 in.
S of M—Hand.
PP—1 water tube boiler, total 60 H. P., 1 pump.
EMP—50. Last fiscal year output, 19,500 tons.
PREP. EQUIPT—Bar Screens.
Old Information.

SUNBEAM COLLIERIES, LTD.
General Office, 212 7th Ave. West, Calgary, Alta., Can.
PR—Fred Brown, Calgary, Alta.
VP—Dr. Mahood, Calgary, Alta.
TR—J. I. Milligan, Calgary, Alta.
GM—D. McGill, Calgary, Alta.
GM—D. McGill, Calgary, Alta.
GS—Ronald Hannan, Watson, Ardley, Alta.
PA—Fred Brown, Calgary, Alta.

(Continued on Next Page)

Sunbeam Collieries, Ltd.—Cont.

CE—Airthrie Cadder, Bellevue, Alta.
EM—Ronald Hannan Watson, Ardley, Alta.

Parkers Creek Mine; Slope; Red Deer Seam 72 inches thick.
PO—Ardley, Alta.; SP—Bullockville, Alta., Can.; RR—Grand Trunk Pac.
S of H—Mules; Track gage 36 inches.
S of M—4 comp. air punchers mchs.
PP—Water tube boiler, 300 H. P., 2 pumps.

EMP—60. Last fiscal year output, 10,000 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
PREP. EQUIPT—Gravity, Revolving and Shaker Screens, Loading Booms.

Blue Gem Mine; Slope; Three Hills Seam, 66 inches thick.
PO—Three Hills, Alta.; SP—Same; RR—Grand Trunk Pacific.

S of H—Mules; Track gage 36 inches.
S of M—2 comp. air mchs.
PP—2 water tube boilers, 300 H. P., 2 pumps.

EMP—12.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
PREP. EQUIPT—Gravity, Revolving and Shaker Screens.

Maple Leaf Mine; Slope; Bellevue Seam; 168 inches thick.
PO—Bellevue, Alta.; SP—Hillcrest; RR—Canadian Pacific.

S of H—Mules, rope, electric and steam loco. Track gage 30 inches.

S of M—Hand.
PP—2 water tube boilers, 300 H. P., 2 pumps.

EMP—150. Last fiscal year output, 75,080 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.
Note—This mine formerly operated by Maple Leaf Coal Co., Spokane, Wash.

The Sunbeam Mine; Drifts; Ardley No. 1 Seam, 72 in. thick.
PO—Ardley, Alta.; SP—Same; RR—Canadian National.

MS—R. H. Watson, Ardley, Alta.
S of H—Mules and tail rope. Track gage 28 in.

S of M—Comp. air punchers.
PP—2—200 H. P. fire tube boilers, 1 pump.

EMP—22. Last years tonnage 1,200.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Gravity Screens.

TOFIELD COAL CO., LTD.

General Office, Tofteld, Alta.
PR—Robert Lee, 4 Benson Block, Edmonton.

VP—W. I. Crafts, 4 Benson Block, Edmonton.
TR—C. Gallinger, Tofteld, Alta.
GM—C. Gallinger, Tofteld, Alta.
GS—C. Gallinger, Tofteld, Alta.
PA—C. Gallinger, Tofteld, Alta.

Tofteld Mine; Stripping; Lignite Seam; 84 in. thick.

PO—Tofteld, Alta.; SP—Same; RR—C. N.

S of H—Mules; Track gage 56½ in. S of M—Hand.

PP—2 pumps.
EMP—75. Last years tonnage 19,196.
SIZES SHIPT—Run of Mine, Slack, Lump.

TROCHU JEWEL COAL COMPANY.

GM—Tom McKinley, Trochu, Alta.
MS—Tom McKinley, Trochu, Alta.
SA—C. L. Kusler, Trochu, Alta.

Trochu Jewel Mine; Slope; Seam, 72 in thick.

PO—Trochu, Alta. SP—Same. RR—G T. P.

S of H—Mules. Track gage, 24 in. S of M—Hand.

EMP—10. Last fiscal year output, 4,050 tons.
SIZES SHIPT—Run of Mine, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

old information.
TWIN CITY COAL CO., LTD.
Now operated by Donkin & Stevens Co.

TWIN SEAM COAL COMPANY

General Office, Chignecto Mine, Nova Scotia.

PR—Edgar Fillmore, Amherst, N. S.
VP—T. C. Douglas, Amherst, N. S.
TR—T. C. Douglas, Amherst, N. S.
GM—J. T. Wallace, Chignecto Mines, N. S.
PA—Stiles Vance, Chignecto Mines, N. S.

Twin-Seam Mine; Slope; Scotia Seam; 57-66 inches thick.

PO—Chignecto Mines, N. S.; SP—Mac-can, N. S.; RR—Maritime.

S of H—Mules. Track gage 30 inches. S of M—Hand.

PP—Power purchased. Transformer 11,000 to 220 volts A. C., fire tube boiler, 75 H. P., 2 pumps.

EMP—25.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

VULCAN COAL CO., LTD.

General Office, 715 Centre St., Calgary, Alta.

PR—A. J. Sayre, Calgary, Alta.
VP—J. W. Davidson, Calgary, Alta.
TR—E. B. Mosher.

Vulcan Mine; Drift; Edmonton Seam; 60 in. thick.

PO—Calgary, Can.; SP—Drumheller, RR—Canadian National.

Walker Mine.
General Office, 35 Lineham Block, Calgary, Alta., Canada.

PR—James Walker, Calgary, Alta.
VP—W. J. Walker, Calgary, Alta.

Walker Mine; Slope; Lignite Seam, 108 in. thick.

PO—Sheerness, Alta.; SP—Richdale, Alta.; CTY—Alberta; RR—G. N. R.

MS—R. J. Campbell, Sheerness, Alta.
S of H—Steam locos. Track gage, 26 inches.

S of M—Hand.
PP—1 50 H. P. fire tube boiler, 1 pump.

EMP—4. Last fiscal year output, 3,438 tons.

SIZES SHIPT—Lump.
PREP. EQUIPT—Loading Rooms.
old information.

WEST CANADIAN COLLIERIES, LTD.

General Office, Blairmore, Alta.

PR—A. W. Ait, Blairmore, Alta.
TR—E. Prior, London, England.
GM—J. Charbonnel, Blairmore, Alta.

GS—B. Green.
PA—H. M. Bennett, Blairmore, Alta.
CE—E. Mettrier, Blairmore, Alta.

EM—L. P. Robert, Bellevue, Alta.
EE—G. H. Thompson, Bellevue, Alta.
SA—J. R. Smith, Blairmore, Alta.

Bellevue Mine; Drift; 1 and 2 Kootenay Seams, 108 to 180 in. thick.

PO—Hillcrest, Alta.; SP—Same; RR—Canadian Pacific.

SM—H. M. Bennett, Blairmore, Alta.
S of H—8 air locos. Track gage, 36 in.

PP—8 return tubular boilers, total 1,200 H. P., 3 gen. units, 2,200 volts A. C., 3 phase, 60 cycle, 3 air compressors.

EMP—375. Last fiscal year output, 350,000 tons.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Screens, Picking Tables.

Lille Mine; Drift; 1 and 2 Kootenay Seams, 36 to 120 in. thick. Operate washery.

PO—Lille, Alta.; SP—Frank, Alta.; RR—Canadian Pacific.

S of H—Air locomotives.
50 Bee Hive coke ovens.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Shaker Screen, Picking Table.

Greenhill Mine; Drift; 1 and 2 Kootenay Seams, 120 to 168 in. thick.

PO—Blairmore, Alta.; SP—Same; RR—Canadian Pacific.

MS—R. Green, Blairmore, Alta.
S of H—Mules and rope. Track gage 36 in.

S of M—1 comp. air mach.
PP—2 return tubular boilers, total 300 H. P., 1 gen. unit, 2,200 volts A. C., 3 phase, 60 cyles.

EMP—160. Last fiscal year output, 193,000 tons.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Screens, Picking Table.

Blairmore Mine; Drift; 1 and 2 Kootenay Seams, 108 to 180 in. thick.

PO—Blairmore, Alta.; SP—Same; RR—Canadian Pacific.

S of H—Horses.
PP—2 return tubular boilers, total 300 H. P.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Screens, Picking Table.

WESTERN COMMERCIAL CO. LTD., THE.
General Office, Calgary, Alta.

PR—V. Ruby, 1009 20th Ave., West Calgary, Alta.

VP—P. Laurendeau, Calgary, Alta., Can.
TR—P. Laurendeau, 1804 Center St., Calgary, Alta.

MNG DIRECTOR—P. Laurandeau, Wayne, Alta.

MGR—W. Bell Hytberington, Wayne, Alta.

PA—T. H. Lancaster, Calgary, Alta.

EM—W. Bell Hytberington, Wayne, Alta.

EE—H. Grever, Calgary, Alta.

SCO—Address the Company, Buyer, Evan Roberts, Wayne, Alta.

Commercial Mine; Slope; Seam, 108 in. thick.

PO—Wayne, Alberta; SP—Same; RR—Canadian National Railway.

S of H—Mules. Track gage, 26 in. S of M—Radialax Comp. Air Punchers.

PP—5 fire tube boilers, 555 H. P., 1 100 K. W. and 1 50 K. W. gen. units, 220 volts D. C., 7 pumps.

EMP—280. Daily tonnage 900.

SIZES SHIPT—Slack, Pea, Lump.

PREP. EQUIPT—Shaker Screens, Picking Tables.

WESTERN DOMINION COLLIERIES, LTD.
General Office, 305 Trust & Loan Bldg., Winnipeg, Man., Canada.

PR—Hugh Southland, Winnipeg, Can.

TR—C. G. Ashwul, Winnipeg, Man., Can.

GS—Andrew A. Millar, Taylorton, Sask., Can.

PA—C. G. Ashwul, Winnipeg, Can.

SCO—Address the Company, Buyer, S. B. Mazur, Taylorton, Sask., Can.

SA—Souris Coal Sales Company, Winnipeg, Man., Can.

Taylorton Mine; Shaft; Taylorton Seam, 78 in. thick.

PO—Taylorton, Sask.; SP—Blenfah, Sask., Can.; RR—C. P. & C. N.

S of H—Mules, trolley pole type locos. Track gage 30 inches.

S of M—4 chain breast type mchs.
PP—4 water tube boilers, 400 H. P., 2—200 K. W. gen. units, 250 volts D. C., 4 pumps.

EMP—115. Last years tonnage 96,025.

SIZES SHIPT—Run of Mine, Slack and Lump.

PREP. EQUIPT—Gravity and Shaker Screens, Electric Loaders.

WESTERN FUEL CORP. OF CANADA, LTD.
General Office, Nanaimo, B. C.

PR—C. P. Eaton, San Francisco, Cal.

VP—Geo. W. Bowen, Nanaimo, B. C.

TR—Mark Bate, Jr., Nanaimo, B. C.

MANAGING DIRECTOR—G. W. Bowen, Nanaimo, B. C.

SECY—Mark Bate, Jr., Nanaimo, B. C.

GM—John Hunt, Nanaimo, B. C.

GS—John Hunt, Nanaimo, B. C.

PA—Jas. B. Bowen, Nanaimo, B. C.

EM—Jos. Boyce, Nanaimo, B. C.

EE—James Hodgson, Nanaimo, B. C.

SA—J. G. Lawrence, Nanaimo, B. C.

No. 1 Mine; Shaft; Wellington Seam

PO—Nanaimo, B. C.; SP—Same; RR—C. P. P.

MS—Robt. Laird, Nanaimo, B. C.

SM—J. E. Bowen, Nanaimo, B. C.

S of H—Mules, rope and trolley pole type and steam locos. Track gage, 30½ in.

S of M—7 comp. air mchs and 4 long wall mchs.

PP—12 200 H. P. fire tube boilers, 3 200 H. P. water tube boilers, 2 800 amp. gen. units, 250 volts D. C., 52 pumps.

EMP—540. Last years tonnage 293,853.

SIZES SHIPT—Slack, Pea, Nut, Lump.

PREP. EQUIPT—Revolving and Shaker Screens, Picking Tables, Loading Booms, Washeries.

Successors to Western Fuel Co.

Harewood Mine; Drift; Wellington Seam.

PO—Nanaimo, B. C.; SP—Same; Boat shipment.

MS—R. Henderson, Nanaimo, B. C.

SM—J. B. Bowen, Nanaimo, B. C.

S of H—Mules, trolley pole type and 1 steam locos. Track gage, 30½ inches.

S of M—Hand.

PP—2 120 H. P. fire tube boilers, 1 600 Amp. A. C. gen. units, M. G. sets, 250 volts D. C.

EMP—300. Last years tonnage 204,130.

SIZES SHIPT—Slack, Pea, Nut, Lump.

PREP. EQUIPT—Revolving and Shaker Screens, Picking Tables, Loading booms, washeries.

Reserve Mine; Shaft; Douglas Seam;

MS—David Brown, Nanaimo, B. C.

SM—J. B. Bowen, Nanaimo, B. C.

S of H—Mules. Track gage 36 in.

S of M—Hand.

PP—4 200 H. P. fire tube boilers, 1 280 amp. gen. unit, 250 volts D. C.

EMP—300. Last years tonnage 73,581.

Wakesiah Mine; Shaft; Wellington Seam;

MS—W. H. Moore, Nanaimo, B. C.

SM—J. B. Bowen, Nanaimo, B. C.

S of H—Mules. Track gage 36 in.

S of M—Hand.

PP—2 160 H. P. fire tube boilers, 1 80 amp. gen. unit, 115 volts D. C.

EMP—80. Last years tonnage 5,325.

SIZES SHIPT—Slack, Pea, Lump.

THE WESTERN GEM COAL CO., LTD.
General Office, Drumheller, Alta., Can.

PR—W. S. Henderson, Drumheller, Alta., Can.

PA—W. S. Henderson, Drumheller, Alta., Can.

The Western Gem Mine; Shaft; Newcastle Seam, 45 in. thick.

PO—Drumheller, Alta.; SP—Same; RR—C. N.

MS—Frank Scarpino, Drumheller, Alta., Can.

S of H—Mules.

S of M—Electric Punchers.

PP—Purchase Power transformers 2,200-220 volts A. C., 2-105 H. P. fire tube boilers.

SIZES SHIPT—Slack, Lump, Stone.

PREP. EQUIPT—Bar Screens, Picking Tables.

YELLOWHEAD COAL CO.
General Office, Coalspur, Alta., Can.

PR—M. J. O'Brien, Ottawa, Can.

VP—J. A. O'Brien, Ottawa, Can.

TR—E. M. Horter, Montreal, Can.

GM—G. H. Eaton, Coalspur, Can.

GS—E. I. Roberts, Coalspur, Alta., Can.

PA—J. B. Cleary, Coalspur, Alta., Can.

CE—E. I. Roberts, Coalspur, Alta., Can.

EM—D. Jones, Edmonton, Can.

SCO—Address the Company, Buyer, J. B. Cleary, Coalspur, Alta., Can.

Coalspur Mine; Drift and Slack; Yellowhead Seam, 84-108-144 in. thick.

PO—Coalspur, Alta.; SP—Same; RR—Canadian National.

MS—D. Muir, Coalspur, Alta., Can.

S of H—Mules, Electric. Track gage 36 inches.

S of M—Hand, Shortwall Pitching Mach.

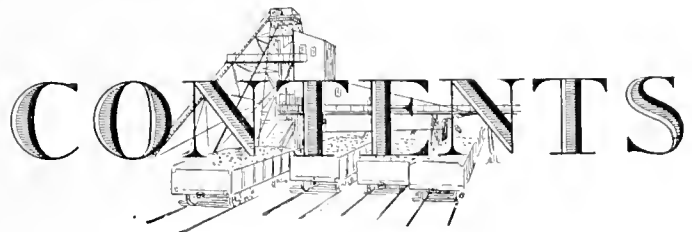
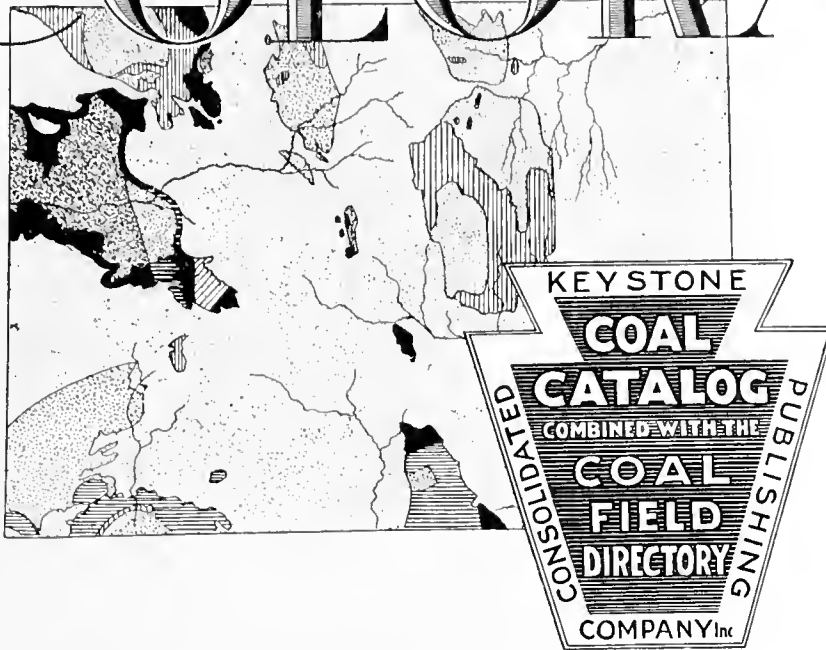
PP—2 fire tube boilers, 200 H. P. Transformer, 2,200-440 volts A. C., gen. units, 2—200 K. V. A. 110-250 volts A. C. and D. C.

EMP—125. Last fiscal year output 58,505 tons.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.

PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms, Washeries.

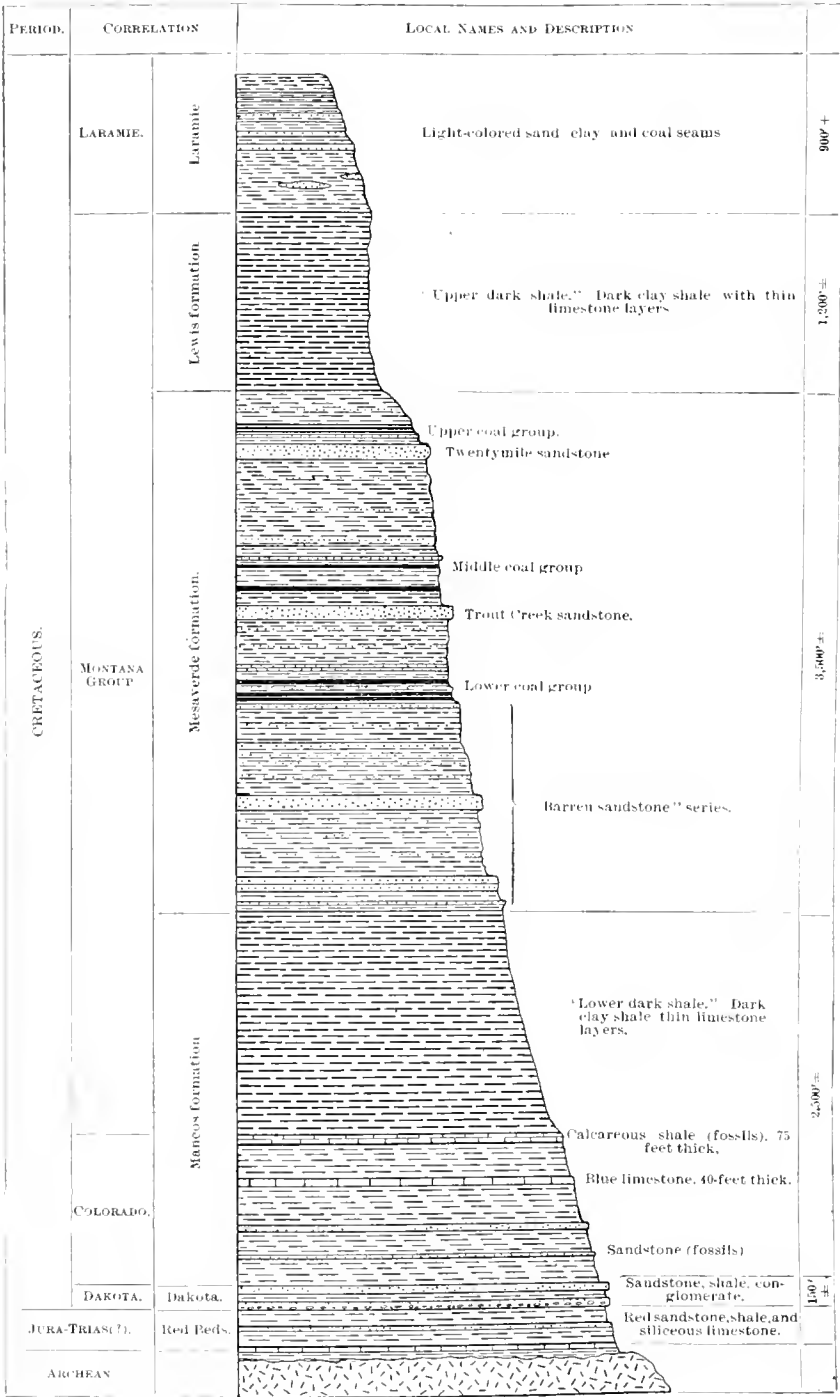
COLORADO



CONTENTS

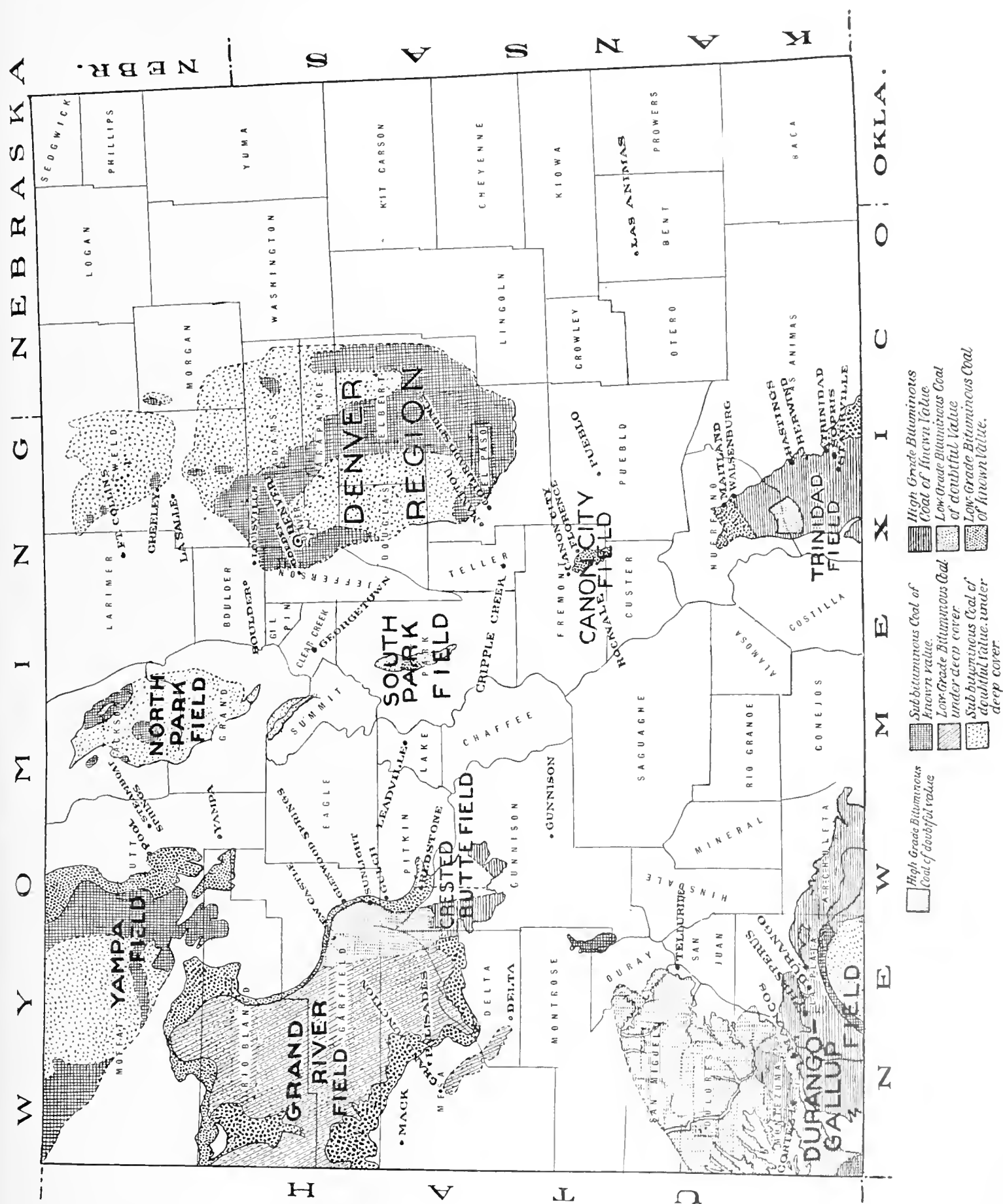
Sectional View of Coal Formations.....	282
Map of Mining Fields.....	283
General Description of Coal Resources.....	284, 285
Trinidad Field.....	285
Walsenburg District.....	285
Trinidad District.....	286
Durango Field.....	286
Canyon City Field.....	286
South Park Field.....	287
Tongue Mesa Field.....	287
North Park Field.....	287
Yampa Field.....	288
South Platte Field.....	288
Denver Basin.....	288
Colorado Springs Field.....	289
Grand River Field.....	289
Preparation and Sizing of Coal.....	289
Supplementary Analyses.....	290 to 293
List of Mines by Counties.....	294 to 297
Alphabetical Directory of Coal Mines.....	298 to 305

COLORADO



GENERAL STRATIGRAPHIC SECTION FOR YAMPA COAL FIELD

COAL FIELDS OF COLORADO



COLORADO*

General Description of the Geology of the Coal Fields, With the Ranks of Coal Produced; Treats of the Mining Areas With a Map Showing Their Location; Railroads Serving the Various Districts; Columns of Geological Formations; Kinds of Coal: General Analysis, Etc.

The total area of the coal fields of the State of Colorado has been estimated at 18,100 square miles, of which area 50 per cent is estimated workable. The total yearly production of coal is about 12,000,000 tons, half of which comes from Huerfano and Las Animas counties in the Trinidad field. The yearly production of coke amounts to about 2,000,000 tons, nearly all of which is produced in Las Animas county, with a small quantity from La Plata and Gunnison counties.

The coal fields of Colorado lie on both flanks of the Rocky Mountain Range. The Denver field, the Raton field and the Canyon City field lie along the eastern edge of the mountain ranges. The North Park and South Park fields lie within the great mountain area, and the Yampa, Grand River and Durango-Gallup fields lie on the western flanks of the mountains. The general character of the Cretaceous coals of the Western States is subbituminous, but owing to conditions of mountain building and volcanic action they have been metamorphosed locally into the higher grades of bituminous coal and anthracite. This form of metamorphism is frequently designated "regional" as contrasted with "local." By regional metamorphism is meant those changes in the rocks that are wrought by the forces of heat and pressure accompanying deep burial and mountain-building upheavals. Local metamorphism includes those changes effected by igneous intrusion, which are largely the result of the heat of the molten rock, but also includes the chemical changes brought about by the hot gases and solutions which accompany such processes. As these names indicate, the former is comparatively uniform and far reaching in its effects, while the latter is restricted to the immediate vicinity of the eruptive masses which cause the change. The anthracite coals of Pennsylvania are the product of regional metamorphism of original or normal bituminous coals just as the bituminous coals of the Rocky Mountains are the product of regional metamorphism of original subbituminous coals, but the anthracites of the Rocky Mountains are the product of local metamorphism.

In general it may be said that in close proximity to the mountains the coal of Colorado is changed to bituminous, and at some distance it retains its original subbituminous character. East of the Rocky Mountains the subbituminous coals in general occur in the central and eastern parts of the fields, while bituminous varieties are found along the flanks of the ranges. North and south of the region as a whole a similar change can be noted, from the high-grade coals near the mountain masses to subbituminous in Wyoming and New Mexico. On the west, also, the low-grade coals are found in fields farther removed from the great mountain masses which constitute the core of the Rocky and San Juan mountain ranges.

On account of this metamorphism in the vicinity of the mountain masses, and also on account of its variability from place to place, the State of Colorado contains representatives of almost all grades of coal that are known. Anthracite is found only in limited areas, and at present is mined only at Crested Butte, in Gunnison county.

Bituminous coal is much more common, occurring in the Raton, Durango, Grand River and Yampa fields, in the counties of Archuleta, Delta, Fremont, Garfield, Gunnison, Huerfano, Las Animas, La Plata, Mesa, Moffat, Montezuma, Park, Pitkin, Rio Blanco and Routt counties.

Subbituminous coal occurs in almost all of the fields of the State, though principally in Adams, Boulder, Delta, El Paso, Fremont, Larimer, La Plata, Jefferson, Routt and Weld counties. So far as known at the present time, the Raton, Durango and Grand River fields are the only ones containing good coking coal. From time to time reports are current regarding the discovery of coking coals in other fields, but the quantity has always proved too small to be of commercial value, or the quality such that the product could not be marketed. Las Animas, Gunnison, Pitkin and La Plata counties now produce coal that is utilized for coking, and coal from Garfield county has been coked in the past.

Colorado Anthracite.† Anthracite is, in Colorado, limited to areas that have been invaded by igneous rocks. What regional metamorphism did on a large scale for the coals of the Appalachian region by the mechanical heat of folding and deep burying, and other metamorphic agencies, has been accomplished, and apparently in a much shorter space of time, in Colorado, by the local intrusion and influence of heated or molten igneous rocks. Hence, as the metamorphic agencies and influences were local, rather than widespread or regional, we find Colorado anthracite to be also local, limited and irregular, dependent, as we have said, wholly on the casual intrusion or influence of igneous rocks upon the normal coal, either lignitic or bituminous.

The limited areas of Colorado anthracite are confined to close proximity to volcanic dikes or intrusive sheets of lava, and the anthracitic condition or not of the coal is dependent upon the somewhat erratic behavior of these same igneous bodies. For example, a body of bituminous, or even lignitic coal, may

*The information here presented on Colorado coals has been gathered largely from the following sources: 22nd Annual Report, Part 3, 1901; U. S. G. S. Bulletins Nos. 297, 316, 341, 381 and 471; Monograph U. S. G. S. by R. C. Hills; The Primero Mines, by R. M. Hosea, Mines & Minerals, Vol. 24, pg. 521.

†Colorado Anthracite, by Prof. Arthur Lakes, Mines & Minerals, Vol. 26, pg. 275.

locally, and for a few yards, be changed into anthracite at near contact with an intrusive sheet, but should that erratic sheet leave its plane of horizon in the strata, as it is apt to do, and deviate even but slightly from its original contact or nearness to the coal, the coal in that interval is apt to return to its original unaltered condition.

The favorite local position for a bed of anthracite is on one, or both, sides of an igneous dike, or of a horizontal or gently dipping intrusive sheet of igneous rock, conforming generally to the planes of stratification of the sedimentary beds. The igneous rock may be in close contact, or it may be separated from actual contact with the coal by a few inches, or a foot or two of sedimentary rock. The most favorable position for an igneous rock to produce anthracitism in a coal seam is for it to be a little below the coal, rather than above it, the heat apparently ascending and slowly changing the coal.

Certain varieties of igneous rock appear to be more favorable to produce anthracitism than others, e. g., the light or gray acidic porphyrites, containing a great deal of silica in their quartz and feldspathic elements, are more favorable than the heavy, dark and basic lavas, such as basalt. The latter, if it changes the coal at all, is more likely to burn it and reduce it to a worthless coke, or to an impure graphite. Probably this phenomenon is due to the greater or less conductivity of the varieties of lava rock. In one case the heat may have been radiated more slowly and the process been more gradual than the other.

The anthracite areas in Colorado are, so far as is known, restricted to the Yampa coal field in Routt county, and to scattered occurrences in the Grand River field in Gunnison county. Both fields are remarkable for the igneous activity displayed in them, especially the Grand River field, which is largely occupied by the volcanic ranges of the Elk Mountains, all of which are of laccolitic origin and structure, and from these laccolites a vast number of dikes and intrusive sheets of igneous rocks traverse the coal strata. The Yampa field also has several laccolites, such as Bear Mountain and Hahns Peak, and many of the table lands are capped with lava and traversed by dikes, sending out intrusive sheets into the coal strata, as on the tableland capped by the volcanic mass of Pilot Knob, 20 miles north of Steamboat Springs.

In the Crested Butte district of the Grand River field we have a striking example of the influence of the eruptive rocks in the coal. The structure of the field has been produced by two agencies; first, the mountain-forming movement, and secondly, the Post-Cretaceous eruptive activity. The most prominent eruptions were in the southern half of the field. The character of the coal invariably depends upon the presence or absence, nearness to or distance from, intrusive eruptive rocks, and on their relation to the several coal seams. Thus the coal along the southern border, where volcanic activity was more pronounced, varies from semibituminous to anthracite. The gradation is well shown on Slate River, where the mines of Crested Butte are located upon a zone of coking coal less than one mile wide, grading on one side into semi-coking, and on the other through semianthracite to anthracite.

Railroads. The railroads traversing the coal areas are the Denver & Salt Lake; Colorado & Southern; Denver & Rio Grande; Atchison, Topeka & Santa Fe; Union Pacific; Rio Grande Southern; Chicago, Burlington & Quincy; Chicago, Rock Island & Pacific; Colorado & Midland; Colorado, Wyoming & Eastern; Colorado & Southeastern; Denver, Northwestern & Pacific; Crystal River; and Uintah.

The coals of Colorado will be discussed by fields.

Trinidad Field. (Comprises Huerfano and Las Animas counties.)

The Trinidad field is a part of a large and important area known as the Raton Mountain, or, preferably, the Raton Mesa coal region that lies along the eastern base of the front range in Colorado and New Mexico. This field may be divided into two districts: the Northern, or Walsenburg district, including the mines of Huerfano county; and the Southern, or Trinidad district, located in the southeastern corner of the field and including the mines of Las Animas county.

Walsenburg District. This coal bearing area lies in the northeastern part of the Raton field. The mines are operated on seams lying near the base of the Laramie formation, the lowest seam being within 10 feet of the Trinidad basal sandstone. There are two groups of seams affording workable coal bodies. Both lie well toward the base of the measures, and are separated from each other by a prominent bed of sandstone 30 to 60 feet thick, situated about 100 feet above the Trinidad sandstone.

The productive seams are not of continuous workable size throughout the district, but usually afford areas of "high coal," 4 feet or more thick, at several points along the outcrop. Not only do

the seams vary in thickness from place to place, but the number of seams in a group will vary; that is, small seams present in one section may be absent in another section less than a mile distant. Want of continuity is, therefore, a characteristic of the district, as of the Raton field generally. When one seam expands or thickens, there is generally parallel expansion of one or two other seams, as though there had been a local recurrence of the conditions favorable to coal formation. When the lowest seam is workable, there are commonly overlapping areas of workable coal in other seams.

The Walsenburg-Pictou group is the lower of the two groups of seams recognized. Mines are operated on each of the three workable beds it affords. The lowest, known as the Cameron at Walsenburg, and as the Maitland at Pictou, is 39 inches thick on the Cuchara River. It thickens to the north and in the Pictou mine is 5 feet. In the same locality is a 30-inch seam 14 feet above the Maitland. The Walsen seam at Walsenburg is 35 feet above the Cameron; it includes a lower bench 48 inches thick, separated from an upper bench 36 to 40 inches thick by a 2-inch parting of yellow clay. This seam is called the Lenox in the Pictou workings. There the lower bench is 5 feet thick and is separated by 18 inches of rock from the upper one, which is 20 to 24 inches thick.

The Robinson seam of the Walsenburg mine lies 60 feet above the Walsen, and is $6\frac{1}{2}$ feet thick in the Robinson mine; the same seam at Pictou is $4\frac{1}{2}$ feet thick.

Natural coke is common, adjacent to volcanic dikes. Certain layers in the seam afford purer coal than others, and the quality varies as these layers expand or contract. Explosive gases are rare. Water is sometimes too abundant, and at times may force up the shale floor and inundate the mine, as it did in the old Rouse mine.

The dip of the beds, which is southwesterly, is heaviest near the outcrop, and may be from 8 to 15 degrees. Faults occur, but have no relation to the dikes of the region; the latter appear not to fault the measures in the slightest degree. Displacements by faults range from a few inches to 25 feet.

The coal, which is semicoking or domestic, varies materially in composition at the different mines. The lowest seam generally affords the best quality of coal, but they are all good steam coals. The disappearance of the coking property is really progressive from the Ratón Mountain northward.

Trinidad District. The beds worked in the Trinidad district are confined to the lower series, although in the northern part of the district the upper group contains two workable seams. In the southern part of the district, the producing mines have from 4 to 8 feet of coal. The beds here have a slight inclination which gradually increases toward the north, becoming as high as 15 degrees in places near the northern end of the district.

The excellent coking quality of the coal from the Trinidad district is attributed to the presence of eruptive sheets of lava intruded into the strata of the coal formation. These have sometimes destroyed the coal seams when too near them, or transformed them into natural coke. In other cases, especially if the lava sheet lies below a coal seam and some distance from it, the coking property is highly developed. A peculiarity of the coal about Primero is the almost entire absence of cleavage. The coal seems to have been crushed and reconsolidated by pressure. Generally the coals in this district have the butts and faces very well marked, and mining is facilitated, as the coal breaks out in blocks or cubes when shot.

The principal production of the coke and a portion of the steam coal are consumed by the large lead and iron smelters of Pueblo and Denver.

GENERAL ANALYSIS

	Las Animas County	Huerfano County
Moisture	2.30	2.54
Volatile Matter	29.80	36.08
Fixed Carbon	58.70	49.14
Ash	9.20	12.24
Sulphur	0.50	0.69
B. T. U.	13,780	12,227

Durango Field. (Comprises Montezuma, La Plata and Archuleta counties.)

The Durango field is located in the southwestern part of the State and extends thence into New Mexico and Utah. The extent of the field along the southern state line is 85 miles, north of which it extends about 15 miles, giving a superficial area of 1,250 square miles. There are two productive districts, the Durango and the La Plata. The first

is located near the town of that name and the product is entirely coking coal. The La Plata adjoins it on the west. There are two grades of coal in this district; one occurs in the Upper Laramie formation and the other in the Mesaverde formation. The Laramie coals, of which there are several beds, are of medium to low grade and are classed as subbituminous coal, or black lignite. It is dull black in color and softer than the ordinary bituminous coal, and like that breaks at the mines in cubical or block form. When exposed to the weather for a considerable time it gives out and reabsorbs more moisture under varying conditions of the atmosphere than the coals of higher grade and will finally slack, the blocks breaking down into small lumps or particles. It is considerably lighter than the better bituminous coals and when fired in the locomotive a large part of the smaller fragments of coal are driven out in the blast. The Laramie coals in this region contain many partings of shale and bone. This is especially true of the lower and thicker of the workable beds. In mining, these partings cannot be entirely eliminated from the marketable coal. Certain variable and thin bony streaks also are an inseparable part of the coal bed and give it a higher percentage of ash.

The other class of coal in the Durango district occurs in the Mesaverde formation and is known to contain three, and in places, four workable coal beds. The coals in the different beds vary in quality slightly from place to place. The beds that have been mined for a number of years at Porter are the best of those known in the district for carrying a good grade of coking coal, the coke being utilized chiefly for smelting purposes. Coals from this formation are excellent for locomotive use.

GENERAL ANALYSIS

	Laramie Coal	Mesaverde Coal
Moisture	3.45	3.55
Volatile Matter	34.20	38.60
Fixed Carbon	46.60	50.85
Ash	15.75	7.00
Sulphur	0.95	1.95
B. T. U.	11,900	13,200

Canyon City Field. (Comprises the coals of Fremont county.)

The Canyon City coal field is a small syncline of the Laramie formation located in south central Colorado at the foot of Wet Mountain, which is the western range of the Rocky Mountain system in this region. The field comprises an isolated area of 54 square miles, two-thirds of which contain beds of workable thickness. Along the western margin of the field the strata are steeply upturned against the flanks of the mountain, but rapidly flatten out, so that in the body of the field they are nearly horizontal with a slight westward dip as the eastern edge is reached.

Faulting is very rare and there are no dikes or other evidence of eruptive rock within the area. Extensive prospecting with the diamond drill has demonstrated the presence of as many as 16 coal beds 4 inches thick and upward, the lower beds being the most persistent and ranging from 4 to 5 feet in thickness. The coal of the Canyon City field is well known in the west as possessing excellent qualities for domestic purposes. In burning it does not coke, but produces a bright flame and

leaves but a small amount of very light ash. Practical tests have shown that it does not coke. The absence of the coking property makes the coal cleaner to handle and therefore more desirable as domestic fuel, although it would be better for steaming purposes if it had a tendency to coke. In general, the coals of this field may be considered as the transitional type between the lignitic coals of the South Platte field and the more altered coals of the Raton field. The coal is firm and hard and produces comparatively little dust in handling. A very desirable quality of the coal from this field is that it stocks unusually well. This statement applies more particularly to coals from the northern end of the field, it having been observed that the coal is not quite so hard from the south end of the field.

GENERAL ANALYSIS

Moisture	11.70
Volatile Matter	34.70
Fixed Carbon	45.00
Ash	8.60
Sulphur	0.65
B. T. U.	11,000

South Park Field. (Comprises the coals of Park county.)

The South Park coal field is located in the western part of South Park, an intermountain depression in central Colorado. Between 1875 and 1893 several mines near Como were worked on a large scale by the Union Pacific Coal Company, but they were abandoned after the best and most easily available coal had been mined.

There are no commercial shipments made from this region at the present writing and it is probable that extensive operations will not be made for many years, because of the difficulty in finding the coal beneath the cover of gravel and weathered rock and of the apparent absence of thick coal beds.

The coal beds of South Park occur in what is presumably the Laramie formation, consisting of sandstone, with subordinate beds of carbonaceous shale and ranging in thickness from 375 feet down to the vanishing point. The field is about 21 miles long and from 3 to 5 miles wide. Only one-half of this area can be considered available on account of the intrusion of the eruptive mass which limits the workable area on the south. The northern end is badly faulted, which makes the cost of production excessive. The inclination of the beds along the western outcrop ranges from 30 degrees to 50 degrees through the workable area. Three coal beds are present in the Laramie, where the entire formation is present. The lowest coal bed, which is usually the best, is regarded as the basis of the formation and rests directly and conformably on the upper mountain sandstone.

The second coal bed occurs about 180 feet above the lower coal, while the upper coal bed lies about 200 feet above the middle coal.

The coal of the South Park field is bituminous and of an excellent quality for steam purposes. The quantity available is unknown, but such explorations as have been conducted show that very little of the coal is of satisfactory thickness.

The future of the field is problematical and

depends on the discovery of beds of workable thickness. All in all, this comprises one of the least valuable fields of this State.

GENERAL ANALYSIS

Moisture	6.80
Volatile Matter	36.25
Fixed Carbon	53.95
Ash	3.00
Sulphur	0.50

Tongue Mesa Field. (Comprises the coals of Montrose county.)

This field includes a long, narrow, isolated strip of the Laramie Measures occupying the region between the Cimarron and Uncompahgre rivers. The strata which are not steeply inclined, contain two beds of workable thickness. The lower is from 15 to 20 feet thick, the upper, 400 feet above, is 5 feet thick and contains a better grade of coal. The coal is dry, closely resembling the lignitic coals of the eastern slope. The greater part of the output from this field, which is of relatively small importance, is consumed in the town of Montrose on the line of the Denver & Rio Grande Railroad, about 10 miles northeast of the field.

GENERAL ANALYSIS

Moisture	14.00
Volatile Matter	37.65
Fixed Carbon	41.30
Ash	7.05
Sulphur	0.58

North Park Field. (Comprises the coals of Jackson county.)

This field comprises nearly the entire area of the most northern of the interrange parks of the State, extending from its northern end as far south as the divide separating the drainage of this park from that of Middle Park. The measures through the center of the area are covered by post-Laramie beds of considerable thickness. The beds outcropping on the northern edge of the park have a slight dip to the south for a short distance, when they gradually assume a northern dip, owing to the presence of an anticline fold, the beds on each side of which have an inclination of about 15 degrees.

There are in this field apparently three workable coal beds, all remarkably free from shaly impurities, and of considerable size. The largest is from 21 to 32 feet thick, another is 15 feet, and the third from 4 to 5 feet.

The character of this coal is essentially the same as that of the coals in the Denver field, namely, lignitic, but not true lignite.

GENERAL ANALYSIS

Moisture	19.60
Volatile Matter	33.75
Fixed Carbon	39.90
Ash	6.75
Sulphur	0.60
B. T. U.	9,600

Yampa Field. (Comprises the coals of Moffat and Routt counties.)

This field lies altogether on the drainage of the Yampa River. It is but a few miles north of the Grand River field, the two being separated by a small eroded anticlinal valley from the sides of which the strata of the two fields dip in opposite directions, doubtless at one time having been connected. The Yampa field gives great promise of becoming one of the big producing districts of Colorado.

The coal bearing rocks of the Yampa field are found in the Mesaverde formation and in the Laramie. The main basin that composes the field is complicated by a number of cross folds or wrinkles whose axes trend approximately at right angles to that of the major fold. Within the area of the coal bearing rocks the structure of the field is influenced only in a very subordinate way by folds. Local slips or breaks in the strata may be noted at a number of points, but with two or three exceptions these disturbances are not of sufficient magnitude to produce any marked effect on the distribution or general attitude of the strata. Intrusive igneous rocks of several different types cut the sedimentary beds at many points in the Yampa field, and these are the important factors in the anthracization of the coal seams. The heat accompanying the intrusion of molten lava has influenced in varying degrees the character and position of the coal seams that lie adjacent. In general, the effect of this baking process on the coal seams has been to drive off the volatile hydrocarbons more or less completely. In this way all grades of coal ranging from lignite to anthracite have been formed. In general, the lignite is found where the rocks are little disturbed and at a considerable distance from the great mountainous centers of uplift. Bituminous coal usually occurs in those parts of the field that are nearer in position to the mountains, and the anthracite, where some dike, or sill or igneous rock, has cut the coal or come into sufficiently close proximity to drive off its volatile constituents. The bulk of the coal, however, is probably bituminous, having a bright, shiny luster and more or less prismatic structure. It is sufficiently hard to be mined without a heavy percentage of slack and also to stand transportation. It does not weather badly and so is well fitted for domestic use and for the production of steam. The anthracite, although of somewhat limited extent, will doubtless be used largely as a domestic fuel. It is doubtful if any of the coals of the Yampa fields can be classed as coking coal.

GENERAL ANALYSIS

	Bituminous	Anthracite
Moisture	10.30	6.95
Volatile Matter	37.75	3.40
Fixed Carbon	45.60	75.60
Ash	6.35	14.05
Sulphur	0.70	0.57
B. T. U.	11,900	12,000

South Platte Field—Denver Region. (Comprises the coals of El Paso, Douglas, Elbert, Denver, Arapahoe, Jefferson, Larimer, Adams, Boulder and Weld counties.)

This field consists of a continuous strip of coal bearing rocks beginning a few miles north of Colo-

rado Springs and extending thence nearly to the north line of the State. The western limit is defined by the upturned strata in the foothills of the Front Range along which the field extends, according to Mr. Hills, for a distance of 140 miles. The width of the field averages about 40 miles, these dimensions representing the extent of the Laramie formation containing coal seams of economic value.

The great area east of this line in northeastern Colorado contains, with local exceptions, only coal of an inferior grade. The strata along the western edge of the South Platte field are steeply upturned along the base of the range, but rapidly flatten out toward the east. There are, however, gentle undulations through the body of the field, their axes extending parallel with the axis of the range. Faulting is generally confined to the northern district, in which there are numerous displacements, often of such magnitude as to prevent the extension of mine workings. The occurrence of eruptive rock is limited to the small flow near Golden, on the western edge, and a small patch at Castle Rock, near the center of the field.

So far as known, there are from one to four coal beds in the field, from two to four being found in the southern district and in the southern part of the northern district, and one in the rest of this district. These beds vary from 3 to 16 feet in thickness, the greatest development being in the center of the field.

The character of the coal is essentially lignitic, with local variations, though quite removed from true lignite, since it mines in blocks which show the even fracture of "block" coal. It has a black color and brilliant luster. It slacks rapidly upon exposure to the air and is therefore not adapted for storage or long transportation. The best grade of fuel is produced in that portion of the field in which the strata have been subjected to movement. This is the western edge of the northern district, where the strata are steeply upturned. The poorest coal is produced in the southern district. The coal found in the upper half of the measures contains too many impurities to enter into competition with that from the lower half.

On account of the excessive moisture content of these coals their use is entirely confined to the markets in the immediate vicinity, where they have a large consumption for domestic and steam purposes.

The South Platte field is divided into a northern district, or, as generally known, the Denver basin, and the southern district, or Colorado Springs field.

The Denver Basin. This field includes the mines in and about Boulder, Marshall, Erie, Lafayette and Louisville, where active mining has been carried on for a long time. The coal is shiny and black, is inclined to be massive except as it separates along the planes of bedding. Because of the rapid disintegration on exposure to air, the coal is generally shipped in box cars. Although it is inferior to much of the coal from other fields of Colorado, its nearness to Denver and to a region of intensive farming more than offsets its poor quality.

GENERAL ANALYSIS

Moisture	20.70
Volatile Matter	30.50
Fixed Carbon	43.65
Ash	5.15
Sulphur	0.35
B. T. U.	9,500

Colorado Springs Field. The Colorado Springs field lies in El Paso county. Its northern limit is indeterminate, for the coal bearing rocks pass under cover in that direction and all development or exploration are but little back from the outcrop. There is no marked difference in the character of the coal in different parts of this field. It slacks readily on exposure to the circulating air, breaking into fragments in an irregular network of cracks. Fossil resin is common in the coal.

GENERAL ANALYSIS

Moisture	22.30
Volatile Matter	33.30
Fixed Carbon	38.25
Ash	6.15
Sulphur	0.40
B. T. U.	8,625

Grand River Field. (Comprises the coals of Delta, Garfield, Gunnison, Mesa, Rio Blanca and Pitkin counties.)

This is prospectively the most valuable field of the State, both because of its extent and because of the varied character of the coals which it contains. It forms the eastern extension of the Green River Basin, while the Wasatch field of Utah forms the western extension. It extends from the State line eastward to the base of Mount Wheatstone, near Crested Butte, a distance of over 150 miles, and from the drainage of the Yampa River on the north to the Gunnison River on the south, a distance of over 100 miles.

The thickness of the coal bearing Laramie varies from 2,000 feet along the southwestern border to 3,500 feet near the mines at Coal Ridge, on Grand River. The exact limiting beds are very hard to define at all points, and the change from the predominantly shaly beds of the Montana to the sandstones which comprise the greater part of the Laramie is so gradual that an arbitrary dividing line has been established at the massive sandstone immediately

under the lowest of the coal beds. The determination of the summit of the Laramie is equally difficult.

As elsewhere in the Rocky Mountain region, the structure of the field has been produced by two agencies, first, the mountain-forming movement, and, second, the post-Cretaceous eruptive activity. Most of the eruptions occurred in the southern half of the field.

The number of coal beds in this field varies considerably in the different localities. In the eastern, southern, northern and southwestern areas from two to four beds of workable size are known, while through the central tract and along the northwestern border there are from five to seven beds, containing a total of from 22 to 106 feet of clean coal.

The character of the coal invariably depends on the presence or absence of intrusive eruptive rocks and on their relation to the several coal seams. The coal along the northern border of the field is nearly all semibituminous, while that in the southern half varies from semibituminous to anthracite. The graduation is well shown on Slate River, where the mines at Crested Butte are located upon a zone of coking coal less than one mile wide, which grades on one side into semicoking and on the other into anthracite. The coke made from the coals of the Coal Basin district is superior to any other produced in the Rocky Mountain region, being remarkably similar to the Connellsville (Pa.) product, both in chemical composition and in physical structure.

GENERAL ANALYSIS

	Somerset Bituminous	Crested Butte Anthracite	Sunlight	Grand Junction
Moisture	3.70	3.00	6.75	9.75
Volatile Matter	33.00	3.50	34.60	34.00
Fixed Carbon	57.10	88.00	52.15	50.00
Ash	6.20	5.50	6.50	6.25
Sulphur	0.55	0.85	0.90	0.75
B. T. U.	13,000	14,000	12,000	12,200

PREPARATION OF COAL

The large variety of the coals in Colorado, along with the marked differences in the character of seams, necessarily involves the employment of many types of tippie equipment, in preparation and sizing. Because so much of the coal is lignitic and subject to rapid deterioration when exposed to air, a considerable portion of the output is loaded into box cars, usually by a mechanical device known as a box car loader.

The dirty condition of the coal in some regions generally necessitates some sorting before the product is marketable. Most of this work is done in the mines, the miners being required to discard bony coal and impurities. In the Trinidad district, where the greater part of the coal is coked, all that

is so used is first washed. At some places only the slack is made into coke, but where the entire output is coked the lump coal is crushed before washing.

The coal is usually put on the market in four grades—run of mine, lump, nut and slack. The entire product of only a few mines is disposed of as run of mine; generally the coal is sized, both shaking and stationary screens being used. In this region there are no standard sizes for the several grades, and at each mine the practice is different. The most common sizes are as follows: Lump coal is that which passes over openings that vary in size between 1½ and 3 inches, nut coal passes over openings between ¾ inch and 1¼ inches, and slack is that which passes through ½ to 1-inch openings.

Analyses of Colorado Seams by Counties and Localities

(ALL ANALYSES MADE ON MINE SAMPLES "AS RECEIVED")

COUNTY AND LOCATION	SEAM	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carbon	RATIOS	
										Oxygen	F. C. Oxy. + Ash V. M.
Adams, 25 mi. n. e. of Bennett.....	*	Thomas.....	35.00	27.39	30.23	7.38	0.31	6,982	41.71	43.30	0.82
Adams, about 2½ mi. e. of Lafayette.....	*	Parkdale.....	19.65	30.75	43.60	6.00	0.33	8,638	56.54	30.09	1.10
Archuleta, 12 mi. n. e. of Pagosa Springs..	*	Kleckner.....	9.50	34.78	45.75	9.97	1.14	.....	.....	.....	1.42
Boulder, 1 mi. s. e. of Lafayette.....	*	Rankin.....	18.68	34.88	40.45	5.99	0.55	10,143	57.46	28.78	1.32
Boulder, Lafayette.....	*	Simpson.....	20.71	31.82	43.98	3.49	0.45	9,941	57.80	31.02	1.65
Boulder, 1 mi. s. e. of Lafayette.....	*	19.15	30.82	44.27	5.76	0.25	9,616	56.38	30.60	1.38
Boulder, near Louisville.....	*	21.63	27.84	46.98	3.55	0.37	9,508	56.06	33.00	1.44
Boulder, Superior.....	*	Acme.....	17.32	32.05	45.99	4.64	0.31	9,947	58.51	29.44	1.53
Delta, Bowie.....	*	Industrial.....	3.29	39.74	52.16	4.81	0.62	13,379	74.33	13.56	1.72
Delta, 3 mi. s. w. of Bowie.....	*	Co-operative.....	9.37	34.75	53.04	2.84	0.50	12,389	69.94	19.60	1.31
Delta, 9 mi. e. of Cedaridge.....	*	Newman.....	15.54	33.03	46.06	5.37	0.98	10,557	60.08	27.03	4.05
Delta, 2½ mi. n. e. of Dominguez.....	*	Wells Gulch.....	3.45	38.81	51.75	5.99	0.58	13,107	.....	.....	3.12
Delta, 6 mi. n. of Hotchkiss.....	*	Burdick.....	16.67	33.10	46.27	3.96	0.47	10,701	.....	.....	1.86
Delta, 8 mi. n. e. of Hotchkiss.....	*	Stucker.....	22.40	31.19	42.16	4.25	0.30	8,159	.....	.....	.....
Delta, 3 mi. n. e. of Rollins.....	*	Fairview.....	16.37	29.79	45.39	8.45	0.45	10,109	56.74	27.36	1.40
Elbert, 4 mi. e. of Mattison Station.....	*	Barker.....	25.6	25.6	25.6	15.66	0.44	6,150	36.78	40.22	1.35
El Paso, 9 mi. s. of Calhan.....	*	Mosby.....	33.13	25.95	27.03	13.89	0.30	6,199	37.25	41.40	1.58
El Paso, 6 mi. n. e. of Calhan.....	*	Purdon.....	34.40	24.44	27.27	13.89	0.14	6,055	35.94	42.91	0.66
El Paso, Curtis.....	*	Curtis.....	20.92	33.68	39.87	5.53	0.39	8,912	52.25	35.09	1.04
El Paso, 2 mi. s. of Franceville.....	*	Cel.....	19.23	32.34	41.41	7.02	0.45	9,306	53.63	32.25	1.12
El Paso, 3 mi. n. w. of Pikeview.....	*	Monument Valley.....	20.14	35.13	37.61	7.09	1.03	8,743	51.64	33.92	1.18
El Paso, 1 mi. n. of Pikeview.....	*	Pikeview.....	26.20	29.67	37.67	6.46	0.30	8,352	49.36	37.09	1.27
El Paso, 3 mi. s. w. of Ramah.....	*	Purdon.....	33.66	23.46	24.67	18.21	0.32	5,506	33.21	41.41	0.56
Fremont, Canon City.....	*	Royal Gorge No. 2.....	14.99	34.22	45.71	5.08	0.54	10,843	60.76	27.19	1.88
Fremont, Chandler.....	*	Diamond.....	23.18	30.34	40.20	6.28	0.95	9,626	54.62	31.21	1.34
Fremont, Rockvale.....	*	Chandler.....	9.89	35.28	48.62	6.21	0.43	11,443	64.02	23.33	1.46
Fremont, Rockvale.....	*	Rockvale.....	8.41	33.70	48.27	9.62	0.59	11,290	64.09	19.24	2.17
Fremont, Williamsburg.....	*	Rockvale.....	5.44	38.03	44.43	12.10	0.72	11,880	64.05	16.52	2.22
Garfield, Cardiff.....	*	Magnet.....	9.11	35.71	47.96	7.22	0.94	11,704	65.99	19.04	2.24
Garfield, 15 mi. s. of Glenwood Springs.....	*	Black Diamond.....	14.11	32.71	43.99	9.19	0.91	10,355	57.97	24.97	2.51
Garfield, 1 mi. n. of Sunlight.....	*	Sunlight.....	5.32	36.29	49.60	8.79	0.76	12,424	67.76	15.85	1.70
Garfield, 4 mi. s. w. of Cardiff.....	*	Mascot.....	8.89	33.11	41.83	16.17	2.08	10,156	.....	.....	2.75
Garfield, 1 mi. s. of Sunlight.....	*	Black Diamond.....	12.20	34.23	48.60	4.97	0.48	11,104	.....	.....	.....
Garfield, Sunlight.....	*	Pocahontas.....	6.10	38.47	53.53	1.90	0.52	13,169	72.18	18.06	3.62
Garfield.....	*	Midland.....	7.69	36.48	48.75	7.08	0.78	12,096	67.16	18.02	2.68
Garfield, 1 mi. w. of Marion.....	*	Uinta.....	10.36	32.19	42.45	14.40	0.48	10,467	58.42	19.83	1.71
Garfield, 1 mi. s. w. of Newcastle.....	*	Keystone.....	24.10	28.36	36.23	11.31	0.29	7,538	73.24	14.28	3.73
Garfield, ½ mi. s. e. of Newcastle.....	*	Keystone No. 1.....	4.16	35.55	54.94	5.35	0.42	13,122	72.86	14.82	3.09
Garfield, 2 mi. e. of Newcastle.....	*	Coryell.....	3.51	38.38	53.17	4.94	0.54	13,266	72.86	14.82	3.66
Garfield, South Canon.....	*	Vulcan.....	4.45	42.05	49.56	3.94	0.44	13,129	72.57	15.90	3.18
Garfield, South Canon.....	*	South Canon.....	7.44	36.18	53.90	2.48	0.47	12,685	69.73	20.31	3.06
Gunnison, Baldwin.....	*	Wheeler.....	8.31	36.29	44.74	10.66	0.52	11,216	62.87	19.33	2.10
Gunnison, Crested Butte.....	*	Mt. Carbon.....	11.32	36.64	45.57	6.47	1.93	11,464	63.62	21.74	1.24
Gunnison, about 16 mi. s. e. of Somerset.....	*	Crested Butte.....	2.98	36.62	56.16	7.24	0.39	13,428	74.46	11.00	2.26
		Mosely's.....	3.3	14.0	77.6	5.1	0.70	13,990	.....	.....	4.08

COAL CATALOG

(Continued on Next Page)

*Bulletins Bureau of Mines.

ANALYSES OF COLORADO SEAMS BY COUNTIES AND LOCALITIES—Continued

COUNTY AND LOCATION	SEAM	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carbon	Oxygen	RATIOS	
											Carbon	F. C.
											Oxy. + Ash	V. M.
Gunnison, Crested Butte.....	Ruby.....	.....	2.26	7.72	82.33	10.25	1.08	13,508	.....	.....	.....	10.65
Gunnison, Crested Butte.....	Ruby.....	.....	3.62	4.85	78.57	16.58	0.81	11,826	.....	.....	.....	16.20
Gunnison, 1 mi. n. of Crested Butte.....	2.7	3.32	88.15	5.83	0.80	14,099	85.38	3.59	9.06	26.55
Gunnison, 5 mi. s. e. of Crested Butte.....	10.18	29.66	55.69	3.47	0.41	12,062	.....	.....	.....	1.88
Gunnison, Floresta.....	3.0	3.0	86.5	7.5	0.69	13,500	83.20	4.48	7.00	28.83
Gunnison, 2 mi. e. of Mount Carbon.....	18.71	29.9	45.65	5.74	0.38	9,860	.....	.....	.....	1.53
Gunnison, 1/2 mi. s. e. of Mt. Carbon.....	12.8	34.0	46.50	6.66	1.15	11,270	62.21	22.66	2.12	1.37
Gunnison, Mt. Carbon.....	No. 2.....	.....	10.03	32.14	53.17	4.66	0.87	11,981	67.62	20.04	2.74	1.65
Gunnison, 9 1/2 mi. s. e. of Somerset.....	8.94	34.23	52.04	4.79	0.57	12,307	68.76	19.06	2.88	1.52
Gunnison, Somerset.....	5.61	37.60	47.57	9.22	0.43	12,434	69.68	13.96	3.01	1.27
Gunnison, 4 mi. s. of Somerset.....	21.44	29.13	44.75	4.68	0.33	7,870	.....	.....	.....	1.54
Huerfano, 7 mi. w. of La Veta.....	7.80	38.50	44.80	8.90	0.53	11,542	65.48	18.83	2.36	1.16
Huerfano, 7 mi. w. of La Veta.....	6.79	38.59	45.78	8.84	0.56	.....	51.74	33.22	.....	1.19
Jackson, Coalmont.....	22.81	36.21	34.08	6.90	0.70	9,007	.....	.....	.....	0.94
Jackson, 10 1/2 mi. s. e. of Walden.....	18.05	34.39	35.32	12.13	0.80	9,275	52.44	27.70	1.32	1.03
Jackson, 8 1/2 mi. from Walden.....	16.72	33.02	46.67	3.59	0.16	10,359	60.20	29.72	1.81	1.41
Jefferson, 2 1/2 mi. from Morrison.....	28.67	30.69	34.85	5.79	0.75	8,159	47.94	38.48	1.08	1.14
La Plata, 6 mi. s. e. of Mancos Station.....	Mesaverde.....	.....	15.7	31.7	44.5	8.05	0.58	10,270	59.59	24.93	1.81	1.40
La Plata, Beaver Creek.....	4.79	35.04	45.45	14.72	0.77	.....	.....	.....	.....	1.30
La Plata, near Durango.....	2.87	35.60	54.37	7.16	0.231	.....	.....	.....	.....	1.53
La Plata, 1 1/4 mi. s. w. of Durango.....	3.01	34.77	55.31	6.91	0.74	13,714	76.36	8.99	4.80	1.59
La Plata, Durango.....	3.05	32.70	47.47	16.78	1.30	11,900	64.21	11.55	2.27	1.45
La Plata, Durango.....	3.64	37.79	53.35	5.22	1.36	13,395	75.40	11.15	4.61	1.41
La Plata, 5 mi. s. e. of Durango.....	5.31	38.98	50.03	5.68	2.11	13,216	72.83	12.14	4.09	1.28
La Plata, 16 mi. w. of Durango.....	7.57	38.01	47.75	6.67	0.70	.....	.....	.....	.....	1.26
La Plata, Hesperus.....	5.55	36.23	52.53	5.69	0.66	13,120	72.70	14.14	3.67	1.45
La Plata, Porter.....	2.02	34.92	55.89	7.17	0.48	.....	.....	.....	.....	1.60
La Plata, Porter.....	2.73	36.05	54.48	6.74	0.53	13,914	.....	.....	.....	1.51
La Plata, Porter.....	3.33	34.85	52.68	9.14	1.15	.....	.....	.....	.....	1.51
La Plata, Porter.....	29.33	28.95	32.72	9.00	3.43	7,468	42.88	37.66	0.92	1.13
La Plata, Porter.....	6.31	30.15	49.45	14.09	0.65	12,145	67.46	11.39	2.65	1.64
La Plata, Porter.....	2.42	35.14	56.38	6.06	0.42	13,554	76.93	10.10	4.76	1.60
La Plata, Porter.....	3.11	35.22	47.68	13.99	0.81	12,195	67.60	11.38	2.66	1.35
La Plata, Porter.....	3.88	27.34	55.05	13.73	0.47	12,548	69.67	10.01	2.93	2.01
La Plata, Porter.....	2.53	36.90	52.00	11.10	0.74	12,856	.....	.....	.....	1.41
La Plata, Porter.....	10.12	26.06	41.99	21.83	0.51	.....	.....	.....	.....	1.61
La Plata, Porter.....	3.32	31.98	49.09	15.61	0.82	12,357	67.66	9.75	2.67	1.54
La Plata, Porter.....	2.10	29.15	55.74	13.01	0.65	13,253	.....	.....	.....	1.91
La Plata, Porter.....	2.15	34.82	54.79	8.24	0.72	13,415	75.11	9.75	4.18	1.57
La Plata, Porter.....	2.91	36.65	53.48	9.87	0.48	12,858	.....	.....	.....	1.46
La Plata, Porter.....	1.9	30.8	51.5	15.8	0.80	12,620	.....	.....	.....	1.67
La Plata, Porter.....	2.2	30.7	51.8	15.3	0.65	12,620	.....	.....	.....	1.69
La Plata, Porter.....	1.3	28.6	52.3	17.8	0.60	12,290	.....	.....	.....	1.83
La Plata, Porter.....	1.2	30.5	55.7	12.6	0.50	13,190	.....	.....	.....	1.83
La Plata, Porter.....	1.6	27.1	59.1	12.2	0.50	13,260	.....	.....	.....	2.18
La Plata, Porter.....	2.90	37.06	52.42	10.52	0.48	12,713	.....	.....	.....	1.41
La Plata, Porter.....	2.07	36.02	50.24	13.74	0.60	12,672	.....	.....	.....	1.39
La Plata, Porter.....	2.77	33.12	45.29	18.82	0.62	11,682	64.45	10.11	2.23	1.37
La Plata, Porter.....	5.78	26.22	53.79	14.21	0.59	12,452	69.54	9.21	2.97	2.05
La Plata, Porter.....	6.43	31.82	47.97	13.78	0.56	12,220	.....	.....	.....	1.51
La Plata, Porter.....	2.33	25.82	54.58	17.27	0.52	12,337	69.14	7.38	2.81	2.11
La Plata, Porter.....	2.85	32.65	55.26	9.24	0.62	13,262	74.39	9.24	4.02	1.69

(Continued on Next Page)

COAL CATALOG

ANALYSES OF COLORADO SEAMS BY COUNTIES AND LOCALITIES—Continued

COUNTY AND LOCATION	SEAM	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Detonated B. T. U.	Carbon	Oxygen	RATIOS		
											Carbon	H. C.	V. M.
											Wgt. + Ash		
Las Animas, Primero.....		Primero.....	1.24	31.65	50.99	16.12	0.54	12,602	69.96	7.29	2.99	1.61	
Las Animas, 1½ mi. s. w. of Rugby.....		Rapson.....	3.67	33.69	52.16	10.48	0.64	12,645	70.93	11.46	3.23	1.51	
Las Animas, Starkville.....		Starkville.....	2.87	29.15	55.56	13.22	0.57	12,850	71.77	8.65	3.28	1.91	
Las Animas, Tercio.....		Las Vegas.....	2.07	29.94	48.06	19.13	0.77	11,720	65.28	9.15	2.31	1.61	
Las Animas, 3 mi. e. of Trinidad.....		Eagle.....	2.25	29.49	47.82	20.44	0.64	11,714	65.00	8.20	2.27	1.59	
Las Animas, 1 mi. s. of Wild Cat Creek.....		Clark's.....	3.14	30.62	58.83	7.41	0.67	13,672	75.74	10.32	4.27	1.92	
*Cameo.....		Cameo.....	8.42	33.32	47.53	10.73	0.60	11,639	65.52	16.50	2.41	1.43	
Mesa, n. e. of Fruita.....		Tomlinson.....	5.40	33.30	55.57	5.73	0.49	12,409	70.18	17.01	3.08	1.67	
Mesa, Grand Junction.....		7.50	36.38	53.42	10.20	0.57	11,785	.....	.....	.....	1.47	
Mesa, 1½ mi. s. of Grand Junction.....		Book Cliff.....	11.42	34.25	44.49	9.84	0.84	11,099	61.84	20.95	2.01	1.30	
*Palisades.....		Palisades.....	7.52	36.03	50.46	5.99	0.85	12,308	68.43	17.92	2.86	1.40	
Mesa, 1½ mi. n. e. of Palisades.....		Riverside.....	7.57	33.56	52.91	5.96	0.72	12,443	69.47	16.79	3.05	1.58	
Mesa, 2 mi. n. w. of Palisades.....		11.96	31.30	48.73	6.01	0.63	10,861	.....	.....	.....	1.56	
Mesa, 4 mi. n. e. of Palisades.....		Bailey.....	7.18	32.97	50.98	8.87	0.58	11,968	67.54	16.24	2.69	1.40	
Mesa, 9 mi. s. e. of Palisades.....		Patterson.....	11.51	32.60	45.53	10.36	0.93	10,408	.....	.....	.....	1.40	
Mesa, 5 mi. s. e. of Grand Junction.....		Prospect.....	3.51	39.19	51.33	5.97	1.67	13,052	.....	.....	.....	1.31	
Mesa, 1 mi. s. of Grand Junction.....		5.13	27.94	38.74	28.19	1.14	5,147	.....	.....	.....	1.39	
Moffat, 6 mi. w. of Axial.....		Battle Era.....	14.67	36.65	42.56	6.12	0.89	10,141	59.06	27.06	1.78	1.16	
Moffat, 1½ mi. s. of Axial.....		Joe Collom.....	11.91	40.64	45.54	2.21	0.32	11,612	.....	.....	.....	1.12	
Moffat, 3 mi. s. e. of Craig.....		Walker.....	15.54	37.42	39.56	7.48	0.97	10,352	.....	.....	.....	1.06	
Moffat, 15 mi. s. of Craig.....		Hart.....	11.87	36.78	45.63	5.72	0.55	11,234	64.36	22.14	2.31	1.24	
Moffat, 1½ mi. s. e. of Lay.....		Lay.....	11.71	38.0	44.33	5.96	0.92	11,182	63.99	22.15	2.28	1.17	
*Mesaverde.....		Fielding-Spencer.....	5.5	38.3	47.3	8.85	0.77	12,550	69.92	13.54	3.12	1.23	
Montezuma, 2 mi. s. e. of Mancos Station.....		Old Spencer.....	8.5	39.2	47.0	5.33	0.99	12,560	69.99	16.42	3.22	1.20	
Montezuma, 2 mi. s. e. of Mancos Station.....		Spencer.....	7.0	38.3	50.2	4.47	0.61	12,940	72.57	15.32	3.67	1.31	
Montezuma, 7 mi. n. of Mancos.....		Spencer.....	7.71	27.84	48.11	16.34	1.02	11,484	64.24	12.64	2.22	1.73	
Montezuma, 6 mi. s. e. of Cortez.....		Todd.....	12.1	37.7	44.1	6.07	0.59	11,390	64.41	21.55	2.33	1.17	
Montezuma, Cortez.....		Cortez.....	8.05	32.27	45.50	14.18	0.57	10,439	60.29	19.23	1.80	1.41	
Montezuma, 7 mi. from Cortez.....		Todd.....	10.97	40.30	42.28	6.45	0.81	11,632	63.43	21.55	2.22	1.04	
Montezuma, 7 mi. from Cortez.....		Todd.....	12.05	39.65	41.27	7.03	0.73	11,358	.....	.....	.....	0.98	
Montezuma, 10 mi. s. e. of Cortez.....		Jackson.....	13.79	40.67	39.93	5.61	0.49	11,117	.....	.....	.....	1.32	
Montezuma, s. of Cortez.....		Prospect.....	20.92	31.37	41.26	6.45	0.47	.....	.....	.....	.....	1.56	
Montezuma, 11 mi. s. of Dolores.....		Haller.....	10.29	31.81	49.73	8.17	0.53	.....	.....	.....	.....	1.72	
Montezuma, 8 mi. n. of Mancos.....		Spencer.....	5.44	31.26	53.80	13.40	1.02	.....	.....	.....	.....	1.30	
Montezuma, Mancos.....		Wood.....	6.12	35.86	49.44	8.58	0.64	.....	.....	.....	.....	1.38	
Montezuma, Mancos.....		Lou Creek.....	14.15	37.80	40.98	7.07	0.58	.....	.....	.....	.....	1.08	
Ouray, 10 mi. n. e. of Ridgway.....		Spring Gulch.....	3.4	34.0	55.4	7.2	0.57	13,500	74.49	10.73	4.16	1.63	
Pitkin, Gulch.....		Coal Basin.....	0.96	21.49	68.93	8.62	0.52	14,330	79.61	4.76	5.95	3.21	
*"Sunshine".....		Coal Basin.....	2.39	19.44	70.76	7.41	0.52	14,377	75.80	5.84	4.32	3.64	
Pitkin, Coal Basin.....		Coal Basin.....	3.75	22.12	62.41	11.72	0.40	13,349	64.20	21.63	2.31	1.15	
Pitkin, Coal Basin.....		Fairfield.....	11.02	38.53	44.25	6.20	0.85	11,234	63.39	22.05	2.16	1.19	
Rio Blanco, 2½ mi. w. of Meeker.....		Fairfield.....	9.41	37.97	45.38	7.24	0.75	10,690	.....	.....	.....	1.42	
Rio Blanco, 2½ mi. w. of Meeker.....		10.95	33.13	47.05	8.86	0.73	10,690	.....	.....	.....	1.22	
Rio Blanco, s. w. of Angora.....		Sulphur Creek.....	10.41	36.56	44.73	8.30	0.59	11,263	63.38	20.97	2.16	1.22	
Rio Blanco, 2½ mi. n. of Meeker.....		Wesson.....	14.40	28.42	41.17	6.01	0.81	10,600	60.64	25.47	1.93	1.07	
Rio Blanco, 14 mi. n. of Meeker.....		24.87	32.30	38.92	3.91	0.49	.....	.....	.....	.....	1.20	
Rio Blanco, 3 mi. s. of Rangely.....		Rector.....	14.10	31.83	48.81	5.26	0.38	10,935	62.15	25.5	2.02	1.53	
Rio Blanco, Sulphur Creek.....		Sulphur Creek.....	11.90	33.14	48.30	6.66	0.47	11,336	63.89	21.93	2.23	1.46	
Rout, 14 mi. n. e. of Hayden.....		Crawford.....	6.94	3.42	75.61	14.03	0.57	11,740	73.40	7.84	3.36	22.11	
Rout, Oak Creek.....		Mammoth.....	8.12	40.07	54.39	5.54	0.71	12,195	1.36	

*Bulletins Bureau of Mines.

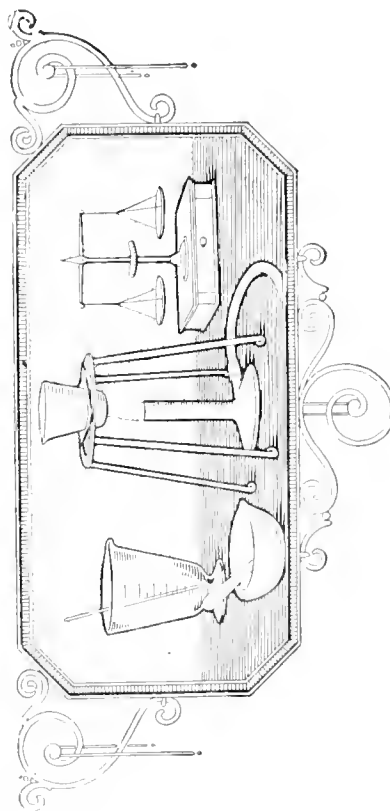
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COAL CATALOG

ANALYSES OF COLORADO SEAMS BY COUNTIES AND LOCALITIES—Continued

COUNTY AND LOCATION	SEAM	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carboca	Oxygen	RATIOS		
											Carbon	F. C.	V. M.
											Oxy. + Ash		
Routt, s. of Lay.	*Sweeney.	Sweeney.	12.31	36.17	45.40	6.12	1.10	11,093	62.72	23.15	2.14	1.26	
Routt, s. of Eddy.	*Yampa.	Oak Creek.	7.53	36.36	45.46	10.65	1.51	11,459	64.90	16.24	2.41	1.25	
Routt, 4 mi. s. of Axial.	*	James.	12.01	35.83	47.54	4.62	0.52	11,362	63.87	24.20	2.22	1.33	
Routt, e. of Axial.	*	Shafer.	13.15	36.44	47.54	2.87	0.57	11,300	64.12	25.89	2.23	1.30	
Routt, 10 mi. w. of Axial.	*	Prospect Pit.	31.40	32.66	30.91	5.03	0.33	.....	.....	.....	.....	0.95	
Routt, 10 mi. s. w. of Craig.	*	Haubruch.	17.75	30.39	48.08	3.78	0.51	10,356	59.63	28.63	1.84	1.58	
Routt, 7 mi. s. w. of Eddy.	*	Wadge.	8.59	33.85	47.30	10.26	1.50	.....	.....	.....	.....	1.40	
Routt, 8 mi. e. of Hayden.	*	.....	9.49	37.89	47.04	5.58	0.41	11,617	.....	.....	.....	1.24	
Routt, 6 mi. s. of Hayden.	*	Dry Creek.	11.03	35.85	47.46	5.66	0.52	11,365	.....	.....	.....	1.32	
Routt, 7 mi. s. of Hayden.	*	Gartman.	15.74	33.37	46.77	4.12	0.41	.....	.....	.....	.....	1.40	
Routt, 14 mi. e. of Hayden.	*	Wisconsin.	12.20	35.80	47.38	4.62	0.44	11,376	64.99	23.03	2.35	1.32	
Routt, s. of Lay.	*	Lucksinger.	14.65	34.73	44.48	6.14	0.99	10,561	60.07	25.90	1.87	1.28	
Routt, 5 mi. e. of Slater.	*	.....	12.95	35.69	45.02	6.34	0.65	10,627	61.54	24.55	1.99	1.26	
Weld, Firestone.	*Emerson.	.....	23.55	40.45	53.30	6.25	0.55	9,445	.....	.....	.....	1.32	
Weld, Dacono.	*	Golden Ash.	22.20	39.23	33.12	5.45	0.33	9,578	55.01	32.06	1.47	0.84	
Weld, 1 mi. e. of Eaton.	*	Star.	31.41	28.11	35.13	5.35	0.46	7,952	45.57	40.98	0.98	1.25	
Weld, 8 mi. w. of Fort Lupton.	*	Warwick.	25.61	27.99	41.06	5.34	0.36	9,182	51.81	35.11	1.28	1.47	
Weld, 13 mi. s. e. of Greeley.	*	White Ash.	29.13	28.52	36.53	5.82	0.30	8,401	48.95	37.35	1.13	1.28	
Weld, 5 mi. s. e. of Idaho Creek.	*	Puritan.	24.28	27.63	44.84	3.25	0.36	9,376	55.28	33.90	1.49	1.62	
Weld, Platteville.	*	Platteville.	28.90	28.83	37.25	5.02	0.46	8,465	48.36	38.59	1.11	1.29	

*Bulletins Bureau of Mines.



List of Mines By Counties, Including Name of Company, General Office Address, Railroad and Shipping Point.

COLORADO

BOULDER COUNTY COALS

Subbituminous rank. Suitable for Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Big Four Coal & Coke Co.	Denver, Colo.	Centennial.	Boulder.	C. & S.	Louisville, Colo.
Cowie Coal Co., The.	Boulder, Colo.	Cowie.	Boulder.	Colorado & Southern.	Marshall, Colo.
Cracker Jack Coal Co.	1800 Bluebell Ave., Boulder, Colo.	Cracker Jack.	Boulder.	C. & S.	Boulder, Colo.
Engineers Leasing Co.	918 Equitable Bldg., Denver, Colo.	Cambria.	Boulder.	C. B. & Q.	Lafayette, Colo.
Fox Coal Mining Co.	Gorham, Colo.	Fox.	Boulder.	Colo. & Southern.	Marshall, Colo.
International Fuel Corp.	328 Gas & Elec. Bldg., Denver, Colo.	Champion.	Boulder.	C. & S. (Louis'v'e Ry.)	Louisville, Colo.
Marshall Coal Company.	311-12 Central Savings Bk. Bldg., Denver, Colo.	Red Ash.	Boulder.	C. & S.	Marshall, Colo.
Marshall Coal Company.	311-12 Central Savings Bk. Bldg., Denver, Colo.	Sunnyside.	Boulder.	C. & S.	Louisville, Colo.
National Fuel Company.	519 Colorado Bldg., Denver, Colo.	Monarch.	Boulder.	C. & S.	Louisville, Colo.
Northwestern Fuel Co.	416 Central Savings Bank Bldg., Denver, Colo.	Nonpareil.	Boulder.	C. & S.	Louisville, Colo.
Rocky Mountain Fuel Co.	Denver, Colo.	Aerne.	Boulder.	C. & S.	Louisville, Colo.
Rocky Mountain Fuel Co.	Denver, Colo.	Simpson.	Boulder.	C. & S., C. B. & Q.	Lafayette, Colo.
Rocky Mountain Fuel Co. (The).	Denver, Colo.	Gorham.	Boulder.	Colo. & Southern.	Marshall, Colo.
Rocky Mountain Fuel Co. (The).	Denver, Colo.	Industrial.	Boulder.	Colo. & Southern.	Superior, Colo.
Rocky Mountain Fuel Co. (The).	Denver, Colo.	Mitchell.	Boulder.	C. B. & Q.	Lafayette, Colo.
Rocky Mountain Fuel Co. (The).	Denver, Colo.	Standard.	Boulder.	C. B. & Q.	Lafayette, Colo.
Rocky Mountain Fuel Co. (The).	Denver, Colo.	Vulcan.	Boulder.	Colo. & Southern.	Lafayette, Colo.

DELTA COUNTY COALS

Bituminous and Subbituminous rank. Suitable for Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Converse Coal Company.	Paonia, Colo.	Converse.	Delta.	D. & R. G.	Paonia, Colo.
Hall, A. W. Son.	Cedaredge, Colo.	Red Mountain.	Delta.	D. & R. G.	Delta, Colo.
Independent Lumber Co.	Hatchkiss, Colo.	Kurtzville Mine.	Delta.	D. & R. G.	Hatchkiss, Colo.
Juanita Coal & Coke Co.	Pueblo, Colo.	King.	Delta.	D. & R. G.	Bowie, Colo.
Red Canon Coal Co.	Cedaredge, Colo.	Red Canon.	Delta.	D. & R. G.	Delta, Colo.
States Coal Co.	Cedaredge, Colo.	States.	Delta.	D. & R. G.	Delta, Colo.
Winton Coal Co.	Cedaredge, Colo.	Winton.	Delta.	D. & R. G.	Delta, Colo.

EL PASO COUNTY COALS

Subbituminous rank. Suitable for Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Colorado Springs Co., The.	Colorado Springs, Colo.	City No. 1 Mine.	El Paso.	A. T. & S. F.	Colorado Springs, Colo.
Corley, W. D.	Colorado Springs, Colo.	Klondike.	El Paso.	A. T. & S. F.	Breed, Colo.
Patterson, Alexander.	2409 W. Feyon, Colorado Springs, Colo.	City No. 2 Mine.	El Paso.	A. T. & S. F.	Santa Fe, Colo.
Pikes Peak Consolidated Fuel Co.	125 E. Pikes Peak Ave., Colorado Springs, Colo.	Keystone.	El Paso.	C. R. I. & P.	Colorado Springs, Colo.
Pikes Peak Consolidated Fuel Co.	Colorado Springs, Colo.	Pikeview.	El Paso.	D. & R. G.	Colorado Springs, Colo.

FREMONT COUNTY COALS

Bituminous and Subbituminous ranks. Suitable for Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Canon Crystal Coal Company.	Box 233, Canon City, Colo.	Bassick.	Fremont.	D. & R. G.	Rockvale, Colo.
Canon-Reliance Coal Co., The.	Canon City, Colo.	"Canon".	Fremont.	A. T. & S. F.	Canon City, Colo.
Colorado Fuel & Iron Co.	Denver, Colo.	Coal Creek.	Fremont.	A. T. & S. F.	Rockvale, Colo.
Colorado Fuel & Iron Co. (The).	Boston Bldg., Denver, Colo.	Emerald.	Fremont.	D. & R. G.	Rockvale, Colo.
Colorado Fuel & Iron Co.	Denver, Colo.	Fremont.	Fremont.	D. & R. G.	Florence, Colo.
Colorado Fuel & Iron Co.	Denver, Colo.	Monae.	Fremont.	A. T. & S. F.	Canon City, Colo.
Colorado Fuel & Iron Co.	Denver, Colo.	Rockvale.	Fremont.	A. T. & S. F.	Rockvale, Colo.
Florence-Canon Coal Co., The.	Florence, Colo.	Florence-Canon Mine.	Fremont.	D. & R. G.	Florence, Colo.
Gibson Lumber & Fuel Co.	Box 75, Canon City, Colo.	Royal Gorge.	Fremont.	A. T. & S. F.	Canon City, Colo.
Harris, Elmer R.	Coal Creek, Colo.	Double Dick.	Fremont.	D. & R. G.	Florence, Colo.
Vezzetti & Moschetti Coal Company.	B. F. D. No. 1, Canon City, Colo.	Brookside.	Fremont.	A. T. & S. F.	Canon City, Colo.
Victor-American Fuel Co.	Denver, Colo.	Chandler.	Fremont.	C. & S.	Chandler, Colo.
Victor-American Fuel Co.	Denver, Colo.	Radiant.	Fremont.	A. T. & S. F.	Florence, Colo.

GARFIELD COUNTY COALS

Bituminous rank. Suitable for Cement Burning, Melting, Tile and Pottery Burning, Powdered, Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Gilson-Asphaltum Co.	Philadelphia, Pa.	Carbonera.	Garfield.	Unita.	Carbonera, Colo.

GUNNISON COUNTY COALS

Anthracite, Semibituminous and Bituminous ranks. Bituminous coals suitable for Cement Burning and Bee-hive Coking; all coals suitable for Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Baldwin Fuel Co.	850 Equitable Bldg., Denver, Colo.	Baldwin Star.	Gunnison	D. & R. G.	Copper Spur, Colo.
Colorado Fuel & Iron Co.	Denver, Colo.	Crested Butte.	Gunnison	D. & R. G.	Crested Butte, Colo.
Colorado Fuel & Iron Co. (The)	Boston Bldg., Denver, Colo.	Elk Mountain.	Gunnison	D. & R. G.	Crested Butte, Colo.
Crested Butte Anthracite Mng Co.	Equitable Bldg., Denver, Colo.	Smith Anthracite.	Gunnison	D. & R. G.	Crested Butte, Colo.
Crested Butte Coal Co. (The)	Equitable Bldg., Denver, Colo.	Bukley.	Gunnison	D. & R. G.	Crested Butte, Colo.
Ohio Creek Coal Co.	Gunnison, Colo.	Ohio Creek.	Gunnison	D. & R. G.	Gunnison, Colo.
Rocky Mountain Fuel Co., The.	Denver, Colo.	Alpine.	Gunnison	D. & R. G.	Crested Butte, Colo.
Ross Coal Co., The.	Crested Butte, Colo.	Lorance.	Gunnison	D. & R. G.	Sumner, Colo.
Utah Fuel Co.	Salt Lake City, Utah.	Sumner.	Gunnison	D. & R. G.	Sumner, Colo.

HUERFANO COUNTY COALS

Bituminous rank. Suitable for Cement Burning, Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Aztec Coal Mining Co.	Denver, Colo.	Toltee No. 1.	Huerfano	C. & S., D. & R. G.	Walsenburg, Colo.
Black Canon Coal & Fuel Co.	Denver, Colo.	Caddell.	Huerfano	D. & R. G., C. & S.	Walsenburg, Colo.
Green Coal Mining Co.	Walsenburg, Colo.	Breen.	Huerfano	C. & S., D. & R. G.	Walsenburg, Colo.
Brennan Coal Mining Co., The.	Walsenburg, Colo.	Brennan.	Huerfano	D. & R. G., C. S.	Walsenburg, Colo.
Caddell & Son.	Lester, Colo.	Heron.	Huerfano	D. & R. G.	Rouse Jct., Colo.
Canon-Reliance Coal Co., The.	Canon City, Colo.	Rivance.	Huerfano	D. & R. G.	LaVeta, Colo.
Castle Coal Company.	Walsenburg, Colo.	Caprock.	Huerfano	D. & R. G., C. & S.	Walsenburg, Colo.
Colorado Fuel & Iron Co.	Denver, Colo.	Camaron.	Huerfano	Colorado & Southern	Farr, Colo.
Colorado Fuel & Iron Co.	Denver, Colo.	Heron.	Huerfano	C. & S.	Lester, Colo.
Colorado Fuel & Iron Co.	Denver, Colo.	Ideal.	Huerfano	Colorado & Southern	Mayne, Colo.
Colorado Fuel & Iron Co. (The)	Boston Bldg., Denver, Colo.	Johal.	Huerfano	D. & R. G.	Walsenburg, Colo.
Colorado Fuel & Iron Co. (The)	Boston Bldg., Denver, Colo.	Kehler No. 1.	Huerfano	D. & R. G.	Tioga, Colo.
Colorado Fuel & Iron Co. (The)	Boston Bldg., Denver, Colo.	Kehler No. 2.	Huerfano	D. & R. G.	Tioga, Colo.
Colorado Fuel & Iron Co.	Denver, Colo.	Lester.	Huerfano	C. & S.	Lester, Colo.
Colorado Fuel & Iron Co.	Denver, Colo.	Pictou.	Huerfano	D. & R. G.	Walsenburg, Colo.
Colorado Fuel & Iron Co.	Denver, Colo.	Rouse.	Huerfano	D. & R. G.	Rouse, Colo.
Colorado Fuel & Iron Co.	Denver, Colo.	Walsen & Robinson.	Huerfano	C. & S., D. & R. G.	Walsenburg, Colo.
Gordon Coal Co.	Walsenburg, Colo.	Gordon.	Huerfano	D. & R. G.	Walsenburg, Colo.
McNally & Thompson.	Maitland, Colo.	Maitland No. 1.	Huerfano	D. & R. G.	Tropic, Colo.
Oakdale Coal Co. (The)	Denver, Colo.	Oakdale Nos. 1 & 2.	Huerfano	D. & R. G.	Strong, Colo.
Sunnyside Coal Mining Co. (The)	1062 Gas & Electric Bldg., Denver, Colo.	Sunnyside.	Huerfano	D. & R. G.	Walsenburg, Colo.
Turner Coal Co.	Walsenburg, Colo.	Turner.	Huerfano	D. & R. G.	Pryor, Colo.
Union Coal & Coke Co.	Denver, Colo.	Pryor.	Huerfano	D. & R. G.	Walsenburg, Colo.
Vesta Mines, Inc.	Cooper Bldg., Denver, Colo.	Vesta.	Huerfano	C. & S.	Ravenwood, Colo.
Victor-American Fuel Co.	Denver, Colo.	Ravenwood.	Huerfano	D. & R. G.	Ravenwood, Colo.
Walsenburg Coal Mining Co.	Denver, Colo.	Solar.	Huerfano	Denver & Rio Grande	Solar, Colo.

JACKSON COUNTY COALS

Lignitic rank. Suitable for Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
North Park Coal Co.	Fort Collins, Colo.	North Park	Jackson	C. W. & E.	Coalmont, Colo.

JEFFERSON COUNTY COALS

Subbituminous and Lignite ranks. Suitable for Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Colorado Collieries Co.	911 Foster Bldg., Denver, Colo.	Satanic.	Jefferson	C. & S.	Mt. Morrison, Colo.
Leyden Coal Company, The.	707 Tramway Bldg., Denver, Colo.	Leyden No. 3.	Jefferson	D. & M., D. & S. L., C. & S.	Denver, Colo.

LA PLATA COUNTY COALS

Bituminous and Subbituminous ranks. Bituminous coal suitable for Cement Burning, Bee-hive Coking, Melting, Tile and Pottery Burning and Powdered uses; all coals suitable for Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
American Smelting & Refining Co.	120 Broadway, New York, N. Y.	San Juan.	La Plata	D. & R. G.	Durango, Colo.
Calumet Fuel Co. (The)	Judge Bldg., Salt Lake City, Utah.	Perins Peak.	La Plata	Rio Grande, Southern	Durango, Colo.
Hesperus Fuel Co.	Hesperus, Colo.	Hesperus.	La Plata	Rio Grande, Southern	Hesperus, Colo.
Sunshine Coal Co.	Durango, Colo.	Sunshine.	La Plata	D. & R. G.	Durango, Colo.

LAS ANIMAS COUNTY COALS

Bituminous rank. Suitable for Cement Burning, Bee-hive Coking, Melting, Tile and Pottery Burning, Powdered, Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
American Smelting & Refining Co.	120 Broadway, New York, N. Y.	Boncarbo.	Las Animas.	D. & R. G.	Cokedale, Colo.
Bear Canon Coal Co. (The)	Trinidad, Colo.	Bear Canon Nos. 1, 3 & 6.	Las Animas.	C. & S.	Berwind, Colo.
Black Hawk Coal Co. (The)	731 Cooper Bldg., Denver, Colo.	Primrose No. 4.	Las Animas.	C. & S., D. & R. G.	Rugby, Colo.
Cedar Hill Coal & Coke Co.	Denver, Colo.	Black Diamond.	Las Animas.	C. & S.	Rugby, Colo.
Cedar Hill Coal & Coke Co.	Denver, Colo.	Greenville.	Las Animas.	C. & S.	Ludlow, Colo.
Colorado Fuel & Iron Co., The.	Roston Bldg., Denver, Colo.	Toller.	Las Animas.	Colo. & Southern.	Tellerburg, Colo.
Colorado Fuel & Iron Co.	Denver, Colo.	Rerwind.	Las Animas.	Colo. & Sou.	Berwind, Colo.
Colorado Fuel & Iron Co.	Denver, Colo.	Engle.	Las Animas.	D. & R. G.	Engl. burg, Colo.
Colorado Fuel & Iron Co.	Denver, Colo.	Frederick.	Las Animas.	Colo. & Wyoming.	Valdez, Colo.
Colorado Fuel & Iron Co.	Denver, Colo.	Morley.	Las Animas.	A. T. & S. F.	Morley, Colo.
Colorado Fuel & Iron Co.	Denver, Colo.	Primero.	Las Animas.	Colo. & Wyoming.	Primero, Colo.
Colorado Fuel & Iron Co.	Denver, Colo.	Segundo.	Las Animas.	C. & W.	Segundo, Colo.
Colorado Fuel & Iron Co.	Denver, Colo.	Sopris.	Las Animas.	C. & S., C. & W.	Sopris, Colo.
Colorado Fuel & Iron Co.	Denver, Colo.	Starkville.	Las Animas.	A. T. & S. F., C. & S.	Starkville, Colo.
Colorado Fuel & Iron Co.	Denver, Colo.	Tabasco.	Las Animas.	D. & R. G., C. & S.	Tabasco, Colo.
Cominotti & Company.	Rugby, Colo.	Star.	Las Animas.	C. & S.	Rugby, Colo.
Dick Coal Co.	Walsenburg, Colo.	Dix.	Las Animas.	D. & R. G.	Bon Carbo, Colo.
Empire Coal Mining Co. (The)	809 Interstate Trust Bldg., Denver, Colo.	Empire.	Las Animas.	Colorado & Southern.	Aguilar, Colo.
Eureka Coal Mining Co.	115 W. 1st St., Trinidad, Colo.	Maecove.	Las Animas.	D. & R. G.	Trinidad, Colo.
Fairview Coal Co.	Box 173, Trinidad, Colo.	Fairview.	Las Animas.	A. T. & S. F., C. & W.	Trinidad, Colo.
Huerfano Coal Co.	Denver, Colo.	Ludlow.	Las Animas.	Colorado & Southern.	Ludlow, Colo.
Jeffries Fuel Co.	Trinidad, Colo.	Jeffries.	Las Animas.	A. T. & S. F., C. & S.	Trinidad, Colo.
Jewell Coal Co.	518-19 Denham Bldg., Denver, Colo.	Jewell.	Las Animas.	C. & S.	Lynn, Colo.
Liberty Coal Mining Co.	Box 473, Trinidad, Colo.	Liberty.	Las Animas.	C. & S.	Forb's Jet., Colo.
Miners Coal & Coke Co., The.	Trinidad, Colo.	Williams Mine.	Las Animas.	Colo. & Wyo.	Trinidad, Colo.
National Fuel Co.	Denver, Colo.	Thor.	Las Animas.	C. & S.	Bowen, Colo.
New Santa Fe Coal & Coke Co.	Trinidad, Colo.	New Viola.	Las Animas.	Santa Fe.	Trinidad, Colo.
Prairie Canon Coal Co.	Trinidad, Colo.	Prairie Canon.	Las Animas.	C. & S.	Pear Canon, Colo.
Rapson Coal Mining Co. (The)	Colorado Springs, Colo.	Rapson No. 1.	Las Animas.	C. & S., D. & R. G.	Rapson, Colo.
Rocky Mountain Fuel Co., The.	Denver, Colo.	Forbes.	Las Animas.	C. & S.	Forbes, Colo.
Rocky Mountain Fuel Co., The.	Denver, Colo.	LaBelle No. 2.	Las Animas.	C. & W.	Sopris, Colo.
Rocky Mountain Fuel Co., The.	Denver, Colo.	Piedmont.	Las Animas.	C. & W.	Sopris, Colo.
Rocky Mountain Fuel Co., The.	Denver, Colo.	Southwestern.	Las Animas.	C. & S.	Aguilar, Colo.
Royal Fuel Co.	Denver, Colo.	Royal.	Las Animas.	C. & S., D. & R. G.	Aguilar, Colo.
Rugby Fuel Co. (The)	422-427 Exchange Bldg., Denver, Colo.	Rugby.	Las Animas.	C. & S.	Rugby, Colo.
Santa Fe Coal Co.	Denver, Colo.	Santa Fe.	Las Animas.	A. T. & S. F.	Trinidad, Colo.
Temple Fuel Co.	Trinidad, Colo.	New Alta.	Las Animas.	C. & S., D. & R. G.	Aguilar, Colo.
Temple Fuel Co.	Trinidad, Colo.	Broadhead.	Las Animas.	C. & S., D. & R. G.	Aguilar, Colo.
Temple Fuel Co.	Trinidad, Colo.	Number Ten.	Las Animas.	C. & S., D. & R. G.	Aguilar, Colo.
Three Pines Coal Co.	Amarillo, Tex.	Three Pines.	Las Animas.	C. & S., D. & R. G.	Berwind, Colo.
Trinidad Coal Co.	Trinidad, Colo.	Baldy Mountain.	Las Animas.	D. & R. G., A. T. & S. F.	Trinidad, Colo.
Victor-American Fuel Co.	Denver, Colo.	Delagua.	Las Animas.	C. & S.	Hastings, Colo.
Victor-American Fuel Co.	Denver, Colo.	Gray Creek.	Las Animas.	C. & S.	Trinidad, Colo.
Victor American Fuel Co.	502 Ernest & Cramer Bldg., Denver, Colo.	Hastings No. 5.	Las Animas.	C. & S.	Hastings, Colo.
Victor American Fuel Co.	302 Ernest & Cramer Bldg., Denver, Colo.	Cass.	Las Animas.	C. & S.	Hastings, Colo.
Wootton Land & Fuel Co.	Wootton, Colo.	Turner No. 1.	Las Animas.	A. T. & S. F.	Wootton, Colo.

MESA COUNTY COALS

Bituminous rank. Suitable for Cement Burning, Melting, Tile and Pottery Burning, Powdered, Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Book Cliff R. R. Co. (The)	Grand Junction, Colo.	Book Cliff.	Mesa.	The Book Cliff.	Grand Junction, Colo.
Garfield Coal Mining Co.	Palisade, Colo.	Garfield.	Mesa.	D. & R. G., C. M.	Palisades, Colo.
Gilson Asphaltum Co.	Philadelphia, Pa.	Carbonera.	Mesa.	Unita.	Carbonera, Colo.
Grand Junction Mng. & Fuel Co. (The) ..	Denver, Colo.	Cameo.	Mesa.	Colo. Mid., D. & R. G.	Cameo, Colo.
Hunter, J. B. Coal Company.	Fruta, Colo.	Hunter.	Mesa.	D. & R. G.	Fruta, Colo.
Midwest Coal & Iron Co.	519 E. & C. Bldg., Denver, Colo.	Midwest & Hilltop.	Mesa.	D. & R. G., Colo. Mid.	Palisades, Colo.
Palisade Coal & Supply Co.	Palisade, Colo.	Palisade.	Mesa.	D. & R. G., C. M.	Palisades, Colo.
Stokes, W. D.	Palisade, Colo.	Stokes.	Mesa.	D. & R. G., C. M.	Palisades, Colo.
Thomas, C. F. Coal Co.	Grand Junction, Colo.	Thomas.	Mesa.	D. & R. G.	Grand Junction, Colo.

MOFFAT COUNTY COALS

Mined in the Yampa field. Bituminous and Subbituminous ranks. Suitable for Cement Burning, Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Axial Basin Development Company.	631 U. S. Nat'l Bank Bldg., Denver, Colo.	E.	Moffat.	D. & S. L.	Craig, Colo.
Axial Basin Development Company.	631 U. S. Nat'l Bank Bldg., Denver, Colo.	Miller.	Moffat.	D. & S. L.	Craig, Colo.
Axial Basin Development Company.	631 U. S. Nat'l Bank Bldg., Denver, Colo.	No. 10 Columbine.	Moffat.	D. & S. L.	Craig, Colo.
Waite Mining Company, The.	Craig, Colo.	"Waite".	Moffat.	D. & R. G.	American-Craig, Colo.

MONTEZUMA COUNTY COALS

Bituminous and Lignite ranks. Bituminous coal suitable for Cement Burning; all coals suitable for Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Moffitt-Carhill Coal Co.	Cortez, Colo.	Moffitt-Carhill.	Montezuma.	D. & R. G.	Palisades, Colo.

RIO BLANCO COUNTY

Mined in the Grand River field. Bituminous rank. Suitable for Cement Burning, Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Meeker Coal Mining & Development Co.	Meeker, Colo.	No. 1	Rio Blanco	D. & R. G.	Meeker, Colo.
Meeker Coal Mining & Development Co.	Meeker, Colo.	No. 2	Rio Blanco	D. & R. G.	Meeker, Colo.

ROUTT COUNTY COALS

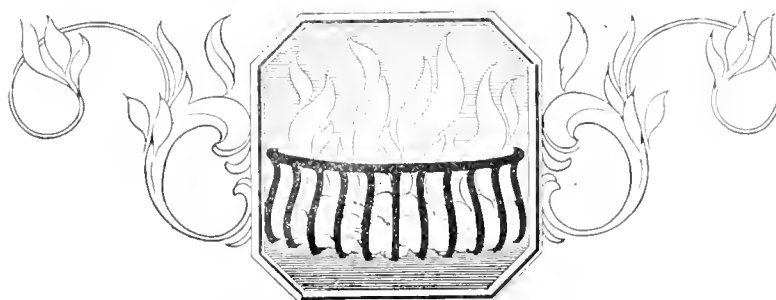
Anthracite, Bituminous and Subbituminous ranks. Bituminous coal suitable for Cement Burning; all coals suitable for Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Allen Coal Co.	Denver, Colo.	Allen No. 1	Route	D. & S. L.	Coalview, Colo.
Amalgamated Development Corp.	Denver, Colo.	Elk Creek No. 1	Route	D. & S. L.	Milner, Colo.
Amalgamated Development Corp.	Denver, Colo.	Elk Creek No. 2	Route	D. & S. L.	Milner, Colo.
Amalgamated Development Corp.	Denver, Colo.	Yampa	Route	D. & S. L.	Milner, Colo.
Bear River Coal Co.	Denver, Colo.	Bear River	Route	D. & S. L.	Bear River, Colo.
Colorado & Utah Coal Co.	1203 First National Bank Bldg., Denver, Colo.	Harris	Route	D. & S. L.	Mt. Harris, Colo.
Curtis Coal Co. (The)	Colorado Springs, Colo.	Curtis	Route	D. & S. L.	Milner, Colo.
Hayden Bros. Coal Corp. (The)	1 Tramway Bldg., Denver, Colo.	Hayden	Route	D. & S. L.	Hayden, Colo.
International Fuel Co.	Denver, Colo.	Wolf Creek	Route	D. & S. L.	Mt. Harris, Colo.
Jones, R. C.	Bear River, Colo.	Jones	Route	D. & S. L.	Bear River, Colo.
Moffat Coal Co. (The)	503 Gas & Electric Bldg., Denver, Colo.	Oak Hill No. 1	Route	D. & S. L.	Oak Hill, Colo.
Moffat Coal Co. (The)	503 Gas & Electric Bldg., Denver, Colo.	Oak Hill No. 2	Route	D. & S. L.	Oak Hill, Colo.
McNeill Coal Co.	750 Equitable Bldg., Denver, Colo.	MacGregor	Route	D. & S. L.	Mt. Harris, Colo.
Roman Coal Mining Co., The	Milner, Colo.	Crown Point	Route	D. & S. L.	Milner, Colo.
Route Pinnacle Coal Co. (The)	307-9-11 Cooper Bldg., Denver, Colo.	Route Pinnacle	Route	D. & S. L.	Coalview, Colo.
Victor-American Fuel Co.	Denver, Colo.	Wadsworth	Route	D. & S. L.	Mt. Harris, Colo.
Victor-American Fuel Co.	Denver, Colo.	Pinnacle	Route	D. & S. L.	Oak Creek, Colo.
Walter Coal Co.	25 Temple Court Bldg., Denver, Colo.	Postal	Route	D. & S. L.	Oak Creek, Colo.

WELD COUNTY COALS

Subbituminous and Lignite ranks. Suitable for Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Boulder Valley Coal Co.	712 Central Savings Bank Bldg., Denver, Colo.	Boulder Valley	Weld	E. P.	Erie, Colo.
Consolidated Coal & Coke Co. (The)	321 Empire Bldg., Denver, Colo.	Baum	Weld	Union Pacific	Frederick, Colo.
International Fuel Corp.	328 Gas & Electric Bldg., Denver, Colo.	Evans	Weld	E. P.	Frederick, Colo.
National Fuel Co., The	Denver, Colo.	Puritan	Weld	C. & N. P. & U. S.	Racone, Colo.
Rocky Mountain Fuel Co.	Denver, Colo.	Frederick	Weld	E. P.	Frederick, Colo.
Rocky Mountain Fuel Co.	Denver, Colo.	Grant	Weld	E. P.	Frederick, Colo.
Russ H. W. E. Coal Co.	1523 Wilson St., Denver, Colo.	Russ H.	Weld	Union Pacific	Frederick, Colo.
Shamrock Coal Co.	Erie, Colo.	No. 1	Weld	Union Pacific	Puritan, Colo.
United Collieries Co.	116 Quincey Bldg., Denver, Colo.	Muro	Weld	E. P.	Puritan, Colo.



COLORADO

Alphabetical Directory of Coal Mines, Giving Complete Detailed Information Covering Each Mine

For List of Abbreviations See Page 13.

ALIANCE COAL COMPANY.

Now Canon R. Hance Coal Co.

ALLEN COAL COMPANY, THE
General Office, Denver, Colo.
PR—E. S. McKinlay, Denver, Colo.
TR—Guy R. Houghton, Denver, Colo.
GS—John McDowell, Coalview, Colo.
SA—Aztec Coal Mining Co., Denver, Colo.

The Allen Mine; Slope; Seam 72 inches thick.
PO—Coalview, Colo.; SP—Same; CTY—Routt; RR—Denver, Salt Lake.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
old Information.

AMALGAMATED DEVELOPMENT CORP.

General Office, Denver, Colo.
PR—B. B. McGee, Denver, Colo.
VP—E. W. McGee, Denver, Colo.
TR—Albert J. McGee, Denver, Colo.
GM—B. B. McGee, Denver, Colo.
GS—Thomas Hotchkiss, Denver, Colo.
PA—B. B. McGee, Denver, Colo.
CE—Thos. Hotchkiss, Denver, Colo.
EM—Thos. Hotchkiss, Denver, Colo.
EE—John Heltefreu, Milner, Colo.
SCO—Stucky-Allen, Milner, Colo.
SA—Carbon Coal & Supply Co., Omaha, Neb.

Elk Creek No. 1 Mine; Drift; Wolf Creek Seam, 168 inches thick.
PO—Milner, Colo.; SP—Same; CTY—Routt; RR—Denver & Salt Lake.
MS—Albert Oliver, Milner, Colo.
S of H—Main and tail rope. Track gage 36 inches.
S of M—1 shortwall mach.
PP—2 125 H. P. fire tube boilers, gen. units, 150 K. W., 250 volts D. C., 3 pumps.
EMP—65. Last years output 40,000.
SIZES SHIPT—Run of Mine; Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.
Note—Formerly operated by Elk Creek Mining Co.

Elk Creek No. 2 Mine; Drift; Wolf Creek Seam, 168 inches thick.
PO—Milner, Colo.; SP—Same; CTY—Routt; RR—Denver & Salt Lake.
MS—Albert Oliver, Milner, Colo.
S of H—Mules. Track gage 36 inches.
S of M—Shortwall machs.
PP—G-erates power, 250 volts D. C.
EMP—10. Last years output 4,000.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

Yampa Mine; Slope; Madge Seam, 132 inches thick.
PO—Milner, Colo.; SP—Same; CTY—Routt; RR—Denver & Salt Lake.
MS—Paul Talbure, Milner, Colo.
S of H—Mules, main and tail rope. Track gage 36 inches.
PP—2 125 H. P. fire tube boilers, 3 pumps.
EMP—30. Last years tonnage 10,000.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens.
Note—Formerly operated by Yampa Coaleries Company.

AMERICAN SMELTING & REFINING CO.

General Office, 120 Broadway, New York, N. Y.
PR—Simon Guggenheim, New York, N. Y.
VP—F. H. Brownell, 120 Broadway, New York, N. Y.
TR—John C. Emison, 120 Broadway, N. Y.
GM—G. P. Bartholomew, 120 Broadway, New York, N. Y.
GS—H. H. Bubb, Cokedale, Colo.
PA—E. R. Reets, 120 Broadway, New York, N. Y.
EE—G. V. Hughes, Cokedale, Colo.
SCO—Gottlieb Merc. Co. Buyer, L. R. Gottlieb, Cokedale, Colo.

Cokedale Plant

Boncarbo Mine; Drift; Boncarbo Seam, 66 in. thick.
PO—Cokedale, Colo.; SP—Frt., Same
EN—Trinidad, Colo. CTY—Las Animas; RR—D. & R. G.
MS—C. R. Garrett, Boncarbo, Colo.
S of H—6 gathering and 1 haulage loco. Track gage 36 in.
S of M—10 shortwall machs.

PP—Power purchased. Transformer 22,000-440 volts A. C., 2—150 K. W., M. G. Sets, 250 volts D. C., 5 pumps.
EMP—225. Last years tonnage 219,641.
Coke Ovens—350 Bee Hive.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Shaker Screens.

San Juan Mine; San Juan Seam, 36 in. thick.
PO—Durango, Colo.; SP—Same; CTY—La Plata; RR—D. & R. G.
MS—R. P. Reynolds, Durango, Colo.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—Power purchased, transformer 2300 volts A. C., M. G. Set, 220 volts D. C.
EMP—30. Last years tonnage 26,424.
Coke Ovens 28 Bee Hive.
SIZES SHIPT—Run of Mine, Slack, Lump.

AXIAL BASIN DEVELOPMENT COMPANY

General Office, 631 U. S. National Bank Bldg., Denver, Colo.
PR—H. W. Myers, Kansas City, Mo.
VP—Frank A. Butler, Indianapolis, Ind.
VP—H. J. Paulus, Marion, Ind.
TR—H. W. Swigert, Denver, Colo.
GM—C. M. Thompson, Mt. Streeter, Colo.
GS—C. M. Thompson, Mt. Streeter, Colo.
PA—A. J. Kapple, Mt. Streeter, Colo.
CE—C. M. Thompson, Mt. Streeter, Colo.
SCO—Address the Company, Buyer, A. J. Kapple, Mt. Streeter, Colo.

No. 10 Columbine, Miller and E Mines; Drifts; Mesa Verde Seam; 25-30 ft. thick.
PO—Mt. Streeter, Colo.; SP—Craig, Colo.; CTY—Moffat.
S of H—Mules.
S of M—Hand.
PP—2 pumps.
EMP—10. Daily tonnage 10.
SIZES SHIPT—Run of Mine, Slack, Pea, Lump.
PREP. EQUIPT—Gravety Screens.

AZTEC COAL MINING CO.

General Office, Denver, Colo.
PR—Geo. Fruth, Denver, Colo.
TR—Geo. Fruth, Denver, Colo.
GM—Geo. Fruth, Denver, Colo.
PA—Geo. Fruth, Denver, Colo.
CE—Woolfender, Wood & Webb, 1109 Broadway, Denver, Colo.
SCO—Huerfano Trading Co., Buyer, Jno. Kirkpatrick, Walsenburg, Colo.
SA—G. R. Houghton, Denver, Colo.

Toltec Mine; Slope; Walsen-Cameron Seam, 42-60 in. thick.
PO—Toltec, Colo.; SP—Walsenburg, Colo.; CTY—Huerfano; RR—Colo. & Sou. and D. & R. G.
MS—S. R. Smith, Walsenburg, Colo.
S of H—Mules and rope. Track gage 36 inches.
S of M—2 electric, 2 comp. air punchers and 4 shortwall machs.
PP—Power purchased. Transformer 2,300-440 volts A. C., 2 M. G. Sets 440-250 volts D. C., 4—380 H. P. fire tube boilers, 6 pumps.
EMP—85. Last years tonnage 37,577.
SIZES SHIPT—Slack, Pea, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

THE BALDWIN FUEL CO.

General Office, 850 Equitable Bldg., Denver, Colo.
PR—Frank Bulkley, 850 Equitable Bldg., Denver, Colo.
TR—Joseph Gledartz, Denver, Colo.
GS—Clarence S. Kellenger, Baldwin, Colo.
EM—John Robinson, Gunnison, Colo.
SA—F. C. Ewing, 850 Equitable Bldg., Denver, Colo.

Raldwin Star Mine; Slope; No. 1 Vein Seam; 84 inches thick.
PO—Baldwin, Colo. SP—Copper Spur, Colo.; CTY—Gunnison; RR—D. & R. G.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—1 40 H. P. fire tube boiler, 1 pump.
EMP—10-30. Daily output, 50 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

BEAR CANON COAL COMPANY, THE

General Office, Trinidad, Colo.
PR—John Aiello, Trinidad, Colo.
VP—P. D. Miller, Valloroso, Colo.
TR—W. G. Plested, Trinidad, Colo.
GM—Chas. Beuchat, Trinidad, Colo.
GS—P. D. Miller, Valloroso, Colo.
PA—Chas. Beuchat, Trinidad, Colo.
CE—Douglas, Cory & Fisk, Trinidad, Colo.
EM—C. E. Corey, Trinidad, Colo.
EE—M. D. Enke, Valloroso, Colo.
SCO—Valloroso Mercantile Co., Buyer, W. H. Lincoln, Valloroso, Colo.
SA—J. J. J. Alcerrombie, Trinidad, Colo.

Bear Canon Nos. 1, 3 and 6 Mines; Drift; Bear Canon, McLaughlin and Cass Seams, 48-72 in. thick.
PO—Valloroso, Colo.; SP—Berwind, Colo.; CTY—Las Animas; RR—C. & C. and D. & R. G.
S of H—Mules and storage battery loco. Track gage 42 in.
S of M—2 comp. air punchers and 2 shortwall machs.
PP—Power purchased. Transformers, 2,300-440 volts A. C.
EMP—85. Last years tonnage 50,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.

BEAR RIVER COAL COMPANY.

General Office, 514 Central Savings Bk. Bldg., Denver, Colo.
PR—John Connell, Denver, Colo.
VP—P. M. Peltier, Denver, Colo.
TR—W. T. Mayfield, Denver, Colo.
GM—John Connell, Denver, Colo.
GS—John Connell, Denver, Colo.
PA—W. T. Mayfield, Denver, Colo.
CE—J. J. Argo, Denver, Colo.
EE—R. R. Smith, Bear River, Colo.
SCO—Bear River Mercantile Co. Buyer, Louis Barberio, Bear River, Colo.
SA—The Big Four Coal Selling Agency, Denver, Colo.

Bear River Mine; Slope; Bear River Seam, 109 to 168 in. thick.
PO—Bear River, Colo.; SP—Same; CTY—Routt; RR—D. & S. L.
MS—R. R. Smith, Bear River, Colo.
S of H—Combination locos. Track gage 36 inches.
S of M—Hand.
PP—2 fire tube and 3 water tube boilers, total 700 H. P., gen. units, 410 volts, A. C.
EMP—73. Last years tonnage 72,481.
SIZES SHIPT—Slack, Nut, Lump, Pea.
PREP. EQUIPT—Revolving and Shaker Screens.

BIG FOUR COAL & COKE CO.

General Office, 512 Central Savings Bk. Bldg., Denver, Colo.
PR—P. M. Peltier, Denver, Colo.
VP—E. Nesbit, Denver, Colo.
TR—E. Nesbit, Denver, Colo.
GM—P. M. Peltier, Denver, Colo.
GS—E. Nesbit, Denver, Colo.
PA—P. M. Peltier, Denver, Colo.
EM—Thomas Knill, Lafayette, Colo.
SA—W. W. Colvin, Denver, Colo.

Centennial Mine; Shaft; Larimer Seam, 72 in. thick.
PO—Louisville, Colo.; SP—Same; CTY—Boulder; RR—Colo. & Southern.
MS—W. Andrews, Louisville, Colo.
S of H—Mules, rope. Track gage 36 in.
S of M—Electric mach. and punchers.
PP—Purchase power, 4 water tube boilers, total 450 H. P., 440 volts A. C., 5 pumps.
Last years tonnage 90,524.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.

BIG SIX COAL COMPANY, THE

Now part of Marshall Coal Company.

BLACK CANON COAL & FUEL CO., THE

General Office, 509 Tabor Bldg., Denver, Colo.
PR—Jno. Q. Royce, Wichita, Kan.
VP—S. S. Ott, Topeka, Kan.
TR—T. F. Crane, Denver, Colo.
GM—T. F. Crane, Denver, Colo.
GS—T. F. Crane, Denver, Colo.
PA—T. F. Crane, Denver, Colo.
SA—T. F. Crane, Denver, Colo.

Caddell Mine; Slope; Robinson and Cameron Seams; 36 inches thick.
PO—Walsenburg, Colo.; SP—Same; CTY—Huerfano; RR—D. & R. G. and C. & S.
MS—W. D. Robinson, Walsenburg, Colo.
S of H—Rope. Track gage 36 inches.
S of M—2 shortwall.
PP—Power purchased. Transformer 2,600 to 440 volts, A. C.
EMP—80. Last years tonnage 22,000.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

BLACK HAWK COAL CO., THE.

General Office, 731 Cooper Bldg., Denver, Colo.
PR—J. J. Wolfersperger, 731 Cooper Bldg., Denver, Colo.
VP—David Lewis, Rugby, Colo.
TR—Thos. F. Ahrens, 731 Cooper Bldg., Denver, Colo.
GM—J. J. Wolfersperger, 731 Cooper Bldg., Denver, Colo.
GS—David Lewis, Rugby, Colo.
PA—Thos. F. Ahrens, 731 Cooper Bldg., Denver, Colo.
SCO—Huerfano Trading Co. Buyer, Mr. Stroman, Rugby, Colo.
SA—The Southwestern Coal Co., Amarillo, Tex.

Primrose Mine; Slope; Primrose No. 2 Seam; 46 in. thick.
PO—Rugby, Colo.; SP—Same; CTY—Las Animas; RR—C. & S. and D. & R. C.
S of H—Mules and main rope. Track gage 36 in.
PP—Power purchased. Transformer 23,000 to 440 volts, motor geo. sets, 2 pumps.
EMP—50. Last years tonnage 34,102.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

BOOK CLIFF R. R. CO., (THE)

LESSEES—Book Cliff Coal Co., Grand Junction, Colo.
GM—Lou Luther, Grand Junction, Colo.
PA—Lou Luther, Grand Junction, Colo.
Book Cliff Mine; Drift; Book Cliff Seam; 72 in. thick.
PO—Grand Junction, Colo.; SP—Same, CTY—Mesa; RR—The Book Cliff
S of H—Mules and 2 steam locos. Track gage 36 in.
S of M—Hand.
EMP—14. Last years tonnage 12,000.
SIZES SHIPT—Slack, Nut, Egg, Lump.
PREP. EQUIPT—Screens.

BOULDER VALLEY COAL COMPANY

General Office, 512 Central Savings Bk. Bldg., Denver, Colo.
PR—P. M. Peltier, Denver, Colo.
GM—P. M. Peltier, Denver, Colo.
GS—E. Nesbit, Denver, Colo.
PA—P. M. Peltier, Denver, Colo.
EM—T. J. Knill, Lafayette, Colo.
SA—Big Four Coal & Coke Co., Denver, Colo.

Boulder Valley Mine; Shaft; Larimer Seam, 114 inches thick.
PO—Erie, Colo.; SP—Same; CTY—Weld; RR—Union Pacific.
MS—J. Weiler, Erie, Colo.
S of H—Mules and storage battery locos. Track gage 36 in.
S of M—Elec. machs. and punchers.
PP—Power purchased, 3 water tube boilers, 360 H. P.; 440 volts A. C., 5 pumps.
EMP—50. Last years tonnage 48,051.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.

BRENNAN COAL MINING CO., THE

General Office, Walsenburg, Colo.
PR—Fred O. Roof, Equitable Bldg., Denver, Colo.
VP—James Turner, Walsenburg, Colo.
TR—Ralph Snodgrass, Walsenburg, Colo.
GS—James Turner, Walsenburg, Colo.
SA—Huerfano Agency Co., Walsenburg, Colo.

(Continued on Next Page)

Brennan Coal Mining Co.—Cont.

Brennan Mine; Slope; Robinson Seam; 42 to 48 in. thick.
PO—Camp Shumway, Colo.; SP—Walsenburg, Colo.; CTY—Huerfano; RR—D. & R. G.
MS—James Turner, Walsenburg, Colo.
S of H—Mules and elec. hoist. Track gage 36 in.
S of M—4 shortwall machs.
PP—Power purchased, Transformer 22.-000 to 440 volts A. C.
EMP—75. Last years tonnage 49,097.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

BLOOMSBURG FUEL CO., THE
New Northwestern Fuel Co.

CADDELL & SON

PR—R. W. Caddell, Lester, Colo.
VP—E. R. Caddell, Lester, Colo.
GM—R. W. Caddell, Lester, Colo.
GS—E. R. Caddell, Lester, Colo.
EE—Cand Smith, Lester, Colo.
SCO—Colorado Supply Company.
Hezron Mine; Slope; Robinson Seam, 60 in. thick.
PO—Lester, Colo.; SP—Rouse Junction, Colo.; CTY—Huerfano; RR—D. & R. G.
SM—Mr. Henly, Lester, Colo.
S of H—Mules and elec. locos. Track gage 36 in.
S of M—Chain breast type machs.
PP—Power purchased, 440 volts 60 cycles A. C.
EMP—13. Last years tonnage 13,000.
SIZES SHIPT—Run of Mine.

CADDELL-TAGGART FUEL CO.

General Office, Walsenburg, Colo.
PR—Elmer E. Caddell, Walsenburg, Colo.
VP—C. W. Taggart, Walsenburg, Colo.
TR—R. W. Caddell, Walsenburg, Colo.
GM—R. W. Caddell, Walsenburg, Colo.
GS—Elmer E. Caddell, Walsenburg, Colo.
PA—Elmer E. Caddell, Walsenburg, Colo.
CE—C. W. Taggart, Walsenburg, Colo.
SA—Caddell-Taggart Fuel Co., Walsenburg, Colo.

Cachara-Canyon Mine; Slope; Cameron Seam, 38 inches thick.
PO—Walsenburg, Colo.; SP—Same; CTY—Huerfano; RR—D. & R. G.
S of H—Rope and steam locos. Track gage 36 inches.
S of M—Hand and comp. air puncher.
PP—1—125 H. P. water tube boiler.
EMP—15. Daily tonnage, 75.
SIZES SHIPT—Slack, Egg, Lump.
PREP. EQUIPT—Bar Screens.
NOTE—Formerly operated by the Cad-dell & Carlson Coal Co.

CALUMET FUEL COMPANY, THE

General Office, Judge Bldg., Salt Lake City, Utah.
PR—A. H. Cowie, Salt Lake City, Utah.
VP—J. B. Andrews, Denver, Colo.
TR—E. R. Dickerson, Equitable Bldg., Denver, Colo.
GS—W. C. Ferguson, Equitable Bldg., Denver, Colo.
PA—W. C. Ferguson, Equitable Bldg., Denver, Colo.
CE—E. H. Burdick, Salt Lake City, Utah.
EM—E. T. Ralph, Somerset, Colo.
SCO—Address the Company; Buyer, John Meston, Perins, Colo.
SA—W. C. Ferguson, Denver, Colo.

Perins Peak Mine; Drift; Mesa Verde Seam, 42-66 in. thick.
PO—Perins, Colo.; SP—Durango, Colo.; CTY—La Plata; RR—Rio Grande, Southern.
MS—Leo McCormick, Perins, Colo.
SM—A. Rader, Perins, Colo.
S of H—Mules and rope. Track gage, 36 in.
S of M—3 shortwall machs.
PP—Power purchased, transformer 6600-440 volts A. C.
EMP—81. Last years tonnage 68,762.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

CANON CRYSTAL COAL COMPANY

General Office, Box 233, Canon City, Colo.
PR—J. A. Moschetti, Canon City, Colo.
TR—L. D. Moschetti, Canon City, Colo.
PA—J. A. Moschetti, Canon City, Colo.
EM—Harry S. Thayer, Colorado Springs, Colo.
SA—L. D. Moschetti, Canon City, Colo.

Bassick Mine; Slope; Seam 60 inches thick.
PO—Canon City, Colo.; SP—Rockvale, Colo.; CTY—Fremont; RR—D. & R. G.
MS—Patty Moschetti, Canon City, Colo.
S of H—Steam hoist. Track gage 36 in.
S of M—Hand.
PP—1—40 H. P. water tube boiler.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Screens.

CANON-RELIANCE COAL CO., THE

General Office, Canon City, Colo.
PR—F. W. Allen, New York, N. Y.
VP—J. S. Cheyney, Canon City, Colo.
TR—Wm. E. Griswald, New York, N. Y.
GM—J. S. Cheyney, Canon City, Colo.
PA—J. S. Cheyney, Canon City, Colo.
EM—B. F. McFall, Florence, Colo.
EE—L. Roberts, Ojo, Colo.
SA—Jackson Walker Coal & Mining Co., Kansas City, Mo.

Reliance Mine; Drift; Mammoth Seam; 60 to 168 inches thick.
PO—Ojo, Colo.; SP—LaVeta, Colo.; CTY—Huerfano; RR—D. & R. G.
S of H—Mules and rope, steam loco. Track gage 42 inches.
S of M—Hand and 3 shortwall machs.
PP—4 water tube boilers, 320 H. P., transformer 22,000 to 440 volts A. C., 4 pumps, power purchased.
EMP—50. Last fiscal year output, 50,085 tons.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT—Revolving and Shaker Screens.
NOTE—This mine formerly operated by Alliance Coal Co.

"Canon" Mine; Shaft; Chandler Seam; 60 inches thick.
PO—Canon City, Colo.; SP—Same; CTY—Fremont; RR—A. T. & S. F.
MS—Mozart Lewis, Canon City, Colo.
S of H—Mules. Track gage 30 inches.
S of M—3 shortwall machs.
PP—Power purchased, Transformer 22.-000 to 440 volts A. C., M. G. sets, 250 volts D. C., 3 pumps.
EMP—80. Last fiscal year output, 31,236 tons.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.
NOTE—This mine formerly operated by Wolf Park Coal Co.

CASTLE COAL COMPANY

General Office, Walsenburg, Colo.
PR—A. J. Merritt, Walsenburg, Colo.
VP—J. B. Labring, Walsenburg, Colo.
TR—J. B. Labring, Walsenburg, Colo.
GM—A. J. Merritt, Walsenburg, Colo.
PA—J. B. Labring, Walsenburg, Colo.

Caprock Mine; Slope; Cameron Seam, 42 inches thick.
PO—Walsenburg, Colo.; SP—Same; CTY—Huerfano; RR—D. & R. G., C. & S.
MS—Wm. Merritt, Walsenburg, Colo.
S of H—Mules.
S of M—Hand and shortwall machs.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Bar Screens.
NOTE—Formerly operated by the Caprock Fuel Company.

CEDAR HILL COAL & COKE CO.

General Office, 505 Temple Court Bldg., Denver, Colo.
PR—J. M. Massey, Denver, Colo.
VP—J. M. Massey, Denver, Colo.
TR—J. M. Massey, Denver, Colo.
GM—J. M. Massey, Denver, Colo.
GS—Robt. Donaldson, Ludlow, Colo.
PA—J. M. Massey, Denver, Colo.
EM—Correy, Thompson & Fiske, Denver, Colo.

Black Diamond Mine; Slope; "Cameron" Seam; 3 to 4 ft. thick.
PO—Rugby, Colo. SP—Same. CTY—Las Animas. RR—C. & S.
S of H—Rope and Mules; track gage 36 in.
S of M—Hand.
PP—3 Water tube boilers, total 140 H. P., 1 pump.
EMP—43.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

Greenville Mine; Slope; Berwind Seam, 60 to 72 in. thick.
PO—Ludlow, Colo. SP—Same. CTY—Las Animas. RR—C. & S.
S of H—Rope and Mules; track gage 40 in.
S of M—Hand.
PP—2 water tube boilers, total 150 H. P., 440 volts A. C. 3 phases, 60 cycles, elec power purchased, 1 pump.
EMP—25. Average daily tonnage 100.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

CHICOSA FUEL COMPANY.

New part of Rocky Mountain Fuel Co.

COLORADO & UTAH COAL CO.

General Office, 1203 First National Bank Bldg., Denver, Colo.
PR—G. W. Harris, Denver, Colo.
VP—Chas. Shuler, Davenport, Iowa.
GS—B. A. Harris, Mt. Harris, Colo.
TR—B. A. Harris, Mt. Harris, Colo.
GM—B. A. Harris, Denver, Colo.
PA—H. L. Settergren, 1st Ntl. Bk. Bldg., Denver, Colo.
CE—George T. Haldeman, First National Bank Bldg., Denver, Colo.

EM—H. E. Caddell, Mt. Harris, Colo.
EE—Alex C. Burt, Mt. Harris, Colo.
SCO—Address the Company, Buyer, H. L. Settergren, 1st Ntl. Bk. Bldg., Denver, Colo.
SA—J. F. Emmert, First National Bank Bldg., Denver, Colo.

Harris Mine; Slope; Wadge Seam, 96 to 108 inches thick.
PO—Mt. Harris, Colo.; S—Same; CTY—Huerfano; RR—D. & S. L.
MS—H. A. Mallott, Mt. Harris, Colo.
SM—Frank C. Howell, Mt. Harris, Colo.
S of H—Mules and rope, 1 trolley pole type loco. Track gage 36 inches.
S of M—1 elec. mach.
PP—1 return tubular boilers, total 530 H. P., 1 120 K. W., 1 240 K. W. gen. units. Transformer 2,200 to 440 and 140 volts A. C., M. G. sets, 440 volts D. C., 440 volts, 110 volts A. C., and 440 volts D. C., in mine, 8 pumps.
EMP—300. Last years tonnage 246,296.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

COLORADO COLLIERIES CO.

General Office, 911 Foster Bldg., Denver, Colo.
PR—H. D. Lawrence, Buffalo, N. Y.
VP—V. P. Kinne, Buffalo, N. Y.
TR—D. E. Deadrick, Denver, Colo.
GM—W. A. Roam, Denver, Colo.
PA—W. A. Roam, Denver, Colo.
EM—W. A. Roam, Denver, Colo.
SCO—Address the Company, Buyer, A. T. Kent, Mt. Morrison, Colo.
SA—C. W. Barrett, Denver, Colo.

Satanic Mine; Shaft; Seam, 120 in. thick.
PO—Mt. Morrison, Colo.; SP—Same; CTY—Jefferson; RR—C. & S.
MS—G. E. Dunn, Mt. Morrison, Colo.
S of H—Mules. Track gage 36 in.
S of M—7 mining machs.
PP—Power purchased, transformer, 11,000-440 volts A. C., 4 pumps.
EMP—40. Last years tonnage 27,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.
NOTE—Successors to The Western Col-leries Co.

COLORADO FUEL & IRON CO. (THE)

General Office, Boston Bldg., Denver, Colo.
PR—J. F. Welborn, Denver, Colo.
VP—S. G. Pierson, Denver, Colo.
TR—S. G. Pierson, Denver, Colo.
GM—E. H. Weitzle, Pueblo, Colo.
MGB—D. A. Stout, Pueblo, Colo.
PA—J. B. Marks, Denver, Colo.
EE—Geo. S. Thompson, Pueblo, Colo.
SCO—Colorado Supply Co. Buyer, E. Redman, Pueblo, Colo.
SA—F. A. Aurelius, Denver, Colo.

Toller Mine; Shaft; Berwind Seam, 60 to 84 inches thick.
PO—Tollerburg, Colo.; SP—Same; CTY—Las Animas; RR—C. & S. and D. & R. G.
MS—D. L. Hansen, Tollerburg, Colo.
SM—T. E. Williams, Tollerburg, Colo.
S of H—Mules and rope. Track gage, 36 in.
S of M—2 shortwall machs.
PP—Power purchased, transformer 22.-000 to 440 volts A. C., 2 fire tube boilers, 200 H. P., 9 pumps.
EMP—200. Last years tonnage 153,719.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.
NOTE—Formerly operated by the Cedar Hill Coal & Coke Company.

Engle Mine; Drift; Laramie Seam, 60 inches thick.
MS—T. P. Davis, Engleburg, Colo.
SM—O. D. Williams, Engleburg, Colo.
PO—Engleburg, Colo.; SP—Same; Exp. Trinidad, Colo.; CTY—Las Animas; RR—D. & R. G.
S of H—Mules, main and tail rope and 2 trolley pole type locos. Track gage 36 inches.
S of M—Hand.
PP—Purchase power, transformer, 22.-000-440 volts A. C., motor gen. sets, 500 volts D. C., 4 fire tube boilers, 400 H. P., 4 pumps.
EMP—100. Last years tonnage 82,442.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

Crested Butte Mine; Drift; Crested Butte Seam, 108 to 300 inches thick.
PO—Crested Butte, Colo.; SP—Same; CTY—Gunnison; RR—D. & R. G., Crested Butte, Colo.
MS—W. J. Tyson, Crested Butte, Colo.
SM—R. W. Grizzard, Crested Butte, Colo.
S of H—Mules and rope; track gage 36 in.
S of M—Hand.

PP—5 fire tube boilers, 500 H. P., 2 pumps.
EMP—150. Last years tonnage 134,300. Coke ovens 154 Bee Hive.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

Berwind Mine; Drift; Seam 4 1/2 ft thick.
PO—Berwind, Colo.; SP—Frt., Berwind, Colo.; Exp., Ludlow, Colo.; CTY—Las Animas; RR—C. & S. and D. & R. G.
MS—F. C. Bennett, Berwind, Colo.
SM—J. P. Tatum, Berwind, Colo.
S of H—6 elec. loco., rope and mules. Track gage, 36 in.
S of M—Hand and 3 shortwall machs.
PP—2 fire tube boilers, 200 H. P., 12 pumps. Power from Tabasco mine, 500 volts D. C.
EMP—286. Last years tonnage 254,245.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

Tabasco Mine; Slope; Hastings Seam, 60 to 84 inches.
PO—Tabasco, Colo.; SP—Frt., Same; Exp., Ludlow, Colo.; CTY—Las Animas; RR—C. & S. and D. & R. G.
MS—F. C. Bennett, Berwind, Colo.
SM—L. M. Myers, Berwind, Colo.
S of H—Mules, main and tail rope and 2 trolley pole type locos, Track gage 36 inches.
S of M—Electric punchers, 2 short-wall machs.
PP—6 fire tube boilers, 600 H. P., 1 500 K. W., 4 120 K. W., gen. units, 500 volts D. C., 8 pumps.
EMP—230. Last years tonnage 203,715. Coke ovens 302 R-c Hive.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

Bouse Mine; Slope; Walsen Seam, 6 ft. thick.
PO—Rouse, Colo.; SP—Frt., Same; Exp., Monson, Colo.; CTY—Huerfano; RR—C. & S. and D. & R. G.
ACTING MS—R. H. Noah, Rouse, Colo.
SM—F. J. Young, Rouse, Colo.
S of H—Mules and rope; track gage 36 in.
S of M—Hand.

PP—2 water tube boilers, 1,000 H. P., 1—75 K. W. turbine generator, 6 pumps.
EMP—140. Last years tonnage 175,458.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaking Screens.
NOTE—This mine not in operation.

Lester Mine; Slope; Laramie Seam, 60 to 108 inches thick.
PO—Lester, Colo.; SP—Frt., Same; Exp., Monson, Colo.; CTY—Huerfano; RR—C. & S. D. & R. G.
MS—J. L. McBrayer, Lester, Colo.
SM—T. A. Henley, Lester, Colo.
S of H—Mules, rope and trolley pole type locos. Track gage, 36 in.
S of M—1 chain breast type and 1 shortwall mach.
PP—Power purchased, transformer 22.-000-440 volts A. C., motor gen. sets, 500 volts D. C., 5 pumps.
EMP—200. Last years tonnage 170,827.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

Ideal Mine; Slope; Robinson Seam, 48-72 inches thick.
PO—Ideal, Colo.; SP—Mayne, Colo.; CTY—Huerfano; RR—C. & S. D. & R. G.
MS—Arthur Samples, Ideal, Colo.
SM—Ernest Erskine, Ideal, Colo.
S of H—Mules, main and tail rope and 1 trolley pole type loco. Track gage, 36 inches.
S of M—Hand.
PP—Power purchased, transformer 22.-000-440 volts A. C., motor gen. sets, 250 volts D. C., 3 pumps.
EMP—160. Last years tonnage 160,068.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

Cameron Mine; Slope; Walsen Seam, 4 ft. thick.
PO—Farr, Colo.; SP—Walsenburg and Farr, Colo.; CTY—Huerfano; RR—C. & S. D. & R. G.
MS—C. A. Kaiser, Farr, Colo.
SM—James Donaldson, Farr, Colo.
S of H—Mules and rope. Track gage, 36 in.
S of M—Elec. puncher and 9 shortwall machs.
PP—Power purchased, transformer, 22.-000-440 volts A. C., motor gen. sets, 500 volts D. C., 1 100 H. P. fire tube boiler, 9 pumps.

(Continued on Next Page)

Colorado Fuel & Iron Co.—Cont.

EMP—210. Last years tonnage 235,277.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Washeries.

Walsen-Robinson Mines; Slopes; Laramie Seam, 60-108 inches thick.
PO—Walsen, Colo.; SP—Walsenburg, Colo.; CTY—Huerfano; RR—C. & S. P. & R. G.
MS—W. S. Getchell, Walsen, Colo.
SM—H. G. Lammie, Walsen, Colo.
S of H—Mules and trolley pole type locos. Track gage, 36 in.
S of M—19 shortwall machs.
PP—Purchased power, transformer 22,000-440 volts A. C., motor gen. sets, 500 volts D. C., 2 fire tube boilers, 200 H. P., 8 pumps.
EMP—250. Last years tonnage 494,587.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

Pictou Mine; Slopes; Walsen-Robinson Seam, 54-108 inches thick.
PO—Pictou, Colo.; SP—Walsenburg, Colo.; CTY—Huerfano; RR—C. & S. D. & R. G.
MS—W. S. Getchell, Walsen, Colo.
SM—W. B. Taylor, Pictou, Colo.
S of H—Mules and trolley pole type locos. Track gage, 36 in.
S of M—Electric punchers, 6 shortwall machs.
PP—Purchased power, transformer 6000-440 volts A. C., rotary converters, 500 volts D. C., 1 180 H. P., fire tube boilers, 5 pumps.
EMP—145. Last years tonnage 150,066.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

Coal Creek Mine; Shaft; Canon City Seam, 4 ft. thick.
PO—Coal Creek, Colo.; SP—Rockvale, Colo.; CTY—Fremont; RR—A. T. & S. F.
MS—Ben Beach, Coal Creek, Colo.
SM—F. W. Abbott.
S of H—Mules and rope; track gage 36 in.
S of M—Hand.
PP—Purchased power, transformer 22,000-440 volts A. C., motor gen. sets, 250 volts D. C., 3 pumps.
EMP—200. Last years tonnage 197,453.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaking Screens.

Rockvale Mine; Shaft; Canon City Seam, 42-60 inches thick.
PO—Rockvale, Colo.; SP—Same; CTY—Fremont; RR—A. T. & S. F.
MS—John D. Cribbs, Rockvale, Colo.
SM—E. O. Nordgren, Rockvale, Colo.
S of H—Mules and rope; track gage 40 in.
S of M—Hand.
PP—Purchased power, transformer 22,000-440 volts A. C., 5 fire tube boilers, 500 H. P., 8 pumps.
EMP—250. Last years tonnage 140,220.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

Fremont Mine; Shaft; Canon City Seam, 4 ft. thick.
PO—Florence, Colo. SP—Florence, Colo. CTY—Fremont; RR—D. & R. G.
MS—W. J. Davis, Florence, Colo.
S of H—Mules and rope. Track gage, 36 in.
S of M—Electric punchers and 2 long-wall machs.
PP—Power purchased, transformer 22,000-440 volts A. C., 4 fire tube boilers, 400 H. P., 8 pumps.
EMP—173. Last years tonnage 126,982.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaking Screens.

Nonac Mine; Slopes; Canon City Seam, 5½ ft. thick.
PO—Canon City, Colo.; SP—Same; CTY—Fremont; RR—A. T. & S. F.
MS—Chas. O'Neill, Canon City, Colo.
S of H—Mules and rope. Track gage, 36 in.
S of M—Electric punchers and shortwall machs.
PP—Purchase power, transformer 22,000-440 volts A. C., 2 fire tube boilers, 180 H. P., 4 pumps.
EMP—25. Last years tonnage 31,863.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

Primero Mine; Drift and Slopes; Laramie Seam, 60-84 inches thick.
PO—Primero, Colo.; SP—Same; CTY—Las Animas; RR—Colo. & Wyoming.

MS—F. T. Baker, Primero, Colo.
SM—E. G. Rodda, Primero, Colo.
S of H—Mules, main and tail rope and 6 trolley pole type locos. Track gage 36 inches.
S of M—Hand.
PP—Power purchased, transformer 22,000 to 440 volts A. C., M. G. sets, 550 volts D. C., 8 fire tube boilers, 800 H. P., 7 pumps.
EMP—225. Last years tonnage 243,599.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

Frederick Mine; Drift; Laramie Seam, 60-84 inches thick.
PO—Valdez, Colo.; SP—Same; CTY—Las Animas; RR—Colo. & Wyoming.
MS—James O'Neill, Valdez, Colo.
SM—Thomas Taylor, Valdez, Colo.
S of H—Mules and 4 trolley pole type locos. Track gage 36 inches.
S of M—Electric punchers and 3 short-wall machs.
PP—Purchase power, transformer 22,000-440 volts A. C., motor gen. sets, 550 volts D. C., 2 fire tube boilers, 200 H. P., 6 pumps.
EMP—224. Last years tonnage 248,036.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

Iezon Mine; Slopes; Robinson Seam, 72 inches thick.
PO—Lester, Colo.; SP—Same and Mayne; CTY—Huerfano; RR—C. & S. and D. & R. G.
MS—R. W. Caddell, Lester, Colo.
S of H—Mules and rope. Track gage, 36 in.
S of M—Hand.
PP—Purchase power, transformer 22,000-440 volts A. C.
Last years tonnage 11,496.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.
Note—Mine leased and operated by R. W. Caddell.

Morley Mine; Slopes and Drift; Laramie Seam, 5 ft. thick.
PO—Morley, Colo.; SP—Same; CTY—Las Animas; RR—A. T. & S. F.
MS—Chas. Chambers, Morley, Colo.
SM—C. L. Hudson, Morley, Colo.
S of H—Mules, main and tail rope and 2 trolley pole type locos.
S of M—Hand.
PP—6 fire tube boilers, 600 H. P., 2—100 K. W. gen. units, 250 volts D. C., 11 pumps.
EMP—320. Last years tonnage 365,431.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

Starkville Mine; Drift; Laramie Seam, 66 inches thick.
PO—Starkville, Colo. SP—Same. CTY—Las Animas; RR—A. T. & S. F.
MS—James Wilson, Starkville, Colo.
SM—W. W. Boyle, Starkville, Colo.
S of H—Mules and 7 trolley pole type locos. Track gage 40 inches.
S of M—Hand.
PP—Power purchased, transformer 44,000 to 370 to 440 volts A. C., rotary converters, 550 volts D. C., 3 fire tube boilers, 300 H. P., 4 pumps.
EMP—290. Last years tonnage 245,794. Coke Ovens, 190 Bee Hive.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

Sopris Mine; Drift and Slopes; Laramie Seam, 42 inches thick.
PO—Sopris, Colo.; SP—Same; CTY—Las Animas; RR—Colo. & Sou. Colo. & Wyoming.
MS—John Dehossio, Sopris, Colo.
SM—D. J. Phillips, Sopris, Colo.
S of H—Mules, main and tail rope and 4 trolley pole type locos. Track gage 38 inches.
S of M—4 shortwall machs.
PP—Power purchased, transformer 22,000 to 370 to 440 volts, 8 fire tube boilers, 800 H. P., 9 pumps.
EMP—410. Last years tonnage 259,518. Coke Ovens, 190 Bee Hive.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

Elk Mountain Mine; Drift; Seam, 84 inches thick.
PO—Crested Butte, Colo.; SP—Same; CTY—Gunnison; RR—D. & R. G.
MS—W. J. Tyson, Crested Butte, Colo.

S of H—Mules and rope. Track gage 36 inches.
S of M—2 shortwall machs.
PP—4 fire tube boilers, 400 H. P., 2 pumps.
EMP—15. Last years tonnage 17,722.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

Kebler Nos. 1 and 2 Mines; Slopes; Walsen Seam, 60 in. thick.
PO—Tioga, Colo.; SP—Exp., Walsenburg, Colo.; Frit., Tioga, Colo.; CTY—Huerfano.
MS—S. S. Temple, Tioga, Colo.
SM—C. P. Feulhauser, Tioga, Colo.
S of H—Mules and rope. Track gage 36 inches.
S of M—7 compressed air, 4 shortwall machs.
PP—Power purchased, transformer 6000 to 440 volts A. C., 2 fire tube boilers, 200 H. P., 14 pumps.
EMP—175. Last years tonnage 88,450.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.
Note—Formerly operated by Big Four Coal & Coke Co.

Segundo Coke Plant.
PO—Segundo, Colo.; SP—Same; CTY—Las Animas; RR—Colorado and Wyoming.
MS—W. E. Panford, Segundo, Colo.
SM—C. H. Boyd, Segundo, Colo.
S of H—Larry cars. Track gage, 36 inches.
PP—Power purchased, transformer 22,000-440 volts A. C., motor gen. sets, 250 volts D. C., 4 fire tube boilers, 400 H. P., 5 pumps.
EMP—92. Last years tonnage 102,412. Coke Ovens, 800 Bee Hive.
PREP. EQUIPT—Washeries.

Jobal Mine; Slopes; Lennox and Sun-shine Seams.
PO—Pictou, Colo.; SP—Walsenburg, Colo.; CTY—Huerfano; RR—D. & R. G.
MS—W. S. Getchell, Walsen, Colo.
SM—W. B. Taylor, Walsen, Colo.
S of H—Main and tail rope. Track gage 36 inches.
S of M—4 shortwall machs.
PP—Power purchased, transformer 6600 to 440 volts A. C.
EMP—70. Last years tonnage 29,057.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.
NOTE—Formerly operated by the Loma Fuel Company.

Emerald Mine; Slopes; Canon City Seam, 42 to 60 inches thick.
PO—Florence, Colo.; SP—Rockvale, Colo.; CTY—Fremont; RR—D. & R. G.
MS—W. J. Davis, Florence, Colo.
S of H—Mules, rope. Track gage 36 in.
S of M—Hand.
PP—Power purchased, transformer 22,000 to 440 volts A. C., 2 pumps.
EMP—45. Last years tonnage 17,455.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.
NOTE—Formerly operated by the Williamsburg Slope Coal Co.

COLORADO SPRINGS CO., THE

General Office, Colorado Springs, Colo.
PR—Geo. A. Krause, Colorado Springs, Colo.
VP—Thos. J. Fisher, Colorado Springs, Colo.
TR—Thos. J. Fisher, Colorado Springs, Colo.
GM—J. R. Young, Colorado Springs, Colo.
PA—J. R. Young, Colorado Springs, Colo.
CE—P. W. Whiteside, Trinidad, Colo.

City No. 1 Mine; Slopes; Lignite Seam; 216 inches thick.
PO—Colorado Springs, Colo.; SP—Same; CTY—El Paso; RR—A. T. & S. F.
MS—John Streeman, Colorado Springs, Colo.
S of H—Mules and rope. Track gage 36 inches.
S of M—Hand, chain breast mach.
PP—Power purchased, transformer 440 volts A. C., 4 pumps.
EMP—50. Last years tonnage 66,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

60MINOTTI & COMPANY

General Office, Rugby, Colo.
PR—Wm. Minottti, Rugby, Colo.
TH—Frank D. La Guardia, Rugby, Colo.
Star Mine; Drift; Walsen Seam, 36-48 inches thick.
PO—Rugby, Colo.; SP—Same; CTY—Las Animas; RR—C. & S.
MS—Wm. Minottti, Rugby, Colo.

S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—12. Last years tonnage 8,500.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.
Note—Formerly operated by the Premium Coal Company.

COMMERCIAL COAL & OIL COMPANY

Out of Business.

CONSOLIDATED COAL & COKE CO., THE.

General Office, 321 Empire Bldg., Denver, Colo.
PR—C. L. Baum, Denver, Colo.
TR—C. L. Baum, Denver, Colo.
GM—C. W. Smith, Denver, Colo.
GS—Stanley Rice, Dacono, Colo.
PA—C. L. Baum, Denver, Colo.
CE—C. W. Smith, Denver, Colo.
EE—Elmer Weetbee, Dacono, Colo.

Baum Mine; Shaft; Lignite Seam, 66 to 116 in. thick.
PO—Dacono, Colo.; SP—Frederick, Colo.; CTY—Weld; RR—Union Pacific.
S of H—Mules and 2 trolley pole type locos. Track gage 36 in.
S of M—5 chain breast and 2 short-wall machs.
PP—Power purchased, transformer 66,000-250 and 120 volts A. C., 1 100 K. W. M. G. set, 250 volts D. C., 4 125 H. P. fire tube boilers, 12 pumps.
EMP—101. Last years tonnage 106,087.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaking Screen.

CONVERSE COAL COMPANY

General Office, Paonia, Colo.
PR—Frank Converse, Paonia, Colo.
VP—A. B. Converse, Paonia, Colo.
TR—F. E. Converse, Paonia, Colo.
GM—Frank Converse, Paonia, Colo.
GS—L. L. Converse, Paonia, Colo.
PA—Frank Converse, Paonia, Colo.
CE—Abner McKee, Paonia, Colo.

Converse Mine; Drift; Seam 216 inches thick.
PO—Paonia, Colo.; SP—Same; CTY—Delta; RR—D. & R. G.
S of H—Mules. Track gage 34 inches.
S of M—Hand.
Daily tonnage 30.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

CORLEY, W. D.

GM & Owner—Corley, W. D. Colorado Springs, Colo.

Klondike Mine; Sub-bituminous Seam, 84 in. thick.
PO—Colorado Springs, Colo. SP—Breed, Colo. CTY—El Paso. RR—A. T. & S. F.
MS—W. K. Anderson, Colorado Springs, Colo.

S of H—Mules.
S of M—3 elec. locos.
PP—2 return tubular boilers, total 250 H. P., 440 volts A. C., 3 phase, 60 cycles. Purchase power.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
(Old Information.)

COWIE COAL COMPANY, THE

PR—James Cowie, Boulder, Colo.
TR—James Cowie, Boulder, Colo.
GM—James Cowie, Boulder, Colo.

Cowie Mine; Slopes; 60 inches thick.
PO—Boulder, Colo.; SP—Marshall, Colo.; CTY—Boulder; RR—Colorado & Southern, Main Line.
S of H—1 comp. air loco.
S of M—1 comp. air mach.
PP—1 return tubular boiler, total 60 H. P.
Daily output, 30 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
Old Information.

CRACKER JACK COAL COMPANY.

General Office, 1800 Bluebell Ave., Boulder, Colo.
TR—W. W. Morgan, 1800 Bluebell Ave., Boulder, Colo.
GM—W. W. Morgan, 1800 Bluebell Ave., Boulder, Colo.

Cracker Jack Mine; Slopes; Lignite Seam, 96 in. thick.
PO—Boulder, Colo.; SP—Same; CTY—Boulder; RR—C. & S.
MS—W. W. Morgan, 1800 Bluebell Ave., Boulder, Colo.
S of H—Mules. Track gage 36 in.
S of M—3 comp. air machs.
PP—Purchase power. Transformer 1,300 to 440 volts.
EMP—24. Last years tonnage 12,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.
Note—Successors to Morgan & Williams Coal Co.

CRESTED BUTTE ANTHRACITE MNG. CO.
General Office, 850 Equitable Bldg., Denver, Colo.
PR—Frank Bulkley, Denver, Colo.
VP—R. F. Bulkley, Denver, Colo.
TR—J. M. Page, Crested Butte, Colo.
GS—J. M. Page, Crested Butte, Colo.
PA—J. M. Page, Crested Butte, Colo.
EM—J. M. Page, Crested Butte, Colo.
SA—P. C. Ewing, 850 Equitable Bldg., Denver, Colo.

Smith Anthracite Mine; Slope; Seam 48 in. thick.
PO—Crested Butte, Colo.; SP—Anthracite, Colo.; CTY—Gunnison; RR—D. & R. G.
MS—M. E. Somerville, Crested Butte, Colo.
S of H—Mules and 60 H. P. steam hoist. Track gage 36 in.
S of M—Hand.
PP—1 60 H. P. and 1 80 H. P. boiler.
EMP—50. Daily output, 200.
SIZES SHIPT—Slack, Pca, Nut, Egg, Lump.
PREP. EQUIPT—Revolving Screens, Picking Tables.

THE CRESTED BUTTE COAL CO.
General Office, 850 Equitable Bldg., Denver, Colo.
PR—Frank Bulkley, Denver, Colo.
VP—R. F. Bulkley, Casper, Wyo.
TR—Joseph Gledart, Denver, Colo.
GM—P. G. Elden, Crested Butte, Colo.
GS—J. M. Page, Crested Butte, Colo.
PA—Joseph Gledart, Denver, Colo.
EM—J. M. Page, Crested Butte, Colo.
SA—P. C. Ewing, 850 Equitable Bldg., Denver, Colo.

Bulkley Mine; Slope; No. 3 Seam; 72 inches thick.
PO—Crested Butte, Colo.; SP—Same; CTY—Gunnison; RR—D. & R. G.
MS—John McIntyre, Crested Butte, Colo.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—40. Daily output, 150 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

CURTIS COAL CO. (THE).
General Office, Colorado Springs, Colo.
PR—W. W. Curtis, Colorado Springs, Colo.
VP—Harry Jackson, Colorado Springs, Colo.
TR—W. W. Curtis, " " "
GM—W. W. Curtis, " " "
PA—W. W. Curtis, " " "
Curtis Routt Mine; Slope; Seam 56 to 64 in. thick.
PO—Miller, Colo.; SP—Same; CTY—Routt; RR—D. & S. L.
S of H—Rope and mules. Track gage 36 inches.
S of M—Hand and 1 Shortwall mach.
PP—60 H. P. fire tube boiler, 1 62½ K. W. gen. unit, 250 volts D. C., 3 pumps.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.
NOTE—Not operating. 10-1-21

DICK COAL CO.
General Office, Walsenburg, Colo.
PR—James B. Dick, Walsenburg, Colo.
VP—Jas. B. Dick, Jr., Walsenburg, Colo.
TR—Andrew J. Morrett, Walsenburg, Colo.
GM—James B. Dick, Walsenburg, Colo.
GS—Robert E. Graham, Bon Carbo, Colo.
PA—James B. Dick, Walsenburg, Colo.
SA—Huerfano Agency, Walsenburg, Colo.
Dick Mine; Drift; Primero Seam.
PO—Bon Carbo, Colo.; SP—Same; CTY—Las Animas; RR—D. & R. G.
S of H—Storage Battery loco. Track gage 36 in.
S of M—1 chain breast type and 1 short-wall mach.
PP—Power purchased, 440 volts, 60 cycle, 3 phase, 1 pump.
EMP—25.

THE ELK CREEK MINING CO.
Now a part of the Amalgamated Development Corp.

THE EMPIRE COAL MINING CO.
General Office, 809 Interstate Trust Bldg. Denver, Colo.
PR—J. W. Siple, Denver, Colo.
TR—R. D. Mathens, Denver, Colo.
GM—J. W. Siple, Denver, Colo.
PA—R. D. Mathens, Denver, Colo.
EM—V. V. Parton, Aguilar, Colo.

Empire Mine; Slope; Peerless Seam; 78 inches thick.
PO—Aguilar, Colo.; SP—Frt. Aguilar, Expr. Lynn; CTY—Las Animas; RR—Colorado & Southern.
MS—Wm. Hoss, Aguilar, Colo.
S of H—Mules and rope. Track gage 36 inches.
S of M—Hand.
PP—Power purchased. Transformer 13,000 to 440 volts A. C., M. G. sets, 440 volts D. C., 1 40 H. P. fire tube boiler, 13 pumps.

EMP—90. Last years tonnage 56,400.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

ENGINEERS' LEASING CO.
General Office, 709-710 Exchange Bldg., Denver, Colo.
TR—R. S. Jamison, Denver, Colo.
GM—W. B. Milliken, Denver, Colo.
GS—John G. Miller, Lafayette, Colo.
PA—W. B. Milliken, Denver, Colo.
EM—W. B. Milliken, Denver, Colo.
SA—W. B. Milliken, Denver, Colo.

Cambria Mine Slope; Simpson Seam; 84 in. thick.
PO—Lafayette, Colo.; SP—Same; CTY—Rouder; RR—C. R. & Q.
MS—John G. Miller, Lafayette, Colo.
S of H—Mules and rope, comp. air and steam locos. Track gage 30 inches.
S of M—5 comp. air pumps.
PP—2 200 H. P. fire tube boilers, 5 pumps.
EMP—60. Last years tonnage 40,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

EUREKA COAL MINING CO.
General Office, 115 W. 1st St., Trinidad, Colo.
VP—E. J. Churchill, Denver, Colo.
TR—Jas. P. Hoyer, Trinidad, Colo.
GS—Jas. P. Hoyer, Trinidad, Colo.
PA—Jas. P. Hoyer, Trinidad, Colo.
SA—Jas. P. Hoyer, Trinidad, Colo.

Macoye Mine; Drift; Delagua Seam, 66 in. thick.
PO—Bon Carbo, Colo.; SP—Trinidad, Colo.; CTY—Las Animas; RR—D. & R. G.
MS—Thos. F. Hoyer, Bon Carbo, Colo.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
Last years tonnage 42,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.

EVANS FUEL CO. THE.
Now International Fuel Corp.

FAIRVIEW COAL CO.
General Office, Box 173, Trinidad, Colo.
GM—Lee Davis, Box 173, Trinidad, Colo.
GS—W. H. Owen, Box 173, Trinidad, Colo.

Fairview Mine; Drift; Seam 32 in. thick.
PO—Trinidad, Colo.; SP—Same; CTY—Las Animas; RR—A. T. & S. F. and C. & W.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—Generate Power.
Daily tonnage 40.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.

FEDERAL COAL MINING CO.
Out of business.

FICKES, FRANK M.
Now Red Canon Coal Company.

FLORENCE-CANON COAL COMPANY, THE
General Office, Florence, Colo.
PR—J. D. Blunt, Florence, Colo.
VP—John Lippis, Canon City, Colo.
TR—J. D. Blunt, Florence, Colo.
GM—Roland Blunt, Florence, Colo.
GS—Roland Blunt, Florence, Colo.
PA—D. A. McCall, Florence, Colo.
SA—Address the Company, Buyer, D. A. McCall.

The Florence-Canon Coal Co., Florence, Colo.
Florence Canon Mine; Drift; Canon City Coal Seam; 36 in. thick.
PO—Florence, Colo.; SP—Same; CTY—Fremont; RR—Denver & Rio Grande.
S of H—Rope, trolley pole type loco. Track gage 36 inches.
S of M—1 longwall mach.
PP—Power purchased, 440 volts A. C.
EMP—30. Daily tonnage 150.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity and Revolving Screens.

FOX COAL MINING COMPANY.
GM—S. A. Snyder, 830 18th St., Denver, Colo.
Sales Agent, S. A. Snyder, Denver, Colo.
Fox Mine; Shaft.
PO—Gorham, Colo. SP—Marshall, Colo.
CTY—Rouder, RR—Colo. & Sm.
MS—Henry Risher, Gorham, Colo.
S of H—Mules. Track gage 30 in.
S of M—3 comp. air machs.
PP—2 return tubular boilers, total 180 H. P. 440 volts A. C.
Daily Output—400 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.

GARFIELD COAL MINING CO. (THE).
General Office, Palisade, Colo.
PR—Geo. W. Bowman, Palisade, Colo.
VP—Geo. Smith, Palisade, Colo.
TR—S. M. Logan, Grand Junction, Colo.
GM—Geo. Smith, Palisade, Colo.
PA—Geo. Smith, Palisade, Colo.
EM—R. E. Mearns, Grand Junction, Colo.

Garfield Mine; Slope; Palisade Seam, 90 in. thick.
PO—Palisade, Colo.; SP—Same; CTY—Mear; RR—Denver & Rio Grande.
MS—Geo. Smith, Palisade, Colo.
S of H—Mules and gasoline locos. Track gage 36 in.
S of M—Room and pillar elec. machs.
PP—Power purchased. Transformer 440 volts A. C.
EMP—30. Daily tonnage 200.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

GIBSON LUMBER & FUEL CO.
General Office, Canon City, Colo.
PR—D. E. Gibson, Canon City, Colo.
VP—Herman Locher, Canon City, Colo.
TR—Herman Locher, " " "
GM—Herman Locher, " " "
GS—Herman Locher, " " "
EM—Jas. Ruten, " " "
EF—O. O. Spell, Canon City, Colo.
SA—Address the Company, Buyer, Peter Balfour, Canon City, Colo.
Sales Agent, Herman Locher, Canon City, Colo.

Royal Gorge Mine; Slope; Canon City Seam, 48 to 84 in. thick.
PO—Canon City, Colo. SP—Same. CTY—Fremont, RR—Santa Fe.
MS—Stanley Pavelsky, Canon City, Colo.
S of H—Mules, direct power elec. loco. Track gage, narrow.
S of M—Hand.
PP—500 volts A. C., 2 pumps. Purchase power.
EMP—75. Last years tonnage 48,000.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

GILSON ASPHALTUM CO.
General Office, Land Title Bldg., Philadelphia, Pa.
PR—Arthur Swell, Philadelphia, Pa.
VP—L. B. Bissen, Philadelphia, Pa.
TR—Ira Atkinson, Philadelphia, Pa.
GM—Jas. E. Hood, Mack, Colo.
GS—Homer D. Ford, Watson, Utah.
PA—Homer D. Ford, Watson, Utah.

Carbonera Mine; Drift; 66 to 96 in. thick.
PO—Mack, Colo.; SP—Carbonera, Colo.; CTY—Garfield; RR—Unita.
S of H—Mules. Track gage 40 in.
S of M—Hand.
EMP—15. Daily tonnage 75.
SIZES SHIPT—Run of Mine.

GORDON COAL COMPANY.
General Office, Walsenburg, Colo.
PR—Jas. B. Dick, Sr., Walsenburg, Colo.
VP—John J. Pritchard, Walsenburg, Colo.
TR—J. J. Pritchard, " " "
GM—Geo. B. Dick, Walsenburg, Colo.
GS—Jas. B. Dick, Jr., Walsenburg, Colo.
PA—James B. Dick, Walsenburg, Colo.
EE—Thos. Gale, Camp Shumway, Colo.
SA—Huerfano Trading Co., Buyer, John Kirkpatrick, Walsenburg, Colo.
SA—Huerfano Agency Co., Walsenburg, Colo.

Gordon Mine; Slope; Camron Seam, 48 in. thick.
PO—Camp Shumway, Colo. SP—Gordon Mine Walsenburg, Colo. CTY—Huerfano, RR—D. & R. G.
MS—Ralph Peli, Camp Shumway, Colo.
SM—Wm. Bann, Camp Shumway, Colo.
S of H—4 storage battery locos. Track gage 26 in.
S of M—4 shortwall machs.
PP—Power purchased. Transformer 6,600 to 440 volts A. C., 3 phase 60 cycle 2 pumps.
EMP—150. Daily tonnage 250.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

GRAND JUNCTION MINING & FUEL CO.
General Office, 750 Equitable Bldg., Denver, Colo.
PR—G. W. McNeil, Denver, Colo.
TR—A. M. McNeil, Denver, Colo.
GM—G. W. McNeil, Denver, Colo.
GS—G. W. McNeil, Denver, Colo.
PA—G. W. McNeil, Denver, Colo.

EE—C. P. Anderson, Cameo, Colo.
SA—Cameo Mercantile Co. Buyer, Wm. Layden, Cameo, Colo.
SA—H. E. Stewart, Denver, Colo.

Cameo Mine; Drift; Cameo Seam, 72 in. thick.
PO—Cameo, Colo.; SP—Same; CTY—M. & R. G.
MS—John Smith, Cameo, Colo.
S of H—Mules, 3 trolley pole type elec. and 1 storage battery loco. Track gage, 36 in.
S of M—1 shortwall machs.
PP—2 water tube boilers, total 500 H. P., 2 gen. units, 250 volts D. C., 1 pump.
EMP—10. Last years tonnage 101.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker & Rotary Screens.

GRAND VIEW COAL CO.
Now Midwest Coal & Iron Co.

HALL, A. W. & SON
General Office, Cedaredge, Colo.
GS—A. W. Hall, Cedaredge, Colo.
PA—A. W. Hall, Cedaredge, Colo.
EM—A. H. Batton, Cedaredge, Colo.

Red Mountain Mine; Slope; Rollins Seam, 96 inches thick.
PO—Cedaredge, Colo.; SP—Delta, Colo.; CTY—Delta; RR—D. & R. G.
S of H—Steam loco. Track gage 36 in.
S of M—Hand.
PP—2 fire tube boilers, 150 H. P., 1 pump.
EMP—1. Last years tonnage, 4701.
SIZES SHIPT—Nut, Lump.
PREP. EQUIPT—Gravity Screens.

HARRIS, E. R. & CO.
General Office, Coal Creek, Colo.
TR—E. R. Harris, Coal Creek, Colo.
GM—E. R. Harris, Coal Creek, Colo.
GS—E. R. Harris, Coal Creek, Colo.
EM—J. G. McNatt, Florence, Colo.
SA—E. R. Harris, Coal Creek, Colo.

Double Duck Mine; Slope; Seam, 30 in. thick.
PO—Coal Creek, Colo.; SP—Florence, Colo.; CTY—Fremont; RR—D. & R. G.
S of H—Mules. Track gage, 36 in.
S of M—1 longwall mach.
PP—Power purchased. Transformer 25,000-440 volts A. C., rotary converters, 440 volts D. C.
EMP—8. Last local year output, 4,000 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.
Old Information

HAYDEN BROS. COAL CORP. (THE)
General Office, No. 1 Tramway Bldg., Denver, Colo.
OWNERS—W. F. Hayden and L. A. Hayden, Denver, Colo.
PR—L. A. Hayden, Denver, Colo.
VP—W. F. Hayden, Denver, Colo.
GM—L. A. Hayden, Denver, Colo.
SA—C. W. Brown, Denver, Colo.

Hayden Mine; Slope; Pinnacle Seam, 84 in. thick.
PO—Hayden, Colo. SP—Same. CTY—Routt; RR—D. & S. L.
S of H—Mules and rope. Track gage 36 in.
S of M—Hand and 1 mining mach.
PP—6 return tube boilers, total 900 H. P., 2 gen. units, 600 K. W., 250 volts D. C., 5 pumps.
EMP—100. Last years tonnage 70,000.
SIZES SHIPT—Slack, Pca, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

HESPERUS FUEL COMPANY.
General Office, Hesperus, Colo.
PR—W. I. Gifford, Hesperus, Colo.
VP—J. R. C. Tyler, 1020 Emerson St., Denver, Colo.
TR—Rose Gifford, Hesperus, Colo.
GM—W. I. Gifford, " " "
PA—W. I. Gifford, " " "
EM—A. L. Krueger, Durango, Colo.
EE—John Roberts, Hesperus, Colo.
SA—Address the Company, Buyer, W. I. Gifford, Hesperus, Colo.
SA—W. I. Gifford, Hesperus, Colo.

Hesperus Mine; Drift; Fox Hills Seam, 66 to 72 in. thick.
PO—Hesperus, Colo. SP—Same. CTY—La Plata; RR—Rio Grande, Sm.
MS—William Galt, Hesperus, Colo.
SM—R. A. Gifford, Hesperus, Colo.
S of H—Mules and 1 elec. loco. Track gage 36 in.
S of M—Hand.
PP—2 150 return tubular boilers, total 250 H. P., 2 gen. units, 250 volts D. C., 5 pumps.
EMP—50. Last years tonnage 24,002.
SIZES SHIPT—Run of Mine, Slack, Pca, Nut, Lump.
PREP. EQUIPT—Bar Screens.

HUERFANO COAL COMPANY.

General Office, Denver, Colo.
 PR—S. S. Murphy, Denver, Colo.
 GM—S. S. Murphy, " "
 TR—N. C. Anderson, " "
 GS—F. McDermott, Ludlow, Colo.
 PA—S. S. Murphy, Denver, Colo.

Ludlow Mine; Drift; "Hastings" or "Berwind" Seams, 48 to 72 in. thick.

PO—Ludlow, Colo.; SP—Same; CTY—Las Animas, RR—Colo. & Sou. D. & R. G.

MS—F. McDermott, Ludlow, Colo. S of H—Mules and rope. Track gage 36 in.

S of M—Hand and 3 elec. machs. PP—Purchase power. Transformer 2,300 to 440 volts, 4 fire tube boilers, 400 H. P.

EMP—120. Last years tonnage 100,000. SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Shaker Screens, Picking Tables.

HUNTER, J. B. COAL COMPANY

Hunter Mine; Slope; Seam 60 inches thick.

PO—Fruita, Colo.; SP—Same; CTY—Mesa; RR—D. & R. G.

MS—J. B. Hunter, Fruita, Colo. S of M—Mules.

SIZES SHIPT—Nut, Lump. PREP. EQUIPT—Bar Screens, Washeries.

IDEAL FUEL COMPANY

Now Jewell Coal Company.

INDEPENDENT LUMBER COMPANY

General Office, Hotchkiss, Colo.
 PR—C. A. Biggs, Canon City, Colo.
 VP—Clyde Biggs, Grand Junction, Colo.
 TR—Wm. Mack, Delta, Colo.
 GM—W. C. Kurtz, Grand Junction, Colo.
 GS—C. E. Goddard, Hotchkiss, Colo.

Kurtzville Mine; Drift; Seam, 144 in. thick.

PO—Hotchkiss, Colo.; SP—Same; CTY—Delta; RR—D. & R. G.

MS—Guy Lewis, Hotchkiss, Colo. S of H—Mules.

S of M—Hand. PREP. EQUIPT—Bar Screen.

INTERNATIONAL FUEL COMPANY

Now International Fuel Corp.

INTERNATIONAL FUEL CORP.

General Office, 328 Gas & Electric Bldg., Denver, Colo.

PR—Geo. Zarlengo, Denver, Colo. VP—L. B. Domenico, Denver, Colo.

TR—F. Frazzini, Denver, Colo. GM—Geo. Zarlengo, Denver, Colo.

PA—J. H. Domenico, Denver, Colo. EM—J. E. Leper, Hayden, Colo., G. E. Wilson, Boulder, Colo.

Sales Manager—H. C. Schnepf, Denver, Colo.

Wolf Creek Mine; Drift; Wolf Creek Seam, 208 in. thick.

PO—Mt. Harris, Colo.; SP—Same; CTY—Routt; RR—Denver & Salt Lake.

MS—S. Domenico, Mt. Harris, Colo. S of H—Mules and rope. Track gage 36 in.

S of M—Hand. PP—2 fire tube boilers, 150 H. P., 3 pumps.

EMP—40. Last years tonnage 17,411. SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Shaker Screens.

Evans Mine; Shaft; Lignite Seam, 84-96 in. thick.

PO—Frederick, Colo.; SP—Same; CTY—Weld; RR—Union Pacific.

MS—L. B. Domenico, Frederick, Colo. S of H—Mules and electric locos.

S of M—4 comp. air punchers. PP—Power purchased. 1—150 H. P. and 2—125 H. P. water tube boilers, 20 pumps.

EMP—150. Last years tonnage 130,000. SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Shaker Screens.

Champion Mine; Shaft; Lignite Seam, 48-72 in. thick.

PO—Louisville, Colo.; SP—Same; CTY—Boulder; RR—C. & S. (Louisville Br.)

MS—J. E. Daily, Boulder, Colo. S of H—Mules, main and tail rope. Track gage 30 inches.

S of M—6 comp. air machs. PP—Power purchased. Transformer 2300 to 440 volts A. C., M. G. Sets, 440 and 110 volts D. C., 3 fire tube boilers, total 180 H. P., 10 pumps.

EMP—84. Last years tonnage 33,000. SIZES SHIPT—Run of Mine, Slack, Lump, Nut.

PREP. EQUIPT—Shaker Screens, Picking Tables.

JEFFRIES FUEL COMPANY, THE.

General Office, Trinidad, Colo.
 PR—E. H. Jeffries, Trinidad, Colo.
 VP—A. G. Jeffries, Trinidad, Colo.
 GS—A. G. Jeffries, " "
 GM—A. G. Jeffries, " "
 PA—A. G. Jeffries, " "
 SC—Jeffries Bros., Buyer, A. G. Jeffries, Trinidad, Colo.

SA—A. G. Jeffries, Trinidad, Colo. Jeffries Mine; Drift; Starkville Seam, 52 to 72 in. thick.

PO—Trinidad, Colo.; SP—Same; CTY—Las Animas; RR—A. T. & S. F., C. & S.

S of H—Mules and trolley pole type locos. Track gage 36 in.

S of M—2 shortwall machs. PP—550 volt D. C. Purchase power.

EMP—42. Last years tonnage 35,621. SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Gravity Screens.

JEWELL COAL CO.

General Office, 518-19 Denham Bldg., Denver, Colo.

PR—Arch. Bean, Denver, Colo. VP—R. A. Cox, Aguilar, Colo.

TR—John M. Yearlick, Denver, Colo. GM—Arch. Bean, Denver, Colo.

PA—Arch. Bean, Denver, Colo. EM—C. B. Carey, Trinidad, Colo.

EE—Harry Smith, Aguilar, Colo. Jewell Mine; Drift; Robinson Seam, 60 in. thick.

PO—Aguilar, Colo.; SP—Lyon, Colo. CTY—Las Animas; RR—C. & S.

S of H—Mules and elec. hoist. Track gage, 36 inches.

S of M—2 shortwall machs. EMP—75. Last years tonnage 3,000.

SIZES SHIPT—Slack, Nut, Lump. PREP. EQUIPT—Shaker Screens.

Note—Successors to Ideal Fuel Co.

JONES, R. C.

General Office, Bear River, Colo. PR—R. C. Jones, Bear River, Colo.

Drift; Pinnacle Seam, 1-3 in. thick. PO—Bear River, Colo.; SP—Same; CTY—Routt; RR—D. & S. L.

S of H—Mules. S of M—Hand and chain breast type machs.

PP—Generate power. SIZES SHIPT—Slack, Nut, Lump.

Old Information.

JUANITA COAL & COKE CO.

General Office, Pueblo, Colo.
 PR—A. T. King, Milwaukee, Wis.
 VP—M. D. Thatcher, Pueblo, Colo.
 TR—A. S. Booth, " "
 GM—J. S. Bowie, " "
 PA—J. S. Bowie, " "
 EM—W. D. Bowie, " "

King Mine; Slope; King and Bowie Seams, King 132 in. and Bowie 276 in. thick.

PO—Bowie, Colo.; SP—Same; CTY—Delta; RR—D. & R. G., North Fork Br.

MS—Alex. R. Bowie, Bowie, Colo. S of H—Mules, main and tail rope, storage battery loco. Track gage 42 in.

S of M—Hand. PP—2 return tube boilers, total 250 H. P., 1—50 K. W. Gen. unit, 500 volts D. C., 5 pumps.

EMP—100. Last years tonnage 104,000.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Shaker Screens.

LEYDEN COAL COMPANY, THE

General Office, 707 Tramway Bldg., Denver, Colo.

PR—C. C. Parks, First National Bk. Bldg., Denver, Colo.

TR—W. F. Rogers, First National Bk. Bldg., Denver, Colo.

GM—W. D. McCausland, Denver, Colo. GS—W. D. McCausland, Denver, Colo.

PA—Wm. Mathews, 707 Tramway Bldg., Denver, Colo.

EM—Geo. E. Wilson, Boulder, Colo. Leyden No. 3 Mine; Shaft; Leyden B Seam, 120 inches thick.

PO—Denver, Colo.; SP—Same; CTY—Jefferson; RR—D. & I. M. D. & S. L. and C. & S.

MS—Archie Gilchrist, Leyden, Colo. S of H—Mules and main and tail rope.

Track gage 36 inches. S of M—11 comp. air machs.

PP—2 water tube and 7 fire tube boilers, total 1,500 H. P., M. G. Sets, 580 K. W., 250 volts, D. C., 18 pumps.

EMP—173. Last years tonnage 157,379. SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Shaker Screens.

LIBERTY COAL COMPANY, THE

General Office, Box 473, Trinidad, Colo.

PR—W. E. Riggs, Forbes, Colo. VP—W. B. Hamerslough, Trinidad, Colo.

TR—M. L. Riggs, Forbes, Colo. GM—W. E. Riggs, Forbes, Colo.

PA—W. E. Riggs, Forbes, Colo. EM—B. C. Corey, Trinidad, Colo.

SC—W. E. Riggs & Co., Majestic, Colo., Buyer, M. L. Riggs, Forbes, Colo.

Liberty Mine; Drift; Berwind Seam; 48 in. thick.
 PO—Forbes, Colo.; SP—Forbes Jct.; CTY—Las Animas; RR—C. & S.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 PP—1 75 H. P. fire tube boiler, 1 85 K. W. gen. unit, 500 volts D. C., Last years tonnage 3,780.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

LITTLE, H. L. COAL CO., The.

Now Ross Coal Company.

LOMA FUEL COMPANY THE

Now part of Colorado Fuel and Iron Co.

LOUISVILLE COAL AND LAND CO.

Out of business.

McGOWAN, L. H.

Now Vesta Mines, Inc.

McNALLY & THOMPSON

General Office, Maitland, Colo.
 PR—S. M. Thompson, Maitland, Colo.
 VP—Geo. McNally, Maitland, Colo.
 TR—S. M. Thompson, Maitland, Colo.
 GM—S. M. Thompson, Maitland, Colo.
 GS—Geo. McNally, Maitland, Colo.
 CE—M. O. Danford, Trinidad, Colo.
 EM—S. M. Thompson, Maitland, Colo.
 EE—Joseph Gaymay, Trinidad, Colo.
 SC—Western Stores Company, Buyer, William Sperry, Maitland, Colo.
 SA—A. M. Johnson, Victor American Fuel Co., Denver, Colo.

Maitland Mine; Slope; Maitland and Lennox Seams; 48 inches thick.

PO—Maitland, Colo.; SP—Walsenburg, Colo.; CTY—Huerfano; RR—Denver and Rio Grande.

MS—Dave Turner, Maitland, Colo. S of H—Mules and elec. loco. Track gage 36 in.

S of M—2 shortwall machs. PP—Power purchased. Transformer 6,600 to 250 volts, A. C., rotary converters, 250 volts, D. C., 1 pump.

EMP—65. Last years tonnage 40,000. SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Revolving and Shaker Screens, Washeries.

Note—Successors to Geo. McNally & Co.

McNALLY, GEO. & CO.

Now McNally & Thompson.

McNEIL COAL CO.

General Office, 750 Equitable Bldg., Denver, Colo.

PR—John McNeil, Sr., Denver, Colo. VP—A. M. McNeil, Denver, Colo.

TR—G. F. McNeil, " "
 GM—C. W. McNeil, Denver, Colo. GS—George W. McNeil, Denver, Colo.

PA—Geo. W. McNeil, Denver, Colo. SC—Cameo Mercantile Co. Buyer, F. A. Wahob, Denver, Colo.

SA—H. E. Stewart, Denver, Colo. McGregor Mine; Slope; Lower Routt Seam, 15 in. thick.

PO—McGregor, Colo.; SP—Mt. Harris, Colo.; CTY—Routt; RR—D. & S. L.

MS—Lee File, McGregor, Colo. S of H—Mules, 1 storage battery loco.

Track gage 44 in. S of M—7 chain breast machs.

PP—2 return tubular boilers, total 250 H. P., 2 75 K. W. gen. units, 250 volts, D. C., 2 pumps.

EMP—85. Last fiscal year output, 82,176 tons.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Shaker Screens, Picking Tables.

MARSHALL COAL COMPANY

General Office, 311-12 Central Savings Bank Bldg., Denver, Colo.

PR—Jerome Welsman, Denver, Colo. TR—Abner Wagsman, Denver, Colo.

GM—Philip J. Ragoland, Denver, Colo. GS—Jerome Welsman, Denver, Colo.

PA—Philip J. Ragoland, Denver, Colo. CE—Tom Knill, Denver, Colo.

EM—Albert E. Oliver, Denver, Colo. Red Ash Mine; Slope; Seam 84-108 inches thick.

PO—Graham, Colo.; SP—Marshall, Colo.; CTY—Boulder; RR—C. & S.

S of H—Mules and rope; compressed air and steam locos. Track gage 30 inches.

S of M—Hand, comp. air punchers and shortwall machs.

EMP—75. Last fiscal year output, 25,000 tons.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Bar Screens. Formerly operated by Red Ash Coal Co.

Suncyside Mine; Shaft; Lignite Seam, 59 in. thick.
 PO—Louisville, Colo.; SP—Same; CTY—Boulder; RR—C. S.
 MS—A. E. Oliver, Boulder, Colo. S of H—Mules and rope; comp. air and steam locos. Track gage 30 inches.
 S of M—Hand, comp. air punchers and shortwall machs.
 EMP—30. Daily tonnage, 100.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Revolving and Shaker Screens.
 Formerly operated by Big Six Coal Co. Old Information.

MATCHLESS FUEL COMPANY.

Now International Fuel Corporation.

MEEKER COAL MINING & DEVELOPMENT COMPANY

PR—Thomas Allen, Meeker, Colo. SECY—Frank Delaney, Meeker, Colo. TR—Frank Delaney, Meeker, Colo.

No. 1 Mine; Seam 96-168 inches thick. MS—Thomas Foreman, Meeker, Colo.

S of H—1 hoist, 50 H. P. PP—1 boiler, 100 H. P.

No. 2 Mine; Sulphur Creek Seam, 72-168 inches thick.

MS—Thomas Foreman, Meeker, Colo. S of H—Mules.

MIDWEST COAL & IRON COMPANY

General Office, 519 E. & C. Bldg., Denver, Colo.

PR—John Sandberg, Denver, Colo.

Midwest & Hilltop Mines; Drifts; 60 in. thick.

PO—Pallades, Colo.; SP—Same; CTY—Mesa; RR—D. & R. G. and Colo. Midland.

S of H—Mules. Track gauge 36 in. S of M—Hand.

PP—1 gen. unit, 2,200 volts A. C. Purchase power, 500 tons.

Daily output, 500 tons. SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

Note—Successors to Grand View Coal Co. (Old information.)

MINERS COAL & COKE CO., THE

General Office, Trinidad, Colo.

PR—Walter Williams, Trinidad, Colo. VP—J. N. Short, Trinidad, Colo.

TR—John G. Humble, Trinidad, Colo. GM—Walter Williams, Trinidad, Colo.

GS—Walter Williams, Trinidad, Colo. PA—Walter Williams, Trinidad, Colo.

SA—John G. Humble, Trinidad, Colo. Williams Mine; Drift; Piedmont Seam; 48 in. thick.

PO—Trinidad, Colo.; SP—Same; CTY—Las Animas; RR—Colo. & Wyo.

MS—David Jackson, Trinidad, Colo. S of H—Mules, steam locos.

S of M—Hand, shortwall machs., electric punchers.

EMP—15. Last years tonnage 5,000. SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Bar Screens. Old Information.

MOFFATT COAL COMPANY, THE

General Office, 503 Gas & Elec. Bldg., Denver, Colo.

PR—S. M. Perry, Denver, Colo. GM—S. M. Perry, " "

TR—J. H. Porter, " "
 PA—F. A. Perry, " "

GS—R. M. Perry, Oak Creek, " EM—Guy S. Newkirk, Oak Creek, "

SC—Oak Hills Coal Co. Stores, Buyer, F. A. Perry, Denver, Colo.

Sales Agent, F. A. Perry, Denver, Colo. Oak Hill Nos. 1 & 2 Mines; Slope; Pine

nucle Seam, 114 to 120 in. thick. PO—Oak Creek, Colo.; SP—Oak Hills,

Colo.; CTY—Routt; RR—D. & S. L. MS—John Alexander, Oak Creek, Colo.

S of H—3 elec. and 2 steam locos. Track gage 36 in.

S of M—7 electric machs. PP—4 return tubular boilers, total

1,000 H. P., 1—267 H. P. water tube boiler, 2 gen. units, 2300

volts A. C., 3 phase 60 cycle, 1—500 K. W. gen. unit, 250 volts

D. C., 2 air compressors, 5 pumps. EMP—325. Last fiscal year output,

300,000 tons. SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Screen and Picking Table, Ror Car Loader.

MOFFITT-CARLILE COAL COMPANY.

General Office, Cortez, Colo.

GM—Walter J. Moffitt, Cortez, Colo.

Moffitt-Carlile Mine; Drift; 60 to 72 in. thick.

PO—Cortez, Colo. SP—Dolores, Colo. CTY—Montezuma. RR—D. & R. G.

S of H—Mules. S of M—Hand. Last fiscal year output, 900 tons.

SIZES SHIPT—Run of Mine.

MORGAN & WILLIAMS COAL COMPANY
Now Cracker Jack Coal Co.

NATIONAL FUEL COMPANY

General Office, 519 Colorado Bldg., Denver, Colo.
PR—Harry Van Meter, Denver, Colo.
TR—J. Sproule, Denver, Colo.
GM—Samuel Tescher, Denver, Colo.
GS—Samuel Tescher, Denver, Colo.
PA—Christopher F. Cusack, Denver, Colo.
SCO—Address & the Company, Boyer, C. F. Cusack, Denver, Colo.
SA—John C. Mitchell, Denver, Colo.

Monarch Mine; Shaft; Laramie Seam; 72 in. thick.
PO—Broomfield, Colo.; SP—Louisville, Colo.; CTY—Boulder; RR—C. & S.
MS—John Stille, Broomfield, Colo.
S of H—Mules and trolley pole type locos. Track gage 36 in.
S of M—8 comp. air punchers.
PP—Power purchased. Transformer 2200-440 volts A. C., 3 300 H. P. fire tube boilers, 8 pumps.
EMP—175. Last years tonnage 135,000.
PREP. EQUIPT—Shaker Screens.

Thor Mine; Drift; Laramie Seam; 72 in. thick.
PO—Bowen, Colo.; SP—Same; CTY—Las Animas.
MS—E. Wagstaff, Bowen, Colo.
S of H—Mules, rope. Track gage 36 in. S of M—Hand.
PP—Power purchased. Transformer 2200-440 volts A. C., 1 100 H. P. fire tube boiler.
Last years tonnage 75,000.
PREP. EQUIPT—Shaker Screens.

Puritan Mine; Shaft; Laramie Seam; 110 in. thick.
PO—Dacono, Colo.; SP—Puritan, Colo.; CTY—Weid; RR—V. P.
MS—Geo. Mathews, Dacono, Colo.
SM—Mick Bissale, Dacono, Colo.
S of H—Mules and trolley pole type loco. Track gage 36 in.
S of M—9 comp. air and 1 elec. punchers.
PP—Power purchased. Transformer 2200-440 volts A. C., 6 fire tube boilers, 600 H. P., 10 pumps.
EMP—250. Last years tonnage 230,000.
PREP. EQUIPT—Shaker Screens.

NEW SANTA FE COAL & COKE CO.

General Office, Trinidad, Colo.
PR—W. J. Cannon, Denver, Colo.
VP—W. P. Jester, Texico, N. Mex.
TR—M. B. Ogilvie, Denver, Colo.
GM—F. C. Shumaker, Trinidad, Colo.
GS—F. C. Shumaker, Trinidad, Colo.
PA—F. C. Shumaker, Trinidad, Colo.

New Viola Mine; Drift; Seam, 53 inches thick.
PO—Trinidad, Colo.; SP—Same; CTY—Las Animas; RR—Santa Fe.
S of H—Mules.
S of M—Electric Punchers.
PP—Power purchased.
EMP—14.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.
Old Information.

NORTH PARK COAL CO.

General Office, Fort Collins, Colo.
PR—R. W. Fleming, Fort Collins, Colo.
VP—J. M. Purdie, Wellington, Colo.
TR—L. C. Moore, Fort Collins, Colo.
GM—L. C. Moore, Fort Collins, Colo.
GS—Jos. Simpson, Coalmont, Colo.
MM—McClain Smith.
SCO—Coalmont Trading Co. Buyer, W. T. Ferrier, Coalmont, Colo.

North Park Mine; Shaft; Lignite Seam, 30 to 40 ft. thick.
PO—Coalmont, Colo.; SP—Same; CTY—Jackson; RR—C. W. & E.
S of H—Mules and rope Track gage 36 in. S of M—Hand.
PP—2 engines, 2 return tubular boilers, 2 pumps.
EMP—45.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

NORTHERN COLORADO FUEL CO.

Out of business.

NORTHWESTERN FUEL CO.

General Office 416 Central Savings Bank Bldg., Denver, Colo.
PR—C. W. Hood, Denver, Colo.
VP—W. E. Brooks, Boulder, Colo.
TR—C. W. Hood, Denver, Colo.
GM—Jos. Jackson, Denver, Colo.
GS—Jno. Morgan, Louisville, Colo.
PA—W. E. Brooks, Louisville, Colo.
EM—G. E. Wilson, Boulder, Colo.
EE—Arthur Viggers, Louisville, Colo.
SA—C. W. Hood, Denver, Colo.

Nonpareil Mine; Shaft; Nonpareil Seam, 60-108 in. thick.
PO—Louisville, Colo.; SP—Same; CTY—Boulder; RR—C. & S.
MS—Jas. Kimber, Louisville, Colo.

S of H—Mules, Track gage 36 in. S of M—5 mining machs.
PP—3 return tubular boilers, total 300 H. P., 0 pumps.
EMP—55. Last years tonnage, 25,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
Successors to Brooks Fuel Co.
Old Information.

O. K. COAL CO.

Out of business.

OKDALE COAL CO. THE

General Office, 922 Gas & Electric Bldg., Denver, Colo.
PR—W. B. Lewis, 40 Wall St., New York, N. Y.
VP—H. F. Nash, 922 Gas and Electric Bldg., Denver, Colo.
TR—A. S. Pratt, 61 Broadway, New York, N. Y.
GM—E. H. McClear, Oakview, Colo.
PA—H. F. Nash, 922 Gas and Electric Bldg., Denver, Colo.
CE—Danford & Thompson, Walsenburg, Colo.
EE—D. A. Young, Oakview, Colo.
SCO—Huerfano Trading Company, Buyer, John Kirkpatrick, Walsenburg, Colo.
SA—H. F. Nash, 922 Gas and Electric Bldg., Denver, Colo.

Okdale Nos. 1 and 2 Mines; No. 1 Slope; No. 2 Drift; Mammoth Seam; 72-144 in. thick.
MS—E. H. McClear, Oakview, Colo.
SM—S. M. Moser, Oakview, Colo.
PO—Oakview, Colo.; SP—Frt., Tropic, Colo., Exp., La Veta, Colo.; CTY—Huerfano; RR—D. & R. G.
S of H—Mules, 3 elec. hoists, 3 trolley pole locos, 5 air hoists and 1 steam hoist. Track gage 36 in.
S of M—Acrewall and puncher mach.
PP—Power purchased. Transformer, 2200-220 volts A. C., M. G. sets, 250 volts D. C., 1—175 K. W. and 1—200 K. W. 5 water tube boilers, total 750 H. P., 10 pumps.
EMP—185. Last years tonnage 168,341.
SIZES SHIPT—Slack, Pea, Nut, Lump.
PREP. EQUIPT—Shaker and revolving Screens.

OHIO CREEK COAL CO.

General Office, Gunnison, Colo.
PR—S. L. Staples, Gunnison, Colo.
VP—Geo. D. Manville, Gunnison, Colo.
TR—C. M. Long, Gunnison, Colo.
GM—S. L. Staples, Gunnison, Colo.
GS—Geo. D. Manville, Gunnison, Colo.
PA—C. M. Long, Gunnison, Colo.
EE—L. Kyle, Gunnison, Colo.
SA—C. M. Long, Gunnison, Colo.

Ohio Creek Mine; Drift; Seam, 72 in. thick.
PO—Gunnison, Colo.; SP—Same; CTY—Gunnison; RR—D. & R. G.
S of H—Mules. Track gage 30 in.
S of M—1 cutting machine, 1 electric drilling mach.
PP—1 fire tube boiler, 100 H. P., with 60 H. P. high speed engine, 220 volts.
EMP—25. Daily tonnage 90.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity and Revolving Screens.
Old Information.

ORECHIO COAL CO.

Out of business.

P. V. COAL COMPANY.

Out of business.

PALISADE COAL & SUPPLY CO.

PR—J. W. Cummings, Glenwood Springs, Colo.
VP—Robt. Shaw, Aspen, Colo.
TR—J. C. Huber, Palisade, Colo.
GM—J. W. Cummings, Glenwood Springs, Colo.
GS—J. H. Cummins, Palisade, Colo.
PA—J. W. Cummings, Glenwood Springs, Colo.

Palisade Mine; Drift; Seam 48 inches thick.
PO—Palisade, Colo.; SP—Same; CTY—Mesa; RR—D. & R. G.
S of H—Mules, one storage battery loco. Track gage 26 inches.
S of M—1 shortwall mach.
PP—Power purchased. Transformer 2200 to 440 volts A. C.
EMP—65. Last fiscal year output, 30,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

PATTERSON, ALEXANDER

General Office, 2409 W. Feyer, Colorado Springs, Colo.
PR—Alex. Patterson, Colorado Springs, Colo.
GS—Alex. Patterson, Colorado Springs, Colo.

City No. 2 Mine; Shaft; Lignite Seam; 240 inches thick.
PO—Colorado Springs, Colo.; SP—Santa Fe, Colo.; CTY—El Paso; RR—Santa Fe.
MS—Alex. Patterson, Colorado Springs, Colo.
S of H—1 mule. Track gage 30 inches. S of M—Hand.
PP—1 fire tube boiler, 20 H. P.
EMP—18. Daily output, 75 tons.
SIZES SHIPT—Run of Mine, Slack, Lump, Block.
PREP. EQUIPT—Bar Screens.
Old Information.

PIKES PEAK CONSOLIDATED FUEL CO

General Office, 125 E. Pikes Peak Av., Colorado Springs, Colo.
PR—H. McGarry, Colorado Springs, Colo.
TR—J. F. Schlotter, Colorado Springs, Colo.
GM—L. G. Carlton, Colorado Springs, Colo.
GS—Henry Thomas, Pikeview, Colo.
PA—S. W. Baker, Colorado Springs, Colo.
SCO—Miners and Farmers' Trd. & S Co. Buyer, W. A. Greening, Pikeview, Colo.

Pikeview Mine; Shaft; Laramie Seam, 108 in. thick.
PO—Pikeview, Colo.; SP—Colorado Springs, Colo.; CTY—El Paso; RR—D. & R. G.
S of H—Mules and trolley pole type locos. Track gage, 30 in.
S of M—Chain breast type and shortwall machs.
PP—Power purchased. Transformer 6600-220 volts A. C., 2 75 K. W., 1 85 K. W. gen. units, 250 volts D. C., 3 100 H. P. fire tube boilers, 1 250 H. P. water tube boiler, 6 pumps.
EMP—160. Daily tonnage 300.
SIZES SHIPT—Run of Mine, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

Keystone Mine; Slope; 84 in. thick.
PO—Colorado Springs, Colo.; SP—Same; CTY—El Paso; RR—C. R. I. & P.
S of H—Mules, rope. Track gage 36 in. S of M—Chain breast type and shortwall machs.
PP—2 fire tube boilers, 100 H. P., 1 50 K. W. gen. units, 250 volts D. C., 5 pumps.
EMP—70. Daily tonnage 150.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.

PRAIRIE CANON COAL CO.

PR—A. E. Woodward, Trinidad, Colo.
VP—C. G. Odorizzi, Trinidad, Colo.
TR—C. G. Odorizzi, Trinidad, Colo.
GM—John Allan, Ludlow, Colo.
GS—John Allan, Ludlow, Colo.
CE—Danford & Douglass, Trinidad, Colo.
SA—J. J. Abercrombie, Trinidad, Colo.

Prairie Canon Mine; Slope; Bear Canon Seam, 42 inches thick.
PO—Vailorco, Colo.; SP—Frt. Bear Canon, Colo.; EXP—Ludlow, Colo.; CTY—Las Animas; RR—C. & S.
S of H—Mules. Track gage 36 inches.
PP—Power purchased, 440 volts A. C.
EMP—30. Last years tonnage, 3,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Shaker Screens.
Old Information.

RAPSON COAL MNG. CO. (THE)

General Office, Colorado Springs, Colo.
PR—W. W. Curtis, Colorado Springs, Colo.
TR—W. W. Curtis, " "
GM—W. W. Curtis, " "

Rapson No. 1 Mine; Slope; Robinson Seam, 42 in. thick.
PO—Rapson, Colo.; SP—Same; CTY—Las Animas; RR—C. & S. D. & E. G.
MS—R. C. Curtis, Rugby, Colo.
S of H—Mules and rope. Track gage 36 in.
S of M—Hand and 2 shortwall machs.
PP—3 fire tube boilers, 260 H. P., 62½ K. W. gen. unit, 250 volts D. C., 3 pumps.
EMP—60. Daily tonnage 200.
SIZES SHIPT—Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screen.

RED ASH COAL COMPANY.

Now Marshall Coal Company.

RED CANON COAL CO.

General Office, Cedaredge, Colo.
GM—Frank M. Flekes, Cedaredge, Colo.
Red Canon Mine; Slope; Rollins Seam, 60 in. thick.
PO—Cedaredge, Colo.; SP—Delta, Colo.; CTY—Delta.
MS—Frank M. Flekes, Cedaredge, Colo.
S of H—Mules. Track gage 28 inches.
S of M—Hand.

Last years tonnage 1,445.
SIZES SHIPT—Pea, Nut, Lump.
PREP. EQUIPT—Gravity Screens.
Note—Formerly operated by Frank M. Flekes.

ROCKY MOUNTAIN FUEL CO. (THE)

General Office, 11th floor A. C. Foster Bldg., Denver, Colo.
PR—D. W. Brown, Denver, Colo.
VP—J. J. Roche, Denver, Colo.
TR—John J. Roche, " "
GM—D. W. Brown, " "
Asst. GM—Geo. T. Poart, Denver, Colo.
PA—G. A. Easterly, " "
EM—H. M. Jones, " "
EE—John Coan, Lafayette, Colo.
MM—Harry Noble, Lafayette, Colo.
SCO—Rocky Mountain Store Co., Buyer, E. Hornstman, Denver, Colo.
SA—W. B. McDonald, Denver, Colo.

Alpine Mine; Shaft; Baldwin Seam, 90 in. thick.
PO—Baldwin, Colo.; SP—Gunnison, Colo.; CTY—Gunnison; RR—D. & R. G., Baldwin Branch.
MS—John Featherstone, Baldwin, Colo.
SM—J. H. Saunders, " "
S of H—Mules, rope and gravity; track gage 30 in.
S of M—Hand and 2 chain breast type machs.
PP—3 return tubular boilers, 260 H. P., 2 gen. units, 250 volts D. C., 2 pumps.
EMP—51. Last years tonnage 47,587.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

Piedmont Mine; Drift and slope, Piedmont Seam, 42-84 in. thick.
PO—Sopris, Colo.; SP—Same; CTY—Las Animas; RR—C. & W., Sopris Branch.
MS—Wm. Morgan, Sopris, Colo.
S of H—Mules and 2 trolley pole type locos. Track gage, 36 in.
S of M—Hand and breast machs.
PP—Purchase power, 500 volts D. C., 2 return tubular boilers, total 200 H. P., 5 pumps.
EMP—46. Last years tonnage 36,957.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

Mitchell Mine; Shaft; Simpson Seam; 72 in. thick.
PO—Lafayette, Colo.; SP—Same; CTY—Boulder; RR—C. R. & Q.
MS—James Morgan, Lafayette, Colo.
SM—Fred Autry, Lafayette, Colo.
S of H—Mules and 1 trolley pole type loco. Track gage, 36 in.
S of M—2 comp. air machs.
PP—3 return tubular boilers, total 250 H. P., 1 pump also power from Simpson Mine.
EMP—41. Last years tonnage 57,579.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

Standard Mine; Shaft; Standard S. 1, 4 to 9 ft. thick.
PO—Lafayette, Colo.; SP—Same; CTY—Boulder; RR—C. R. & Q.
MS—Geo. Swearingen, Lafayette, Colo.
SM—Fred Autry, Lafayette, Colo.
S of H—2 trolley pole type locos. and mules. Track gage, 36 in.
S of M—8 comp. air machs. and hand.
PP—Purchase power, rotary converters, 250 volts D. C., 4 return tubular boilers, total 390 H. P., 2 comp., 4 pumps.
EMP—100. Last years tonnage 123,739.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

Midland Mine not operating.

Industrial Mine, Shaft; "Industrial" Seam, 54 to 120 in. thick.
PO—Superior, Colo.; SP—Same; CTY—Boulder; RR—Colorado & Southern.
MS—Thos. Gibby, Superior, Colo.
SM—W. W. Young, Superior, Colo.
S of H—Mules and 3 trolley pole type locos. Track gage, 36 in.
S of M—8 chain breast type machs.
PP—3 return tubular boilers, total 375 H. P., 2 250 volt D. C. gen. units, 7 pumps.
EMP—123. Last years tonnage 127,333.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

Gorham Mine, Slope; "Gorham" Seam, 6 to 7 ft. thick.
PO—Gorham, Colo.; SP—Marshall, Colo.; CTY—Boulder; RR—Colorado & Southern.
MS—Thos. Hilton, Gorham, Colo.
SM—A. H. Antoline, Marshall, Colo.
S of H—Mules and rope. Track gage, 36 in.
S of M—Hand and 8 comp. air machs.

(Continued on Next Page)

Rocky Mountain Fuel Co., (The)—Cont.
 PP—Power purchased, 440 volts A. C., 8 pumps.
 EMP—52. Last years tonnage 65,164.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Shaker Screens.
 Vulcan Mine, shaft; "Vulcan" Seam; 6 to 7 ft. thick.
 PO—Lafayette, Colo.; SP—Same; CTY—Boulder; RR—Colo. & Southern.
 MS—August Sire, Lafayette, Colo.
 SM—W. F. Autrey, Lafayette, Colo.
 S of H—Mules and rope. Track gage, 36 in.
 S of M—Hand and 6 air comp.
 PP—2 return tubular boilers, total 300 H. P., 1 air comp., 5 pumps.
 EMP—73. Last years tonnage 87,176.
 SIZES SHIPT—Run of Mine.
 Hecla Mine closed down.
 Simpson Mine, shaft; "Simpson" Seam, 72 to 133 in. thick.
 PO—Lafayette, Colo.; SP—Same; CTY—Boulder; RR—Colo. & Southern and C. R. & Q.
 MS—David Allan, Lafayette, Colo.
 SM—W. F. Autrey, Lafayette, Colo.
 S of H—Mules and 2 trolley pole type locos. Track gage, 36 in.
 S of M—Hand and 8 comp. air machs.
 PP—5 return tubular boilers, total 750 H. P.; 3 gen. units; 250 volts D. C.; 1 air comp.; 9 pumps.
 EMP—80. Last years tonnage 148,352.
 SIZES SHIPT—Run of Mine.
 Grant Mine; Shaft; Grant Seam, 126 in. thick.
 PO—Frederick, Colo.; SP—Same; CTY—Weld; RR—C. & P.
 MS—J. J. Thomas, Frederick, Colo.
 S of H—Mules. Track gage, 36 in.
 S of M—Chain breast type machs. and overhead cutters.
 PP—Power purchased, M. G. sets, 250 volts D. C., 1 100 K. W. gen. units, 250 volts D. C., 1 80 H. P. fire tube boiler, 2 pumps.
 EMP—55. Last years tonnage 8,823.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.
 Frederick Mine; Slope; Frederick Seam, 79 in. thick.
 PO—Frederick, Colo.; SP—Same; CTY—Weld; RR—C. & P.
 MS—E. H. Whiles, Frederick, Colo.
 S of H—Mules and rope. Track gage, 36 in.
 S of M—7 comp. air punchers.
 PP—4 fire tube boilers, total 350 H. P., 4 pumps.
 EMP—81. Last years tonnage 63,780.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.
 Acme Mine; Shaft; Louisville Lower Seam, 80 in. thick.
 PO—Louisville, Colo.; SP—Same; CTY—Boulder; RR—C. & S.
 MS—L. G. Wilson, Louisville, Colo.
 SM—Harry Ball, Louisville, Colo.
 S of H—Mules and rope. Track gage, 36 in.
 S of M—8 comp. air punchers.
 PP—3 fire tube boilers, 300 H. P., 5 pumps.
 EMP—91. Last years tonnage 102,609.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.
 Garfield-Vulcan Mine not operating.
 LaBelle No. 2 Mine; Drift; LaBelle Seam, 42-60 in. thick.
 PO—Sopris, Colo.; SP—Same; CTY—Las Animas; RR—C. & W.
 MS—Wm. Morgan, Sopris, Colo.
 SM—L. Lewis, Sopris, Colo.
 S of H—Mules and rope. Track gage, 36 in.
 S of M—Hand.
 PP—Power purchased, 500 volts.
 EMP—25. Last years tonnage 30,235.
 SIZES SHIPT—Run of Mine.
 Marion Mine not operating.
 Southwestern Mine; Slopes (2); Upper and Lower Robinson Seams, 36-60 in. thick.
 PO—Aguilar, Colo.; SP—Same; CTY—Las Animas; RR—C. & S.
 MS—G. Fortune, Aguilar, Colo.
 S of H—Rope. Track gage, 36 in.
 S of M—2 chain breast type machs.
 PP—Power purchased, 440 volts A. C., M. G. sets, 250 volts D. C., 1 125 H. P. fire tube boiler, 2 pumps.
 EMP—34. Last years tonnage 15,774.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.
 Formerly operated by Southwestern Fuel Co.
 Forbes Mine; Drift; Hastings Seam, 48-54 in. thick.
 PO—Forbes, Colo.; SP—Same; CTY—Las Animas; RR—C. & S.
 MS—James Matthews, Forbes, Colo.
 SM—L. F. Morris, Forbes, Colo.

S of H—2 trolley pole type locos. Track gage, 36 in.
 S of M—5 chain breast type machs.
 PP—Power purchased, 440 volts A. C., M. G. set, 250 volts D. C., 1 80 H. P. fire tube boiler, 4 pumps.
 EMP—102. Last years tonnage 120,232.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.
 Formerly operated by Chiosa Fuel Co.
ROMAN COAL MINING CO., THE
 General Office, Milner, Colo.
 PR—Paul Tulbure, Milner, Colo.
 VP—G. O. Opincar, Blanca, Colo.
 TR—S. Q. Wenger, Milner, Colo.
 GM—Paul Tulbure, Milner, Colo.
 PA—Paul Tulbure, Milner, Colo.
 CE—J. J. Argo, 63 Byers St., Denver, Colo.
 SCO—Address the Company, Buyer, S. Q. Wenger, Milner, Colo.
 SA—Barnett Fuel Co., Guardian Trust Bldg., Denver, Colo.
 Crown Point Mine; Slope; Wedge Seam, 90 inches thick.
 PO—Milner, Colo.; SP—Same; CTY—Routt; RR—D. & S. L.
 MS—Paul Tulbure, Milner, Colo.
 S of H—Mules. Track gage 36 in.
 S of M—Hand.
 EMP—21. Daily tonnage, 80.
 SIZES SHIPT—Run of Mine.
 Old Information.
ROSS COAL CO., THE
 General Office, Crested Butte, Colo.
 PR—Chas. L. Ross, Crested Butte, Colo.
 VP—W. H. Whalen, Crested Butte, Colo.
 TR—W. M. Campbell, Crested Butte, Colo.
 GM—Chas. L. Ross, Crested Butte, Colo.
 GS—John Amott, Crested Butte, Colo.
 PA—W. M. Campbell, Crested Butte, Colo.
 EM—J. T. McNatt, Canon City, Colo.
 SA—Rocky Mountain Fuel Co., Denver.
 Horace Mine; Shaft; Cheyenne Seam, 32 inches thick.
 PO—Crested Butte, Colo.; SP—Same; CTY—Gunnison; RR—D. & R. G.
 MS—W. E. Kerr, Crested Butte, Colo.
 S of H—Mules. Track gage 36 inches.
 S of M—Longwall mach.
 PP—6 water tube boilers, 5 pumps.
 EMP—82. Daily tonnage, 250.
 SIZES SHIPT—Slack, Pea, Nut, Egg.
 PREP. EQUIPT—Shaker Screens.
 Note: Formerly operated by H. L. Littell Coal Co. and Littell-Ross Coal Co.
ROUTT PINNACLE COAL COMPANY.
 General Office, 307-9-11 Cooper Bldg., Denver, Colo.
 PR—Albert Wright, Denver, Colo.
 VP—G. H. Miller, Denver, Colo.
 TR—J. A. Gosney, Denver, Colo.
 GM—Albert Wright, Denver, Colo.
 GS—J. A. Hanna, Denver, Colo.
 PA—G. H. Miller, Denver, Colo.
 SCO—Joe Michietta, Coalview, Colo.
 SA—G. H. Miller, Denver, Colo.
 Routt Pinnacle Mine; Drift and Slope; Pinnacle Seam, 108-134 in. thick.
 PO—Coalview, Colo.; SP—Same; CTY—Routt; RR—D. & S. L.
 MS—M. T. Lommasson, Denver, Colo.
 S of H—Mules and endless rope. Track gage, 42 inches.
 S of M—2 shortwall machines.
 PP—2 fire tube boilers, gen units, 1—200 K. W., 440 volts A. C., 3 pumps.
 Last years tonnage 28,277.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.
ROYAL FUEL CO.
 General Office, Denver, Colo.
 PR—H. Van Miter, Denver, Colo.
 GM—H. Van Miter, Denver, Colo.
 TR—W. H. Spenkel, " "
 CE—C. A. Fisher, " "
 Royal Mine; Shaft; Laramie Seam; 72 in. thick.
 PO—Aguilar, Colo.; SP—Lynn, Colo.; CTY—Las Animas; RR—C. & S.
 MS—R. G. Bickerton, Aguilar, Colo.
 S of H—Mules, rope. Track gage 36 in.
 S of M—Hand.
 PP—Power purchased, Transformer 22-000-440 volts A. C., 3 200 H. P. fire tube boilers, 9 pumps.
 EMP—175. Last years tonnage 175,000.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.
RUGBY FUEL COMPANY (THE).
 General Office, 422-427 Exchange Bldg., Denver, Colo.
 GM—George D. Kimball, 422 Exchange Bldg., Denver, Colo.
 PA—George D. Kimball, 422 Exchange Bldg., Denver, Colo.
 Rugby Mine; Slope; Rugby Seam, 48 in. thick.
 PO—Rugby, Colo.; SP—Same; CTY—Huerfano; RR—C. & S., D. & R. G.
 MS—Thos. McLaughlin, Rugby, Colo.
 S of H—Rope.
 S of M—Hand.
 PP—Purchase power.
 EMP—60. Last years tonnage 20,185.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

RUSSELL, WM. E., COAL COMPANY.
 General Office, 1523 Welton St., Denver, Colo.
 PR—Wm. E. Russell, Denver, Colo.
 VP—W. E. Russell, Denver, Colo.
 TR—Wm. E. Russell, " "
 GM—Wm. E. Russell, " "
 PA—C. P. Brockway, Denver, Colo.
 EM—C. L. Mitten, Denver, Colo.
 SCO—Russell Store, Buyer, C. P. Brockway, 1523 Welton St., Denver, Colo.
 Russell Mine; Shaft, 66 to 84 in. thick.
 PO—Firestone, Colo.; SP—Frederick, Colo.; CTY—Weld; RR—Union Pacific.
 MS—Fred Smith, Firestone, Colo.
 SM—W. V. R. Mington, Firestone, Colo.
 S of H—Mules. Track gage, 36 in.
 S of M—11 comp. air machs.
 PP—3 return tubular boilers, total 600 H. P., 2 air compressors and 6 pumps.
 EMP—70. Last fiscal year output, 62,528 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.
SANTA FE COAL CO.
 General Office, 412 Interstate Trust Bldg., Denver, Colo.
 PR—F. A. Williams, 412 Interstate Trust Bldg., Denver, Colo.
 TR—N. C. Anderson, 334 First National Bank Bldg., Denver, Colo.
 GM—F. A. Williams, 412 Interstate Trust Bldg., Denver, Colo.
 PA—F. A. Williams, 412 Interstate Trust Bldg., Denver, Colo.
 Santa Fe Mine; Drift; Nos. 4, 5 and 6 Seams, 48-72 inches thick.
 PO—Trinidad, Colo.; SP—Same; CTY—Las Animas; RR—A. T. & S. F.
 MS—Geo. Gallely, Trinidad, Colo.
 S of H—Mules and rope. Track gage, 36 inches.
 PP—Power purchased, transformer 23,000 to 440 volts A. C., 2 pumps.
 EMP—50. Last years tonnage 26,772.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables.
SHAMROCK COAL CO.
 PR—P. H. Powers, Lafayette, Colo.
 TR—James Brannan, Erie, Colo.
 GS—Thos. Morgan, Erie, Colo.
 PA—P. H. Powers, Lafayette, Colo.
 EM—Thos. Morgan, Erie, Colo.
 SA—P. H. Powers, Lafayette, Colo.
 No. 1 Mine; Shaft; Larimer Seam, 108 inches thick.
 PO—Erie, Colo.; SP—Puritan, Colo.; CTY—Weld; RR—Union Pacific.
 S of H—Mules. Track gage, 36 inches.
 S of M—5 shortwall machines.
 PP—Power purchased, 440 volts A. C., 2 water tube boilers, 220 H. P., 2 pumps.
 EMP—50. Last fiscal year output, 57,000 tons.
 PREP. EQUIPT—Shaker Screens.
 (Old information.)
SOUTHWESTERN FUEL COMPANY.
 Now a part of Rocky Mountain Fuel Co.
STATES COAL CO.
 General Office, Cedaridge, Colo.
 PR—G. W. States, Preton, Idaho.
 GS—C. G. States, Cedaridge, Colo.
 GM—John C. Farrar, Delta, Colo.
 PA—John C. Farrar, Delta, Colo.
 EM—John C. Farrar, Delta, Colo.
 State Coal Mine; Slope; Rollins No. 1 Seam, 168 in. thick.
 PO—Cedaridge, Colo.; SP—Delta, Colo.; CTY—Idaho.
 S of H—Mules. Track gage 27 in.
 S of M—Hand.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.
STOKES, W. D.
 GM—W. D. Stokes, Palisade, Colo.
 GS—W. D. Stokes, Palisade, Colo.
 PA—W. D. Stokes, Palisade, Colo.
 Stokes-Palisades Mine; Slope; Palisade Seam; 48 in. thick.
 PO—Palisade, Colo.; SP—Same; CTY—Mesa; RR—D. & R. G.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 PP—Power purchased, 210 volts A. C., 1 pump.
 EMP—6. Last fiscal year output, 3,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.
SUNNYSIDE COAL MINING CO. (THE)
 General Office, Sweeney Bldg., Denver, Colo.
 PR—W. F. Oakes, Denver, Colo.
 VP—Ellen Terry Robinson, Denver, Colo.
 TR—Ellen Terry Robinson, Denver, Colo.
 SCO—Sunnyside Store, Buyer, J. P. Neuhauser, Denver, Colo.

SA—Southwestern Coal Co., Amarillo, Tex.
 Sunnyside Mine; Slope; Walsen Seam, 72 inches thick.
 PO—Strong, Colo.; SP—Frt., Same, Exp., Walsenburg, Colo.; CTY—Huerfano; RR—D. & R. G., Col. Southern.
 MS—R. T. Bell, Strong, Colo.
 S of H—Mules, main rope, 2 trolley pole type locos. Track gage 36 in.
 S of M—5 shortwall machines.
 PP—Power purchased, Transformer 6800 to 440 volts A. C., M. G. sets, 1 75 K. W., 1 100 K. W., 220 volts D. C., 1 125 H. P. fire tube boiler, 3 pumps.
 EMP—125. Daily tonnage 400.
 SIZES SHIPT—Slack, Pea, Nut, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables; Loading Booms.
SUNSHINE COAL COMPANY.
 General Office Durango, Colo.
 PR—Harry Fry, Durango, Colo.
 GM—Thomas G. Pierce, Durango, Colo.
 PA—Thomas G. Pierce, Durango, Colo.
 SA—F. E. Pierce, Durango, Colo.
 Sunshine Mine; Drift; Mesa Verde Seam, 72 in. thick.
 PO—Durango, Colo. SP—Same. CTY—La Plata. RR—D. & R. G. S.
 S of H—Mules. Track gage 30 in.
 S of M—Hand.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.
TEMPLE FUEL CO.
 General Office, Trinidad, Colo.
 PR—F. R. Wood, Trinidad, Colo.
 VP—Kenneth O. Wood, Trinidad, Colo.
 TR—H. C. Moore, Trinidad, Colo.
 GM—F. R. Wood, Trinidad, Colo.
 GS—O. C. Cook, Broadhead, Colo.
 CE—Danford & Douglas, Trinidad, Colo.
 EM—Danford & Douglas, Trinidad, Colo.
 EE—H. W. R. Rame, Broadhead, Colo.
 SCO—Temple Supply Company, Buyer, Joseph Morasky, Broadhead, Colo.
 SA—L. B. Corning, Trinidad, Colo.
 Broadhead Mine; Slope; Broadhead Seam, 48 inches thick.
 PO—Broadhead, Colo.; SP—Ex-Lynn, Colo.; Fr.—Aguilar, Colo.; CTY—Las Animas; RR—C. & S., D. R. & G.
 S of H—Mules, main and tail rope 3 trolley pole type and 5 storage battery locos. Track gage 36 in.
 S of M—5 shortwall machines.
 PP—Power purchased, transformer 22,000 to 440 volts A. C., M. G. set 440 volts D. C., 1 fire tube boiler 90 H. P., 16 pumps.
 EMP—175. Last years tonnage 140,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.
 Number Ten Mine; Slope; Primrose Seam, 52 inches thick.
 PO—Broadhead, Colo.; SP—Ex-Lynn, Colo.; Fr.—Aguilar, Colo.; CTY—Las Animas; RR—C. & S. and D. R. & G.
 S of H—Mules, main and tail rope and 1 trolley pole type loco. Track gage, 36 inches.
 S of M—2 shortwall machines.
 PP—Power purchased, transformer 22,000 to 440 volts A. C., M. G. set 410 volts D. C., 2 pumps.
 EMP—40. Last years tonnage 30,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.
 New Alta Mine; Slope; Primrose Seam, 52 inches thick.
 PO—Broadhead, Colo.; SP—Ex-Lynn, Colo.; Fr.—Aguilar, Colo.; CTY—Las Animas; RR—C. & S. and D. R. & G.
 S of H—Mules and endless rope. Track gage 36 inches.
 S of M—Hand.
 PP—Power purchased, transformer 22,000 to 440 volts A. C., M. G. set 410 volts D. C.
 EMP—10.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.
THOMAS, C. F. COAL CO.
 General Office, 252 Teller Ave., Grand Junction, Colo.
 OWNER—C. F. Thomas, Grand Junction, Colo.
 GM—C. F. Thomas, 252 Teller Ave., Grand Junction, Colo.
 GS—Chas. F. Thomas, Jr., 252 Teller Ave., Grand Junction, Colo.
 PA—Chas. F. Thomas, Jr., 252 Teller Ave., Grand Junction, Colo.
 Thomas Mine; Drift and Slope; Palisades Seam, 56 to 62 in. thick.
 PO—Grand Junction, Colo.; SP—Same; CTY—Mesa; RR—D. & R. G., Colorado & Midland Br.
 S of H—Mules. Track gage 36 in.
 S of M—Hand.
 EMP—8. Daily tonnage 20.
 SIZES SHIPT—Slack, Nut, Lump.

THREE PINES COAL COMPANY

General Office, Amarillo, Tex.
PR—Earl Cobb, Amarillo, Tex.
VP—F. R. Wood, Trinidad, Colo.
TR—R. E. Hanson, Amarillo, Tex.
SA—Southwestern Coal Co., Amarillo, Tex.

Three Pines Mine; Slope; Upper Series Seam, 48 inches thick.
PO—Valleroso, Colo.; SP—Berwind, Colo.; CTY—Las Animas; RR—C. & S. D. & R. G.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—Purchase power. Transformer 22,000 to 440 volts A. C.
EMP—50. Last years tonnage 9,563.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

TRINIDAD COAL CO.

General Office, Trinidad, Colo.
PR—Geo. W. Haigh, Trinidad, Colo.
TR—J. J. Wolfe, Trinidad, Colo.
GS—G. W. Haigh, Trinidad, Colo.
PA—M. E. Topham.
SA—Address the company—M. E. Topham, Trinidad, Colo.

Baldy Mountain Mine; Slope; Trinidad Seam, 108 in. thick.
PO—Trinidad, Colo.; SP—Same; CTY—Las Animas; RR—C. & S. D. R. & G. A. T. & S. F.
MS—M. C. Broyles, Trinidad, Colo.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
Last years tonnage 5,200.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

TURNER COAL COMPANY.

General Office, Walsenburg, Colo.
PR—James B. Dick, Walsenburg, Colo.
VP—W. C. Ferguson, Denver, Colo.
TR—James R. Dick, Jr., Walsenburg, Colo.
GM—James B. Dick, Walsenburg, Colo.
PA—James B. Dick, Walsenburg, Colo.
EM—K. S. Ferguson.
SCO—Huertano Trading Co., Buyer, John Kirkpatrick, Walsenburg, Colo.
SA—Huertano Agency Company, Walsenburg, Colo.

Turner Mine; Slope; Walsen Seam, 72 in. thick.
PO—Del Carbon, Colo.; SP—Walsenburg, Colo.; CTY—Huertano; RR—D. & R. G.
MS—Robt. Turner, Del Carbon, Colo.
S of H—Mules and rope. Track gage, 36 in.
S of M—7 shortwall machs.
PP—Power purchased, transformer, 6,000 to 440 volts A. C., 3 phase 60 cycle, 2 pumps.
EMP—175. Daily tonnage 800.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

UNION COAL & COKE CO.

General Office, Denver, Colo.
PR—J. V. Bowen, Denver, Colo.
VP—A. H. Marshall, " "
TR—J. V. Bowen, " "
GM—J. V. Bowen, " "
GS—Chas. Beuchat, Sr., Pryor, Colo.
SCO—Huertano Trading Co., Walsenburg, Colo.

SA—Harry Huribut, Denver, Colo.
Pryor Mine; Slope; Walsen and Cameron Seams, 3 to 7½ ft. thick.
PO—Pryor, Colo.; SP—Same; CTY—Huertano; RR—D. & R. G. Rouse Branch.
S of H—1 Steam loco. and rope. Track gage 36 in.
S of M—4 elec. mach. and hand.
PP—Power purchased, 440 volts, 2 fire tube boilers, 180 H. P.
EMP—95. Last years tonnage 60,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screen, Picking Table, Loading Rooms.

UNITED COLLIERIES COMPANY

General Office, 416 Quincy Bldg., Denver, Colo.
PR—Andrew Walker, Denver, Colo.
VP—Ed. Walker, Denver, Colo.
TR—Andrew Walker, Denver, Colo.
GM—Andrew Walker, Denver, Colo.
GS—Ed. Walker, Denver, Colo.
PA—James J. O'Connor, Denver, Colo.
EM—R. E. Young, Denver, Colo.
SA—James J. O'Connor, Denver, Colo.
Munro Mine; Shaft; Lignite Seam, 84-144 in. thick.
PO—Erie, Colo.; SP—Frt. Pitman, Colo.; EX—Frederick, Colo. CTY—Weid; RR—U. P.
S of H—Mules and rope. Track gage 36 inches.
S of M—6 comp. air punchers.
PP—3 100 H. P. fire tube boiler, 3 pumps.
EMP—70. Last years tonnage 67,576.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.

UTAH FUEL COMPANY.

General Office, Salt Lake City, Utah.
PR—E. T. Jeffrey, New York, N. Y.
VP—A. H. Cowie, Salt Lake City, Utah.
TR—Jesse White, New York, N. Y.
ASST TR—E. A. Greenwood, Salt Lake City, Utah.

GM—A. H. Cowie, Salt Lake City, Utah.
GS—W. C. Ferguson, Denver, Colo.
PA—H. N. How, Salt Lake City, Utah.
EM—A. C. Watts, Salt Lake City, Utah.
EE—Leonard Wilson, Salt Lake City, Utah.
SCO—Wasatch Store Co. Royer, J. B. Schluness, Salt Lake City, Utah.
SA—A. D. Pierson, Salt Lake City, Utah.
Somerset Mine; Slope; Somerset Seam, 144 to 188 in. thick.
PO—Somerset, Colo.; SP—Same; CTY—Garrison; RR—D. & R. G.
MS—Robert Williams, Jr., Somerset, Colo.
SM—Geo. W. Edwards, Somerset, Colo.
S of H—Mules. Track gage, 10 in.
S of M—1 arewall overhead enter mach.
PP—8 fire tube boilers, 125 H. P., 2 175 K. W. gen. unit, 500 volts D. C., 5 pumps.
EMP—258. Last years tonnage 287,050.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaking Screens.

VESTA MINES, INC.

General Office, Cooper Bldg., Denver, Colo.
PR—N. D. Ewart, Camp Shumway, Colo.
TR—D. J. O'Hara, Cooper Bldg., Denver, Colo.
GS—C. M. Hutton, Camp Shumway, Colo.
SA—Minerqua Coal Co., Denver, Colo.
Vesta Mine; Shaft; Seam 42 inches thick.
PO—Camp Shumway, Colo.; SP—Walsenburg, Colo.; CTY—Huertano; RR—D. & R. G.
S of H—Rope and electric locos.
S of M—Hand, chain breast and short-wall machs.
PP—Power purchased.
EMP—60. Last years tonnage, 39,448.
SIZES SHIPT—Slack, Pea, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

Successors to L. H. McGowan.

VEZZETTI & MOSCHETTI COAL COMPANY

General Office, R. F. D. No. 1, Canon City, Colo.
PR—Joseph Vezzetti, Canon City, Colo.
GS—Rocco Moschetti, Canon City, Colo.
SA—Thomas Orrechio, Florence, Colo.
Brookside Mine; Slope; Seam, 65 inches thick.
PO—Canon City, Colo.; SP—Same; CTY—Tremont; RR—A. T. & S. F.
S of H—Mules and electric machs.
PP—Power purchased, 440 volts D. C. EMP—10. Last years tonnage 15,154.
PREP. EQUIPT—Bar Screens.
Note—Formerly operated by Brooks Coal Mining Company.

VICTOR-AMERICAN FUEL CO.

General Office, 302 Ernest & Cramer Bldg., Denver, Colo.
PR—W. H. Huff, Denver, Colo.
VP—S. I. Heyn, Denver, Colo.
TR—C. C. Dieter, Denver, Colo.
GS—B. W. Snodgrass, Denver, Colo.
PA—A. H. C. Boisser, Denver, Colo.
CE—P. W. Whiteside, Denver, Colo.
EE—F. R. Thomas, Denver, Colo.
SCO—Western Stores; Buyer, W. H. Howell, Denver, Colo.
SA—A. M. Johnson, Denver, Colo.
Ravenwood Mine; Slope; Cameron Seam, 22 in. thick.
PO—Ravenwood, Colo.; FR—Same; EX—Walsenburg, Colo.; CTY—Huertano; RR—Colo. and Sou.
MS—C. D. Jones, Ravenwood, Colo.
SM—C. E. Edwards, Ravenwood, Colo.
S of H—Mules, rope and 1 elec. loco. Track gage 36 in.
S of M—Hand and 5 elec. chain mach.
PP—Power purchased, transformer, 22,000 to 440 volts A. C., 4 pumps.
EMP—97. Last years tonnage 57,002.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Spiral Separators.
Gray Creek Mine; Drift and Slope; Lower Series Laramie Seam, 48 in. thick.
PO—Gray Creek, Colo.; SP—Exp. Same; Frt. Trinidad, Colo.; CTY—Las Animas; RR—Colorado & Southern.
MS—Jas. O'Nell, Gray Creek, Colo.
SM—F. M. Baker, Gray Creek, Colo.
S of H—14 mules, rope and 3 trolley pole type locos. Track gage, 36 inches.
S of M—Hand and 1 shortwall mach.
PP—Power purchased, transformer 22,000-440 volts A. C., rotary converters, 250 volts D. C., 3 pumps.
EMP—51. Last years tonnage 33,995.
Coke Oven, 94 bee hive.
SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Lump.
PREP. EQUIPT—Shaker Screens.

Radant Mine; Slope; Laramie-Radant

Seam, 44 in. thick.
PO—Pyrolite, Colo.; SP—Florence, Colo.; CTY—Fremont; RR—A. T. & S. F.
MS—W. D. Bryson, Pyrolite, Colo.
SM—A. C. Purinton, Pyrolite, Colo.
S of H—18 mules and rope. Track gage, 36 in.
S of M—5 shortwall machs.
PP—Power purchased, transformer 22,000-175-110 volts A. C., rotary converters, 250 volts D. C., 2 pumps.
EMP—77. Last years tonnage 18,277.
SIZES SHIPT—Slack, Pea, Nut, Lump.
PREP. EQUIPT—Shaker Screens.
Pinnacle Mine; Drift; Laramie-Pinnacle Seam, 168 in. thick.
PO—Oak Creek, Colo.; SP—Same; CTY—Routt; RR—Denver & Salt Lake.
MS—J. E. Davis, Oak Creek, Colo.
SM—W. B. Morgan, Oak Creek, Colo.
S of H—Mules, main rope, 2 trolley pole type and 2 Pinkey steam locos. Track gage, 36 in.
S of M—Hand.
PP—3 fire tube boilers, 480 H. P., 1—150 K. W. and 2—100 K. W. gen. units, 250 volts D. C., 2 pumps.
EMP—149. Last years tonnage 111,021.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.
Wadge Mine; Slope; Wadge Seam, 96 inches thick.
PO—Mt. Harris, Colo.; SP—Same; CTY—Routt; RR—Denver & S. L.
MS—J. A. Halbert, Mt. Harris, Colo.
S of H—Mules, 2 steam and 3 elec. gathering holsts. Track gage 36 in.
S of M—4 shortwall machs.
PP—2 fire tube boilers, 200 H. P., 1 water tube boiler, 250 H. P., gen. units, 150 K. W., 440 volts A. C., 5 pumps.
EMP—104. Last years tonnage 73,081.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.
Delagua Mine; Drift and Slope; Upper Series Primero and Delagua Seams, 68 in. thick.
PO—Delagua, Colo.; SP—Frt. Hastings, Colo.; Exp. Ludlow, Colo.; CTY—Las Animas; RR—Colorado & South-eastern.
MS—Jas. Struthers, Delagua, Colo.
SM—L. W. Barry, Delagua, Colo.
S of H—62 mules, rope and 15 trolley pole type locos. Track gage 36 in.
S of M—Hand, 8 elec. chain and shortwall machs.
PP—Power purchased. Transformer 23,000-2300 and 440 volts A. C., M. G. sets, rotary converter, 250 volts D. C., 12 pumps.
EMP—405. Last years tonnage 527,010. Coke Ovens, 161 bee hive.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.
Chandler Mine; Shaft; Laramie-Chandler Seam, 60 in. thick.
PO—Chandler, Colo.; FR—Same; EX—Florence, Colo.; CTY—Fremont, RR—Colo. & S. E.
MS—A. E. Thompson, Chandler, Colo.
SM—A. G. Price, Chandler, Colo.
S of H—Mules and 1 electric loco. Track gage, 36 in.
S of M—8 shortwall machs.
PP—Power purchased, transformer 22,000-440 volts A. C., rotary converters, 250 volts D. C., 2 water tube boilers, 500 H. P., 6 pumps.
EMP—161. Last years tonnage 122,232.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT—Raveling and Shaker Screens, Picking Tables, Washeries.
Cass Mine; Drift; Raton Formation Seam, 48 inches thick.
PO—Delagua, Colo.; SP—Frt. Hastings, Colo.; Exp. Ludlow, Colo.; CTY—Las Animas; RR—C. & S.
MS—Geo. Sbllds, Delagua, Colo.
SM—L. W. Berry, Delagua, Colo.
S of H—Mules, 2 trolley pole type locos. Track gage 36 inches.
S of M—Hand and 4 shortwall machs.
PP—Power purchased, transformer 2300-250-440 volts A. C. Rotary converters, 250 volts D. C.
EMP—88. Last years tonnage 105,588.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.
Hastings No. 5 Mine; Drift; Vermojo Formation Seam, 60 inches thick.
PO—Hastings, Colo.; SP—Frt. Hastings, Exp. Ludlow, Colo.; CTY—Las Animas; RR—C. & S.
MS—A. J. Brooks, Hastings, Colo.
SM—Geo. Baker, Hastings, Colo.
S of H—Mules, rope and elec. locos. Track gage 36 in.
S of M—Hand and shortwall mach.
PP—Power purchased, transformer 2300-440-500 volts A. C., 1 pump.
EMP—70. Last years tonnage 73,461. Coke ovens 180 bee hive.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

WAITE MINING COMPANY, THE

General Office, Craig, Colo.
PR—Allen Waite, Craig, Colo.
VP—C. R. Fisk, Oak Creek, Colo.
TR—David Johnson, Craig, Colo.
GM—Geo. W. Flannigan, Craig, Colo.
GS—Geo. W. Flannigan, Craig, Colo.
PA—Geo. W. Flannigan, Craig, Colo.
CE—Geo. W. Flannigan, Craig, Colo.
LM—Geo. W. Flannigan, Craig, Colo.
EE—Geo. W. Flannigan, Craig, Colo.

"Waite"—Seam "E" Mine; Slope (Rocky Lamp); Lower Series Seam, 48-108 inches thick.
PO—Craig, Colo.; SP—American-Craig, Colo.; CTY—Moffat; RR—D. & S. L.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—M. G. sets, 500 volts A. C. and D. C.
EMP—9. Last years tonnage 1,200.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

WALSENBURG COAL MINING CO.

General Office, 634 Cooper Bldg., Denver, Colo.
PR—George Fruth, Denver, Colo.
VP—J. K. Dick, Walsenburg, Colo.
GM—George Fruth, Denver, Colo.
GS—George Fruth, Denver, Colo.

Solar Mine; Shaft; Walsen Seam, 69 in. thick.
PO—Walsenburg, Colo. SP—Solar, Colo. CTY—Huertano. RR—D. & R. G.
S of H—Mules.
S of M—7 comp. air machs.
PP—6 water tube boilers, total 560 H. P., 1 air comp., 440 volts A. C., 5 pumps. Purchase power.
SIZES SHIPT—Slack, Pea, Nut and Lump.
PREP. EQUIPT—Shaker Screens and Washeries.
NOTE—Mine not operating, 9-1-21.

WALTER COAL COMPANY

General Office, 325 Temple Court Bldg., Denver, Colo.
PR—Geo. W. Welch, Boulder, Colo.
VP—M. T. Baptsis, Birmingham, Ala.
TR—O. A. Smith, Denver, Colo.

Postal Mine; Slope; Pinnacle and Blacksmith Seams, 72 in. thick.
MS—T. Hays, Oak Creek, Colo.
PO—Oak Creek, Colo.; SP—Same; CTY—Routt; RR—Denver & Salt Lake.
S of H—Mules, rope. Track gage 36 inches.
S of M—Hand.
PP—250 volts D. C., 2 pumps.
EMP—30. Last years tonnage 350.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

WESTERN COLLIERIES COMPANY, THE

New Colorado Collieries Co.

WILLIAMSBURG SLOPE COAL CO., THE

New part of Colorado Fuel and Iron Co.

WINTON COAL CO.

General Office, Cedaridge, Colo.
PR—Mrs. C. Winton, Seattle, Wash.
GM—J. C. Bowerman, Cedaridge, Colo.
GS—Ira L. Bowerman, Cedaridge, Colo.
EM—Oliver Cook, Delta, Colo.

Winton Mine; Drift; Semi-Bituminous Seam, 44-156 in. thick.
PO—Cedaridge, Colo.; SP—Delta, Colo.; CTY—Delta; RR—D. & R. G.
S of H—Mules. Track gage, 25 in.
S of M—Hand.
EMP—4. Last fiscal year output, 1,265 tons.
SIZES SHIPT—Nut, Egg, Lump.

WOOD, FRANKLIN P. & CO.

Out of business.

WOLF PARK COAL COMPANY, THE

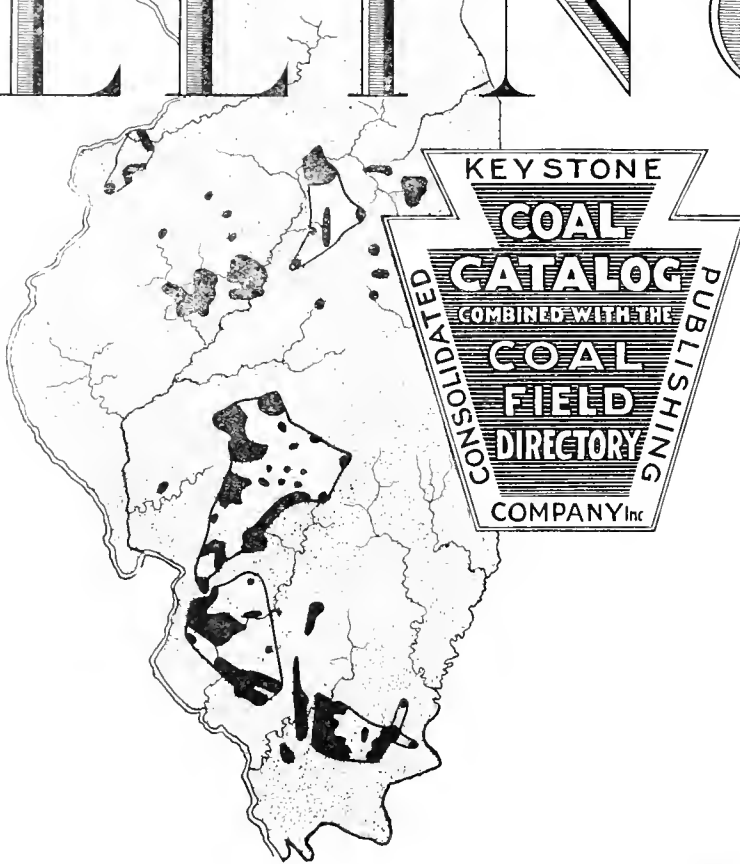
New Canon-Radance Coal Co.

WOOTTON LAND & FUEL COMPANY

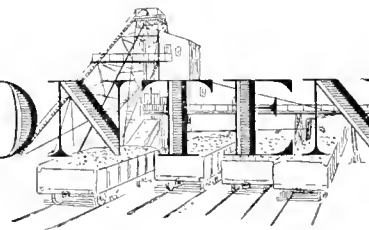
General Office, Wootton, Colo.
PR—T. W. Joyce, 23 Wall St., New York, N. Y.
GM—A. V. Berg, Wootton, Colo.
SCO—Wootton Supply Co., Buyer, A. V. Berg, Wootton, Colo.

Turner Mine; Drift; Laramie Seam, 42 inches thick.
PO—Wootton, Colo.; SP—Same; CTY—Las Animas; RR—Santa Fe.
S of H—Mules and trolley pole type locos. Track gage, 36 in.
S of M—Hand.
PP—2 water tube boilers, 150 H. P., gen. units, 500 volts D. C. and A. C., 3 pumps.
SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Lump.
PREP. EQUIPT—Shaker Screens.

ILLINOIS



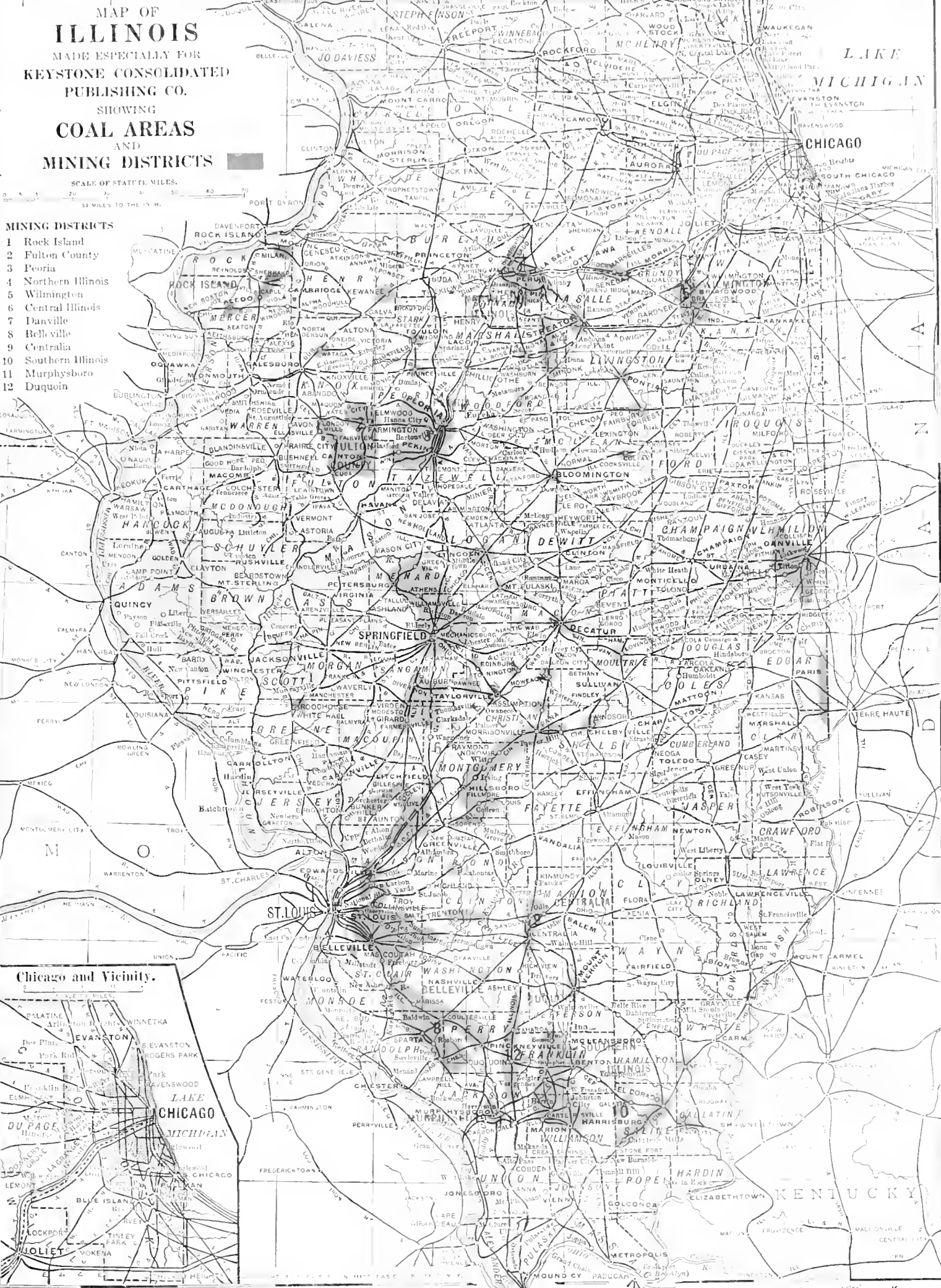
CONTENTS



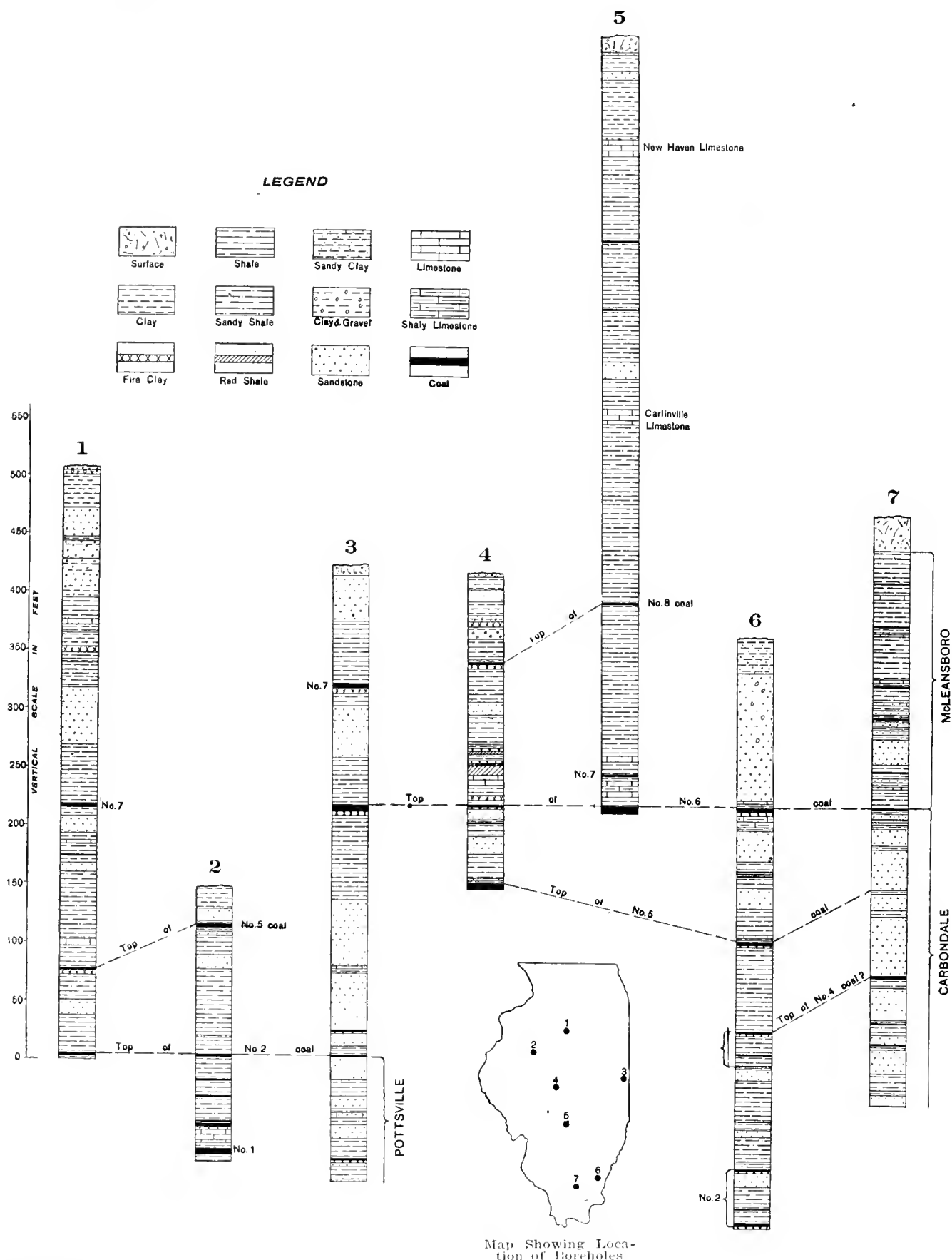
Map of Mining Districts.....	Opp. 306
Sectional View of Coal Formations.....	Opp. 307
General Description of Coal Resources....	307 to 309
No. 7 Seam.....	309
No. 6 Seam.....	310,311
No. 5 Seam.....	311
No. 2 Seam.....	312
No. 1 Seam.....	313
Preparation and Sizing of Coal.....	313
Supplementary Analyses.....	314 to 316
Descriptive Advertisements.....	317 to 345
List of Mines by Seams.....	346 to 350
Alphabetical Directory of Coal Mines....	351 to 369
List of Mines by Counties.....	370, 371

MINING DISTRICTS

- 1 Rock Island
- 2 Fulton County
- 3 Peoria
- 4 Northern Illinois
- 5 Wilmington
- 6 Central Illinois
- 7 Danville
- 8 Bellville
- 9 Centralia
- 10 Southern Illinois
- 11 Murphysboro
- 12 Duquoin



STRATIGRAPHIC SECTIONS OF ILLINOIS COAL MEASURES



ILLINOIS*

General Description of the Geology of the State With the Ranks of Coal Produced Treats of the Mining Districts, With a Map Showing Their Location, All Seams Lying Within the State, and the Railroads Serving Same; Description of the Producing Seams Showing Their Geological Order; Kinds of Coal; General Analysis; Etc

Illinois is the second largest producer of coal in the United States, being exceeded in production only by Pennsylvania. The annual production is around 85,000,000 tons, or about 15 per cent. of the total annual production of the country.

The coals of Illinois are a part of the Eastern Interior coal field, and are estimated to have an area of 35,000 square miles. All coal bearing rocks of this field belong to the Pennsylvanian or "Coal Measures" division of the Carboniferous. The Pennsylvanian consists of a series of shales and sandstones, and minor amounts of limestone, clay and coal. The series thickens gradually toward the southern part of the state, where it attains a thickness of 2,000 feet. It is underlain by strata varying in age from Upper Mississippian to Ordovician, the youngest rocks belonging to the Chester group of the Mississippian, the oldest to the St. Peter sandstone. Generally overlying the Pennsylvanian rocks are unconsolidated clays, sands, and gravels of glacial or alluvial origin. Exposures of the "Coal Measures" are commonly restricted to the stream valleys and are very rare in the central part of the coal field.

The Illinois "Coal Measures" are divided into three formations. In ascending order these are the Pottsville formation, the Carbondale formation and the McLeansboro formation. The Pottsville includes that part of the Pennsylvania series which lies below coal No. 2. These strata consist of coarse, gray sandstones and some conglomerate in the lower part, and shales or sandy shales predominating in the middle and upper portions. Several coal beds are known in the Pottsville. The most important commercially is the Rock Island coal of Rock Island, Mercer and Fulton counties. The coal lies about 50 feet below No. 2 coal. In southern Gallatin county at least two Pottsville coals are locally mined, the Ice House and Bell coals, the former 250 feet, and the latter 325 feet below No. 2 coal. Locally in southern Williamson county a bed of cannel-like coal is found near the base of the formation. The Carbondale formation is represented by the portion between the base of coal No. 2 and the top of coal No. 6. This is the important coal bearing formation in the state. The McLeansboro formation includes all the "Coal Measures" lying above coal No. 6, the roof shale over this seam being its basal member.

The coals of Illinois are bituminous in rank and are used mainly for steam and domestic purposes. Compared with other coal fields of the country, the quality of Illinois coals occupies an intermediate position. As a general proposition, the coal from the lower seams is superior to that of the upper. The quality improves also from the north to the south, the beds in the southern part of the state being superior to those in the northern part; this is more particularly true of the heating power. The coals of the central field contain from 40 to 55 per cent of solid carbon, from 10 to 25 per cent of combustible gas, from 5 to 15 per cent of water and from 8 to 15 per cent of ash. The average heat value of Illinois coals is about 11,300 British Thermal Units, considerably less than the coals from Pennsylvania, Kentucky and West Virginia, with which the home product is in constant competition. The high quality of these competitive coals, particularly those that make little smoke, has allowed them to set the pace in making prices. Coals of the Illinois type ignite easily and burn freely and quickly, and since the cost of Illinois coal is so much less than that of the other fuels mentioned, it is less expensive to residents of Illinois, if considered solely on a basis of the amount of heat to be obtained for a given expenditure of money.

"Probably all Illinois coals will coke. However, they would as a rule produce considerable breeze, and a coke too high in sulphur for metallurgical uses. Certain low-sulphur coals from Franklin, Williamson, Perry, and Jackson counties are capable, under best conditions, of yielding a metallurgical coke of satisfactory sulphur content, but in present practice such coals are mixed with Eastern coals in the manufacture of by-products coke. Certain low-sulphur varieties are used satisfactorily in gas producers, and during the past two years have come into wide use as a substitute for coke in the manufacture of water-gas."

RAILROADS

The coal mines of the state are afforded transportation facilities by counties by the following railroads: Bond County—Vandalia; Chicago, Burlington & Quincy. Bureau County—Chicago & Northwestern; Chicago, Rock Island & Pacific; Chicago, Milwaukee & St. Paul; Chicago, Burlington & Quincy. Christian County—Wabash; Illinois Central; Chicago & Illinois Midland; Chicago & Eastern Illinois; Cleveland, Cincinnati, Chicago & St. Louis; Baltimore & Ohio Southwestern. Clinton County—Baltimore & Ohio Southwestern; South-

ern. Franklin County—Chicago, Burlington & Quincy; Chicago & Eastern Illinois; Illinois Central; St. Louis, Iron Mountain & Southern. Fulton County—Chicago, Burlington & Quincy; Minneapolis & St. Louis; Toledo, Peoria & Western. Gallatin County—Louisville & Nashville. Grundy County—Elgin, Joliet & Eastern; Atchison, Topeka & Santa

*The information here presented on Illinois seams has been gleaned largely from the various Bulletins of the Illinois Coal Mining Investigations, in particular Bulletin No. 13, "Coal Mining in Illinois," and through the assistance of the Survey.

Fe; Chicago & Alton. Jackson County—Illinois Central; St. Louis, Iron Mountain & Southern; Mobile & Ohio. Jefferson County—Chicago & Eastern Illinois; Louisville & Nashville. La Salle County—Chicago, Burlington & Quincy; Illinois Central; Chicago & Alton; Chicago, Milwaukee & St. Paul; Chicago, Indiana & Southern; Chicago, Rock Island & Pacific; Atchison, Topeka & Santa Fe; Wabash; Cleveland, Cincinnati, Chicago & St. Louis. Livingston County—Topeka, Peoria & Western; Chicago & Alton; Illinois Central. Logan County—Illinois Central; Chicago & Alton. Macon County—Wabash; Illinois Central; Vandalia; Cincinnati, Hamilton & Dayton. Macoupin County—St. Louis, Peoria & Northwestern; Chicago, Burlington & Quincy; Chicago & Alton; Chicago & Northwestern. Madison County—St. Louis, Troy & Eastern; Litchfield & Madison; Cleveland, Cincinnati, Chicago & St. Louis; Vandalia; Chicago & Eastern Illinois; Wabash; Illinois Traction System; Toledo, St. Louis & Western; Illinois Terminal. Marion County—Illinois Central; Chicago, Burlington & Quincy; Baltimore & Ohio Southwestern. Marshall County—Illinois Central; Chicago & Alton; Atchison, Topeka & Santa Fe; Chicago, Rock Island & Pacific. McLean County—Illinois Central. Menard County—Chicago & Alton; Chicago, Peoria & St. Louis. Mercer County—Rock Island Southern; Chicago, Rock Island & Pacific. Montgomery County—Chicago & Eastern Illinois; Cleveland, Cincinnati, Chicago & St. Louis; Toledo, St. Louis & Western; Illinois Central. Moultrie County—Wabash; Vandalia. Perry County—Illinois Central; Mobile & Ohio; Wabash, Chester & Western. Peoria County—Minneapolis & St. Louis; Peoria &

Pekin Union; Chicago, Burlington & Quincy; Peoria Railway Terminal; Toledo, Peoria & Western. Putnam County—Chicago, Milwaukee & St. Paul. Randolph County—Illinois Central; Mobile & Ohio; Illinois Southern. Saline County—Cleveland, Cincinnati, Chicago & St. Louis; Illinois Central; Louisville & Nashville. Sangamon County—Chicago & Alton; Chicago & Illinois Midland; Wabash; Chicago, Peoria & St. Louis; Illinois Central; Cincinnati, Hamilton & Dayton; Chicago, Burlington & Quincy; Baltimore & Ohio Southwestern; Illinois Traction System; Chicago & Northwestern. Shelby County—Cleveland, Cincinnati, Chicago & St. Louis; Illinois Central; Baltimore & Ohio Southwestern. Stark County—Chicago, Burlington & Quincy. St. Clair County—St. Louis & O'Fallon; Illinois Central; Vandalia; East St. Louis & Suburban; Louisville & Nashville; St. Louis & Belleville; Baltimore & Ohio Southwestern; Southern; Mobile & Ohio. Tazewell County—Peoria & Pekin Union; Cleveland, Cincinnati, Chicago & St. Louis; Atchison, Topeka & Santa Fe; Lake Erie & Western. Vermilion County—Chicago & Eastern Illinois; Cleveland, Cincinnati, Chicago & St. Louis; Illinois Traction System; Wabash. Washington County—Illinois Central; Chicago, Burlington & Quincy; Louisville & Nashville; Illinois Southern. White County—Baltimore & Ohio Southwestern; Cleveland, Cincinnati, Chicago & St. Louis. Will County—Elgin, Joliet & Eastern; Chicago & Alton. Williamson County—St. Louis, Iron Mountain & Southern; Illinois Central; Chicago, Burlington & Quincy; Chicago & Eastern Illinois; Coal Belt. Woodford County—Atchison, Topeka & Santa Fe; Illinois Central.

COAL DISTRICTS OF ILLINOIS

DISTRICTS	COAL MINED			
	GEOLOGIC NUMBER OR NAME OF SEAM	TRADE NAME OR NAME BY WHICH IT IS KNOWN IN THE MARKET	COUNTIES	METHOD OF MINING
1 Longwall.....	No. 2 or "Third Vein".	"La Salle," Wilmington"...	Bureau Grundy La Salle Marshall Putnam Will Woodford	Longwall
2 Jackson County.....	No. 2.....	"Murphysboro".....	Jackson	Room and pillar
3 Rock Island and Mercer Counties.....	No. 1.....		Rock Island Mercer Warren Knox Fulton Schuyler Warren Knox Fulton Schuyler	Room and pillar
	No. 2.....		Brown Cass Morgan Scott Green Jersey	

(Continued on Next Page)

COAL DISTRICTS OF ILLINOIS—Continued

DISTRICTS	COAL MINED			
	GEOLOGIC NUMBER OR NAME OF SEAM	TRADE NAME OR NAME BY WHICH IT IS KNOWN IN THE MARKET	COUNTIES	METHOD OF MINING
4 Peoria-Springfield.....	No. 5.....	"Peoria," "Fulton County," "Springfield" ("Central Illinois").....	Fulton Knox Logan Macon McLean Menard Peoria Sangamon Schuyler Tazewell	Room and pillar
5 Saline-Gallatin Counties..	No. 5.....	"Harrisburg," "Ledford," "Eldorado".....	Gallatin Saline	Room and pillar
6 Franklin, Williamson and Jefferson Counties....	No. 6.....	"Franklin - Williamson," "Carterville," "Herrin," etc.....	Franklin Jackson Perry Williamson	Room and pillar
7 Southwestern Illinois....	No. 6, "Blue-band"....	"Belleville," "Standard," "Mt. Olive," "Staunton," "Montgomery".....	Bond Christian Clinton Macoupin Madison Marion Montgomery Moultrie Perry Randolph Sangamon Shelby St. Clair Washington	Room and pillar
8 Danville.....	No. 6, "Grape Creek".. No. 7.....	"Danville".....	Edgar Vermilion	Room and pillar

MCLEANSBORO FORMATION

No. 7 Seam. (Known to the trade as Danville coal.) (Mined in the Danville District.)

This coal is the only seam in the McLeansboro formation that has commercial value, and is mined in the vicinity of Danville and Fairmount in Vermilion county, and until recently has been mined at Streator in La Salle county. Thinner beds, 2 to 3 feet thick, and higher in the formation are mined locally in Shelby, Jefferson, Lawrence and Wabash counties. No. 7 coal has a thickness of 5 feet to 7 feet 6 inches over a large area west of Danville, but thins toward the south. It is exposed all along the river front in the southwest quarter of Danville, but it disappears toward the northeast, having been eroded in the formation of the pre-glacial valley of Vermilion River.

This coal contains a variable quantity of sulphur, occurring as lenses, bands, stringers and plates along bedding planes and cleavage faces. In its massive form it is easily separated and thrown

out. At one mine a large equipment has been installed to separate it from the coal as a valuable by-product. The roof is a black shale of variable thickness, and is generally not good. The seam lies directly upon a 6 to 8-inch bed of clay which heaves badly. This coal is essentially a steam and domestic fuel, although its relatively high ash, moisture and sulphur content renders it less suitable for domestic uses than coal from some of the other districts of the state. It has also a relatively high content of volatile matter which renders it somewhat difficult to burn effectively in many domestic plants.

GENERAL ANALYSIS

Moisture	13.00
Volatile Matter	38.30
Fixed Carbon	38.70
Ash	10.00
Sulphur	2.95
B. T. U.	11,145

CARBONDALE FORMATION

Seam No. 6. (Known to the trade as Franklin-Williamson, Cartersville, Herrin, Belleville, Standard, Mt. Olive, Staunton, Montgomery and Grape Creek coal.) (Mined in Franklin and Williamson counties; Southwestern Illinois; and Danville districts.)

In Jefferson, Franklin and Williamson counties this coal is uniformly thick, varying from about 5 feet near the Saline county line on the east side of the district to a maximum of about 14 feet in the vicinity of Christopher. The thicker and better coal is found in the western part of Franklin county, where there exists a large area of coal having less than 1.50 per cent. sulphur. There is no significant difference in the appearance of No. 6 coal to distinguish it from other coals of the State, all of which are shining black and are commonly banded, due to laminations of bright and dull coal. The No. 6 coal is characteristically interbedded by a dirt band or "blue band" found commonly about 18 inches above the base of the seam. Where the coal is thick the "blue band" is known to lie as much as 52 inches above the floor. Its thickness varies from $\frac{1}{2}$ inch to 4 inches, with an average of about 1 inch. In general, though not in all places, the thickness of the "blue band" increases with the thickness of the coal.

The coal commonly lies in three benches in this district; the upper bench is separated from the middle by a persistent parting, commonly of mother coal, and the middle and lower benches are separated by the "blue band". Each bench varies in thickness as the total thickness of the coal varies. In the eastern part of the district, where the coal is less than 8 feet thick the upper bench is about 12 to 18 inches thick, the lower bench 15 to 18 inches, and the middle bench possibly 4 to 5 feet. Where the coal is thicker each bench is also thicker, the upper bench being in places 3 to 4 feet, the lower 2 to 3 feet, and the middle 6 to 7 feet thick.

Impurities in the coal, in addition to the "blue band", consist of sulphur balls and lenses, these being more common in the eastern than in the western part of the district, where they are relatively rare. Streaks of mother coal are not uncommon. These, however, should not be considered as impurities, except as they tend to make the coal sooty to handle. Streaks of bone and clay are not unknown, but the coal is rather freer of these impurities than the coal from other districts of the State.

The strata overlying the coal vary from the typical dark shale and limestone cap rock within 25 feet of the coal to a large thickness of gray shale, amounting in places to 110 feet. The dark shale and cap rock is the characteristic roof of this coal throughout southern Illinois, but in this district is restricted in distribution practically to the area underlain by coal less than 8 feet thick in the eastern part of Franklin, Williamson and Jefferson counties. Where the coal is thick the roof is gray shale which does not stand well when the coal is removed, and for this reason the upper bench, 18 to 60 inches thick, is commonly left for roof. Some mines in the same region follow the practice of mining only the coal between the "blue band" and the roof, thus removing only the middle bench and gaining a product free from impurities. The clay beneath the coal is hard and generally thin, ranging

from 4 inches to 8 feet. Below it is commonly a limestone. Some rock rolls occur at the top, the larger ones extending down into the coal 2 to 3 feet.

The coal lies nearly level over much of the district or with an average dip toward the northwest of 10 to 20 feet per mile. Along the west side of the district, however, the coal rises for a short distance in the Duquoin anticline, which is more properly called a monocline, at a rate of 300 feet per mile. Also in the 6 miles north of the outcrop of No. 6 coal in Williamson county the coal dips more steeply than it does farther north, so that in this belt the dip averages about 50 feet per mile. A belt of faulting or displacement crosses the southern part of the district extending from Royalton to Johnson City and probably also continuing in the same southeasterly direction across Williamson county and even into the Harrisburg district as far as, and possibly beyond Harrisburg. Displacements of the coal as great as 75 feet are known in mines located in this disturbed belt.

In the Belleville, Standard and Staunton district of southwestern Illinois the coal differs from the coal in Franklin and Williamson counties by having a large content of impurities and by its division into more numerous benches. In considerable areas in this district the coal is missing from the section. It rarely exceeds 8 feet in thickness, and it averages in the areas in which the coal is present about 7 feet.

In part of this district the upper and lower bench of the Franklin and Williamson counties field is present and the middle bench is represented by several small benches. The various benches of this coal are spoken of as the "top" coal, the "nine-inch" coal, "drift" coal, "block" coal, and "bottom" coal. Between successive benches there are generally partings of sulphur or dirt $\frac{1}{4}$ to $\frac{1}{16}$ inch thick. This separation of the middle part of the bed seems to be restricted to St. Clair, Clinton, Washington, Randolph and Perry counties, as it is not characteristic of the coal in the Staunton and Mt. Olive regions in Madison, Montgomery, Macoupin and Bond counties, where only three benches are present.

The roof is commonly dark shale a few inches to a few feet thick, underlying a limestone cap rock averaging 7 feet in thickness. This succession is very persistent in the northern part of the district. In the southern part, however, including Clinton and St. Clair counties and counties to the south, there is greater irregularity. The immediate roof may be a soft draw slate, dark shale, or "slate", an interlaminated mixture of gray shale and black shale or limestone to hold it up, but the draw slate and white top are difficult to hold. In certain areas even the black slate is rendered insecure by the presence of a soft dark-gray or black shale called clod, between it and the limestone cap rock.

In general, mining conditions in the southern part of this district are less satisfactory than in the northern part because of the poorer roof and the greater amount of impurity in the coal.

In the Danville district seam No. 6 averages 6 feet in thickness. Its chief characteristic is the presence of a blue band which divides it into upper and lower benches. This blue band consists of gray shale of varying hardness and in some mines has a

thickness of $7\frac{1}{2}$ inches, the top part lying $1\frac{3}{4}$ to $3\frac{1}{2}$ feet above the floor.

The limestone cap rock characteristically overlying No. 6 coal in other districts is absent in the Danville area except in the immediate vicinity of Danville. The usual roof is a gray sandy shale with so little cohesion that it falls easily. The contact of the roof and coal is extremely irregular. Lenticular masses of shale usually covered by a thin layer of coal extend downward into the coal bed. Such "rolls", as they are called, are extremely difficult to support. In isolated cases there are 3 to 4 inches of black shale between the coal and the gray shale which forms the cap-rock. Wherever this black shale is broken, air and moisture disintegrate the gray shale cap-rock and the roof becomes insupportable.

In all parts of the Danville district the floor is a soft fireclay.

Coal from the No. 6 seam in some localities, notably Franklin and Williamson counties, has produced a satisfactory coke, though always inferior to the Standard Connellsville. It is at the present time being used for by-product coking, after mixing with West Virginia or Pennsylvania coals. This coal is also used at a limited number of places in Illinois and Missouri for the manufacture of illuminating gas. Where the sulphur content is favorable, coal from this bed does satisfactorily. In tests made with high sulphur coal a difficulty in addition to that of sulphur in the gas, lay in the clinkering of the coke when used in the gas producer. The total ash in the seam is not high, therefore it follows that the cleaner portion is low in ash, because a large percentage of it is present in the bands. For this reason a high quality of lump, egg or nut coal is produced.

GENERAL ANALYSIS

	Franklin- Williamson District	Belleville- Staunton District	Danville District
Moisture	9.20	12.55	14.45
Volatile Matter . .	34.00	38.05	35.90
Fixed Carbon . .	48.10	39.05	40.30
Ash	8.70	10.35	9.35
Sulphur	1.55	4.00	2.55
B. t. u.	11,825	10,850	10,920

No. 5 Seam. (Known to the trade as Peoria, Fulton County, Springfield, Harrisburg, Ledford and Eldorado coal.) (Mined in Fulton, Peoria, Sangamon, Saline and Gallatin counties.)

The average thickness of the coal is 4 feet 8 inches, as reported in the Thirty-first Annual Coal Report of Illinois from 240 mines. The seam has a uniform appearance from top to bottom and the coal is hard and massive. It shows fine laminations with knife-edge mother coal partings. In some places there are discontinuous bands of pyrites near the middle of the seam. The seam lacks the blue-band characteristic of No. 6. Udden states that, "In the mines near East Peoria and at Edwards the coal runs out against the drift in several of the entries. Miners recognize that these defects in the coal are due to erosion, and they speak of the drift as 'wash.' The drift generally consists of sand, or silt, which in some places has been found to contain

embedded trunks of trees and other vegetation. Experience has shown that the surface of the bed-rock does not always conform to the present topography of the land, and operators are careful to avoid unprofitable explorations of places where 'wash' has been encountered."

The immediate roof is a black, sheety shale locally called slate. This shale varies in thickness from a few inches to 35 feet and in places contains "niggerheads" of iron pyrites. In many mines between the coal and the shale there is in places a layer of iron pyrites 2 or 3 inches thick. Where this layer is present the shale is protected from the air and stays up; where it is not present the shale falls badly and in places caves to a height of 35 feet.

The cap-rock in most mines is limestone, but in a few is a fine-grained micaceous sandstone. In some places the shale of the immediate roof is absent and the cap-rock comes in contact with the coal. When the limestone is disseminated and mingled with the shale the roof is soft and weathers quickly, owing perhaps to the presence of marcasite. It is then called clod and the "niggerheads" are iron carbonate.

From the viewpoint of the miner the chief characteristic of the district is the great number of clay veins extending through the coal and the roof shale crossing their bedding planes. These clay veins are fissures which have been filled with a hard light-gray clay. Besides clay veins the physical features which affect mining are small faults, slips and rolls. In one mine where the shale of the immediate roof is absent the sandstone has cut out the coal for 150 feet along an entry.

The coal in this district in many places sticks to the roof and is separated from it with difficulty. In one mine about an inch of coal is left up to protect the roof shale from the moisture of the air.

The floor in most places is a dark gray fireclay which heaves badly when wet. At one mine the floor is a blue fireclay containing nodular concretions of iron pyrites.

Seam No. 5 in Saline and Gallatin counties outcrops in a belt extending about east-west from the vicinity of Harrisburg. The strata dip to the north so that in the northern part of these counties the coal is 600 or more feet in depth. At New Haven in White county it lies at a depth of about 770 feet. The seam varies in thickness from 4 to 9 feet, averaging about 5 feet in Saline county and about $4\frac{1}{2}$ feet in Gallatin county.

The roof of No. 5 coal in this district is a shale which is commonly black and which contains the characteristic concretion of iron pyrites or "niggerheads" practically everywhere present in the roof shale of this coal throughout the Eastern Interior Basin of Indiana, Illinois and western Kentucky. The floor is fire clay, which gives trouble only locally and where wet. In general roof and floor conditions are more satisfactory for mining than in other districts of the State with the possible exception of the small field of No. 1 coal in Mercer and Rock Island counties.

The present mining operation in Saline county is in or close to a belt of folding or faulting which crosses Williamson and Saline counties from near Royalton to near Harrisburg. Within and south of the belt the coals are more irregular in position

or "lay" than they are to the north. Within the belt itself the coal is known to be faulted. Faults have been noted in Williamson county between Johnston City and Royalton and a large fault having a throw of about 100 feet is present between two mines about 2 miles northeast of Harrisburg. Adjacent to this belt of faulting the bed contains many hills and rolls, and in one mine continuous grades as high as 75 feet in one-half mile have been encountered. Local grades as high as 15 per cent. are reported in the entries of some mines. Variations in the thickness of the bed apparently bear no relation to the irregularities in the "lay" of the bed.

No. 5 seam is locally absent along a line about 2 miles wide crossing the district from north to south about 2 miles west of Harrisburg. Its absence is apparently due to erosion, its place being occupied by a sandstone which extends from considerable distance above to considerable distance below the horizon of the coal.

A belt of folding or faulting crosses the district from north to south near the central line of Gallatin county. East of this line the coal lies about 475 feet lower than its altitude to the west. There has been no mining and very little exploratory work in this part of the area. Similarly most of the northern part of Saline and Gallatin counties represents an essentially unexplored resource.

The district is characterized by the presence of igneous intrusions in the form of dikes which penetrate the coal in many of the mines in Saline county. These dikes are not known at the surface and in some mines appear to stop at the roof of the coal. No single dike has been traced except across the workings of the mine in which it is found, so actual length of any of them is not known. Rock from a dike near Eldorado was identified by Albert Johansen, formerly of the U. S. Geological Survey, as mica peridotite. One dike is known to have a thickness of as much as 300 feet, but commonly they are thinner. Apparently this system of intrusions is similar and of the same age as that found in the fluorspar region of southern Illinois and western Kentucky. The intrusions commonly have produced a natural coke for a few feet each side of the coal and in places apparently silicified this product. Except for the extra labor necessary to cut through the harder rock of the dike and coke, the intrusions offer no especial difficulty in mining.

No. 5 coal is one of the most continuous seams in the series. Its chemical and physical character, however, varies from district to district so that there is a greater difference between the coal mined from No. 5 seam in Saline county and the coal mined at Springfield-Peoria than exists between No. 5 and No. 6 coal in Saline and Franklin counties. Coal from Saline county stands high in heat value among the coals in the State, being exceeded in this respect only by the No. 2 coal from Jackson county.

GENERAL ANALYSIS

	Peoria-Springfield District	Saline-Gallatin District
Moisture	15.10	6.75
Volatile Matter	36.80	35.50
Fixed Carbon	37.60	48.70
Ash	10.50	9.05
Sulphur	3.50	2.90
B. t. u.	10,515	12,275

Seam No. 2. (Known also as Third Vein in the northern part of the State; to the trade as Third Vein, La Salle, or Wilmington in the northern part of the State; as the Colchester coal in the western part of the State; and as Murphysboro coal in the southern part of the State.) (Mined in the Longwall district and in Jackson county.)

Seam No. 2 in the northern part of the State varies in thickness from 2 feet 6 inches to 4 feet, averaging about 3 feet 6 inches in the La Salle field and 3 feet 4 inches in the Wilmington field.

In physical appearance this coal differs little from other coals in the State. There is possibly a slight tendency to break in slabs rather than blocks, and accordingly it is occasionally referred to as a "long-grain" coal. The coal does not possess the persistent dirt or sulphur bands of No. 6 nor the "horsebacks" or "clay slip" of No. 5. For identification of the bed large reliance has been placed upon determination of the fossil plants in the associated roof shales. Lenses and bands of pyrite and bands of mother coal and dirt are distributed throughout the seam without irregularity or persistence, varying in thickness up to 4 inches.

In the La Salle field the usual roof is gray shale called "soapstone" 15 to 18 feet thick, above which is a black laminated shale containing "niggerheads", commonly of large size, and composed mostly of limestone. In places the gray shale is out and the black shale rests directly upon the coal. Mining in this coal is by the longwall method, to which the roof is well adapted.

Near the anticline the immediate roof is in some portions a gray, calcareous shale, called "soapstone"; in others, a black, carbonaceous shale. The black shale is generally laminated and commonly includes "niggerheads" of pyritous material. It is harder than the gray shale.

In the Wilmington field a dark-gray fireclay generally lies directly under the coal and varies in thickness from a few inches to several feet. The clay heaves badly under pressure when wet. In some localities ironstone balls and root remains have been found imbedded in the clay. In the La Salle field the coal is generally underlain by fireclay, but in parts of some mines a hard sandstone lies directly beneath the coal.

Generally bed No. 2 in this district lies nearly flat or is slightly rolling, but on the La Salle anticline it dips as much as 51 degrees.

Bed No. 2 in Jackson county has only a shallow cover, the coal lying at depths varying from 25 to 160 feet. A characteristic feature of the bed is its division into two benches by a gray laminated shale band varying in thickness from $\frac{1}{3}$ inch to 36 feet. Where this parting is thick the lower bench has sometimes been called, erroneously, seam No. 1. The bottom bench varies in thickness from $3\frac{1}{2}$ to 4 feet, averaging $3\frac{3}{4}$ feet. The top bench averages 2 feet.

The bed contains few nodular concretions of iron pyrites, but has a layer of bone 2 to 3 inches thick, generally next to the floor. This floor in most places is sandstone, but in sections is shale or fireclay. The coal shows a pronounced cleavage, northeast to southwest.

Where the parting is thin and the two benches are united, the roof over the coal is a hard gray

shale, but where the parting is thick and only the lower bench is worked the parting becomes the roof. Where this parting is a light gray shale it is easy to support; where it is dark colored it slakes much on exposure to the air.

Numerous small faults occur in all mines, and horses, usually of a hard dark gray micaceous sandstone, are found in the vicinity of the faults.

The presence in places of a quicksand deposit about 30 feet below the surface has a marked effect on surface subsidence after roof-caves.

No. 2 seam in the Wilmington and La Salle field differs considerably from the No. 2 coal in Jackson county. The "Third Vein" coal has a high moisture content which reduces its heating value to the rank of sixth among the coals of the State. Murphys-

boro coal, on the other hand, ranks highest in heating value and lowest in ash and sulphur content. Coal from this bed can be satisfactorily used in the manufacture of coke for metallurgical purposes or of illuminating gas, especially when used with eastern coking and gas coals. The remaining supply of No. 2 coal in Jackson county is small.

GENERAL ANALYSIS

	Longwall District	Jackson County District
Moisture	9.30	16.15
Volatile Matter	34.00	38.85
Fixed Carbon	51.00	37.90
Ash	5.70	7.10
Sulphur	7.30	2.90
B. t. u.	12,500	10,980

POTTSVILLE FORMATION

No. 1 Seam. (Mined in Rock Island and Mercer Counties (No. 3) district.)

Seam No. 1 lies at depths varying from 40 to 213 feet. The topography of the surface in many places is rolling, with hills about 150 feet high near Matherville. The seam averages 4 feet in thickness and is broken in places by small faults, slips, clay veins and rolls. The coal has weak vertical cleavage, dull luster, and banded texture. On cleavage faces thick plates of calcite and iron pyrites are deposited. Near Ellisville sulphur bands 2 to 6 inches thick and in places 50 feet long are found at various horizons. A poorly developed parting divides the bed into two benches, the upper of which is in most places about 2 feet thick.

The immediate roof in the northwestern part of the district is a hard black shale that is easy to support. In the southern part of the district in places a bituminous calcareous shale, 2 to 5 inches thick, lies immediately over the coal. This shale, called clod, is hard when first exposed, but after exposure to the air becomes soft and falls.

Throughout the district the cap-rock is limestone. In limited areas where the shale is missing this limestone is the immediate roof over the coal. Above the cap-rock is a dense, fine-grained non-crystalline limestone locally called "blue rock."

Below seam No. 1 in places there is an irregular band of hard bone, 3 to 6 inches thick. The floor proper is a light gray micaceous fireclay which contains plant stems and roots. This clay heaves badly when wet and in places swells enough to fill the entry. In parts of some mines a carbonaceous shale lies between the fireclay floor and the coal, and in other parts, sandstone. These casual deposits are called "false bottoms."

No. 1 is a clean seam, low in ash.

GENERAL ANALYSIS

Moisture	13.45
Volatile Matter	38.15
Fixed Carbon	39.75
Ash	8.65
Sulphur	3.60
B. t. u.	11,035

PREPARATION OF COAL

Illinois was one of the first states to undertake a careful cleaning and sizing of coal, and no mining state can show a greater degree of attention to the production of a grade of coal pleasing to the trade. The following convenient table of sizes is given in Circular No. 4, University of Illinois:

ILLINOIS COAL

NAME	SIZE OF PIECES
Run of Mine	Mixture of all sizes
Lump	Large lumps separated from the finer sizes
Egg or Furnace	Lumps 3"—6"
No. 1 Nut or Small Egg	2"—3"
No. 2 Nut or Stove	1 1/4"—2"
No. 3 Nut or Chestnut	3/4"—1 1/4"
No. 4 Nut or Pea or Buckwheat	1 1/4"—3/4"
No. 5 Nut	Under 1/4"
Screenings	A mixtures of all sizes under 2"

For additional information on uses and analyses of Illinois coals, see descriptive advertisements of coal mines following the Supplementary Analyses.

Analyses of Illinois Seams by Counties and Localities

(ALL ANALYSES MADE ON MINE SAMPLES "AS RECEIVED")

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined C, P, U.	Carbon	Oxygen	RATIOS	
											Carbon Oxy. + Ash	F. C. V. M.
†No. 1.	Christian.	Christian.	11.13	39.21	41.26	8.40	2.56	11.715	...	...	...	1.05
†No. 1.	Christian.	Christian.	11.27	38.68	40.55	9.50	2.07	11.445	...	...	...	1.05
†No. 1.	Mercer.	Mercer.	14.97	38.27	37.07	9.69	3.75	9.637	...	...	...	0.97
†No. 1.	Mercer.	Mercer.	17.75	39.50	34.61	8.14	5.53	10.435	...	...	...	0.88
†No. 1.	Mercer.	Mercer.	13.23	40.29	37.20	9.28	4.37	11.104	...	...	...	0.92
†No. 1.	Mercer.	Mercer.	15.15	39.06	38.48	7.31	3.30	11.252	...	...	...	0.99
†No. 1.	Bureau.	Bureau.	15.08	40.12	36.35	8.45	3.68	10.831	...	...	...	0.88
†No. 2.	Bureau.	Bureau.	16.97	38.66	34.83	9.54	2.25	10.397	...	...	...	0.90
†No. 2.	Bureau.	Bureau.	17.34	37.12	39.28	6.26	2.80	11.006	...	...	...	1.06
†No. 2.	Bureau.	Bureau.	16.07	39.68	38.36	5.89	2.96	11.216	...	...	...	0.97
†No. 2.	Bureau.	Bureau.	14.88	38.69	37.25	9.08	3.83	10.685	...	...	...	0.96
†No. 2.	Christian.	Christian.	12.07	39.36	41.91	6.66	3.74	11.776	...	...	...	1.06
†No. 2.	Christian.	Christian.	14.30	39.54	40.30	5.86	2.00	11.609	...	...	...	1.02
†No. 2.	Grundy.	Grundy.	19.97	38.16	37.45	4.42	1.82	10.936	...	...	...	0.98
†No. 2.	Grundy.	Grundy.	17.01	39.48	36.74	6.77	3.32	10.834	...	...	...	0.93
†No. 2.	Grundy.	Grundy.	16.84	38.37	41.19	6.60	1.74	11.508	...	...	...	1.07
†No. 2.	Grundy.	Grundy.	13.73	39.87	42.19	4.21	2.04	11.787	...	...	...	1.06
†No. 2.	Grundy.	Grundy.	15.81	39.28	39.77	6.13	2.30	11.212	...	...	...	1.00
†No. 2.	Jackson.	Jackson.	9.37	33.39	49.29	7.95	2.11	11.972	...	...	...	1.48
†No. 2.	Jackson.	Jackson.	9.88	33.23	52.43	4.46	0.70	12.709	...	...	...	1.58
†No. 2.	Jackson.	Jackson.	9.76	33.45	52.07	4.72	1.08	12.629	...	...	...	1.56
†No. 2.	Jackson.	Jackson.	7.72	35.09	48.56	8.63	2.01	12.248	...	...	...	1.38
†No. 2.	Jackson.	Jackson.	7.72	35.09	48.56	8.63	2.00	12.253	...	...	...	1.54
†No. 2.	Jackson.	Jackson.	8.77	32.78	50.58	7.87	2.00	12.253	...	...	...	1.56
†No. 2.	Jackson.	Jackson.	8.91	34.03	53.17	3.89	1.15	12.844	...	...	...	1.56
†No. 2.	Jackson.	Jackson.	13.87	37.26	38.56	10.31	3.44	10.985	...	...	...	1.03
†No. 2.	La Salle, La Salle.	La Salle.	15.16	40.13	38.10	6.61	2.99	11.147	...	...	...	0.95
†No. 2.	La Salle.	La Salle.	14.43	40.01	35.89	9.67	4.47	10.678	...	...	...	0.90
†No. 2.	La Salle.	La Salle.	16.46	33.94	42.46	7.14	1.71	11.064	...	...	...	1.25
†No. 2.	McDonough.	McDonough.	19.35	31.70	40.61	8.34	2.31	10.392	...	...	...	1.28
†No. 2.	McDonough.	McDonough.	14.5	37.5	42.2	5.76	3.16	11.600	...	20.87	2.37	1.13
†No. 2.	McDonough, 12 mi. s. w. of Macomb.	McDonough.	10.61	41.87	35.94	11.58	3.79	11.225	...	...	...	0.86
†No. 2.	McDonough.	McDonough.	12.00	42.00	37.96	8.04	2.37	11.634	...	...	...	0.90
†No. 2.	McDonough.	McDonough.	16.79	36.81	40.34	6.06	2.59	11.130	...	...	...	1.10
†No. 2.	Marshall.	Marshall.	12.92	41.69	37.60	7.78	2.38	11.597	...	...	...	0.90
†No. 2.	Marshall.	Marshall.	13.10	38.73	39.64	8.53	3.47	11.414	...	...	...	1.02
†No. 2.	Marshall.	Marshall.	13.89	33.96	40.89	11.26	3.83	10.636	...	...	...	1.20
†No. 2.	Sangamon, Springfield.	Sangamon.	14.53	37.46	38.35	9.66	3.18	10.804	...	...	...	1.03
†No. 2.	Fulton.	Fulton.	15.67	31.43	43.10	9.80	2.99	10.620	...	...	...	1.37
†No. 5.	Fulton, St. David.	Fulton.	17.13	36.23	34.44	12.20	3.03	9.846	...	...	...	0.95
†No. 5.	Fulton.	Fulton.	5.37	36.54	45.10	12.99	3.99	11.883	...	...	...	1.23
†No. 5.	Gallatin.	Gallatin.	3.68	37.82	48.18	10.32	4.55	12.818	...	...	...	1.27
†No. 5.	Gallatin.	Gallatin.	15.52	41.56	32.57	10.35	4.08	10.425	...	...	...	0.78
†No. 5.	La Salle.	La Salle.	14.64	43.01	34.25	8.10	2.83	10.961	...	...	...	0.80
†No. 5.	La Salle.	La Salle.	15.68	32.41	39.82	12.09	3.51	10.337	...	...	...	1.23
†No. 5.	Logan, Lincoln.	Logan.	13.98	36.86	37.98	11.18	3.14	10.549	...	21.02	1.71	1.03
†No. 5.	Logan.	Logan.	13.34	38.39	36.72	11.55	3.59	10.743	...	...	...	0.96
†No. 5.	McLean.	McLean.	13.34	38.39	36.72	11.55	3.59	10.743	...	...	...	0.96

(Continued on Next Page)

•Bulletins Bureau of Mines. †State Geological Survey Reports.

COAL CATALOG

ANALYSES OF ILLINOIS SEAMS BY COUNTIES AND LOCALITIES—Continued

SEAM	COUNTY AND LOCATION	MINE	Moisture	Matter Volatile	Fixed Carbon	Ash	Sulphur	Determined R. T. U.	Carbon	RATIOS		
										Oxygen	oxy. + Ash	F. C. V. M.
*No. 5.	Macon.	.....	13.62	37.72	40.31	8.32	3.39	11.046	.....	.....	.....	1.07
*No. 5.	Macon.	.....	14.76	35.46	38.08	11.70	3.24	10.390	.....	.....	.....	1.07
*No. 5.	Menard.	.....	20.27	34.58	37.43	7.72	3.31	9.919	.....	.....	.....	1.08
*No. 5.	Menard.	.....	15.44	36.38	39.71	8.47	3.34	10.841	.....	.....	.....	1.09
*No. 5.	Peoria, Bartlett.	.....	13.70	39.61	44.80	15.56	3.09	10.517	.....	.....	.....	1.13
*No. 5.	Peoria, Bartonville.	.....	15.44	34.72	39.81	10.03	2.85	10.744	59.19	20.86	1.92	1.15
*No. 5.	Peoria, Hanna City.	.....	15.41	34.34	38.52	11.73	2.97	10.422	57.96	20.57	1.79	1.12
*No. 5.	Saline, 1 mile south of Harrisburg.	.....	7.12	34.55	50.68	7.68	2.23	10.548	.....	.....	.....	1.47
*No. 5.	Saline, Harrisburg.	.....	5.56	34.41	51.31	8.72	2.87	12.643	68.75	13.20	3.14	1.49
*No. 5.	Saline, near Harrisburg.	.....	6.83	37.20	53.49	9.31	2.26	12.380	.....	.....	.....	1.44
*No. 5.	Sangamon.	.....	13.19	38.44	36.47	11.90	4.61	10.513	.....	.....	.....	0.95
*No. 5.	Sangamon.	.....	14.25	37.25	37.07	11.43	4.76	10.414	.....	.....	.....	1.00
*No. 5.	Sangamon.	.....	13.09	36.51	41.14	9.26	3.77	10.935	.....	.....	.....	.....
*No. 5.	Tazewell.	.....	13.88	37.58	40.01	8.53	2.55	11.076	.....	.....	.....	1.06
*No. 5.	Tazewell.	.....	15.56	37.60	36.70	10.14	3.23	10.552	.....	.....	.....	0.98
*No. 6.	Clinton, Germantown.	.....	11.64	35.41	44.29	8.66	3.41	11.290	.....	.....	.....	1.25
*No. 6.	Clinton, New Baden.	.....	13.43	33.02	44.37	9.18	3.35	10.937	.....	.....	.....	1.34
*No. 6.	Clinton, Trenton.	.....	15.06	29.48	45.81	9.65	1.05	10.726	.....	.....	.....	1.55
*No. 6.	Franklin, Roylton.	.....	9.61	30.68	50.44	9.27	0.50	11.725	66.67	16.76	2.56	1.64
*No. 6.	Franklin, West Frankfort.	.....	9.99	32.82	49.27	7.92	1.03	11.857	66.80	17.16	2.66	1.50
*No. 6.	Franklin, Christopher.	.....	9.19	33.80	48.61	8.40	0.92	11.925	67.25	16.42	2.71	1.44
*No. 6.	Franklin, Orient.	.....	9.93	33.13	48.77	8.17	0.75	11.896	67.08	17.13	2.65	1.47
*No. 6.	Franklin, Buckner.	.....	9.01	34.52	47.87	8.60	1.08	11.970	67.37	16.12	2.73	1.39
*No. 6.	Franklin, Benton.	.....	9.46	33.55	48.87	8.12	1.63	11.990	.....	.....	.....	1.46
*No. 6.	Franklin, Christopher.	.....	7.90	36.08	53.45	10.47	0.80	11.879	.....	.....	.....	1.48
*No. 6.	Franklin, Sesser.	.....	8.12	34.46	48.79	8.63	1.13	12.064	66.44	17.21	2.57	1.42
*No. 6.	Franklin, Zeigler.	.....	9.58	29.18	50.24	11.00	0.52	11.428	65.33	16.39	2.38	1.72
*No. 6.	Gallatin.	.....	10.82	33.83	42.43	12.92	4.93	11.263	.....	.....	.....	1.25
*No. 6.	Gallatin.	.....	7.17	36.36	45.25	11.22	3.92	11.678	.....	.....	.....	1.24
*No. 6.	Jackson.	.....	10.88	31.71	48.90	8.51	0.65	11.594	.....	.....	.....	1.54
*No. 6.	Macoupin, Gillespie.	.....	12.90	37.80	39.77	9.53	4.23	10.852	59.65	19.79	2.04	1.05
*No. 6.	Macoupin, Staunton.	.....	13.54	35.69	40.03	10.74	4.03	10.807	58.69	19.88	1.92	1.12
*No. 6.	Macoupin.	.....	4.29	39.09	37.21	9.41	4.13	10.635	.....	.....	.....	0.95
*No. 6.	Macoupin.	.....	15.12	38.28	36.55	10.05	3.85	10.610	.....	.....	.....	0.95
*No. 6.	Madison, Collinsville.	.....	10.83	36.24	39.75	13.18	4.53	10.816	58.59	17.36	1.92	1.10
*No. 6.	Madison, Collinsville.	.....	13.07	34.85	42.02	10.06	3.59	10.949	.....	.....	.....	1.21
*No. 6.	Madison, Livingston.	.....	12.47	33.12	41.85	12.56	4.37	10.667	57.17	19.53	1.78	1.26
*No. 6.	Madison, Marysville.	.....	13.51	34.64	41.70	10.15	4.01	10.881	.....	.....	.....	1.20
*No. 6.	Madison, Troy.	.....	15.23	31.42	44.32	9.03	1.59	10.901	.....	.....	.....	1.41
*No. 6.	Marion, Centralia.	.....	10.25	37.43	39.79	12.53	3.70	11.077	.....	.....	.....	1.03
*No. 6.	Montgomery, Panama.	.....	13.48	34.84	40.13	11.55	.....	10.548	58.33	19.34	1.89	1.15
*No. 6.	Montgomery, Panama.	.....	13.31	33.62	41.34	11.73	3.75	10.548	59.07	19.31	1.90	1.23
*No. 6.	Montgomery, Coffeen.	.....	11.93	29.99	43.90	14.18	4.29	10.303	56.94	18.37	1.75	1.46
*No. 6.	Moultrie.	.....	7.18	38.09	41.38	13.35	5.18	11.223	.....	.....	.....	1.09
*No. 6.	Moultrie.	.....	6.24	40.34	42.55	10.87	3.18	12.149	.....	.....	.....	1.05
*No. 6.	Perry, Duquoin.	.....	11.03	32.40	48.64	7.93	0.86	11.578	65.26	18.93	2.43	1.50
*No. 6.	Perry, Duquoin.	.....	10.63	35.48	49.82	14.07	1.05	10.903	.....	.....	.....	1.40
*No. 6.	Randolph.	.....	10.62	38.10	39.12	12.16	4.45	10.849	.....	.....	.....	1.03
*No. 6.	St. Clair, 5½ miles s. w. of O'Fallon.	.....	11.17	39.31	39.20	10.32	4.22	11.223	.....	.....	.....	1.00
*No. 6.	St. Clair, Shiloh.	.....	9.88	42.26	37.05	10.81	3.83	11.439	.....	.....	.....	0.88
*No. 6.	St. Clair, Worden.	14.38	33.92	42.95	8.75	3.13	10.858	1.27

*Bulletin Bureau of Mines.

†State Geological Survey Reports.

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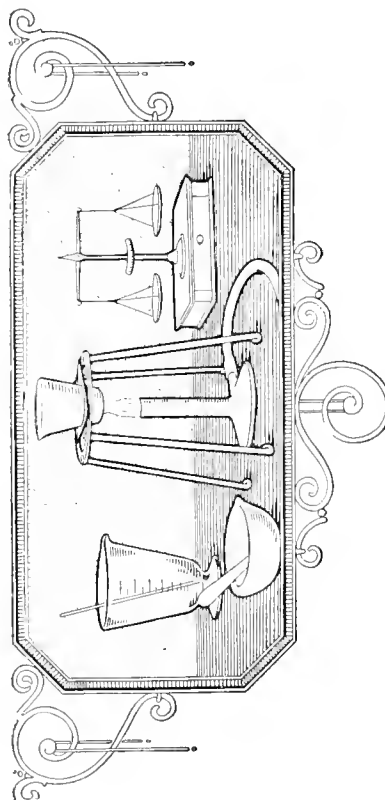
COAL CATALOG

ANALYSES OF ILLINOIS SEAMS BY COUNTIES AND LOCALITIES—Continued

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carbon	Oxygen	RATIOS	
											Carbon Oxy. + Ash	F. C. V. M.
*No. 6	Sangamon, Auburn.	Auburn-Alton.	14.29	37.17	40.36	8.18	4.41	11,007	53.89	21.83	1.80	1.09
*No. 6	Sangamon, Auburn.	Auburn-Alton.	16.00	32.41	37.82	13.77	4.05	9,940	.....	.....	.....	1.17
†No. 6	Sangamon.	.....	14.43	38.14	37.07	10.36	4.77	10,495	.....	.....	.....	0.97
*No. 6	Vermilion, 2 miles s. of Westville.	Little Vermilion.	16.16	30.09	39.19	10.56	1.74	10,433	58.38	22.36	1.77	1.30
†No. 6	Vermilion.	.....	11.87	40.37	39.52	8.24	3.07	11,416	.....	.....	.....	0.98
*No. 6	Williamson, Bush.	Bush No. 1.	8.20	32.26	46.59	12.95	3.48	11,362	62.52	14.86	2.25	1.44
*No. 6	Williamson, Cartersville.	Daws.	8.30	33.75	48.69	9.26	2.82	11,999	.....	.....	.....	1.44
*No. 6	Williamson, 1½ mi. n. e. of Cartersville.	No. 8.	9.18	27.30	55.40	8.12	0.90	12,015	68.45	16.29	2.80	2.03
*No. 6	Williamson, Herrin.	No. 7.	7.98	33.80	55.42	7.52	1.13	12,222	68.70	16.24	2.89	1.80
*No. 6	Williamson, Johnson City.	Black Brier.	8.50	29.47	50.75	10.78	1.55	11,895	.....	.....	.....	1.64
*No. 6	Williamson, Marion.	No. 3.	13.82	41.42	35.90	11.28	1.72	11,776	65.48	15.04	2.45	1.72
†No. 7	La Salle.	.....	12.87	42.40	37.35	8.86	3.95	11,174	.....	.....	.....	0.87
†No. 7	La Salle.	.....	12.87	39.53	38.38	7.88	3.86	11,468	.....	.....	.....	0.88
†No. 7	Vermilion.	.....	13.10	38.42	39.14	9.34	2.26	11,281	.....	.....	.....	0.97
†No. 7	Vermilion.	.....	7.28	32.03	50.00	10.69	1.91	11,804	66.55	14.22	.....	1.02
*No. 7	Williamson, Herrin.	C. & H.	.....	.....	.....	.....	.....	.....	.....	.....	2.67	1.56

*Bulleins Bureau of Mines.

†State Geological Survey Reports.



AMERICAN COAL & SUPPLY CO.

General Office

Suite 618-630—108 S. La Salle Street, CHICAGO, ILL.

MINE AT CAMBRIA, WILLIAMSON COUNTY, ILLINOIS

Served by Illinois Central Railroad

Exclusive Distributors of

"SUNRISE" COAL

(One Carload or Trainload)

Location

Our present holdings in Illinois consist of the Sunrise Coal Mine, located at Cambria, Ill., in the County of Williamson.

"SUNRISE" Coal

The trade name of "SUNRISE" is well known in all the States surrounding Illinois, it having been extensively advertised, and the coal tried out by the most discriminate of industrial consumers.

"SUNRISE" coal is produced from No. 6 Seam and averages six to ten feet in thickness, without a parting.

Nature has seen fit to endow our property with an exceptionally hard roof and floor, thereby making conditions ideal both for the miners and from an operating standpoint.

Production

Our production at this time is 1000 tons per day, consisting entirely of mine run, we specializing in mine run steam business from this operation. Modern equipment has been installed, insuring the loading of clean coal, minimizing the ash content, resulting in an economical fuel and reduced freight accounts.

Analysis

The following recent analysis by the Commercial Testing & Engineering Co., Chicago, Ill., is satisfactory evidence as to "SUNRISE" Purity and Quality:

Moisture	7.10
Volatile Matter	34.09
Fixed Carbon	52.59
Ash	6.22
	<hr/>
	100.00
Sulphur	1.20
B.t.u. (Dry)	13,200

Commercial Usages

Owing to the purity of this coal its uses are many. For Steam it has no equal and is likewise excellently adapted for Tile and Pottery, Cement Burning, Producer, Illuminating Gas and for Coking when mixed with Eastern Coking Coal.

Tell Us Your Fuel Troubles

Having distributed coal for the past quarter of a century, we are prepared to locate and rectify your fuel troubles and give the same high standard of service rendered during our business career.

Contracts solicited and esteemed as a moral obligation.

We have representatives in the States of Illinois, Indiana, Iowa, Michigan, Minnesota, North Dakota, South Dakota and Wisconsin, and all inquiries for further particulars will be handled with promptness and despatch.

"SUNRISE" FOR ECONOMY AND SATISFACTION

OMAHA

MINNEAPOLIS

BIG CREEK COALS, Inc.

Operating Office
PREMIUM COALS
Harrisburg, Ill.

General Offices

Peoples Gas Building, CHICAGO

Operating Office
BIG CREEK COALS
St. David, Ill.

BIG CREEK COALS, Inc., operates seven mines with a daily production in excess of 10,000 tons.

Producing 7,500 tons in Saline county, Southern Illinois, and approximately 2,500 tons in Fulton county.

Properties are equipped with the most modern type machinery, insuring the most careful preparation of Domestic and Steam Coals.

Mines in Saline county are served by the Big Four, Louisville & Nashville, and Illinois Central Railroads, and in Fulton county by the Chicago, Burlington & Quincy Railroad.

Premium Coal

A product of our Saline county mines, is representative of the best production in the state.

Properties are equipped mechanically in such a way as to permit our offering a wide range of sizes.

We prepare for Domestic use:

- 6"—Lump
- 6x3"—Furnace Egg
- 3x2"—Small Egg
- 2x1 $\frac{1}{4}$ "—Stove Nut
- 1 $\frac{1}{4}$ x $\frac{3}{4}$ "—Chestnut

For Steam use:

- $\frac{3}{4}$ x $\frac{3}{8}$ "—Pea
- $\frac{3}{8}$ " and less—Carbon
- 1 $\frac{1}{4}$ x6"—Steam Egg
- 2x6"—Steam Egg

- 1 $\frac{1}{4}$ "—Steam Lump
- 2"—Steam Lump
- 1 $\frac{1}{4}$ " and 2"—Screenings
- 3" and 6"—Run of Mine

The above range of sizes permits our offering coals suitable for any Domestic or Steam plant.

Analyses

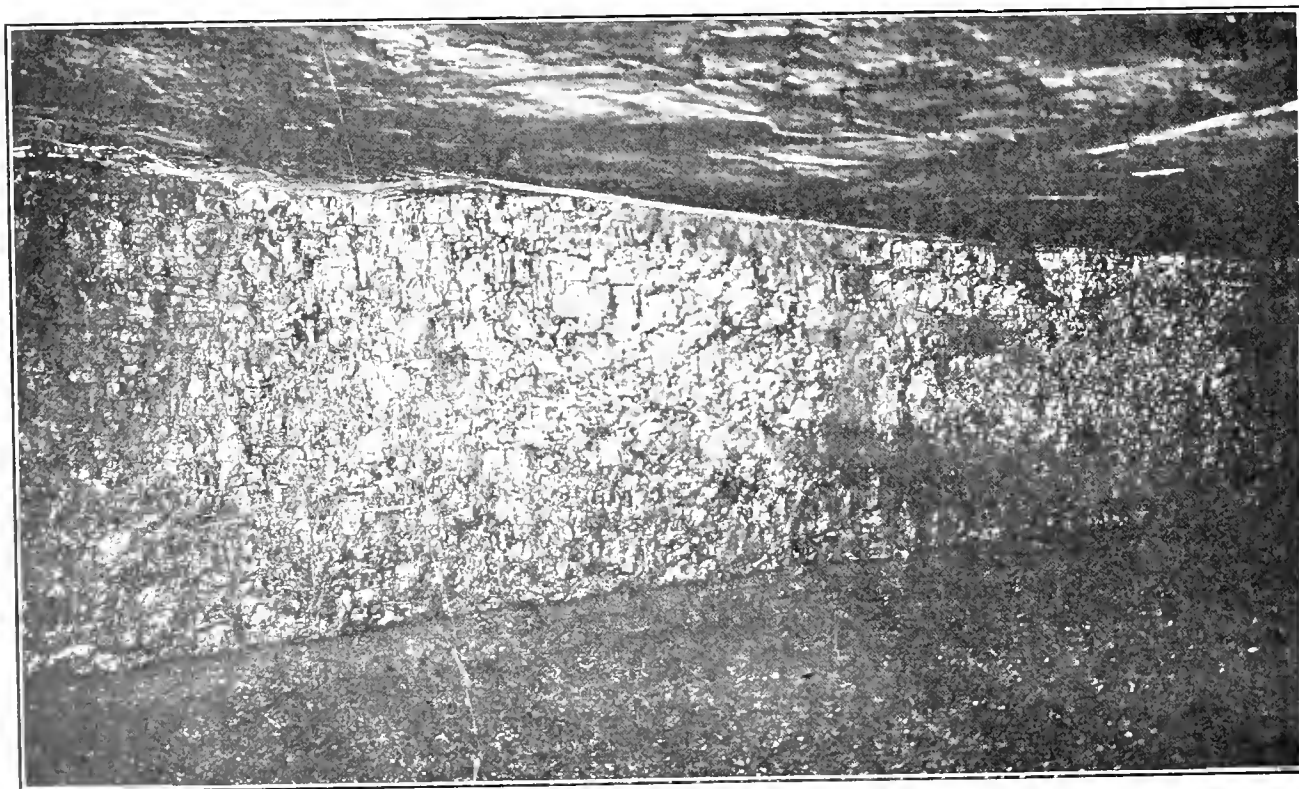
Received from the Commercial Testing & Engineering Company, demonstrate the quality of PREMIUM:

6" LUMP

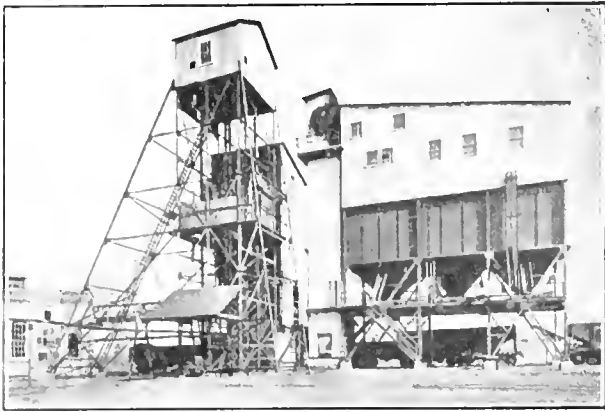
Ash	5.41
Volatile Matter	36.99
Fixed Carbon	57.60
	<hr/>
	100.00
Sulphur	1.65
B.t.u. per pound.....	13,964

2" SCREENINGS

Ash	6.53
Volatile Matter	38.79
Fixed Carbon	54.63
	<hr/>
	100.00
Sulphur	1.95
B.t.u. per pound.....	13,664



PREMIUM Coal is Mined from Seam No. 5, with an Average Thickness of About 6 Feet, as Shown in the Illustration



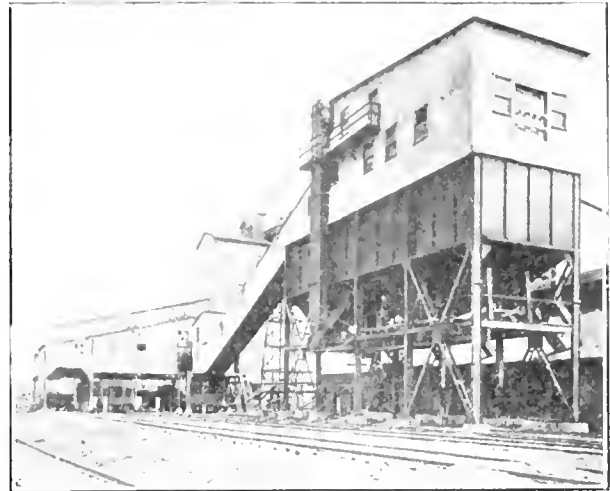
Mine No. 2, Ledford, Ill.

PREMIUM—Its Uses

It is desirable for steam purposes in general, due to low ash and sulphur and high heat value, as shown by analyses on opposite page.

Of the various properties operated by this company, one of the most important is Mine No. 5, producing a gas coal that is one of the very best products of its kind. It is adaptable to any type of coke oven on the market, and recent experiments have shown that recoveries are all that could be desired in this type of fuel.

The recovery of residuals is a very important conservation of resources and it forms one of the principal means of revenue to the coal gas producer, the sale of these residuals reducing the cost of gas production in a degree corresponding to the efficiency of the recovery methods adopted and the market value of the product.



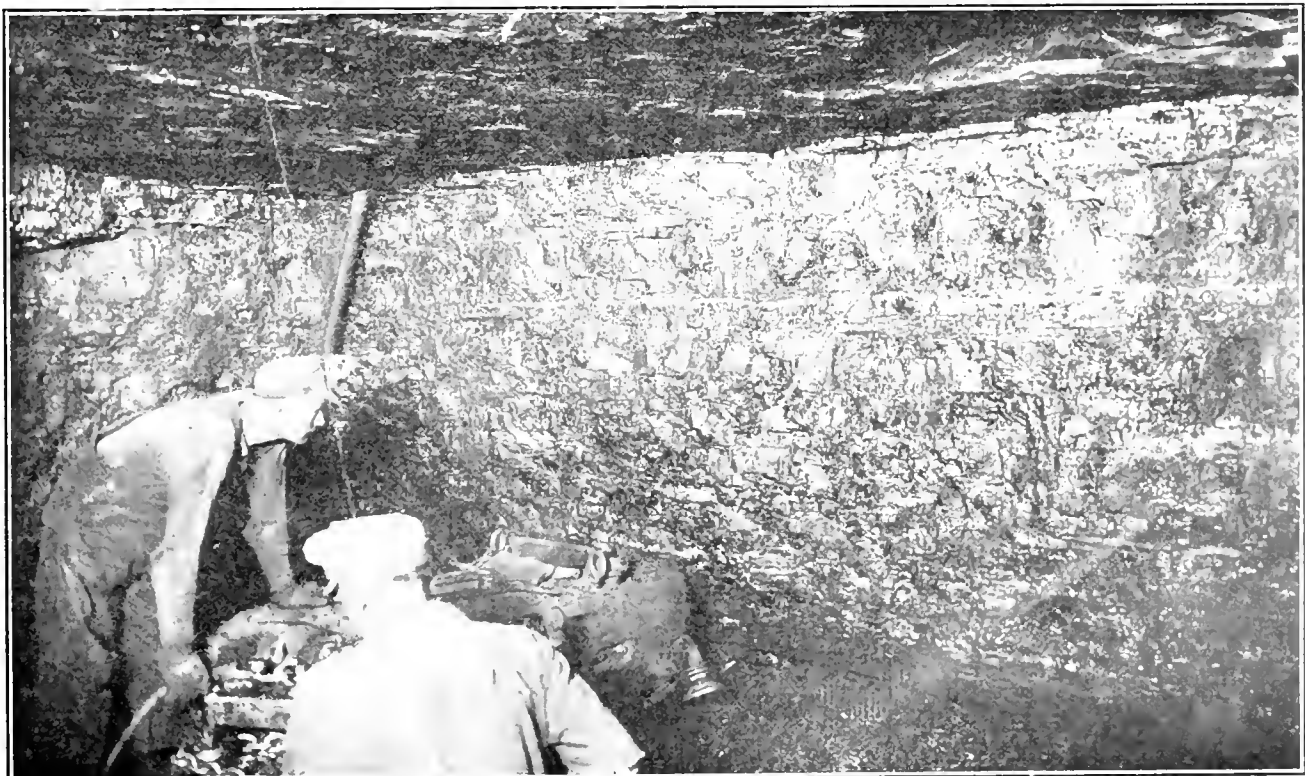
Mine No. 3, Harrisburg, Ill.

The coal from Mine No. 5 contains the principal residuals recovered from any other gas coal mined.

The residuals recovered today are tar-naphthalene, cyanogen, ammonia and in the case of coke oven gas, also benzol, by direct recovery method, and benzol is one of the most important of tar constituents.

Service

"BIG CREEK" has become symbolical for Service with the Trade. The advantages derived from the use of PREMIUM go straight back to its excellent mechanical preparation and its inherent basic qualities.



Working Face at No. 3 Mine, Harrisburg, Ill.

BINKLEY COAL COMPANY

11 South La Salle Street, CHICAGO, ILL.

Miners and Shippers of

ILLINOIS AND INDIANA COALS

ILLINOIS COALS

We are the owners and operators of the Thomas-Waters mine, located at Herrin, Illinois, on the Burlington Railroad.

The No. 5 and 6 seams, which are here worked, produce a fine quality of coal, much used for steam, locomotive fuel and domestic purposes.

We are also Sales Agents for two additional Illinois mines, as follows:

MarionI. C., C. & E. I., and Mo. Pac. Railroads

HarrisburgBig Four Railroad

INDIANA MINES

The Binkley Coal Company owns and operates the Pine Ridge mine in the West Clinton District of Indiana on the southeastern division of the Chicago, Milwaukee & St. Paul Railroad. This mine operates in the No. 5 Vein and produces 1,500 tons of coal per day.

Pine Ridge coal ranks as one of Indiana's best fuels. It is an excellent steam coal and is popular with the retail coal trade. It is also much used for railroad fuel.

In addition to the above mine, we are Sales Agents for four additional mines in Indiana, as follows:

Terre HauteVein No. 4.... } Big Four, C. & E. I., and
C. M. & St. P. Railroads

SullivanVein No. 6.....C. & E. I. Railroad

Boonville, Warrick County.....Vein No. 5.....Southern Railroad

Our total production is in excess of 1,500,000 tons.

We specialize in large tonnages for industrial plants and railroads.

We deliver what we sell.

COSGROVE & COMPANY

Producers and Shippers of

"Franco" Coal From Southern Illinois



General Offices
JOHNSTOWN, PA.

Western Sales Offices
Old Colony Bldg., CHICAGO, ILL.

Sales Offices Also Located at
Central National Bank Bldg., ST. LOUIS, MO.
Swank Bldg., JOHNSTOWN, PA.

149 Broadway, NEW YORK CITY
Pennsylvania Bldg., PHILADELPHIA, PA.

Location of Mines

The mines of Cosgrove & Company, FRANCO Nos. 1, 2 and 3, are located in the Williamson-Franklin county district of Southern Illinois. Shipments from these mines are made over five great railroads which serve that district. The coal is of the No. 6 seam, recognized as the most representative of the better grades of Illinois bituminous.

Personnel of Company

Cosgrove & Company is a partnership which owns or controls, operates and sells the output of the three FRANCO mines in Illinois and ten THERMAL mines in Pennsylvania. The members are John C. Cosgrove, one of the outstanding successful coal producers of the present day, and widely known in the East and West as a progressive, constructive organizer; Harry J. Meehan, successful mining engineer and production manager of the firm; Enoch Carver, Jr., general sales manager of the organization; A. Kemerer Cosgrove, a brother of John C. Cosgrove. W. R. Kernohan, of Chicago, is western sales manager and handles the entire output of the FRANCO mines. Homer S. Cotton is in charge of the St. Louis branch.

Character of FRANCO Coals

FRANCO coal is one of the most popular domestic coals by reason of its natural quality and structure and the rigid preparation characteristic of all Cosgrove productions. The sizing is done by the most modern tipple equipment in the field. FRANCO No. 3 mine is frequently visited by dele-

gations interested in the highest developments of American mining equipment.

FRANCO steam sizes are also in demand by reason of the cleanliness of the coal, and its contents, which give a long flame, maintain normal steam loads with a minimum of firing and waste smoke.

Analysis*

The following analysis is a fair representation of FRANCO coals:

Moisture	2.96
Volatile Matter	35.16
Fixed Carbon	56.86
Ash	5.12
	<hr/>
	100.00
Sulphur .....	.89
B. t. u. per pound.....	13,520

*Analysis taken from average submitted all sources in 1921.

Tipple Equipment

FRANCO mines are equipped with five-track car-loading facilities and engine-fuel loading device in addition to a most complete system for proper cleaning, inspection and sizing of the coal. Mechanical loading booms are used, avoiding practically all breakage in loading. The capacity at present is approximately 2,500,000 tons per year, with greater development proceeding rapidly, especially at the newer FRANCO No. 3 mine at Paulton. The town of Paulton itself, built by the Cosgroves, is a model mining community with the best of home design and equipment.



CHICAGO, WILMINGTON & FRANKLIN COAL COMPANY

332 South Michigan Avenue, CHICAGO, ILL.

McKnight Bldg., MINNEAPOLIS

Boatmens Bank Bldg., ST. LOUIS

Woodmen of the World Bldg., OMAHA

Miners of

WILMINGTON
ROYAL THAYER

ORIENT
BENTON
PYROLITE

HICKORY HILL
BLACK BRIER

Location

The nine mines of the Chicago, Wilmington & Franklin Coal Company are located throughout the state of Illinois, Wilmington being in Grundy County (Northern Illinois); Royal and Thayer mines in Sangamon and Macoupin Counties (Central Illinois); Orient, Benton No. 1 and No. 2, Hickory Hill A and B, and Black Brier in Franklin and Williamson Counties (Southern Illinois); each of these mines being supported by extensive coal land areas.

Preparation

The Chicago, Wilmington & Franklin Coal Company is one of the leaders in progressive mining methods in Illinois, and the preparation of its coals has always been a distinctive feature. The preparation plant at each of the mines has been designed with reference to the character and fracture of the coal at each shaft, and planned to give the highest preparation standard possible for each mine. The mines are equipped with shaker screens

and picking tables, also loading booms, which do away with excessive breakage that occurs in other methods of loading.

Capacity

The nine mines have a daily capacity of 25,000 tons, and a yearly capacity of approximately 7,500,000 tons. Orient is the largest single coal mine in the country, and the largest producer, holding the records of 6,777 tons in eight hours, 34,792 tons in one week, and 144,576 tons in one month of 26 working days.

Quality

Not only are the Chicago, Wilmington & Franklin coals exceptionally free from impurities, but the superior preparation insures uniform size, easy draft in burning, and freedom from clinker. The coal burns hot, down to a fine white ash, and can be stored for long periods without material depreciation.

Orient Mine



RAILROAD CONNECTIONS, SIZES SHIPPED, ETC.

Pyrolite Mine



ORIENT

Orient, Franklin County, Illinois

Located on the C. B. & Q., C. & E. I., and I. C. Railroads

6-inch Lump	$\frac{7}{8}$ -inch down Carbon
6 x 3-inch Furnace	2-inch Screenings
3 x 2-inch Small Egg	$1\frac{1}{4}$ -inch Screenings
2 x $1\frac{1}{4}$ -inch Stove	$\frac{3}{4}$ -inch Screenings
$1\frac{1}{4}$ x $\frac{3}{4}$ -inch Chestnut	Mine Run
$\frac{3}{4}$ x $\frac{7}{8}$ -inch Pea	Storage Mine Run

PYROLITE

Benton, Franklin County, Illinois

Located on the C. & E. I., I. C., and Mo. Pac. Railroads

6-inch Lump	$\frac{3}{4}$ x $\frac{7}{8}$ -inch Pea
6 x 3-inch Furnace	$\frac{7}{8}$ -inch down Carbon
3 x 2-inch Small Egg	2-inch Screenings
2 x $1\frac{1}{4}$ -inch Stove	$1\frac{1}{4}$ -inch Screenings
$\frac{1}{4}$ x $\frac{3}{4}$ -inch Chestnut	Mine Run

BENTON

Benton, Franklin County, Illinois

Located on the C. & E. I., I. C., and Mo. Pac. Railroads

6-in Lump	1 x $\frac{7}{8}$ -inch Pea
6 x 3-inch Furnace	$\frac{7}{8}$ -inch down Carbon
3 x 2-inch Small Egg	$1\frac{1}{2}$ -inch Screenings
2 x $1\frac{1}{2}$ -inch Stove	Mine Run
$1\frac{1}{2}$ x 1-inch Chestnut	

BLACK BRIER

Johnston City, Williamson County, Illinois

Located on the C. & E. I. and I. C. Railroads

6-inch Lump	3 x $1\frac{1}{2}$ -inch Small Egg
6 x 3-inch Furnace	$1\frac{1}{2}$ -inch Screenings

HICKORY HILL

Mine "A"

Herrin, Williamson County, Illinois

Located on the C. B. & Q., I. C. and Mo. Pac. Railroads

6-inch Lump
6 x 3-inch Furnace
No. 1 Washed 3 x 2-inch
No. 2 Washed 2 x $1\frac{1}{4}$ -inch
No. 3 Washed $1\frac{1}{4}$ x $\frac{3}{4}$ -inch
No. 4 Washed $\frac{3}{4}$ x $\frac{1}{4}$ -inch
No. 5 Washed $\frac{1}{4}$ -inch down
3-inch Screenings
$1\frac{1}{4}$ -inch Screenings
Mine Run

HICKORY HILL

Mine "B"

Herrin, Williamson County, Illinois

Located on the C. B. & Q. and I. C. Railroads

6-inch Lump
6 x 3-inch Furnace
3 x 2-inch Small Egg
2 x $1\frac{1}{4}$ -inch Stove
$1\frac{1}{4}$ x $\frac{3}{4}$ -inch Chestnut
$\frac{3}{4}$ x $\frac{3}{8}$ -inch Pea
2-inch Screenings
$1\frac{1}{4}$ -inch Screenings
$\frac{3}{4}$ -inch Screenings
Mine Run

ROYAL THAYER

Royal Mine

Virden, Macoupin County, Illinois

Located on the C. & A., C. B. & Q., and C. & N. W. Railroads

6-inch Lump	$2\frac{1}{2}$ x $1\frac{1}{4}$ -inch Nut
6 x $1\frac{1}{4}$ -inch Egg	$1\frac{1}{4}$ -inch Screenings
6 x $2\frac{1}{2}$ -inch Egg	Mine Run

ROYAL THAYER

Thayer Mine

Thayer, Sangamon County, Illinois

Located on the C. & A., C. B. & Q., C. & N. W., and I. T. S. Railroads

6-inch Lump	$2\frac{1}{2}$ x $1\frac{1}{4}$ -inch Nut
6 x $1\frac{1}{4}$ -inch Egg	$1\frac{1}{4}$ -inch Screenings
6 x $2\frac{1}{2}$ -inch Egg	Mine Run

WILMINGTON

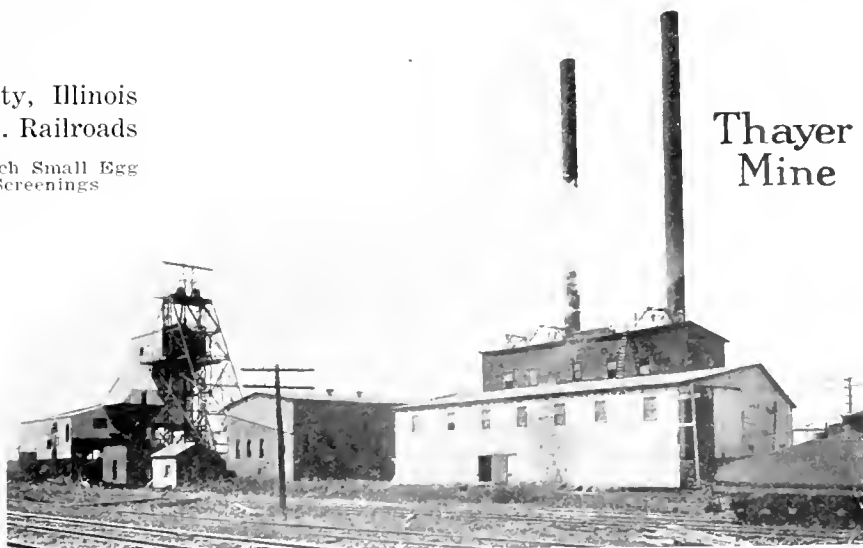
South Wilmington, Grundy County, Illinois

Located on the E. J. & E. Railroad

Situating in One of the Oldest Coal Fields in Illinois

6-inch Lump
6 x 3-inch Furnace
No. 1 Washed, Egg, 3 x 2-inch
No. 2 Washed Nut, 2 x $1\frac{1}{2}$ -inch
Washed Carbon, $1\frac{1}{2}$ -inch down

Thayer Mine



GREAT LAKES COAL & COKE CO

(Not Inc.)

General Offices

Standard Oil Co. (Indiana) Bldg.
910 South Michigan Ave., Chicago

Shippers of

INDUSTRIAL AND POWER PLANT COAL

from

Indiana, Kentucky, ILLINOIS, Missouri, Kansas

The actual merchandising of industrial coal is something which is not often attempted in the development of a coal business. However, nowadays merchandising rather than ordinary selling is necessary. The members of the Great Lakes Coal & Coke Company, one of them an experienced operator, the other two of a good many year's experience in coal sales, have analyzed the market for industrial coal. Their analysis is that the purchaser of industrial coal in quantities must necessarily demand the lowest price that he can obtain. He must be assured of an uninterrupted supply of coal at all times. He must also get a coal that will perform its function economically for him. It is their aim to assist the buyer of industrial coal along each of these lines; thereby becoming merchandisers rather than wholesalers.

Cost

Buying, as this company does, for some of the largest users of industrial coal, and in large quantities always, gives it the opportunity to sell this coal to its customers at a lower cost than is ordinarily possible. This is due in the first place to the fact that mine operators, assured of a steady market for their coal, are inclined to do business on a narrower margin, and this company can also handle the coal on a smaller margin than is usual, on account of the great tonnage involved.

Supply

The same factors, namely the purchase of large quantities of coal and dealing regularly with certain operating companies in each field also make it possible to supply the customers at times when the flow of coal from one or more fields is interrupted. In other words, this company maintains its mining connections in every field of Illinois, Indiana, Kentucky, Missouri and Kansas, either by stock interests in the mining companies or by contracting and controlling the outputs of the mines as sales agents for the mining companies.

It can readily be seen that in the event of car shortages or strikes, or trouble of any kind in any one field, with a knowledge of the client's requirements, a satisfactory coal may be supplied from some other field temporarily.

Proper Selection

Through the knowledge and experience of the personnel of this company, they are able to give expert advice as to the quality and kind of coal that will work to the best advantage in the customer's plant and members of the organization are ready to make a study of the combustion problems presented in an industrial heating or power plant and make expert suggestions as to their handling. In addition to this, being in touch with, and watching closely all of the different fields, they are in a position and ready to give clients a market analysis based on conditions that are not always evident to the buyer, to assist them in buying economically.

In a nut shell, the salient points in the operation of this organization are:

1. It is built around men thoroughly experienced in their profession, whose integrity and financial responsibility is unquestioned.
2. Their ability to serve when needed most.
3. Lower prices through added buying power with minimum profits on exceptionally large tonnages.
4. Strong mining connections in every field of Illinois, Indiana, Kentucky, Missouri and Kansas.
5. Conscientious advice as to when to buy and when not to buy.
6. Merchandising and not selling.
7. A personal knowledge of the power units is taken at the time of the first sale.
8. Not prejudiced by the operation of one or two of their own mines in restricted fields.
9. The ability to supply the customer with his coal requirements at all times.

These are the factors which have brought about the success of the Great Lakes Coal & Coke Company in its chosen field. They are also the factors which must comprise the company's fundamental policy in the future as well.

T. C. KELLER, President

A. B. STEFFENS, Vice President

Indiana and Illinois Coal Corporation

Southwestern Sales Office
425 International Life Bldg., St. Louis, Mo.

Main Office
1425 Old Colony Bldg., Chicago, Ill.

Owning and Operating

FIVE MINES IN MONTGOMERY COUNTY, ILL.

THREE MINES AT CLINTON, IND.

ONE MINE AT PAXTON, IND.

DAILY CAPACITY 20,000 TONS

THE INDIANA AND ILLINOIS COAL CORPORATION owns approximately 35,000 acres of coal land in Montgomery county, Illinois. It operates in what is known as Seam No. 6; averaging in thickness from seven to eight feet. At the present time it has five producing mines in operation, with a daily average production of 14,500 tons.

The mines are equipped with the most modern machinery, which insures excellent preparation. To the trade the coal is commonly known as "MONTGOMERY COUNTY," and the mines are designated by numbers, viz.: No. 10, No. 11, No. 12, No. 14 and No. 15.

Mine No. 10 is located at Nokomis, Ill.
Average daily production, 3,800 tons.

Mine No. 11 is located at Hillsboro, Ill.
Average daily production, 2,400 tons.

Mine No. 12 is located at Witt, Ill.
Average daily production, 2,400 tons.

Mine No. 14 is located at Witt, Ill.
Average daily production, 3,200 tons.

Mine No. 15 is located at Taylor Springs, Ill.
Average daily production, 2,600 tons.

Preparation and Service

At all times the most particular attention is given to preparation. In addition to modern screens, we employ men on each car to pick out any visible impurities. Our chief aim is reliability of service, and during the past six years, since this

Company has been under its present management, it can point very proudly to the record of having filled its contract obligations 100%.

The following sizes are made at these mines:

6" Lump
1½" Lump
6x3" Egg
6x1½" Egg
3x1½" Nut
1½" Screenings
Mine Run

Quality

The product of the mines owned by the INDIANA AND ILLINOIS COAL CORPORATION is adaptable for both steam and domestic purposes. Approximately 50% of our production is used by railroads centering in Chicago and East; and the other 50% for large industrial plants and domestic purposes.

Although not in the Springfield district proper, we have the same freight rates, which enables our customers to obtain a high grade coal at very low freight cost.

Shipment

The mines of the INDIANA AND ILLINOIS COAL CORPORATION are jointly located on the C. & E. I. and Big Four Railroads, and, having the advantage of drawing our car supply from both roads, we can at all times assure our customers the very best of service.

SEE ARTICLE UNDER STATE OF INDIANA

LUMAGHI COAL COMPANY

L. F. LUMAGHI, Pres.
J. D. LUMAGHI, Secy.
O. L. LUMAGHI, Gen. Supt.

606 Equitable Building
ST. LOUIS, MO.

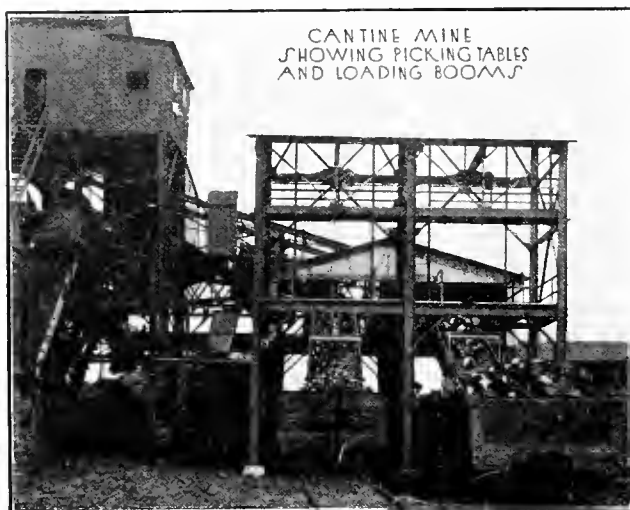
C. V. BECK, in Charge of
Sales and Adv.

E. P. STANTON, Traffic Mgr.
and Sales.

The Company

The Lumaghi Coal Company is one of those rare institutions among the coal trade that has weathered the business storms of over half a century. The company has grown from a modest beginning until now it is one of the largest operating units in the West—made so by fifty-one years of consecutive service to its customers.

Control of the Lumaghi Coal Company remains in the hands of the original founders. All the present officials have been "born and bred" in the coal business, and consequently are in position to give a quick and definite answer to any coal problem which may arise.



Properties and Output

The Lumaghi Coal Company controls twenty-two thousand acres of coal lands in three different districts of Illinois. It operates four mines, having a daily output of ten thousand tons. All of these mines are working the No. 6 seam, which varies in thickness, in these properties, from 6½ to 9 feet. The Lumaghi mines are fully equipped with the latest improvements for producing a large tonnage, and with the picking table plants and loading booms to give the best possible preparation at low cost.

Cantine Coal

The two Cantine mines operated by The Lumaghi Coal Company are located on the Penn-

sylvania Railroad in Madison County, Illinois. Cantine is a very hard coal. It cleans up like Anthracite and stays clean—a splendid coal for storing.



Florida Coal

The Florida mine is located on the Illinois Central Railroad in the Perry County high grade Southern Illinois district. It serves a large territory North, South and West.

In addition to the usual picking table preparation there are installed at the Florida mine Farrer Slate Picking Machines such as are used on Pennsylvania Anthracite, which remove the impurities



from the smaller sizes. All sizes of Florida Coal are screened twice—are absolutely clean and perfectly sized. Florida is equally excellent either for domestic or specialized steam use. The unique location of this mine, at the point where the high-

grade coal district and the low freight rate district overlap, gives unusual rate advantages to Florida purchasers.



Black Brier Coal

The new Black Brier Mine which has just recently been completed is located at Johnston City, Williamson County, Illinois. It enjoys both Illinois Central and Missouri Pacific rail connections, and serves a wide territory North, South and West—especially the Southwest.

Black Brier is of the highest natural grade coal produced in Illinois, and is generally excellent for both domestic and special steam uses. All Black Brier sizes are screened twice, giving a perfectly clean, pure coal. The screenings from this mine are among the greatest heat producers mined in the West.

Sizes Produced

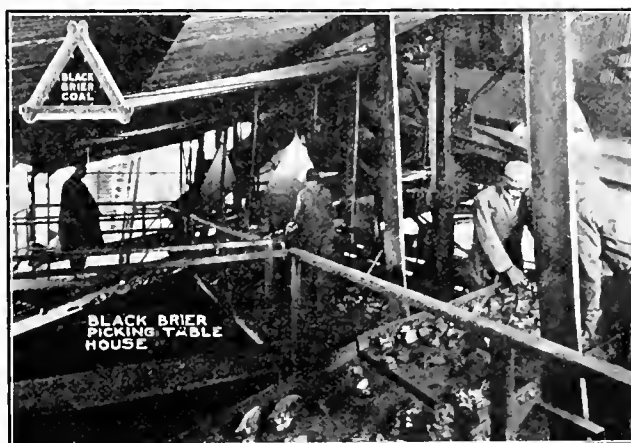
All of the Lumaghi mines produce the following sizes of coal:

6" Lump, 2" Lump, 1½" Lump, 1¼" Lump, 6" x 3" Egg, 6" x 2" Egg, 6" x 1½" Egg, 3" x 2" No. 1 Egg Nut, 2" x 1¼" No. 2 or Stove, and 1¼" Screenings.

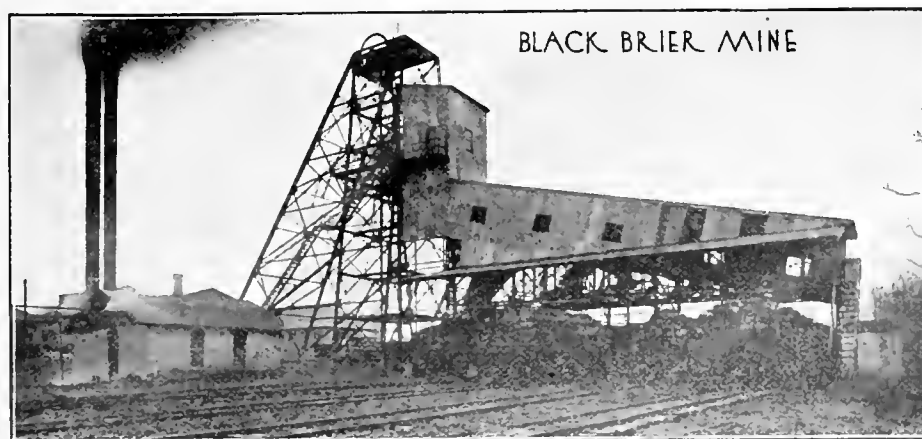
LUMAGHI ANALYSES

The following analyses, made by the Commercial Testing & Engineering Company of Chicago, shows the high natural value of Lumaghi coals:

	Centine	Florida	Black Brier
Moisture	8.41	8.77	4.92
Volatile Matter.....	39.87	39.06	39.01
Fixed Carbon.....	42.40	44.57	49.02
Ash	9.32	7.60	7.05
	100.00	100.00	100.00
Sulphur	3.65	2.80	2.77
B. t. u. (Dry).....	12,722	13,088	13,403
Fusion Temperature of Ash	2050°	2300°	2295°



The Lumaghi Coal Company is able to give the very best service on any of the above standard sizes, whether it be the smallest retail order or the largest railroad contract. Lumaghi quality and service please all customers. Fifty-one years of successful operation and continuous growth guarantees protection to the buyer.



D. E. McMILLAN & BRO.

Old Colony Building, CHICAGO, ILL.

SINCERITY COAL

Exclusive Distributors for the SINCERITY COAL CO., Williamson County, Illinois

Sincerity Mine

The Sincerity mine is located on the C. B. & Q. and the Mo. Pac. railroads. Billing stations are Herrin and Bush, respectively. The No. 6 seam, with an average thickness of ten feet and a blue band which nowhere exceeds one inch, is the coal being worked. This mine has a capacity of 3,000 tons daily, nearly all of which is machine mined.

Sincerity Coal

"Sincerity" coal is low in sulphur and is particularly adaptable for metallurgical and producer gas use. It is highly regarded by industrials, and because of its thorough preparation makes a clean burning coal for domestic use. The following is the average of four analyses made September, 1921, on samples taken at three different sections of the mine:

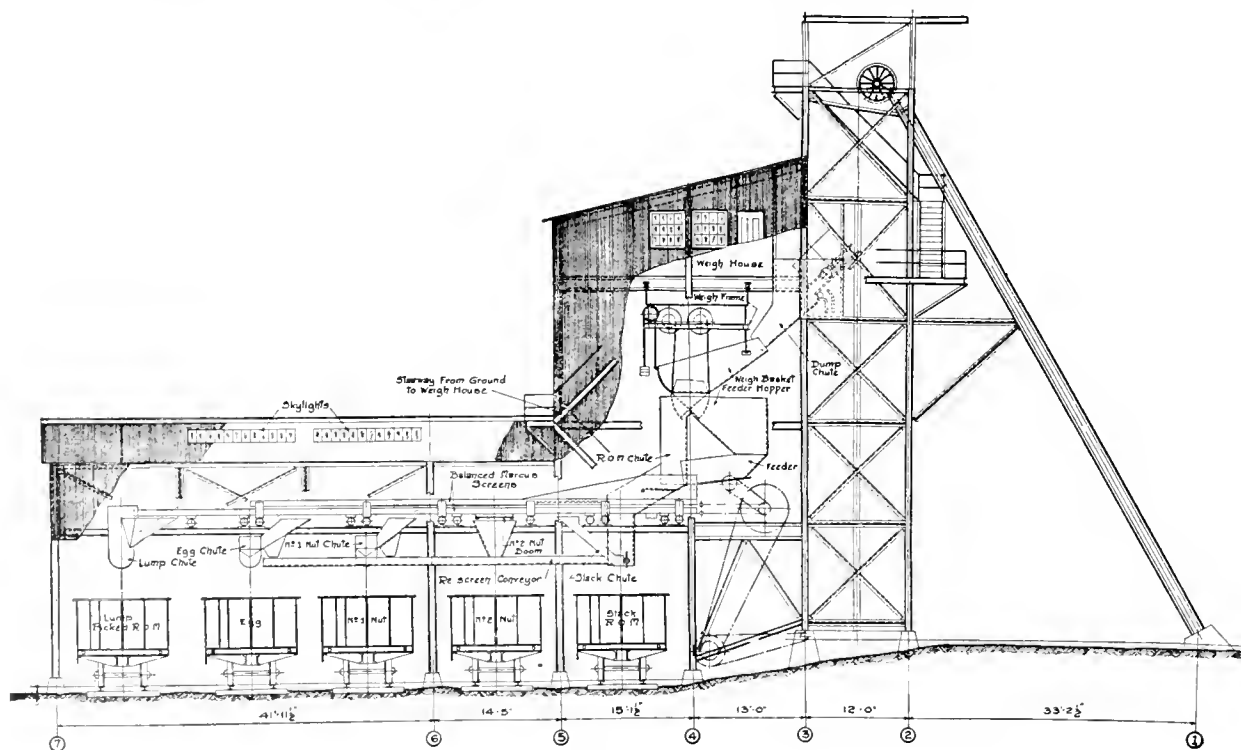
	Dry Basis	As Received*
Moisture .....	.....	8.46
Volatile Matter	34.19	31.30
Fixed Carbon	58.21	53.28
Ash	7.60	6.96
Sulphur	1.13	1.04
B. t. u.	13,375	12,245

*Commercial Testing & Eng. Co.

Sincerity Preparation

"Sincerity" coal enjoys the advantages of an unusual preparation. Recently there was completed a five-track steel tippie (shown below) equipped with the balanced "Marcus" screen, which assures a clean and well-sized product. Domestic sizes are shipped as 6-inch lump, 6 x 3-inch egg, 3 x 2-inch No. 1 nut, 2 x 1 $\frac{1}{4}$ -inch domestic stove, and 1 $\frac{1}{4}$ x 2-inch screenings.

SINCERITY COAL—LOW SULPHUR, WELL PREPARED, CLEAN BURNING



All "Sincerity" Coal Passes Over Marcus Screens in This New Five-Track Steel Tippie

NEW KENTUCKY COAL COMPANY

ORGANIZED 1890



Fisher Building, CHICAGO, ILL

Distributors of Coal



BUCKHORN

NEW KENTUCKY

POCAHONTAS

"Buckhorn" Coal

The location of the mine producing "Buckhorn" coal from the No. 6 seam at Herrin, Illinois, was decided upon only after the entire district had been bored. The tract selected showed a superior analysis and the results since obtained by its users prove "Buckhorn" to be one of the leading coals of Southern Illinois.

Analysis of "Buckhorn" Coal

The following analysis, made at Iowa State College on 6-inch lump coal, is a fair average of its various sizes:

Moisture	7.00
Volatile Matter	33.57
Fixed Carbon	52.17
Ash	7.26
Sulphur	1.06
B. t. u. (commercial)	12,720
B. t. u. (dry coal)	13,660

"Buckhorn" Sizes

6-inch Hand-picked Lump
 6 x 3-inch Egg
 Washed Egg No. 1, 3 x 2-inch
 Washed Stove No. 2, 2 x 1-inch
 Washed Chestnut No. 3, 1 x 3/4-inch
 Washed Pea No. 4, 3/4 x 3/8-inch
 Washed Slack No. 5, 3/8-inch
 1 1/2-inch Screenings
 2" Screenings
 Run-of-Mine
 No. 1 Small Egg Unwashed

The prepared 6" hand-picked Lump, 6" x 3" Egg and No. 1 Washed Egg (3" x 2") are excellent and particularly made for domestic purposes. For steam use, either with hand-fired or stoker-fired boilers, the following sizes are prepared: No. 2 Washed Stove (2" x 1"), No. 3 Washed Nut (1" x 3/4"), No. 4 Washed Pea (3/4" x 3/8"), and No. 5 Washed Slack through a 3/8" screen.

"Buckhorn" Washed Coal

We recommend our washed sizes, because:

1. Less freight and haulage to be paid on waste material.
2. The fuel value of the coal is increased.
3. Washed coal burns freer, with less smoke and with more efficiency.
4. Less ash for removal and disposal.
5. Less clinkers, hence more heat and less labor.

"Buckhorn" Shipments

The two mines in Williamson County have a combined capacity of 5,500 tons daily and during the past ten years have produced over 7,000,000 tons. Shipments can be made on the I. C., C. B. & Q., C. & E. I., and Mo. Pac. railroads.

"New Kentucky" Coal

"New Kentucky" coal is produced at Murphysboro, Illinois. It is a high grade, free-burning coal, low in ash and sulphur. Anyone wanting a fuel above the average will find it in this coal.

"New Kentucky" Analysis

An analysis made on a sample taken from a car of 2 1/2-inch lump gave the following results:

Moisture	7.54
Volatile Matter	34.07
Fixed Carbon	55.23
Ash	3.16

Sulphur	0.81
B. t. u. (commercial)	13,100
B. t. u. (dry)	14,000

As is clearly indicated, this coal is splendidly adapted for gas, clay ware and malleable purposes, in addition to its especial fitness for all-around steam and domestic uses.

"New Kentucky" Sizes

6" Special Lump	2 1/2" Steam Nut
6" x 1 1/2" Egg	1 1/2" Screenings
2 1/2" Standard Lump	Run-of-Mine

"New Kentucky" Shipments

Shipments of "New Kentucky" coal are made on the Illinois Central Railroad and its connections.

Pocahontas Coal

We handle the best grade Third Vein Pocahontas, or as often referred to, Thick Vein Pocahontas.

Illinois and Indiana Coals

All grades of Illinois and Indiana steam and domestic coals may be bought through us.

OUR COALS ARE ALL GOOD—OUR SERVICE IS LIKEWISE

COAL CATALOG

O'GARA COAL COMPANY

Mine Owners and Operators

FRANK H. WOODS, President
C. M. MODERWELL, Vice President

FRANK A. MANLEY, Vice President
F. A. BRAZELTON, General Sales Manager

Daily Capacity 15,000 Tons, Saline County, Illinois Coal

BILLING STATIONS

Harrisburg, Ill. 4 Mines
Eldorado, Ill. 3 "
Ledford, Ill. 1 "
Carrier Mills, Ill. . . . 1 "

General Offices
CHICAGO, ILL.



RAILROADS

Big Four (C. C. C. & St. L. Ry.)
Illinois Central Ry.
Louisville & Nashville Ry.

Branch Office
MINNEAPOLIS, MINN.

Seam Worked—Geological Seam No. 5

All the Company's mines work in this same No. 5 Seam, generally known as the "Harrisburg Vein," which ranges in thickness from five to seven feet without a parting, and is found at a depth of from 75 feet at the Southern to 450 feet in the Northern end of the Field. Working conditions are excellent, including a hard slate roof, fire clay floor, not too much water, and very little gas.

The coal has a rich lustre, is of pleasing appearance, hard, rather brittle, with a semi-conchoidal fracture. It is a non-clinkering coal. The ash fuses only at very high temperature and the component parts of the ash contain a minimum of those elements, the combination of which tend to produce a lower fusing point.

Reference to analyses show it to be a high volatile, or gas coal, and while it is not adapted for extensive use for illuminating gas, it makes a splendid producer gas coal in some types of gas producers. The ignition point is at high temperature, so that the best result is secured by light and frequent firing. While the "Harrisburg" coal has not all the properties usually found in a first class coking coal, it does coke, and this makes it a very lasting fuel.

In separating into the various sizes the Run of Mine coal yields about 30% of 1 1/4" round hole Screenings.

"Harrisburg" is a popular Domestic coal with dealers, due to its great heating power, attractive appearance, and careful preparation.

"Harrisburg" is an excellent general purpose industrial fuel, owing to its high percentage of Carbon and low Ash and Moisture.

"Harrisburg" is an unusually efficient Steam coal, and an excellent Railroad locomotive fuel.

Preparation—Equipment

Five of the Company's mines have four loading tracks, so that it is possible to make four different sizes at the same time.

Four of the Company's mines have three loading tracks, so that only three different sizes of coal can be prepared at the same time.

The equipment and machinery for the preparation of the coal into the various sizes required for the many different uses is of the most modern and up-to-date character.

In addition to having the best available Screening machinery, these mines are equipped with picking tables for removing visible impurities and loading booms for lowering coal into the car with minimum breakage, assuring the cleanest, most uniformly sized coal. The screens are of the modern shaker type, being sets of steel plates 18 to 24 feet long and 7 feet wide, perforated with round holes the diameter of which gives names to the various sizes.

By shifting and adjusting these screens the Company is able satisfactorily to turn out in the best of condition practically every size that may be desired for any use to secure best results.

Illinois State Geological Survey Year Book for 1909 Says:

"The Saline County field is the newest, and in respect to quality of product, the most important in Illinois."

Wilson & Co., Packers, Chicago:

"We appreciate the exceptional service you have given us. This only assures and demonstrates that we properly placed our confidence when we awarded our contract to you. We know you have sacrificed considerably by giving your contract customers all their requirements even though you could have sold part of the coal on the open market at a very handsome profit."

Clark Coal Co., Chicago:

"Harrisburg is the best coal coming into this market. It has made good for us in every instance. If we please you as customers as much as your coal and service please us we see no reason why we should not be on your books many years to come."

Jacob E. Decker & Sons, Packers, Mason City, Ia.:

"It gives us much satisfaction to again be able to give you our contract. We know that you can and will give us the required service if anyone can."

SOME ANALYSES OF HARRISBURG COAL

Illinois Geological Survey, Bulletin No. 3

	As rec'd	Dry Coal
Moisture	3.05%	.....
Ash	8.20%	8.50%
Volatile Matter	37.20%	38.50%
Fixed Carbon	51.10%	53.00%
Sulphur	2.07%	2.54%
B.t.u.	13,070	13,540

Ultimate Analysis

By A. Bement, Consulting Engineer, Chicago.

	Moist Coal	Dry Coal
Moisture	6.75%	.....
Ash	7.23%	7.75%
Carbon	70.16%	75.24%
Hydrogen Available.....	3.64%	3.90%
Water of Composition.....	8.68%	9.31%
Nitrogen	1.53%	1.64%
Sulphur, total.....	1.01%	2.16%
	100.00%	100.00%
Sulphur, less Sulphur in Ash	1.76%	1.89%
Heating Power per pound in		
B.t.u.	12,944	13,882

U. S. Arsenal, Rock Island, Illinois

	From Contract Shipments	11 1/4" Lump	Mine Run
Moisture	4.1 %		4.2 %
B.t.u., as received.....	13,240		12,960
Dry Coal			
Fixed Carbon	53.5 %		55.3 %
Volatile Matter	39.9 %		37.5 %
Ash	6.6 %		7.2 %
Sulphur	1.86%		1.72%
B.t.u.	13,800		13,500

U. S. Indian Agencies and Schools

	From Contract Shipments	Walker, Minn.	Hayward, Wis.
Moisture	4.70%		4.69%
Volatile Matter (Dry Coal) ..	41.15%		39.44%
Fixed Carbon (Dry Coal) ..	51.07%		51.73%
Ash (Dry Coal).....	7.78%		8.83%
Sulphur	2.23%		2.57%
B.t.u. (Dry Coal).....	13,628		13,477

SOME PERFORMANCES OF HARRISBURG COAL

U. S. Government Fuel Testing Plant at St. Louis, Mo.

11 1/4" Screenings from Harrisburg, Saline County, Illinois.

Heat value B.t.u.....13,621

Evaporated per pound of coal as fired 8.24

Pounds of coal per indicated H.P. 3.43

Cooper, Wells & Co., St. Joseph, Mich.

Nov. 24, 1916

Harrisburg, 6x1 1/4" Egg Coal—

Coal Burned	16,800 lbs.
Water Evaporated	155,375 lbs.
Water Evaporated per lb. of Coal..	9.24 lbs.
Boiler H. P. Developed.....	409
Cost per Boiler H. P.....	10.6 cents
Average Evaporation, 2 Days.....	9.11 lbs.

Dubuque Electric Co., Dubuque, Iowa

"It was noticeable that, while running on O'Gara coal, one boiler could be cut out with a very good margin of safety, carrying the entire load at the heaviest peak on three boilers.

"In my opinion, however, it would always be good policy to carry the fourth boiler on a short bank, which would reduce our total boilers under fire from five to four."

Cooper, Wells & Co., St. Joseph, Mich.

April 4, 1920

Harrisburg Mine Run Coal—

Coal Burned	14,100 lbs.
Water Evaporated	121,224 lbs.
Water Evaporated per lb. of Coal..	8.6 lbs.
Boiler H. P. Developed.....	319
Cost per B. H. P.....	9.7 cents
Average Evaporation, 3 Days.....	8.56 lbs.

Northern Michigan Transportation Co., Chicago, Illinois

Coal used on Steamers "Kansas" and "Racine" during month of June, 1914, and June, 1915, same ships, same number of trips, same schedule, same route both years.

Summary

1914—Used 573 2/5 tons Pittsburgh coal for 26 trips	\$2,164.40
1915—Used 536 tons Harrisburg coal for 26 trips	1,455.30
Net saving in cost of Harrisburg....	\$ 709.10
Decrease in consumption of Harrisburg for 26 trips, 37 2/5 tons.	

Iowa Gas and Electric Company, Iowa City, Iowa

We are equipped with V-Notch meter for weighing all water used in boilers and scales with trucks on track for weighing and handling all coal burned.

Average evaporation of water per pound of coal for nine days, 8.05. This represents coal as weighed with no deductions for moisture.

January 25, 1920	8.2 lbs.
January 26, 1920	8.0 lbs.
January 27, 1920	7.9 lbs.
January 28, 1920	8.3 lbs.
January 29, 1920	7.8 lbs.
January 30, 1920	8.0 lbs.
January 31, 1920	7.9 lbs.
February 1, 1920	8.3 lbs.
February 2, 1920	8.0 lbs.

OLD BEN COAL CORPORATION

McCormick Building, CHICAGO, ILL.

Operates 12 mines, 305 miles south of Chicago, and owns approximately 61,000 acres of coal land, with agricultural surface. These mines are located in Franklin County, Illinois, which contains the thickest and most desirable body of bituminous coal in the middle west.

The coal which blankets the county is geologically known as No. 6 seam and averages from 9 to 14 feet in thickness that will average .55 to 1.2 per cent. of sulphur content and is rich in by-products, and develops over 13,000 B. t. u. in heat value. Beneath the No. 6 seam and easily workable is another body of desirable coal from 4 to 5 feet in thickness, which can be considered as a reserve for a far-off future.

All the coal on the OLD BEN properties is the very best quality for steam and domestic fuel and commands a steady and ready market always at top prices.

General quality is shown below by one of many analyses made by Robt. W. Hunt & Company, Engineers, Chicago, Ill.

	Small Egg	No. 2	No. 3
Moisture	7.56	7.10	7.60
Volatile Matter.....	32.51	32.20	30.10
Fixed Carbon.....	54.30	54.51	56.10
Ash	5.63	6.19	6.20
	100.00	100.00	100.00
Sulphur	1.18	1.20	1.09
B. t. u., Dry.....	13,618	13,536	13,480
B. t. u., Commercial.	12,588	12,575	12,456

The location of the mines is of the most desirable strategic nature, for distribution to an area

containing 20 prosperous states, cobwebbed with railroads of the best class, and with an easy approach to future export opportunities.

The mines are equipped with every modern mechanical device and are located in or near prosperous and large towns which makes readily available the best sort of mine labor at all times of the year.

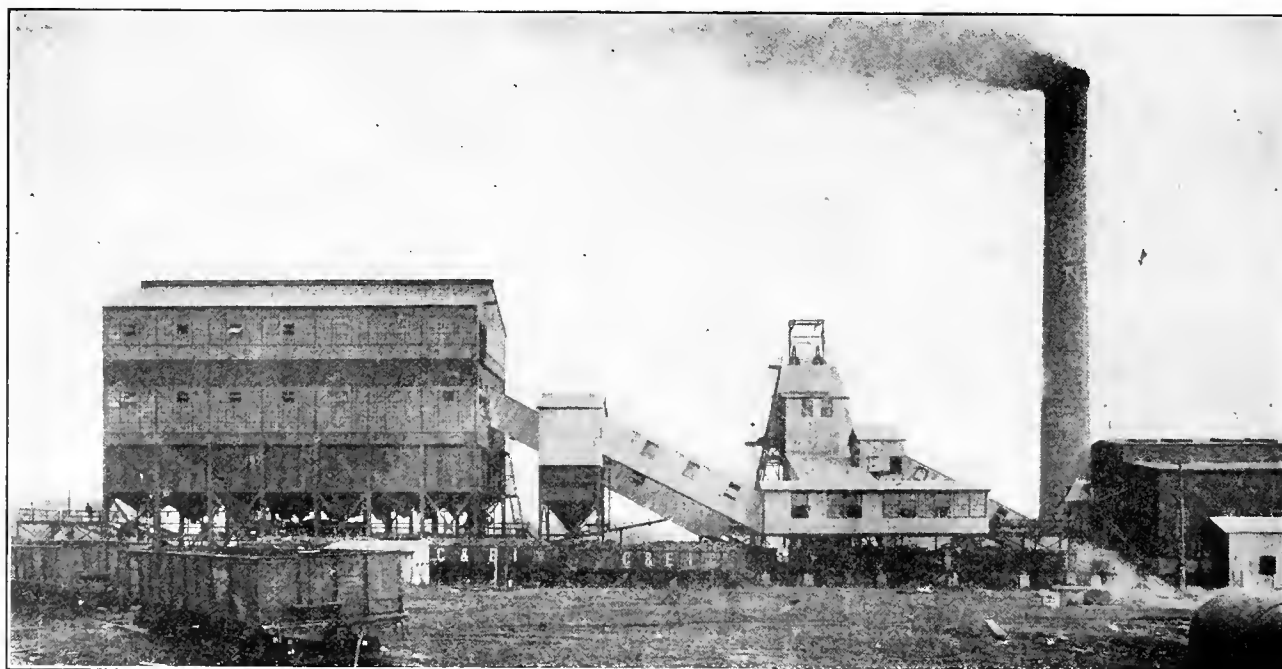
The Corporation employs about 7,000 men at the mines, drawn from the best class of mine workers, who are encouraged to build permanent homes by the comforts and advantages that surround them.

In no part of the world is bituminous coal so perfectly prepared, sized and loaded for market as in these plants of Old Ben Coal Corporation, and the product is so superior, and has been so thoroughly advertised through the advanced publicity that has been employed, that it is now the standard fuel of the midwest section of the United States, and is likely to become a real factor in the export market of the world as the development of water transportation, now under active consideration, becomes a fact.

At a fair estimate, the daily capacity of the OLD BEN group of mines is 50,000 tons daily when full working time and adequate transportation conditions are possible. Direct mine connections are made with four great trunk lines: The Chicago, Burlington & Quincy, Chicago & Eastern Illinois, Illinois Central, and Missouri Pacific Railways, with great lakes and tidewater outlets.

With the territory now served by the Corporation properly developed, there are still greater expansions of tonnage and market easily possible.

SOLD UNDER TRADE NAMES "OLD BEN," "PURITY," "CHRISTOPHER"



Mine No. 9, a Typical "Old Ben" Plant, 5000 Tons Daily Capacity

PEABODY COAL COMPANY

CHICAGO, ILL.

BRANCHES

CINCINNATI, OHIO
 PINEVILLE, KENTUCKY
 ST. LOUIS, MISSOURI
 KANSAS CITY, MISSOURI

MINNEAPOLIS, MINNESOTA
 SPRINGFIELD, ILLINOIS
 PEORIA, ILLINOIS

OMAHA, NEBRASKA
 DEADWOOD, SOUTH DAKOTA
 SHERIDAN, WYOMING
 SPOKANE, WASHINGTON

Coal Mine Management

For General Summary of Peabody Management Service See Page 249

OPERATING MANAGER

Out of the tested, successful operating methods of mines under our active control in most of the important fields, you can secure for your mine the methods which make possible the most efficient, effective and economical operation.

As Operating Manager for your mine, we can employ the fund of data on mining conditions, cost items and improved methods which is daily collected and arranged for comparison for the benefit of each of the mines we manage.

In addition to our own mines, we are operating thirty mines owned by others, located in Kentucky, Illinois, Indiana, Oklahoma and Wyoming. This large scale operation makes possible the employment of a staff of exceptionally well qualified mining experts and field men.

The efficiency of this management was recently shown following an accident at Mine No. 18, West Frankfort, Illinois, owned by the By-Products Coke

Corporation and operated under the Peabody plan. A fire caused by a short circuit in one of the large transformers completely destroyed the power house. The buildings and electrical machinery were wiped out and the hoisting engine partly wrecked. The destroyed electrical machinery consisted of a 550 K. W. A. C. generator, a 400 M. G. generator set and a 300 A. C. generator set complete with switchboards. By bringing in equipment from the company's supply house, which is maintained to minimize delays due to accidents such as this, the buildings were temporarily restored and all damaged machinery replaced so that the mine was operating to its full capacity with an interruption of only three working days.



First Aid Room, standard equipment of mines operated by Peabody Coal Company



Empty car track bottom Peabody Mine No. 18, West Frankfort

PEABODY COAL COMPANY

332 South Michigan Avenue, CHICAGO

PEORIA, ILLINOIS
SPRINGFIELD, ILLINOIS
CINCINNATI, OHIO
ST. LOUIS, MISSOURI

BRANCHES
KANSAS CITY, MISSOURI
OMAHA, NEBRASKA

MINNEAPOLIS, MINNESOTA
DEADWOOD, SOUTH DAKOTA
SHERIDAN, WYOMING
SPOKANE, WASHINGTON

Operating 36 Mines in 11 Fields on 19 Railroads With Annual Capacity of 18,000,000 Tons

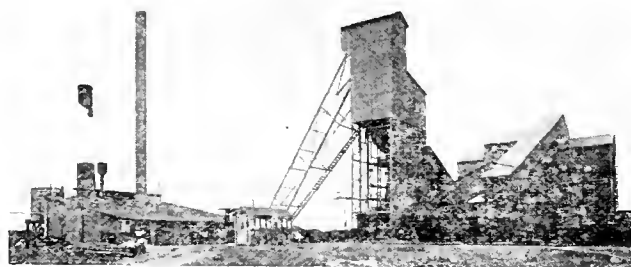
Peabody Service to Coal Buyers

The mining and distributing of coal is full of uncertainties. In no other business are there so many factors utterly beyond the control of the producer. Accidents within the mine which it is impossible to foresee or prevent may at any time completely paralyze a mining operation. Failure in the supply of railroad cars often enforces idleness. Impairment of the working force through strikes and other causes frequently results in stoppage of production.

It is therefore obviously impossible for any coal producing company to maintain 100% service under all conditions. But it is equally obvious that a producing company having a large number of mines with many railroad connections will not be seriously crippled by accidents occurring at one mine and that it is better able to replace production lost through local strikes or failure of car supply on one or two lines. In other words, such a company will be the last to feel impairment of service due to conditions beyond control.

It will be noted that Peabody Coal Company has unusual facilities for supplying coal from the important districts of Illinois, the enormous potential capacity of the mines operated providing a measure of protection against periodical shortages. During the trying times of the past several years, "Peabody Service" has become more than ever recognized by large and small buyers of coal as something more than a matter of good intentions, having back of it physical resources unequalled in the Illinois field.

On the following pages we have set forth essential data concerning our Illinois properties which may be of interest to buyers of coal. The analyses given represent the average of a large number made by The Kawin Co., The Dearborn Chemical Co., The United States Fuel Co., and the University of Illinois.



Peabody Mine No. 3

LOCATION—Marion, Williamson County, Illinois.
RAILROADS—C. B. & Q., I. C., C. & E. L. Mo. Pac.
SHIPPING POINTS—Marion, Bush and Herrin.
SEAM MINED—Illinois No. 6.
CAPACITY—1,350,000 tons per year.
PREPARATION—Round Hole Shaker Screens, Picking Tables and Washer.

Sizes Produced

Mine Run	
6" Lump.....	Over 6" Screen
6" Egg.....	Through 6" over 3" Screen
No. 1 Nut.....	Through 3" over 1½" Screen
2" Screenings.....	Through 2" Screen
1½" Screenings.....	Through 1½" Screen
Washed Egg.....	Through 3" over 2" Screen
Washed Range.....	Through 2" over 1½" Screen
Washed Chestnut.....	Through 1½" over ¾" Screen
Washed Pea.....	Through ¾" over ⅜" Screen

Average Analysis

Moisture	8.4
Volatile	33.4
Fixed Carbon	48.7
Ash	9.5
	100.0
Sulphur	1.8
Commercial B. t. u.	11,797



Peabody Mine No. 5

LOCATION—Pawnee, Sangamon County, Illinois.
RAILROADS—C. & I. M., C. & A., I. C., C. & N. W., Wabash, E. & O.

SHIPPING POINT—Pawnee.
SEAM MINED—Illinois No. 6.
CAPACITY—500,000 tons per year.
PREPARATION—Round Hole Shaker Screens, Impurities Removed by Hand Picking.

Sizes Produced

Mine Run	
6" Lump.....	Over 6" Screen
6" x 1¼" Egg.....	Through 6" over 1¼" Screen
1¼" Lump.....	Over 1¼" Screen
1¼" Screenings.....	Through 1¼" Screen

Average Analysis

Moisture	12.65
Volatile	37.17
Fixed Carbon	39.44
Ash	10.74
	100.00
Sulphur	4.10
Commercial B. t. u.	10,737



Peabody Mine No. 6

LOCATION—Sherman, Sangamon County, Illinois.
RAILROAD—C. & A.
SHIPPING POINTS—Sherman and Springfield.
SEAM MINED—Illinois No. 5.
CAPACITY—625,000 tons per year.
PREPARATION—Round Hole Shaker Screen, Impurities Removed by Hand Picking.

Sizes Produced

Mine Run	
6" Lump.....	Over 6" Screen
1 1/4" Lump.....	Over 1 1/4" Screen
6" x 3" Egg.....	Through 6" over 3" Screen
6" x 1 1/4" Egg.....	Through 6" over 1 1/4" Screen
No. 1 Nut.....	Through 3" over 1 1/4" Screen
1 1/4" Screenings.....	Through 1 1/4" Screen

Average Analysis

Volatile	34.15
Fixed Carbon	43.64
Ash	10.52
Moisture	11.69
	100.00
Sulphur	3.67
Commercial B. t. u.	10,869



Peabody Mine No. 7

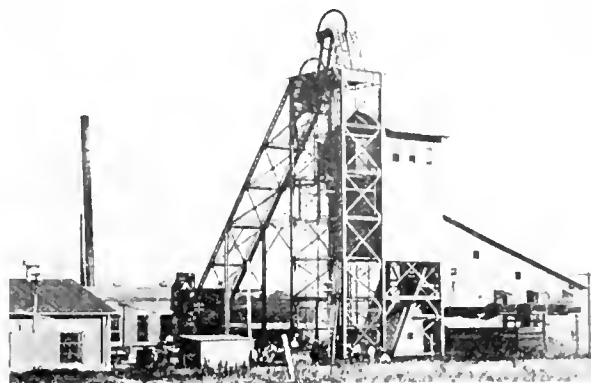
LOCATION—Kincaid, Christian County, Illinois.
RAILROADS—C. & I. M., C. & A., I. C., C. & N. W., Wabash, B. & O.
SHIPPING POINT—Kincaid.
SEAM MINED—Illinois No. 6.
CAPACITY—1,000,000 tons per year.
PREPARATION—Round Hole Shaker Screens, Impurities Removed by Hand Picking.

Sizes Produced

Mine Run	
6" Lump.....	Over 6" Screen
1 1/4" Lump.....	Over 1 1/4" Screen
6" x 3" Egg.....	Through 6" over 3" Screen
6" x 1 1/4" Egg.....	Through 6" over 1 1/4" Screen
No. 1 Nut.....	Through 3" over 1 1/4" Screen
Screenings.....	Through 1 1/4" Screen

Average Analysis

Volatile	36.97
Fixed Carbon	43.55
Ash	10.27
Moisture	9.21
	100.00
Sulphur	3.74
Commercial B. t. u.	11,179



Peabody Mine No. 8

LOCATION—Kincaid, Christian County, Illinois.
RAILROADS—C. & I. M., C. & A., I. C., C. & N. W., Wabash, B. & O.
SHIPPING POINT—Kincaid
SEAM MINED—Illinois No. 6.
CAPACITY—1,000,000 tons per year.
PREPARATION—Round Hole Shaker Screens, Impurities Removed by Hand Picking.

Sizes Produced

Mine Run	
6" Mine Run.....	Through 6" Screen
6" Lump.....	Over 6" Screen
1 1/4" Lump.....	Over 1 1/4" Screen
6" x 3" Egg.....	Through 6" over 3" Screen
6" x 1 1/4" Egg.....	Through 6" over 1 1/4" Screen
No. 1 Nut.....	Through 3" over 1 1/4" Screen
Screenings.....	Through 1 1/4" Screen

Average Analysis

Volatile	38.37
Fixed Carbon	38.20
Ash	9.33
Moisture	11.10
	100.00
Sulphur	3.80
Commercial B. t. u.	10,725



Peabody Mine No. 9

LOCATION—Calloway, Christian County, Illinois.
RAILROADS—C. & I. M., C. & A., I. C., C. & N. W., Wabash, B. & O.
SHIPPING POINT—Calloway, Illinois.
SEAMS MINED—Illinois No. 6.
CAPACITY—750,000 tons per year.

Sizes Produced

Mine Run	
Lump	Over 1 1/4" Screen
Screenings	Through 1 1/4" Screen

Average Analysis

Volatile	38.55
Fixed Carbon	36.42
Ash	9.83
Moisture	11.26
	100.00
Sulphur	3.93
Commercial B. t. u.	10,904



Peabody Mine No. 18

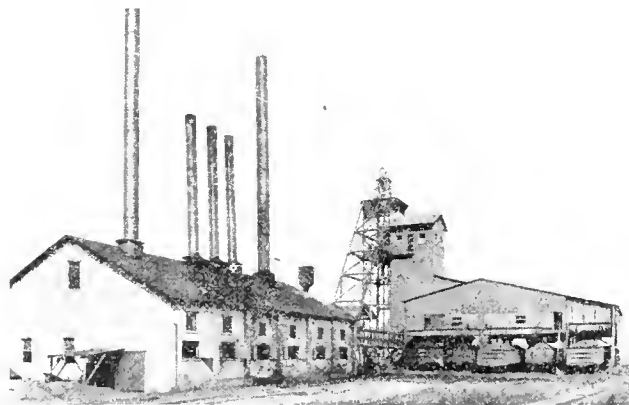
LOCATION—West Frankfort, Franklin County, Illinois.
RAILROADS—C. & E. I., I. C., C. E. & Q.
SHIPPING POINTS—West Frankfort and Benton.
SEAM MINED—Illinois No. 6.
CAPACITY—500,000 tons per year.
PREPARATION—Round Hole Shaker Screens, Impurities Removed by Hand Picking.

SIZES PRODUCED

Mine Run	
6" Lump.....	Over 6" Screen
6" x 3" Egg.....	Through 6" over 3" Screen
No. 1 Nut.....	Through 3" over 2" Screen
No. 2 Nut.....	Through 2" over 1½" Screen
Screenings.....	Through 1½" Screen

Average Analysis

Volatile	39.26
Fixed Carbon	46.42
Ash	8.47
Moisture	5.85
	100.00
Sulphur	2.81
Commercial B. t. u.	12,416



Peabody Mine No. 19

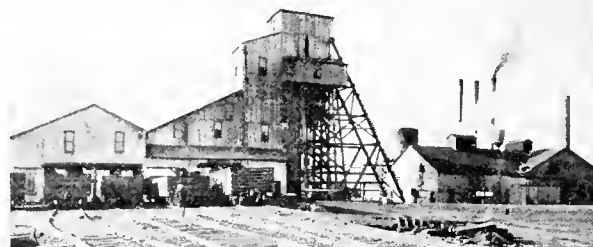
LOCATION—West Frankfort, Franklin County, Illinois.
RAILROADS—C. & E. I., and I. C.
SHIPPING POINT—West Frankfort.
SEAM MINED—Illinois No. 6.
CAPACITY—500,000 tons per year.
PREPARATION—Round Hole Shaker Screens, Impurities Removed by Hand Picking.

SIZES PRODUCED

Mine Run	
6" Lump.....	Over 6" Screen
6" x 3" Egg.....	Through 6" over 3" Screen
No. 1 Nut.....	Through 3" over 2" Screen
No. 2 Nut.....	Through 2" over 1½" Screen
Screenings.....	Through 1½" Screen

Average Analysis

Volatile	32.52
Fixed Carbon	52.26
Ash	8.52
Moisture	6.70
	100.00
Sulphur	1.21
Commercial B. t. u.	12,418



Peabody Mine No. 20

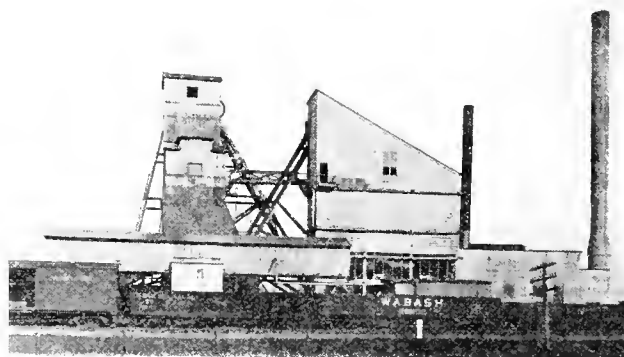
LOCATION—Eldorado, Saline County, Illinois.
RAILROAD—C. C. C. & St. L.
SHIPPING POINT—Harrisburg.
SEAM MINED—Illinois No. 5.
CAPACITY—500,000 tons per year.
PREPARATION—Round Hole Shaker Screens, Impurities Removed by Hand Picking.

SIZES PRODUCED

Mine Run	
6" Lump.....	Over 6" Screen
6" x 1¼" Egg.....	Through 6" over 1¼" Screen
Nut.....	Through 1¼" over 1" Screen
Screenings.....	Through 1" Screen

Average Analysis

Volatile	34.50
Fixed Carbon	50.53
Ash	10.74
Moisture	4.23
	100.00
Sulphur	4.03
Commercial B. t. u.	12,416



Peabody Mine No. 21

LOCATION—Stonington, Christian County, Illinois.
RAILROAD—Wabash.
SHIPPING POINT—Stonington.
SEAM MINED—Illinois No. 6.
CAPACITY—500,000 tons per year.
PREPARATION—Round Hole Shaker Screens, Impurities Removed by Hand Picking.

SIZES PRODUCED

Mine Run	
6" Lump.....	Over 6" Screen
1¼" Lump.....	Over 1¼" Screen
6" x 1¼" Egg.....	Through 6" over 1¼" Screen
Screenings.....	Through 1¼" Screen

Average Analysis

Volatile	39.39
Fixed Carbon	41.83
Ash	7.74
Moisture	11.04
	100.00
Sulphur	2.54
Commercial B. t. u.	10,240



Peabody Mine No. 24

LOCATION—Westville, Vermilion County, Illinois.
RAILROADS—C. & E. L., C. C. C. & St. L.
SHIPPING POINT—Westville.
SEAM MINED—Illinois No. 6.
CAPACITY—525,000 tons per year.
PREPARATION—Round Hole Shaker Screens, Impurities Removed by Hand Picking.

Sizes Produced

Mine Run
6" Lump.....Over 6" Screen
1½" Lump.....Over 1½" Screen
6" Egg.....Through 6" over 1½" Screen
Screenings.....Through 1½" Screen

Average Analysis

Volatile	32.16
Fixed Carbon	42.36
Ash	11.34
Moisture	14.14
	<hr/>
Sulphur	1.86
Commercial B. t. u.	10,573



Peabody Mine No. 26

LOCATION—Johnston City, Williamson County, Illinois.
RAILROADS—C. & E. L., I. C.
SHIPPING POINTS—Johnston City and Herrin.
SEAM MINED—Illinois No. 6.
CAPACITY—100,000 tons per year.
PREPARATION—Round Hole Shaker Screens, Impurities Removed by Hand Picking.

Sizes Produced

Mine Run
6" Lump.....Over 6" Screen
1½" Lump.....Over 1½" Screen
6" Egg.....Through 6" over 3" Screen
No. 1 Nut.....Through 3" over 1½" Screen
Screenings.....Over 1½" Screen

Average Analysis

Volatile	36.96
Fixed Carbon	44.79
Ash	10.86
Moisture	7.48
	<hr/>
Sulphur	1.63
Commercial B. t. u.	11,880



Peabody Mine No. 25

LOCATION—Cartersville, Williamson County, Illinois.
RAILROAD—Illinois Central.
SHIPPING POINT—Herrin.
SEAM MINED—Illinois No. 6.
CAPACITY—400,000 tons per year.
PREPARATION—Round Hole Shaker Screens, Impurities Removed by Hand Picking.

Sizes Produced

Mine Run
6" Lump.....Over 6" Screen
2" Lump.....Over 2" Screen
6" Egg.....Through 6" over 3" Screen
No. 1 Nut.....Through 3" over 2" Screen
Screenings.....Through 2" Screen

Average Analysis

Volatile	30.73
Fixed Carbon	52.64
Ash	7.83
Moisture	8.80
	<hr/>
Sulphur	1.54
Commercial B. t. u.	12,240



Peabody Mine No. 51

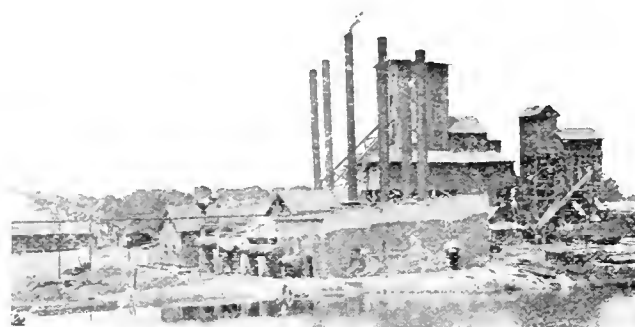
LOCATION—Andrew, Sangamon County, Illinois.
RAILROADS—C. P. & St. L., C. & N. W., C. & A.
SHIPPING POINT—Andrew.
SEAM MINED—Illinois No. 5.
CAPACITY—325,000 tons per year.
PREPARATION—Round Hole Shaker Screens, Impurities Removed by Hand Picking.

Sizes Produced

Mine Run
6" Lump.....Over 6" Screen
6" Egg.....Through 6" over 3" Screen
No. 1 Nut.....Through 3" over 2" Screen
No. 2 Nut.....Through 2" over 1½" Screen
Screenings.....Through 1½" Screen

Average Analysis

Volatile	36.21
Fixed Carbon	53.35
Ash	10.15
Moisture	11.25
	<hr/>
Sulphur	3.67
Commercial B. t. u.	10,681



Peabody Mine No. 52

LOCATION—Riverton, Sangamon County, Illinois.

RAILROAD—Wabash.

SHIPPING POINT—Riverton.

SEAM MINED—Illinois No. 5.

CAPACITY—525,000 tons per year.

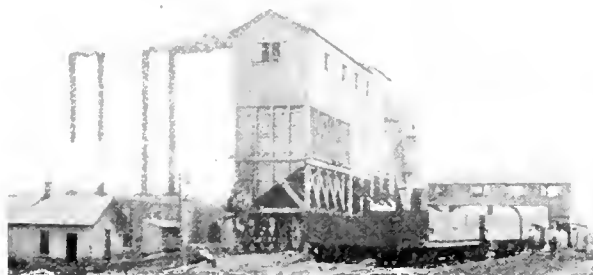
PREPARATION—Round Hole Shaker Screens, Impurities Removed by Hand Picking. Nut coal given special preparation through Rescreening Plant.

SIZES PRODUCED

Mine Run	Over 6" Screen
6" Lump	Over 6" Screen
1 1/4" Lump	Over 1 1/4" Screen
6" Egg	Through 6" over 3" Screen
No. 1 Nut	Through 3" over 2" Screen
No. 2 Nut	Through 2" over 1 1/4" Screen
Screenings	Through 1 1/4" Screen

AVERAGE ANALYSIS

Volatile	36.21
Fixed Carbon	39.63
Ash	10.36
Moisture	13.80
	100.00
Sulphur	3.45
Commercial B. t. u.	10,770



Peabody Mine No. 53

LOCATION—Springfield, Sangamon County, Illinois.

RAILROAD—Wabash.

SHIPPING POINT—Springfield

SEAM MINED—Illinois No. 5.

CAPACITY—450,000 tons per year.

PREPARATION—Round Hole Shaker Screens, Impurities Removed by Hand Picking.

SIZES PRODUCED

Mine Run	Over 6" Screen
6" Lump	Over 6" Screen
6" x 1 1/4" Egg	Through 6" over 1 1/4" Screen
Screenings	Through 1 1/4" Screen

AVERAGE ANALYSIS

Volatile	33.68
Fixed Carbon	42.20
Ash	10.34
Moisture	13.78
	100.00
Sulphur	3.15
Commercial B. t. u.	10,558



Peabody Mine No. 54

LOCATION—Auburn, Sangamon County, Illinois.

RAILROADS—C. & I. M., C. & A., I. C., C. & N. W., Wabash, B. & O., I. T. S.

SHIPPING POINT—Auburn.

SEAM MINED—Illinois No. 6.

CAPACITY—625,000 tons per year.

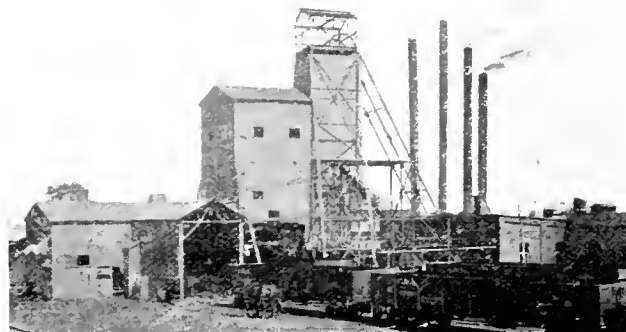
PREPARATION—Round Hole Shaker Screens, Impurities Removed by Hand Picking.

SIZES PRODUCED

Mine Run	Through 6" Screen
6" Mine Run	Through 6" Screen
6" Lump	Over 6" Screen
1 1/4" Lump	Over 1 1/4" Screen
6" Egg	Through 6" over 1 1/4" Screen
Screenings	Through 1 1/4" Screen

AVERAGE ANALYSIS

Volatile	37.17
Fixed Carbon	40.12
Ash	8.42
Moisture	14.29
	100.00
Sulphur	4.15
Commercial B. t. u.	11,124



Peabody Mine No. 55

LOCATION—Springfield, Sangamon County, Illinois.

RAILROADS—C. & A., Wabash.

SHIPPING POINT—Springfield.

SEAM MINED—Illinois No. 5.

CAPACITY—500,000 tons per year.

PREPARATION—Round Hole Shaker Screens, Impurities Removed by Hand Picking.

SIZES PRODUCED

Mine Run	Through 6" Screen
6" Mine Run	Through 6" Screen
6" Lump	Over 6" Screen
1 1/4" Lump	Over 1 1/4" Screen
6" Egg	Through 6" over 1 1/4" Screen
Screenings	Through 1 1/4" Screen

AVERAGE ANALYSIS

Moisture	12.70
Ash	10.94
Fixed Carbon	38.42
Volatile	37.94
	100.00
Sulphur	2.33
Commercial B. t. u.	10,560



Peabody Mine No. 57

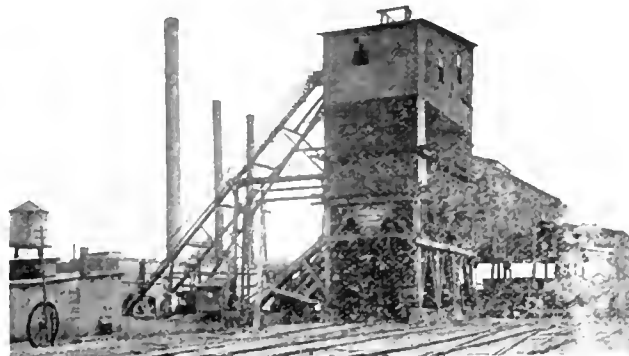
LOCATION—Springfield, Sangamon County, Illinois.
RAILROADS—C. I. & W., B. & O., I. C., I. T. S., C. & A., Wabash, C. & N. W.
SHIPPING POINT—Springfield.
SEAM MINED—Illinois No. 5.
CAPACITY—450,000 tons per year.
PREPARATION—Round Hole Shaker Screens, Impurities Removed by Hand Picking. Nut prepared through Rescreening Plant.

SIZES PRODUCED

Mine Run	Through 6" Screen
6" Mine Run	Through 6" Screen
6" Lump	Over 6" Screen
3" Lump	Over 3" Screen
6" Egg	Through 6" over 1½" Screen
3" Egg	Through 3½" over 3" Screen
No. 1 Nut	Through 3" over 2½" Screen
No. 2 Nut	Through 2½" over 1½" Screen
Screenings	Through 1½" Screen

AVERAGE ANALYSIS

Volatile	38.35
Fixed Carbon	39.07
Ash	10.28
Moisture	12.30
	100.00
Sulphur	2.48
Commercial B. t. u.	10,480



Peabody Mine No. 58

LOCATION—Taylorville, Christian County, Illinois.
RAILROADS—C. & I. M. C. & A., I. C., C. & N. W., Wabash, B. & O.
SHIPPING POINT—Taylorville.
SEAM MINED—Illinois No. 6.
CAPACITY—625,000 tons per year.
PREPARATION—Round Hole Shaker Screen, Impurities Removed by Hand Picking.

SIZES PRODUCED

Mine Run	Through 6" Screen
6" Mine Run	Through 6" Screen
6" Lump	Over 6" Screen
1½" Lump	Over 1½" Screen
6" Egg	Through 6" over 1½" Screen
Screenings	Through 1½" Screen

AVERAGE ANALYSIS

Volatile	38.14
Fixed Carbon	37.07
Ash	10.36
Moisture	14.43
	100.00
Sulphur	4.56
Commercial B. t. u.	10,495

PEABODY ILLINOIS MINES CLASSIFIED BY DISTRICTS

SOUTHERN ILLINOIS

Mine No.	County	Seam Mined	Shipping Points	Railroads
3	Williamson	6	Marion, Bush and Herrin	C.P.&Q., I.C., C&E.I., Mo.Pac.
18	Franklin	6	West Frankfort and Benton	C&E.I., I.C., C.R.&Q.
19	Franklin	6	West Frankfort	C&E.I., I.C.
20	Saline	6	Harrisburg	C.C.C.&St.L.
25	Williamson	6	Herrin	Illinois Central
26	Williamson	6	Johnston City and Herrin	C&E.I., I.C.

CENTRAL ILLINOIS

Mine No.	County	Seam Mined	Shipping Points	Railroads
5	Sangamon	6	Pawnee	C&I.M., C&A., I.C., C&N.W., Wabash, B.&O.
6	Sangamon	5	Sherman and Springfield	C&A.
7	Christian	6	Kincaid	C&I.M., C&A., I.C., C&N.W., Wabash, B.&O.
8	Christian	6	Kincaid	C&I.M., C&A., I.C., C&N.W., Wabash, B.&O.
9	Christian	6	Calloway	C&I.M., C&A., I.C., C&N.W., Wabash, B.&O.
21	Christian	6	Stonington	Wabash
51	Sangamon	5	Andrew	C.P.&St.L., C&N.W., C&A.
52	Sangamon	5	Riverton	Wabash
53	Sangamon	5	Springfield	Wabash
54	Sangamon	6	Auburn	C&I.M., C&A., I.C., C&N.W., Wabash, B.&O., I.T.S.
55	Sangamon	5	Springfield	C&A., Wabash
57	Sangamon	5	Springfield	C.I.&W., B.&O., I.C., I.T.S., C&A., Wabash, C&N.W.
58	Christian	6	Taylorville	C&I.M., C&A., I.C., C&N.W., Wabash, B.&O.

DANVILLE DISTRICT

Mine No.	County	Seam Mined	Shipping Points	Railroads
24	Vermillion	6	Westville	C&E.I., C.C.C.&St.L.

TAYLOR COAL COMPANY

Northwestern Sales Office
BUI LDERS EXCHANGE BLDG., MINNEAPOLIS, MINN.

Main Office
OLD COLONY BUILDING, CHICAGO



Owning and Operating
Four Mines in Franklin and Williamson Counties, Illinois

Producing **ENERGY** Coal
For Domestic, Steam & By-Product Use



Distributors of High Grade
Central Illinois, Brazil (Ind.), Hocking, Kentucky, West Virginia and Pennsylvania Coals

The Field

The four mines operated by the Taylor Coal Company which produce the coal sold under the trade name of Energy lie close to the center of the Franklin and Williamson County field. The Southern Illinois field, of which this is a part, is considered to be the most important in the state.

The vein of coal mined here is what is known as No. 6. All of the coal mined in Franklin County



Tipple and Washery at Energy Mine No. 2

and most of that in Williamson County comes from this vein. This coal is generally a low moisture and low sulphur coal. The vein averages about nine feet in thickness; one room in Energy Mine No. 5 is working in twelve foot coal. This means economical mining.



Energy Egg from Mine No. 5, Ready for Market

Energy Mines

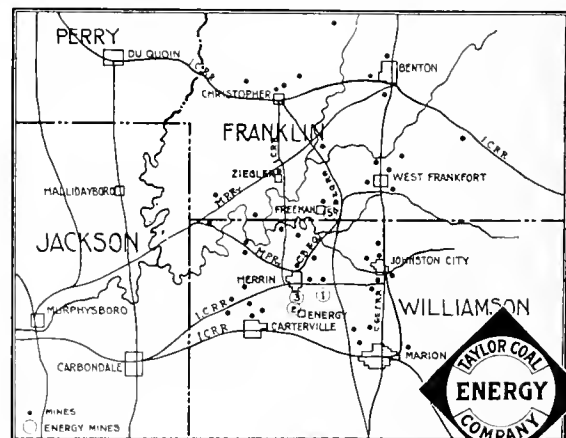
Energy Mines Nos. 1, 2 and 3 lie about five or six miles south of the Franklin-Williamson County line. Mine No. 5 lies just north of the same line. Nos. 1, 2 and 3 ship through Herrin, over the Illinois Central and Missouri Pacific Railroads. The shipping point for No. 5 is Freeman, on the Illinois Central and Chicago, Burlington & Quincy Railroads.

Energy No. 1

In addition to the regular shaker screen equipment this mine has for the purpose of producing a particularly well sized coal for domestic use a re-screening plant which makes the following sizes: 3"x2" small egg, 2"x1 1/4" stove, 1 1/4"x3/4" chestnut, 3/4"x3/8" pea, 3/8"x0" buckwheat, at the same time giving an opportunity for a very close inspection and picking of the coal. Long loading booms insure a minimum of breakage in loading. This mine has a daily capacity of 1,500 tons.

Energy No. 2

Has a daily capacity of 1,800 tons of coal mined and 1,200 tons washed, having beside the regular up-to-date mining equipment a Luhrig coal washer.

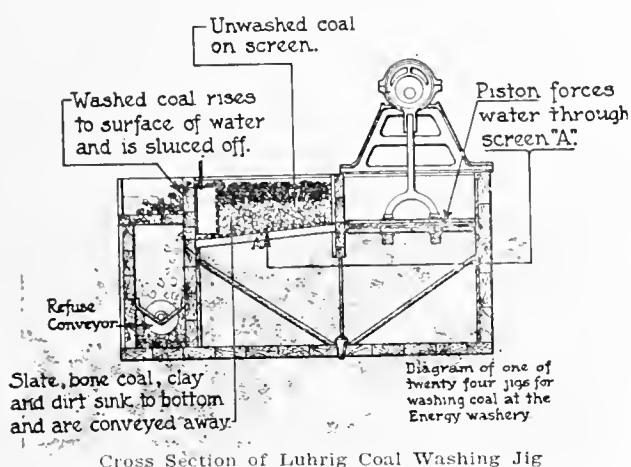


Map of Franklin and Williamson County Field

In this as in the other mines the coal is properly mined and the raw coal is given a first grade preparation over shaker screens. The coal to be washed, however, is carried to rotary screens in the top of the washery building. These rotary screens do a double duty. In the first place they will break the coal wherever there is a fracture already started,

and, in that way, to a large extent, eliminate any possible breakage in later handling. In the second place one of the important features of a Luhrig coal washing plant is the fact that the coal must be accurately sized before it is washed.

The washing of the coal occurs in banks of jigs, each bank comprising several jigs, handling a separate size of coal. The jig itself is a tank filled with water divided across the top by a partition, in front of this the coal lies on a perforated plate. Back of the partition a plunger working on a cam gives the proper number of pulsations to the water which forces its way through the coal lying on the perforated plate. The coal, being lighter in weight, rises and is finally washed to the top and over the edge of the tank into a sluice which carries it on. The slate, clay, bone coal and other impurities settle to the bottom and at regular intervals are released through a gate which opens to another sluice leading to refuse disposal machinery.



The coal after leaving the jigs is given a thorough spray with fresh water, which removes any fine coal which may remain from the jig water. From here the washed coal passes through revolving draining screens, which in turn deliver the coal to storage bins.



Energy Coal in the Mine

The coal is washed and delivered in seven sizes: large egg $3\frac{1}{2}'' \times 3''$, small egg $3'' \times 2''$, stove $2'' \times 1\frac{1}{2}''$, chestnut $1\frac{1}{2}'' \times 1''$, No. 3 $1'' \times \frac{7}{8}''$, pea $\frac{7}{8}'' \times \frac{1}{2}''$, buckwheat $\frac{1}{2}'' \times \frac{1}{16}''$.

This coal, according to tests made, carries less moisture content than raw coal and burned properly comes very close to being a smokeless coal. While it kindles very quickly, it also holds fire remarkably well and makes not only a high grade steam coal but a remarkably good and economical coal for domestic use.

Energy No. 3

The coal produced at No. 3 is of a very high grade and is prepared in the following sizes: 6" lump, 6" x 3" furnace, 3" x 2" small egg, and 2" screenings. Each size is very carefully hand-picked.

Energy No. 5

Is the Franklin County mine of the quartet. In this mine the vein reaches a thickness of twelve to thirteen feet in places.

The coal is a remarkable heat producer. It is slightly freer burning than the other coals, but is very easily controlled and has won great popularity both as a steam and domestic coal. It is well prepared and ranks with the finest coals produced in this section of the country. This mine has just been equipped with a Marcus screen and picking table of the very latest design and long loading booms, for each size of coal, delivering to the cars a very fine coal.

Analyses

The analyses which follow were made by one of the most reliable testing companies in the country, the Commercial Testing and Engineering Company, of Chicago, and while only giving the tests on certain sizes, give a very fair indication of what the coal is, as they are the results of tests made on samples taken from consumers' bins.

	6" Lump	Furnace	Small Egg	Stove	Chestnut
Moisture	7.50	7.50	7.50	7.50	7.50
Volatile	33.30	33.30	33.30	33.30	33.30
Carbon	51.91	51.91	51.41	51.41	51.31
Ash	7.29	7.29	7.79	7.79	7.89
Dry B. t. u.	100.00 13,350	100.00 13,350	100.00 13,320	100.00 13,320	100.00 13,300
	Washed Pea	Washed Buckwheat	2" Screenings	1½" Screenings	Min. Run
Moisture	7.25	9.00	8.10	8.10	8.00
Ash	7.24	11.68	10.76	10.88	10.07
Volatile	32.94	33.44	33.63	33.63	33.40
Carbon	52.57	45.88	47.51	47.39	48.53
Dry B. t. u.	100.00 13,400	100.00 12,600	100.00 12,820	100.00 12,775	100.00 13,050

SULPHUR
Herrin mines.... 1.82%
Freeman mines... .66%

TAYLOR COAL COMPANY
Producers of ENERGY COAL
Chicago Minneapolis

UNION COLLIERY COMPANY

General Office:
Union Electric Building, St. Louis, Missouri

W. C. SCHROEDER, Sales Manager
500 Old Colony Building, Chicago, Illinois

KATHLEEN MINE

KATHLEEN Mine is located at Dowell, Jackson County, Illinois.

We ship KATHLEEN Coal in 6 inch lump, 6 by 3 inch Egg, and 3 by 2 inch Nut.

KATHLEEN Coal is recommended for Steam and Domestic uses.

All shipments are billed from Dowell, which is on the Illinois Central Railroad.

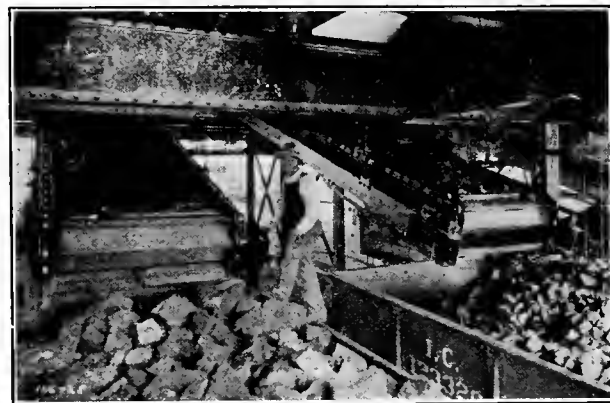
KATHLEEN Mine is a new installation, electrically driven throughout, including short-wall mining machines, electric haulage, and electric hoists.

In the construction and operation of the KATHLEEN Mine no expense has been spared to insure the maximum character of preparation and quality.



Booms Loading Lump, Egg, and Nut

Located on the main line of the Illinois Central Railroad our production is being distributed throughout the states of Illinois, Wisconsin, Minnesota, Iowa, Nebraska, Kansas and Missouri.



Steel Tipple at Kathleen Mine

Our tipple is equipped with steel picking tables and loading booms, the coal is hand-picked, and delivered into the car with minimum breakage. Our Screenings are made through full 2-inch round openings.

We are desirous of bidding on the requirements of consumers who are appreciative of integrity in the matter of quality and weights, and of dependability of delivery

“QUALITY—DEPENDABILITY—INTEGRITY” OUR MOTTO

UNION FUEL COMPANY



Producers and Distributors of Bituminous Coal

Character of Organization

The Union Fuel Company, with the strategic location of its mines, its excellent transportation facilities, experienced supervision, low operating costs and efficient service to its customers, proposes to continue to merit and to hold the confidence and respect of those with whom it is dealing. The conservative policy of the Company has safeguarded the interests of its customers.

Mines

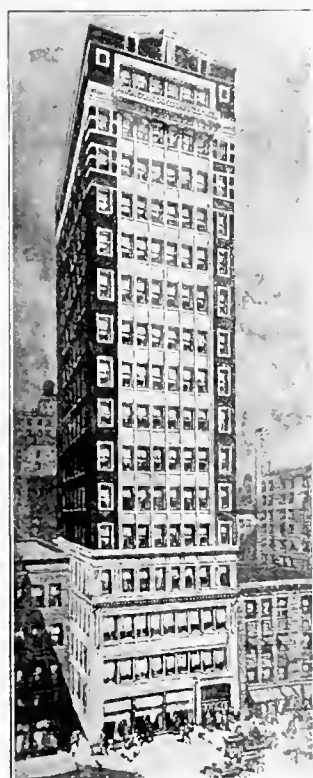
The Company owns and operates six well-known mines in the Springfield district. At every mine new equipment has been installed, modern buildings erected, and every possible improvement inaugurated to raise the quality of coal produced and lower its cost to the consumer.

Quality and Preparation

The coal is high in heat producing capacity and low in ash content. It is prepared in all sizes and is excellent for steam, railroad and domestic purposes.

Transportation Facilities

The Company's mines are served by six railroads, namely, C. & A., C. & N. W., C. B. & Q., C. P. & St. L., C. I. & W., C. & I. M., and their connecting lines; therefore, our coal is consistently delivered into an extensive territory. And with a potential capacity of 7,000 tons a day from our mines, we are able to make prompt and full shipments even during severe emergencies.



UNION FUEL BUILDING
123 W. Madison St., Chicago

Freight Rates

The coal buyers in the Central and Middle Western States are substantially benefitted by the favorable location of the Union Fuel Company's mines, because the freight rates are decidedly lower than from other coal producing districts.

MINES LOCATED AT

- | | |
|----------------------------|----------------------------|
| No. 1—Nilwood, Ill. | No. 4—Athens, Ill. |
| No. 2—Keys, Ill. (Tuxhorn) | No. 5—Selbytown, Ill. |
| No. 3—Auburn, Ill. | No. 6—Girard, Ill. (Ridge) |

GENERAL AND OPERATING OFFICES

Reisch Building, Springfield, Ill.

L. J. Pulliam, President
Andrew Stevenson, Vice-President
A. E. Lee, General Sales Manager
B. F. Bliss, Auditor

G. W. Hatch, Gen'l Sales Manager
H. E. Smith, General Superintendent
L. S. Short, Purchasing Agent.

WASSON COAL COMPANY

Sole Producers of

Wasson's Harrisburg White Ash Coal

"The Best In The Middle West"

Sales Office
1914 Fisher Bldg., CHICAGO

Main Office and Mines
HARRISBURG, ILL.

Location of Mines

The mines of the Wasson Coal Company, two in number, are situated in Saline county, Illinois, one of the three major coal producing fields in the southern part of the state. One mine is immediately north of and the other immediately south of Harrisburg.

Seam Worked and Its Characteristics

The Number Five Seam, from which both mines derive their coal, is everywhere recognized as a superior fuel. Its good reputation is due partly to the fact that the coal mines clean. In Saline county the seam lies under deep cover and has a very hard top and bottom. At the Wasson mines, directly above the seven-foot seam, there is a dense layer of black slate, at some places as much as three feet in thickness. This slate is solid and parts easily from the coal in shooting, so that there is no contamination of the coal with top rock. Neither is it possible to get any bottom dirt mixed with the coal, for the bottom is as hard as flint and can not be cut into by the mining machines. A third natural cause for the production of clean coal from the Wasson mines is that the entire seam between top and bottom is without partings.

In content of volatile matter, Wasson coal ranges somewhere between Hocking and Youghiogheny. It is a coking coal, and, according to A. Bement, is comparable more closely with the Youghiogheny coal of Western Pennsylvania than to any coal found in Illinois.

Its analysis is as follows:

Analysis*

	Dry Basis	As Received
Moisture	0.00	6.65
Volatile Matter	35.80	33.42
Fixed Carbon	54.27	50.66
Ash	9.93	9.27
	100.00	100.00
Sulphur	2.29	2.14
B. t. u. per pound...	13,225	12,346
Fusion Temperature of Ash...	2240° F.	

*Commercial Testing & Engineering Co., Chicago.

Wasson Coal for Steam Purposes

Saline county coal is widely known as a premier steam coal. Forty per cent of the output of the Wasson mines is used under boilers, and gives general satisfaction. This coal predominates at the Chicago Stock Yards where it is burned in stokers.

Likewise, in Chicago and other points along Lake Michigan, it is substituted on tug boats for Eastern coals, which heretofore were supposed to be the only ones that would meet the exacting conditions on board these high-powered lake steamers. Another indication of the unusual qualities of Saline county coal for steam purposes is that in the Chicago market, although in competition with coal from many parts of the United States, the screenings usually sell at a premium of ten to fifteen or even twenty cents a ton over other Illinois offerings.

Method of Firing

As is the case with all high-volatile coals, Wasson-Saline coal will smoke unless carefully handled. For hand firing, the most successful way is to distribute the coals thinly over the glowing bed of coals and thus fire lightly but often. When the coal is fired in this way an almost even surface of coked coal is kept, with the production of very little smoke.

Wasson Coal For Domestic Users

About sixty per cent of the Wasson output goes to the domestic trade. The domestic consumers of this company are as permanent as are the steam customers, and their number is constantly increasing. Wasson coal is free burning and has proved itself a first-class domestic coal wherever it has been used. It sells in Western Indiana in competition with Number Four coal. It is distributed through the central and northwestern parts of Illinois in competition with the best grades of domestic coal. The same is true in the markets of Wisconsin, Iowa, Nebraska and the northwest.

Method of Firing

After firing in a household furnace, the drafts should all be opened wide for fifteen minutes to permit sufficient air to burn off the volatile gases without the formation of dense smoke. The amount of coal fired at one time should be small. After the gases are burned off, the draft should be removed, and if a shovelful of ashes is put on top of the glowing bed of coal it will hold fire over night without any difficulty.

Wasson Coal For Other Usages

Harrisburg coal is being used with success in glass works where a long-flame coal is required. It is also well adapted for cement burning, railroad and cannery use.

Preparation

The equipment at both mines is about the same. After being weighed, the coal passes to shaker screens where it is sized into lump, egg, nut and screenings. Any combination of these sizes can be made. Below the screens there are four loading booms, one to each track, which let the coal down into the cars. Alongside these booms workers are stationed to clean the coal from any impurity which may have found its way into the coal. Having a clean seam to begin with, plus the care taken in preparation, explains why users of Wasson coal find that all shipments consist of real combustible material, rather than an admixture of slate and coal.

Railroads

The mines are served exclusively by the Cairo branch of the New York Central Lines. By means of the originating carrier and its connections, coal

from the Wasson mines can reach any point that can be served by any Illinois railroad.

Selling Zone

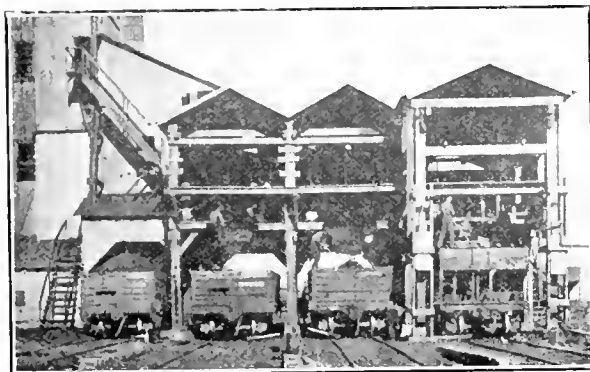
In the southern part of Illinois; in the western part of Indiana; in all points reached through Cairo; in St. Louis and all points to the west reached thereby; in Chicago, Peoria and all points reached through these two gateways.

Wasson Coal Company Policy

Satisfactory service for the customer; good preparation for the coal; fair price for ourselves.

This trinity expresses the Wasson creed. We believe the customer's first want is a good, clean coal, one he can burn efficiently. Wasson Service is a lubricant which keeps our relations at all times pleasant with the trade.

A fair price is all we deserve and all we ask.

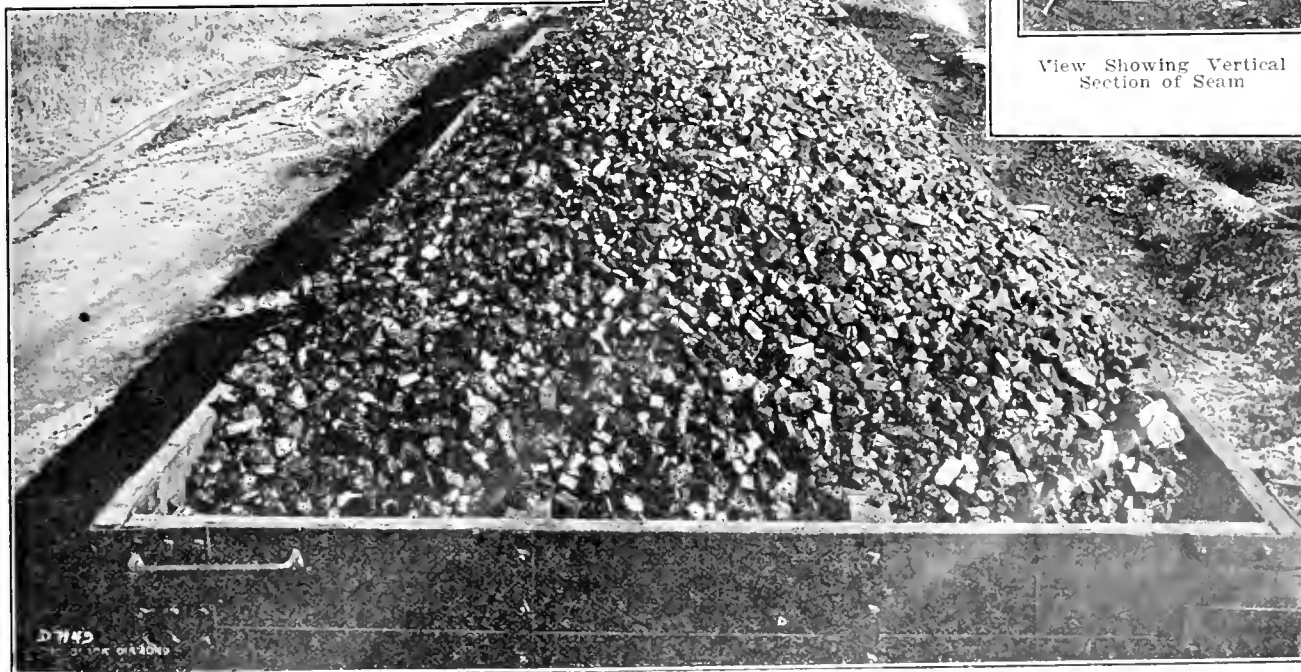


Loading Coal By Booms Into Cars

← To Tipple From Face →
To Trade
↓



View Showing Vertical Section of Seam



Wasson Coal Enroute to Market

List of Mines By Seams, Including Name of Company, General Office Address,
County, Railroad and Shipping Point

ILLINOIS

NO. 1 SEAM

Bituminous rank. Suitable for Locomotive Fuel, Producer Gas, Steam and Domestic use.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Alden Coal Co.	Davenport, Ia.	Alden No. 7.	Marion	R. I., Sou.	Matherville, Ill.
Assumption Coal & Mining Co. (The)	Assumption, Ill.	No. 1.	Christian	Ill. Central	Assumption, Ill.
Coal Valley Mining Co.	139 W. Van Buren St., Chicago, Ill.	Matherville No. 3.	Mercer	R. I., Sou. Ry. System	Matherville, Ill.
Consolidated Coal Co. of St. Louis.	1155 Ry. Exchange, St. Louis, Mo.	No. 9.	Jackson	Ill. Central	Murphysboro, Ill.
Consolidated Coal Co. of St. Louis.	1155 Ry. Exchange, St. Louis, Mo.	No. 10.	Jackson	M. & O.	Murphysboro, Ill.
Gartsid Coal Co.	St. Louis, Mo.	No. 4.	Jackson	M. & O., I. C.	Murphysboro, Ill.
Golden Rule Coal Co.	Lenzburg, Ill.	Golden Rule.	St. Clair	Ill. Cent.	Lenzburg, Ill.
McGraney Sand & Gravel Co.	Davenport, Ia.	No. 2.	Rock Island	C. R. I. & P.	Coal Valley, Ill.
Pryce Coal Co.	Coal Valley, Ill.	Pryce.	Rock Island	C. R. I. & P.	Coal Valley, Ill.
Spoon River Colliery Co.	Rock Island, Ill.	No. 1.	Fulton	C. R. & Q.	Ellisville, Ill.

No. 2 SEAM (Known as the THIRD VEIN in the Longwall district; MURPHYSBORO COAL in Jackson county; to the trade as LA SALLE, WILMINGTON, COLCHESTER and MURPHYSBORO COAL)

Mined in Longwall and Jackson county districts. Bituminous rank. Coals from both districts suitable for Locomotive Fuel, Steam, Tile and Pottery, Cement Burning, Zinc Smelting, Powdered, and Domestic uses. Coal from Jackson county also suitable for By-Product Coking, Bee-hive Coking and Producer Gas uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Baird Bros.	Colchester, Ill.	Baird.	McDonough	C. B. & Q.	Colchester, Ill.
Berry, B. P., Coal Co.	Granville, Ill.	Standard No. 4.	Putnam	C. M. & St. P.	Standard, Ill.
Black Diamond Coal Mine.	Petersburg, Ill.	Black Diamond.	Menard	C. & A., C. P. & St. L.	Petersburg, Ill.
Bretz & Schilling.	205 East St., Belleville, Ill.	White Rose.	St. Clair	I. C.	Belleville, Ill.
Chicago, Wilmington & Franklin Coal Co.	McCormick Bldg., Chicago, Ill.	S. Wilmington No. 3	Grundy	E. J. & E.	South Wilmington, Ill.
Consolidated Coal Co. of St. Louis.	1155 Ry. Exchange, St. Louis, Mo.	No. 9.	Jackson	Ill. Central	Murphysboro, Ill.
Consolidated Coal Co. of St. Louis.	1155 Ry. Exchange, St. Louis, Mo.	No. 10.	Jackson	M. & O.	Murphysboro, Ill.
Illinois Third Vein Coal Co.	Ladd, Ill.	No. 1.	Bureau	C. M. & St. P., C. B. & Q.	Ladd, Ill.
Illinois Zinc Co.	Peru, Ill.	No. 1.	La Salle	C. B. & Q.	Deer Park, Ill.
Illinois Zinc Co.	Peru, Ill.	No. 3.	La Salle	R. I. C. B. & Q.	Peru, Ill.
La Salle County Carbon Co.	La Salle, Ill.	No. 1.	La Salle	I. C., C. B. & Q.	La Salle, Ill.
La Salle County Carbon Co.	La Salle, Ill.	La Salle.	La Salle	I. C., C. R. I. & P.	La Salle, Ill.
La Salle County Carbon Co.	La Salle, Ill.	Union.	La Salle	C. R. I. & P.	La Salle, Ill.
La Salle County Carbon Co.	La Salle, Ill.	No. 5.	La Salle	C. M. & St. P.	Cedar Point, Ill.
McLean County Coal Co.	Bloomington, Ill.	McLean.	McLean	C. & A. Bldg 4, L. E. & W.	Bloomington, Ill.
Manufacturers Coal Co.	Marseilles, Ill.	Manufacturers.	La Salle	C. R. I. & P.	Marseilles, Ill.
Roanoke Coal Co.	Roanoke, Ill.	Roanoke.	Woodford	A. T. & S. F.	Roanoke, Ill.
St. Paul Coal Co.	63 E. Adams St., Chicago, Ill.	Cherry No. 2.	Bureau	C. M. & St. P.	Cherry, Ill.
St. Paul Coal Co.	63 E. Adams St., Chicago, Ill.	Graville No. 1.	Putnam	C. M. & St. P.	Graville, Ill.
Spring Valley Coal Co.	Old Colony Bldg., Chicago, Ill.	No. 1.	Bureau	C. & N. W., C. R. I. & P.	Spring Valley, Ill.
Spring Valley Coal Co.	Old Colony Bldg., Chicago, Ill.	No. 3.	Bureau	C. P. & St. L., C. & A.	Spring Valley, Ill.
Spring Valley Coal Co.	Old Colony Bldg., Chicago, Ill.	No. 5.	Bureau	C. & N. W.	Dalzell, Ill.
Summit Coal & Mining Co.	Belleville, Ill.	Summit.	St. Clair	L. & N.	Summit Mine Switch, Ill.
Toluca Coal Co.	Kansas City, Mo.	No. 1.	Marshall	A. T. & S. F., C. & A.	Toluca, Ill.
Toluca Coal Co.	Kansas City, Mo.	No. 2.	Marshall	A. T. & S. F., C. & A.	Toluca, Ill.
United States Coal & Coke Corp.	Monadnock Block, Chicago, Ill.	Rutland.	La Salle	I. C., C. & A.	Rutland, Ill.
Wenona Coal Co.	Wenona, Ill.	Wenona No. 1.	Marshall	Ill. Cent., C. & A.	Wenona, Ill.
Western United Gas Coal Co.	Aurora, Ill.	Gas Blair.	Jackson	M. P., I. C.	Murphysboro, Ill.
Wilmington Coal Mining & Mfg. Co.	343 S. Dearborn St., Chicago, Ill.	Diamond No. 6.	Will	E. J. & E., C. & A.	Coal City, Ill.
Wilmington Star Mining Co.	Chicago, Ill.	No. 7.	Grundy	E. J. & E., C. & A., A. T. & S. F.	Coal City, Ill.

NO. 5 SEAM (Known to the trade as PEORIA, FULTON COUNTY, SPRINGFIELD, HARRISBURG, LEDFORD and ELDORADO COAL)

Mined in Saline, Gallatin, Williamson, Randolph, Sangamon, Macon, Menard, Logan, McLean, Livingston, Peoria, Tazewell, Knox, Fulton and Schuyler counties. Bituminous rank. Suitable for Locomotive Fuel, Cement Burning, Bee-hive Coking, Producer Gas, Steam and Domestic uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Alden Coal Co.	Davenport, Ia.	Alden No. 5.	Fulton	C. B. & Q.	Farmington, Ill.
Alden Coal Co.	Davenport, Ia.	Alden No. 6.	Fulton	C. B. & Q.	Norris, Ill.
Alden Coal Co.	Davenport, Ia.	No. 8.	Fulton	M. & S. L.	Farmington, Ill.

(Continued on Next Page)

NO. 5 SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Baird Bros. & Bucher	Astoria, Ill.	No. 1	Fulton	C. B. & Q.	Astoria, Ill.
Bausser Truesdale	Bunker Hill, Ill.	Bausser Truesdale	Macomb	Big Four	Bunker Hill, Ill.
Big Creek Coals, Inc.	Chicago, Ill.	No. 2	Saline	C. B. & Q.	Ledford, Ill.
Big Creek Coals, Inc.	Chicago, Ill.	No. 1	Saline	Big Four	Harrisburg, Ill.
Big Creek Coals, Inc.	Chicago, Ill.	No. 3	Saline	Big Four	Harrisburg, Ill.
Big Creek Coals, Inc.	Chicago, Ill.	No. 4	Saline	Ill. Central	Galatia, Ill.
Big Creek Coals, Inc.	Chicago, Ill.	No. 5	Saline	N. & N. Big Four	Grayson, Ill.
Big Creek Coals, Inc.	Chicago, Ill.	No. 6	Saline	Minneapolis & St. L.	Farmington, Ill.
Bintel Coal Mining Co., The	Farmington, Ill.	Bintel	Sangamon	Ill. Central	Springfield, Ill.
Bissell Coal Co.	Springfield, Ill.	Bissell	Fulton	C. B. & Q.	Norris, Ill.
Canton Coal Co.	Canton, Ill.	Canton	Peoria	P. H. C. & W.	Hollis, Ill.
Cass, M. E. Coal Co.	1024 Jefferson Bldg., Peoria, Ill.	La Marsh No. 1	Peoria	C. B. & Q.	Edwards, Ill.
Central West Coal Co.	1112 Jefferson Bldg., Peoria, Ill.	Central West	Sangamon	Chicago & Alton	Springfield, Ill.
Chicago, Springfield Coal Co.	Springfield, Ill.	C. S.	Gallatin	L. & N.	Equality, Ill.
Chion, W. R.	Junction, Ill.	Sanks	Sangamon	C. P. & St. L.	Springfield, Ill.
Citizens Coal Mining Co.	Springfield, Ill.	A.	Sangamon	C. P. & St. L.	Springfield, Ill.
Citizens Coal Mining Co.	Springfield, Ill.	B.	Peoria	M. & St. L.	Hanna, Ill.
Clark Coal & Coke Co.	Peoria, Ill.	Logan	Peoria	M. & St. L.	Peoria, Ill.
Clark Coal & Coke Co.	Peoria, Ill.	Empire No. 2	Fulton	C. B. & Q.	Fairview, Ill.
Coal Creek Mining Co.	Galesburg, Ill.	Perryville	Fulton	L. & N.	Rentschler, Ill.
Colfax Coal Co.	Aread Bldg., St. Louis, Mo.	Enterprise	St. Clair	P. & P. W.	Ames Station, Ill.
Collier Co-Operative Co.	5912 S. Adam St., Bartonville, Ill.	No. 1	Peoria	C. B. & Q.	Vickary, Ill.
Crescent Coal Co.	Peoria, Ill.	Crescent No. 1	Fulton	C. B. & Q.	Bryant, Ill.
Cripple Creek Coal Co.	Galesburg, Ill.	Bryant No. 1	Fulton	C. B. & Q.	Bryant, Ill.
Cripple Creek Coal Co.	Galesburg, Ill.	Bryant No. 2	Fulton	Wabash	Dawson, Ill.
Dawson Coal Mining Company	Chicago, Ill.	Dawson	Sangamon	Ill. Central	Decatur, Ill.
Deatur Coal Co.	Decatur, Ill.	No. 1	Marion	Ill. Central	Eldorado, Ill.
Dering, J. K. Coal Co.	Chicago, Ill.	No. 2	Saline	Big Four	Carriers Mills, Ill.
Dodds Coal Co.	Carriers Mills, Ill.	Dodds	Saline	C. B. & Q.	Astoria, Ill.
Eclipse Coal Co.	Astoria, Ill.	Eclipse	Fulton	C. B. & Q.	Equality, Ill.
Gallatin Coal & Coke Co.	Equality, Ill.	Gallatin	Gallatin	L. & N.	Peoria, Ill.
Gowland Coal Mining Co.	McCormick Bldg., Chicago, Ill.	No. 2	Tazewell	Peoria & Pekin Union	Carriers Mills, Ill.
Harris Coal Co.	Carriers Mills, Ill.	Harris	Saline	Big Four	Harrisburg, Ill.
Harrisburg Coal Mining Co.	Harrisburg, Ill.	No. 1	Saline	C. C. & St. L.	Harrisburg, Ill.
Harrisburg Colliery Co.	Chicago, Ill.	Haron	Saline	Big Four	Dumas, Ill.
Hickory Hill Coal Co.	Equality, Ill.	Hickory Hill	Gallatin	L. & N.	Springfield, Ill.
Illinois Coal & Coke Corp.	37 West Van Buren St., Chicago, Ill.	Empire No. 1	Sangamon	C. & A. C. P. & St. L.	Middletown, Ill.
Johnson Valley Coal Co.	Middletown, Ill.	Johnson Valley	Macomb	C. & A.	Pittsburg, Ill.
Kingshild Coal Co.	Pittsburg, Ill.	Kingshild	Macomb	C. & A.	Peoria, Ill.
Lake Erie Mining Co.	Peoria, Ill.	Lake Erie	Tazewell	P. & P. W. L. F. & W.	Middletown, Ill.
Lancaster Coal Co.	Kingshild Min. S., Ill.	No. 1	Peoria	T. P. & W.	Lincoln, Ill.
Latham Lincoln Mining Co.	28 E. Jackson Ave., Chicago, Ill.	Latham	Logan	C. & H. I. C.	Hollis, Ill.
Leitch Coal Co.	R. R. No. 3, Peoria, Ill.	Leitch	Peoria	P. R. T. P. & P. U.	R. R. No. 1, Peoria, Ill.
Limston Coal Co.	R. R. No. 1, Peoria, Ill.	Limston	Peoria	C. & A. C. P. & St. L.	Springfield, Ill.
Lincoln Park Coal & Brick Co.	Springfield, Ill.	Lincoln Park	Sangamon	T. P. W.	Canton, Ill.
McLaughlin, Jos. & Sons	677 E. Chestnut St., Canton, Ill.	McLaughlin	Fulton	C. & A. Big Four, L. E. & W.	Bloomington, Ill.
McLean County Coal Co.	Bloomington, Ill.	McLean	McLean	I. C. & Penna.	Decatur, Ill.
Macon County Coal Co.	Decatur, Ill.	Macon	Macon	T. P. & W.	East Peoria, Ill.
Manhattan Coal Co.	East Peoria, Ill.	Manhattan	Tazewell	M. & St. L.	Farmington, Ill.
Maplewood Coal Co.	Peoria, Ill.	No. 1	Fulton	C. B. & Q.	Farmington, Ill.
Marlwood Colliery Co.	Peoria, Ill.	No. 2	Fulton	C. B. & Q.	La Salle, Ill.
Matthiessen & Högler Zinc Co.	La Salle, Ill.	M. & H. Z.	La Salle	T. P. & W.	Canton, Ill.
Middletown Coal Co.	Canton, Ill.	No. 1	Fulton	C. B. & Q.	Norris, Ill.
Monmouth Coal Mining Co.	Bartonville, Ill.	Brereton	Fulton	I. C.	Moweaqua, Ill.
Moweaqua Coal Mining & Mfg. Co.	Moweaqua, Ill.	No. 1	Shelby	M. & St. L.	Middletown, Ill.
National Coal Mining Co.	Peoria, Ill.	National	Fulton	Wabash	Springfield, Ill.
Niantic Carbon Coal Co.	Decatur, Ill.	Niantic Carbon	Macon	C. & A. C. P. & St. L.	Harrisburg, Ill.
Number Twelve Coal Co.	R. F. D. No. 4, Springfield, Ill.	No. 12	Sangamon	Big Four	Harrisburg, Ill.
O'Gara Coal Co.	Fisher Bldg., Chicago, Ill.	No. 1	Saline	Big Four	Eldorado, Ill.
O'Gara Coal Co.	Fisher Bldg., Chicago, Ill.	No. 2	Saline	L. & N. Big Four	Harrisburg, Ill.
O'Gara Coal Co.	Fisher Bldg., Chicago, Ill.	No. 3	Saline	L. & N. Big Four	Eldorado, Ill.
O'Gara Coal Co.	Fisher Bldg., Chicago, Ill.	No. 4	Saline	L. & N. Big Four	Eldorado, Ill.
O'Gara Coal Co.	Fisher Bldg., Chicago, Ill.	No. 5	Saline	I. C. Big Four	Harrisburg, Ill.
O'Gara Coal Co.	Fisher Bldg., Chicago, Ill.	No. 6	Saline	Big Four	Ledford, Ill.
O'Gara Coal Co.	Fisher Bldg., Chicago, Ill.	No. 7	Saline	Big Four	Carriers Mills, Ill.
O'Gara Coal Co.	Fisher Bldg., Chicago, Ill.	No. 8	Saline	Big Four	Sherman, Ill.
O'Gara Coal Co.	Fisher Bldg., Chicago, Ill.	No. 9	Saline	Chicago & Alton	Eldorado, Ill.
O'Gara Coal Co.	Fisher Bldg., Chicago, Ill.	No. 10	Saline	Big Four	Andrews, Ill.
O'Gara Coal Co.	Fisher Bldg., Chicago, Ill.	No. 11	Saline	C. P. & St. L.	Riverton, Ill.
O'Gara Coal Co.	Fisher Bldg., Chicago, Ill.	No. 12	Saline	Wabash, C. & A.	Springfield, Ill.
O'Gara Coal Co.	Fisher Bldg., Chicago, Ill.	No. 13	Saline	R. & O. I. C. C. I. & W.	Springfield, Ill.
O'Gara Coal Co.	Fisher Bldg., Chicago, Ill.	No. 14	Saline	T. P. W.	Canton, Ill.
O'Gara Coal Co.	Fisher Bldg., Chicago, Ill.	No. 15	Saline	T. & S. F. Big Four	Pekin, Ill.
Peabody Coal Co.	McCormick Bldg., Chicago, Ill.	No. 6	Sangamon	C. C. & St. L.	Ledford, Ill.
Peabody Coal Co.	Chicago, Ill.	Eldorado No. 20	Saline	C. & A. J. C. C. I. & W.	Springfield, Ill.
Peabody Coal Co.	McCormick Bldg., Chicago, Ill.	No. 51	Sangamon	C. P. & St. L.	Cantrill, Ill.
Peabody Coal Co.	McCormick Bldg., Chicago, Ill.	No. 52	Sangamon	R. & O. I. T. S.	Springfield, Ill.
Peabody Coal Co.	McCormick Bldg., Chicago, Ill.	No. 53	Sangamon	C. B. & Q.	Fairview, Ill.
Peabody Coal Co.	McCormick Bldg., Chicago, Ill.	No. 54	Sangamon	M. & St. L. C. B. & Q.	Farmington, Ill.
Peabody Coal Co.	McCormick Bldg., Chicago, Ill.	No. 55	Sangamon	C. B. & Q.	Canton, Ill.
Peabody Coal Co.	McCormick Bldg., Chicago, Ill.	No. 56	Sangamon	B. & O. S. W. C. & A. C. & N. W.	Springfield, Ill.
Peabody Coal Co.	McCormick Bldg., Chicago, Ill.	No. 57	Sangamon	C. & A.	Springfield, Ill.
Rawalt Coal Co.	Canton, Ill.	Rawalt	Fulton	C. B. & Q.	Cuba, Ill.
B. gal Coal Co.	Pekin, Ill.	Regal	Tazewell	A. T. & S. F. C. C. C. & St. L.	Pekin, Ill.
Saline Gas Coal Co.	Chicago, Ill.	No. 1	Saline	P. R. & T.	Ames Station, Ill.
Sangamon Coal Co.	Springfield, Ill.	Sangamon	Sangamon	L. & N.	Equality, Ill.
Sangamon Coal Co.	Springfield, Ill.	No. 3	Sangamon	C. C. & St. L.	Pekin, Ill.
Sangamon County Mining Co.	Marquette Bldg., Chicago, Ill.	Jeff.	Sangamon	C. P. & St. L. C. N. & W.	Athens, Ill.
Shuler & Long	Fairview, Ill.	Parryville	Fulton	C. I. & W.	K. C. Ill.
Silver Creek Colliery Co.	Monmouth, Ill.	Silver Creek	Fulton	C. & A.	St. Hytown, Ill.
Simmons Coal Co.	Canton, Ill.	Simmon	Fulton	Big Four	Wasson, Ill.
Spring Creek Coal Co.	Springfield, Ill.	Spring Creek	Sangamon	R. A. O. C. & N. W. Wab. C. H. D. C. & A.	Carriers Mills, Ill.
Springfield Co-Operative Coal Mining Co.	Springfield, Ill.	No. 1	Sangamon	C. P. & St. L. I. C.	Springfield, Ill.
Star Coal Co. of Galesburg	Galzburg, Ill.	No. 3	Fulton	C. B. & Q.	Farmington, Ill.
Star Coal Co. of Galesburg	Galzburg, Ill.	Flat No. 1	Fulton	C. B. & Q.	Farmington, Ill.
Tazewell Coal Co.	Pekin, Ill.	Tazewell	Tazewell	A. T. & S. F. C. C. C. & St. L.	Farmington, Ill.
Treasure Coal Co.	Peoria, Ill.	Treasure	Peoria	P. R. & T.	Farmington, Ill.
Turns Coal Co.	Equality, Ill.	East Side	Gallatin	L. & N.	Farmington, Ill.
Ubben Coal Co.	Pekin, Ill.	Ubben	Tazewell	C. C. & St. L.	Farmington, Ill.
Union Fuel Co.	B. isch Bldg., Springfield, Ill.	Athens No. 4	Macomb	C. P. & St. L. C. N. & W.	Farmington, Ill.
Union Fuel Co.	B. isch Bldg., Springfield, Ill.	Tuxhorn No. 2	Sangamon	C. I. & W.	Farmington, Ill.
Union Fuel Co.	B. isch Bldg., Springfield, Ill.	No. 5	Sangamon	C. & A.	Farmington, Ill.
Wasson Coal Co.	Harrisburg, Ill.	Wasson No. 1	Saline	Big Four	Farmington, Ill.
Wasson Coal Co.	Harrisburg, Ill.	No. 2	Saline	Big Four	Farmington, Ill.
West End Coal Co.	Springfield, Ill.	West End	Sangamon	R. A. O. C. & N. W. Wab. C. H. D. C. & A.	Farmington, Ill.
Westerly Bros. & Gorkin	Farmington, Ill.	Westerly-Gorkin	Fulton	C. B. & Q.	Farmington, Ill.
Winters Coal Co.	Bartonville, Ill.	Winters	Peoria	C. P. & St. L.	Farmington, Ill.
Wolschlag Co-Operative Coal Co.	Peoria, Ill.	Wolschlag	Peoria	P. & P. U. P. R. T.	Bartonville, Ill.

NO. 6 SEAM (Known as BLUE-BAND SEAM in southwestern Illinois; as GRAPE CREEK SEAM in the Danville district; to the trade as FRANKLIN-WILLIAMSON, CARTERSVILLE, HERRIN, BELLEVILLE, STANDARD, MT. OLIVE, STAUNTON, MONTGOMERY and DANVILLE COAL)

Mined in Franklin, Williamson and Jefferson counties; southwestern Illinois and the Danville districts. Bituminous rank. Suitable for Locomotive Fuel, Tile and Pottery, Cement Burning, By-Product Coking (by mixing), Bee-hive Coking, Producer Gas, Steam, Melting, Powdered, Illuminating Gas and Domestic uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Abbey Coal Corp.	Collinsville, Ill.	Abby	Madison	P. C. C. & St. L.	Collinsville, Ill.
Abend Coal Co.	Belleville, Ill.	Abend	St. Clair	L. & N.	Belleville, Ill.
Alumoum Ore Co.	Oliver Bldg., Pittsburgh, Pa.	Radium	St. Clair	Ill. Central	Belleville, Ill.
Bartels Coal Co.	Carlinville, Ill.	Bartels	Macoupin	I. T. S.	Carlinville, Ill.
B. B. Coal & Mining Co.	690 Arcade Bldg., St. Louis, Mo.	R. B.	St. Clair	St. L. & E. E. Sou.	Coop. r Station, Ill.
Bailey Bros. Coal Co.	Duquoin, Ill.	Diamond	Perry	I. C.	Sunfield, Ill.
Beatty Coal Co.	Mascoutah, Ill.	Beatty	St. Clair	L. & N.	Mascoutah, Ill.
Beece Coal Co.	314 E. 11 St., Belleville, Ill.	Beece	St. Clair	I. C. L. & N., Southern	Belleville, Ill.
Bell & Zoller Mining Co.	343 S. Dearborn St., Chicago, Ill.	Zeigler No. 1	Franklin	I. C. C. B. & Q., Mo. Pac.	Zeigler, Ill.
Bell & Zoller Mining Co.	343 S. Dearborn St., Chicago, Ill.	Zeigler No. 2	Franklin	I. C. C. B. & Q., Mo. Pac.	Zeigler, Ill.
Black Diamond Coal Mine	Petersburg, Ill.	Black Diamond	Menard	C. & A., C. P. & St. L.	Petersburg, Ill.
Black Star Coal Co.	76 W. Monroe St., Chicago, Ill.	Logan	Franklin	I. C. C. B. & Q.	Logan, Ill.
Black Coal Co.	Pana, Ill.	Black	Williamson	I. C.	Cartersville, Ill.
Boyle Coal Co.	Sparta, Ill.	Boyle	Randolph		Sparta, Ill.
Breese-Trouton Mining Co.	Breese, Ill.	East Breese	Clinton	R. & O., S. W.	Breese, Ill.
Breese-Trouton Mining Co.	Breese, Ill.	Reckmeyer	Clinton	B. & O., S. W.	Beckmeyer, Ill.
Carterville & Big Muddy Coal Co.	Herrin, Ill.	John's	Williamson	Ill. Cen.	Cambria, Ill.
Centralia Coal Co.	343 S. Dearborn St., Chicago, Ill.	Centralia No. 5	Marion	C. B. & Q., I. C.	Centralia, Ill.
Chicago Big Muddy Coal & Mining Co.	2014 Fisher Bldg., Chicago, Ill.	Big Muddy	Williamson	C. & E. I., C. B. & Q., Mo. Pac.	Marion, Ill.
Chicago Sandoval Coal Co.	507 McCormick Bldg., Chicago, Ill.	No. 2	Marion	I. C.	Sandoval, Ill.
Chicago, Wilmington & Franklin Coal Co.	McCormick Bldg., Chicago, Ill.	Royal Colliery Co.	Macoupin	C. & A.	Virdon, Ill.
Chicago, Wilmington & Franklin Coal Co.	McCormick Bldg., Chicago, Ill.	Thayer No. 1	Sangamon	C. & A., C. B. & Q., I. T. S., C. & N. W.	Thayer, Ill.
Chicago, Wilmington & Franklin Coal Co.	McCormick Bldg., Chicago, Ill.	Orient No. 1	Franklin	C. & E. I., C. B. & Q., I. C.	West Frankfort, Ill.
Chicago, Wilmington & Franklin Coal Co.	McCormick Bldg., Chicago, Ill.	"A"	Williamson	Mo. Pac., I. C. C. B. & Q.	Herrin, Ill.
Chicago, Wilmington & Franklin Coal Co.	McCormick Bldg., Chicago, Ill.	"B"	Williamson	C. B. & Q., I. C. Mo. Pac.	Herrin, Ill.
Chicago, Wilmington & Franklin Coal Co.	McCormick Bldg., Chicago, Ill.	Benton No. 1	Franklin	C. & E. I., I. C.	Benton, Ill.
Chicago, Wilmington & Franklin Coal Co.	McCormick Bldg., Chicago, Ill.	Benton No. 2	Franklin	C. & E. I., I. C.	Benton, Ill.
Chicago, Wilmington & Franklin Coal Co.	McCormick Bldg., Chicago, Ill.	Black Briar No. 1	Williamson	I. C. C. & E. I.	Johnston City, Ill.
Christian Coal Mining Co.	Decatur, Ill.	Greenwood	Christian	B. & O.	Edinburg, Ill.
Coal Belt Coal Co.	W. St. Frankfort, Ill.	Coal Belt	Williamson	Mo. Pac.	Marion, Ill.
Coffeen Coal Mining Co.	507 McCormick Bldg., Chicago, Ill.	Coffeen	Montgomery	T. St. L. & W.	Coffeen, Ill.
Colfax Coal Co.	Arcade Bldg., St. Louis, Mo.	Colfax No. 1	McLean	I. C.	Colfax, Ill.
Consolidated Coal Co. of St. Louis	St. Louis, Mo.	Lake Creek	Williamson	Mo. Pac.	Johnson City, Ill.
Consolidated Coal Co. of St. Louis	St. Louis, Mo.	No. 7	Macoupin	Wab. L. & M.	Staunton, Ill.
Consolidated Coal Co. of St. Louis	1155 Railway Exch., St. Louis, Mo.	No. 7	Williamson	I. C. C. B. & Q., St. L. I. M.	Herrin, Ill.
Consolidated Coal Co. of St. Louis	1155 Railway Exch., St. Louis, Mo.	No. 8 Clifford	Williamson	I. C. C. B. & Q., I. M.	Clifford, Ill.
Consolidated Coal Co. of St. Louis	St. Louis, Mo.	No. 14	Macoupin	Wab. C. & N. W.	Staunton, Ill.
Consolidated Coal Co. of St. Louis	1155 Ry. Exchange, St. Louis, Mo.	No. 15	Macoupin	Wabash	Mt. Olive, Ill.
Consolidated Coal Co. of St. Louis	1155 Ry. Exchange, St. Louis, Mo.	No. 17	St. Clair	Vandalia	Collinsville, Ill.
Consolidated Coal Co. of St. Louis	St. Louis, Mo.	West Breese	Clinton	B. & O., S. W.	Breese, Ill.
Co-operative Coal Co.	Fairbury, Ill.	No. 1	Livingston	T. P. & W.	Fairbury, Ill.
Davison, B. P. Coal Co.	Caseville, Ill.	Davison	St. Clair	B. & O.	Caseville, Ill.
Dunk Bros. Coal & Coke Co.	314 N. 4th St., St. Louis, Mo.	Thermal	Madison	St. L. Troy & Eastern	Edwardsville, Ill.
Dunk Bros. Coal & Coke Co.	314 N. 4th St., St. Louis, Mo.	No. 1	Madison	St. Louis, Troy & Eastern	Donkville, Ill.
Dunk Bros. Coal & Coke Co.	314 N. 4th St., St. Louis, Mo.	No. 2	Madison	St. Louis, Troy & Eastern	Maryville, Ill.
Dunk Bros. Coal & Coke Co.	314 N. 4th St., St. Louis, Mo.	No. 3	Madison	St. Louis, Troy & Eastern	Troy, Ill.
Duncan Coal Co.	Chicago, Ill.	Hale	Williamson	M. O. R.	Herrin, Ill.
East Side Coal Co.	Edwardsville, Ill.	East Side	Madison	T. St. L. & W.	Edwardsville, Ill.
Edwardsville Coal Co.	Edwardsville, Ill.	No. 3	Madison	L. & N.	Edwardsville, Ill.
Egyptian Coal & Mining Co.	923 Boatmens Bk. Bldg., St. Louis, Mo.	Meek	St. Clair	I. C.	Marissa, Ill.
El-Rich Mining Co.	R. H. Bldg., Chicago, Ill.	El-Rich	St. Clair	L. & N.	B. H. Bldg., Ill.
Equitable Coal & Coke Co.	Chicago, Ill.	Maestrie	Perry	Ill. Central	Clinch, Ill.
Ernest Coal Co.	Marion, Ill.	France No. 1	Williamson	C. B. & Q.	Johnson City, Ill.
Ernest Coal Co.	Marion, Ill.	France No. 2	Williamson	M. & E.	Marion, Ill.
Fairbury Coal Co.	Fairbury, Ill.	Fairbury	Livingston	T. P. & W.	Fairbury, Ill.
Fallon Coal Mines Co.	406 Sharer Bldg., Bay City, Mich.	O'Fallon	St. Clair	B. & O.	O'Fallon, Ill.
Fort Dearborn Coal Co.	Benton, Ill.	Jackson-Peacock	Jackson	I. C.	De Soto, Ill.
Franklin Coal & Coke Co.	McCormick Bldg., Chicago, Ill.	North	Franklin	Mo. Pac., I. C. C. B. & Q.	Royalton, Ill.
Franklin Coal & Coke Co.	McCormick Bldg., Chicago, Ill.	South	Franklin	Mo. Pac., I. C. C. B. & Q.	Royalton, Ill.
Franklin County Mining Co.	Benton, Ill.	Franklin	Franklin	I. C. C. & E. I.	Benton, Ill.
Freeman Coal Mining Co.	Fisher Bldg., Chicago, Ill.	Franklin	Williamson	C. B. & Q., I. C. Franklin	Herrin, Ill.
Fullerton Coal Co.	Belleville, Ill.	Burdette	St. Clair	L. & N.	B. H. Bldg., Ill.
Gillespie Coal Co.	1407 Boatmens Bank Bldg., St. Louis, Mo.	Little Dog	Macoupin	I. T. S.	Gillespie, Ill.
Glendale Coal & Mining Co.	Granite Bldg., St. Louis, Mo.	Glendale	St. Clair	Ill. Central	Fr. burg, Ill.
Groom Coal Co.	Belleville, Ill.	Richland	St. Clair	I. C.	B. H. Bldg., Ill.
Henderson-Wallace Coal Co.	Marion, Ill.	Henderson	Williamson	Mo. Pac., I. C. C. & E. I.	Marion, Ill.
Highland Coal Co.	Belleville, Ill.	Highland	St. Clair	L. & N.	B. H. Bldg., Ill.
Highland Coal Co.	K. & C. Bldg., Belleville, Ill.	W. St. Belleville	St. Clair	Southern	B. H. Bldg., Ill.
Hillsboro Coal Co.	Hillsboro, Ill.	Hillsboro	Montgomery	C. C. C. & St. L., C. & E. I.	Hillsboro, Ill.
Hydraulic Press Brick Co.	Central National Bank Bldg.	St. Louis, Mo.	Madison	R. I., Sou.	Collinsville, Ill.
Illinois Coal & Coke Corp.	37 W. Van Buren St., Chicago, Ill.	Empire No. 2	Sangamon	C. & A.	Auburn, Ill.
Illinois Coal & Coke Corp.	37 W. Van Buren St., Chicago, Ill.	Empire No. 3	Macoupin	C. & A., C. B. & Q., C. & N. W.	Virden, Ill.
Illinois Coal & Coke Corp.	37 W. Van Buren St., Chicago, Ill.	Empire No. 4	Macoupin	C. & A., C. B. & Q., C. & N. W.	Girard, Ill.
Illinois Fuel Co.	Sparta, Ill.	No. 4	Randolph	M. & O. M. & I.	Shaws, Ill.
Illinois Sixth Vein Coal Co.	Pinckneyville, Ill.	Illinois Sixth Vein	Perry	W. C. W., I. C., St. L. & S. F.	Pinckneyville, Ill.
Indiana & Illinois Coal Corp.	1405 Ole Colony Bldg., Chicago, Ill.	No. 11	Montgomery	C. & E. I.	Hillsboro, Ill.
Indiana & Illinois Coal Corp.	1405 Ole Colony Bldg., Chicago, Ill.	No. 10	Montgomery	C. & E. I.	Nokomis, Ill.
Indiana & Illinois Coal Corp.	1405 Ole Colony Bldg., Chicago, Ill.	No. 15	Montgomery	C. & E. I.	Taylor Springs, Ill.
Indiana & Illinois Coal Corp.	1405 Ole Colony Bldg., Chicago, Ill.	No. 12	Montgomery	C. & E. I.	Witt, Ill.
Indiana & Illinois Coal Corp.	1405 Ole Colony Bldg., Chicago, Ill.	No. 14	Montgomery	C. & E. I.	Witt, Ill.
Jackson Coal Co. (The)	Connellsville, Pa.	Muddy Valley	Jackson	Ill. Central	Hallidayboro, Ill.
Jackson-Peacock Coal & Mng. Co.	Benton, Ill.	Jackson-Peacock	Jackson	Ill. Central	De Soto, Ill.
Jewel Coal & Mining Co.	DuQuoin, Ill.	Jewel No. 1	Perry	I. C.	DuQuoin, Ill.
Johnston City Washed Coal Co.	Chicago, Ill.	White Ash	Williamson	C. & E. I.	Johnston City, Ill.
Jones Bros. Coal Co.	Marissa, Ill.	Eureka No. 1	St. Clair	I. C.	Marissa, Ill.
Jones Bros. Coal Co.	Marissa, Ill.	Eureka No. 2	Randolph	I. C.	Marissa, Ill.
Kerens-Donnwald Coal Co.	12th St. & Lucas Ave., St. Louis, Mo.	K. D.	Madison	L. & M., Wab. I. T. S.	Word n, Ill.
Kohl Coal Co.	930 Boatmens Bank Bldg., St. Louis, Mo.	No. 1	St. Clair	L. & N.	Mascoutah, Ill.
Kohl Coal Co.	930 Boatmens Bank Bldg., St. Louis, Mo.	No. 2	St. Clair	L. & N.	Mascoutah, Ill.
Kohl Coal Co.	930 Boatmens Bank Bldg., St. Louis, Mo.	Fairbanks	St. Clair	Ill. Central	N. W. Athens, Ill.
Kohl Coal Co.	930 Boatmens Bank Bldg., St. Louis, Mo.	Vingar Hill	St. Clair	Ill. Central	N. W. Athens, Ill.
Liberty Coal & Mining Co.	1303 Boatmens Bank Bldg., St. Louis, Mo.	Liberty	St. Clair	L. & N.	Rantechler, Ill.
Lou Nash Coal & Mining Co.	St. Louis, Mo.	Enterprise	St. Clair	L. & N.	Rantechler, Ill.
Lovington Coal Mining Co.	312 Citiz ns Titl. & Trust Bldg., Decatur, Ill.	Lovington No. 1	Moultrie	Wabash & P. C. C. & St. L.	Lovington, Ill.
Lumaghi Coal Co.	613 Locust St., St. Louis, Mo.	No. 2	Madison	P. C. C. & St. L.	Collinsville, Ill.
Lumaghi Coal Co.	613 Locust St., St. Louis, Mo.	No. 3	Madison	P. C. C. & St. L.	Collinsville, Ill.

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NO. 6 SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Madison Coal Corp.	910 So. Michigan Blvd., Chicago, Ill.	No. 2	Madison	Ill. Central	Clinton Carbon, Ill.
Madison Coal Corp.	910 S. Michigan Blvd., Chicago, Ill.	No. 5	Macoupin	I. C. & St. L.	Mt. Olive, Ill.
Madison Coal Corp.	910 So. Michigan Blvd., Chicago, Ill.	No. 6	Sangamon	Ill. Central	Dix noon, Ill.
Madison Coal Corporation	910 S. Michigan Blvd., Chicago, Ill.	No. 12	Williamson	Ill. Central	Cambria, Ill.
Madison Coal Corp.	910 So. Michigan Blvd., Chicago, Ill.	No. 8	Williamson	Ill. Central	Cartville, Ill.
Madison Coal Corp.	910 So. Michigan Blvd., Chicago, Ill.	No. 9	Williamson	Ill. Central	Coneria, Ill.
Madison County Mining Co.	1311 Syndicate Trust Bldg., St. Louis, Mo.	Crystal	Madison	I. C. & St. L.	Thiden, Ill.
Marion County Coal Co.	Centralia, Ill.	Madison	Madison	Wabash	Edwardsville, Ill.
Midway Coal Mining Co.	1205 Fisher Bldg., Chicago, Ill.	Glenridge	Marion	I. C. B. & Q.	Centralia, Ill.
Miller, Howard E.	Casysville, Ill.	Vard	Jackson	Ill. Central	Ward, Ill.
Moffat Coal Co.	Sparta, Ill.	Ruby	St. Clair	B. & O. S. W.	Farmington, Ill.
Mt. Olive & Staunton Coal Co.	Staunton, Ill.	No. 1	Randolph	M. & O.	Sparta, Ill.
Mt. Olive & Staunton Coal Co.	Staunton, Ill.	No. 2	Madison	L. & M.	Staunton, Ill.
Nashville Hill Coal Co.	Freeburg, Ill.	No. 1	Madison	L. & M.	Staunton, Ill.
Nashville Mining Co.	Nashville, Ill.	Mulberry Hill	St. Clair	Ill. Central	Freeburg, Ill.
New National Coal & Mining Co.	21 S. Eighth St., Belleville, Ill.	Nashville	Washington	Louisville & Nashville	Nashville, Ill.
New Staunton Coal Co.	St. Louis, Mo.	New National	St. Clair	Ill. Central	Belleville, Ill.
Nokous Coal Co.	37 W. Van Buren St., Chicago, Ill.	No. 1	Madison	C. & E. I., Big Four	Edwardsburg, Ill.
North Brees Coal & Mining Co.	120 Rialto Bldg., St. Louis, Mo.	No. 1	Montgomery	Big Four, C. & E. I.	Nokous, Ill.
O. K. Coal Co. (The)	Odin, Ill.	North	Clinton	B. & O. and S. W.	Perce, Ill.
Old Abe Mining Co.	933 Boatmen's Bank Bldg., St. Louis, Mo.	Odin	Marion	B. & O. and I. C.	Odin, Ill.
Old Ben Coal Corp.	1111 McCormick Bldg., Chicago, Ill.	Old Abe	St. Clair	Ill. Central	Marissa, Ill.
Old Ben Coal Corp.	Chicago, Ill.	Old Ben No. 15	Perry	Ill. Central	DuPont, Ill.
Old Ben Coal Corp.	Chicago, Ill.	No. 14	Franklin	C. & E. I., I. C., C. B. & Q.	West Frankfort, Ill.
Old Ben Coal Corp.	Chicago, Ill.	No. 12	Franklin	I. C. and C. B. & Q.	Cartville, Ill.
Old Ben Coal Corp.	Chicago, Ill.	No. 11	Franklin	C. B. & Q. and I. C.	Christophers, Ill.
Old Ben Coal Corp.	Chicago, Ill.	No. 10	Franklin	C. B. & Q.	Christophers, Ill.
Old Ben Coal Corp.	Chicago, Ill.	Old Ben No. 9	Franklin	C. & E. I., C. B. & Q. and Ill. Cent.	West Frankfort, Ill.
Old Ben Coal Corp.	Chicago, Ill.	Old Ben No. 8	Franklin	C. & E. I., C. B. & Q. and Ill. Cent.	West Frankfort, Ill.
Old Ben Coal Corp.	Chicago, Ill.	Old Ben No. 16	Franklin	C. B. & Q.	Sesser, Ill.
Old Ben Coal Corp.	1114 McCormick Bldg., Chicago, Ill.	Old Ben No. 17	Williamson	C. & E. I., I. C.	Johnston City, Ill.
Old Ben Coal Corp.	1114 McCormick Bldg., Chicago, Ill.	Old Ben No. 18	Williamson	C. & E. I. C. B. & Q.	Johnston City, Ill.
Old Ben Coal Corp.	1114 McCormick Bldg., Chicago, Ill.	Old Ben No. 19	Franklin	C. B. & Q.	Sesser, Ill.
Old Ben Coal Corp.	1114 McCormick Bldg., Chicago, Ill.	No. 20	Williamson	C. B. & Q., I. C.	Perrin, Ill.
Orchard Coal Co.	675 Old Colony Bldg., Chicago, Ill.	Orchard	Williamson	C. & E. I., I. C., Mo. Pac.	Marion, Ill.
Pana Coal Co.	Pana, Ill.	Pana No. 1	Christian	Big Four, C. & E. I., B. & O., I. C.	Pana, Ill.
Pana Coal Co.	Pana, Ill.	Pana No. 2	Christian	I. C. Big Four, C. & E. I.	Pana, Ill.
Paradise Creek Mines, Inc.	Springfield, Ill.	Panther Creek	Sangamon	C. & A.	Auburn, Ill.
Paradise Coal Co.	By Quoin, Ill.	Paradise	Perry	I. C.	Paradise, Ill.
Patriek Coal Co.	Carbondale, Ill.	Patriek No. 1	Jackson	I. C.	Carbondale, Ill.
Patriek Coal Co.	Carbondale, Ill.	Patriek No. 2	Jackson	I. C.	Carbondale, Ill.
Peabody Coal Co.	332 So. Michigan Ave., Chicago, Ill.	No. 3	Williamson	C. & E. I. Ill. Cent. C. B. & Q. Iron Mt.	Marion, Ill.
Peabody Coal Co.	332 So. Michigan Ave., Chicago, Ill.	No. 5	Sangamon	C. & I. M., C. & A., I. C. Wabash	Pawnee, Ill.
Peabody Coal Co.	332 So. Michigan Ave., Chicago, Ill.	No. 7	Christian	C. & I. M., C. & A., I. C. Wabash	Kincaid, Ill.
Peabody Coal Co.	332 So. Michigan Ave., Chicago, Ill.	No. 8	Christian	C. & I. M., C. & A., I. C. Wabash	Kincaid, Ill.
Peabody Coal Co.	332 So. Michigan Ave., Chicago, Ill.	No. 9	Christian	C. & I. M., C. & A., I. C.	Taylorville, Ill.
Peabody Coal Co.	332 So. Michigan Ave., Chicago, Ill.	No. 18	Franklin	I. C., C. & E. I., C. B. & Q.	West Frankfort, Ill.
Peabody Coal Co.	332 So. Michigan Ave., Chicago, Ill.	No. 19	Franklin	Ill. Central, C. & E. I.	West Frankfort, Ill.
Peabody Coal Co.	332 So. Michigan Ave., Chicago, Ill.	No. 21	Christian	Wabash	Stonington, Ill.
Peabody Coal Co.	332 So. Michigan Ave., Chicago, Ill.	No. 24	Vermilion	C. & E. I., Big Four	Cattin, Ill.
Peabody Coal Co.	332 So. Michigan Ave., Chicago, Ill.	No. 25	Williamson	Ill. Cent.	Cartville, Ill.
Peabody Coal Co.	332 So. Michigan Ave., Chicago, Ill.	No. 26	Williamson	C. & E. I., Iron Mountain	Johnston City, Ill.
Peabody Coal Co.	332 So. Michigan Ave., Chicago, Ill.	No. 54	Sangamon	C. & A., C. & I. W.	Auburn, Ill.
Peabody Coal Co.	332 So. Michigan Ave., Chicago, Ill.	No. 58	Christian	Wabash	Taylorville, Ill.
Penwell Coal Co.	Pana, Ill.	Penwell	Christian	I. C. B. & O. S. W.	Pana, Ill.
Perry County Coal Corp.	St. Louis, Mo.	Carbon	St. Clair	B. & O. S. W.	O'Fallon, Ill.
Perry County Coal Corp.	St. Louis, Mo.	Taylor	St. Clair	B. & O. S. W.	O'Fallon, Ill.
Perry County Coal Corp.	St. Louis, Mo.	Perry County	Perry	Ill. Central, Ill. Son.	Conterville, Ill.
Perry County Coal Corp.	St. Louis, Mo.	St. Ellen	St. Clair	E. St. L. & Suburban	O'Fallon, Ill.
Pioneer Coal Co.	Belleville, Ill.	No. 1	St. Clair	L. & N.	B. H.ville, Ill.
Pocahontas Mining Co.	Times Bldg., St. Louis, Mo.	Pocahontas	Bond	Pama	Pocahontas, Ill.
Prairie Coal Co.	Pierce Bldg., St. Louis, Mo.	Prairie	St. Clair	St. Louis and Suburban Elec.	Prairie Cross Road, Ill.
Randolph County Coal Co.	1163 Railway Exchange Bldg., St. Louis, Mo.	No. 2	Randolph	Illinois Southern	Conterville, Ill.
Ratcliffe, Arthur	Old Colony Bldg., Chicago, Ill.	No. 1	Henry	C. B. & Q.	Kewanee, Ill.
Ridge Coal Mining Co.	2027 S. Broadway, St. Louis, Mo.	Watson	Williamson	M. P., C. B. & Q.	Marion, Ill.
St. Louis & O'Fallon Coal Co.	2027 S. Broadway, St. Louis, Mo.	No. 1	St. Clair	St. Louis & O'Fallon	E. St. Louis, Ill.
St. Louis & O'Fallon Coal Co.	2027 S. Broadway, St. Louis, Mo.	No. 2	St. Clair	St. Louis & O'Fallon	E. St. Louis, Ill.
Sandford Coal Co.	Marion, Ill.	France No. 3	Williamson	M. & E.	Paulton, Ill.
Searls Coal Co.	645 Bookery Bldg., Chicago, Ill.	McClintock	Williamson	I. M. & S.	Johnston City, Ill.
Security Coal & Mining Co. of Mo.	1515 Fisher Bldg., Chicago, Ill.	Security	Perry	Ill. Cent.	By Quoin, Ill.
Sharon Coal & Brick Co.	Georgetown, Ill.	Sharon	Vermilion	Ill. Traction System	Georgetown, Ill.
Shoal Creek Coal Co.	Chicago, Ill.	No. 1	Montgomery	T. St. L. & W.	Panama, Ill.
Slogo Coal Co.	606 Equitable Bldg., St. Louis, Mo.	Slogo	Williamson	Mo. Pac. of Ill.	Marion, Ill.
Smith-Lohr Coal Mining Co.	Pana, Ill.	Smith-Lohr	Christian	I. C. & E. I., Big Four, B. & O., C. C. & St. L.	Pana, Ill.
Soper Coal Co., Inc.	Cuttler, Ill.	Sopr No. 1	Perry	Wab. Chester & Westboro.	Cuttler, Ill.
Soper Coal Co.	Cuttler, Ill.	Sopr No. 2	Perry	W. C. & W.	Cuttler, Ill.
Southern Bell Co. Coal Co.	1303 Boatmen's Bank Bldg., St. Louis, Mo.	South B. lueve	St. Clair	Ill. Central	Belleville, Ill.
Southern Coal, Coke & Mining Co.	St. Louis, Mo.	Avery No. 1	St. Clair	E. St. L. & Sub., Sou.	Belleville, Ill.
Southern Coal, Coke & Mining Co.	219 N. Fourth St., St. Louis, Mo.	Muren No. 6	St. Clair	Southern	Belleville, Ill.
Southern Coal, Coke & Mining Co.	St. Louis, Mo.	Shiloh No. 8	St. Clair	Southern	Belleville, Ill.
Southern Coal, Coke & Mining Co.	St. Louis, Mo.	Little Oak No. 7	St. Clair	Southern	Belleville, Ill.
Southern G. m. Coal Corp.	St. Louis, Mo.	New Baden No. 9	St. Clair	Southern	Belleville, Ill.
Southern G. m. Coal Corp.	Chicago, Ill.	No. 1	Franklin	I. C. C. B. & Q., C. & E. I.	West Frankfort, Ill.
Southern G. m. Coal Corp.	Chicago, Ill.	No. 2	Franklin	C. B. & Q.	Sesser, Ill.
Southern G. m. Coal Corp.	Chicago, Ill.	No. 5	Perry	I. C., W. C. & W.	Pickneyville, Ill.
Southern G. m. Coal Corp.	Chicago, Ill.	No. 6	Perry	I. C., W. C. & W.	Pickneyville, Ill.
Southern G. m. Coal Corp.	Chicago, Ill.	No. 7	Perry	W. C. & W.	Jamestown, Ill.
Southern G. m. Coal Corp.	Chicago, Ill.	No. 9	Perry	W. C. & W.	Cuttler, Ill.
Southern G. m. Coal Corp.	Chicago, Ill.	No. 10	Perry	W. C. & W.	Cuttler, Ill.
Southern G. m. Coal Corp.	Chicago, Ill.	No. 11	Perry	I. C., W. C. & W.	Tomarora, Ill.
Standard Oil Co. of Indiana	Chicago, Ill.	No. 1	Macoupin	C. & A.	Carlisle, Ill.
Standard Oil Co. of Indiana	Chicago, Ill.	No. 2	Macoupin	C. & A., N. W.	Carlisle, Ill.
Star Coal Co.	K. of C. Bldg., Belleville, Ill.	Star	St. Clair	I. C.	Freeburg, Ill.
Suburban Coal & Minlog Co.	St. Louis, Mo.	Suburban	St. Clair	St. L. & B. E.	Signal Blk, Ill.
Superior Coal Co.	Gillespie, Ill.	No. 1	Macoupin	C. & N. W.	R. nld, Ill.
Superior Coal Co.	Gillespie, Ill.	No. 2	Macoupin	C. & N. W.	R. nld, Ill.
Superior Coal Co.	Gillespie, Ill.	No. 3	Macoupin	C. & N. W.	R. nld, Ill.
Superior Coal Co.	Gillespie, Ill.	No. 4	Macoupin	C. & N. W.	R. nld, Ill.
Superior Mining Co.	1003 Boatmen's Bank Bldg., St. Louis, Mo.	Superior	St. Clair	St. L. B. H. & Electric	R. nld, Ill.
Superior Mining Co.	1003 Boatmen's Bank Bldg., St. Louis, Mo.	Valley	St. Clair	L. & N.	Belleville, Ill.
Taylor Coal Co.	Chicago, Ill.	No. 1	Williamson	C. B. & Q., I. C. & M. P.	B. nld, Ill.
Taylor Coal Co.	Chicago, Ill.	No. 2	Williamson	C. B. & Q., I. C. & M. P.	B. nld, Ill.
Taylor Coal Co.	Old Colony Bldg., Chicago, Ill.	No. 5	Williamson	I. C. & Mo.	Freeman, Ill.
Taylor-English Coal Co.	Cattin, Ill.	Taylor-English No. 2	Vermilion	Wabash	Cattin, Ill.
Tower Grove Coal & Iron Co.	Belleville, Ill.	Tower Grove	St. Clair	L. & N. and Southern	Belleville, Ill.
Union Colliery Co.	Union Electric Bldg., St. Louis, Mo.	Kathleen	Jackson	Ill. Central	Bowell, Ill.
Union Fuel Co.	R. nld Bldg., Springfield, Ill.	Auburn No. 3	Sangamon	C. & A.	Auburn, Ill.

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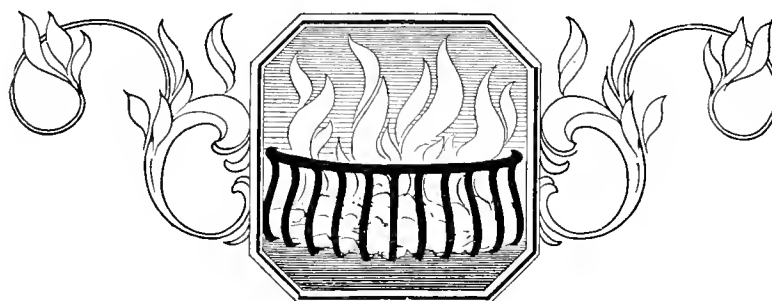
NO. 6 SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Union Fuel Co.	Reisch Bldg., Springfield, Ill.	Nilwood No. 1	Macoupin	C. & A.	Nilwood, Ill.
Union Fuel Co.	Reisch Bldg., Springfield, Ill.	No. 6	Macoupin	C. & C. & N. W. C. B. & Q.	Greenville, Ill.
United States Fuel Co.	S. La Salle St., Chicago, Ill.	Vermilion	Vermilion	C. C. C. & St. L.	Georgetown, Ill.
United States Fuel Co.	S. La Salle St., Chicago, Ill.	Kelly No. 4	Vermilion	C. & E. I.	Westville, Ill.
United States Fuel Co.	S. La Salle St., Chicago, Ill.	Bunsenville	Vermilion	C. C. C. & St. L.	Georgetown, Ill.
United States Fuel Co.	S. La Salle St., Chicago, Ill.	Middle Fork	Franklin	I. C. & C. and E. I.	Benton, Ill.
Valley Coal Co.	547 West Jackson Blvd., Chicago, Ill.	Valley No. 1	Franklin	C. B. & Q.	Valley, Ill.
Vein Six Coal Co.	Danville, Ill.	Vein Six	Vermilion	Ill. Traction	Danville, Ill.
Victory Collieries Co.	14 E. Jackson Blvd., Chicago, Ill.	Victory No. 1	Perry	Ill. Central	Tamora, Ill.
Watson Coal Co.	Herrin, Ill.	No. 1	Williamson	Mo. Pac.	Herrin, Ill.
West Belleville Coal Co.	K. of C. Bldg., Belleville, Ill.	West Belleville	St. Clair	Southern	Belleville, Ill.
Western Coal & Mining Co.	St. Louis, Mo.	Bush No. 2	Franklin	Mo. Pac.	Rush, Ill.
White County Mining Co.	406 Standard Life Bldg., Decatur, Ill.	White	White	B. & O.	Norris City, Ill.
White-Sargent Coal Co.	Rentchler, Ill.	Rentchler	St. Clair	L. & N.	Rentchler, Ill.
Willis Coal & Mining Co.	710 Fullerton Bldg., St. Louis, Mo.	Willis No. 1	Perry	M. & O.	Willisville, Ill.
Willis Coal & Mining Co.	710 Fullerton Bldg., St. Louis, Mo.	Willis No. 6	Randolph	M. & O.	Perry, Ill.
Willis Coal & Mining Co.	710 Fullerton Bldg., St. Louis, Mo.	Willis No. 8	Perry	M. & O.	Willisville, Ill.
Willis Coal & Mining Co.	710 Fullerton Bldg., St. Louis, Mo.	Willis No. 9	Randolph	M. & O.	Perry, Ill.
Willis Coal & Mining Co.	710 Fullerton Bldg., St. Louis, Mo.	Willis No. 7	Randolph	M. & O.	Sparta, Ill.

NO. 7 SEAM (Known to the trade as DANVILLE COAL)

Mined in the Danville district. Bituminous rank. Suitable for Locomotive Fuel, Producer Gas, Steam and Domestic uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Acme Coal Co.	Streator, Ill.	Acme	La Salle	C. B. & Q.	Streator, Ill.
Brady Branch Coal Co.	Danville, Ill.	Brady Branch	Vermilion	Illinois Traction System	Danville, Ill.
Cameron Coal Co.	Marion, Ill.	Keystone	Williamson	R. T. C. & E. I.	Marion, Ill.
Central Coal Co.	Danville, Ill.	Central	Vermilion	C. C. C. & St. L.	Danville, Ill.
Contract Mining Co.	Danville, Ill.	Western Brick Co.	Vermilion	Big Four	Danville, Ill.
Chicago Collieries Co.	Catlin, Ill.	Chicago Collieries	Vermilion	C. & E. I.	Fairmount, Ill.
General Coal & Mining Co.	St. Louis, Mo.	St. Clair	St. Clair	Ill. Central	Freeburg, Ill.
Hafer Washed Coal Co.	Chicago, Ill.	Hafer No. 3	Williamson	I. C. St. L. I. M. & S.	Herrin, Ill.
Harrisburg Fuel Co.	Harrisburg, Ill.	Harrisburg	Saline	Big Four	Harrisburg, Ill.
Heato Coal Co.	Carrier Mills, Ill.	Heato No. 1	Saline	C. I. R. & P.	Carrier Mills, Ill.
Lime Spring Coal Co.	Tilton, Ill.	Lime Spring	Vermilion	Wabash	Tilton Sta. C., Ill.
Louden Coal Mines Co.	324 Choate Bldg., Winona, Minn.	Louden	Perry	W. C. & W.	Pinckneyville, Ill.
Peoples Coal Co.	1824 R. R. Exe. Bldg., St. Louis, Mo.	Peoples	St. Clair	B. & O.	Careyville, Ill.
Pratt Bros.	Herrin, Ill.	J. Frey	Williamson	I. C. Mo. Pac.	Herrin, Ill.
St. Louis Coal Co.	606 Equitable Bldg., St. Louis, Mo.	Consolidated	Randolph	I. C.	Conterville, Ill.
Seranton Coal Mining Co.	675 Old Colony Bldg., Chicago, Ill.	Seranton	Williamson	Mo. Pac.	Marion, Ill.
Streator Clay Mfg. Co.	Streator, Ill.	Streator Clay	Livingston	Wab. and C. I. & S.	Streator, Ill.
United Electric Coal Companies	Danville, Ill.	No. 1	Vermilion	Big Four, N. Y. C. Wab.	Oakwood, Ill.
United Electric Coal Companies	Danville, Ill.	No. 4	Vermilion	Big Four, N. Y. C. Wab.	Oakwood, Ill.
United Electric Coal Companies	Danville, Ill.	No. 5	Vermilion	Big Four, N. Y. C. Wab.	Oakwood, Ill.
United Electric Coal Companies	Danville, Ill.	No. 6	Vermilion	Big Four, N. Y. C. Wab.	Oakwood, Ill.
West Virginia Coal Co.	Marion, Ill.	West Virginia	Williamson	Mo. P.	Marion, Ill.
Williamson County Coal Co.	Johnson City, Ill.	Black Brier	Williamson	C. & E. I.	Johnston, Ill.



ILLINOIS

Alphabetical Directory of Coal Mines, Giving Complete Detailed Information Covering Each Mine

For List of Abbreviations See Page 13.

ABBEY COAL CORPORATION

General Office, Collinsville, Ill.
PR—Jesse Long, Collinsville, Ill.
VP—Wm. H. Martin, Collinsville, Ill.
TR—Aug. C. Lohmann, " "
GM—F. H. Rice, " "
PA—F. H. Rice, " "
EM—Hugh W. Flood, Belleville, Ill.

Abbey Mine; Shaft; Belleville No. 6 Seam; 66 to 90 in. thick.

PO—Collinsville, Ill. SP—Same; CTY—Madison, RR—P. C. C. & St. L.
MS—Leon Barber, Collinsville, Ill.
S of H—Mules. Track gauge 19 in.
S of M—3 chain breast mchrs.
PP—2 return tubular boilers, 250 H. P., 1 hoisting engine, 2 pumps.
EMP—73. Last years tonnage 76,741.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Bar Revolving, Shaker Screens.

ABEND COAL COMPANY.

General Office, Belleville, Ill.
PR—F. M. Rumbold, Washington, D. C.
VP—Edward Abend, Belleville, Ill.
TR—Edw. Abend, Belleville, Ill.
GM—W. J. Reiss, Belleville, Ill.
GS—W. J. Reiss, Belleville, Ill.
PA—W. J. Reiss, Belleville, Ill.
SA—Kohb Coal Co., St. Louis, Mo.

Abend Mine; Shaft; Seam, 66 inches thick.

PO—Belleville, Ill.; SP—Same; CTY—Saint Clair; RR—L. & N., O'Fallon Br.
MS—John P. Taylor, Belleville, Ill.
S of H—Mules. Storage battery locos. Track gauge 34 inches.
S of M—Hand.
PP—Power purchased, transformer, 220 volts A. C. M. G. Sets, 220 volts D. C., 2 fire tube boilers, 250 H. P., 6 pumps.
EMP—95. Daily tonnage 650.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.

ACME COAL COMPANY.

General Office, Streator, Ill.
PR—Thomas Fairbairn, Streator, Ill.
TR—R. J. Fairbairn, Streator, Ill.
GM—Thos. Fairbairn, Streator, Ill.
PA—Thomas Fairbairn, Streator, Ill.
MS—Thomas Fairbairn, Streator, Ill.

Acme Mine; Shaft; No. 7 Seam, 54 in. thick.

PO—Streator, Ill. SP—Same; CTY—La Salle, RR—C. B. & Q.
S of H—Mules. Track gauge 36 in.
S of M—Hand.
PP—Purchase power, 1 return tubular boiler, total 50 H. P., 3 pumps.
EMP—25. Last fiscal year output, 12,000 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

ALADDIN COAL COMPANY

Now Aladdin Coal & Mining Co.

ALADDIN COAL & MINING CO.

Mines operated under lease by the Southern G. M. Coal Corporation.

ALDEN COAL COMPANY.

General Office, Davenport, Ia.
PR—J. W. Gilchrist, Davenport, Ia.
VP—H. W. Gilchrist, Davenport, Ia.
TR—J. W. Gilchrist, " "
GM—H. M. Gilchrist, " "
PA—H. M. Gilchrist, " "
GS—Arch Gilchrist, Davenport, Ia.
CE—H. M. Gilchrist, Davenport, Ia.
EE—Wm. Russell, Farmington, Ill.
SCD—Alden Coal Co., River, Ray Kitzmiller, Norris, Ill.

Sales Agent, C. H. Crowe, Davenport, Ia.

Alden No. 5 Mine; Shaft; No. 5 Seam, 48 in. thick.

PO—Farmington, Ill.; SP—Same; CTY—Fulton; RR—C. B. & Q.
S of H—Mules and rope. Track gauge 28 in.
S of M—Hand.
PP—Power purchased, transformer 2,300 to 110-220 volts A. C., 1 125 H. P. fire tube boiler, 5 pumps.
EMP—151. Last fiscal year output 106,000 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screen.

Alden No. 6 Mine; Shaft; No. 5 Seam, 48 in. thick.

PO—Norris, Ill.; SP—Same; CTY—Fulton; RR—C. B. & Q.
SM—Ray Kitzmiller, Norris, Ill.
S of H—Mules and trolley type locos. Track gauge, 36 in.
S of M—6 shortwall.

PP—Power purchased, Transformer 2,300 to 110 and 220 volts A. C., 3—450 H. P. fire tube boilers, 2 M. G. Sets, 1—200 K. W. and 1—150 K. W. and 75 K. W. gen. units, 250 volts D. C., 4 pumps.
EMP—180. Last fiscal year output, 151,600 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screen.

Alden No. 7 Mine; Shaft; No. 1 Seam, 36 to 72 in. thick.

PO—Matherville, Ill.; SP—Same; CTY—Mercer; RR—Rock Island & Southern.
S of H—Mules and trolley pole and storage battery locos. Track gauge, 36 in.
S of M—Hand.

PP—Power purchased, Transformer 2,300 to 110-220 volts A. C., 2 fire tube boilers, 250 H. P., M. G. Sets, 1—100 K. W. and 20 K. W., 250 volts D. C., 8 pumps.
EMP—148. Last fiscal year output, 158,210 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screen.

Alden No. 8 Mine; Shaft; No. 5 seam, 48 in. thick.

PO—Farmington, Ill.; SP—Same; CTY—Fulton; RR—M. & St. L.
S of H—Mules and trolley pole type locos. Track gauge, 36 in.
S of M—6 chain breast type and 6 shortwall mchrs.
PP—Power purchased, Transformer 2,300 volts A. C., 1—100 K. W. and 1—200 K. W., M. G. Sets, 250 volts D. C., 2 fire tube boilers, 5 pumps.
EMP—162. Last fiscal year output, 185,084 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens and Crusher.

ALUMINUM ORE CO.

General Office, Oliver Bldg., Pittsburgh, Pa.
GM—H. Isler, Belleville, Ill.
PA—N. N. Gould, East St. Louis, Ill.
CE—G. H. Slocum, East St. Louis, Ill.
EE—J. E. Housley, East St. Louis, Ill.

Radium Mine; Shaft; No. 6 Seam, 72 inches thick.

PO—Belleville, Ill.; SP—Same; CTY—St. Clair; RR—Illinois Central & St. L. and Ohio River R. R.
MS—W. C. Wolf, Belleville, Ill.
S of H—Mules and 2 elec. storage battery locos.
PP—Power purchased, 6—75 K. V. A., 400 volts 4—50 K. V. A., 220 volts, M. G. Sets, 220 volts D. C., 3 pumps.
EMP—137. Last years tonnage, 175,069.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
Note—Successors to Radium Coal Co.

ASSUMPTION COAL & MINING CO THE

General Office, Assumption, Ill.
PR—Silas A. Shafer, Assumption, Ill.
VP—T. P. Myers, Assumption, Ill.
TR—David Lacharite, Assumption, Ill.
GM—Silas A. Shafer, " "
PA—Silas A. Shafer, " "
EE—Albert Palmer, Assumption, Ill.
EM—Wm. Lewis, Assumption, Ill.

No. 1 Mine; Shaft; No. 1 Seam, 42 inches thick.

PO—Assumption, Ill. SP—Same; CTY—Chicago; RR—Illinois Central.
MS—Ira Hinkle, Assumption, Ill.
S of H—Mules and electric locos. Track gauge 29 1/2 inches.
S of M—Hand and 3 longwall mchrs.
PP—4 return tubular boilers, total 600 H. P., 1 125 K. W. gen. units, 250 volts D. C., 3 pumps.

EMP—120. Daily tonnage 250.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
PREP. EQUIPT—Revolving and Shaker Screens.

ATHENS COAL COMPANY.

Now part of Union Fuel Co.

AUBURN & ALTON COAL CO.

Now part of Union Fuel Co.

B. B. COAL & MINING COMPANY.

General Office, 690 Arcade Bldg., St. Louis, Mo.
PR—Wm. H. Boehmer, St. Louis, Mo.
VP—Mrs. A. Boehmer, St. Louis, Mo.
TR—Wm. H. Boehmer, " "
GM—Wm. H. Boehmer, " "
PA—Wm. H. Boehmer, " "
CE—John J. Guest, Belleville, Ill.
GS—John J. Guest, Belleville, Ill.
EM—John J. Guest, " "
EE—John J. Guest, " "
SCD—Address the Company, Boyer, W. H. Boehmer, St. Louis, Mo.

R. B. Mine; Shaft; 6th Seam, 72 inches thick.

PO—Belleville, Ill. SP—Cooper Sta., Ill. CTY—St. Clair. RR—St. L. & E. and Son.
S of H—Mules.
S of M—Hand.
PP—Power purchased, 440 volts, A. C., 1 pump.
EMP—102. Last years tonnage 47,486.
SIZES SHIPT—Run of Mine, Nut, Egg, Lump.
PREP. EQUIPT—Screen.

BADER, E. G.

Elipsa Mine.
PO—Astoria, Ill.; SP—Same; CTY—Fulton; RR—C. B. & Q.
No report.

BAILEY BROS. COAL CO.

General Office, Duquoin, Ill.
PR—Jos. Bai v. Duquoin, Ill.
TR—Jos. Bailey, Duquoin, Ill.
GM—Jos. Bailey, Duquoin, Ill.
GS—Jos. Bailey, Duquoin, Ill.
PA—Jos. Bailey, Duquoin, Ill.
SCD—Address the company, Boyer, Carl Bailey, Duquoin, Ill.

Diamond Mine; Shaft; No. 6 Seam, 5 and 6 ft. thick.

PO—Duquoin, Ill.; SP—Sunbird, Ill.; CTY—Perry; RR—I. C.
S of H—Mules and 1 storage battery loco. Track gauge 36 in.
S of M—2 shortwall mchrs.
PP—3 fire tube boilers, 200 H. P. 2 pumps.
EMP—60. Last years tonnage 40,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Revolving and Shaker Screens.

BAIRD BROS.

General Office, Colchester, Ill.
PR—Oswald Baird, Colchester, Ill.
GM—J. T. Baird, Colchester, Ill.
PA—J. T. Baird, " "
EM—J. T. Baird, " "

Baird Mine; Shaft; No. 2 Seam, 30 in. thick.

PO—Colchester, Ill. SP—Same; CTY—McDonough; RR—C. B. & Q.
MS—J. T. Baird, Colchester, Ill.
S of H—Mules. Track gauge 36 in.
S of M—Hand.
PP—Power purchased, 220 volts.
EMP—30. Last fiscal year output, 20,000 tons.
SIZES SHIPT—Run of Mine, Egg, Lump, Block.
PREP. EQUIPT—Bar Screens.

BAIRD BROS. & BUCHER

PR R. O. Baird, Astoria, Ill.
GM—E. Bucher, Astoria, Ill.
GS—J. T. Baird, Colchester, Ill.

No. 1 Mine; Shaft; No. 5 Seam, 72 inches thick.

PO—Astoria, Ill.; SP—Same; CTY—Fulton; RR—C. B. & Q.
S of H—Mules. Track gauge 36 inches.
S of M—Hand.
PP—Power purchased, 220 volts A. C., 1 30 H. P. and 1 50 H. P. fire tube boiler, 2 pumps.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.
Old Information.

BARTELS COAL COMPANY.

General Office, Carlinville, Ill.
GM—H. W. Bartels, Carlinville, Ill.
GS—H. W. Bartels, Carlinville, Ill.
PA—H. W. Bartels, Carlinville, Ill.

Bartels Mine; Shaft; No. 6 Seam, 78 in. thick.

PO—Carlinville, Ill.; SP—Same; CTY—Macoupin; RR—I. T. S.
S of H—Mules.
S of M—Hand.
EMP—50. Daily tonnage 300.
SIZES SHIPT—Run of Mine, Slack, Lump.
NOTE—Formerly operated by the Carlinville Coal Co.

BAUSER-TRUESDALE

Edward A. Bauser, Lessee, Bunker Hill, Ill.

Bauser-Truesdale Mine; Shaft; No. 1 Seam, 60 in. thick.

PO—Bunker Hill, Ill.; CTY—Macoupin, Ill.; RR—Big Four.
S of H—Mules.
S of M—2 comp. air mchrs.
PP—2 fire tube boilers, total 130 H. P., 1 air compressor, 2 pumps.
EMP—20.
PREP. EQUIPT—Bar Screens.
Note—Formerly operated under name of Edward A. Bauser.

BAXTER, NEIL & SONS.

Now Rawlitt Coal Company.

BEATTY COAL COMPANY

General Office, Mascoutah, Ill.
PR—R. J. Beatty, Mascoutah, Ill.
VP—O. J. Klingenfus, Belleville, Ill.
TR—C. W. Beatty, Mascoutah, Ill.
GM—R. J. Klingenfus, Belleville, Ill.
GS—R. J. Klingenfus, Belleville, Ill.

Beatty Mine; Shaft; No. 6 Seam; 90 in. thick.

PO—Mascoutah, Ill.; SP—Same; CTY—St. Clair; RR—L. & N.
MS—R. J. Beatty, Mascoutah, Ill.
S of H—Mules. Track gauge 19 1/2 in.
S of M—Hand.
PP—1 fire tube boiler, total 120 H. P., 3 pumps.
EMP—6. Last years tonnage 3,904.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.
Note—Formerly John T. Beatty Operations.
Old Information.

BEESE COAL COMPANY

General Office, 314 E. 11th St., Belleville, Ill.

PR—Charles Stogmeyer, Belleville, Ill.
VP—Edgar McKenzie, Belleville, Ill.
TR—Walter Hoener, Belleville, Ill.
GM—John E. Reese, 314 E. 11th St., Belleville, Ill.
EN—John Reese, Jr., Belleville, Ill.
SA—John Beese, Sr., Belleville, Ill.

Beese Mine; Shaft; No. 6 Seam; 72 inches thick.

PO—Belleville, Ill.; SP—Same; CTY—St. Clair.
S of H—Mules, rope, steam loco. Track gauge 36 inches.
S of M—Hand.
PP—1 fire boiler, 75 H. P., 2 pumps.
EMP—10. Last years tonnage 5,482.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Bar Screens.

CELL & ZOLLER MINING CO

General Office, 343 South Dearborn St., Chicago, Ill.

PR—H. E. Zell, 343 South Dearborn St., Chicago, Ill.
VP—R. H. Zell, Chicago, Ill.
TR—W. G. Zell, Chicago, Ill.
GM—R. H. Zell, Chicago, Ill.
GS—J. Y. Zell, Zell, Ill.
PA—J. H. Zell, Chicago, Ill.
EM—Paul Zell, Zell, Ill.
SA—R. H. & Zell, Zell, Ill.

Zell No. 1 Mine; Shaft; No. 1 Seam, 130 in. thick.

PO—Zell, Ill. SP—Same; CTY—Grand River; RR—I. C. & Q. and Mo. Pac.
S of H—27 fire tube boilers, total 1,200 H. P., 2 pumps.
S of M—24 chain breast mchrs.

(Continued on Next Page)

Bell & Zoller Mining Co.—Cont.

PP—6 375 H. P. water tube boilers, 1 500 K. W., 1 300 K. W., 1 100 K. W., gen. units, 250-275 volts D. C., 10 pumps.

EMP—800. Daily output, 5,000 tons. SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Special Stove, Chestnut.

PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

Zelger No. 2 Mine; Shaft; No. 6 Seam, 120 inches thick.

PO—Zeigler, Ill.; SP—Same; CTY—Franklin; RR—L. C.; C. B. & Q., and Mo. Pac.

MS—E. L. Burger, Zeigler, Ill.

S of H—6 trolley pole type locos. Track gage, 42 inches.

S of M—4 chain breast type and 6 short-wall machs.

PP—4 375 H. P. water tube boilers, 1 300 K. W., 1 100 K. W., gen. units, 250-275 volts D. C., 5 pumps.

EMP—1,000. Daily output, 6,000 tons. SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.

PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

BENTON BIG MUDDY COAL CO.

Leased to the Fort Dearborn Coal Co.

BENTON COAL COMPANY.

Now a part of Chicago, Wilmington & Franklin Coal Co.

BERRY, B. F. COAL CO.

General Office, Graniteville, Ill.

PR—S. T. Crane, Detroit, Mich.

VP—E. J. Earling, Milwaukee, Wis.

TR—Jas. Phelps, Milwaukee, Wis.

GM—E. J. Earling, Milwaukee, Wis.

ES—John T. Cherry, Standard, Ill.

PA—Chas. H. Sturges, Graniteville, Ill.

SA—Central Coal Co., Plankinton Arcade, Milwaukee, Wis.

Standard No. 1 Mine; Shaft; No. 2 Seam, 37 inches thick.

PO—Standard, Ill.; SP—Same; CTY—Putnam; RR—L. C. & St. P., Chicago, Rochelle & Southern.

S of H—Mules. Track gage 41 in.

S of M—Hand.

PP—6 fire tube boilers, total 900 H. P., 6 pumps.

EMP—250. Last fiscal year output, 196,884 tons.

SIZES SHIPT—Run of Mine, Slack, Egg, Lump.

PBEP EQUIPT—Shaker Screens, Washeries.

BIG CREEK COALS, INC.

General Office, Chicago, Ill.

PR—C. E. Pierce, Chicago, Ill.

VP—(In Charge of Operations) M. S. Coleman, Harrisburg, Ill.

VP—(In Charge of Sales and Accounts) H. E. Stuart, Chicago, Ill.

SECY—W. H. Burnham, Chicago, Ill.

ASST. TR—W. H. Burnham, Chicago, Ill.

PA—D. V. McCarthy, Chicago, Ill.

CHIEF ENGR—J. C. Quade, Harrisburg, Ill.

Additional Information on pages 318, 319.

No. 2 Mine; Shaft; No. 5 Seam, 66 inches thick.

PO—Leford, Ill.; SP—Same; CTY—Sallina; RR—Big Four.

MS—Jno. Wunderlick, Harrisburg, Ill.

S of H—Mules and 3 trolley pole type locos. Track gage 42 inches.

S of M—8 chain breast type and 3 shortwall machs.

PP—Power purchased, transformer 33,000 to 2,300 volts A. C., M. G. Set, 250 volts D. C., 6—150 H. P. fire tube boilers, 12 pumps.

EMP—450. Daily tonnage 2460.

SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.

PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

No. 3 Mine; Shaft; No. 5 Seam, 6-72 inches thick.

PO—Harrisburg, Ill.; SP—Same; CTY—Sallina; RR—Big Four.

MS—W. E. Monroe, Harrisburg, Ill.

S of H—Mules and 19 elec. locos. Track gage 42 in.

S of M—20 chain breast type, 7 short-wall and 1 overhead cutter machs.

PP—Power purchased, transformer 33,000 to 2,300 volts A. C., Gen. Units, 1—300 K. W. and 1—200 K. W.

250 volts D. C., 6 fire tube, 1 water tube boilers 1350 H. P., 9 pumps.

EMP—600. Daily tonnage 4,149.

SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.

PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

No. 4 Mine; Shaft; No. 5 Seam.

PO—Harrisburg, Ill.; SP—Same; CTY—Sallina; RR—Big Four.

S of H—Mules.

S of M—5 chain breast type machs. Note—Mines No. 2, 3 and 4 formerly operated by Saline County Coal Co.

No. 5 Mine; Shaft; No. 5 Seam, 84 inches thick.

PO—Galatit, Ill.; SP—Same; CTY—Sallina; RR—Big Four.

MS—C. E. Coleman, Galatit, Ill.

S of H—Mules and trolley pole type locos. Track gage 42 inches.

S of M—5 chain breast type machs.

PP—Power purchased, transformer 2300 to 220 volts D. C., M. G. set, 150 K. W. 250 volts D. C., 4—150 H. P. water tube boilers, 7 pumps.

EMP—120. Daily tonnage, 410.

SIZES SHIPT—Run of Mine, Slack, Egg, Lump.

PBEP EQUIPT—Shaker Screens.

Note—Formerly operated by the Galatia Colliery Co.

No. 6 Mine; Shaft; No. 5 Seam, 66 inches thick.

PO—Grayson, Ill.; SP—Same; CTY—Sallina; RR—L. C. & N. and Big Four.

MS—Frank Maynard, Grayson, Ill.

S of H—Mules and trolley pole type loco.

Track gage 40 inches.

S of M—8 shortwall machs.

PP—6—90 H. P. fire tube boilers, 2—100 K. W. and 1—150 K. W. gen. units, 250 volts D. C., 5 pumps.

EMP—230. Daily tonnage 1505.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

Note—No. 6 Mine formerly operated by the Saline County Coal Co.

BIG MUDDY COAL & IRON CO.

Now part of Consolidated Coal Company of St. Louis.

BINKLEY COAL COMPANY

General Office, Chicago, Ill.

PR—L. G. Binkley, Chicago, Ill.

VP—W. H. Leland, Chicago, Ill.

TR—H. E. Howard, Chicago, Ill.

GS—M. H. Stark, Libertyville, Ind.

SA—L. G. Binkley Coal Co., Chicago, Ill.

Additional Information on Page 320.

Thomas-Waters Mine; Slope; No. 5 Seam, 4 inches thick.

PO—Marion, Ill.; SP—Herrin, Ill.; CTY—Williamson; RR—Burlington.

MS—C. Budder, Marion, Ill.

S of H—Mules. Track gage 42 inches.

S of M—Hand.

PP—Power purchased, transformer 2300 volts A. C.

EM—150. Daily tonnage, 750.

SIZES SHIPT—Run of Mine, Slack, Egg, Lump.

PREP. EQUIPT—Shaker Screens.

Binzel Mine; Shaft; No. 5 Seam, 52 in thick.

PO—Farmington, Ill.; SP—Same; CTY—Fulton; RR—Minneapolis & St. L.

Mine Mgr.—Tom Preston, Farmington, Ill.

S of H—Mules, 1 trolley and 1 storage battery locos. Track gage 36 in.

S of M—4 shortwall machs.

PP—Power purchased, Transformer 13,200 to 440 volts, 1—150 K. W. gen. units, 220 volts A. C., 2 pumps.

EMP—70. Last years tonnage 62,209.

SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.

PBEP EQUIPT—Shaker Screens, Picking Tables.

BISSELL COAL COMPANY

General Office, Springfield, Ill.

PR—S. E. Wolf, New York, N. Y.

VP—P. B. Warren, Springfield, Ill.

TR—E. F. Hall, Springfield, Ill.

GM—E. F. Hall, Springfield, Ill.

PA—E. F. Hall, Springfield, Ill.

CE—Allen & Garcia Co., Chicago, Ill.

EM—L. E. Read, Chicago, Ill.

Bissell Mine; Shaft; No. 5 Seam; 66 inches thick.

PO—Springfield, Ill.; SP—Same; CTY—Sangamon; RR—L. C., C. & A. C. F. & St. L., Wabash, C. I. & W. I. T. S. & S. T. Ry.

MS—P. J. Donner, Springfield, Ill.

S of H—Mules. Track gage 36 inches.

S of M—Hand.

PP—Power purchased, Transformer 13,000 to 250 volts, rotary converter, 1 water tube boiler, 60 H. P.

EMP—212. Last years tonnage 172,104.

SIZES SHIPT—Run of Mine, Slack, Egg, Lump.

PREP. EQUIPT—Shaker Screens.

BLACKBURN COAL COMPANY

Blackburn Mine.

PO—Marion, Ill.; SP—Same; CTY—Williamson; RR—C. & E. I.

No report.

BLACK DIAMOND COAL MINE.

General Office, Petersburg, La.

OPERATOR—Jno. W. Mallagrew, Petersburg, Ill.

Black Diamond Mine; Shaft; Nos. 8 and 2 Seams, 74 in. thick.

PO—Petersburg, Ill.; SP—Same; CTY—Menard; RR—C. & A., C. P. & St. L.

S of H—Mules. Track gage, 28 in.

S of M—Hand.

PP—Power purchased, 1 pump.

EMP—15. Daily tonnage 300.

SIZES SHIPT—Run of Mine, Slack.

PREP. EQUIPT—Gravity Screens.

BLACK STAR COAL COMPANY.

General Office, 76 W. Monroe St., Chicago, Ill.

PR—A. T. Murphy, Chicago, Ill.

VP—W. B. Carney, Chicago, Ill.

TR—Quintin Johnstone, Jr., 76 Monroe St., Chicago, Ill.

GS—H. E. Wilson, Logan, Ill.

PA—Quintin Johnstone, Jr., 76 Monroe St., Chicago, Ill.

EM—J. M. Aiken, Chicago, Ill.

EE—Harlan Day, Chicago, Ill.

SCO—Logan Merc. Co. Buyer, W. L. Davis, Logan, Ill.

SA—John A. Logan Coal Co., Chicago, Ill.

Logan Mine; Shaft; No. 6 Seam, 84 in. thick.

PO—Logan, Ill.; SP—Same; CTY—Franklin; RR—L. C. and C. E. & Q.

S of H—Mules, 5 elec. locos, 3—10 ton and 3—6 ton machs.

S of M—23 chain breast machs.

PP—7 fire tube boilers, 1600 H. P., 350 K. W., 150 K. W. and 100 K. W. gen. units, 275 volts D. C., 7 pumps.

EMP—100. Last years tonnage 262,000.

SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.

PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

BLAIR, GUS, BIG MUDDY COAL CO.

Now operated by the Western United Gas Coal Company.

BLOCK COAL COMPANY

General Office, Pana, Ill.

PR—Harry Tanner, Pana, Ill.

VP—Ben Guadder, Centralia, Ill.

TR—Ben Guadder, Centralia, Ill.

Block Mine; Slope; Fifth Vein Seam, 48 inches thick.

PO—Carterville, Ill.; SP—Same; CTY—Williamson; RR—L. C.

S of H—Mules and rope. Track gage 42 inches.

S of M—Hand.

PP—Power purchased. Transformer 2300 to 250 volts A. C., M. G. Set, 250 volts, 2—30 H. P. water tube boilers.

EMP—60. Daily tonnage 200.

SIZES SHIPT—Run of Mine, Slack, Egg, Lump.

PREP. EQUIPT—Shaker Screens.

BOYLE COAL COMPANY.

General Office, Sparta, Ill.

LESSEE—Geo. Lemon, Sparta, Ill.

Roxie Mine; Shaft.

PO—Sparta, Ill.; CTY—Randolph.

S of H—Mules.

S of M—Hand.

PP—Total 100 H. P., 2 pumps.

EMP—5. Last fiscal year output, 10,531 tons.

Old Information.

BRADY BRANCH COAL CO.

General Office, 1102 1st National Bk. Bldg., Danville, Ill.

GM—Louis Clements, Danville, Ill.

GS—Robt. Fettingler, Danville, Ill.

PA—Louis Clements, Danville, Ill.

EM—Plescher & Hubbard, Westville, Ill.

Brady Branch Mine; Slope; No. 7 Seam, 72 inches thick.

PO—Danville, Ill.; SP—Same; CTY—Vernilion; RR—Ill. Tract. System and Wabash.

S of H—Mules and 1 trolley loco. Track gage, 36 in.

S of M—6 shortwall machs.

PP—Power purchased, transformer 2,300 to 220 volts, motor gen. sets, 220 volts D. C., 3 pumps.

EMP—220. Last years tonnage 194,292.

SIZES SHIPT—Run of Mine, Slack, Egg, Lump.

PREP. EQUIPT—Gravity Screens.

BREESE-TRENTON MINING CO.

General Office, Breese, Ill.

PR—H. F. Elsey, Flora, Ill.

VP—Henry Hammett, Breese, Ill.

TH—H. F. Elsey, Flora, Ill.

GM—Henry Hammett, Breese, Ill.

GS—Aug. J. Hammett, Breese, Ill.

PA—Aug. J. Hammett, Breese, Ill.

EE—Frank Watson, Beckmeyer, Ill.

SA—A. H. Leedoe, 413 Locust St., St. Louis, Mo.

East Breese Mine; Shaft; No. 6 Seam, 72 to 90 in. thick.

PO—Breese, Ill.; SP—Same; CTY—Clinton; RR—B. & O., S. W.

S of H—Stoles and 4 trolley pole type locos. Track gage, 26 in.

S of M—6 electric punchers and short-wall machs.

PP—7 return tubular boilers, 900 H. P., 200 K. W., 1 250 K. W. gen. units, 250 volts D. C., 2 pumps.

EMP—215. Daily output, 1,100 tons.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Shaker and Revolving Screens.

Beckmeyer Mine; Shaft; No. 6 Seam, 90 in. thick.

PO—Beckmeyer, Ill.; SP—Same; CTY—Clinton; RR—B. & O., S. W.

MS—Aug. J. Hammett, Breese, Ill.

S of H—Mules and 2 trolley pole type locos. Track gage, 26 in.

S of M—Electric puncher and shortwall mach.

PP—7 return tubular boilers 950 H. P., 1 150 K. W., 1 250 K. W. gen. units, 250 volts D. C., 3 pumps.

CENTRAL COAL COMPANY.
Now part of Sangamon Coal Company.

CARLINVILLE MINING COMPANY
Now The Bartels Coal Co.

CARTERVILLE & BIG MUDDY COAL CO
General Office, Herrin, Ill.
PR—A. K. Elles, Herrin, Ill.
VP—Edw. C. Elles, Herrin, Ill.
TR—L. G. Anderson, Herrin, Ill.
GM—A. K. Elles, Herrin, Ill.
GS—E. D. Roach, Marion, Ill.
PA—Wm. A. Chamness, Herrin, Ill.
CE—A. C. Malams, Herrin, Ill.
EM—John Smith, Cambria, Ill.
EE—R. J. Kemp, Herrin, Ill.
SCO—Elles Stone Co. Buyer, Howard Hagler, Cambria, Ill.
SA—Wisconsin Lime & Cement Co., Chicago, Ill.

John Mine; Shaft; No. 6 Seam, 84 inches thick.
PO—Cambria, Ill.; SP—Same; CTY—Williamson; RR—1. C.
S of H—Mules. 2 locos. Track gage 36 in.
S of M—Hand and 4 breast mchs.
PP—Power purchased. Transformer, 2,300 volts A. C., 6 boilers, 12 pumps.
EMP—236. Last years tonnage 152,717.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens and Rescreener.

CASE, M. E., COAL COMPANY.

General Office, 1024 Jefferson Bldg Peoria, Ill.
GM—W. E. Case, Peoria, Ill.
GS—W. C. Evans, Peoria, Ill.
PA—Chas. K. Lambert, Peoria, Ill.
CE—W. P. Baekes, Peoria, Ill.
SA—Crescent Coal Co., 1024 Jefferson Bldg., Peoria, Ill.

La Marsh No. 1 Mine; Slope; No. 5 Seam, 52 in. thick.
PO—Peoria, Ill.; SP—Hollis, Ill.; CTY—Peoria; RR—P. H. C. & W.
S of H—Mules and trolley pole type loco. Track gage, 42 in.
S of M—3 chain breast and 12 short-wall mchs.
PP—Power purchased. Transformer 13,000 to 440 volts A. C., 1—150 K. W. gen. units, M. G. Sets, 275 volts D. C., 1 pump.
EMP—262. Daily tonnage 1,350.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.

CENTRAL COAL COMPANY.

General Office, R. R. No. 1, Danville, Ill.
PR—J. H. Mauck, Danville, Ill.
VP—Wm. Ray Mauck, Danville, Ill.
TR—J. H. Mauck, Danville, Ill.
GM—J. H. Mauck, Danville, Ill.
PA—Wm. Ray Mauck, Danville, Ill.
EE—Ernest V. Mauck, Danville, Ill.
SCO—J. H. Mauck & Sons, Buyer, Everett A. Mauck, Danville, Ill.

Central Mine; Slope; No. 7 Seam, 72 in. thick.
PO—Danville, Ill.; SP—Same; CTY—Vermilion; RR—C. C. & St. L.
MS—Wm. Mauck, Danville, Ill.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—Power purchased. Transformer 2,300 to 220 volts A. C., 1 pump.
EMP—18. Last years tonnage 17,600.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

CENTRAL WEST COAL COMPANY.

General Office, 1112 Jefferson Bldg., Peoria, Ill.
PR—Geo. P. De Valt, Edwards, Ill.
VP—J. H. Harsh, Peoria, Ill.
TR—Geo. M. Spangler, Peoria, Ill.
GM—Geo. P. De Valt, Edwards, Ill.
GS—Geo. P. De Valt, Edwards, Ill.
PA—J. A. Richter, Peoria, Ill.
SA—Central West Coal Co., Peoria, Ill.

Central West Mine; Drift; No. 5 Seam, 50 in. thick.
PO—Edwards, Ill.; SP—Same; CTY—Peoria; RR—C. C. & Q.
S of H—Electric locos and mules. Track gage 34 in.
S of M—Hand and chain breast type mchs.
PP—Power purchased. 1—35 K. W. M. G. S. T., 250 volts D. C., fire tube boiler.
EMP—150. Daily tonnage 500.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens
NOTE—Formerly operated by the Warsaw Coal Co.

CENTRALIA COAL CO.

General Office, 343 South Dearborn St., Chicago, Ill.
PR—H. E. Bell, Chicago, Ill.
VP—W. G. Zoller, Chicago, Ill.

TR—R. H. Zoller, Chicago, Ill.
GM—R. H. Zoller, Chicago, Ill.
GS—H. G. Brown, Centralia, Ill.
EM—Paul Wier, Centralia, Ill.
SA—Bell & Zoller Coal Co., 343 South Dearborn St., Chicago, Ill.

Centralia No. 5 Mine; Shaft; No. 6 Seam, 66 in. thick.
PO—Centralia, Ill.; SP—Same; CTY—Marion; RR—C. C. & Q. I. C.
S of H—17 trolley pole type locos. Track gage, 42 in.
S of M—7 chain breast type mchs.
PP—10 150 H. P. fire tube boilers, 2 300 K. W., 1 250 K. W., 1 50 K. W., gen. units, 250 volts, D. C., 1 pumps.
Daily output, 3,000 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens Picking Tables, Loading Rooms.

CHICAGO BIG MUDDY COAL & MINING CO.

General Office, 2014 Fisher Bldg., Chicago, Ill.
PR—O. M. Burnett, Chicago, Ill.
VP—John T. Dean, Chicago, Ill.
TR—Mark Woodley, Marion, Ill.
GM—Mark Woodley, Marion, Ill.
GS—Chas. Sherertz, Marion, Ill.
PA—Mark Woodley, Marion, Ill.
EE—R. Little, Marion, Ill.
GEN SALES MGR—O. M. Burnett, Chicago, Ill.

Big Muddy Mine; Shaft; No. 6 Seam, 84 inches thick.
PO—Marion, Ill.; SP—Same; CTY—Williamson; RR—C. & E. I. C. & Q. & Mo. Pac.
S of H—Mules. Trolley pole type loco. Track gage 44 in.
S of M—5 chain breast and 5 shortwall mchs.
PP—1 return tubular boiler. Purchase power.
EMP—200 to 250. Last fiscal year output, 289,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

CHICAGO COLLIERIES CO.

General Office, Catlin, Ill.
PR—B. B. Taylor, Catlin, Ill.
TR—Wm. Dolan, Catlin, Ill.
GM—B. B. Taylor, Catlin, Ill.
GS—James Sidel, Catlin, Ill.
PA—Wm. Dolan, Catlin, Ill.
EM—James Sidel, Catlin, Ill.
EE—Wm. Mauck, Catlin, Ill.
SCO—Shipp's Timber & Supply Co. Buyer, Newton Crosby, Catlin, Ill.

Chicago Collieries; Shaft; 7th Seam, 66-72 in. thick.
PO—Fairmount, Ill.; SP—Same; CTY—Vermilion; RR—C. & E. I.
MS—Al Hunter, Catlin, Ill.
S of H—Mules. Track gage, 36 in.
S of M—Hand and elec. mach.
PP—3 125 H. P. water tube boilers, 5 pumps.
EMP—106.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.

CHICAGO SANOVAL COAL CO.

General Office, 507 McCormick Bldg Chicago, Ill.
PR—C. A. Rickett, Chicago, Ill.
VP—Bryan G. Tighe, Chicago, Ill.
TR—Chas. Nexton, Chicago, Ill.
GM—C. A. Rickett, Chicago, Ill.
GS—C. G. Lewis, Sandoval, Ill.
PA—Don B. Sebastian, 507 McCormick Bldg., Chicago, Ill.
EM—E. Toothacker, Sandoval, Ill.
SA—Rickett Coal & Coke Co., McCormick Bldg., Chicago, Ill.

No. 2 Mine; Shaft; No. 6 Seam, 72 in. thick.
PO—Sandoval, Ill.; SP—Same; CTY—Marion; RR—Illinois Central.
S of H—Mules, 2 elec. motors and 1 gasoline motor. Track gage 24 in.
S of M—Hand.
PP—5 fire tube boilers, 600 H. P., 2 100 K. W., gen. units, 250 volts D. C., 5 pumps.
EMP—325. Last years tonnage 266,913.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens and Picking Tables.

CHICAGO, SPRINGFIELD COAL CO

PR—H. H. Devereux, Springfield, Ill.
VP—John H. McCreery, Springfield, Ill.
TR—G. A. Wood, Springfield, Ill.
GM—Geo. A. Wood, Springfield, Ill.
PA—H. H. Devereux, Springfield, Ill.
C-S Mine; Shaft; No. 5 Seam, 6 ft. thick.
PO—Springfield, Ill.; SP—Same; CTY—Sangamon; RR—Chicago & Alton.
MS—Chas. Foster, Springfield, Ill.

S of H—Mules, 1 gasoline and storage battery locos. Track gage 42 in.
S of M—Hand.
PP—1 return tubular boilers, 1 pump.
EMP—320. Last years tonnage 300,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Egg, Lump.
PREP. EQUIPT—Shaker Screens.
Old information.

CHICAGO WILLIAMSVILLE COAL CO.

Out of business.

CHICAGO, WILMINGTON & FRANKLIN COAL COMPANY.

General Office, McCormick Bldg., Chicago, Ill.
PR—George R. Harrington, Chicago, Ill.
VP—A. J. Maloney, Chicago, Ill.
TR—Henry R. Sawyer, Chicago, Ill.
GS—Joseph Louis, Benton, Ill.
PA—H. S. Kinney, Chicago, Ill.
CE—Alvin & Garcia Company, Chicago, Ill.
Sales Manager, A. J. Maloney, Chicago, Ill.

Additional Information on Pages 322, 323

Orient No. 1 Mine; Shaft; No. 6 Seam; 26 to 126 in. thick.
PO—Orient, Ill.; SP—W. Frankfort, Ill.
CTY—Franklin; RR—C. & E. I. C. B. & Q. I. C., Orient Spur br.
MS—John Rudolph, Orient, Ill.
SM—S. K. K. K., Orient, Ill.
S of H—27 trolley pole type locos. Track gage, 42 in.
S of M—43 shortwall mchs.
PP—6 water tube boilers, total 2,400 H. P., 1—500 K. W. and 3—300 K. W. gen. units, 250 volts D. C., 15 pumps.
EMP—950. Last years tonnage 1,235,963.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Rescreener Plant, Picking Tables, Coal Crusher, Re-processing Plant.

Benton No. 2 Mine; Shaft; No. 6 Seam, 84 to 120 in. thick.
PO—Benton, Ill.; SP—Same; CTY—Franklin; RR—C. & E. I. C. & I. C.
MS—H. A. Treadwell, Benton, Ill.
S of H—Mules and 4 trolley pole locos. Track gage, 42 in.
S of M—18 chain breast mchs.
PP—7 return tubular boilers, total 1050 H. P., 1—300 K. W., 2—150 K. W., Gen. units, 250 volts D. C., 5 pumps.
EMP—299. Last fiscal year output, 384,955 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Egg, Furnace.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

"B" Mine; Shaft; No. 6 Ill. Seam, 84 to 122 in. thick.
PO—Herrin, Ill.; CTY—Williamson. RR—C. R. & Q. I. C., Mo. Pac.
MS—J. F. Hauck, Herrin, Ill.
SM—B. F. Bowen, Herrin, Ill.
S of H—2 trolley pole type locos. Track gage 36 in.
S of M—Hand.
PP—4 water tube boilers, total 750 H. P., 1 125 K. W., 1 200 K. W. gen. units, 250 volts D. C., 9 pumps.
EMP—272. Last years tonnage 237,063.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms, Washeries.

"A" Mine; Shaft; No. 6 Ill. Seam, 84 to 122 in. thick.
PO—Herrin, Ill.; SP—Same; CTY—Williamson; RR—Mo. Pac., I. C., C. B. & Q.
MS—Fred Hauck, Herrin, Ill.
SM—B. F. Bowen, Herrin, Ill.
S of H—Mules and 6 trolley pole type locos. Track gage, 42 in.
S of M—17 chain breast mchs.
PP—4 water tube boilers, total 1250 H. P., 1 500 K. W., 1 150 K. W. gen. units, 250 volts D. C., 10 pumps.
EMP—422. Last fiscal year output, 403,389 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Washeries.

Thayer No. 1 Mine; Shaft; No. 6 Seam; 72 to 84 in. thick.
PO—Thayer, Ill.; SP—Same; CTY—Sangamon; RR—C. & A. C. B. & Q. I. T. S. C. & N. W.
MS—E. G. Gordon, Thayer, Ill.
S of H—Mules and 6 trolley pole type locos. Track gage, 42 in.
S of M—21 elec. mach.
PP—5 water tube boilers, 1,500 H. P., 2 150 K. W. gen. units, 250 volts D. C., 6 pumps.
EMP—411. Last fiscal year output 670,961 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.

PREP. EQUIPT.—Shaker Screens, Picking Tables and Loading Rooms.

South Wilmington No. 3 Mine; Shaft; No. 2 Seam; 36 in. thick. Operate washery.
PO—South Wilmington, Ill.; SP—Same; CTY—Grundy; RR—E. J. & E., Coal City, Ill.
MS—George Nutman, S. Wilmington, Ill.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
PP—5 fire tube, 2 water tube boilers, total 700 H. P., 1 22 K. W. gen. unit, 250 volts D. C., 6 pumps.
EMP—264. Last fiscal year output, 251,812 tons.
SIZES SHIPT—Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms, Washeries.

Royal Colliery Co. Mine; Shaft; No. 6 Seam; 72 to 90 in. thick. Operate washery.
PO—Virden, Ill.; SP—Same; CTY—Macomb; RR—C. & A., C. B. & Q. and C. & N. W.
MS—J. T. Smith, Virden, Ill.
S of H—Mules and 3 trolley pole type locos. Track gage, 42 in.
S of M—20 chain breast mchs.
PP—7 water tube boilers, total 875 H. P., 1—200 K. W., 1 100 K. W., M. G. Sets, 250 volts D. C., 6 pumps.
EMP—444. Last fiscal year output, 556,557 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

Renton No. 1 Mine; Shaft; No. 6 Seam, 84 inches thick.
PO—Benton, Ill.; SP—Same; CTY—Franklin; RR—C. & E. I. C.
MS—Walter Nichols, Benton, Ill.
S of H—Mules, 7 trolley pole type and 2 combination elec. locos. Track gage 42 inches.
S of M—20 chainbreast type and 2 shortwall mchs.
PP—7 water tube boilers, total 1050 H. P., 2—150 and 1—500 K. W. gen. units, 250 volts D. C., 8 pumps.
EMP—360. Daily output, 2,200 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.
NOTE—Formerly operated by the Benton Coal Company.

Black Briar No. 1 Mine; Shaft; No. 6 Seam; 102 in. thick.
PO—Johnston City, Ill.; SP—Same; CTY—Williamson; RR—1. C., C. & E. I.
MS—W. J. Ruff, Johnston City, Ill.
S of H—18 mules and 5 trolley pole type locos. Track gage 25 1/2 inches.
S of M—3 chain breast type and 1 short-wall mchs.
PP—Power purchased. Transformers 23,000 to 220 volts A. C., 1—150 K. W. and 1—100 K. W. gen. units, 250 volts D. C., 4 fire tube boilers, total 600 H. P., 11 pumps.
EMP—257. Last years tonnage 210,600.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

CHINN, W. R.

GM—W. R. Chinn, Junction, Ill.
CS—W. R. Chinn.
Sanks Mine; Slope; No. 5 Seam, 52 in. thick.
PO—Junction, Ill.; SP—Equality, Ill.; CTY—Gallatin; RR—L. & N.
S of H—Mules. Track gage, 20 in.
S of M—Hand.
PP—1 pump.
EMP—10. Last fiscal year output, 2,200 tons.
SIZES SHIPT—Run of Mine, Slack (old information.)

CHRISTIAN COAL MINING COMPANY

General Office, 406 Standard Life Bldg., Decatur, Ill.
PR—Walter R. Kimzey, Mt. Carmel, Ill.
VP—G. D. Harwell, Decatur, Ill.
TR—R. Z. Saunders, Decatur, Ill.
SECY—Fred L. Bergstresser, Springfield, Ill.
GM—Fred L. Bergstresser, Springfield, Ill.
GS—C. J. Frengen, Edinburg, Ill.
PA—C. J. Frengen, Edinburg, Ill.
SA—Fred L. Bergstresser, Springfield, Ill.
Greenwood Mine; Shaft; No. 6 Seam, 66 to 96 in. thick.
PO—Edinburg, Ill.; SP—Same; CTY—Christian; RR—B. & O.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—2 steam boilers, 1 pump.
EMP—60. Last years tonnage 30,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

Co-Operative Coal Co.—Cont.

GS—William Price, Fairbury, Ill.
PA—W. H. Martin, Fairbury, Ill.
EM—James Loughran, Fairbury, Ill.
No. 1 Mine; Shaft; No. 6 Seam, 48 in. thick.
PO—Fairbury, Ill.; SP—Same; CTY—Livingston; RR—T. P. & W.
S of H—Mules. Track gage, 35 in.
S of M—1 chain breast type mach.
PP—Power purchased, transformer 2,300-270 volts A. C., 3 pumps.
EMP—26. Last years tonnage 12,022. Old Information.

CRESCENT COAL CO.

General Office, Peoria, Ill.
PR—Warren Sullivan, Peoria, Ill.
VP—E. J. Case, Peoria, Ill.
TR—M. E. Case, Peoria, Ill.
GM—M. E. Case, Peoria, Ill.
GS—George D. Deemy, Peoria, Ill.
PA—Chas. Lambert, 1024 Jefferson Bldg., Peoria, Ill.
CE—Walter P. Barkes, Peoria, Ill.

Crescent Mine; Slope; No. 5 Seam, 54 in. thick.
PO—Peoria, Ill.; SP—Vickary, Ill.; CTY—Peoria; RR—C. B. & Q.
S of H—Trolley pole type loco. Track gage 42 in.
S of M—7 shortwall machs.
PP—Power purchased, 220 volts A. C.
EMP—208. Last years tonnage 183,586.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

CRIPPLE CREEK COAL CO.

General Office, Galesburg, Ill.
PR—Thomas Fairbairn, Streator, Ill.
VP—R. J. Fairbairn, Galesburg, Ill.
TR—R. J. Fairbairn, Galesburg, Ill.
GS—James Wood, Cuba, Ill.
PA—R. J. Fairbairn, Galesburg, Ill.
CE—Jos. W. Fairbairn, Canton, Ill.
EM—J. N. Guyer, Canton, Ill.
SA—W. R. Hawkins, Galesburg, Ill.

No. 1 Mine; Drift; No. 5 Seam, 60 inches thick.
PO—Bryant, Ill.; SP—Same; CTY—Fulton; RR—C. B. & Q.
S of H—Mules and trolley pole type locos. Track gage 36 inches.
S of M—Hand.
PP—Power purchased. Transformer 13,000 to 220 volts A. C., rotary converters, 250 volts D. C., 2 pumps.
EMP—151. Daily tonnage 800.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

No. 2 Mine; Drift; No. 5 Seam, 60 inches thick.
PO—Bryant, Ill.; SP—Same; CTY—Fulton; RR—C. B. & Q.
S of H—Mules and trolley pole type locos. Track gage 36 inches.
S of M—Hand.
PP—Power purchased. Transformer, 13,000 volts A. C., rotary converters, 250 volts D. C., 1 pump.
EMP—124. Daily tonnage 600.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.

CROWN COAL MINING CO.

Now part of Southern Gem Coal Corp.

DAVISON, B. P. COAL COMPANY

Davidson Mine; Shaft; No. 6 Seam, 84 in. thick.
PO—Caseville, Ill.; SP—Same; CTY—St. Clair; RR—R. & O.
MS—B. P. Davison, Caseville, Ill.
S of H—Mules. Track gage 36 in.
S of M—Hand.
SIZES SHIPT—Run of Mine.
NOTE—New Mine.

DAWSON COAL MINING COMPANY.

General Office, 1734 Lytton Bldg., 14 E. Jackson Blvd., Chicago, Ill.
PR—L. E. Fischer, Boatmans Bk. Bldg., St. Louis, Mo.
VP—J. E. Hitt, 1734 Lytton Bldg., Chicago, Ill.
TR—J. E. Hitt, 760 McCormick Bldg., Chicago, Ill.
GM—J. E. Hitt, 760 McCormick Bldg., Chicago, Ill.
GS—W. G. Hilgard, Dawson, Ill.
PA—Wm. F. Meyer, 1734 Lytton Bldg., Chicago, Ill.
CE—Allen Garcia Co., Chicago, Ill.
SCO—Address the Company, Buyer, W. G. Hilgard, Dawson, Ill.

Dawson Mine; Shaft; 5th Seam 66 in. thick.
PO—Dawson, Ill.; SP—Same; CTY—Saneamon; RR—Wabash.
S of H—Mules, elec. locos. Track gage 36 in.
S of M—Hand.
PP—Power purchased 3—110 H. P. fire tube boilers, 250 volts D. C., 3 pumps.

EMP—125. Daily tonnage 1,000.
SIZES SHIPT—Run of Mine, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

DECATUR COAL COMPANY, THE.

PR—J. M. Corzine, Decatur, Ill.
VP—D. W. Beggs, Decatur, Ill.
TR—J. H. Howard, " "
GM—D. W. Beggs, " "
GS—D. W. Beggs, " "
MN—Henry Decker, " "
PA—John Howard, " "
EE—Ernest Schupp, " "
EM—Mark Conrad, " "
SA—Kutledge & Taylor Coal Co., Chicago, Ill.

No. 2 Mine; Shaft; No. 5 Seam, 52 to 56 in. thick.
PO—Decatur, Ill.; SP—Same; CTY—Macou; RR—Ill. Cent.
MS—P. Flood, Decatur, Ill.
S of H—Mules and 1 gasoline loco. Track gage 24 in.
PP—4 water tube boilers, total 400 H. P., 4 gen. units, 1 pump.
EMP—60. Last years tonnage 100,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Revolving and Shaker Screens.

DERING, J. K. COAL COMPANY

General Office, 1914 McCormick Bldg., Chicago, Ill.
PR—J. K. Dering, Chicago, Ill.
VP—(In charge of operations)—J. B. Pauley, Chicago, Ill.
VP—(In charge of Sales)—J. B. Roy-non, Chicago, Ill.
TR—J. E. Ford, Chicago, Ill.
GS—D. B. McMill, Clinton, Ind.
PA—J. E. Ford, Chicago, Ill.
CE—Allen & Garcia Co., Chicago, Ill.
EM—R. L. Lindsay, Eldorado, Ill.
EE—A. H. Jackson, Clinton, Ind.

No. 2 Mine; Shaft; No. 5 Seam, 68 to 78 in. thick.
PO—Eldorado, Ill.; SP—Same; CTY—Saline; RR—Ill. Central.
MS—L. Haskins, Eldorado, Ill.
S of H—14 trolley pole type locos. Track gage 42 in.
S of M—12 shortwall machs.
PP—4 return tubular boilers, total 600 H. P., 2 gen. units, 250 volts D. C., 2 pumps.
EMP—320. Last years tonnage 291,500.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

DERING MINES COMPANY

Now part of the Peabody Coal Co.

DESOTO COAL & MINING COMPANY

General Office, Grand Rapids, Mich.
Desoto Mine.
PO—Desoto, Ill.; SP—Same; CTY—Jackson; RR—I. C.
No report.

DODDS COAL CO.

General Office, Carrier Mills, Ill.
PR—C. E. Knickerbocker, Carrier Mills, Ill.
VP—F. E. Dodds, Carrier Mills, Ill.
TR—F. E. Dodds, Carrier Mills, Ill.
GM—Douglas Tanner, Carrier Mills, Ill.
GS—Douglas Tanner, Carrier Mills, Ill.
PA—Douglas Tanner, Carrier Mills, Ill.
CE—C. B. Drake, Harrisburg, Ill.
SA—Piatt & Brahm Coal Co., Chicago, Ill.

Dodds Coal Co. Mine; Shaft; No. 5 Seam, 60 inches thick.
PO—Carrier Mills, Ill.; SP—Same; CTY—Saline; RR—Big Four.
S of H—Mules. Track gage 42 inches.
S of M—2 shortwall machs.
PP—3 water tube boilers total 450 H. P., transformer 2300 to 220 volts A. C., motor gen. unit 250 volts D. C., 3 pumps.
EMP—75. Last years tonnage 50,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.

DONK BROS. COAL & COKE CO.

General Office, 314 N. 4th St., St. Louis, Mo.
PR—Edwin H. Conrades, St. Louis, Mo.
VP—Edmund C. Donk, " "
TR—G. C. Bogue, " "
PA—W. C. Johnston, " "
GS—W. J. Clark, Collinsville, Ill.
CE—W. E. Gallier, Edwardsville, Ill.
SCO—Address the company, Buyer, L. Mashek, Maryville, Ill.
SA—W. C. Johnston, 314 N. Fourth St. St. Louis, Mo.

No. 1 Mine; Shaft; No. 6 Seam, 84 in. thick.
PO—Collinsville, Ill. SP—Donkville, Ill.
CTY—Madison, RR—St. L. T. & E.
MS—Mr. Wood, Collinsville, Ill.
S of H—Mules and 1 trolley pole type loco. Track gage, 42 in.
S of M—Hand.
PP—6 return tubular boilers, total 900 H. P., 1 gen. unit, 250 volts D. C., 1 pump.

EMP—350. Daily output, 2,000 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Wash-eries.

No. 2 Mine; Shaft; No. 6 Seam, 81 in. thick.
PO—Maryville, Ill. SP—Same. CTY—Madison, RR—St. L. T. & E.
MS—Wm. Vaine, Maryville, Ill.
S of H—Mules, 14 elec. locos. Track gage 42 in.
S of M—20 chain breast machs., 5 shortwall machs.
PP—8 return tubular boilers, total 1,200 H. P., 200 K. W. and 400 K. W. gen. units, 250 volts D. C., 1 pump.
EMP—500. Daily tonnage 3,800.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

No. 2 Mine; Shaft; No. 6 Seam, 66 in. thick.
PO—Troy, Ill. SP—Same. CTY—Madison, RR—St. L. T. & E.
MS—J. H. Day, Troy, Ill.
S of H—Mules, 3 elec. locos. Track gage 42 in.
S of M—4 chain breast machs. and 1 shortwall mach.
PP—4 return tubular boilers, total 600 H. P., gen. unit, 250 volts D. C., 1 pump.
EMP—250. Daily tonnage 1,400.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Pea.
PREP. EQUIPT—Shaker Screens.

Thermal Mine; Shaft; No. 6 Seam, 72 inches thick.
PO—Edwardsville, Ill.; SP—Same; CTY—Madison; RR—St. Louis, Troy & Eastern.
MS—Wm. Palecek, Edwardsville, Ill.
S of H—Trolley pole type, storage battery and combination locos. Track gage 42 inches.
S of M—6 chain breast type and 2 short-wall machs.
PP—4 fire tube boilers, total 800 H. P., transformer, 2300 to 220 volts A. C., M. G. sets, 1—450 K. W., 1—50 K. W., 1—200 K. W. M. G. set, 275 volts D. C., 4 pumps.
EMP—157. Daily tonnage 1,40.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

DOZAW VALLEY COAL COMPANY

General Office, Marissa, Ill.
Dozaw Valley Mine.
PO—Marissa, Ill.; SP—Same; CTY—St. Clair; RR—I. C.
No report.

DUNCAN COAL COMPANY

General Office, Chicago, Ill.
PR—R. Floyd Clinch, Chicago, Ill.
VP—E. C. Searls, Chicago, Ill.
TR—Chas. White, " "
GM—E. C. Searls, " "
GS—T. S. Cousins, Duquoin, Ill.
PA—T. S. Cousins, " "
CE—H. M. Goodnow, Duquoin, Ill.
EM—A. F. Lee, Duquoin, Ill.
SA—Cramer, Clinch & Co., Chicago, Ill.

Dale Mine; Shaft; No. 6 Seam, 96 in. thick.
PO—Herrin, Ill.; SP—Same; CTY—Wil-Hamson; RR—M. O. P., Ill. Br.
MS—E. R. Danglefield, Herrin, Ill.
S of H—Mules and 2 trolley pole type locos. Track gage, 36 in.
S of M—3 chain breast type machines.
PP—4 return tubular boilers, total 500 H. P., 1—150 K. W., 1—110 K. W. Gen. units, 250 volts D. C., 8 pumps.
EMP—207. Last years tonnage 211,757.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker and Revolving Screens.

EAGLE MINING CO.

Out of Business.

EAST SIDE COAL COMPANY.

General Office, Edwardsville, Ill.
PR—David Cunningham, Edwardsville, Ill.
VP—Robert Cunningham, Edwardsville, Ill.
TR—Walter Herder, Edwardsville, Ill.
GM—David Cunningham, Edwardsville, Ill.
GS—David Cunningham, Edwardsville, Ill.

East Side Mine; Shaft; No. 6 Seam, 72 in. thick.
PO—Edwardsville, Ill. SP—Same. CTY—Madison; RR—I. H. Traction.
S of H—Mules. Track gage 24 in.
S of M—Hand.
PP—1 water tube boiler, total, 50 H. P., 2 pumps.
EMP—23. Last fiscal year output, 25,432 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.

EAST MAPLETON CO-OPERATIVE COAL CO

General Office, Mapleton, Ill.
East Mine.
PO—Mapleton, Ill.; SP—Same. CTY—Peoria; RR—T. P. & W.
No report.

EAST PEORIA MINING COMPANY

General Office, East Peoria, Ill.
PO—East Peoria, Ill.; SP—Frankdale, Ill.; CTY—Tazewell; RR—I. T. S.
No report.

ECLIPSE COAL COMPANY

General Office, Astoria, Ill.
PR—E. G. Bader, Astoria, Ill.
VP—W. F. Bader, Vermont, Ill.
TR—W. S. Long, Rushville, Ill.
GM—E. G. Bader, Astoria, Ill.
Eclipse Mine; No. 5 Seam.
PO—Astoria, Ill.; SP—Same; CTY—Fulton.
MS—H. P. Vanech, Astoria, Ill.
S of H—Mules. Track gage 34 inches.
S of M—Electric machs.
PP—2 pumps.
EMP—32. Last years tonnage 30,120.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar and Shaker Screens.
Old Information.

EDWARDSVILLE COAL COMPANY

General Office, Edwardsville, Ill.
PR—T. T. Browster, Edwardsville, Ill.
GS—Ben T. Chapman, Edwardsville, Ill.

No. 3 Mine; Shaft; No. 6 Seam.
PO—Edwardsville, Ill.; SP—Same; CTY—Madison; RR—L. & N.
S of H—Mules. Track gage 28 inches.
S of M—Hand, comp. air punchers.
PP—3 fire tube boilers.
EMP—60. Daily tonnage 600.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.

EGYPTIAN COAL & MINING COMPANY

General Office, 933 Boatmens Bank Bldg., St. Louis, Mo.
PR—J. A. Hamilton, Marissa, Ill.
VP—W. E. Meek, Marissa, Ill.
TR—W. S. Walter, St. Louis, Mo.
GM—R. E. Eggerbrecht, St. Louis, Mo.
GS—Henry McGorrens, Marissa, Ill.
PA—W. S. Walter, St. Louis, Mo.
EM—Wm. Ziemert, Belleville, Ill.
FE—O. Stimpson, Marissa, Ill.
SCO—J. C. Hamilton & Co., Marissa, Ill.
Buyer, D. Hamilton, Marissa, Ill.

Meek Mine; Shaft; No. 6 Seam; 78 inches thick.
PO—Marissa, Ill.; SP—Same; CTY—St. Clair; RR—I. C.
S of H—Mules, elec. locos. Track gage 36 inches.
S of M—Elec. punchers, 6 chain breast type and 3 shortwall machs.
PP—4 fire tube boilers, 150 H. P., 2—125 K. W. gen. units, 250 volts D. C., 3 pumps.
EMP—300. Last years tonnage 196,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

ELDER-BIXLER COAL CO.

Now being operated by the Harrisburg Coal Mining Co.

ELDNAR COAL COMPANY

General Office, Belleville, Ill.
Eldnar Mine.
PO—Belleville, Ill.; SP—Same; CTY—St. Clair; RR—L. & N.
No report.

ELDRADO COAL & MINING CO.

Now Dering Mines Company.

ELECTRIC COAL CO.

Now United Electric Coal Companies.

ELL-RICH MINING COMPANY.

PR—Frank R. Ellis, St. Louis, Mo.
TR—H. C. Richner, " "
GS—Robt. White, Belleville, Ill.
Sales Agency, Ellis & Richner Coal Co., St. Louis, Mo.

Ell-Rich Mine; Slope; Bituminous Seam, 78 to 90 in. thick.
PO—Belleville, Ill. SP—Same. CTY—St. Clair RR L. & N.
S of H—1 elec. loco.
S of M—Hand.
PP—2 water tube boilers, 1 gen. unit, 220 volts A. C., 1 pump.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.

ENTERPRISE COLLIERIES CO.

Now part of Colfax Coal Co.

EQUITABLE COAL & COKE COMPANY.

General Office, Chicago, Ill.
PR—R. Floyd Clinch, Chicago, Ill.
VP—E. C. Searls, Chicago, Ill.
TR—Chas. White, Chicago, Ill.
GM—E. C. Searls, " "
GS—T. S. Cousins, Duquoin, Ill.
PA—P. G. Barron, Duquoin, Ill.

(Continued on Next Page)

Equitable Coal & Coke Co.—Cont.

CE—M. H. Goodnow, Duquoin, Ill.
EM—A. F. Lee, Duquoin, Ill.
SA—Cramer, Clinch & Co., Chicago, Ill.

Majestic Mine; Shaft; No. 6 Seam, 102 inches thick.
PO—Duquoin, Ill.; SP—Clinch, Ill.; CTY—Perry; RR—Ill. Central.
S of H—16 mules, 7 trolley pole type locos, and 1 storage battery loco.
S of M—18 electric shortwall machs.
PP—6 return tubular boilers, 900 H. P., 1 250 K. W., 1 110 K. W. gen. units, 250 volts D. C., 4 pumps.
EMP—450. Last fiscal year output, 612,749 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT.—Shaker Screens.
Note—Successors to Majestic Coal & Coke Co.

ERNEST COAL COMPANY

General Office, Marion, Ill.
PR—H. J. Meehan, Johnston, Pa.
VP—W. H. Sandford, Tatton, Pa.
TR—E. O. Cramer, Johnston, Pa.
GM—John C. Cosgrove, Johnston, Pa.
GS—R. B. Mitchell, Marion, Ill.
ASST GS—Harry Woods, Marion, Ill.
PA—H. W. Ragel, Marion, Ill.
CE—F. T. Fitzharris, Johnston, Pa.
EM—E. H. Elder, Marion, Ill.
EE—S. J. Burgess, Marion, Ill.
SCO—Franco Stores Co., Buyer, E. A. Johnston, Marion, Ill.
SA—Cosgrove & Co., Old Colony Bldg., Chicago, Ill.

Franco No. 1 Mine; Shaft; No. 6 Seam, 110 in. thick.
PO—Johnston City, Ill.; SP—Same; CTY—Williamson; RR—C. B. & Q.
MS—R. H. Schull, Johnston City, Ill.
S of H—Mules, electric loco. Track gage 42 inches.
S of M—Chain breast and shortwall machs.
PP—Power purchased. Transformer 33,000 to 2,200 volts A. C., M. G. set, 200 and 175 K. W., 250 volts D. C., 3 fire tube boilers, total 375 H. P.
EMP—275. Last years tonnage 400,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT.—Shaker Screens.

Franco No. 2 Mine; Shaft; No. 6 Seam, 84 in. thick.
PO—Marion, Ill.; SP—Same; CTY—Williamson; RR—M. & E.
MS—B. H. Schull, Johnston City, Ill.
S of H—Mules and 4 trolley pole type locos. Track gage 36 in.
S of M—12 chain breast machs.
PP—4 return tubular boilers, total 600 H. P., 1—150 K. W. Gen. unit, 250 volts D. C., 6 pumps.
EMP—200.
SIZES SHIPT—Run of Mine, Nut, Egg, Lump.
PREP. EQUIPT.—Shaker Screens.
NOTE—This mine formerly the Marion Pittsburgh Coal Co.

FAIRBURY COAL COMPANY.

General Office, Fairbury, Ill.
PR—William Morris, Fairbury, Ill.
VP—Wm. C. Morris, Fairbury, Ill.
TR—M. A. Morris, " "
GM—M. A. Morris, Fairbury, Ill.
PA—M. A. Morris, " "

Fairbury Mine; Shaft; No. 6 Seam, 66 in. thick.
PO—Fairbury, Ill.; SP—Same; CTY—Livingston; RR—T. P. & W.
S of H—Mules and gasoline loco.
S of M—Hand.
PP—4 pumps.
EMP—45. Daily tonnage 150.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT.—Shaker Screens.

FALLON COAL MINES COMPANY

General Office, 427 Shearer Bldg., Bay City, Mich.
PR—C. G. Olmstead, Midland, Mich.
VP—Albert W. Black, Bay City, Mich.
TR—Samuel Meister, Bay City, Mich.
GM—Albert W. Black, Bay City, Mich.
GS—Thomas C. Wright, O'Fallon, Ill.
PA—H. W. Luce, O'Fallon, Ill.
CE—R. G. Read, Fisher Bldg., Chicago, Ill.
SA—Bruce Schram, Grand Rapids, Mich.

O'Fallon Mine; Shaft; Seam 102 inches thick.
PO—O'Fallon, Ill.; SP—Same; CTY—St. Clair; RR—B. & O.
S of H—Mules. Track gage 42 in.
S of M—Electric machs.
PP—Power purchased. Transformers, M. G. Sets, 250 volts D. C., 2 pumps.
EMP—40. Last years tonnage 15,586.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT.—Conveyor and Bar Screens.

FORT DEARBORN COAL CO.

General Office, Benton, Ill.
PR—F. H. Wykes, Benton, Ill.
VP—John A. Logan, Benton, Ill.
TB—John A. Logan, Benton, Ill.
GS—John C. Swafford, De Soto, Ill.

Jackson-Peacock Mine; Slope; No. 6 Seam, 84 in. thick.
PO—De Soto, Ill.; SP—Same; CTY—Jackson; RR—1. C.
MS—Fred Laughron, De Soto, Ill.
S of H—Mules. Track gage 30 in.
S of M—Hand.
PP—1 40 H. P. fire tube boiler.
NOTE—Formerly operated by the Benton Big Muddy Coal Co.

FRANKLIN COAL & COKE CO.

General Office, McCormick Bldg., Chicago, Ill.
PR—J. L. Mitchell, Royalton, Ill.
VP—Bryan G. Tighe, Chicago, Ill.
TR—Chas. Newton, Chicago, Ill.
GM—J. L. Mitchell, Royalton, Ill.
EM—William Haverkamp, Royalton, Ill.
EE—Henry Kinsman, Royalton, Ill.
SCO—Franklin Supply Co., Royalton, Ill.
SA—Bickett Coal & Coke Co., Chicago, Ill.

North Mine; Shaft; No. 6 Seam, 103 in. thick.
PO—Royalton, Ill.; SP—Same; CTY—Franklin; RR—Mo. Pacific, I. C., C. B. & Q.
MS—Ed. Nicholson, Royalton, Ill.
SM—Jos. Kraft, Royalton, Ill.
S of H—Mules, 10 trolley pole type and 1 storage battery locos. Track gage, 42 in.

S of M—18 chain breast type and 5 shortwall machs.
PP—Power purchased, transformer 2300-275 volts A. C., motor gen. sets, 2 200 K. W., 250-275 volts D. C., 5 water tube boilers, 1250 H. P., 4 pumps.
EMP—550. Last fiscal year output, 605,292 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Lump.
PREP. EQUIPT.—Shaker Screens, Picking Tables, Loading Booms.

South Mine; Shaft; No. 6 Seam, 108 in. thick.
PO—Royalton, Ill.; SP—Same; CTY—Franklin; RR—Mo. Pacific, I. C., C. B. & Q.
S of H—Mules, 1 trolley pole type and 2 combination locos. Track gage, 42 in.
S of M—1 chain breast type mach.
PP—Power purchased, transformer 2300-275 volts A. C., 1 300 K. W., motor gen. sets, 250-275 volts D. C., 2 fire tube boilers, 100 H. P., 5 pumps.
EMP—140. Last fiscal year output, 70,083 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT.—Shaker Screens.

FRANKLIN COUNTY MINING COMPANY.

General Office, Benton, Ill.
PR—J. M. Seymour, Benton, Ill.
VP—Farwell Gascolgne, Chicago, Ill.
TR—Robt. R. Ward, Benton, Ill.
GM—J. M. Seymour, " "
GS—J. M. Seymour, " "
PA—J. M. Seymour, " "
EM—Charles Mantz, " "
SA—Great West Coal & Lumber Co., Chicago, Ill.

Franklin Mine; Shaft; No. 6 Seam; 102 in. thick.
PO—Benton, Ill.; SP—Same; CTY—Franklin; RR—1. C. & C. and E. I. MS—T. A. Carrabur, Benton, Ill.
S of H—Mules and 6 storage battery locos. Track gage 42 in.
S of M—18 shortwall machs.
PP—Power purchased. Transformer 2,300 to 250 volts A. C., M. G. Set, 250 volts D. C., 2 water tube boilers, total 800 H. P., 4 pumps.
EMP—350. Last years tonnage 340,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Egg, Lump.
PREP. EQUIPT.—Shaker Screens, Picking Tables.

FREENEY COAL MINING COMPANY

General Office, 809-10 Fisher Bldg., Chicago, Ill.
PR—J. W. McElvain, Chicago, Ill.
VP—C. H. Hoy, Chicago, Ill.
TR—J. Wm. McElvain, Herrin, Ill.
GM—C. H. Hoy, Chicago, Ill.
GS—Elvis Skages, Herrin, Ill.
PA—Elvis Skages, Herrin, Ill.
EM—Pfeiffer & Maltons, Herrin, Ill.
EE—Thomas Thornton, Herrin, Ill.
SCO—Yuill Bros. Merc. Co., Buyer, J. H. Yuill, Herrin, Ill.
SA—McElvain-Hoy Coal Co., Chicago, Ill.

Franklin Mine; Shaft; No. 6 Seam, 96 in. thick.
PO—Herrin, Ill.; SP—Same; CTY—Williamson; RR—C. B. & Q., I. C. & Franklin.

S of H—Mules and electric loco. Track gage 42 inches.
S of M—Hand, comp. air and shortwall machs.
PP—2 fire tube and 2 water tube boilers, total 1,035 H. P., 2 (100 K. W. and 150 K. W.) gen. units, 250 volts D. C.
EMP—275. Last years tonnage, 317,573.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT.—Revolving and Shaker Screens.

FOLLERTON COAL CO.

General Office, Belleville, Ill.
PR—Jos. Randle, Belleville, Ill.
TR—Oswald Bollman, " "
GM—Charles H. Starkey, Belleville, Ill.
GS—Jos. Randle, " "
PA—Oswald Bollman, " "
CE—Levi Siddoll, Belleville, Ill.
Sales Agent—Miller Coal and Coke Co., St. Louis, Mo.

Burdette Mine; Shaft; No. 6 Seam, 6 to 7 ft. thick.
PO—Belleville, Ill.; SP—Same; CTY—St. Clair; RR—L. & N.
MS—C. H. Starkey, Belleville, Ill.
S of H—Mules. Track gage, 24 in.
S of M—Hand.
PP—2 Return tubular boilers, total 180 H. P., 3 pumps.
EMP—70. Daily tonnage 500.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
PREP. EQUIPT.—Shaker Screen.

G. & J COAL COMPANY

General Office, Seneca, Ill.
No. 1 Mine; Shaft; No. 2 Seam, 42 in. thick.
PO—Seneca, Ill.; SP—Same; CTY—La Salle; RR—C. R. I. & P.
No report.

GALLATIN COAL & COKE COMPANY

General Office, Equality, Ill.
PR—W. B. Tapper, Fisher Bldg., Chicago, Ill.
VP—W. S. Walker, Syndicate Trust Bldg., St. Louis, Mo.
TR—W. R. Tapper, Fisher Bldg., Chicago, Ill.
GM—W. S. Walker, Syndicate Trust Bldg., St. Louis, Mo.
GS—W. H. Stricklin, Equality, Ill.
PA—C. H. Guard, " "
EE—Iver Crages, Equality, Ill.
SCO—General Supply Store, Buyer, N. L. Shockney, Equality, Ill.
SA—The Farley Hopkins Co., Fisher Bldg., Chicago, Ill.

Gallatin Mine; Shaft; No. 5 Seam, 56 in. thick.
PO—Equality, Ill. SP—Same. CTY—Gallatin; RR—L. & N.
S of H—10 mules, 2 elec. locos. Track gage 40 inches.
S of M—7 shortwall machs.
PP—4 return tubular boilers, gen. units, 5 pumps.
EMP—150. Daily tonnage 800.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT.—Shaker Screens.

GARTSIDE COAL CO.

General Office, St. Louis, Mo.
PR—Robert A. Niggeman, St. Louis, Mo.
VP—Edgar G. Niggeman, St. Louis, Mo.
TR—Robert A. Niggeman, St. Louis, Mo.
GM—Wm. J. Niggeman, St. Louis, Mo.
GS—Frank Hattman, Murphysboro, Ill.

No. 4 Mine; Shaft; No. 1 Seam, 70 in. thick.
PO—Murphysboro, Ill.; SP—Same; CTY—Jackson; RR—M. & O., and I. C.
S of H—Mules and comp. air loco. Track gage, 32 in.
S of M—7 comp air machs.
PP—6 fire tube boilers, 430 H. P., 6 pumps.
EMP—110. Last fiscal year output, 90,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT.—Shaker Screens.
(Old information.)

GENERAL COAL & MINING CO.

General Office, Syndicate Trust Bldg., St. Louis, Mo.
PR—Ernest L. May, St. Louis, Mo.
VP—H. P. Dreimeyer, East St. Louis, Ill.
TR—C. F. Waters, St. Louis, Mo.
GS—G. O. Grainger, Belleville, Ill.
PA—C. F. Waters, St. Louis, Mo.

St. Clair Mine; Shaft; No. 7 Seam.
PO—Freeburg, Ill.; SP—Same; CTY—St. Clair; RR—Ill. Central.
S of H—Mules. Track gage 24 inches.
S of M—Hand.
PP—1 water tube boiler.
EMP—50. Daily tonnage 400.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT.—Bar Screens, Shaker Screens.
NOTE—Formerly operated by Jack Run Coal Company.

GERMAN COAL COMPANY

Now Leitner Coal Co.

GILLESPIE COAL COMPANY

General Office, 1407 Boatmen's Bank Bldg., St. Louis, Mo.
PR—John Henderson, St. Louis, Mo.
TR—V. M. Hodson, St. Louis, Mo.
GM—C. J. Sandoe, St. Louis, Mo.
GS—G. E. Urbain, Gillespie, Ill.
PA—C. J. Sandoe, St. Louis, Mo.
EM—H. W. Haapainen, St. Louis, Mo.
SA—West Virginia Coal Co. of Mo., 1407 Boatmen's Bank Bldg., St. Louis, Mo.

Little Dog Mine; Shaft; No. 6 Seam; 90 inches thick.
PO—Gillespie, Ill.; SP—Same; CTY—Macoupin; RR—1. L. S.
MS—Nat Farnsworth, Gillespie, Ill.
S of H—Mules and 1 8-ton loco. Track gage 30 in.
S of M—3 shortwall and 5 breast machs.
PP—Power purchased. Transformer 2300 to 440 volts A. C., M. G. Sets 250 volts D. C., 2 pumps.
EMP—178. Daily tonnage 850.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT.—Shaker Screens.

GLENDALE COAL & MINING COMPANY

General Office, Granite Bldg., St. Louis, Mo.
PR—P. Brandenburger, St. Louis, Mo.
TR—P. Brandenburger, " "
GM—P. Brandenburger, " "
GS—P. Brandenburger, Belleville, Ill.
PA—P. Brandenburger, 506 Granite Bldg., St. Louis, Mo.
SA—Glendale Coal & Mining Co., 506 Granite Bldg., St. Louis, Mo.

Glendale Mine; Shaft; No. 6 Bituminous Seam, 72 in. thick.
PO—Freeburg, Ill.; SP—Same; CTY—St. Clair; RR—Ill. Cent., Belleville Br.
S of H—Mules.
S of M—Hand.
PP—2 water tube boilers, total 175 H. P., 1 gen. unit.
EMP—40. Last years tonnage 61,117.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT.—Shaker Screens.

GOLDEN RULE COAL COMPANY.

General Office, Leuzburg, Ill.
PR—Otto Faibe, Leuzburg, Ill.
VP—William Prediger, Leuzburg, Ill.
TR—Joseph Prediger, Leuzburg, Ill.
GM—Ferdinand Frech, Leuzburg, Ill.
PA—Hy. Schneidwind, Leuzburg, Ill.
EM—W. H. Flood, Belleville, Ill.
Sales Agency, Missouri & Illinois Coal Co., Railway Exchange Bldg., St. Louis, Mo.

Golden Rule Mine; Shaft; 1st Seam, 82 in. thick.
PO—Leuzburg, Ill. SP—Same. CTY—St. Clair. RR—Ill. Central.
S of H—1 storage battery loco.; mules. Track gage 36 in.
S of M—Hand.
PP—2 return tubular boilers, total 250 H. P., 3 pumps.
EMP—78. Last years tonnage 59,905.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg and Lump.
PREP. EQUIPT.—Shaker Screens.

GROOM COAL CO.

General Office, Belleville, Ill.
PR—John Groom, Belleville, Ill.
VP—William Groom, Jr., Belleville, Ill.
TR—Mrs. E. A. Groom, Belleville, Ill.
GM—John Groom, Belleville, Ill.
GS—Robert Groom, Belleville, Ill.
PA—John & Robt. Groom, Belleville, Ill.
EM—John Groom, Belleville, Ill.
EE—Ollie Groom, Belleville, Ill.

Richland Mine; Shaft; No. 6 Seam, 84 in. thick.
PO—Belleville, Ill.; SP—Same; CTY—Smithton; RR—Ill. Cent.
S of H—Mules and 2 trolley pole type locos. Track gage 24 inches.
S of M—Hand.
PP—2 fire tube boilers, 75 H. P., 250 volts D. C., 3 pumps.
EMP—75. Last years tonnage 62,615.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT.—Shaker Screens and Picking Tabls.

GROVELAND COAL MINING CO.

General Office, McCormick Bldg., Chicago, Ill.
PR—Don. R. Sebastian, Chicago, Ill.
VP—Clifford Off. Chicago, Ill.
TR—Chas. Newton, Chicago, Ill.
GS—Chas. F. Sherman, Hippodrome Bldg., Peoria, Ill.
PA—Don. R. Sebastian, Chicago, Ill.
EM—Harry Beasley, Peoria, Ill.
EE—N. Godar, Peoria, Ill.
SA—Bickett Coal & Coke Co., McCormick Bldg., Chicago, Ill.

(Continued on Next Page)

Groveland Coal Mining Co.—Cont.

Groveland No. 2 Mine; Shaft: No. 5 Seam, 50 in. thick.
 PO—Peoria, Lock Box 32, Ill.; SP—Same; CTY—Tazewell; RR—P. & P. U.
 MS—Chas. F. Sherman, Peoria, Ill.
 S of H—Mules and 5-6 ton elec. locos. Track gage 36 in.
 S of M—18 shortwall and 2 breast machs.
 PP—Power purchased. Transformer, 13,200 to 440 220 volts A. C. 3 150 K. W. M. G. Sets, 275-250 volts D. C., 2 return tubular boilers, 8 pumps.
 EMP—125. Last years tonnage 257,186.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens

GUEST COAL COMPANY

General Office, Belleville, Ill.
 Oak Hill Mine.
 PO—Belleville, Ill.; SP—Same; CTY—St. Clair; RR—S.
 No report.

HAER WASHED COAL CO.

General Office, Chicago, Ill.
 GM—M. J. Mauermann, Chicago, Ill.
 GS—John McGonaghl, Carville, Ill.
 PA—M. J. Mauermann, Chicago, Ill.
 Haer No. 3 Mine; Shaft: No. 6 Seam, 84-108 in. thick.
 PO—Carville, Ill. SP—Herrin, CTY—Williamson. RR—I. C. & I. M. & S. Herrin Southern Br.
 S of H—Mules and 2 elec. locos. Track gage 36 inches.
 S of M—Hand.
 PP—4 return tube boilers, total 300 H. P., 1 generator, 5 pumps.
 EMP—250.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables.

HARRIS COAL COMPANY

PR—Robert Harris, Carriers Mills, Ill.
 TR—B. E. Harris, " "
 GM—B. E. Harris, " "
 PA—B. E. Harris, " "
 Harris Mine; Slope: No. 5 Seam, 60 in. thick.
 PO—Carriers Mills, Ill.; SP—Same; CTY—Saline; RR—Big Four.
 PP—220 volts A. C., 3 phase, 60 cycles.
 Daily output, 100 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut and Lump.
 Old Information

HARRIS, THOS. R.

General Office, 1314 Syndicate Trust Bldg., St. Louis, Mo.
 New Douglas Mine.
 PO—New Douglas, Ill.; SP—Same; CTY—Madison; RR—T. St. L. & W.
 No report

HARRISBURG COAL MINING COMPANY.

General Office, Harrisburg, Ill.
 PR—T. H. Cochran, Chicago, Ill.
 VP—J. H. Crawford, Harrisburg, Ill.
 SECY—W. J. Brennan, Chicago, Ill.
 TG—T. H. Cochran, Chicago, Ill.
 GM—J. H. Crawford, Harrisburg, Ill.
 GS—Sam Deacon, Harrisburg, Ill.
 PA—E. M. Collier, Harrisburg, Ill.
 TE—Allen & Garcia Co., Chicago, Ill.
 SA—Endor Coal & Coke Co., Chicago, Illinois.
 No. 1 Mine; Shaft: No. 5 Seam, 72 in. thick.
 PO—Harrisburg, Ill.; SP—Same; CTY—Saline; RR—C. C. & St. L.
 S of H—Mules and elec. locos. Track gage 36 in.
 S of M—Room and Pillar method.
 PP—Purchased power.
 EMP—200. Daily tonnage 1,000.
 SIZES SHIPT—Run of Mine, Lump, Egg and Nut.
 PREP. EQUIPT—Shaker Screens.
 NOTE—Formerly operated by the Elder-Bixler Coal Company

HARRISBURG COLLIERY COMPANY.

General Office, Chicago, Ill.
 PR—E. D. Kilmer, Chicago, Ill.
 VP—E. G. Case, Chicago, Ill.
 TR—E. G. Horner, " "
 GM—H. B. Kilmer, Harrisburg, Ill.
 GS—Walter Stump, Harco, Ill.
 PA—W. B. Fogg, Chicago, Ill.
 EE—Byron Somers, Chicago, Ill.
 SA—P. D. Kilmer, 750 Old Colony Bldg., Chicago, Ill.
 Harco Mine; Shaft: No. 5 Seam, 78 in. thick.
 PO—Harco, Ill. SP—Harrisburg, Ill. CTY—Saline. RR—Big Four.
 S of H—30 elec. locos. Track gage 42 in.
 S of M—22 elec. machs.
 PP—10 return tubular boilers, total 1500 H. P., 8 pumps.
 EMP—550. Last years tonnage 650,000.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

HARRISBURG FUEL CO.

General Office, Harrisburg, Ill.
 PR—John W. Gray, Marion, Ill.
 TR—R. A. Parke, Marion, Ill.
 GM—John W. Gray, Marion, Ill.
 GS—D. H. Sullivan, Harrisburg, Ill.
 PA—R. A. Parke, Harrisburg, Ill.
 EM—Chas. Sheretz, Harrisburg, Ill.
 EE—D. H. Sullivan, Harrisburg, Ill.
 SA—L. G. Binkley & Co., Chicago, Ill.
 Harrisburg Mine; Shaft: No. 7 Seam, 58 in. thick.
 PO—Harrisburg, Ill.; SP—Same; CTY—Saline; RR—Big Four.
 S of H—2 mules, rope and 1 storage battery loco. Track gage, 42 in.
 S of M—3 shortwall machs.
 PP—Power purchased, transformer 2300-220 volts A. C., 1 pump.
 EMP—15. Last years tonnage 26,621.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

HEATO COAL COMPANY

General Office, Carrier Mills, Ill.
 PR—G. G. Moore, Carrier Mills, Ill.
 VP—P. H. Block, Muscatine, Ia.
 TR—H. C. Henderson, Carrier Mills, Ill.
 GM—H. C. Henderson, Carrier Mills, Ill.
 GS—H. C. Henderson, Carrier Mills, Ill.
 PA—H. C. Henderson, Carrier Mills, Ill.
 Heato No. 1 Mine; Slope: No. 7 Seam, 58 to 60 in. thick.
 PO—Carrier Mills, Ill.; SP—Same; CTY—Saline; RR—C. R. I. & P.
 MS—G. G. Moore, Carrier Mills, Ill.
 S of H—Mules.
 S of M—Shortwall mach.
 PP—Power purchased, transformer 2309 to 220 volts A. C., 2 pumps.
 EMP—20. Last years tonnage 26,000.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Picking Tables and Crusher.

HENDERSON-WALLACE COAL CO.

General Office, Marion, Ill.
 PR—Geo. A. Wallace, Marion, Ill.
 VP—John Henderson, St. Louis, Mo.
 TR—John Wallace, Marion, Ill.
 GM—Geo. A. Wallace, Marion, Ill.
 GS—John K. Wallace, Marion, Ill.
 PA—Geo. A. Wallace, Marion, Ill.
 CE—Cyrus Davis, Marion, Ill.
 EE—Thomas Lindick, Marion, Ill.
 SCQ—Wallace Brothers, Marion, Ill.; Buyer, George A. Wallace, Marion, Ill.
 SA—West Virginia Coal Co., St. Louis, Mo.
 Henderson Mine; Shaft: No. 6 Seam, 72-102 in. thick.
 PO—Marion, Ill.; SP—Same; CTY—Williamson; RR—Mo. P. R. R., I. C. and C. & E. I.
 S of H—Mules and trolley pole type locos. Track gage, 42 in.
 S of M—5 chain breast type machs.
 PP—Power purchased, 2 150 H. P. water tube boilers, 250 volts D. C., 2 pumps.
 EMP—200. Daily tonnage 1250.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.
 Old Information

HICKORY HILL COAL COMPANY.

General Office, Equality, Ill.
 PR—W. R. Tapper, Fisher Bldg., Chicago, Ill.
 VP—W. A. Walker, St. Louis, Mo.
 TR—W. R. Tapper, Chicago, Ill.
 GM—W. A. Walker, St. Louis, Mo.
 GS—W. H. Stricklin, Equality, Ill.
 PA—F. H. Guard, Equality, Ill.
 SA—The Parley Honkins Co., Sales Mer., W. S. Walker, St. Louis, Mo.
 Hickory Hill Mine, Stone, No. 5 Seam, 56 to 66 ins. thick.
 PO—Equality, Ill.; SP—Dumppis; RR—CTY—Gallatin; RR—L. & N., Shown-on Branch.
 MS—Noah Kerstern, Equality, Ill.
 S of H—Mules, rope and 2 elec. locos. Track gage 42 inches.
 S of M—6 elec. machs.
 PP—2 water tube boilers, total 250 H. P. 150 volts D. C., 1 pump.
 EMP—75. Daily tonnage 850.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

HICKORY HILL COAL COMPANY.

General Office, Equality, Ill.
 PR—W. R. Tapper, Fisher Bldg., Chicago, Ill.
 VP—W. A. Walker, St. Louis, Mo.
 TR—W. R. Tapper, Chicago, Ill.
 GM—W. A. Walker, St. Louis, Mo.
 GS—W. H. Stricklin, Equality, Ill.
 PA—F. H. Guard, Equality, Ill.
 SA—The Parley Honkins Co., Sales Mer., W. S. Walker, St. Louis, Mo.
 Hickory Hill Mine, Stone, No. 5 Seam, 56 to 66 ins. thick.
 PO—Equality, Ill.; SP—Dumppis; RR—CTY—Gallatin; RR—L. & N., Shown-on Branch.
 MS—Noah Kerstern, Equality, Ill.
 S of H—Mules, rope and 2 elec. locos. Track gage 42 inches.
 S of M—6 elec. machs.
 PP—2 water tube boilers, total 250 H. P. 150 volts D. C., 1 pump.
 EMP—75. Daily tonnage 850.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

HIGBEE COAL COMPANY

General Office, Weeping Willows Mine, No. 2 Weeping Mine.
 PO—Weeping Willows; SP—Same; CTY—Stark; RR—C. B. & Q. C. R. I. & P.
 No report

HIGHLAND COAL CO

General Office, K of C Bldg., Belleville, Ill.
 PR—Anthony F. Jakoubek, Belleville, Illinois.
 VP—Christian Neff, 307 S. 6th St., Belleville, Ill.
 TR—Human Neff, 307 S. 16th St., Belleville, Ill.
 GM—Anthony F. Jakoubek, K of C Bldg., Belleville, Ill.
 GS—Anthony F. Jakoubek, K of C Bldg., Belleville, Ill.
 PA—Anthony F. Jakoubek, K of C Bldg., Belleville, Ill.
 CE—Hugh W. Flood, K of C Bldg., Belleville, Ill.
 SA—Lake & Export Coal Corporation, St. Louis, Mo., and Chicago, Ill.
 Highland Mine; Shaft: No. 6 Seam, 26 in. thick.
 PO—Belleville, Ill.; SP—Same; CTY—St. Clair; RR—L. & N.
 MS—Aug. Crosspeter, Belleville, Ill.
 S of H—Mules, Track gage 21 in.
 S of M—Hand.
 PP—2-100 H. P. water tube boilers, 2 pumps.
 EMP—44. Last years tonnage 37,500.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens

West Belleville Mine; Shaft: No. 6 Seam, 96 inches thick.
 PO—Belleville, Ill.; SP—Belleville, Ill. CTY—St. Clair; RR—Southern.
 MS—Peter Noll, Belleville, Ill.
 S of H—Mules. Track gage 21 in.
 S of M—Hand.
 PP—2-100 H. P. water tube boilers, 2 pumps.
 EMP—39. Last years tonnage 39,500.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Shaker Screens.

HILLSBORO COAL COMPANY.

General Office, 1123 School St., Hillsboro, Ill.
 PR—Amos Miller, Hillsboro, Ill.
 VP—J. M. Whitehead, Jasonville, Wis.
 GS—Rice Miller, Hillsboro, Ill.
 TR—Rice Miller, " "
 GM—Rice Miller, " "
 PA—Rice Miller, " "
 CE—Allen & Garcia Co., Chicago, Ill.
 EM—W. H. Smith, Hillsboro, Ill.
 EE—H. A. Clutfelder, Hillsboro, Ill.
 Hillsboro Mine; Shaft: No. 6 Seam; 84 to 96 in. thick.
 PO—Hillsboro, Ill.; SP—Same; CTY—Montgomery; RR—C. C. St. L. & W. & C. & I. R.
 MS—W. H. Smith, Hillsboro, Ill.
 S of H—Mules and trolley pole type locos.
 S of M—10 chain breast type machs.
 PP—5 water tube boilers, 150 H. P., 1 150 K. W., 1 100 K. W. gen units, 250 volts D. C., 4 pumps.
 EMP—85. Last years tonnage 260,000.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms

HOFFMAN, JOHN A.

General Office, 1525 Main St., Peoria, Ill.
 PO—Peoria, Ill.; SP—Same; CTY—Peoria; RR—C. B. & Q.
 No report

HYDRAULIC PRESS BRICK COMPANY.

General Office, Central National Bank Bldg., St. Louis, Mo.
 PR—George A. Bess, St. Louis, Mo.
 TR—George F. Baker, " "
 GM—F. W. Miles, St. Louis, Mo.
 GS—P. S. Trowbridge, St. Louis, Mo.
 PA—F. W. Miles, St. Louis, Mo.
 CE—F. W. Miles, St. Louis, Mo.
 EM—N. H. Tinsell, Davenport, Ia.
 SCQ—Address the Company Buyer, C. W. Irwin, Davenport, Ia.
 SA—C. W. Irwin, Davenport, Ia.
 Hydraulic Press Brick Mine; Shaft: No. 6 Seam, 72 inches thick.
 PO—Collinsville, Ill.; SP—Same; CTY—Madison; RR—Rock Island and So. MS—Thomas Miller, Collinsville, Ill.
 S of H—Mules. Track gage 24 inches.
 S of M—Chain breast type machs.
 PP—3 fire tube boilers, 150 H. P., 110 volts D. C. for light only, 2 pumps.
 EMP—10. Daily tonnage 50.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.
 Mine coal for own use.

ILLINOIS COAL & COKE CORP.

General Office, 37 West Van Buren St., Chicago, Ill.
 PR—Albert J. Nason, Chicago, Ill.
 VP—J. D. Zook, Chicago, Ill.
 GS—Garner Williams, Springfield, Ill.
 PA—A. P. Anderson, Chicago, Ill.
 ME—E. W. Smith, Chicago, Ill.
 SA—Nason Coal Company, 37 West Van Buren St., Chicago, Ill.
 Empire No. 1 Mine; Shaft: No. 5 Seam, 70 in. thick.
 MS—Matt Hick Springfield, Ill.
 PO—Springfield, Ill.; SP—Same; CTY—Sangamon; RR—C. & A. C. P. & St. L.
 S of H—Mules and 4 trolley pole type locos. Track gage 36 in.
 S of M—Hand

PP—Power purchased. Transformer, 2,300 volts, M. G. Sets, 1 200 K. W., 275 volts D. C., 3 fire tube boilers, 125 H. P., 1 100 K. W. and 1 62½ K. W. gen units, 6 pumps.
 EMP—240. Daily tonnage 1,800.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.
 Empire No. 2 Mine; Shaft: No. 6 Seam, 84 in. thick.
 PO—Auburn, Ill.; SP—Same; CTY—Sangamon; RR—C. & A.
 S of H—Mules and 2 trolley pole type locos. Track gage 36 in.
 S of M—4 chain breast type machs.
 PP—4 fire tube boilers, 125 H. P., 1 175 K. W. D. C. and 1—250 K. W. D. C. gen. units, 275 volts D. C., 4 pumps.
 EMP—125.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.
 Empire No. 3 Mine; Shaft: No. 6 Seam, 78 in. thick.
 PO—Virden, Ill.; SP—Same; CTY—Macopin; RR—C. & A. C. B. & Q. and C. & N. W.
 MS—Mike Holte, Virden, Ill.
 S of H—Mules and 3 trolley pole type locos. Track gage 36 inches.
 S of M—12 chain breast type machs.
 PP—7 fire tube boilers, 125 H. P., 1 175 K. W. D. C., 1—250 K. W. D. C. gen. units, 275 volts D. C., 4 pumps.
 EMP—247. Last years tonnage 126,971.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

Empire No. 4 Mine; Shaft: No. 6 Seam, 74 in. thick.
 PO—Girard, Ill.; SP—Same; CTY—Macopin; RR—C. & A. C. B. & Q. and C. & N. W.
 MS—Thomas H. Green, Girard, Ill.
 S of H—Mules and 3 trolley pole type locos. Track gage 31 inches.
 S of M—8 shortwall machs.
 PP—Power purchased. Transformer, 2,300 to 275 volts A. C., 5 fire tube boilers, 125 H. P., 2 100 K. W. gen units, 275 volts D. C., 3 pumps.
 EMP—311. Last years tonnage 76,824.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.
 Note: Successors to Pittsburgh Coal Co.

ILLINOIS FUEL CO., THE

General Office, Springfield, Ill.
 PR—W. S. McMahon, Bristol, Conn.
 TR—W. V. Stockton, Sparta, Ill.
 GM—W. V. Stockton, " "
 PA—W. V. Stockton, " "
 GS—John Waterbottom, " "
 SECY—J. C. Newman, " "

Mine No. 1, Shaft: No. 6 Seam, 6 to 6½ ft. thick.
 PO—Sparta, Ill.; SP—Same; RR—V. R. R. and Mo. & A. I.
 S of H—17 mules and 2 trolley pole type locos. Track gage, 42 in.
 S of M—10 chain breast type machs.
 PP—5 return tubular boilers, 800 H. P.
 EMP—250. Last years tonnage 210,503.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens

ILLINOIS THIRD VEIN COAL CO

General Office, Ladd, Ill.
 PR—G. E. Taylor, Emp. La.
 TR—C. F. Sherrard, Ladd, Ill.
 GM—C. F. Sherrard, Ladd, Ill.
 GS—Mart Lunn, Ladd, Ill.
 PA—C. F. Sherrard, Ladd, Ill.

No. 1 Mine; Shaft: No. 2 Seam, 42 in. thick.
 PO—Ladd, Ill.; SP—Same; CTY—Bureau; RR—C. M. & St. P. C. B. & Q. C. I. & S.
 S of H—Mules and 2 5 ton trolley pole type locos.
 S of M—1 electric puncher and 7 long wall machs.
 PP—Power purchased. M. G. sets, 250 K. W. and rotary converters, 225 volts D. C. to 150 H. P. water tube boiler, 4 pumps.
 EMP—400. Last fiscal year output, 227,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Washeries

ILLINOIS SIXTH VEIN COAL COMPANY

General Office, Pinckneyville, Ill.
 PR—Geo. F. Mead, Pinckneyville, Ill.
 GM—Geo. F. Mead, Pinckneyville, Ill.
 Illinois Sixth Vein Mine; Shaft, No. 6 Seam, 72 inches thick.
 PO—Pinckneyville, Ill.; SP—Same; CTY—Perry; RR—W. C. W., I. C., Frisco.

(Continued on Next Page)

Illinois Sixth Vein Coal Co.—Cont.

MS—John W. Howells, Pinckneyville, Ill.
S of H—Mules Track gage 26 inches.
S of M—Chain breast type and shortwall machines.
PP—2 fire tube boiler 175 H. P., 75 K. W. gen. units 250 volts D. C.
EMP—47. Daily output, 300 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.
Old Information

ILLINOIS ZINC COMPANY

General Office, Peru, Ill.
PR—B. G. Wells, 700 Chestnut St., Philadelphia, Pa.
VP—A. Green, New York, N. Y.
TR—B. G. Wells, 700 Chestnut St., Philadelphia, Pa.
GM—E. H. Wolf, Peru, Ill.
PA—F. G. Leahy, Peru, Ill.
EM—J. A. Ede, Peru, Ill.

No. 1 Mine; Shaft; No. 2 Seam, 39 in. thick.
PO—Peru, Ill.; SP—Deer Park, Ill.; CTY—La Salle; RR—C. B. & Q.
MS—J. A. Ede, Peru, Ill.
S of H—Mules and rope, steam loco. Track gage 36 in.
S of M—Hand.
PP—2 return tubular boilers, total 200 H. P.
EMP—81. Last fiscal year output 51,218 tons.
SIZES SHIPT—Run of Mine, Slack.
PREP. EQUIPT—Bar Screens.

No. 3 Mine; Shaft; No. 2 Seam, 40 in. thick.
PO—Peru, Ill.; SP—Same; CTY—La Salle; RR—Rock Island, C. B. & Q.
MS—J. A. Ede, Peru, Ill.
S of H—Mules, 2 storage battery locos. Track gage 36 in.
S of M—Hand.
PP—2 return tubular boilers, total 185 H. P., Gen. units, 220 volts D. C.
EMP—136. Last fiscal year output 79,155 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.
Old Information.

INDIANA & ILLINOIS COAL CORP.

General Office, 37 W. Van Buren St., Chicago, Ill.
PR—T. C. Keller, Chicago, Ill.
VP—A. B. Steffen, Chicago, Ill.
GM—T. C. Keller, Chicago, Ill.
CS—H. C. Perry, Hillsboro, Ill.
PA—T. P. Keller, Chicago, Ill.
EM—Preston Crowell, Nokomis, Ill.
Additional Information on Page 325.

No. 10 Mine; Shaft; No. 6 Seam, 72 in. thick.
PO—Nokomis, Ill.; SP—Same; CTY—Montgomery; RR—C. & E. I., Big Four.
MS—John J. Fries, Nokomis, Ill.
S of H—17 trolley pole type locos.
S of M—27 chain breast type machs.
PP—Water tube boiler, total 60 H. P., 250 volts D. C., 3 pumps. Purchase power.
EMP—751. Last fiscal year output, 658,376 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.
No. 11 Mine; Shaft; No. 6 Seam, 72 in. thick.
PO—Hillsboro, Ill.; SP—Same; CTY—Montgomery; RR—C. & E. I., Big Four.
MS—W. C. Phillips, Hillsboro, Ill.
S of H—2 trolley pole type locos. Track gage 36 in.
S of M—17 chain breast machs.
PP—3 return tubular boilers, total 450 H. P., gen. units, 250 volts D. C., 4 pumps. Purchase power.
EMP—347. Last years tonnage 406,774.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

No. 12 Mine; Shaft; No. 6 Seam, 72 in. thick.
PO—Witt, Ill.; SP—Same; CTY—Montgomery; RR—C. & E. I., Big Four.
MS—James Scelto, Witt, Ill.
S of H—Mules, 3 trolley pole type locos. Track gage 30 in.
S of M—Chain breast type machs.
PP—5 return tubular boilers, total 750 H. P., 1 gen. unit, 250 volts D. C., 4 pumps.
EMP—283. Last fiscal year output, 221,636 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Bar Screens.

No. 14 Mine; Shaft; No. 8 Seam, 72 in. thick.
PO—Witt, Ill.; SP—Same; CTY—Montgomery; RR—C. & E. I., Big Four.
MS—Wm. T. Haywood, Witt, Ill.
S of H—11 trolley pole type locos. Track gage 42 in.

S of M—3 chain breast type machs.
PP—5 return tubular boilers, total 250 H. P., gen. units, 250 volts D. C., 5 pumps. Purchase power.
EMP—651. Last fiscal year output, 753,264 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

No. 15 Mine; Shaft; No. 6 Seam, 72 in. thick.
PO—Taylor Springs, Ill.; SP—Same; CTY—Montgomery; RR—C. & E. I., Big Four.
MS—Martin Tonner, Taylor Springs, Ill.
S of H—Mules, 6 trolley pole type locos. Track gage 48 in.
S of M—2 chain breast type and 10 shortwall machs.
PP—5 gen. units, 250 volts D. C., 3 pumps. Purchase power.
EMP—217. Last fiscal year output, 179,276 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

INTERNATIONAL COAL MINING COMPANY

Now Mutual Coal & Mining Co.
I. X. L. MINING COMPANY
General Office 606 Equitable Bldg., St. Louis, Mo.
No. 1 Mine.
PO—Edwardsville, Ill.; SP—Same; CTY—Madison RR—L. & M.
No report.

JACK RUN COAL COMPANY

Now being operated by the General Coal and Mining Co.

JACKSON COAL CO. (THE)
General Office, Connellsville, Pa.
PR—H. C. Hoffman, Connellsville, Pa.
VP—Jas. F. Scott, Connellsville, Pa.
TR—E. R. Floto, Connellsville, Pa.
GM—James F. Scott, Connellsville, Pa.
PA—C. G. Wagoner, Hallidayboro, Ill.
EM—John G. Gibson, Duquoin, Ill.
EE—A. R. Hill, Hallidayboro, Ill.
SCO—Muddy Valley Supply Co., Hallidayboro, Ill.; Buyer, E. S. Scott, Hallidayboro, Ill.
SA—The Jackson Coal Co., 1110 Fisher Bldg., Chicago, Ill.

Muddy Valley Mine; Shaft; No. 6 Seam, 96 in. thick.
PO—Hallidayboro, Ill.; SP—Same; CTY—Jackson; RR—Illinois Central.
MS—C. G. Wagoner, Hallidayboro, Ill.
S of H—Mules, rope and 6 storage battery locos. Track gage 36 inches.
S of M—Hand. 6 machs.
PP—5 fire tube boilers, 750 H. P., 2—150 K. W. generator, 250 volts D. C., 8 pumps.
EMP—4605. Last years tonnage 308,426.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Screens and Picking Booms.

JACKSON-PEACOCK COAL & MINING CO.
General Office, Benton, Ill.
PR—F. H. Wykes, Benton, Ill.
VP—H. M. Hall, 343 So. Dearborn St., Chicago, Ill.
TR—G. F. Stahmer, Chicago, Ill.
GS—Ed Laughson, De Soto, Ill.
SA—Fort Dearborn Coal Co., Chicago, Illinois.

Jackson-Peacock Mine; Shaft; No. 6 Seam, 108 in. thick.
PO—DeSoto, Ill.; SP—Same; CTY—Jackson; RR—Ill. Central.
S of H—Mules. Track gage 39½ in.
S of M—Hand.
PP—Power purchased, transformer, 23,000 to 2,300—220—110 volts A. C., 2 pumps.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Gravity Screens.

JEWEL COAL & MINING CO.
General Office, Du Quoin, Ill.
PR—W. S. Burris, Du Quoin, Ill.
VP—John M. Posperting, Boatman's Bank Bldg., St. Louis, Mo.
TR—R. S. Linzee, Du Quoin, Ill.
GM—L. D. Flavell, Du Quoin, Ill.
GS—W. S. Burris, Du Quoin, Ill.
PA—R. S. Linzee, Du Quoin, Ill.
CE—J. C. Gibson, Du Quoin, Ill.
SCO—Jewell Store Co. Buyer, Harry Dally, Du Quoin, Ill.
SA—Sterling Midland Coal Co., Chicago, Ill.

Jewel Mine; Shaft; No. 6 Seam, 84 in. thick.
PO—Du Quoin, Ill.; SP—Same; CTY—Perry; RR—I. C.
MS—L. D. Flavell, Du Quoin, Ill.
S of H—Mules and 1 storage battery motor. Track gage 36 in.
S of M—Hand and 3 shortwall machs.
PP—4 fire tube boilers, 475 H. P., 2 generators, 1—150, 1—27½ K. W., 250 volts D. C., 6 pumps.
EMP—197. Last years tonnage 186,621.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

JOHNSON CITY COAL COMPANY.

Now part of Old Ben Coal Corporation.

JOHNSON VALLEY COAL CO.
General Office, Middletown, Ill.
PR—Jerry C. Johnson, Fancy Prairie, Ill.
TR—C. C. Johnson, Fancy Prairie, Ill.
VP—Wm. Johnson, Fancy Prairie, Ill.
GM—H. C. Johnson, Fancy Prairie, Ill.
GS—H. C. Johnson, Fancy Prairie, Ill.
PA—H. C. Johnson, Fancy Prairie, Ill.
CE—H. C. Johnson, Fancy Prairie, Ill.
EM—H. C. Johnson, Fancy Prairie, Ill.

Johnson Valley Coal Mine; Shaft; No. 1 Seam, 60-72 in. thick.
PO—Middletown, Ill.; SP—Same; CTY—Menard; RR—C. & A.
S of H—Mules. Track gage, 26 in.
S of M—1 shortwall mach. and 1 comp. air puncher.
PP—1 boiler, 150 H. P., 75 K. W. gen. unit, 250 volts D. C., 1 pump.
EMP—14. Last fiscal year output, 8,000 tons.

SIZES SHIPT—Slack, Lump.
PREP. EQUIPT—Gravity Screens.

JOHNSTON CITY WASHED COAL CO.

General Office, McCormick Bldg., Chicago, Ill.
PR—P. A. Burton, Chicago, Ill.
TR—F. A. Burton, Chicago, Ill.
GM—J. M. Seymour, Benton, Ill.
GS—F. H. Seymour, Marion, Ill.
PA—F. H. Seymour, Marion, Ill.
SA—Burton Coal Co., Chicago, Ill.

White Ash Mine; Shaft; No. 6 Seam, 78 in. thick.
PO—White Ash, Ill.; SP—Johnston City, Ill.; CTY—Williamson; RR—C. & E. I., Mo. Pacific.
S of H—Mules and 3 trolley pole type locos. Track gage 37½ inches.
S of M—3 chain breast type and 1 shortwall mach., also solid work.
PP—5 fire tube boilers, 600 H. P., 1 200 K. W., 1 50 K. W. gen. units, 250 volts D. C., 10 pumps.
EMP—400. Last years tonnage 425,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker and Roller Screens.

JONES BROS. COAL CO.

PR—Charles Jones, Marissa, Ill.
VP—Wm. Jones, Marissa, Ill.
TR—Jonathan Jones, Sr., Marissa, Ill.
GM—Chas. Jones, Marissa, Ill.
GS—Wm. Jones, Marissa, Ill.
PA—Wm. Jones, Marissa, Ill.
SCO—Jones Bros. Store, Buyer, Walter Westwood, Marissa, Ill.

Eureka No. 1 Mine; Shaft; No. 6 Seam, 78 inches thick.
PO—Marissa, Ill.; SP—Same; CTY—St. Clair; RR—I. C.
SM—Wm. Jones, Marissa, Ill.
S of H—Mules, rope. Track gage 32 in.
S of M—Hand.
PP—1 fire tube boiler, 100 H. P., 2 pumps.
EMP—88.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Gravity Screens.

Eureka No. 2 Mine; Shaft; No. 6 Seam, 78 inches thick.
PO—Marissa, Ill.; SP—Same; CTY—Randolph; RR—I. C.
S of H—Mules and 2 gasoline locos. Track gage 36 inches.
S of M—Hand.
PP—1 150 H. P. fire tube boiler, 2 pumps.
EMP—120.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Revolving and Shaker Screens.

KANAWHA FUEL CO.

Now Old Abe Mining Co.

KERENS-DONNEWALD COAL COMPANY.
General Office, Twelfth St. and Lucas Ave., St. Louis, Mo.
PR—J. A. Jeffers, St. Louis, Mo.
VP—W. E. Drury, Champaign, Ill.
TR—J. A. Jeffers, St. Louis, Mo.
GM—J. A. Jeffers, St. Louis, Mo.
GS—Pat. Scanlon, Worden, Ill.
PA—J. A. Jeffers, St. Louis, Mo.
EE—R. Leonard, Worden, Ill.
SA—J. A. Jeffers, Twelfth St. and Lucas Ave., St. Louis, Mo.

K and D Mine; Shaft; No. 6 Seam, 80 inches thick.
PO—Worden, Ill.; SP—Same; CTY—Madison; RR—I. T. S., Wabash, L. & N.

S of H—Mules and trolley pole type locos. Track gage, 36 in.
S of M—8 chain breast type machs.
PP—1 fire tube boilers, total 600 H. P. Purchase power. Transformer 33000-2300 volts A. C., 1—100 K. W. M. G. set, 275 volts D. C., 5 pumps.
EMP—235. Daily output, 950 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

KLINGBEIL COAL COMPANY.

General Office, Petersburg, Ill.
PR—W. F. Klingbeil, Pittsburg, Ill.
TR—Ed. Klingbeil, Pittsburg, Ill.
GM—Ed. Klingbeil, Pittsburg, Ill.
GS—E. A. Klingbeil, Petersburg, Ill.

Klingbeil Mine; Shaft; No. 5 Seam, 72 inches thick.
PO—Pittsburg, Ill.; SP—Same; CTY—Menard; RR—Chicago & Alton.
S of H—Mules.
S of M—Hand.
PP—1 pump.
EMP—15. Daily tonnage 41.
SIZES SHIPT—Run of Mine, Slack.

KOLB COAL COMPANY.

General Office, 930 Boatmen's Bank Bldg., St. Louis, Mo.
PR—E. R. Hagist, Mascoutah, Ill.
VP—P. H. Sauter, St. Louis, Mo.
TR—Henry Huckle, Mascoutah, Ill.
GM—H. B. Wessel, St. Louis, Mo.
GS—William Hartman, St. Louis, Mo.
PA—E. Schubkegel, St. Louis, Mo.
EM—William Muser, New Athens, Ill.
SALES MGR.—H. B. Wessel, St. Louis, Missouri.

No. 1 Mine; Shaft; No. 6 Seam, 84 in. thick.
PO—Mascoutah, Ill. SP—Same. CTY—St. Clair, RR—L. & N.
MS—A. Bergadine, Mascoutah, Ill.
S of H—9 mules, 4 gasoline locos. Track gage 21 inches.
S of M—Hand.
PP—3 water tube boilers, 450 H. P.
EMP—173. Last fiscal year output, 230,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

No. 2 Mine; Shaft; No. 6 Seam, 84 in. thick.
PO—Mascoutah, Ill. SP—Same. CTY—St. Clair, RR—L. & N.
MS—John Kilian, Mascoutah, Ill.
S of M—Hand.
PP—4 return tubular boilers, total 500 H. P., 4 pumps.
EMP—300. Last fiscal year output 320,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

Fairbanks Mine; Shaft; No. 6 Seam, 84 in. thick.
PO—New Athens, Ill. SP—Same. CTY—St. Clair, RR—I. C.
MS—Theo. Legendre, New Athens, Ill.
S of H—Mules and 3 gasoline locos. Track gage, 30 in.
S of M—Hand.
PP—3 return tubular boilers, total 350 H. P., 3 pumps.
EMP—96. Last fiscal year output 90,000 tons.
SIZES SHIPT—Run of Mine, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

Vinegar Hill Mine; Shaft; No. 6 Seam.
PO—New Athens, Ill. SP—Same. CTY—St. Clair, RR—I. C.
S of H—Mules and 2 gasoline locos. Track gage, 30 in.
S of M—Hand.
PP—2 return tubular boilers, total 300 H. P., 3 pumps.
EMP—60. Last fiscal year output, 60,000 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Shaker Screens.

KUHN COALERY COMPANY

General Office, DuBois, Ill.
Bois Mine; Shaft; No. 6 Seam, 72 in. thick.
PO—DuBois, Ill.; SP—Same; CTY—Washington; RR—I. C.
No report.

LAKE ERIE MINING COMPANY

PR—G. A. Ditewig, Peoria, Ill.
TR—James F. McElwee, Peoria, Ill.
GM—G. A. Ditewig, Peoria, Ill.

Lake Erie Mine; Shaft; Seam, 48 in. thick.
PO—Peoria, Ill.; SP—Same; CTY—Tazewell; RR—P. P. & U., L. F. & W.
S of H—Mules and trolley pole type loco. Track gage 36 inches.
S of M—Hand.
PP—Power purchased. Transformer 13,200 volts A. C., rotary converters, 250 volts D. C., 2 pumps.
SIZES SHIPT—Slack, Egg, Lump.
NOTE—Formerly operated by the Maplewood Sales Company.

LANCASTER COAL CO.

General Office, Kingston Mines, Ill.
PR—S. R. J. Ford, Kingston Mines, Ill.
TR—H. J. Ford, Kingston Mines, Ill.
GM—S. R. J. Ford, Kingston Mines, Ill.
PA—S. R. J. Ford, Kingston Mines, Ill.
SM—Chas. F. Bradbury, Canton, Ill.
No. 1 Mine; Shaft; Bituminous No. 5 Seam, 54 in. thick.
PO—Kingston Mines, Ill.; SP—Mapleton, Ill.; CTY—Peoria; RR—T. & W. Illinois River.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
PP—2 pumps.
EMP—52. Last years tonnage 28,621.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

LA SALLE COUNTY CARBON COAL CO.

General Office, La Salle, Ill.
PR—Richard P. Joy, Detroit, Mich.
VP—F. J. H. Coker, Detroit, Mich.
TR—F. W. Dennis, " "
GM—C. C. Swift, La Salle, Ill.
PA—J. D. Walsh, " "
EE—Adam Currie, " "
EM—Wm. Seacrest, La Salle, Ill.
SCO—Union Stores Co. Buyer, T. E. Flanagan, La Salle, Ill.
No. 1 Mine; Shaft; No. 2 Seam, 36 to 42 in. thick.
PO—La Salle, Ill.; SP—Same; CTY—La Salle, Ill.; RR—C. & C. R. & Q.
MS—A. X. S. Jones, La Salle, Ill.
S of H—2 elec. locos. Track gage 40 in.
S of M—Hand and 1 longwall machs.
PP—Purchase power transformer 33,000 to 440 volts gen. units, 240 volts D. C., 5 fire tube boilers, 625 H. P., 7 pumps.
EMP—320. Daily output, 800 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Table.

La Salle Mine; Shaft; No. 2 Seam, 36 to 42 in. thick.
PO—La Salle, Ill.; SP—Same; CTY—La Salle, Ill.; RR—C. & C. R. 1. & P.
MS—Jas. Richards, La Salle, Ill.
S of H—Mules and 1 elec. loco. Track gage 42 in.
S of M—Hand and 4 longwall machs.
PP—Purchase power, transformer 2,300 to 220 volts; motor generator sets, 240 volts D. C., 5 pumps.
EMP—180. Daily output, 450 tons.
SIZES SHIPT—Run of Mine Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

Union Mine; Shaft; No. 2 Seam, 36 to 42 in. thick.
PO—La Salle, Ill.; SP—Same; CTY—La Salle, Ill.; RR—C. & C. R. 1. & P.
MS—Harvey Knowles, La Salle, Ill.
SM—Fred Bond, La Salle, Ill.
S of H—Mules. 1 trolley pole loco. Track gage, 42 in.
S of M—Hand. 5 longwall machs.
PP—Purchase power, transformer 2,300 to 220 volts; motor generator sets, 240 volts D. C., 2 pumps.
EMP—190. Daily output, 550 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

No. 5 Mine; Shaft; No. 2 Seam, 36 to 42 in. thick.
PO—Cedar Point, Ill.; SP—Same; CTY—La Salle, Ill.; RR—C. & C. M. & St. P.
MS—Owens White Cedar Point, Ill.
S of H—Mules. Track gage 42 in.
S of M—Hand.
PP—6 return tubular boilers, 2 gen. units, 17 K. W. and 70 K. W., 250 volts D. C., 6 pumps.
EMP—230. Daily output, 750 tons.
SIZES SHIPT—Run of Mine, Slack, Lump, Egg.
PREP. EQUIPT—Shaker Screens, Picking Tables.

LATHAM COAL & MINING CO.
Out of business.

LATHAM LINCOLN MINING COMPANY

General Office, 28 E. Jackson Ave., Chicago, Ill.
PR—H. D. Wright, Lincoln, Ill.
VP—W. P. Forstner, Chicago, Ill.
TR—L. H. Dayhoff, Chicago, Ill.
GM—Wm. Von Derber, Lincoln, Ill.
PA—H. D. Wright, Lincoln, Ill.

Latham Mine; Shaft; No. 5 Seam, 70 inches thick.
PO—Lincoln, Ill.; SP—Same; CTY—Logan; RR—C. & O., I. C.
S of H—Electric locos.
S of M—Hand.
PP—6 water tube boilers, 150 H. P. Gen. power.
EMP—400. Last years tonnage 280,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.
Note—Formerly operated by the Latham Coal & Mining Co.

LEITNER COAL COMPANY.

General Office, R. R. No. 3, Peoria, Ill.
PR—Chas. Leitner, Pekin, Ill.
TR—John Leitner, R. R. No. 3, Peoria, Ill.
GM—Chas. Leitner, Pekin, Ill.
GS—Chas. Leitner, Pekin, Ill.
PA—Chas. Leitner, Pekin, Ill.
SA—Sharon Coal Co., Peoria, Ill.

Leitner Mine; Shaft; No. 5 Seam, 54 in. thick.
PO—Peoria, Ill.; SP—Oliss, Ill.; CTY—Peoria; RR—T. & P. & P. U.
S of H—Combination 4 in. Track gage, 30 in.
S of M—2 chain breast type machs.
PP—Power purchased, rotary converters, 250 volts D. C., 3 pumps.
EMP—45. Last fiscal year output, 35,356 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.
Note—Successors to German Coal Co. Old Information.

LIBERTY COAL & MINING COMPANY

General Office, 1303 Boatmen Bank Bldg., St. Louis, Mo.
PR—John Henderson, St. Louis, Mo.
VP—V. M. Henderson, St. Louis, Mo.
GM—C. J. Sandoe, " "
PA—C. J. Sandoe, " "
SA—West Virginia Coal Co., 1303 Boatmen Bank Bldg., St. Louis, Mo.

Liberty Mine; Shaft; No. 6 Seam, 78 in. thick.
PO—Rentelher, Ill.; SP—Same; CTY—St. Clair; RR—L. & N., St. Louis Br.
MS—William Davis, Rentelher, Ill.
S of H—Mules. Track gage 30 in.
S of M—12 comp. air machs.
PP—3 return tubular boilers, total 450 H. P., 1 air comp., 5 pumps.
EMP—120. Last years tonnage 165,000.
SIZES SHIPT—Run of Mine, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

LIME SPRING COAL CO.

General Office, Tilton, Ill.
PR—B. C. English, Tilton, Ill.
VP—O. A. Gause, Tilton, Ill.
TR—O. A. Gause, Tilton, Ill.
GM—O. A. Gause, Tilton, Ill.
PA—O. A. Gause, Tilton, Ill.

Lime Spring Mine; Shaft; 7 Vein Seam, 72 in. thick.
PO—Tilton Station C. Ill.; SP—Same; CTY—Vermilion; RR—Wabash.
MS—Chas. Emley, South Danville, Ill.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—2 water tube boilers, 40 H. P.
EMP—18. Last years tonnage 8,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Bar Screens.

LIMESTONE COAL CO.

General Office, R. R. No. 1, Peoria, Ill.
GM—Wm. Cook Jr., Peoria, Ill.

Limestone Mine; Shaft; Fifth Vein Seam, 50 inches thick.
PO—R. R. No. 1, Peoria, Ill.; SP—Same; CTY—Peoria.
S of H—Mules. Track gage, 30 in.
S of M—Hand.
PP—1 65 H. P. fire tube boiler, 4 pumps.
EMP—12. Last years tonnage 7,113.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Screens.

LINCOLN PARK COAL AND BRICK CO.

General Office, 308 South Fifth St., Springfield, Ill.
PR—James A. Hall, Springfield, Ill.
VP—D. A. Watson, Springfield, Ill.
TR—James A. Hall, " "
GM—D. A. Watson, " "
GE—David A. Watson, Springfield, Ill.
PA—D. A. Watson, " "

Lincoln Park Mine; Shaft; No. 5 Seam, 66 to 70 in. thick.
PO—Springfield, Ill.; SP—Same; CTY—Sangamon; RR—C. & A., C. P. & St. L.
MS—D. E. Wall, Springfield, Ill.
S of H—Mules and 1 storage battery locos. Track gage, 33 in.
PP—2 fire tube boilers, 150 H. P., 4 pumps.
EMP—135. Last years tonnage 95,845.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Revolving Screens.

LOGAN COAL CO.

Now part of Clark Coal & Coke Co.

LOUDON COAL MINES CO. (THE).

General Office, 324 Choate Bldg., Winona, Minn.
PR—R. D. Loudon, Winona, Minn.
VP—W. H. Neumann, Chicago, Ill.
TR—R. D. Loudon, Winona, Minn.
GM—R. D. Loudon, Winona, Minn.
GS—R. D. Loudon, Winona, Minn.
PA—George McMath, Pinckneyville, Ill.

EM—George McMath, Pinckneyville, Ill.
SA—R. D. Loudon, Winona, Minn.

Loudon Mine; Shaft; No. 6 Seam, 72 in. thick.
PO—Pinckneyville, Ill.; SP—Same; CTY—Perry; RR—Wabash, Chester & Western.
MS—George McMath, Pinckneyville, Ill.
S of H—2 mules. Track gage, 26 in.
S of M—Hand.
PP—1 80 H. P. fire tube boiler, 1 pump.
EMP—13. Last years tonnage 14,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Shaker Screens.

LOU NASH COAL & MINING CO.

General Office, 808 International Life Bldg., St. Louis, Mo.
PR—R. B. Clark, St. Louis, Mo.
VP—R. Vernon Clark, St. Louis, Mo.
TR—R. B. Clark, St. Louis, Mo.
GM—R. B. Clark, St. Louis, Mo.

Enterprise Mine; Shaft; Seam, 72 inches thick.
PO—Rentelher, Ill.; SP—Same; CTY—St. Clair; RR—L. & N.
S of H—Mules and elec. locos. Track gage 24 inches.
S of M—Hand and chain breast type machines.
PP—2 100 H. P. fire tube boilers.
EMP—60. Daily tonnage 400.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens.
NOTE—Formerly operated by Enterprise Collieries Co.

LOVINGTON COAL MINING COMPANY.

General Office, 512 Citizens Title & Trust Bldg., Decatur, Ill.
PR—J. M. Duncan, Decatur, Ill.
VP—Jno. Benson, Decatur, Ill.
TR—G. C. Knickerbocker, Decatur, Ill.
GM—G. C. Knickerbocker, Decatur, Ill.
GS—G. E. Valentine, Lovington, " "
PA—G. C. Knickerbocker, Decatur, Ill.
EM—Miller Hallbrook & Warren, Decatur, Ill.
EE—L. E. Valentine, Lovington, Ill.
SCO—Lovington Coal Mining Company, Buyer, G. C. Knickerbocker, Decatur, Ill.
SA—Great West Coal & Lumber Co., 1716 Fisher Bldg., Chicago, Ill.

Lovington No. 1 Mine; Shaft; No. 6 Seam, 108 to 120 in. thick.
PO—Lovington, Ill.; SP—Same; CTY—Moultrie; RR—Wabash and P. C. & St. L.
S of H—Mules and elec. loco. Track gage 42 in.
S of M—Hand and 3 breast machs.
PP—7 water tube boilers, total 1,205 H. P., 1—150 K. W. gen. unit, 250 volts D. C., 6 pumps.
EMP—185. Last years tonnage 171,000.
SIZES SHIPT—Run of Mine, Slack Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens.

LUMAGHI COAL CO.

General Office, 613 Locust St., St. Louis, Mo.
PR—L. F. Lumaghi, St. Louis, Mo.
VP—C. L. Drew, St. Louis, Mo.
TR—J. D. Lumaghi, " "
GM—J. D. Lumaghi, " "
PA—E. M. Collins, " "
EM—O. L. Lumaghi, " "
GS—F. Kaiser, Collinsville, Ill.
SA—E. P. Stanton, 613 Locust St., St. Louis, Mo.

Additional Information on Pages 326, 327.

Mine No. 2, Shaft Mine; No. 6 Seam, 5 1/2 to 10 ft. thick.
PO—Collinsville, Ill.; SP—Same; CTY—Madison; RR—P. C. & St. L.
MS—F. Kaiser, Collinsville, Ill.
S of H—Mules, trolley pole and storage battery locos. Track gage, 41 1/2 in.
S of M—chain breast machines.
PP—6 return tubular boilers, total 1,250 H. P., 1 gen. unit, 250 D. C., 1 pump.
EMP—450. Daily output, 3,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

Mine No. 3, Shaft Mine, No. 6 Seam, 5 1/2 to 10 ft. thick.
PO—Collinsville, Ill.; SP—Same; CTY—Madison; RR—P. C. & St. L.
MS—P. McKernon, Collinsville, Ill.
S of H—Mules, 2 storage battery locos. Track gage 42 in.
S of M—Hand.
PP—Purchase power, 250 volts 2 150 H. P. fire tube boilers, 5 pumps.
EMP—200.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

MCCRANEY SAND & GRAVEL CO.

General Office, Davenport, Ia.
PR—E. McCraney, Davenport, Ia.
TR—E. McCraney, Davenport, Ia.

GM—Geo. Scott, Davenport, Iowa.
GS—Geo. Scott, Davenport, Iowa.
SA—Lay Fuel Co., Davenport, Ia.

No. 2 Mine; Shaft; No. 1 Seam, 48 in. thick.
PO—Coal Valley, Ill.; SP—Same; CTY—Rock Island; RR—C. R. 1 & P.
S of H—Mules. Track gage 36 inches.
S of M—Shortwall mach.
PP—Power purchased. Transformer 1100-220 volts A. C., 2 pumps.
EMP—50.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

McELVAIN & HOY

See Watson Coal Co.

McLAUGHLIN, JOS., & SONS.

General Office, 657 East Chestnut St., Canton, Ill.
PR—Jos. McLaughlin, Canton, Ill.
GM—John McLaughlin, " "
GS—Thomas McLaughlin, Canton, Ill.

McLaughlin Mine; Shaft; No. 5 Seam; gage 36 in.
PO—Canton, Ill.; SP—Same; CTY—Fulton; RR—T. P. W.
S of H—Mules and steam bolst. Track gage 36 in. thick.
S of M—Hand.
PP—1 water tube boiler, total 60 H. P., 1 pump.
EMP—12. Last fiscal year output, 9,500 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

McLEAN COUNTY COAL CO.

PR—Julia G. Scott, Bloomington, Ill.
TR—L. M. Graham, " "
GM—L. M. Graham, " "
GS—C. E. Shope, " "
PA—L. M. Graham, " "

McLean Mine; Shaft; Nos 3 and 5 Seams, 42 to 48 in. thick.
PO—Bloomington, Ill.; SP—Same; CTY—McLean; RR—C. & A., Big 4 & L. E. & W.
S of H—Rops and Elec. motors. Track gage 34 inches.
S of M—Hand.
PP—4 water tube boilers, 250 H. P., 440 volts D. C., 3 pumps.
EMP—125. Last years tonnage 37,000.
SIZES SHIPT—Slack, Nut, Lump, Egg, Block.
PREP. EQUIPT—Bar, Revolving Screens.

MACON COUNTY COAL CO.

General Office, Decatur, Ill.
PR—John Armstrong, Decatur, Ill.
VP—S. D. May, Decatur, Ill.
TR—J. N. Baker, Decatur, Ill.
GM—Forrest Fie, Decatur, Ill.
GS—Geo. L. Terry, Decatur, Ill.

Macon Mine; Shaft; No. 5 Seam, 54 in. thick.
PO—Decatur, Ill.; SP—Same; CTY—Macon; RR—Ill. Cent., Penna.
MS—Louis White, Decatur, Ill.
S of H—Mules and 3 gasoline locos. Track gage 38 inches.
S of M—4 longwall machs.
PP—Power purchased. Transformer 2300-250 volts A. C., 4 water tube boilers, 125 H. P., 3 pumps.
EMP—200. Last years tonnage 122,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Revolving and Shaker Screens.
Note—Successors to Manufacturers & Consumers Coal Co.

MADISON COAL CORPORATION.

General Office, 910 South Michigan Bldg., Chicago, Ill.
PR—A. J. Moorshead, Chicago, Ill.
TR—F. H. Wolfarth, " "
GM—A. J. Moorshead, " "
GS—G. E. Lyman, Glen Carbon, Ill.
PA—L. B. Rushorogh, Chicago, Ill.
CE—G. E. Lyman, Glen Carbon, Ill.
EM—D. W. Blaylock, Glen Carbon, Ill.
EE—J. A. Long, Glen Carbon, Ill.

No. 2 Mine; Shaft; No. 6 Seam, 72 to 84 in. thick.
PO—Glen Carbon, Ill.; SP—Same; CTY—Madison; RR—Ill. Central.
MS—A. Danner, Glen Carbon, Ill.
S of H—Mules and 5 trolley pole locos. Track gage 24 in.
S of M—5 comp. air punchers, 3 chain breast type and 10 shortwall machs.
PP—5—150 H. P. and 2—200 H. P., fire tube boilers, 1—120 K. W. and 1—250 K. W. gen. units, 250 volts P. C., 12 pumps.
EMP—402. Last years tonnage 482,581.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Shaker Screens.

(Continued on Next Page)

Madison Coal Corp.—Cont.

No. 6 Mine; Shaft; No. 6 Seam, 72 to 90 in. thick.
PO—Diermon, Ill.; **SP**—Same; **CTY**—Sangamon; **RR**—Ill. Central.
MS—Jas. S. Anderson, Diverson, Ill.
S of H—Mules, 5 trolley pole type, 14 storage battery and 2 combination locos. Track gage 42 in.
S of M—28 chain breast type machs.
PP—125 H. P. fire tube boilers, 2—100 K. W., 1—172 K. W. and 1—175 K. W. Gen. units, 250 volts D. C., 8 pumps.
EMP—728. Last years tonnage 910,667.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens.
 No. 8 Mine; Shaft; No. 6 Seam, 84 to 108 in. thick.
PO—Carterville, Ill.; **SP**—Same; **CTY**—Williamson; **RR**—Illinois Central, Rawlaine Br.
MS—William Turton, Carterville, Ill.
SCO—Store No. 1, Store Mgr., J. A. Baker, Rawlaine, Ill.
S of H—3 trolley pole type, 6 storage battery and 2 combination locos. Track gage 44 in.
S of M—4 chain breast type machs.
PP—4 125 H. P. fire tube boilers, 1—250 K. W. and 1—200 K. W. gen. units, 275 volts D. C., 10 pumps.
EMP—307. Last years tonnage 483,585.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.
 No. 9 Mine; Shaft; No. 6 Seam, 84 to 108 in. thick.
PO—Carterville, Ill.; **SP**—Cambria, Ill.; **CTY**—Williamson; **RR**—Ill. Central.
MS—William Turton, Carterville, Ill.
SCO—Store No. 2, Store Mgr., Chas. M. Fowler, Carterville, Ill.
S of H—4 trolley pole type, 10 storage battery and 2 combination locos. Track gage 42 in.
S of M—10 chain breast type machs.
PP—P 125 H. P. fire tube boilers, 1—250 K. W. and 1—200 K. W. gen. units, 275 volts D. C., 15 pumps.
EMP—597. Last years tonnage 770,612.
SIZES SHIPT—Run of Mine, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.
 No. 5 Mine; Shaft; No. 6 Seam, 60-96 in. thick.
PO—Mt. Olive, Ill.; **SP**—Same; **CTY**—Macomb; **RR**—I. C. & St. L., Springfield Br.
MS—Jas. S. Anderson, Mt. Olive, Ill.
S of H—3 trolley pole type locos. Track gage 26 in.
S of M—18 comp. air punchers.
PP—5—112 H. P. fire tube boilers, 1—200 H. P. water tube boiler, 1—150 K. W. gen. unit, 250 volts D. C., 3 pumps.
EMP—290. Last years tonnage 279,875.
SIZES SHIPT—Run of Mine, Egg, Lump.
PREP. EQUIPT—Shaker Screens.
 Note—No. 5 mine leased to Eugene Colgan, Mt. Olive, Ill.
 Crystal Mine; Shaft; No. 6 Seam, 60-78 in. thick.
PO—Tilden, Ill.; **SP**—Same; **CTY**—Randolph; **RR**—I. C. & St. L., Carbondale Br.
MS—A. Baenzler, Tilden, Ill.
S of H—Mules, 2 trolley pole type locos. Track gage 24 in.
S of M—12 shortwall machs.
PP—1—125 H. P., 2—80 H. P. fire tube boilers, 1—500 H. P. water tube boiler, 1—200 K. W., 1—50 K. W. and 1—100 K. W. gen. units, 250 volts D. C., 5 pumps.
EMP—288. Last years tonnage 330,498.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Shaker Screens.
 Note—Crystal mine owned by Chicago Great Western Coal Co. operated under contract.
 No. 12 Mine; Shaft; No. 6 Seam, 84 in. thick.
PO—Cambria, Ill.; **SP**—Same; **CTY**—Williamson; **RR**—Ill. Central.
MS—Wm. Turton, Cambria, Ill.
S of H—4 combination locos.
S of M—6 chain breast type machs.
PP—2—90 H. P. fire tube boilers, 3—500 H. P. water tube boilers, 1—125 K. W. gen. unit, 7 pumps.
EMP—75. Daily tonnage 600.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

MADISON COUNTY MINING CO.

General Office, 1314 Syndicate Trust Bldg., St. Louis, Mo.
PR—Thomas R. Harris, St. Louis, Mo.
VP—Frank Lanna, Worden, Ill.
Sec—Etta Worden, Edwardsville, Ill.
GM—T. R. Harris, St. Louis, Mo.
PA—T. R. Harris, St. Louis, Mo.
EE—C. E. Burgess, Edwardsville, Ill.
SA—White Ash Coal Co., 1314 Syndicate Trust Bldg., St. Louis, Mo.

Madison Mine; Drift.
PO—Edwardsville, Ill.; **CTY**—Madison; **RR**—Wabash.
MS—Frank Lanna, Worden, Ill.
S of H—Mules.
S of M—4 shortwall machs.
PP—Power purchas d. 1 pump.
EMP—85. Last years tonnage 105,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.

MANHATTAN COAL COMPANY.

General Office, East Peoria, Ill.
GM—Ellis Rahney, East Peoria Heights, East Peoria, Ill.
GS—Thomas Thompson, 220 Stewart Ave., East Peoria, Ill.
EM—John Appleby, 220 Stewart Ave., East Peoria, Ill.

Manhattan Mine; Shaft; No. 5 Seam, 54 inches thick.
PO—East Peoria, Ill.; **CTY**—Tazewell; **RR**—T. P. & W.
S of H—Mules. Track gage 30 inches.
PP—1 return tubular boiler, 40 H. P., 2 pumps.
EMP—26. Last years tonnage 26,075.

MANUFACTURERS COAL CO.

General Office, Marseilles, Ill.
PR—R. F. Knott, Marseilles, Ill.
TR—F. E. Smith, " "
GM—F. E. Smith, " "
PA—F. E. Smith, " "
CE—R. F. Knott, Jr., Marseilles, Ill.
EM—Peter Proctor, Marseilles, Ill.

Galloway Mine; Shaft; Second Seam, 34 inches thick.
PO—Marseilles, Ill.; **SP**—Same; **CTY**—LaSalle; **RR**—C. R. I. & P.
MS—F. E. Smith, Marseilles, Ill.
S of H—Mules. Track gage 35 inches.
S of M—Hand.
PP—2 fire tube boilers, 250 H. P., 4 pumps.
EMP—100. Daily tonnage 200.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

MAPLEWOOD COAL CO.

General Office, Peoria, Ill.
PR—G. A. Ditewig, Peoria, Ill.
TR—Jas. F. McElwee, " "
GS—C. Saur, " "
GM—G. A. Ditewig, Peoria, Ill.
PA—W. C. Gill, Peoria, Ill.

No. 1 Mine; Shaft; No. 5 Seam, 48 in. thick.
PO—Farmington, Ill.; **SP**—Same; **CTY**—Fulton; **RR**—M. & St. L.
S of H—1 elec. loco. Track gage 36 in.
S of M—Electric machs.
PP—2 return tubular boilers, total 300 H. P., 3 gen. units, 250 volts D. C., 3 pumps.
SIZES SHIPT—Run of Mine, Pea, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

MAPLEWOOD COLLIERY COMPANY.

General Office, Peoria, Ill.
PR—G. A. Ditewig, Peoria, Ill.
TR—James F. McElwee, Peoria, Ill.
GM—G. A. Ditewig, Peoria, Ill.
GS—C. Saur, Peoria, Ill.
PA—W. C. Gill, Peoria, Ill.

No. 2 Mine; Shaft; No. 5 Seam, 48 inches thick.
PO—Farmington, Ill.; **SP**—Same; **CTY**—Fulton; **RR**—C. B. & Q.
S of H—Mules and trolley pole type loco. Track gage, 42 in.
PP—4 fire tube boilers, 600 H. P., generate power, 250 volts D. C., 4 pumps.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens.

MAPLEWOOD SALES COMPANY.

New Lake Erie Mining Company.

MARION & PITTSBURG COAL CO.

Now part of Ernest Coal Co.

MARION COUNTY COAL CO.

General Office, Centralia, Ill.
PR—F. Kohl, Centralia, Ill.
TR—H. Kohl, Centralia, Ill.
GM—E. E. Fyke, Centralia, Ill.
SUPT—Jno. W. Stedlin, Centralia, Ill.
PA—Jno. W. Stedlin, Centralia, Ill.
EM—E. C. Toothacher, Sandoval, Ill.
SA—C. B. Cone, 536 McCormick Bldg., Chicago, Ill.

Glunridge Mine; Shaft; No. 6 Seam, 80 in. thick.
PO—Centralia, Ill.; **SP**—Frt., Glenridge, Ill.; **Exp.**—Centralia, Ill.; **CTY**—Marion; **RR**—I. C., C. B. & Q.
S of H—Mules, 5 trolley pole type locos. Track gage, 36 in.
S of M—20 chain breast machs.
PP—8 fire tube boilers, 1200 H. P., 1—500, 1—200, 1—125 K. W. gen. units, 250 volts D. C., 6 pumps.
EMP—460. Last years tonnage 400,000.
SIZES SHIPT—Run of Mine, Egg, Lump, Nut.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

MATTHIESSEN & HEGELER ZINC CO.

General Office, La Salle, Ill.
PR—Joseph Breneman, La Salle, Ill.
EM—C. H. Nicolet, La Salle, Ill.
EE—C. Sweager, La Salle, Ill.

M. & H. Z. Mine; Shaft; No. 5 Seam, 48 in. thick.
PO—La Salle, Ill. **SP**—Same. **CTY**—La Salle.
MS—David McGrindle, La Salle, Ill.
S of H—Mules and trolley pole type locos. Track gage 41½ inches.
S of M—Hand.
PP—1 80 K. W. and 1 75 K. W. gen. units, M. G. Sets, 250 volts D. C., 1 pump.
EMP—160. Last years tonnage 124,000.
 Note—Mine coal only for own use.

MIDCOLENT COAL COMPANY

PR—W. S. Middleton, Canton, Ill.
VP—W. S. Middleton, Canton, Ill.
TR—W. S. Middleton, Canton, Ill.
GM—W. S. Middleton, Canton, Ill.
GS—H. O. Standard, Canton, Ill.
PA—W. S. Middleton, Canton, Ill.
SA—Ley Fuel Co., Davenport, Ia.
 Middleton Mine; Shaft; No. 5 Seam; 58 inches thick.
PO—Canton, Ill.; **SP**—Same; **CTY**—Fulton; **RR**—T. P. & W.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—Power purchased. Transformer 2300—220 volts A. C. 3 pumps.
EMP—60. Last years tonnage 25,000.
SIZES SHIPT—Run of Mine, Lump, Slack, Egg.
PREP. EQUIPT—Gravity and Shaker Screens.
 Old Information.

MIDWAY COAL MINING CO.

General Office, 1205 Fisher Building, Chicago, Ill.
PR—Jack McElvain, Auburn, Ill.
VP—H. H. Hoy, Chicago, Ill.
TR—J. Wm. McElvain, Herrin, Ill.
GM—C. H. Hoy, Chicago, Ill.
GS—Elvis Skaggs, Herrin, Ill.
PA—Elvis Skaggs, Herrin, Ill.
CE—Phieffer & Whallan, Herrin, Ill.
SA—McElvain-Hoy Coal Co., 809-10 Fisher Bldg., Chicago, Ill.

Ward Mine; Shaft; No. 6 Seam, 103 inches thick.
PO—DeSoto, Ill.; **SP**—Ward, Ill. (Propay); **CTY**—Jackson; **RR**—Ill. Cent.
S of H—Mules and storage battery locos. Track gage 36 inches.
S of M—2 chain breast type machs.
PP—4 fire tube boilers, 400 H. P., 50 K. W. gen. unit 250 volts D. C., 2 pumps.
EMP—120. Daily tonnage 500.
SIZES SHIPT—Run of Mine, Egg, Lump.
PREP. EQUIPT—Shaker Screens.
 Note—Successors to Peacock Coal & Mining Co.

MILLER, HOWARD E.

General Office, Caseyville, Ill.
OWNER—Howard E. Miller, Caseyville, Ill.
SA—Miller Coal & Coke Co., St. Louis, Mo.

Ruby Mine; Shaft; Six Seam, 36 ins. to 48 in. thick.
PO—Caseyville, Ill.; **SP**—Furman, Ill.; **CTY**—St. Clair; **RR**—B. & O. S. W.
MS—J. G. Beynon, Caseyville, Ill.
S of H—Mules. Track gage, 24 in.
S of M—Hand.
PP—2 fire tube boilers, 120 H. P., 4 pumps.
EMP—50. Last fiscal year output, 19,000 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

MINONK COAL COMPANY

General Office, Minonk, Ill.
No. 2 Mine.
PO—Minonk, Ill.; **SP**—Same; **CTY**—Woodford; **RR**—A. T. & S. F., I. C.
 No report.

MODERN COAL CO.

Now Southern Gen Coal Corporation.

MOFFAT COAL CO.

General Office, Sparta, Ill.
PR—J. D. Moffat, Sparta, Ill.
VP—R. E. Moffat, Sparta, Ill.
TR—J. D. Moffat, Sparta, Ill.
GM—J. D. Moffat, Sparta, Ill.
GS—R. E. Moffat, Sparta, Ill.
PA—J. D. Moffat, Sparta, Ill.
EM—Robert Deans, Sparta, Ill.
EE—W. G. Watts, Sparta, Ill.
SA—Moffat Coal Co., 1160 Arcade Bldg., St. Louis, Mo.

Moffat Mine; Shaft; No. 6 Seam, 72 in. thick.
PO—Sparta, Ill.; **SP**—Same; **CTY**—Randolph; **RR**—M. & O.
S of H—Mules and 2 trolley pole type locos. Track gage 35½ inches.
S of M—12 shortwall machs.
PP—6 150 H. P. fire tube boilers, 1—150 K. W., 1—200 K. W. gen. units, 250 volts D. C.
EMP—250. Last years tonnage 188,510.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

MONTGOMERY BROS.

General Office, Carbondale, Ill.
 Black Diamond Mine.
PO—Carbondale, Ill.; **SP**—Same; **CTY**—Jackson; **RR**—I. C.
 No report.

MONMOUTH COAL COMPANY.

General Office, Breerton, Ill.
PR—W. J. Spencer, Breerton, Ill.
VP—C. P. Jacobson, Breerton, Ill.
TR—J. P. Daily, " "
GM—W. J. Spencer, " "
GS—C. P. Jacobson, " "
PA—Jonas Swanson, Breerton, Ill.
SCO—Breerton Merc. Co., Mayer, J. P. Daily, Breerton, Ill.

Breerton Shaft No. 1, No. 5 Seam, 48 to 63 in. thick.
PO—Breerton, Ill.; **SP**—Norris, Ill.; **CTY**—Fulton; **RR**—C. B. & Q.
 Buda-Canton-Rushville Br.
S of H—Mules and 3 trolley pole type locos. Track gage 36 inches.
S of M—6 shortwall machs.
PP—Power purchased. Transformer 2300—250 volts A. C. 1—150 K. W. gen. units, M. G. Sets, 250 volts D. C., 4 fire tube boilers, 500 H. P., 3 pumps.
EMP—180. Last years tonnage 100,000.
SIZES SHIPT—Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

MT. OLIVE COAL CO.

Out of Business.

MT. OLIVE & STAUNTON COAL CO.

General Office, Staunton, Ill.
VP—Thomas T. Brewster, St. Louis, Mo.
GM—Thomas T. Brewster, St. Louis, Mo.
ASST. MGR.—W. G. Kimball, St. Louis, Mo.
GS—W. G. Kimball, St. Louis, Mo.
PA—W. G. Kimball, St. Louis, Mo.
CE—W. G. Kimball, St. Louis, Mo.
EM—H. M. Killmar, Staunton, Ill.
EE—W. G. Kimball, St. Louis, Mo.

No. 1 Mine; Shaft; No. 6 Seam, 60 in. thick.
PO—Staunton, Ill.; **SP**—Same; **CTY**—Madison; **RR**—Litchfield & Madison.
MS—Hugh Wilson, Staunton, Ill.
S of H—Mules and 2 trolley pole type locos. Track gage, 26 in.
S of M—6 chain breast type and 3 long-wall machs.
PP—4 fire tube boilers, 400 H. P. gen. units, 2 100 K. W., 270 volts D. C., 3 pumps.
EMP—272. Last fiscal year output, 314,537 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

No. 2 Mine; Shaft; No. 6 Seam, 70 in. thick.
PO—Staunton, Ill.; **SP**—Same; **CTY**—Madison; **RR**—Litchfield & Madison.
MS—Robert Nixon, Staunton, Ill.
S of H—Mules and 3 trolley pole type locos. Track gage, 42 in.
S of M—17 chain breast type machs.
PP—6 fire tube boilers, 900 H. P. gen. units, 2 150 and 1 100 K. W., 270 volts D. C., 6 pumps.
EMP—627. Last fiscal year output, 779,973 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Crusher and Rescreening. Operate a washery at Edwardsville, Ill. 1,000 capacity. Washer Foreman, Mr. Shrimp.

MOWEQUA COAL MINING & MFG. CO.

General Office, Moweaqua, Ill.
PR—Silas A. Shafer, Assumption, Ill.
VP—Mary Kantz, Moweaqua, Ill.
TR—E. C. Foster, Moweaqua, Ill.
GM—Silas A. Shafer, Assumption, Ill.

(Continued on Next Page)

Mowacqua Coal Mining & Mfg. Co.—Cont.

PA—Chas. Abl. Mowacqua, Ill.
EM—Will Lewis, Pana, Ill.
EE—Chas. Kuhn, Mowacqua, Ill.

No. 1 Mine; Shaft; No. 5 Seam, 63 in. thick.
PO—Mowacqua, Ill.; SP—Same; CTY—Shelby; RR—L. C.
MS—Chas. Abl. Mowacqua, Ill.
S of H—Mules, trolley pole type and combination locos. Track gage, 40 inches.
S of M—Chain breast type locos.
PP—1 125 H. P. fire tube boilers, 1 200 K. W. gen. units, 250 volts D. C., 3 pumps.
EMP—500. Daily output, 400 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Revolving and Shaker Screens.

MULBERRY HILL COAL COMPANY

General Office, Freeburg, Ill.
PR—W. T. Koken, 4560 Shaw Ave., St. Louis, Mo.
VP—F. W. Kleme, 1202 Central Nat. Bank Bldg., St. Louis, Mo.
TR—Claud Hall, 1201 Central Nat. Bank Bldg., St. Louis, Mo.
GS—Aug. Kulis, Freeburg, Ill.
PA—Aug. Kulis, Freeburg, Ill.
SA—Hovey & Kuhn, 1225 Central Nat. Bank Bldg., St. Louis, Mo.

Mulberry Hill Mine; Shaft; No. 6 Seam, 84 inches thick.
PO—Freeburg, Ill.; SP—Same; CTY—St. Clair; RR—Ill. Central
S of H—Mules and 2 storage battery locos. Track gage 36 inches.
S of M—4 chain breast type machs.
PP—2 water tube boilers, 250 H. P., 2—250 K. W., 250 volts D. C., 4 pumps.
EMP—176. Last years tonnage 135,812.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

MURPHY, LINSKY & KASHER COAL CO.

General Office, Pontiac, Ill.
No. 1 Mine.
PO—Pontiac, Ill.; SP—Same; CTY—Livingston; RR—W.
No report.

MUTUAL COAL & MINING COMPANY

Now Perry County Coal Corporation

NASHVILLE MINING COMPANY

General Office, Nashville, Ill.
PR—John T. Clarkson, Albia, Iowa
VP—Samuel Day, Nashville, Ill.
TB—John L. Clarkson, Nashville, Ill.
GM—John L. Clarkson, Nashville, Ill.
GS—S. Day, Nashville, Ill.
PA—John L. Clarkson, Nashville, Ill.
SA—Clarkson Coal Company, Syndicate Trust Bldg., St. Louis, Mo.

Nashville Mine; Shaft; No. 6 Seam, 68 inches thick.
PO—Nashville, Ill.; SP—Same; CTY—Washington; RR—Louisville & Nashville.
S of H—Mules and trolley pole type elec. loco. Track gage, 24 in.
S of M—2 elec. shortwall machs.
PP—Gen. Units, 125 K. W., 1 pump.
Last years tonnage 55,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

NATIONAL COAL MINING COMPANY.

General Office, 1009 Central National Bank Bldg., Peoria, Ill.
PR—Harold W. Lynch, Peoria, Ill.
TR—R. A. Lynch, Peoria, Ill.
PA—R. A. Lynch, Peoria, Ill.
SA—H. W. Lynch, Peoria, Ill.

National Mine; Shaft; No. 5 Seam; 48 in. thick.
PO—Farmington, Ill. SP—Middle Grove, Ill. CTY—Fulton, RR—M. & St. L.
MS—Robert Taggart, Farmington, Ill.
S of H—Mules and 1 trolley pole type loco. Track gage, 38 in.
S of M—Hand. 6 shortwall machs.
PP—Power purchased. Transformer 13,000 to 440 volts A. C., 2 M. G. Sets, Total 275 K. W., 250-275 volts D. C., 2 water tube boilers, 100 H. P., 3 pumps.
EMP—170. Last years tonnage 165,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

NEW NATIONAL COAL & MINING CO.

General Office, 21 South Eighth St., Belleville, Ill.
PR—A. L. Wright, Belleville, Ill.
VP—Aug. Merl, N. 6th St. Belleville, Ill.
TR—Anderson Wright, "

GM—Edw. Wright, Belleville, Ill.
PA—Edw. L. Gofat, Belleville, Ill.
SA—West Virginia Coal Co., Boatmen's Bank Bldg., St. Louis, Mo.

New National Mine; Shaft; No. 6 Seam, 78 in. thick.
PO—Belleville, Ill.; SP—Same; CTY—St. Clair; RR—L. C. Ry.
MS—A. L. Wright, Belleville, Ill.
SM—Ed. Wright, Belleville, Ill.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—2 fire tube boilers, 150 H. P., 4 pumps.
EMP—102. Daily tonnage 600.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens.

NEWSAM BROS.

General Office, Peoria, Ill.
No. 1 Glasford Mine; Shaft; No. 5 Seam, 54 inches thick.
PO—Glasford, Ill.; SP—Same; CTY—Peoria; RR—T. P. & W.
No. 5 La Marsh Mine.
PO—Peoria, Ill.; SP—Same; CTY—Peoria; RR—T. P. & W.
No report.

NEW STAUNTON COAL CO., THE

General Office, 818 Security Bldg., St. Louis, Mo.
PR—Charles Gilbert, Security Bldg., St. Louis, Mo.
TR—W. J. Monahan, Security Bldg., St. Louis, Mo.
GM—W. E. Rutledge, 1515 Fisher Bldg., Chicago, Ill.
GS—T. G. Hebenstreit, Livingston, Ill.
PA—Clifford House, 818 Security Bldg., St. Louis, Mo.
EM—J. A. Hebenstreit, Livingston, Ill.
EE—Herman Becker, Sales Agency, Rutledge & Taylor Coal Co., 1515 Fisher Building, Chicago, Ill.

No. 1 Mine; Shaft; No. 6 Seam, 72 inches thick.
PO—Livingston, Ill. SP—Same. CTY—Madison, RR—Big Four and C. & E. I.
S of H—5 13-ton trolley type locos. 16 storage-battery locos. Track gage, 42 in.
S of M—19 breast machs.
PP—8 return tubular boilers, 4 gen. units, 1 75, 1 100, 1 200, 1 300 K. W., 275 volts D. C., 6 pumps.
EMP—500. Last years tonnage 663,552.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Crusher.

NIENTIC CARBON COAL CO.

PR—J. M. Corzine, Decatur, Ill.
TR—J. H. Howard, Decatur, Ill.
GM—D. W. Rogers, Decatur, Ill.
GS—D. W. Rogers, Decatur, Ill.
PA—J. M. Corzine, Decatur, Ill.
SA—Address the company. Buyer, R. B. Knapp, Niantic, Ill.

Niantic Carbon Mine; Shaft; No. 5 Seam, 60 inches thick.
PO—Niantic, Ill.; SP—Same; CTY—Macon; RR—Wabash.
MS—Wm. Robinson, Niantic, Ill.
S of H—Mules and gasoline loco. Track gage 24 inches.
S of M—Hand.
PP—2 water tube boilers.
EMP—75. Last years tonnage 38,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Lump.
PREP. EQUIPT—Bar Screens.
NOTE—Formerly operated by the Niantic Mining Co.

NILWOOD COAL COMPANY.

Now part of Union Fuel Co.

NOKOMIS COAL COMPANY

General Office, 37 West Van Buren St., Chicago, Ill.
PR—Albert J. Nason, Chicago, Ill.
VP—J. D. Zook, Chicago, Ill.
GS—J. P. Hebenstreit, Nokomis, Ill.
PA—A. F. Anderson, Chicago, Ill.
EM—Ozell W. Smith, Chicago, Ill.
SA—Nason Coal Company, 37 West Van Buren St., Chicago, Ill.

Nokomis Mine; Shaft; No. 6 Seam, 100 in. thick.
PO—Nokomis, Ill.; SP—Same; CTY—Montgomery; RR—C. & E. I., Big Four.
S of H—4 trolley pole type elec. and 17 storage battery locos. Track gage, 42 in.
S of M—30 shortwall machs.
PP—Power purchased. Transformer 2300 to 275 volts A. C., 1000 K. W., 300 K. W. gen. units, 275 volts D. C., 6 fire tube boilers, total 1350 H. P.
EMP—650. Last years tonnage 820,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

NORTH BREESE COAL & MNC CO.

General Office, 420 Rialto Bldg., St. Louis, Mo.
PR—Chas. Schroeter, St. Louis, Mo.
VP—ohn Schroeter, St. Louis, Mo.
TR—A. J. Tilden, St. Louis, Mo.
GM—John Schroeter, "
GS—Frank F. Tirre, St. Louis, Mo.
PA—Frank F. Tirre, St. Louis, Mo.
EM—Standard Eng. Co., Duquoin, Ill.
CE—S. K. Smith, Chicago, Ill.
EE—Chas. Casey, Breese, Ill.
SA—Frank F. Tirre, St. Louis, Mo.

North Mine; Shaft; No. 6 Seam, 90 inches thick.
PO—Breese, Ill.; SP—Same; CTY—Clinton; RR—K. & O., and S. W., main line.
S of H—Mules and 2 12 ton trolley pole type locos. Track gage, 36 inches.
S of M—12 chain breast type machs.
PP—6 fire tube boilers, 600 H. P., 2 250 K. W. gen. units, 250 volts D. C., 3 pumps.
EMP—2310. Last years tonnage 203,070.
SIZES SHIPT—Slack, Pea, Run of Mine, Nut, Egg, Lump.
PREP. EQUIPT—Loading Booms and Picking Tables.

NUMBER TWELVE COAL COMPANY

General Office, R.F.D. No. 4, Springfield, Ill.
PR—L. N. Spaulhower, Springfield, Ill.
VP—Walter Farrand, Springfield, Ill.
TR—Joseph Taylor, Springfield, Ill.
GM—Joseph Taylor, Springfield, Ill.
GS—Joseph Taylor, Springfield, Ill.
PA—Joseph Taylor, Springfield, Ill.

No. 12 Mine; Shaft; No. 5 Seam, 66 inches thick.
PO—R.F.D. No. 4 Springfield, Ill.; SP—Same; CTY—Sangamon.
S of H—Mules.
S of M—Hand.
PP—2 pumps.
EMP—57. Last years tonnage 21,000.

O. K. COAL COMPANY.

General Office, 233 Boatmen's Bank Bldg., St. Louis, Mo.
PR—J. A. Hamilton, Marissa, Ill.
VP—W. E. Meek, Marissa, Ill.
TR—A. C. Smith, St. Louis, Mo.
GS—Henry McCurens, Marissa, Ill.
PA—Carroll Smith, St. Louis, Mo.
EM—Wm. Zienert, Belleville, Ill.
EE—O. Simpson, Belleville, Ill.
SCO—J. C. Hamilton & Co. Buyer, D. Hamilton, Marissa, Ill.
SA—R. E. Eggebrecht, St. Louis, Mo.

O. K. Mine; Shaft; No. 6 Seam, 78 in. thick.
PO—Marissa, Ill. SP—Same. CTY—St. Clair, RR—Ill. Central.
S of H—2 elec. trolley pole type locos. 6 mules. Track gage 24 inches.
S of M—2 breast type machs.
PP—2 boilers, 1—100 K. W. gen. unit, 250 volts D. C., 3 pumps.
EMP—100.
SIZES SHIPT—Run of Mine, Nut, Egg, Lump screenings.
PREP. EQUIPT—Shaker Screens, Picking Tables.

ODIN COAL CO.

General Office, Odin, Ill.
PR—C. H. Morrison, Odin, Ill.
VP—F. D. Seer, Odin, Ill.
TR—E. E. Fyke, Centralia, Ill.
GM—C. H. Morrison, Odin, Ill.
GS—C. H. Morrison, Odin, Ill.
PA—C. H. Morrison, Odin, Ill.
EM—W. L. Murray, Odin, Ill.
EE—Stanley Hawley, Odin, Ill.
SCO—Address the company; Buyer, George Moody, Odin, Ill.

Odin Mine; Shaft; No. 6 Seam, 78 in. thick.
PO—Odin, Ill.; SP—Same; CTY—Marion; RR—L. C. B. & O.
MS—Karl Moody, Odin, Ill.
S of H—Mules and trolley pole type locos. Track gage, 26 in.
S of M—12 chain breast type machs.
PP—8 fire tube boilers, 800 H. P., 2—100 K. W. gen. units, 250 volts D. C., 5 pumps.
EMP—250. Daily tonnage 1,000.
SIZES SHIPT—Run of Mine, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Gravity and Revolving Screens.

O'GARA COAL COMPANY.

General Office, 910 Fisher Bldg., Chicago, Ill.
PR—Frank H. Woods, 910 Fisher Bldg., Chicago, Ill.
VP—F. A. Manly, 910 Fisher Bldg., Chicago, Ill.
TR—W. M. Moderwell, Chicago, Ill.
GM—R. M. Dawes, 910 Fisher Bldg., Chicago, Ill.
GS—C. M. Moderwell, Chicago, Ill.
PA—R. B. Brown, Harrisburg, Ill.
EM—A. B. Walters, Harrisburg, Ill.
EE—Horace Rawlings, Harrisburg, Ill.
SA—E. H. Irwin, 910 Fisher Bldg., Chicago, Ill.
Additional Information on Pages 330, 331.

No. 1 Mine; Shaft; No. 5 Seam, 60 to 66 in. thick.
PO—Harrisburg, Ill. SP—Harrisburg, CTY—Saline, RR—Big Four, Cairo Div.
MS—Samuel Cape, Harrisburg, Ill.
S of H—Mules and trolley pole type locos. Track gage, 40 in.
S of M—17 chain breast type machs.
PP—Power purchased, transformer 2,300 to 275 volts A. C., rotary convertors, 275 volts D. C., 4 150 H. P. fire tube boilers, 8 pumps.
EMP—250. Daily output, 1,800 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

No. 3 Mine; Shaft; No. 5 Seam, 60 to 66 in. thick.
PO—Harrisburg, Ill.; SP—Same; CTY—Saline, RR—Big Four, Cairo Div.
MS—George Eadie, Harrisburg, Ill.
S of H—Mules and trolley pole type locos. Track gage, 36 in.
S of M—19 chain breast type machs.
PP—6 return tubular boilers, total 900 H. P., 3 gen. units, 150 K. W., 250 volts D. C., 2 pumps.
EMP—400. Daily output, 2,000 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

No. 8 Mine; Shaft; No. 5 Seam, 56 in. thick.
PO—Eldorado, Ill.; SP—Same; CTY—Saline, RR—L. & N. and Big Four.
MS—John Evans, Eldorado, Ill.
S of H—Mules and trolley pole type locos. Track gage, 40 in.
S of M—7 chain breast type machs and 5 shortwall machs.
PP—4 return tubular boilers, total 600 H. P., 2 gen. units, 150 K. W., 250 volts D. C., 6 pumps.
EMP—200. Daily output, 1,500 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

No. 9 Mine; Shaft; No. 5 Seam, 60 to 66 in. thick.
PO—Harrisburg, Ill.; SP—Same; CTY—Saline; RR—Big Four.
MS—Geo. Eadie, Harrisburg, Ill.
S of H—Mules and trolley pole type locos. Track gage, 36 in.
S of M—18 chain breast type machs.
PP—6 return tubular boilers, total 900 H. P., 3 gen. units, 150 K. W., 250 volts D. C., 17 pumps.
EMP—475. Daily output, 2,500 tons.
SIZES SHIPT—Run of Mine, Slack, Lump, Egg.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

No. 10 Mine; Shaft; No. 5 Seam, 56 in. thick.
PO—Eldorado, Ill.; SP—Same; CTY—Saline; RR—L. C. and Big Four.
MS—John Eadie, Eldorado, Ill.
S of H—Mules and trolley pole type locos. Track gage, 42 in.
S of M—Hand and 14 chain breast type machs.
PP—3 return tubular boilers, total 600 H. P., 1 gen. unit, 250 K. W., 250 volts D. C., 6 pumps.
EMP—325. Daily output, 1,850 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

No. 11 Mine; Shaft; No. 5 Seam, 56 to 66 in. thick.
PO—Eldorado, Ill.; SP—Same; CTY—Saline; RR—L. C. and Big Four.
MS—John Eadie, Eldorado, Ill.
S of H—Mules and trolley pole type locos. Track gage, 42 in.
S of M—16 chain breast type machs.
PP—6 fire tube boilers, 900 H. P., 3 150 K. W. gen. units, 250 volts D. C., 9 pumps.
EMP—350. Daily output, 1,540 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

No. 12 Mine; Shaft; No. 5 Seam, 66 in. thick.
PO—Harrisburg, Ill.; SP—Same; CTY—Saline; RR—Big Four.
MS—Samuel Cape, Harrisburg, Ill.
S of H—Mules and trolley pole type loco. Track gage, 36 in.
S of M—13 chain breast type machs.
PP—Power purchased, transformer 2,300 to 275 volts A. C., M. G. 1, 500 K. W., 250 volts D. C., 5 fire tube boilers, 8 pumps.
EMP—300. Daily output, 1,600 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

No. 14 Mine; Shaft; No. 5 Seam, 70 in. thick.
PO—Ledford, Ill.; SP—Same; CTY—Saline; RR—Big Four.
(Continued on Next Page)

O'Gara Coal Co.—Cont.

MS—Wm. Evans, Harrisburg, Ill.
S of H—Mules and trolley pole type locos.
Track gage, 42 in.
S of M—8 chain breast type mchs.
PP—4 fire tube boilers, 600 H. P., 150 K. W. gen. unit, 250 volts D. C., 6 pumps.
EMP—300. Daily output, 1,500 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

No. 15 Mine; Shaft; No. 5 Seam, 60 in. thick.
PO—Carriers Mills, Ill.; SP—Same; CTY—Saline; RR—B. & Q. and Ill. Central.
MS—Wm. Evans, Harrisburg, Ill.
S of H—Mules and trolley pole type loco.
Track gage, 42 in.
S of M—8 chain breast type mchs and 2 shortwall mchs.
PP—4 fire tube boilers, 600 H. P., 2 150 K. W. gen. units, 250 volts D. C., 10 pumps.
EMP—325. Daily output, 1,850 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.
Note—This mine formerly operated by Harrisburg-Saline Coaleries Co.

OLD ABE MINING COMPANY

General Office, 599 Canal St., Milwaukee, Wis.
PR—A. S. Austin, Milwaukee, Wis.
TR—A. S. Austin, Jr., Duquoin, Ill.
GM—A. S. Austin, Jr., Duquoin, Ill.
PA—A. S. Austin, Jr., Duquoin, Ill.

Old Abe Mine; Shaft; Sixth Seam, 84 in. thick.
PO—Duquoin, Ill.; SP—Same; CTY—Perry; RR—Ill. Central.
S of H—Mules.
S of M—Shortwall mchs.
PP—Generate power.
EMP—150. Daily output, 1,000 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Revolving Screens.
NOTE—Formerly operated by the Kana-wha Fuel Co.

OLD BEN COAL CORPORATION.

General Office, 1114 McCormick Bldg., Chicago, Ill.
PR—D. W. Buchanan, Chicago, Ill.
VP—Gordon Buchanan, Chicago, Ill.
TR—N. L. Kretz, " "
PA—P. W. Beda, " "
EM—R. J. Adams, Christopher, Ill.
SCO—Coalfield Company, Buyer, John Campbell, West Frankfort, Ill.
Additional information on Page 332.

Old Ben No. 8 Mine; Shaft; No. 6 Seam, 108 to 144 in. thick.
PO—West Frankfort, Ill.; SP—Same. CTY—Franklin. RR—C. & E. I., C. B. & Q. and Ill. Central.
MS—Jas. Dunn, West Frankfort, Ill.
S of H—15 trolley pole type locos. Track gage, 42 in.
S of M—39 chain breast mchs.
PP—10 return tubular boilers, total 1,500 H. P., 3 gen. units, 250 volts D. C.
EMP—800. Last fiscal year output, 1,150,000 tons.
SIZES SHIPT—Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms, Spiralizer, Separator.

Old Ben No. 9 Mine; Shaft; No. 6 Seam, 108 to 144 in. thick.
PO—West Frankfort, Ill.; SP—Same. CTY—Franklin. RR—C. B. & Q., Ill. Central and C. & E. I.
MS—Jas. Dunn, West Frankfort, Ill.
S of H—20 trolley pole type locos. Track gage, 42 in.
S of M—36 chain breast mchs, 8 shortwall mch.
PP—8 water tube boilers, total 3200 H. P., 4 3,750 K. W. gen. units, 250 volts D. C.
EMP—800. Last fiscal year output, 1,100,000 tons.
SIZES SHIPT—Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms, Spiralizer, Separator.

Old Ben No. 10 Mine; Shaft; No. 6 Seam, 108 to 120 in. thick.
PO—Christopher, Ill.; SP—Same. CTY—Franklin. RR—C. B. & Q.
MS—L. T. Putnam, Christopher, Ill.
S of H—18 trolley pole type locos. Track gage, 42 in.
S of M—25 chain breast mchs.
PP—7 return tubular boilers, total 1050 H. P., 3 gen. units, 250 volts D. C.
EMP—500. Last fiscal year output, 700,000 tons.
SIZES SHIPT—Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Sizing Plant.

Old Ben No. 11 Mine; Shaft; No. 6 Seam, 108 to 120 in. thick.
PO—Christopher, Ill.; SP—Same. CTY—Franklin. RR—C. B. & Q.

MS—L. T. Putnam, Christopher, Ill.
S of H—20 trolley pole type locos. Track gage, 42 in.
S of M—32 chain breast mchs.
PP—5 water tube boilers, total 2,500 H. P., 3 gen. units, 250 volts D. C.
EMP—600. Last years tonnage 650,000.
SIZES SHIPT—Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms, Sizing Plant.

Old Ben No. 12 Mine; Shaft; No. 6 Seam, 114 in. thick.
PO—Christopher, Ill.; SP—Same. CTY—Franklin. RR—C. B. & Q. and Ill. Central.
S of H—11 trolley pole type locos. Track gage, 42 in.
S of M—23 chain breast mchs.
PP—7 return tubular boilers, total 1,050 H. P., 3 gen. units, 250 volts D. C.
EMP—500. Last fiscal year output, 675,000 tons.
SIZES SHIPT—Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

Old Ben No. 14 Mine; Shaft; No. 6 Seam, 114 in. thick.
PO—Ruckner, SP—Same. CTY—Franklin. RR—C. B. & Q., Ill. Central.
S of H—19 trolley pole type locos. Track gage, 42 in.
S of M—32 chain breast mchs.
PP—4 water tube boilers, total 2,000 H. P., 2 gen. units, 250 volts D. C.
EMP—650. Last fiscal year output, 810,000 tons.
SIZES SHIPT—Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms, Sizing Plant.

Old Ben No. 15; Shaft; No. 6 Seam, 150 in. thick.
PO—West Frankfort, Ill.; SP—Same; CTY—Franklin; RR—C. & E. I., I. C. C. B. & Q.
Note—New shaft just being sunk.

Old Ben No. 16 Mine; Shaft; No. 6 Seam, 96-168 in. thick.
PO—Sesser, Ill.; SP—Same; CTY—Franklin RR—C. B. & Q.
S of H—14 elec. locos. Track gage, 42 inches.
S of M—6 comp. air and 12 shortwall mchs.
PP—8 return tubular boilers, total 1,500 H. P., 2 gen. units, 250 volts D. C., 2 air comp., 8 pumps.
EMP—47.
SIZES SHIPT—Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

Old Ben No. 17 Mine; Shaft; No. 6 Seam, 108 inches thick.
PO—Johnston City, Ill.; SP—Same; CTY—Williamson; RR—C. & E. I., Ill. Central.
MS—John White, Johnston City, Ill.
S of H—Mules and 15 trolley pole type locos. Track gage 42 inches.
S of M—23 chain breast type mchs.
PP—10 fire tube boilers, 1500 H. P., 500 K. W. turbo generators, 250 volts D. C., 15 pumps.
EMP—500. Daily output, 3,000 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Revolving and Shaker Screens.
NOTE—Formerly known as Mine No. 1, operated by the Johnston City Coal Company.

Old Ben No. 18 Mine; Shaft; No. 6 Seam, 108 inches thick.
PO—Johnston City, Ill.; SP—Same; CTY—Williamson; RR—C. & E. I., and C. B. & Q.
MS—John White, Johnston City, Ill.
S of H—Mules and 20 trolley pole type locos. Track gage 42 inches.
S of M—25 chain breast type mchs.
PP—8 fire tube boilers, 1200 H. P., 1 M. G. set, 500 K. W. turbo., 250 volts D. C., 5 pumps.
EMP—500. Daily output, 3,000 tons.
SIZES SHIPT—Slack, Pea, Nut, Egg, Lump.
NOTE—Formerly known as Mine No. 2, operated by the Johnston City Coal Company.

No. 19 Mine; Shaft; No. 6 Seam, 96-132 in. thick.
PO—Rend, Ill.; SP—Sesser, Ill.; CTY—Franklin; RR—C. B. & Q.
S of H—Mules and 3 elec. locos. Track gage 42 in.
S of M—25 elec. mchs.
PP—3 return tubular boilers, total 13,000 H. P., 250 volts D. C., 6 pumps.
EMP—500. Last years tonnage 500,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker and Revolving Screens, Picking Tables, Loading Booms.
NOTE—No. 19 Mine formerly operated by the W. P. Rend Coal & Coke Co.

No. 20 Mine; Shaft; No. 6 Seam, 96-156 in. thick.
PO—Herrin, Ill.; SP—Same; CTY—Williamson; RR—C. B. & Q.
I. C.

S of H—Mules and 6 elec. locos. Track gage 4 in.
S of M—25 elec. mchs.
PP—8 return tubular boilers, total, 12,000 H. P., 3 gen. units, 275 volts D. C., 8 pumps.
EMP—575. Last years tonnage 600,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker and Revolving Screens, Picking Tables, Loading Booms.
NOTE—No. 20 Mine formerly operated by the W. P. Rend Coal & Coke Co.

ORCHARD COAL CO.

General Office, 675 Old Colony Bldg., Chicago, Ill.
PR—C. A. Gent, Marion, Ill.
VP—M. Ready, Chicago, Ill.
TR—D. S. Gent, Chicago, Ill.
GM—D. S. Gent, Chicago, Ill.
GS—W. E. Grissom, Marion, Ill.
PA—W. E. Grissom, Marion, Ill.
AUDITOR—G. A. Metzger, Chicago, Ill.
SA—Sterling-Midland Coal Co., Chicago, Ill.

Orchard Mine; Shaft; No. 6 Seam, 72 in. thick.
PO—Marion, Ill.; SP—Same; CTY—Williamson; RR—I. C. C. & E. I., Mo. Pac.
S of H—Mules. Track gage 42 inches.
S of M—8 breast and 2 shortwall mchs.
PP—4 water tube boilers, 600 H. P., 1-125 K. W. gen unit, 220 volts D. C., 4 pumps.
EMP—200.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

PANA COAL CO.

General Office, Pana, Ill.
PR—Silas A. Shafer, Assumption, Ill.
VP—L. L. Long, Assumption, Ill.
TR—Glenn A. Shafer, Pana, Ill.
GM—Silas A. Shafer, Assumption, Ill.
GS—Glenn A. Shafer, Pana, Ill.
PA—Glenn A. Shafer, Pana, Ill.
EM—Will Lewis, Pana, Ill.
EE—Fred Allison, Pana, Ill.
SA—Lorin W. Jones, Chicago, Ill.

Nos. 1 and 2 Mines; Shaft; No. 6 Seam, 90 in. thick.
PO—Pana, Ill.; SP—Same; CTY—Christian; RR—I. C., Big Four, C. & E. I., B. & O.
S of H—Mules, trolley pole type and combination locos. Track gage, 42 inches.
S of M—2 shortwall mchs.
PP—12-125 H. P. Water tube boilers, 2-200 K. W., 1-400 K. W., 2-150 K. W. and 1-100 K. W., M. G. Sets, 250 volts D. C., 6 pumps.
EMP—600. Last years tonnage 400,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Revolving and Shaker Screens.

PANTHER CREEK MINES, INC.

General Office, Springfield, Ill.
PR—Henry A. Solomon, Springfield, Ill.
VP—G. W. Solomon, Springfield, Ill.
TR—Robert C. Solomon, " "
GM—R. C. Solomon, Springfield, Ill.
GS—E. C. Solomon, Springfield, Ill.
PA—Robert C. Solomon, " "

Panther Creek Mine; Shaft; Illinois No. 6 Seam, 84 inches thick.
PO—Auburn, Ill.; SP—Same. CTY—Sangamon. RR—C. & A.
S of H—Combination locos. Track gage 12 inches.
S of M—Hand.
PP—3 water tube boilers, 750 H. P., 1-50 K. W., 1-250 K. W. gen. units, 250 volts D. C., 6 pumps.
EMP—390. Daily tonnage 2,500.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

PARADISE COAL CO.

PR—J. H. Forester, DuQuoin, Ill.
TR—H. W. Telle, Cairo, Ill.
GM—James Forester, DuQuoin, Ill.
PA—James Forester, DuQuoin, Ill.
EE—O. C. Jackson, DuQuoin, Ill.

Paradise Mine; Shaft; No. 6 Seam; 84 to 122 in. thick.
PO—DuQuoin, Ill.; SP—Paradise, Ill.; CTY—Perry; RR—I. C., Eldorado Div.
MS—R. J. Forester DuQuoin, Ill.
S of H—Mules and 6 elec. locos. Track gage 36 in.
S of M—13 elec. mchs.
PP—7 return tubular boilers, total 900

H. P., 3 gen. units, 250 volts A. C., 2 pumps.
EMP—400. Daily tonnage 2,200.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Picking Table, Loading Booms, Shaker Screens.

PATRICK COAL CO.

General Office, Carbondale, Ill.

Patrick No. 1 Mine; Shaft; No. 6 Seam, 74 inches thick.
PO—Carbondale, Ill.; SP—Same; CTY—Jackson; RR—I. C.
MS—J. C. Swafford, Carbondale, Ill.
S of H—2 mules. Track gage 36 inches S of M—Hand.
EMP—11. Daily tonnage, 75.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

Patrick No. 2 Mine; Shaft; No. 6 Seam, 74 inches thick.
PO—Carbondale, Ill.; SP—Same; CTY—Jackson; RR—I. C.
MS—J. C. Swafford, Carbondale, Ill.
S of H—Mules. Track gage 36 inches S of M—Hand.
PP—1 30 H. P. fire tube boiler, 2 pumps.
EMP—7. Daily tonnage 60.
SIZES SHIPT—Run of Mine, Slack, Pea, Lump.
PREP. EQUIPT—Gravity Screens.

PEABODY COAL COMPANY

General Office, 332 S. Michigan Ave., Chicago, Ill.
Chairman of Board—Francis S. Peabody, Chicago, Ill.
PR—Stuyvesant Peabody, Chicago, Ill.
VP—Clarence J. Gray, Chicago, Ill.
VP—Moses F. Feltner, Chicago, Ill.
VP—(In charge of Operations), Hiram M. Young, Chicago, Ill.
VP—(In charge of Sales and Traffic), George W. Reed, Chicago, Ill.
VP—(In charge of Finance), Chas. E. Schrage, Chicago, Ill.
VP—(In charge of Accounts), Charles S. Ellis, Chicago, Ill.
ASST. TO VP—(In charge of Sales)—J. L. Pieroni, Chicago, Ill.
Secy.—Joseph Solari, Chicago, Ill.
TR—Chas. F. Schrage, Chicago, Ill.
Asst. Secy.—Treas.—Walter A. Fisher, Chicago, Ill.
Mgr. of Traffic—James B. Duggan, Chicago, Ill.
Asst. to VP in Charge of Operation—George C. McFadden, Chicago, Ill.
PA—Harr E. Campbell, Chicago, Ill.
Additional information on pages 333 to 339.

No. 3 Mine; Shaft; No. 6 Seam; 108 inches thick.
PO—Marion, Ill.; SP—Marion, Bush and Herrin, Ill.; CTY—Williamson; RR—Mo. Pac., I. C. C. & E. I., C. B. & Q.
S of H—Mules, 10 trolley pole type locos. Track gage 42 inches.
S of M—27 chain breast type mchs.
PP—Power purchased. Transformer 33,000 to 2,300 volts A. C., 1 200 K. W., 1 250 K. W. gen. units, 275 volts D. C., 5 comb. fire and water tube boilers, 1,350 H. P., 19 pumps.
EMP—560.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms, Washeries.

No. 5 Mine; Shaft; No. 6 Seam; 84 inches thick.
PO—Pawnee, Ill.; SP—Same; CTY—Sangamon; RR—C. & I. M. C. & A., I. C. Wab. C. & N. W., B. & O.
S of H—Mules, 2 trolley pole type locos. Track gage 40 inches.
S of M—Hand.
PP—Power purchased. Transformer 33,000 to 2,300 volts A. C., M. G. set, 1 200 K. W., 275 volts D. C., 4 fire tube boilers, total 300 H. P., 1 comb. fire and water tube boiler, 250 H. P., 3 pumps.
EMP—320.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

No. 6 Mine; Shaft; No. 5 Seam; 72 inches thick.
PO—Sherman, Ill.; SP—Same; CTY—Sangamon; RR—C. & A.
S of H—Mules, 3 trolley pole type locos. Track gage 42 inches.
S of M—Hand.
PP—4 fire tube boilers, total 600 H. P., 1 comb. fire and water tube boiler, 250 H. P., 1 250 K. W. and 1 35 K. W. gen. units, 275 volts D. C., 5 pumps.
EMP—450.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

(Continued on Next Page)

Peabody Coal Company—Cont.

No. 7 Mine; Shaft; No. 0 Seam; 90 inches thick.
 PO—Kincaid, Ill.; SP—Same; CTY—Christian; RR—C. & I. M. C. & A. I. C. & N. W. Wabash, B. & O.
 S of H—3 trolley pole and 15 storage battery locos. Track gage 42 inches.
 S of M—7 chain breast and 26 short-wall machs.
 PP—Power purchased. Transformer 2,300 volts A. C., 1 75 K. W. charging set, 2 300 K. W. M. G. sets, 275 volts D. C., 3 pumps, 1 fire tube boiler, 60 H. P.
 EMP—525.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables.
 No. 8 Mine; Shaft; No. 6 Seam; 90 inches thick.
 PO—Towey, Ill.; SP—Same; CTY—Christian; RR—C. & I. M. C. & A. I. C. & N. W. Wabash, B. & O.
 S of H—18 trolley pole type locos. Track gage 42 inches.
 S of M—10 chain breast and 28 short-wall machs.
 PP—Power purchased. Transformer 33,000 to 2,300 volts A. C., M. G. set, 2 300 K. W., 275 volts D. C., 1 fire tube boiler, 60 H. P., 7 pumps.
 EMP—585.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables.
 No. 9 Mine; Shaft; No. 6 Seam; 90 inches thick.
 PO—Taylorville, Ill.; SP—Calloway, Ill.; CTY—Christian; RR—C. & I. M. C. & A. I. C. & N. W. Wabash, B. & O.
 S of H—2 trolley pole and 12 G. E. storage battery locos. Track gage 42 inches.
 S of M—15 chain breast type machs.
 PP—Power purchased. Transformer 33,000 to 2,300 volts A. C., M. G. set, 1 300 K. W., 275 volts D. C., 1 fire tube boiler, 50 H. P., 2 pumps.
 EMP—110.
 SIZES SHIPT—Run of Mine, Lump, Screenings.
 No. 18 Mine; Shaft; No. 6 Seam; 90 inches thick.
 PO—W. Frankfort, Ill.; SP—W. Frankfort and Benton, Ill.; CTY—Franklin; RR—C. & E. I. C., C. B. & O.
 S of H—10 trolley pole type locos. Track gage 42 inches.
 S of M—12 chain breast and 8 short-wall machs.
 PP—Power purchased. Transformer 33,000 to 2,300 volts A. C., M. G. set, 1 550 K. V. A., 275 volts A. C., 7 fire tube boilers, 1,505 H. P., 8 pumps.
 EMP—325.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.
 No. 19 Mine; Shaft; No. 6 Seam; 90 inches thick.
 PO—W. Frankfort, Ill.; SP—Same; CTY—Franklin; RR—C. & E. I. C., I. C.
 S of H—Mules, 5 trolley pole type locos. Track gage 42 inches.
 S of M—1 chain breast and 14 short-wall machs.
 PP—Power purchased. Transformer 33,000 to 2,300 volts A. C., M. G. set, 200 K. W., 275 volts D. C., haulage, 240 volts A. C., 1—425 K. V. A., 10 pumps, 7 fire tube boiler, 925 H. P.
 EMP—382.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.
 Eldorado Mine No. 20; Shaft; No. 5 Seam, 54-66 inches thick.
 PO—Eldorado, Ill.; SP—Harrisburg, Ill.; CTY—Saline; RR—Big Four.
 S of H—3 trolley pole type locos. Track gage 42 in.
 S of M—8 chain breast type and 11 short-wall machs.
 PP—6—150 H. P. fire tube boilers, 1—100 K. W. and 1—200 K. W. gen. units, 250 volts D. C., 3 pumps.
 EMP—337.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.
 No. 21 Mine; Shaft; No. 6 Seam; 90 inches thick.
 PO—Stonington, Ill.; SP—Same; CTY—Christian; RR—Wabash.

S of H—Mules, 5 trolley pole type locos. Track gage 42 inches.
 S of M—14 chain breast type machs.
 PP—6 fire tube boilers, 900 H. P., 2 150 K. W., 1 75 K. W. gen. units, 275 volts D. C., 10 pumps.
 EMP—325.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.
 No. 21 Mine; Shaft; No. 6 Seam; 72 inches thick.
 PO—Danville, Ill.; SP—Westville, Ill.; CTY—Vermilion; RR—C. & E. I. C. & St. L.
 S of H—Mules, 3 trolley pole type locos. Track gage 38 inches.
 S of M—6 chain breast type and 18 short-wall machs.
 PP—6 fire tube boilers, 900 H. P., 1 200 K. W., 1 150 K. W. gen. units, 275 volts D. C., 7 pumps.
 EMP—470.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.
 No. 25 Mine; Shaft; No. 6 Seam, 111 inches thick.
 PO—Carterville, Ill.; SP—Herrin, Ill.; CTY—Williamson; RR—I. C.
 S of H—Mules, 3 trolley pole type machs. Track gage 40 inches.
 S of M—Hand.
 PP—4 fire tube boilers, 500 H. P., 1 150 K. W. gen. unit, 275 volts D. C., 9 pumps.
 EMP—295.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.
 No. 26 Mine; Shaft; No. 6 Seam; 90 inches thick.
 PO—Johnston City, Ill.; SP—Johnston City & Herrin, Ill.; CTY—Williamson; RR—C. & E. I., Ill. Cent.
 S of H—Mules, 3 trolley pole type locos. Track gage 36 inches.
 S of M—10 chain breast type machs.
 PP—4 fire tube boilers, 475 H. P., 1 150 K. W., 1 36 K. W. gen. units, 275 volts D. C., 9 pumps.
 EMP—300.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.
 No. 51 Mine; Shaft; No. 5 Seam; 72 inches thick.
 PO—Andrews, Ill.; SP—Same; CTY—Sangamon; RR—C. P. & St. L.
 S of H—Mules, main and tail rope. Track gage 36 inches.
 S of M—Hand.
 PP—4 fire tube boilers, total 575 H. P., 1 15 K. W. gen. unit, 275 volts D. C., 4 pumps.
 EMP—210.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.
 No. 52 Mine; Shaft; No. 5 Seam; 70 inches thick.
 PO—Riverton, Ill.; SP—Same; CTY—Sangamon; RR—Wabash.
 S of H—Mules, 3 trolley pole type locos. Track gage 36 inches.
 S of M—Hand.
 PP—6 fire tube boilers, total 900 H. P., 1 150 K. W., 1 15 K. W. gen. units, 275 volts D. C., 5 pumps.
 EMP—440.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.
 No. 53 Mine; Shaft; No. 5 Seam; 68 inches thick.
 PO—Springfield, Ill.; SP—Same; CTY—Sangamon; RR—Wabash.
 S of H—Mules, 4 trolley pole type locos. Track gage 36 inches.
 S of M—Hand.
 PP—4 fire tube boilers, total 600 H. P., 1 150 K. W., 1 125 K. W. gen. units, 275 volts D. C., 4 pumps.
 EMP—385.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.
 No. 54 Mine; Shaft; No. 6 Seam; 90 inches thick.
 PO—Auburn, Ill.; SP—Same; CTY—Sangamon; RR—C. & A. Illinois Traction System, C. & I. W.
 S of H—Mules, 4 trolley pole type locos. Track gage 42 inches.
 S of M—Hand.
 PP—6 fire tube boilers, total 850 H. P., 1 200, 1 150, 1 15 K. W. gen. units, 275 volts D. C., 7 pumps.
 EMP—400.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

No. 55 Mine; Shaft; No. 5 Seam; 68 inches thick.
 PO—Springfield, Ill.; SP—Same; CTY—Sangamon; RR—Wabash, C. & A.
 S of H—Mules, 3 trolley pole type locos. Track gage 36 inches.
 S of M—Hand.
 PP—4 fire tube boilers, total 600 H. P., 1—200 K. W., 1 20 K. W. gen. units, 275 volts D. C., 1 pumps.
 EMP—355.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.
 No. 57 Mine; Shaft; No. 5 Seam; 66 inches thick.
 PO—Springfield, Ill.; SP—Same; CTY—Sangamon; RR—B. & O., I. C., I. T. & C. I. & W.
 S of H—Mules, 3 trolley pole type locos. Track gage 36 inches.
 S of M—Hand.
 PP—Purchase power for fan, tippie lights. Transformer 2300 to 440-220 volts A. C., 1—125 K. W. Gen. Unit, 275 volts D. C., 4 fire tube boilers 600 H. P., 3 pumps.
 EMP—215.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.
 No. 58 Mine; Shaft; No. 6 Seam; 96 inches thick.
 PO—Taylorville, Ill.; SP—Same; CTY—Christian; RR—C. & I. M. C. & A., I. C. & N. W. Wabash, B. & O.
 S of H—7 trolley pole type and 8 storage battery locos. Track gage 42 inches.
 S of M—Hand.
 PP—Purchase power for pumps, lights. Transformer 33000 to 2300 volts A. C. M. G. sets, 1—150, 1—100 K. W., 440 and 275 volts D. C., 8 fire tube boilers, total 900 H. P., 8 pumps.
 EMP—480.
 PREP. EQUIPT—Shaker Screens, Picking Tables.
 Note—Mines No. 51, 52, 53, 54, 55, 57 and 58 formerly operated by the Springfield District Coal Mining Co.
 PEERLESS COAL COMPANY
 General Office, McCormick Bldg., Chicago, Ill.
 PR—H. C. Adams, McCormick Bldg., Chicago, Ill.
 TR—J. Solari, McCormick Bldg., Chicago, Ill.
 GM—H. C. Adams, McCormick Bldg., Chicago, Ill.
 GS—Henry Martini, Springfield, Ill.
 PA—Stella Manning, Chicago, Ill.
 CE—George McFadden, Springfield, Ill.
 EM—W. E. Dawson, Springfield, Ill.
 EE—Carl Lee, Springfield, Ill.
 SA—John Heibinger, Springfield, Ill.
 Peerless Mine; Shaft; No. 5 Seam; 72 inches thick.
 PO—Springfield, Ill.; SP—Same; CTY—Sangamon; RR—C. & A. Wabash, C. I. & W. I. C., I. T. S. C. P. & St. L., S. T.
 S of H—Mules and storage battery loco. Track gage 42 in.
 S of M—Hand.
 PP—Power purchased. Transformer 2300-440-220 volts A. C., M. G. Sets, 250 volts D. C., 6 pumps.
 EMP—500. Last years tonnage 500,000.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.
 PENWELL COAL MINING CO.
 General Office, Pana, Ill.
 PR—Geo. V. Penwell, 39 Adams St., Chicago, Ill.
 VP—O. E. Penwell, Chicago, Ill.
 TR—Warren Penwell, Pana, Ill.
 GM—Warren Penwell, " "
 PA—Warren Penwell, " "
 GS—Geo. Rollo, " "
 EE—Jas. Olinger, Pana, Ill.
 SC0—Geo. V. Penwell & Sons Co.; Buyer, O. E. Penwell, Pana, Ill.
 Penwell Mine; Shaft; No. 6 Seam, 72 to 120 in. thick.
 PO—Pana, Ill.; SP—Same; CTY—Christian; RR—Ill. Central, B. & O.; C. C. C. & St. L.
 S of M—Mules and 3 elec. locos. Track gage 42 in.
 S of M—Hand.
 PP—5 fire tube boilers, 600 H. P., 250 K. W. gen. unit, 220 volts D. C., 2 pumps.
 EMP—360. Last years tonnage 247,872.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

PEOPLES COAL COMPANY.

General Office, 1824 R. R. Exchange Bldg., St. Louis, Mo.
 PR—W. S. Scott, St. Louis, Mo.
 TR—N. A. Qualey, St. Louis, Mo.
 GM—Thos. Mower, Lebanon, Ill.
 GS—Thos. Mower, Lebanon, Ill.
 PA—N. A. Qualey, St. Louis, Mo.
 SA—Mr. Capps, 1824 R. R. Exchange Bldg., St. Louis, Mo.

Peoples Coal Mine; Shaft; No. 7 Seam, 78 in. thick.
 PO—Caryville, Ill.; SP—Same; CTY—St. Clair; RR—B. & O.
 MS—W. H. Chapple, Lebanon, Ill.
 S of H—Mules. Track gage 36 in.
 S of M—Hand.
 PP—2 boilers, 150 H. P. 1 pump.
 EMP—85. Last years tonnage 70,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Shaker Screens.

PERRY COUNTY COAL CORP.

General Office, 1303 Boatmens Bank Bldg., St. Louis, Mo.
 PR—John Henderson, St. Louis, Mo.
 VP—V. M. Henderson, St. Louis, Mo.
 TR—C. Voigt, St. Louis, Mo.
 GM—C. J. Sandoz, St. Louis, Mo.
 PA—C. J. Sandoz, St. Louis, Mo.
 SA—West Virginia Coal Co. of Mo., 1303 Boatmens Bank Bldg., St. Louis, Mo.

Perry County Mine; Shaft; No. 6 Seam; 84 inches thick.
 PO—Coulterville, Ill.; SP—Same; CTY—Randolph; RR—Illinois Central, Illinois Southern.
 MS—Wm. Towers, Coulterville, Ill.
 S of H—14 mules and 2 trolley pole type locos. Track gage, 36 in.
 S of M—5 shortwall and 3 chain breast type machs.
 PP—2 fire tube boilers, 300 H. P., 1 water tube boiler, 357 H. P., 1 150 K. W., 1 200 K. W. gen. units, 3 pumps.
 EMP—230. Last years tonnage 210,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

St. Ellen Mine; Shaft; No. 6 Seam, 84 in. thick.
 PO—O'Fallon, Ill.; SP—Same; CTY—St. Clair; RR—E. St. L. & Suburban.

MS—J. P. Stevenson, O'Fallon, Ill.
 S of H—Mules and 2 trolley pole type locos. Track gage 42 inches.
 EMP—376. Last years tonnage 437,000.
 PP—Purchase power, 1 150 K. W. motor gen. units, 3 fire tube boilers, 450 H. P., 4 pumps.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

Carbon Mine; Shaft; No. 6 Seam, 90 inches thick.
 PO—O'Fallon, Ill.; SP—Same; CTY—St. Clair; RR—R. & O. S. W.
 MS—Thomas Grant, O'Fallon, Ill.
 S of H—Mules, elec. locos. Track gage 30 inches.
 S of M—8 chain breast type machs.
 PP—Power purchased. Transformer 22,000 to 250 volts, M. G. set, 250 volts D. C.
 EMP—150. Daily tonnage 1,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

Taylor Mine; Shaft; No. 6 Seam, 84 inches thick.
 PO—O'Fallon, Ill.; SP—Same; CTY—St. Clair; RR—B. & O. S. W.
 MS—George Goodall, O'Fallon, Ill.
 S of H—Mules and 2 elec. loco. Track gage 24 inches.
 S of M—Hand.
 PP—Power purchased. Transformer 22,000 to 2,200 volts A. C., M. G. Set, 250 volts D. C., 3 return tubular boilers, total 450 H. P.
 EMP—150. Daily tonnage 1,200.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.
 NOTE—Carbon and Taylor Mines formerly operated by Mutual Coal & Mining Company.

PIONEER COAL COMPANY.

General Office, Belleville, Ill.
 PR—R. Schramm, Belleville, Ill.
 GM—R. J. Schramm, Belleville, Ill.
 GS—R. J. Schramm, Belleville, Ill.
 PA—R. J. Schramm, Belleville, Ill.

Pioneer Mine; Shaft; Seam, 72 inches thick.
 PO—Belleville, Ill.; SP—Same; CTY—St. Clair; RR—L. & N.
 S of H—Mules. Track gage 30 in.
 S of M—Hand.
 PP—1—150 H. P. fire tube boiler, 2 pumps.
 EMP—25. Last years tonnage 29,520.
 SIZES SHIPT—Run of Mine, Slack, Lump.

Sangamon Coal Co.—Cont.

PP—3 water tube boilers, 500 H. P., gen. units, 250 volts D. C., 2 pumps.
Last years tonnage 50,000
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens.
NOTE—This mine formerly operated by the Cantrill Coal Company.

SANGAMON COUNTY MINING COMPANY.
General Office, Marquette Bldg., Chicago, Ill.

PR—W. A. Brewerton, Chicago, Ill.
TR—N. H. Gordon, Chicago, Ill.
GS—L. S. Casey, Springfield, Ill.
PA—W. A. Brewerton, Chicago, Ill.
EE—C. J. Vought, Springfield, Ill.
SA—Sangamon County Mining Co., Chicago, Ill.

J-F Mine; Shaft; No. 5 Seam, 72 in. thick.
PO—Springfield, Ill.; SP—Same; CTY—Sangamon; RR—B. & O. and I. T. S.
S of H—Mules, 3 trolley pole type locos.
PP—Power purchased, Rotary converters, 250 volts D. C., 2 pumps.
EMP—280. Daily tonnage 1,500.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

SCOTT COAL COMPANY

General Office, Railway Exchange Bldg., St. Louis, Mo.
Wildman Mine.
PO—R. R. No. 1 Belleville, Ill.; SP—Same; CTY—St. Clair; RR—I. C.
No report.

SCHMIDT, F. P. & SONS

Now Leithner Coal Co.

SCRANTON & BIG MUDDY COAL MINING CO.

Now operated by the Scranton Coal Mining Company.

SCRANTON COAL MINING CO.

General Office, Room 675, Old Colony Bldg., Chicago, Ill.
PR—D. S. Gent, Chicago, Ill.
VP—E. J. Payne, Huntington, W. Va.
TR—C. A. Gent, Chicago, Ill.
GS—W. E. Grissom, Marion, Ill.
PA—W. E. Grissom, Marion, Ill.
EM—E. E. Hartwell, Marion, Ill.
SA—Lake Export Coal Corp., Chicago, Ill.

Scranton Mine; Shaft; No. 7 Seam, 84 inches thick.
PO—Marion, Ill.; SP—Same; CTY—Williamson; RR—Mo. Pac.
S of H—Mules. Track gage 36 inches.
S of M—Hand and comp. air punches.
PP—5 fire tube boilers, 750 H. P., 8 pumps.
EMP—300 Daily tonnage 1,500.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.
NOTE—Formerly operated by the Scranton & Big Muddy Coal Mining Co.

SEARLS COAL CO.

General Office, 645 Rookery Bldg., Chicago, Ill.
PR—E. C. Searls, Chicago, Ill.
VP—Chas. White, Chicago, Ill.
TR—A. F. Hooper, Chicago, Ill.
GM—E. C. Searls, Chicago, Ill.
GS—T. S. Cousins, Duquoin, Ill.
PA—T. S. Cousins, Duquoin, Ill.
CE—M. H. Goodnow, Duquoin, Ill.
EM—A. F. Lee, Du Quoin, Ill.
EE—Rolla Crane, Johnston City, Ill.
SA—Crerar, Clinch & Co., Chicago, Ill.

McClintock Mine; Shaft; No. 6 Seam, 84-114 in. thick.
PO—Johnston City, Ill.; SP—Same; CTY—Williamson; RR—I. M. & S.
MS—M. G. Henderson, Johnston City, Ill.
S of H—Mules, 3 trolley pole type and 3 storage battery locos. Track gage 42 in.
S of M—21 chain breast type machs.
PP—5 water tube boilers, 750 H. P., 2 250 K. W., 1 8 K. W. g. n. units, 250 volts D. C., 11 pumps.
EMP—339. Last years tonnage 314,550.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker and revolving Screens.

SECURITY COAL & MINING CO. OF MISSOURI.

General Office, 1515 Fisher Bldg., Chicago, Ill.
PR—W. E. Rutledge, Chicago, Ill.
VP—F. W. Sextro, Chicago, Ill.
TR—W. P. Schlegel, Chicago, Ill.
GM—W. E. Rutledge, Chicago, Ill.
GS—J. B. Burkhardt, Duquoin, Ill.
PA—J. B. Burkhardt, Du Quoin, Ill.
CE—J. B. Burkhardt, Du Quoin, Ill.
EE—John Gibson, Duquoin, Ill.
EE—J. Morris, Du Quoin, Ill.

SCO Duquoin Mercantile Co., Buyer, M. Reid, Duquoin, Ill.
Sales Agency, Rutledge & Taylor Coal Co., 1515 Fisher Bldg., Chicago, Ill.

Security Mine; Shaft; No. 6 Seam, 60 to 96 in. thick.
PO—Duquoin, Ill.; SP—Same; CTY—Perry, RR—Ill. Central.
S of H—10 trolley pole type and 14 storage battery locos. Track gage 36 inches.
S of M—19 shortwall machs.
PP—6 fire tube boilers, total 900 H. P., 2 200 K. W., 100 K. W. g. n. units, 250 volts D. C., 11 pumps.
EMP—450. Last years tonnage 352,787.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Picking Table, Shaker Screen, Loading Rooms.

SHARON COAL AND BRICK CO.

General Office, Georgetown, Ill.
PR—H. W. Morris, Georgetown, Ill.
VP—S. M. Clark, Danville, Ill.
TR—O. P. Clark, Georgetown, Ill.
GM—P. P. Morris, Georgetown, Ill.
GS—P. P. Morris, Georgetown, Ill.
PA—P. P. Morris, Georgetown, Ill.
EE—C. A. Hubbard, Georgetown, Ill.
EM—Harlan R. Id, Georgetown, Ill.
EE—Ed Steidman, Georgetown, Ill.

Sharon Mine; Shaft No. 6 Seam; 60 to 72 in. thick.
PO—Georgetown, Ill.; SP—Same; CTY—Vermilion; RR—Illinois Traction System.
MS—Jas. Spicer, Georgetown, Ill.
S of H—Mules, steam locos. Track gage 38 in.
S of M—Hand.
PP—3 fire tube boilers, Atlas, 390 H. P., 1—100 K. W. gen. unit, 250 volts D. C., 4 pumps.
EMP—135. Last years tonnage 77,798.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity and Shaker Screens.

SKOAL CREEK COAL CO.

General Office, 440 North Michigan Ave., Chicago, Ill.
PR—Frank P. Blair, Chicago, Ill.
VP—C. E. Karstrom, Chicago, Ill.
TR—C. E. Karstrom, Chicago, Ill.
GS—J. R. Sharp, Chicago, Ill.
PA—J. R. Sharp, Chicago, Ill.
EM—R. V. Myers, Panama, Ill.
EE—Lee Woods, Panama, Ill.
MM—A. C. Caulk, Panama, Ill.
Sales Manager—R. L. Darby, 1558 McCormick Bldg., Chicago, Ill.

No. 1 Mine; Shaft; No. 6 Seam; 72 to 90 in. thick. Operate washery.
PO—Panama, Ill.; SP—Same; CTY—Montgomery; RR—T. St. L. & W., C. R. & Q.
MS—Harry Evans, Panama, Ill.
S of H—Mules and 7 trolley pole type locos. Track gage 40 in.
S of M—26 chain breast machs.
PP—Power purchased, transformer 3,300 to 275 volts A. C., M. G. sets, 275 volts D. C., 7 pumps.
EMP—600. Last years tonnage 681,992.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Washeries.

SHULER & LONG

General Office, Fairview, Ill.
Perryville Mine; Drift; "5" Seam, 50 inches thick.
PO—Fairview, Ill.; SP—Same; CTY—Fulton; RR—C. B. & Q.
MS—Louis Shuler, Fairview, Ill.
S of H—Mules. Track gage 32 inches.
EMP—12. Daily tonnage, 50.
SIZES SHIPT—Run of Mine.
Old Information.

SILVER CREEK COLLIERY CO.

General Office, Monmouth, Ill.
PR—G. W. Gale, Galesburg, Ill.
VP—W. W. McCullough, Monmouth, Ill.
TR—H. W. Stewart, Monmouth, Ill.
GM—W. W. McCullough, Monmouth, Ill.
GS—Frank M. Guthrie, Farmington, Ill.
PA—T. E. Shaw, Monmouth, Ill.
EE—Frank Burkhardt, Farmington, Ill.

Silver Creek Mine; Shaft; No. 5 Seam, 50 to 54 in. thick.
PO—Farmington, Ill.; SP—Same; CTY—Fulton; RR—M. & St. L. and C. B. & Q.
S of H—Mules, 2 trolley pole type and 6 storage battery locos. Track gage 36 inches.
S of M—12 shortwall machs.
PP—Power purchased, Transformer 2300-440 volts A. C., M. G. Sets, 250 volts D. C., 4 pumps.
EMP—250. Daily tonnage 1200.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Loading Rooms.

SIMMONS COAL CO.

PR—Thos. Simmons, Canton, Ill.
VP—Chas. Simmons, Canton, Ill.
TR—L. L. Simmons, Canton, Ill.
GM—Chas. Simmons, Canton, Ill.
GS—Thos. Simmons, Canton, Ill.

Simmon Mine; Shaft, No. 5 Seam, 56 to 62 in. thick.
PO—Canton, Ill.; SP—Same; CTY—Fulton; RR—C. B. & Q.
MS—Chas. Simmons, Canton, Ill.
S of H—Mules and trolley pole type locos. Track gage 35 inches.
S of M—3 chain breast type and 4 shortwall machs.
PP—Power purchased, Transformer 2300 volts A. C., M. G. Sets, 250 volts D. C., 3 fire tube boilers, 5 pumps.
EMP—125. Daily tonnage 500.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

SLOGO COAL COMPANY.

General Office, 606 Equitable Bldg., St. Louis, Mo.
PR—J. V. Berk, 606 Equitable Bldg., St. Louis, Mo.
GM—C. V. Berk, 606 Equitable Bldg., St. Louis, Mo.
GS—Patrick H. Kelly, Marion, Ill.
PA—E. M. Collins, 606 Equitable Bldg., St. Louis, Mo.
SA—Lumagh Coal Co., St. Louis, Mo.

Slogo Mine; Shaft; No. 6 Seam, 84 in. thick.
PO—Marion, Ill.; SP—Same; CTY—Williamson; RR—Missouri Pacific.
S of H—Mules. Track gage, 42 in.
S of M—Hand.
PP—3 fire tube boilers, 400 H. P., 4 pumps.
EMP—110. Last fiscal year output, 51,000 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

SMITH-LOHR COAL MINING CO.

General Office, Pana, Ill.
PR—B. Beckenhelm, Pana, Ill.
VP—R. G. Lohr, Pana, Ill.
TR—B. Beckenhelm, Pana, Ill.
GM—B. Beckenhelm, Pana, Ill.
GS—B. G. Lohr, Pana, Ill.
PA—Ira M. Virdon, Pana, Ill.
EM—R. Sauerbier, Pana, Ill.
EE—Steve Busak, Pana, Ill.
SA—Address the company, Buyer, Ira M. Virdon, Pana, Ill.

Smith-Lohr Mine; Shaft; No. 6 Seam, 90 in. thick.
PO—Pana, Ill.; SP—Same; CTY—Christian; RR—I. C., C. & E. I., C. C. & St. L., B. & O. S. W.
S of H—Mules and trolley pole type loco. Track gage, 38 in.
S of M—Hand.
PP—5 fire tube boilers, 725 H. P., 1 gen. unit, 225 volts D. C., 2 pumps.
EMP—235. Last years tonnage 161,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Tipples, Picking Tables, Rescreening plant, Loading Rooms, Coal Crushers.

SOPER COAL COMPANY

General Office, Cutler, Ill.
PR—Gus Blair, Morpheshoro, Ill.
TR—Gus Blair, Morpheshoro, Ill.
GM—Gus Blair, Morpheshoro, Ill.
GS—R. G. Mathew, Cutler, Ill.
EM—Alex Wilson, Cutler, Ill.
SA—W. Va. Coal Co., Boatmen's Bank Bldg., St. Louis, Mo.

Soper No. 1 Mine; Shaft; No. 6 Seam; 65 inches thick.
PO—Cutler, Ill.; SP—Same; CTY—Perry; RR—W. C. & W.
S of H—Mules. Track gage 35 inches.
S of M—1 shortwall mach.
PP—2 return tubular boilers, gen. unit, 250 volts A. C., 3 pumps.
EMP—76. Last fiscal year output, 52,081 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

Soper No. 2 Mine; Shaft; No. 6 Seam; 67 inches thick.
PO—Cutler, Ill.; SP—Same; CTY—Perry; RR—W. C. & W.
S of H—Mules. Track gage 35 inches.
S of M—1 shortwall mach.
PP—2 return tubular boilers, gen. unit, 250 volts A. C., 3 pumps.
EMP—57. Last fiscal year output, 41,262 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.
Old Information.

SOUTH BELLEVUE COAL COMPANY

General Office, 1203 Boatmen's Bank Bldg., St. Louis, Mo.
PR—John Henderson, St. Louis, Mo.
GM—C. J. Sandoe, St. Louis, Mo.

PA—C. J. Sandoe, St. Louis, Mo.
SA—West Virginia Coal Co., 1303 Boatmen's Bank Bldg., St. Louis, Mo.

South Belleville Mine Shaft; No. 6 Seam, 84 in. thick.
PO—Belleville, Ill.; SP—Same; CTY—St. Clair; RR—I. C.
MS—Harry Taylor, Belleville, Ill.
S of H—5 mules. Track gage, 30 in.
S of M—Hand.
PP—1 water tube boiler, total 125 H. P., 3 pumps.
EMP—17. Last years tonnage 32,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Bar Screens.
Note—Formerly the Lattmann Rebe Coal Co.

SOUTHERN COAL, COKE & MINING CO.

General Office, 349 North Fourth St., St. Louis, Mo.
PR—W. K. Kavanaugh, St. Louis, Mo.
TR—Jas. Y. Lockwood, St. Louis, Mo.
GM—W. K. Kavanaugh, St. Louis, Mo.
GS—W. F. Davis, Belleville, Ill.
EFFICIENCY ENGR. L. A. Foster, St. Louis, Mo.
MM—J. E. Richmond, St. Louis, Mo.
PA—Jas. Y. Lockwood, St. Louis, Mo.
EM—Marshall Morris, St. Louis, Mo.
EE—Jas. Albert, Belleville, Ill.
SA—R. H. May, St. Louis, Mo.

Avery No. 1 Mine; Shaft; No. 6 Seam, 78 in. thick.
PO—Belleville, Ill.; SP—Same; CTY—St. Clair; RR—E. St. L. & Sub.; Southern.
S of H—Mules and 2 storage battery locos. Track gage, 24 in.
S of M—Hand.
PP—2 100 H. P. fire tube boilers, 30 K. W. g. n. units, 110 volts D. C., 4 pumps.
EMP—192. Daily output, 1,000 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms, Washeries.

Muren No. 6 Mine Shaft; No. 6 Seam, 78 in. thick.
PO—Belleville, Ill.; SP—Same; CTY—St. Clair; RR—Southern.
MS—Albert Severt, 1404 N. Church St., Belleville, Ill.
S of H—Mules. Track gage, 22 in.
S of M—Hand.
PP—2 100 H. P. fire tube boilers, 3 K. W. g. n. units, 110 volts D. C., 3 pumps.
EMP—122. Daily output, 1,000 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms, Washeries.

Little Oak No. 7 Mine; Shaft; No. 6 Seam, 90 in. thick.
PO—Belleville, Ill.; SP—Same; CTY—St. Clair; RR—Southern.
MS—Steve Herbert, 610 N. First St., Belleville, Ill.
S of H—2 trolley pole type and 8 storage battery locos. Track gage 36 in.
S of M—4 breast and 4 shortwall machs.
PP—2—300 H. P. water tube boilers, 2—175 K. W. g. n. units, 250 volts D. C., 3 pumps.
EMP—269. Daily output, 2,000 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms, Washeries.

Shiloh No. 8 Mine; Shaft; No. 6 Seam, 90 in. thick.
PO—Belleville, Ill.; SP—Same; CTY—St. Clair; RR—Southern.
MS—Harry Maitland, 1912 W. Main St., Belleville, Ill.
S of H—2 trolley pole type and 12 storage battery locos.
S of M—10 chain breast type machs.
PP—1—300 H. P. water tube boiler, 1—200 K. W., 1—150 K. W. gen. unit, 250 volts D. C., 7 pumps.
EMP—338. Daily output, 2,800 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms, Washeries.

New Baden No. 9 Mine; Shaft; No. 6 Seam, 92 inches thick.
PO—Belleville, Ill.; SP—Same; CTY—St. Clair; RR—Southern.
MS—John Viasak, New Baden, Ill.
S of H—Mules, 5 trolley pole type and 1 storage battery loco. Track gage 26 inches.
S of M—12 chain breast type machs.
PP—4 water tube boilers, 1 200 H. P., 2 150 K. W. g. n. units, 250 volts D. C., 5 pumps.
EMP—136. Daily output, 3,200 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms, Washeries, Dry Washer.

SOUTHERN GEM COAL CORP.

General Office, Old Colony Bldg., Chicago, Ill.
 PR—Jesse Diamond, Chicago, Ill.
 VP—Thos. Horn, St. Louis, Mo.
 TR—J. M. Millavou, Chicago, Ill.
 GM—Thos. Horn, St. Louis, Mo.
 GS—Thos. Horn, St. Louis, Mo.
 PA—Ira D. Kay, Chicago, Ill.
 CE—J. L. Oliver, Mt. Vernon, Ill.
 EM—Fred Oberding, West Frankfort, Ill.
 SA—Harris-Tullavou-Diamond Co., Chicago, Ill.; Crown Wood & Coal Co., Chicago, Ill.

No. 1 Mine; Shaft; No. 6 Seam; 120 inches thick.
 PO—West Frankfort, Ill.; SP—Same; CTY—Franklin; RR—C. C. B. & Q. C. & E. I.
 MS—E. E. Jacobs, West Frankfort, Ill.
 S of H—Mules, 8 trolley pole type locos. Track gage 42 inches.
 S of M—19 chain breast type and 9 shortwall machs.
 PP—7 fire tube boilers, total 1175 H. P., 3-750 K. W. gen. units, 250 volts D. C.
 EMP—502. Last year tonnage 576,697.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
 PREP. EQUIPT.—Shaker Screens, Loading booms.

No. 2 Mine; Shaft; No. 6 Seam, 120 in. thick.
 PO—Sesser, Ill.; SP—Same; CTY—Franklin; RR—C. C. B. & Q.
 MS—R. Schettler, Sesser, Ill.
 S of H—Trolley pole type locos. Track gage 42 in.
 S of M—2 chain breast type and 18 shortwall machs.
 PP—6 water tube boilers, total 1800 H. P., 3-830 K. W. gen. units, 250 volts D. C.
 EMP—417. Last years tonnage 463,473.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
 PREP. EQUIPT.—Shaker Screens, Picking Tables.

No. 5 Mine; Shaft; No. 6 Seam, 70 in. thick.
 PO—Pickneyville, Ill.; SP—Same; CTY—Perry; RR—L. C. W. C. & W.
 MS—F. C. Wilson, Pickneyville, Ill.
 S of H—Mules. Track gage 36 in.
 S of M—Hand.
 PP—3-550 H. P. fire tube boilers.
 EMP—245. Last years tonnage 42,725.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
 PREP. EQUIPT.—Shaker Screens.
 NOTE—Formerly operated by the Ritchey Coal Company.

No. 6 Mine; Shaft; No. 6 Seam, 70 in. thick.
 PO—Pickneyville, Ill.; SP—Same; CTY—Perry; RR—L. C. W. C. & W.
 MS—L. C. Smiley, Pickneyville, Ill.
 S of H—Mules. Track gage 42 in.
 S of M—Hand.
 PP—2-500 H. P. water tube boilers.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
 PREP. EQUIPT.—Shaker Screens.

No. 7 Mine; Shaft; No. 6 Seam; 70 in. thick.
 PO—Jamestown, Ill.; SP—Same; CTY—Perry; RR—C. & W.
 MS—H. B. Blough, Jamestown, Ill.
 S of H—Mules.
 S of M—Hand.
 PP—2-400 H. P. fire tube boilers.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
 PREP. EQUIPT.—Shaker Screens.

No. 9 Mine; Shaft; No. 6 Seam, 70 in. thick.
 PO—Cutler, Ill.; SP—Same; CTY—Perry; RR—W. C. & W.
 MS—John Howells, Cutler, Ill.
 S of H—Mules.
 S of M—Hand.
 PP—2-400 H. P. fire tube boilers.
 EMP—75. Daily tonnage 375.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
 PREP. EQUIPT.—Shaker Screens.

No. 10 Mine; Shaft; No. 6 Seam, 70 in. thick.
 PO—Cutler, Ill.; SP—Same; CTY—Perry; RR—W. C. & W.
 MS—John Howells, Cutler, Ill.
 S of H—Mules.
 S of M—5 shortwall machs.
 PP—4-600 H. P. fire tube boilers, 1-200 K. W. gen. unit, 250 volts D. C.
 EMP—225. Daily tonnage 1,150.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
 PREP. EQUIPT.—Shaker Screens.
 NOTE—Formerly operated by the Aladdin Coal Company.

No. 11 Mine; Shaft; No. 6 Seam, 70 in. thick.
 PO—Tamaroa, Ill.; SP—Same; CTY—Perry; RR—L. C. W. C. & W.
 S of H—Mules.
 S of M—Hand.

PP—2-400 H. P. fire tube boilers.
 EMP—140. Daily tonnage 650.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
 PREP. EQUIPT.—Shaker Screens.
 NOTE—Formerly operated by the Collier Coal Company.

SPOON RIVER COLLIERY COMPANY.

General Office, 211 Peoples National Bk. Bldg., Rock Island, Ill.
 PR—W. A. Schaeffer, Rock Island, Ill.
 VP—Otto Koch, Rock Island, Ill.
 TR—C. A. Schuessel, Rock Island, Ill.
 GM—W. A. Schaeffer, Rock Island, Ill.
 GS—J. H. Morris, London Mills, Ill.
 PA—W. A. Schaeffer, Rock Island, Ill.
 SCO—Address the Company, Buyer, C. E. Reed, London Mills, Ill.
 SA—W. A. Schaeffer, Rock Island, Ill.

Spoon River Mine; Shaft; No. 1 Seam, 36 to 72 in. thick.
 PO—London Mills, Ill.; SP—Elmhurst, Ill.; CTY—Fulton; RR—C. C. B. & Q. Havana Br.
 S of H—2-6-ton Elec. locos. Track gage 36 in.
 S of M—Hand.
 PP—3 return tube boilers, 175 K. W. generator, 220-250 volts D. C., 7 pumps.
 EMP—150. Last years tonnage 90,000.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT.—Shaker Screens.

SPRING CREEK COAL COMPANY.

General Office, Springfield, Ill.
 PR—Geo. Reisch, Sr., Springfield, Ill.
 VP—Frank Reisch, Springfield, Ill.
 TR—Geo. Reisch, Jr., Springfield, Ill.
 GM—Frank Reisch, Springfield, Ill.
 GS—Carl H. Elshoff, Springfield, Ill.
 PA—Carl H. Elshoff, Springfield, Ill.
 CE—W. F. Humphrey, Springfield, Ill.
 EM—Peter Esper, Springfield, Ill.
 EE—Joseph Bee, Springfield, Ill.
 SCO—Address the company, Buyer, H. F. Neuman, Springfield, Ill.
 SA—Geo. Simpson, Springfield, Ill.

Spring Creek Mine; Shaft; No. 5 Seam, 68 in. thick.
 PO—Springfield, Ill.; SP—Same; CTY—Sangamon; RR—B. & O. Wabash, C. & A. P. & St. L., C. N. W.
 MS—Jno. Streber, Springfield, Ill.
 SM—H. F. Neuman, Springfield, Ill.
 S of H—Mules, trolley pole loco. and storage battery loco. Track gage, 36 in.
 S of M—Hand.
 PP—3 water tube boilers, 375 H. P. gen. units, 250 volts D. C., 3 pumps.
 EMP—220. Last fiscal year output, 260,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT.—Shaker Screens, Picking Tables.

SPRING LAKE COAL CO.

Out of business.

SPRING VALLEY COAL CO.

General Office, 915 Old Colony Bldg., Chicago, Ill.
 PR—C. H. Strong, Erie, Pa.
 VP—C. H. Strong, Erie, Pa.
 TR—J. S. Owen, Erie, Pa.
 GM—L. H. Smith, Chicago, Ill.
 GS—Wm. Bevan, Spring Valley, Ill.
 PA—L. H. Smith, Chicago, Ill.
 EM—I. G. Pospysala, Spring Valley, Ill.
 MM—A. H. Halladay, Spring Valley, Ill.
 SCO—Address the Company, Buyer, Miss Mae Walsh, Spring Valley, Ill.
 SA—L. H. Smith, Chicago, Ill.

No. 1 Mine; Shaft; Second Seam, 41 in. thick.
 PO—Spring Valley, Ill.; SP—Same; CTY—Bureau; RR—C. & N. W. C. R. I & P.
 MS—Chas. Sulski, Spring Valley, Ill.
 S of H—Trolley pole type locos. and mules. Track gage, 41 in.
 S of M—7 longwall machs.
 PP—Power purchased, transformer 2,300 volts, motor gen. units, 175 volts D. C., 6-900 H. P. water tube boilers 2 pumps.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
 PREP. EQUIPT.—Shaker Screens and Washeries.

No. 3 Mine; Shaft; Second Seam, 41 in. thick.
 PO—Spring Valley, Ill.; SP—Same; CTY—Bureau; RR—C. & N. W. C. R. I & P.
 MS—A. J. Prieto, Spring Valley, Ill.
 S of H—Mules. Track gage, 41 in.
 S of M—Hand.
 PP—5-150 H. P. horizontal tubular boilers 1 pump.
 EMP—1120. Last years tonnage 586,492.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
 PREP. EQUIPT.—Shaker Screens and Washeries.

No. 5 Mine; Shaft; No. 2 Seam, 41 inches thick.
 PO—Dalzell, Ill.; SP—Same; CTY—Bureau; RR—C. & N. W.
 MS—Anton Loeffler, Spring Valley, Ill.
 S of H—Mules. Track gage, 41 in.
 S of M—2 gasoline locos.
 PP—6-900 H. P. water tube boilers.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
 PREP. EQUIPT.—Shaker Screens and Washeries.

SPRINGFIELD CO-OPERATIVE COAL MINING COMPANY

General Office, Springfield, Ill.
 PR—R. H. Scheibner, Springfield, Ill.
 TR—Miss C. E. Scheibner, Springfield, Ill.
 GM—Chas. H. Sutton, Springfield, Ill.
 GS—Oswald Richter, Springfield, Ill.
 PA—Chas. H. Sutton, Springfield, Ill.

Springfield Mine; Shaft; No. 5 Seam, PO—Springfield, Ill. SP—Same; CTY—Sangamon; RR—Chl. & Alton.
 S of H—Mules and 2 trolley pole type locos. Track gage 36 inches.
 S of M—Hand.
 PP—4 fire tube boilers, 500 H. P., gen. unit, 250 volt D. C., 4 pumps.
 EMP—200. Daily output, 1000 tons.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT.—Shaker Screens.

SPRINGFIELD DIST. COAL MINING CO.

Now Peabody Coal Company.

STANDARD COAL COMPANY.

Out of business.

STANDARD OIL CO OF INDIANA

General Office, Chicago, Ill.
 PR—Wm. Burton, Chicago, Ill.
 GM—C. R. Manbeck, Carlville, Ill.
 ASST GEN MGR—C. W. Clark, Carlville, Ill.
 PA—F. H. Rosworth, Chicago, Ill.
 CHIEF ELECT—Arthur Hibbard, Carlville, Ill.
 EM—C. W. Clark, Carlville, Ill.
 EE—C. W. Clark, Carlville, Ill.

No. 1 A Mine abandoned.

No. 1 Mine; Shaft; No. 6 Seam, 72 in. thick.
 PO—Carlville, Ill.; SP—Same; CTY—Macoupin; RR—C. & A.
 MS—T. W. Paul, Carlville, Ill.
 SM—Wm. Fries, Carlville, Ill.
 S of H—2 trolley pole type and 11 storage battery locos. Track gage 42 in.
 S of M—22 shortwall machs.
 PP—Power purchased. Transformer 33,000 to 2,300 volts A. C., 2 M. G. Sets, 275 volts D. C., 2 water tube boilers, total 500 H. P., 4 pumps.
 EMP—515. Last years tonnage 600,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT.—Gravity Screens.

No. 2 Mine; Shaft; No. 6 Seam, 72 in. thick.
 PO—Carlville, Ill.; SP—Same; CTY—Macoupin; RR—C. & A. and North Western.
 MS—T. W. Paul, Carlville, Ill.
 SM—John McMillen, Carlville, Ill.
 S of H—2 15-ton trolley pole type and 6 combination locos. Track gage 48 inches.
 S of M—30 shortwall machs.
 PP—4 water tube boilers, total 2,000 H. P., transformer 6,600 to 2,300 volts A. C., 2 M. G. Sets, 275 volts D. C., 11 pumps.
 EMP—350. Daily tonnage 1,250.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT.—Gravity Screens.

STAR COAL & MINING COMPANY

General Office, K. of C. Bldg., Belleville, Ill.
 PR—Anthony F. Jakoubek, Belleville, Ill.
 VP—Charles Jakoubek, Belleville, Ill.
 TR—Richard Geh, Marissa, Ill.
 GM—Anthony F. Jakoubek, Belleville, Ill.
 GS—Anthony F. Jakoubek, Belleville, Ill.
 PA—Anthony F. Jakoubek, Belleville, Ill.
 SA—Lake & Export Coal Corp., St. Louis, Mo., and Chicago, Ill.

Star Mine; Shaft; No. 6 Seam, 120 inches thick.
 PO—Freeburg, Ill.; SP—Same; CTY—St. Clair; RR—Ill. Central.
 MS—Tony Fakke, Freeburg, Ill.
 S of H—Mules, rope and storage battery loco. Track gage 42 inches.
 S of M—Hand and comp. air puncher.
 PP—3-150 H. P. water tube boilers, transformer 250 to 225 volts A. C., M. G. set, I-35 H. P., 250 volts D. C.
 EMP—135. Last years tonnage 195,000.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
 PREP. EQUIPT.—Shaker Screens.
 Note—Formerly operated by the Star Coal Co.

STAR COAL CO.

Now operated by Star Coal & Mining Co.

STAR COAL CO. OF GALESBURG.

General Office, Galesburg, Ill.
 PR—Thomas Fairbairn, Streator, Ill.
 TR—R. J. Fairbairn, Galesburg, Ill.
 PA—R. J. Fairbairn, " "
 GM—W. R. Hawkins, " "
 Sales Mgr.—W. R. Hawkins, " "
 GS—J. J. Wood, Cuba, Ill.
 CE—J. W. Fairbairn, Canton, Ill.

No. 3 Mine; Shaft; No. 5 Seam, 54 in. thick.
 PO—Cuba, Ill. SP—Same. CTY—Fulton.
 RR—C. R. & Q.
 MS—J. J. Wood, Cuba, Ill.
 S of H—Mules and rope. Track gage, 36 in.
 S of M—Hand.
 PP—Purchase power, transformer, 220 volts, 3 fire tube boilers, 450 H. P., 1 25 K. W. gen. unit D. C., 3 pumps.
 EMP—125. Daily output, 350 tons.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
 PREP. EQUIPT.—Shaker Screens.
 Flat No. 1 Mine; Shaft; No. 5 Seam, 54 in. thick.
 PO—Flat, Ill. SP—Same. CTY—Fulton.
 RR—C. R. & Q.
 MS—Wm. Donaldson, Flat, Ill.
 S of H—Mules. Track gauge, 36 in.
 S of M—Hand.
 PP—Purchase power, 220 volts A. C., 3 return tubular boilers, total 240 H. P., 3 pumps.
 EMP—60. Daily output, 260 tons.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT.—Shaker Screens.

STREATOR CLAY MFG. CO., THE

General Office, Streator, Ill.
 PR—R. H. Green, Streator, Ill.
 VP—Jas. A. Green, Streator, Ill.
 TR—R. H. Green, Streator, Ill.
 GM—G. E. Connolly, Streator, Ill.
 GS—E. S. Baer, Streator, Ill.
 PA—E. R. Green, Streator, Ill.

Streator Clay Mine; Shaft; No. 7 Seam, 66 inches thick.
 PO—Streator, Ill.; SP—Same; CTY—Livingston; RR—Wabash, C. I. & S.
 MS—Reese Noel, Streator, Ill.
 S of H—Mules and 1 storage battery loco. Track gage 34 in.
 S of M—Hand.
 PP—Power purchased. Transformer 33,000 to 440 volts A. C., 5 fire tube boilers, 750 H. P., 2 pumps.
 EMP—56. Daily tonnage 135.
 PREP. EQUIPT.—Bar Screens, Washeries.
 Mine for own use only.

SUBURBAN COAL & MINING CO.

General Office, St. Louis, Mo.
 PR—Wm. H. Bochner, St. Louis, Mo.
 VP—John Guest, Belleville, Ill.
 GM—John Guest, Belleville, Ill.
 GS—John Guest, " "
 PA—John Guest, " "
 Sales Agent, W. H. Bochner, St. Louis, Mo.

Suburban Mine; Shaft; No. 6 Seam; 78 to 90 in. thick.
 PO—Belleville, Ill.; SP—Signal Hill; CTY—St. Clair; RR—St. L. & B. E.
 MS—Aug. Steable, Belleville, Ill.
 S of H—Mules. Track gage, 22 in.
 PP—2 return tubular boilers, 150 H. P., 2 pumps.
 EMP—91.
 SIZES SHIPT—Slack, Lump, Nut.
 PREP. EQUIPT.—Shaker Screens.

SUMMIT COAL & MINING CO.

PR—H. Scott, Belleville, Ill.
 TR—Walter Lanxon, " "
 Sec—J. Schneider, " "
 GM—Wm. Erwin, " "
 GS—Wm. Erwin, " "
 PA—Walter Lanxon, " "
 EM—G. Meug, " "
 Sales Agent, R. Avery, St. Louis, Mo.

Summit Mine; Shaft; Second Seam, 84 in. thick.
 PO—Belleville, Ill. R. R. No. 3; SP—Summit Mine Switch, Ill.; CTY—St. Clair; RR—L. & N.
 S of H—Mules; track gauge 24 in.
 S of M—Hand.
 PP—2 Return tubular boilers, total 110 H. P., 1 gen. unit, 1 pump.
 EMP—34. Last fiscal year output 19,969 tons.
 (Old information.)

SUPERIOR COAL CO.

General Office, Gillespie, Ill.
 PR—Marvin Hughtit, Jr., Chicago, Ill.
 TR—John D. Caldwell, Chicago, Ill.
 GM—F. S. Pfahler, Gillespie, Ill.
 GS—F. S. Jorgensen, Gillespie, Ill.
 PA—W. L. Gilgis, 226 W. Jackson Blvd., Chicago, Ill.
 CHIEF ENG—F. F. Jorgensen, Gillespie, Ill.
 EE—H. L. Seekamp, Gillespie, Ill.

(Continued on Next Page)

Superior Coal Co.—Cont

No. 1 Mine; Shaft; No. 6 Seam, 90-96 in. thick.
PO—Gillespie, Ill.; SP—Reid, Ill.; CTY—Macoupin; RR—C. & N. W.
MS—D. D. Wilcox, Gillespie, Ill.
S of H—Mules, 7 trolley pole type and 1 combination locos. Track gage, 42 in.
S of M—10 chain breast type and 3 shortwall machs.
PP—12 fire tube boilers, 1200 H. P., 2 200 K. W. gen. units, 250 volts D. C., 4 pumps.
EMP—775. Last years tonnage 775,870.
SIZES SHIPT—Run of Mine, Lump, Nut.
PREP. EQUIPT—Gravity Screens and Washeries.

No. 2 Mine; Shaft; No. 6 Seam, 90-96 in. thick.
PO—Gillespie, Ill.; SP—Reid, Ill.; CTY—Macoupin; RR—C. & N. W.
MS—D. D. Wilcox, Gillespie, Ill.
S of H—Mules and 6 trolley pole type locos. Track gage, 42 in.
S of M—1 chain breast and 8 shortwall machs.
PP—12 fire tube boilers, 1400 H. P., 2 200 K. W. gen. units, 250 volts D. C., 4 pumps.
EMP—760. Last years tonnage 1,007,615.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Gravity Screens.

No. 3 Mine; Shaft; No. 6 Seam, 90-96 in. thick.
PO—Gillespie, Ill.; SP—Reid, Ill.; CTY—Macoupin; RR—C. & N. W.
MS—D. D. Wilcox, Gillespie, Ill.
S of H—Mules, 10 trolley pole type, 3 storage battery and 6 combination locos. Track gage 42 in.
S of M—8 chain breast type and 4 shortwall machs.
PP—8 fire tube boilers, 1200 H. P., 2 200 K. W. gen. units, 250 volts D. C., 4 pumps.
EMP—750. Last years tonnage 1,016,143.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Gravity Screens.

No. 4 Mine; Shaft; No. 6 Seam, 90-96 in. thick.
PO—Gillespie, Ill.; SP—Reid, Ill.; CTY—Macoupin; RR—C. & N. W.
MS—D. D. Wilcox, Gillespie, Ill.
S of H—11 trolley pole type locos. Track gage 42 in.
S of M—7 chain breast type and 3 shortwall machs.
PP—3 513 H. P. water tube boilers, transformer, 2300-250 volts A. C., 1 938 Kva. and 1 375 Kva. gen. units, 250 volts D. C., 6 pumps.
EMP—600. Last years tonnage 657,563.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Gravity Screens.

SUPERIOR MINING COMPANY

General Office, 1303 Boatmens Bank Bldg., St. Louis, Mo.
PR—John Henderson, St. Louis, Mo.
TR—Carl Voigt, St. Louis, Mo.
GM—C. J. Sandoe, St. Louis, Mo.
GS—Theodore Michaelis, Belleville, Ill.
PA—C. J. Sandoe, St. Louis, Mo.
SA—West Virginia Coal Co., 1303 Boatmens Bank Bldg., St. Louis, Mo.

Superior Mine; Shaft; No. 6 Seam; 84 inches thick.
PO—Belleville, Ill.; SP—Same; CTY—St. Clair; RR—St. L.-Belleville Electric.
S of H—1 electric loco. Track gage 30 inches.
S of M—10 comp. air machs.
PP—3 water tube boilers, total 400 H. P., 1 air comp., 1 gen. unit, 275 volts D. C., 4 pumps.
EMP—128. Last years tonnage 187,867.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

Valley Mine; Shaft; No. 6 Seam; 72 inches thick.
PO—Belleville, Ill.; SP—Same; CTY—St. Clair; RR—L. & N.
MS—Theodore Michaelis, Belleville, Ill.
S of H—1 storage battery loco. Track gage 30 inches.
S of M—Hand.
PP—2 return tubular boilers, total 300 H. P., 1 gen. unit, 250 volts D. C., 2 pumps.
EMP—70.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

TAYLOR COAL COMPANY.

General Office, Old Colony Bldg., Chicago, Ill.
PR—Herbert H. Taylor, Chicago, Ill.
TR—H. J. Ellis.
GS—G. L. Saylor, Herrin, Ill.
PA—M. M. Shepherd, Herrin, Ill.
Additional Information on Pages 340, 341.

No. 1 Mine; Shaft.
PO—Herrin, Ill. SP—Same. CTY—Williamson. RR—I. C. and Mo. Pac.

S of H—Mules, storage battery loco.
S of M—Hand.
EMP—300.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

No. 2 Mine; Shaft.
PO—Herrin, Ill. SP—Same. CTY—Williamson. RR—I. C. and Mo. Pac.
S of H—Mules, storage battery loco.
S of M—Hand.
EMP—325.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Washeries.

No. 3 Mine; Shaft.
PO—Herrin, Ill. SP—Same. CTY—Williamson. RR—I. C. and Mo. Pac.
S of H—Mules, storage battery loco.
S of M—Hand.
EMP—275.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.

No. 5 Mine; Shaft.
PO—Herrin, Ill. SP—Freemano, Ill. CTY—Williamson. RR—I. C. and Mo. Pac.
S of H—Mules, storage battery loco.
S of M—Hand.
EMP—340.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

TAYLOR-ENGLISH COAL CO.

General Office, Catlin, Ill.
PR—B. B. Taylor, Catlin, Ill.
VP—Geo. B. Niezer, Ft. Wayne, Ind.
TR—Wm. Dolan, Catlin, Ill.
GM—B. B. Taylor, Catlin, Ill.
GS—James Sidell, Catlin, Ill.
PA—Wm. Dolan, Catlin, Ill.
EM—Jas. Sidell, Catlin, Ill.
EE—Wm. Mauck, Danville, Ill.
SCO—Shippa Timber & Supply Co. Buyer, Newton Crosby, Catlin, Ill.
SA—Clarence Parker, Catlin, Ill.

Catlin Mine; Shaft; No. 6 Seam; 72 in. thick.
PO—Catlin, Ill.; SP—Same; CTY—Vermillion; RR—Wabash.
S of H—Mules. Track gage, 36 in.
S of M—Hand and 4 shortwall machs.
PP—3 water tube boilers, 450 H. P. gen. units, 250 volts D. C., 4 pumps.
EMP—211. Daily output, 1,000 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

TAZEWELL COAL COMPANY.

General Office, Pekin, Ill.
PR—Jas. Duggan, Pekin, Ill.
TR—Michael Duggan, Pekin, Ill.
GM—Jas. Duggan, Pekin, Ill.
GS—Jas. Duggan, Pekin, Ill.
PA—Jas. Duggan, Pekin, Ill.
EE—Ed. Schroeder, Pekin, Ill.
SA—Tazewell Coal Co., 744 Conway Bldg., Chicago, Ill.

Tazewell Mine; Shaft; No. 5 Seam, 56 in. thick.
PO—Pekin, Ill. SP—Same. CTY—Tazewell. RR—A. T. and B. F. C. C. & St. L.
S of H—8 mules and 3 trolley pole type locos. Track gage 32 inches.
S of M—13 chainbreast type machs.
PP—5 water tube boilers, total 750 H. P., 2-100 K. W. gen. units, 250 volts D. C., 6 pumps.
EMP—164. Last years tonnage 110,000.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

THE TOLUCA COAL CO.

General Office, 1510 Commerce Bldg., Kansas City, Mo.
PR—C. P. A. Cough, Kansas City, Mo.
TR—J. A. Parkinson, Kansas City, Mo.
GM—Geo. B. Gallon, Toluca, Ill.
GS—Geo. Colville, Toluca, Ill.
PA—R. R. Miller, Kansas City, Mo.
EM—G. L. Humphreys, Toluca, Ill.
EE—E. Arnold, Toluca, Ill.
SA—E. J. Wheeler, Mgr. Sales, 1665 Old Colony Bldg., Chicago, Ill.

Nos. 1 and 2 Mines; Shaft; Third Vein Seam, 32 in. thick.
PO—Toluca, Ill.; SP—Same; CTY—Marshall; RR—A. T. & S. F. C. & A.
MS—Geo. Colville, Toluca, Ill.
S of H—Mules and 4 trolley pole type locos. Track gage 36 in.
S of M—Hand and 7 longwall machs.
PP—7 fire tube boilers, total 900 H. P., 1 Turbine Gen., 2300 volts, 625 K. V. A., 1 eng. gen., 2300 volts, 200 K. V. A., 9 pumps.
EMP—500. Last years tonnage 220,000.

SIZES SHIPT—Run of Mine, Slack, Lump, Chunk.
PREP. EQUIPT—Shaker Screens.

TOWER GROVE COAL AND IRON CO.

PR—Peter A. Zink, Belleville, Ill.
GM—Peter A. Zink, Belleville, Ill.
TR—George H. Schick, Belleville, Ill.

Tower Grove Mine; Shaft; No. 6 Seam, 78 to 90 in. thick.
PO—Belleville, Ill.; SP—Same; CTY—St. Clair; RR—L. & N. and Son.
S of H—Mules.
S of M—Hand.
PP—1 return tubular boiler, 1 pump.
EMP—18. Last fiscal year output 8,903 tons.
SIZES SHIPT—Run of Mine.
(Old Information.)

TREASURE COAL CO.

General Office, Peoria, Ill.
PR—Octave Andre, Peoria, Ill.
TR—Wm. Mahannah, Peoria, Ill.
GM—Wm. Mahannah, Peoria, Ill.
GS—Aug. Lucow, 201 Summer Ave., Peoria, Ill.
PA—Wm. Mahannah, Peoria, Ill.
EE—Elmer Haman, Peoria, Ill.
EE—A. E. Tyler, Peoria, Ill.
SCO—Address the Company; Buyer, Wm. Mahannah, Peoria, Ill.
SA—J. W. Mahannah, Peoria, Ill.

Treasure Mine; Shaft; No. 5 Seam, 52 in. thick.
PO—Peoria, Ill.; SP—Acme Station, Ill.; CTY—Peoria; RR—P. R. & T.
S of H—Mules and steam locos. Track gage, 26 in.
S of M—1 shortwall mach.
PP—Power purchased, 220 volts A. C., 2 fire tube boilers, 160 H. P., 7 pumps.
EMP—38. Last years tonnage 28,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

URNS COAL COMPANY

General Office, Equality, Ill.
PR—H. F. Turns, Equality, Ill.
VP—S. D. Turns, Equality, Ill.
TR—J. E. Turns, Equality, Ill.
GM—H. F. Turns, Equality, Ill.
GS—J. E. Turns, Equality, Ill.
PA—J. E. Turns, Equality, Ill.
SCO—S. D. Turns Store, Buyer, J. E. Turns, Equality, Ill.

East Side Mine; Shaft; No. 5 Illinois Seam; 58 inches thick.
PO—Equality, Ill.; SP—Same; CTY—Callatin; RR—L. & N.
S of H—Mules and rope. Track gage 36 inches.
S of M—2 shortwall machs.
PP—Power purchased, 3 transformers, 11,000-200 volts A. C., 1-150 H. P. fire tube boiler, 2 pumps.
EMP—75. Last years tonnage 15,496.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.
NOTE—Formerly operated by Evans Coal & Mining Co.

TUXBORN COAL CO.

Now part of Union Fuel Company.

UBBEN COAL CO

General Office, Pekin, Ill.
PR—H. A. Ubben, Pekin, Ill.
VP—John Bank, Pekin, Ill.
TR—Theo. H. Ubben, Pekin, Ill.
GM—Theo. H. Ubben, Pekin, Ill.
GS—Theo. Ubben, Pekin, Ill.
PA—Theo. Ubben, Pekin, Ill.
EE—Louis Ubben, Pekin, Ill.

Ubben Mine; Shaft; No. 5 Seam, 52 to 56 in. thick.
PO—Pekin, Ill.; SP—Same, CTY—Tazewell. RR—C. C. & St. L.
S of H—Mules and 1 trolley pole type elec. loco. Track gage, 32 in.
S of M—2 chain breast and 1 shortwall machs.
PP—Power purchased, Transformer 2300-250 volts A. C., M. G. Sels, 250 volts D. C., 1-75 H. P. water tube boiler, 2 pumps.
EMP—60. Last years tonnage 30,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity and Shaker Screens.

UNION COLLIERY CO.

General Office, 4th floor, Union Electric Bldg., St. Louis, Mo.
PR—Eugene McAniff, St. Louis, Mo.
VP—L. H. Egan, St. Louis, Mo.
TR—J. L. Ganz, St. Louis, Mo.
GM—Eugene McAniff, St. Louis, Mo.
PA—F. P. Walters, St. Louis, Mo.
CE—Allen & Garcia, Chicago, Ill.
EM—Arthur S. White, Danquid, Ill.
EE—H. W. Enos, St. Louis, Ill.
SA—W. C. Schroeder, Old Colony Bldg., Chicago, Ill.
Additional Information on Page 342.

Kathleen Mine; Shaft; No. 6 Seam, 100 in. thick.
PO—Dowell, Ill.; SP—Same; CTY—Jackson; RR—I. C.

MS—Geo. Suedell, Dowell, Ill.
S of H—16 Trolley pole type locos. Track gage 42 in.
S of M—18 shortwall and 4 chain breast machs.
PP—Power purchased, transformer 33,000 to 2,300-240 volts A. C., M. G. Sels, 250 volts D. C., 2 50 H. P., fire tube boilers, 1 pump.
EMP—400. Last years tonnage 325,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

UNION FUEL COMPANY

General Office, Risch Bldg., Springfield, Ill.
PR—L. J. Pullham, Springfield, Ill.
VP—L. W. Hatch, Springfield, Ill.
TR—L. J. Pullham, Springfield, Ill.
SA—R. F. Bliss, Springfield, Ill.
GM—H. E. Smith, Springfield, Ill.
GS—H. E. Smith, Springfield, Ill.
PA—L. S. Short, Springfield, Ill.
CE—Allen & Garcia Co., Chicago, Ill.
SCO—Ridge Mercantile Co., Springfield, Ill.
SA—Union Fuel Co., Springfield, Ill.
Additional Information on Page 343.

Nilwood No. 1 Mine; Shaft; No. 6 Seam; 72 inches thick.
PO—Nilwood, Ill.; SP—Same; CTY—Macoupin; RR—C. & A.
MS—Claude Little, Nilwood, Ill.
S of H—Mules. Track gage 29 inches.
S of M—Hand.
PP—Power purchased, transformer 500 volts D. C., 3 fire tube boilers, 250 H. P., 3 pumps.
EMP—85. Daily tonnage 500.
SIZES SHIPT—Run of Mine, Lump, Block.
PREP. EQUIPT—Gravity Screens.
Note—Formerly operated by Nilwood Coal Co.

Tuxborn No. 2 Mine; Shaft; No. 5 Seam; 68 inches thick.
PO—Springfield, Ill.; R. F. D. No. 7; SP—Kays, Ill.; CTY—Sangamon; RR—C. I. & W.
MS—H. F. Young, Springfield, R. R. No. 7, Ill.
S of H—Mules, trolley pole type locos. Track gage 42 inches.
S of M—Hand.
PP—Power purchased, Transformer 6,000 to 440 volts A. C., M. G. Sels, 250 volts D. C., 1 fire tube boiler, 150 H. P., 2 pumps.
EMP—255. Daily output, 1,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.
Note—Formerly operated by the Tuxborn Coal Co.

Auburn No. 3 Mine; Shaft; No. 6 Seam; 84 inches thick.
PO—Auburn, Ill.; SP—Same; CTY—Sangamon; RR—C. & A.
MS—J. W. Menzle, Auburn, Ill.
S of H—Mules, 3 trolley pole type locos. Track gage 30 inches.
S of M—Hand.
PP—4 fire tube boilers, total 400 H. P., 1 150 K. W. gen. unit, 250 volts D. C., 4 pumps.
EMP—225. Daily tonnage 1,200.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Gravity Screens.
Note—Formerly operated by Auburn & Alton Coal Co.

Athens No. 4 Mine; Shaft; No. 5 Seam; 72 inches thick.
PO—Athens, Ill. SP—Same; CTY—Menard; RR—C. P. & St. L. and C. & N. W.
MS—Eli Mason, Athens, Ill.
S of H—Mules, 2 storage battery locos. Track gage 36 inches.
S of M—Hand.
PP—3 fire tube boilers, 1-200 K. W. and 1-35 K. W. Gen. units, 250 volts D. C., 3 pumps.
EMP—172. Daily tonnage 800.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens.
Note—Formerly operated by the Athens Coal Co.

No. 5 Mine; Shaft; No. 5 Seam, 72 in. thick.
PO—Schuytown, Ill.; SP—Same; CTY—Sangamon; RR—C. & A.
MS—C. N. Bambergh, Schuytown, Ill.
S of H—Mules and 2 trolley pole type locos. Track gage 36 in.
S of M—Hand.
PP—Power purchased, transformer 33,000-2300 volts A. C., rotary converters, 250 volts D. C., 2 fire tube boilers, 1 pump.
Daily tonnage 1300.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens.
NOTE—Formerly operated by Chicago-Williamsville Coal Co.

(Continued on Next Page)

Union Fuel Co.—Cont.

No. 6 Mine; Shaft; No. 6 Seam, 78 in. thick.
 PO—Greenridge, Ill.; SP—Same; CTY—Macoupin; RR—C. & C. C. & N. W. C. B. & Q.
 MS—Ed. Rees, Greenridge, Ill.
 S of H—Mules. Track gage 39 in.
 S of M—2 chain breast type mchs.
 PP—Power purchased, transformer 33,-000—2300 volts A. C., M. G. Set 250 volts D. C., 1 fire tube boiler, 2 pumps.
 Daily tonnage 1,000.
 SIZES SHIPT—Run of Mine; Slack, Egg, Lump.
 PREP. EQUIPT.—Shaker Screens.
 NOTE—Formerly operated by the Ridge Coal Mining Co.

UNITED ELECTRIC COAL COMPANIES.

General Office, Danville, Ill.
 PR—F. E. Butcher, Danville, Ill.
 VP—Howard Swallow, Danville, Ill.
 TR—J. R. F. McVie, Danville, Ill.
 GM—F. E. Butcher, Danville, Ill.
 GS—James Anderson, Danville, Ill.
 PA—W. B. Scott, Danville, Ind.
 E—Grant Holmes, Danville, Ill.
 EM—J. C. Jennings, Danville, Ill.
 EE—W. C. Jackson, Danville, Ill.
 SCO—Address the Company, Buyer, J. M. Shull, Danville, Ill.

Nos. 1, 4, 5 & 6 Mines; Slope and Strip; Illinois No. 7 Seam, 72 in. thick.
 PO—Danville, Ill.; SP—Oakwood, Ill.; CTY—Vermilion; RR—Big 4, N. Y. C. & Wabash.
 MS—Alex. Anderson, James Lane, Mike Bateman, Felix Pichon, Danville, Ill.
 S of H—Steam and elec. Track gage 36 in.
 S of M—4 mchs.
 PP—Power purchased. 10 pumps.
 EMP—500. Last years tonnage 650,000.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT.—Shaking Screens, Picking Tables.
 NOTE—Formerly operated by the Electric Coal Company.

UNITED STATES COAL & COKE CORP.

General Office, Monadnock Block, Chicago, Ill.
 PR—Geo. F. Bryant, Chicago, Ill.
 TR—A. B. Caldwell, Chicago, Ill.
 PA—A. B. Caldwell, Chicago, Ill.
 CE—Geo. F. Bryant, Chicago, Ill.
 SA—U. S. Coal & Coke Corp., Monadnock Block, Chicago, Ill.

Rutland Mine; Shaft; Third Vein Seam, 36 in. thick.
 PO—Rutland, Ill.; SP—Same; CTY—LaSalle; RR—I. C. C. & A.
 MS—Michael Proctor, Rutland, Ill.
 S of H—Elec. loco. Track gage 36 in.
 S of M—Longwall mchs.
 PP—Power purchased, 1—35 K. W. gen. unit, 220 volts A. C., 2 sh-1 boilers, 1 150 H. P. water tube boiler, 3 pumps.
 EMP—150. Last years tonnage 1,000.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT.—Shaker Screens, Loading Rooms.

UNITED STATES FUEL COMPANY.

General Office, So. La Salle St., Chicago, Ill.
 Four Mines in Ill.; 2 Mines in Ind.
 PR—W. H. Clinger, Carnegie Bldg., Pittsburgh, Pa.
 TR—C. S. Wardley, Chicago, Ill.
 PA—C. H. Rhodes, Chicago, Ill.
 GS—Thomas Moses, Westville, Ill.
 EM—A. F. Alford, " "
 EE—Thomas Mills, Westville, Ill.

Vermilion Mine; Shaft, No. 6 Seam, 72 in. thick.
 PO—Westville, Ill.; SP—Georgetown, Ill.; CTY—Vermilion; RR—C. C. C. & St. L.
 MS—Charles Karral, Westville, Ill.
 S of H—7 elec. locos. Track gage 38 in.
 S of M—23 elec. mchs.
 PP—7 return tubular boilers, total 1050 H. P., 3 gen. units D. C., 1 pump.
 EMP—833. Last years tonnage 993,659.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT.—Washeries.

Kelly No. 3 Mine Abandoned

Kelly No. 4 Mine; Shaft, No. 6 Seam, 72 in. thick.
 PO—Westville, Ill.; SP—Same; CTY—Vermilion; RR—C. C. & P. I.
 MS—Chas. Karral, Westville, Ill.
 S of H—4 elec. locos. Track gage 36 in.
 S of M—Hand.
 PP—1 return tubular boilers, total 650 H. P. gen. unit D. C., 2 pumps.
 EMP—548. Last years tonnage 559,569.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT.—Washeries.

Bunsenville Mine; Shaft; No. 6 Seam, 72 in. thick.
 PO—Westville, Ill.; SP—Georgetown, Ill.; CTY—Vermilion; RR—C. C. C. & St. L.
 MS—Chas. Karral, Westville, Ill.
 S of H—2 elec. locos. Track gage 38 in.
 S of M—9 elec. mchs.
 PP—3 return tubular boilers, total 450 H. P.
 EMP—400. Last years tonnage 336,553.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT.—Washeries.
 Middle Fork Mine; Shaft; No. 6 Seam, 84 to 120 in. thick.
 PO—Benton, Ill.; SP—Same; CTY—Franklin; RR—I. C. C. & E. I.
 MS—Wm. Brinkley, Benton, Ill.
 S of H—10 elec. locos. Track gage 38 in.
 PP—2 return tubular boilers, total 300 H. P., 250 volts D. C.
 EMP—769. Last years tonnage 741,505.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT.—Washeries.

VALIER COAL COMPANY.

General Office, 547 West Jackson Blvd., Chicago, Ill.
 PR—C. I. Sturges, Chicago, Ill.
 ASST. PR—R. H. Safford, Chicago, Ill.
 VP—C. G. Burnham, Chicago, Ill.
 TR—W. J. Jarvis, Chicago, Ill.
 GM—Walter Stevens, Valier, Ill.
 GS—J. C. Lindsay, Valier, Ill.
 PA—W. M. Dickson, 547 West Jackson Blvd., Chicago, Ill.
 CE—Carl Scholz, Charleston, W. Va.
 EM—F. E. Green, Christopher, Ill.
 EE—M. S. Dillon, Valier, Ill.

Valier Mine No. 1; Shaft; No. 6 Seam, 108 inches thick.
 PO—Valier, Ill.; SP—Same; CTY—Franklin; RR—C. B. & Q.
 S of H—1 trolley pole type and 10 combination electric locomotives. Track gage, 44 in.
 S of M—3 chain breast type and 30 shortwall mchs.
 PP—Power purchased. Transformer, 33,000 to 2,300 volts A. C., M. G. Sets, 220 volts D. C., 2—150 H. P., fire tube boilers, 9 pumps.
 EMP—850. Last years tonnage 744,853.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT.—Shaker Screens, Picking Tables.

VEIN SIX COAL COMPANY.

General Office, Danville, Ill.
 PR—John H. Harrison, Danville, Ill.
 GM—Frank A. Giddings, Danville, Ill.
 Vein Six Mine; Drift; No. 6 Seam, 60 in. thick.
 PB—Danville, Ill.; SP—Same; CTY—Vermilion; RR—I. C. Traction.
 MS—F. A. Hodges, Danville, Ill.
 S of H—Mules. Track gage 36 inches.
 S of M—Chain breast type and shortwall mchs.
 PP—Power purchased. Transformer 220 volts A. C.
 EMP—85. Last fiscal year output, 30,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT.—Shaker Screens.

VICTORIA COAL COMPANY.

General Office 1630-31 Lytton Bldg., Chicago, Ill.
 Victoria Mine, Shaft; No. 6 Seam, 72-90 inches thick.
 PO—Belleville, Ill.; SP—Same; CTY—St. Clair; RR—I. C.
 No report.

VICTORY COLLIERIES COMPANY.

General Office, 14 East Jackson Blvd., Chicago, Ill.
 PR—R. D. O'Shaughnessy, Chicago, Ill.
 VP—W. F. Dunk, Chicago, Ill.
 TR—M. E. Hopkins, " "
 PA—R. D. O'Shaughnessy, " "
 GM—R. D. O'Shaughnessy, Chicago, Ill.
 GS—J. H. Booth, Tamaroa, Ill.
 EM—J. H. Gibson, Duquoin, Ill.
 Victory No. 1 Mine; Shaft; No. 6 Seam, 70 in. thick.
 PO—Tamaroa, Ill.; SP—Same. CTY—Ferry, RR—I. Cent.
 S of H—Mules and 1 trolley pole type loco. Track gage, 42 in.
 S of M—5 breast mchs. 1 overcut-ter mach.
 PP—2 boilers, total 500 H. P. gen. units, 1—150 K. W., 250 volts D. C., 3 pumps.
 EMP—150.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT.—Shaker Screens.

VULCAN COAL COMPANY.

General Office, Marion, Ill.
 PO—Marion, Ill.; SP—Same; CTY—Williamson; RR—C. B. & Q. C. & P., I. C. C., St. L. I. M. & S.
 No report.

WAROEN, T. A.

Now McElvain & Hoy.

WARSAW COAL CO.

Now operated by the Central West Coal Co.

WASSON COAL CO.

General Office, Harrisburg, Ill.
 PR—C. M. Wasson, Harrisburg, Ill.
 VP—Frank Bastin, Vincennes, Ind.
 TR—T. L. Oliphant, Vincennes, Ind.
 GM—C. M. Wasson, Harrisburg, Ill.
 GS—Wm. Griffin, Harrisburg, Ill.
 PA—L. A. Wasson, Harrisburg, Ill.
 VP—O. O. Auten, Wasson, Ill.
 Additional Information on Pages 344, 345.

Wasson No. 1 Mine; Shaft; No. 5 Seam, 72 in. thick.
 PO—R. F. D. 5, Wasson, Ill.; SP—Same; CTY—Salina; RR—Big Four.
 S of H—Mules and trolley pole type locos. Track gage, 40 in.
 S of M—17 chain breast type and 6 shortwall mchs.
 PP—7 water tube boilers, 105 H. P., motor gen. sets, 2—750 K. W., 250 volts D. C., 16 pumps.
 EMP—560. Daily output, 2,500 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT.—Shaker Screens, Picking Tables, Loading Booms.

Wasson No. 2 Mine; Slope; No. 5 Seam, 60 in. thick.
 PO—Carrier Mills, Ill.; SP—Same; CTY—Salina; RR—Big Four.
 S of H—Trolley pole type locos. Track gage, 40 in.
 S of M—21 chain breast type and 8 shortwall mchs.
 PP—4 water tube boilers, 600 H. P., motor gen. sets, 2—550 K. W., 250 volts D. C., 12 pumps.
 EMP—350. Daily tonnage 1,800.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT.—Shaker Screens, Picking Tables, Loading Booms.

WATKINS COAL COMPANY.

General Office, 1110 W. Williams St., Danville, Ill.
 PR—Edward Fredrickson, Danville, Ill.
 PA—Edw. Fredrickson, 1110 W. Williams St., Danville, Ill.

Watkins Mine; Drift; No. 7 Seam; 72 in. thick.
 PO—Danville, Ill.; SP—Same; CTY—Vermilion; RR—I. T. S.
 MS—Edw. Fredrickson, 1110 W. Williams St., Danville, Ill.
 S of H—Mules.
 S of M—Hand.
 PP—2 pumps.
 EMP—10. Last years tonnage 5,000.
 Note—Formerly W. J. Watkins Operations.

WATSON COAL CO.

General Office, 809 Fisher Bldg., Chicago, Ill.
 PR—Jas. W. McElvain, Chicago, Ill.
 GM—C. H. Hoy, Chicago, Ill.
 GS—Elvis Skaggs, Herrin, Ill.
 PA—Elvis Skaggs, Herrin, Ill.
 SA—McElvain & Hoy Coal Co., Fisher Bldg., Chicago, Ill.

Watson Nos. 1 & 2 Mines; Slope; Nos. 6 & 5 Seams, 108-45 in. thick.
 PO—Herrin, Ill.; SP—Same; CTY—Williamson; RR—C. B. & Q. Mo. P.
 S of H—Mules. Track gage 36 & 42 in.
 S of M—Hand.
 PP—Purchase power, 220 volts A. C.
 EMP—50.
 SIZES SHIPT—Run of Mine.

WENONA COAL CO.

General Office, Wenona, Ill.
 PR—George S. Monser, Wenona, Ill.
 VP—W. E. Monser, Los Angeles, Cal.
 TR—J. A. Locke, Wenona, Ill.
 GM—Geo. S. Monser, Wenona, Ill.
 GS—Geo. S. Monser, Wenona, Ill.
 PA—J. A. Locke, Wenona, Ill.
 EM—J. E. Rantz, Streator, Ill.
 EE—Philip Christ, Streator, Ill.

Wenona No. 1; Shaft; No. 2 Seam, 36 to 48 in. thick.
 PO—Wenona, Ill.; SP—Same; CTY—Marshall; RR—Illinois Central.
 MS—Joseph Henderson, Wenona, Ill.
 S of H—Mules and tail rope. Track gage, 21½ in.
 S of M—Hand.
 PP—5 fire tube boilers, 500 H. P., 1—100 K. W., 1—35 K. W. gen. units, 250 volts D. C., 6 pumps.
 EMP—175. Last years tonnage 80,219.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT.—Shaker Screens, Loading Rooms.

WEST BELLEVILLE COAL COMPANY.

General Office, K. of C. Bldg., Belleville, Ill.
 PR—Anthony F. Jakoubek, Belleville, Ill.
 TR—Otto Bch, Belleville, Ill.
 GM—Anthony F. Jakoubek, Belleville, Ill.
 GS—Anthony F. Jakoubek, Belleville, Ill.
 PA—Anthony F. Jakoubek, Belleville, Ill.
 CE—Hugh W. Flood, Belleville, Ill.
 SA—Lake & Export Coal Corp., St. Louis, Mo., and Chicago, Ill.

West Belleville Mine; Shaft; No. 6 Seam, 96 in. thick.
 PO—Belleville, Ill.; SP—Same; CTY—St. Clair; RR—Southern.
 MS—Peter Noll, Belleville, Ill.
 S of H—Mules. Track gage 21 in.
 PP—2 100 H. P. water tube boilers, 2 pumps.
 EMP—39. Last years tonnage 30,500.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT.—Shaker Screens.
 Note—Formerly operated by the Southern Coal, Coke & Mining Co.

WEST END COAL CO.

General Office, 311 De Witt Smith Bldg., Springfield, Ill.
 PR—Chas. H. Hurst, Springfield, Ill.
 VP—Mrs. J. E. Hurst, Springfield, Ill.
 TR—Chas. A. Starne, Springfield, Ill.
 GM—Paul L. Starne, Springfield, Ill.
 GS—James Greenan, " "
 PA—James Greenan, Springfield, Ill.
 SA—Wilcox Coal & Coke Co., Fisher Bldg., Chicago, Ill.

West Mine; Shaft; No. 5 Seam, 68 to 72 in. thick.
 PO—Springfield, Ill.; SP—Same; CTY—Saugamon; RR—B. & O. C. & N. W. Wab., I. C. D. C. & A. C. P. & St. L. & I. C.
 S of H—Mules. 2 8-ton and 2 10-ton elec. locos. Track gage 35 in.
 S of M—Hand.
 PP—1 pump, 4 return tubular boilers, total 500 H. P., 250 volts D. C. Purchase power.
 EMP—260. Last years tonnage 265,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT.—Shaker Screen.

WEST FRANKFORT COAL CO.

Now part of Southern Gem Coal Corp.

WEST SIDE COAL & MINING CO.

Now St. Louis Coal Co.

WEST VIRGINIA COAL COMPANY.

General Office, Marion, Ill.
 PR—George A. Wallace, Marion, Ill.
 VP—John Henderson, St. Louis, Mo.
 TR—John K. Wallace, Marion, Ill.
 GM—John K. Wallace, Marion, Ill.
 GS—George A. Wallace, Marion, Ill.
 PA—Geo. A. Wallace, Marion, Ill.
 EM—H. H. Cooksey, Marion, Ill.
 EE—L. Ferrell, Marion, Ill.
 SCO—Wallace Bros., Marion, Ill. Buyer, John K. Wallace, Marion, Ill.
 Sales Agent, John Henderson, Boatmen's Bank Bldg., St. Louis, Mo.

West Virginia Coal Co. Mine; Shaft; No. 7 Seam, 72 to 96 in. thick.
 PO—Marion, Ill.; SP—Same; CTY—Williamson; RR—Mo. P.
 S of H—Mules and trolley pole type locos. Track gage 42 in.
 S of M—11 chain breast type mchs.
 PP—4 water tube boilers, 1—100 K. W. gen. units, 250 volts D. C., 6 pumps.
 EMP—300. Daily tonnage 1,250.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT.—Shaker Screens.

WESTERLY BROS. & GORDEN.

General Office, Farmington, Ill.
 PR—Robert Gordon, Farmington, Ill.
 TR—Jas. Westerly, Farmington, Ill.

Westerly-Gorden Mine; Shaft; No. 5 Seam, 54 in. thick.
 PO—Farmington, Ill.; SP—Same; CTY—Fulton; RR—C. B. & Q.
 S of H—Mules.
 S of M—Hand.
 PP—2 water tube boilers, 120 H. P., 2 pumps.
 EMP—50. Last years tonnage 11,447.
 SIZES SHIPT—Slack.
 PREP. EQUIPT.—Gravity Screens.
 No report.

WESTERN COAL & MINING CO.

General Office, 1166 Railway Exchange Bldg., St. Louis, Mo.
 4 Mines in Missouri, 8 Mines in Kansas, 1 Mine in Illinois, 3 Mines in Arkansas.
 PR—W. P. Hawkins, St. Louis, Mo.
 VP—A. P. Hawkins, St. Louis, Mo.
 TR—E. S. Johnson, " "
 GM—W. P. Hawkins, " "

(Continued on Next Page)

Western Coal & Mining Co.—Cont.

GS—A. W. Dickinson, St. Louis, Mo.
PA—M. A. Bush, " "
EM—A. W. Dickinson, " "
SCO—Address the company, Buyer, M. A. Bush, St. Louis, Mo.
SA—Geo. J. L. Wulff, Railway Exchange Bldg., Kansas City, Mo.

Bush Mines No. 2; Shaft; No. 6 Seam, 7½ to 6 ft. thick.
PO—Bush, Ill.; SP—Same; CTY—Franklin; RR—Mo. Pac.
MS—Geo. Bowie, Bush, Ill.
SM—D. Motto, Bush, Ill.
S of H—Mules, trolley pole type and storage battery locos. Track gage 42 in.
S of M—22 chain breast type machs.
PP—4 235 H. P. each fire tube boilers, 2—200 K. W. gen. units, 250 volts D. C., 6 pumps.
EMP—650. Last years tonnage 612,361.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

WESTERN UNITED GAS COAL COMPANY

General Office, Aurora, Ill.
PR—B. P. Alschuler, Aurora, Ill.
VP—W. M. Willett, Aurora, Ill.
TR—E. H. O'Meara, Aurora, Ill.
GM—W. M. Willett, Aurora, Ill.
GS—H. L. Farrar, Murphysboro, Ill.
PA—S. J. Ricker, Aurora, Ill.
CE—C. C. Boardman, Aurora, Ill.

Gas Blair Mine; Shaft; No. 2 Seam, 42-48 inches thick.
PO—Murphysboro, Ill.; SP—Same; CTY—Jackson; RR—M. P. & I. C.
S of H—Mules, electric and storage battery locos.
S of M—Comp. air and shortwall machs.
PP—Power purchased. Transformer 2,200 to 220 volts A. C.
Last years tonnage 57,000.
SIZES SHIPT—Slack, Lump.
PREP. EQUIPT—Shaker Screens.

WHITE COUNTY MINING CO.

General Office, 106 Standard Life Bldg., Decatur, Ill.
PR—J. E. Paisley, Decatur, Ill.
VP—L. J. Pulliam, Springfield, Ill.
TR—S. O. Harvell, Decatur, Ill.
GM—S. O. Harvell, Decatur, Ill.
GS—F. L. Swanson, Norris City, Ill.
PA—F. L. Swanson, Norris City, Ill.
White County Mine; Shaft; No. 6 Seam, 66 in. thick.
PO—Norris City, Ill.; SP—Same; CTY—White; RR—B. & O., Big Four
S of H—Mules.
S of M—Shortwall mach.
PP—2 150, 2 100 H. P. fire tube boilers, 1 100 K. W., 1 75 K. W. gen. units, 250 volts D. C., 4 pumps.

EMP—187. Last years tonnage 200,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

WHITE-SERGEANT COAL COMPANY.

PR—Robert White, Reutcher, Ill.
TR—F. Sargent, Reutcher, Ill.
Sales Agency, Missouri & Ill. Coal Co. 1824 Railway Exchange Bldg., St. Louis, Mo.
Reutcher Mine; No. 6 Seam, 81 in. thick.
PO—Reutcher, Ill.; SP—Same; CTY—St. Clair; RR—L. & N.
S of H—1 elev. loco. Track gage, 24 in.
S of M—Hand.
PP—Return tubular boiler, total 300 H. P., 250 volts D. C.
SIZES SHIPT—Run of Mine, Slack, Lump.
(Old information.)

WILLIAMSON COUNTY COAL COMPANY

Now part of the St. Louis Coal & Iron Co.

WILLIS COAL & MINING COMPANY

General Office, 710 Fullerton Bldg., St. Louis, Mo.
PR—E. J. Krause, St. Louis, Mo.
VP—C. H. Krause, St. Louis, Mo.
TR—E. J. Krause, St. Louis, Mo.
GM—C. H. Krause, St. Louis, Mo.
GS—John J. Jeremiah, Willisville, Ill.
PA—H. H. Schroeder, St. Louis, Mo.
CE—C. E. Glassen, Willisville, Ill.
EM—Fred Krewer, Percy, Ill.
EK—C. E. Glassen, Willisville, Ill.
SA—W. T. Steger, 710 Fullerton Bldg., St. Louis, Mo.

Willis No. 1 Mine; Shaft; No. 6 Seam; 72 in. thick.
PO—Willisville, Ill.; SP—Same; CTY—Perry; RR—M. & O.
S of H—Trolley pole type loco. Track gage 30 in.
S of M—6 chain breast type machs.
PP—Generates power, 6 fire tube boilers, 900 H. P., 8 pumps.
Last years tonnage 118,706.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.

Willis No. 6 and No. 9 Mines; Shaft; No. 6 Seam, 72 in. thick.
PO—Percy, Ill.; SP—Same; CTY—Randolph; RR—M. & O.
MS—Wm. Flynn, Percy, Ill.
S of H—1 storage battery and 4 trolley pole type locos. Track gage 36 in.
S of M—6 chain breast machs. 5 short-wall machs.

PP—1 fire tube boilers, 600 H. P. gen. units, 5 pumps.
Last years tonnage 353,237.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Loading Booms, Picking Tables, Shaker Screens.

Willis No. 7 Mine; Shaft; No. 6 Seam; 66 in. thick.
PO—Sparta, Ill.; SP—Same; CTY—Randolph; RR—M. & O.
MS—Wm. H. Jeremiah, Sparta, Ill.
S of H—Mules and trolley pole type locos. Track gage 40 inches.
S of M—5 chain breast type machs.
PP—3 fire tube boilers. Purchase power. Transformer 2,300-250 volts, rotary converters, 250 volts, M. G. sets, 100 K. W., 250 volts D. C., 2 pumps.
Last years tonnage 127,213.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.

Willis No. 8 Mine; Shaft; No. 6 Seam; 66 inches thick.
PO—Sparta, Ill.; SP—Same; CTY—Perry; RR—M. & O.
MS—Thos. Brown, Willisville, Ill.
S of H—Mules, 2 trolley pole type locos. Track gage 36 inches.
S of M—10 chain breast type machs.
PP—Purchase power. 2 fire tube boilers, 250 H. P., 250 volts D. C., 4 pumps.
Last years tonnage 234,163.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.

WILMINGTON COAL MINING & MFG. CO.

General Office, 343 S. Dearborn St., Chicago, Ill.
PR—D. S. Gray, Columbus, O.
VP—L. J. Buckley, Chicago, Ill.
TR—L. J. Buckley, Chicago, Ill.
GM—L. J. Buckley, " "
PA—L. J. Buckley, " "
GS—J. K. Brown, Torino, Ill.
EM—J. K. Brown, Torino, Ill.
SA—L. J. Buckley, Chicago, Ill.

Diamond No. 6 Mine; Shaft; No. 2 Seam, 42 to 54 in. thick.
PO—Torino, Ill.; SP—Coal City, Ill.; CTY—Wm.; RR—E. J. & E.
S of H—Mules. Track gage 28 in.
S of M—Hand.
PP—2 water tube boilers, total 500 H. P., 2 pumps.
EMP—140. Last fiscal year output, 30,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Double Shaker.
(Old information.)

WILMINGTON STAR MINING CO.

General Office, Chicago, Ill.
PR—Gordon Buchanan, Chicago, Ill.
TR—Gordon Buchanan, " "
PA—P. W. Bodin, Chicago, Ill.
SCO—Coalfield Co., Buyer, H. A. Campbell, Coal City, Ill.
Sales Agency—Old Ben Coal Corporation, Chicago, Ill.

No. 7 Mine; Shaft; No. 2 Seam, 3 ft. thick; operate washery.
PO—Coal City, Ill.; SP—Same; CTY—Gundy; RR—E. J. & E. C. & A. A. T. & S. F.
MS—William Campbell, Coal City, Ill.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—12 Return tubular boilers.
EMP—250.
SIZES SHIPT—Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

WILSON, G. A.

General Office, Sparta, Ill.
Buy Mine.
PO—Sparta, Ill.; SP—Same; CTY—Randolph; RR—M. & O. No report.

WINTERS COAL COMPANY.

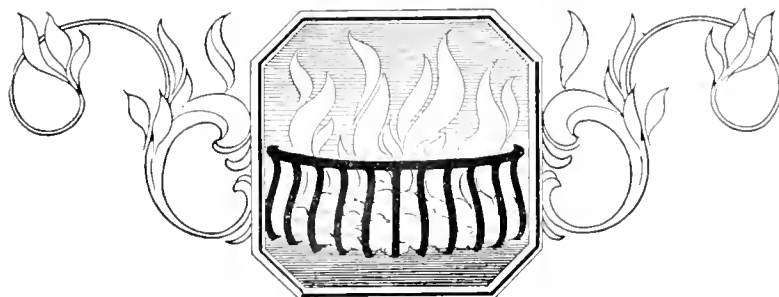
General Office, Bartonville, Ill.
PR—Henry Molm, Bartonville, Ill.
VP—Albert Schneider, Bartonville, Ill.
TR—George Swinford, Bartonville, Ill.
GM—George Swinford, Bartonville, Ill.
PA—George Swinford, Bartonville, Ill.
SA—George Swinford, Bartonville, Ill.

Winters Coal Mine; Shaft; No. 5 Seam; 52 in. thick.
PO—Bartonville, Ill.; SP—Same; CTY—Peoria; RR—C. P. & St. L.
S of H—Mules. Track gage 32 inches.
S of M—Hand.
PP—2 fire tube boilers, 2 pumps.
EMP—23. Daily tonnage 100 to 125.
SIZES SHIPT—Run of Mine, Slack, Lump.

WOLSCHLAG CO-OPERATIVE COAL CO.

General Office, Peoria, Ill.
PR—G. A. Dittewig, Peoria, Ill.
TR—Jas. F. McElwee, " "
GS—C. Savors, " "
PA—A. L. McLinden, Peoria, Ill.
Sales Agent, Jas. F. McElwee, Peoria, Ill.

Wolschlag Mine; Slope; No. 5 Seam, 54 in. thick.
PO—Peoria, Ill.; SP—Bartonville, Ill.; CTY—Peoria; RR—P. & P. U. and P. R. T.
S of H—Trolley pole type loco. Track gage 36 inches.
S of M—7 shortwall machs.
PP—Power purchased. Transformer 13,200 volts A. C., M. G. set, 250 volts D. C., 3 pumps.
EMP—225.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP EQUIPT—Shaker Screens.



Directory of Mines by Counties

ILLINOIS

Company.	Mines.	Post Office of Mines.
Pocahontas Mining Co.	Pocahontas No. 1	Pocahontas

BUREAU COUNTY

Illinois Third Vein Coal Co.	No. 1	Ladd
Spring Valley Coal Co.	Nos. 1 and 3	Spring Valley
Spring Valley Coal Co.	No. 5	Dalzell
St. Paul Coal Co.	Cherry No. 2	Cherry

CHRISTIAN COUNTY

Assumption Coal & Mining Co., The	No. 1	Assumption
Christian Coal Mining Co.	Greenwood	Edinburg
Pana Coal Co.	Nos. 1 and 2	Pana
Peabody Coal Co.	No. 7	Kincaid
Peabody Coal Co.	No. 8	Towry
Peabody Coal Co.	Nos. 9 and 58	Taylorville
Peabody Coal Co.	No. 21	Stonington
Penwell Coal Mining Co.	Penwell	Pana
Smith-Lohr Coal Mining Co.	Smith-Lohr	Pana

CLINTON COUNTY

Breese-Trenton Mining Co.	East Breese	Breese
Breese-Trenton Mining Co.	Beckmeyer	Beckmeyer
Consolidated Coal Co. of St. Louis.	West Breese	Breese
North Breese Coal & Mining Co.	North	Breese

FRANKLIN COUNTY

Bell & Zoller Mining Co.	Zelgler Nos. 1 and 2	Zelgler
Black Star Coal Co.	Logan	Logan
Chicago, Wilmington & Franklin Coal Co.	Benton Nos. 1 and 2	Benton
Chicago, Wilmington & Franklin Coal Co.	Orient No. 1	Orient
Franklin Coal & Coke Co.	North and South	Royalton
Franklin County Mining Co.	Franklin	Benton
Old Ben Coal Corp.	Old Ben Nos. 8, 9 and 15	West Frankfort
Old Ben Coal Corp.	Old Ben Nos. 10, 11 and 12	Christopher
Old Ben Coal Corp.	Old Ben No. 14	Buckner
Old Ben Coal Corp.	Old Ben No. 16	Sesser
Old Ben Coal Corp.	No. 19	Bend
Peabody Coal Co.	Nos. 18 and 19	West Frankfort
Southern Gem Coal Corp.	No. 1	Sesser
Southern Gem Coal Corp.	No. 2	Benton
United States Fuel Co.	Middle Fork	Valler
Valler Coal Co.	Valler No. 1	Valler
Western Coal & Mining Co.	Bush No. 2	Bush

FULTON COUNTY

Alden Coal Co.	Alden Nos. 5 and 8	Farmington
Alden Coal Co.	Alden No. 6	Norris
Baird Bros. & Bucher	No. 1	Astoria
Binzel Coal Mining Co., The	Binzel	Farmington
Canton Coal Co.	Canton	Canton
Coal Creek Mining Co.	Parrville	Fairview
Cripple Creek Coal Co.	Bryant Nos. 1 and 2	Bryant
Eclipse Coal Co.	Eclipse	Astoria
McLaughlin, Jos. & Sons	McLaughlin	Canton
Maplewood Coal Co.	No. 1	Farmington
Maplewood Colliery Co.	No. 2	Farmington
Middleton Coal Co.	Middleton	Canton
Monmouth Coal Co.	Brewton Shaft No. 1	Brewton
National Coal Mining Co.	National	Farmington
Rawalt Coal Co.	Rawalt	Canton
Shuler & Long	Fairview	Fairview
Simmons Coal Co.	Simmons	Canton
Silver Creek Colliery Co.	Silver Creek	Farmington
Spoon River Colliery Co.	Spoon River	London Mills
Star Coal Co. of Galesburg	No. 3	Cuba
Star Coal Co. of Galesburg	Flatt No. 1	Flatt
Westerly Bros. & Gorden	Westerly-Gorden	Farmington

GALLATIN COUNTY

Chinn, W. R.	Sanks	Junction
Gallatin Coal & Coke Co.	Gallatin	Equality
Hickory Hill Coal Co.	Hickory Hill	Equality
Turns Coal Co.	East Side	Equality

GRUNDY COUNTY

Chicago, Wilmington & Franklin Coal Co.	South Wilmington No. 3	S. Wilmington
Wilmington Star Mining Co.	No. 7	Coal City

HENRY COUNTY

Ratliff, Arthur	Ratliff	Kewanee
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JACKSON COUNTY

Consolidated Coal Co. of St. Louis	Nos. 9 and 10	Murphysboro
Fort Dearborn Coal Co.	Jackson-Peacock	De Soto
Gartside Coal Co.	No. 4	Murphysboro
Jackson Coal Co., The	Muddy Valley	Halldayboro
Jackson-Peacock Coal & Mining Co.	Jackson-Peacock	De Soto
Midway Coal Mining Co.	Ward	De Soto
Patrick Coal Co.	Patrick No. 2	Carbondale
Union Colliery Co.	Kathlen	Dowell
Western United Gas Coal Co.	Gus Blair	Murphysboro

LA SALLE COUNTY

Acme Coal Co.	Acme	Streator
Illinois Zinc Co.	Nos. 1 and 3	Peru
La Salle County Carbon Coal Co.	No. 1, La Salle and Union	La Salle
La Salle County Carbon Coal Co.	No. 5	Cedar Point
Manufacturers Coal Co.	Galloway	Marseilles
Matthessen & Hegeler Zinc Co.	M. & H. Z	Shaker Screens
United States Coal & Coke Corp.	Rutland	and

LIVINGSTON COUNTY

Company.	Mines.	Post Office of Mines.
Co-operative Coal Co.	No. 1	Fairbury
Fairbury Coal Co.	Fairbury	Fairbury
Streator Clay Mfg. Co., The	Streator Clay	Streator

LOGAN

Latham Lincoln Mining Co.	Latham	Lincoln
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MCDONOUGH COUNTY

Baird Bros.	Baird	Colchester
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MCLEAN COUNTY

McLean County Coal Co.	McLean	Bloomington
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MACON COUNTY

Decatur Coal Co., The	No. 2	Decatur
Macon County Coal Co.	Macon	Decatur
Niantic Carbon Coal Co.	Niantic Carbon	Niantic

MACOUPIN COUNTY

Bartels Coal Co.	Bartels	Carlinville
Bauser-Truesdale	Bauser-Truesdale	Bunker Hill
Chicago, Wilmington & Franklin Coal Co.	Royal Colliery	Virden
Consolidated Coal Co. of St. Louis	Nos. 7 and 14	Stanton
Consolidated Coal Co. of St. Louis	No. 15	Mt. Olive
Gillespie Coal Co.	Little Dog	Gillespie
Illinois Coal & Coke Corp.	Empire No. 3	Virden
Illinois Coal & Coke Corp.	Empire No. 4	Girard
Madison Coal Corp.	No. 5	Mt. Olive
Standard Oil Co. of Indiana	Nos. 1 and 2	Carlinville
Superior Coal Co.	Nos. 1, 2, 3 and 4	Gillespie
Union Fuel Co.	Nilwood No. 1	Nilwood
Union Fuel Co.	No. 6	Greenridge

MAISON COUNTY

Abbey Coal Corp.	Abbey	Collinsville
Donk Bros. Coal & Coke Co.	No. 1	Collinsville
Donk Bros. Coal & Coke Co.	No. 2	Maryville
Donk Bros. Coal & Coke Co.	No. 3	Troy
Donk Bros. Coal & Coke Co.	Thermal	Edwardsville
East Side Coal Co.	East Side	Edwardsville
Edwardsville Coal Co.	No. 3	Edwardsville
Hydraulic Press Brick Co.	Hydraulic	Collinsville
Kereas-Donnewald Coal Co.	K. & D.	Warden
Lumaghi Coal Co.	No. 2 and 3	Collinsville
Madison Coal Corp.	No. 2	Glen Carbon
Madison County Mining Co.	Madison	Edwardsville
Mt. Olive & Stanton Coal Co.	Nos. 1 and 2	Stanton
New Stanton Coal Co., The	Livingston	Livingston

MARION COUNTY

Centralia Coal Co.	Centralia No. 5	Centralia
Chicago Sandoval Coal Co.	No. 2	Sandoval
Marion County Coal Co.	Glenridge	Centralia
Odin Coal Co.	Odin	Odin

MARSHALL COUNTY

Toluca Coal Co., The	Nos. 1 and 2	Toluca
Wenona Coal Co.	Wenona No. 1	Wenona

MENARD COUNTY

Black Diamond Coal Mine	Black Diamond	Petersburg
Johnson Valley Coal Co.	Johnson Valley Coal	Middletown
Klingbeil Coal Co.	Klingbeil	Petersburg
Union Fuel Co.	Athens No. 4	Athens

MERCER COUNTY

Alden Coal Co.	Alden No. 7	Matherville
Coal Valley Mining Co.	Matherville No. 3	Matherville

MONTGOMERY COUNTY

Coffeen Coal Mining Co.	Coffeen No. 2	Coffeen
Hillsboro Coal Co.	Hillsboro	Hillsboro
Indiana & Illinois Coal Corp.	No. 10	Nokomis
Indiana & Illinois Coal Corp.	No. 11	Hillsboro
Indiana & Illinois Coal Corp.	Nos. 12 and 14	Witt
Indiana & Illinois Coal Corp.	No. 15	Taylor Springs
Nokomis Coal Co.	Nokomis	Nokomis
Shoal Creek Coal Co.	No. 1	Panama

MOULTRIE COUNTY

Lovington Coal Mining Co.	Lovington No. 1	Lovington
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PEORIA COUNTY

Case, M. E. Coal Co.	La Marsh No. 1	Peoria
Central West Coal Co.	Central West	Edwards
Clark Coal & Coke Co.	Logan	Hanna
Clark Coal & Coke Co.	Empire No. 2	Peoria
Collier Co-operative Co.	Colliers	Bartonville
Crescent Coal Co.	Crescent	Peoria
Lancaster Coal Co.	No. 1	Kingston Mines
Leitner Coal Co.	Leitner	Peoria
Limestone Coal Co.	Limestone	Peoria
Treasure Coal Co.	Treasure	Bartonville
Winters Coal Co.	Winters Coal	Peoria
Walschlag Co-operative Coal Co.	Wolachlag	Peoria

Company.	Mines.	Post Office of Mines.
Railly Bros. Coal Co.	Diamond	Du Quoin
Equitable Coal & Coke Co.	Majestic	Du Quoin
Illinois Sixth Vdu Coal Co.	Illinois Sixth Vdu	Pineknobville
Jewel Coal & Mining Co.	Jewel	Du Quoin
Old Abe Mining Co.	Old Abe	Du Quoin
Paradise Coal Co.	Paradise	Du Quoin
Perry County Coal Corp.	Perry County	Coulterville
Security Coal & Mining Co. of Missouri	Security	Du Quoin
Soper Coal Co.	Soper Nos. 1 and 2	Cutler
Southern Gem Coal Corp.	Nos. 5 and 6	Pickensville
Southern Gem Coal Corp.	No. 7	Janestown
Southern Gem Coal Corp.	Nos. 9 and 10	Cutler
Southern Gem Coal Corp.	No. 11	Tamora
Victory Collieries Co.	Victory No. 1	Tamora
Willis Coal & Mining Co.	Willis Nos. 1 and 8	Willisville

PUTNAM COUNTY

Berry, R. F. Coal Co.	Standard No. 1	Standard
St. Paul Coal Co.	Granville No. 1	Granville

RANDOLPH COUNTY

Boyle Coal Co.	Boyle	Sparta
Illinois Fuel Co., The	No. 4	Sparta
Madison Coal Corp.	Crystal	Tilden
Moffat Coal Co.	Moffat	Sparta
Randolph County Coal Co.	No. 2	Coulterville
St. Louis Coal Co.	Consolidated	Coulterville
Willis Coal & Mining Co.	Edward No. 7	Sparta
Willis Coal & Mining Co.	Willis Nos. 6 and 9	Percy

ROCK ISLAND COUNTY

McCrancey Sand & Gravel Co.	No. 2	Coal Valley
Pryce Coal Co.	Pryce Coal	Coal Valley

ST. CLAIR COUNTY

Abend Coal Co.	Abend	Belleville
Aluminum Ore Co.	Radlum	Belleville
B. R. Coal & Mining Co.	B. R.	Belleville
Beatty Coal Co.	Beatty	Masontab
Beese Coal Co.	Beese	Belleville
Bretz & Schilling	White Roe	Belleville
Colfax Coal Co.	Colfax No. 1	Colfax
Colfax Coal Co.	Enterprise	Rentschler
Consolidated Coal Co. of St. Louis	No. 17	Collinsville
Davison, B. P. Coal Co.	Davison	Cassville
Egyptian Coal & Mining Co.	Meek	Marissa
Ell-Rich Mining Co.	Ell-Rich	Belleville
Fallon Coal Mines Co.	O'Fallon	O'Fallon
Fullerton Coal Co.	Burdette	Belleville
General Coal & Mining Co.	St. Clair	Freeburg
Glendale Coal & Mining Co.	Glendale	Freeburg
Golden Rule Coal Co.	Golden Rule	Lenzburg
Highland Coal Co.	Highland & West Belleville Coal Co.	Belleville
Jones Bros. Coal Co.	Eureka Nos. 1 and 2	Marissa
Koh Coal Co.	Nos. 1 and 2	Masontab
Koh Coal Co.	Fairbanks and Vinegar Hill	New Athens
Liberty Coal & Mining Co.	Liberty	Rentschler
Lou Nash Coal & Mining Co.	Enterprise	Rentschler
Miller, Howard E.	Ruby	Cassville
Mulberry Hill Coal Co.	Mulberry Hill	Freeburg
New National Coal & Mining Co.	New National	Belleville
O. K. Coal Co.	O. K.	Marissa
Peoples Coal Co.	Peoples Coal	Cassville
Perry County Coal Corp.	St. Ellen, Carbon and Taylor	O'Fallon
Pioneer Coal Co.	Pioneer	Belleville
Prairie Coal Co.	Prairie	Belleville
St. Louis & O'Fallon Coal Co.	Nos. 1 and 2	East St. Louis
South Bellevue Coal Co.	South Belleville	Belleville
Southern Coal, Coke & Mining Co.	Avery No. 1, Muren No. 6, Little Oak No. 7, Shiloh No. 8 and New Baden No. 9	Belleville
Star Coal Co.	Star	Freeburg
Suburban Coal & Mining Co.	Suburban	Belleville
Summit Coal & Mining Co.	Summit	Belleville
Superior Mining Co.	Superior and Valley	Belleville
Tower Grove Coal & Iron Co.	Tower Grove	Belleville
West Belleville Coal Co.	West Belleville	Belleville
White-Sergeant Coal Co.	Rentschler	Rentschler

SALINE COUNTY

Big Creek Coals, Inc.	No. 2	Ledford
Big Creek Coals, Inc.	Nos. 3 and 4	Harrisburg
Big Creek Coals, Inc.	No. 5	Galatia
Big Creek Coals, Inc.	No. 6	Grayson
Dering, J. K. Coal Co.	No. 2	Eldorado
Dodds Coal Co.	Dodds Coal Co.	Carriers Mills
Harris Coal Co.	Harris	Carriers Mills
Harrisburg Coal Mining Co.	No. 1	Harrisburg
Harrisburg Colliery Co.	Harco	Harco
Harrisburg Fuel Co.	Harrisburg	Harrisburg
Heato Coal Co.	Hato No. 1	Carriers Mills
O'Gara Coal Co.	Nos. 1, 3, 9 and 12	Harrisburg
O'Gara Coal Co.	Nos. 8, 10 and 11	Eldorado
O'Gara Coal Co.	No. 14	Ledford
O'Gara Coal Co.	No. 15	Carriers Mills
Peabody Coal Co.	Eldorado No. 20	Eldorado
Saline Gas Coal Co.	No. 1	Harrisburg
Wasson Coal Co.	Wasson No. 1	R. F. D. 5, Wasson
Wasson Coal Co.	Wasson No. 2	Carriers Mills

SANGAMON COUNTY

Company.	Mines.	Post Office of Mines.
Rissell Coal Co.	Biss II	Springfield
Chicago-Springfield Coal Co.	C-S	Springfield
Chicago, Wilmington & Franklin Coal Co.	Thayer No. 1	Thayer
Citizens Coal Mining Co., The	"A" and "B"	R. R. No. 6, Springfield
Dawson Coal Mining Co.	Dawson	Dawson
Illinois Coal & Coke Corp.	Empire No. 1	Springfield
Illinois Coal & Coke Corp.	Empire No. 2	Auburn
Lincoln Park Coal & Brick Co.	Lincoln Park	Springfield
Madison Coal Corp.	No. 6	Divernon
Number Twelve Coal Co.	No. 12	R. F. D. 10, Springfield
Panther Creek Mines, Inc.	Panther Creek	Auburn
Peabody Coal Co.	No. 5	Pawnee
Peabody Coal Co.	No. 6	Sherman
Peabody Coal Co.	No. 51	Andrews
Peabody Coal Co.	No. 52	Riverton
Peabody Coal Co.	Nos. 53, 55 and 57	Springfield
Peabody Coal Co.	No. 54	Auburn
Peerless Coal Co.	Peerless	Springfield
Sangamon Coal Co.	No. 3	Centerville
Sangamon Coal Co.	Sangamon	Springfield
Sangamon County Mining Co.	Jeff	Springfield
Spring Creek Coal Co.	Spring Creek	Springfield
Springfield Co-operative Coal Mining Co.	Springfield	Springfield
Union Fuel Co.	Tuxhorn No. 2	Springfield
Union Fuel Co.	Auburn No. 3	Auburn
Union Fuel Co.	No. 5	Salttown
West End Coal Co.	West	Springfield

SHELBY COUNTY

Moweaqua Coal Mining & Mfg. Co.	No. 1	Moweaqua
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SMITHTON

Groom Coal Co.	Richland	Belleville
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TAZEWELL COUNTY

Groveland Coal Mining Co.	Groveland No. 2	Peoria
Lake Erie Mining Co.	Lake Erie	Peoria
Manhattan Coal Co.	Manhattan	East Peoria
Regal Coal Co.	Regal	Pekin
Tazewell Coal Co.	Tazewell	Pekin
Ubben Coal Co.	Ubben	Pekin

VERMILION COUNTY

Brady Branch Coal Co.	Brady Branch	Danville
Central Coal Co.	Central	Danville
Chicago Collieries Co.	Chicago	Fairmount
Contract Mining Co.	Western Brick	Danville
Lime Spring Coal Co.	Lime Spring	Tilton Station C
Peabody Coal Co.	No. 24	Westville
Sharon Coal & Brick Co.	Sharon	Georgetown
Taylor-English Coal Co.	Taylor-English No. 2	Cattin
United Electric Coal Companies	Nos. 1, 4, 5 and 6	Danville
United States Fuel Co.	Vermilion, Kelly No. 4 and Bun-	Westville
Veln Six Coal Co.	Veln Six	Danville
Watkins Coal Co.	Watkins	Danville

WASHINGTON COUNTY

Nashville Mining Co.	No. 1	Nashville
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WHITE COUNTY

White County Mining Co.	Norris City No. 1	Norris City
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WILL

Wilmington Coal Mining & Mfg. Co.	Diamond No. 6	Torino
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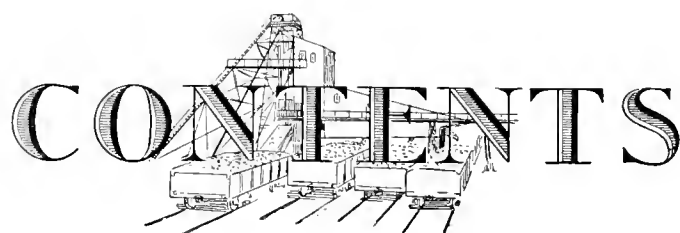
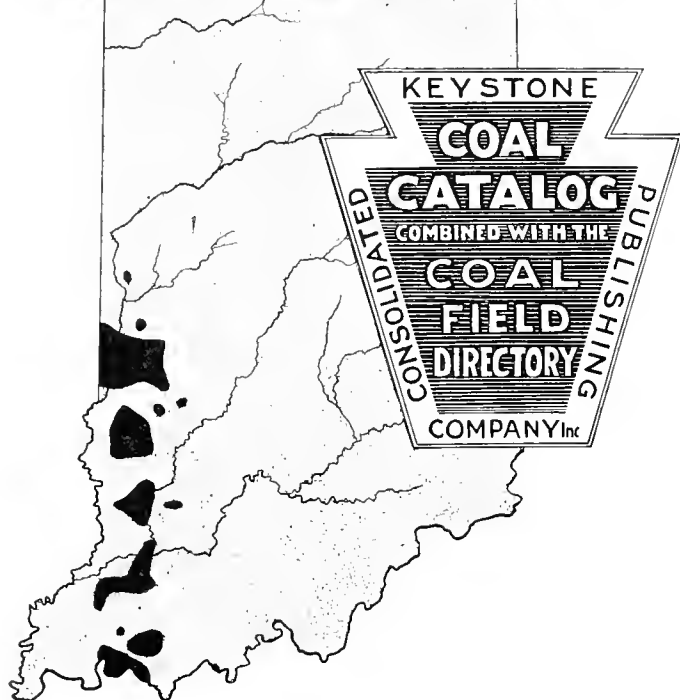
WILLIAMSON COUNTY

Block Coal Co.	Block	Cartersville
Cameron Coal Co.	Keystone	Marion
Cartersville & Big Muddy Coal Co.	John's	Cambria
Chicago Big Muddy Coal & Mng. Co.	Big Muddy	Marion
Chicago, Wilmington & Franklin Coal Co.	"A" and "B"	Herrin
Chicago, Wilmington & Franklin Coal Co.	Black Briar No. 1	Johnston City
Coal Belt Coal Co.	Coal Belt	Marion
Consolidated Coal Co. of St. Louis	Lake Creek	Johnston City
Consolidated Coal Co. of St. Louis	No. 8 Clifford	Clifford
Consolidated Coal Co. of St. Louis	No. 7	Herrin
Duncan Coal Co.	Dale	Herrin
Ernest Coal Co.	Franco No. 1	Johnston City
Ernest Coal Co.	Franco No. 2	Marion
Freeman Coal Mining Co.	Freeman	Herrin
Hafer Washed Coal Co.	Hafer No. 3	Cartersville
Henderson-Wallace Coal Co.	Henderson	Marion
Johnston City Washed Coal Co.	White Ash	White Ash
Madison Coal Corp.	Nos. 8 and 9	Cartersville
Madison Coal Corp.	No. 12	Cambria
Old Ben Coal Corp.	Old Ben Nos. 17 and 18	Johnston City
Old Ben Coal Corp.	No. 20	Herrin
Orchard Coal Co.	Orchard	Marion
Peabody Coal Co.	No. 3	Marion
Peabody Coal Co.	No. 25	Cartersville
Peabody Coal Co.	No. 26	Johnston City
Pratt Brothers	Jeffrey	Herrin
Ridge Coal Mining Co.	Watson	Marion
Sandford Coal Co.	Franco No. 3	Paulton
Seranton Coal Mining Co.	Seranton	Marion
Scaris Coal Co.	McClintock	Johnston City
Slogo Coal Co.	Slogo	Marion
Taylor Coal Co.	Nos. 1, 2, 3 and 5	Herrin
Warden, T. A.	Sunnyside	Herrin
Watson Coal Co.	Watson	Herrin
West Virginia Coal Co.	West Virginia	Marion

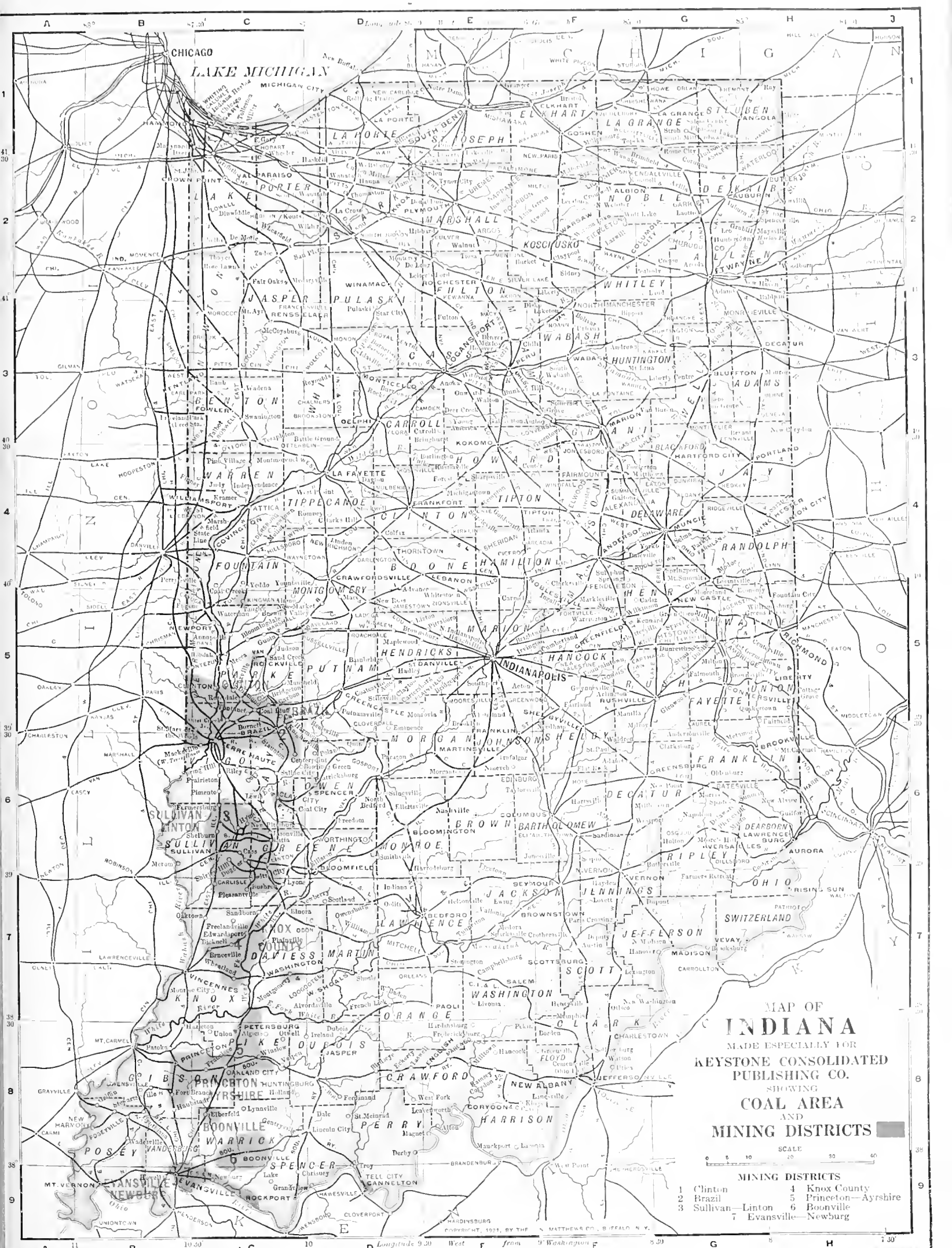
WOODFORD COUNTY

Roanoke Coal Co.	Bonnoke	Roanoke
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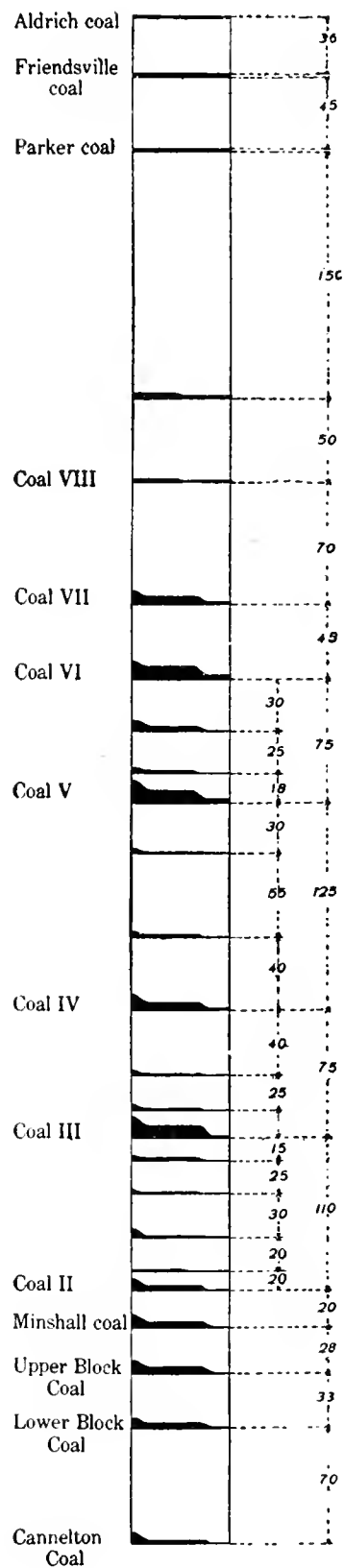
INDIANA



Map of Mining Field.....	Opp. 372
Sectional View of Coal Formations.....	Opp. 373
General Description of Coal Resources.....	373 to 376
No. 7 Seam.....	374
No. 6 Seam.....	374
No. 5 Seam.....	375
No. 4 Seam.....	375
No. 3 Seam.....	375
Minshall Seam.....	376
Brazil Block Seams.....	376
Cannelton Seam.....	376
Preparation and Sizing of Coal.....	376
Supplementary Analyses.....	377, 378
Descriptive Advertisements.....	379 to 401
List of Mines by Seams.....	402 to 404
Alphabetical Directory of Coal Mines.....	405 to 416
List of Mines by Counties.....	417



INDIANA COAL SEAMS



VERTICAL SECTION

INDIANA*

General Description of the Geology of the State With the Rank of Coal
Produced, Treats of the Two Mining Divisions, With a Map
Showing Their Location, All Seams Lying Within the
State, With a Description of the Producing
Beds, Their Geological Order, Kinds of
Coal, General Analysis, Etc.

The coal measures of Indiana lie in the southwestern part of the state, extending from Warren county on the north to the Ohio River on the south and eastward to the northwestern-southeastern line running from Warren county to Perry county. They cover practically all of sixteen counties and parts of nine additional counties. The Indiana coal field is part of the Illinois coal basin, or the Eastern Interior coal region. This region is a true basin shape, being deepest in the center in southeastern Illinois and rising to a rim on all sides. The Indiana field is a part of the eastern or northeastern rim extending in the southwestern corner of the state well into the center of the basin.

The Coal Measures have a total thickness of approximately 2,000 feet, of which about 1,300 feet occurs in Indiana. Of these 1,300 feet there are 600 feet of barren beds at the top, then a 500-foot interval which contains most of the workable coals, followed in descending order by 200 feet or more of rock consisting mainly of sandstone. Recent work of David White indicates that the rock of the upper 600 feet are of post-Allegheny age, those of the next 450 feet of Allegheny age, and the lower rocks of Pottsville age.

The coal occurs at thirty-four different horizons, of which about twenty-five have a fairly wide persistence. Of these beds one is workable everywhere in the state where it outcrops and eight others are workable over large areas. Several of the smaller beds are workable locally. The average thickness of the beds of the state is probably less than two feet, but the workable beds range from three to eight feet. The most important bed in the field probably averages six to eight feet. Many of the other beds average six to eight feet over several hundred square miles, but are thin or absent over adjacent areas. The maximum thickness measured was ten feet two inches, though thickness of eleven to fifteen feet are reported in "swamps."

A few individual coals beds can be traced the whole length of the Indiana coal field. In one case this tracing appears to be thoroughly reliable and in several others it is apparently good, though the possibility of error must be admitted. Still other coal beds can be traced with only a fair degree of probability. On the other hand, beds which maintain a thickness of six or eight feet over large areas thin out within the space of a few miles. In some beds such thinning out is against the edge of its basin, and though the horizon of the coal can be traced for miles, no further indication of coal can be seen within the state. In other beds the coal is very regular over large areas and very irregular over similarly large areas beyond.

In general the upper beds are much more regular than the lower beds. In fact, the lowest beds occur in small, nearly detached basins, usually lying in a west of north and east of south direction and ranging from a few acres to several square miles in extent. In the center of one of these basins the coal may have a thickness of five feet, but between the basins on the ridges the thickness may decrease to as many inches. In these basins it is observed that where the coal has several benches the lowest benches thin out first in approaching the rise, so that the coal going over the divide into the next basin may represent only the upper part of the top bench. Of even more interest is the fact that at two horizons where the coal in the basins has a somewhat distinctive section, the same section is repeated from basin to basin over hundreds of square miles.

All of the coal found in Indiana belongs in the bituminous class, and may be said to occur in three varieties, namely, bituminous, block and cannel. The first two differ but little chemically, but when typically developed show rather marked physical differences. The cannel coal is physically a block coal, but differs chemically from either of the other coals. The so-called "bituminous" coal of Indiana is pitch black, the color remaining black even when powdered; the luster is bright or vitreous. In structure it is banded or bedded, the jointing and cleavage is cubic, i. e., tending to break up into cubes; the fracture is irregular, and the texture dense to laminated. This coal is brittle, soft and rather light. It burns with a long flame, with a bituminous or sulphurous odor, running together on burning, and leaving much white or red ash. Sulphur is usually present.

The block coal of Indiana differs from the bituminous in being distinctly banded when viewed on the edges of the bedding, by splitting readily along the dull bands, which prove to be bands of charcoal, by breaking with difficulty across the bedding; especially by the perfect development of the cleavage, the cleavage planes usually extending vertically nearly or quite the full thickness of the coal, dividing the bed into blocks or cubes, often several feet on a side. This character is reflected in the character of the coal as marketed, where it is noted the blocks are commonly in rather thin, square-edge slabs, being square

*The information on Indiana coals has been gathered largely from "Stratigraphy and Coal Beds of the Indiana Coal Field," by George H. Ashley, Bulletin No. 381, U. S. G. S., and from the 33rd Annual Report, 1908, Indiana Department of Geology.

or quadrilateral, often one to two feet on a side, and six inches thick, with charcoal faces. In burning, the coal does not run together or cake, but remains in distinct blocks, like blocks of wood, and burns to a small white ash. In comparison with early years, but little block coal is now being mined, due to exhaustion of the limited supply.

The cannel coal, of which Indiana has but a small amount, is a block coal as regards being divided by the cleavage into distinct blocks, usually the full thickness of the bed. It differs physically in not having the dull or charcoal bands, or any bedding, being quite massive in structure, in its dull, resinous luster, and in its conchoidal fracture. Under the microscope still other differences are seen which need not be discussed here.

As a whole, it may be said that Indiana coal is characterized by a high moisture, high volatile, medium ash and medium sulphur content and that it does not stand transportation and storage as well as the Appalachian coals. The bituminous coal finds its main use as a steam coal, while the block coals are in demand for household purposes.

The railroads traversing the coal fields of Indiana are: Chicago & Eastern Illinois; Vandalia; Big Four; Southern; Chicago, Terre Haute & South Eastern; Toledo, St. Louis & Western; Baltimore & Ohio Southwestern; Cincinnati, Buffington & Chicago; Evansville & Indianapolis; Chicago, Indianapolis & Louisville; Central Indiana; Evansville, Suburban & Newburg; and Illinois Central.

There are two mining regions, known according to the kind of coal mined, that is whether bituminous or block coal.

DISTRICTS	COAL MINED	
	Geologic Number or Name	Trade Name or Name by Which It Is Known in the Market
Block Coal Field.....	Brazil Block coals, Minshall coal, No. III and No. IV coals.....	"Brazil"
Bituminous Field.....	No. IV, No. V, No. VI, and No. VII coals.....	"Clinton," "Sullivan," "Greene," "Vigo," "Knox" Counties

The coals of Indiana will be discussed in geological order, beginning with the highest seam worked, which is the No. 7. Above this coal, as a rule, only thin coals are found. In a few places these reach a thickness of 3 or 4 feet, but in 9 out of 10 drillings they show a thickness of less than 2 feet, and commonly less than 1 foot. Small coals occur between Seam No. 4 and Seam No. 5, although in some places they reach a thickness of 3 feet. As a rule they are thin and in the presence of much thicker coals above and below they will not be considered of workable character for a long time.

No. 7 Seam. (Mined in Sullivan and Vigo counties.)

About 40 feet above the top of coal VI in Sullivan county comes coal VII, which is practically everywhere a solid coal from 3 to 6 feet in thickness, overlain by shale or sandstone. North of Sullivan county this bed is readily traced past Terre Haute and through the southwest corner of Vermilion county out of the state. West of Terre Haute and to the north it shows a thickness of 4 to 5 feet of good coal, overlain by 1 to 2 feet of bony coal. A few feet below this coal, in all of the northern part of the coal field, is a limestone that is believed to be one of the persistent members of the coal measures. South of Sullivan county this coal bed can be traced through Wheatland, in the hills west of Petersburg, and on to the Ohio River, with a thickness of 4 feet or less, becoming rather thin as the Ohio River is approached.

As stated above, the underlying coal VI is close beneath it from Gibson county southward, and in one place in western Warrick county they are worked together. In general the limestone below coal VII lies between the two coals, and in many places where the two coals are close together the limestone forms the only parting. This condition continues into western Kentucky, where coal VII is known as Kentucky 12 and coal VI as Kentucky 11. Coal V of Indiana corresponds to coal 9 of Kentucky.

GENERAL ANALYSIS

Moisture	13.80
Volatile Matter	35.20
Fixed Carbon	41.80
Ash	9.20
Sulphur	3.00
B. T. U.	11,150

No. 6 Seam. (Mined in Clay, Greene, Knox and Sullivan counties.)

About 70 feet above the top of coal V, in Sullivan county, lies coal VI, ranging in that county from 6 to 8 feet in thickness. Practically everywhere it is divisible into four benches—an upper bench of about 2½ feet, a thin bench of 4 to 6 inches, a lower bench of about 2½ feet and a bottom bench of 1 foot. The two main benches range from 2 to 2½ feet or more. Between these benches occur gray-shale partings that are nearly everywhere half an inch thick. When exposed to the atmosphere in the entries of the mines this gray-shale weathers to a white clay, so that in the mines on this coal bed there appear to be two white chalk marks about midway of the wall at every point. Practically no doubt can therefore exist as to the correlation of this coal within that district. The bottom bench of 1 foot is bony and is usually left in the mine. At the north edge of Sullivan county this coal becomes irregular, in places appearing to run out entirely, and north of that point neither

drilling nor mining finds any trace of it in Indiana. It appears to maintain its thickness south of Sullivan county as far as Bicknell and for several miles farther south, though it becomes broken up toward the southwest. From that locality southward it disappears as a regular bed, in many places being entirely absent and in others appearing as a thin bed of 1 or 2 feet. It reaches a workable thickness in a few localities and is commercially worked at two points in Gibson county. Apparently it approaches nearer and nearer to the overlying coal toward the south, until the two range from 20 feet to 6 inches apart, and in at least one place the two coals have been mined together.

GENERAL ANALYSIS

Moisture	14.90
Volatile Matter	31.65
Fixed Carbon	46.15
Ash	7.30
Sulphur	2.20
B. T. U.	11,325

No. 5 Seam. (Mined in Clay, Greene, Gibson, Knox, Warwick, Vigo, Vermilion, Pike, Sullivan and Vanderberg counties.)

This is a thick coal with certain peculiarities of roof which render its recognition possible through the whole length of its outcrop in Indiana. It is at almost every point characterized by a roof of black sheety shale, the under surface of which contains pyrite concretions that, as a rule, project downward into the coal. In some mines these concretions are very abundant, the roof being almost botryoidal from their presence. In other mines they are only scattered, possibly one or two to a room, but they are absent in but few of the mines. Some of them project down into the coal as much as 4 or 5 feet. Overlying the black shale is a limestone. Similar black shales overlie other coals and are in turn overlain by limestones, but these coals are almost invariably thin, the accompanying limestone is usually thin, and the presence of the pyrite concretions is not everywhere obvious. There is only one other coal, lying about 300 feet stratigraphically below coal V, whose overlying limestone is thick at many places and which is itself of workable thickness. Its position so far below coal V, however, insures its outcropping well to the east of the outcrop of that coal, so that, although the two have often been confused in the past, there is no danger, with the present knowledge of the coal field, of their being taken for the same coal. Coal V has a thickness of 4 to 10 feet, averaging from 5 to 8 feet over a large part of the area within which it outcrops and maintaining this thickness with considerable uniformity from southwestern Vermilion county, where it enters the state, to Ohio River.

GENERAL ANALYSIS

	Greene County	Sullivan County
Moisture	10.30	12.15
Volatile Matter	36.30	35.15
Fixed Carbon	41.65	43.75
Ash	11.75	8.95
Sulphur	4.20	4.15
B. T. U.	11,220	11,515

No. 4 Seam. (Mined in Clay, Greene, Vigo, Sullivan and Vermilion counties.)

This seam is extensively worked around Linton, and is from 100 to 130 feet below coal V. It is commonly a solid coal, with a sandy shale or sandstone roof and a sandstone or sandy clay floor. It shows a tendency to split in many districts, the splitting being in places rather extensive, so that the benches are separated by 10 to 15 feet or more. It can be traced northward to Seelyville, where it is the surface bed, ranging from 3 to 6 feet in thickness, and on to the horseshoe bend of Little Vermilion River, being of workable thickness nearly everywhere, except as it may be broken up by one or more large partings. It is a coal of excellent quality. To the south the thickness of this coal is somewhat less, usually not being more than 3½ feet and toward the Ohio River averaging probably less than 2½ feet. In that district it is nearly everywhere a solid coal, with either a shale or sandstone roof.

GENERAL ANALYSIS

	Greene County	Sullivan County
Moisture	13.55	12.15
Volatile Matter	33.55	33.50
Fixed Carbon	45.40	46.25
Ash	7.50	8.10
Sulphur	0.94	1.60
B. T. U.	11,740	11,720

No. 3 Seam. (Mined in Clay, Perry, Greene, Vigo, Vermilion, Spencer, Fountain, Parke, Owen and Daviess counties.)

About 70 feet below coal IV in Green county is coal III, a bed 6 to 8 feet, almost invariably with one or more regular partings. It maintains this thickness northward through western Clay county and eastern Vigo county, being the large bed worked around Turner and Stanton and the principal bed at Seelyville, Fontanet and Rosedale. It tends to be a strong steam coal, but in many places has a high content of sulphur. In the Rosedale-Fontanet district the sulphur occurs in the form of one or more regular partings and therefore is more easily separated. North of Coxville this bed occurs in scattered patches for a distance of 6 or 8 miles, beyond which it is absent altogether. South of Greene county no bed of this character is found, and it is possible that the coal runs out entirely. In many places one or more thin coals are found about in the position of coal III, and it has been assumed that they may possibly represent this coal. Few of these thin coals south of Greene county, however, are workable, though here and there they increase to 3 feet in thickness. The coal called the Rock Creek coal in the Ditney folio possibly belongs at the horizon of coal III of Greene county.

GENERAL ANALYSIS

Moisture	11.50
Volatile Matter	38.25
Fixed Carbon	40.45
Ash	9.80
Sulphur	4.55
B. T. U.	11,550

Minshall Seam. (Mined in Clay, Parke and Vigo counties.)

About 100 feet below coal III in northeastern Vigo county is a coal bed that is being worked around Fontanet, Minshall and Mecca, and at other points. It has been called in the trade the Minshall coal, and this name has been retained for it, as it comes below the bed called coal II, in the general columnar section. It is a coal of variable thickness, lying in basins and ranging from 5 feet to a fraction of an inch. Overlying it in many places is black shale, which is not everywhere sheeted, and above that a heavy limestone. A limestone underlain by a coal that is in some localities of workable thickness occurs at many points through the northern part of the Indiana coal field in Parke, Fountain and Warren counties. It has been assumed to belong at the horizon of the Minshall coal. In the Brazil district of Clay county this bed has been called the Rider Block coal, as it lies only about 30 feet above the Upper Block coal.

GENERAL ANALYSIS

Moisture	13.10
Volatile Matter	37.65
Fixed Carbon	39.50
Ash	9.75
Sulphur	2.95
B. T. U.	11,000

Brazil Block Seams. (Mined in Owen, Fountain, Clay and Vigo counties.)

In the Brazil district the two block coals lie about 30 feet apart. Each may have a thickness of about 5 feet in the center of the basins and thin down to a few inches on the hills between the various basins. The Upper Block coal has slightly the greater thickness. It is usually a solid coal, with a 2-inch band of brittle coal a little below the middle. It is also distinguished from the Lower Block coal by the fact that the vertical joints that characterize both the block coals are in the Upper Block coal more open at the top and are indistinct below this brittle "bench mining." The Lower Block coal is a solid coal except for a smooth parting 6 to 10 inches from the top. The coal above that parting is not of the block character. The joints are more open at the bottom and, as a rule, do not penetrate this upper bench of coal. In the center of the basins below the main bench there usually occurs clay, then 1 to 2 feet or more of bony coal, then, locally, up to 2 feet of good coal, with

clay underneath. Towards the edges of the basins these underlying benches thin out one at a time, beginning at the bottom, and at the crest of the divide even the lower part of the main coal has thinned out, leaving possibly only the thin upper bench to pass over to the next basin. The two block coals can be traced northward into Fountain county, though the Lower Block appears to be absent in Warren county. The block coals extend southward with their characteristic features into southern Clay county and central and eastern Greene county. South of that region their characteristics have not been recognized, and correlations made with them are only suggestional in character. Because of exhaustion of the Block seams, but little of this coal is now being produced—less than 2 per cent. of the annual output.

GENERAL ANALYSIS

Moisture	15.40
Volatile Matter	32.65
Fixed Carbon	46.05
Ash	5.90
Sulphur	1.60
B. T. U.	11,680

Cannelton Seam. (Mined in Perry county.)

In the southeastern part of the coal field is a coal that has been long extensively worked at Cannelton, from which it has been called the Cannelton coal. Like the other coals, it occurs in basins, ranging where present from 4 feet in thickness down. It has been recognized along the Anderson River, as far north as St. Meinrad. It is possible that it is the same coal that locally shows a workable thickness around Shoals.

The Cannelton coal is typically developed at Cannelton on the Ohio River. Here it has a thickness of 3½ feet or possibly 4 feet down to nothing. The basin character of the coal is very clearly seen at Cannelton, as the coal has been mined here for more than three-quarters of a century. This coal usually has under it a bench of bone coal or in places it may have one or more benches of cannel coal. The roof is usually shale.

GENERAL ANALYSIS

Moisture	1.47
Volatile Matter	49.08
Fixed Carbon	26.35
Ash	23.10
Sulphur	1.50
B. T. U.	10,850

PREPARATION OF COAL

In Indiana, as in Illinois, the preparation of coal before sending to market has received much attention, and some of the most modern and efficient devices for the production of a clean and acceptable coal will be found in use.

Where shaker screens are employed, lump coals of various sizes are made. In addition to these,

egg, nut, slack, or combinations of egg and nut or nut and slack are possible. Where bar screens are used, usually 1¼-inch lump is produced. Picking tables for the removal of impurities from nut, egg and lump coal, and adjustable loading booms for lowering the lump coal into cars with a minimum of breakage are common, especially where the coals are prepared for domestic trade.

For additional information on uses and analyses of Indiana coals, see descriptive advertisements on coal mines following the Supplementary Analyses.

Analyses of Indiana Seams by Counties and Localities

CALL ANALYSES MADE ON MINE SAMPLES "AS RECEIVED")

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Percent B. T. U.	Carbon	Hydrogen	RATIOS		
											Carbon	F. C.	Hydrogen
											100	100	100
†Lower Block.....	Clay, Asherville.....	Crawford No. 3.....	11.26	36.34	48.23	4.16	0.56	12,344	.....	.....	.....	1.33	.....
†Lower Block.....	Clay, Brazil.....	No. 1.....	13.82	35.16	49.96	1.06	1.47	12,338	.....	.....	.....	1.42	.....
*Lower Block.....	Clay, 1 mi. s. w. of Brazil.....	No. 4.....	15.38	32.66	46.08	5.88	.....	11,680	.....	.....	.....	1.41	.....
†Lower Block.....	Clay, Carbon.....	Eureka No. 1.....	9.80	36.32	50.42	3.46	0.34	12,690	.....	.....	.....	1.39	.....
†Lower Block.....	Clay, Cardonia.....	Gart No. 5.....	11.20	36.11	49.16	3.53	0.62	12,193	.....	.....	.....	1.36	.....
†Lower Block.....	Clay, s. w. of Perth.....	.....	16.91	26.85	38.87	17.37	1.89	9,524	52.97	21.28	1.37	1.45	.....
†Lower Block.....	Clay, Island Valley.....	.....	8.81	36.19	47.84	7.16	3.03	13,201	.....	.....	.....	1.32	.....
†Lower Block.....	Parke, near Diamond.....	McIntosh No. 1.....	8.21	36.69	51.01	4.09	0.95	12,614	.....	.....	.....	1.39	.....
†Upper Block.....	Owen, Woodside.....	Lancaster No. 4.....	12.73	36.45	47.40	3.42	0.55	11,944	.....	.....	.....	1.30	.....
*Brazil Block (Upper).....	Parke, Diamond.....	No. 9.....	13.70	35.94	44.45	5.91	2.66	11,930	.....	.....	.....	1.24	.....
†Minshall.....	Clay, Williamstown.....	Gifford.....	13.12	37.67	39.48	9.75	10.992	10,992	.....	.....	.....	1.05	.....
No. 3.....	Greene, Jasonville.....	.....	7.39	39.66	49.63	3.32	3.29	12,731	.....	.....	.....	1.25	.....
No. 3.....	Greene, Midland.....	.....	6.33	40.19	49.45	4.03	3.26	12,783	.....	.....	.....	1.23	.....
†No. 3.....	Parke, Coxville.....	Cox No. 3.....	6.49	41.88	46.45	5.18	2.93	12,414	.....	.....	.....	1.11	.....
*No. 3.....	Parke, Rosedale.....	Rosedale.....	10.72	39.29	41.42	8.57	3.83	11,767	63.48	17.10	2.47	1.05	.....
*No. 3.....	Parke, Rosedale.....	Rosedale.....	11.54	39.49	39.35	9.62	4.41	11,655	.....	.....	.....	1.00	.....
*No. 3.....	Sullivan, Hymers.....	No. 34.....	10.45	38.62	41.35	9.58	4.04	11,745	.....	.....	.....	1.07	.....
*No. 3.....	Vermilion, 1 1/2 mi. s. w. of Clinton.....	Dering No. 1.....	11.39	38.87	41.10	8.64	3.48	11,574	63.62	17.28	2.45	1.06	.....
*No. 3.....	Vigo, 1 1/2 mi. e. of Seeleyville.....	No. 65.....	7.88	36.85	41.07	14.20	5.14	11,146	59.75	14.76	2.06	1.11	.....
†No. 3.....	Vigo, Seeleyville.....	Ray.....	10.16	38.34	44.39	7.11	3.32	13,076	.....	.....	.....	1.16	.....
†No. 3.....	Greene, Island City.....	Island City No. 1.....	7.57	40.25	44.21	7.97	4.01	12,171	.....	.....	.....	1.10	.....
†No. 4.....	Greene, w. of Linton.....	Summit.....	7.12	35.97	50.50	6.41	0.81	11,274	.....	.....	.....	1.40	.....
†No. 4.....	Greene, 2 mi. w. of Linton.....	Black Creek.....	13.58	32.07	52.24	5.02	0.61	12,333	63.53	20.34	2.23	1.48	.....
*No. 4.....	Greene, n. w. of Linton.....	Black Creek.....	13.98	32.58	46.35	8.15	0.91	11,419	.....	.....	.....	1.42	.....
*No. 4.....	Greene, Blackhawk.....	Buckeye.....	6.75	41.74	43.21	7.10	0.96	.....	.....	.....	.....	1.03	.....
†.....	Greene, Linton.....	Alum Cave.....	7.81	35.69	51.10	5.40	0.72	11,912	.....	.....	.....	1.43	.....
†.....	Greene, Linton.....	Gifford.....	6.49	42.60	42.17	8.74	3.18	12,409	.....	.....	.....	0.99	.....
†.....	Jasper, Gifford.....	.....	13.12	37.67	39.48	9.73	2.95	10,993	.....	.....	.....	1.05	.....
†.....	Knox, Bicknell.....	.....	5.09	35.16	50.91	8.84	4.45	12,177	.....	.....	.....	1.45	.....
No. 4.....	Knox, Bicknell.....	Bicknell.....	7.61	35.22	48.54	8.63	1.67	11,680	.....	.....	.....	1.38	.....
†No. 4.....	Knox, Edwardsport.....	Edwardsport.....	8.75	36.00	46.03	9.22	3.08	11,421	61.78	20.03	2.41	1.27	.....
†No. 4.....	Sullivan, Dugger.....	Vandalia No. 10.....	13.60	34.97	44.58	6.85	1.06	11,545	.....	.....	.....	1.42	.....
*No. 4.....	Sullivan, Dugger.....	No. 4.....	14.23	33.04	47.01	5.72	0.89	11,722	.....	.....	.....	1.05	.....
*No. 4.....	Sullivan, 1 1/2 mi. s. w. of Dugger.....	Vandalia No. 10.....	13.48	32.51	48.38	5.63	1.09	11,788	66.01	19.84	2.59	1.29	.....
No. 5.....	Daviess, 3 mi. s. w. of Washington.....	Cabel & Kauffmann.....	6.50	37.99	49.16	4.91	1.85	12,565	.....	.....	.....	1.30	.....
*No. 5.....	Daviess, 1 mi. w. of Montgomery.....	No. 3.....	10.95	35.47	45.90	7.68	3.73	.....	.....	.....	.....	0.91	.....
*No. 5.....	Gibson, 1 mi. s. of Fort Branch.....	Fort Branch.....	6.87	38.74	35.40	8.99	3.51	12,188	67.35	13.28	3.02	1.20	.....
†No. 5.....	Gibson, Princeton.....	Oswald.....	7.88	37.72	45.30	9.10	2.71	11,862	61.00	16.58	2.15	1.15	.....
*No. 5.....	Greene, 4 mi. w. of Linton.....	White Rabbit.....	10.30	36.31	41.64	11.75	4.23	11,218	63.62	16.10	2.50	1.15	.....
*No. 5.....	Knox, 4 mi. s. of Bicknell.....	Indian Creek.....	10.72	37.17	42.77	9.34	3.24	11,615	.....	.....	.....	1.03	.....
†No. 5.....	Knox, Bicknell.....	Linn.....	10.60	38.06	43.04	8.30	3.69	11,752	.....	.....	.....	1.30	.....
†No. 5.....	Pike, Ayrshire.....	Ayrshire.....	10.75	41.32	41.15	6.78	0.81	11,920	.....	.....	.....	1.31	.....
*No. 5.....	Pike, Ayrshire.....	Ayrshire No. 4.....	13.83	34.24	45.91	6.02	1.41	.....	.....	.....	.....	1.01	.....
†No. 5.....	Pike, Blackburn.....	Columbia No. 2.....	7.47	43.38	43.95	5.20	5.21	12,453	.....	.....	.....	.....	.....

*Bulletins Bureau of Mines. †State Geological Survey Reports.

(Continued on Next Page)

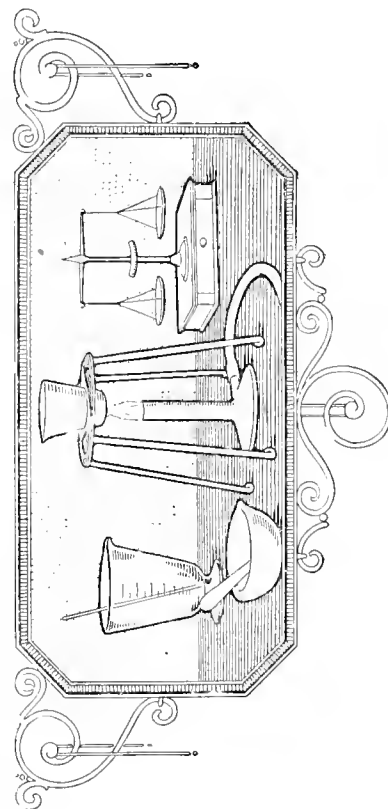
COAL CATALOG

ANALYSES OF INDIANA SEAMS BY COUNTIES AND LOCALITIES—Continued

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined R. T. U.	Carbon	Oxygen	RAYIUS	
											Carbon	F. C.
											Oxy. + Ash	V. M.
*No. 5.	Pike, Hartwell.	Hartwell.	10.57	35.03	41.75	11.65	3.87	11,266	61.11	16.80	2.15	1.19
*No. 5.	Pike, Littles.	Littles.	10.18	38.86	42.84	8.12	3.96	12,181	...	...	...	1.10
*No. 5.	Pike, 1 mi. s. w. of Winslow.	Ayrshire No. 4.	12.88	34.71	46.27	6.14	1.70	11,801	...	...	...	1.33
†No. 5.	Posey, Mt. Vernon.	Alum Cave.	10.02	50.24	35.16	10.10	2.28	12,238	...	...	...	0.70
†No. 5.	Sullivan, Alum Cave.	Alum Cave.	6.49	42.60	42.17	8.74	3.18	12,409	...	...	...	0.99
*No. 5.	Sullivan, Hymers.	No. 34.	10.80	35.09	40.49	12.62	4.39	11,185	60.88	15.52	2.16	1.12
*No. 5.	Sullivan, ½ mi. n. of Carlisle.	Viola.	10.80	37.57	42.44	9.19	2.96	11,687	64.38	16.48	2.51	1.13
*No. 5.	Sullivan, Hymers.	No. 33.	12.03	35.65	41.44	10.88	4.27	11,192	60.73	17.54	2.14	1.16
†No. 5.	Vanderburgh, Evansville.	Sunnyside.	6.44	38.59	48.14	6.83	1.85	12,166	...	...	...	1.25
†No. 5.	Vanderburgh, Evansville.	Sunnyside.	9.72	35.61	44.48	10.19	2.92	11,435	63.53	16.56	2.38	1.25
*No. 5.	Vermilion, ½ mi. e. of Blanford.	W. Clinton No. 1.	11.13	39.46	40.06	9.35	3.18	11,549	63.40	16.93	2.41	1.02
*No. 5.	Vermilion, Clinton.	Vermilion.	4.22	40.77	42.75	12.26	3.13	...	...	...	...	1.05
*No. 5.	Vigo, 6 mi. w. of Terre Haute.	Vandalia No. 82.	11.42	39.08	40.32	9.18	3.01	11,599	63.77	17.07	2.43	1.03
No. 5.	Warrick, Boonville.	No. 3.	5.46	41.11	46.65	6.78	3.38	12,494	...	...	...	1.13
*No. 5.	Warrick, Boonville.	No. 3.	13.18	31.92	39.27	15.63	4.79	10,030	54.52	18.62	1.59	1.23
*No. 5.	Warrick, Boonville.	Electric.	9.62	36.14	41.22	13.02	4.43	11,122	60.70	15.32	2.14	1.14
†No. 5.	Warrick, Deforest.	Deforest.	6.08	39.09	45.07	9.76	2.14	11,410	...	...	...	1.15
*No. 5.	Warrick, 1 mi. s. of Elberfeld.	Elberfeld.	9.69	38.59	41.04	10.68	4.79	11,412	62.36	15.50	2.38	1.06
No. 6.	Gibson, Fort Branch.	No. 6.	10.04	32.60	52.90	4.46	1.39	12,319	...	...	...	1.62
*No. 6.	Knox, Bicknell.	Linn.	12.08	32.48	44.42	11.02	3.65	11,011	60.45	18.65	2.04	1.37
*No. 6.	Sullivan, Mildred.	Mildred.	8.66	34.86	42.67	13.81	2.58	11,405	62.20	14.99	2.16	1.22
†No. 6.	Sullivan, Mildred.	Farnsworth.	11.40	33.81	41.39	13.40	2.50	11,061	60.34	17.21	1.97	1.28
†No. 6.	Sullivan, Farnsworth.	Pleasantville.	12.07	34.40	43.89	9.64	2.57	...	...	...	...	1.16
†No. 6.	Sullivan, Pleasantville.	Pleasantville.	11.30	37.61	43.67	7.42	3.13	11,580	...	...	...	1.12
†No. 6.	Sullivan, Shelburn.	No. 6.	8.63	38.82	43.45	9.05	2.57	...	...	...	...	1.27
†No. 6.	Sullivan, Star City.	Star City.	9.40	38.53	48.77	3.30	1.23	12,703	...	...	...	1.27
*No. 6.	Sullivan, Star City.	No. 29.	13.99	29.40	42.29	14.32	2.31	10,318	57.18	19.72	1.68	1.44
*No. 6.	Sullivan, Star City.	No. 29.	14.86	31.65	46.14	7.35	...	11,324	...	...	...	1.46
*No. 6.	Sullivan, Star City.	Home.	12.79	35.45	39.67	12.09	3.18	10,899	59.84	18.49	1.96	1.12
*No. 6.	Vigo, 3 mi. w. of Terre Haute.	Red Bird.	13.43	36.72	42.51	7.34	2.16	...	...	...	...	1.16
*No. 6.	Vigo, West Terre Haute.	Red Bird.	13.53	34.80	40.91	10.76	3.15	10,948	59.64	19.61	1.96	1.18
*No. 7.	Vigo, Macksville.	...	6.60	37.92	42.25	13.23	3.24	12,422	...	...	...	1.11
...	Vigo, West Terre Haute.	...	...	...	...	...	...	...	...	...	...	...

*Bullietins Bureau of Mines.

†State Geological Survey Reports.



BINKLEY COAL COMPANY

11 South La Salle Street, CHICAGO, ILL.

Miners and Shippers of

INDIANA AND ILLINOIS COALS

INDIANA MINES

The Binkley Coal Company owns and operates the Pine Ridge mine in the West Clinton District of Indiana on the southeastern division of the Chicago, Milwaukee & St. Paul Railroad. This mine operates in the No. 5 Vein and produces 1,500 tons of coal per day.

Pine Ridge coal ranks as one of Indiana's best fuels. It is an excellent steam coal and is popular with the retail coal trade. It is also much used for railroad fuel.

In addition to the above mine, we are Sales Agents for four additional mines in Indiana, as follows:

Terre Haute	Vein No. 4....	{ Big Four, C. & E. I., and C. M. & St. P. Railroads
Sullivan	Vein No. 6.....	C. & E. I. Railroad
Boonville, Warrick County.....	Vein No. 5.....	Southern Railroad

ILLINOIS COALS

We are the owners and operators of the Thomas-Waters mine, located at Herrin, Illinois, on the Burlington Railroad.

The No. 5 and 6 seams, which are here worked, produce a fine quality of coal, much used for steam, locomotive fuel and domestic purposes.

We are also Sales Agents for two additional Illinois mines, as follows:

Marion	I. C., C. & E. I., and Mo. Pac. Railroads
Harrisburg	Big Four Railroad

Our total production is in excess of 1,500,000 tons.

We specialize in large tonnages for industrial plants and railroads.

We deliver what we sell.

W. S. BOGLE & COMPANY, Inc.

Principal Office
Union Bank Bldg.
CHICAGO, ILL.

Northwestern Office
533 Security Bldg.
MINNEAPOLIS, MINN.

Producers of Indiana

ST. BERNICE AND ESSANBEE COAL Steam and Domestic

Holdings and Locations

W. S. Bogle & Co., Inc. owns and controls a large coal acreage, carrying the Nos. 3 and 5 Seams of the Indiana Geological Survey—located 22 miles North of Terre Haute and eight miles West of Clinton, Indiana, in Vermillion and Vigo Counties of Indiana and Edgar County, Illinois. This acreage is partially developed through the operations of St. Bernice and Essanbee Mines, which have a daily capacity of 4,500 tons.

Operations

The St. Bernice and Essanbee are twin mines, with a power and electrical generating plant common to both.

The St. Bernice development is in the No. 5 Seam, which is one of the best known Indiana Seams—running very regular in thickness and consistent in mining conditions. The St. Bernice acreage averages four feet and eight inches in height, with one hundred eighty-six feet of solid overburden with very substantial black slate immediately above the Coal Seam, and hard fire clay underneath—No explosive gases, and very little water.

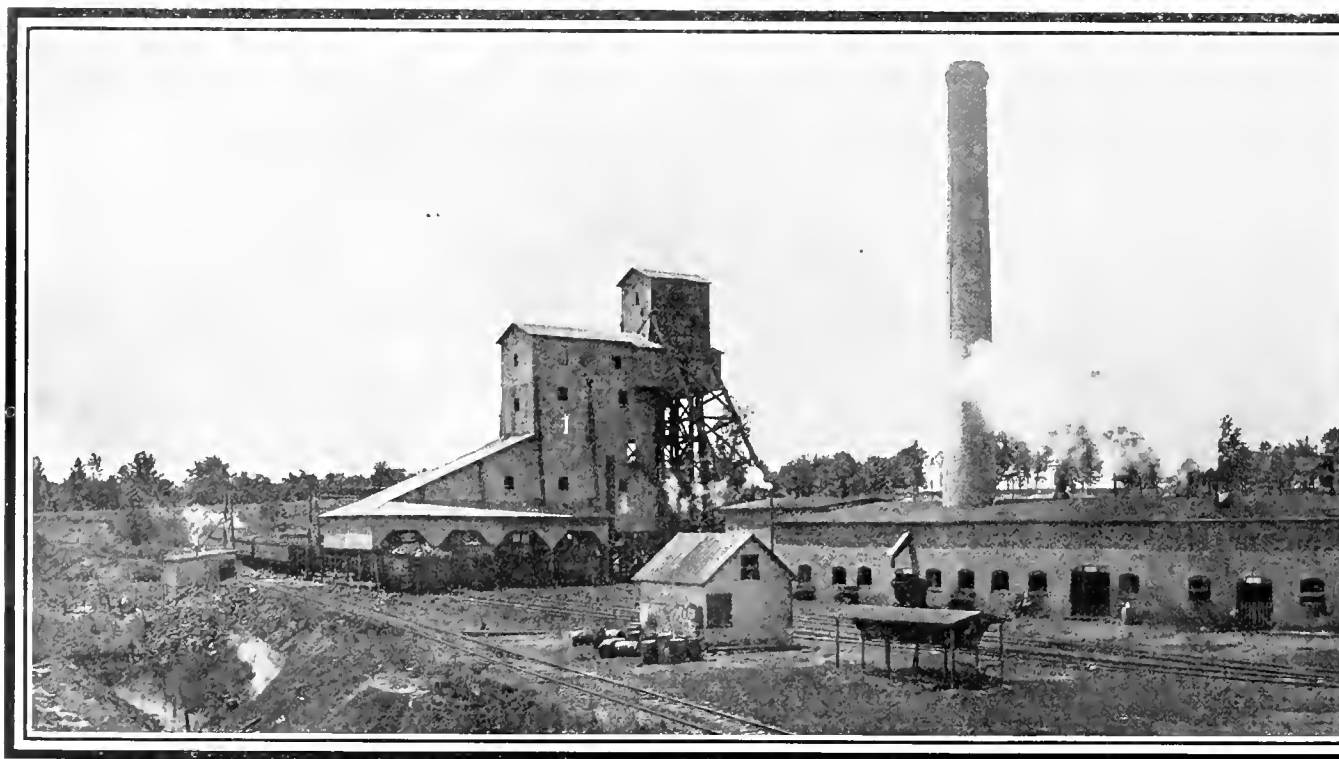
Essanbee is developed in the No. 3 Seam, carrying an overburden of three hundred-fifty feet, with lime stone immediately above the Coal and hard fire clay below—is free from explosive gases and no water.

Railroad Facilities

Both mines are served by the Chicago, Milwaukee and St. Paul Railroad (formerly the Chicago, Terre Haute and Southeastern) which has overnight service to Chicago and adjacent points, and direct routings and through freight rates throughout Indiana, Illinois, Wisconsin, Iowa, Minnesota and the Northwest.

Mining Methods

St. Bernice Coal is mined on the solid by what is known as the Pick Mining Method—Essanbee is undercut with Electric Undercutting Mining Machines of the Breast and Short Wall type. The Coal is gathered with mules to convenient storage tracks throughout the mines from which Heavy-duty Electric Haulage Locomotives draw it to the hoisting shafts.



Preparation

Both St. Bernice and Essanbee Mines are equipped with screening equipment and machinery for preparing the Coal of the most modern design—both installations having been made late in 1921. The St. Bernice plant was completely destroyed by fire late in the Fall, and the new installation of equipment for preparing the Coal at both mines was the outgrowth of the reconstruction of that plant.

That equipment consists of four-track double shaker screens, with additional shaking chutes for removal of any fine Coal which may remain after screening and sizing on the main shakers—with degradation conveyors for the accommodation of the Screenings thus produced.

The screens are designed for Six Inch Lump, Six by Two and One-half Inch Egg, Two and One-half Inch Nut and Screenings—and all the combinations of these sizes required.

The Lump, Egg and Nut tracks are equipped with picking tables and loading booms, which take the rescreened sizes from the rescreening chutes after a thorough hand picking to the railroad car where it is loaded without breakage.

Usages of Coal

St. Bernice and Essanbee prepared sizes enjoy a broad market as Domestic Coals, and are popular with a large list of Retail Dealers who have been customers for a long term of years. Many industrial plants, utilities and railroads use the steam sizes, and the fact that some of them have been Bogle customers for thirty-five years testifies to the high regard of W. S. Bogle & Co., Inc., for their contract obligations, and to their ability to produce Coal of the quality to justify the continued confidence of their patrons.

Analysis

ST. BERNICE

Cross-Cut of the Seam at the Face	
Moisture	6.57
Volatile Combustible	37.17
Fixed Carbon	44.61
Ash	11.65

100.00

B. t. u. of Commercial Sample 11,781

B. t. u. of Dry Sample..... 12,609

ESSANBEE

Moisture	4.44
Volatile Combustible	38.27
Fixed Carbon	46.96
Ash	10.33

100.00

B. t. u. of Commercial Sample 12,454

B. t. u. of Dry Sample..... 13,003

Personnel of Company

Walter S. Bogle, the President, has been in the Coal Business for over sixty years. He has been directly and continuously interested in the distribution of Coal during the entire period, as the owner of Retail Coal Yards, Wholesale Distributing Organizations and Mining Companies. St. Bernice and Essanbee Coals are the result of the knowledge of the requirements of the ultimate consumer gained through those years of experience, and the popularity of the Coals testify to the accuracy of the application of that experience.

Mr. Bogle is very ably assisted in the management of the mining properties and the sale of their product by Harry A. Stark, Vice-President; C. K. Forgey, Secretary; J. M. Easterly, Sales Manager, located in Chicago, and Thos. Cokeley, General Superintendent at the Mines—all of whom are men with large experience in the various phases of the Coal Industry.



WALTER BLEDSOE & COMPANY

General Office: Terre Haute Trust Bldg., TERRE HAUTE, IND.

Indianapolis Office
Traction Terminal Building

Chicago Office
Old Colony Building

Cincinnati Office
Union Central Life Building

Organization

Walter Bledsoe & Company was organized and incorporated in 1910, and the incorporators of the business have not only a financial interest in the company, but have given it their personal services continuously since that time.

During all these years we have shared with our customers and friends that element of PERSONAL INTEREST and SERVICE which we believe so vital to the best business relations.

Growth

A growth to a point where it is possible to market annually approximately 2,500,000 tons of

coal, as is done by Walter Bledsoe & Company, is the result of three important factors, namely, a fuel that gives satisfaction, a reliable company back of it, and an honest service to go with it. We should like to work with you on this basis. If we have never served you we should like to get acquainted. If we have served you in the past we want to renew our acquaintance. If we are now serving you we trust we are doing so to your entire satisfaction. In any event we should be pleased to have a word from you either by telephone, telegraph, letter or through our representatives.

LIST OF WALTER BLEDSOE & COMPANY MINES

FOURTH VEIN MINES

Fayette Mine	Talleydale Mine
Daily Capacity, 2,500 tons	Daily Capacity, 2,500 Tons
Shaker Screens	Shaker Screens
Loading Booms	Loading Booms
Picking Tables	Picking Tables
Bardyke Mine	Glen Ayr Mine
Daily Capacity, 2,800 Tons	Daily Capacity, 1,400 Tons
Modern Screens	Shaker Screens
	All sizes of coal
Bon Ayr Mine	Green Valley Mine
Daily Capacity, 3,000 Tons	Daily Capacity, 1,300 Tons
Shaker Screens	Shaker Screens
Loading Booms	All sizes of coal
Picking Tables	

SIXTH VEIN

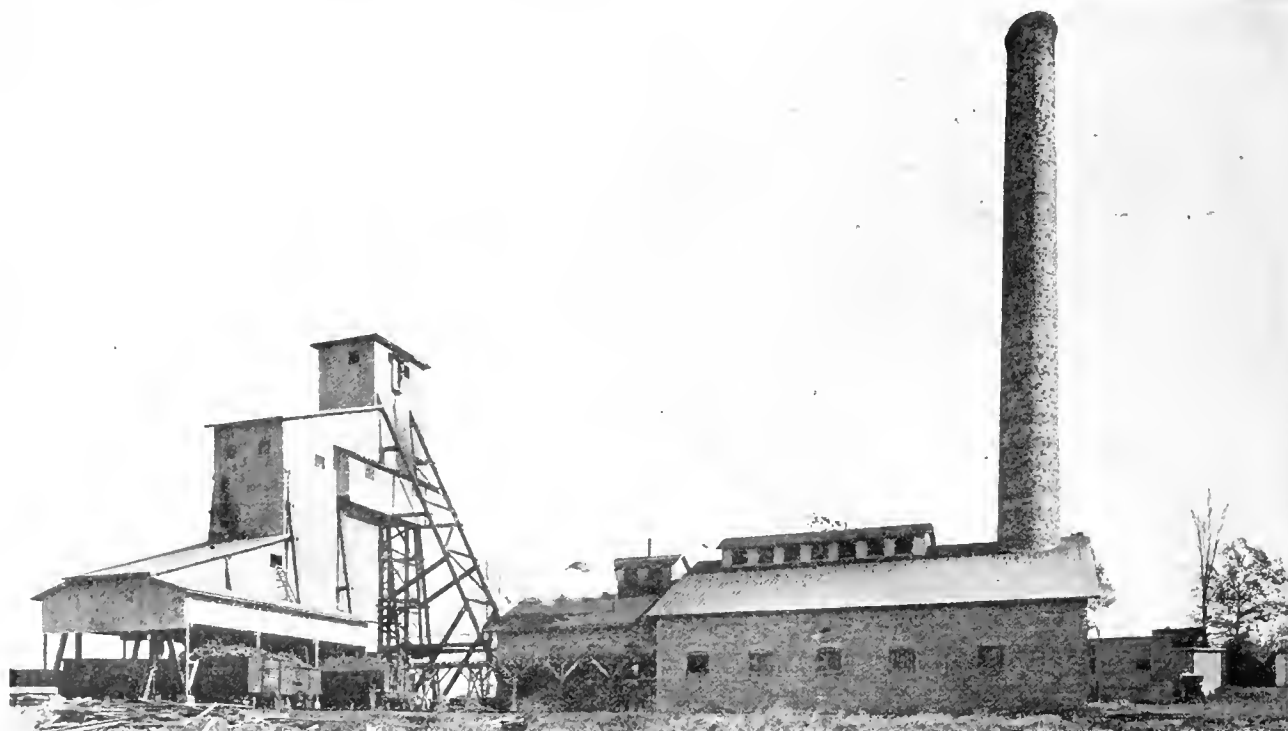
Hamilton Mine
Daily Capacity, 1,400 Tons
Shaker Screens
Loading Booms
Picking Tables

FIFTH VEIN MINES

Clovelly Mine	Ayrdale Mine
Daily Capacity, 2,000 Tons	Daily Capacity, 1,500 Tons
Standard Screens	Standard Screens

SPECIAL VEIN

Mohawk Mine
Daily Capacity, 2,800 Tons
Shaker Screens
Loading Booms
Picking Tables



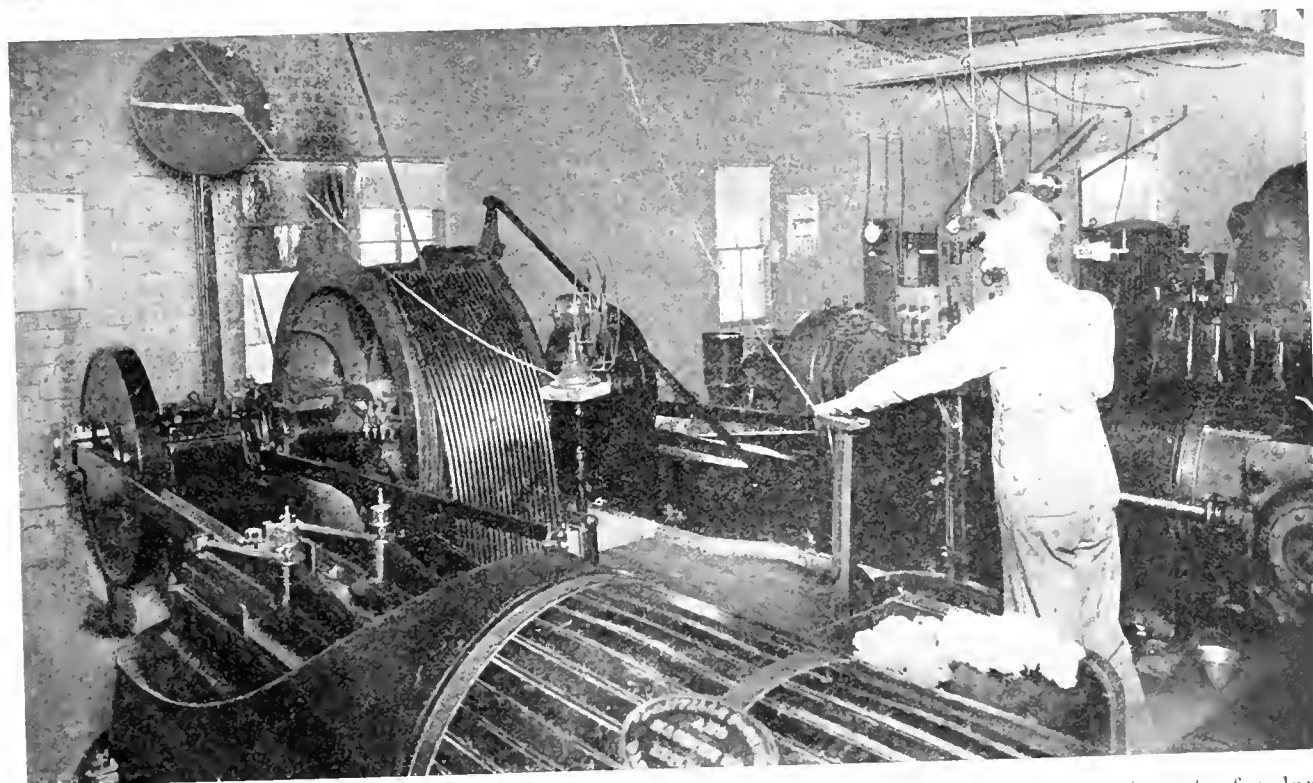
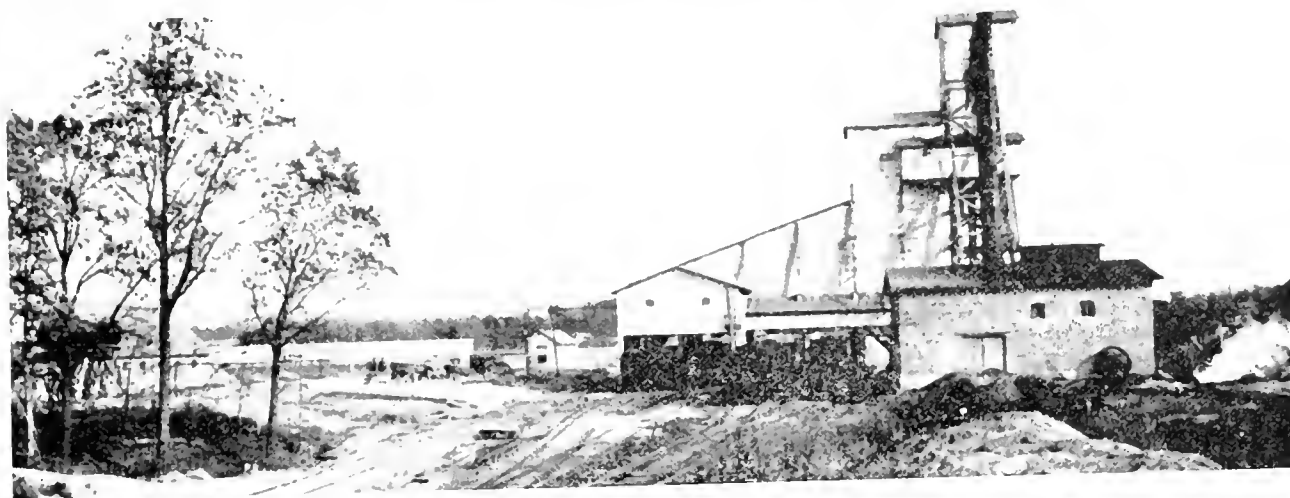
A Typical View of One of Our Mines

We believe you are acquainted with Indiana Fourth Vein Coal—with its low sulphur and low ash content, with its long flame and free burning qualities, with the fact that it meets all of the requirements of clay product, gas producer and malleable iron work.

Walter Bledsoe & Company control the largest tonnage of Indiana No. 4 Vein Coal marketed by any organization.

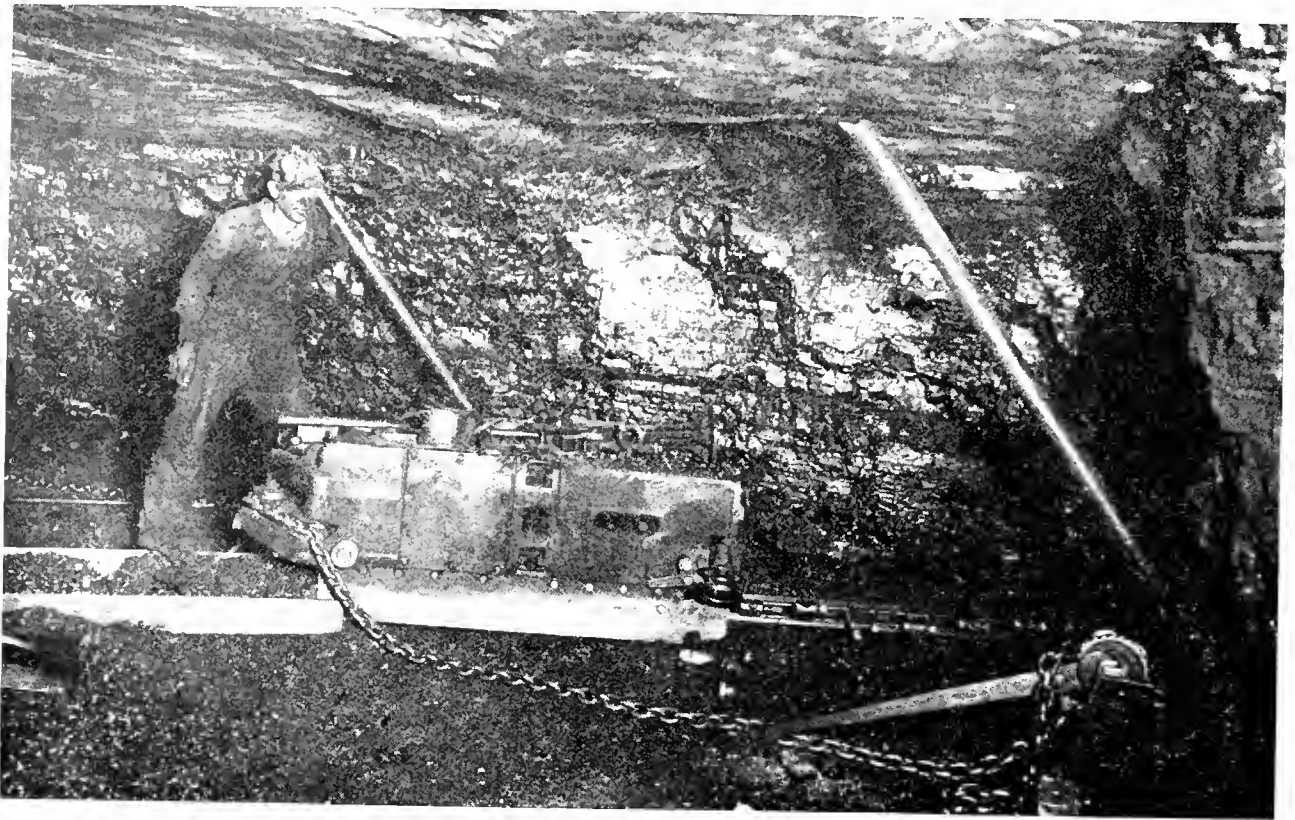
In the Clinton field alone there are three large mines producing our Fourth Vein Coal Creek Coal. Each of these mines has a daily capacity of approximately 2,500 tons. All of them are comparatively new mines and the equipment, both as to production and preparation, is of the very latest and best. In the Terre Haute field, just east of the city, our Glen Ayr mine has been a steady producer of Fourth Vein Coal for a number of years. Green Valley mine, in the edge of the town of Jasonville, in the Linton field, is a steady producer of No. 4 Coal after years of operation. Our new Bon Ayr mine, in the Linton field, produces an excellent Fourth Vein Coal at the rate of 3,000 tons per day of eight hours, 375 tons an hour, or $6\frac{1}{4}$ tons per minute.

In the pictures that follow we want to give you an idea of the rapid, but well-timed and efficient, movement of this coal from the "face" of a "room" where it has lain in dark and cool storage for thousands of years to the railroad car where it lies in the bright sunshine cleaned, sized and prepared for your use.



The first picture is a general view of the plant above ground. This is an important part of a large coal mine, because from it radiates the power that reaches the farthest underground corner. The wheels that turn here furnish the very air that the miner breathes far below in his working place. All of the latest devices for cleaning and preparing coal are housed in this tipple.

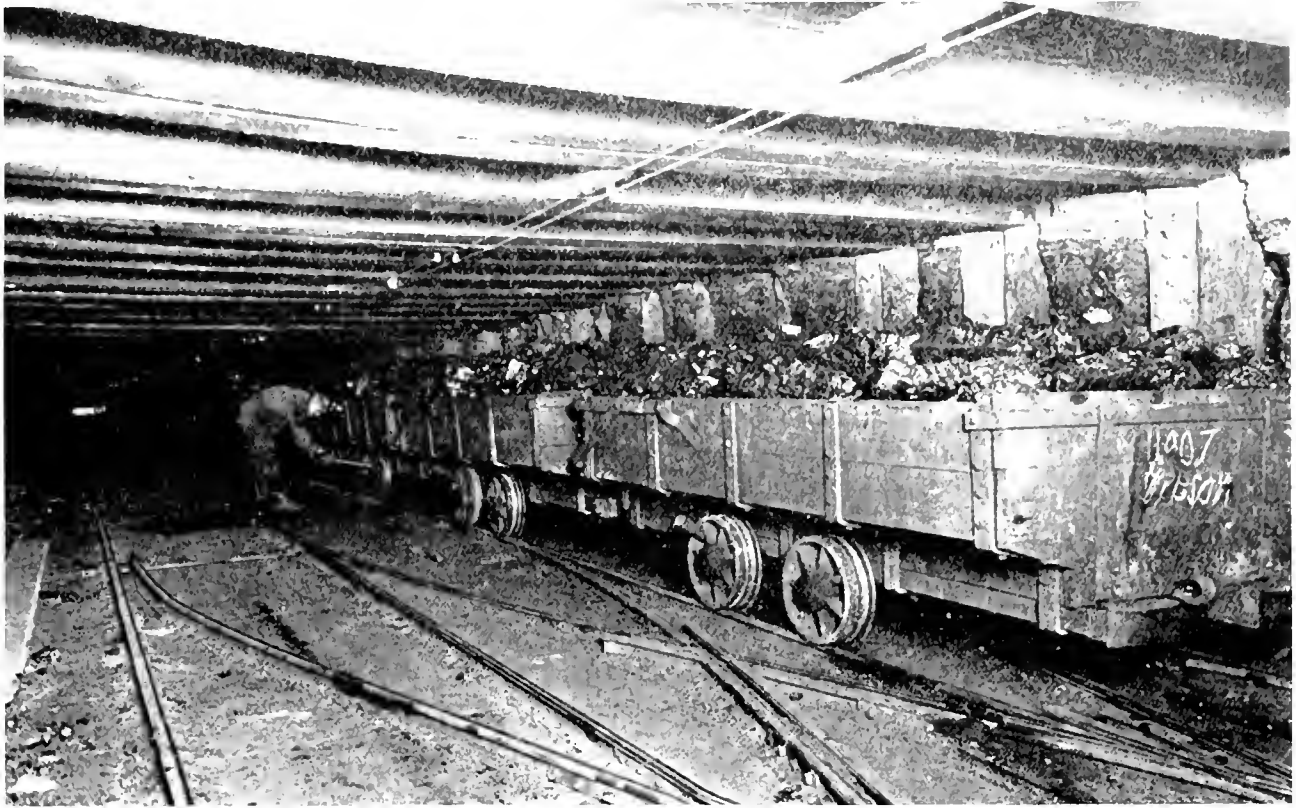
The lower picture shows the hoisting engine in operation and gives a glimpse of the high power electric machinery in use.



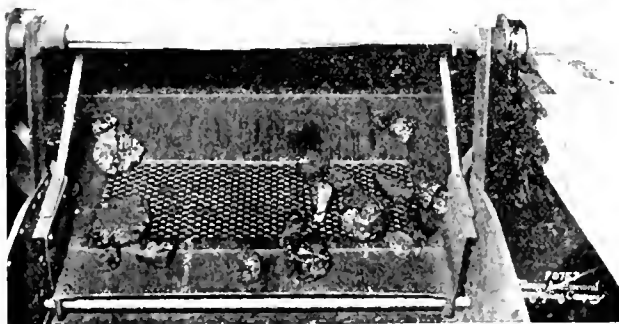
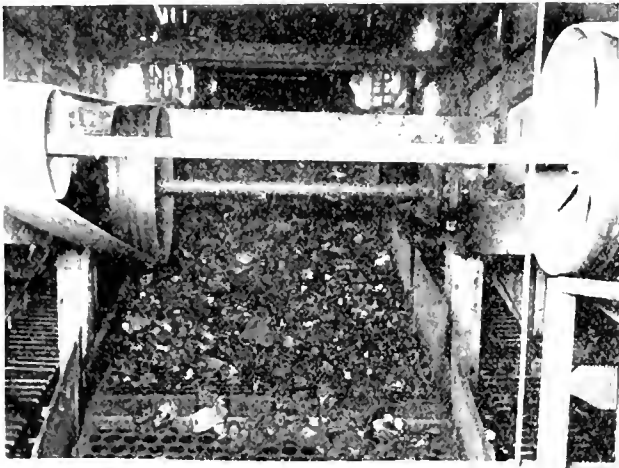
The next picture shows an electric coal cutting machine making an "under-cut" so that the "shots" of powder placed later by the miner in holes drilled into the coal will roll out a great section of the vein in large blocks of coal ready for the trip to the surface.



Then comes a picture showing the miner loading the coal into the "pit car "



These cars are gathered into a "motor trip" and hauled to the "bottom" by a high power electric motor which takes a long train of them at each trip.



After being hoisted and weighed the coal is gently dumped onto a shaker screen and sized to meet the needs of various users. Only a vague idea of the screening process can be given in a picture because of the many and complicated parts needed to properly size the coal.



From the screen the coal passes onto a combination picking table and loading boom. The men shown in the picture on either side of the table pick out by hand any impurities the coal may contain. The loading boom is controlled by an electric motor which lowers and raises it in the railroad car, so that the coal never falls more than a few inches and breakage is thus reduced to the minimum.

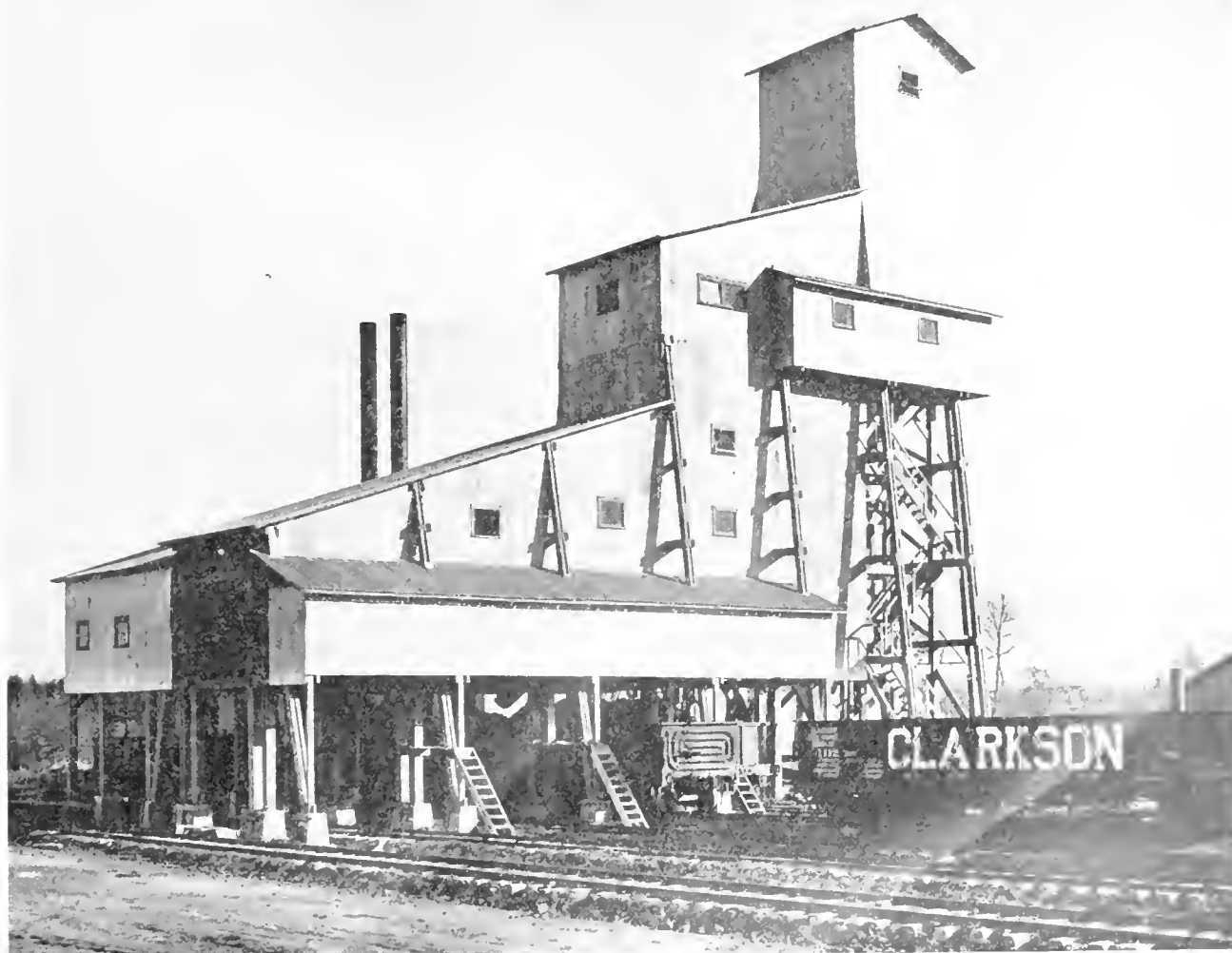


The Finished Product. Our 6" Lump and 6" x 3" Egg photographed in the car, just as it is loaded regularly for our trade.

Sixth Vein Coal has made a place for itself, particularly among retail dealers, which is surprising in view of the fact that there is comparatively little of it and that it has not been advertised as other veins of Indiana coal have. It is a bright, shining, fine appearing coal which absolutely lives up to its appearance. We are told by users that our Hamilton mine produces the best Sixth Vein Coal mined in the state. This mine is equipped with shaker screen, loading boom and the most modern preparation devices and has a daily production of 1,300 tons.

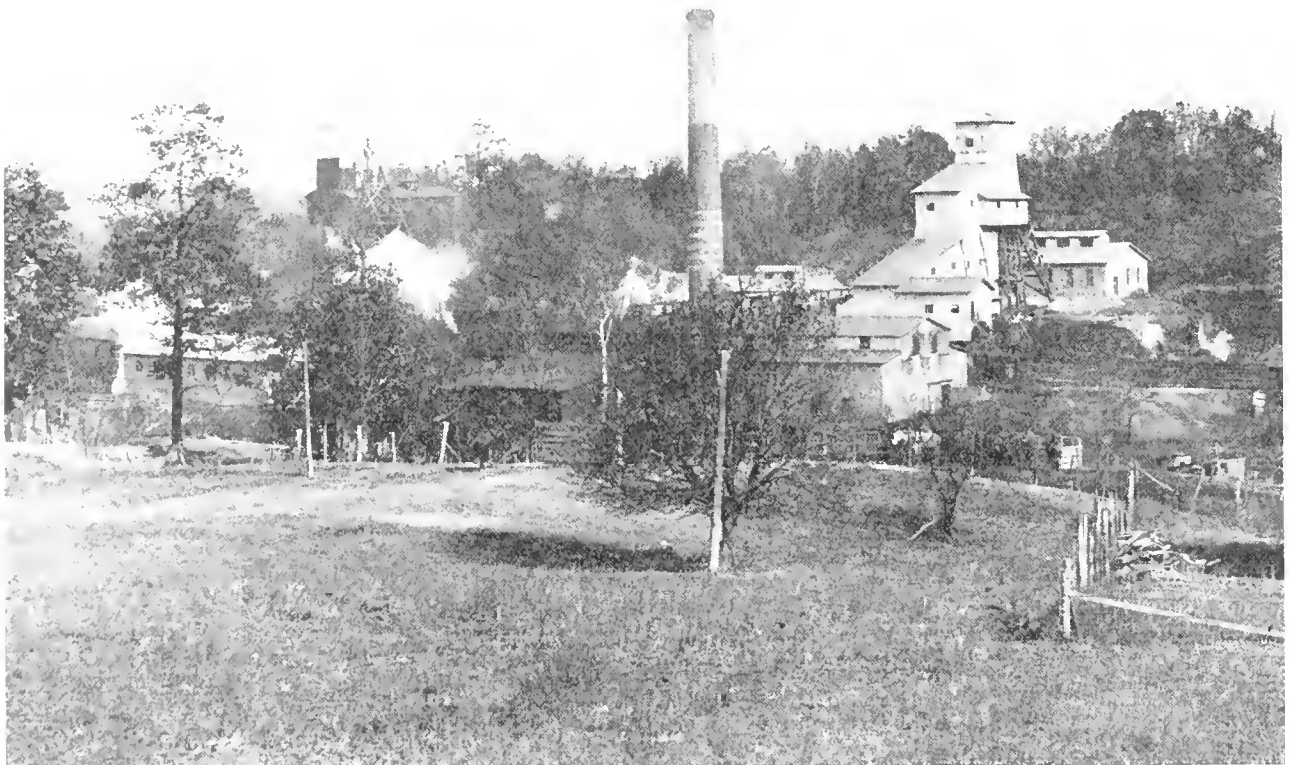
We have a large and representative mine in both the Linton and Clinton fields producing a standard high grade Fifth Vein Coal. This vein is known among steam users wherever Indiana Coal is burned as a power fuel of fine and dependable quality.

Our new Mohawk mine in the Linton field taps a special vein of wonderful coal which cannot be classed under the heading of any of the standard veins, as only in a small territory surrounding this mine is coal showing the superior qualities of this fuel found. In ages gone, and working in a strange world to us, Mother Nature tucked away in certain spots in the Indiana coal field deposits that excel the fuel she made in the regular and larger beds. You remember the old apple tree in the orchard at home that dropped on the ground at your feet an apple that you could not classify. You didn't try. It was different and it was just to your taste. You remember that tree but have forgotten the hundred others in the old orchard. We expect to make "Mohawk" a well-known name of a much desired coal. Needless to say our equipment here is of the latest and best design. The picture gives you an idea of the tipple and screening plant.



We cannot show in pictures the service that brings the coal to your plant, that keeps accurate record of car numbers and weights, that gives you proper information at the proper time and endeavors all the time to give that personal and friendly touch that makes business a pleasure as well as a profit. We do make mistakes at times, but we honestly try to give a little more than the straight business proposition demands, a little more than the words of the contract call for—to do a little more than you expect of us.

Most of all, we want the opportunity to keep in touch with you and to serve you.



A birds-eye view of one of our plants nestling in a friendly little valley midst the Hoosier Hills.

We address our advertising to that large group of high class honorable business concerns who meet their obligations and who feel that a contract, or the spoken word, is a definite obligation. When we are all again on the highway of true prosperity and business stability, we will have arrived there largely through the efforts of this group. Should it happen that we can never offer you our product because of location, freight rates, etc., we do offer you our sincere best wishes.

WALTER BLEDSOE & COMPANY.

CLINTON COAL COMPANY FERGUSON COAL COMPANY

Main Office: CLINTON, INDIANA

Sales Office
First National Bank Bldg.,
CHICAGO, ILL.

Sales Office
First National Bank Bldg.,
MILWAUKEE, WIS.

We Mine and Sell Our Own Coal

CLINTON COAL COMPANY

Clinton Coal Company owns and operates three 4th Vein mines and three 5th Vein mines, located on two railroad lines, the Chicago & Eastern Illinois and the Chicago, Milwaukee & St. Paul.

We prepare all sizes for both Steam and Domestic Use. Specially prepared sizes for Malleable Iron, Steel, Tile and Brick Plants.

FERGUSON COAL COMPANY

Sole Producers of
SUBMARINE COAL

Machine Cut; Shaker Screened; Hand Picked and Boom Loaded.

Submarine coal is especially prepared for Steel, Malleable Iron, Brick and Tile and any industry requiring a low-sulphur coal.

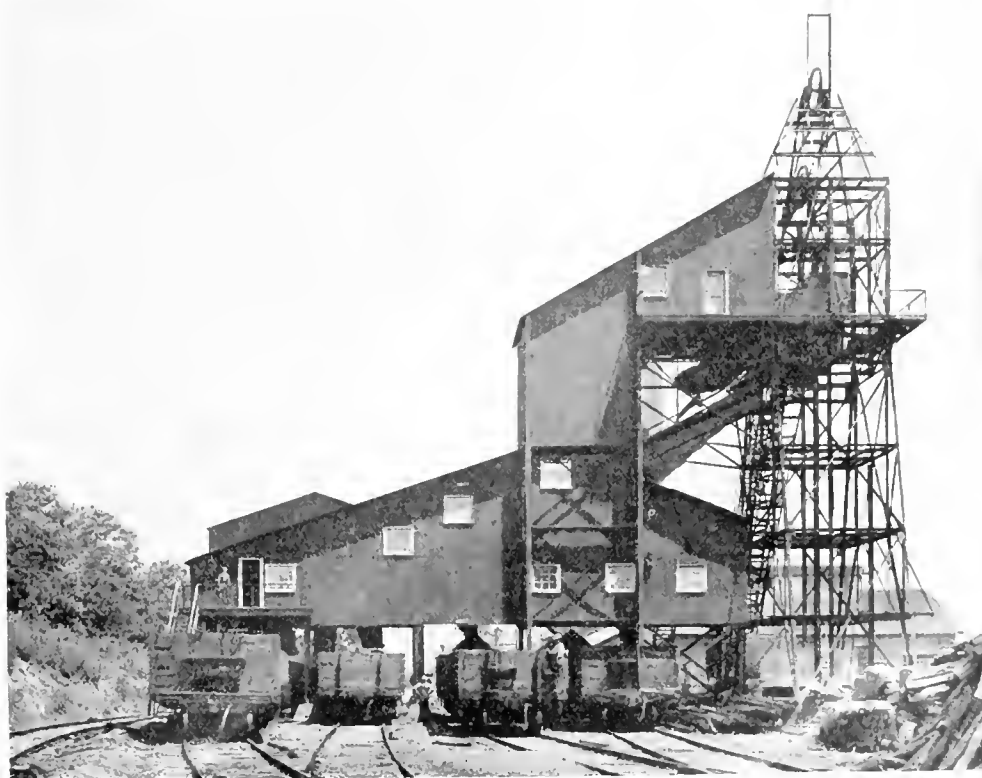
Made in 6" Lump, 6x3" Egg; 3x1½" Nut; 1½" Screenings and Mine Run.

Average Analysis*

Moisture	9.87
Volatile Matter...	35.27
Fixed Carbon.....	49.12
Ash	5.74

	100.00
Sulphur	0.78
B.t.u. per pound..	13,611

*Analysis made by Commercial Testing and Engineering Co.



Submarine Mine

Having successfully served the Coal Consuming Public for twenty-nine years, I feel that I can yet be of service to you.

H. M. FERGUSON, President.

WRITE OR WIRE FOR QUOTATIONS

DEEP VEIN COAL COMPANY

ROBERT J. SMITH, President

Miners and Shippers of

High Quality Indiana Coals

Main Office

TERRE HAUTE, IND.

CHICAGO OFFICE,
Fisher Building

RIDGELY REA, Manager

INDIANAPOLIS OFFICE,
Traction Terminal Bldg.

E. P. LOWERY, Manager

The Secret About Indiana Quality

It is not generally known how much bearing the kind of roof has on the quality of Indiana Coal.

The Number 5 Seam is the most widely prevailing in the state. Overlying the coal will be found two kinds of roof, namely, black slate and gray slate.

Most of the mines operating in this seam—over 90 per cent as shown by count—have a black slate boulder bearing roof, very hard and firm. A peculiarity is that coal from these mines runs high in sulphur and has an ash content which runs from 12 to 22 per cent and which forms hard clinkers.

Occasionally Number 5 Indiana coal occurs in a "freak vein" formation, having a gray slate roof. There is a decided difference in coal mined under this roof. The quantity of ash drops from five to eight per cent and its color is soft white instead of hard black. Sulphur largely disappears and the heat units show an increase of 10 per cent.

There are about 108 mines in Indiana mining Number 5 Seam. Of these not over 9 have the gray slate roof and the super-quality.

Positively the highest grade of coal mined in Indiana will be found to have come from one of these nine gray-slate-roof mines. The Deep Vein Coal Company controls two of these mines, having a daily capacity of 4000 tons.

Analyses No. 5 Coal

Analysis made by Commercial Testing & Engineering Co., on core sample of coal at Ebbw Vale mine, having gray slate roof.

	Dry Basis
Volatile Matter.....	37.54
Fixed Carbon.....	57.27
Ash	5.19
	<hr/>
	100.00
Sulphur	0.69
B. t. u.	13,910

Analyses made by Wisconsin Steel Company on three cars of Deep Vein Princeton coal from mines having gray slate roof. As received.

	Car 72662	Car 76021	Car 75579
		C. & E. I.	
Moisture	9.38	9.39	9.38
Volatile Matter..	39.06	38.51	37.96
Fixed Carbon....	44.42	44.56	44.69
Ash	7.14	7.55	7.97
	<hr/>	<hr/>	<hr/>
	100.00	100.00	100.00
Commercial			
B. t. u.	11,923	11,920	11,915

All analyses point to the high quality of our Number 5 Seam coal and actual usage confirms it as the most satisfactory coal mined in Indiana. A trial shipment is all you will need to become convinced.

GREAT LAKES COAL & COKE CO

(Not Inc.)

General Offices

Standard Oil Co. (Indiana) Bldg.
910 South Michigan Ave., Chicago

Shippers of

INDUSTRIAL AND POWER PLANT COAL

from

Illinois, Kentucky, INDIANA, Missouri, Kansas

The actual merchandising of industrial coal is something which is not often attempted in the development of a coal business. However, now-a-days merchandising rather than ordinary selling is necessary. The members of the Great Lakes Coal & Coke Company, one of them an experienced operator, the other two of a good many year's experience in coal sales, have analyzed the market for industrial coal. Their analysis is that the purchaser of industrial coal in quantities must necessarily demand the lowest price that he can obtain. He must be assured of an uninterrupted supply of coal at all times. He must also get a coal that will perform its function economically for him. It is their aim to assist the buyer of industrial coal along each of these lines; thereby becoming merchandisers rather than wholesalers.

Cost

Buying, as this company does, for some of the largest users of industrial coal, and in large quantities always, gives it the opportunity to sell this coal to its customers at a lower cost than is ordinarily possible. This is due in the first place to the fact that mine operators, assured of a steady market for their coal, are inclined to do business on a narrower margin, and this company can also handle the coal on a smaller margin than is usual, on account of the great tonnage involved.

Supply

The same factors, namely the purchase of large quantities of coal and dealing regularly with certain operating companies in each field also make it possible to supply the customers at times when the flow of coal from one or more fields is interrupted. In other words, this company maintains its mining connections in every field of Illinois, Indiana, Kentucky, Missouri and Kansas, either by stock interests in the mining companies or by contracting and controlling the outputs of the mines as sales agents for the mining companies.

It can readily be seen that in the event of car shortages or strikes, or trouble of any kind in any one field, with a knowledge of the client's requirements, a satisfactory coal may be supplied from some other field temporarily.

Proper Selection

Through the knowledge and experience of the personnel of this company, they are able to give expert advice as to the quality and kind of coal that will work to the best advantage in the customer's plant and members of the organization are ready to make a study of the combustion problems presented in an industrial heating or power plant and make expert suggestions as to their handling. In addition to this, being in touch with, and watching closely all of the different fields, they are in a position and ready to give clients a market analysis based on conditions that are not always evident to the buyer, to assist them in buying economically.

In a nut shell, the salient points in the operation of this organization are:

1. It is built around men thoroughly experienced in their profession, whose integrity and financial responsibility is unquestioned.
2. Their ability to serve when needed most.
3. Lower prices through added buying power with minimum profits on exceptionally large tonnages.
4. Strong mining connections in every field of Illinois, Indiana, Kentucky, Missouri and Kansas.
5. Conscientious advice as to when to buy and when not to buy.
6. Merchandising and not selling.
7. A personal knowledge of the power units is taken at the time of the first sale.
8. Not prejudiced by the operation of one or two of their own mines in restricted fields.
9. The ability to supply the customer with his coal requirements at all times.

These are the factors which have brought about the success of the Great Lakes Coal & Coke Company in its chosen field. They are also the factors which must comprise the company's fundamental policy in the future as well.

T. C. KELLER, President

A. B. STEFFENS, Vice President

Indiana and Illinois Coal Corporation

Southwestern Sales Office
425 International Life Bldg., St. Louis, Mo.

Main Office
1425 Old Colony Bldg., Chicago, Ill.

Owning and Operating

FIVE MINES IN MONTGOMERY COUNTY, ILL.

THREE MINES AT CLINTON, IND.

ONE MINE AT PAXTON, IND.

DAILY CAPACITY 20,000 TONS

THE INDIANA AND ILLINOIS COAL CORPORATION owns approximately 42,000 acres of coal land, located in the states of Illinois and Indiana; 7,000 acres of which are in Indiana, where it has in operation four mines with a daily average production of 5,000 tons, and working in what is known as seams No. 3, No. 4 and No. 5.

In Illinois it operates five mines in Montgomery county, located at Nokomis, Hillsboro, Taylor Springs and Witt, situated jointly on the C. & E. I. and Big Four Railroads.

All the Indiana mines are located on the C. & E. I. Railroad; three of them at Clinton, and one at Paxton (Sullivan county), and are known as No. 1, No. 2, No. 5 and No. 8.

Location of Indiana Mines

Mine No. 1, located at Clinton, Indiana, has a capacity of approximately 1,000 tons daily and is mining what is known as Third Vein coal. This is a very strong coal primarily adapted for railroad fuel and large steam users. As a general rule, only $1\frac{1}{4}$ " Lump and $1\frac{1}{4}$ " Screenings and Straight Mine Run is made. The mine is equipped, however with all facilities for making 4" Lump and Egg coal.

Mine No. 2 is located at Clinton, Indiana, and is the newest mine of the group, being in operation about two years and is now hoisting approximately 2,000 tons daily, which can be increased as business demands. What is known as Seam No. 5 is being worked at this mine, and averaging from 4 feet 10 inches to 5 feet 3 inches in thickness. This coal

is used largely by railroads and high pressure steam plants requiring full boiler capacity. At this mine the following sizes are made:

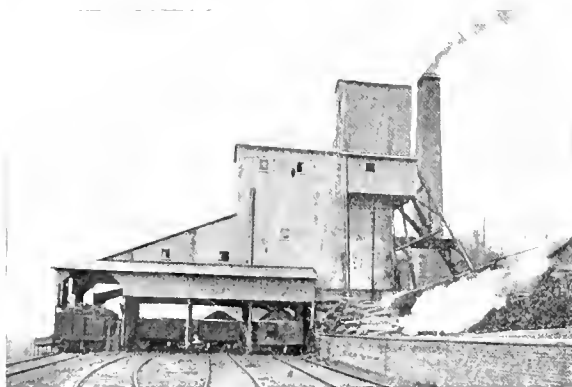
6" Lump	6x1 $\frac{1}{4}$ " Egg
1 $\frac{1}{4}$ " Lump	Mine Run
	1 $\frac{1}{4}$ " Screenings

Mine No. 5 produces the celebrated Fourth Vein Coal, known to be of the highest grade mined in the state of Indiana. On account of its low sulphur content (running about 1% or less in sulphur), it is used principally for gas producing purposes, annealing and malleable iron works. This coal is entirely free from slate and other impurities, so that the demand for it by the steel companies and domestic users always exceeds the supply. The following sizes are made:

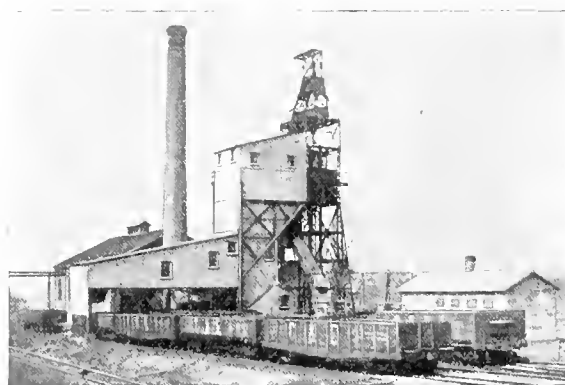
4" Lump	2 $\frac{1}{2}$ x1 $\frac{1}{4}$ " Nut
1 $\frac{1}{4}$ " Lump	1 $\frac{1}{4}$ " Screenings
4x2 $\frac{1}{2}$ " Egg	Mine Run

Mine No. 8 is located at Paxton, Indiana, and produces what is known as Fifth Vein (Sullivan county) coal. It is adaptable for both steam and domestic purposes, being entirely free from slate and other impurities, and is used extensively by steam railroads and the domestic trade. The present output is about 1,000 tons per day, but increased tonnage plans are under way. At this mine the following sizes are made:

4" Lump	2 $\frac{1}{2}$ x1 $\frac{1}{4}$ " Nut
1 $\frac{1}{4}$ " Lump	4x1 $\frac{1}{4}$ " Egg
4x2 $\frac{1}{2}$ " Egg	Mine Run
	1 $\frac{1}{4}$ " Screenings



Indiana and Illinois Coal Corporation Mine No. 5



Indiana & Illinois Coal Corporation Mine No. 2

SEE ARTICLE UNDER STATE OF ILLINOIS

THE OAKLAND COAL COMPANY

General Sales Office

Merchants Bank Building
INDIANAPOLIS, INDIANA

Miners and Shippers of
GIBSON COUNTY COAL

The Oakland mine is located on the E. I. & T. H. Railroad (now owned and operated by the C. C. C. & St. L. Railroad), at Oakland City, Indiana, in the heart of the Gibson County Field. The daily capacity is 1,000 tons.

Gibson County is a comparatively new field in Indiana. The coal is generally recognized as of splendid quality, but lack of adequate railroad facilities has hampered its development.

The recent purchase of the E. I. & T. H. Railroad by the C. C. C. & St. L. Railway has removed this handicap and Gibson County Coal has taken its place among the foremost coals of Indiana.

Railroads and other large steam users have demonstrated the splendid quality of Gibson County Coal beyond any possible doubt.

Our mine is equipped with shaker screens, and the coal is carefully prepared in the following sizes:

6" Lump	1 1/4" Lump
6" x 3" Egg	2" Screenings
3" x 2" Nut	Run-of-Mine
1 1/4" Screenings	

Following is a typical analysis of Oakland Coal:

ANALYSIS	
Moisture	8.48%
Volatile	36.91%
Fixed Carbon	44.61%
Ash	10.00%
Sulphur	3.00%
B. t. u.	13,050

THE OAKLAND COAL COMPANY

PEABODY COAL COMPANY

CHICAGO, ILL.

CINCINNATI, OHIO
PINEVILLE, KENTUCKY
ST. LOUIS, MISSOURI
KANSAS CITY, MISSOURI

BRANCHES
MINNEAPOLIS, MINNESOTA
SPRINGFIELD, ILLINOIS
PEORIA, ILLINOIS

OMAHA, NEBRASKA
DEADWOOD, SOUTH DAKOTA
SHERIDAN, WYOMING
SPOKANE, WASHINGTON

Coal Mine Management

For General Summary of Peabody Management Service See Page 249

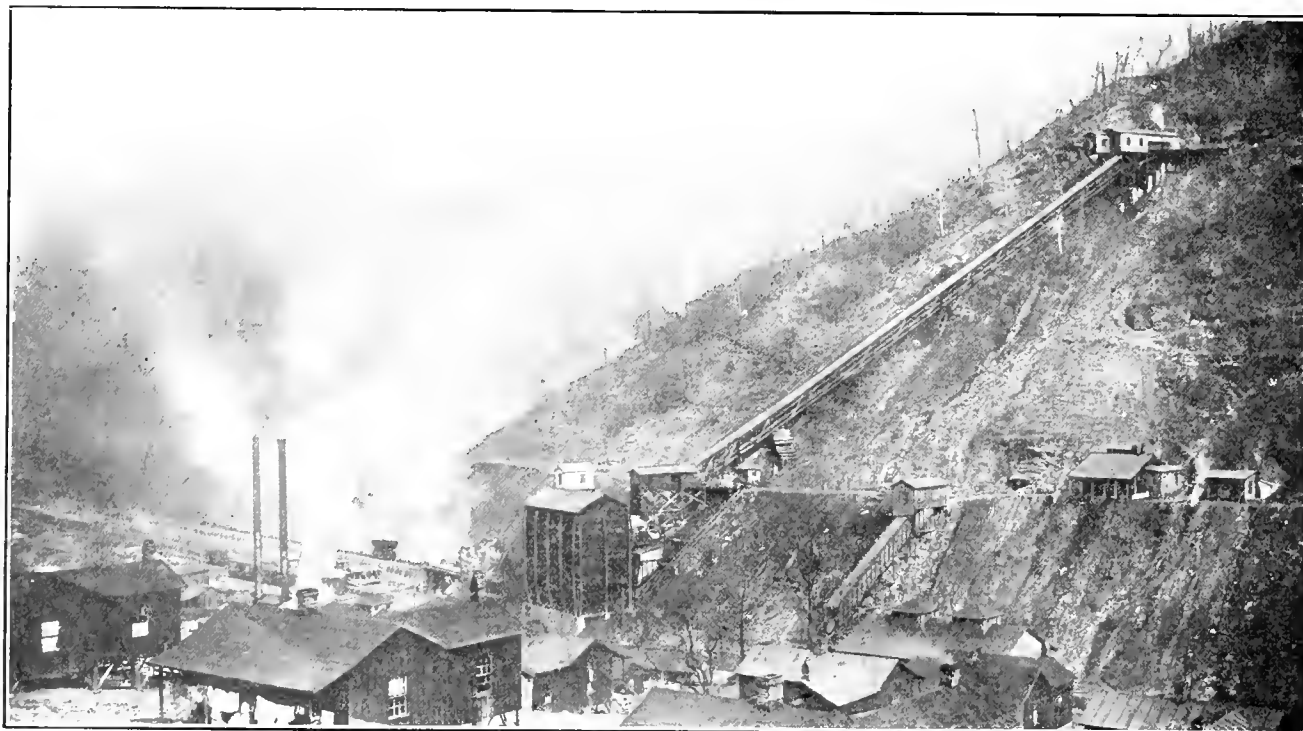
CONSULTING ENGINEER

We place at your disposal the fruits of our active experience and practical knowledge gained by daily contact with mining problems for the past thirty-eight years.

For a good many years, owners of coal properties, as well as prospective purchasers, have found it to their advantage to employ our services in the capacity of Consulting Engineer.

In the case of undeveloped property, this service takes the form of advice as to the value of the property, taking into consideration the nature and extent of the coal deposits, cost of development, estimated mining costs, location of the property with reference to markets and competition and consequent sales possibilities. Plans for the most economical and practical development are also furnished.

In the case of developed property, the service is directed along the lines of improved mining methods, increased production, lowered costs, better preparation of the coal for market, adoption of safety measures for the prevention of accidents and improved organization of working force. It has frequently been found in our experience with mines yielding an inadequate profit that economical changes in operating methods could put them on a profitable paying basis. Judgment born of knowledge acquired by long experience is invaluable in preventing mistakes or correcting errors which tend to inflate mining costs to the point where profits are difficult, if not impossible.



Mine No. 28, at Hellier, Pike County, Kentucky, owned by Manufacturers Coal & Coke Company and managed by Peabody Coal Company under operating and selling arrangements.

ROWLAND-POWER CONSOLIDATED COLLIERIES CO.

Producers of

BITUMINOUS COAL

Merchants Bank Bldg.
INDIANAPOLIS, IND.

General Office: TERRE HAUTE, IND.

Fisher Bldg.
CHICAGO, ILL.

Organization

The Rowland-Power Consolidated Collieries Company was organized in 1917 to continue the administration of properties started in 1912. At the time of its inception Mr. George G. Rowland, of Indianapolis, was made President and General Manager, and Mr. Ira W. Aten, of Terre Haute, became Secretary and Treasurer. Mr. W. S. McCloud, of Terre Haute, is Vice President in charge of operations, and Mr. Thomas D. Haskett, of Chicago, is Vice President in charge of sales. The above named officials are all financially interested in the operations of the company, are men of mining and sales experience and give to the affairs of the company their undivided attention.

Location of Mines

The Rowland-Power mines, ten in number, are located in Clay, Owen, Greene, Sullivan and Vigo counties, Indiana. Four of these are underground operations and six are stripping.

Three mines (stripping) are located on the Monon Railway, all operating in the No. 4 seam coal.

One mine (stripping) is located on the Chicago, Milwaukee & St. Paul Railroad and operates in the No. 4 seam.

These four mines are situated in the Linton mining district.

Two mines (shaft) are located on the Illinois Central Railroad and Monon., operating the No. 6 seam.

Three mines (one shaft and two stripping) are located on the Pennsylvania Lines and operate in the No. 3 seam.

One mine (stripping) is on the Big Four Railroad in the Brazil district and operates the Block seam.

Quality of Coals Mined

Our Block seam coal is of superior grade and is unexcelled for domestic purposes and for tile and terra cotta plants.

The No. 4 seam coal shipped from Rowland-Power mines is of the best grade of Indiana coal. It is low in sulphur and in addition to its being in high favor for steam and domestic uses, is much used for metallurgical purposes.

We are exceptionally fortunate in the quality of our No. 6 seam coal, in that our operations tap a superior section of this bed. Our No. 6 coal is much used for domestic purposes.

Rowland-Power No. 3 seam mines are located in the Seelyville district. Owing to the partings which are natural to this seam, we have provided the best of equipment in the way of shaker screens and picking tables in order that the coal shall be properly prepared, and, as is well known, when properly prepared it is one of the strongest coals for steam purposes.

Analyses

For the analyses of our coals we refer the reader to the General Analysis given in the Coal Catalog under the discussion of Indiana coals as follows: general analysis of No. 6 seam; general analysis of No. 4 seam, Greene county; general analysis of No. 3 seam; general analysis of Block seam.

Modern Equipment Throughout

In the underground mines the most modern equipment is used, all workings being electrically equipped with Jeffrey mining machines and locomotives, also with Iron-ton storage battery locomotives. The strip mines use the latest type Marion and Bucyrus stripping and loading shovels, some of these being of exceptional capacity.

Careful preparation of our output to meet the demands of the consumer is a daily practice at Rowland-Power mines. Our tipples are well equipped with Link-Belt shaker screens, picking tables and other appliances for loading a clean and well sized product. At the strip mines on the Pennsylvania Railroad the coal is prepared over shaker screens and picking tables before shipping.

We Supply Coals and Service

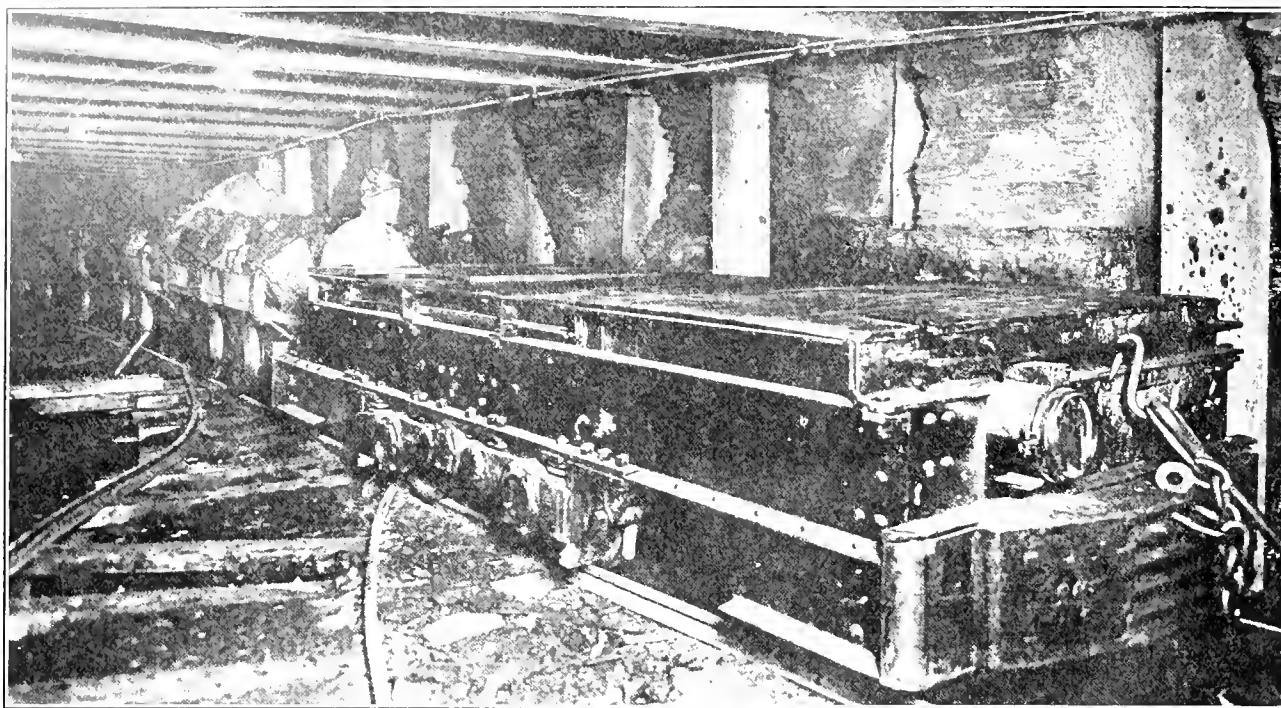
The Rowland-Power Consolidated Collieries Company are in business to win and to hold the trade of the coal buying and consuming agencies. With ten operations on five different railroads in five different counties and working four seams, we are constantly in position to meet the demands of the trade.

The daily capacity of our tipples is 12,000 tons, and at this rate of output the company has sufficient holdings to assure continued operations for the next twenty years.

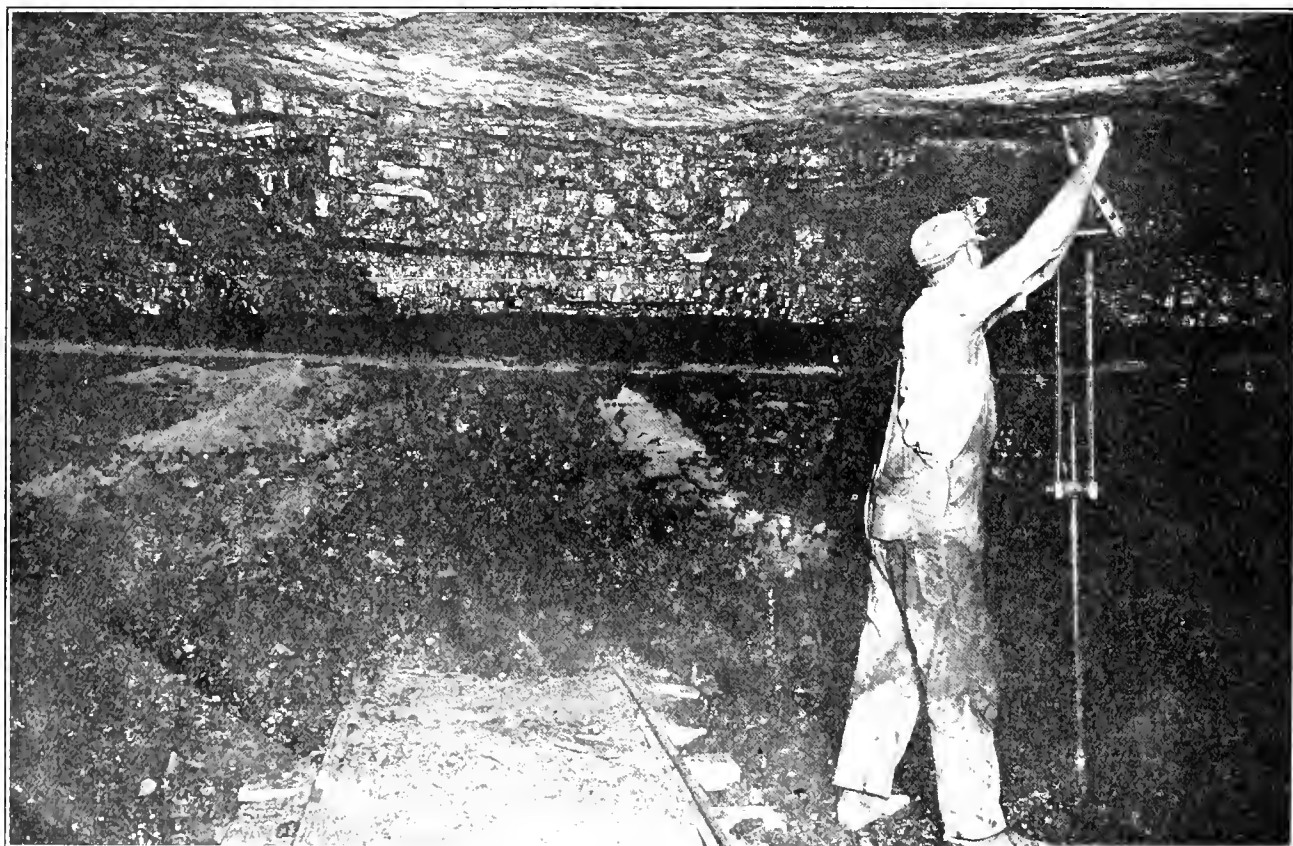
Because of the number of our mines, their location and their capacity, we can give the very best service to users of steam coal in large quantities.

VIEWS OF OPERATIONS

We show on this and the following pages views taken at some of our Indiana operations. They tell more clearly than pages of description the remarkable properties of the coal referred to in the preceding paragraphs.

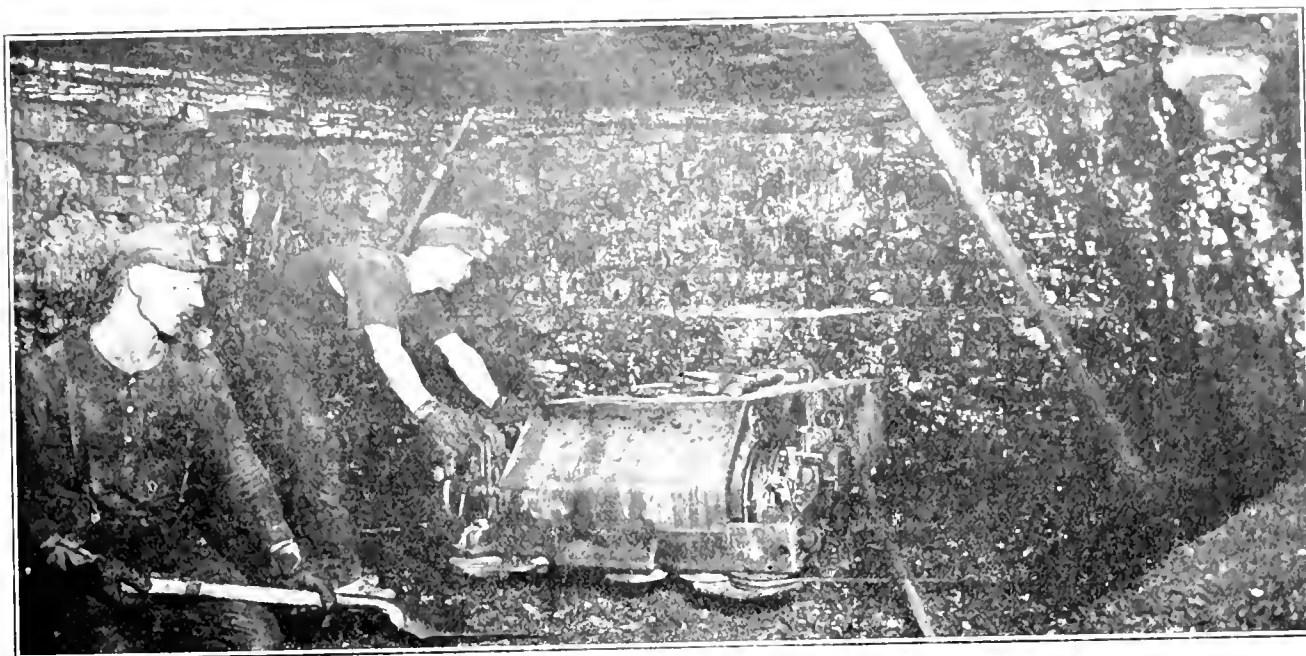


Storage Battery Locomotive Bringing Trip of Block Coal Cars to Shaft Bottom.



Being Preliminary to Shooting Top Bench of No. 3 Seam Coal. Note Cut Made in Middle of Seam.

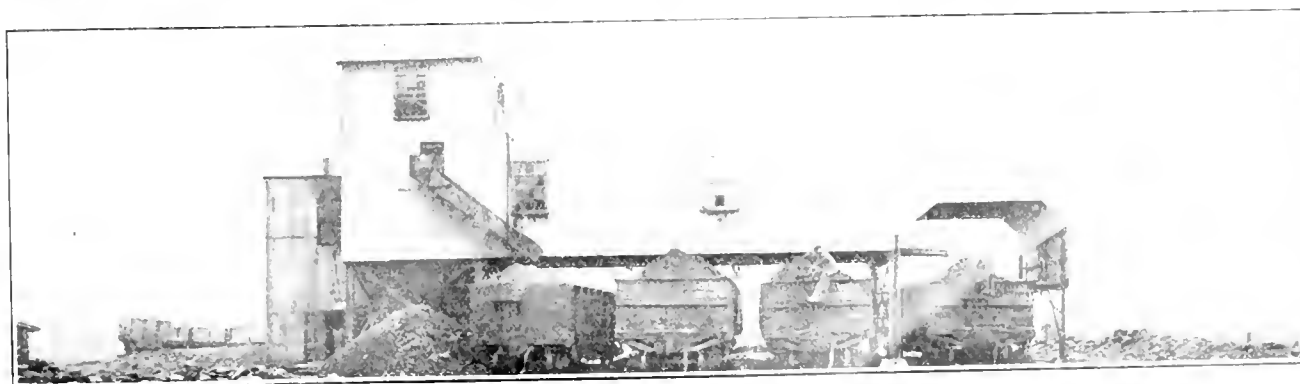
VIEWS OF OPERATIONS



Shortwall Machine Making Undercut in No. 6 Seam Coal.



Shaker Screen Sizing No. 4 Seam Coal.



Four-Track Tipple at One of the No. 4 Operations.

VIEWS OF OPERATIONS

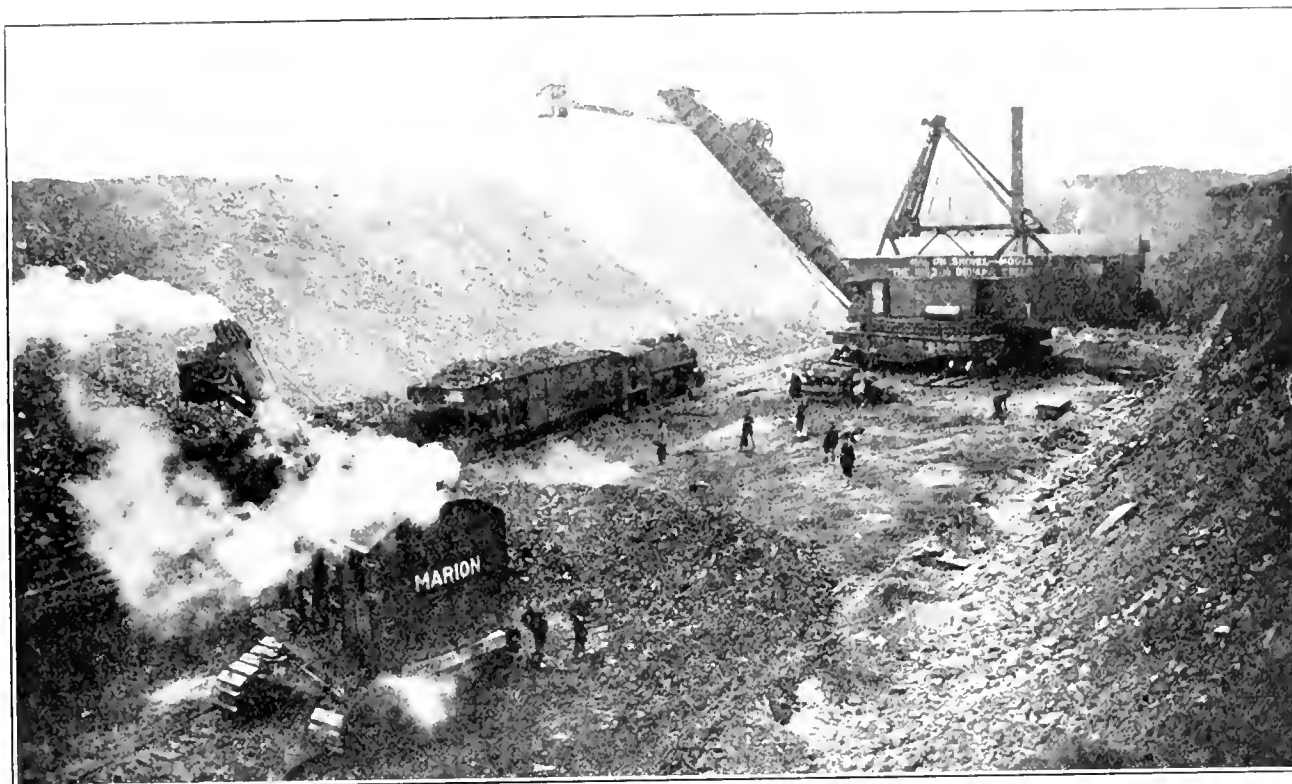


View of Block Coal Face. Note the Large Blocks Unjointed in the Seam.



Showing Block Coal as it Looks on Railroad Cars.

VIEWS OF OPERATIONS



Stripping operation in No. 4 Seam Coal. The Top of Bed is Thoroughly Cleaned Before Shooting.



A Close View of Dipper Loading No. 4 Seam Coal. Note the Absence of Impurities.

STERLING-MIDLAND COAL CO.

Fisher Building
CHICAGO

BRANCHES
TERRE HAUTE
INDIANAPOLIS
ST. LOUIS
MINNEAPOLIS
MASON CITY (Iowa)



W. J. O'BRIEN, President
W. K. SPROULE, Treasurer
H. W. POTTER, Secretary

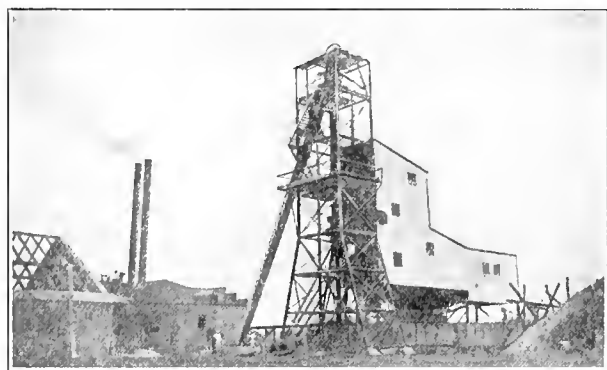
Sterling-Midland Service

This company, now in the fifth year of existence, attributes its success mainly to a never-laxing effort to render its customers superior service.

It was to extend and improve its service that the above listed branch offices were opened and placed in charge of skilled managers.

For the meeting of emergency requirements in particular, this breadth of organization has proved its worth on many occasions, and for the general welfare of the consumer its advantages are obvious.

We know our policy of better service is appreciated because it has resulted in a constantly increasing business and our pledge is to firmly maintain it.



Tipples of Baker-Glendora Mine

Illinois Coals

ILLINOIS coals regularly supplied by us are:

Jewel—Perry county (two mines).

Orchard—Williamson county.

Both of the foregoing products are of high quality and serviceable for the domestic and industrial purposes to which good Southern Illinois coal is commonly applied.

Illinois Mines—Capacity

Five thousand tons daily capacity; shipments via C. & E. I., I. C. and Mo. Pac. in standard sizings.

Indiana Coals

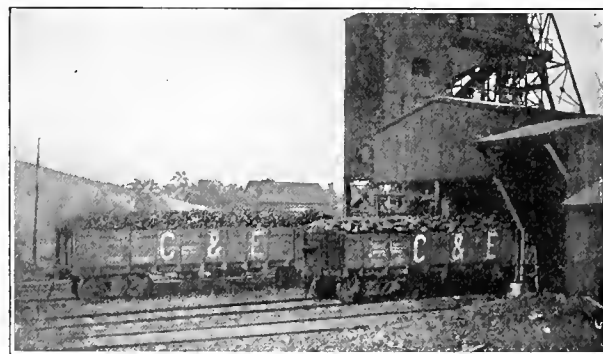
INDIANA coals regularly supplied from ten mines are:

Fourth Vein—Clinton district, short rate, C. & E. I. origin.

Fifth Vein—Greene, Knox (two mines), Vigo and Pike counties, for shipment via C. M. & St. P., Pan Handle, C. & E. I. and Big Four.

Seventh Vein—Sullivan county, C. & E. I. origin.

Glendora—The Wonder Coal of the West (three mines), C. & E. I. and C. M. & St. P. origin.



Lump and Egg Loaded at the Peerless-Glendora Mine

Indiana Coals—Capacity

Our Fourth, Fifth and Seventh vein coals are representative of the best, and the seven mines involved have a daily producing capacity of 10,000 tons.

Uses of Indiana Coals

The Fourth and Seventh veins yield coal of the better quality and are specially adaptable to the manufacture of producer gas, metallurgical work and the requirements of the clay industry. They are low in ash and sulphur.

Fifth vein coal is primarily a steam producer and is used in enormous quantities by the railroads for locomotive operation. In large power plants and by reason of attractive cost, it is a favored and efficient coal.

GLENDORA COAL

GLENDORA, produced in Sullivan county, is a coal of recent discovery and peculiarly above other Mid-West products in quality. In a few months' time it has taken a leading place among Illinois-Indiana products. It comes from a vein outside the regular classification and would more naturally be found amongst the splints of West Virginia, which are well known for their efficiency in industrial channels.

A typical analysis as made by the University of Wisconsin in its own behalf is as follows:

Moisture	10.72
Volatile Matter	32.32
Fixed Carbon	51.94
Ash	5.02
	<hr/>
	100.00
Sulphur	0.25
B.t.u. per pound of dry coal..	13,490

The low sulphur and ash recorded above cannot logically be connected with any other seam of the Illinois-Indiana fields.

GLENDORA is a coal of remarkable purity, has the long flame characteristic so essential in certain lines of industry and gives a high yield of gas.

In screenings form this coal has shown itself highly adaptable to chain grates. Maximum com-

bustion with freedom from clinker is readily secured and verified by analysis and examination of the ash.

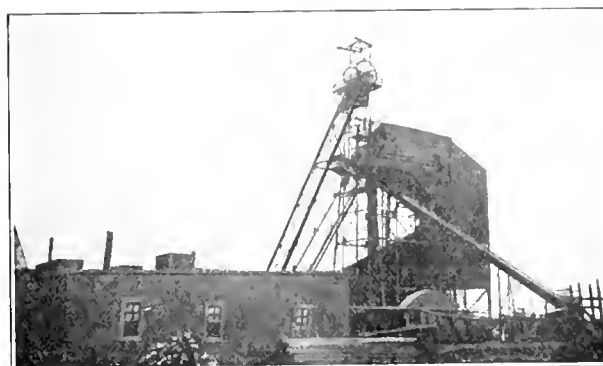
Glendora—A Real Steam Coal

From and at 212 degrees Fahrenheit a typical evaporation test of GLENDORA screenings as made by a Chicago manufacturer yielded the following:

High Evaporation—10 lbs. water per lb. of coal.

Low Evaporation—8 lbs. water per lb. of coal.

Average—8 $\frac{2}{3}$ lbs. water per lb. of coal.



Tippie of Peerless-Glendora Mine

As this copy is written the three mines producing GLENDORA coal have a daily capacity of 3,000 tons. Up-to-date methods of recovery and preparation are practiced and plans are being carried out whereby the daily production will be increased to 10,000 tons. The unmined acreage approximates 7,000.

Consumers in the Middle-West now obliged to use Eastern coal to secure satisfactory results will find GLENDORA a coal capable of effecting marked fuel economy by reason of the lower freight rates applicable.

It is the banner coal of the Central States.

List of Mines By Seams, Including Name of Company, General Office Address
County, Railroad and Shipping Point

INDIANA

BLOCK SEAM

Mined in Owen, Fountain, Clay and Vigo counties. Bituminous rank. Suitable for Cement Burning, Domestic, Locomotive Fuel, Melting, Powdered, Producer Gas, Steam and Tile and Pottery Burning uses. By structure is a Block coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
American Vitrified Products Co.	Akron O.	Goucher.	Clay	C. & E. I.	Brazil, Ind.
Ames Coal Co.	Carbon, Ind.	Ames.	Parke	N. Y. C.	Carbon, Ind.
Bradway Coal Co.	Center Point, Ind.	Bradway No. 1.	Clay	P. C. C. & St. L.	Center Point, Ind.
Brazil Block Coal & Clay Co.	Brazil, Ind.	No. 12.	Clay	C. & E. I.	Brazil, Ind.
Brazil Cottier's Co.	Brazil, Ind.	No. 2.	Clay	Penna.	Brazil, Ind.
Clay Products Co., The.	Brazil, Ind.	Clay Product.	Clay	Penna.	Brazil, Ind.
Climax Coal & Clay Co.	Lafayette Life Bldg., Lafayette, Ind.	Climax No. 1.	Clay	E. T. & T. H.	Saline City, Ind.
Coal Bluff Mining Co.	Terre Haute, Ind.	Plymouth No. 1.	Vigo	Elg Four.	Fontanet, Ind.
Coal City Block Coal Co.	Terre Haute, Ind.	Plymouth No. 2.	Clay	C. & E. I.	Coal Bluff, Ind.
Harrison Coal & Mining Co.	Clay City, Ind.	Coal City.	Owen	C. & E. I.	Coal City, Ind.
Howell Coal Co.	Center Point, Ind.	Harrison No. 6.	Clay	P. C. C. & St. L.	Center Point, Ind.
Lindsay, Frederman & Hopkins.	Saline City, Ind.	Howell.	Clay	E. I.	Saline City, Ind.
Otter Creek Coal Co.	417 S. Dearborn St., Chicago, Ill.	Mary No. 2.	Vigo	C. & E. I.	Fontanet, Ind.
Owen Block Coal Co.	Patrickburg, Ind.	Owen.	Owen	C. D. & L.	Patrickburg, Ind.
Owensburg Coal Co.	2131 Pleasant St., Indianapolis, Ind.	Owensburg No. 1.	Greene	C. F. & L.	Owensburg, Ind.
Prosperity Block Coal Co.	Brazil, Ind.	Prosperity Block.	Clay	Penna.	Asherville, Ind.
Putnam Coal Co.	Coal City, Ind.	Putnam.	Owen	E. & I.	Coal City, Ind.
Radiant Coal Co.	601 N. Seventh St., Terre Haute, Ind.	Radiant.	Owen	Evansville & Ind.	Coal City, Ind.
Rowland Power Cons. Collieries Co.	723 S. Sixth St., Terre Haute, Ind.	No. 16.	Clay	C. C. C. & St. L.	Carbon, Ind.
Schrepperman Coal Co.	Brazil, Ind.	No. 1.	Clay	Penna.	Brazil, Ind.
Shelby Coal & Clay Co.	Brazil, Ind.	Sterling.	Vigo	C. & E. I.	R. R. 5, Brazil, Ind.
Stewart Coal Co.	87 Vandergrift Bldg., Pittsburgh, Pa.	Stewart.	Owen	C. I. & L.	Clay City, Ind.

CANNELTON SEAM

Mined in Perry county. Bituminous rank. Cannel coal. Suitable for Producer Gas, Domestic, Illuminating Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
American Cannel Coal Co.	Cannelton, Ind.	Winnecke.	Perry	Southern	Cannelton, Ind.

MINSHALL SEAM

Mined in Clay, Parke and Vigo counties. Bituminous rank. Suitable for Domestic, Railway, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Bright Gem Mining Co.	Brazil, Ind.	Bright Gem.	Parke	Penna.	Jessup, Ind.
Devon & Clark Coal Co.	Eugene, Ind.	Devon and Clark.	Vermilion	C. & E. I., P. L. & W.	Cayuga, Ind.
Neutral Coal Producers Co.	Terre Haute, Ind.	Bridge.	Parke	C. & E. I.	Bridgeton, Ind.
Newport Coal Mining Co.	Newport, Ind.	Newport.	Vermilion	C. & E. I.	Newport, Ind.
Otter Creek Coal Co.	417 S. Dearborn St., Chicago, Ill.	Mary No. 3.	Vigo	C. & E. I.	Fontanet, Ind.
Rockville Coal Co.	Rockville, Ind.	Rockville.	Parke	Vandalia	Rockville, Ind.
Vigo Mining Co.	Rose Dispensary Bldg., Terre Haute, Ind.	No. 74.	Vigo	C. & E. I.	Coal Bluff, Ind.
Western Indiana Mining Co.	Terre Haute, Ind.	Minshall.	Vigo	Big Four	Fontanet, Ind.

NO. 3 SEAM

Mined in Clay, Perry, Greene, Vigo, Vermilion, Spencer, Fountain, Parke, Owen and Daviess counties. Bituminous rank. Suitable for Domestic, Cement Burning, Railway, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Brazil District Mining Co.	Brazil, Ind.	Hamlin & Heck.	Clay	P. C. C. & St. L.	Brazil, Ind.
Burnett Coal Mining Co.	Burnett, Ind.	No. 1.	Vigo	C. & E. I.	Burnett, Ind.
Burnett Coal Mining Co.	Purnett, Ind.	No. 2.	Vigo	C. & E. I.	Burnett, Ind.
Calora Coal Company.	Terre Haute, Ind.	Calora No. 2.	Greene	C. T. H. & S. E.	Latta, Ind.
Deep Vein Coal Co.	Terre Haute, Ind.	Deep Vein.	Vigo	P. C. C. & St. L.	Macksville, Ind.
Dering, J. K. Coal Co.	1914 McCormick Bldg., Chicago, Ill.	Dering No. 8.	Vermilion	C. & E. I.	Clinton, Ind.
Essanbee Mines Co.	Clinton, Ind.	Essanbee No. 3.	Vermilion	C. T. H. & S. E.	West Clinton, Ind.
Glover Coal Co.	Brazil, Ind.	Twin Hills.	Vigo	C. & E. I.	Brazil, Ind.
Intrurban Coal Co.	139 S. Main St., Clinton, Ind.	Cloverland.	Clay	P. C. C. & St. L.	Seelyville, Ind.
Miller Coal Co.	1100 Wabash Ave., Terre Haute, Ind.	Miller.	Clay	Penna.	Staunton, Ind.
Rowland Power Unsol. Collieries Co.	723 S. Sixth St., Terre Haute, Ind.	No. 3.	Clay	Penna.	Staunton, Ind.
Rowland Power Cons. Collieries Co.	723 S. Sixth St., Terre Haute, Ind.	No. 6.	Clay	Penna.	Staunton, Ind.
Rowland Power Unsol. Collieries Co.	723 S. Sixth St., Terre Haute, Ind.	No. 9.	Clay	Penna.	Staunton, Ind.
Schrepperman Coal Co.	Brazil, Ind.	No. 3.	Vigo	C. & E. I.	Brazil, Ind.
State Coal Mining Co.	1506 Fletcher Tr. Bldg., Terre Haute, Ind.	Hillside.	Vigo	C. & E. I.	Coal Bluff, Ind.
Tower Hill Coal Co.	Linton, Ind.	Tower Hill.	Greene	C. I. & L.	Midland, Ind.
United Fourth Vein Coal Co.	Indianapolis, Ind.	Island Valley.	Clay	C. T. H. & S. E.	Jasonville, Ind.
Whippo Coal & Mining Co.	Terre Haute, Ind.	Whippo.	Vigo	C. C. C. & St. L.	Rurnett, Ind.
Willow Creek Coal Co.	Terre Haute, Ind.	Willow Creek.	Vigo	Penna.	Seelyville, Ind.
Winslow Mining Co.	Milwaukee, Wis.	Wolfman.	Pike	Southern	Winslow, Ind.
Wood Coal Co.	Coal Bluff, Ind.	Wood.	Vigo	C. & E. I.	Coal Bluff, Ind.

NO. 1 SEAM

Mined in Clay, Greene, Vigo, Vermilion and Sullivan counties. Bituminous rank. Suitable for Cement Burning, Domestic, Illuminating Gas, Locomotive Fuel, Powdered, Melting, Producer Gas, Steam and Tile and Pottery Burning uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Atlas Mining Co.	Terre Haute, Ind.	No. 24	Greene	Penna.	Linton, Ind.
Bon Ayr Coal Co.	Terre Haute, Ind.	Bon Ayr	Greene	C. I. & L.	Jacksonville, Ind.
Calhoun Coal Co.	Terre Haute, Ind.	Calhoun No. 1	Greene	C. T. H. & S. E.	Jacksonville, Ind.
Clinton Coal Co.	Clinton, Ind.	No. 2	Vermilion	C. & E. I.	Clinton, Ind.
Clinton Coal Co.	Clinton, Ind.	No. 3	Vermilion	C. & E. I.	Clinton, Ind.
Clinton Coal Co.	Clinton, Ind.	No. 4	Vermilion	C. & E. I.	Clinton, Ind.
Clinton Coal Co.	Terre Haute, Ind.	Talbydale	Vigo	C. M. & St. P.	Libertyville, Ind.
Clovelly Coal Co.	Terre Haute, Ind.	Farlyke	Vigo	C. M. & St. P.	Libertyville, Ind.
Clovelly Coal Co.	Linton, Ind.	Coal Ridge No. 1	Greene	Monon	Midland, Ind.
Coal Ridge Mining Co.	760 McCormick Bldg., Chicago, Ill.	Davies County	Davies	B. & O. S. W.	Montgomery, Ind.
Davies County Fuel Co.	Chicago, Ill.	No. 6	Vermilion	C. & E. I.	Clinton, Ind.
Derling, J. K. Coal Co.	Terre Haute, Ind.	Fayette	Vigo	C. T. H. & S. E.	West Clinton, Ind.
Fayette Realty & Development Co.	Clinton, Ind.	Submarine	Vigo	C. & E. I.	Clinton, Ind.
Ferguson Coal Co.	Huntingburg, Ind.	Fox Hill No. 1	Spencer	Southern	Lincoln City, Ind.
Fox Hill Coal & Mining Co.	Terre Haute, Ind.	Glen Ayr No. 1	Vigo	P. C. C. & St. L.	Terre Haute, Ind.
Glen Ayr Coal Co.	Terre Haute, Ind.	Glendale No. 1	Vigo	Penna.	Sedelyville, Ind.
Glendale Coal Co.	Terre Haute, Ind.	Glendon No. 1	Vigo	P. C. C. & St. L.	Terre Haute, Ind.
Glendon Coal Co.	Terre Haute, Ind.	Green Valley	Greene	C. T. H. & S. E.	Jacksonville, Ind.
Green Valley Coal Co.	Jacksonville, Ind.	Haywood	Greene	C. T. H. & S. E.	Jacksonville, Ind.
Haywood, Jesse	112 8th St., Evansville, Ind.	Hoch	Spencer	Southern	Lincoln City, Ind.
Hoch, M. J. Coal Co., Inc.	37 W. Van Buren St., Chicago, Ill.	No. 1	Vermilion	C. & E. I.	Clinton, Ind.
Indiana & Illinois Coal Corp.	37 W. Van Buren St., Chicago, Ill.	No. 5	Vermilion	C. & E. I.	Clinton, Ind.
Indiana & Illinois Coal Corp.	Terre Haute, Ind.	No. 5	Vigo	C. & E. I.	Clinton, Ind.
Jackson Hill Coal & Coke Co.	Terre Haute, Ind.	No. 7	Vermilion	C. & E. I.	Kokseim, Ind.
Jackson Hill Coal & Coke Co.	818 Traction Bldg., Indianapolis, Ind.	No. 1	Knox	P. C. C. & St. L.	Edwardsport, Ind.
Knox County Fourth Vein Coal Co.	Terre Haute, Ind.	Le Noir No. 1	Greene	C. T. H. & S. E.	Jacksonville, Ind.
Le Noir Coal Co.	Evansville, Ind.	Lincoln	Spencer	Southern	Lincoln City, Ind.
Lincoln Coal Co.	Indianapolis, Ind.	Little Betty	Sullivan	I. C.	Linton, Ind.
Linton Coal Co.	Terre Haute, Ind.	Speedwell No. 2	Vigo	C. I. C. & St. L.	W. Terre Haute, Ind.
Lower Vein Coal Co.	Chicago, Ill.	Miami No. 8	Vermilion	C. & E. I.	Clinton, Ind.
Miami Coal Co.	Chicago, Ill.	No. 10	Vermilion	C. & E. I.	Clinton, Ind.
Miami Coal Co.	Jacksonville, Ind.	No. 4	Greene	C. I. & L.	Vicksburg, Ind.
Persons Coal Co.	Indianapolis, Ind.	Primrose	Clay	C. T. H. & S. E.	Jacksonville, Ind.
Promrose Coal Producing Co.	723 S. Sixth St., Terre Haute, Ind.	No. 12	Greene	C. M. & St. P.	Linton, Ind.
Rowland Power Cons. Collieries Co.	723 S. Sixth St., Terre Haute, Ind.	No. 13	Greene	C. I. & L.	Jacksonville, Ind.
Rowland Power Cons. Collieries Co.	723 S. Sixth St., Terre Haute, Ind.	No. 14	Greene	C. I. & L.	Jacksonville, Ind.
Rowland Power Cons. Collieries Co.	723 S. Sixth St., Terre Haute, Ind.	No. 15	Greene	C. I. & L.	Jacksonville, Ind.
Rowland Power Cons. Collieries Co.	723 S. Sixth St., Terre Haute, Ind.	No. 17	Greene	C. T. H. & S. E.	Linton, Ind.
United Fourth Vein Coal Co.	Indianapolis, Ind.	Black Creek	Vermilion	C. & E. I.	Clinton, Ind.
United States Fuel Co.	208 La Salle St., Chicago, Ill.	Universal	Sullivan	Penna.	Dugger, Ind.
Vandalia Coal Co.	Terre Haute, Ind.	No. 16	Sullivan	Penna.	Dugger, Ind.
Vandalia Coal Co.	Rose Dispensary Bldg., Terre Haute, Ind.	No. 6	Greene	C. I. & L., C. T. H. & S. E.	Jacksonville, Ind.
Vigo Mining Co.	Terre Haute, Ind.	No. 22	Sullivan	Penna.	Dugger, Ind.
Vigo Mining Co.	Terre Haute, Ind.	No. 27	Sullivan	C. T. H. & S. E.	Jacksonville, Ind.
Vigo Mining Co.	Rose Dispensary Bldg., Terre Haute, Ind.	No. 28	Sullivan	Monon, C. T. H. & S. E.	Cast, Ind.
West Clinton Coal Co.	Terre Haute, Ind.	West Clinton No. 1	Vermilion	C. T. H. & S. E.	Blanford, Ind.
Western Indiana Mining Co.	Terre Haute, Ind.	Wabash	Vigo	Big Four	Macksville, Ind.
White Ash Coal Co.	Linton, Ind.	White Ash	Greene	C. T. H. & S. E.	Jacksonville, Ind.
White River Mining Co.	Fisher Bldg., Chicago, Ill.	White River	Davies	B. & O.	Cannelburg, Ind.
Zimmerman Coal Co.	Terre Haute, Ind.	Black Betty	Vermilion	C. & E. I.	Clinton, Ind.

NO. 5 SEAM

Mined in Clay, Greene, Gibson, Knox, Summit, Vigo, Vermilion, Pike, Sullivan and Vanderburgh counties. Bituminous rank. Suitable for Cement Burning, Domestic, Railway, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
American Coal Mining Co.	Brazil, Ind.	No. 1	Knox	Penna.	Bicknell, Ind.
American Coal & Mining Co.	Brazil, Ind.	American No. 2	Knox	Penna.	Bicknell, Ind.
Archbold, John, Coal Co.	Evansville, Ind.	Red Shaft	Warwick	E. S. & N.	Newburgh, Ind.
Ayrault Coal Co.	Jacksonville, Ind.	Antioch	Greene	C. T. H. & S. E.	Linton, Ind.
Ayrshire Coal Co.	Oakland City, Ind.	No. 8	Pike	Sou. St. L. Div.	Winslow, Ind.
Ayrshire Coal Co.	Oakland City, Ind.	No. 6	Pike	Southern	Winslow, Ind.
Ayrshire Coal Co.	Oakland City, Ind.	No. 7	Pike	Southern	Winslow, Ind.
Bays-Logan Coal Co.	Sullivan, Ind.	Bays-Logan	Greene	C. T. H. & S. E.	Coalmont, Ind.
Bickett & Shirkie Coal Co.	Terre Haute, Ind.	No. 1	Vermilion	C. M. & St. P.	Terre Haute, Ind.
Big Four Coal Co.	Louisville, Ky.	Big Four No. 3	Warwick	Southern	Roanville, Ind.
Big Muddy Mining Co.	Winslow, Ind.	Big Muddy	Pike	Southern	Winslow, Ind.
Big Vein Mining Co.	Terre Haute, Ind.	Big Vein	Vigo	C. M. & St. P.	Coalmont, Ind.
Black Hawk Mining Co.	111 N. Seventh St., Terre Haute, Ind.	Black Hawk	Vigo	C. M. & St. P.	Black Hawk, Ind.
Bolt Coal Co.	Coalmont, Ind.	Little Birtle	Clay	C. T. H. & S. E.	Coalmont, Ind.
Boonville Mining Co.	Boonville, Ind.	DeForest	Warwick	Southern	Warwick, Ind.
Russe Coal Co.	Evansville, Ind.	Korfs	Gibson	E. S. & N. Sou.	Kirks, Ind.
Russe Coal Co.	Evansville, Ind.	Liberty	Gibson	E. & I.	Ind. skin, Ind.
Bryan, Jos. A., Coal Co.	Evansville, Ind.	Bryan	Warwick	Southern	Chandler, Ind.
Caledonia Mining Co.	2038 Port Ave., Louisville, Ky.	No. 1	Pike	Southern	Winslow, Ind.
Cathleen Coal Co.	Terre Haute, Ind.	Cathleen	Greene	C. T. H. & S. E.	Lata, Ind.
Chicago-Carlisle Coal Co.	1505 Fletcher S. & T. Bldg., Indianapolis, Ind.	Carlisle	Sullivan	C. & E. I.	Carlisle, Ind.
Clinton Coal Co.	Clinton, Ind.	No. 5	Vermilion	C. T. H. & S. E.	West Clinton, Ind.
Clinton Coal Co.	Clinton, Ind.	No. 6	Vermilion	C. T. H. & S. E.	Clinton, Ind.
Clinton Coal Co.	Clinton, Ind.	No. 7	Vermilion	C. & E. I.	Clinton, Ind.
Clovelly Coal Co.	Terre Haute, Ind.	Clovelly	Vigo	P. M. & St. P.	Libertyville, Ind.
Coal Bluff Mining Co.	Terre Haute, Ind.	Riverside	Vigo	Big Four	Macksville, Ind.
Coal Ridge Mining Co.	Linton, Ind.	Coal Ridge No. 1	Greene	Monon	Midland, Ind.
Commerce Coal Co.	Evansville, Ind.	Thrifty	Davies	E. & I.	Washington, Ind.
Cox Coal Co.	R. P. D., Newburg, Ind.	Cox	Warwick	E. & O. V.	Washington, Ind.
Crescent Coal Co.	Evansville, Ind.	Crescent	Vanderburgh	I. C.	Evansville, Ind.
Crescent Coal Co.	Washington, Ind.	Crescent	Davies	B. & O.	Cannelburg, Ind.
Cypress Creek Coal Co.	Boonville, Ind.	Cypress Creek	Warwick	Southern	Boonville, Ind.
Dana Coal & Mining Co.	Indianapolis, Ind.	No. 1	Vermilion	C. I. W.	Clay, Ind.
Deep Vein Coal Co.	Terre Haute, Ind.	Princeton	Gibson	Princeton	Princeton, Ind.
Diamond Coal Co.	Evansville, Ind.	Hammond	Vanderburgh	C. & E. I.	Evansville, Ind.
Elberfeld Coal Mining Co.	Elberfeld, Ind.	Elberfeld	Warwick	P. C. C. & St. L.	Elberfeld, Ind.
Enos Coal Mining Co., The	Cleveland, O.	Enos	Pike	Southern	Oakland City, Ind.
Erie Canal Coal Co.	Boonville, Ind.	Erie Canal	Warwick	Southern	Chandler, Ind.
Essanbe Mines Co.	Clinton, Ind.	Essanbe No. 1	Vermilion	C. T. H. & S. E.	W. T. Clinton, Ind.
Eureka Block Coal Co.	Terre Haute, Ind.	Dixie Bee	Vigo	C. & E. I.	Clinton, Ind.
Fors Ridge Mining Co.	Oakland City, Ind.	Fork Ridge	Gibson	Southern	Oakland City, Ind.
Fort Branch Coal Mining Co.	Fort Branch, Ind.	Fort Branch No. 2	Gibson	C. & E. I.	Fort Branch, Ind.
Fort Harrison Mining Co.	Terre Haute, Ind.	Clovelly	Vigo	C. T. H. & S. E.	W. Terre Haute, Ind.
Francisco Mining Co.	Merchants Bk. Bldg., Indianapolis, Ind.	Francisco	Gibson	Southern	Princeton, Ind.
Truette & Blair Coal Co.	Citizens Bank Bldg., Evansville, Ind.	No. 1	Vermilion	E. S. & N. Sou.	Midland, Ind.
Globe Mining Co.	Indianapolis, Ind.	Rogers	Pike	Big Four	Pittsburg, Ind.
Globe Mining Co.	Indianapolis, Ind.	Globe	Gibson	Southern	Pittsburg, Ind.
Globe Mining Co.	Indianapolis, Ind.	Maple Grove	Vigo	C. M. & St. P.	New Goshen, Ind.
Globe Mining Co.	1204 National Bank Bldg., Chicago, Ill.	Maple Grove	Davies	E. & I.	Box 244, Washington, Ind.
Globe Mining Co.	Box 244, Washington, Ind.	Thrifty No. 2	Davies	E. & I.	Box 244, Washington, Ind.

(Continued on Next Page)

COAL CATALOG

NO. 5 SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Hall-Zimmerman Coal Co.	Terre Haute, Ind.	Wizard	Vigo	P. B. R.	Macksville, Ind.
Hamilton Coal Mining Co.	Linton, Ind.	Mohawk	Sullivan	C. M. & St. P.	Hymara, Ind.
Horton Coal Co.	K. R. No. 1, Newburgh, Ind.	Horton	Warriick	E. & O. V.	Hatfield, Ind.
Hymara Coal Co.	Hymara, Ind.	No. 1	Sullivan	C. & E. I.	Hymara, Ind.
Hymara Coal Co.	Hymara, Ind.	Hymara No. 2	Sullivan	C. M. & St. P.	Hymara, Ind.
Indiana & Illinois Coal Corp.	37 W. Van Buren St., Chicago, Ill.	No. 2	Vermillion	C. & E. I.	Clinton, Ind.
Indiana & Illinois Coal Corp.	Chicago, Ill.	No. 8	Sullivan	C. & E. I.	Paxton, Ind.
Indiana Creek Coal & Mining Co.	317 Traction Bldg., Indianapolis, Ind.	Indian Creek	Knox	P. C. C. & St. L.	Bicknell, Ind.
Interstate Coal Co. of Ind.	308-9-10 McKeen Bldg., Terre Haute, Ind.	Interstate No. 1	Vermillion	C. M. & St. P.	Blanford, Ind.
Jackson Hill Coal & Coke Co.	Terre Haute, Ind.	No. 6	Vermillion	C. & H. S. E.	Libertyville, Ind.
Jewell Coal Co.	Linton, Ind.	No. 1	Greene	Ill. Cent.	Linton, Ind.
J. M. Coal & Mining Co.	Linton, Ind.	J. & M.	Greene	Monon	Linton, Ind.
Key Coal Co.	Evansville, Ind.	Caledonia No. 3	Warriick	Southern	Chandler, Ind.
Linton Summit Coal Co.	Linton, Ind.	Tumpton No. 2	Greene	C. T. H. & S. E.	Vicksburg, Ind.
Little, S. W., Coal Co. (The)	Indianapolis, Ind.	Blackburn No. 2	Pike	E. & I. Big Four	Blackburn, Ind.
Little, S. W., Coal Co. (The)	Indianapolis, Ind.	Little's	Pike	E. & I. Big Four	Little, Ind.
Lower Vein Coal Co.	Terre Haute, Ind.	Lower Vein No. 1	Vigo	C. C. C. & St. L.	Richard Switch, Ind.
Miami Coal Co.	Chicago, Ill.	Miami No. 5	Vigo	C. & E. I.	Clinton, Ind.
Miami Coal Co.	Chicago, Ill.	Miami No. 6	Vigo	C. & E. I.	Clinton, Ind.
Miami Coal Co.	Chicago, Ill.	Miami No. 9	Vigo	C. & E. I.	Clinton, Ind.
Murphy Coal Co.	Winslow, Ind.	Murphy	Pike	Southern	Winslow, Ind.
Newburg Coal Co.	Newburg, Ind.	Epworth	Warriick	E. S. & N.	Newburg, Ind.
Norris Coal Mining Corp.	Norris, Ill.	Norris	Fulton	C. B. & Q.	Norris, Ill.
Oakland Coal Co.	Merchants Bk. Bldg., Indianapolis, Ind.	Gage	Gibson	E. & I.	Oakland City, Ind.
Oliphant-Johnson Coal Co.	Vincennes, Ind.	Oliphant No. 1	Knox	P. C. C. & St. L.	Brucerville, Ind.
Panhandle Coal Co.	Indianapolis, Ind.	No. 5	Knox	Penna.	Bicknell, Ind.
Peabody Coal Co.	McCormick Bldg., Chicago, Ill.	No. 50	Warriick	Southern	Roanville, Ind.
Persons Coal Co.	Jacksonville, Ind.	Atlas	Greene	E. I. & L.	Vicksburg, Ind.
Pike County Coal Co.	McCormick Bldg., Chicago, Ill.	Pine Ridge	Pike	E. & I.	Petersburg, Ind.
Pine Ridge Mines Co.	343 S. Dearborn St., Chicago, Ill.	Princeton	Vigo	C. T. H. & S. E.	Libertyville, Ind.
Princeton Coal Co.	Princeton, Ind.	Knox	Gibson	Southern, C. & E. I.	Princeton, Ind.
Ridge Coal Mining Co.	Chicago, Ill.	Knox	Knox	Penna.	Bicknell, Ind.
Riverview Coal Co.	Washington, Ind.	Riverview	Daviess	E. I. & T. H.	Washington, Ind.
Sanford Mining Co.	Terre Haute, Ind.	Sanford No. 2	Vigo	N. Y. C.	Sanford, Ind.
Sargent Coal Co.	Newburg, Ind.	Sargent No. 1	Warriick	E. O. & V.	Newburgh, Ind.
Sargent Coal Co.	Newburg, Ind.	Sargent No. 2	Warriick	E. O. & V.	Newburgh, Ind.
Shirley Coal Co.	Terre Haute, Ind.	Shirley No. 1	Vigo	C. T. H. & S. E.	Libertyville, Ind.
Sleepy Eye Mining Co.	Dugger, Ind.	Sleepy Eye	Greene	Monon	Midland, Ind.
South Washington Coal Co.	100 E. Main St., Washington, Ind.	Sunny Side	Daviess	E. I. & T. H.	Washington, Ind.
Spring Valley Coal Co.	Linton, Ind.	Spring Valley	Greene	P. C. C. & St. L.	Linton, Ind.
Standard Coal Co., The	Vincennes, Ind.	Whetland	Knox	B. & O.	Whetland, Ind.
Star City Coal Mining Co.	Indianapolis, Ind.	Star City No. 5	Sullivan	C. & E. I.	Shelburn, Ind.
Steele-Kattman Coal Co.	Hymara, Ind.	Mayflower	Sullivan	C. & E. I.	Hymara, Ind.
Sugar Valley Coal Co.	Terre Haute, Ind.	Sugar Valley	Vigo	P. C. C. & St. L.	Macksville, Ind.
Sunbeam Coal Co.	Terre Haute, Ind.	Sunbeam	Vigo	Vandavia	Macksville, Ind.
Sunflower Coal Co.	Dugger, Ind.	Sunflower	Sullivan	Ill. Cent.	Dugger, Ind.
Sunlight Coal Co.	Indianapolis, Ind.	Sunlight	Warriick	Southern	Boonville, Ind.
Sunnyside Coal & Coke Co.	Evansville, Ind.	Sunnyside	Vanderburg	C. & E. I. and I. C.	Evansville, Ind.
Suwanee Coal Co.	Cor. Court & By. Ave., Evansville, Ind.	Yankee town, Ind.	Warriick	E. & O. V.	Hartwell Siding, Ind.
Tecumseh Coal & Mining Co.	Chicago, Ill.	Tecumseh No. 1	Knox	Penna.	Bicknell, Ind.
Tecumseh Coal & Mining Co.	Chicago, Ill.	Tecumseh No. 2	Knox	Penna.	Bicknell, Ind.
Tighe Coal Co.	509 Trust Bldg., Terre Haute, Ind.	No. 1	Vermillion	C. M. & St. P.	Libertyville, Ind.
Turkey Knob Mining Co.	K. R. No. 5, Winslow, Ind.	Turkey Knob	Pike	Southern	Hartwell Jet., Ind.
United States Fuel Co.	208 La Salle St., Chicago, Ill.	Universal	Vermillion	C. & E. I.	Clinton, Ind.
Utilities Coal Co.	1734 Lytton Bldg., Chicago, Ill.	National	Vigo	P. C. C. & St. L.	Maxwell, Ind.
Vandalia Coal Co.	Terre Haute, Ind.	No. 82	Vigo	Penna.	Macksville, Ind.
Vermillion Coal Co.	Clinton, Ind.	Vermillion	Vermillion	C. & E. I.	Clinton, Ind.
Vulcan Coal Co.	511 Peoples Bk. Bldg., Evansville, Ind.	Clyshire	Pike	E. & I. Sou.	Oakland City, Ind.
Vulcan Coal Co.	511 Peoples Bk. Bldg., Evansville, Ind.	Petersburg	Pike	E. & I. Sou.	Oakland City, Ind.
West Clinton Coal Co.	308-9-10 McKeen Bldg., Terre Haute, Ind.	Interstate	Vermillion	C. T. H. & S. E.	Blanford, Ind.
Westru Indiana Mining Co.	Terre Haute, Ind.	Riverside	Vigo	Big Four	Macksville, Ind.
Wolley, J., Coal Co.	Evansville, Ind.	Castle Garden No. 6	Warriick	Southern	Chandler, Ind.
Wolley, J., Coal Co.	Evansville, Ind.	Polk No. 5	Warriick	Southern	Roanville, Ind.
Wolley, J., Coal Co.	Evansville, Ind.	Polk No. 7	Warriick	Southern	Boonville, Ind.

NO. 6 SEAM

Mined in Clay, Greene, Knox and Sullivan counties. Bituminous rank. Suitable for Cement Burning, Domestic, Railway, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Big Muddy Coal Co.	322 S. Michigan Ave., Chicago, Ill.	Kettle Creek	Sullivan	C. T. H. & S. E.	Shelburn, Ind.
Black Diamond Coal Co.	Box 187, Linton, Ind.	Black Diamond	Sullivan	Monon	Victoria, Ind.
Central Indiana Coal Co.	Sullivan, Ind.	Robin Head	Sullivan	P. C. C. & St. L.	Dugger, Ind.
Chicago-Carlisle Coal Co.	Fletcher Sav. & Tr. Bldg., Indianapolis, Ind.	Reliance	Sullivan	C. & E. I.	Shelburn, Ind.
Columbia Coal Co.	Bicknell, Ind.	Columbia	Knox	Penna.	Bicknell, Ind.
Enterprise Coal Mining Co.	Sullivan, Ind.	Black Comet	Sullivan	I. C.	Sullivan, Ind.
Hamilton Coal Mining Co.	Linton, Ind.	Hamilton	Sullivan	C. I. & L.	Victoria, Ind.
Indiana Power Co.	327 S. LaSalle St., Chicago, Ill.	Linn	Knox	Vandalia, I. & V.	Pickel, Ind.
Jackson Hill Coal & Coke Co.	Terre Haute, Ind.	No. 4	Sullivan	C. & E. I.	Kelso, Ind.
Panhandle Coal Co.	Fletcher Sav. & Tr. Bldg., Indianapolis, Ind.	Panhandle No. 6	Knox	Penna. Lines	Bicknell, Ind.
Peabody Coal Co.	McCormick Bldg., Chicago, Ill.	No. 27	Sullivan	T. H. & S. E.	Shelburn, Ind.
Rose Hill Coal Co.	Linton, Ind.	Rose Hill	Greene	Monon	Linton, Ind.
Rowland Power Consol. Collieries Co.	723 S. Sixth St., Terre Haute, Ind.	No. 7	Sullivan	I. C.	Cass, Ind.
Rowland Power Consol. Collieries Co.	723 S. Sixth St., Terre Haute, Ind.	No. 11	Sullivan	I. C., Monon	Cass, Ind.
Sherwood Coal Co.	Indianapolis, Ind.	Allan Dale	Sullivan	Monon	Dugger, Ind.
Stockton Coal Co.	Dugger, Ind.	Freeman	Sullivan	I. C.	Dugger, Ind.
Sunflower Coal Co.	Dugger, Ind.	Sunflower	Sullivan	Ill. Cent.	Dugger, Ind.
Syndicate Coal Co.	Dugger, Ind.	No. 7	Sullivan	Monon	Midland, Ind.
Templeton Coal Co.	Citizens Bk. Bldg., Terre Haute, Ind.	Glendora	Sullivan	C. & E. I., C. T. H. & S. E.	Glendora, Ind.
Templeton Coal Co.	Citizens Bk. Bldg., Terre Haute, Ind.	Peerless	Sullivan	C. & E. I., C. T. H. & S. E.	Glendora, Ind.
Templeton Coal Co.	Citizens Bk. Bldg., Terre Haute, Ind.	St. Clair	Sullivan	C. & E. I., C. T. H. & S. E.	Glendora, Ind.
United Traction Coal Co.	Rose Dispensary Bldg., Terre Haute, Ind.	No. 23	Sullivan	Penna.	Dugger, Ind.
Vandalia Coal Co.	Terre Haute, Ind.	No. 12	Sullivan	Penna.	Dugger, Ind.
Vandalia Coal Co.	Rose Dispensary Bldg., Terre Haute, Ind.	No. 17	Sullivan	Penna.	Dugger, Ind.
Vigo Mining Co.	Rose Dispensary Bldg., Terre Haute, Ind.	No. 15 Clover Leaf	Sullivan	C. I. & L.	Cass, Ind.
Vigo Mining Co.	Terre Haute, Ind.	No. 29	Sullivan	Monon	Dugger, Ind.
Wolley, J., Coal Co.	Evansville, Ind.	Mildred No. 2	Sullivan	C. & E. I.	Seifert, Ind.
Wolley, J., Coal Co.	Evansville, Ind.	Mildred No. 13	Sullivan	C. & E. I.	Seifert, Ind.

NO. 7 SEAM

Mined in Sullivan and Vigo counties. Bituminous rank. Suitable for Domestic, Railway, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Buam Creek Coal Co.	Keene Bldg., Terre Haute, Ind.	Buam No. 1	Sullivan	C. & E. I.	Farmersburg, Ind.
Farmersburg Coal Co.	Farmersburg, Ind.	Superior	Sullivan	C. & E. I.	Farmersburg, Ind.
Johnson, W. E., & Co.	Farmersburg, Ind.	Lash	Sullivan	C. & E. I.	Farmersburg, Ind.
Shelburn Indian Coal & Mining Co.	Shelburn, Ind.	Virginian	Sullivan	C. & E. I.	Shelburn, Ind.
Star City Coal Mining Co.	Indianapolis, Ind.	Star City No. 7	Sullivan	C. & E. I.	Shelburn, Ind.

INDIANA

Alphabetical Directory of Coal Mines, Giving Complete Detailed Information Covering Each Mine

For List of Abbreviations See Page 13.

AMERICAN COAL MINING COMPANY

General Office, Brazil, Ind.
PR—Wm. M. Zeller, Brazil, Ind.
VP—H. R. McMillan, Brazil, Ind.
TR—W. J. Snyder, Brazil, Ind.
GM—H. G. Conrad, Bicknell, Ind.
GS—P. b. Conrad, Bicknell, Ind.
PA—H. G. Conrad, Bicknell, Ind.
CE—Allen & Garcia Co., Chicago, Ill.
EM—R. I. Kattman, Bicknell, Ind.
EE—Herman S. Ranzholzer, Bicknell, Ind.
SC—Address the Company, Buyer, Arthur Gisten, Bicknell, Ind.
SA—American Coal Mining Co., 1500 Fletcher Trust Bldg., Indianapolis, Ind.

American No. 1 Mine; Shaft; No. 5 Seam, 86 in. thick.
PO—Bicknell, Ind.; SP—Same; CTY—Knox; RR—Penna.
S of H—25 trolley pole type and 2 combination locos. Track gage 42 inches.
S of M—10 shortwall and 15 longwall machines.
PP—6 water tube boilers, 315 H. P. each, 1—200 K. W. and 1—150 K. W. gen. units, 250 volts D. C., 8 pumps.
EMP—1,350. Last years tonnage 1,057,766.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker and Gravity Screens, Picking Tables, Loading Booms.

American No. 2 Mine; Shaft; No. 5 Seam, 86 in. thick.
PO—Bicknell, Ind.; SP—Same; CTY—Knox; RR—Penna. Lines.
SM—Arthur Lister, Bicknell, Ind.
S of H—7 trolley pole type locos. Track gage 42 inches.
S of M—6 shortwall and 4 longwall machines.
PP—Power purchased. Transformer 33,000-2200 volts A. C. M. G. sets, 240 volts D. C., 4 pumps.
EMP—235. Last fiscal year output, 127,518 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

AMERICAN CANNEL COAL CO.

General Office, Cannelton, Ind.
TR—J. C. Shallcross, Cannelton, Ind.
GM—J. C. Shallcross, Cannelton, Ind.
GS—J. C. Shallcross, Jr., Cannelton, Ind.
PA—J. C. Shallcross, Jr., Cannelton, Ind.
EM—J. C. Shallcross, Jr., Cannelton, Ind.

Winnucke Mine; Drift; Cannelton Seam, 30 in. thick.
PO—Cannelton, Ind.; SP—Same; CTY—Perry; RR—Southern.
S of H—Mules. Track gage, 42 in.
S of M—1 shortwall mach.
PP—Power purchased, transformer 2,200-220 volts A. C.
EMP—20. Daily output, 50 tons.
SIZES SHIPT—Run of Mine.

AMERICAN SEWER PIPE COMPANY.

Now American Vitrefied Products Co.

AMERICAN VITRIFIED PRODUCTS CO.

General Office, Akron, O.
PR—George R. Hill, Akron, O.
VP—F. W. Walker, Beaver Falls, Pa.
TR—A. S. McCombe, Akron, O.
GM—A. S. McCombe, Akron, O.
GS—R. H. Russell, Akron, O.
PA—W. K. Hill, Akron, O.

Goucher Mine; Shaft; Seam 48 in. thick.
PO—Brazil, Ind.; SP—Same; CTY—Clay; RR—C. & E. I.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—3 boilers, 1 gen. unit, 110 volts D. C., 3 pumps.
EMP—5. Last years tonnage, 9,712.
Note—Formerly American Sewer Pipe Co. Old Information.

AMES COAL CO.

General Office, Carbon, Ind.
PR—Otis Ames, Carbon, Ind.
VP—Leonard Muir, Carbon, Ind.
TR—Fred Campbell, Carbon, Ind.
GM—Joe Evans, Carbon, Ind.
GS—Joe Evans, Carbon, Ind.
PA—Emmit Evans, Carbon, Ind.
EE—Leslie Reynolds, Carbon, Ind.

Ames Mine; Shaft; Brazil Block Seam, 41 inches thick.
PO—Carbon, Ind.; SP—Same; CTY—Parke; RR—N. Y. C.
S of H—Mules. Track gage 32 inches.
S of M—1 chain breast type mach.
PP—2 fire tube boilers 20 and 40 H. P., gen. units 250 volts D. C., 2 pumps.
EMP—25. Daily tonnage, 50.
SIZES SHIPT—Slack, Block.
PREP. EQUIPT—Gravity Screens.
Old Information.

ARCHBOLD, JOHN COAL COMPANY

General Office, Evansville, Ind.
PR—John Archbold, Evansville, Ind.
TR—V. D. Herronbruck, " "
GM—John Archbold, " "
GS—Edmund Archbold, Evansville, Ind., " "
PA—John Archbold, " "

Red Shaft Mine; Shaft; No. 5 Seam, 50 to 53 in. thick.
PO—Newburgh, Ind. SP—Same. CTY—Warriek, RR—E. S. & N.
S of H—Mules and storage battery locos. Track gage 36 inches.
S of M—Hand.
PP—2 fire tube boilers; gen. units, 1—10 K. W., 1—30 K. W., 4 pumps.
EMP—100. Last years tonnage 10,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
PREP. EQUIPT—Gravity and revolving screens.

ATLAS MINING CO.

General Office, Rose Disp. Bldg., Terre Haute, Ind.
PR—R. M. Ogle, Rose Disp. Bldg., Terre Haute, Ind.
VP—E. W. Stout, Indianapolis, Ind.
TR—Leon Stern, Rose Disp. Bldg., Terre Haute, Ind.
GM—D. C. Rotting, Sullivan, Ind.
GS—Thos. Lippert, Dugger, Ind.
PA—W. C. Steward, Terre Haute, Ind.
EM—H. P. Oyer, Sullivan, Ind.
SA—Ogle Coal Co., Indianapolis, Ind.

No. 24 Mine; Shaft; No. 4 Vein, 54 in. thick.
PO—Linton, Ind.; SP—Same; CTY—Greene; RR—Penna.
S of H—2 trolley pole type locos. Track gage, 36 in.
S of M—7 chain breast type and 6 shortwall machs.
PP—2 150 H. P. fire tube boilers, 1 150 K. W. gen. units, 250 volts D. C., 6 pumps.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

AYROALE COAL COMPANY

General Office, Indianapolis, Ind.
PR—C. R. O. Murphy, Indianapolis, Ind.
TR—Henry Knapp, Indianapolis, Ind.
GM—C. G. Hall, Terre Haute, Ind.
GS—J. R. Schmitt, Linton, Ind.
PA—Paul Birdsall, Indianapolis, Ind.
CE—Rush & Everson, Terre Haute, Ind.
SA—Walter Bledsoe & Co., Terre Haute, Ind.

Antloeh Mine; Shaft; No. 5 Seam; 54-72 inches thick.
PO—Linton, Ind.; SP—Same; CTY—Sullivan; RR—C. T. H. & S. E.
S of H—Mules, 2 trolley pole type locos. Track gage 42 inches.
S of M—12 shortwall machines.
PP—2 fire tube boilers, total 300 H. P., 2 pumps.
EMP—180. Daily output, 1,200 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

AYRSHIRE COAL COMPANY.

General Office, Oakland City, Ind.
PR—David Ingles, Oakland City, Ind.
VP—W. D. Ingles, Oakland City, Ind.
TR—David Ingles, " "
GM—W. D. Ingles, " "
GS—R. H. Jackson, Oakland City, Ind.
PA—W. D. Ingles, " "
CE—R. H. Jackson, Oakland City, " "
EM—Ed Epperson, Oakland City, Ind.
EE—L. G. Griggsby, Winslow, Ind.
SC—Ingles Supply Co. Buyer, Cal Whitman, Oakland City, Ind.
SA—Geo. E. Garlinger, Oakland City, Ind.

Ayrshire No. 7 Mine; Shaft; No. 5 Seam, 48 to 87 in. thick. Operate washery.
PO—Winslow, Ind.; SP—Same; CTY—

Pike; RR—Sou., St. Louis Div.
MS—Chas. H. Burlbank, Oakland City, Ind.
S of H—Mules and trolley pole type locos. Track gage, 36 in.
S of M—12 shortwall machs.
PP—Purchase power, transformer 2,300 to 220 volts A. C., 2 150 K. W., M. G. sets, 250 volts D. C., 4 150 H. P. fire tube boilers, 16 pumps.
EMP—330. Last years tonnage 177,918.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Picking Table, Loading Booms, Shaker Screens, Washeries.

No. 8 Mine; Shaft; Indiana No. 5 Seam, 60 in. thick.
PO—Winslow, Ind.; SP—Same; CTY—Pike; RR—Sou., St. L. Div.
MS—Luther Hale, Winslow, Ind.
MF—C. Whitman, Winslow, Ind.
S of H—Storage battery locos.
S of M—Shortwall machs.
PP—2 fire tube boilers, 100 H. P., 3 pumps.
EMP—150. Last years tonnage 30,000.
SIZES SHIPT—Run of Mine, Nut, Slack, Egg, Lump.

Ayrshire No. 6 Mine; Shaft; No. 5 Seam, 58 to 72 in. thick.
PO—Winslow, Ind.; SP—Same; CTY—Pike; RR—Sou., St. Louis Div.
MS—R. H. Jackson, Oakland City, Ind.
S of H—1 elec. loco. and mules. Track gage, 36 in.
S of M—4 elec. machs.
PP—Power purchased. Transformer, 2,300 to 220 volts. M. G. Sets, 250 volts D. C., 4 pumps.
EMP—150. Last years tonnage 110,439.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

No. 4 Mine abandoned

AYRSHIRE DISTRICT COLLIERIES CO.

Now operated by the Francisco Mining Company

BAYS-LOGAN COAL COMPANY

General Office, Sullivan, Ind.
PR—Lee F. Bays, Sullivan, Ind.
TR—R. F. Logan, Sullivan, Ind.
GM—R. F. Logan, Sullivan, Ind.
PA—R. F. Logan, Sullivan, Ind.

Bays-Logan Mine; Shaft; No. 5 Seam; 70 to 84 inches thick.
PO—Coalmont, Ind.; SP—Same; CTY—Greene; RR—C. T. H. & S. E.
MS—R. F. Logan, Sullivan, Ind.
S of H—Mules.
S of M—Hand.
PP—Power purchased. Transformer 2,300 to 220 volts A. C., 1 pump.
EMP—48. Daily output, 300 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.
Note—Formerly operated by Peoples Coal & Mining Co. Old Information.

BUCKETT & SHIRKIE COAL CO.

General Office, Terre Haute, Ind.
PR—Edward Shirkie, Terre Haute, Ind.
VP—C. A. Bickett, Chicago, Ill.
TR—Edward Shirkie, Terre Haute, Ind.
GM—Edward Shirkie, Terre Haute, Ind.
PA—George Merchant, Terre Haute, Ind.
EE—S. V. Peary, Paris, Ill.
SA—Bickett Coal & Coke Co., Chicago, Ill.

No. 1 Mine; Shaft; No. 5 Seam, 56 in. thick.
PO—Paris, Ill.; R. F. D.; SP—Terre Haute, Ind.; CTY—Vermilion; RR—C. M. & St. P.
MS—Wm. Wildon, 1600 So. 10th St., Terre Haute, Ind.
S of H—Trolley pole type locos. Track gage, 44 in.
S of M—Hand.
PP—4 fire tube boilers, 150 H. P., 2 175 K. W., gen. units, 250 volts D. C., 6 pumps.
EMP—325. Daily output, 1,600 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Gravity Screens.

BICKNELL COAL & MINING CO

out of Business.

BIG FOUR COAL COMPANY.

General Office, Louisville, Ky.
PR—Lawrence Jones, Louisville, Ky.
VP—Henning Chambers, Louisville, Ky.
TR—Edw. J. Hackett, Louisville, Ky.
GM—Edw. J. Hackett, Louisville, Ky.
GS—Chas. Wilder, Louisville, Ky.
PA—Edw. J. Hackett, Louisville, Ky.
EM—Rush & Everson, Terre Haute, Ind.

Big Four Mine; Slope; No. 5 Seam, 48 to 72 in. thick.
PO—Boonville, Ind. SP—Same. CTY—Warriek, RR—Southern.
MS—Jno. O'Laughlin, Boonville, Ind.
S of H—Mules and elec. loco. Track gage 36 in.
S of M—2 elec., a comp. air, and 2 shortwall machs.
PP—4 water tube boilers, total 550 H. P., 1 air comp., 1 gen. unit, 250 volts D. C., 10 pumps.
EMP—125. Daily tonnage 400.
SIZES SHIPT—Run of Mine.

BIG MUDDY COAL COMPANY.

General Office, 332 S. Michigan Ave., Chicago, Ill.

PR—P. S. Peabody, Chicago, Ill.
VP—M. P. Peltier, Chicago, Ill.
MS—(In charge of operation)—H. M. Young, Chicago, Ill.
TR—M. Fisch, Chicago, Ill.
GS—G. C. Brockbridge, Shelbyville, Ind.
PA—H. E. Campbell, Chicago, Ill.
GM—E. E. McFadden, Chicago, Ill.
EE—Carl Lee, Chicago, Ill.
SA—Peabody Coal Company, Chicago, Ill.

Kettle Creek Mine No. 27; Shaft; No. 6 Seam, 66 in. thick.
PO—Shelbyville, Ind.; SP—Same; CTY—Sullivan; RR—C. T. H. & S. E.
S of H—Mules and trolley pole type locos. Track gage 36 in.
S of M—Chain breast type and short-wall machs.
PP—4 150 H. P. fire tube boilers Transformer, 275 volts, gen. units, 1—100 K. W. and 1—250 K. W., 275 volts D. C.
EMP—200. Daily tonnage 800.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens

BIG MUDDY MINING CO.

General Office, Winslow, Ind.
PR—James C. Ellis, Owensboro, Ind.
VP—H. G. Roetzel, Winslow, Ind.
TR—H. G. Roetzel, Winslow, Ind.
GM—H. G. Roetzel, Winslow, Ind.
PA—H. G. Roetzel, Winslow, Ind.
CE—Rush Everson, Terre Haute, Ind.
SC—D. J. Mackey Co. Buyer A. L. Spidel, Winslow, Ind., R. R. 5.
SA—Martin Howe Coal Co., Chicago, Ill.

Big Muddy Mine; Drift; No. 5 Seam; 52 to 60 inches thick.
PO—Winslow, Ind.; R. R. 5; SP—Same; CTY—Pike; RR—Southern.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—20. Daily tonnage 200.
SIZES SHIPT—Run of Mine.

BIG VEIN MINING CO.

General Office, 611 Tribune Bldg., Terre Haute, Ind.

PR—C. H. Ray, Terre Haute, Ind.
TR—W. L. Williamson, Terre Haute, Ind.
PA—W. L. Williamson, " "
SA—Central Coal Producers Co., Terre Haute, Ind.

Big Vein Mine, Shaft, No. 5 Seam, 7 1/2 to 11 ft thick.
PO—Coalmont, Ind.; SP—Same; CTY—Clay; RR—C. M. & St. P.
S of H—Mules. Track gage 42 in.
S of M—12 comp air machs.
PP—8 pumps.
EMP—200. Last years tonnage 200,000.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.

BINKLEY COAL COMPANY

General Office, Chicago, Ill.
PR—L. G. Binkley, Chicago, Ill.
VP—W. H. Binkley, Chicago, Ill.
TR—H. E. Howard, Chicago, Ill.
GS—M. H. Stark, Libertyville, Ind.
SA—L. B. Binkley Coal Co., Chicago, Ill.

Additional Information on Pages 320, 379.

Pine Ridge Mine; Shaft, No. 7 Seam, 56 inches thick.
PO—Libertyville, Ill.; SP—Same; CTY—Vigo; RR—C. T. H. & S. E.
(Continued on Next Page)

Binkley Coal Company—Cont.

S of H—2 trolley pole type locos. Track gage 42 inches.
 S of M—Hand.
 PP—3 water tube boilers, 1—150 K. W. gen. unit, 250 volts D. C.
 Daily tonnage 1,200.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.
 Formerly operated by Pine Ridge Mines Company.

BLACK COMET COAL MINING COMPANY
Now operated by the Enterprise Coal Mining Co.

BLACK DIAMOND COAL COMPANY.
 General Office, Box 187, Linton, Ind.
 PR—C. A. Runyan, Kalamazoo, Mich.
 VP—J. T. Dunigan, Cleveland, Ohio.
 TR—L. F. Ryall, Kalamazoo, Mich.
 GS—O. H. Hanger, Linton, Ind.
 AUDITOR—J. W. Barrett, Linton, Ind.
 PA—Francis Haseman, Linton, Ind.

Black Diamond Mine; Stripping; No. 6 Seam, 72 in. thick.
 PO—Linton, Ind.; SP—Victoria; CTY—Sullivan; RR—Monon.
 S of H—Steam locos.
 S of M—Drag line and loading shovel.
 PP—Power from Indiana Power & Water Co., 3 pumps.
 EMP—48. Daily tonnage 600.
 SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Lump.
 PREP. EQUIPT—Gravity Screens.
 Old Information.

BLACK HAWK MINING COMPANY

General Office, 111 N. Seventh St., Terre Haute, Ind.
 PR—John B. Mershon, Brazil, Ind.
 VP—Crisah Smith, Terre Haute, Ind.
 TR—John M. Manson, Terre Haute, Ind.

GM—A. T. Spears, Terre Haute, Ind.
 GS—A. T. Spears, Terre Haute, Ind.

Black Hawk Mine; Shaft; No. 5 Seam; 66 in. thick.
 PO—Black Hawk, Ind.; SP—Same; CTY—Vigo; RR—C. M. & St. P.
 MS—Thomas Watkins, Terre Haute, Ind.

SM—J. P. Traule, Black Hawk, Ind.
 S of H—Mules, 2 elec. locos. Track gage 42 in.
 S of M—Hand.
 PP—2 fire tube boilers, 150 H. P., 75 K. W. gen. units, 250 volts D. C., 3 pumps.

EMP—250. Last years tonnage 1,200.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens, Picking Tables.

BOLT COAL COMPANY.

PR—F. D. Bolt, Coalmont, Ind.
 TR—Sanford Bolt, Coalmont, Ind.
 GS—F. D. Bolt, " "
 PA—F. D. Bolt, " "

Little Dirtle Mine; Shaft and Slope; No. 5 Seam; 96 in. thick.
 PO—Coalmont, Ind.; SP—Same; CTY—Clay; RR—C. T. H. & S. E.
 MS—W. A. Stone, Coalmont, Ind.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 PP—1 fire tube boiler, 25 H. P., 1 pump.

EMP—65. Last years tonnage 50,000.
 SIZES SHIPT—Run of Mine.
 (Old information.)

BON AYR COAL COMPANY

General Office, Terre Haute, Ind.
 PR—W. J. Freeman, Terre Haute, Ind.
 VP—David Ingle, Evansville, Ind.
 TR—Jasper Schlot, Linton, Ind.
 GM—W. J. Freeman, Terre Haute, Ind.
 GS—Jasper Schlot, Linton, Ind.
 PA—Jasper Schlot, Linton, Ind.
 CE—Rush & Ersson, Terre Haute, Ind.
 SA—Walter Bledsoe & Co., Terre Haute, Ind.

Bon Ayr Mine; Shaft; No. 4 Seam; 54 to 68 inches thick.
 PO—Jasoville, Ind.; SP—Same; CTY—Greene; RR—C. I. & L.
 MS—Wm. James, Jasoville, Ind.
 S of H—3 trolley pole type and 6 storage battery locos. Track gage 42 in.
 S of M—10 shortwall machs.

PP—Power purchased, Transformer, 1 150 K. W., 1 300 K. W. gen. units, 250 volts D. C., 3—150 H. P. fire tube boilers.
 EMP—250.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

BOONVILLE MINING COMPANY.

General Office, Boonville, Ind.
 PR—Clem E. Doane, Boonville, Ind.
 VP—Gus Golsen, 305 Colony Bldg., Chicago, Ill.
 TR—E. L. Klein, Chicago, Ill.
 GS—Clem E. Doane, Boonville, Ind.

GM—Geo. H. Doane, Boonville, Ind.
 PA—Clem E. Doane, Boonville, Ind.
 EM—Rush & Ersson, Terre Haute, Ind.
 EE—Clem E. Doane, Boonville, Ind.
 SA—Golsen Doan Coal Co., Chicago, Ill.

DeForest Mine; Shaft; No. 5 Seam, 60 in. thick.
 PO—Boonville, Ind.; SP—Same; CTY—Warrick; RR—Southern.
 MS—Mark Wilson, Chandler, Ind.
 S of H—Mules and storage battery locos. Track gage 36 in.
 S of M—Hand and shortwall mach.
 PP—2 180 H. P. water tube boilers, 150 K. W. generator, 250 volts D. C., 5 pumps.
 EMP—100. Last years tonnage 80,000.

SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screen.

BOSSE COAL COMPANY.

General Office, 329 Sycamore St., Evansville, Ind.

PR—Benjamin Bosse, Evansville, Ind.
 VP—John Brill, " "
 TR—Walter B. Korff, Evansville, Ind.
 GM—Walter B. Korff, " "
 CE—Rush & Ersson, Terre Haute, Ind.
 EE—Wm. Davout, Evansville, Ind.
 Sales Agent, Walter B. Korff, 329 Sycamore St., Evansville, Ind.

Korff's Mine; Shaft; No. 5 Seam, 60 to 72 in. thick.
 PO—Evansville, Ind.; SP—Korff's Mine, Ind.; CTY—Warrick; RR—E. S. N. I., S. Southern.

MS—Walter B. Korff, Evansville, Ind.
 S of H—Mules, trolley pole type locos. Track gage 36 in.

S of M—4 machs.
 PP—2 water tube boilers, total 300 H. P., gen. units, 250 volts D. C., 14 pumps.

EMP—225. Daily tonnage 800.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.

PREP. EQUIPT—Bar Screens.

Liberty Mine; Shaft; No. 5 Seam; 84 to 96 in. thick.

PO—Buckskin, Ind.; SP—Same; CTY—Gibson; RR—E. & I.

MS—Walter B. Korff, Evansville, Ind.
 S of H—Mules. Track gage, 36 in.

S of M—Hand.
 PP—2 80 H. P. water tube boilers, 3 pumps.

EMP—230. Daily tonnage 800.
 PREP. EQUIPT—Bar Screens.

BRADWAY COAL COMPANY

General Office, Center Point, Ind.
 PR—A. B. Coates, Duluth, Minn.
 VP—Geo. P. Tweed, Duluth, Minn.
 GM—K. M. Way, Center Point, Ind.
 SA—E. L. Hedstrom & Co., Chicago, Ill.

Bradway No. 1 Mine; Stripping; Brazil Block Seam; 36 inches thick.

PO—Center Point, Ind.; SP—Same; CTY—Clay; RR—P. C. C. & St. L.

S of H—Steam loco. Track gage 36 inches.
 PP—2 fire tube boilers, 30 H. P.

EMP—40. Daily tonnage 400.
 SIZES SHIPT—Run of Mine, Slack, Lump, Block.

PREP. EQUIPT—Bar Screens with reciprocating feeder.

BRAZIL BLOCK COAL & CLAY COMPANY

General Office, Brazil, Ind.
 PR—Jas. J. Bucklin, Brazil, Ind.
 VP—A. A. Spears, Brazil, Ind.

TR—Eugene Wardlaw, Brazil, Ind.
 GM—Jas. J. Bucklin, Brazil, Ind.
 GS—Jas. J. Bucklin, Brazil, Ind.
 PA—Jas. J. Ruckhu, Brazil, Ind.

EM—Frank Katiman, Terre Haute, Ind.
 No. 12 Mine; Shaft; Block Seam; 44 in. thick.

PO—Brazil, Ind.; SP—Same; CTY—Clay; RR—C. & E. I.

MS—William Penz, Brazil, Ind.
 S of H—Mules. Track gage 36 in.

S of M—Hand.
 PP—5 fire tube boilers, 75 H. P., 100 K. W. 200 amp. gen. unit, 250 volts D. C., 4 pumps.

EMP—35. Last years tonnage 34,705.
 SIZES SHIPT—Slack, Block.
 PREP. EQUIPT—Bar Screens.
 Not operating since April, 1921.

BRAZIL COLLIERIES COMPANY.

General Office, Brazil, Ind.
 PR—A. L. Allais, Chicago, Ill.
 VP—Edward Allais, Sr., Terre Haute, Ind.

TR—W. M. Zeller, Brazil, Ind.
 GM—Edw. Allais, Sr., Terre Haute, Ind.

GS—Thos. P. Grant, Brazil, Ind.
 PA—Thos. P. Grant, Brazil, Ind.
 EE—Jesse Lowe, Brazil, Ind.

No. 2 Mine; Shaft; Rider Vein Block; 48 in. thick.
 PO—Brazil, Ind.; SP—Same; CTY—Clay; RR—Penna.

S of H—Mules. Track gage, 36 in.

S of M—2 chain breast type and 4 shortwall machs.
 PP—2 fire tube boilers, gen. units, 250 volts D. C., 4 pumps.
 EMP—130. Daily output, 600 tons.
 PRODUCTS—Steam, Domestic.
 SIZES SHIPT—Run of Mine, Lump.
 PREP. EQUIPT—Gravity Screens.

BRAZIL DISTRICT MINING CO.

General Office, Brazil, Ind.
 PR—Fred W. Heck, Brazil, Ind.
 VP—Jes. G. Kirchner, Terre Haute, Ind.
 TR—E. E. Shaw, Brazil, Ind.
 GM—Jos. G. Kirchner, Terre Haute, Ind.
 GS—Fred W. Heck, Brazil, Ind.
 PA—Jos. G. Kirchner, Terre Haute, Ind.
 SA—Jos. G. Kirchner, Terre Haute, Ind.

Hamlin & Heck Mine; Shaft; Third Vein Seam, 84 in. thick.

PO—Brazil, Ind.; SP—Same; CTY—Clay; RR—P. C. C. & St. L.

S of H—Mules. Track gage, 36 in.
 S of M—Hand.

PP—4 upright boilers, 5 pumps.
 EMP—75. Last years tonnage 36,000.

SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

BRIGHT GEM MINING COMPANY.

General Office, Brazil, Ind.
 PR—A. L. Allais, Chicago, Ill.
 VP—Edward Allais, Jr., Terre Haute, Ind.

TR—T. F. Grant, Brazil, Ind.
 GM—Edward Allais, Sr., Terre Haute, Ind.

PA—Edward Allais, Sr., Terre Haute, Ind.
 CE—Victor & Stievenast, Brazil, Ind.

SA—Columbus Mining Company, McCormick Bldg., Chicago, Ill.

Right Gem Mine; Shaft; Minsbell Seam, 50 in. thick.

PO—Jessup, Ind.; SP—Same; CTY—Parke; RR—P. R. R.

MS—Edward Allais, Terre Haute, Ind.
 S of H—Mules. Track gage 36 in.

S of M—Hand.
 PP—Water tube boiler, 2 pumps.

EMP—125. Daily tonnage 1,000.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.

PREP. EQUIPT—Bar Screens.

BROWN COAL COMPANY

Out of business.

BRYAN, JOS. A. COAL CO.

General Office, Evansville, Ind.
 GM—J. A. Bryan, Evansville, Ind.
 GS—Chas. Lay, Chandler, Ind.

PA—J. A. Bryan, Evansville, Ind.
 EM—Jas. Klee, Evansville, Ind.

SA—Linton White Ash Coal Co., Chicago, Ill.

Bryan Mine; Shaft; No. 5 Seam, 60 in. thick.

PO—Chandler, Ind.; SP—Same; CTY—Warrick; RR—Southern.

S of H—Mules. Track gage, 41 in.
 S of M—6 comp. air punchers.

PP—4 fire tube boilers, 360 H. P., 5 pumps.

EMP—80. Daily output, 400 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Gravity and Shaker Screens.
 Old Information.

BURNETT COAL MINING COMPANY

General Office, Burnett, Ind.
 PR—G. D. Rosengrant, 934 McCormick Bldg., Chicago, Ill.

VP—E. J. Devonald, Burnett, Ind.
 TR—Jas. L. Devonald, Burnett, Ind.

GM—James L. Devonald, Burnett, Ind.
 GS—Jas. L. Devonald, Burnett, Ind.

PA—James L. Devonald, Burnett, Ind.
 SC—Address the Company, Buyer, E. J. Devonald, Burnett, Ind.

SA—Rosengrant Coal Co., Chicago, Ill.

Nos. 1 and 2 Mines; Slope; Ehrmandale Seam, 72 to 90 in. thick.

PO—Burnett, Ind.; SP—Same; CTY—Vigo; RR—C. & E. I.

S of H—Mules, Rope and 2 locos. Track gage 42 in.

S of M—Hand.
 PP—3 return tubular boilers, total 350 H. P., 1 air comp., 6 pumps.

EMP—200. Last years tonnage 150,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg.
 PREP. EQUIPT—Bar Screens.

BUSRAM CREEK COAL COMPANY

General Office, Keene Bldg., Terre Haute, Ind.

PR—John Shirkie, Terre Haute, Ind.
 VP—Steward Shirkie, Terre Haute, Ind.

TR—Steward Shirkie, Terre Haute, Ind.
 GM—John Shirkie, Terre Haute, Ind.

GS—Ralph Sharpe, Farmersburg, Ind.
 PA—Steward Shirkie, Terre Haute, Ind.

EM—Leonard Henneman, Terre Haute, Ind.

EE—Kirby Phillips, Terre Haute, Ind.

SA—Bickett Coal & Coke Co., Chicago, Ill.

Busram No. 1 Mine; Slope and Shaft; No. 7 Seam.

PO—Farmersburg, Ind.; SP—Same; CTY—Sullivan; RR—C. & E. I.

S of H—Mules, trolley pole type and storage battery locos. Track gage 42 inches.

S of M—Hand.
 PP—2 water tube boilers, 150 H. P., 1 150 K. W. gen. unit, 250 volts D. C.

EMP—80. Last fiscal year output, 36,000 tons.

SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.
 Old Information.

C. & E. I. COAL PROPERTIES.

Now Indiana & Illinois Coal Corporation.

CALEDONIA MINING COMPANY.

General Office, 2938 Port Ave., Louisville, Ky.

PR—James C. Ellis, Owensboro, Ky.
 VP—Henry S. Roetzel, Winslow, Ind.

TR—Henry S. Roetzel, Winslow, Ind.
 GM—Henry S. Roetzel, Winslow, Ind.

GS—Henry S. Roetzel, Winslow, Ind.
 PA—A. Louis Selpel, Winslow, Ind.

CE—Rush & Ersson, Terre Haute, Ind.
 SC—D. J. Mackey Co. Buyer, A. Louis Selpel, Winslow, Ind.

Caledonia Mine; Drift; No. 5 Seam, 50-66 inches thick.

PO—Winslow, Ind.; SP—Same; CTY—Pike; RR—Southern, Hartwell Br.

MS—John Randall, Winslow, Ind.
 S of H—Mules. Track gage 36 in.

S of M—2 elec. machs.
 PP—1 return tubular boiler, total 125 H. P., one 75 K. W. gen. unit, 1 pump.

EMP—35. Weekly output, 600 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.

PREP. EQUIPT—Shaker Screens.

CALORA COAL CO.

General Office, 407-8 Opera House Bldg., Terre Haute, Ind.

PR—C. H. Jones, Terre Haute, Ind.
 VP—M. G. Jones, Terre Haute, Ind.

TR—H. M. Stout, Terre Haute, Ind.
 GM—C. H. Jones, Terre Haute, Ind.

GS—A. J. Wheatley, Jasoville, Ind.
 PA—H. M. Stout, Terre Haute, Ind.

EM—J. C. Lister, Terre Haute, Ind.
 EE—J. C. Lister, Terre Haute, Ind.

Calora No. 1 Mine; Shaft; No. 4 Seam, 48 in. thick.

PO—Jasoville, Ind.; SP—Same; CTY—Greene; RR—C. T. H. & S. E.

MS—C. H. Jones, Terre Haute, Ind.
 S of H—Mules and trolley pole type locos. Track gage, 42 in.

S of M—5 chain breast type and 5 short-wall machs.

PP—4 fire tube boilers, 1 200 K. W. gen. unit, 250 volts D. C., 9 pumps.

EMP—215. Last fiscal year output, 150,000 tons.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Shaker Screens.

Calora No. 2 Mine; Seam, 72 in. thick.
 PO—Jasoville, Ind.; SP—Latta, Ind.; CTY—Greene; RR—C. T. H. & S. E.

MS—C. H. Jones, Terre Haute, Ind.
 S of H—Mules and trolley pole type locos. Track gage, 42 in.

S of M—1 electric puncher and 2 short-wall machs.

PP—2 water tube boilers, gen. units, 250 volts D. C., 3 pumps.

EMP—25. Last fiscal year output, 35,000 tons.

SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

CARBON MINING COMPANY

Out of business.

CATHLEEN COAL CO.

General Office, 969 Wabash Ave., Terre Haute, Ind.

PR—W. D. Hunter, Terre Haute, Ind.

TR—B. E. German, Terre Haute, Ind.

GM—W. D. Hunter, Terre Haute, Ind.

GS—W. D. Hunter, Terre Haute, Ind.

PA—W. D. Hunter, Terre Haute, Ind.

CE—W. A. Spangler, Linton, Ind.

EE—Arthur Parks, Linton, Ind.

SA—Schroelcke Coal Co., Indianapolis, Ind.

Cathleen Mine; Shaft; No. 5 Seam, 84 in. thick.

PO—Linton, Ind.; SP—Latta, Ind.; CTY—Greene; RR—C. T. H. & S. E.

MS—John Quigley, Linton, Ind.

S of H—Mules. Track gage 36 in.

S of M—2 trolley shortwall machs.

PP—1 150 H. P., 1 90 H. P. boilers, gen. unit, 100 K. W., 250 volts D. C., 3 pumps.

EMP—55. Last years tonnage 33,860.

SIZES SHIPT—Run of Mine.

CENTRAL INDIANA COAL CO.

General Office, Sullivan, Ind.
PR—R. H. Sherwood, Indianapolis, Ind.
VP—F. W. Bull, Chicago, Ill.
TR—B. E. Lundblad, Indianapolis, Ind.
GM—B. E. Lundblad, Indianapolis, Ind.
GS—W. H. Stewart, Dugger, Ind.
PA—W. H. Stewart, Dugger, Ind.
SA—E. A. Lundblad, Indianapolis, Ind.

Robin Hood Mine; Stripping; No. 6 Seam, 63 inches thick.
PO—Dugger, Ind.; SP—Same; CTY—Sullivan; RR—C. C. & St. L.
MS—Walter Sutphin, Dugger, Ind.
S of H—Steam loco. Track gage 36 in.
S of M—Haad.
PP—Power purchased. Transformer 2300 to 440 volts A. C., 5 fire tube boilers, 350 H. P., 5 pumps.
EMP—75. Daily tonnage 850.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms, Washeries.

CHICAGO-CARLISLE COAL CO.

General Office, 1506 Fletcher Savings & Trust Bldg., Indianapolis, Ind.
PR—Geo. A. Van Dyke, Indianapolis, Ind.
VP—Alva B. Van Dyke, Sullivan, Ind.
TR—Alva B. Van Dyke, Sullivan, Ind.
GM—Geo. A. Van Dyke, Indianapolis, Ind.
PA—W. C. Keever, Indianapolis, Ind.
EM—C. P. Stewart, Sullivan, Ind.
SA—Schroelcke Coal Co., Indianapolis, Ind.

Reliance Mine; Shaft; No. 6 Seam, 66 in. thick.
PO—Shelburn, Ind.; SP—Same; CTY—Sullivan; RR—C. C. & E. I.
MS—Ralph Butler, Shelburn, Ind.
S of H—Mules and trolley pole type locos. Track gage, 40 in.
S of M—5 shortwall machs.
PP—4 fire tube boilers, 150 H. P., 1 150 K. W., 2 100 K. W. gen. units, 250 volts D. C., 6 pumps.
EMP—160. Daily tonnage 800.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Gravity and Shaker Screens.

Carlisle Mine; Shaft; No. 5 Seam, 72 in. thick.
PO—Carlisle, Ind.; SP—Same. CTY—Sullivan; RR—C. C. & E. I.
MS—W. L. Cooper, Carlisle, Ind.
S of H—Mules, main and tall rope, trolley pole type locos. Track gage, 36 inches.
S of M—3 shortwall machs.
PP—4 fire tube boilers, 150 H. P., 2 150 K. W. gen. units, 250 volts D. C., 6 pumps.
EMP—150. Daily tonnage 800.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

CLAY PRODUCTS CO. (THE).

General Office, Brazil, Ind.
PR—F. M. Sayre, Columbus, O.
VP—Geo. W. Shoemaker, Brazil, Ind.
MGR—R. A. Danorano, Brazil, Ind.
PA—W. J. Burke, Brazil, Ind.

Clay Mine; Stripping; Brazil Block Seam, 43 in. thick.
PO—Brazil, Ind.; SP—Same; CTY—Clay; RR—Penna.
MS—John Brownell, Brazil, Ind.
S of H—Steam locos.
S of M—Hand.
EMP—26. Daily tonnage 100.
SIZES SHIPT—Run of Mine.
Note—Consume entire output.

CLIMAX COAL & CLAY CO.

General Office, Lafayette Life Bldg., Fayette, Ind.
PR—J. S. Randolph, Lafayette, Ind.
VP—Edgar Randolph, Fayette, Ind.
TR—Edgar Randolph, Fayette, Ind.
GM—J. S. Randolph, Lafayette, Ind.
GS—E. G. Eppie, 520 N. Walnut St., Brazil, Ind.
PA—J. S. Randolph, Lafayette, Ind.
CE—Frank Katman, Terre Haute, Ind.
EE—Clarence West, Cory, Ind.

Climax No. 1 Mine; Shaft; Brazil Block Seam, 36 in. thick.
PO—Saline City, Ind.; SP—Same; CTY—Clay; RR—E. T. & T. H.
MS—Frank Friend, Saline City, Ind.
S of H—Mules.
S of M—2 top cutting machs.
PP—2 150 H. P. and 1 100 H. P. tubular boilers, M. G. set, 250 volts D. C., 4 pumps.
EMP—108. Last years tonnage 10,200.
SIZES SHIPT—Slack, Block.
PREP. EQUIPT—Diamond Bar Screens. Old Information.

CLINTON COAL COMPANY.

General Office, Clinton, Ind.
PR—H. M. Ferguson, Clinton, Ind.
GM—H. M. Ferguson, " "
GS—Arthur Ferguson, " "
PA—Arthur Ferguson, " "
TR—S. C. Stutz, " "
EM—Cecll Harrison, " "
EE—Howard Hughes, " "
SA—F. L. Nichols, Clinton, Ind.

Additional Information on Page 389.
No. 2 Mine; Shaft; No. 4 Seam, 46 to 50 in. thick.
PO—Clinton, Ind.; SP—Same; CTY—Vermillion; RR—C. C. & E. I.
PP—4 return tubular boilers, total 600 H. P., 1 gen. unit, 250 volts D. C., 4 pumps.
S of H—5 elec. locos. Track gage 42 in.
EMP—200. Last fiscal year output, 137,000 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar and Shaker Screens.

No. 3 Mine; Shaft; No. 4 Seam, 46 to 50 in. thick.
PO—Clinton, Ind.; SP—Same; CTY—Vermillion; RR—C. C. & E. I.
S of H—5 elec. locos. Track gage 42 in.
PP—6 return tubular boilers, total 900 H. P., 1 gen. unit, 250 volts D. C., 6 pumps.
EMP—200. Last fiscal year output, 170,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Bar and Shaker Screens, Picking Tables, Loading Booms.

No. 4 Mine; Shaft; No. 4 Seam, 46 to 50 in. thick.
PO—Clinton, Ind.; SP—Same; CTY—Vermillion; RR—C. C. & E. I.
MS—Arthur Ferguson, Clinton, Ind.
S of H—7 elec. locos. Track gage 42 in.
S of M—Hand and 2 elec. machs.
PP—5 return tubular boilers, total 750 H. P., 2 gen. units, 250 volts D. C., 7 pumps.
EMP—210. Last fiscal year output, 165,000 tons.
SIZES SHIPT—Run of Mine Slack, Nut, Egg, Lump.
PREP. EQUIPT—Bar and Shaker Screens, Loading Booms.

No. 5 Mine; Shaft; No. 5 Seam, 63 to 68 in. thick.
PO—Clinton, Ind.; SP—West Clinton, Ind.; CTY—Vermillion; RR—C. T. H. & S. E.
MS—A. J. Hays, Clinton, Ind.
S of H—Mules, 2 elec. locos. Track gage 42 in.
PP—4 return tubular boilers, total 600 H. P., 1 gen. unit, 250 volts D. C., 5 pumps.
EMP—225. Last fiscal year output, 156,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
PREP. EQUIPT—Bar and Shaker Screens.

No. 6 Mine; Shaft; No. 5 Seam, 63 to 68 in. thick.
PO—Clinton, Ind.; SP—Same; CTY—Vermillion; RR—C. T. H. & S. E.
MS—A. J. Hays, Clinton, Ind.
S of H—Mules. Track gage 42 in.
PP—3 return tubular boilers, total 450 H. P., 4 pumps. Elec. power from Mine No. 5.
EMP—240. Last fiscal year output, 176,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Bar and Shaker Screens.

No. 7 Mine; Shaft; No. 5 Seam, 63 to 68 in. thick.
PO—Clinton, Ind.; SP—Same; CTY—Vermillion; RR—C. C. & E. I.
S of H—Mules. Track gage 42 in.
S of M—Hand.
PP—2 return tubular boilers, total 300 H. P., 4 pumps.
EMP—145. Last fiscal year output, 156,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Bar and Shaker Screens.

CLOVELLY COAL CO.

General Office, Terre Haute, Ind.
PR—H. R. Talley, Terre Haute, Ind.
VP—G. Ed Talley, Terre Haute, Ind.
TR—H. B. Talley, Terre Haute, Ind.
GS—J. A. Templeton, Terre Haute, Ind.
PA—G. Ed Talley, Terre Haute, Ind.
EM—Geo. Vicks, Terre Haute, Ind.
SC—Affiliated Coal Bldg. Store, Ruyar, Victor H. Nash, Terre Haute, Ind.
SA—Walter Bledsoe Co., Terre Haute, Ind.

Talleydale Mine; Shaft; No. 4 Seam, 68 inches thick.
PO—Terre Haute, Ind.; SP—Libertyville, Ind. CTY—Vigo; RR—C. M. & St. P.
MS—William Strachan, Terre Haute, Ind.
S of H—Trolley pole type loco. Track gage 42 in.

S of M—7 chain breast type and 6 long-wall machs.
PP—7 water tube boilers, 1—200 K. W. and 1—100 K. W. gen. units, 250 volts D. C., 3 pumps.
EMP—200. Daily tonnage 2,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

Bardye Mine; Shaft; No. 4 Seam, 68 inches thick.
PO—Terre Haute, Ind.; SP—Libertyville, Ind.; CTY—Vigo; RR—C. M. & St. P.
MS—William Strachan, Terre Haute, Ind.
S of H—Mules and trolley pole type locos. Track gage 42 in.
S of M—6 longwall machs.
PP—3 water tube boilers, 1—300 K. W. Gen. unit, 3 pumps.
EMP—200. Last years tonnage 3,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Gravity and Shaker Screens, Picking Tables and Loading Booms.

Clovelly Mine; Shaft; No. 5 Seam, 66 in. thick.
PO—Terre Haute, Ind.; SP—Libertyville, Ind.; CTY—Vigo; RR—C. M. & St. P.
MS—William Strachan, Terre Haute, Ind.
S of H—Trolley pole type locos. Track gage 42 in.
S of M—Hand.
PP—7 water tube boilers, 1—200 K. W. and 1—100 K. W. gen. units, 250 volts D. C., 4 pumps.
EMP—250. Daily tonnage 2,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Gravity Screens.

COAL BLUFF MINING COMPANY

General Office, Terre Haute, Ind.
PR—Homer R. Talley, Terre Haute, Ind.
VP—Walter W. Talley, Terre Haute, Ind.
TR—Homer R. Talley, Terre Haute, Ind.
GS—John A. Templeton, Terre Haute, Ind.
PA—G. Ed Talley, Terre Haute, Ind.
EM—Geo. Fick, Terre Haute, Ind.
SC—Address the Company, Buyer, Victor H. Nash, Terre Haute, Ind.
SA—Coal Bluff Mining Co., Terre Haute, Ind.

Plymouth No. 1 Mine; Shaft; Lower Vein Brazil Seam, 40-45 in. thick.
PO—Fontanet, Ind.; SP—Same; CTY—Vigo; RR—Big Four.
MS—R. Davies, Fontanet, Ind.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—4 water tube boilers, 5 pumps.
EMP—200.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Gravity Screens.

Plymouth No. 2 Mine; Shaft; Brazil Block Seam, 45 in. thick.
PO—Coal Bluff, Ind.; SP—Same; CTY—Clay; RR—C. C. & E. I.
MS—Barney Navin, Brazil, Ind.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—2 water tube boilers, 5 pumps.
EMP—100. Daily output, 200 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

Riverside Mine; Shaft; No. 5 Seam, 54 in. thick.
PO—Terre Haute, Ind.; RR—Marksville, Ind.; CTY—Vigo; RR—Big Four.
MS—Ed. Atkinson, Terre Haute, Ind.
S of H—Mules. Track gage 42 in.
S of M—Hand.
EMP—150. Daily tonnage 1,000.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Gravity Screens.

Wabash Mine; Shaft; No. 4 Seam, 66 in. thick.
PO—Terre Haute, Ind.; RR—Marksville, Ind.; CTY—Vigo; RR—Big Four.
MS—Robt. Weston, Terre Haute, Ind.
S of H—Mules and trolley pole type locos. Track gage 42 in.
S of M—17 chain breast type machs.
PP—7 water tube boilers, 1—200 K. W. and 1—150 K. W. gen. units, 250 volts D. C., 5 pumps.
EMP—350. Daily tonnage 2,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.

COAL CITY BLOCK COAL COMPANY

PR—C. P. Mancourt, Coal City, Ind.
TR—C. P. Mancourt, Coal City, Ind.
GS—Fred C. Mancourt, Terre Haute, Ind.

Coal City Mine; Shaft; Lower Block Seam, 42 to 50 in. thick.
PO—Coal City, Ind.; SP—Same; CTY—Owens; RR—E. & I.
MS—J. W. Beck, Coal City, Ind.
S of H—Mules. Track gage, 30 in.
S of M—Hand.
PP—1 fire tube boiler, 100 H. P., 2 pumps.

EMP—30. Daily output, 200 tons.
SIZES SHIPT—Run of Mine, Slack, Block.
(Old information.)

COAL RIDGE MINING COMPANY

General Office, Linton, Ind.
PR—David D. Terhune, Linton, Ind.
VP—Frank A. Witt, Linton, Ind.
TR—Frank A. Witt, Linton, Ind.
GM—David D. Terhune, Linton, Ind.
PA—David D. Terhune, Linton, Ind.

Coal Ridge No. 1 Mine; Shaft; Nos. 4 and 5 Seams; 48 to 72 inches thick.
PO—Linton, Ind.; SP—Midland, Ind.; CTY—Greene; RR—Monon.
S of H—Electric loco. Track gage 42 inches.
S of M—Chain breast & shortwall machs.
PP—Power purchased. Transformer 2,200 to 220 and 440 volts A. C., rotary converters 220 and 110 volts in mine.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

COATS, G. A. COAL COMPANY.

Out of business.

COLUMBIA COAL COMPANY

General Office, Bicknell, Ind.
PR—T. M. Byers, Bicknell, Ind.
VP—Alfred Pickel, Bicknell, Ind.
TR—C. E. Freeman, Bicknell, Ind.

Columbia Mine; Shaft; No. 6 Seam; 53 inches thick.
PO—Bicknell, Ind.; SP—Same; CTY—Knox; RR—Penna.
MS—Alfred Pickel, Bicknell, Ind.
S of H—Mules. Track gage 36 inches.
S of M—Shortwall machs.
PP—Power purchased. Transformer 2300 to 275 volts A. C., rotary converters, 250 volts D. C., 1 pump.
EMP—93. Last years tonnage 41,847.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Gravity Screens.

COMMERCE COAL COMPANY.

General Office, Evansville, Ind.
PR—T. C. Bugg, Evansville, Ind.
TR—L. E. Fricke, Evansville, Ind.
GM—J. H. Blair, Washington, Ind.
PA—T. C. Bugg, Evansville, Ind.
EM—J. H. Blair, Washington, Ind.
SA—J. R. Morris Coal Co., Indianapolis, Ind.

Thrifty No. 1 Mine; Shaft; No. 5 Seam, 80 in. thick.
PO—Washington, Ind. SP—Same. CTY—Davies. RR—E. & I.
MS—Frank Osha, Washington, Ind.
S of H—Mules. Track gage, 42 in.
S of M—3 compressed air machs.
PP—1 water tube boiler, 1 air comp., 2 pumps.
EMP—32. Daily output, 200 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.
(Old information.)

CONSOLIDATED INDIANA COAL CO.

Now Templeton Coal Company.

COX COAL COMPANY

General Office, R. F. D., Newburg, Ind.
PR—O. P. Cox, Newburg, Ind.
TR—W. A. Carson, Evansville, Ind.
GM—O. P. Cox, Newburg, Ind.
PA—W. A. Carson, Evansville, Ind.
SA—W. A. Carson, Evansville, Ind.

Cox Mine; Drift; No. 5 Seam; 48 in. thick.
PO—R. R. 1, Newburg, Ind.; SP—Yanketown, Ind.; CTY—Warrick; RR—E. & O. V.
MS—O. P. Cox, Newburg, Ind.
S of H—Mules. Track gage 36 in.
S of M—Hand.
EMP—20. Last years tonnage 20,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

CRESCENT COAL COMPANY.

PR—Jas. H. Moore, Evansville, Ind.
VP—P. F. Herbert, Evansville, Ind.
TR—P. F. Herbert, " "
GM—Jas. H. Moore, " "
GS—J. N. Retlinger, " "
PA—Jas. H. Moore, " "
EE—T. J. Phillips, " "

Crescent Mine, Shaft, No. 5 Ind. or No. 6 Kentucky Seam, 4 ft. 2 in. to 4 ft. 8 in. thick.
PO—Evansville, Ind. SP—Same. CTY—Vanderburg. RR—I. C., Evansville Belt.
MS—Fred Suthelm, Evansville, Ind.
S of H—Mules and trolley pole type locos. Track gage, 30 1/2 in.
S of M—2 shortwall machs.
PP—3 water tube boilers, total 450 H. P. gen. unit, 250 volts D. C., 5 pumps.
EMP—210.
SIZES SHIPT—Run of Mine, Screenings, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

CRESCENT COAL CO.

General Office, Washington, Ind.
 GM—Lewis W. Burris, Washington, Ind.
 GS—Theodore Manderback, Washington, Ind.
 PA—L. W. Burris, Washington, Ind.
 SA—Burris & Clements, Washington, Ind.
 (Crescent Mine; Shaft; No. 5 Seam, 48 in. thick.
 PO—Cannelburg, Ind.; SP—Same; CTY—Davies; RR—B. & O.
 S of H—Mules.
 S of M—Hand.
 PP—Fire tube boiler, 20 H. P.
 NOTE—Successors to L. R. Horrall & Son.

CYPRESS CREEK COAL COMPANY

PR—T. D. Seales, Boonville, Ind.
 VP—J. E. Cox, Evansville, Ind.
 TR—John Heazle, Boonville, Ind.
 GM—T. D. Seales, Boonville, Ind.
 GS—J. E. Kelley, Boonville, Ind.
 PA—John Heazle, Boonville, Ind.
 Cypress Creek Mine; Shaft; No. 5 Seam; 60 to 72 in. thick.
 PO—Boonville, Ind.; SP—Same; CTY—Warrick; RR—Southern.
 MS—Louis Shaw, Boonville, Ind.
 S of H—Mules and electric loco. Track gauge 42 inches.
 S of M—Comp. air and electric machs.
 PP—110 volts, 2 pumps.
 EMP—150. Daily tonnage 1,000.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

DANA COAL & MINING CO.

General Office, 1506 Fletcher Savings & Trust Bldg., Indianapolis, Ind.
 PR—Malcolm Reid, Indianapolis, Ind.
 VP—M. A. Mogg, Indianapolis, Ind.
 TR—Malcolm Reid, Indianapolis, Ind.
 GM—Hugh Reid, Dana, Ind.
 EE—Harry Cornelius, Indianapolis, Ind.
 SA—Linton Collieries Co., Indianapolis, Ind.
 Dana No. 1 Mine; Shaft; No. 5 Seam; 54 to 63 in. thick.
 PO—Dana, Ind.; SP—Same; CTY—Vermillion; RR—C. & E. I. W.
 MS—Len Duebonay, Dana, Ind.
 S of H—Mules and motors. Track gauge 36 in.
 S of M—6 shortwall and chain breast type machs.
 PP—2 150 H. P. fire tube boilers, 1 250 K. W. gen. unit, 250 volts D. C., 4 pumps.
 EMP—70. Daily tonnage 450.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Shaker Screens.

DAVISS COUNTY FUEL COMPANY

General Office, 760 McCormick Bldg., Chicago, Ill.
 PR—W. D. Owens, Baltimore, Md.
 TR—E. M. Devereaux, Baltimore, Md.
 GM—Earl Oliphant, Vincennes, Ind.
 GS—J. E. Hart, Chicago, Ill.
 PA—Earl Oliphant, Vincennes, Ind.
 CE—Allen & Garcia, Chicago, Ill.
 EM—Walter Buss, Vincennes, Ind.
 SCO—Black Oak Supply Co., Buyer, L. D. Wadsworth, Montgomery, Ind.
 Daviess County Mine; Shaft; No. 4 Seam, 42 to 48 in. thick.
 PO—Montgomery, Ind.; SP—Same CTY—Daviess; RR—B. & O.
 MS—J. H. McKenna, Washington, Ind.
 S of H—3 trolley pole type locos, Mules. Track gauge 36 in.
 S of M—Hand.
 PP—3 fire tube boilers, 100 H. P. power generated 75 K. W. gen. units, 220 volts D. C., 4 pumps.
 EMP—160. Daily tonnage 500.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Shaker Screens.

DEEP VEIN COAL CO.

General Office, Terre Haute, Ind.
 PR—R. J. Smith, Terre Haute, Ind.
 VP—Wm. N. Manson, Terre Haute, Ind.
 TR—John M. Manson, Terre Haute, Ind.
 GM—R. J. Smith, Terre Haute, Ind.
 GS—Chas. F. Hill, Terre Haute, Ind.
 PA—R. J. Smith, Terre Haute, Ind.
 CE—Rush & Everson, Terre Haute, Ind.
 EM—Chas. F. Hill, Terre Haute, Ind.
 EE—Wm. Lavett, Terre Haute, Ind.
 SCO—Smith Bros., Buyer, H. P. Smith, Terre Haute, Ind.
 SA—H. P. Smith, Terre Haute, Ind.
 Additional Information on Page 390.
 Deep Vein Mine; Shaft; No. 3 Seam, 72 in. thick.
 PO—West Terre Haute, Ind.; SP—Macksville, Ind.; CTY—Vigo; RR—P. C. & St. L.
 S of H—Mules, 2 trolley pole type locos. Track gauge, 36 in.
 S of M—1 chain breast type and 5 short-wall machs.
 PP—Purchase some power, 4 fire tube boilers, 450 H. P., 1 200 K. W. gen. unit, 500 volts D. C., 4 pumps.

EMP—148. Last years tonnage 113,715.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Bar Screens.

Princeton Mine; Shaft; Indiana No. 5 Seam; 84 in. thick.
 PO—Princeton Ind.; SP—Same; CTY—Gibson; RR—Princeton.
 S of H—Mules and 4 trolley pole type locos. Track gauge, 42 in.
 S of M—1 chain breast type and 13 shortwall machs.
 PP—Some power purchased, 5 fire tube boilers, 500 H. P., 1 200 K. W., 1 150 K. W. gen. units, 500 volts D. C., 7 pumps.
 EMP—275. Last years tonnage 245,029.
 PREP. EQUIPT—Shaker Screens.

DERING, J. K. COAL COMPANY

General Office, 1914 McCormick Bldg., Chicago, Ill.
 PR—J. K. Dering, Chicago, Ill.
 VP—(In charge of Operations)—J. B. Pauley, Chicago, Ill.
 VP—(In charge of Sales)—J. B. Royce, Chicago, Ill.
 TR—J. E. Ford, Chicago, Ill.
 GS—D. R. Medill, Clinton, Ind.
 PA—J. E. Ford, Chicago, Ill.
 CE—Allen & Garcia Co., Chicago, Ill.
 EM—A. H. Brymer, Clinton, Ind.
 EE—A. H. Jackson, Clinton, Ind.
 Dering No. 6 Mine; Shaft; No. 4 Seam, 60 in. thick.
 PO—Clinton, Ind.; SP—Same; CTY—Vigo; RR—C. & E. I.
 S of H—14 elec. locos. Track gauge 42 in.
 S of M—16 shortwall machs.
 PP—6 return tubular boilers, total 900 H. P., 2 gen. units, 250 volts D. C., 1 pump.
 EMP—380. Last years tonnage 595,500.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

Dering No. 8 Mine; Shaft; No. 3 Seam, 72 in. thick.
 PO—Clinton, Ind.; SP—Same; CTY—Vermillion; RR—C. & E. I.
 S of H—14 trolley pole type locos. Track gauge 42 in.
 S of M—16 shortwall machs.
 PP—5 return tubular boilers, total 625 H. P., 2 gen. units, 250 volts D. C., 2 pumps.
 EMP—425. Daily tonnage 3,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Loading Booms, Washeries.

DEVON & CLARK COAL COMPANY

General Office, Eugene, Ind.
 PR—L. R. Clark, Eugene, Ind.
 VP—W. C. DeVon, Eugene, Ind.
 TR—Estelle DeVon, Eugene, Ind.
 DeVon & Clark Mine; Shaft; Minchel Seam, 56-84 inches thick.
 PO—Eugene, Ind.; SP—Cayuga; CTY—Vermillion; RR—C. & E. I. P., L. & W.
 S of H—Mules.
 S of M—Hand.
 PP—70 H. P. water tube boiler.
 EMP—18. Last years tonnage 15,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.

DIAMOND COAL CO.

General Office, Evansville, Ind.
 GM—Raymond N. Lannert, Evansville, Ind.
 PA—Raymond N. Lannert, Evansville, Ind.
 Diamond Mine; Shaft; No. 5 Seam, 48 in. thick.
 PO—Evansville, Ind. SP—Same. CTY—Vanderburg; RR—C. & E. I.
 MS—Pius Schultze, Evansville, Ind.
 S of H—Mules and storage battery locos. Track gauge 36 in.
 S of M—Hand.
 PP—3 fire tube boilers, 180 H. P.
 EMP—83.
 SIZES SHIPT—Run of Mine, Pea, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

DRY FORK COAL CO.

General Office, Elberfeld, Ind.
 PR—A. Q. Jones, Indianapolis, Ind.
 VP—W. W. Hamond, Indianapolis, Ind.
 TR—C. P. Bartlett, Elberfeld, Ind.
 GM—C. A. Wiggs, Elberfeld, Ind.
 GS—C. A. Wiggs, Elberfeld, Ind.
 PA—C. A. Wiggs, Elberfeld, Ind.
 EM—H. N. Robinson, Evansville, Ind.
 EE—L. M. Quinn, Elberfeld, Ind.
 SA—Cedar Creek Coal Company, Merchants Bank Bldg., Indianapolis, Ind.
 Elberfeld Mine; Shaft; No. 5 Seam, 66 in. thick.
 PO—Elberfeld, Ind.; SP—Same; CTY—Warrick; RR—P. C. & St. L.

ELBERFIELD COAL MINING CO.

General Office, Elberfeld, Ind.
 PR—A. Q. Jones, Indianapolis, Ind.
 VP—W. W. Hamond, Indianapolis, Ind.
 TR—C. P. Bartlett, Elberfeld, Ind.
 GM—C. A. Wiggs, Elberfeld, Ind.
 GS—C. A. Wiggs, Elberfeld, Ind.
 PA—C. A. Wiggs, Elberfeld, Ind.
 EM—H. N. Robinson, Evansville, Ind.
 EE—L. M. Quinn, Elberfeld, Ind.
 SA—Cedar Creek Coal Company, Merchants Bank Bldg., Indianapolis, Ind.
 Elberfeld Mine; Shaft; No. 5 Seam, 66 in. thick.
 PO—Elberfeld, Ind.; SP—Same; CTY—Warrick; RR—P. C. & St. L.

S of H—Mules, trolley pole type and steam locos. Track gauge 36 in.
 S of M—Elec. puncher, chain breast type and shortwall machs.
 PP—3 Horizontal Tubular boilers, total 50 H. P., Gen. units, 250 volts D. C., 4 pumps.
 EMP—150. Last years tonnage 88,762.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Shaker Screens.

ENOS COAL MINING COMPANY, THE

General Office, Kirby Bldg., Cleveland, O.
 PR—George A. Enos, Cleveland, Ohio.
 VP—Fred S. McConnell, Cleveland, Ohio.
 TR—George A. Enos, Cleveland, Ohio.
 GM—Fred S. McConnell, Cleveland, Ohio.
 GS—E. K. Trickey, Oakland City, Ind.
 PA—Fred S. McConnell, Cleveland, O.
 SA—The George A. Enos Coal Co., Cleveland, Ohio.
 Enos Mine; Stripping; No. 5 Seam, 66 in. thick.
 PO—Oakland City, Ind.; SP—Same; CTY—Pike; RR—Southern.
 S of H—Steam locos. Track gauge 36 in.
 S of M—Steam shovels.
 PP—Water tube boilers, 125 H. P.
 EMP—150. Daily tonnage 1,500.
 SIZES SHIPT—Nut, Egg and Lump.
 PREP. EQUIPT—Shaker Screen and Picking Tables.

ENTERPRISE COAL MINING CO.

General Office, Sullivan, Ind.
 PR—R. J. Pickett, Sullivan, Ind.
 TR—Allen Zaaser, Sullivan, Ind.
 PA—A. R. Ladson, Sullivan, Ind.
 SA—H. C. Booth, Sullivan, Ind.
 Black Comet Mine; Shaft; No. 6 Seam, 66 in. thick.
 PO—Sullivan, Ind.; SP—Same; CTY—Sullivan; RR—I. C.
 S of H—Electric loco. Track gauge 42 inches.
 S of M—Hand and chain breast mach.
 PP—2—150 H. P. fire tube boilers, M. G. Set, 250 volts D. C.
 EMP—115. Daily tonnage 650.
 SIZES SHIPT—Run of Mine, Slack, Lump, Egg, Block.
 PREP. EQUIPT—Bar Screens.
 NOTE—Formerly operated by the Black Comet Coal Mining Company.

ERIE CANAL COAL CO.

General Office, Boonville, Ind.
 PR—T. D. Seales, Boonville, Ind.
 VP—Kenneth Weyerbacher, Boonville, Ind.
 TR—W. P. Weyerbacher, Boonville, Ind.
 GM—T. D. Seales, Boonville, Ind.
 GS—W. W. Deane, Chandler, Ind.
 PA—W. W. Deane, Chandler, Ind.
 SA—W. P. Weyerbacher, Boonville, Ind.
 Erie Canal Mine, Shaft, No. 5 Seam, 5 to 6 ft. thick.
 PO—Boonville, Ind.; SP—Chandler, Ind.; CTY—Warrick; RR—Southern.
 S of H—Mules and 2 trolley pole type locos. Track gauge 36 inches.
 S of M—5 chain breast type and 4 short-wall machs.
 PP—3 Horizontal tubular boilers, total 450 H. P., 2 gen. units, 250 volts D. C., 3 pumps.
 EMP—112. Daily tonnage 650.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

ESSANBEE MINES COMPANY

PR—W. S. Royle, Chicago, Ill.
 VP—H. A. Stark, Chicago, Ill.
 TR—H. A. Stark, Chicago, Ill.
 GM—Thos. Cokely, Clinton, Ind.
 GS—Thos. Cokely, Clinton, Ind.
 PA—Thos. Cokely, Clinton, Ind.
 SA—W. S. Royle & Co., Inc., 601-25 No. Dearborn St., Chicago, Ill.
 Essanbee No. 1 Mine; Shaft; No. 5 In diana Seam, 56 in. thick.
 PO—Clinton, Ind.; SP—West Clinton, Ind.; CTY—Vermillion; RR—C. T. H. & S. E.
 MS—Thos. Cokely, Clinton, Ind.
 S of H—Mules and elec. loco. Track gauge 42 in.
 PP—6 fire tube boilers, 250 H. P., power generated 1—300 K. W., 1—200 K. W. gen. units, 8 pumps.
 EMP—275. Last years tonnage 246,835.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Loading Booms, Picking Tables.

ESSANBEE MINES COMPANY

Essanbee No. 2 Mine abandoned 1919.
 Essanbee No. 3 Mine; No. 3 Seam, 75 in. thick.
 PO—Clinton, Ind.; SP—West Clinton, Ind.; CTY—Vermillion; RR—C. T. H. & S. E.
 S of H—Mules, trolley pole type locos. Track gauge 42 in.
 S of M—Hand.
 PP—6 fire tube boilers, 250 H. P., 1—300 K. W., 1—100 K. W. gen. units, 250 volts D. C., 5 pumps.

ESSANBEE MINES COMPANY

Essanbee No. 2 Mine abandoned 1919.
 Essanbee No. 3 Mine; No. 3 Seam, 75 in. thick.
 PO—Clinton, Ind.; SP—West Clinton, Ind.; CTY—Vermillion; RR—C. T. H. & S. E.
 S of H—Mules, trolley pole type locos. Track gauge 42 in.
 S of M—Hand.
 PP—6 fire tube boilers, 250 H. P., 1—300 K. W., 1—100 K. W. gen. units, 250 volts D. C., 5 pumps.

EMP—60.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

ETNICA COAL COMPANY

Out of Business.
 EUREKA BLOCK COAL CO.
 General Office, Terre Haute, Ind.
 PR—W. E. Eppert, Terre Haute, Ind.
 VP—Chas. W. Miller, Terre Haute, Ind.
 TR—W. E. Eppert, Terre Haute, Ind.
 SECY—C. H. McCalla, Terre Haute, Ind.
 GM—W. E. Eppert, Terre Haute, Ind.
 PA—C. H. McCalla, Terre Haute, Ind.
 SA—C. H. McCalla, Terre Haute, Ind.

Dixie Bee Mine; Shaft; No. 5 Seam; 72 in. thick.
 PO—Pimento, Ind.; SP—Same; CTY—Vigo; RR—C. & E. I.
 MS—Lewis Mantelet, West Terre Haute, Ind.
 S of H—Mules and motors. Track gauge 42 in.
 S of M—Hand.
 PP—4 150 H. P. fire tube boilers, gen. units, 250 K. W., 150 volts D. C., 3 pumps.
 EMP—90.
 PREP. EQUIPT—Shaker Screens.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.

FARMERSBURG COAL COMPANY

General Office, Farmersburg, Ind.
 PR—D. B. Scott, Linton, Ind.
 TR—Geo. R. Anthony, Farmersburg, Ind.
 GS—E. C. Goddard, Farmersburg, Ind.
 PA—Geo. R. Anthony, Farmersburg, Ind.
 SA—Sterling Midland Co., Chicago, Ill.
 Superior Mine; Shaft; No. 7 Seam; 60 inches thick.
 PO—Farmersburg, Ind.; SP—Same; CTY—Sullivan; RR—C. & E. I.
 S of H—Mules and 2 storage battery locos. Track gauge 37 inches.
 S of M—Hand.
 PP—2 150 H. P. water tube boilers, 35 K. W. gen. unit, 250 volts D. C., 4 pumps.
 EMP—135. Daily tonnage 700.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

FAYETTE REALTY & DEVELOPMENT CO.

General Office, Terre Haute, Ind.
 PR—W. J. Freeman, Terre Haute, Ind.
 VP—Ward H. Watson, Indianapolis, Ind.
 TR—Ward H. Watson, Indianapolis, Ind.
 GM—W. J. Freeman, Terre Haute, Ind.
 GS—N. J. Anderson, Terre Haute, Ind.
 PA—W. J. Freeman, Terre Haute, Ind.
 CE—Rush & Everson, Terre Haute, Ind.
 Sales Agent—Walter Bledsoe & Co., Terre Haute, Ind.

Fayette Mine; Shaft; No. 4 Seam, 60 to 64 in. thick.
 PO—Libertyville, Ind.; SP—West Clinton, Ind.; CTY—Vigo; RR—C. T. H. & S. E.
 S of H—Mules and 2 electric locos. Track gauge 42 in.
 S of M—9 electric machs.
 PP—4 return tubular boilers, total 500 H. P., 1 gen. unit, 250 volts D. C.
 EMP—350. Last fiscal year output, 398,638 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

FERGUSON COAL CO.

General Office, Clinton, Ind.
 PR—H. M. Ferguson, Clinton, Ind.
 VP—Arthur Ferguson, Clinton, Ind.
 TR—L. M. Ferguson, Clinton, Ind.
 GS—W. G. Spears, Terra Haute, Ind.
 PA—W. G. Spears, Terra Haute, Ind.
 EE—Albert Klensbner, Terre Haute, Ind.
 Additional Information on Page 389.

Submarine Mine; Shaft; Indiana No. 4 Seam, 60 in. thick.
 PO—Clinton, Ind.; SP—Same; CTY—Vigo; RR—C. & E. I.
 S of H—Mules and 4 trolley pole type locos. Track gauge 42 in.
 S of M—6 chain breast type and 8 shortwall machs.
 PP—6 water tube boilers, total 900 H. P., 75—250-300 K. W. gen. units, 230 to 250 volts D. C., 11 pumps.
 EMP—300. Daily tonnage 2,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables.
 NOTE—Formerly operated by Ferguson-Spears Coal Co.

FERGUSON-SPEARS COAL COMPANY

Now Ferguson Coal Co.

FLUHART-MCLOUD COLLIERIES CO.

Now Ayrshire District Collieries Co.

FORK RIDGE MINING COMPANY

PR—H. M. Clemens,Cannelton, Ind.
TR—Edw. J. Hackett, New Albany, Ind.
GM—Edw. J. Hackett, New Albany, Ind.
GS—Chas. Welder, Oakland City, Ind.
PA—J. H. Snyder, Louisville, Ky.
EM—Rush & Everson, Terre Haute, Ind.
SCO—Address the company, Buyer, Clark Whitman, Oakland City, Ind.
SA—Edward J. Hackett, Louisville, Ky.
Fork Ridge Mine; Shaft; No. 5 Seam, 50 in. thick.
PO—Oakland City, Ind.; SP—Same; CTY—Gibson; RR—Southern.
MS—John Gray, Oakland City, Ind.
S of H—Mules.
S of M—Hand.
PP—1 water tube boiler, total 150 H. P.
SIZES SHIPT—Run of Mine.

FORT BRANCH COAL MINING CO.

General Office, Fort Branch, Ind.
PR—W. A. Jackson, Evansville, Ind.
VP—Russell Jackson, Fort Branch, Ind.
TR—W. A. Jackson, Evansville, Ind.
GM—Russell Jackson, Fort Branch, Ind.
GS—Russell Jackson, Fort Branch, Ind.
PA—Russell Jackson, Fort Branch, Ind.
CE—Rush & Everson, Terre Haute, Ind.
EE—John Hornbrook, Princeton, Ind.
SCO—Address the company, Buyer, W. G. Jackson, Evansville, Ind.
SA—W. A. Jackson, Evansville, Ind.
Fort Branch No. 2 Mine; Shaft; No. 5 Seam, 60 in. thick.
PO—Fort Branch, Ind.; SP—Same; CTY—Gibson; RR—C. & E. I.
MS—Elba Yeast, Fort Branch, Ind.
S of H—Mules and trolley pole type locos. Track gage, 36 in.
S of M—10 shortwall machs.
PP—Power purchased, 2,300 volts A. C., M. G. set, 250 volts D. C., 1 pump.
EMP—170. Last years tonnage 123,300.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

FORT HARRISON MINING CO.

General Office, Terre Haute, Ind.
PR—G. Edward Talley, Terre Haute, Ind.
TR—Homer B. Talley, Terre Haute, Ind.
GS—John A. Templeton, Terre Haute, Ind.
EM—Geo. Fick, Terre Haute, Ind.
SA—Walter Bledsoe & Co., Terre Haute, Ind.

Clovelly Mine; Shaft; Clinton No. 5 Seam; 60 inches thick.
PO—Terre Haute, Ind.; SP—W. Terre Haute, Ind.; CTY—Vigo; RR—T. H. & S. E.
MS—Wm. Strachan, Terre Haute, Ind.
S of H—Mules, 3—6 ton trolley pole type locos. Track gage 42 in.
S of M—Hand.
PP—4—150 H. P. fire tube boilers, 1—100, 1—200 K. W. Gen. Units, 250 volts D. C., 3 pumps.
EMP—200. Daily output, 2000 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Gravity Screens.

Tallevdal and Badyke Mines; Shafts; No. 4 Seam, 68 inches thick.
PO—Terre Haute, Ind.; SP—Clovelly, Ind.; CTY—Vigo; RR—C. M. & St. P.
MS—Wm. Strachan, Terre Haute, Ind.
SM—Victor H. Nash, Terre Haute, Ind.
S of H—Trolley pole type locos, mules. Track gage 42 inches.
S of M—9 chain breast, 14 longwall machs.
PP—10 150 H. P. water tube boilers, gen. units, 250 volts D. C., 8 pumps.
EMP—200.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Loading Rooms.

FOX HILL COAL & MINING CO.

General Office, Huntington, Ind.
PR—C. M. Dowell, Huntington, Ind.
VP—C. E. Doam, Booneville, Ind.
TR—D. K. Dowell, Huntington, Ind.
GM—C. M. Dowell, Huntington, Ind.
PA—C. M. Dowell, Huntington, Ind.
Fox Hill No. 4 Mine; Slope; No. 4 Seam, 48 in. thick.
PO—Lincolnton City, Ind.; SP—Same; CTY—Spencer; RR—Southern.
MS—C. R. Woods, Lincoln City, Ind.
S of H—Mules and main rope gasoline loco. Track gage, 36 in.
S of M—Hand.
PP—2 pumps.
EMP—20. Last years tonnage 20,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

FRANCISCO MINING COMPANY.

General Office, 1007 Merchants Bank Bldg., Indianapolis, Ind.
PR—William Johnson, Indianapolis, Ind.
VP—Tyler L. Andrews, Lawrenceville, Ind.
TR—J. R. Henderson, Vincennes, Ind.

GM—William Johnson, Indianapolis, Ind.
GS—W. E. Cox, Frankfort, Ind.
PA—J. B. Hendrick, Vincennes, Ind.
EM—W. E. Cox, Vincennes, Ind.
EE—John Jackson, Frankfort, Ind.
SA—J. L. Thompson, Indianapolis, Ind.
Francisco Mine; Shaft; No. 5 Seam, 72 in. thick.
PO—Francisco, Ind.; SP—Same; CTY—Gibson; RR—Southern.
S of H—Mules and 3 5-ton locos.
Track gage 36 in.
S of M—Hand.
PP—3 fire tube boilers, 350 H. P., 1—125 K. W. gen. unit, 250, 275 volts, D. C., 3 pumps.
EMP—250. Daily tonnage 1,600.
SIZES SHIPT—Run of Mine.

FRANKLIN, TANDY & LOWISH, INC.

Out of Business.

FRIEKE & BLAIR COAL CO.

General Office, 516-17 Citizens Bank Bldg., Evansville, Ind.
PR—L. E. Fricke, Evansville, Ind.
VP—John H. Blair, Urbana, Ill.
TR—L. E. Fricke, Evansville, Ind.
GM—John H. Blair, Urbana, Ill.
GS—J. C. Wright, 911 N. 3rd St., Booneville, Ind.
PA—John H. Blair, Urbana, Ill.
CE—John H. Blair, Urbana, Ill.
EE—Carl Barclay, Booneville, Ind.
SA—Fricke & Blair Co., Evansville, Ind.
No. 1 Mine; Shaft; Ind. No. 5 Seam, 60 inches thick.
PO—Evansville, Ind.; SP—Mitchem Sta. Ind.; CTY—Warrick; RR—E. S. & N. and Sou.
S of H—Mules and elec. locos. Track gage 36 inches.
S of M—Hand and shortwall machs.
PP—2 fire tube boilers, 125 H. P. each, gen. units, 1—50 K. W., 1—60 K. W., 250 volts D. C.
EMP—125. Daily tonnage 500.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.
NOTE—Formerly operated by the Possum Ridge Coal Co.

GLEN AYR COAL COMPANY.

General Office, Terre Haute, Ind.
PR—W. J. Freeman, Terre Haute, Ind.
VP—David Ingle, Evansville, Ind.
TR—W. J. Freeman, " "
GM—C. J. Freeman, Terre Haute, Ind.
GS—Wm. Wright, Terre Haute, Ind.
PA—C. J. Freeman, Terre Haute, Ind.
CE—Rush & Everson, " "
SA—Walter Bledsoe & Co., Terre Haute, Ind.
Glen Ayr No. 1 Mine; Shaft; No. 4 Seam, 48 to 72 in. thick.
PO—Glen Ayr, Ind.; SP—Terre Haute, Ind.; CTY—Vigo; RR—Penna.
MS—Jas. Nevins, Terre Haute, Ind.
SM—C. J. Freeman, " "
S of R—3 elec. locos. and mules. Track gage 40 in.
S of M—6 longwall and 3 chain breast type machs.
PP—6 fire tube boilers, 900 H. P., 3—100 K. W. gen. units, 240 volts D. C.
EMP—200. Last years tonnage 200,384.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.
Glen Ayr No. 2 Mine; see Glendale Coal Co.

GLENCO COAL COMPANY.

General Office, 406 Opera House Bldg., Terre Haute, Ind.
PR—Hugh Shirkie, Terre Haute, Ind.
VP—C. A. Rickett, Chicago, Ill.
TR—Ryan G. Tighe, Chicago, Ill.
GM—Hugh Shirkie, Terre Haute, Ind.
GS—E. H. Shirkie, Terre Haute, Ind.
PA—E. A. Shirkie, Terre Haute, Ind.
EM—H. C. Henneman, Terre Haute, Ind.
Sales Agency, Rickett Coal & Coke Co., Chicago, Ill.

Glenco No. 1 Mine; Shaft; No. 4 Seam, 54 in. thick.
PO—Terre Haute, Ind.; SP—Same; CTY—Vigo; RR—P. C. & St. L.
MS—James Baxter, Terre Haute, Ind.
S of H—3 elec. locos. Track gage 40 in.
S of M—Hand.
PP—1 water tube boiler.
EMP—200. Daily tonnage 1,300.
SIZES SHIPT—Run of Mine, Slack, Lump.

GLENDAL COAL COMPANY.

General Office, 403 Opera House, Terre Haute, Ind.
PR—Hugh Shirkie, Terre Haute, Ind.
VP—C. A. Rickett, Chicago, Ill.
TR—Ryan G. Tighe, Chicago, Ill.
GM—Earl H. Shirkie, Terre Haute, Ind.
GS—James Baxter, Terre Haute, Ind.
PA—Earle H. Shirkie, Terre Haute, Ind.
EM—H. C. Henneman, Terre Haute, Ind.

Glendale No. 1 Mine; Shaft, No. 4 Seam, 40 to 50 in. thick.
PO—Terre Haute, Ind.; SP—Savoyville, Ind.; CTY—Vigo; RR—Penna.
MS—Geo. Dodge, Savoyville, Ind.
S of H—3 trolley pole type locos. Track gage 40 in.
S of M—Hand.
PP—3 water tube boilers, 1 gen. unit, 250 volts D. C., 2 pumps.
EMP—200. Daily tonnage 1,000.
SIZES SHIPT—Run of Mine, Slack, Lump.

GLOBE MINING COMPANY.

General Office, Indianapolis, Ind.
PR—J. T. Moorman, Indianapolis, Ind.
TR—O. R. Scott, Indianapolis, Ind.
GS—E. B. Hendrix, Petersburg, Ind.
EM—Fred Rush, Terre Haute, Ind.
Globe Mine; Stripping; Ayrshire Seam; 52 inches thick.
PO—Petersburg, Ind.; SP—Same; CTY—Vigo; RR—Southern.
S of H—Steam locos. Track gage 56 1/2 inches.
S of M—Stripping.
EMP—80. Last fiscal year output, 107,000 tons.

Roger Mine; Stripping; Roger Seam, 96 in. thick.
PO—Petersburg, Ind.; SP—Same; CTY—Vigo; RR—Big 4.
S of H—Steam loco. Track gage 56 1/2 inches.
S of M—Hand.
EMP—50.
SIZES SHIPT—Run of Mine.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

GLOVER COAL CO.

General Office, Brazil, Ind.
PR—H. A. Glover, Brazil, Ind.
GM—Geo. McGranahan, Brazil, Ind.
Twin Hills Mine; Drift and Stripping; No. 3 Seam, 84 inches thick.
PO—Brazil, Ind.; SP—Same; CTY—Vigo; RR—C. & E. T.
MS—Geo. McGranahan, Brazil, Ind.
S of H—Mules and main and tail rope. Track gage 36 inches.
S of M—Hand.
PP—2 water tube boilers, 100 H. P. 4 pumps.
EMP—50. Daily tonnage, 350.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by the Twin Hills Coal Co.
Old information.

GRANT COAL & MINING COMPANY

General Office, 1304 First National Bank Bldg., Chicago, Ill.
PR—J. E. Baum, Jr.,Chicago, Ill.
TR—Richard Fitzgerald, Chicago, Ill.
GS—C. E. Jaenisch,Terre Haute, Ind.
PA—C. E. Jaenisch, " "
MM—Fred Houser, " "
EM—Rush & Everson, Terre Haute, Ind.
EE—Rubin Crosby, New Goshen, Ind.
SCO—Export Mercantile Co., Buyer, R. B. Eppert, Terre Haute, Ind.
SA—Address the Company, Chicago, Ill.
Maple Grove Mine; Shaft; No. 5 Seam; 56 in. thick.
PO—New Goshen, Ind.; SP—Frt. New Goshen, Ind. Exp. Terre Haute, Ind.; CTY—Vigo; RR—C. M. & St. P.
S of H—3 trolley pole type, 6 storage battery, 1 comb. locos. Track gage 42 in.
S of M—22 comp. air punching machs. and hand.
PP—6 water tube boilers, 825 H. P., 2 gen. units, 250 volts D. C., 6 pumps.
EMP—400. Last years tonnage 314,025.
SIZES SHIPT—Run of Mine, Nut, Slack, Egg, Lump.
PREP. EQUIPT—Gravity and shaker Screens.

GREEN MOUND COAL COMPANY

General Office, Box 244, Washington, Ind.
PR—T. C. Rugg, Evansville, Ind.
VP—T. J. Howard, Evansville, Ind.
TR—Jas Platt, Evansville, Ind.
GM—Frank Platt, Evansville, Ind.
GS—Geo. Ritter, Washington, Ind.
PA—Jas. Platt, Evansville, Ind.
CE—John Blair, Washington, Ind.
EM—Geo. Ritter, Washington, Ind.
SA—J. R. Morris Coal Co., Indianapolis, Ind.

Thrifty No. 2 Mine; Shaft; No. 5 Seam; 66 inches thick.
PO—Washington, P. O. Box 244, Ind.; SP—Same; CTY—Davies; RR—E. & I.
S of H—Mules and steam loco.
S of M—Hand.
PP—Fire tube boiler, 80 H. P.
EMP—40.
SIZES SHIPT—Run of Mine.
Old information.

GREEN VALLEY COAL COMPANY.

General Office, Terre Haute, Ind.
PR—David Ingle, Evansville, Ind.
VP—Val Martin, Bicknell, Ind.
TR—W. J. Freeman, Terre Haute, Ind.
GM—W. J. Freeman, Terre Haute, Ind.
GS—W. J. Freeman, Terre Haute, Ind.
PA—W. J. Freeman, Terre Haute, Ind.
EM—Rush & Everson, Terre Haute, Ind.
EE—Geo. M. Hawry, Jassonville, Ind.
SA—Walter Bledsoe & Co., Terre Haute, Ind.
Green Valley Mine; Shaft; No. 4 Seam; 60 in. thick.
PO—Jassonville, Ind.; SP—Same; CTY—Vigo; RR—Chicago, Terre Haute & South Eastern.
MS—Wm. Jams,Jassonville, Ind.
S of H—Mules and 2 electric locos. Track gage 38 in.
S of M—10 chain breast type machs.
PP—Power purchased, Transformer 11,000 to 2,300 volts A. C., rotary converters, 1—250 K. W. gen. units, 250 volts D. C., 6 pumps.
EMP—275. Last years tonnage 184,000.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

HALL-ZIMMERMAN COAL CO.

General Office, Terre Haute, Ind.
PR—W. C. Hall, Sr.,Brazil, Ind.
TR—W. Paul Zimmerman, " "
PA—W. Paul Zimmerman, " "
GM—W. Paul Zimmerman, " "
GS—John Royle, 715 S. 7th. St., Terre Haute, Ind.
Sales Agent, Wm. Paul Zimmerman, Terre Haute, Ind.
Wizard No. 2 Mine; Shaft; No. 5 Seam, 54 in. thick.
PO—Terre Haute, Ind. SP—Sameville, Ind. CTY—Vigo. RR—P. B. R.
S of H—Mules and trolley pole type locos. Track gage, 36 in.
S of M—Hand.
PP—3 return tubular boilers, total 450 H. P., 1 100 K. W., 1 50 K. W. gen. units, 250 volts D. C., 8 pumps.
EMP—150. Last fiscal year output, 225,000 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

HAMILTON COAL MINING COMPANY.

General Office, Linton, Ind.
PR—C. S. Cunningham, Martinsville, Ind.
VP—D. R. Scott, Linton, Ind.
TR—W. J. Hamilton,Linton, Ind.
GM—W. J. Hamilton, " "
GS—Jas. E. Davis, Linton, Ind.
PA—W. J. Hamilton, " "
SA—Walter Bledsoe & Co., Terre Haute, Ind.
Hamilton Mine; Shaft; No. 6 Seam, 60 in. thick.
PO—Linton, Ind.; SP—Same; CTY—Sullivan; RR—C. I. & L.
S of H—Mules, 1 trolley pole type loco. Track gage 42 in.
S of M—6 shortwall machs.
PP—Power purchased, transformer 2300—220 volts A. C., M. G. Sets, 220 and 250 volts D. C., water tube boiler, 3 pumps.
EMP—175. Last years tonnage 172,631.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Loading Rooms.
Mehawk Mine; Shaft; No. 5 Seam, 60 in. thick.
PO—Sheburn, R. R. A., Ind.; SP—Hymara, Ind.; CTY—Sullivan; RR—C. M. & St. P.
S of H—Mules and storage battery locos. Track gage 42 in.
S of M—3 shortwall machs.
PP—Power purchased, 2200—250 volts A. C., rotary converters, 250 volts D. C., 2—150 H. P. water tube boilers, 2 pumps.
EMP—25.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Loading Rooms.

HARRISON COAL & MINING CO.

General Office, Clay City, Ind.
PR—A. C. Nash, Clay City, Ind.
VP—A. C. Nash, Clay City, Ind.
GM—H. Whitman, Clay City, Ind.
GS—J. Luther, Clay City, Ind.
PA—R. C. Nash, Clay City, Ind.
EM—G. Gelf, Clay City, Ind.
EE—Wm. Tracy, Clay City, Ind.
SCO—Harrison Store; Buy R. C. Nash, Clay City, Ind.
Harrison No. 6 Mine; Shaft; No. 2 Block Seam, 36 in. thick.
PO—Clay City, Ind.; SP—Same; CTY—Clay City; RR—Big 4 and C. E. & I.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
PP—2—50 H. P. fire tube boilers, 3 pumps.
EMP—50. Last years tonnage 22,000.
SIZES SHIPT—Run of Mine, Slack, Lump.

HAYWOOD, JESSE.

General Office, Jasonville, Ind.

Haywood Mine; Stripping; No. 4 Seam, 60 in. thick.
 PO—Jasonville, Ind.; SP—Same; CTY—Greene.
 MS—Jesse Haywood, Jasonville, Ind.
 S of H—Mules.
 PP—1—30 H. P. water tube boiler, 2 pumps.

HOCH, M. COAL CO., INC.

General Office, 412 8th St., Evansville, Ind.

TR—M. Hoch, Evansville, Ind.
 GM—David Ellison, Evansville, Ind.
 GS—David Ellison, Evansville, Ind.

Stripping; 54 inches thick.
 PO—Buffalo, Ind.; SP—Lincoln City, Ind.; CTY—Spencer; RR—Southern.
 Track gage 42 inches.

HORRALL, L. R. & SON.

Now Crescent Coal Co.

HORION COAL COMPANY

General Office, Newburgh, Ind., R. R. No. 1.

GM—Paul E. Horton, Newburgh, Ind., R. R. No. 1.
 SA—Paul E. Horton, Newburgh, Ind., R. R. No. 1.

Horton Mine; Drift; No. 5 Seam, 48 inches thick.
 PO—Newburgh, Ind.; SP—Hartfield, Ind.; CTY—Warrick; RR—E. & O. V. to Ill. Central.
 MS—Paul E. Horton, Newburgh, Ind.
 S of H—Mules. Track gage 40 inches.
 S of M—Hand.
 EMP—12. Daily tonnage 100.
 SIZES SHIPT—Run of Mine.

HOWELL COAL COMPANY.

General Office, Center Point, Ind.
 PR—Griff Howell, Center Point, Ind.
 VP—Griff Howell, Center Point, Ind.
 TR—John Howell, Center Point, Ind.
 GM—Griff Howell, Center Point, Ind.
 GS—Arthur Howell, Center Point, Ind.
 PA—John Howell, Center Point, Ind.

Howell Pit; Shaft; Brazil Block Seam, 36 in. thick.
 PO—Center Point, Ind.; SP—Same; CTY—Clay; RR—P. C. & St. L.
 MS—John Howell, Center Point, Ind.
 S of H—Mules and rope. Track gage 32 in.
 S of M—Hand.
 PP—1 fire tube boiler, 3 pumps.
 EMP—10. Daily tonnage 100.
 SIZES SHIPT—Slack, Lump.

HYMERA COAL MINING CO.

General Office, Hymera, Ind.
 PR—Mr. O. W. Turner, Hymera, Ind.
 VP—Frank McCrocklin, Hymera, Ind.
 TR—Mr. Frank Griss, Hymera, Ind.
 GM—Mr. O. W. Turner, Hymera, Ind.
 GS—Mr. Frank Griss, Hymera, Ind.
 PA—Mr. O. W. Turner, Hymera, Ind.
 SA—D. C. Shoemaker Coal Co., 740 McCormick Bldg., Chicago, Ill.

Hymera No. 1 Mine; Shaft; No. 5 Seam, 58 in. thick.
 PO—Hymera, Ind.; SP—Same; CTY—Sullivan; RR—C. & E. I.
 MS—Mr. Frank McCrocklin, Hymera, Ind.
 S of H—Mules, 2 elec. motors. Track gage 3 in.
 S of M—Hand.
 PP—2 fire tube boilers, 1 pump.
 EMP—100. Last fiscal year output, 118,458 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

Hymera No. 2 Mine; Shaft; No. 5 Seam, 72 in. thick.
 PO—Hymera, Ind.; SP—Same; CTY—Sullivan; RR—C. M. & St. P.
 S of H—Mules. Track gage 36 in.
 S of M—Hand and 10 Mining machs.
 PP—2 fire tube boilers, 2 water tube boiler, 1 engine, 2 pumps.
 EMP—200.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

INDIAN CREEK COAL & MINING CO.

General Office, 817 Traction Terminal Bldg., Indianapolis, Ind.
 PR—F. D. Logsdon, Indianapolis, Ind.
 VP—C. L. Slinkard, Indianapolis, Ind.
 TR—R. E. Neal, " "
 GM—F. E. Neal, " "
 PA—C. N. Elliott, " "
 EM—Joseph Roach, Vincennes, Ind.
 EE—Thos. James, Vincennes, Ind.
 SCO—Address the Company, Buyer, D. L. Donaldson, Vincennes, Ind.
 SA—H. E. Neal, Indianapolis, Ind.

Indian Creek Mine, Shaft, No. 5 Seam, 6 to 7½ ft. thick.
 PO—Bicknell, Ind.; SP—Same; CTY—Knox; RR—P. C. & St. L.

MS—P. L. Donle, Vincennes, Ind.
 S of H—Trolley pole type locos. Track gage 42 in.
 S of M—20 Longwall machs.
 PP—Power purchased, 7 water tube boilers, 10 pumps.
 EMP—500. Last years tonnage 3,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

INDIANA & ILLINOIS COAL CORP.

General Office, 37 W. Van Buren St., Chicago, Ill.

PR—T. C. Keller, Chicago, Ill.
 VP—A. B. Steffens, Chicago, Ill.
 GS—H. C. Perry, Hillsboro, Ill.
 PA—T. P. Keller, Chicago, Ill.

Additional Information on Page 392.

No. 1 Mine; Shaft; No. 4 Seam, 72 in. thick.
 PO—Clinton, Ind.; SP—Same; CTY—Vermilion; RR—C. & E. I.
 SM—J. M. Ledford, Clinton, Ind.
 S of H—Mules, 6 trolley pole type locos.
 Track gage 42 inches.
 S of M—12 shortwall machs.
 PP—Power purchased. Transformer 23,000 to 220 volts A. C., M. G. sets, 1—150 K. W., 1—300 K. W., 250 volts D. C.
 EMP—110. Daily output, 750 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Shaker Screens.

No. 2 Mine; Shaft; No. 5 Seam, 58 in. thick.
 PO—Clinton, Ind.; SP—Same; CTY—Vermilion; RR—C. E. & I.
 SM—J. M. Ledford, Clinton, Ind.
 S of H—Mules, 5 trolley pole type locos.
 Track gage 42 inches.
 S of M—Hand.
 PP—2 fire tube boilers, total 400 H. P., gen. unit, 250 volts D. C., 4 pumps.
 EMP—114. Daily output, 600 tons.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

No. 5 Mine; Shaft; No. 4 Seam, 52 in. thick.
 PO—Clinton, Ind.; SP—Same; CTY—Vermilion; RR—C. E. & I.
 SM—Thos. Williams, Clinton, Ind.
 S of H—Mule, 4 trolley pole type locos.
 Track gage 37 inches.
 S of M—Hand.
 PP—4 fire tube boilers, total 600 H. P., gen. units, 250 volts D. C., 4 pumps.
 EMP—150. Daily output, 650 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

No. 8 Mine; Shaft; No. 5 Seam; 66 inches thick.
 PO—Paxton, Ind.; SP—Same; CTY—Sullivan; RR—C. & E. I.
 MS—Andrew Dockerty, Sullivan, Ind.
 SM—Charles Warren, Paxton, Ind.
 S of H—9 elec. trolley pole type locos.
 Track gage 42 inches.
 S of M—13 shortwall machs.
 PP—4 water tube boilers, total 600 H. P., 2—150 K. W. gen. units, 250 volts D. C., 9 pumps.
 EMP—160. Daily output, 1,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screen.

INDIANA HOCKING COAL COMPANY.

Now Peabody Coal Company.

INDIANA POWER COMPANY

General Office, 327 S. LaSalle St., Chicago, Ill.

PR—H. L. Clarke, Chicago, Ill.
 VP—C. E. Gregg, Vincennes, Ind.
 GM—H. T. Pritchard, Vincennes, Ind.
 PA—A. H. Davis, Chicago, Ill.
 EE—J. N. Caravan, Chicago, Ill.

Linn Mine; Shaft; No. 6 Seam, 48 to 54 in. thick.
 PO—Bicknell, Ind.; SP—Same; CTY—Knox; RR—Vandalia, I. & V.
 MS—J. H. Cornelius, Bicknell, Ind.
 S of H—Mules. Track gage 36 in.
 S of M—Hand.
 PP—Power purchased. Transformer 33,000 to 2,300 volts A. C., 3—200 K. W. Trans.
 EMP—100. Last years tonnage 65,000.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Screens.
 Note—Successors to Linn Coal Co.

INLAND COAL & MINING COMPANY.

Sterling Mine now Shelby Coal & Clay Company.

INTERSTATE COAL CO. OF INDIANA

General Office, 308-9-10 McKeen Bldg., Terre Haute, Ind.

PR—Steward Shirkie, Terre Haute, Ind.
 VP—John Shirkie, Terre Haute, Ind.
 TR—John Shirkie, Terre Haute, Ind.
 GM—Steward Shirkie, Terre Haute, Ind.
 GS—Fred Mitch, Terre Haute, Ind.
 PA—Steward Shirkie, Terre Haute, Ind.

EM—Leonard Henneman, Terre Haute, Ind.
 EE—Kirby Phillips, Terre Haute, Ind.
 SA—West Clinton Coal Co., McCormick Bldg., Chicago, Ill.

Interstate No. 1 Mine; Shaft; No. 5 Seam; 54 inches thick.
 PO—Blanford, Ind.; SP—Same; CTY—Vermilion; RR—C. M. & St. P.
 S of H—Trolley pole type locos. Track gage 42 inches.
 S of M—3 fire tube boilers, 150 H. P., 1 250 and 150 K. W. gen. units, volts D. C.
 EMP—160. Last fiscal year output, 168,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens.

INTERURBAN COAL COMPANY

General Office, 139 South Main St., Clinton, Ind.

PR—Henry Meyer, Clinton, Ind.
 TR—I. D. White, Clinton, Ind.
 GM—W. A. Satterlee, Clinton, Ind.
 GS—Roscoe Russell, 918 North 9th St., Terre Haute, Ind.
 PA—Willis A. Satterlee, Clinton, Ind.
 SA—Murphy Spensley Coal Co., Terre Haute, Ind.

Cloverland Mine; Shaft; No. 3 Seam, 78 in. thick.
 PA—Brazil, Ind., R. R. 2; SP—Seelyville, Ind.; CTY—Clay; RR—P. C. & St. L.
 S of H—Mules. Track gage 36 in.
 S of M—Hand.
 PP—2 pumps.
 EMP—85. Last years tonnage 88,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

J. M. COAL & MINING CO.

General Office, Linton, Ind.

J. & M. Mine; Shaft; No. 5 Seam, 72 in. thick.
 PO—Linton, Ind.; SP—Same; CTY—Greene; RR—Moon.
 MS—Ed. Church, Linton, Ind.
 SM—R. C. Jones, Linton, Ind.
 S of H—Mules. Track gage 42 inches.
 S of M—Hand.
 PP—2 water tube boilers, 2 pumps.
 EMP—150. Daily tonnage 600.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

JACKSON HILL COAL & COKE CO.

General Office, Terre Haute, Ind.
 PR—C. Fairbanks, Terre Haute, Ind.
 TR—J. C. Kolsem, Terre Haute, Ind.
 GM—J. C. Kolsem, Terre Haute, Ind.
 GS—W. E. Evans, Terre Haute, Ind.
 PA—J. C. Kolsem, Terre Haute, Ind.
 EM—Rush & Everson, Terre Haute, Ind.
 SCO—Address the company, Buyer, C. O. Bidwell, Shelbyville, Ind.

No. 4 Mine; Shaft; No. 6 Seam, 68 inches thick.
 PO—Shelbyville, R. R. "A." Ind.; SP—Ex. Same; Fr., Kolsem, Ind.; CTY—Sullivan; RR—C. & E. I.
 MS—Jas. Brooks, Shelbyville, Ind.
 S of H—Mules, trolley pole type loco. Track gage 38 inches.
 S of M—Chainbreast type mach.
 PP—Fire tube boiler, gen. unit, 250 volts D. C.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

No. 5 Mine; Shaft; No. 4 Seam, 60 inches thick.
 PO—West Terre Haute, R. R. A. Ind.; SP—Clinton, Ind.; CTY—Vigo; RR—C. & E. I.
 MS—Thos. W. Faulds, Clinton, Ind.
 S of H—Mules, trolley pole type and storage battery locos. Track gage 42 inches.
 S of M—Chainbreast type and shortwall machs.
 PP—Fire tube boiler, gen. unit, 250 volts D. C.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

No. 6 Mine; Shaft; No. 5 Seam, 54 inches thick.
 PO—Clinton, R. R. No. 2, Ind.; SP—Libertyville, Ind.; CTY—Vermilion; RR—Terre Haute Div., C. M. & St. P.
 MS—Jesse Hamilton, R. R. "E", Terre Haute, Ind.
 S of H—Trolley pole type and storage battery locos. Track gage 46 in.
 S of M—Hand.
 PP—Fire tube boiler, gen. unit, 250 volts D. C.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

No. 7 Mine; Shaft; Jackson Hill Glen-dora Seam.
 PO—Shelburn, R. R. "A." Ind.; SP—Same; Fr., Kolsem, Ind.; CTY—Vermilion; RR—C. & E. I.
 S of H—Mules.
 S of M—Machs.
 PP—Fire tube boiler, gen. units, 250 volts D. C.
 SIZES SHIPT—Run of Mine, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

JASONVILLE FOURTH VEIN COAL CO.

Out of Business.

JEWELL COAL CO.General Office, Linton, Ind.
OPERATOR—C. A. Murphy, Linton, Ind.

Jewell Mine; Shaft; Fifth Vein, 72-90 in. thick.
 PO—Linton, Ind.; SP—Exp. Linton, Ind.; Freight Victoria, Ind.; CTY—Greene; RR—Illinois Central.
 MS—Arthur Love, Linton, Ind.
 S of H—Mules and 1 steam loco. Track gage 36 inches.
 S of M—Hand.
 PP—2 water tube boilers, 150 H. P., 3 pumps.
 EMP—84. Daily output, 550 tons.
 SIZES SHIPT—Run of Mine.

JOHNSON, W. E. & COMPANY.

GM—W. E. Johnson, Farmersburg, Ind.
 PA—Fred B. Lash, " "
 EM—M. Shumaker, " "
 Lash Mine; Shaft; No. 7 Seam, 54 in. thick.
 PO—Farmersburg, Ind.; SP—Same; CTY—Sullivan; RR—C. & E. I.
 MS—W. E. Johnson, Farmersburg, Ind.
 S of H—Mules.
 S of M—Hand.
 SIZES SHIPT—Run of Mine, Lump.
 (Old information.)

KEY COAL COMPANY

General Office, Evansville, Ind.
 PR—Martin Emig, Jr., Evansville, Ind.
 VP—Louis A. Grupel, Evansville, Ind.
 TR—Julius Rastatter, Evansville, Ind.
 GM—Martin Emig, Jr., Evansville, Ind.
 GS—Edgar Traylor, Evansville, Ind.

Caledonia No. 3 Mine; Shaft Indiana No. 5 Seam, 80 in. thick.
 PO—Boonville, Ind.; SP—Chandler, Ind.; CTY—Warrick; RR—Southern.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 PP—2 fire tube boilers, 150 H. P., 5 pumps.
 EMP—150. Last years tonnage 180,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

KNOX COUNTY FOURTH VEIN COAL CO.

General Office, 818 Traction Bldg., Indianapolis, Ind.
 PR—E. B. Logsdon, Indianapolis, Ind.
 TR—C. N. Elliott, Indianapolis, Ind.
 GS—Wm. P. McQuade, Vincennes, Ind.
 PA—C. N. Elliott, Indianapolis, Ind.

No. 1 Mine; Shaft; No. 4 Seam, 52 in. thick.
 PO—Edwardsport, Ind.; SP—Same; CTY—Knox; RR—P. C. & St. L.
 S of H—Trolley pole type locos. Track gage 42 in.
 S of M—8 shortwall machs.
 PP—3 150 H. P. water tube boilers, motor gen. sets, 125 K. W., 250 volts D. C., 5 pumps.
 EMP—127. Last fiscal year output, 111,847 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Gravity and Shaker Screens.

LE NOIR COAL COMPANY.

General Office, Terre Haute, Ind.
 PR—C. H. Jones, Terre Haute, Ind.
 VP—P. E. Goodrich, Winchester, Ind.
 TR—C. H. Jones, Terre Haute, Ind.
 GM—H. M. Stout, Terre Haute, Ind.
 GS—J. H. Needhamer, Jasonville, Ind.
 PA—H. M. Stout, Terre Haute, Ind.
 Sales Agency, Le Noir Coal Co. Sales Agent, C. H. Jones, Terre Haute, Ind.

Le Noir Mine; Shaft; No. 4 Seam, 50 in. thick.
 PO—Jasonville, Ind.; SP—Midland; CTY—Greene; RR—C. T. H. & S. E.
 S of H—Mules, trolley pole type and storage battery locos. Track gage, 42 in.
 S of M—2 chain breast type and 7 shortwall machs.
 PP—Power purchased, 250 volts D. C., 3 water tube boilers, 150 H. P., 4 pumps.
 EMP—210. Last years tonnage 150,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

LINCOLN COAL CO.

General Office, 408½ Main St., Evansville, Ind.
PR—J. Percy Long, Evansville, Ind.
VP—G. L. Schellen, Louisville, Ky.
TR—C. F. Wilson, Evansville, Ind.
GM—C. F. Wilson, Evansville, Ind.
GS—C. F. Wilson, Evansville, Ind.
PA—C. F. Wilson, Evansville, Ind.
CE—C. F. Wilson, Evansville, Ind.

Lincoln Mine; Slope; 4th Vein, 44-54 in. thick.

PO—Lincoln City, Ind.; SP—Same; CTY—Spencer; RR—Southern.

S of H—Rope. Track gage, 42 in.

S of M—Hand.

PP—1 pump.

Last years tonnage 12,000 tons.

SIZES SHIPT—Run of Mine.

LINDSAY, FRODERMAN & HOPKINS

General Office, Saline City, Ind.
PR—Sam Lindsay, Saline City, Ind.
TR—Fred Froderman, Center Point, Ind.
GM—Sam Lindsay, Saline City, Ind.
SA—Lindsay & Froderman, Saline City, Ind.

Indiana Block No. 2 Mine; Shaft; Seam 36 inches thick.

PO—Saline City, Ind.; SP—Same; CTY—Clay; RR—E. I.

MS—Sam Lindsay, Saline City, Ind.

S of H—Mules. Track gage 36 inches.

S of M—Hand.

PP—1 fire tube boiler, 60 H. P., 2 pumps.

EMP—9. Last years tonnage 1,865.

SIZES SHIPT—Slack, Block.

PREP. EQUIPT—Bar Screens.

Old Information.

LINTON COAL COMPANY.

General Office, 701 Tract, Bldg., Indianapolis, Ind.

PR—M. L. Gould, Indianapolis, Ind.

VP—J. D. Gould, Indianapolis, Ind.

TR—J. D. Gould, Indianapolis, Ind.

EE—O. A. Kelsey, Indianapolis, Ind.

Little Betty Mine; Shaft; No. 4 Seam, 68 in. thick.

PO—Linton, Ind.; SP—Same; CTY—Sullivan; RR—Mocon.

MS—Joseph Stevenson, Linton, Ind.

S of H—7 trolley pole type locos. Track gage 36 in.

S of M—10 shortwall machs.

PP—Power purchased. Transformer 22,000 to 250 volts A. C., rotary converters, 250 volts D. C., 3—150 H. P. water tube boilers, 3 pumps.

EMP—175. Daily tonnage 1,200.

SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.

PREP. EQUIPT—Shaker Screens.

LINTON FOURTH VEIN COAL CO.

Now Linton No. 4 Coal Co.

LINTON-MASON COAL CO., THE

General Office, Linton, Ind.

PR—Geo. W. Johnson, Linton, Ind.

TR—Chas. W. Johnson, Linton, Ind.

SA—Chas. W. Johnson, Linton, Ind.

Note—New development.

LINTON NO. 4 COAL CO.

General Office, Indianapolis, Ind.

SA—Schrocke Coal Co., Indianapolis, Ind.

Linton Mine; Stripping; No. 4 Seam, 60-84 inches thick.

PO—Linton, Ind.; SP—Same; CTY—Greene; RR—C. M. & St. P.

S of H—2 steam locos. Track gage 56½ inches.

PP—1 10 K. W. gen. unit, 220 volts D. C., 6 pumps.

PREP. EQUIPT—Shaker Screens, Picking Tables Loading Rooms.

LINTON-SUMMIT COAL CO.

General Office, Citizens Trust Bldg., Terre Haute, Ind.

PR—John A. Templeton, Terre Haute, Ind.

VP—John P. Jeffries, Terre Haute, Ind.

TR—Chas. N. Templeton, Linton, Ind.

GM—John A. Templeton, Terre Haute, Ind.

GS—R. A. Templeton, Linton, Ind.

PA—R. A. Templeton, Linton, Ind.

EM—L. A. Van Arsdale, Sullivan, Ind.

EE—Homer Brooks, Linton, Ind.

SA—Sterling-Midland Coal Co., Fisher Bldg., Chicago, Ill.

Templeton Mine; Shaft; No. 5 Seam, 72 in. thick.

PO—Linton, Ind.; SP—Vicksburg, Ind.; CTY—Greene; RR—Chgo. Terre

MS—Bank Cummings, Linton, Ind.

S of H—Mules and 3 trolley pole type locos. Track gage, 42 in.

S of M—3 chain breast and 10 shortwall machs.

PP—Power purchased. Transformer 33,000 to 2,300 volts A. C., M. G. sets, 1—150 K. W. and 1—200 K. W., 250 volts D. C., 3 water tube boilers, 7 pumps.

EMP—250. Daily tonnage 1750.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.

PREP. EQUIPT—Gravity and Shaker Screens, Loading Rooms.

LITTLE, S. W. COAL CO.

General Office, 817 Traction Terminal Bldg., Indianapolis, Ind.

PR—E. D. Logsdon, Indianapolis, Ind.

VP—C. L. Slinkard, Indianapolis, Ind.

TR—B. E. Neal, Indianapolis, Ind.

GM—E. E. Neal, Indianapolis, Ind.

GS—E. George, Petersburg, Ind.

PA—C. N. Elliott, Indianapolis, Ind.

EM—J. J. Roche, 510 Scott St., Vincennes, Ind.

SA—Indian Creek Coal & Mining Co., 817 Traction Terminal Bldg., Indianapolis, Ind.

Little's Mine; Shaft; No. 5 Seam, 72 in. thick.

PO—Little, Ind.; SP—Same; CTY—Pike; RR—E. & I. Big Four.

SCO—Indian Creek Supply Co., Petersburg, Ind.

S of H—Mules, 4 trolley pole type locos. Track gage 40 inches.

S of M—8 shortwall machs.

PP—Power purchased. Transformer 22,000 to 2,200 volts A. C., M. G. sets 1—100 K. W., 1—200 K. W., 250 volts D. C., 4 fire tube boilers, 525 H. P.

EMP—244. Daily tonnage 1,600.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Shaker Screens.

Blackburn No. 2 Mine; Shaft; No. 5 Seam, 72 inches thick.

PO—Petersburg, Ind., Route 5; SP—Blackburn, Ind.; CTY—Pike; RR—E. & I. Big Four.

SCO—The Whitman Co., Petersburg, Ind.

S of H—Mules and 3 trolley pole type locos. Track gage 40 inches.

S of M—Longwall machs.

PP—2 fire tube boilers, 250 H. P., 1—150 K. W. gen. unit, 250 volts D. C., 5 pumps.

EMP—95. Daily tonnage 600.

SIZES SHIPT—Run of Mine, Slack, Nut.

PREP. EQUIPT—Shaker Screens.

Blackburn No. 2 Mine; Shaft; No. 5 Seam, 72 inches thick.

PO—Petersburg, Ind., Route 5; SP—Blackburn, Ind.; CTY—Pike; RR—E. & I. Big Four.

SCO—The Whitman Co., Petersburg, Ind.

S of H—Mules and 3 trolley pole type locos. Track gage 40 inches.

S of M—Longwall machs.

PP—2 fire tube boilers, 250 H. P., 1—150 K. W. gen. unit, 250 volts D. C., 5 pumps.

EMP—95. Daily tonnage 600.

SIZES SHIPT—Run of Mine, Slack, Nut.

PREP. EQUIPT—Shaker Screens.

Blackburn No. 2 Mine; Shaft; No. 5 Seam, 72 inches thick.

PO—Petersburg, Ind., Route 5; SP—Blackburn, Ind.; CTY—Pike; RR—E. & I. Big Four.

SCO—The Whitman Co., Petersburg, Ind.

S of H—Mules and 3 trolley pole type locos. Track gage 40 inches.

S of M—Longwall machs.

PP—2 fire tube boilers, 250 H. P., 1—150 K. W. gen. unit, 250 volts D. C., 5 pumps.

EMP—95. Daily tonnage 600.

SIZES SHIPT—Run of Mine, Slack, Nut.

PREP. EQUIPT—Shaker Screens.

Blackburn No. 2 Mine; Shaft; No. 5 Seam, 72 inches thick.

PO—Petersburg, Ind., Route 5; SP—Blackburn, Ind.; CTY—Pike; RR—E. & I. Big Four.

SCO—The Whitman Co., Petersburg, Ind.

S of H—Mules and 3 trolley pole type locos. Track gage 40 inches.

S of M—Longwall machs.

PP—2 fire tube boilers, 250 H. P., 1—150 K. W. gen. unit, 250 volts D. C., 5 pumps.

EMP—95. Daily tonnage 600.

SIZES SHIPT—Run of Mine, Slack, Nut.

PREP. EQUIPT—Shaker Screens.

Blackburn No. 2 Mine; Shaft; No. 5 Seam, 72 inches thick.

PO—Petersburg, Ind., Route 5; SP—Blackburn, Ind.; CTY—Pike; RR—E. & I. Big Four.

SCO—The Whitman Co., Petersburg, Ind.

S of H—Mules and 3 trolley pole type locos. Track gage 40 inches.

S of M—Longwall machs.

PP—2 fire tube boilers, 250 H. P., 1—150 K. W. gen. unit, 250 volts D. C., 5 pumps.

EMP—95. Daily tonnage 600.

SIZES SHIPT—Run of Mine, Slack, Nut.

PREP. EQUIPT—Shaker Screens.

Blackburn No. 2 Mine; Shaft; No. 5 Seam, 72 inches thick.

PO—Petersburg, Ind., Route 5; SP—Blackburn, Ind.; CTY—Pike; RR—E. & I. Big Four.

SCO—The Whitman Co., Petersburg, Ind.

S of H—Mules and 3 trolley pole type locos. Track gage 40 inches.

S of M—Longwall machs.

PP—2 fire tube boilers, 250 H. P., 1—150 K. W. gen. unit, 250 volts D. C., 5 pumps.

EMP—95. Daily tonnage 600.

SIZES SHIPT—Run of Mine, Slack, Nut.

PREP. EQUIPT—Shaker Screens.

EMP—100.

PREP. EQUIPT—Gravity Screens.

Miami No. 6 Mine; Shaft; No. 5 Seam, 56 to 60 in. thick.

PO—Clinton, Ind.; SP—Same; CTY—Vigo; RR—C. & E. I.

MS—John Baird, Clinton, Ind.

S of H—Mules and 3 electric locos. Track gage 36 in.

S of M—Hand.

PP—3 return tubular boilers, total 450 H. P., 7 pumps.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.

Miami No. 8 Mine; Shaft; No. 4 Seam, 62 in. thick.

PO—Clinton, Ind.; SP—Same; CTY—Vigo; RR—C. & E. I.

MS—John Baird, Clinton, Ind.

S of H—Mules and 4 electric locos. Track gage 42 in.

S of M—15 elec. machs.

PP—8 fire tube boilers, 150 H. P., power generated, 2—200 and 300 K. W. gen. units, 250 volts D. C., 7 pumps.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Gravity Screens.

Miami No. 9 Mine; Shaft; No. 5 Seam, 58 in. thick.

PO—Clinton, Ind.; SP—Same; CTY—Vigo; RR—C. & E. I.

MS—John Baird, Clinton, Ind.

S of H—Mules, 4 trolley pole type locos. Track gage 41 in.

S of M—Hand.

PP—4 fire tube boilers, 150 H. P., 1—150 K. W. gen. unit, 250 volts D. C., 3 pumps.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.

Miami No. 10 Mine; Shaft; No. 4 Seam, 60 in. thick.

PO—Clinton, Ind.; SP—Same; CTY—Vigo; RR—C. & E. I.

MS—John Baird, Clinton, Ind.

S of H—Mules, 3 trolley pole type locos. Track gage 41 inches.

S of M—Hand.

PP—6 fire tube boilers, 150 H. P., power generated, 1—175 K. W. gen. units, 250 volts D. C., 4 pumps.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Shaker Screens.

Miami No. 10 Mine; Shaft; No. 4 Seam, 60 in. thick.

PO—Clinton, Ind.; SP—Same; CTY—Vigo; RR—C. & E. I.

MS—John Baird, Clinton, Ind.

S of H—Mules, 3 trolley pole type locos. Track gage 41 inches.

S of M—Hand.

PP—6 fire tube boilers, 150 H. P., power generated, 1—175 K. W. gen. units, 250 volts D. C., 4 pumps.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Shaker Screens.

Miami No. 10 Mine; Shaft; No. 4 Seam, 60 in. thick.

PO—Clinton, Ind.; SP—Same; CTY—Vigo; RR—C. & E. I.

MS—John Baird, Clinton, Ind.

S of H—Mules, 3 trolley pole type locos. Track gage 41 inches.

S of M—Hand.

PP—6 fire tube boilers, 150 H. P., power generated, 1—175 K. W. gen. units, 250 volts D. C., 4 pumps.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Shaker Screens.

Miami No. 10 Mine; Shaft; No. 4 Seam, 60 in. thick.

PO—Clinton, Ind.; SP—Same; CTY—Vigo; RR—C. & E. I.

MS—John Baird, Clinton, Ind.

S of H—Mules, 3 trolley pole type locos. Track gage 41 inches.

S of M—Hand.

PP—6 fire tube boilers, 150 H. P., power generated, 1—175 K. W. gen. units, 250 volts D. C., 4 pumps.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Shaker Screens.

Miami No. 10 Mine; Shaft; No. 4 Seam, 60 in. thick.

PO—Clinton, Ind.; SP—Same; CTY—Vigo; RR—C. & E. I.

MS—John Baird, Clinton, Ind.

S of H—Mules, 3 trolley pole type locos. Track gage 41 inches.

S of M—Hand.

PP—6 fire tube boilers, 150 H. P., power generated, 1—175 K. W. gen. units, 250 volts D. C., 4 pumps.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Shaker Screens.

Miami No. 10 Mine; Shaft; No. 4 Seam, 60 in. thick.

PO—Clinton, Ind.; SP—Same; CTY—Vigo; RR—C. & E. I.

MS—John Baird, Clinton, Ind.

S of H—Mules, 3 trolley pole type locos. Track gage 41 inches.

S of M—Hand.

PP—6 fire tube boilers, 150 H. P., power generated, 1—175 K. W. gen. units, 250 volts D. C., 4 pumps.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Shaker Screens.

Miami No. 10 Mine; Shaft; No. 4 Seam, 60 in. thick.

PO—Clinton, Ind.; SP—Same; CTY—Vigo; RR—C. & E. I.

MS—John Baird, Clinton, Ind.

S of H—Mules, 3 trolley pole type locos. Track gage 41 inches.

S of M—Hand.

NEWBURG COAL CO.

General office, Newburg,

Oilphant-Johnson Coal Co.—Cont.

S of M—I chain breast type and 20 shortwall machs.
 PP—Power purchased. 1 M. G. set, 1 rotary converter, 2—100 K. W. gen. units, 250 volts D. C., 5 water tube boilers, 10 pumps.
 EMP—470 Daily tonnage, 3,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables.

OTTER CREEK COAL COMPANY.

General Office, 417 South Dearborn St., Chicago, Ill.
 PR—J. P. Austin, 417 So. Dearborn St., Chicago, Ill.
 GM—J. P. Austin, 417 So. Dearborn St., Chicago, Ill.
 GS—John Chesterfield, Brazil, Ind.
 PA—John Chesterfield, Brazil, Ind.
 EE—Joe Stewart, Brazil, Ind.
 EM—D. H. Collier, R. F. D. 3, Carbon, Ind.
 Mary No. 2 Mine; Shaft; No. 1 Block Seam, 42 in. thick.
 PO—Brazil, Ind.; SP—Fontaine, Ind.; CTY—Vigo; RR—C. & E. I.
 MS—Everett Chesterfield, Carbon, Ind.
 SM—J. P. Austin, Chicago, Ill.
 R. B. 3.

S of H—Mules, 1 elec motor, 1 storage battery loco. Track gage 36 inches.

S of M—Chain breast type mach.
 PP—3 return tubular boilers, total 450 H. P., 2 100 K. W. gen. units, 250 volts D. C., 3 pumps.
 EMP—160.

SIZES SHIPT—Lump, Block, Nut.
 PREP. EQUIPT—Gravity Screens.

Mary No. 3 Mine; Shaft; Minshall No. 4 Seam, 54 to 60 in. thick.

PO—Brazil, Ind.; SP—Fontaine, Ind.; CTY—Vigo; RR—C. & E. I.

S of H—Mules, trolley pole type locos. Track gage 42 in.

S of M—Hand.

PP—Power from plant No. 2, 3 pumps.

EMP—170.

SIZES SHIPT—Slack, Egg, Lump.

PREP. EQUIPT—Shaker Screen.

OWEN BLOCK COAL COMPANY

General Office, Patrickburg, Ind.
 PR—Hon. W. A. Magee, Pittsburgh, Pa.
 TR—L. B. Cook, Pittsburgh, Pa.
 GM—E. L. Butler, Patrickburg, Ind.
 GS—J. E. Davidson, Patrickburg, Ind.
 PA—E. L. Butler, Patrickburg, Ind.
 SA—Chicago Coal & Mining Co., 111 W. Wash. St., Chicago, Ill.

Owen Block Mine; Lower Vein Brazil Block Seam.

PO—Patrickburg, Ind.; SP—Same; CTY—Owen; RR—C. D. & L.

S of H—Steam loco. Track gage 36 inches.

S of M—Steam shovel.

EMP—38. Last fiscal year output, 8,234 tons.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.

PREP. EQUIPT—Bar Screens.

OWENSBURG COAL COMPANY

General Office, 2131 Pleasant St., Indianapolis, Ind.
 PR—O. C. Carter, 602 E. Walnut St., Indianapolis, Ind.
 VP—Harry Steel, Robinson, Ill.
 TR—B. F. Egan, Indianapolis, Ind.
 GM—B. F. Egan, Indianapolis, Ind.
 GS—O. C. Carter, Indianapolis, Ind.
 SA—B. F. Egan, 2131 Pleasant St., Indianapolis, Ind.

Owensburg No. 1 Mine; Slope; Brazil Block Seam, 36 to 48 inches thick.

PO—Owensburg, Ind.; SP—Same; CTY—Greene; RR—C. F. & L.

S of H—Mules.

S of M—Hand.

Daily tonnage 40.

PAN HANDLE COAL COMPANY.

General Office, 1506 Fletcher Savings & Trust Bldg., Indianapolis, Ind.
 PR—Wm. Schrolucke, Indianapolis, Ind.
 VP—G. H. Hilgmeier, Indianapolis, Ind.
 TR—W. K. Sprude, Indianapolis, Ind.
 GM—Wm. Schrolucke, Indianapolis, Ind.
 GS—Wesley S. Harris, Bicknell, Ind.
 PA—Wesley S. Harris, Bicknell, Ind.
 EM—F. I. Pearce, Bicknell, Ind.
 EE—Wm. Kennedy, Bicknell, Ind.
 SA—Schrolucke Coal Co., Indianapolis, Ind.

Pan Handle No. 5 Mine; Shaft; No. 5 Seam, 78 inches thick.

PO—Bicknell, Ind. SP—Same CTY—Knox, RR—Penna. Lines.

MS—Jack Thompson, Bicknell, Ind.

S of H—Mules and 6 trolley pole type locos. Track gage, 36 in.

S of M—8 shortwall machs.

PP—Purchase power, transformer 33,000 to 2,300 volts, rotary converters to 220 D. C., 1 150 H. P. fire tube boiler, 4 pumps.

EMP—249. Daily tonnage 1,428

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Shaker Screens, Loading Booms, Picking Tables.

Pan Handle No. 6 Mine; Shaft; No. 6 Seam, 60 inches thick.

PO—Bicknell, Ind.; SP—Same; CTY—Knox, RR—Penna. Lines.

MS—Thomas Halley, Bicknell, Ind.

S of H—Mules and 4 trolley pole type locos. Track gage, 36 in.

S of M—5 shortwall machs.

PP—Purchase power, transformer 33,000 to 2,300 volts, rotary converters to 220 D. C., 1 150 H. P. fire tube boiler, 3 pumps.

EMP—184. Daily tonnage 1,072.

PREP. EQUIPT—Shaker Screens, Picking Tables.

SIZES SHIPT—Run of Mine, Nut, Egg, Lump.

PREP. EQUIPT—Gravity Screens.

PEABODY COAL COMPANY

General Office, 332 So. Michigan Ave., Chicago, Ill.

Chairman of Board—Francis S. Peabody, Chicago, Ill.

PR—Stuyvesant Peabody, Chicago, Ill.

VP—Clarence J. Gray, Chicago, Ill.

VP—Moses F. Pettier, Chicago, Ill.

VP—(In charge of Operations), Hiram M. Young, Chicago, Ill.

VP—(In charge of Sales and Traffic), George W. Reed, Chicago, Ill.

VP—(In charge of Finance), Chas. E. Schrage, Chicago, Ill.

VP—(In charge of Accounts), Charles S. Ellis, Chicago, Ill.

ASST. TO VP—(In charge of sales)—J. L. Pieroni, Chicago, Ill.

Secy—Joseph Solari, Chicago, Ill.

TR—Chas. E. Schrage, Chicago, Ill.

Asst. Secy.—Treas.—Walter A. Fisher, Chicago, Ill.

Mgr. of Traffic—James E. Duggan, Chicago, Ill.

PA—Harry E. Campbell, Chicago, Ill.

Additional Information on Page 394.

No. 50 Mine; Stripping; No. 5 Seam, 96 in. thick.

PO—Boonville, Ind.; SP—Same; CTY—Warwick; RR—Southern.

S of H—2 steam locos.

S of M—Stripping.

PP—Power generated.

Last years tonnage 500,000.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Shaker Screens.

No. 27 Mine; Shaft; No. 6 Seam; 66 inches thick.

PO—Shelburn, Ind.; SP—Same; CTY—Sullivan; RR—Chicago, Terre Haute & South Eastern.

S of H—Mules, 1 trolley pole type loco. Track gage 36 inches

S of M—7 chain breast machs.

PP—3 fire tube boilers, total 375 H. P., 1—100 K. W. gen. unit, 275 volts D. C., 4 pumps.

EMP—155.

SIZES SHIPT—Run of Mine, Slack, Egg, Lump.

PREP. EQUIPT—Shaker Screens.

PEOPLES COAL & MINING COMPANY

General Office, Jacksonville, Ind.

PR—J. H. Persons, 1621 South 6th St., Terre Haute, Ind.

VP—F. B. Harrison, Jacksonville, Ind.

TR—H. O. Bedwell, Jacksonville, Ind.

GM—H. O. Bedwell, Jacksonville, Ind.

GS—F. B. Harrison, Jacksonville, Ind.

PA—H. O. Bedwell, Jacksonville, Ind.

EM—Rush & Everson, Terre Haute, Ind.

SA—Rader Coal Company, 402-04 Traction Bldg., Indianapolis, Ind.

No. 4 Mine; Shaft; No. 4 Seam, 48 in. thick.

PO—Jacksonville, Ind.; SP—Vicksburg, Ind.; CTY—Greene; RR—C. I. & L.

S of H—4 storage battery locos. Track gage 42 in.

S of M—4 shortwall machs.

PP—Power purchased. Transformer 2300-250 volts, 1—150 K. W. gen. unit, 250 volts D. C., 2—160 H. P. fire tube boilers, 2 pumps.

EMP—20.

SIZES SHIPT—Run of Mine, Slack, Egg, Lump.

PREP. EQUIPT—Gravity and Shaker Screens.

No. 5 Mine; Shaft; No. 5 Seam, 60 in. thick.

PO—Jacksonville, Ind.; SP—Vicksburg, Ind.; CTY—Greene; RR—C. I. & L.

S of H—4 storage battery locos. Track gage 36 in.

S of M—7 shortwall machs.

PP—Power purchased. Transformer, 2,300-250 volts, rotary converters, 250 volts D. C., 1 pump.

Daily tonnage 1,000.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.

NOTE—Formerly operated by the Queen Coal and Mining Co.

PIKE COUNTY COAL CO.

General Office, McCormick Bldg., Chicago, Ill.

PR—R. A. McClevey, McCormick Bldg., Chicago, Ill.

VP—J. H. Coulter, McCormick Bldg., Chicago, Ill.

TR—N. H. McClevey, Petersburg, Ind.

GM—N. H. McClevey, Petersburg, Ind.

GS—J. D. Ladson, Petersburg, Ind.

PA—N. H. McClevey, Petersburg, Ind.

CE—Folwell-Alskog, McCormick Bldg., Chicago, Ill.

EM—Rush & Everson, Terre Haute, Ind.

EE—Blythe McCarthy, Petersburg, Ind.

Atlas No. 1 Mine; Shaft; No. 5 Seam, 125 in. thick.

PO—Petersburg, Ind.; SP—Same; CTY—Pike; RR—E. I. & T. H., Br. Big 4.

S of H—10 6-ton motors, 1 trolley pole type loco.

S of M—10 shortwall machs.

PP—Power purchased. Transformer, 3300 to 2300 to 230 volts A. C., motor gen. sets, 250 volts D. C., 5 pumps.

EMP—210. Daily output, 1,300 tons.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Shaker Screen, Picking Tables, Loading Booms.

PINE RIDGE MINES CO.

Now Binkley Coal Co.

POSSUM RIDGE COAL COMPANY.

Now Fricke & Blair Coal Co.

PRIMROSE COAL PRODUCING CO.

General Office, 1506 Fletcher Savings and Trust Bldg., Indianapolis, Ind.

PR—Wm. Schrolucke, Indianapolis, Ind.

VP—Geo. Hilgmeier, Indianapolis, Ind.

TR—Geo. Hilgmeier, Indianapolis, Ind.

GM—G. W. Dixon, Jacksonville, Ind.

GS—G. W. Dixon, Jacksonville, Ind.

PA—G. W. Dixon, Jacksonville, Ind.

SA—Schrolucke Coal Co., Indianapolis, Ind.

Primrose Mine; Stripping; No. 4 Seam; 48 in. thick.

PO—Jacksonville, Ind.; SP—Same; CTY—Clay; RR—C. T. H. & S. E.

MS—Otis Keller, Jacksonville, Ind.

S of H—Mules and 2 locos.

S of M—Hand, Stripping and Loading Shovels.

PP—3 pumps.

EMP—68. Daily tonnage 1,000.

SIZES SHIPT—Run of Mine, Slack, Lump.

PRINCETON COAL COMPANY.

General Office, Princeton, Ind.

PR—Henry Smith, Princeton, Ind.

TR—J. G. Applebath, Princeton, Ind.

GS—Chas. Hill, " "

PA—J. G. Applebath, " "

EM—Chas. Hill, Princeton, Ind.

SCO—Princeton Mds. Co. Buyer, J. G. Applebath, Princeton, Ind.

SA—Deep Vein Coal Co., Terre Haute, Ind.

Princeton Mine; Shaft; No. 5 Seam, 84 in. thick.

PO—Princeton, Ind. SP—Same. CTY—Gibson, RR—C. & E. I., and Sou.

S of H—Mules and trolley pole type locos. Track gage, 42 in.

S of M—14 shortwall mach.

PP—6 fire tube boilers, total 750 H. P., Generator units, 1—125 K. W., 1—200 K. W., 1—250 K. W., 500 volts D. C., 9 pumps.

EMP—400. Last years tonnage 200,000.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Revolving and Shaker Screens.

PROSPERITY BLOCK COAL CO.

PR—J. A. Rawley, Brazil, Ind.

TR—J. G. H. Klingler, Brazil, Ind.

GS—W. J. Wolfe, Brazil, Ind.

PA—J. G. H. Klingler, Brazil, Ind.

SA—J. G. H. Klingler, Brazil, Ind.

Prosperity Block Mine; Shaft; Seam, 48 inches thick.

PO—Brazil, Ind.; SP—Asherville, Ind.; CTY—Clay; RR—P. R. R.

S of H—Mules.

S of M—Hand.

PP—Fire tube boiler, 1 pump.

EMP—10.

SIZES SHIPT—Run of Mine, Slack, Block.

NOTE—Formerly the Prosperity Coal Co.

PUTNAM COAL COMPANY

General Office, Coal City, Ind.

PR—James G. Baird, Coal City, Ind.

VP—J. G. Baird, Coal City, Ind.

TR—R. L. Burns, Greencastle, Ind.

GM—James G. Baird, Coal City, Ind.

GS—James G. Baird, " "

PA—James G. Baird, " "

Putnam Mine; Shaft; No. 1 or Block Seam, 42 inches thick.

PO—Coal City, Ind.; SP—Same; CTY—Owen; RR—E. I. & T. H., Br. C. C. & St. L.

S of H—Mules. Track gage 29 in.

S of M—Hand.

PP—1 return tubular boiler, total 100 H. P., 3 pumps.

EMP—20. Daily tonnage 80.

SIZES SHIPT—Run of Mine, Slack, Block.

PREP. EQUIPT—Gravity Screens.

QUEEN COAL AND MINING CO.

Now Persons Coal Co.

RADIANT COAL COMPANY

General Office, 601 N. 7th St., Terre Haute, Ind.

PR—P. F. Brady, 601 N. 7th St., Terre Haute, Ind.

VP—A. M. Dudley, 1022 Wabash St., Terre Haute, Ind.

TR—A. J. Harvey, Burnett, Ind.

GM—A. J. Harvey, Burnett, Ind.

Radiant Mine; Shaft; Block Coal Seam; 48 inches thick.

PO—Coal City, Ind.; SP—Same; CTY—Owen; RR—E. I. & T. H., Br. Big Four.

MS—A. J. Harvey, Burnett, Ind.

S of H—Mules. Track gage 32 in.

S of M—Hand.

PP—1 pump.

EMP—12. Daily tonnage 40.

SIZES SHIPT—Run of Mine, Slack, Block.

PREP. EQUIPT—Bar Screens.

Old Information.

RIDGE COAL MINING COMPANY.

General Office, Old Colony Bldg., Chicago, Ill.

PR—H. A. Huskey, Chicago, Ill.

VP—H. P. Pope, Chicago, Ill.

TR—W. P. Worth, Chicago, Ill.

GM—W. P. Worth, Chicago, Ill.

GS—Wm. H. Cheney, Bicknell, Ind.

PA—C. H. Hassmann,

ROSE HILL COAL COMPANY.

General Office, Linton, Ind.
VP—M. E. Mogg, Indianapolis, Ind.
TR—Malcolm Reed, Linton, Ind.
GS—Ray Road, Linton, Ind.
Sales Agency, Linton Collieries Co., 1506 Fletcher Trust Bldg., Indianapolis, Ind.

Rose Hill No. 1 Mine; Shaft; No. 6 Seam, 72 in. thick.
PO—Linton, Ind.; SP—Same; CTY—Greene; RR—Monon.
S of H—Mules, rope and 2 gasoline locos. Track gage, 36 in.
S of M—Hand.
PP—3 fire tube boilers, 150 H. P., 4 pumps.
EMP—175. Last years tonnage 138,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Bar Screens.

ROWLAND POWER CONSOLIDATED COLLIERIES COMPANY

General Office, 723 S. Sixth St., Terre Haute, Ind.
PR—Geo. C. Rowland, Terre Haute, Ind.
VP—W. S. McCloud, Terre Haute, Ind.
TR—J. W. Aten, Terre Haute, Ind.
GM—Geo. C. Rowland, Terre Haute, Ind.
GS—W. S. McCloud, Terre Haute, Ind.
PA—O. L. Nicholson, Terre Haute, Ind.
EM—J. E. Rowlands, Terre Haute, Ind.

Additional Information on Pages 395 to 399

No. 1 and 2 Mines abandoned.

No. 3 Mine; Stripping; No. 3 Seam, 90 in. thick.
PO—Staunton, Ind.; SP—Same; CTY—Clay; RR—Penna.
MS—John Mogenhart, Staunton, Ind.
S of H—2 steam locos. Track gage, 56 1/2 in.
S of M—Hand.
PP—1 75 H. P. fire tube boiler, 4 pumps.
EMP—65. Daily output, 1,000 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Loading Booms.

No. 6 Mine; Shaft; No. 3 Seam, 90 in. thick.
PO—Staunton, Ind.; SP—Same; CTY—Clay; RR—Penna.
MS—Dan Davis, Terre Haute, Ind.
S of H—8 mules, 5 trolley pole and 1 storage battery locos.

S of M—8 are wall cutters.
PP—5 150 H. P. fire tube boilers, 1—200 K. W. gen. unit, 250 volts D. C., 3 pumps.
EMP—200. Daily output, 1,500 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Loading Booms.

No. 7 Mine; Shaft; No. 6 Seam, 72 in. thick.

PO—Cass, Ind.; SP—Same; CTY—Sullivan; RR—C. & E. I.
MS—Dan Davis, Terre Haute, Ind.
S of H—Mules, 3 trolley pole and 1 combination locos. Track gage, 42 inches.

S of M—6 shortwall machs.
PP—3 150 H. P. fire tube boilers, 1—200 K. W. gen. units, 200 volts D. C., 3 pumps.

EMP—200. Daily output, 1,200 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens.

No. 8 Mine abandoned.

No. 9 Mine; Stripping; No. 3 Seam, 90 in. thick.

PO—Staunton, Ind.; SP—Same; CTY—Clay; RR—Penna.
MS—Sam Rowland, Brazil, Ind.
S of H—2 steam locos. Track gage, 56 1/2 in.

S of M—Hand.
PP—1 pump.
EMP—60. Daily output, 1,200 tons.

No. 11 Mine; Shaft; No. 6 Seam, 72 in. thick.

PO—Cass, Ind.; SP—Same; CTY—Sullivan; RR—C. & E. I.
MS—Dan Davis, Terre Haute, Ind.
S of H—Mules. Track gage 42 in.

S of M—3 shortwall machs.
PP—2 fire tube boilers, 150 H. P., 4 pumps.

EMP—80. Daily tonnage 700.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Gravity Screens.

No. 12 Mine; Stripping; No. 4 Seam, 48 inches thick.

PO—Linton, Ind.; SP—Same; CTY—Greene; RR—C. M. & St. P.
MS—David E. Rowland, Linton, Ind.
S of H—2 steam locos.

S of M—Hand.
PP—1 75 H. P. fire tube boiler, 2 pumps.
EMP—60. Daily output, 500 tons.
SIZES SHIPT—Run of Mine.

No. 13 Mine; Stripping; No. 4 Seam, 54 in. thick.

PO—Jasonville, Ind.; SP—Same; CTY—Greene; RR—C. I. & L.
MS—David Rowland, Linton, Ind.
S of H—2 steam locos. Track gage, 56 1/2 in.

S of M—Hand.
PP—2 pumps.
EMP—60. Daily output, 1,000 tons.

No. 14 Mine; Stripping; No. 4 Seam, 48 in. thick.

PO—Jasonville, Ind.; SP—Same; CTY—Greene; RR—C. I. & L.
MS—David Rowland, Linton, Ind.
S of H—1 steam loco. Track gage, 56 1/2 inches.

S of M—Hand.
PP—1 pump.

EMP—60. Daily output, 1,000 tons.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Screens.

No. 15 Mine; Shaft; No. 4 Seam, 54 in. thick.

PO—Jasonville, Ind.; SP—Same; CTY—Greene; RR—Monon.
MS—Dan Davis, Terre Haute, Ind.
S of H—Mules. Track gage 42 in.

S of M—Hand.
PP—2 fire tube boilers, 150 H. P., 2 pumps.

EMP—72. Daily tonnage 500.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

No. 16 Mine; Stripping; Block Seam, 54 in. thick.

PO—Carbon, Ind.; SP—Same; CTY—Clay; RR—C. C. & St. L.
MS—J. W. Jones, Carbon, Ind.
S of H—3 steam locos. Track gage 56 1/2 in.

S of M—Hand.
PP—1 fire tube boiler, 75 H. P., 3 pumps.

EMP—60. Daily tonnage 500.
SIZES SHIPT—Run of Mine.

SANFORD MINING COMPANY.

General Office, Terre Haute, Ind.
VP—C. H. Ray, Terre Haute, Ind.
TR—W. L. Williamson, " "
PA—W. L. Williamson, " "
SA—Neutral Coal Producers Co., Terre Haute, Ind.

Sanford No. 2 Mine; Shaft; No. 5 Seam, 52 to 60 in. thick.

PO—Terre Haute, Ind.; SP—Sanford, Ind.; CTY—Vigo; RR—N. Y. C.
S of H—Mules. Track gage 36 in.

S of M—Hand.
PP—4 return tubular boilers, total 600 H. P., 2 pumps.

EMP—200. Daily output, 1,000 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. SHIPT—Gravity Screens.

SARGEANT COAL COMPANY

General Office, Newburg, Ind.
PR—E. G. Sargeant, Newburg, Ind.
VP—M. H. Sargeant, Evansville, Ind.
TR—Mrs. Wm. Spiegel, Newburg, Ind.
GM—E. G. Sargeant, Newburg, Ind.
GS—E. G. Sargeant, Newburg, Ind.
PA—E. G. Sargeant, Newburg, Ind.
CE—Smith Abshire, Newburg, Ind.
EM—Harry N. Robinson, Evansville, Ind.

SCO—Sargeant Grocery Co. Buyer, John Moore, Newburg, Ind.

SA—William Hayes, Milwaukee, Wis.

Sargeant No. 1 and 2 Mines; Shafts; No. 5 Seam, 48-56 inches thick.

PO—Newburg, Ind.; SP—Same; CTY—Warwick; RR—E. O. V.
MS—John Wittmer, Newburg, Ind.
S of H—3 storage battery locos. Track gage 36 in.

S of M—Hand.
PP—Power purchased, 2 fire tube boilers, total 200 H. P., 3 pumps.

EMP—125. Last years tonnage 23,468.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

SCHREPPERMAN COAL COMPANY.

General Office, Brazil, Ind.
PR—Nicholas Schrepperman, Brazil, Ind.
TR—Cornelius Schrepperman, " "

No. 1 Mine; Shaft; Lower Vein Brazil Seam, 40 to 46 in. thick.

PO—Brazil, Ind.; SP—Same; CTY—Clay; RR—P. R. R.

S of H—Mules. Track gage 32 in.

S of M—Hand.
PP—3 pumps.
EMP—12. Last years tonnage 8,000.
SIZES SHIPT—Slack and Block.
PREP. EQUIPT—Gravity Screens.

No. 3 Mine; Shaft; No. 3 Coal Seam, 72 in. thick.

PO—Brazil, Ind.; SP—Same; CTY—Vigo, Ind.; RR—C. & E. I.

S of H—Mules. Track gage 42 in.

S of M—7 comp. air machs.
PP—1—15 H. P. fire tube boiler, 2 pumps.

EMP—10. Daily tonnage 200.

SIZES SHIPT—Run of Mine, Slack, Egg, Lump.

PREP. EQUIPT—Gravity Screens.

SHELBOURN INDIANA COAL & MINING CO

General Office, Shelby, Ind.

PR—R. M. Stern, 130 N. Wells St., Chicago, Ill.

VP—Jos. Jeffray, 130 N. Wells St., Chicago, Ill.

GM—E. M. Stern, Chicago, Ill.

GS—W. H. Taylor, Shelby, Ind.

PA—W. H. Taylor, Shelby, Ind.

SA—Jeffray & Stern Coal Co., 130 N. Wells St., Chicago, Ill.

Virginia Mine; Shaft; No. 7 Seam 48 in. thick.

PO—Shelburn, Ind.; SP—Same; CTY—Sullivan; RR—C. & E. I.

S of H—Mules. Track gage, 36 in.

S of M—2 Mining machs.

PP—Power purchased, Transformer, 2200 to 250 volts A. C., 2—50 H. P. fire tube boilers, 1—125 K. W. Generator, 1 pump.

EMP—60. Last years tonnage 15,000.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.

SHELBY COAL & CLAY CO.

General Office, Brazil, Ind.

PR—M. M. Wells, Fairland, Ind.

VP—John Kiefer, Elwing, Ind.

TR—Thomas Vincent, Crawfordville, Ind.

GM—C. E. Hoffman, Brazil, Ind.

GS—C. E. Hoffman, Brazil, Ind.

PA—C. E. Hoffman, Brazil, Ind.

EM—Frank Kattman, Terre Haute, Ind.

SA—Murphy-Spensley Coal Co., Terre Haute, Ind.

Sterling Mine; Shaft; Block Coal Seam, 42 inches thick.

PO—Brazil, R. R. No. 5, Ind.; SP—Same; CTY—Vigo; RR—C. & E. I.

S of H—Mules and 2 trolley pole type locos. Track gage 32 inches.

S of M—5 chain breast type and 1 short-wall machs.

PP—2 fire tube boilers, total 300 H. P., 1—100 K. W. gen. unit, 250 volts D. C., 5 pumps.

EMP—40. Daily tonnage, 100.

SIZES SHIPT—Slack, Egg, Block.

PREP. EQUIPT—Gravity Screens.

Note—Formerly operated by the Inland Coal & Mining Co.

Old Information.

SHERWOOD COAL CO.

General Office, Indianapolis, Ind.

PR—R. H. Sherwood, Indianapolis, Ind.

VP—F. W. Bull, Chicago, Ill.

TR—R. E. Lundblad, Indianapolis, Ind.

GM—R. E. Lundblad, Indianapolis, Ind.

GS—W. H. Stewart, Dugger, Ind.

PA—W. H. Stewart, Dugger, Ind.

Allen Dale Mine; Stripping; No. 6 Seam, 63 in. thick.

PO—Dugger, Ind.; SP—Same; CTY—Sullivan & Greene; RR—Monon.

S of H—2 steam locos. Track gage 42 in.

PP—Power purchased, Transformer, 23,000-440 volts A. C., 3 pumps.

EMP—75.

SIZES SHIPT—Slack, Nut, Egg, Lump.

PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

SHIRKIE COAL COMPANY.

General Office, 406 Opera House, Terre Haute, Ind.

PR—Hugh Shirkie, Terre Haute, Ind.

VP—Earle H. Shirkie, Terre Haute, Ind.

TR—Earle H. Shirkie, " "

GM—Earle H. Shirkie, " "

GS—James Baxter, Terre Haute, Ind.

PA—Earle H. Shirkie, " "

EM—H. C. Heonaman, " "

EE—B. Coleman, Terre Haute, Ind.

Shirkie No. 1 Mine; Shaft; No. 5 Seam, 52 to 56 in. thick.

PO—Terre Haute, Ind.; SP—Libertyville, Ind.; CTY—Vigo; RR—C. T. I. & S. E.

MS—Peter Donie, Terre Haute, Ind.

S of H—Mules and 2 elec. and 2 storage battery locos. Track gage 42 in.

PP—2 pumps.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.

SLEEPY EYE MINING CO.

General Office, Dugger, Ind.

PR—M. E. Dugger, Dugger, Ind.

VP—O. E. Dugger, Dugger, Ind.

TR—R. E. Price, Dugger, Ind.

GM—R. E. Price, Dugger, Ind.

GS—W. F. Ellis, Dugger, Ind.

PA—R. E. Price, Dugger, Ind.

CE—M. H. Dugger, Dugger, Ind.

EM—M. L. Oberholzer, Dugger, Ind.

SCO—Citizens Merc. Co. Buyer, R. E. Price, Dugger, Ind.

SA—Stockton Coal Co., Dugger, Ind.

Sleepy Eye Mine; Slope; No. 5 Seam, 66 in. thick.

PO—Dugger, Ind.; SP—Midland, Ind.

CTY—Greene, RR—Monon

SM—Edie Page, Dugger, Ind.

S of H—Mules and rope. Track gage, 36 inches.

S of M—Hand.

PP—2 tubular boilers, 1—35 H. P., 1—60 H. P., 1 pump.

EMP—80. Last fiscal year output, 12,000 tons.

SIZES SHIPT—Run of Mine

SOUTH WASHINGTON COAL COMPANY

General Office, 100 E. Main St., Washington, Ind.

PR—A. A. Wallace, Washington, Ind.

VP—Casper Rohle, Washington, Ind.

TR—J. A. Colbert, Washington, Ind.

GM—Gasper Klingensmith, Washington, Ind.

Sunny Side Mine; Shaft; No. 5 Seam, 54 inches thick.

PO—Washington, Ind.; SP—Same; CTY—Greene; RR—E. & I.

S of H—Mules.

S of M—Hand.

PP—3 water tube boilers.

EMP—12. Last years tonnage 30,000.

SIZES SHIPT—Run of Mine, Slack, Pea, Lump.

SPRING VALLEY COAL COMPANY

General Office, Linton, Ind.

PR—H. C. Scully, Linton, Ind.

TR—Joe E. Turner, Linton, Ind.

PA—Joe E. Turner, Linton, Ind.

Spring Valley Mine; Shaft; No. 5 Seam; 72-80 inches thick.

PO—Linton, Ind.; SP—Same; CTY—Greene; RR—P. C. & St. L.

S of H—Mules. Track gage 42 inches.

S of M—Hand and elec. machs.

PP—Power purchased, Transformer 2300 to 250 volts D. C., 2 pumps.

EMP—150. Daily tonnage 1,000.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.

STANDARD COAL CO., THE

General Office, Vincennes, Ind.

PR—F. L. Oliphant, Vincennes, Ind.

VP—J. L. Riddle, Vincennes, Ind.

TR—Earl Oliphant, Vincennes, Ind.

GM—Earl Oliphant, Vincennes, Ind.

GS—A. D. Stodghill, Vincennes, Ind.

EM—W. E. Buss, Vincennes, Ind.

SA—Bert Kingan, Vincennes, Ind.

Wheatland Mine; Shaft; No. 5 Seam, C3 inches thick.

PO—Wheatland, Ind.; SP—Same; CTY—Knox; RR—B. & O.

S of H—3 trolley pole locos and mules. Track gage 36 inches.

S of M—4 chain breast type machs.

PP—Power purchased, 250 volts D. C., 3 pumps.

EMP—270. Last years tonnage, 225,000.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Bar Screens.

Note—Formerly operated by the Washington-Wheatland Coal Company.

STAR CITY COAL MINING CO.

General Office, Indianapolis, Ind.

PR—C. R. Campbell, Chicago, Ill.

VP—M. E. Lowish, Indianapolis, Ind.

GM—M. E. Lowish, Indianapolis, Ind.

PA—M. E. Lowish, Indianapolis, Ind.

Star City No. 5 and No. 7 Mines; Shaft; No. 5 and 7 Seams, 72-60 inches thick.

PO—Shelburn, Ind.; SP—Same;

STEELE-KATTMAN COAL COMPANY

General Office, Hymera, Ind.
 PR—G. J. McNulty, Indianapolis, Ind.
 VP—Ed. W. Zaiser, Indianapolis, Ind.
 TR—O. B. Kattman, Hymera, Ind.
 GM—O. B. Kattman, Hymera, Ind.
 GS—Heston Griffith, Hymera, Ind.
 EM—Frank Kattman, Terre Haute, Ind.

Mayflower Mine; Shaft; No. 5 Seam; 72 inches thick.
 PO—Hymera, Ind.; SP—Same; CTY—Sullivan; RR—C. & E. I.
 S of H—Mules and 2 storage battery locos. Track gage 42 in.

S of M—Hand.
 PP—Power purchased, 2 fire tube boilers, 110 H. P., 220 volts D. C., 4 pumps.
 EMP—195. Daily tonnage 1,250.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. SHIPT—Gravity Screens.

STEWART COAL COMPANY

General Office, 87 Vandergrift Bldg., Pittsburgh, Pa.
 PR—James Ward, Jr., Pittsburgh, Pa.
 VP—Jas. R. Dodworth, Pittsburgh, Pa.
 TR—Samuel Hollis, Pittsburgh, Pa.
 GM—James R. Dodworth, Pittsburgh, Pa.
 GS—John Sykes, Clay City, Ind.
 PA—Samuel Hollis, Pittsburgh, Pa.
 SA—C. S. B. Ward & Co., 1st National Bank Bldg., Pittsburgh, Pa.

Stewart Mine; Stripping; Brazil Block Seam; 42 to 48 inches thick.
 PO—Clay City, Ind.; SP—Same; CTY—Owen; RR—C. I. & L.
 S of H—Steam loco. Track gage 66 1/2 inches.
 S of M—2 steam shovels.
 EMP—34.
 SIZES SHIPT—Run of Mine.

STOCKTON COAL CO.

General Office, Dugger, Ind.
 PR—Roy E. Price, Dugger, Ind.
 VP—E. H. Price, Dugger, Ind.
 GM—A. H. Kramer, Dugger, Ind.
 GS—Ebert Hammack, Dugger, Ind.
 PA—R. E. Price, Dugger, Ind.
 CE—E. R. Dickey, Dugger, Ind.
 EM—M. L. Oberholzer, Dugger, Ind.
 SC—Address the Company; Buyer, E. E. Price, Dugger, Ind.

Freeman Mine; Shaft; No. 6 Seam, 66 in. thick.
 PO—Dugger, Ind.; SP—Same; CTY—Sullivan; RR—I. C.
 S of H—Mules.
 S of M—Hand.
 PP—2 fire tube boilers, 75 H. P., 2 pumps.
 EMP—51. Last fiscal year output, 63,400 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. SHIPT—Gravity Screens.

SUGAR VALLEY COAL COMPANY.

General Office, Terre Haute, Ind.
 PR—F. C. Jones, Springfield, Ill.
 VP—C. B. Meredith, Terre Haute, Ind.
 GM—Edward Church, Terre Haute, Ind.
 PA—E. W. McCullough, Terre Haute, Ind.
 EM—George Flick, Terre Haute, Ind.

Sugar Valley Mine; Shaft; No. 5 Seam, 50 in. thick.
 PO—Terre Haute, Ind.; SP—Macksville, Ind.; CTY—Vigo; RR—P. C. C. & St. L.
 MS—Carl Gillum, Terre Haute, Ind.
 S of H—Mules. Storage batteries and combination locos. Track gage 42 in.
 PP—2 fire tube boilers, 225 H. P., 2 pumps.
 EMP—100.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Gravity and Breveting Screens.

SUNBEAM COAL CO.

General Office, 311 Opera House Bldg., Terre Haute, Ind.
 PR—Harry Hafer, Chicago, Ill.
 VP—Harry A. Bratton, Terre Haute, Ind.
 TR—Harry A. Bratton, Terre Haute, Ind.
 GM—Harry A. Bratton, Terre Haute, Ind.
 PA—Harry A. Bratton, Terre Haute, Ind.
 EM—Rush & Everson, Terre Haute, Ind.
 EE—Ray McCarthy, Terre Haute, Ind.

Sunbeam Mine; Shaft; Seam No. 5, 48 to 52 in. thick.
 PO—Terre Haute, Ind.; SP—Macksville, Ind.; CTY—Vigo; RR—Vandalia.
 S of H—2 electric and 3 storage battery locos, and mules. Track gage 36 in.
 S of M—Hand.
 PP—3 boilers, total 400 H. P., gen unit, 250 volts D. C., 1 pump.
 EMP—225. Last fiscal year output, 1,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.

SUNFLOWER COAL COMPANY.

General Office, Dugger, Ind.
 PR—E. M. Dugger, Dugger, Ind.
 VP—E. M. Dugger, Dugger, Ind.
 TR—W. E. Dugger, " "
 GM—M. E. Dugger, " "
 GS—O. H. Meredith, Dugger, Ind.
 PA—M. E. Dugger, Dugger, Ind.
 CE—E. M. Dugger, Dugger, Ind.
 EE—W. Leaman, Dugger, Ind.
 SC—Chowning & Dickey, Buyer, E. O. Chowning, Dugger, Ind.

Sunflower Mine; Shaft; No. 5 and 6 Seams, 66 to 78 in. thick.
 PO—Dugger, Ind.; SP—Same; CTY—Sullivan; RR—I. C.
 SM—R. M. Dugger, Dugger, Ind.
 S of H—Mules, 2 trolley pole type locos. Track gage 36 in.
 S of M—8 longwall machs.
 PP—4 fire tube boilers, 500 H. P., 1—250 K. W. gen. units, 250 volts D. C., 4 pumps.
 EMP—250. Daily tonnage 1,500.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

SUNLIGHT COAL CO.

General Office, Indianapolis, Ind.
 PR—Samuel Ashby, Indianapolis, Ind.
 VP—Clarence Stanley, Indianapolis, Ind.
 2nd VP—T. C. Mullins, Boonville, Ind.
 TR—Victor C. Kendall, Indianapolis, Ind.
 GM—T. C. Mullins, Boonville, Ind.
 GS—Henry Osha, Boonville, Ind.
 PA—A. A. Gee, Boonville, Ind.

Sunlight Mine; Stripping; No. 5 Seam, 66 in. thick.
 PO—Boonville, Ind.; SP—Same; CTY—Warrick; RR—Southern.
 S of H—Track gage, 56 1/2 in.
 PP—9 water tube boilers, 6 pumps.
 EMP—85. Last fiscal year output, 134,951 tons.
 SIZES SHIPT—Run of Mine.

SUNNYSIDE COAL & COKE CO.

General Office, Evansville, Ind.
 PR—Jas. H. Moore, Evansville, Ind.
 TR—H. V. Blackman, Evansville, Ind.
 GS—J. H. Odell, Evansville, Ind.
 PA—Jas. H. Moore, Evansville, Ind.
 EE—T. S. Phillips, Evansville, Ind.

Sunnyside Mine; Shaft; Indiana No. 5 Seam, 50 in. thick.
 PO—Evansville, Ind.; SP—Same; CTY—Vanderburgh; RR—I. C., C. E. I.
 MS—A. A. Sams, Evansville, Ind.
 S of H—Mules and trolley pole type loco. Track gage, 40 in.
 S of M—Shortwall machs.
 PP—2 150 H. P. fire tube boilers, 250 volts.
 EMP—145. Daily tonnage 475.
 SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Lump.
 PREP. EQUIPT—Gravity Screens.

SUPERIOR COAL MINING COMPANY.

Now White River Mining Co.

SUWANEE COAL COMPANY

General Office, Cor. Covert & Ry. Aves., Evansville, Ind.
 PR—Dr. C. A. Hartley, Evansville, Ind.
 VP—T. J. Herron, R.R. No. 1, Newburg, Ind.
 TR—J. T. Herron, Evansville, Ind.
 SECY & SALES MGR.—J. C. Stephan, Evansville, Ind.
 GS—T. J. Herron, R.R. No. 1, Newburg, Ind.
 PA—J. C. Stephan, Evansville, Ind.
 CE—Mr. Robertson, Waverly Bldg., Evansville, Ind.
 SA—J. C. Stephan, Evansville, Ind.

Suwanee Mine; Double Shaft; Ind. No. 5 Seam, 50 inches thick.
 PO—Newburg, Ind., R.R. No. 1; SP—Hartley Siding, Ind.; CTY—Warrick; RR—E. & O. V.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 PP—Scotch Marine type boilers, 35 H.P.
 EMP—40. Daily tonnage 300.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Gravity Screens.

SYNDICATE COAL COMPANY

General Office, Dugger, Ind.
 PR—John McLin, Dugger, Ind.
 TR—R. E. Price, Dugger, Ind.
 GM—John McLin, Dugger, Ind.
 PA—R. E. Price, Dugger, Ind.
 CE—E. H. Dugger, Dugger, Ind.
 SA—Stockton Coal Co., Dugger, Ind.

Syndicate Mine; Shaft; No. 6 Seam; 66 in. thick.
 PO—Dugger, Ind.; SP—Midland, Ind.; CTY—Sullivan; RR—Moonon.
 S of H—Mules.
 S of M—Hand.
 PP—1 return tubular boiler, total 60 H. P.
 SIZES SHIPT—Run of Mine.

TECUMSEH COAL & MINING COMPANY.

General Office, McCormick Bldg., Chicago, Ill.
 PR—W. H. Howe, Chicago, Ill.
 VP—H. H. Conner, Chicago, Ill.
 GS—Valentine Martin, Bicknell, Ind.
 TR—W. J. Freeman, Terre Haute, Ind.
 GM—W. J. Freeman, " "
 GS—Val Martin, " "
 PA—W. J. Freeman, " "
 CE—Rush & Everson, " "
 Sales Agency, Martin Howe Coal Co., Chicago, Ill.

Tecumseh No. 1 and 2 Mines; Shaft; No. 5 Seam, CO-96 inches thick.
 PO—Bicknell, Ind.; SP—Same; CTY—Knox; RR—Penna.
 S of H—6 elec. locos, mules. Track gage 40 inches.
 S of M—14 elec. and 4 comp. air machs.
 PP—Power purchased. Transformer 2300-220 volts A. C., M. G. Sets, 300 K. W. Rotary converters, 2—150 K. W., 9 return tubular boilers, 13 pumps.
 EMP—555. Last years tonnage 526,900.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Picking Table, Screens.

TEMPLETON COAL COMPANY.

General Office, Citizens Bank Bldg., Terre Haute, Ind.
 PR—John A. Templeton, Terre Haute, Ind.
 GM—J. A. Templeton, Terre Haute, Ind.
 GS—J. A. Templeton, Terre Haute, Ind.
 PA—R. A. Templeton, Terre Haute, Ind.
 CE—L. Van Arsdale, Terre Haute, Ind.
 EM—Clarence Dillhunt, Terre Haute, Ind.
 SA—Sterling Midland Coal Company, 916 Fisher Bldg., Chicago, Ill.

Glendora, Peerless, St. Clair Mine; Shaft; Glendora Seam, 66 in. thick.
 PO—Sullivan, Ind.; SP—Glendora, Ind.; CTY—Sullivan; RR—C. & E. I., C. T. H. & S. H.
 S of H—Mules and storage battery locos. Track gage 38 in.
 S of M—Shortwall, longwall and chain breast type machs.
 PP—Power purchased, transformer 33000-250 volts A. C., 1—150 H. P. water tube boiler.
 EMP—700.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
 NOTE—Formerly Consolidated Indiana Coal Co.

TIGHE COAL CO.

General Office, 509 Trust Bldg., Terre Haute, Ind.
 PR—B. G. Tighe, Chicago, Ill.
 VP—C. A. Bickett, Chicago, Ill.
 TR—Edward Shirkie, Terre Haute, Ind.
 GM—Edward Shirkie, Terre Haute, Ind.
 PA—Geo. Merchant, Terre Haute, Ind.
 EM—V. Strain, Terre Haute, Ind.
 EE—S. V. Pearce, Terre Haute, Ind.
 SA—Bickett Coal & Coke Co., Chicago, Ill.

No. 1 Mine; Shaft; No. 5 Seam, 54 in. thick.
 PO—Clinton, Ind.; SP—Libertyville, Ind.; CTY—Vermillion; RR—C. M. & St. L.
 MS—Lawrence Anderson, Terre Haute, Ind.
 S of H—Mules, 4 trolley pole type locos. Track gage 44 inches.
 S of M—Hand.
 PP—3 150 H. P. fire tube boilers, 150 K. W. gen. unit, 250 volts D. C., 4 pumps.
 EMP—250. Daily tonnage 1,500.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

TOWER HILL COAL COMPANY

General Office, Linton, Ind.
 PR—K. L. Ogile, Linton, Ind.
 VP—John Hewitt, Linton, Ind.
 TR—K. L. Ogile, Linton, Ind.
 GM—John Hewitt, Linton, Ind.
 PA—J. C. Fritz, Linton, Ind.
 SA—Ogle Coal Co., Indianapolis, Ind.

Tower Hill Mine; Shaft; No. 3 Seam, 78 inches thick.
 PO—Linton, Ind.; SP—Midland, Ind.; CTY—Greene; RR—C. I. & L.
 MS—Thos. Fleming, Linton, Ind.
 S of H—Mules. Track gage 42 inches.
 S of M—Hand.
 PP—2 fire tube boilers, transformer 33,000 to 2,300 volts A. C., M. G. Set, 250 volts D. C., 5 pumps.
 EMP—85. Daily tonnage 500.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

TURKEY KNOB MINING COMPANY.

General Office, R. R. No. 5, Winslow, Ind.
 PR—James C. Ellis, Owensburg, Ky.
 TR—Henry G. Roetzal, Winslow, Ind.
 GM—Henry G. Roetzal, Winslow, Ind.
 GS—John Randal, Winslow, Ind.
 PA—Henry G. Roetzal, Winslow, Ind.

EM—Rush & Everson, Terre Haute, Ind.
 SC—D. J. Mackey Co., Buyer, A. Louis Seipel, Winslow, Ind.
 SA—Martin Howe Coal Co., Chicago, Ill.

Turkey Knob Mine; 2 drifts; No. 5 Seam, 41 to 60 in. thick.
 PO—R. F. D. No. 20, Winslow, Ind.; SP—Hartwell Jct., Ind.; CTY—Pike; RR—Southern, Hartwell Br.
 S of H—Mules and 2 elec. locos.
 S of M—Hand and 3 elec. machs.
 PP—1 return tubular boiler, 250 volts D. C., 5 pumps.
 EMP—120. Daily tonnage, 400.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens.

TWIN HILLS COAL COMPANY

Now Glover Coal Company.

UNITED FOURTH VEIN COAL CO.

General Office, Indianapolis, Ind.
 PR—E. R. Dye, 502 Traction Bldg., Indianapolis, Ind.
 VP—H. B. Pop, 343 S. Dearborn St., Chicago, Ill.
 TR—T. D. Yeazel, 502 Traction Bldg., Indianapolis, Ind.
 GM—E. R. Dye, 502 Traction Bldg., Indianapolis, Ind.
 GS—Clayton Moss, Linton, Ind.
 PA—Clayton Moss, Linton, Ind.
 EM—John Boudersque, Linton, Ind.
 EE—S. I. Mount, Linton, Ind.
 SC—J. W. Wolford & Sons, Buyer, J. W. Wolford, Linton, Ind.
 SA—George G. Pope Coal Co., 343 S. Dearborn St., Chicago, Ill.

Black Creek Mine; Shaft; No. 4 Seam, 4 ft. thick.
 PO—Linton, Ind.; SP—Same; CTY—Green; RR—C. T. H. & S. E.
 MS—Nat. Hagerman, Linton, Ind.
 S of H—Elec. locos, and mules. Track gage 36 in.
 S of M—10 Elec. mach.
 PP—5 return tubular boilers, total 500 H. P., 1 gen. unit, 250 volts D. C., 6 pumps.
 EMP—200. Daily tonnage 800.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

Island Valley Mine; Shaft; No. 3 Seam, 74 in. thick.
 PO—Jasonville, Ind.; SP—Same; CTY—Clay; RR—C. T. H. & S. E.
 S of H—1 Elec. loco.; track gage 38 in.
 S of M—8 Elec. mach.
 PP—3 boilers, 325 H. P., 1 gen. unit, 250 volts D. C., 5 pumps.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screen.
 Old Information.

UNITED STATES FUEL CO.

General Office, 208 So. LaSalle St., Chicago, Ill.
 2 Mines in Indiana, 5 Mines in Illinois.
 PR—W. H. Clingerman, Carnegie Bldg., Pittsburgh, Pa.
 TR—C. S. Wardley, Chicago, Ill.
 PA—C. H. Rhodes, " "
 GS—Thomas Moses, Westville, Ill.
 EM—A. F. Allard, " "
 EE—Thomas Mills, Westville, Ill.

Universal Mine; Shaft; Nos. 4 and 5 Seams; 48 to 60 in. thick.
 PO—Universal, Ind.; SP—Clinton, Ind.; CTY—Vermillion; RR—C. & E. I.
 MS—R. H. Thomas, Universal, Ind.
 S of H—3 Elec. loco. and 2 storage batteries; track gage 42 in.
 S of M—19 Elec. mach.
 PP—8 water tube boilers, total 2,244 H. P., 3 gen. units D. C., 2 pumps.
 EMP—674. Last years tonnage 844,558.

UNITED TRACIONS COAL CO.

General Office, Rose Disp. Bldg., Terre Haute, Ind.
 PR—R. I. Todd, Trac. Terminal Bldg., Indianapolis, Ind.
 GM—D. C. Botting, Sullivan, Ind.
 GS—Thos. Lipsett, Dugger, Ind.
 PA—W. C. Stewart, Sullivan, Ind.
 CE—H. P. Dyer, Sullivan, Ind.
 SA—Vandalia Coal Co., Terre Haute, Ind.

No. 23 Mine; Shaft; No. 6 Vein Seam, 66 in. thick.
 PO—R. F. D. No. 5, Sullivan; SP—Dugger, Ind.; CTY—Sullivan; RR—Penna.
 MS—Hugh Rice, R. F. D. 5, Sullivan, Ind.
 S of H—2 trolley pole type locos. Track gage, 42 in.
 S of M—9 chain breast and 5 shortwall machs.
 PP—Power purchased, transformer 2,200-220 volts A. C., motor gen. sets, 250 volts D. C., 4 150 H. P. fire tube boilers, 3 pumps.
 EMP—75. Daily output, 800 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. SHIPT—Gravity Screens.

UTILITIES COAL CO.

General Office, 1734 Lytton Bldg., Chicago, Ill.

PR—J. E. Hitt, Chicago, Ill.
VP—R. K. Hammond, Chicago, Ill.
TR—W. F. Meyer, Chicago, Ill.
GM—J. E. Hitt, Chicago, Ill.
GS—John Calhoun, West Terre Haute, Ind.
PA—Wm. F. Meyer, Chicago, Ill.
EM—Allen & Garcia, Chicago, Ill.
SA—B. Walter Bledsoe & Co., Terre Haute, Ind.

National Mine; Shaft; No. 5 Seam 56 in. thick.

PO—West Terre Haute, Ind.; SP—Macksville, Ind.; CTY—Vigo; RR—P. C. C. & St. L.

S of H—2 trolley pole type locos. Track gage, 42 in.

PP—3 150 H. P. water tube boilers, 1 125 K. W. gen. units, 250 volts D. C., 4 pumps.

EMP—190. Last fiscal year output, 200,000 tons.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.

VANDALIA COAL COMPANY.

General Office, Rose Dispensary Bldg., Terre Haute, Ind.

PR—A. M. Ogle, Terre Haute, Ind.
VP—J. G. Van Winkle, Terre Haute, Ind.

TR—A. M. Ogle, Terre Haute, Ind.
GM—D. C. Botting, Sullivan, Ind.

GS—Thos. Lippeatt, Dugger, Ind.
PA—W. C. Stewart, Terre Haute, Ind.

EM—H. P. Iyer, Terre Haute, Ind.
SA—Ogle Coal Co., Indianapolis, Ind.

No. 10 Mine; Shaft; No. 4 Vein, 64 in. thick.

PO—R. F. D., Sullivan, Ind.; SP—Dugger, Ind.; CTY—Sullivan; RR—Penna.

MS—W. S. Robertson, Dugger, Ind.
S of H—5 trolley pole type locos. Track gage, 42 in.

S of M—12 chain breast type and 8 shortwall machs.

PP—6 150 H. P. fire tube boilers, 2 150 K. W. gen. units, 250 volts D. C., 3 pumps.

EMP—97. Daily output, 1,100 tons.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.

No. 12 Mine; Shaft; No. 6 Seam, 72 in. thick.

PO—R. F. D., Sullivan, Ind.; SP—Dugger, Ind.; CTY—Sullivan; RR—Penna.

MS—Thos. Fleming, R. F. D. No. 5, Sullivan, Ind.

S of H—4 trolley pole type locos. Track gage, 42 in.

S of M—10 chain breast and 11 shortwall machs.

PP—Power purchased, transformer 23,000 to 220 volts, 2 M. G. sets, 250 volts D. C., 2 pumps.

EMP—55. Daily output, 550 tons.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens, Picking Tables.

No. 16 Mine; Shaft; No. 4 Vein, 64 in. thick.

PO—R. F. D., Sullivan, Ind.; SP—Dugger, Ind.; CTY—Sullivan; RR—Penna.

MS—W. S. Robertson, Dugger, Ind.
S of H—2 trolley pole type locos. Track gage, 42 in.

S of M—8 chain breast and 5 shortwall machs.

PP—Power purchased, transformer 33,000 to 220 volts, M. G. sets, 250 volts D. C., 2 pumps.

EMP—36. Daily output, 500 tons.

SIZES SHIPT—Run of Mine, Slack, Lump.

No. 17 Mine; Shaft; No. 6 Vein, 60 in. thick.

PO—R. F. D., Sullivan, Ind.; SP—Dugger, Ind.; CTY—Sullivan; RR—Penna.

MS—Theodore Thompson, R.F.D. No. 5, Sullivan, Ind.

S of H—3 trolley pole type locos. Track gage, 42 in.

S of M—11 chain breast and 8 shortwall machs.

PP—Power purchased, transformer 33,000 to 220 volts, M. G. sets, 250 volts D. C.

EMP—80. Daily output, 900 tons.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens, Picking Tables.

No. 82 Mine; Shaft; No. 5 Vein Seam, 52 in. thick.

PO—R. F. D., West Terre Haute, Ind.; SP—Macksville, Ind.; CTY—Vigo, RR—Penna.

MS—W. O. Conaur, Terre Haute, Ind.
S of H—3 storage batteries and 2 combination locos. Track gage, 56 1/2 inches.

S of M—Hand.

PP—Power purchased, transformer 23,000 to 220 volts, M. G. sets, 250 volts D. C., 5 pumps.

EMP—60. Daily output, 800 tons.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.

VERMILION COAL COMPANY.

General Office, Clinton, Ind.

PR—A. D. Spears, Clinton, Ind.
VP—T. H. Cochran, Chicago, Ill.

TR—A. R. Milward, Clinton, Ind.
GM—A. D. Spears, Clinton, Ind.

PA—A. D. Spears, " "
CE—A. D. Spears, " "

Vermilion Mine; Shaft; No. 5 Vein; 60 in. thick.

PO—Clinton, Ind.; SP—Same; CTY—Vermilion; RR—C. & E. I., Hunt Switch.

S of H—Mules.

S of M—Hand.

SIZES SHIPT—Run of Mine, Slack, Lump.

VIGO MINING COMPANY.

General Office, Rose Dispensary Bldg., Terre Haute, Ind.

PR—Warren S. Blawett, Terre Haute, Ind.

VP—James Royce, Terre Haute, Ind.
TR—Leon Stern, Terre Haute, Ind.

GM—D. C. Botting, Sullivan, Ind.
GS—Phil. Roberts, Sullivan, Ind.

PA—W. C. Stewart, Sullivan, Ind.
EM—H. P. Iyer, Sullivan, Ind.

SA—Ogle Coal Co., Indianapolis, Ind.

No. 2 Hocking No. 18 Tower Hill Mine. Note—Mine abandoned.

No. 6 Lattas Creek Mine; Shaft; No. 4 Vein Seam, 60 in. thick.

PO—Jasonville, Ind.; SP—Same; RR—Greene; RR—C. I. & L., C. T. H. & S. E.

MS—Geo. Wulke, Jasonville, Ind.
S of H—8 trolley pole type locos. Track gage, 42 in.

PP—6 fire tube boilers, 150 H. P., 1 150 K. W., 1 200 K. W. gen. units, 250 volts D. C., 3 pumps.

EMP—84. Daily output, 1,100 tons.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Shaker Screens.

No. 7 Mine Closed.

No. 14 Mine Worked Out.

No. 15 Cloverleaf Mine; Shaft; No. 6 Seam, 64 in. thick.

PO—Cass, Ind.; SP—Same; CTY—Sullivan; RR—C. I. & L.

MS—Wade Benfield, Dugger, Ind.
S of H—2 trolley pole type locos. Track gage, 36 in.

S of M—13 chain breast type and 4 longwall machs.

PP—5 fire tube boilers, 150 H. P., 2—150 K. W. gen. units, 250 volts D. C., 4 pumps.

EMP—88. Daily output, 900 tons.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Shaker Screens.

No. 22 Mine; Shaft; No. 4 Vein Seam, 54 in. thick.

PO—Sullivan, Ind.; SP—Dugger, Ind.; CTY—Sullivan; RR—Penna. Lines.

MS—Hugh Rice, R. F. D., Sullivan, Ind.

S of H—Mules. Track gage, 42 in.

S of M—2 chain breast type and 1 shortwall machs.

PP—2 pumps.

EMP—50. Daily output, 200 tons.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.

No. 27 Mine; Shaft; No. 4 Vein Seam, 62 in. thick.

PO—Jasonville, Ind.; SP—Same; CTY—Sullivan; RR—C. T. H. & S. E.

MS—Geo. Wilke, Jasonville, Ind.
S of H—2 trolley pole type locos. Track gage, 42 in.

S of M—6 chain breast type and 9 shortwall machs.

PP—4 fire tube boilers, 150 H. P., 2 150 K. W. gen. units, 250 volts D. C., 3 pumps.

EMP—100. Daily output, 900 tons.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Shaker Screens.

No. 28 Mine; Shaft; No. 4 Vein Seam, 66 in. thick.

PO—Cass, Ind.; SP—Same; CTY—Sullivan; RR—Monon, Southeastern.

MS—Jas. Calloway, Jasonville, Ind.
S of H—Mules and 2 trolley pole type locos. Track gage 42 inches.

S of M—8 chain breast type and 8 shortwall machs.

PP—Power purchased, transformer 33,000-220 volts A. C., motor gen. sets, 250 volts D. C., 2 pumps.

EMP—29. Daily output, 300 tons.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.

No. 29 Mine; Shaft; No. 6 Seam; 68 inches thick.

PO—Dugger, Ind.; SP—Same; CTY—Sullivan; RR—Monon.

MS—Wade Benfield, Dugger, Ind.
S of H—Mules. Track gage 36 inches.

S of M—Hand.

PP—2 fire tube boilers, 50 H. P., 2 pumps.

Daily output, 150 tons.

SIZES SHIPT—Run of Mine.

No. 71 Mine; Shaft; Minshall Vein Seam, 60 in. thick.

PO—Coal Bluff, Ind.; SP—Same; CTY—Vigo; RR—C. & E. I.

MS—Wellington O'Connor, Coal Bluff, Ind.
S of H—Mules, rope, 2 trolley pole and 1 storage battery loco. Track gage 36 inches.

S of M—4 chain breast and 8 shortwall machs.

PP—4 fire tube boilers, 150 H. P., 1 100 K. W., 1 200 K. W. gen. units, 250 volts D. C., 5 pumps.

Daily output, 1,000 tons.

SIZES SHIPT—Run of Mine, Slack, Egg, Lump.

PREP. EQUIPT—Gravity Screens.

Note—This mine formerly operated by Minshall Coal Co.

No. 74 Mine; Shaft; Minshall Vein Seam, 60 in. thick.

PO—Spartan, Ind.; SP—Oakland City, Ind.; CTY—Pike; RR—E. & L. Southern.

S of H—Steam locos.

S of M—Hand.

SIZES SHIPT—Lump, Block.

VULCAN COAL COMPANY
General Office, 511 Peoples Bank Bldg., Evansville, Ind.

PR—L. G. Julian, Evansville, Ind.
TR—T. J. Morton, Evansville, Ind.

Clyshire and Petersburg Mine; Seam, 60 inches thick.

PO—Spartan, Ind.; SP—Oakland City, Ind.; CTY—Pike; RR—E. & L. Southern.

S of H—Steam locos.

S of M—Hand.

SIZES SHIPT—Lump, Block.

WANETI COAL COMPANY
Operations abandoned.

WASHINGTON-WHEATLAND COAL CO.
New Standard Coal Co.

WEST CLINTON COAL COMPANY
General Office, 308-9-10 McKee Bldg., Terre Haute, Ind.

PR—John Shirkie, Chicago, Ill.
TR—Steward Shirkie, Terre Haute, Ind.

GS—Fred White, 2040 N. 12th, Terre Haute, Ind.

EM—Leonard Henneman, Terre Haute, Ind.

EE—Kirby Phillips, North Terre Haute, Ind.

SA—West Clinton Coal Co., McCormick Bldg., Chicago, Ill.

West Clinton Mine; Shaft; No. 4 Seam; 54 in. thick.

PO—Blanford, Ind.; SP—Same; CTY—Vermilion; RR—C. T. H. & S. E.

S of H—Trolley pole type locos. Track gage 42 in.

S of M—Shortwall machs.

PP—3 fire tube boilers, 150 H. P., 1 150 K. W. gen. unit, 250 volts D. C., 5 pumps.

EMP—200. Daily tonnage 800

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Shaker Screens.

Interlate Mine; Shaft; No. 5 Seam; 60 in. thick.

PO—Blanford, Ind.; SP—Same; CTY—Vermilion; RR—C. T. H. & S. E.

S of H—10 trolley pole type locos. Track gage 42 in.

S of M—Hand.

PP—3 fire tube boilers, total 900 H. P., 1—225 K. W. and 1—100 K. W. gen. units, 250 volts D. C., 4 pumps.

EMP—300. Daily tonnage 1,500.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Gravity and Shaker Screens.

WESTERN INDIANA MINING COMPANY

General Office, Terre Haute, Ind.

PR—G. Edward Talley, Terre Haute, Ind.
VP—Walter W. Talley, Terre Haute, Ind.

TR—Homer E. Talley, Terre Haute, Ind.
GS—John A. Templeton, Terre Haute, Ind.

EM—Geo. Fick, Terre Haute, Ind.
SC—Address the Company, Buyer, Victor H. Nash, Terre Haute, Ind.

SA—Coal Bluff Mining Co., Terre Haute, Ind.

Wabash Mine; Shaft; No. 4 Seam; 68 inches thick.

PO—Terre Haute, Ind.; SP—Macksville, Ind.; CTY—Vigo; RR—Big Four.

MS—Louis Waullett, W. Terre Haute, Ind.
S of H—Mules, 4 electric locos. Track gage 42 in.

S of M—16 chain breast type machs.

PP—8 125 H. P. fire tube boilers, 1 200 K. W. and 1 150 K. W. gen. units, D. C., 6 pumps.

EMP—400. Daily output, 2,000 tons.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Domestic.

PREP. EQUIPT—Shaker Screens, Loading Rooms.

Riverside Mine; Shaft; No. 5 Clinton Seam; 54 inches thick.

PO—Terre Haute, Ind.; SP—Macksville, Ind.; CTY—Vigo; RR—Big Four.

MS—Ed Atkinson, Terre Haute, Ind.
S of H—Mules. Track gage 42 inches.

S of M—Hand.

PP—Power from Wabash Mine, 4 pumps

EMP—200. Daily output, 1,000 tons

SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Domestic.

PREP. EQUIPT—Gravity Screens.

Minshall Mine; Shaft; Minshall Seam; 56 inches thick.

PO—Fontanet, Ind.; SP—Same; CTY—Vigo; RR—Big Four.

MS—Rhys Davies Fontanet, Ind.
S of H—Mules, 2 10-ton trolley pole type locos. Track gage 36 in.

S of M—Hand.

PP—4 125 H. P. fire tube boilers, 100 K. W. gen. unit, D. C., 6 pumps.

EMP—150. Daily output, 800 to 1,000 tons.

SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Domestic.

PREP. EQUIPT—Gravity Screens.

WHITE ASH COAL CO.
General Office, Linton, Ind.

PR—Clay Moss, Linton, Ind.
VP—John Moony, Jasonville, Ind.

TR—G. D. Yeazel, 502 Traction Bldg., Indianapolis, Ind.

SECY—G. D. Yeazel, 502 Traction Bldg., Indianapolis, Ind.

GM—Clay Moss, Linton, Ind.
PA—Clay Moss, Linton, Ind.

EM—John Bondonesque, Linton, Ind.
SA—G. D. Yeazel, 502 Traction Bldg., Indianapolis, Ind.

White Ash Mine; Slope; No. 4 Seam, 54 inches thick.

PO—Jasonville, Ind.

MF—John Moony, Jasonville, Ind.
S of H—Mules. Track gage 38 inches

S of M—Hand.

PP—1 boiler and 1 pump.

EMP—50.

SIZES SHIPT—Run of Mine.

WHITE RIVER MINING CO.
General Office, Fisher Bldg., Chicago, Ill.

PR—Chas. A. Becke, Chicago, Ill.
VP—Wm. E. Becke, Chicago, Ill.

GS—Addison Todd, Cannelburg, Ind.
SA—Chas. A. Becke, Chicago, Ill.

White River Mine; Shaft; No. 4 Seam, 48 in. thick.

PO—Cannelburg, Ind.; SP—

WILLFRED COAL COMPANY
Out of business.**WILLOW CREEK COAL CO.**

General Office, Opera House, Terre Haute, Ind.
 PR—C. J. Richards, Terre Haute, Ind.
 VP—C. J. Richards, Terre Haute, Ind.
 GM—B. J. Richards, Terre Haute, Ind.
 GS—I. H. Woolley, Terre Haute, Ind.
 PA—B. J. Richards, Terre Haute, Ind.
 EM—Rush & Everson, Terre Haute, Ind.
 SA—Richards & Sons, 410 Opera House, Terre Haute, Ind.

Willow Creek Mine; Shaft; No. 3 Seam, 66 in. thick.
 PO—Selyville, Ind.; SP—Same; CTY—Vigo; RR—Penna. Locs West.
 MS—B. J. Richards, Terre Haute, Ind.
 S of H—Mules, trolley pole type locos. Track gage 36 inches.
 S of M—Hand.
 PP—2 fire tube boilers, 4 pumps.
 EMP—155. Last years tonnage 102,533.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

WINSLOW MINING COMPANY

General Office, Milwaukee, Wis.
 PR—Edw. Callaway, Milwaukee, Wis.
 VP—Wm. Maas, Milwaukee, Wis.
 TR—Edith Callaway, Milwaukee, Wis.
 GM—O. A. Wulfman, Winslow, Ind.
 GS—O. A. Wulfman, Winslow, Ind.
 SA—Callaway Fuel Co., Milwaukee, Wis.

Wulfman Mine; Shaft; No. 5 Seam, 60 inches thick.
 PO—Winslow, Ind.; SP—Same; CTY—Pike; RR—Southern.
 S of H—Mules. Track gage 30 inches.
 S of M—Hand.
 PP—1 40 H. P. fire tube boiler.
 EMP—55. Daily tonnage 200.
 SIZES SHIPT—Run of Mine.

WOOD COAL CO.

PR—Wm. Wood, Coal Bluff, Ind.
 VP—A. H. Wood, Coal Bluff, Ind.
 TR—Wm. Wood, Coal Bluff, Ind.
 GM—Wm. Wood, Coal Bluff, Ind.
 GS—Wm. Harkes, Coal Bluff, Ind.
 PA—Wm. Wood, Coal Bluff, Ind.
 EM—A. S. Tate, Coal Bluff, Ind.
 SA—Wm. Wood, Coal Bluff, Ind.

Wood Mine; Slope; No. 3 Seam, 72 in. thick.
 PO—Coal Bluff, Ind.; SP—Same; CTY—Vigo; RR—C. E. & I.
 S of H—Mules and rope. Track gage, 36 inches.
 S of M—1 comp. air puncher mach.
 PP—2 water tube boilers, 150 H. P., 2 pumps.
 EMP—65. Daily output, 200 to 300 tons.
 SIZES SHIPT—Slack, Run of Mine, Lump.
 PREP. EQUIPT—Gravity Screens.
 Old Information.

WOOLEY, J. COAL CO.

General Office, Evansville, Ind.
 PR—Jabez Wooley, Evansville, Ind.
 VP—C. A. Ritz, Evansville, Ind.
 TR—Jabez Wooley, Evansville, Ind.
 GM—Jabez Wooley, Evansville, Ind.

GS—J. D. McInnes, Sullivan, Ind.
 PA—John C. Gross, Evansville, Ind.

Mildred No. 2 Mine; Shaft; No. 6 Seam, 66 to 72 in. thick.
 PO—Sullivan, Ind. SP—Selfert, Ind.
 CTY—Sullivan. RR—C. & E. I.
 S of H—Mules.
 S of M—Hand.
 PP—2 Brownell water tube boilers.
 SIZES SHIPT—Run of Mine, Lump, Slack.

Mildred No. 13 Mine; Shaft; No. 6 Seam, 66 to 72 in. thick.
 PO—Mildred, Ind.; SP—Selfert, Ind.; CTY—Sullivan; RR—C. & E. I.
 S of H—Mules and 2 electric locos. Track gage 42 in.
 S of M—6 elec. machs.
 PP—4 water tube boilers, total 450 H. P., 3 gen. units, 250 volts D. C., 1 pump.
 EMP—240. Last fiscal year output, 300,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

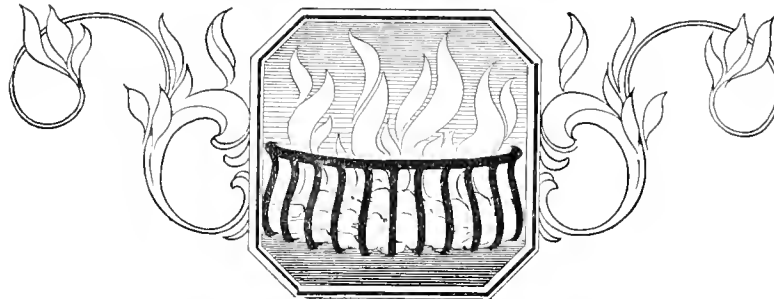
Polk Nos. 5 and 7 Mines; Strippling, Slope; No. 5 Seam, 72 to 103 inches thick.
 PO—Boonville, Ind.; SP—Same; CTY—Warrick; RR—Southern.
 MS—Wm. C. Wooley, Boonville, Ind.
 S of H—2 gasoline locos. Track gage 42 in.
 S of M—2 steam shovels.
 PP—2 water tube boilers, total 350 H. P., 2 compressors and 2 pumps.
 EMP—40. Last fiscal year output, 100,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Pea, Lump.

Castle Garden No. 6 Mine; Shaft; No. 5 Seam, 48 to 60 in. thick.
 PO—Chandler, Ind.; SP—Same; CTY—Warrick; RR—Southern.
 MS—Daniel McKillop, Boonville, Ind.
 S of H—Mules.
 PP—3 water tube boilers, total 300 H. P.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens.

ZELLER-McCLELLAN & COMPANY.
Out of Business.**ZIMMERMAN COAL COMPANY.**

General Office, 609 Tribune Bldg., Terre Haute, Ind.
 PR—W. Paul Zimmerman, Brazil, Ind.
 VP—J. B. Mershon, Brazil, Ind.
 TR—M. T. James, Terre Haute, Ind.
 GM—W. Paul Zimmerman, Brazil, Ind.
 GS—John Boyle, Terre Haute, Ind.
 PA—W. Paul Zimmerman, Brazil, Ind.
 EE—Jas. Velely, Terre Haute, Ind.

Black Betty Mine; Shaft; No. 4 Seam, 56 to 68 in. thick.
 PO—Terre Haute, Ind.; SP—Clinton, Ind.; CTY—Vigo; RR—C. & E. I.
 S of H—Mules and 4 trolley pole type locos. Track gage, 42 in.
 S of M—10 elec. and 7 shortwall machs.
 PP—5 return tubular boilers, total 750 H. P., 2 gen. units, 1—200, 1—300 K. W., 250 volts D. C., 1 air compressor, 5 pumps.
 EMP—300. Last fiscal year output, 400,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.



Directory of Mines by Counties

INDIANA

Company.	Mines.	Post Office of Mines.
American Vitrified Products Co.	Goucher	Brazil
Big Vein Mining Co.	Rug Vein	Coalmont
Bolt Coal Co.	Little Little	Coalmont
Bradway Coal Co.	Bradway No. 1	Center Point
Brazil Block Coal & Clay Co.	No. 12	Brazil
Brazil Collieries Co.	No. 2	Brazil
Brazil District Mining Co.	Hamlin and Hook	Brazil
Clay Products Co., The	Clay	Brazil
Climax Coal & Clay Co.	Climax No. 1	Saline City
Coal Bluff Mining Co.	Plymouth No. 2	Coal Bluff
Harrison Coal & Mining Co.	Harrison No. 6	Clay City
Howell Coal Co.	Howell	Center Point
Interurban Coal Co.	Cloverland	Brazil
Lindsay, Froelichman & Hopkins.	Indiana Block No. 2	Saline City
Miller Coal Co.	Miller	Stanton
Primrose Coal Producing Co.	Primrose	Jacksonville
Prosperity Coal Co.	Prosperity	Brazil
Rowlands Power Consolidated Collieries Co.	Nos. 3, 6 and 9	Stanton
Rowland Power Consolidated Collieries Co.	No. 16	Carbon
United Fourth Vein Coal Co.	Island Valley	Jacksonville

Company.	Mines.	Post Office of Mines.
Commerce Coal Co.	Thrifty No. 1	Washington
Crescent Coal Co.	Crescent	Cannelburg
Davess County Fuel Co.	Davess County	Montgomery
Green Mound Coal Co.	Thrifty No. 2	Washington
Riverview Coal Co.	Riverview	Washington
South Washington Coal Co.	Sunny Side	Washington
White River Mng. Co.	White River	Cannelburg

Company.	Mines.	Post Office of Mines.
Norris Coal Mining Corp.	Norris	Norris

Company.	Mines.	Post Office of Mines.
Bosse Coal Co.	Liberty	Bockskin
Deep Vein Coal Co.	Princeton	Princeton
Fort Branch Coal Mining Co.	Fort Branch No. 2	Fort Branch
Fork Ridge Mining Co.	Fork Ridge	Oakland City
Francisco Mining Co.	Francisco	Francisco
Oakland Coal Co., The	Godgel	Oakland City
Princeton Coal Co.	Princeton	Princeton

Company.	Mines.	Post Office of Mines.
Atlas Mining Co.	No. 24	Linton
Bays-Logan Coal Co.	Bays-Logan	Coalmont
Bon Ayr Coal Co.	Bon Ayr	Jacksonville
Calora Coal Co.	Calora Nos. 1 and 2	Jacksonville
Cathleen Coal Co.	Cathleen	Linton
Coal Ridge Mining Co.	Coal Ridge No. 1	Linton
Green Valley Coal Co.	Green Valley	Jacksonville
Haywood, Jesse	Haywood	Jacksonville
Jewell Coal Co.	Jewell	Linton
J. M. Coal & Mining Co.	J. M.	Linton
Le Noir Coal Co.	Le Noir	Jacksonville
Linton No. 4 Coal Co.	Linton No. 4	Linton
Linton Summit Coal Co.	Templeton	Linton
Owensburg Coal Co.	Owensburg No. 1	Owensburg
Persons Coal Co.	Nos. 4 and 5	Jacksonville
Rose Hill Coal Co.	Rose Hill No. 1	Linton
Rowland Power Consolidated Collieries Co.	No. 12	Linton
Rowland Power Consolidated Collieries Co.	Nos. 13, 14 and 15	Jacksonville
Sherwood Coal Co.	Alleo Dale	Dugger
Sleepy Eye Mining Co.	Sleepy Eye	Dugger
Spring Valley Coal Co.	Spring Valley	Linton
Tower Hill Coal Co.	Tower Hill	Linton
United Fourth Vein Coal Co.	Black Creek	Linton
Vigo Mining Co.	No. 6 Lattas Creek & No. 27	Jacksonville
White Ash Coal Co.	White Ash	Jacksonville

Company.	Mines.	Post Office of Mines.
American Coal Mining Co.	American Nos. 1 and 2	Bicknell
Columbia Coal Co.	Columbia	Bicknell
Indian Creek Coal & Mining Co.	Indian Creek	Bicknell
Indiana Power Co.	Linton	Bicknell
Knox County Fourth Vein Coal Co.	No. 1	Edwardsport
Oliphant-Johnson Coal Co.	Oliphant No. 1	Brunsville
Pan Handle Coal Co.	Pan Handle Nos. 5 and 6	Bicknell
Ridge Coal Mining Co.	Knox	Bicknell
Standard Coal Co., The	Wheatland	Wheatland
Tecumseh Coal & Mining Co.	Tecumseh No. 1 and 2	Bicknell

Company.	Mines.	Post Office of Mines.
Coal City Block Coal Co.	Coal City	Coal City
Owen Block Coal Co.	Owen	Patriotsburg
Putnam Coal Co.	Putnam	Coal City
Radiant Coal Co.	Radiant	Coal City
Stewart Coal Co.	Stewart	Clay City

Company.	Mines.	Post Office of Mines.
Ames Coal Co.	Ames	Carbon
Bright Gem Mining Co.	Bright Gem	Jessup
Neutral Coal Producers Co.	Bridget	Terre Haute
Rockville Coal Co.	Rockville	Rockville

Company.	Mines.	Post Office of Mines.
American Cannel Coal Co.	Winnecke	Cannilton

Company.	Mines.	Post Office of Mines.
Ayrshire Coal Co.	Ayrshire Nos. 6, 7 and 8	Winslow
Big Muddy Mining Co.	Big Muddy	Winslow
Caledonia Mining Co.	Caledonia	Winslow
Enos Coal Mining Co.	Enos	Oakland City
Globe Mining Co.	Globe & Roger	Petersburg
Little, S. W. Coal Co.	Little's	Petersburg
Little, S. W. Coal Co.	Blackburn No. 2	Petersburg
Muen, J. C. Mining Co.	Muen	Winslow
Pike County Coal Co.	Atlas No. 1	Petersburg
Turkey Knob Mining Co.	Turkey Knob	Winslow
Vulcan Coal Co.	Clyshire & Petersburg	Spurgeon
Winslow Mining Co.	Wulfman	Winslow

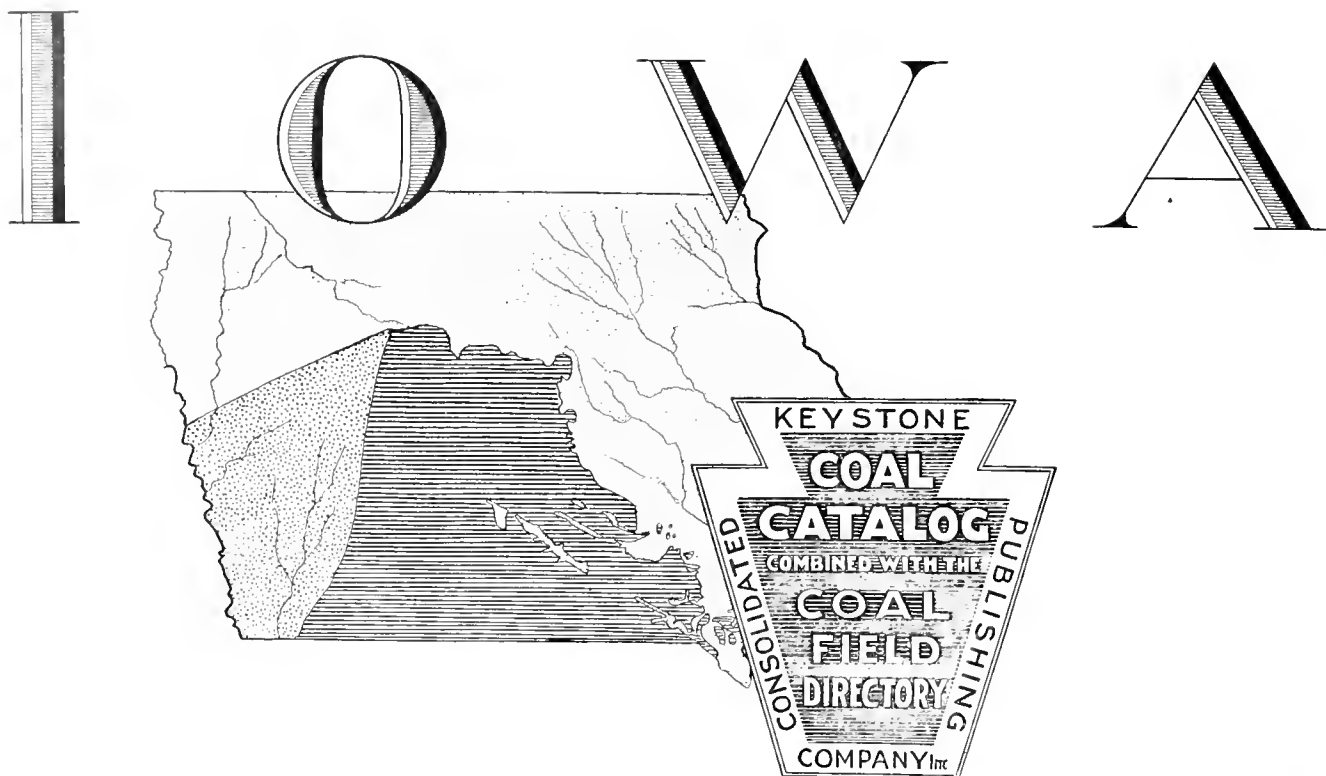
Company.	Mines.	Post Office of Mines.
Fox Hill Coal & Mining Co.	Fox Hill No. 4	Lincoln City
Hoch, M. Coal Co., Inc.	Stripping	Buffaloville
Lincoln Coal Co.	Lincoln	Lincoln City

Company.	Mines.	Post Office of Mines.
Ayrshire Coal Co.	Anthrac	Linton
Big Muddy Coal Co.	Kettle Creek	Shelburn
Black Diamond Coal Co.	Black Diamond	Linton
Busram Creek Coal Co.	Busram No. 1	Farmersburg
Central Indiana Coal Co.	Robin Hood	Dugger
Chicago-Carlisle Coal Co.	Carlisle	Shelburn
Enterprise Coal Mining Co.	Black Comet	Shelburn
Farmersburg Coal Co.	Superior	Farmersburg
Hamilton Coal Mining Co.	Hamilton Coal	Linton
Hamilton Coal Mining Co.	Monark	Shelburn
Hymara Coal Mining Co.	Hymara Nos. 1 and 2	Hymara
Indiana & Illinois Coal Corp.	No. 8	Paxton
Jackson Hill Coal & Coke Co.	No. 4	Shelburn
Johnson, W. E. & Co.	Lash	Farmersburg
Linton Coal Co.	Little Betty	Linton
Peabody Coal Co.	No. 27	Shelburn
Rowland Power Consolidated Collieries Co.	Nos. 7 and 11	Cass
Shelburn Indiana Coal & Mining Co.	Virginia	Shelburn
Sherwood Coal Co.	Allen Dale	Dugger
Star City Coal Mining Co.	Star City No. 5 and 7	Shelburn
Steele-Kattman Coal Co.	Mayflower	Hymara
Stockton Coal Co.	Freeman	Dugger
Sunflower Coal Co.	Sunflower	Dugger
Templeton Coal Co.	Glenora, Peerless & St. Clair	Sullivan
Syndicate Coal Co.	Syndicate	Dugger
United Traction Coal Co.	No. 23	R. F. D., Sullivan
Vandalia Coal Co.	Nos. 10, 12, 16 and 17	Sullivan
Vigo Mining Co.	No. 15 Cloverleaf & No. 28	Cass
Vigo Mining Co.	No. 22	Sullivan
Vigo Mining Co.	No. 29	Dugger
Woolley, J. Coal Co.	Mildred No. 2	Sullivan
Woolley, J. Coal Co.	Mildred No. 13	Mildred

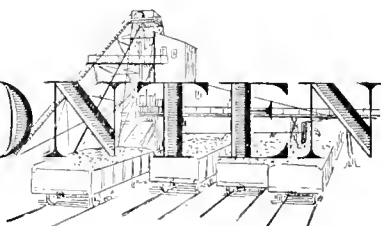
Company.	Mines.	Post Office of Mines.
Crescent Coal Co.	Crescent	Evansville
Diamond Coal Co.	Diamond	Evansville
Sunnyside Coal & Coke Co.	Sunnyside	Evansville
Rickett & Shirkle Coal Co.	No. 1	Paris
Clinton Coal Co.	Nos. 2, 3, 4, 5, 6 and 7	Clinton
Dana Coal & Mining Co.	Dana	Dana
Devon & Clark Coal Co.	Devon and Clark	Eugene
Essanbee Mines Co.	Essanbee Nos. 1 and 3	Clinton
Indiana & Illinois Coal Corp.	Nos. 1, 2 and 5	Clinton
Interstate Coal Co. of Indiana.	Interstate No. 1	Blanford
Jackson Hill Coal & Coke Co.	No. 6	Clinton
Newport Coal Mining Co.	Newport	Clinton
Tighe Coal Co.	No. 1	Clinton
United States Fuel Co.	Universal	Universal
Vermillion Coal Co.	Vermillion	Clinton
West Clinton Coal Co.	West Clinton and Interstate	Blanford

Company.	Mines.	Post Office of Mines.
Black Hawk Mining Co.	Black Hawk	Black Hawk
Burnett Coal Mining Co.	No. 1 and 2	Burnett
Cleavelly Coal Co.	Talleydale, Bantley & Cleavelly	Terre Haute
Coal Bluff Mining Co.	Plymouth No. 1	Fontanet
Coal Bluff Mining Co.	Riverside and Wabash	Terre Haute
Deep Vein Coal Co.	Deep Vein	West Terre Haute
Dering J. K. Coal Co.	Dering Nos. 6 and 8	Clinton
Eureka Block Coal Co.	Dixie Bee	Pimento
Fayette Realty & Development Co.	Fayette	Libertyville
Ferguson Coal Co.	Submarine	Clinton
Fort Harrison Mining Co.	Cleavelly	Terre Haute
Glen Ayr Coal Co.	Glen Ayr No. 1	Glen Ayr
Glenco Coal Co.	Glenco No. 1	Terre Haute
Glendale Coal Co.	Glendale No. 1	Terre Haute
Glover Coal Co.	Twin Hills	Brazil
Grant Coal & Mining Co.	Maple Grove	New Goshen
Hall-Zimmerman Coal Co.	Wizard No. 2	Terre Haute
Jackson Hill Coal & Coke Co.	No. 5	West Terre Haute
Lower Vein Coal Co.	Lower Vein No. 1, Speedwell	West Terre Haute
Miami Coal Co.	Miami Nos. 5, 6, 8, 9 and 10	Clinton
Otter Creek Coal Co.	Mary Nos. 2 and 3	Brazil
Pine Ridge Mines Co.	Pine Ridge	Clinton
Sanford Mining Co.	Sanford No. 2	Terre Haute
Schriepferman Coal Co.	Nos. 1 and 3	Brazil
Shelby Coal & Clay Co.	Sterling	R. B. No. 5
Shirkle Coal Co.	Shirkle No. 1	Terre Haute
State Coal Mining Co.	Hillsdale	Coal Bluff
Sugar Valley Coal Co.	Sugar Valley	Terre Haute
Sunbeam Coal Co.	Sunbeam	Terre Haute
Utilities Coal Co.	National	West Terre Haute
Vandalia Coal Co.	No. 82	R. F. D., West Terre Haute
Vigo Mining Co.	No. 74	Coal Bluff
Western Indiana Mining Co.	Wabash and Riverside	Terre Haute
Western Indiana Mining Co.	Minshall	Fontanet
Whippo Coal & Mining Co.	Whippo	Terre Haute
Willow Creek Coal Co.	Willow Creek	Soelyville
Wood Coal Co.	Wood	Coal Bluff
Zimmerman Coal Co.	Black Betty	Terre Haute

Company.	Mines.	Post Office of Mines.
Archbold, John Coal Co.	Red Shaft	Newburgh
Big Four Coal Co.	Big Four	Boonville
Boonville Mining Co.	DeForest	Boonville
Bosse Coal Co.	Kroff	Evansville
Bryan, Jos. A. Coal Co.	Bryan	Chandler
Cox Coal Co.	Cox	Newburgh
Cypress Creek Coal Co.	Cypress Creek	Boonville
Elberfeld Coal Mining Co.	Elberfeld	Elberfeld
Erie Canal Coal Co.	Erie Canal	Boonville
Fricke & Blair Coal Co.	No. 1	Evansville
Horton Coal Co.	Horton	Newburgh
Key Coal Co.	Caledonia No. 3	Boonville
Newburg Coal Co.	Enworth	Boonville
Peabody Coal Co.	No. 50	Newburgh
Sargeant Coal Co.	Sargeant Nos. 1 and 2	Newburgh
Sunlight Coal Co.	Sunlight	Boonville
Sweeney Coal Co.	Sweeney	Newburgh
Woolley, J. Coal Co.	Polk Nos. 5 and 7	Boonville
Woolley, J. Coal Co.	Castle Garden No. 6	Chandler

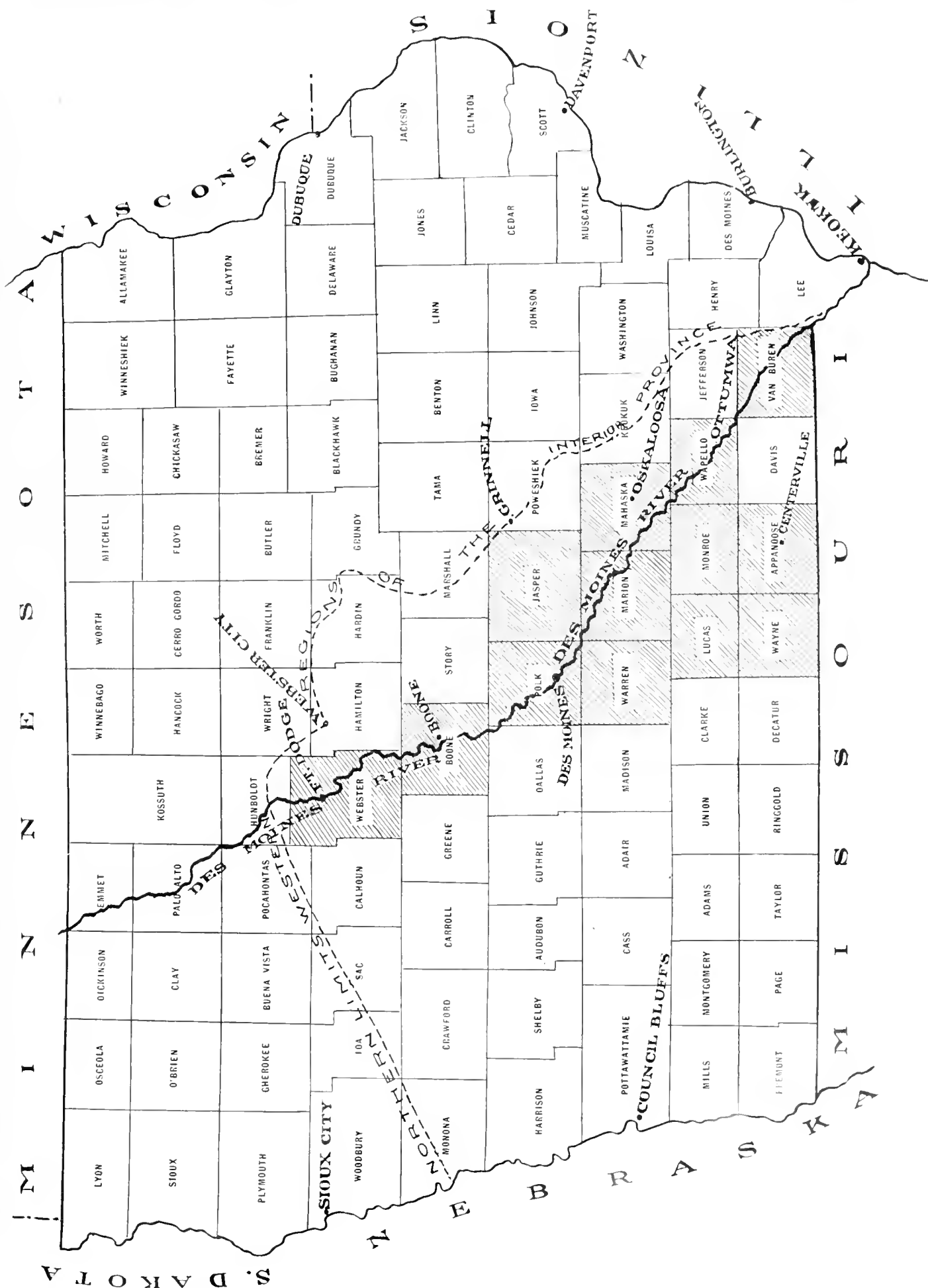


CONTENTS



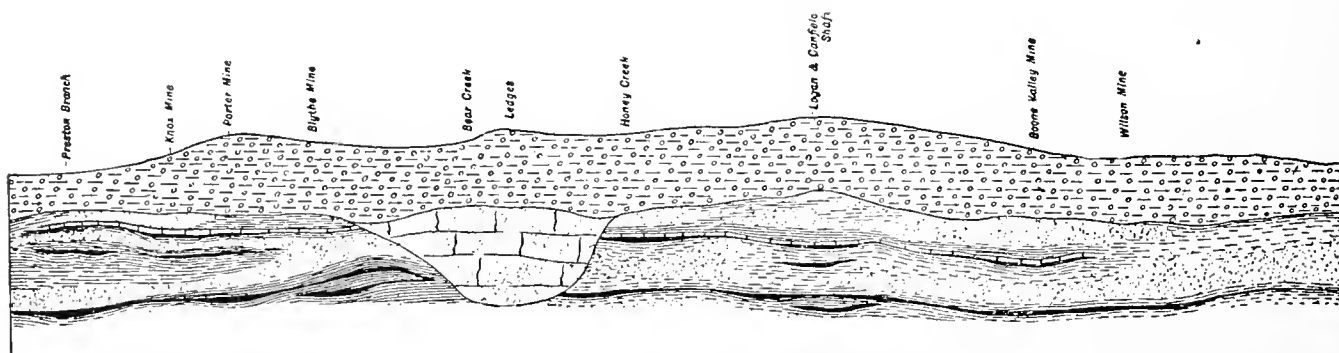
Map of Mining Districts.....	419
Sectional View of Coal Formations.....	420
General Description of Coal Resources.....	421
Mystic Seam.....	422
Boone County Coal.....	422
Dallas County Coal.....	423
Jasper County Coal.....	423
Lucas County Coal.....	423
Mahasha County Coal.....	423
Marion County Coal.....	423
Monroe County Coal.....	424
Polk County Coal.....	424
Van Buren County Coal.....	424
Wapello County Coal.....	424
Warren County Coal.....	424
Webster County Coal.....	425
Preparation and Sizing of Coal.....	425
Supplementary Analyses.....	426
List of Mines by Counties.....	427 to 429
Alphabetical Directory of Coal Mines....	430 to 435

SHOWING LIMITS OF THE COAL MEASURES AND COUNTIES PRODUCING COAL

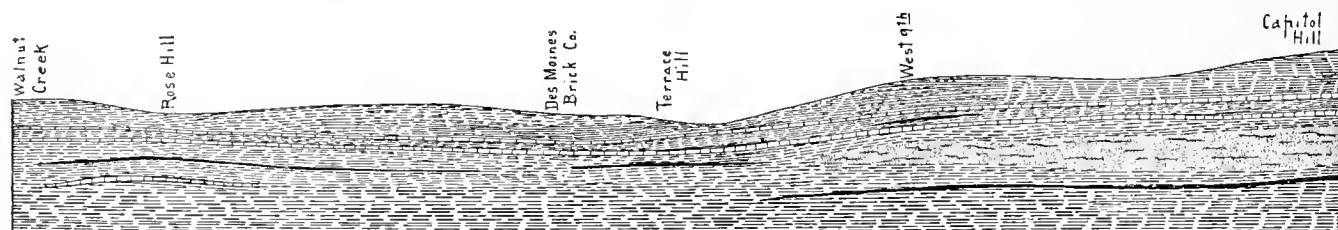


CROSS SECTIONS SHOWING OCCURRENCE OF COAL SEAMS IN IOWA

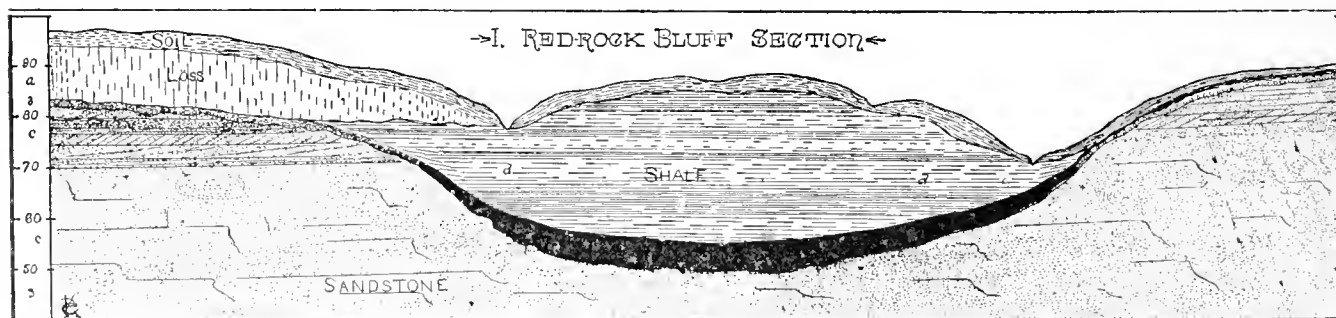
(From Vol. 19, Iowa Geological Survey)



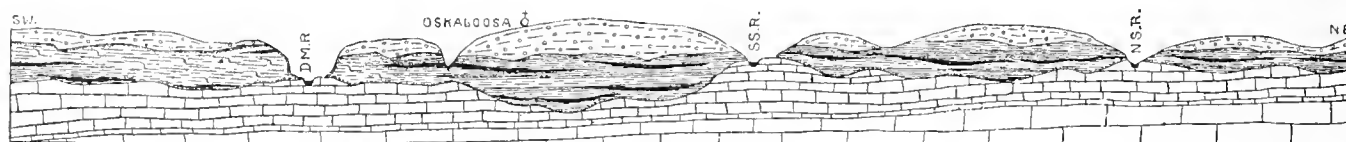
General geological section across Boone county along the Des Moines River.



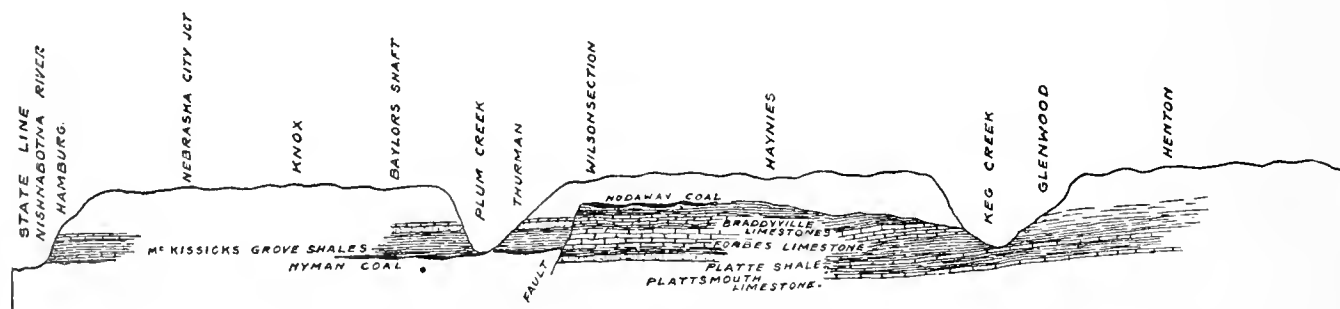
Geological section from Capitol Hill to Walnut Creek.



Coal seam shown in Red Rock quarry (Miller).



Ideal cross-section in Mahaska county.



Section, south to north, along the Missouri River bluffs.

IOWA*

General Description of the Geology of the State With the Ranks of Coal Produced;
Treats of the Mining Districts, With a Map Showing Their Location, All
Seams Lying Within the Territory, and the Railroads Serving Same;
Description of Principal Counties, Kinds of Coal,
General Analysis, Etc.

With a production of about 8,000,000 tons of bituminous coal yearly, Iowa ranks eighth in the United States. Coal is mined in 20 counties, ranging from Webster on the north to Van Buren on the southeast and Page on the southwest. Monroe county is the leader in output, with Polk a close second and Appanoose third.

Iowa's coal fields lie at the northern margin of what is known as the Western Region of the Interior Province. The area within the state covered by this coal field is about 19,000 square miles, although only 13,000 square miles are known to bear coal beds which are workable under present conditions. Much of the remaining part in all probability contains no coal, while in other parts there are thin beds which may be mined profitably after the present coal supply has become much diminished. The original supply of Iowa coal is estimated by Marius Campbell, of the United States Geological Survey, to have been about 29,160,000,000 tons.

In parts of the Des Moines valley there are as many as eight to twelve layers of coal, some of them three or four feet thick, some of them mere streaks between beds of shale. These various deposits of sandstone, shale, coal and occasional limestone, which by geologists are grouped under the name of Des Moines beds, now cover an area extending from Webster, Hamilton and Hardin counties on the north, to Lee on the southeast and down into Missouri. West of a line joining the western edges of Webster, Dallas and Wayne counties the Des Moines beds are covered by later deposits, and while they are perhaps present in southwest Iowa they do not seem to be coal-bearing. These later deposits of Iowa are limestones, with some shale beds and a coal seam twelve to eighteen inches thick which is remarkably regular in its distribution. It seems to be generally present in western Adams and Taylor counties and in Montgomery and Page counties. It is known as the Nodaway seam and is the only seam of economic importance in these upper strata—the Missouri beds as they are called.

Owing to the irregular lenticular arrangement of the greater part of the coal beds of Iowa and to the heavy deposits of glacial drift which obscure outcrops of beds, except along the courses of the major streams, a geological examination of the area under consideration is attended with considerable difficulty, and generalizations as to the location and extent of unprospected fuels are frequently rendered either impossible or extremely uncertain. During the early days of the development of the Iowa coal field, when the nature of the deposits was very imperfectly understood, it was generally considered that two or three persistent coal beds underlay essentially the entire region and that it would be possible to trace certain continuous seams from Fort Dodge to Des Moines and thence to What Cheer, Oskaloosa and other parts of the field. Systematic prospecting, especially in the southern counties, has however proved that few coal basins contained over a few thousand acres and that the greater number carry thick coal under no more than 500 or 600 acres. In many cases drill records have shown workable coal at one point and a mere carbonaceous film in the same horizon a few hundred feet distant. It is this lenticular character of the deposits that makes imperative a fairly large outlay of capital for the thorough prospecting of any given field before the installation of expensive mine equipment is undertaken.

Several sections illustrating the incontinuity of Iowa seams are shown on the preceding page in place of a coal column, since any column shown must needs represent but a small portion of the state.

An exception to the generally inconstant character of Iowa coal seams is furnished by the bed mined in the Appanoose-Wayne field in the south-central part of the state, known as the Mystic seam, and by the thin coal mined in the southwestern corner of the state, already referred to as the Nodaway seam.

Iowa coal is of bituminous rank with a small amount of cannel in Webster county. The thickness of the individual coal beds is not great. The thickest coal is perhaps to be found in Marion county, where as much as sixteen feet is encountered in local "swamps." Where such thick coal occurs, however, it is often of poor quality and filled with concretions of clay-ironstone and sandstone. The greater part of the mining done is in beds from four to six feet in thickness. Geological faults that affect mining operations at all seriously are extremely rare. The throw of such faults as are met with is usually only a few inches or a few feet. The mines are usually dry and non-gaseous. Most of the coal is shot from the solid and about one-third of the operations are worked on the longwall system.

Iowa is an agricultural state, and the coal markets, outside of what is taken by the railroads, are chiefly in the rural communities and cities of moderate size. Some coal is shipped into Nebraska, Minnesota and other states.

Roughly speaking, 35 per cent. of the product is used by the railroads, 45 per cent. enters into domestic use and 20 per cent. is consumed by manufacturing plants. The sulphur and ash contents are

*We are indebted to Vol. 13 of the Iowa Geological Survey for the information here given on the geology and coal seams of Iowa.

extremely variable in amount but are commonly high, the sulphur averaging about 5 per cent. and the ash 13 per cent. Iowa coals are used for locomotives, domestic purposes, and power houses. The coal tends to clinker in locomotive fire boxes and under boilers where there is a hot fire, though with care in keeping an even fire it is used successfully.

For domestic purposes Iowa coal makes a smoky fire, but is satisfactory when burned in lump or nut size. The small screenings and slack are largely used in power-house boiler plants.

The following railroads traverse the coal fields: Minneapolis and St. Louis; Chicago and North Western; Chicago Great Western; Wabash; Iowa and St. Louis; Fort Dodge, Des Moines and Southern; Chicago, Milwaukee and St. Paul; Chicago, Rock Island and Pacific; Chicago, Burlington and Quincy; and Southern Iowa Traction.

Other than the description of the Mystic seam, which is of uncommon regularity, the discussion of Iowa coals will be by counties. As each small mining district is a field by itself and the deposits are almost always lenticular, generalizations and correlations of distant beds are dangerous and usually unwarranted. A presentation of facts alone with but few theorizations is all that can be safely attempted with strata constituted as are those of the Des Moines stage. This is especially true when, as in Iowa, the coal bearing formations are concealed almost universally by a heavy mantle of drift averaging 100 feet or more in thickness.

Mystic Seam. (Known also as the Centerville seam). (Mined in Appanoose and Wayne counties.)

The Mystic seam lies in a section of the Des Moines stage that was deposited under singularly uniform conditions of plant growth and sedimentation. Throughout an area containing at least 275,000 acres in Iowa alone, this bed is present everywhere except where locally removed by old erosion channels. The field occupies also a considerable territory in adjacent portions of Missouri. A remarkable feature is the persistency and uniformity of the characteristics of the coal bed; it nowhere varies more than a few inches either way from a thickness of thirty inches, and always bears in its middle portion a clay parting from one-half to two inches in thickness, known as the "mud band", and usually bears a second and thinner clay seam, termed the "dutchman", below the first.

Several layers of limestone act as markers for the Mystic seam wherever it occurs. The names applied to them locally—the "floating rock", "fifty-foot limestone", "seventeen-foot limestone" or "little rock", the "cap rock", and the "bottom rock" indicate succinctly their stratigraphic position with respect to the coal. While these rock bands are not of exactly the same thickness or at exactly the same distance above or below the coal in all sections of the field, the differences noted at widely separated points are minor ones. The Appanoose beds dip, in general, to the southwest at the rate of about ten feet per mile. This dip is far from universal, however, if limited areas be considered; for local anticlines and synclines disturb the symmetry of the inclination.

Coal from the Mystic seam is used for steam, railroad and domestic purposes. It mines in large blocks which are very much esteemed for household use in the country, as the coal can be stocked in piles and weathers more slowly than the average Iowa coals.

Boone County.

The coal bearing strata of the Des Moines stage everywhere underlie Boone county to a depth of between 400 and 500 feet below the highland level. The Des Moines river has cut for itself a deep, narrow valley, bisecting the county from north to south and exposing along its course a magnificent geological section. The coal outcropping along the bluffs soon attracted the attention of the first pioneers, so that mining began in this region during the early stages of settlement. There are four coal horizons in the county. The first has an elevation of from fifty to seventy feet above the water in the Des Moines river and is usually overlain by a cap-rock of hard, brittle calcareous shale. The second horizon occurs some fifty feet below the first and is the most persistent seam in the county. It is currently known as the "upper vein", or "black jack". The former name is in contradistinction to a lower vein which sometimes accompanies it; the latter name is often applied to it on account of its semi-lustrous jet-black color and somewhat bony character. It is usually provided with a good roof and carries its thickness well.

The third horizon occurs from four to twelve feet below the second and is usually denominated the "lower vein". The distribution of coal in this seam is somewhat anomalous; the coal usually occurs in pockets of limited extent. The roof is fairly good, but often contains numerous septarian nodules and clay ironstone concretions which render mining somewhat hazardous unless due precautions are observed. The fourth bed lies between fifty and eighty feet below the lower vein. It possesses coal of good quality found in pockets. None of the districts throughout the county are connected uninterruptedly by workable coal.

GENERAL ANALYSIS

Moisture	7.25
Volatile Matter	36.00
Fixed Carbon	47.50
Ash	9.25
Sulphur	3.75
B. T. U.	11,500

GENERAL ANALYSIS

Moisture	12.30
Volatile Matter	38.20
Fixed Carbon	43.80
Ash	5.70
Sulphur	4.75
B. T. U.	10,500

Dallas County

Dallas county has never been ranked as one of the prominent producers of the state, but recent developments in the Des Moines valley have caused a decided increase in its production. Unfortunately for Dallas, a large part of the county is a high level plain, and exposures of the coal bearing strata are few. Diamond drill tests show that workable seams are plentiful in the Des Moines stage, but here, as elsewhere throughout the State, there is no assurance of continuity. The future of the coal industry in this county would appear to lie in the hands of those who are willing to risk considerable capital in systematic prospecting.

GENERAL ANALYSIS

Moisture	19.10
Volatile Matter	29.35
Fixed Carbon	39.85
Ash	11.70
Sulphur	2.45
B. T. U.	10,340

Jasper County.

As in so many other sections of the Iowa field, mining in Jasper county has been largely confined to the valleys of the main stream where coal has been seen to outcrop or where it may be easily traced in test holes of shallow depth. The future will reveal lucrative basins in other parts of the county, where only systematic prospecting can hope to locate them. The workable seams lie in basins of limited extent, distributed along a number of horizons, and there appears to be two groups of such horizons separated by a short stratigraphic interval. Present knowledge of the conditions is not, however, sufficiently definite to permit of correlating the coals of the different fields. The southwestern portion of the county contains much undeveloped coal; it is the logical field for thorough exploration. The northeastern portion is not so promising, both because the coal measures are thinner there and because the strata present were deposited contemporaneously with those which have not so far yielded abundant coal in neighboring counties on the west and north. There are strong possibilities, nevertheless, in even the northeastern townships.

GENERAL ANALYSIS

Moisture	8.00
Volatile Matter	39.50
Fixed Carbon	41.00
Ash	11.50
Sulphur	3.60
B. T. U.	11,750

Lucas County.

The gentle dip to the southwest that is common to the Carboniferous beds in most of the Iowa coal fields lessens greatly in Lucas county, so that the limestones of the Missouri stage appear only in a few places on its extreme western border and the Saint Louis limestone lies closer to the surface than would otherwise be the case. The highest indurated rocks of practically the entire county belong to the lower and more productive division of the Coal Measures and bear coal in considerable quantity. Two general coal horizons have been recognized in Lucas county, one near the surface

and the other about 250 feet below. The thickness of the lower bed at places reaches 7 feet 9 inches. The bed is irregular, being disturbed to some extent by horsebacks. The thick coal lies in local basins or swamps and therefore does not extend for a great distance. In general, the coal lies in discontinuous basins along more or less definite horizons. The largest basin so far located contains less than 4000 acres; while the driller considers himself fortunate if he discovers a thousand acre field in prospecting ten or fifteen miles along the valleys.

GENERAL ANALYSIS

Moisture	11.00
Volatile Matter	35.00
Fixed Carbon	42.00
Ash	9.00
Sulphur	3.20
B. T. U.	10,500

Mahaska County.

The coal basins of Mahaska are seldom of large size, though often bearing thick seams of coal. Although great quantities of coal have been mined in the county, the productive areas have been confined to a comparatively small portion of the whole region. Mining on a large scale was first undertaken on Spring Creek, near Oskaloosa, and in the valley of Muchakinock creek. The coal worked lay in basins of limited extent, separated by areas in which coal was thin or lacking. As a production center, the Muchakinock district has been largely replaced by the development of coal beds in the southwestern corner of the county. The basins of coal here are lenticular in shape and are not large; the coal is higher than in many parts of the Iowa field, but where thickest often contains aggregations of clay ironstone boulders distributed "like raisins in a cake". In this region the Coal Measures are found to extend to greater depths than in many other sections of the county, although shafts usually reach the coal at depths of less than one hundred feet.

GENERAL ANALYSIS

Moisture	4.75
Volatile Matter	39.50
Fixed Carbon	49.50
Ash	6.25
Sulphur	3.50
B. T. U.	11,500

Marion County.

Marion county embraces the northwestern portion of what has proved the most prolific section of the Iowa coal field, and includes some of the best coal basins in the state. There are at least six well-defined coal beds in the county. These are nearly all well exposed in the bluffs along the Des Moines river. In local "swamps" are found some of the thickest beds in the state. Vertical heights of as much as sixteen feet have been reported from more than one mine, but in such cases the value of the coal is often decreased by the presence of considerable foreign substance or by weakness in the overlying stratum forming the roof. Coal appears to be abundant in all parts of the county; very rarely is a test hole sunk without encountering at least one seam. Nevertheless, the discovery of thick coal in one pocket by no means indicates the

presence of a workable field in the neighborhood. The coal lies in isolated basins of lenticular shape, many of them small, and it has been known to thicken and thin with startling rapidity when followed short distances laterally. It is not safe to sink a shaft to any seam until its extent has been accurately determined by a free use of the drill.

GENERAL ANALYSIS

Moisture	6.50
Volatile Matter	39.00
Fixed Carbon	46.75
Ash	7.75
Sulphur	5.00
B. T. U.	10,200

Monroe County.

Magnificently served by railroads and lying in a highly productive coal belt, Monroe county has for several years been the most important coal producer in Iowa. With the exception of a few small areas the entire county is underlain with Coal Measure strata of the Des Moines stage. From a thickness of zero at Eddyville these increase progressively toward the southwest until probably a thickness of 400 feet is attained in the southwestern corner of the county. Notwithstanding the amount of development work that has been done, mining has been confined chiefly to the northern and central portions of the county. It is in the extreme southwestern corner that the Mystic seam of the Appanoose-Wayne field is most likely to be found if present at all in Monroe county. The seam worked by the several mines varies from four to six feet in thickness.

GENERAL ANALYSIS

Moisture	5.25
Volatile Matter	41.00
Fixed Carbon	46.25
Ash	7.50
Sulphur	5.25
B. T. U.	11,750

Polk County.

Polk county holds second place in production. In this county three seams are recognized, commonly known as the "first", "second" and "third" seams. These are the workable seams and they have associated with them other beds that are not of workable thickness. Blasting from the solid is the common practice. With a few exceptions the room and pillar system of mining prevails. The quality of the coal differs but little from the average of the Iowa fields. Of the shipping mines many of them supply coal for the local trade of Des Moines. The coal burns well and stands storage without excessive deterioration.

GENERAL ANALYSIS

Moisture	10.30
Volatile Matter	38.25
Fixed Carbon	39.65
Ash	11.80
Sulphur	5.00
B. T. U.	10,500

Van Buren County.

Van Buren county lies on the eastern margin of the coal field and is quite generally underlain with Coal Measure strata. These deposits are commonly, however, rather attenuated and are far from continuous over the entire region. The coal basins so far discovered have been quite small and the mines have been chiefly located in the Des Moines valley and in the northern tier of townships. The beds are too local in extent and the market too limited to warrant much expenditure of labor or capital. Shaft mines are shallow, ranging from thirty to seventy feet in depth. The productive seam varies from three to four feet in thickness.

GENERAL ANALYSIS

Moisture	4.40
Volatile Matter	47.00
Fixed Carbon	43.00
Ash	5.60
Sulphur	1.00

Wapello County.

As in the case of most of the counties that are traversed by the Des Moines river, Wapello has been a consistent producer of coal for a long period of time. Most of the coal mined lies at no great depth beneath the surface and the Coal Measures themselves are not thick, being, perhaps, only 250 feet at a maximum and in by far the greater part of the county considerable less. Mining has been confined almost entirely to the immediate neighborhood of the Des Moines river and its principal tributaries, for it is only in these districts that good outcrops of the Coal Measures are found. Wapello county coal basins are of limited extent, seldom underlying more than a hundred acres in continuous seams. The discovery of a workable thickness in one prospect does not prove that a workable pocket has been found, for another hole a few hundred feet distant may give quite different results. As many as five seams are encountered by the drill, but of these only the third and fourth seams are deemed of sufficient thickness to be worked.

GENERAL ANALYSIS

Moisture	5.75
Volatile Matter	40.50
Fixed Carbon	45.00
Ash	8.75
Sulphur	5.00
B. T. U.	11,800

Warren County.

In no other county of the state, apparently, are the possibilities of finding hitherto undiscovered coal so bright as in Warren county. In Polk on the north, Marion on the east, and Lucas on the south-east, strata corresponding stratigraphically with those underlying Warren are known to include coals in abundance. Extensive prospecting has been neglected owing to the numerous thin coal outcrops in the many deep valleys. A serious check on attempts to establish shipping mines within the confines of the county has been the poor transportation facilities at hand and the difficulty of constructing new lines in so rough a country. As in other sections of the Iowa field, the coals of

Warren county lie in more or less isolated basins that are surrounded by areas in which the seams are either attenuated or absent.

GENERAL ANALYSIS

Moisture	11.50
Volatile Matter	39.10
Fixed Carbon	43.00
Ash	6.40
Sulphur	4.50

Webster County.

The surface of the greater part of Webster county is a gently undulating plain or prairie, poorly drained. A large section of country in the southwestern portion of the county is destitute of streams of any consequence, so that no natural outcrops of the indurated rocks beneath the heavy cover of drift may be seen, and prospect records and wells furnish the only clue to the geological

structure of the region. Along the Des Moines river thick coal beds are found in the geological sections exposed, and for this reason the growth of coal mining has been largely restricted to the immediate vicinity of the river. The finding of coal near Tara, Otho and Dayton indicates that other coal basins exist at points remote from the main valleys. Coal occurs at several horizons throughout the county. One of the seams, known as the Colburn, bears a varying thickness of so-called cannel coal throughout the bed. Its analysis indicates that it is on the borderland between cannel and bituminous coal. In some portions of the county seams are found varying from six to eight feet in thickness.

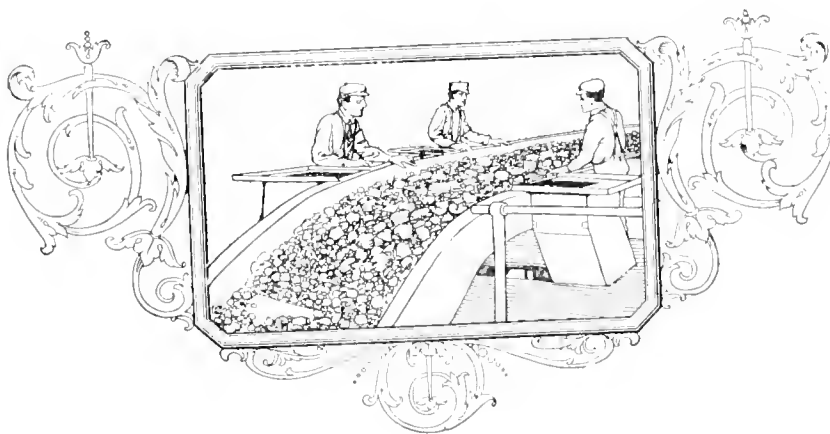
GENERAL ANALYSIS

Moisture	9.20
Volatile Matter	37.25
Fixed Carbon	41.55
Ash	12.00
Sulphur	5.00

PREPARATION OF COAL

In Iowa payment is made to the miner on the run of mine basis. One, two, or three sets of bar screens are often used, making at the most four sizes; through $1\frac{1}{4}$ -inch, through $2\frac{1}{2}$ -inch, then through 4, 5 or 6-inch, and a large lump over this size. Heretofore little has been done to improve the quality of the coal except hand picking and

culling at the point of loading. Much could be done to improve the coarse coal by more adequate picking tables, and to improve the small coal by building washeries at central points where mines are short lived. The tendency in the newer operations is to install shaker screens.



Analyses of Iowa Seams by Counties and Localities

CALL ANALYSES MADE ON NINE SAMPLES "AS RECEIVED"

COUNTY AND LOCATION	SEAM	MINB	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carbon	Oxygen	RATIOS		
											Carbon	F. C.	V. M.
Appanoose, Centerville.....	Mystic.....	No. 3.....	17.13	35.44	40.36	7.07	4.00	10,931	60.08	17.22	...	...	1.14
Appanoose, Centerville.....	Mystic.....	No. 3.....	13.24	36.50	37.85	12.41	3.90	10,885	...	...	...	2.03	1.04
Appanoose, Mystic.....	Mystic.....	Lodwick Bros.....	16.21	32.74	46.00	5.05	2.64	12,780	...	...	...	...	1.11
Appanoose, Cincinnati.....	Mystic.....	Appanoose.....	6.54	36.20	44.17	13.09	4.53	...	...	...	...	...	1.22
Boone, Boone.....	...	Crow Coal Co.....	4.03	39.79	48.30	7.88	3.99	12,729	...	...	...	...	1.21
Boone, 2 mi. n. of Ogden.....	...	Ogden No. 1.....	18.61	33.78	38.70	8.91	5.45	10,627	57.01	21.49	...	1.87	1.15
Boone, Ogden.....	...	Ogden Coal Co.....	19.56	33.43	38.29	8.82	5.40	10,515	...	...	...	...	1.15
Dallas, High Bridge.....	...	High Bridge.....	18.21	29.67	40.29	11.83	2.46	10,452	59.03	20.18	...	1.85	1.36
Greene, near Angus.....	...	Willow Grove.....	13.20	35.60	37.14	14.06	4.94	10,326	55.59	18.71	...	1.69	1.04
Jasper, Colfax.....	5.45	40.49	46.97	7.09	2.91	12,134	...	...	...	...	1.16
Jasper, Colfax.....	...	No. 6.....	9.34	39.19	39.08	12.39	2.84	11,206	...	...	...	...	1.00
Jasper, 4 mi. s. e. of Colfax.....	...	No. 8.....	17.46	34.20	37.49	10.85	3.05	10,119	55.53	23.58	...	1.61	1.10
Kookuk, 1 mi. e. of What Cheer.....	...	Armstrong.....	14.68	35.22	37.88	12.22	4.75	10,517	57.84	18.95	...	1.85	1.08
Lucas, Chariton.....	...	Inland No. 1.....	15.39	30.49	41.49	12.63	3.19	10,242	55.81	21.49	...	1.64	1.36
Lucas, Cleveland.....	...	Lucas.....	11.29	37.13	42.69	8.83	2.97	...	...	...	...	...	1.15
Mahaska, Bolton.....	14.64	36.26	40.53	8.57	2.94	11,003	...	...	...	...	1.12
Mahaska, Bolton.....	...	Bolton No. 2.....	14.14	36.48	40.77	8.61	2.96	11,067	60.87	20.55	...	2.09	1.12
Mahaska, Rose Hill.....	...	Blyth.....	15.11	32.68	39.83	12.38	5.85	10,623	...	...	...	...	1.22
Mahaska, White City.....	14.57	32.88	40.08	12.47	6.00	10,688	56.90	18.37	...	1.84	1.22
Mahaska, White City.....	...	Crescent No. 5.....	12.93	34.04	38.68	14.30	5.47	10,663	...	...	...	...	1.14
Mahaska, Hamilton.....	...	No. 5.....	12.56	34.21	38.88	14.35	5.47	10,713	57.21	16.85	...	1.83	1.14
Marion, Knoxville.....	14.21	33.17	37.40	15.22	4.66	10,019	54.08	19.23	...	1.57	1.13
Marion, 2 mi. e. of Knoxville.....	...	Hawkeye.....	18.30	31.12	37.95	12.63	5.16	10,215	...	...	...	...	1.22
Monroe, Avery.....	...	Smoky Hollow.....	17.68	31.35	38.24	12.73	5.20	10,291	54.67	20.62	...	1.64	1.22
Monroe, Buxton.....	13.24	40.45	38.68	20.87	5.23	11,267	...	...	...	...	0.95
Monroe, Buxton.....	9.48	35.58	46.07	10.87	2.06	12,030	...	...	...	...	1.29
Monroe, Hilton.....	6.51	37.97	45.07	10.45	3.02	12,396	...	...	...	...	1.19
Monroe, Hireman.....	16.51	33.01	38.97	11.41	1.92	10,528	...	...	...	...	1.18
Monroe, 3 mi. n. w. of Hireman.....	...	Wapello No. 4.....	15.92	33.28	39.29	11.51	1.93	10,615	58.84	20.64	...	1.83	1.18
Polk, Altoona.....	...	No. 4.....	13.88	36.94	35.17	14.01	6.15	10,244	54.68	18.80	...	1.67	0.95
Polk, Des Moines.....	...	Bennett.....	13.42	34.60	38.03	13.95	5.70	10,440	...	...	...	...	1.10
Polk, Des Moines.....	...	Keystone.....	12.99	35.47	40.32	11.22	4.70	11,064	59.14	18.42	...	2.00	1.14
Polk, Enterprise.....	...	No. 2.....	13.01	34.77	38.22	14.00	5.72	10,483	55.82	17.91	...	1.75	1.10
Polk, Enterprise.....	14.17	37.48	40.36	7.99	3.46	11,382	62.24	19.35	...	2.28	1.08
Polk, Enterprise.....	...	No. 2.....	5.09	43.30	47.73	3.88	2.60	10,574	...	...	...	...	1.10
Polk, Enterprise.....	14.69	37.25	40.12	7.94	3.44	11,313	...	...	...	...	1.08
Polk, Norwoodville.....	...	Campbell No. 1.....	14.20	32.30	38.40	15.00	4.26	10,479	56.80	20.90	...	1.75	1.19
Taylor, 1 mi. e. of New Market.....	...	Cox.....	19.11	20.45	38.36	11.58	0.29	...	...	...	...	...	1.26
Van Buren, Hillsboro.....	...	Slaughter.....	7.92	41.74	46.76	3.58	0.29	...	...	...	...	...	1.12
Van Buren, Farmington.....	...	Manhard.....	8.62	38.08	47.42	5.88	1.02	...	...	...	...	...	1.25
Van Buren, Selma.....	...	No. 2.....	7.76	40.23	48.11	3.90	1.69	...	...	...	...	...	1.20
Wapello, Laddsdale.....	Third.....	No. 2.....	11.35	38.65	39.49	10.51	4.72	11,345	...	...	...	...	1.02
Wapello, Laddsdale.....	Middle.....	Bear Creek.....	8.24	30.74	45.02	16.00	5.03	11,027	59.82	13.40	...	2.03	1.46
Wapello, 4 mi. s. w. of Ottumwa.....	11.92	34.78	39.98	13.32	6.13	10,819	57.40	16.49	...	1.93	1.15
Wapello, Rutledge.....	...	Rutledge No. 5.....	13.97	35.68	40.61	10.34	5.76	11,051	...	...	...	...	1.14
Warren, Rutledge.....	...	Bennum.....	12.93	35.86	40.82	10.39	5.79	11,106	59.36	17.63	...	2.12	1.14
Warren, Summerset.....	9.43	36.96	45.18	8.43	3.78	...	...	...	...	...	1.22
Webster, Coalville.....	7.80	37.74	45.14	9.32	4.09	...	...	...	...	...	1.20
Webster, Kalo.....	"Cannel".....	Craig Cannel.....	5.87	39.04	39.22	15.87	7.12	...	...	...	...	...	1.00
Webster, Kalo.....	Bituminous.....	Craig.....	8.46	37.97	43.40	10.17	5.29	...	...	...	...	...	1.14
Webster, Lehigh.....	6.99	34.40	42.26	16.34	6.04	...	...	...	...	...	1.23

*Bulletins Bureau of Mines.

†State Geological Survey Reports.

COAL CATALOG

List of Mines By Counties Including Name of Company, General Office Address,
Railroad and Shipping Point

IOWA

APPANOOSE COUNTY—MYSTIC SEAM

Mined in the Appanoose-Wayne district. Bituminous rank. Suitable for Cement Burning, Domestic,
Locomotive Fuel, Producer Gas and Steam Uses. Known also as Block Coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Anchor Coal Co.	Box 1480, Lincoln, Neb.	Anchor No. 2	Appanoose	C. R. I. & P.	Centerville, Ia.
Appanoose Coal & Fuel Co.	Mystic, Ia.	No. 22	Appanoose	C. M. & St. P.	Mystic, Ia.
Armstrong Coal Co.	Cincinnati, Ia.	No. 1	Appanoose	C. B. & Q.	Cincinnati, Ia.
Barrett Coal Co.	Mystic, Ia.	Barrett	Appanoose	C. M. & St. P.	Mystic, Ia.
Beggs Coal Co.	Mystic, Ia.	Beggs	Appanoose	C. M. & St. P.	Mystic, Ia.
Blackbird Creek Coal Co.	Centerville, Ia.	Blackbird	Appanoose	C. B. & Q.	Unionville, Ia.
Caldwell Coal Co., Inc.	Exline, Ia.	Caldwell	Appanoose	C. B. & Q.	Exline, Ia.
Carbon Fuel Co.	Centerville, Ia.	No. 30	Appanoose	C. R. I. & P.	Centerville, Ia.
Center Coal Co.	Centerville, Ia.	Center No. 1	Appanoose	C. R. I. & P., Mo. Div.	Centerville, Ia.
Centerville Block Coal Co.	Centerville, Ia.	Diamond No. 1	Appanoose	C. R. I. & P.	Centerville, Ia.
Centerville Block Coal Co.	Centerville, Ia.	Numa No. 2	Appanoose	C. R. I. & P.	Numa, Ia.
Centerville Block Coal Co.	Centerville, Ia.	Relay No. 3	Appanoose	C. B. & Q., K. & W.	Centerville, Ia.
Centerville Block Coal Co.	Centerville, Ia.	No. 5 Hawkeye	Appanoose	C. B. & Q., K. & W. Line	Brazil, Ia.
Centerville Block Coal Co.	Centerville, Ia.	Raven No. 10	Appanoose	C. R. I. & P.	Centerville, Ia.
Centerville Block Coal Co.	Centerville, Ia.	Citizens	Appanoose	Sou. Ia. Inter Elec.	Centerville, Ia.
Citizens Coal Co.	Centerville, Ia.	Clark	Appanoose	C. B. & Q.	Centerville, Ia.
Clark Coal Co.	Centerville, Ia.	Dewey	Appanoose	C. B. & Q.	Centerville, Ia.
Dewey Block Coal Co.	Mystic, Ia.	Klondyke	Appanoose	Milwaukee	Mystic, Ia.
Diamond Block Coal Co.	Mystic, Ia.	No. 12	Appanoose	Milwaukee	Mystic, Ia.
Diamond Block Coal Co.	Cincinnati, Ia.	Domestic	Appanoose	C. R. & K. C.	Cincinnati, Ia.
Domestic Coal Co.	Mystic, Ia.	Egypt	Appanoose	C. M. & St. P.	Exline, Ia.
Egypt Coal Co.	Exline, Ia.	No. 1	Appanoose	C. B. & Q.	Exline, Ia.
Exline Coal Co.	Ottumwa, Ia.	Rathbun No. 1	Appanoose	C. M. & St. P.	Rathbun, Ia.
Fowler & Wilson Coal Co.	Ottumwa, Ia.	Rathbun No. 2	Appanoose	C. M. & St. P.	Rathbun, Ia.
Fowler & Wilson Coal Co.	Centerville, Ia.	Globe	Appanoose	C. R. I. & P., C. B. & Q.	Centerville, Ia.
Globe Coal Co.	Coal City, Ia.	No. 1	Appanoose	C. B. & Q.	Coal City, Ia.
Giffin Coal Co.	Keith & Perry Bldg., Kansas City, Mo.	Harkes	Appanoose	C. M. & St. P.	Jerome, Ia.
Harkes Coal Co.	Exline, Ia.	Iowa Block No. 1	Appanoose	C. B. & Q.	Exline, Ia.
Iowa Block Coal Co.	Centerville, Ia.	Kountz	Appanoose	B. I. L. S. P.	Centerville, Ia.
Kountz Coal Co.	Mystic, Ia.	Arnett No. 6	Appanoose	C. M. & St. P.	Mystic, Ia.
Liberty Coal Co.	Mystic, Ia.	No. 4	Appanoose	C. M. & St. P.	Mystic, Ia.
Liberty Coal Co.	Mystic, Ia.	No. 3	Appanoose	C. M. & St. P.	Mystic, Ia.
Liberty Coal Co.	Mystic, Ia.	Lee Jones	Appanoose	C. M. & St. P.	Mystic, Ia.
Lee, D. A. Coal Co.	Brazil, Ia.	Low Hickory	Appanoose	C. B. & Q.	Brazil, Ia.
Lowe, W. W. & Son	Centerville, Ia.	McConville	Appanoose	M. & St. L. & C. R. & Q.	Centerville, Ia.
McConville Coal Co.	Rathbun, Ia.	McVeigh	Appanoose	C. R. I. & P.	Rathbun, Ia.
McVeigh Bros. Coal Co.	Mystic, Ia.	No. 17 1/2	Appanoose	C. M. & St. P.	Mystic, Ia.
Mystic Coal Co.	Centerville, Ia.	Oriental	Appanoose	C. B. & Q.	Centerville, Ia.
New Oriental Coal & Mining Co.	Brazil, Ia.	New Walnut	Appanoose	C. B. & Q.	Brazil, Ia.
New Walnut Block Coal Co.	Centerville, Ia.	No. 1 Streepy	Appanoose	C. R. I. & P.	Centerville, Ia.
Prairie Coal Co.	Centerville, Ia.	No. 5	Appanoose	C. R. I. & P.	Numa, Ia.
Prairie Coal Co.	Centerville, Ia.	Rosebrook	Appanoose	L. S. W.	Centerville, Ia.
Rosebrook Coal Co.	Brazil, Ia.	No. 5	Appanoose	C. B. & Q.	Brazil, Ia.
Saco Coal Co.	Centerville, Ia.	Plano	Appanoose	C. B. & Q.	Plano, Ia.
Scandinavian Coal Co.	Centerville, Ia.	Sterling	Appanoose	I. S. F. M. & St. L.	Centerville, Ia.
Sterling Coal Co.	Centerville, Ia.	Sunshine	Appanoose	C. B. & Q.	Centerville, Ia.
Sunshine Coal & Mining Co.	Box 1480, Lincoln, Neb.	Sunshine	Appanoose	C. M. & St. P.	Mystic, Ia.
Winifred Coal Co.	Mystic, Ia.	No. 30	Appanoose	C. M. & St. P.	Centerville, Ia.
Woodland Coal Co.	Centerville, Ia.	Woodland	Appanoose	C. B. & Q. M. & St. L.	Centerville, Ia.

BOONE COUNTY

Bituminous rank. Suitable for Cement Burning, Domestic, Locomotive Fuel, Producer Gas and
Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Boone Coal Co.	Boone, Ia.	No. 1	Boone	C. & N. W.	Boone, Ia.
Boone Coal Co.	Boone, Ia.	No. 2	Boone	D. D. V. & S.	Boone, Ia.
Ogden Consolidated Coal Co.	Ogden, Ia.	No. 5	Boone	M. & St. L. F. & D. D. M.	Ogden, Ia.
Prospect Coal Co.	Fraser, Ia.	No. 1	Boone	C. & S.	Fraser, Ia.
Scandia Coal Co.	416 Loest St., Des Moines, Ia.	No. 2	Boone	F. D. & D. S.	Madrid, Ia.
Scandia Coal Co.	416 Loest St., Des Moines, Ia.	No. 4	Boone	C. M. & St. P.	Madrid, Ia.
Scandia Coal Co.	416 Loest St., Des Moines, Ia.	No. 5	Boone	C. M. & St. P.	Madrid, Ia.

DALLAS COUNTY

Bituminous rank. Suitable for Cement Burning, Domestic, Locomotive Fuel, Producer Gas and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Dallas Coal Co.	Crocker Bldg. Des Moines, Ia.	Dallas	Dallas	C. M. & St. P.	Granger, Ia.
Harris Coal Co.	Ottumwa, Ia.	Harris No. 1	Dallas	C. M. & St. P.	Wauke, Ia.
Norwood-White Coal Co.	907 Equitable Bldg., Des Moines, Ia.	No. 7	Dallas	Interurban	Moran, Ia.
Radiant Coal Co.	Chamber of Commerce Bldg., Ottumwa, Ia.	Radiant	Dallas	C. M. & St. P.	Wauke, Ia.
Radiant Coal Co.	Ottumwa, Ia.	Radiant	Dallas	C. M. & St. P.	Ottumwa, Ia.
Scandia Coal Co.	416 Locust St., Des Moines, Ia.	No. 2	Dallas	C. M. & St. P.	Madrid, Ia.
Scandia Coal Co.	416 Locust St., Des Moines, Ia.	No. 5	Dallas	C. M. & St. P.	Madrid, Ia.

JASPER COUNTY

Bituminous rank. Suitable for Cement Burning, Domestic, Locomotive Fuel, Producer Gas and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Colfax Consolidated Coal Co.	Colfax, Ia.	No. 9	Jasper	C. R. I. & P. Inter.	Colfax, Ia.
Colfax Consolidated Coal Co.	Colfax, Ia.	No. 10	Jasper	C. R. I. & P. Inter.	Colfax, Ia.
Hopkins Coal Co.	Colfax, Ia.	Hopkins	Jasper	Rock Island	Colfax, Ia.
Newton Coal Co.	Newton, Ia.	Newton	Jasper	C. R. I. & P.	Newton, Ia.

LUCAS COUNTY

Bituminous rank. Suitable for Cement Burning, Domestic, Locomotive Fuel, Producer Gas and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Central Iowa Fuel Co.	Des Moines, Ia.	No. 1	Lucas	C. R. I. & P.	Chariton, Ia.
Central Iowa Fuel Co.	Des Moines, Ia.	No. 2	Lucas	C. R. I. & P.	Olmitz, Ia.
Central Iowa Fuel Co.	Des Moines, Ia.	No. 3	Lucas	C. R. I. & P.	Olmitz, Ia.
Central Iowa Fuel Co.	Des Moines, Ia.	No. 4	Lucas	C. R. I. & P.	Williamson, Ia.
Iowa Nebraska Coal Co.	1216 West Grand Ave. Des Moines, Ia.	No. 1	Lucas	C. B. & Q.	Lucas, Ia.

MARION COUNTY

Bituminous rank. Suitable for Cement Burning, Domestic, Locomotive Fuel, Producer Gas and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Anderson Coal Co.	Knoxville, Ia.	Anderson	Marion	C. R. I. & P.	Knoxville, Ia.
Black Diamond Coal Co.	Dallas, Ia.	Black Diamond	Marion	C. R. I. & P.	Melcher, Ia.
Capitol City Coal Co.	Cordova, Ia.	Capitol City No. 1	Marion	C. R. I. & P.	Otley, Ia.
Consolidated Indiana Coal Co.	139 West Van Buren St., Chicago, Ill.	Electra	Marion	Rock Island	Melcher, Ia.
Gold Goose Coal & Mining Co.	Albia, Ia.	Gold Goose No. 2	Marion	C. B. & Q.	Hamilton, Ia.
Harvey Coal Mining Co.	Harvey, Ia.	Harvey	Marion	C. B. & Q.	Harvey, Ia.
Hoover Fuel Co.	Albia, Ia.	Hoover Fuel	Marion	C. N. W.	Buxton, Ia.
McKenzie & Geery Coal Co.	Harvey, Ia.	McKenzie & Geery	Marion	C. R. I. & P.	Harvey, Ia.
Melcher Coal Co.	Melcher, Ia.	No. 1	Marion	C. R. I. & P.	Melcher, Ia.
Pershing Coal Co.	225 Iowa Bldg., Des Moines, Ia.	Pershing No. 1	Marion	Wabash, C. B. & Q.	Tracey, Ia.
Pollock-Ross Coal Co.	Hamilton, Ia.	Pollock-Ross	Marion	C. B. & Q.	Hamilton, Ia.
Red Rock Coal Co.	Des Moines, Ia.	Red Rock	Marion	C. R. I. & P.	Melcher, Ia.

MONROE COUNTY

Bituminous rank. Suitable for Cement Burning, Domestic, Locomotive Fuel, Producer Gas and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Albia Coal Co.	Ottumwa, Ia.	Albia	Monroe	M. & St. L.	Albia, Ia.
Central Coal Co.	Oskaloosa, Ia.	Lockman	Monroe	M. & St. L.	Lockman, Ia.
Consolidation Coal Co.	Buxton, Ia.	No. 18	Monroe	C. & N. W.	Consol, Ia.
Consolidation Coal Co.	Buxton, Ia.	No. 19	Monroe	C. & N. W.	Consol, Ia.
Crescent Coal Co.	Oskaloosa, Ia.	No. 7	Monroe	C. & N. W.	Buxton, Ia.
Hocking Coal Co.	Hocking, Ia.	No. 5	Monroe	M. & St. L.	Albia, Ia.
Maple Coal Co.	Des Moines, Ia.	Maple No. 1	Monroe	C. & N. W.	Eddyville, Ia.
Maple Coal Co.	Des Moines, Ia.	Wanlock No. 2	Monroe	C. & N. W.	Lovilia, Ia.
National Union Coal Mining Co.	Baltimore, Md.	Ward No. 1	Monroe	C. B. & Q.	Albia, Ia.
Rex Fuel Co.	Lovilia, Ia.	No. 4	Monroe	C. & N. W.	Lovilia, Ia.
Rex Fuel Co.	Lovilia, Ia.	No. 5	Monroe	C. & N. W.	Lovilia, Ia.
Sheriff Coal Co.	Oskaloosa, Ia.	Sheriff	Monroe	C. & N. W.	Lovilia, Ia.
Smith, T. H. & Sons	Albia, Ia.	Diamond	Monroe	M. & St. L.	Coalfield, Ia.
Smoky Hollow Coal Co.	Albia, Ia.	No. 11	Monroe	C. B. & Q.	Tower 307, Ia.
Smoky Hollow Coal Co.	Albia, Ia.	No. 10	Monroe	C. B. & Q.	Tower 307, Ia.

POLK COUNTY

Bituminous rank. Suitable for Cement Burning, Domestic, Locomotive Fuel, Producer Gas and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Acme Coal Mining Co.	30 Park Ave., Des Moines, Ia.	Acme	Polk	C. R. I. & P.	Des Moines, Ia.
Bennett Bros. Coal Co.	Des Moines, Ia.	Bennett No. 2	Polk	C. R. I. & P.	Des Moines, Ia.
Bloomfield Coal & Mining Co.	513 Grant Ave., Des Moines, Ia.	Bloomfield	Polk	C. & N. W.	Saylor, Ia.
Clover Leaf Coal & Mining Co.	R. No. 7, Des Moines, Ia.	Clover Leaf	Polk	C. & N. W.	R. No. 7, Des Moines, Ia.
Diamond Joe Coal Co.	Runnells, Ia.	Diamond Joe	Polk	Wabash	Runnells, Ia.
Des Moines Coal Co.	Des Moines, Ia.	Iowa No. 3	Polk	C. G. W.	Des Moines, Ia.
Des Moines Coal Co.	Des Moines, Ia.	Iowa No. 4	Polk	C. G. W.	Des Moines, Ia.
Economy Coal Co.	Des Moines, Ia.	Economy No. 2	Polk	C. R. I. & P.	Des Moines, Ia.
Keystone Coal Mining Co.	407 Crocker Bldg., Des Moines, Ia.	Keystone	Polk	C. M. & St. P.	Des Moines, Ia.
Liberty Coal Mining Co.	Des Moines, Iowa	Liberty No. 1	Polk	Interurban	Acme St., Care I. U. Ry.
Maple Block Coal Co.	Des Moines, Ia.	No. 2	Polk	C. R. I. & P.	Des Moines, Ia.
Norwood-White Coal Co.	907 Equitable Bldg., Des Moines, Ia.	No. 3	Polk	C. R. I. & P.	Berwick, Ia.
Norwood-White Coal Co.	907 Equitable Bldg., Des Moines, Ia.	No. 6	Polk	Interurban	Phillips, Ia.
Saylor Coal Co.	Des Moines, Ia.	Saylor No. 2	Polk	C. & N. W.	Saylor, Ia.
South Des Moines Coal Co.	107 Crocker Bldg., Des Moines, Ia.	South Des Moines	Polk	Des Moines Interurban	Des Moines, Ia.
Urbandale Coal Co.	Des Moines, Ia.	Urbandale	Polk	C. R. I. & P.	Des Moines, Ia.
Wright Coal Co.	416 Loewel St., Des Moines, Ia.	Wright	Polk	C. & N. W.	Saylor, Ia.

WAPELLO COUNTY

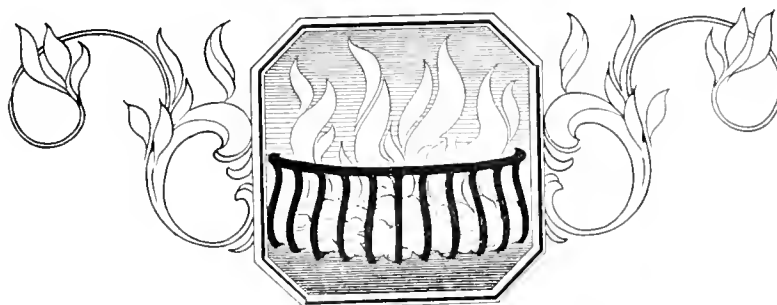
Bituminous rank. Suitable for Cement Burning, Locomotive Fuel, Domestic, Producer Gas and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Bidwell Coal Co.	Ottumwa, Ia.	Goodwell	Wapello	Milwaukee	Ottumwa, Ia.
Iowa Mining Co.	Box 33, Ottumwa, Ia.	Iowa	Wapello	Milwaukee	Ottumwa, Ia.
Rutledge Coal Co.	R. R. No. 3, Ottumwa, Ia.	Rutledge	Wapello	C. M. & St. P.	Rutledge, Ia.
South Ottumwa Mining Co.	Ottumwa, Ia.	South Ottumwa	Wapello	Milwaukee	Ottumwa, Ia.

MISCELLANEOUS SEAMS

Bituminous rank. Mined chiefly in Adams, Wayne, Warren and Webster counties. Suitable for Cement Burning, Domestic, Locomotive Fuel, Producer Gas and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Des Moines Ice & Fuel Co.	Des Moines, Ia.	Springhill No. 1	Warren	C. R. I. & P.	Springhill, Ia.
Equality Coal Co.	Buxton, Ia.	No. 2	Mohaska	C. & N. W.	Buxton, Ia.
Lockwood, D. W.	Carbon, Ia.	Lockwood	Adams	C. G. W.	Carbon, Ia.
McClure, Samuel, Coal Co.	Fort Dodge, Ia.	McClure	Webster	F. D., D. M. & S.	Lehigh, Ia.
Seymour Coal Co.	Seymour, Ia.	New Sunshine	Wayne	C. R. I. & P.	Seymour, Ia.



IOWA

Alphabetical Directory of Coal Mines Giving Complete Detailed Information Covering Each Mine

For List of Abbreviations See Page 13.

ACME COAL MINING COMPANY.

General Office, 30 Park Ave., Des Moines, Ia.
 PR—John McKay, Jr., Des Moines, Ia.
 VP—Chas. R. Hutchings, Des Moines, Ia.
 TR—Chas. R. Hutchings, Des Moines, Ia.
 GM—John McKay, Des Moines, Ia.
 GS—Chas. R. Hutchings, Des Moines, Ia.
 PA—John McKay, Des Moines, Ia.

Acme Mine; Shaft; Third Seam, 42 to 60 in. thick.
 PO—Des Moines, Ia.; SP—Same; CTY—Polk.

S of H—Mules, tail and gravity rope. Track gage 35 in.

S of M—Hand.
 PP—Power purchased, 220 volts, 2—60x16 tubular boilers, 4 pumps.
 EMP—75. Last years tonnage 14,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Gravity Screens.
 Note—Successors to Ray Coal Mining Co.

ALBIA COAL CO.

General Office, Ottumwa, Ia.
 PR—H. M. Gilechrist, Davenport, Ia.
 VP—W. T. Ramsay, Bidwell, Ia.
 TR—Homer H. Harris, Ottumwa, Ia.
 GM—Homer H. Harris, Ottumwa, Ia.
 PA—Homer H. Harris, Ottumwa, Ia.
 CE—H. M. Gilechrist, Davenport, Ia.
 EE—Clarence Krebs, Albia, Ia.
 SA—Homer H. Harris, Ottumwa, Ia.

Albia Mine; Shaft; Deep Vein Seam, 72 in. thick.

PO—Ottumwa, Ia.; SP—Albia; CTY—Monroe; RR—Minneapolis & St. Louis.

MS—W. T. Ramsay, Bidwell, Ia.
 SM—Homer H. Harris, Ottumwa, Ia.
 S of H—Mules, main and tail rope. Track gage, 36 in.

PP—Power purchased, transformer 440-220 volts A. C., 4 150 H. P., water tube boilers, 10 steam and electric pumps.

EMP—300. Last years tonnage 175,000.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.

PREP. EQUIPT—Shaker Screens, Pickling Tables.

ANCHOR COAL CO.

General Office, Box 1486, Lincoln, Neb.
 PR—M. E. Serat, Lincoln, Neb.
 VP—T. F. Horn, Lincoln, Neb.
 TR—T. F. Horn, Lincoln, Neb.
 PA—M. E. Serat, Lincoln, Neb.

No. 2 Mine; Shaft; Appanoose Seam, 30 in. thick.

PO—Centerville, Ia.; SP—Same; CTY—Appanoose; RR—C. R. I. & P.

MS—Bruce C. Wool, Centerville, Ia.
 S of H—Mules. Track gage, 36 in.

S of M—Hand.
 PP—3 fire tube boilers, 450 H. P., 4 pumps.

EMP—120 Daily output, 250 tons.
 SIZES SHIPT—Lump, Block.

PREP. EQUIPT—Gravity Screens.

ANDERSON COAL COMPANY

General Office, Knoxville, Ia.
 PR—A. L. Cunitz, Des Moines, Ia.
 VP—Wm. E. Abram, Knoxville, Ia.
 TR—A. J. Abram, Knoxville, Ia.
 GS—Wm. E. Abram, Knoxville, Ia.
 PA—E. J. Abram, Knoxville, Ia.
 EM—L. John, Knoxville, Ia.
 SCO—Mitchell Supply Co. Buyer, Chet Johnson, Knoxville, Iowa.

Anderson Mine; Shaft; Third Seam; 48-144 inches thick.

PO—Knoxville, R. F. D. 8, Ia.; SP—Same; CTY—Marion; RR—C. R. I. & P.

S of H—Mules, main and tail rope. Track gage 36 inches.

S of M—Hand.
 PP—4 water tube boilers, total 320 H. P., 4 pumps.

EMP—150 Last years tonnage 75,000.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.

PREP. EQUIPT—Gravity Screens.

APPANOOSE COAL & FUEL CO.

General Office, Mystic, Ia.
 PR—L. L. Lodwick, Mystic, Ia.
 VP—L. L. Lodwick, Mystic, Ia.
 TR—M. Lodwick, Mystic, Ia.
 GM—L. L. Lodwick, Mystic, Ia.
 GS—L. L. Lodwick, Mystic, Ia.
 PA—L. L. Lodwick, Mystic, Ia.

CE—G. S. Lodwick, Mystic, Ia.
 SCO—Wm. Price & Co., Diamond, Ia.
 SA—M. Lodwick, Mystic, Ia.

Diamond No. 22 Mine; Shaft; Seam 30 in. thick.

PO—Mystic, Ia.; CTY—Appanoose; RR—C. M. & St. P.

S of H—Mules. Track gage, 31 in.
 S of M—Longwall machs.

PP—Power purchased, transformer 250-240 volts A. C., fire tube boilers, 120 H. P., 2 pumps.

EMP—50. Last years tonnage 26,000.
 SIZES SHIPT—Nut, Egg, Lump, Block.

PREP. EQUIPT—Screens.

ARMSTRONG COAL CO.

General Office, Cincinnati, Ia.
 PR—E. R. Busky, Kansas City, Mo.
 VP—W. B. Ketcham, Mendota, Mo.
 TR—G. B. McPherson, Kansas City, Mo.
 GM—W. D. Ketcham, Mendota, Mo.
 GS—W. D. Ketcham, Mendota, Mo.
 PA—W. D. Ketcham, Mendota, Mo.
 SA—Star Coal Co., Kansas City, Mo.

No. 1 Mine; Shaft; Low Coal Field Seam, 30 in. thick.

PO—Cincinnati, Ia.; SP—Same; CTY—Appanoose; RR—C. B. & Q.

MS—C. H. Harrison, Cincinnati, Ia.
 S of H—Mules. Track gage, 36 in.

S of M—Hand.
 PP—1 100 H. P. fire tube boiler, 1 100 H. P. water tube boiler.

EMP—125. Last fiscal year output, 57,222 tons.

SIZES SHIPT—Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

BARRETT COAL COMPANY.

General Office, Mystic, Ia.
 GM—J. J. Barrett, Mystic, Ia.
 PA—J. J. Barrett, Mystic, Ia.

Barrett Mine; Slope; Seam, 30 in. thick.

PO—Mystic, Ia.; SP—Same; CTY—Appanoose; RR—C. M. & St. P.

MS—J. J. Lee, Mystic, Ia.
 S of H—Main and tail rope. Track gage 31 in.

S of M—Hand.
 PP—Power purchased, Transformer, 13,200-250 volts A. C.

EMP—30. Last years tonnage 10,000.
 SIZES SHIPT—Lump, Block.

NOTE—Formerly operated by Barrett-Voyce Coal Co.

BARRETT-VOYCE COAL CO.

Now Barrett Coal Co.

BEGGS COAL CO.

General Office, Mystic, Ia.
 PR—William Beggs, Mystic, Ia.
 TR—William Beggs, Mystic, Ia.
 GM—William Beggs, Mystic, Ia.
 GS—William Beggs, Mystic, Ia.
 PA—C. F. Ludington, Mystic, Ia.
 EM—G. Lodwick, Mystic, Ia.

Beggs Mine; Shaft; Low Coal Seam, 30 in. thick.

PO—Mystic, Ia.; SP—Same; CTY—Appanoose; RR—C. M. & St. P.

S of H—Mules. Track gage 30 in.
 S of M—Hand.

PP—Power purchased, 220 volts A. C., 1 pump.

EMP—20. Last years tonnage 4,000.
 SIZES SHIPT—Lump.

PREP. EQUIPT—Gravity Screens.
 Note—Entire output consumed by C. M. & St. P. R. R.

BENNETT BROS. COAL COMPANY.

PR—F. J. Bennett, Des Moines, Ia.
 GS—F. J. Bennett, " "
 TR—F. J. Bennett, Des Moines, Ia.
 GM—A. A. Bennett, " "
 PA—A. A. Bennett, " "
 CE—G. V. Wicks, " "

Bennett No. 2 Mine; Shaft; No 2 Seam, 60 in. thick.

PO—Des Moines, Ia. SP—Same. CTY—Polk.

S of H—Mules.
 S of M—Hand.

PP—2 water tube boilers, total 40 H. P. Purchase power.

BIOWELL COAL COMPANY.

General Office, Ottumwa, Ia.
 PR—John Shuler, Des Moines, Ia.
 VP—Wm. T. Ramsay, Bidwell, Ia.
 TR—Homer H. Harris, Ottumwa, Ia.
 GM—Homer H. Harris, " "
 PA—Homer H. Harris, " "

GS—William T. Ramsay, Bidwell, Ia.
 CE—Wm. T. Ramsay, Bidwell, Ia.
 EM—E. A. Hieronymus, Galesburg, Ill.

SCO—Harris Mde. Co., Ottumwa, Ia.
 Buyer, Edwin Gantz, Albia, Ia.

SA—Homer H. Harris, Ottumwa, Ia.

Goodwell Mine; Shaft; Deep Vein Seam; 60 in. thick.

PO—Ottumwa, Ia.; SP—Bidwell, Ia.; CTY—Wapell; RR—Milwaukee.

S of H—Mules, tail rope and engines. Track gage 36 in.

S of M—Hand.
 PP—3 fire tube boilers, 450 H. P.

EMP—250. Last years tonnage 160,000.
 SIZES SHIPT—Run of Mine, Slack, Pea, Egg, Lump, Block.

PREP. EQUIPT—Gravity Screens.

BLACK DIAMOND COAL CO.

General Office, Dallas, Iowa.
 PR—J. L. Goff, Dallas, Iowa.
 VP—J. A. Hartlev, Dallas, Iowa.
 TR—R. C. Goff, Dallas, Iowa.
 GM—Edw. Rowley, Dallas, Iowa.

Black Diamond Mine; Shaft; Seam, 52 inches thick.

PO—Dallas, Iowa; SP—Melcher, Iowa; CTY—Marion; RR—C. R. I. & P.

MS—Edw. Rowley, Dallas, Iowa.
 S of H—Mules and steam locos. Track gage 34 inches.

S of M—Hand.
 FMP—75 Daily tonnage 200.

SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.

PREP. EQUIPT—Bar Screens.

BLACKBIRD CREEK COAL CO.

GM—C. W. Lane, Centerville, Ia.

Blackbird Mine, Slope.

PO—Centerville, Ia. SP—Unionville, Mo. CTY—Appanoose. RR—C. B. & Q., Burlington & Carrollton Br.

S of H—Mules and ropes. Track gage 34 in.

S of M—Hand.
 SIZES SHIPT—Run of Mine, Slack, Block.

PREP. EQUIPT—Bar Screens.

Note—Mine not in operation.

BLOOMFIELD COAL & MINING CO.

General Office, 513 E. Grand Ave., Des Moines, Ia.

PR—Geo. Yarn, Des Moines, Ia.
 EM—Bert Shivers, Des Moines, Ia.

TR—Chas. S. Worth, " "
 GM—Chas. S. Worth, " "

GS—Geo. Yarn, " "
 PA—Chas. S. Worth, " "

SA—Gov. Hollingsworth, Des Moines, Ia.

Bloomfield No. 5 Mine; Shaft; Lower Vein Seam; 34 to 60 in. thick.

PO—Des Moines, Ia.; SP—Saylor, Ia.; RR—C. & N. W. Ry.

S of H—1 elec. loco. Mules. Track gage 33 in.

S of M—4 longwall machs.
 PP—Power purchased, transformer 2200-440-220 volts A. C., 1 fire tube boiler, 80 H. P., 3 pumps.

EMP—150. Last years tonnage 95,643.

SIZES SHIPT—Slack, Egg, Lump.
 PREP. EQUIPT—Gravity Screens.

BLOUNT-EVANS COAL CO.

Out of business.

BOONE BLOCK COAL CO.

Operations exhausted.

BOONE COAL COMPANY

General Office, Boone, Ia.
 PR—Robert Heaps, Boone, Ia.
 VP—W. D. Johnson, Boone, Ia.
 TR—Peter Benson, Boone, Ia.
 GM—Geo. Heaps, Sr., Boone, Ia.
 GS—Geo. Heaps, Sr., Boone, Ia.
 PA—J. W. Berts, Boone, Ia.

No. 1 Mine; Shaft; Upper Vein Seam, 36 in. thick.

PO—Boone, Ia.; SP—Same; CTY—Boone; RR—C. & N. W.

S of H—Mules. Track gage 28 in.
 S of M—Electric puncher. Shortwall and longwall machs.

PP—Power purchased, 220 volts D. C., 1—60 H. P., 2—80 H. P. water tube boilers, 2 pumps.

EMP—150. Daily tonnage 150.
 SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.
 Note—Formerly operated by the Heaps Coal Co.

No. 2 Mine; Shaft; Upper Seam, 30 in. thick.

PO—Boone, Ia.; SP—Same; CTY—Boone; RR—Frt., D. B. M. & S.

S of H—Mules. Track gage 28 in.
 S of M—1 elec. longwall mach.

PP—Power purchased, 220 volts D. C., 2—80 H. P. water tube boilers, 2 pumps.

EMP—150. Daily tonnage 250.
 SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.
 Note—Formerly operated by the Smiley & Heaps Coal Co.

CALDWELL COAL CO.

General Office, Exline, Ia.
 PR—L. Johnson, Exline, Ia.
 VP—O. E. Anderson, Exline, Ia.
 TR—J. D. Roman, Exline, Ia.
 GM—L. Johnson, Exline, Ia.
 SA—Peoa Block Coal Co., Exline, Ia.

Caldwell Mine; Shaft; Bituminous Seam, 36 in. thick.

PO—Exline, Ia.; SP—Same; CTY—Appanoose; RR—C. B. & Q.

S of H—Mules and gasoline locos. Track gage, 30 in.

S of M—Hand.
 PP—3 pumps.

EMP—40. Last years tonnage 100,000.
 SIZES SHIPT—Lump.

CAPITOL CITY COAL CO.

General Office, Cordova, Ia.
 PR—John Spitzer, Des Moines, Ia.
 VP—Andy Swanson, Cordova, Ia.
 TR—Andy Swanson, Cordova, Ia.
 GM—Andy Swanson, Cordova, Ia.

Capitol City No. 1 Mine; Shaft; Third Vein Seam, 72 in. thick.

PO—Cordova, Ia.; SP—Otley, Ia. CTY—Marion; RR—C. R. I. & P.

S of H—Mules. Track gage 36 in.
 S of M—Hand.

PP—2 160 H. P. fire tube boilers.
 EMP—25. Last years tonnage 4,000.

SIZES SHIPT—Run of Mine, Slack, Block.

PREP. EQUIPT—Bar Screen.

CARBON BLOCK COAL CO.

Now operated by the Carbon Fuel Co.

CARBON FUEL COMPANY

General Office, Centerville, Iowa.
 PR—Eli Bailey, Centerville, Iowa.
 SECY—J. Q. Adams, Centerville, Iowa.
 TR—J. Q. Adams, Centerville, Iowa.
 GM—J. Q. Adams, Centerville, Iowa.
 PA—Eli Bailey, Centerville, Iowa.
 CE—J. Q. Adams, Centerville, Iowa.
 SA—Carbon Fuel Co., Centerville, Iowa.

No. 30 Mine; Shaft; Mystic Seam, 30-36 inches thick.

PO—Centerville, Iowa; SP—Same; CTY—Appanoose; RR—C. R. I. & P.

MS—Nels Anderson, Centerville, Iowa.
 S of H—2 trolley pole type locos. Track gage 36 inches.

S of M—Hand.
 PP—Power purchased, Transformer 22,000 volts A. C., 2—60 H. P. fire tube boilers, 1 pump.

EMP—240. Last years tonnage 91,000.
 SIZES SHIPT—Run of Mine, Pea, Nut, Egg, Lump, Block.

PREP. EQUIPT—Gravity Screens.

CENTER COAL CO.

General Office, Centerville, Ia.
 PR—A. V. Venell, Centerville, Ia.
 VP—John Sheren, Centerville, Ia.
 TR—Louis Anderson, Centerville, Ia.
 GS—Louis Anderson, Centerville, Ia.
 GM—Louis Anderson, " "
 PA—Louis Anderson, " "
 CE—G. M. Hall, Centerville, Ia.

Center No. 1 Mine; Shaft; Centerville Seam, 31 in. thick.

PO—Centerville, Ia. SP—Same. CTY—Appanoose; RR—C. R. I. & P., Mo. Div.

MS—John Sheren, Centerville, Ia.
 S of H—Mules. Track gage 36 in.

S of M—Hand.
 PP—3 fire tube boilers, 160 H. P., 2 pumps.

EMP—125 Last years tonnage 53,000.
 SIZES SHIPT—Pea, Nut, Egg, Lump, Block.

PREP. EQUIPT—Gravity Screens

CENTERVILLE BLOCK COAL COMPANY.

General Office, Centerville, Ia.
PR—C. W. Lane, Centerville, Ia.
VP—Alex. Dargavell, Centerville, Ia.
TR—W. W. Oliver, " "
GM—W. W. Oliver, " "
GS—Alex. Dargavell, " "
PA—Alex. Dargavell, " "
EM—Frank L. Davis, Centerville, Ia.
EE—John D. Miller, Centerville, Ia.

Diamond No. 1 Mine Shaft; First and Low Coal Field Seams, 30 in. thick.
PO—Centerville, Ia. SP—Same; CTY—Appanoose; RR—C. R. I. & P., Kansas City Line.
S of H—Mules and rope. Track gage 36 in.
S of M—Hand and mach.
PP—3 100 H. P. fire tube boilers, 3 pumps.
EMP—69. Last years tonnage 25,206.
SIZES SHIPT—Pea, Nut, Egg, Lump, Block.

No. 2 Numa Mine; Shaft; Low Coal Field Seam, 30 in. thick.
PO—Numa, Ia. SP—Same; CTY—Appanoose; RR—C. R. I. & P., Kansas City Line.
MS—Alex. Dargavell, Centerville, Ia.
S of H—Mules and rope. Track gage 36 in.
S of M—Hand.
PP—2 return tubular boilers, total 175 H. P., 2 pumps.
EMP—66. Last years tonnage 26,184.
SIZES SHIPT—Pea, Nut, Slack, Egg, Lump.
PREP. EQUIPT.—Bar Screens.

No. 3 Relay Mine; Shaft; First Seam, 30 in. thick.
PO—Centerville, Ia. SP—Same; CTY—Appanoose; RR—C. B. & Q., K. & W. Line.
MS—Alex. Dargavell, Centerville, Ia.
S of H—Mules and rope. Track gage 36 in.
S of M—2 longwall machs.
PP—3 return tubular boilers, total 300 H. P., purchase power.
EMP—63. Last years tonnage 19,979.
SIZES SHIPT—Egg, Lump, Block.

No. 5 Hawkeye Mine; Slope; First Seam, 30 in. thick.
PO—Brazil, Ia. SP—Same; CTY—Appanoose; RR—C. B. & Q., K. & W. Line.
MS—Alex. Dargavell, Centerville, Ia.
S of H—Mules and rope. Track gage 36 in.
S of M—1 longwall mach.
PP—2 return tubular boilers, total 160 H. P. Purchase power.
EMP—67. Last years tonnage 12,337.
SIZES SHIPT—Slack, Pea, Nut, Egg, Lump.

Raven No. 10 Mine; Shaft; Low Coal Field Seam, 30 in. thick.
PO—Centerville, Ia. SP—Same; CTY—Appanoose; RR—C. R. I. & P., Kansas City Line.
S of H—Mules, rope and motor.
S of M—Hand and 2 mining machs.
PP—3 100 H. P. fire tube boilers, 1 pump.
EMP—71. Last years tonnage 32,204.
SIZES SHIPT—Slack, Pea, Nut, Egg, Lump.

CENTRAL COAL COMPANY.

General Office, Oskaloosa, Ia.
PR—J. L. Jones, Oskaloosa, Ia.
VP—J. L. Jones, Oskaloosa, Ia.
TR—W. J. Sullivan, Oskaloosa, Ia.
GM—J. L. Jones, Oskaloosa, Ia.
GS—Ray Harris, Albia, Ia.
PA—J. L. Jones, Oskaloosa, Ia.
EM—D. E. Ridgway, Lockman, Ia.
SC—Lockman Supply Co. Buyer, R. G. Harris, Lockman, Ia.
SA—Northwestern Coal Co., Des Moines, Ia.

Lockman Mine; Slope and Shaft; Bituminous Seam, 48 to 60 inches thick.
PO—Oskaloosa, Ia. SP—Lockman, Ia. CTY—Monroe; RR—M. & St. L.
S of H—Mules and rope. Track gage 36 in.
S of M—Hand.
PP—2 boilers, total 160 H. P., 6 pumps.
EMP—150. Last years tonnage 100,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT.—Gravity Screens, Picking Tables.

CENTRAL IOWA FUEL CO.

General Office, Des Moines, Ia.
PR—A. E. Hollingsworth, Des Moines, Ia.
VP—J. Norwood, Des Moines, Ia.
TR—F. C. MacMillan, Des Moines, Ia.
GM—J. Norwood, Des Moines, Ia.
PA—J. Norwood, Des Moines, Ia.
CE—F. W. Frost, Chariton, Ia.
SC—Olmitsz Supply Co.; Buyer, J. A. Cornell, Olmitsz, Ia.

No. 1 Mine; Shaft; Third V. in Seam, 48-72 in. thick.
PO—Chariton, Ia. SP—Same; CTY—Lucas; RR—C. R. I. & P.
MS—Wm. Malone, Chariton, Ia.
S of H—Mules and rope. Track gage 36 in.
S of M—2 shortwall machs.
PP—Power purchased, 7 150 H. P. fire tube boilers, 7 pumps.
EMP—214. Last years tonnage 130,792.
SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.
No. 2 Mine; Shaft; Third V. in Seam, 48-72 in. thick.
PO—Olmitsz, Ia. SP—Same; CTY—Lucas; RR—C. R. I. & P.
S of H—Trolley pole type and combination loco. Track gage 36 in.
S of M—Hand.
PP—4 150 H. P. fire tube boilers, 6 pumps.
EMP—355. Last years tonnage 217,169.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Gravity Screens.

No. 3 Mine; Shaft; Third V. in Seam, 48-72 in. thick.
PO—Olmitsz, Ia. SP—Same; CTY—Lucas; RR—C. R. I. & P.
S of H—Rope. Track gage 36 in.
PP—2 150 H. P. fire tube boilers, 2 pumps.
EMP—86. Last years tonnage 50,540.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Gravity and Shaker Screens.

No. 4 Mine; Shaft; Third V. in Seam, 60 to 96 in. thick.
PO—Chariton, Ia. SP—Williamson, Ia. CTY—Lucas; RR—C. R. I. & P.
MS—Wm. Malone, Chariton, Ia.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—2 fire tube boilers, 150 H. P.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.

CITIZENS COAL CO.

PR—H. G. Graham, Centerville, Ia.
VP—H. W. Parker, Centerville, Ia.
TR—Mrs. H. G. Graham, " "
GM—Graham & Parker, Centerville, Ia.
GS—Graham & Parker, Centerville, Ia.
PA—Graham & Parker, Centerville, Ia.
EM—H. W. Parker, Centerville, Ia.
EE—H. G. Graham, Centerville, Ia.
Citizens Mine; Shaft; Thin V. in Seam; 28 in. thick.
PO—Centerville, Ia. SP—Same; CTY—Appanoose; RR—Sou. Ind. Inter. Elec.
S of H—Mules.
S of M—1 elev. mach.
PP—Gen. unit 220 volts A. C., 3 phase, 60 cycles. Purchase power.
EMP—23. Daily tonnage 80.
SIZES SHIPT—Run of Mine.
Old Information.

CLARKE COAL CO.

General Office, Centerville, Ia.
OWNER—Daniel Clarke, Centerville, Ia.
Clarke Mine; Shaft; Centerville Seam, 33 in. thick.
PO—Centerville, Ia. SP—Same; CTY—Appanoose; RR—C. B. & Q., Rock Island.
MS—Daniel Clarke, Centerville, Ia.
S of H—Mules. Track gage 34 in.
S of M—1 longwall mach.
PP—Power purchased, Transformer 3300 to 220 volts A. C., 1-50 H. P. fire tube boiler, 1 pump.
EMP—15. Last fiscal year output, 4,500 tons.
SIZES SHIPT—Lump.
PREP. EQUIPT—Hand Picked.

CLOVER LEAF COAL & MINING CO.

General Office, R. 7, Des Moines, Ia.
PR—O. E. Heggen, 2011 E. 13th St., Des Moines, Ia.
VP—S. C. Cowgill, R. 7, Des Moines, Ia.
TR—O. E. Heggen, 2011 E. 13th St., Des Moines, Ia.
GM—O. E. Heggen, 2011 E. 13th St., Des Moines, Ia.
GS—S. C. Cowgill, R. 7, Des Moines, Ia.
Clover Leaf Mine; Shaft; 45 ft; Lower V. in; 36-40 in. thick.
PO—R. 7, Des Moines, Ia. SP—Same; CTY—Polk; RR—C. & N. W.
S of H—Mules. Track gage 30 in.
S of M—Hand machs.
PP—One steam tubular boiler, Steam engine hoist, 2 pumps.
EMP—9. Daily tonnage 20.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

COLFAX CONSOLIDATED COAL CO.

General Office, Colfax, Ia.
PR—W. A. Sowers, Colfax, Ia.
VP—Robert Ryan, Colfax, Ia.
TR—J. B. Ryan, Colfax, Ia.
GM—J. B. Ryan, Colfax, Ia.
PA—Thos. H. Gould, Colfax, Ia.
EM—R. Winterstein, Colfax, Ia.
SC—Address the Company, Buyer, Thos. H. Gould, Colfax, Ia.
SA—Colfax Consolidated Coal Co., Colfax, Ia.

No. 9 Mine; Shaft; Lower Seam, 54 in. thick.
PO—Colfax, Ia. SP—Same; CTY—Jasper; RR—C. R. I. & P., Interurban.
MS—John Pearson, Colfax, Ia.
SM—H. A. Gunn, Colfax, Ia.
S of H—Mules, trolley pole type and storage battery loco.
S of M—6 shortwall machs.
PP—4 water tube boilers, 600 H. P., power generated 250 volts D. C., 5 pumps.
EMP—210. Last years tonnage 107,789.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables.

No. 10 Mine; Shaft; Lower V. in Seam, 36-72 in. thick.
PO—Colfax, Ia. SP—Same; CTY—Jasper; RR—C. R. I. & P., Interurban.
MS—John Pearson, Colfax, Ia.
SM—H. A. Gunn, Colfax, Ia.
S of H—Mules and combination loco.
S of M—Shortwall machs.
PP—3 water tube boilers, 350 H. P., power generated 210 volts D. C., 3 pumps.
EMP—78. Daily tonnage 400.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables.

CONSOLIDATED INDIANA COAL CO.

General Office, Room 325, 139 W. Van Buren St., Chicago, Ill.
PR—Robert E. Lee, Chicago, Ill.
VP—B. M. Hedberg, Chicago, Ill.
TR—Robert E. Lee, Chicago, Ill.
GS—Robert E. Lee, Chicago, Ill.
PA—B. M. Hedberg, Chicago, Ill.
Electric No. 1 Mine; Shaft; No. 3 Seam; 60 in. thick.
PO—Melcher, Ia. SP—Same; CTY—Marion; RR—C. R. I. & P.
MS—John Hall, Melcher, Ia.
S of H—Mules and 3 trolley pole type loco. Track gage 36 in.
S of M—Hand.
PP—1-100 K. W. and 1-150 K. W. g. n. units, 250 volts D. C., 8 pumps.
EMP—115.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Shaker Screens.

CONSOLIDATED COAL CO.

General Office, Buxton, Ia.
PR—G. M. Davidson, C. & N. W. Ry. Chicago Shops, Chicago, Ill.
TR—A. R. Jones, 226 West Jackson Blvd., Chicago, Ill.
GM—F. S. Pfahler, Gillespie, Ill.
GS—F. F. Jorgensen, Gillespie, Ill.
PA—W. L. Gillespie, 226 W. Jackson Blvd., Chicago, Ill.
EM—F. F. Jorgensen, Gillespie, Ill.

No. 18 and 19 Mines; Shaft; Lower V. in, 60 inches thick.
PO—Buxton, Ia. SP—Consol., Ia.; CTY—Monroe; RR—C. & N. W.
MS—John Day, Buxton, Ia.
S of H—Mules and 10 trolley pole type loco. Track gage 35 1/2 inches.
S of M—Hand.
PP—8-100 H. P. fire tube boilers, 2-250 K. W. gen. units, 250 volts D. C., 1-500 K. W. gen. unit, D. C., 8 pumps.
EMP—834. Last years tonnage 677,021.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens, Loading Booms, Coal Crusher.

CRESCENT COAL CO.

General Office, Oskaloosa, Ia.
PR—S. W. White, Oskaloosa, Ia.
SECY—J. E. Hatfield, Oskaloosa, Ia.
GS—Wm. Ross, Whiteburg, Ia.
EM—A. S. White, Whiteburg, Ia.
SC—Crescent Supply Co. Buyer, Leonard Duprez, Whiteburg, Ia.

Mine No. 7; Shaft; Buxton Seam, 30 in. thick.
PO—Whiteburg, Ia. SP—Buxton, Ia. CTY—Monroe; RR—C. & N. W. I. & M. Div.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—2 return tubular boilers, 200 H. P.
EMP—150.

SIZES SHIPT—Slack, Lump.
PREP. EQUIPT—Gravity Screens.
Old Information.

DALLAS COAL COMPANY.

General Office, Crocker Bldg., Des Moines, Ia.
PR—John Lindblom, Des Moines, Ia.
VP—R. E. Carlson, Des Moines, Ia.
TR—F. Alexander, Grinnell, Ia.
GM—A. W. Carlson, Jr., Des Moines, Ia.
GS—John Lindblom, Des Moines, Ia.
PA—A. W. Carlson, Jr., " "
EM—E. L. Leibrock, " "
EE—J. W. Peterson, " "

Dallas Mine No. 1; Shaft; Seam 54 in. thick.
PO—R. R. 2, Madrid, Ia. SP—Granger, Ia.; CTY—Dallas; RR—C. M. & St. P.
MS—R. B. Adey, R. R. 2, Madrid, Ia.
S of H—Mules and 2 elec. loco. Track gage 36 in.
S of M—Hand.
PP—Power purchased, Transformer 22,000 volts A. C., M. G. sets, 250 volts D. C., 1 fire tube boiler, 2 pumps.
EMP—250. Last years tonnage 119,872.
SIZES SHIPT—Run of Mine, Slack, Pea, Egg, Lump, Block.
PREP. EQUIPT—Gravity Screens.

DAWSON, I. H. COAL CO.

Out of business.

DES MOINES COAL CO.

General Office, Des Moines, Iowa.
PR—J. Norwood, Des Moines, Iowa.
VP—Fred. Norwood, Des Moines, Iowa.
TR—R. W. Z. Hunt, Des Moines, Iowa.
GM—Fred. Norwood, Des Moines, Iowa.
GS—Fred. Norwood, Des Moines, Iowa.
PA—Fred. Norwood, Des Moines, Iowa.

Iowa Mine No. 3; Shaft; Second V. in Seam, 48 inches thick.
PO—Des Moines, Iowa; SP—Same; CTY—Polk; RR—C. G. W.
MS—Joe Strachan, Des Moines, Iowa.
S of H—Mule, main and tail rope. Track gage 32 inches.
S of M—Shortwall machs.
PP—2 fire tube boilers, 60 and 80 H. P. Power purchased, Transformer 13,000 to 220 volts A. C., 4 pumps.
EMP—60. Daily tonnage 200.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

No. 4 Mine; Shaft; Second V. in Seam, 54 inches thick.
PO—Des Moines, Iowa; SP—Same; CTY—Polk; RR—C. G. W.
MS—Carl Sparks, Des Moines, Iowa.
S of H—Mules. Track gage 32 inches.
S of M—Hand.
PP—1 fire tube boiler. Power purchased, Transformer 13000 to 220 volts A. C., 2 pumps.
EMP—20.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

DES MOINES COAL & COKE CO.

New Anderson Coal Co.

DES MOINES ICE & FUEL CO.

General Office, Des Moines, Ia.
PR—Joe Mohaupt, Des Moines, Ia.
VP—J. G. Black and J. W. Hill, Des Moines, Ia.
TR—S. H. Blount, Des Moines, Ia.
GM—H. B. Hill, Spring Hill, Ia.
GS—E. Jeffries, Spring Hill, Ia.
PA—Edw. H. Blount, Des Moines, Ia.
CE—S. H. Blount, Des Moines, Ia.
EM—L. L. Leibrock, Des Moines, Ia.
EE—Joe Swatta, Spring Hill, Ia.

Springhill No. 1 Mine; Shaft; 3rd V. in, 46 in. thick.
PO—Springhill, Ia. SP—Same; CTY—Warren; RR—C. R. I. & P.
S of H—Mules, Main and Tail. Track gage 36 in.
S of M—5 shortwall machs.
PP—Boilers, total 350 H. P., 1 100 K. W. g. n. unit, 250 volts D. C., 6 pumps.
EMP—95. Last years tonnage 105,000.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Bar Screens.

DEWEY BLOCK COAL COMPANY.

General Office, Centerville, Ia.
OWNER—G. E. Come, Centerville, Ia.
TR—G. E. Come, " "
GM—G. E. Come, " "
PA—G. E. Come, " "

St. 1 Mine; Bituminous Seam, 29 to 34 in. thick.
PO—Centerville, Ia. SP—Same; CTY—Appanoose; RR—C. B. & Q.
MS—G. L. Come, Centerville, Ia.
S of H—Rope and 1 steam loco.
S of M—Hand.
PP—2 water boilers, total 125 H. P., 2 gen. units, 1 pump.
EMP—65. Daily output 130 tons.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT—Screens.

DIAMOND BLOCK COAL COMPANY

General Office, Mystic, Ia.
 PR—David L. Lodaick, Mystic, Ia.
 GM—John S. Lodaick, Mystic, Ia.
 GS—Geo. Young, Mystic, Ia.
 EM—G. Lodaick, Mystic, Ia.
 SA—John S. Lodaick, Mystic, Ia.
 No. 12 and Klondyke Mines; Shaft;
 Blanket Seam, 28 in. thick.
 PO—Mystic, Ia.; SP—Same; CTY—Ap-
 panoose; RR—Milwaukee.
 S of H—Mules. Track gage 31 in.
 S of M—Longwall mach.
 PP—Power purchased, 250 volts D. C.,
 2 boilers, 8 pumps.
 EMP—55.
 SIZES SHIPT—Egg, Lump, Block.

DIAMOND JOE COAL COMPANY

General Office, Runnells, Ia.
 PR—David Jopling, Runnells, Ia.
 VP—V. T. McCall, Runnells, Ia.
 TR—David Jopling, Runnells, Ia.
 CE—T. M. McCall, Runnells, Ia.
 Diamond Joe Mine; Shaft; No. 1 S Seam,
 42 to 48 in. thick.
 PO—Runnells, Ia.; SP—Same; CTY—
 Polk; RR—Wabash.
 MS—David Jopling, Runnells, Ia.
 S of H—Mules. Track gage 36 in.
 S of M—2 punchers.
 PP—1 80 H. P. fire tube boilers.
 EMP—20. Last years tonnage 3,750.
 SIZES SHIPT—Run of Mine, Slack,
 Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

DOMESTIC COAL COMPANY

General Office, Cincinnati, Ia.
 PR—W. O. Cline, Cincinnati, Ia.
 PA—Wm. Cline, Cincinnati, Ia.
 SA—W. O. Cline, Cincinnati, Ia.
 Domestic Mine; Shaft; Bituminous Seam;
 30 in. thick.
 PO—Cincinnati, Ia.; SP—Same; CTY—
 Appanoose; RR—C. B. & K. C.
 MS—W. O. Cline, Cincinnati, Ia.
 S of H—Mules. Track gage 36 in.
 S of M—Hand.
 PP—1 20 H. P. tubular boiler, 1 pump.
 EMP—50. Last years tonnage 200.
 SIZES SHIPT—Run of Mine, Lump,
 Block.
 Old Information.

EAGLE COAL & MINING CO.

Operations suspended.

ECONOMY COAL COMPANY

General Office, Des Moines, Ia.
 FB—Geo. H. Ramsay, Knoxville, Ia.
 TB—Peter Reynolds, Des Moines, Ia.
 GM—John H. Ramsay, Des Moines, Ia.
 GS—John H. Ramsay, Des Moines, Ia.
 PA—John H. Ramsay, Des Moines, Ia.
 Economy No. 2 Mine; Shaft; No. 2 Seam,
 44 in. thick.
 PO—Des Moines, Ia.; SP—Same; CTY—
 Polk; RR—C. R. I. & P.
 MS—Peter Reynolds, Des Moines, Ia.
 S of H—Mules and rope.
 S of M—3 shortwall machs.
 PP—Power purchased, 220 volts, 4
 pumps.
 EMP—125. Last years tonnage
 30,500.
 SIZES SHIPT—Run of Mine, Slack, Egg,
 Lump.
 PREP. EQUIPT—Shaker Screens.

EGYPT COAL CO.

General Office, Mystic, Ia.
 PR—A. V. Venell, Mystic, Ia.
 VP—A. B. Dudley, Mystic, Ia.
 TR—A. B. Dudley, Mystic, Ia.
 GM—A. B. Dudley, Mystic, Ia.
 GS—A. V. Venell, Mystic, Ia.
 PA—A. B. Dudley, Mystic, Ia.
 SA—A. B. Dudley, Mystic, Ia.

Egypt Mine; Shaft; Central Seam, 28 to
 30 in. thick.
 PO—Mystic, Ia.; SP—Same; CTY—Ap-
 panoose; RR—C. M. & St. P.
 S of H—Main and tail rope, steam loco.
 Track gage 31 inches.
 S of M—3 Longwall machs.
 PP—Power purchased, Transformer 2300
 to 250 volts A. C., 2-40 H. P.
 water tube boilers.
 EMP—100. Last years tonnage
 30,000.
 SIZES SHIPT—Nut, Egg, Lump, Block.
 PREP. EQUIPT—Gravity Screens.

ENGLISH CREEK COAL CO.

Out of business.

ENTERPRISE COAL MINING CO.

Out of business.

EQUALITY COAL CO.

General Office, Buxton, Ia.
 PR—Wm. R. Bess, Buxton, Ia.
 TR—W. A. Flynn, Buxton, Ia.
 GM—Wm. R. Bess, Buxton, Ia.
 SCO—Cricket Supply Co.; Buyer, W. A.
 Johnson, Bussy, Ia.

No. 2 Mine; Slope; Third Seam, 60 in.
 thick.
 PO—Buxton, Ia.; SP—Same; CTY—
 Mobaska; RR—C. & N. W.
 MS—Wm. Jones, Buxton, Ia.
 S of H—Rope. Track gage, 34 in.
 S of M—Hand.
 PP—3 pumps.
 EMP—120. Last fiscal year output,
 11,556 tons.
 SIZES SHIPT—Run of Mine, Pea, Lump.
 PREP. EQUIPT—Gravity Screens.
 Old Information.

EXLINE COAL COMPANY.

General Office, Exline, Ia.
 PR—J. D. Rowan, Exline, Ia.
 VP—C. E. Crispin, Exline, Ia.
 TR—E. G. Greenleaf, Exline, Ia.
 GM—J. D. Rowan, Exline, Ia.
 GS—J. D. Rowan, Exline, Ia.
 PA—J. D. Rowan, Exline, Ia.
 EM—C. E. Hollenbeck, Exline, Ia.
 SA—T. L. Greenleaf, St. Joseph, Mo.

No. 1 Mine; Shaft; Seam, 36 in. thick.
 PO—Exline, Ia.; SP—Same; CTY—Ap-
 panoose; RR—C. B. & Q.
 S of H—Mules. Track gage, 37 in.
 S of M—Hand.
 PP—2 water tube boilers, 1 pump.
 EMP—70. Last years tonnage 16,874.
 SIZES SHIPT—Slack, Lump.
 PREP. EQUIPT—Gravity Screens

FOWLER & WILSON COAL COMPANY.

General Office, Ottumwa, Ia.
 PR—E. D. Fowler, Ottumwa, Ia.
 VP—L. W. Fowler, Aiken, S. C.
 TR—W. T. Wilson, " "
 GS—D. F. Cushing, " "
 PA—E. D. Fowler, " "

Rathbun No. 1 Mine; Shaft; Block Seam,
 28 to 36 in. thick.
 PO—Rathbun, Ia.; SP—Same; CTY—
 Appanoose; RR—C. M. & St. P.
 MS—S. Joyce, Rathbun, Ia.
 S of H—Mules and trolley pole type loco.
 Track gage 36 in.
 S of M—5 longwall machs.
 PP—Power purchased, Transformer 13-
 200 to 2,200 volts A. C., M. G.
 set, 220 volts D. C., 2 water tube
 boilers, 200 H. P., 1 pump.
 EMP—200. Last years tonnage 82,000.
 SIZES SHIPT—Slack, Lump, Block.
 PREP. EQUIPT—Gravity Screens.

Rathbun No. 2 Mine; Slope; Block Seam,
 28 to 36 in. thick.
 PO—Rathbun, Ia.; SP—Same; CTY—
 Appanoose; RR—C. M. & St. P.
 S of H—Mules and main and tail rope.
 Track gage 36 in.
 S of M—Longwall machs.
 PP—Power purchased, Transformer 13-
 200 to 2,200 volts A. C., M. G.
 set, 220 volts D. C., 2 water tube
 boilers, 140 H. P., 2 pumps.
 EMP—55. Last years tonnage 19,000.
 SIZES SHIPT—Lump, Block.
 PREP. EQUIPT—Gravity Screens.

GLOBE COAL CO.

General Office, Centerville, Ia.
 PR—W. A. Nordquist, Centerville, Ia.
 VP—Paul Stromdahl, Centerville, Ia.
 TR—D. H. Gustafson, Centerville, Ia.
 GM—Oscar Bergstrom, Centerville, Ia.
 GS—Oscar Bergstrom, Centerville, Ia.
 PA—Oscar Bergstrom, Centerville, Ia.

Globe Mine; Shaft; No. 1 Seam, 33 in.
 thick.
 PO—Centerville, Ia.; SP—Same; CTY—
 Appanoose; RR—C. R. & P. C. B.
 & Q.
 S of H—Mules. Track gage, 32 in.
 S of M—Hand.
 EMP—14. Last years tonnage 4,877.
 SIZES SHIPT—Lump.

GOLD GOOSE COAL & MINING COMPANY.

General Office, Albia, Ia.
 PR—L. T. Richmond, Albia, Ia.
 VP—G. A. Morrow, Albia, Ia.
 TR—W. T. Richmond, Hamilton, Ia.
 GM—G. A. Morrow, Albia, Ia.
 GS—G. A. Morrow, Hamilton, Ia.
 PA—G. A. Morrow, Albia, Ia.
 CE—H. E. Bennett, Hiteam, Ia.
 EM—L. L. Lubrick, Des Moines, Ia.
 SCO—Gold Goose Supply Co.; Buyer,
 W. J. Morrow, Hamilton, Ia.
 SA—W. T. Richmond, Hamilton, Ia.

Gold Goose No. 2 Mine; Shaft; Third
 Seam; 60 in. thick.
 PO—Hamilton, Ia.; SP—Same; CTY—
 Marion; RR—C. B. & Q.
 S of H—17 mules. Track gage 38 in.
 S of M—Hand.
 PP—2 fire tube boilers, 2 pumps.
 EMP—150. Last years tonnage 100-
 000.
 SIZES SHIPT—Run of Mine, Egg, Lump,
 Block, Mixture Steam.
 PREP. EQUIPT—Gravity Screens.

GREATER MAMMOTH VEIN COAL CO.

Now Pershing Coal Company.

GUINN COAL COMPANY

General Office, Coal City, Ia.
 PR—L. A. Guinn, Coal City, Ia.
 TR—L. A. Guinn, Coal City, Ia.
 GM—L. A. Guinn, Coal City, Ia.
 GS—L. A. Guinn, Coal City, Ia.
 PA—L. A. Guinn, Coal City, Ia.
 Sales Agent—L. A. Guinn, Coal City, Ia.
 Drift Mine; Batamir Seam, 46 in. thick.
 PO—Coal City, Ia.; SP—Same; CTY—
 Appanoose; RR—C. B. & Q.
 S of H—Mules. Track gauge, 30 in.
 S of M—Hand.
 PP—1 pump, 1 gas engine.
 EMP—20. Last fiscal year output 4,000
 tons.
 SIZES SHIPT—Run of Mine, Lump.

HARKES COAL COMPANY.

General Office, Keith & Perry Bldg., Kan-
 sas City, Mo.
 PR—Wm. Harkes, Kansas City, Mo.
 TR—P. J. Ellis, Kansas City, Mo.
 PA—William Harkes, Kansas City, Mo.

Harkes Mine; Shaft; No. 2 Seam, 38
 to 40 in. thick.
 PO—Jerome, Ia.; SP—Same; CTY—Ap-
 panoose; RR—C. M. & S. P., Kan-
 sas City Div.
 MS—Robert Hunter, Jerome, Ia.
 S of H—Mules. Track gage 31 in.
 S of M—Hand.
 PP—1 return tubular boiler, total 150
 H. P., 4 steam engines, 1 pump.
 EMP—150. Last years tonnage 35,400.
 SIZES SHIPT—Slack, Lump.
 PREP. EQUIPT—Bar Screen.

HARRIS COAL COMPANY

General Office, Ottumwa, Ia.
 PR—Homer H. Harris, Ottumwa, Ia.
 VP—H. M. Gilchrist, Davenport, Ia.
 TR—Homer H. Harris, Ottumwa, Ia.
 GM—W. T. Ramsay, Albia, Ia.
 PA—Homer H. Harris, Ottumwa, Ia.
 CE—H. M. Gilchrist, Davenport, Ia.
 EM—E. A. Hieronymous, Galesburg, Ill.

Harris No. 1 Mine; Shaft; Deep Vein
 Seam, 72 inches thick.
 PO—Waukegan, Ia.; SP—Same; CTY—
 Dallas; RR—C. M. & St. P.
 MS—C. W. Carpenter, Waukegan, Ia.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 PP—Purchase power, Transformer 22,600
 to 440-220 volts A. C.
 EMP—150.
 SIZES SHIPT—Run of Mine, Slack, Egg,
 Lump.
 PREP. EQUIPT—Shaker Screens, Picking
 Tables.

HARVEY COAL MINING COMPANY

PR—H. W. Pollock, Omaha, Neb.
 TR—E. Z. Ross, Omaha, Neb.
 GM—E. Z. Ross, Omaha, Neb.
 GS—John Y. Ross, 5147 W. Grand Ave.,
 Des Moines, Ia.
 PA—E. Z. Ross, Omaha, Neb.

Harvey Mine; Slope and Stripping; Iowa
 Bituminous Seam; 66 inches thick.
 PO—Harvey, Ia.; SP—Same; CTY—
 Marion; RR—C. B. & Q.
 S of H—Mules and rope.
 S of M—Hand.
 PP—1 fire tube boiler, 1 pump.
 Last fiscal year output, 18,000 tons.
 SIZES SHIPT—Run of Mine, Slack,
 Lump, Egg.
 PREP. EQUIPT—Gravity Screens.

HEAPS COAL CO.

Now part of Boone Coal Co.

HIGH BRIDGE COAL COMPANY

Now a part of the Scandia Coal Com-
 pany.

HOCKING COAL CO.

General Office, Hocking, Ia.
 PR—W. H. Bremner, Minneapolis,
 Minn.

VP—E. E. Nash, Minneapolis, Minn.
 ASST. TR—W. W. Cole, Minneapolis,
 Minn.
 GM—E. E. Nash, Minneapolis, Minn.
 GS—W. G. Hodge, Hocking, Ia.
 PA—W. G. Manchester, Minneapolis,
 Minn.
 EM—A. E. Hupton, Minneapolis, Minn.
 EE—Isaac Jones, Hocking, Ia.
 SCO—Hocking Supply Co. Buyer, W. D.
 Ransey, Hocking, Ia.

No. 5 Mine; Shaft; 5th Seam, 30-
 108 in. thick.
 PO—Hocking, Ia.; SP—Albia, Ia.; CTY—
 Monroe; RR—C. M. & St. L.
 MS—W. G. Hodge, Hocking, Ia.
 S of H—Mules and tail rope, 1 6-
 ton elec. loco. Track gage 36
 inches.
 S of M—Hand.
 PP—Generators, 440-220 volts A. C.,
 rotary converters, 250 volts D.
 C., 4 pumps.
 EMP—273. Daily tonnage 700.
 SIZES SHIPT—Run of Mine, Slack,
 Lump.
 PREP. EQUIPT—Crusher and Gravity
 Screens.

HOOVER FUEL COMPANY.

General Office, Albia, Ia.
 PR—J. M. Timbrel, Oskaloosa, Ia.
 VP—C. E. Loftland, Oskaloosa, Ia.
 TR—C. E. Loftland, Oskaloosa, Ia.
 GM—E. M. Baysar, Albia, Ia.
 PA—E. M. Baysar, Albia, Ia.
 SCO—Monroe Mercantile Co., Buxton, Ia.

Hoover Fuel Co. Mine; Shaft; Seam 48
 to 108 in. thick.
 PO—Lovilla, Ia. SP—Buxton, Ia. CTY—
 Marion, RR—C. N. W.
 MS—M. Wright, Lovilla, Ia.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 PP—2 return tubular boilers, total 200
 H. P., 3 pumps.
 EMP—150. Last fiscal year output,
 60,000 tons.
 SIZES SHIPT—Run of Mine, Slack,
 Lump.
 PREP. EQUIPT—Gravity Screens and
 Washeries.

HOPKINS COAL COMPANY.

General Office, Colfax, Ia.
 PR—R. E. Hopkins, Colfax, Ia.
 VP—Walter Barron, Colfax, Ia.
 TR—F. P. Lemm, Colfax, Ia.
 GM—R. E. Hopkins, Colfax, Ia.
 GS—Walter Barron, Colfax, Ia.
 PA—R. E. Hopkins, Colfax, Ia.

Hopkins Mine; Shaft; 2nd Seam, 50 in.
 thick.
 PO—Colfax, Ia. SP—Same. CTY—Jas-
 per, RR—Rock Island.
 S of H—Mules and 1 steam loco. Track
 gage, 36 in.
 S of M—1 comp. air mach.
 PP—2 water tube boilers, 2 pumps.
 EMP—40. Last fiscal year output,
 10,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut,
 Lump.
 PREP. EQUIPT—Gravity Screens.
 (Old Information)

IOWA BLOCK COAL CO.

General Office, Exline, Ia.
 PR—S. P. Maring, Exline, Ia.
 VP—O. E. Anderson, Exline, Ia.
 TR—L. Johnson, Exline, Ia.
 GM—L. Johnson, Exline, Ia.
 GS—Edw. Biggle, Exline, Ia.
 PA—L. Johnson, Exline, Ia.
 EM—M. G. Hall, Centerville, Ia.
 SA—O. E. Anderson, Exline, Ia.

Iowa Block Mine No. 1; Shaft; Low
 Coal Field Seam, 30 to 34 in.
 thick.

PO—Exline, Ia. SP—Same. CTY—Ap-
 panoose, RR—C. B. & Q.
 S of H—Mules, storage battery loco.
 Track gage, 38 in.
 S of M—2 shortwall machs.
 PP—Power purchased, Transformer 1320-
 220 volts, A. C., M. G. sets 110
 volts D. C., 2-60 H. P. boilers, 2
 pumps.
 EMP—160. Last years tonnage 60,000.
 BIZES SHIPT—Slack, Pea, Nut, Egg,
 Lump, Block.
 PREP. EQUIPT—Gravity Screens.

IOWA MINING COMPANY.

General Office, Box 33, Ottumwa, Ia.
 PR—L. Wilson, Ottumwa, Ia.
 VP—J. O. Wilson, Ottumwa, Ia.
 TR—C. E. Wilson, Ottumwa, Ia.
 GM—J. O. Wilson, Ottumwa, Ia.

Iowa Mine; Shaft; Seam 54 inches thick.
 PO—Ottumwa, Ia.; SP—Same; CTY—
 Wapello.
 S of H—Mules. Track gage 29 inches.
 S of M—Hand.
 PP—1 water tube boiler.
 SIZES SHIPT—Run of Mine, Slack,
 Lump.
 PREP. EQUIPT—Bar Screens.

IOWA NEBRASKA COAL CO.

General Office, 1216 West Grand Ave.,
 Des Moines, Ia.
 PR—James McCauley, Des Moines, Iowa.
 VP—Arthur J. Cooley, 601-609 Jones
 St., Omaha, Neb.
 TR—Frank P. Flynn, Peoples Savings
 Bank, Des Moines, Ia.
 GM—James McCauley, Des Moines, Ia.
 GS—Phil H. Waterman, Lucas, Ia.
 PA—Wm. A. Broquist, Des Moines, Ia.
 CE—Phil H. Waterman, Lucas, Ia.

No. 1 Mine; Shaft; Cleveland Seam, 60
 inches thick.
 PO—Lucas, Iowa; SP—Same; CTY—
 Lucas; RR—C. B. & Q.
 S of H—Mules, elec. locos. Track gage
 36 inches.
 S of M—Shortwall mach.
 PP—1-150 H. P. boiler.
 EMP—125. Daily tonnage 300.
 SIZES SHIPT—Run of Mine, Slack, Nut,
 Egg, Lump.
 PREP. EQUIPT—Bar Screens.

JOHNSON, W. D., COAL CO.

Operations exhausted.

KEYSTONE COAL MINING CO.

General Office, 407 Crocker Bldg., Des Moines, Ia.
 PR—T. W. Carpenter, Des Moines, Ia.
 TR—E. C. Johnson, Des Moines, Ia.
 GS—J. C. Abrams, Des Moines, Ia.
 PA—J. C. Abrams, Des Moines, Ia.
 EM—J. C. Abrams, Des Moines, Ia.
 SA—Keystone Fuel & Supply, 407 Crocker Bldg., Des Moines, Ia.

Keystone Mine; Shaft; Third Vein Seam, 40 in. thick.
 PO—Des Moines, Ia.; SP—Same; CTY—Polk; RR—C. M. & St. P.
 S of H—10 Mules and 2 trolley pole type locos. Track gage, 36 in.
 S of M—5 shortwall machs.
 PP—Power purchased, transformer 2,300-220 volts A. C., 2 80 H. P. fire tube boilers, motor gen. sets, 250-500 volts D. C., 3 pumps.
 EMP—175. Daily tonnage 450.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

KOONTZ COAL COMPANY

General Office, Centerville, Iowa.
 GM—J. A. Koontz, Centerville, Iowa.
 Koontz Mine; Shaft; Seam, 29 inches thick.
 PO—Centerville, Ia.; SP—Same; CTY—Appanoose; RR—R. I. & P.
 S of H—Mules. Track gage 32 inches.
 S of M—Elec. punchers and longwall machines.
 PP—Power purchased, transformer 2300-220 volts A. C.
 EMP—30. Last years tonnage 11,000.
 SIZES SHIPT—Lump.
 PREP. EQUIPT—Gravity Screens.

LEE, O. A. COAL CO.

General Office, Mystic, Ia.
 PR—D. A. Lee, Des Moines, Ia.
 TR—D. A. Lee, Des Moines, Ia.
 GM—W. E. Jones, Mystic, Ia.
 GS—W. E. Jones, Mystic, Ia.
 PA—W. E. Jones, Mystic, Ia.
 SA—Electric Coal Co., Mystic, Ia.
 Lee & Jones Mine; Shaft; Centerville Seam, 28 in. thick.
 PO—Mystic, Ia.; SP—Same; CTY—Appanoose; RR—C. M. & St. P.
 S of H—Mules and rope. Track gage 32 in.
 S of M—Hand.
 EMP—55. Last years tonnage 22,097.
 SIZES SHIPT—Slack, Lump.
 PREP. EQUIPT—Screens.

LIBERTY COAL CO.

General Office, Mystic, Ia.
 PR—E. O. Moss, Centerville, Ia.
 VP—J. A. Colgan, Mystic, Ia.
 TR—J. A. Colgan, Mystic, Ia.
 GM—E. O. Moss, Centerville, Ia.
 GS—J. A. Colgan, Mystic, Ia.
 PA—J. A. Colgan, Mystic, Ia.
 EM—Wm. Cowan, Mystic, Ia.
 EE—J. A. Robinson, Mystic, Ia.
 SA—Electric Coal Co., Sales Mgr., O. V. Kennedy, Mystic, Ia.

Arnett No. 6 Mine; Slope; Centerville Seam; 30 in. thick.
 PO—Mystic, Ia.; SP—Same; CTY—Appanoose; RR—C. M. & St. P.
 MS—Reno Vennell, Mystic, Ia.
 S of H—Mules and rope. Track gage, 31 in.
 S of M—Hand.
 PP—Power purchased, transformer 2300-220 volts A. C., 1 pump.
 EMP—200. Last fiscal year output, 40,000 tons.
 SIZES SHIPT—Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

No. 3 Mine; Drift; Centerville Seam, 30 in. thick.
 PO—Mystic, Ia.; SP—Same; CTY—Appanoose; RR—C. M. & St. P.
 S of H—Mules. Track gage, 31 in.
 S of M—Hand.
 PP—Power purchased, transformer 2300-220 volts A. C., 1 pump.
 EMP—20. Last fiscal year output, 6,000 tons.
 SIZES SHIPT—Slack, Lump.
 Note—Successors to Peerless Coal Co.

No. 4 Mine; Slope; Centerville Seam; 30 in. thick.
 PO—Mystic, Ia.; SP—Same; CTY—Appanoose; RR—C. M. & St. P.
 MS—C. Stoltz, Mystic, Ia.
 S of H—Mules.
 PP—Power purchased, transformer 2300-220 volts A. C., 1 pump.
 SIZES SHIPT—Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

LIBERTY COAL MINING COMPANY

General Office, Des Moines, Ia.
 PR—A. W. Layman, Des Moines, Ia.
 VP—C. W. Layman, Des Moines, Ia.
 TR—Harry L. Gross, Des Moines, Ia.
 GM—Harry L. Gross, Des Moines, Ia.

GS—W. R. Gibson, Des Moines, Ia.
 PA—W. R. Gibson, Des Moines, Ia.
 EM—G. B. Wilks, Des Moines, Ia.
 EE—W. R. Gibson, Des Moines, Ia.
 SA—Harry L. Gross, Univ. Place, Des Moines, Iowa.

Liberty No. 1 Mine; Shaft; Iowa Lower Vein Seam; 42 inches thick.
 PO—Des Moines, Ia.; SP—Arme Sta., c/o I. C. Ry.; CTY—Polk; RR—Inter Urban.
 S of H—Mules. Track gage 36 inches.
 S of M—2 shortwall machs.
 PP—Power purchased. Transformer, 2200-220 volts A. C., 1 pump.
 EMP—75. Last years tonnage 25,000.
 SIZES SHIPT—Run of Mine, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

LOCKWOOD, O. W.

Lockwood Mine; Shaft; Seam 18 inches thick.
 PO—Carlson, Iowa; SP—Same; CTY—Adams; RR—C. G. W.
 S of H—Rope. Track gage 28 inches.
 S of M—Hand and longwall machs.
 EMP—11. Last years tonnage 1,760.
 Note—Formerly operated by Barker S. Trindal.

LOWE, W. W. & SON.

General Office, Brazil, Ia.
 PR—W. W. Lowe, Brazil, Ia.
 VP—Jessie Lowe, Brazil, Ia.
 TR—W. W. Lowe, Brazil, Ia.
 GM—Nelson Palmer, Brazil, Ia.
 GS—Jessie Lowe, Brazil, Ia.

Lowe Hickory Mine; Slope; Bituminous Seam, 30 in. thick.
 MS—W. W. Lowe, Brazil, Ia.
 PO—Brazil, Ia.; SP—Same; CTY—Appanoose; RR—C. E. & Q.
 S of H—Mules. Track gage, 30 in.
 S of M—Hand.
 PP—1 pump.
 EMP—15. Last years tonnage 3,253.
 SIZES SHIPT—Lump.

McCLURE, SAMUEL COAL COMPANY

General Office, Fort Dodge, Ia.
 PR—Samuel McClure, Fort Dodge, Ia.
 GM—Samuel McClure, Jr., Fort Dodge, Ia.

McClure Mine; Shaft; Seam 48-60 in. thick.
 PO—Lehigh, Ia.; SP—Same; CTY—Webster; RR—Fort Dodge, Des Moines & Southern.
 S of H—Mules. Track gage 36 in.
 S of M—1 shortwall mach.
 PP—Purchase power. Transformer 220 volts A. C., 2 water tube boilers.
 Old Information.

McCONVILLE COAL COMPANY

General Office, Centerville, Iowa.
 PR—Edward McConville, Centerville, Ia.
 VP—Owen McConville, Centerville, Ia.
 TR—Joseph McConville, Centerville, Ia.
 GM—Edward McConville, Sr., Centerville, Ia.
 GS—Edward McConville, Sr., Centerville, Ia.
 PA—James McConville, Centerville, Ia.
 SA—McConville Coal Co., Centerville, Ia.

McConville Mine; Shaft; Seam 32 in. thick.
 PO—Centerville, Iowa; SP—Same; CTY—Appanoose; RR—M. & St. L. & C. B. & Q. and C. R. I. & P.
 MS—Owen McConville, Centerville, Ia.
 S of H—Mules. Track gage 36 in.
 S of M—3 longwall machs.
 PP—Purchase power. Transformer 13-200 to 220 volts A. C.
 EMP—125. Last years tonnage 56,000.
 SIZES SHIPT—Nut, Lump.
 PREP. EQUIPT—Bar Screens.

McKENZIE & GEERY COAL COMPANY.

General Office, Harvey, Ia.
 McKenzie & Geery Mine; Shaft; Seam 60 in. thick.
 PO—Harvey, Ia.; SP—Same; CTY—Marion; RR—B. R. L. Wabash.
 S of H—Mules. Track gage 30 in.
 S of M—Hand.
 EMP—12. Daily tonnage 40.
 SIZES SHIPT—Run of Mine, Slack, Lump.

McVEIGH BROS. COAL COMPANY

General Office, Rathbun, Ia.
 TR—L. V. Harbour, Rathbun, Ia.
 GS—L. V. Harbour, Rathbun, Ia.
 PA—L. V. Harbour, Rathbun, Ia.
 McVeigh Mine; Seam 36 inches thick.
 PO—Rathbun, Ia.; SP—Same; CTY—Appanoose; RR—C. M. & St. P.
 S of H—Mules.
 S of M—Hand.
 Daily output, 20 tons.
 SIZES SHIPT—Lump.
 Operations suspended.

MAMMOTH VEIN COAL COMPANY

Now Greater Mammoth Vein Coal Co.

MAPLE CLOCK COAL CO.

General Office, Des Moines, Ia.
 PR—Chas. Shuler, Davenport, Ia.
 VP—H. M. Shuler, Des Moines, Ia.
 TR—John Shuler, Des Moines, Ia.
 GM—H. M. Shuler, Des Moines, Ia.
 GS—H. M. Shuler, Des Moines, Ia.
 PA—H. M. Shuler,
 Sales Agent, John Shuler, Des Moines, Ia.

No. 2 Mine; Shaft; Third Vein Seam; 46 in. thick.
 PO—Des Moines, Ia.; SP—Same; CTY—Polk; RR—C. R. I. & P.
 S of H—Mules. Track gage 36 in.
 S of M—Hand.
 PP—2 return tubular boilers, total 300 H. P., 3 pumps.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens.
 NOTE—Property practically exhausted.

MAPLE COAL CO.

General Office, Des Moines, Ia.
 PR—H. M. Shuler, Des Moines, Ia.
 VP—Chas. Shuler, Davenport, Ia.
 TR—H. M. Shuler, Des Moines, Ia.
 GM—H. M. Shuler, Des Moines, Ia.
 GS—H. M. Shuler, Des Moines, Ia.
 PA—H. M. Shuler, Des Moines, Ia.
 SC—Maple Supply Co., Lovilia, Ia.

Maple No. 1 Mine; Shaft; Third Seam, 50 in. thick.
 PO—Eddyville, Ia.; SP—Same; CTY—Monroe; RR—C. & N. W.
 MS—T. C. Chapman, Eddyville, Ia.
 S of H—Mules and trolley pole type locos. Track gage 36 in.
 S of M—Shortwall machs.
 PP—2 150 H. P. water tube boilers, 100 K. W. gen. unit, 250 volts D. C., 9 pumps.
 EMP—141. Last years tonnage 129,725.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
 PREP. EQUIPT—Gravity Screens.

Wanlock No. 2 Mine; Shaft; No. 3 Seam, 54-72 in. thick.
 PO—Lovilia, Ia.; SP—Same; CTY—Monroe; RR—C. & N. W.
 MS—J. E. Thomas, Lovilia, Ia.
 S of H—Mules and trolley pole type locos. Track gage 36 in.
 S of M—Shortwall machs.
 PP—Power purchased, transformer 13-800-440 volts A. C., motor gen. sets, 250 volts D. C., 2 pumps, 440 A. C. and 250 D. C. in mine.
 EMP—169. Last years tonnage 124,649.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens.

MELCHER COAL COMPANY

General Office, Melcher, Ia.
 PR—C. A. Williams, Oskaloosa, Ia.
 VP—H. Ramsey, Des Moines, Ia.
 TR—H. S. Howard, Oskaloosa, Ia.
 GM—C. A. Williams, Oskaloosa, Ia.
 GS—J. W. Smith, Melcher, Ia.
 PA—F. O. Ewing, Melcher, Ia.
 EM—J. Smith, Melcher, Ia.
 EE—Chas. Fisher, Melcher, Ia.
 SA—Northwestern Coal Co., Des Moines, Ia.

No. 1 Mine; Drift; 60 in.
 PO—Melcher, Ia.; SP—Same; CTY—Marion; RR—C. R. I. & P.
 S of H—Mules, Steam. Track gage 36 inches.
 S of M—Hand.
 PP—Generate Power, 250 volts D. C., 2 pumps.
 EMP—25. Daily tonnage 60.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

MYSTIC COAL COMPANY

PR—James Homage, Mystic, Ia.
 GS—James Homage, " "
 PA—James Homage, " "

Mine No. 17 1/2; Shaft; Walnut Block Seam 28 in. thick.
 PO—Mystic, Ia.; SP—Same; CTY—Appanoose; RR—C. M. & St. P.
 S of H—Mules.
 S of M—Hand.
 PP—2 return tubular boilers, total 100 H. P., 2 pumps.
 EMP—160. Last fiscal year output 37,500 tons.
 SIZES SHIPT—Lump, Block.
 PREP. EQUIPT—Bar Screens.
 (Old Information)

NATIONAL UNION COAL MINING CO

General Office, Baltimore, Md.
 PR—John K. Shaw, Baltimore, Md.
 TR—W. L. Cooper, " "
 GM—G. W. Hartsuck, Ward, Iowa
 PA—G. W. Hartsuck, " "
 SC—Ward Supply Co., Buyer, G. W. Hartsuck, Ward, Iowa.
 Sales Agent—G. W. Hartsuck, Ward, Ia.

Ward Mine No. 1 Shaft; Lower Seam, 48 to 72 in. thick.
 PO—Ward, Ia.; SP—Albia, Ia.; CTY—Monroe; RR—C. B. & Q.
 S of H—Mules and 3 gasoline locos. Track gage 36 in.
 S of M—Hand.
 PP—Electric hoist, 5 pumps.
 EMP—200. Last fiscal year output 102,600 tons.
 SIZES SHIPT—Run of Mine, Slack, Peg, Nut, Lump.
 Old Information.

NEW URILLIAL COAL & MINING CO.

General Office, Centerville, Iowa
 OWNER—Jacob Ritter, Centerville, Ia.
 Oriental Mine; Slope; Centerville Seam, 30 in. thick.
 PO—Brazil, Ia.; SP—Centerville, Ia.; CTY—Appanoose; RR—C. B. & Q.
 MS—Jacob Ritter, Brazil, Iowa.
 S of H—Mules and steam locos. Track gage 30 1/2 inches.
 S of M—8 elec. machs.
 PP—Power purchased. Transformer, 2300 to 220 volts A. C., 1 water tube boiler, 60 H. P., 1 pump.
 EMP—60. Last years tonnage 14,000.
 SIZES SHIPT—Lump.
 NOTE—Formerly operated by the Oriental Coal Mining Co.

NEW WALNUT BLOCK COAL COMPANY

General Office, Brazil, Ia.
 PR—J. C. Werth, Omaha, Neb.
 VP—L. E. Brown, Grand River, Ia.
 TR—W. A. Drew, Brazil, Ia.
 GM—W. A. Drew, Brazil, Ia.
 SA—W. A. Drew, Brazil, Ia.

New Walnut Mine; Drift; Centerville Seam; 28 in. thick.
 PO—Brazil, Ia.; SP—Same; CTY—Appanoose; RR—C. B. & Q.
 MS—W. A. Drew, Brazil, Ia.
 S of H—Mules. Track gage 29 in.
 S of M—1 longwall mach.
 PP—Power purchased Transformer 2,300 to 220 volts A. C.
 EMP—40. Last years tonnage 12,000.
 Note—Formerly operated by J. Ritter, Mgr.

NEWTON COAL CO.

General Office, Newton, Ia.
 PR—H. G. Brown, Newton, Ia.
 TR—H. J. Joy, Newton, Ia.
 GM—H. G. Brown, Newton, Ia.
 GS—Jas. Flanders, Newton, Ia.

Newton Mine; Shaft; Seam, 60 in. thick.
 PO—Newton, Ia. CTY—Jasper.
 S of H—Mules.
 S of M—Hand.
 EMP—30. Last years tonnage 14,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.

NORWOOD-WHITE COAL COMPANY

General Office, 907 Equitable Bldg., Des Moines, Ia.
 PR—H. M. Poole, Buffalo, N. Y.
 VP—F. V. Dole, Des Moines, Ia.
 TR—W. W. Wilson, Des Moines, Ia.
 GM—F. V. Dole, Des Moines, Ia.
 GS—J. D. Phillips, Des Moines, Ia.
 PA—W. W. Wilson, Des Moines, Ia.
 CE—C. E. Harvey, Des Moines, Ia.
 EE—J. S. Piper, Berwick, Ia.
 SC—Norwood Supply Co., Buyer, J. W. Neasham, Norwoodville, Ia.
 SA—F. V. Dole, Des Moines, Ia.

No. 3 Mine; Shaft; Third Vein, 36 to 60 in. thick.
 PO—Norwoodville, Ia.; SP—Berwick, Ia.; CTY—Polk; RR—C. R. I. & P.
 MS—Fred Wright, R. D. No. 2, Des Moines, Ia.
 S of H—Mules and gasoline loco. Track gage, 36 in.
 S of M—2 shortwall machs.
 PP—Purchase power, transformer 32,000 to 440 volts A. C., 220 volts D. C. in mine.
 EMP—100. Last years tonnage 75,000.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Bar and Shaker Screens, Picking Tables.

No. 6 Mine; Slope; Third Seam, 36 to 60 in. thick.
 PO—Norwoodville, Ia.; SP—Phillips, Ia.; CTY—Polk; RR—Interurban.
 MS—Fred Wright, R. D. No. 2, Des Moines, Ia.
 S of H—Mules. Track gage 36 in.
 S of M—2 shortwall, 1 longwall mach.
 PP—Power purchased. Transformer, 32,000 to 440 volts A. C., 2 M. G. sets, 220 volts D. C., 2 pumps.
 LMP—125. Last years tonnage 100,000.
 SIZES SHIPT—Lump, Egg, Steam.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

(Continued on Next Page)

Norwood-White Coal Co.—Cont

No. 7 Mine; Shaft; Third Seam, 60 ft. thick.
 PO—Moriah, Ia.; SP—Same; CTY—Dad-
 1-5, RR—Linton.
 MS—Thomas Hayes, Woodward, Ia.
 S of H—Mules.
 S of M—Hand.
 PP—Power purchased. Transformer,
 32,000 to 440 volts A. C., 2
 pumps.
 LMP—125. Last years tonnage 100,
 000.
 SIZES SHIPT—Lump, Egg, Steam.
 PREP. EQUIPT—Shaker Screens, Pick-
 ing Tables.

OLDEN CONSOLIDATED COAL COMPANY.

General Office, Boone, Ia.
 PR—C. H. Crooks, Boone, Ia.
 TR—F. M. Johnson, Boone, Ia.
 GM—Robert Kennedy, Ogden, Ia.
 GS—Robert Kennedy, Ogden, Ia.
 PA—Robert Kennedy, Ogden, Ia.

Ogden No. 5 Mine; Lower Vein Seam,
 18 in. thick.
 PO—Ogden, Ia.; SP—Same; CTY—
 Boone, RR—M & St. L. and Ft.
 D. & M. A. So.

S of H—Mules, trolley pole locos. Track
 gage 33 in.
 S of H—Hand and longwall mach.
 PP—Power purchased. Transformer 22,
 600 to 240 volts A. C., M. G.
 sets, 250 volts D. C., 5 pumps.
 EMP—150. Daily tonnage 225.
 SIZES SHIPT—Run of Mine, Slack,
 Lump, Block.
 PREP. EQUIPT—Gravity Screens.

PEACOCK COAL COMPANY

General Office, Brazil, Iowa.
 PR—R. F. Lawton, Brazil, Iowa.
 TR—Samuel Philby, Brazil, Iowa.
 GS—R. F. Lawton, Brazil, Iowa.
 PA—R. F. Lawton, Brazil, Iowa.

Peacock Mine; Slope; Seam 31 inches
 thick.
 PO—Brazil, Iowa; SP—Same; CTY—
 Appanoose; RR—C. B. & R.
 MS—Samuel Philby, Brazil, Iowa.
 S of H—Mules. Track gage 30 inches.
 S of M—Hand and longwall machs.
 PP—Purchase power.
 EMP—19. Last years tonnage 7,633.
 SIZES SHIPT—Lump.

PERSHING COAL COMPANY

General Office, 225 Iowa Bldg., Des
 Moines, Ia.
 PR—H. M. Turner, Des Moines, Ia.
 VP—R. B. McGregor, Des Moines, Ia.
 TR—R. B. Kammister, Des Moines, Ia.
 GM—Lawrence P. Love, Des Moines, Ia.
 GS—James Duffy, Knoxville, Ia.
 PA—Lawrence P. Love, Des Moines, Ia.
 EE—A. Nicholson, Des Moines, Ia.
 SCO—Pershing Supply Co., Buyer, J.
 E. Sandeline, Bussey, Ia.
 SA—J. E. Hatfield, Des Moines, Ia.

Pershing No. 1 Mine; Shaft; Mammoth
 Seam, 72 in. thick.
 PO—Tracey, Ia.; SP—Same; CTY—
 Marion; RR—Wabash, C. R. & Q.
 S of H—Mules and 2 combination locos.
 Track gage 36 in.
 S of M—Hand.
 PP—2 150 H. P. water tube boilers,
 gen. set, 250 volts D. C., 3 pumps.
 EMP—200. Daily tonnage 800.
 SIZES SHIPT—Run of Mine, Slack, Egg,
 Lump.
 PREP. EQUIPT—Shaker Screens.
 Old Information.

PHILLIPS COAL CO.

Out of business.

POLLOCK-ROSS COAL CO.

General Office, Hamilton, Ia.

Pollock-Ross Mine; Shaft; Third Seam,
 42-96 in. thick.
 PO—Hamilton, Ia.; SP—Same; CTY—
 Marion; RR—C. B. & Q.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 PP—2 fire tube boilers, 3 pumps.
 SIZES SHIPT—Run of Mine, Slack,
 Lump.
 PREP. EQUIPT—Gravity Screens.
 Old Information.

PRAIRIE BLOCK COAL CO.

Now the Prairie Coal Co.

PRAIRIE COAL COMPANY

General Office, Centerville, Ia.
 PR—D. F. Cushing, Centerville, Ia.
 VP—E. D. Fowler, Ottumwa, Ia.
 TR—W. T. Wilson, Ottumwa, Ia.
 GM—D. F. Cushing, Centerville, Ia.
 GS—Peter Thomas, Centerville, Ia.
 PA—D. F. Cushing, Centerville, Ia.
 ENGR—Fred Smith, Centerville, Ia.
 EM—Hall Engr. Co., Centerville, Ia.
 SA—W. T. Wilson, Ottumwa, Ia.

No. 1 Streepy Mine; Shaft; Mystic Seam,
 32 in. thick.

PO—Streepyville, Ia.; SP—Centerville,
 Ia.; CTY—Appanoose; RR—C. R. I.
 & P.

MS—J. W. Sec, Centerville, Ia.
 S of H—2 trolley pole type locos. Track
 gage, 38 in.
 S of M—12 longwall machs.
 PP—Power purchased. Transformer 33,
 000-2,500 volts, motor gen. set,
 275 volts D. C., 3 pumps, 2 100
 H. P. fire tube boilers.
 EMP—235. Daily output, 600 tons.
 SIZES SHIPT—Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Gravity Screens.

No. 5 Mine; Shaft; Mystic Seam, 30 in.
 thick.
 PO—Noma, Ia.; SP—Same; CTY—Ap-
 panoose; RR—C. R. I. & P.
 MS—J. R. Boyd, Noma, Ia.
 S of H—Mules. Track gage, 32 in.
 S of M—Hand.
 PP—2 100 H. P. fire tube boilers, 3
 pumps.
 EMP—200. Daily output, 500 tons.
 SIZES SHIPT—Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Gravity Screens.
 Note—Successors to the Prairie Block
 Coal Company.

PROSPECT COAL COMPANY.

PR—Malcolm Reid, Fraser, Ia.
 MM—Malcolm Reid, Fraser, Ia.
 TR—C. W. Anderson, Fraser, Ia.
 GS—Geo. Sinclair, Fraser, Ia.
 GM—Edw. Showers, Fraser, Ia.
 MS—Edw. Showers, Fraser, Ia.
 PA—C. H. Henle, Fraser, Ia.
 CE—Edw. Reid, Fraser, Ia.
 EM—C. W. Anderson, Fraser, Ia.
 EE—John Shirkle, Fraser, Iowa.
 SCO—Fraser Mercantile Co., Buyer C. H.
 Henle, Fraser, Iowa.

No. 1 Mine; Shaft; Lower Vein; 40 to
 60 in. thick.
 PO—Fraser, Ia.; SP—Same; CTY—Boone;
 RR—F. D. & D. S.
 S of H—Mules. Track gage 36 in.
 PP—2 B-turn tubular boilers, 2 gen.
 units, 1 pump.
 SIZES SHIPT—Run of Mine, Slack.
 PREP. EQUIPT—Bar Screens.
 (Old Information)

RADIANT COAL CO.

General Office, Chamber of Commerce
 Bldg., Ottumwa, Ia.
 PR—Homer H. Harris, Ottumwa, Ia.
 VP—H. M. Gilchrist, Davenport, Ia.
 TR—Homer H. Harris, Ottumwa, Ia.
 GM—Homer H. Harris, Ottumwa, Ia.
 GS—William T. Ramsay, Waukeet, Ia.
 PA—Homer H. Harris, Ottumwa, Ia.
 CE—H. M. Gilchrist, Davenport, Ia.
 EE—William T. Ramsay, Waukeet, Ia.

Radiant Mine; Shaft; Seam, 66 in.
 thick.
 PO—Waukeet, Ia.; SP—Same; CTY—
 Dallas, RR—C. M. & St. P.
 MS—C. W. Carpenter, Waukeet, Ia.
 S of H—Mules and elec. locos. Track
 gage 36 in.
 S of M—Hand.
 PP—Power purchased, 44,000 volts D.
 C., 6 pumps.
 EMP—350.
 SIZES SHIPT—Run of Mine, Slack,
 Pea, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screen.

RADIANT COAL MINING CO.

General Office, Ottumwa, Ia.
 PR—Homer H. Harris, Ottumwa, Ia.
 VP—H. M. Gilchrist, Davenport, Ia.
 TR—Homer H. Harris, Ottumwa, Ia.
 GM—Homer H. Harris, Ottumwa, Ia.
 GS—William T. Ramsay, Albia, Ia.
 CE—E. A. Hieronymous, Galesburg, Ia.

Radiant Mine; Shaft; Seam, 72 in. thick.
 PO—Ottumwa, Ia.; SP—Same; CTY—
 Dallas; RR—C. M. & St. Paul.
 S of H—Mules and motors. Track
 gage 36 in.
 S of M—Hand.
 SIZES SHIPT—Run of Mine, Slack,
 Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens.

RAPLINGER COAL CO.

Now Diamond Ice Coal Co.

RED ROCK COAL CO.

General Office, Des Moines, Ia.
 PR—A. E. Hollingsworth, Des Moines,
 Ia.
 VP—J. Norwood, Des Moines, Ia.
 TR—H. H. Polk, Des Moines, Ia.
 GM—J. Norwood, Des Moines, Ia.
 GS—C. O. Anderson, Melcher, Ia.
 PA—J. Norwood, Des Moines, Ia.
 CE—C. O. Anderson, Melcher, Ia.

Red Rock Mine; Shaft; Third Seam,
 60-72 in. thick.
 PO—Melcher, Ia.; SP—Same; CTY—
 Marion; RR—C. R. I. & P.
 S of H—Mules, trolley pole type and
 combination locos. Track gage, 36
 inches.
 S of M—4 shortwall machs.

PP—4 fire tube boilers, 320 H. P., 200
 K. W. gen. units, 230 volts D. C.,
 3 pumps.
 EMP—340. Last years tonnage 187,427.
 SIZES SHIPT—Run of Mine, Slack, Egg,
 Lump.
 PREP. EQUIPT—Gravity and Shaker
 Screens.

REGAL COAL CO

Operations suspended.

REX FUEL CO.

General Office, Lovilia, Ia.
 PR—C. A. Williams, Oskaloosa, Ia.
 VP—A. P. Spencer, Oskaloosa, Ia.
 TR—H. S. Howard, Oskaloosa, Ia.
 GM—C. A. Williams, Oskaloosa, Ia.
 PA—J. P. Melcher, Lovilia, Ia.
 EM—J. M. Smith, Lovilia, Ia.
 SCO—Rex Supply Co., Buyer, R. D. Buck-
 ingham, Lovilia, Ia.
 SA—North Western Coal Co., Des Moines,
 Ia.

Rex No. 4 Mine; Shaft; No. 3 Seam,
 60 inches thick.
 PO—Lovilia, Ia.; SP—Same; CTY—
 Monroe; RR—C. & N. W.
 MS—Jas. M. Smith, Lovilia, Ia.
 S of H—Mules, rope. Track gage 36
 inches.
 S of M—Hand.
 PP—2 water tube boilers, 200 H. P.,
 2 pumps.
 EMP—195. Last fiscal year output
 127,128 tons.
 SIZES SHIPT—Run of Mine, Slack,
 Lump.
 PREP. EQUIPT—Gravity Screens.

Rex No. 5 Mine; Shaft; No. 3 Seam,
 60 inches thick.
 PO—Lovilia, Ia.; SP—Same; CTY—
 Monroe; RR—C. & N. W.
 MS—J. W. W. Canty, Hittman, Ia.
 S of H—Mules. Track gage 36 inches.
 S of M—2 chain breast type and 3 short-
 wall machs.
 PP—Power purchased. Transformer 13,
 800-440-220 volts A. C., M. G.
 sets 250 volts D. C., 1 pump.
 EMP—165. Last fiscal year output 83,737
 tons.
 SIZES SHIPT—Run of Mine, Slack, egg,
 Lump.
 PREP. EQUIPT—Shaker Screens, Loading
 Booms.

ROSEBROOK COAL COMPANY

General Office, Centerville, Ia.
 PR—L. L. Lodwich, Mystic, Ia.
 VP—L. L. Lodwich, Mystic, Ia.
 GM—L. L. Lodwich, Mystic, Ia.
 TR—L. L. Lodwich, Mystic, Ia.
 GS—L. L. Lodwich, Mystic, Ia.
 PA—L. L. Lodwich, Mystic, Ia.
 CE—G. S. Lodwich, Mystic, Ia.

Rosebrook Mine; Shaft.
 PO—Centerville, Ia.; SP—Same; CTY—
 Appanoose; RR—L. S. W.
 PP—Purchase power. Transformer 1,320-
 220 volts A. C., 1 pump.
 EMP—26. Daily tonnage 70.
 SIZES SHIPT—Lump, Block.
 PREP. EQUIPT—Gravity Screens.
 Note—Formerly the Lodwich-White Coal
 Company.

RUTLEDGE COAL COMPANY.

PR—A. Everett Erskine, R. R. 3, Ot-
 tumwa, Ia.
 VP—A. J. Erskine, R. R. 5, Ottumwa,
 Ia.
 TR—Frank Erskine, R. R. 3, Ottumwa,
 Ia.
 PA—A. Everett Erskine, R. R. 3, Ot-
 tumwa, Ia.

Rutledge Mine; Shaft; Third Vein; 60
 in. thick.
 PO—Ottumwa, R. R. 3, Ia. SP—But-
 ledge, Ia. CTY—Wapello. RR—C.
 M. & S. P.
 MS—A. Everett Erskine, R. R. 3, Ot-
 tumwa, Ia.
 S of H—Mules, steam loco. Track gage
 32 1/2 in.
 S of M—Hand.
 PP—Steam boilers, 2 pumps.
 EMP—50. Last years tonnage 30,000.
 SIZES SHIPT—Run of Mine, Slack,
 Lump.
 PREP. EQUIPT—Screens, Picking Tables.

SACCO COAL COMPANY.

General Office, Brazil, Ia.
 PR—Joe Sacco, Brazil, Ia.
 TR—Geo. Sacco, Brazil, Ia.
 GM—Galileo Mascagni, Brazil, Ia.
 PA—Galileo Mascagni, Brazil, Ia.
 EM—Serofina Mascagni, Brazil, Ia.

No. 5 Mine, 34 to 36 in. thick.
 PO—Brazil, Ia. SP—Same. CTY—Appa-
 noose, RR—C. B. & Q.
 MS—Galileo Mascagni, Brazil, Iowa.
 S of H—Mules and rope. Track gage
 30 in.
 S of M—Hand.
 PP—5 pumps.
 EMP—17. Last years tonnage 13,000.
 SIZES SHIPT—Slack, Lump, Block.
 PREP. EQUIPT—Revolving Screens.
 Old Information.

SAYLOR COAL COMPANY.

General Office, Des Moines, Ia.
 PR—W. J. Carney, Chicago, Ill.
 VP—K. G. Carney, Des Moines, Ia.
 TR—K. G. Carney, Des Moines, Ia.
 GM—K. G. Carney, Des Moines, Ia.
 GS—E. F. Roberts, Ankeny, Ia.
 PA—K. G. Carney, Des Moines, Ia.
 CE—C. T. Carney, Des Moines, Ia.
 EM—B. H. Shivers, Des Moines, Ia.
 EE—T. J. White, Ankeny, Ia.
 SA—F. H. Zook, Des Moines, Ia.

Saylor No. 2 Mine; Shaft; No. 2 and
 3 Seams, 30 to 48 in. thick.
 PO—Ankeny, Ia.; SP—Saylor, Ia.; CTY—
 Peck; RR—C. & N. W.
 S of H—Mules, trolley pole type locos.
 Track gage 36 inches.
 S of M—Hand.
 PP—Power purchased. Transformer 22,
 000 to 440 volts A. C., M. G.
 sets, 250 volts D. C., 2 fire tube
 boilers, 80 H. P., 4 pumps.
 EMP—250. Last years tonnage 151,
 388.
 SIZES SHIPT—Run of Mine, Slack, Egg,
 Lump.
 PREP. EQUIPT—Bar Screens.

SCANDIA COAL CO.

General Office, 416 Locust St., Des
 Moines, Ia.
 PR—W. J. Carney, Chicago, Ill.
 VP—C. T. Carney, Des Moines, Ia.
 TR—Quintin Johnstone, Jr., Chicago, Ill.
 GS—Owen Reese, Madrid, Ia.
 PA—K. G. Carney, Des Moines, Ia.
 EM—Elmer Carlson, Madrid, Ia.
 EE—J. M. Blake, Madrid, Ia.
 SCO—Scandia Supply Co., Buyer, C. W.
 Voorhis, Zook Spur, Ia.

No. 2, No. 4 and No. 5 Mines; Shafts;
 No. 2 and No. 3 Seams, 46 to
 56 in. thick.
 PO—Madrid, Ia.; SP—Same; CTY—
 Boone and Dallas; RR—C. M. &
 St. P.
 S of H—Mules, trolley pole type, stor-
 age battery and combination locos.
 Track gage, 36 in.
 S of M—Hand.
 PP—Power purchased, transformer 4,000
 to 440 volts, motor gen. sets, 250
 volts D. C., 1 pump.
 EMP—600. Last years tonnage 307,
 669.
 SIZES SHIPT—Run of Mine, Slack, Egg,
 Lump, Block.
 PREP. EQUIPT—Gravity and Shaker
 Screens.

SCANDIAVIAN COAL CO.

General Office, Centerville, Ia.
 PR—G. P. Polson, Centerville, Ia.
 VP—M. R. Moring, Centerville, Ia.
 TR—Claus Johnston, Centerville, Ia.
 GM—Claus Johnston, Centerville, Ia.
 GS—Claus Johnston, Centerville, Ia.
 PA—Claus Johnston, Centerville, Ia.

Piano Mine; Shaft; Appanoose Seam; 28
 in. thick.
 PO—Centerville, Ia.; SP—Piano, Ia.;
 CTY—Appanoose; RR—C. B. & Q.
 S of H—Mules. Track gage 32 in.
 S of M—Hand.
 PP—2 fire tube boilers, 120 H. P., 2
 pumps.
 EMP—30.
 SIZES SHIPT—Lump.

SEYMOUR COAL COMPANY

General Office, Seymour, Iowa.
 PROPRIETOR—Peter Thomas, Sr., Sey-
 mour, Iowa.
 TR—S. P. Hughes, Seymour, Iowa.
 GM—Peter Thomas, Jr., Seymour, Iowa.
 GS—Geo. Joyce, Seymour, Iowa.
 PA—Peter Thomas, Jr., Seymour, Iowa.

New Sunshine Mine; Shaft; Seam, 30
 inches thick.
 PO—Seymour, Iowa; SP—Same; CTY—
 Wayne; RR—C. R. I. & P.
 S of H—Mules. Track gage 36 inches.
 S of M—3 Longwall machs.
 PP—Power purchased. Transformer 1100
 to 220 volts A. C., M. G. Sets,
 220-250 volts D. C.
 EMP—100. Last years tonnage 19,792.
 SIZES SHIPT—Run of Mine, Slack, Pea,
 Nut, Egg, Lump.
 PREP. EQUIPT—Bar Screens.

SHERIFF COAL COMPANY.

General Office, Oskaloosa, Ia.
 PR—H. H. Sheriff, Oskaloosa, Ia.
 VP—W. J. Sullivan, Lovilia, Ia.
 TR—J. L. Jones, Oskaloosa, Ia.
 GM—W. J. Sullivan, Lovilia, Ia.
 GS—W. J. Sullivan, Lovilia, Ia.
 PA—W. J. Sullivan, Lovilia, Ia.
 EM—Joseph Reynolds, Lovilia, Ia.
 SCO—Neagle Supply Co., Buyer, John
 Neagle, Lovilia, Ia.
 SA—W. J. Sullivan, Lovilia, Ia.

Sheriff Mine; Shaft; Seam, 60 in. thick
 PO—Lovilia, Ia. SP—Same. CTY—Mon-
 roe. RR—C. & N. W.
 S of H—Mules and rope. Track gage
 36 in.

(Continued on Next Page)

Sheriff Coal Co.—Cont.

S of M—Hand, 2 shortwall machs.
PP—2—150 H. P. water tube boilers,
220 volts, 2 pumps
EMP—175.
SIZES SHIPT—Run of Mine, Pea, Nut,
Lump.
PREP. EQUIPT—Gravity Screens, Coal
Crusher.

SMILEY & HEAPS COAL COMPANY
Now part of Boone Coal Co.

SMITH, T. H. & SONS.

General Office, Albia, Ia., care Bloomfield
Fuel Co.
PR—M. Smith, Albia, Ia.
TR—T. H. Smith, Eddyville, Ia.
GM—C. N. Bloomfield, Albia, Ia.
GS—Lloyd Smith, Eddyville, Ia.
PA—T. H. Smith, Eddyville, Ia.
SA—Bloomfield Fuel Co., Albia, Ia.

Diamond Mine; Slope; Bituminous Seam,
36 in. thick.
PO—Eddyville, Ia.; SP—Coalfield, Ia.;
CTY—Monroe; RR—M. & St. L.
S of H—Main and tail rope locos. Track
gage, 32 in.
S of M—Hand.
PP—1 pump
EMP—28. Last years tonnage 9,000.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Gravity Screens.

SMOKY HOLLOW COAL COMPANY.

General Office, Albia, Ia.
PR—P. H. Hyoes, Albia, Ia.
GM—P. H. Hyoes, Albia, Ia.
TR—Simon Phillips, " "
GS—Wm. Jones, Hiteman, Ia.
PA—M. G. Youngquist, Albia, Ia.
EM—H. E. Bennett, Hiteman, Ia.
Sales Agent, M. G. Youngquist, Albia, Ia.

No. 10 and 11 Mines; Shaft; Seam, 72
inches thick.
PO—Hiteman, Ia. SP—Tower 307. CTY
Monroe. RR—C. B. & Q.
SM—J. R. Boomhoff, Hiteman, Ia.
S of H—Mules and rope, 2 steam locos.
Track gage, 38 in.
S of M—Hand.
PP—4 60 H. P. fire tube boilers, 4
pumps.
EMP—550. Last years tonnage 553,
100.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Bar Screens.

SOUTH DES MOINES COAL CO.

General Office, 407 Crocker Bldg., Des
Moines, Ia.
PR—T. W. Carpenter, 407 Crocker Bldg.,
Des Moines, Ia.
TR—E. C. Johnson, 407 Crocker Bldg.,
Des Moines, Ia.
GM—T. W. Carpenter, Des Moines, Ia.
GS—John Abrams, 407 Crocker Bldg.,
Des Moines, Ia.
PA—John Abrams, 407 Crocker Bldg.,
Des Moines, Ia.
EM—John Abrams, 407 Crocker Bldg.,
Des Moines, Ia.
SA—Keystone Fuel & Supply, 407
Crocker Bldg., Des Moines, Ia.

South Des Moines Mine; Shaft; Des
Moines Third Vein Seam, 36-72 in.
thick.
PO—Des Moines, Ia.; SP—Same; CTY—
Polk; RR—Des Moines, Interurban.
MS—Wm. Jones, 407 Crocker Bldg., Des
Moines, Ia.
S of H—14 mules and rope. Track gage,
36 in.
S of M—3 shortwall machs.
PP—Power purchased, transformer 2,300-
220 volts A. C., 3 150 H. P. fire
tube boilers, 8 pumps.
EMP—150. Daily tonnage 425.
SIZES SHIPT—Run of Mine, Slack, Egg,
Lump, Block.
PREP. EQUIPT—Shaker Screens.

SOUTH OTTUMWA MINING CO.

Owner—G. W. Chambers, 537 S. Milner
St., Ottumwa, Ia.

South Ottumwa Mine; Shaft; First Seam,
48 in. thick.
PO—Ottumwa, Ia.; SP—Same; CTY—
Wapello.
MS—G. W. Chambers, Ottumwa, Ia.
S of H—Mules. Track gage, 36 in.
PP—1 50 H. P. fire tube boiler, 1
pump.
EMP—12. Last fiscal year output,
10,333 tons.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Standard Screens.
Old Information.

SPRING HILL COAL COMPANY.

Now operated by the Des Moines Ice
& Fuel Company.

STERLING COAL COMPANY

General Office, Centerville, Ia.
PR—A. Burkland, Centerville, Ia.
GM—O. Billberg, Centerville, Ia.
GS—O. Billberg, Centerville, Ia.
SA—Sterling Coal Co., Centerville, Ia.

Sterling Mine; Shaft.
PO—Centerville, Ia.; SP—Same; CTY—
Appanoose; RR—I. S. F., M. &
St. L.
S of H—Mules. Track gage 36 inches.
S of M—Electric punchers.
EMP—75. Daily tonnage 200
SIZES SHIPT—Lump.
PREP. EQUIPT—Bar Screens.

SUNSHINE COAL COMPANY.
Out of business.

SUNSHINE COAL & MINING CO.

General Office, Box 1486, Lincoln, Neb.
PR—M. E. Serat, Lincoln, Neb.
VP—T. F. Horn, Lincoln, Neb.
TR—T. F. Horn, Lincoln, Neb.
PA—M. E. Serat, Lincoln, Neb.
EM—M. E. Serat, Lincoln, Neb.

Sunshine Mine; Shaft; Appanoose Seam,
32 inches thick.
PO—Centerville, Ia.; SP—Same; CTY—
Appanoose; RR—C. B. & Q.
S of H—Mules and longwall machs.
S of M—Hand and longwall machs.
PP—Power purchased. Transformers,
2,300 to 220 volts A. C., gen.
units, 100 K. V. A., 2 pumps.
EMP—85. Last years tonnage 50,000.
SIZES SHIPT—Lump, Block.
PREP. EQUIPT—Gravity Screens.
NOTE—Formerly operated by the Sun-
shine Coal Co.

URBANDALE COAL COMPANY

General Office, Des Moines, Iowa.
PR—E. L. Twining, Des Moines, Iowa.
TR—E. V. Twining, Des Moines, Iowa.
Urbandale Mine; Shaft; No. 1 Seam, 60
in. thick.
PO—Des Moines, Ia.; SP—Same; CTY
—Polk.
MS—G. W. Johnson, Des Moines, Ia.
S of H—Mules. Track gage 36 inches.
S of M—1 mach.
PP—2 100 H. P. fire tube boilers, 2
pumps.
EMP—50. Daily tonnage 150.

WINIFRED COAL CO.

General Office, Mystic, Ia.
PR—L. L. Lodwick, Mystic, Ia.
TR—L. L. Lodwick, Mystic, Ia.
GM—T. E. Williams, " "
GS—T. E. Williams, " "
PA—T. E. Williams, " "
CE—G. S. Lodwick, Mystic, Ia.
SA—M. Ball, Mystic, Ia.

No. 30 Mine; Shaft; Mystic Block Seam,
30 in. thick.
PO—Mystic, Ia.; SP—Same; CTY—Ap-
panoose; RR—C. M. & St. P.
S of H—Kage. Track gage, 30 in.
S of M—2 longwall machs.
PP—Power purchased. Transformer 13,-
000 to 250 volts A. C., 2 fire tube
boilers, 150 H. P., 1 pump.
EMP—100. Last years tonnage 14,000.
SIZES SHIPT—Slack, Pea, Nut, Egg,
Lump, Block.
PREP. EQUIPT—Bar Screens.

WOODLAND COAL CO.

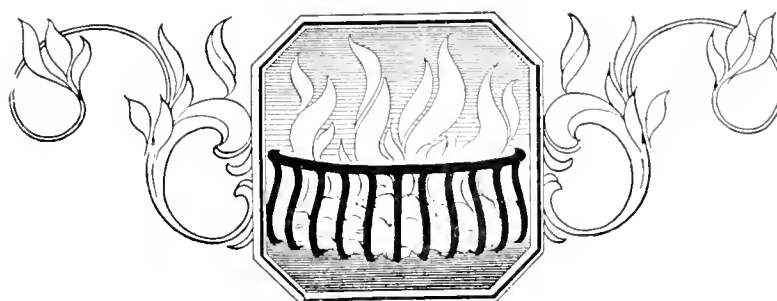
General Office, Centerville, Ia.
PR—W. R. Krappel, Centerville, Ia.
VP—P. Strandberg, Centerville, Ia.
TR—W. R. Krappel, Centerville, Ia.
GM—A. Lofgren, Centerville, Ia.
GS—A. Lofgren, Centerville, Ia.
PA—A. Lofgren, Centerville, Ia.
CE—M. G. Hall, Centerville, Ia.
SA—A. Lofgren, Centerville, Ia.

Woodland Mine; Shaft; 1st Seam; 32 to
36 in. thick.
PO—Centerville, Ia.; SP—Same; CTY—
Appanoose; RR—M. & St. L., C. B.
& Q.
S of H—Mules. Track gage, 32 in.
S of M—Hand.
EMP—20. Last fiscal year output, 6,448
tons.
SIZES SHIPT—Block.
Old Information.

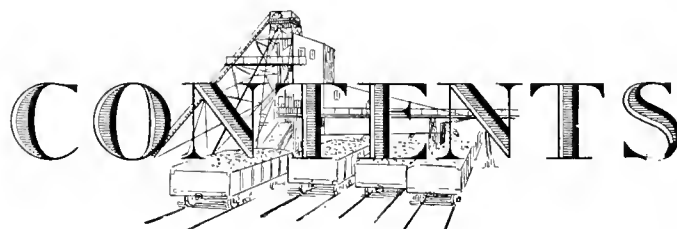
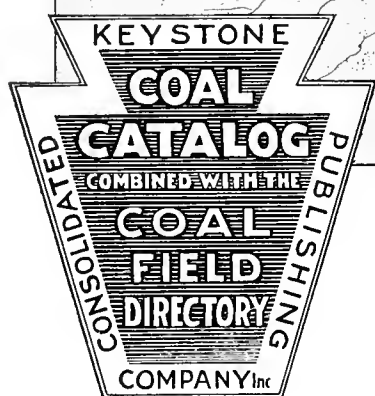
WRIGHT COAL COMPANY

General Office, 416 Locust St., Des
Moines, Ia.
PR—J. Jos. Wright, Chicago, Ill.
VP—C. T. Carney, Des Moines, Ia.
TR—Q. Johnstone, Chicago, Ill.
GM—K. G. Carney, Des Moines, Ia.
GS—C. T. Carney, Des Moines, Ia.
PA—K. G. Carney, Des Moines, Ia.
CE—C. T. Carney, Des Moines, Ia.
EM—Elmer Carlson, Madrid, Ia.
EE—John Brady, Ankeny, Ia.
SA—F. H. Zook, Des Moines, Ia.

Wright Mine; Shaft; Third Seam, 42-48
inches thick.
PO—Ankeny, Ia.; SP—Saylor, Ia.; CTY
—Polk; RR—C. & N. W.
S of H—Mules, 2 trolley pole type locos.
Track gage 36 inches.
PP—Power purchased. Transformer 22,-
000 to 440 volts A. C., M. G.
set, 250 volts D. C., 2—80 H. P.
fire tube boilers, 6 pumps.
EMP—185. Last years tonnage 108,239.
SIZES SHIPT—Run of Mine, Slack, Egg,
Lump.
PREP. EQUIPT—Gravity Screens.



KANSAS

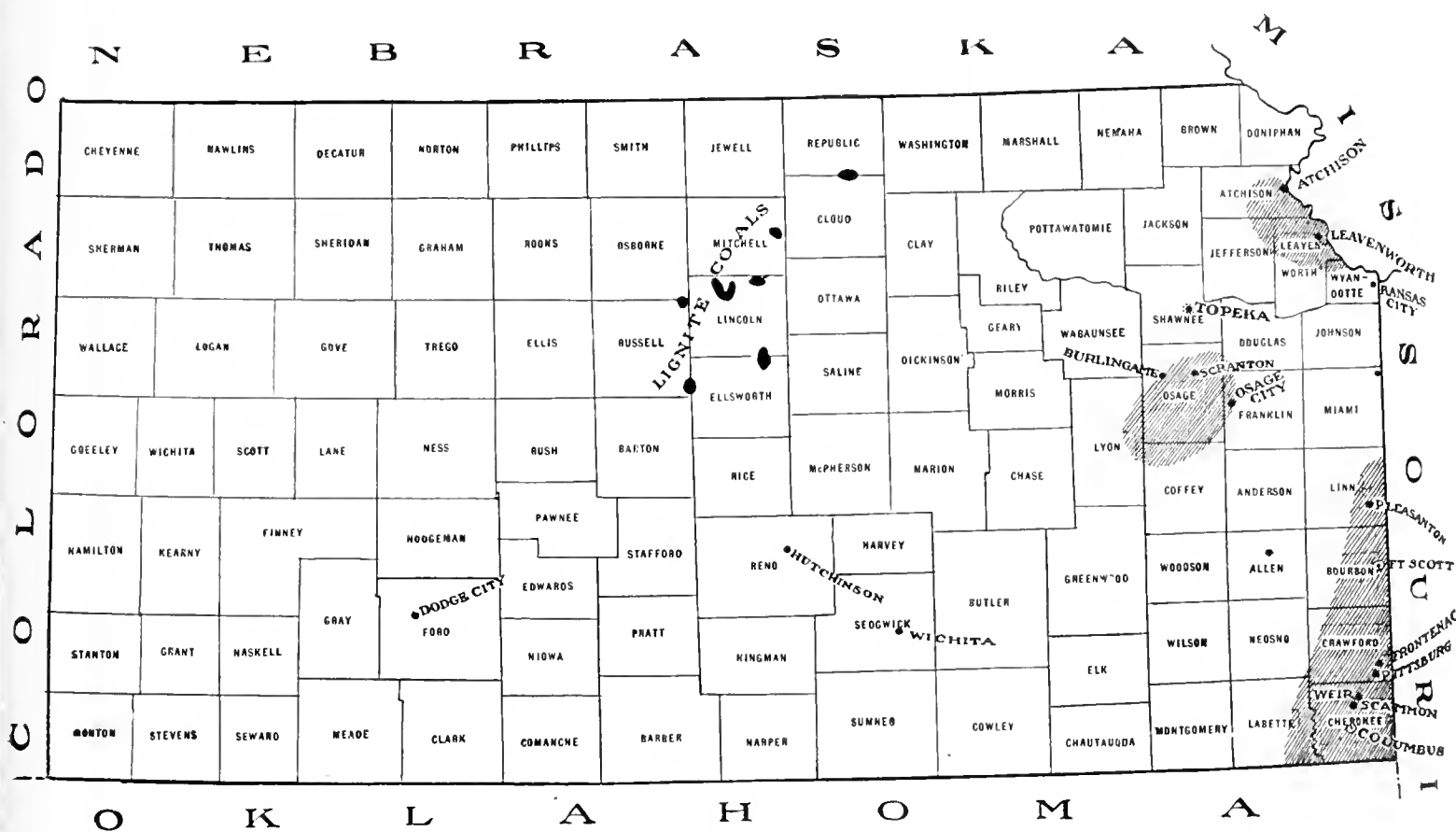


Map of Mining Districts.....	437
Sectional View of Coal Formations.....	438
General Description of Coal Resources.....	439

Cherokee Seam.....	439
Upper Weir-Pittsburg Seam.....	440
Osage Seam.....	440
Leavenworth Seam.....	440
Cretaceous Coals of Kansas.....	440

Preparation and Sizing of Coal.....	440
Supplementary Analyses.....	441
List of Mines by Seams.....	442, 443
Alphabetical Directory of Coal Mines....	444 to 447

KANSAS



MAP OF KANSAS MINING DISTRICTS

Cherokee

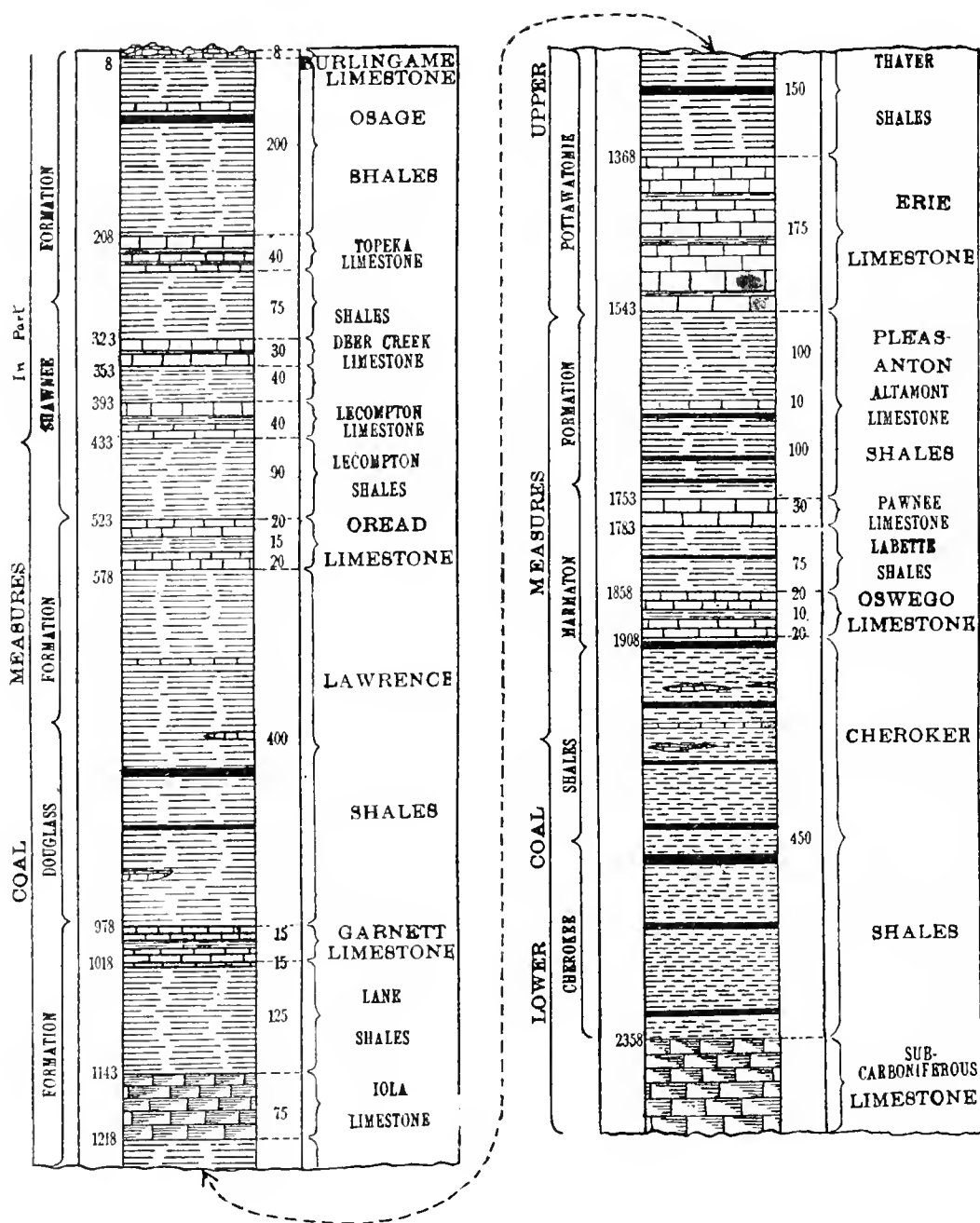
Crawford

Linn

Osage

Leavenworth

KANSAS



COLUMN SHOWING BITUMINOUS COAL BEDS

From Vol. III of the University Geological Survey of Kansas.

KANSAS

General Description of the Geology of the Region With the Ranks of Coal Produced Treats of the Mining Districts, With a Map Showing Their Location. All Seams Lying Within the Territory, and the Railroads Serving Same; Description of the Producing Seams Showing Their Geological Order, Kinds of Coal, General Analysis, Etc

The productive coal measures of Kansas belong to the Pennsylvania series of the Carboniferous, and constitute a mass almost 3,000 feet thick, composed of alternating beds of limestones, sandstones and shales. They occupy the eastern portion of the state and underly approximately 20,000 square miles, of which the most easterly 15,000 are regarded as probably more or less productive. The dip is to the north and west, in which directions the beds also increase in thickness. The coal is of bituminous rank.

The most important coal field in the state is that of Cherokee and Crawford counties in the southeast corner, covering an area trending northeast and southwest. About 95 per cent. of all the coal produced in the state is from this area. Another belt of country with productive mines reaches from near Burlington by way of Ransomville, Pomona and Lawrence to Leavenworth and Atchinson. In this section the seam lies at a depth of from 700 to 1,150 feet. The third important district in Kansas is that of Osage and adjacent counties, in which a coal bed 20 to 22 inches thick is mined, the output being of great commercial importance. The bed here is notable as being well up in the upper coal measures, and stratigraphically 2,000 feet above the Cherokee coal. It occupies approximately the horizon of the bed locally mined in southwestern Iowa.*

In addition to the Coal Measure area there is a Cretaceous coal area in the north central part of the state which furnishes a considerable quantity of lignite for the local trade.

In addition to its coal beds, Kansas has vast deposits of oil and natural gas, all three of which enter into competition as fuels. This has had a considerable effect on the coal trade. Furthermore, coals from states to the East, including West Virginia, are in competition with Kansas coals, and because of their superior qualities oftentimes supplant the native product. Its production, however, has been slowly increasing until it now stands twelfth amongst the coal-producing states, with an annual output of approximately 7,000,000 tons.

The mining districts of Kansas take the names of the counties and will be described in this manner.

MINING DISTRICTS OF KANSAS

- Cherokee.** Seams mined are the Cherokee (Lower Weir Pittsburg) and the Upper Weir Pittsburg. These produce steam, railroad and domestic coals. They have a wide use for threshing engines. Railroads serving are the St. Louis & San Francisco; Missouri Pacific; Missouri, Kansas & Texas.
- Crawford.** Seam mined is the Cherokee (Lower Weir Pittsburg), with uses the same as above stated. Railroads serving are the Atchinson, Topeka & Santa Fe; Missouri Pacific; St. Louis & San Francisco; Kansas City Southern.
- Linn.** Seam mined is the Cherokee, with uses same as stated for Cherokee county. Railroads serving are the St. Louis & San Francisco and Missouri Pacific.
- Osage.** Seam mined is the Osage. It produces a steam, railroad and domestic coal, being also much used for threshing. Railroads serving are the Atchinson, Topeka & Santa Fe; and Missouri Pacific.
- Leavenworth.** Seam mined is the Leavenworth, with uses same as those given for the Osage district. Railroads serving are the Atchinson, Topeka & Santa Fe; Missouri Pacific, and Union Pacific.
- Cherokee Seam.** (Also known as the Lower Weir Pittsburg, Linn and Mineral Seam.) (Mined in Cherokee, Crawford and Linn counties.)
- This seam is the largest bed known in Kansas and produces over 90 per cent. of the state's output. It varies in thickness from 3 to 10 feet, with a general average of from 40 to 42 inches. The coal is of better grade than that found in adjacent states, and the mining conditions as regards roof and floor are excellent. The bed dips to the northwest, with the outcrop at the surface to the southeast. The mines most extensively operated reach the coal by shafting, but large quantities of coal lying near the surface are gotten by stripping methods. Most of the shaft mines are gaseous and require careful supervision. Much of the coal gotten from strip pits is used raw in the smelting of zinc, for which purposes its absolute non-coking qualities make it especially adaptable.
- Some of the coal mined in this district possesses coking qualities, and a small quantity of coke is made from slack coal at mines in the vicinity of Pittsburg. About half of the coal used in coke making is washed before charging into the ovens. The coke is used by the zinc smelters in and about Pittsburg.
- Cherokee county is one of the pioneer mining districts, coal being mined at a number of places

*U. S. G. S. Report, 1910.

in the southeastern part of the county as early as 1867. Heavier beds were later found in the vicinity of Weir, and, being of a superior grade, the early openings were unable to compete and were abandoned. The northeastern section of the county is the present center of production.

Crawford county is the largest coal producer in the state, having about two-thirds the total output. The coal here is practically the same as that of Cherokee county. From 10 to 15 per cent. of the total output is derived from strip pits.

There is a large field of coal in Linn county, but it is not developed to any great extent owing to its proximity to Crawford and Cherokee counties, where the coal is of better quality and can be marketed at less cost.

A great deal of the coal produced from the Cherokee seam is taken by the railroads for locomotive fuel. It supplies practically all the domestic coal used in the state, and is much used for general steam purposes. The coal generally is friable, and great quantities of the resulting slack go to the packing houses in Kansas City. Further uses are for cement burning and threshing.

GENERAL ANALYSIS

Moisture	5.00
Volatile Matter	33.10
Fixed Carbon	52.90
Ash	9.00
Sulphur	4.65
B. T. U.	12,930

Upper Weir Pittsburg Seam. (Known also as Scammon and Upper Cherokee Seam.)
(Mined in Cherokee and Crawford counties.)

The Upper Weir Pittsburg is from 25 to 100 feet above the Cherokee bed, the average vertical distance being 30 feet. It varies from 27 to 30 inches in thickness. It is a gaseous seam and wherever developed is worked on the room and pillar system. In the early days considerable coal was taken from this seam, but owing to the small interval between it and the Cherokee bed, and the superior thickness of the latter, operations in it have practically ceased. It is quite similar in appearance, composition and usage with that of the Cherokee bed.

GENERAL ANALYSIS

Moisture	2.10
Volatile Matter	35.35
Fixed Carbon	48.55
Ash	14.00

Osage Seam. (Mined in Osage and Franklin counties.)

The Osage seam is situated more than 2,000 feet vertically above the heavy coal beds of Cherokee and Crawford counties. The coal is

reached by shafts, slopes, drifts and strip pits. It lies at a depth of from 30 to 145 feet and varies considerably in thickness. At Seranton, Fostoria and Burlingame it averages 17 inches, while in the southern end of the county it is thinner, averaging 13 inches at Osage City. The average in Osage county will be about 20 to 22 inches. The total production from this seam is small, ranging around 100,000 tons yearly. Mining is done on the long-wall system. The coal is used for locomotive fuel, domestic and steam purposes.

GENERAL ANALYSIS

Moisture	6.40
Volatile Matter	36.15
Fixed Carbon	48.65
Ash	8.80
Sulphur	4.60
B. T. U.	10,850

Leavenworth Seam. (Known also as Bevier Seam.)
(Mined in Leavenworth County.)

The Leavenworth coal is found in the Cherokee shales. Three seams exist here, but only the upper one is worked. Any attempt at correlation between the Leavenworth coals and the coals of Cherokee and Crawford counties would be largely conjectural, further than to show that they all belong to the Cherokee shales.* The Leavenworth coal is 22 inches thick and lies at a depth of about 725 feet. The mines are all worked on the longwall system and yield about 3 per cent. of the total production of the state. The coal is used for railroad, steam and domestic purposes.

GENERAL ANALYSIS

Moisture	11.50
Volatile Matter	35.35
Fixed Carbon	39.95
Ash	13.20
Sulphur	4.20
B. T. U.	10,900

Cretaceous Coals of Kansas.

Lignite is found in at least six counties in Northern Central Kansas lying within the Dakota Cretaceous.† It is of fairly uniform quality and thickness, averaging probably 20 inches. Mining operations have been centralized in Cloud county and are of a semi-prospecting nature. No coal from these counties is shipped for commercial usage, the output being small and used locally for boiler and domestic purposes.

GENERAL ANALYSIS

Moisture	6.60
Volatile Matter	29.00
Fixed Carbon	45.25
Ash	19.15

*The University Geological Survey of Kansas, Vol. III., pg. 155.
†Dr. W. R. Crane in Mines and Minerals, Vol. 24, pg. 94.

PREPARATION OF COAL

The preparation of coals in Kansas is usually quite simple. One, two or three sets of bar screens are often used, making at the most four sizes; through 1¼-inch, through 2½-inch, then through 4, 5 or 6-inch, and a large lump over this size.

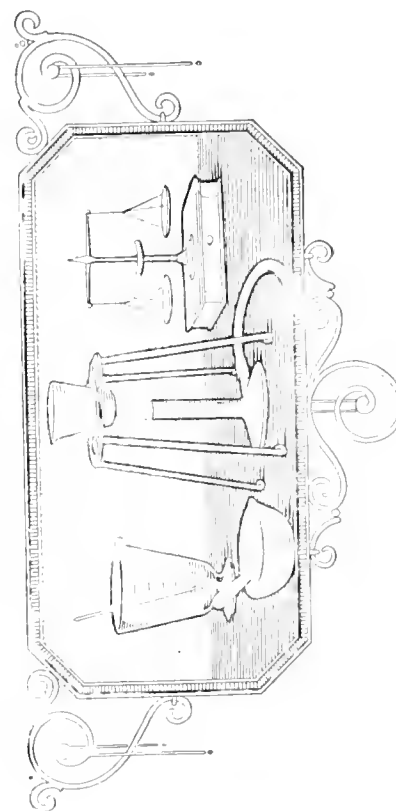
Round-hole shaker screens, however, are not uncommonly used. For general domestic trade, the coal is prepared over round-hole shaker screens into 3-inch lump, 2-inch to 3-inch egg, ¾-inch to 2-inch nut, and a ¾-inch slack.

Analyses of Kansas Seams By Counties and Localities

(ALL ANALYSES MADE ON MINE SAMPLES "AS RECEIVED")

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Hydrogenated E. T. U.	Carbon	RATIOS		
										Oxygen	Carbon	F. C.
										Oxy. + Ash	V. M.	
*Cherokee.	Atchison, Atchison.	Atchison.	6.95	35.70	45.16	12.19	8.04	11,905	62.74	10.74	2.74	1.26
*Cherokee.	Cherokee, Mineral.	No. 11.	5.11	32.60	53.39	8.90	4.34	12,926	69.07	6.69	3.61	1.64
*Cherokee.	Cherokee, Scammon.	No. 9.	2.50	33.80	51.25	12.45	5.68	12,900	69.07	6.69	3.61	1.52
*Cherokee.	Cherokee, Weir.	No. 10.	3.70	29.50	53.25	13.55	4.16	12,105	67.34	9.35	3.02	1.80
*Cherokee.	Crawford, Fleming.	No. 10.	4.99	32.68	49.36	12.97	4.28	12,242	66.68	8.41	3.02	1.51
*Cherokee.	Crawford, Frontenac.	No. 11.	5.75	33.28	47.29	13.68	5.07	12,098	66.68	8.41	3.02	1.42
*Cherokee.	Crawford, Fuller.	Sheridan No. 2.	4.85	33.53	52.52	9.10	4.95	12,942	71.20	5.62	3.89	1.57
*Cherokee.	Crawford, 2 mi. n. of Pittsburg.	Patton.	6.43	34.57	46.31	12.69	3.23	12,084	71.20	5.62	3.89	1.34
*Cherokee.	Crawford, 4 mi. s. w. of Pittsburg.	Central.	6.55	33.52	54.17	5.76	1.68	13,245	74.18	11.69	4.25	1.62
*Cherokee.	Crawford, Yale.	No. 11.	2.44	35.16	51.80	10.60	5.63	13,043	67.66	9.07	3.19	1.47
*Cherokee.	Crawford, $\frac{3}{4}$ mi. n. of Yale.	Western No. 13.	5.55	32.54	49.74	12.17	4.88	12,925	67.66	9.07	3.19	1.53
*Cherokee.	Crawford, Mulberry.	No. 1.	1.40	29.90	52.00	16.70	3.98	11,895	67.66	9.07	3.19	1.74
*Cherokee.	Linn, Jewett.	No. 1.	11.13	28.83	47.44	12.60	2.41	11,219	67.66	9.07	3.19	1.64
*Cherokee.	Leavenworth, Lansing.	Penitentiary.	11.10	35.51	40.69	12.70	3.99	11,065	60.72	16.16	2.11	1.15
*Cherokee.	Leavenworth, Leavenworth.	No. 1.	11.96	35.21	39.13	13.70	4.41	10,721	58.94	16.55	1.95	1.11
*Cherokee.	Osage, Burlingame.	Osage.	6.70	35.65	50.45	7.20	4.33	10,940	60.72	16.16	2.11	1.42
*Cherokee.	Osage, Fostoria.	Osage.	5.10	36.85	48.10	9.95	5.02	10,930	60.72	16.16	2.11	1.30
*Cherokee.	Osage, Osage City.	Osage.	7.45	35.90	47.50	9.15	3.59	10,650	60.72	16.16	2.11	1.32
*Cherokee.	Upper Weir, Pittsburg.	Cherokee.	2.25	34.17	49.51	14.07	...	...	...	...	...	1.45
*Cherokee.	Upper Weir, Pittsburg.	Cherokee.	2.07	34.37	50.21	13.35	...	...	...	...	...	1.46
*Cherokee.	Upper Weir, Pittsburg.	Cherokee.	1.91	37.44	46.19	14.46	...	...	...	...	...	1.23

*Bulletins Bureau of Mines.



List of Mines By Seams, Including Name of Company, General Office Address, County, Railroad and Shipping Point

KANSAS

CHEROKEE SEAM (Known also as the LOWER WEIR PITTSBURG, LINN and MINERAL SEAMS).

Mined in Cherokee, Crawford and Linn Counties. Bituminous Rank. Suitable for Steam, Cement Burning, Producer Gas, Locomotive Fuel, Domestic and Melting (Zinc Smelting) Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Black Diamond Coal Co.	Ft. Scott, Kans.	Black Diamond	Bourbon	M. K. & T.	Ft. Scott, Kans.
Black Diamond Coal Co.	Mulberry, Kan.	Black Diamond	Crawford	St. L. & S. F.	Mulberry, Kan.
Browning Coal Co.	Weir, Kan.	Browning	Cherokee	Frisco	Weir, Kan.
Carbon Coal Co., The	Pittsburg, Kan.	No. 2	Cherokee	Kansas City, Southern	Scammon, Kan.
Carbon Coal Co., The	Pittsburg, Kan.	No. 3	Crawford	St. L. & S. F.	Cherokee, Kan.
Carney Cherokee Coal Co.	Chicago, Ill.	Carney No. 1	Barton	St. L. & S. F.	Mulberry, Kan.
Carney Cherokee Coal Co.	Chicago, Ill.	Carney No. 2	Crawford	Kansas City Sou.	Mulberry, Kan.
Central Coal & Coke Co.	Kansas City, Mo.	No. 45	Crawford	Santa Fe, Frisco, Mo. Pac.	Edison, Kan.
Central Coal & Coke Co.	Kansas City, Mo.	No. 48	Crawford	Santa Fe, Frisco, Mo. Pac.	Edison, Kan.
Central Coal & Coke Co.	Kansas City, Mo.	No. 49	Crawford	Kan. City Southern	Nelson, Kan.
Central Coal & Coke Co.	Kansas City, Mo.	No. 50	Crawford	Frisco, Mo. Pacific	Edison, Kan.
Central Coal & Coke Co.	Kansas City, Mo.	No. 51	Crawford	Frisco, Mo. Pacific	Edison, Kan.
Cherokee-Crescent Coal Co.	Kansas City, Mo.	No. 2	Cherokee	Mo. Pac.	Carona, Kan.
Clemens Coal Co. (The)	Pittsburg, Kan.	No. 17	Cherokee	M. K. & T.	Weir, Kan.
Clemens Coal Co. (The)	Pittsburg, Kan.	No. 18	Crawford	A. T. & S. F.	Pittsburg, Kan.
Clemmens Coal Co.	Pittsburg, Kan.	No. 22	Barton	Mo. Pac.	Mindenmines, Mo.
Consumers Coal & Mining Co.	Kansas City, Mo.	La Cygne	Linn	St. L. & S. F.	La Cygne, Kan.
Crowe Coal Co.	Dwight Bldg., Kansas City, Mo.	No. 14	Crawford	St. L. & S. F.	Croweburg & Mulberry, Kan.
Crowe Coal Co. (The)	Dwight Bldg., Kansas City, Mo.	No. 15	Crawford	St. L. & S. F.	Croweburg, Kan.
Crowe Coal Co. (The)	Dwight Bldg., Kansas City, Mo.	No. 16	Crawford	St. L. & S. F.	Croweburg, Kan.
Crowe Coal Co. (The)	Dwight Bldg., Kansas City, Mo.	No. 20	Crawford	M. K. & T.	West Mineral, Kan.
Crowe Coal Co. (The)	Dwight Bldg., Kansas City, Mo.	No. 22	Crawford	St. L. & S. F.	Croweburg, Kan.
Crowe Coal Co. (The)	Dwight Bldg., Kansas City, Mo.	No. 23	Cherokee	St. L. & S. F.	Scammon, Kan.
Crowe Coal Co. (The)	Dwight Bldg., Kansas City, Mo.	No. 1	Crawford	Kansas City Sou.	Scammon, Kan.
Dean Coal & Mining Co.	Frontenac, Kan.	No. 1	Crawford	A. T. & S. F.	Fuller, Kan.
Dittmann-Wachter Coal Co.	Frontenac, Kan.	No. 2	Crawford	A. T. & S. F.	Frontenac, Kan.
Dittmann-Wachter Coal Co.	Frontenac, Kan.	No. 3	Crawford	A. T. & S. F.	Frontenac, Kan.
Dittmann-Wachter Coal Co.	Frontenac, Kan.	No. 1 Strip	Barton	St. L. & S. F.	Mulberry, Kan.
Domestic Fuel Co., The	Pittsburg, Kan.	No. 2	Crawford	St. L. & S. F.	Arcadia, Kan.
Domestic Fuel Co., The	Pittsburg, Kan.	No. 1	Crawford	St. L. & S. F.	Howe, Kan.
Doubladay Coal Co.	Fort Scott, Kan.	No. 101	Crawford	A. T. & S. F., Mo. Pac., Frisco	Mindenmines, Kan.
Ellsworth Coal Co., The	Pittsburg, Kan.	No. 3	Cherokee	St. L. & S. F.	Turck, Kan.
Fleming Coal Co.	Kansas City, Mo.	No. 7	Crawford	A. T. & S. F.	Radley, Kan.
Girard Coal Co.	Kansas City, Mo.	Gubbio No. 2	Crawford	K. C. S.	Fuller, Kan.
Gubbio Coal Co.	Frontenac, Kan.	No. 6	Crawford	Frisco	Cherokee, Kan.
Hamilton Coal & Mercantile Co.	Weir, Kan.	No. 8	Crawford	Mo. Pac.	Arma, Kan.
Hamilton Coal & Mercantile Co.	Weir, Kan.	No. 9	Crawford	Frisco	Cherokee, Kan.
Horsley-Orr Coal Co.	Columbus, Kan.	Horsley-Orr	Cherokee	St. L. & S. F.	Scammon, Kan.
Italiani Coal Co.	Weir, Kan.	Italiani	Cherokee	Frisco	Weir, Kan.
Jackson-Walker Coal & Mining Co.	Kansas City, Mo.	No. 11	Crawford	A. T. & S. F.	Frontenac, Kan.
Jackson-Walker Coal & Mining Co.	Kansas City, Mo.	No. 15	Crawford	A. T. & S. F.	Frontenac, Kan.
Jackson-Walker Coal & Mining Co.	Kansas City, Mo.	No. 16	Crawford	A. T. & S. F.	Frontenac, Kan.
Jackson-Walker Coal & Mining Co.	Kansas City, Mo.	No. 17	Crawford	A. T. & S. F.	Frontenac, Kan.
Larson Bros. Coal Co.	Weir, Kan.	Larson Bros.	Cherokee	St. L. & S. F.	Weir, Kan.
Liberty Coal Co.	Mulberry, Kan.	Grey Wolf	Crawford	St. L. & S. F.	Mulberry, Kan.
MaGrath, Geo. T., Coal Co. (The)	Pittsburg, Kan.	No. 2	Crawford	A. T. & S. F.	Pittsburg, Kan.
Mackie, Geo. K., Fuel Co. (The)	Scammon, Kan.	Mackie H.	Cherokee	St. L. & S. F.	Scammon & Mineral, Kan.
Mackie, Geo. K., Fuel Co. (The)	Scammon, Kan.	Mackie J.	Cherokee	St. L. & S. F.	Scammon & Mineral, Kan.
Mallams-Halstead Coal Co.	Weir, Kan.	No. 1	Cherokee	Frisco	Weir, Kan.
Mayer Coal Co. (The)	Kansas City, Mo.	Katy No. 2	Crawford	A. T. & S. F.	Radley, Kan.
Mayer Coal Co. (The)	Kansas City, Mo.	Katy No. 4	Cherokee	St. L. & S. F.	Cherokee, Kan.
Mayer Coal Co. (The)	Kansas City, Mo.	Katy No. 6	Cherokee	M. K. & T.	West Mineral, Kan.
Mayer Coal Co. (The)	Kansas City, Mo.	Katy No. 7	Cherokee	Mo. P.	Cherokee, Kan.
Mayer Coal Co. (The)	Kansas City, Mo.	Katy No. 11	Cherokee	M. K. & T.	West Mineral, Kan.
Menghini Coal Co.	Frontenac, Kan.	Menghini	Crawford	A. T. & S. F.	West Mineral, Kan.
Panklin, A. W., Coal Co.	Weir, Kan.	No. 103	Cherokee	St. L. & S. F.	Frontenac, Kan.
Patton Coal & Mining Co., The	Frontenac, Kan.	No. 4	Crawford	A. T. & S. F.	Scammon, Kan.
Patton Coal & Mining Co., The	Frontenac, Kan.	No. 5	Crawford	Mo. P.	Frontenac, Kan.
Patton Coal & Mining Co., The	Frontenac, Kan.	No. 22	Crawford	A. T. & S. F.	Frontenac, Kan.
Pittsburg & Midway Coal Mining Co.	Pittsburg, Kan.	No. 11	Crawford	Mo. Pac., A. T. & S. F.	Pittsburg, Kan.
Pittsburg-Northern Coal Co.	Kansas City, Mo.	No. 8	Crawford	Mo. Pac.	Arma, Kan.
Pleasanton Coal & Mining Co., Inc.	Pleasanton, Kan.	Pleasanton	Linn	M. O. P.	Pleasanton, Kan.
Porphy Coal Co.	Pittsburg, Kan.	No. 1	Crawford	J & P Elec. & K. C. S.	Pittsburg, Kan.
Porphy Coal Co.	Pittsburg, Kan.	No. 2	Crawford	A. T. & S. F.	Pittsburg, Kan.
Reliance Coal & Mining Co.	Pittsburg, Kan.	R. Hance No. 1	Crawford	Mo. Pac., Frisco, Santa Fe	Pittsburg, Kan.
Reliance Coal & Mining Co.	Pittsburg, Kan.	Reliance No. 2	Crawford	St. L. & S. F.	Pittsburg, Kan.
Russell, Peter, Coal Co.	Mineral, Kan.	Mayer No. 4	Cherokee	M. K., Mo. Pac., St. L. & S. F.	West Mineral, Kan.
Russell, Peter, Coal Co.	Mineral, Kan.	Mayer No. 6	Cherokee	M. K., Mo. Pac., St. L. & S. F.	West Mineral, Kan.
Russell, Peter, Coal Co.	Mineral, Kan.	Mayer No. 7	Cherokee	M. K., Mo. Pac., St. L. & S. F.	West Mineral, Kan.
Russell, Peter, Coal Co.	Mineral, Kan.	Mayer No. 11	Cherokee	M. K., Mo. Pac., St. L. & S. F.	West Mineral, Kan.
Scott, Thomas Coal Co.	Weir, Kan.	No. 1	Cherokee	Frisco	Weir, Kan.
Sheridan Coal Co. (The)	Omaha, Neb.	No. 3	Crawford	K. C. S., Mo. Pac., Frisco	Mulberry, Kan.
Sheridan Coal Co. (The)	Omaha, Neb.	No. 7	Crawford	K. C. S., Mo. Pac., Frisco	Mulberry, Kan.
Sheridan Coal Co. (The)	Omaha, Neb.	No. 15	Crawford	K. C. S., Mo. Pac., Frisco	Mulberry, Kan.
Southern Kansas Coal Co.	Weir, Kan.	Shot 1 No. 1	Cherokee	Frisco	Scammon, Kan.
Spencer Newlands Coal Co.	Columbus, Kan.	No. 7	Crawford	Frisco	Mulberry, Kan.
Spencer Newlands Coal Co.	Columbus, Kan.	No. 9	Crawford	Frisco	Mulberry, Kan.
Stanton Coal Co.	Worland, Mo.	Stanton No. 1	Linn	Mo. Pac.	Worland, Mo.
Superior Coal & Mining Co.	Pittsburg, Kan.	Superior No. 2	Cherokee	St. L. & S. F.	Weir, Kan.
Victor Coal Co.	Pittsburg, Kan.	Victor	Crawford	A. T. & S. F.	Pittsburg, Kan.
Wear Coal Co.	Railway Exch. Bldg., St. Louis, Mo.	No. 17	Crawford	A. T. & S. F., Mo. Pac.	Pittsburg, Kan.
Wear Coal Co.	Railway Exch. Bldg., St. Louis, Mo.	No. 21	Crawford	A. T. & S. F., Mo. Pac.	Pittsburg, Kan.
Weir Junction Coal Co.	Cherokee, Kan.	Schwab	Crawford	Frisco	Weir, Kan.
Western Coal & Mining Co.	St. Louis, Mo.	No. 10	Crawford	Mo. Pac.	Pittsburg, Kan.
Western Coal & Mining Co.	St. Louis, Mo.	No. 13	Crawford	Mo. Pac.	Pittsburg, Kan.

(Continued on Next Page)

CHEROKEE (LOWER WEIR PITTSBURG)—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Western Coal & Mining Co.	St. Louis, Mo.	No. 14	Crawford	Mo. Pac.	Pittsburg, Kan.
Western Coal & Mining Co.	St. Louis, Mo.	No. 15	Crawford	Mo. Pac.	Pittsburg, Kan.
Western Coal & Mining Co.	St. Louis, Mo.	No. 16	Crawford	Mo. Pac.	Pittsburg, Kan.
Western Coal & Mining Co.	St. Louis, Mo.	No. 18	Crawford	Mo. Pac.	Pittsburg, Kan.
Western Coal & Mining Co.	St. Louis, Mo.	No. 19	Crawford	Mo. Pac.	Pittsburg, Kan.
Wilbert-Schreeb Coal Co.	Pittsburg, Kan.	No. 2	Crawford	Joplin & Pittsburg	Pittsburg, Kan.
Wilson Bros. Coal Mining Co.	Pittsburg, Kan.	Wilson Bros.	Cherokee	St. L. & S. F.	Pittsburg, Kan.
Young Coal Co., The	219 Globe Bldg., Pittsburg, Kan.	No. 1	Cherokee	St. L. & S. F.	Cherokee, Kan.
Young Coal Co., The	219 Globe Bldg., Pittsburg, Kan.	No. 2	Cherokee	St. L. & S. F.	Cherokee, Kan.
Young Coal Co., The	219 Globe Bldg., Pittsburg, Kan.	No. 9	Crawford	Mo. Pac.	Arma, Kans.

LEAVENWORTH SEAM (Known also as BEVIER SEAM)

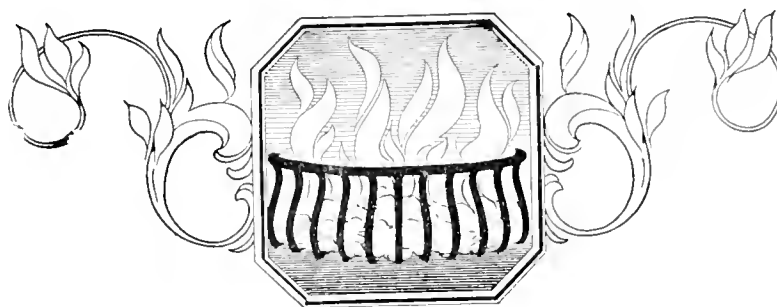
Mined in Leavenworth County. Bituminous Rank. Suitable for Steam, Producer Gas, Locomotive Fuel and Domestic Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Carr Coal Mining & Mfg. Co., The	Leavenworth, Kan.	Carr	Leavenworth	A. T. & S. F., Mo. P.	Lansing, Kan.
Home Riverside Coal Co.	Leavenworth, Kan.	No. 1	Leavenworth	Mo. P. & P.	Leavenworth, Kan.
Home Riverside Coal Co.	Leavenworth, Kan.	No. 2	Leavenworth	U. P., M. P.	Leavenworth, Kan.
Kansas State Penitentiary	Lansing, Kan.	No. 1	Leavenworth	A. T. & S. F., M. P.	Lansing, Kan.

OSAGE SEAM

Mined in Osage and Franklin Counties. Bituminous Rank. Suitable for Steam, Producer Gas, Locomotive Fuel and Domestic Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Bituminous Coal Co.	Osage City, Kan.	Bituminous	Osage	Mo. Pac., Santa Fe	Osage City, Kan.
Black Diamond Coal Company	Osage City, Kan.	Black Diamond	Osage	Mo. Pac., A. T. & S. F.	Osage City, Kan.
Cahill Coal Co.	Osage City, Kan.	Klondyke	Osage	Mo. Pac.	Osage City, Kan.
Carlson Coal Co.	Osage City, Kan.	Carlson No. 7	Osage	Mo. Pac.	Osage City, Kan.
Coughlin Coal Co.	Osage City, Kan.	Coughlin	Osage	A. T. & S. F.	Peterson, Kan.
Elliott, Geo., Coal Mining Co.	Burlingame, Kan.	Comet	Osage	A. T. & S. F.	Burlingame, Kan.
Labor Exchange Coal Association	Seranton, Kan.	Labor Exchange Coal	Osage	A. T. & S. F.	Seranton, Kan.
Miners' Fuel Co.	Osage City, Kan.	Miners' No. 2	Osage	Mo. Pac.	Osage City, Kan.
Osage City Labor Exchange	Osage City, Kan.	Red Top	Osage	Mo. Pac.	Osage City, Kan.
Western Fuel Co.	Osage City, Kan.	No. 4	Osage	A. T. & S. F., M. P.	Osage City, Kan.
		No. 10	Osage	A. T. & S. F., M. P.	Osage City, Kan.



KANSAS

Alphabetical Directory of Coal Mines Giving Complete Detailed Information Covering Each Mine

For List of Abbreviations See Page 13.

BITUMINOUS COAL COMPANY.

PR—Richard Maddiford, Osage City, Kan.
 TR—C. Lindblom, Osage City, Kan.
 GM—T. S. Prevatt, Osage City, Kan.
 PA—T. S. Prevatt, Osage City, Kan.
 Sales Agency, Mr. Nettieblade, Osage City, Kan.
 Bituminous Mine; Shaft; Seam, 14 in. thick.
 PO—Osage City, Kan. SP—Mo. Pac. or Santa Fe. RR—Mo. Pac. & Santa Fe.
 S of H—1 elec. loco.
 S of M—2 elec. machs.
 PP—Gen. units, 250 volts A. C. Purchase power.
 Daily output, 75 tons.
 SIZES SHIPT—Lump.
 (Old information.)

BLACK DIAMOND COAL CO.

OWNERS—A. C. King, T. W. Warner, W. H. Slaughter, Ft. Scott, Kan.
 Black Diamond Mine; Shaft; Seam, 24 in. thick.
 PO—Ft. Scott, Kan.; SP—Same; CTY—Bourbon; RR—M. K. & T.
 S of H—Mules. Track gage, 28 in.
 S of M—1 longwall mach.
 PP—Power purchased, transformer 2300 volts A. C., motor gen. sets, 250 volts D. C., 1 pump.
 EMP—25.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Shaker Screens.

BLACK DIAMOND COAL COMPANY.

General Office, Osage City, Kan.
 PR—E. Nettieblade, Osage City, Kan.
 TR—E. Nettieblade, Osage City, Kan.
 GM—George Murry, Osage City, Kan.
 PA—E. Nettieblade, Osage City, Kan.
 SA—Black Diamond Coal Co., Osage City, Kan.
 Black Diamond No. 1 Mine; Shaft; Osage Seam, 16 inches thick.
 PO—Osage City, Kan. SP—Same; CTY—Osage; RR—M. P. & A. T. & S. F.
 S of H—Mules. Track gage 18 in.
 S of M—Hand.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Picking Tables.
 Note—Mine leased by E. S. White.

BLACK DIAMOND COAL CO.

PR—D. Curran, Mulberry, Kan.
 VP—B. S. Spencer, Mulberry, Kan.
 TR—H. McCullough, Mulberry, Kan.
 GM—H. McCullough, Mulberry, Kan.
 GS—L. Hughes, Mulberry, Kan.
 PA—H. McCullough, Mulberry, Kan.
 EM—Jno. Vartz, Mulberry, Kan.
 SA—Sheridan Coal Co., Mulberry, Kan.
 Black Diamond Mine; Shaft; Cherokee Seam, 34 in. thick.
 PO—Mulberry, Kan.; SP—Same; CTY—Crawford; RR—St. L. & S. F.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 PP—1 water tube boiler, 42 H. P., 2 pumps.
 EMP—30. Daily output, 150 tons.
 SIZES SHIPT—Run of Mine.
 Old information.

BROWNING COAL CO.

OPERATOR—G. A. Browning, Weir, Kan.
 Browning Mine; Shaft Cherokee Seam, 44 in. thick.
 PO—Weir, Kan. SP—Same. CTY—Cherokee. RR—Frisco.
 S of H—Mules. Track gage 36 in.
 S of M—Hand.
 PP—2 fire tube boilers, 80 H. P., 1 pump.
 EMP—12. Last fiscal year output, 18,176 tons.
 SIZES SHIPT—Run of Mine.
 Old information.

CAHILL COAL COMPANY.

General Office, Osage City, Kan.
 GM—R. J. Cahill, Osage City, Kan.
 GS—R. J. Cahill, Osage City, Kan.
 PA—R. J. Cahill, Osage City, Kan.
 EE—John Getsinger, Osage City, Kan.
 Klondike Mine; Shaft; Seam 18 in. thick.
 PO—Osage City, Kan. SP—Same. CTY—Osage. RR—Mo. Pac.
 S of H—Mules. Track gage 20 in.
 S of M—1 longwall mach.
 PP—Purchase power. Transformer 2200 to 220 volts A. C.
 EMP—25. Last years tonnage 3,000.
 SIZES SHIPT—Run of mine.

CARBON COAL COMPANY, THE

General Office, 307 Globe Bldg., Pittsburg, Kan.
 PR—W. W. Patterson, Pittsburg, Kan.
 VP—J. R. Crowe, Jr., Kansas City, Mo.
 TR—R. A. Gray, Pittsburg, Kan.
 GM—W. W. Patterson, Pittsburg, Kan.
 GS—J. D. Robinson, Pittsburg, Kan.

CE—Claude Besheer, Croweburg, Kan.
 SA—Cherokee Fuel Co., Midland Coal Co., Kansas City, Mo.

No. 1 Mine abandoned.

No. 2 Mine; Stripping; Cherokee Seam; 36 inches thick.
 PO—Pittsburg, Kan.; SP—Scammon, Kan.; CTY—Cherokee; RR—St. L. & S. F.
 S of H—Mules, main and tail rope, 1 steam loco. Track gage 36 inches.
 S of M—Steam shovel.
 PP—Power purchased, 220 volts A. C., fire tube boiler, 2 pumps.
 EMP—25. Daily output, 500 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.
 No. 3 Mine; Stripping; Cherokee Seam; 36 inches thick.
 PO—Pittsburg, Kan.; SP—Cherokee, Kan.; CTY—Crawford; RR—St. L. & S. F.
 S of H—Mules, main and tail rope, 1 steam loco. Track gage 36 inches.
 S of M—Steam shovel.
 PP—1 fire tube boiler, 2 pumps.
 EMP—30. Daily output, 400 tons.
 PREP. EQUIPT—Shaker Screens.
 No. 4 Mine; Stripping; Cherokee Seam, 36 in. thick.
 PO—Pittsburg, Kan.; SP—Scammon, Kan.; CTY—Cherokee; RR—St. Louis & S. F.
 S of H—Steam loco. Track gage 42 inches.
 S of M—Steam shovel.
 PP—Power purchased, 220 volts A. C.
 SIZES SHIPT—Nut, Lump.
 PREP. EQUIPT—Gravity Screen.

CARLSON COAL COMPANY.

GM—S. J. Carlson.....Osage City, Kan.
 GS—S. J. Carlson.....Osage City, Kan.
 SA—S. J. Carlson.....Osage City, Kan.
 Carlson No. 7 Mine; Shaft; Osage County Seams; 16 in. thick.
 PO—Osage City, Kan.; SP—Same; CTY—Osage; RR—Mo. Pac.
 S of H—Mules. Track gage 20 in.
 S of M—Electric motor and longwall mach.
 PP—Power purchased, transformer 2200-220 volts A. C.
 EMP—44. Last years tonnage 8,031.
 SIZES SHIPT—Run of Mine.
 Old information.

CARNEY CHEROKEE COAL CO.

General Office, Chicago, Ill.
 PR—W. J. Carney, Chicago, Ill.
 VP—W. R. Carney, Chicago, Ill.
 TR—Quinten Johnstone, Chicago, Ill.
 GM—J. L. Criswell, Mulberry, Kan.
 GS—J. L. Criswell, Mulberry, Kan.
 PA—H. C. Farmer, Mulberry, Kan.
 CE—C. R. Carney, Dennison, Iowa.
 SA—Midland Coal Co., Kansas City, Mo.
 Carney No. 1 Mine; Stripping; Cherokee Seam, 34 inches thick.
 PO—Mulberry, Kan.; SP—Same; CTY—Barton; RR—K. C. S.
 MS—S. O. Sampson, Mulberry, Kan.
 S of H—Mules and 4 steam locos. Track gage 36 inches.
 S of M—2 loaders.
 PP—8 fire tube boilers, 800 H. P., 10 pumps.
 PREP. EQUIPT—Shaker Screens, Conveyor, Loading Room, Picking Tables.
 EMP—62. Daily tonnage 500.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 Carney No. 2 Mine; Shaft; Cherokee Seam, 34 inches thick.
 PO—Mulberry, Kan.; SP—Same; CTY—Crawford; RR—K. C. S.
 MS—R. M. Goodman, Mulberry, Kan.
 S of H—Mules. Track gage 40 inches.
 S of M—Hand.
 PP—3 pumps.
 EMP—100. Daily tonnage 300.
 PREP. EQUIPT—Shaker Screens.

CARR COAL MINING & MFG. CO., The

General Office, Leavenworth, Kan.
 PR—F. E. Carroll, Leavenworth, Kan.
 VP—E. V. Carroll, Leavenworth, Kan.
 TR—H. P. Abernathy, Leavenworth, Kan.
 GM—F. E. Carroll, Leavenworth, Kan.
 GS—John J. Glynn, Leavenworth, Kan.
 PA—John J. Glynn, Leavenworth, Kan.
 EE—A. Shirley.
 SCO—Address the company, Buyer, R McDonald, Leavenworth, Kan.
 Carr Mine; Shaft; Leavenworth Seam, 24 in. thick.
 PO—Leavenworth, Kan.; SP—Lansing; CTY—Leavenworth; RR—A. T. & S. F. Mo P
 SM—R. McDonald, Leavenworth, Kan.
 S of H—Mules. Track gage 30 inches.

S of M—Hand.
 PP—4 fire tube boilers, 600 H. P., 6 K. W. gen. units, 220 volts D. C., 4 pumps.
 EMP—143. Last years tonnage 49,117.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Shaker Screen.

CENTRAL COAL & COKE COMPANY

General Office, Kansas City, Mo.
 PR—C. S. Keith, Kansas City, Mo.
 VP—H. N. Taylor, Kansas City, Mo.
 TR—E. E. Riley, Kansas City, Mo.
 GM—H. N. Taylor, Kansas City, Mo.
 GS—Wm. Harkes, Kansas City, Mo.
 PA—Thos. Mackie, Kansas City, Mo.
 EM—J. S. O'Flaherty, Kansas City, Mo.
 No. 45 Mine; Shaft; Cherokee Seam; 38 inches thick.
 PO—Edison, Kas.; SP—Same; CTY—Crawford; RR—Mo. P., A. T. & S. F.
 MS—W. C. Ernhart, Pittsburg, Kan.
 S of H—Mules and tail rope. Track gage 42 in.
 S of M—Hand.
 PP—5—100 H. P. fire tube boilers, 3 pumps.
 EMP—210. Last years tonnage 148,318.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.
 No. 48 Mine; Shaft; Cherokee Seam; 39 inches thick.
 PO—Edison, Kas.; SP—Same; CTY—Crawford; RR—Mo. P., A. T. & S. F.
 MS—W. C. Ernhart, Pittsburg, Kan.
 S of H—Mules. Track gage 42 inches.
 S of M—Hand.
 PP—3 100 H. P. fire tube boilers, 3 pumps.
 EMP—135. Last years tonnage 91,359.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.
 No. 49 Mine; Shaft; Cherokee Seam; 39 inches thick.
 S of H—Storage battery locos. Track PO—Nelson, Kas.; SP—Same; CTY—Crawford; RR—Kansas City Southern. gage 42 inches.
 S of M—Hand.
 MS—W. C. Ernhart, Pittsburg, Kan.
 PP—2 100 H. P. fire tube boilers, 75 K. W. gen. unit, 250 volts D. C., 3 pumps.
 EMP—160. Last years tonnage 111,311.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.
 No. 50 Mine; Shaft; Cherokee Seam; 39 inches thick.
 PO—Edison, Kas.; SP—Same; CTY—Crawford; RR—A. T. & S. F.
 MS—W. C. Ernhart, Pittsburg, Kan.
 S of H—Storage battery locos. Track gage 42 inches.
 S of M—Hand.
 PP—3 100 H. P. fire tube boilers, 75 K. W. gen. unit, 250 volts D. C., 3 pumps.
 EMP—200. Last years tonnage 122,476.
 SIZES SHIPT—Run of Mine, Nut, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.
 No. 51 Mine; Shaft; Cherokee Seam; 36 inches thick.
 PO—Edison, Kas.; SP—Same; CTY—Crawford; RR—A. T. & S. F.
 MS—W. C. Ernhart, Pittsburg, Kan.
 S of H—Storage battery locos.
 S of M—Hand.
 PP—3 100 H. P. fire tube boilers, 75 K. W. gen. unit, 250 volts D. C., 3 pumps.
 EMP—275. Last years tonnage 214,741.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

S of H—Storage battery locos. Track PO—Nelson, Kas.; SP—Same; CTY—Crawford; RR—Kansas City Southern. gage 42 inches.

S of M—Hand.
 MS—W. C. Ernhart, Pittsburg, Kan.
 PP—2 100 H. P. fire tube boilers, 75 K. W. gen. unit, 250 volts D. C., 3 pumps.
 EMP—160. Last years tonnage 111,311.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

No. 50 Mine; Shaft; Cherokee Seam; 39 inches thick.
 PO—Edison, Kas.; SP—Same; CTY—Crawford; RR—A. T. & S. F.
 MS—W. C. Ernhart, Pittsburg, Kan.
 S of H—Storage battery locos. Track gage 42 inches.
 S of M—Hand.
 PP—3 100 H. P. fire tube boilers, 75 K. W. gen. unit, 250 volts D. C., 3 pumps.
 EMP—200. Last years tonnage 122,476.
 SIZES SHIPT—Run of Mine, Nut, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

No. 51 Mine; Shaft; Cherokee Seam; 36 inches thick.
 PO—Edison, Kas.; SP—Same; CTY—Crawford; RR—A. T. & S. F.
 MS—W. C. Ernhart, Pittsburg, Kan.
 S of H—Storage battery locos.
 S of M—Hand.
 PP—3 100 H. P. fire tube boilers, 75 K. W. gen. unit, 250 volts D. C., 3 pumps.
 EMP—275. Last years tonnage 214,741.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

CHEROKEE-CRESCENT COAL COMPANY

General Office, Kansas City, Mo.
 PR—F. M. Fleming, Kansas City, Mo.
 VP—R. A. Gray, Pittsburg, Kan.
 TR—W. M. Pye, Joplin, Mo.
 GM—F. M. Fleming, Kansas City, Mo.
 GS—George Mack, Pittsburg, Kan.
 PA—F. M. Fleming, Kansas City, Mo.
 SA—Cherokee Fuel Co., Kansas City, Mo.
 No. 2 Mine; Shaft; Cherokee Seam; 38 in. thick.
 PO—Carona, Kan.; SP—Same; CTY—Cherokee; RR—Mo. Pac.
 S of H—Mules and 1 storage battery loco. Track gage 36 in.
 S of M—Hand.
 PP—2 water tube boilers, 200 H. P., 1—20 K. W. volts D. C., 2 pumps.
 EMP—50. Last years tonnage 34,625.
 SIZES SHIPT—Run of Mine, Slack.
 PREP. EQUIPT—Bar Screens.

CLEMMENS COAL CO.

General Office, Pittsburg, Kan.
 PR—Ira Clemens, Pittsburg, Kan.
 VP—G. K. Mackie, Pittsburg, Kan.
 TR—D. W. Jones, Pittsburg, Kan.
 GS—Frank Thomas, Pittsburg, Kan.
 PA—Thos. Mackie, Pittsburg, Kan.
 EM—Thos. Brown, Pittsburg, Kan.
 No. 22 Mine; Stripping; Pittsburg Seam, 36 in. thick.
 PO—Mindemines, Mo.; SP—Same; CTY—Barton; RR—Mo. Pac.
 MS—John Ryder, Mulberry, Kan.
 S of H—4 steam locos. Track gage 36 in.
 S of M—Hand.
 PP—2 80 H. P. water tube boilers, 1 pump.
 EMP—80.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.
 No. 16 Mine worked out.
 No. 17 Mine; Shaft; Pittsburg Seam 38 in. thick.
 PO—Pittsburg, Kan.; SP—Weir, Kan.; CTY—Cherokee; RR—M. K. & T.
 MS—John Davidson, Mulberry, Kan.
 S of H—Mules. Track gage, 40 in.
 S of M—Hand.
 PP—2 100 H. P. water tube boilers, 2 pumps.
 EMP—105.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.
 No. 18 Mine; Shaft; Pittsburg Seam, 36 in. thick.
 PO—Pittsburg, Kan.; SP—Same; CTY—Crawford; RR—A. T. & S. F.
 MS—J. C. Davis, Pittsburg, Kan.
 S of H—Mules. Track gage, 40 in.
 S of M—Hand.
 PP—Power purchased, transformer, 6600-440-220 volts A. C., 2 pumps.
 EMP—60.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

CONSUMERS COAL & MINING CO.

General Office, Kansas City, Mo.
 PR—J. M. Grodzins, Kansas City, Mo.
 VP—J. J. Rooney, Kansas City, Mo.
 TR—A. H. Rapp, Kansas City, Mo.
 GS—J. R. Bauman, La Cygne, Kan.
 La Cygne Mine; Shaft; Kansas Seam; 44 inches thick.
 PO—La Cygne, Kan.; SP—Same; CTY—Lion; RR—St. L. & S. F.
 S of H—Electric loco.
 S of M—Shortwall mach.
 PP—2 water tube boilers, 100 H. P.
 SIZES SHIPT—Slack, Nut, Lump.
 PREP. EQUIPT—Screens.
 Old information.

COUGHLIN COAL CO.

General Office, Osage City, Kan.
 PR—J. T. Coughlin, Osage City, Kan.
 VP—J. F. Graham, Osage City, Kan.
 TR—Martin Coughlin, Osage City, Kan.
 GM—Martin Coughlin, Osage City, Kan.
 GS—J. T. Coughlin, Osage City, Kan.
 SA—Black Diamond Coal Co., Osage City, Kan.
 Coughlin Mine; Shaft; Seams, 16-18 in. thick.
 PO—Osage City, Kan.; SP—Peterson, Kan.; CTY—Osage; RR—A. T. & S. F.
 S of H—Mules. Track gage, 18 in.
 S of M—Hand.
 SIZES SHIPT—Run of Mine.

CROWE COAL COMPANY.

General Office, Dwight Bldg., Kansas City, Mo.
 PR—J. R. Crowe, Jr., Kansas City, Mo.
 VP—H. D. Buchanan, Kansas City, Mo.
 TR—H. D. Buchanan, Kansas City, Mo.
 GM—R. A. Gray, Pittsburg, Kan.
 Asst. Mgr.—W. C. Shank, Pittsburg, Kan.
 PA—A. J. Brady, Kansas City, Mo.
 EM—W. E. Besheers, Pittsburg, Kan.
 EE—Joseph Sharp, Croweburg, Kan.
 SA—Cherokee Fuel Co., Kansas City, Mo.
 No. 14 Mine; Shaft; Cherokee Seam, 34 inches thick.
 PO—Croweburg, Kan.; SP—Croweburg & Mulberry, Kan.; CTY—Crawford; RR—St. L. & S. F.
 MS—R. Luke, Croweburg, Kan.
 S of H—Mules and 2 storage battery locos. Track gage 35 inches.
 S of M—Hand.
 PP—Power purchased. Transformer 22,000-400 volts, A. C. motor gen. sets, 125 volts, D. C., 2 fire tube boilers 150 H. P., 6 pumps.
 EMP—83. Last years tonnage 62,284.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Shaker Screens.
 (Continued on Next Page)

Crowe Coal Co.—Cont.

No. 15 Mine; Shaft; Cherokee Seam; 33 in. thick.
PO—Crawford, Kan.; SP—Same; CTY—Crawford, RR—St. L. & S. F.
MS—R. Luke, Crowburg, Kan.
S of H—Mules. Track gage 35 1-2 in. S of M—Hand.
PP—Power purchased. Transformer 2,200 to 440 volts A. C. M. G. sets, 125 volts D. C. 2 fire tube boilers 250 H. P. 2 pumps.
EMP—65. Last years tonnage 46,292.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.
No. 16 Mine; Shaft; Cherokee Seam; 36 inches thick.
PO—Crawford, Kan.; SP—Same; CTY—Crawford, RR—St. L. & S. F.
MS—R. Luke, Crowburg, Kan.
S of H—Mules. 2 storage battery locos. Track gage 35 1-2 inches.
S of M—Hand.
PP—2 fire tube boilers 250 H. P. 1 30 K. W. gen. unit, 125 volts D. C. 2 pumps.
EMP—127. Last years tonnage 87,383.
SIZES SHIPT—Run of mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

No. 20 Mine; Shaft; Cherokee Seam, 42 inches thick.
PO—Pittsburg, Kan.; SP—West Mineral, Kan.; CTY—Crawford; RR—M. K. & T.
S of H—Mules and 2 storage battery locos. Track gage 35 1/2 inches.
S of M—Hand.
PP—2 fire tube boilers, 200 H. P. 1—30 K. W. gen. unit, 125 volts D. C.
EMP—95. Last years tonnage 56,523.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.
NOTE—This mine leased to the Edw. Ryan Coal Company.

No. 21 Mine; Shaft; Cherokee Seam; 32 inches thick.
PO—Crawburg, Kan.; SP—Same; CTY—Crawford; RR—St. L. & S. F.
MS—R. Luke, Crowburg, Kan.
S of H—3 storage battery locos. Track gage 40 inches.
S of M—Hand.
PP—Power purchased. Transformer 2,200-440 volts, A. C. motor gen. sets, 440 volts, D. C. 1 60 H. P. fire tube boiler, 2 pumps.
EMP—87. Last years tonnage 75,554.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

No. 22 Mine; Stripping; Cherokee Seam, 46 inches thick.
PO—Scammon, Kan.; SP—Same; CTY—Cherokee; RR—St. L. & S. F.
MS—Dan. Miller, Sr., Scammon, Kan.
S of H—2 steam locos. Track gage 42 inches.
S of M—Hand.
PP—Power purchased. Transformer 6,600-440 volts, A. C. motor gen. sets, 440 volts, D. C. 1 60 H. P. fire tube boiler, 5 pumps.
EMP—30. Last years tonnage 27,810.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

No. 23 Mine; Stripping; Cherokee Seam; 48 inches thick.
PO—Scammon, Kan.; SP—Same; CTY—Cherokee; RR—St. L. & S. F.
MS—Dan. Miller, Sr., Scammon, Kan.
S of H—2 steam locos. Track gage 42 inches.
S of M—Hand.
PP—Power purchased. Transformer 6,600-440 volts, A. C. motor gen. sets, 440 volts, D. C. 4 pumps.
EMP—32. Last years tonnage 46,244.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.
NOTE—Successors to the J. R. Crowe Coal & Mining Co.

DEAN COAL & MINING CO.

General Office, Dwight Bldg., Kansas City, Mo.
PR—H. C. Campbell, Kansas City, Mo.
TR—H. C. Campbell, Kansas City, Mo.
GM—H. C. Campbell, Kansas City, Mo.
GS—Wm. Van Duker, R. R. No. 2, Mulberry, Kan.
PA—Wm. Van Duker, R. R. No. 2, Mulberry, Kan.
SA—Cherokee Fuel Co., Kansas City, Mo.
No. 1 Mine; Stripping; Cherokee Seam, 34 in. thick.
PO—Mulberry, Kan. SP—Fuller, Kan. CTY—Crawford. RR—Kansas City Sub.
S of H—2 steam locos. Track gage 36 in.
S of M—1 steam shovel and loader.
EMP—38. Last years tonnage 40,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

DITTMANN-WACHTER COAL CO.

General Office, Frontenac, Kan.
PR—Fred Dittmann, Frontenac, Kan.
EE—Fred Dittmann, " "
TR—Peter Wachter, " "
GM—Peter Wachter, " "
GS—A. H. Tennant, R. R. No. 1, Pittsburg, Kan.
PA—Peter Wachter, Frontenac, Kan.
EM—W. R. Fox, 107 W. Park, Pittsburg, Kan.
Sales Agency, Jackson-Walker Coal & Mining Co., Commerce Bldg., Kansas City, Mo.
Nos. 1, 2 and 3 Mines; Shafts; Cherokee Seam, 36 inches thick.
PO—Frontenac, Kan. SP—Same. CTY—Crawford. RR—A. T. & S. F.
S of H—Mules. Track gage 40 in. S of M—Hand.
PP—Power purchased. Transformer, 35,000 to 440-220 volts A. C. 1 boiler, 25 H. P. 3 pumps.
EMP—111. Last years tonnage 16,577.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

DOMESTIC FUEL COMPANY (THE).

General Office, Globe Bldg., Pittsburg, Kan.
PR—A. H. Schlanger, Pittsburg, Kan.
VP—G. K. Mackey, Lawrence, Kans.
TR—C. M. Sweeney, Pittsburg, Kan.
GS—Frank Thomas, Pittsburg, Kan.
PA—Thos. Mackie, Pittsburg, Kan.
EM—Thos. Brown, Pittsburg, Kan.
SA—Mackie-Clemens Fuel Co., Kansas City, Mo.
No. 12-225-B-shovels Mine; Stripping; Cherokee Pittsburg Seam, 28-34 in. thick.
PO—Pittsburg, Kan.; SP—Mulberry, Kan.; CTY—Barton; RR—St. L. & S. F.
MS—Geo. Elliot, Mulberry, Kan.
S of H—3 locos. Track gage 42 in. S of M—Hand.
PP—1 80 H. P. fire tube boiler, 5 pumps.
EMP—70. Last years tonnage 50,000.
SIZES SHIPT—Slack, Lump, Nut.
PREP. EQUIPT—Shaker Screens.

No. 2 Mine; Shaft; Cherokee Pittsburg Seam.
PO—Arcadia, Kan.; SP—Same; CTY—Crawford; RR—A. T. & S. F.
MS—Wm. Morris, Arcadia, Kan.
S of M—Hand.
PP—1 125 H. P. fire tube boiler, 2 pumps.
S of H—Mules. Track gage 40 inches.
EMP—70. Last fiscal year output, 28,739 tons.
SIZES SHIPT—Slack, Lump, Nut.
PREP. EQUIPT—Gravity and Shaker Screens.

DOUBLEDAY COAL COMPANY.

Owner—F. E. Doubleday, Fort Scott, Kan.
GM—F. E. Doubleday, Jr., Fort Scott, Kan.
No. 1 Mine; Shaft; Pittsburg Seam, 34 in. thick.
PO—Gross, Kan. SP—Horse, Kan. CTY—Crawford; RR—St. L. & S. F.
MS—Charles Spensberger, Gross, Kan.
S of H—Mules. Track gage 36 in. S of M—Hand.
PP—1 100 H. P. fire tube and 1 80 H. P. water tube boilers, 2 pumps.
EMP—180. Last year tonnage 105,000.
SIZES SHIPT—Run of Mine, Slack, Lump Nut.
PREP. EQUIPT—Shaker Screens.

ELLIOTT, GEO. COAL MINING CO.

OWNER—George Elliott, Burlingame, Kan.
SA—Salina Produce Co., Salina, Kan.
Comet Mine; Shaft; Coal Seam, 20 in. thick.
PO—Burlingame, Kan. SP—Same CTY—Osage; RR—A. T. & S. F.
MS—George Elliott, Burlingame, Kan.
S of H—Mules and steam loco. Track gage 17 inches.
S of M—2 longwall machs.
PP—Gen. units 1—32 K. W. 250 volts D. C. 1—fire tube boiler, 25 H. P.
EMP—28. Last fiscal year output, 5,031 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

ELLSWORTH COAL CO., THE.

PR—A. C. Ellsworth, Pittsburg, Kan.
SECY—H. H. Ellsworth, " "
TR—H. H. Ellsworth, " "
Sales Agency, Pittsburg & Midway Coal Mining Co., Pittsburg, Kan.
No. 101 Mine; Stripping; Cherokee-Pittsburg Seam, 34 inches thick.
PO—Mindon Mines, Kan. SP—Same; CTY—Barton; RR—A. T. & S. F. M. P.

MS—W. S. Little, Pittsburg, Kan.
S of H—1 steam loco. Track gage 42 in.
S of M—Steam shovels.
PP—2 return tubular boilers, total 200 H. P. 1 air compressor and 1 pump.
EMP—90. Last years tonnage 83,710.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

FLEMING COAL CO.

General Office, Kansas City, Mo.
PR—J. M. Fleming, Kansas City, Mo.
VP—A. H. Skidmore, Columbus, Kan.
TR—W. M. Pye, Joplin, Mo.
GM—J. M. Fleming, Kansas City, Mo.
GS—Geo. Mack, Pittsburg, Kan.
PA—J. M. Fleming, Kansas City, Mo.
SA—Cherokee Fuel Co., Kansas City, Mo.
No. 3 Mine; Stripping; Cherokee Seam, 36 in. thick.
PO—Scammon, Kan.; SP—Turck, Kan.; CTY—Cherokee; RR—Frisco.
S of H—Mules and 1 storage battery and 1 steam loco. Track gage 36 inches.
S of M—Hand.
PP—2 water tube boilers, 100 H. P. 1—20 K. W. volt D. C., 5 pumps.
EMP—40. Last years tonnage 28,249.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

GIRARD COAL COMPANY.

General Office, Kansas City, Mo.
PR—J. R. Crowe, Jr., Kansas City, Mo.
GM—J. M. Fleming, Kansas City, Mo.
GS—George Mack, Pittsburg, Kan.
PA—George Mack, Pittsburg, Kan.
EM—James C. Brown, Pittsburg, Kan.
Sales Agent, Cherokee Fuel Co., Kansas City, Mo.
No. 7 Mine; Shaft; Cherokee Seam, 30 in. thick.
PO—Pittsburg, Kan.; SP—Radley, Kan.; CTY—Crawford; RR—A. T. & S. F.
S of H—Mules and 1 trolley pole type elec. loco. Track gage 36 in.
S of M—Hand.
PP—1 return tubular boiler, 1 gen. unit, 250 volts D. C., 3 pumps.
EMP—100. Last years tonnage 57,400.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

GIRARD FUEL COMPANY.

Property leased to Young Coal Co.
General Office, Frontenac, Kan.
OWNER—Ezio Farneti, Frontenac, Kan.
SA—Snelair Coal Company, Kansas City, Mo.

Gubbio No. 2 Mine; Shaft; Bituminous Seam, 36 in. thick.
PO—Fuller, Kan.; SP—Same; CTY—Crawford; RR—K. C. S.
S of H—Mules. Track gage 40 in. S of M—Hand.
EMP—25. Last years tonnage 22,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screen.

THE HAMILTON COAL & MERCANTILE COMPANY.

General Office, Weir, Kan.
PR—James Hamilton, Weir, Kan.
GM—James Hamilton, Weir, Kan.
GS—W. R. Hamilton, Weir, Kan.
PA—James Hamilton, Weir, Kan.
CE—James Brown, Pittsburg, Kan.
EE—Lud Kelly, Cherokee, Kan.
SC—Address the Company, Buyer, Frank Sessler, Cherokee, Kan.
SA—Hamilton Coal & Coke Co., Dwight Bldg., Kansas City, Mo.
Hamilton No. 6 Mine; Shaft; Cherokee Seam, 42 in. thick.
PO—Cherokee, Kan.; SP—Same; CTY—Crawford; RR—Frisco.
MS—Geo. Fulton, Cherokee, Kan.
S of H—Mules, 1 storage battery and 2 gasoline locos. Track gage 36 inches.
S of M—Hand.
PP—Power purchased. Transformer 220 volts, M. G. Set, 220 volts D. C., 2 pumps.
EMP—100. Last years tonnage 36,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.
Hamilton No. 8 Mine; Shaft; Cherokee Seam, 42 inches thick.
PO—Arma, Kan.; SP—Same; CTY—Crawford; RR—Mo. P.
MS—Dick Borland, Arma, Kan.
S of H—Mules, Track gage 40 inches.
S of M—Hand.
PP—2 150 H. P. fire tube boilers, 2 pumps.
EMP—50. Last years tonnage 1,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.
Hamilton No. 9 Mine; Shaft; Cherokee Seam, 12 inches thick.
PO—Cherokee, Kan.; SP—Same; CTY—Crawford; RR—Frisco.

MS—John Hobbs, Cherokee, Kan.
S of H—4 storage battery motors.
S of M—Hand.
PP—Power purchased. Transformer 11,000 to 440 volts A. C. M. G. Sets, 440 volts D. C., 1 pump.
EMP—100. Daily tonnage 300.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

HOME RIVERSIDE COAL MINES CO.

General Office, Leavenworth, Kan.
PR—E. W. Snyder, Leavenworth, Kan.
VP—P. T. White, Cleveland, Ohio.
TR—C. N. Fish, Leavenworth, Kan.
GM—C. N. Fish, Leavenworth, Kan.
GS—C. N. Fish, Leavenworth, Kan.
PA—E. P. Reilly, Leavenworth, Kan.
EM—C. N. Fish, Leavenworth, Kan.
EE—E. P. Reilly, Leavenworth, Kan.
SA—E. P. Reilly, Leavenworth, Kan.

Mine No. 1; Shaft, "Leavenworth" Seam; 22 in. thick.
PO—Leavenworth, Kan.; SP—Same; CTY—Leavenworth. RR—Mo. Pac.
MS—James Barr, Leavenworth, Kan.
S of H—Mules, 2 trolley pole locos. Track gage, 30 in.
S of M—Hand. 5 longwall machs.
PP—3 return tubular boilers, 450 H. P. 2 hoisting engines, gen. units, 250 volts D. C. 4 pumps.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.
Note—This mine is not working at present.

Mine No. 2; Shaft; "Leavenworth" Seam; 22 in. thick.
PO—Leavenworth, Kan.; SP—Same; CTY—Leavenworth. RR—U. P.
MS—James Graham, Leavenworth, Kan.
S of H—Mules. Track gage 22 in. S of M—Hand.
PP—3 return tubular boilers, total 300 H. P. 3 hoisting engines, 5 gen. units, 3 pumps.
EMP—233. Last years tonnage 72,381.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.
Old Information.

HORSLEY-ORR COAL COMPANY

General Office, Columbus, Kan.
TR—James A. Orr, Columbus, Kan.
GM—Thos. Horsley, Weir, Kan.
GS—Thos. Horsley, Weir, Kan.
PA—James A. Orr, Columbus, Kan.
SA—John Veatch, Columbus, Kan.

Horsley-Orr Mine; Shaft; Cherokee Seam, 42 inches thick.
PO—Columbus, Kan.; SP—Scammon, Kan.; CTY—Cherokee; RR—St. L. & S. F.
S of H—Mules. Track gage 31 inches.
S of M—Hand.
PP—Purchase power, 550 volts, 1—25 H. P. fire tube boiler.
EMP—12. Last years tonnage 7,155.
SIZES SHIPT—Run of Mine.

ITALIANI COAL COMPANY

PR—John Italiani, Weir, Kan.
GM—John Italiani, " "
GS—James Lavery, " "
Italiani Mine; Stripping; 36 in. thick.
PO—Weir, Kan.; SP—Same; CTY—Cherokee; RR—Frisco. Pittsburg-Scammon Br.
S of H—4 steam and 4 gasoline locos.
S of M—Hand.
Daily output, 250 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
(old information.)

JACKSON-WALKER COAL & MINING CO.

General Office, Kansas City, Mo.
PR—C. P. A. Clough, Kansas City, Mo.
TR—J. A. Parkinson, " "
GS—Joseph Fletcher, Frontenac, Kan.
PA—R. R. Miller, Kansas City, Mo.
EE—A. J. Fletcher, Frontenac, Kan.
EM—W. B. Fox, Frontenac, Kan.
SC—Jackson-Walker Merc. Co. Buyer, R. E. Taylor, Frontenac, Kan.
SA—G. H. Parker, 1510 Commerce Bldg., Kansas City, Mo.
No. 11 Mine; Shaft; Cherokee Seam, 36 to 42 in. thick.
PO—Frontenac, Kan.; SP—Same; CTY—Crawford; RR—A. T. & S. F.
MS—Chas. Fletcher, Frontenac, Kan.
S of H—Mules and trolley pole type loco. Track gage 36 inches.
S of M—Hand.
PP—Power purchased. Transformer 2,200 to 220 volts, motor gen. sets, 250 volts D. C.
EMP—250. Daily tonnage 500.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.
No. 15 Mine; Shaft; Cherokee Seam, 36 to 42 in. thick.
PO—Frontenac, Kan.; SP—Same; CTY—Crawford; RR—A. T. & S. F.

(Continued on Next Page)

Jackson-Walker Coal & Mining Co.—Cont.
MS—Thos. Murphy, Frontenac, Kan.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—Power purchased. Transformer 2,400 to 220 volts A. C. 2 water tube boilers 160 H. P., 1 pump.
EMP—90. Daily tonnage 210.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

No. 16 Mine; Shaft; Cherokee Seam, 36 to 42 in. thick.
PO—Frontenac, Kan.; SP—Same; CTY—Crawford; RR—A. T. & S. F.
MS—James Jones, Pittsburg, Kan.
S of H—Mules and trolley pole type locos. Track gage 36 in.
S of M—Hand.
PP—Power purchased. Transformer 2,300-220 volts A. C.
EMP—250. Daily tonnage 600.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity and Shaker Screens.

No. 17 Mine; Shaft; Cherokee Seam, 36 in. thick.
PO—Frontenac, Kan. SP—Same. CTY—Crawford; RR—A. T. & S. F.
MS—Jos. Murphy, Frontenac, Kan.
S of H—Mules. Track gage 36 in.
S of M—Elec. and comp. air locos.
PP—Power purchased. Transformer 2,300 to 220 volts A. C. 2 Marine type boilers.
EMP—260. Daily tonnage 700.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity and Shaker Screens.

JONES & DAVIS COAL CO.

Out of business.

KANSAS STATE PENITENTIARY

General Office, Lansing, Kan.
STATE PRISON WARDEN—M. F. Amrine, Lansing, Kan.
STATE BUSINESS MGR—James A. Kimball, Topeka, Kan.
GS—Levi L. Day, Lansing, Kan.
CE—W. A. Harmon, Lansing, Kan.
SCO—Prison Store, Buyer, W. O. Thomas, Lansing, Kan.

Kansas Mine; Shaft; Deep Vein Seam; 22 inches thick.
PO—Lansing, Kan.; SP—Same; CTY—Leavenworth; RR—A. T. & S. F. & U. P.
S of H—Mules. Track gage 22 inches.
S of M—Hand.
PP—4 100 H. P. water tube boilers, 2 pumps.
EMP—180. Last years tonnage 60,000.
SIZES SHIPT—Lump.
PREP. EQUIPT—Gravity Screens.

LABOR EXCHANGE COAL ASSOCIATION.

VP—Geo. Harris, Scranton, Kan.
PR—D. Schneider, Scranton, Kan.
TR—James Wilson, Scranton, Kan.
GM—James Wilson, Scranton, Kan.
PA—Edward Barraclough, Scranton, Kan.
SCO—Address the company—Buyer, Henry Gilley, Scranton, Kan.

Labor Exchange Mine; Shaft; Seam, 22 in. thick.
PO—Scranton, Kan. CTY—Osage. RR—A. T. & S. F.
MS—Henry Gilley, Scranton, Kan.
S of H—Mules. Track gage 19 in.
S of M—Hand.
PP—20 pumps.
EMP—23. Last years tonnage 4,800.
SIZES SHIPT—Run of Mine, Lump.

LARSON BROS. COAL CO.

General Office, Weir, Kan.
TR—John Larson, Weir, Kan.
GM—L. A. Larson, Weir, Kan.
PA—John Larson, Weir, Kan.
SA—John Veatch, Weir, Kan.

Larson Bros. Mine; Shaft and Stripping; Cherokee Seam, 46 inches thick.
PO—Weir, Kan.; SP—Same; CTY—Cherokee; RR—St. L. & S. F.
MS—L. A. Larson, Weir, Kan.
SM—John Larson, Weir, Kan.
S of H—Mules. Track gage 29 in.
S of M—Hand.
PP—2 water tube boilers, 60 H. P., 2 pumps.
EMP—15. Last fiscal year output, 10,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity, Revolving and Shaker Screens.

LIBERTY COAL CO.

PR—James McCulloch, Mulberry, Kan.
VP—James McCulloch, Mulberry, Kan.
GM—Albert Cameron, Mulberry, Kan.
GS—Albert Cameron, Mulberry, Kan.
PA—James McCulloch, Mulberry, Kan.

Grey Wolf Mine; Slope; Seam, 32 in. thick.
PO—Mulberry, Kan.; SP—Same; CTY—Crawford; RR—St. L. & S. F.

S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—Power purchased, 1 pump.
Daily tonnage 50.
SIZES SHIPT—Run of Mine.

McGRATH, GEO. T. COAL CO. (THE).

General Office, 417 Globe Bldg., Pittsburg, Kan.
PR—Geo. T. McGrath, Pittsburg, Kans.
VP—W. H. Anderson, Pittsburg, Kans.
TR—E. L. McGrath, Pittsburg, Kans.
GM—Geo. T. McGrath, Pittsburg, Kans.
PA—Geo. T. McGrath, Pittsburg, Kans.
EM—Robert Gillmore, Jr., Pittsburg, Kan.
SA—Central Coal & Coke Co., Kansas City, Mo.

McGrath No. 2 Mine; Shaft; Cherokee Seam, 43 in. thick.
PO—Pittsburg, Kan.; SP—Same; CTY—Crawford; RR—A. T. & Santa Fe.
MS—Geo. T. McGrath, Pittsburg, Kan.
S of H—Mules and steam locos. Track gage, 36 in.
S of M—Hand.
PP—1 80 H. P. fire tube boiler, 3 pumps.
EMP—55. Daily tonnage 250.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

MACKIE, GEO. K. FUEL CO., TRE

General Office, Scammon, Kan.
PR—Geo. K. Mackie, Scammon, Kan.
VP—J. W. Mackie, Scammon, Kan.
TR—Geo. K. Mackie, Scammon, Kan.
MS—Mackie H. and Mackie J. Mines; Shafts; Cherokee Seam, 28 to 48 in. thick.
PO—Scammon, Kan.; SP—Same and Mineral, Kan.; CTY—Cherokee.
MS—John W. Morton, Scammon, Kan.
S of H—Mules. Track gage 40 in.
S of M—Hand.
PP—4 return tubular boilers, total 500 H. P.; 4 pumps.
EMP—205. Last years tonnage 111,000.

MALLAMS-HALSTEAD COAL CO.

General Office, Weir, Kan.
PR—John G. Mallams, Weir, Kan.
VP—Wm. Halstead, Weir, Kan.
TR—Richard Mallams, Weir, Kan.
SA—Weir City Coal Co., Weir, Kan.

No. 1 Mine; Shaft; Bottom Seam, 44 in. thick.
PO—Weir, Kan. SP—Same. CTY—Cherokee. RR—Frisco.
MS—John G. Mallams, Weir, Kan.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—1 boiler, total 35 H. P.
EMP—15. Last fiscal year output, 13,116 tons.
SIZES SHIPT—Run of Mine, MHL Coal, Lump.
Old Information.

MAYER COAL COMPANY (THE).

General Office, Kansas City, Mo.
PR—John Mayer, Kansas City, Mo.
VP—A. J. Mayer, Parsons, Kan.
TR—K. S. Mayer, Kansas City, Mo.
GM—John Mayer, Kansas City, Mo.
PA—John Mayer, Kansas City, Mo.

Katy No. 2 Mine; Shaft; Pittsburg Seam, 34 to 42 in. thick.
PO—Radley, Kan.; SP—Same; CTY—Crawford; RR—A. T. & S. F.
S of H—Mules. Track gage 42 in.
S of M—Hand.
PP—1 return tubular boiler, total 40 H. P., 1 gen. unit, 440 volts A. C., 3 phase, 60 cycles. Purchase power.
EMP—100.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

Katy No. 3 Mine worked out.

Katy No. 4 Mine; Sb ft; Weir City Seam, 40 in. thick.
PO—Weir, Kan. SP—Cherokee, Kan. CTY—Cherokee. RR—St. L. & S. F.
S of H—Mules. Track gage 42 in.
S of M—Hand.
PP—Return tubular boilers, total 250 H. P.
EMP—100.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

NOTE—Katy No. 5 Mine worked out.

Katy No. 6 Mine; Shaft; Weir City Seam, 36 to 44 in. thick.
PO—West Mineral, Kan.; SP—Same; CTY—Cherokee; RR—M. K. & T.
S of H—Mules.
S of M—Hand.
EMP—125.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

Katy No. 7 Mine; Shaft; Weir City Seam, 36 to 46 in. thick.
PO—Scammon, Kan. SP—Cherokee. CTY—Cherokee. RR—Mo. Pac.
S of H—Mules. Track gage 40 in.
S of M—Hand.

PP—Return tubular boiler, total 150 H. P., 3 pumps.
SIZES SHIPT—Run of Mine, Nut, Lump, Slack.
PREP. EQUIPT—Shaker Screens.
NOTE—Katy No. 9 Mine worked out.

No. 11 F Mine; Shaft; Weir City Seam, 36 to 44 in. thick.
PO—West Mineral, Kan.; SP—Same; CTY—Cherokee; RR—M. K. & T.
S of H—Mules. Track gage 42 in.
S of M—Hand.
PP—2 return tubular boilers, total 300 H. P., 1 pump.
EMP—100.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

MENGHINI COAL COMPANY

PR—A. Menghini, Frontenac, Kan.
TR—Peter Menghini, Frontenac, Kan.
MS—Menghini Mine; Stripping; First Vein Seam; 24 inches thick.
PO—Frontenac, Kans. SP—Same. CTY—Crawford; RR—A. T. & S. F.
MS—John Valentine, Pittsburg, Kans.
S of H—2 steam locos.
S of M—2 steam shovels.
PP—Power purchased, 5 pumps.
EMP—30. Last years tonnage 32,500.
SIZES SHIPT—Run of Mine.

MINERS' FUEL COMPANY.

General Office, Osage City, Kan.
PR—A. V. Erickson, Osage City, Kan.
VP—Ellis Johnson, Osage City, Kan.
GM—Edw. Clift, Jr., Osage City, Kan.
GS—Edw. Clift, Jr., Osage City, Kan.
PA—Edw. Clift, Jr., Osage City, Kan.

Red Top Mine; Shaft; Osage Trump Seam; 14 to 20 in. thick.
PO—Osage City, Kan.; SP—Same; CTY—Osage; RR—Mo. Pacific.
S of H—Mules. Track gage 20 in.
S of M—2 longwall machs.
PP—Power purchased. Transformer 2200-250 volts A. C., M. G. Set, 250 volts D. C.
EMP—60. Last years tonnage 8,000.

Miners Fuel No. 2 Mine; Shaft; Osage City-Lump Seam, 16 in. thick.
PO—Osage City, Kan.; SP—Same; CTY—Osage; RR—Mo. Pac.
MS—C. R. Anderson, Osage City, Kan.
S of H—Mules. Track gage 20 in.
S of M—2 longwall machs.
PP—Power purchased, 250 volts D. C.
EMP—35. Last years tonnage 8,000.
SIZES SHIPT—Lump.

OSAGE CITY LABOR EXCHANGE

General Office, Osage City, Kan.
PR—Wm. Peppworth, Osage City, Kan.
VP—Reese Jenkin, Osage City, Kan.
GM—John Gotsinger, Osage City, Kan.
GS—John Gotsinger, Osage City, Kan.
PA—John Gotsinger, Osage City, Kan.

No. 4 Mine; Shaft; Osage Seam; 14 inches thick.
PO—Osage City, Kan.; SP—Same; CTY—Osage; RR—A. T. & S. F., Mo. Pacific.
S of H—1 trolley pole type loco. Track gage 20 inches.
S of M—2 longwall machs.
PP—Power purchased. Transformer 2,300-230 volts A. C., M. G. Sets, 250 volts D. C.
EMP—60. Last years tonnage 13,000.
SIZES SHIPT—Run of Mine.

OSCAR MANLEY COAL COMPANY.

Property worked out and abandoned.

PANKINN, A. W., COAL CO.

General Office, Weir, Kan.
PR—A. W. Pankinn, Weir, Kan.
No. 10 1/2 Mine; Shaft; Bituminous Seam; 48 inches thick.
PO—Scammon, Kan.; SP—Same; CTY—Cherokee; RR—St. L. & S. F.
MS—J. Maxwell, Sr., Scammon, Kan.
S of H—Mules.
S of M—Hand.
PP—Power purchased. 1 fire tube boiler, and 1 pump.
EMP—35.
SIZES SHIPT—Run of Mine.

PATTON COAL & MINING COMPANY, TRE.

General Office, Frontenac, Kan.
PR—J. S. Patton, Frontenac, Kan.
TR—M. R. Patton, Frontenac, Kan.
GM—J. S. Patton, Frontenac, Kan.
GS—Emil Minichetti, Frontenac, Kan.
PA—S. I. Patton, Frontenac, Kan.
SCO—Address the company. Buyer, S. I. Patton, Frontenac, Kan.
SA—Central Coal & Coke Co., Kansas City, Mo.

No. 22 Mine; Stripping; Lighting Creek Seam, 24 in. thick.
PO—Frontenac, Kan.; SP—Same; CTY—Crawford; RR—A. T. & S. F.
S of H—Mules, rope and steam locos. Track gage, 50 1/2 in.
S of M—Steam shovel.
PP—Power purchased. Transformer 2300-220 volts, M. G. sets, 250 volts D. C. 1 fire tube boiler, 50 H. P., 2 water tube boilers, 75 H. P., 10 pumps.

EMP—33. Last years tonnage, 30,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Gravity and Shaker Screens.

No. 4 Mine; Shaft; Pittsburg Seam, 38 inches thick.
PO—Frontenac, Kan.; SP—Same; CTY—Crawford; RR—A. T. & S. F.
SM—Andrew Handlerlein, Frontenac, Kan.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—Purchase power, 220 volts A. C., 3 phase 60 cycles, 1 pump.
EMP—85. Last fiscal year output, 30,000 tons.
SIZES SHIPT—Run of Mine.
No. 5 Mine; Shaft; Pittsburg Seam, 34 in. thick.
PO—Frontenac, Kan.; SP—Same; CTY—Crawford; RR—Mo. P.
MS—Frank Wolf, Pittsburg, Kan.
S of M—Hand.
PP—3 pumps.
EMP—30. Daily tonnage 50.
SIZES SHIPT—Run of Mine.

PIERCE COAL COMPANY.

Now part of Carney Cherokee Coal Co.

PITTSBURG & MIDWAY COAL MINING CO.

PR—C. F. Spencer, Pittsburg, Kan.
TR—W. O. Myers, Pittsburg, Kan.
GM—C. F. Spencer, Pittsburg, Kans.
GS—L. E. Compton, Pittsburg, Kans.
PA—L. E. Compton, Pittsburg, Kan.
EM—J. E. Donohoe, Pittsburg, Kan.
SCO—Address the company. Buyer, D. R. Kerr, Pittsburg, Kan.
Gen. Sales Mgr.—A. F. McElhelne, Kansas City, Mo.

No. 11 Mine; Stripping; S. E. Kansas Seam; 36 inches thick.
PO—Pittsburg, Kans.; SP—Same; CTY—Crawford; RR—Mo. Pac., A. T. & S. F.
MS—A. F. Yarebo, Pittsburg, Kan.
S of H—2 steam locos. Track gage 42 inches.
S of M—Steam shovel.
PP—1 water tube boiler, 150 H. P., 6 pumps.
EMP—45. Last years tonnage 46,804.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

PITTSBURG-NORTHERN COAL CO.

General Office, Kansas City, Mo.
PR—J. M. Fleming, Kansas City, Mo.
VP—J. R. Crowe, Jr., Kansas City, Mo.
TR—H. D. Buchanan, Kansas City, Mo.
GM—J. M. Fleming, Kansas City, Mo.
GS—George Mack, Pittsburg, Kan.
PA—J. M. Fleming, Kansas City, Mo.
SA—Cherokee Fuel Co., Kansas City, Mo.

No. 8 Mine; Shaft; Cherokee Seam, 38 in. thick.
PO—Pittsburg, Kan.; SP—Arma; Kan.; CTY—Crawford; RR—Mo. Pac.
S of H—Mules and 2 storage battery locos. Track gage 36 inches.
S of M—Hand.
PP—3 return tubular boilers, total 300 H. P., 2 pumps.
EMP—125. Last years tonnage 78,090.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

PLEASANTON COAL & MINING CO., INC., THE

General Office, Pleasanton, Kan.
PR—S. Pallucca, Pleasanton, Kan.
VP—C. Mendichi, Pleasanton, Kan.
TR—G. Roldelli, Pleasanton, Kan.
GM—S. Pallucca, Pleasanton, Kan.
GS—S. Pallucca, Pleasanton, Kan.

Pleasanton Mine; Shaft; Seam 28 inches thick.
PO—Pleasanton, Kan.; SP—Same; CTY—Lynn; RR—M. O. P.
S of H—Mules, steam locos. Track gage 36 inches.
S of M—Longwall machs.
PP—Power purchased. Transformer 2,300 to 220 volts A. C.
EMP—30. Daily output, 75 tons.
SIZES SHIPT—Block, Lump.
PREP. EQUIPT—Bar Screens, Old Information.

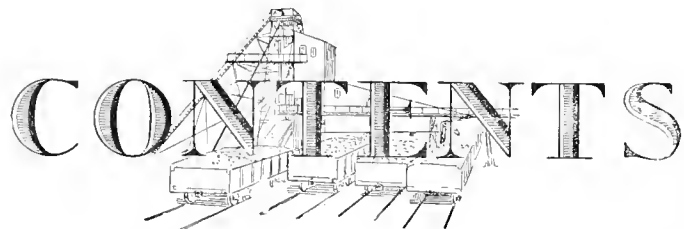
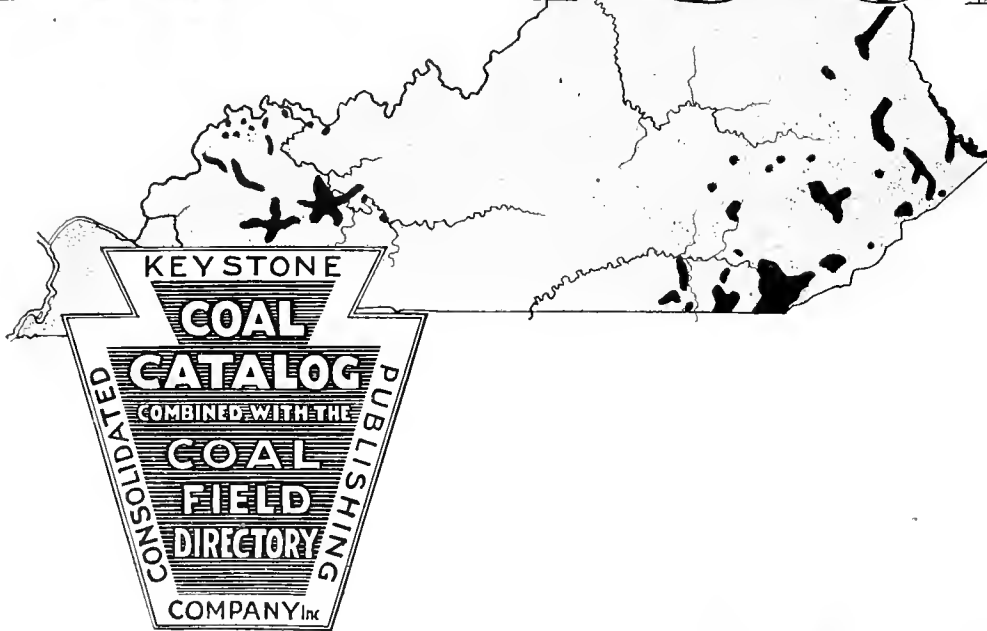
PORPHIR COAL COMPANY

General Office, Pittsburg, Kan.
PR—John Simion, Pittsburg, Kan.
PA—John Simion, Pittsburg, Kan.

No. 1 Mine; Shaft; Cherokee Seam, 36-48 inches thick.
PO—Pittsburg, Kan.; SP—Same; CTY—Crawford; RR—J. & P. Elec. & K. C. S.
MS—Elmer Porphir, Pittsburg, Kan.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—Purchase power. 1 water tube boiler, 35 H. P., 220 volts A. C., 3 pumps.
EMP—35. Daily tonnage 150.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.
(Continued on Next Page)

COAL CATALOG

KENTUCKY



Map of Mining Fields.....	Opp. 448
Sectional View of Coal Formations.....	Opp. 449
General Description of Coal Resources.....	449
Sulphur in Kentucky Coals.....	450
Eastern Kentucky—Appalachian Coal Basin....450	
Elkhorn Seam.....450	High Splint Seam....453
Amburgy Seam.....451	Leonard Seam.....453
Millers Creek Seam..451	Keokee Seam.....453
Freeburn Seam.....451	Cornett Seam.....454
Upper Thacker Seam.451	Hazard Seam....454
Lower Thacker Seam.451	Fire Clay Seam.....454
Harlan Seam.....452	Flag Seam.....454
Straight Creek Seam.452	Miscellaneous Seams.455
Wallins Seam.....452	Cannel Coals of Ky..455
Western Kentucky—Eastern Interior Coal Fields.455	
No. 12 Seam.....455	No. 14 Seam.....457
No. 11 Seam.....456	Nebo Seam.....457
No. 9 Seam.....456	Mannington Seam...457
Preparation and Sizing of Coal.....	457
Supplementary Analyses.....	458 to 460
Descriptive Advertisements.....	461 to 484
List of Mines by Seams.....	485 to 495
Alphabetical Directory of Coal Mines....	496 to 529
List of Mines by Counties.....	530 to 532

MAP OF KENTUCKY

MADE ESPECIALLY FOR
KEYSTONE CONSOLIDATED PUBLISHING CO.

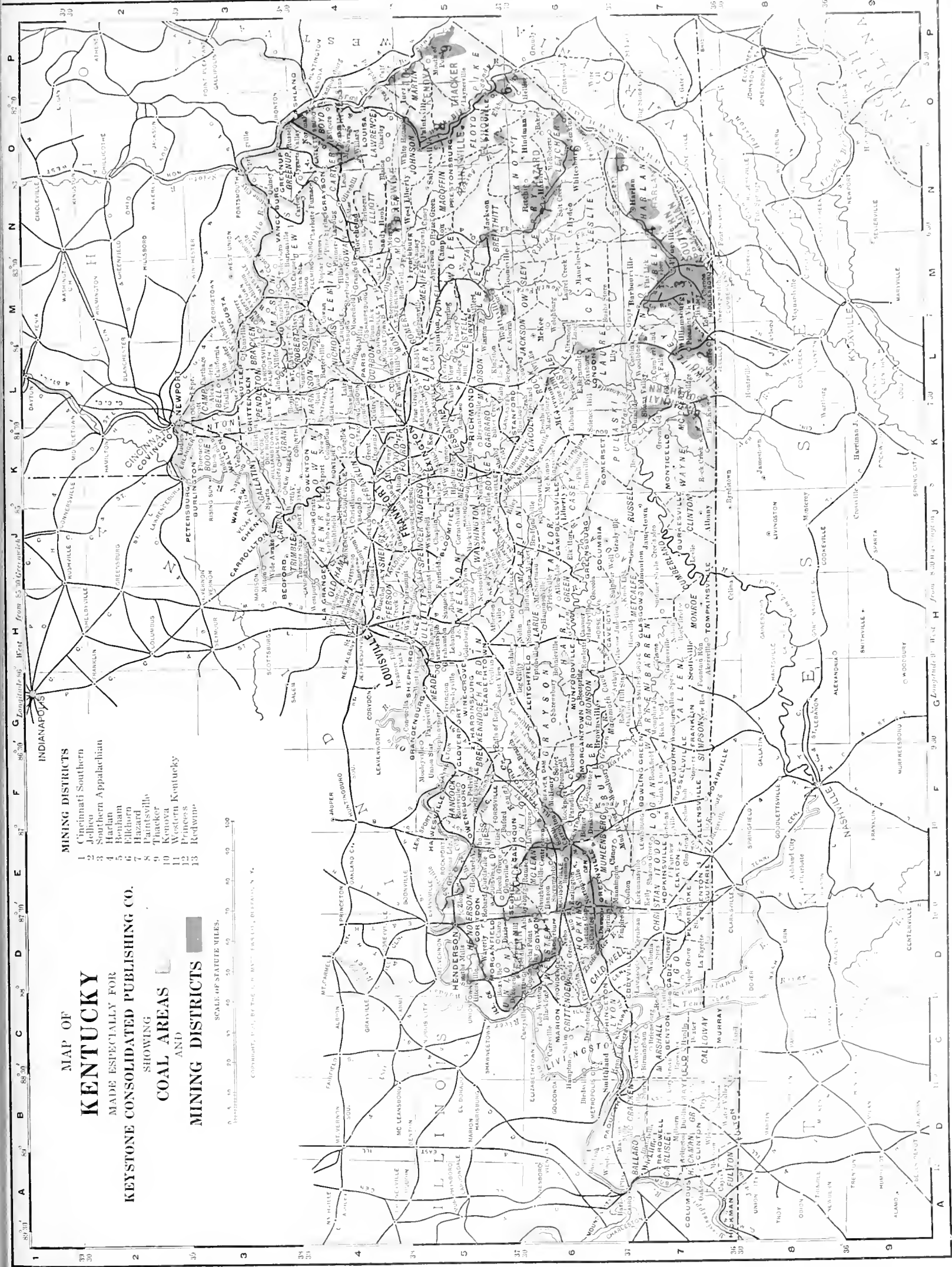
SHOWING
COAL AREAS
AND

MINING DISTRICTS

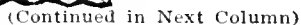
- MINING DISTRICTS**
- 1 Cincinnati Southern
 - 2 Jedico
 - 3 Southern Appalachian
 - 4 Harlan
 - 5 Benham
 - 6 Elkhorn
 - 7 Hazard
 - 8 Paintsville
 - 9 Thacker
 - 10 Kenova
 - 11 Western Kentucky
 - 12 Princes
 - 13 Redwine

SCALE OF STATUTE MILES.

COMPARED, 1911, BY THE U. S. GEOLOGICAL SURVEY, WASHINGTON, D. C.



*From Series IV, Volume IV, Part 1, Kentucky Geological Survey.



KENTUCKY*

General Description of the Geology and Seams of Eastern and Western Kentucky With a Map Showing the Location of the Coal Bearing Areas; Vertical Sections of the Eastern Coal Measures; Railroads Traversing the Coal Districts; Kinds of Coal; General Analysis, Etc., Etc

Kentucky is the one State of the Union which contains within its boundaries portions of both the Appalachian and the Eastern Interior coal fields. The former covers the eastern and the latter extends from Illinois and Indiana into the western part of the State. Crossing the State on a line running through southern Ohio, Kentucky and Tennessee is a low broad arch, forced up by lateral compression and called the Cincinnati Anticline, though it is more generally known in Kentucky as the Blue Grass Anticline. This anticline during the Carboniferous period divided the northeastern part of the Interior Sea into two bays, the larger one covering nearly all of Pennsylvania, the eastern part of Ohio and Kentucky, and West Virginia, the other occupying the southern peninsula of Michigan and communicating with the first by a narrow strait. This has given rise to what may be broadly designated as the Eastern Kentucky field and the Western Kentucky field, the coals of which vary considerably in characteristics and properties.

The eastern coals, being a part of the Appalachian Basin, partake of the many excellent qualities found in these coals. They are of bituminous rank, have a high volatile content and are generally low in ash and moisture. By reason of this, many of the seams are particularly well fitted for coking and the manufacture of illuminating gas. A further characteristic of these eastern coals is that many of them are of the splint and block variety, which entitles them to a high regard for domestic purposes. The heat value of the eastern coals ranges from 13,000 to 14,000 B. T. U.'s, giving them also a commanding position for use in the generation of steam.

Owing to the lack of navigable waterways, the plentiful supply of West Virginia coals and the difficulty in constructing railroads throughout the mountainous regions, which are everywhere characteristic of the eastern part of the State, the development of these coals during the early years of the industry was slow. A keen appreciation, however, of the excellent qualities of these coals has, during the past decade, brought about the construction of railroads in the most accessible portions, and coincident with these the opening of many new mines. Cannel coal is found in several of the eastern counties, the principal of these being Bell, Breathitt, Carter, Leslie and Johnson.

The coals of western Kentucky partake of the characteristics of the coals of the Eastern Interior field to which they belong. Compared with the eastern Kentucky coals, they are higher in moisture and ash and lower in fixed carbon and calorific value. They contain from less than 1 up to 5 per cent. of sulphur. These coals are all of bituminous rank and may be used for the production of coke, although such coals as are high in sulphur require preliminary washing to eliminate impurities. The Illinois Central and the Louisville & Nashville railroads reach all points in this field.

For geographical and trade reasons this State is divided into three districts, as follows: first, the Western, which includes all counties in the western coal field; second, the Southeastern, which includes Bell, Harlan, Knox, Laurel, McCreary, Rockcastle and Whitley counties; third, the Northeastern, which includes Boyd, Breathitt, Carter, Floyd, Jackson, Johnson, Lawrence, Lee, Letcher, Morgan, Perry and Pike counties. The Northeastern District may be subdivided into two parts, the counties lying in whole or larger part on the waters of the Kentucky River constituting one district, and those in whole or larger part on the waters of the Big Sandy forming the other. The Southeastern District, in like manner, may be subdivided into the Upper and Lower Cumberland districts.

The counties in the Kentucky River subdistrict in which commercial mines are operated at present are Breathitt, Jackson, Lee, Letcher, Morgan and Perry. Transportation is most largely over the Louisville & Nashville Railroad (L. & E. Division). Some of the mines in Letcher are on the Big Sandy side of that county, and shipments from them at present go out over the Chesapeake & Ohio Railroad, with which they have connection via the Sandy Valley & Elkhorn Railroad. Most of the mines of that county, however, are on the Kentucky River side, and shipments from them are made over the Louisville & Nashville Railroad. Shipments from the mines of one company in Letcher go out to the Norfolk & Western Railway, on the Virginia side of Black Mountain, in which mountain the mines are opened from the Virginia side. Mines in the southern part of Morgan have connection with the Louisville & Nashville Railroad at Jackson, Breathitt county, over the Ohio & Kentucky Railroad; those in the northern part of the county have connection with the Chesapeake & Ohio Railroad over the Morehead & North Fork Railroad.

The counties in the Big Sandy subdistrict in which commercial mines are at present operated are Boyd, Carter, Floyd, Johnson, Lawrence and Pike. From all but Pike county shipments to market are made exclusively over the Chesapeake & Ohio Railroad, shipments from mines not on that road being made over short lines connecting with the road. The mines of Pike county are situated some of them in the "Big Sandy Valley" (Levisa and Russell Forks), and some of them on the Tug Fork of the

*For much of the information on Kentucky coals we are indebted to the various publications of the Kentucky Geological Survey, Proceedings of the Kentucky Mining Institute, and the United States Geological Survey.

Big Sandy. Shipments from the former are made over the Chesapeake & Ohio Railroad, while those from Tug Fork go over the Norfolk & Western Railway.

The geology of the western coal field presents no unusual difficulties and has been well established through the explorations conducted by the United States Geological Survey and the Kentucky Geological Survey. In the eastern field, however, more investigation is needed, for its geology cannot be said to be well defined. Especially is there considerable uncertainty relative to the correlation of coal seams, brought about to some extent by an unwise policy of the earlier State surveys in adopting numbers instead of names for the coal beds, a tendency which happily has been corrected in the later reports. Furthermore, many of the earlier reports have been shown to be erroneous in their designation of seams, and these and later investigations have demonstrated that it is futile to attempt any scheme of classification while so much of the geology of these regions is in dispute. It is quite probable that the many new mines which are being opened will throw sufficient light on the perplexity of structure to enable conclusions which will be acceptable to the entire geological world. For reason of this uncertainty, there will be no attempt in the following description to go beyond the correlation of such seams as are now generally accepted.

SULPHUR IN KENTUCKY COALS

Dr. W. R. Jillson, State Geologist, has divided the State into three districts for the purpose of making comparison of the sulphur content in the coals of the various districts.* The first district includes the extreme eastern counties, the average percentage of sulphur for the county being given in each case: Lawrence, 0.87 per cent.; Martin, 0.75 per cent.; Johnson, 0.73 per cent.; Magoffin, 0.87 per cent.; Floyd, 0.88 per cent.; Pike, 0.68 per cent.; Knott, 1.04 per cent.; Perry, 0.77 per cent.; Letcher, 0.80 per cent.; Leslie, 0.70 per cent.; Harlan, 0.79 per cent.; Knox, 0.86 per cent.; and Bell, 0.92 per cent.

The second district embraces all the remaining counties of eastern Kentucky. It will be noted that these all lie westward from the counties in the first district. Again the percentages of sulphur are averages and not individual analyses. The counties in this group are: Greenup, 2.60 per cent.; Boyd, 1.67 per cent.; Carter, 1.07 per cent.; Morgan, 1.40 per cent.; Wolfe, 1.83 per cent.; Lee, 2.93 per cent.; Breathitt, 1.85 per cent.; Owsley, 1.09 per cent.; Jackson, 1.06 per cent.; Rockcastle, 2.30 per cent.; Clay, 1.09 per cent.; Laurel, 1.08 per cent.; Pulaski, 2.24 per cent.; Whitley, 1.05 per cent.; and McCreary, 1.50 per cent.

The third district includes all counties in the western Kentucky field. It will be noted that the percentages of sulphur are greatly increased over those given for the counties of the eastern section. The percentages by counties are as follows: Hancock, 2.87 per cent.; Henderson, 3.22 per cent.; McLean, 3.27 per cent.; Muhlenberg, 3.31 per cent.; Hopkins, 3.42 per cent.; Webster, 3.49 per cent.; Butler, 3.5 per cent.; Union, 3.62 per cent.; Daviess, 3.65 per cent.; and Ohio, 3.78 per cent.

Within broad limits it may be said that sulphur district No. 1 corresponds with the Wise-Kanawha or Upper Pottsville, which forms the main body of the Kentucky commercial coals. Sulphur district No. 2 corresponds roughly with the Norton-New River or Middle Pottsville, and the Lee-Pocahontas or Lower Pottsville. It is relatively of much less importance. Sulphur district No. 3, the western coal field, is probably Middle and Lower Pottsville.

EASTERN KENTUCKY—APPALACHIAN BASIN COALS

The Eastern Kentucky coal field is made up of two large but very unequal areas, which are separated by the Pine Mountain. The lesser field is readily described as the Upper Cumberland Basin; the large field includes the Coal Measures northward from the Pine Mountain and westward to the conglomerate capped hills, which are in retreat from the Blue Grass Anticline (Cincinnati Geanticline) of central Kentucky, and is continuous with the West Virginia and Ohio coal field. In all this tri-state field there are no barrier uplifts to give rise to geological basins of the type of the Upper Cumberland Basin. There are many undulations in the rock layers, forming anticlinal waves and synclinal basins in continuous formations transverse to the original southeast dip, and broader waves which give rise to the river valleys which head to the southeast; but no considerable fault-scarp interrupts the continuity of the Coal Measures except the Pine Mountain uplift, which in its northeast extensions declines to an anticlinal wave of the larger field. The discussion of Eastern Kentucky coals, because of the many conflicting reports which have been issued on the various coal areas and the many uncertainties in correlation of seams, will be either by seams or coal fields. A reference to the United States Geological Survey, State Geological Survey, and State Department of Mines' reports, reveals a large number of the seams, many of them named locally, though unquestionably many of these seams will be found identical as a result of future geological investigation.

Elkhorn Seam. (Also known as the No. 3, Rock House or Sandy Lick Coal, Northfork, and the Alma Coal of the Tug Fork section.) (Mined in Letcher and Pike counties.)

This seam has its extreme development both in thickness and character as a coking coal on the

heads of Elkhorn and Shelby Creeks and from here to the headwaters of the North Fork of the Kentucky River. It has been thoroughly proved on all its territory and is the basis of great development in the sections principally centered about the mining

*Bulletin A. I. M. M. E., September, 1919.

towns of Jenkins and McRoberts. The main bed of the Elkhorn coal is generally separated into two benches by a clay parting which occurs within the middle. This parting varies from 2 to 5 feet above the bottom of the coal, with an average thickness of 4 inches. In places the interval varies from 8 to 10 inches and in a few small localities to as much as 3 feet. In mining this band is cut out by overcutting machines and is thus kept from mixing with the coal. On the head of Elkhorn Creek and across on the waters of the North Fork, the Elkhorn coal attains a maximum thickness of 14 feet with an average thickness over large areas of 8 feet. On the waters of Rock House, the main bed is separated from the upper bench, or rider, by an interval of 20 to 30 feet of shale or sandstone. The main, or lower bench, varies from 40 to 49 inches of solid coal. The upper bench in places attains a thickness of 30 to 36 inches, but is less regular than the lower bench. On the headwaters of North Fork the upper bench, which on Rock House is 20 to 300 feet above the main bed, has come down until it unites with the lower bench with, in places, merely a knife edge parting separating the two benches; then in a short distance the interval between the two benches may increase until the two become separated again by as much as 30 feet.

Elkhorn coal is one of the foremost by-product coking coals of the country, having a low ash, sulphur and phosphorous content. Its exceptional purity also gives it a commanding position for use in the manufacture of illuminating gas and producer gas. It is a hard, lumpy, blue-black coal with a firm structure, and is therefore adaptable for use in open grates, furnaces, heating stoves and cooking ranges.

GENERAL ANALYSIS

Moisture	3.40
Volatile Matter	36.75
Fixed Carbon	55.85
Ash	4.00
Sulphur	0.75
B. T. U.	14,000

Amburgy Seam. (Known also as Low Splint Seam.)
(Mined in Letcher county.)

The Amburgy coal occupies a stratigraphical position about half way between the Elkhorn and Fire-clay coals. By reason of its characteristic roof, which is distinct from any other coal in Letcher county, it becomes a most valuable guide in working out the stratigraphy of the region. The roof, where characteristically developed, is a dark, calcareous shale containing well preserved marine fossils. The characteristic feature of the roof is widespread throughout the region north of Pine Mountain.

The Amburgy is a very persistent coal throughout Letcher county and over a large part of the county is a workable coal. At no place does it attain any great thickness, the maximum being about four feet with the minimum rarely under three feet. In places it is cut up with partings which render it of little value.

GENERAL ANALYSIS

Moisture	1.90
Volatile Matter	37.75
Fixed Carbon	52.85
Ash	7.50
Sulphur	1.25
B. T. U.	13,600

Freeburn, Upper Thacker, Lower Thacker and Alma Seams. (Freeburn Seam is known also as the Pond Creek, Warfield and Vulcan seams.) (Mined in Pike county.)

The four seams here named are prominent in their exposures along the waters of Pond Creek, west of Williamson, W. Va. They vary in thickness from 3 feet 6 inches to 6 feet 8 inches. The Freeburn and Pond Creek seams are the best known of the group and vary in thickness from 4 to 6 feet. They rank very high among Kentucky coals and are especially adapted for use in the manufacturing of by-product coke and illuminating gas, as well as for general steam uses. The Thacker coals are highly regarded for steam and domestic usages.

GENERAL ANALYSIS

	Freeburn
Moisture	1.35
Volatile Matter	35.40
Fixed Carbon	57.55
Ash	5.70
Sulphur	0.80
B. T. U.	13,700

Millers Creek Seam. (Known also as the Van Lear Seam, Wheeler Seam and the Keyser Seam of Levisa Fork.) (Mined in Floyd and Johnson counties.)

The Millers Creek Seam is the chief bed of Floyd county where it is extensively mined. It is also the most important seam in Johnson county where it ranges in thickness from 30 to 48 inches. In Pike county, on account of its wide distribution, it is a close second to the Elkhorn Seam.

The Millers Creek Seam has its best development, both as to thickness and workable area, on Millers Creek and at the mouth of John Creek, both of which are tributaries of the Levisa Fork. The numerous openings along the creek show it to be a good clean coal free from partings and from 48 to 60 inches thick. At Paintsville, the Millers Creek coal is brought up by the Pine Creek dome to about 120 feet above low water in the river. Here the coal has its usual character and thickness, running, on an average, nearly 4 feet thick. Sometimes it is cut down in the mine to about 30 inches. On Abbott Creek the thickness ranges from 36 inches up to as much as 50 inches. At the mouth of Johns Creek this seam is just above high water, being brought down by a southerly dip from the Pine Creek dome. Here it ranges in thickness from 45 to 60 inches. The Millers Creek seam is widely noted for its excellence as a steam and domestic fuel. It is a splint and block coal, hard and firm, and analyzing very low in ash and sulphur. This, combined with its high volatile content, makes it particularly desirable for household use.

GENERAL ANALYSIS

Moisture	1.85
Volatile Matter	36.35
Fixed Carbon	56.25
Ash	2.55
Sulphur	0.52
B. T. U.	13,900

Harlan Seam. (Known also as the A seam, Jellico seam in Knox and Whitley counties, Straight Creek seam in Bell county.) (Mined in Harlan county.)

The Harlan coal bed is the lowest of the present workable seams of this field and is undoubtedly the one of most value. This seam outcrops from 400 to 500 feet above drainage on the Big and Little Black Mountains and the Martin's Fork Ridge near Harlan, and yet carries from 1,000 to 1,500 feet of cover and underlies large areas in each of the three mountains and their numerous spurs.

In the western part of the Harlan county field the Harlan coal bed has not been opened and prospected as it has been around and above Harlan. In this district (the area drained by the waters of Foresters, Wallins and Ewing Creeks), it will very likely prove to be the most valuable coal when sufficient prospecting has been done to determine it properly. On Ewing Creek it is now being mined, and here shows a clean section of 33 inches.

At the junction of Clover and Martin's Fork, in the Big and Little Black Mountains and in the Catron and Ewing Spurs of the Martin's Fork Ridge, is found the best development of this coal bed. Here it maintains an average of four feet of clean coal. In this section it is at present being mined extensively. At Benham it provides a coking coal of high quality.

Passing eastward up Clover Fork, this coal bed maintains a good mining section until on Yocum Creek, where openings made on the seam show it to be seriously contaminated by shale partings, but as but few openings exist on this side of Yocum Creek, and the many openings made between Jones Creek and Yocum show a good mining section, it is believed that the opening showing the shale partings is an abnormal one and that eventually it will be proven that this coal bed is of great value in this vicinity. In Virginia, across the Little Black Mountain from the head of Yocum Creek, this coal bed shows a thickness of 3 feet 6 inches of clean coal, and is known as the No. 3 seam of the Pocket Field of Lee county, Virginia.

This coal bed goes under drainage on Clover Fork about 14 miles above Harlan, just below the mouth of Seagraves Creek, and at this point it presents a clean mining section of 3 feet 6 inches. From here, eastwardly, it rises with the stream and is never far below the water level, a few feet at the Fugitt Creek and approximately 120 feet at the mouth of the Left Fork of Clover Fork, near Morris Gap.

Along Poor Fork, below the mouth of Big Looney Creek, it presents a mining section of from 4 to 5 feet, even reaching a thickness of 12 feet in places, but the upper portion of this great thickness is usually worthless, due to many slaty partings. Above the mouth of Big Looney it is split into two benches, neither of which is valuable.

On Martin's Fork and its tributaries this coal bed has been opened in many places, as it produces the most of the fuel used by the citizens of this section. These openings show that this seam maintains an average thickness of a little less than 4 feet, although in many places a greater thickness has been found. Sections of the seam in this district are not as free from impurities, such as slate partings, as is the coal bed on Clover Fork, but

nevertheless this coal bed will be a very valuable one in this district.

The Kentucky Geological Survey describes this coal very well in the following statement: "A bright pitch-black coal, fracture generally cuboidal and irregular; very little fibrous coal apparent, but some granular pyrites."

This coal is hard, lumpy and of the block type, similar to those of the Kentucky River and the Elkhorn coal fields. It has marked vertical cleavages and mines in large smooth-faced blocks, very different from the softer coals of the Virginia and West Virginia coal fields. It is well adapted to shipment and for domestic use.

The Harlan coal is high in volatile matter and heat value and low in the harmful ingredient, sulphur, and the earthly impurities. It ranks high as a steam and domestic coal, having in its favor low ash, its hardness, ease of ignition and the fact that the ash has a high fusion point. It has risen to prominence more rapidly, possibly, than any coal in which developments were begun in the present century, and its excellence is attested by the immense holdings of steel companies, light and power companies, manufacturing concerns, etc., who have bought coal lands in the Harlan field in order to insure to themselves a supply of superior gas and by-product coal.

GENERAL ANALYSIS

Moisture	2.00
Volatile Matter	36.15
Fixed Carbon	57.75
Ash	4.10
Sulphur	0.60
B. T. U.	14,300

Straight Creek Seam. (Mined in Bell county.)

The Straight Creek seam of Bell county is generally regarded as being the same coal as the Harlan seam of Harlan county. It varies in thickness from 30 inches to 60 inches, with an average of 42 inches. This seam is much worked in the vicinity of Pineville. It mines clean, has a hard structure, and can be stocked in the open without excessive degradation. In common with all coals of Bell county, it is low in sulphur and high in heat value, and is much used for steam and domestic purposes, as well as for special applications which require a low sulphur and high volatile coal.

GENERAL ANALYSIS

Moisture	2.45
Volatile Matter	36.10
Fixed Carbon	58.35
Ash	3.10
Sulphur	0.90
B. T. U.	14,400

Wallins Seam. (Believed to be identical to No. 7 seam of Lee county, Virginia.) (Mined in Harlan county.)

This coal bed reaches its maximum thickness in the Wallins Creek section of Harlan county, presenting a 9-foot section with a 6-inch parting 18 inches from the bottom, leaving a top bench of 7 feet of practically clean coal. Lying high in the mountains, it has been sparingly prospected, but one is safe in assuming that there is a large workable area of this seam in the Reynolds and Potato Hill Ridges.

In the Harlan district it has been opened in the Little Black Mountain in Kitts Branch, showing an upper bench of 4 feet 4 inches of coal with a 6-inch shale parting 8 inches from the floor and a lower coal bench of 1 foot 2 inches, separated from the upper by 1 foot 4 inches of shale, coal and bone. It has been exposed on Turtle Creek, presenting a workable section.

Going to the east up Clover Fork it shows sections in the Little Black Mountain of from 3 feet to 3 feet 6 inches of coal, but at all points with one or two partings which lessen or destroy its value. In the Big Black Mountain it has not been exposed with a workable section.

In the Grays Knob of the Martin's Fork Ridge this coal bed is found with a mining section that will compare very favorably with the one on Wallins Creek. The few openings made in the Martin's Fork Ridge show that as a rule this bed is found with a good mining section.

GENERAL ANALYSIS

Moisture	4.00
Volatile Matter	36.80
Fixed Carbon	53.60
Ash	5.60
Sulphur	0.62

High Splint Seam. (Known also as Hinchman and No. 9 seams.) (Mined in Harlan county.)

The High Splint bed lies so high that it overreaches the most of the Little Black Mountain, although there is considerable area between Jones and Days Creek of Clover Fork, where it shows a thickness of from 5 to 6 feet. Throughout the field this seam has been sparingly opened, but it shows a thickness of from 5 to 9 feet.

The High Splint Seam shows two varieties of coal quite different physically, in varying proportions throughout the field. One is a hard, dull gray splint that occurs in layers of from less than an inch to a foot or more. The other is a softer, black, lustrous variety; it mines easier than the splint, is less difficult to crush and is more typically a coking coal.

As will be noted from its general analysis this coal grades high as a gas coal, being remarkably low in both sulphur and ash. Moreover it is a good coking coal and is also regarded as one of the best steam and domestic coals.

GENERAL ANALYSIS

Moisture	3.35
Volatile Matter	35.60
Fixed Carbon	57.65
Ash	3.40
Sulphur	0.70
B. T. U.	14,100

Leonard Seam. (Mined in Harlan county.)

The Leonard coal bed, so named by the Kentucky Geological Survey because of its development about Leonard Postoffice on Clover Fork, near the mouth of Childs Creek, lies from 120 to 150 feet above the Harlan.

On Clover Fork this bed is first recognized on Yocum Creek, showing a 3-foot clean section. Going on up Clover Fork the bed increases in thickness, but also carries some slate partings. At Childs Creek it shows a good mining section, but from here toward the head of Clover Fork it shows only a thin, worthless section, or one that is badly ribbed with partings.

On Clover Lick and Big Looney Creek of Poor Fork it shows a varying section, but in Benham Spur 3 feet 6 inches of a clean coking coal is found. On Martins Fork this bed is reported usually from 50 to 80 feet above the Harlan, and of 3 feet in thickness. This bed is the No. 4 Seam of the Pocket Field, Virginia, and there shows a thickness of 30 inches.

GENERAL ANALYSIS

Moisture	3.30
Volatile Matter	35.40
Fixed Carbon	57.95
Ash	3.35
Sulphur	0.65
B. T. U.	14,150

Keokee Seam. (Known also as the Kellioka Seam, C Seam; Darby of Lee county, Virginia; McConnell and Taggart of Virginia.) (Mined in Harlan county.)

The horizon of the Keokee coal bed occurs approximately 30 feet above the Leonard. This seam is found throughout the Harlan field as well as in the coal fields of Wise and Lee counties, Virginia.

In the western part of the Harlan field it, as a rule, presents a small minable bottom bench, but the upper part of the seam is ribbed with slate partings, and, due to the small number of openings, its value in this district is not at the present known.

Around Harlan it is found high in the mountains, and is thought to be either too thin or badly ribbed with slate partings to be of much value. However, passing on up Clover Fork a 3 foot 6 inch minable section is shown on Jones Creek; between Bailey and Seagraves Creeks it again shows a thin section. At Childs Creek it shows 3 feet of clean coal. It is mined at Darby, across the mountain, showing from 2 feet 6 inches to 3 feet 6 inches of clean coal.

Above Childs Creek this coal bed increases in thickness, in many places showing over 4 feet of workable coal, and reaching a maximum of 4 feet 6 inches to 5 feet on the Razor Fork. At Keokee the coal mined runs from 5 to 7 feet, with a 2 to 4-inch parting which increases to the east. It shows 4 feet 6 inches of clean coal on Little Looney Creek, Virginia, and is mined at Roda, Va., as the Taggart seam, with a thickness of 6 feet, but in some places is seriously contaminated with a parting near the center.

This coal bed reaches its maximum development in the Poor Fork district in Benham Spur and Looney Ridge, where it maintains an average mining section throughout this area of 5 feet 6 inches in thickness and practically without a parting. In the Martins Fork district this seam has not been opened to any great extent, but the mining section is from 3 feet to 4 feet 6 inches. At Benham it furnishes an excellent coking coal, the coke being used in blast furnaces.

GENERAL ANALYSIS

Moisture	3.40
Volatile Matter	35.35
Fixed Carbon	58.95
Ash	2.30
Sulphur	0.65
B. T. U.	14,550

Cornett Seam. (Known as the No. 7 and Flag seams.) (Mined in Harlan county.)

The Cornett coal bed takes its name from the owner on whose land it was found. It is next to the bottom of a group of 4 or 5 beds, all of which show a thickness of about 3 feet of coal, but, due to their height above the valleys, the Cornett and the upper one only will be of commercial value. The bed lies about 200 feet above the fossil limestone, and varies in thickness from 3 feet 6 inches of clean coal to 7 feet with partings.

GENERAL ANALYSIS

Moisture	6.10
Volatile Matter	32.70
Fixed Carbon	58.20
Ash	3.00
Sulphur	0.32

Hazard Seam. (Known also as No. 6 Seam.) (Mined in Perry and Breathitt counties.)

This is a hard brittle coal and is classed as splint. The thickness varies from a few feet up to 8 feet, and it usually has one or more fire clay partings, which are variable as to position in the seam. The Hazard coal is higher in ash content than the Fire Clay seam and is also slower in burning. Its extreme hardness makes it adaptable for a long shipping and storage coal and its large blocking qualities makes it attractive for the domestic market. The seam is very regular, with a noticeable absence of faults and folds, and its remote distance from Pine Mountain or other centers of disturbance lessens the possibilities of any irregularities in its horizon. Underlying the Hazard coal is a hard fire clay which does not soften on exposure to the weather or by moisture. Near the Breathitt-Perry county line the Hazard coal attains a thickness of from 48 to 72 inches, but usually the maximum thickness is accompanied by one or two soft fire clay partings. On Eversole Creek this bed shows 48 to 55 inches of clean coal with only a small parting of one-half inch in thickness. There is a noticeable tendency in some localities for this seam to attain an unusually high percentage of ash, this being accounted for mainly by the presence of bone. This bone coal, however, is not persistent and is frequently entirely absent from the coal.

GENERAL ANALYSIS

Moisture	3.50
Volatile Matter	43.00
Fixed Carbon	45.45
Ash	8.05
Sulphur	0.70
B. T. U.	13,144

Fire Clay Seam. (Known also as No. 4 Seam, Dean Seam.) (Mined in Perry, Breathitt and Lee counties.)

The physical and chemical qualities of the Fire Clay Seam are somewhat variable as well as the structure of the strata found both above and below the coal. It is very persistent in carrying the fire-clay or jack-rock parting, generally near the bottom of the seam, and in the majority of operations the mining is conducted entirely above the parting, leaving the hard fire clay as the mine pavement. On account of the hardness of this parting it makes an excellent pavement to shovel from, yet too hard

to cut out with either chain machine or air punches. The coal below this parting is, therefore, left in the mine. The strata above the coal vary from slate to sandstone. In each instance, however, the sandstone is not very far above the coal, so that the shales and slate constitute a draw rock above the coal, which is brushed to give sufficient head room in the haulage entries. The thickness of the coal above and below the parting within this section varies without reference to course or direction. It is in the most economical position for mining operations, and as to thickness in the mountains in the immediate vicinity of Hazard. The Fire Clay seam here will average 40 inches in thickness above the fire clay parting, with an average of 8 inches of coal below this parting. The parting average is 3 inches in thickness. In the vicinity of Eversole Creek, the Fire Clay seam has a coal rider immediately above which has a thickness of 36 to 40 inches of clean, excellent block coal. The intervening strata between the two coals are shale and slate, and measure in thickness from 24 inches to 60 inches. Following the seam up the river this coal rider becomes thinner and the strata between greater, until the rider becomes a coal stain and eventually disappears entirely. The quality of the Fire Clay seam does not vary much throughout the district, and occurs generally as a large blocking coal, brilliant in luster, and makes an attractive coal on the railroad cars. It is free burning and leaves a fine, soft ash. The coal has coking tendencies and is very satisfactory for the manufacture of illuminating gas. In the markets it is favorably received as a steam and domestic coal.

GENERAL ANALYSIS

Moisture	2.20
Volatile Matter	36.75
Fixed Carbon	58.85
Ash	2.20
Sulphur	0.80
B. T. U.	14,110

Flag Seam. (Known also as No. 7 and Cornett seams.) (Mined in Perry county.)

The Flag coal is of considerable importance in the southeastern district of Kentucky, particularly in Perry county, where it is found in the top of the mountains and is the highest seam of economic importance. It is here a true splint coal of a high bituminous quality. It is generally a hard coal, lacking luster, and will stand hard usage, long distance transportation and a long storage. Its average thickness over the district is 48 inches, although in many localities reaching greater thickness. In the Lost Creek and Troublesome Creek territory it is the thickest seam and is found in places up to 7 feet. In the northwestern section near Eversole and Grapevine Creeks, the seam is split with a fire clay parting from 2 to 4 inches in thickness. The principal bench is from 24 to 34 inches and the lower bench 12 to 20 inches in thickness. On Grapevine Creek the Flag seam has a rider about 12 inches in thickness from 20 to 26 inches above the coal. Here the seam attains a thickness of 50 inches of clean coal without the middle parting. Its elevation in the mountain is, in this vicinity, about 1,200 feet above sea level, while in the extreme southeastern part of this district its elevation is about 1,600 feet above sea level. In the immediate Hazard district the Flag coal is found in

the most economical condition for mining. Here the thickness is from 48 to 60 inches, with a thin fire-clay, or jack-rock, parting near the bottom. A considerable portion of this coal is shipped to Michigan, Iowa, Wisconsin and Minnesota.

GENERAL ANALYSIS

Moisture	2.25
Volatile Matter	38.45
Fixed Carbon	56.20
Ash	3.10
Sulphur	0.42
B. T. U.	14,246

Miscellaneous Seams.

The most widely developed coal bed in South-eastern Kentucky is the "Pineville coal," one of the lower seams in the Coal Measures above the Conglomerate sandstone. This bed is also the "Straight Creek coal," the "Four Mile seam," the "Pogues Branch coal," the "Mason seam" of Clear Creek, the "Ferndale seam" of Cannon Creek, the "Lower Cranes Creek bed," the "Mingo coal" of the Bennetts Fork region, the "Hyslop coal" of Tacketts Creek, the "Douglas seam" of the Big Creek Gap region, the "Birdseye coal" of the Halsey district in Whitely, the "Jellico seam" of the Jellico region, and the "North Jellico coal" of Knox county. This coal bed is, in general terms, 400 to 600 feet above the Conglomerate formation, near the top of a series of

rocks in which shales make up a large part of the vertical section.

At 500 to 600 feet higher in the series is the place of the Dean coal, as known northward from the Pine Mountains. Above this, 30 to 90 feet, is the McGuire coal or the Upper Dean seam. These beds are known as the Upper and Lower Hignite coals in the Middlesborough Log Mountain region, and are from 3 to 30 feet apart.

Between the Pineville (Mason, etc.) seam and the Dean-Hignite horizon several prominent coal beds are found, the extension of which is not so well shown by practical development or prospecting, and the equivalency of beds is not so clearly indicated for the several districts mentioned. The Pinesville and Dean coal horizons may be used as reference levels in the description of beds. Above the latter, one or two prominent coals are found in the higher hills north of the Pine Mountain. The coals above the Dean-Hignite levels, however, are chiefly notable in number and prominence in the higher Log Mountain ridges, in which higher Coal Measures come in above the Conglomerate, or the Coal Measures proper of this region have a thickness of about 2,400 feet. This great thickness of rock beds, as compared with the Coal Measures toward the north-western outcrop, is partly from the thickening of beds, in general, southeastward, and partly by the greater wearing away, down the wider valleys, toward the outcrop of the Carboniferous series.

CANNELED COALS OF KENTUCKY

Cannel coal is found quite frequently in the coal seams of eastern Kentucky, either as constituting the entire portion of the seam or, more generally, as a bench or portion of the main seam. The best beds are found in Morgan county, although a considerable quantity is also found in Bell, Breathitt, Carter, Floyd, Magoffin, Leslie and Johnson counties. The cannel of Morgan county is found in one solid bed without partings or cleavage planes, and in this respect is unlike the cannel found on the North Fork.

The greater portion of the output is shipped to the northwest and Canada for use either as a

domestic fuel or as an enricher for the manufacture of illuminating gas. There are two seams, the principal development being in seam No. 2. A second bed of cannel lies about 200 feet above the No. 2 seam. This coal runs about 55 per cent in volatile matter, making an unusually rich cannel coal.

GENERAL ANALYSIS

Moisture	1.45
Volatile Matter	46.25
Fixed Carbon	39.20
Ash	13.10
Sulphur	1.16
B. T. U.	13,185

WESTERN KENTUCKY—EASTERN INTERIOR COAL FIELD

The western Kentucky coal field embraces approximately 6,400 square miles of the total acreage of the State, which is estimated at 16,670 square miles. The workable coal beds in the western Kentucky coal field under development are, with a few exceptions, No. 9 and No. 11, as identified by the Kentucky State Geological Survey, although some of the seams of minor importance are being developed at the present time.

The western Kentucky coals are bituminous, and compared with eastern Kentucky, West Virginia and Pennsylvania coals, are relatively high in volatile matter, ash and sulphur. They are free burning, and commonly used for domestic heating and steam generation. The high amount of volatile matter renders many of them excellent coals for use in gas producers. The keenest competition for markets is with the Illinois and Indiana coals.

The two railroad companies penetrating the western Kentucky coal field are the Illinois Central and the Louisville & Nashville and their subsidiaries.

No. 12 Seam. (Mined in Hopkins and Webster counties.)

The vertical position of No. 12 coal is immediately above the limestone that overlies No. 11 coal. The interval between the two coals is irregular. In places No. 12 lies directly on the lime-

stone, which, in the Nortonville quadrangle, averages 1 foot in thickness. Further east, the shale overlies the limestone and No. 12 coal is separated from No. 11 by an interval as great as 17 and even 21 feet. The coal is very irregular in thickness and in many places it is represented by a black

smut over its entire basin. The only place in the Nortonville quadrangle where No. 12 coal has been worked at all is at Nortonville. There are a few small operations in Henderson county, and the West Kentucky Coal Company is reported as working this seam in Webster county, although this coal is more frequently referred to there as the Baker coal, the name as proposed by Dr. L. C. Glenn in Bulletin No. 17 of the Kentucky Geological Survey.

GENERAL ANALYSIS

Moisture	4.65
Volatile Matter	36.85
Fixed Carbon	52.65
Ash	10.85
Sulphur	1.58
B. T. U.	12,500

No. 11 Seam. (Known also as Herrin Seam.)
(Mined in Webster, Hopkins, Union and Ohio counties.)

No. 11 Seam, which is from 40 to 100 feet above No. 9, ranks second in importance in this field. It is much more irregular than the No. 9 Seam, and at most of the mines has a thickness of 6 feet or more. As a rule it is not under deep cover, usually outcropping at the surface and extending to depths of less than a hundred feet. This bed is reported as always having a clay parting from $\frac{1}{4}$ inch to 2 or 3 inches thick, and it is much disturbed by rolls, clay slips, etc. It has been found by stratigraphic studies to be the equivalent of the No. 6 coal of Central Illinois, although it lacks the persistency and uniform character of that seam.

No. 11 seam is a medium hard, bituminous coal varying from 5 to 7 feet in thickness. It is separated into three benches by a thin band of sulphur 16 to 18 inches from the top and a 2-inch clay parting, known as the "blue band," 24 to 26 inches from the bottom. The upper bench is the best in quality and is known as shop or gas coal. It is a jet black, brittle coal, practically free of sulphur and low in ash. The middle bench, while inferior to the upper bench, is a good hard coal with an occasional sulphur lens or mother of coal parting. The lower bench is of poorer quality and runs high in sulphur and ash. On account of these characteristics it is often referred to as the "bench" coal. It is bright and clean and streaked with bands of contrasting luster. Slivers of it are easily ignited, and while the coal is bituminous it probably contains to a minor degree some of the constituents of cannel coal. The roof is excellent, being a hard blue limestone from 3 to 5 feet thick; in fact, it is reported there are rooms from 20 feet to 25 feet wide and 300 feet long, and these standing from 8 to 10 years without a prop. This coal, after the sulphur content is reduced by washing, makes a very satisfactory coke.

GENERAL ANALYSIS

Moisture	7.20
Volatile Matter	36.90
Fixed Carbon	45.40
Ash	10.50
Sulphur	4.05
B. T. U.	12,150

No. 9 Seam. (Known also as Springfield Seam.)
(Mined in Muhlenberg, Henderson, Ohio, Union, Webster, Hopkins, McLean and Daviess counties.)

This seam supplies about three-fourths of the total output of the Western field. It is present in eight counties with an average thickness of 5 feet, although it occasionally thickens to 5 feet 6 inches and seldom is thinner than 4 feet 7 inches. It is a coal noted for its persistency, and, as a rule, is found at depths requiring shafts 300 feet or less in depth, although there are depressions in some vicinities which may be entered possibly by slope or drift. In addition to its even thickness and character, it has a good roof and other favorable mining conditions which make it a profitable coal for the producer. Although it slightly exceeds the coal from the same bed in Saline county, Illinois, in ash and sulphur content, it has a slightly higher calorific value than that coal and is much superior to the coal mined from the same bed in Indiana (No. 5) and central Illinois. Compared with coals in other parts of the basin, it exceeds in calorific value the Murphysboro coal, Illinois, which is also lower in both ash and sulphur. The stratum above the coal is a tough black slate from 4 to 10 feet thick. It stands without timbering. Some of the openings, in which the roof is still firm, are said to have been opened for 15 or 20 years. The coal is of uniform character and appearance. It is black, with a slightly brown streak, lustrous, rather brittle and shows fine partings of coaly material of slightly contrasting luster. The fracture is rather uneven and the coal breaks in ragged, squarish blocks. Cleat is indefinite and varies from place to place in the same mine. The bed contains usually a few thin partings of mother of coal at irregular intervals, and there are no clay partings. It does, however, usually contain more or less marcasite in the lower part in sheets, lenses or concretions in such shape, however, that it can be thrown out in loading the cars. The coal is often closely and finely jointed and the cracks are cemented with films of gypsum or marcasite, which no doubt contributes largely to the ash. The floor is fire clay with stigmata and is quite hard, but when exposed to the air is likely to swell. The mining of No. 9 coal in western Kentucky is attended with fewer troubles than any other coal in the region. In most areas there is a total absence of rolls or horse-backs, although in some localities, as in the area between Sturgis and the Ohio River, there are found a few faults of from 5 to 20 feet which introduce some difficulties into mining operations. When washed, it gives a bright firm coke with about 1 per cent of sulphur and having a close resemblance in physical structure to that of the Connellsville region. The unwashed coal in this seam usually carries too great a percentage of sulphur to permit its use for metallurgical purposes. This coal does not stand shipping as well as the harder eastern coals.

GENERAL ANALYSIS

Moisture	8.65
Volatile Matter	35.05
Fixed Carbon	46.75
Ash	9.55
Sulphur	3.30
B. T. U.	11,900

No. 14 Seam. (Mined in Muhlenberg County.)

A large number of seams occurring in lens shaped bodies and differing largely in quality and quantity are found overlying the better known deposits. Naturally there is considerable confusion in their correlation and more investigation is needed before these broken portions can be definitely classified. F. M. Hutchinson* makes the following report on the No. 14 coal: "This seam, which ranges from 0' to 12' in thickness, when best developed, is the thickest coal occurring over the area investigated. It is, however, of a pockety nature, and, except for certain well defined areas, is of doubtful commercial importance. The largest area containing this coal in known workable condition lies east of Cypress Creek in the Central City quadrangle and contains about 25 square miles." This area is in Muhlenberg county, about seven miles north of Central City and is traversed by the L. & N. R. R. which is the outlet to market. It is reported to be a firm lustrous coal of a medium degree of hardness, comparing favorably in this respect with the better known No. 9 seam, and is satisfactory for both steam and domestic purposes.

It is possible that the Nebo seam and the No. 14 seam are one and the same, but more investigation is needed in tracing these detached areas from one field to another before correlations can be made.

Nebo Seam. (Mined in Hopkins and Henderson counties.)

In the region west of Nebo, Coyletown and Circle City is a coal which occurs about 185 feet below the lower Madisonville limestone and 115 to 125 feet above No. 9 Seam. Recent investigations in Henderson county indicate that the Smith Mills and Corydon coals can be correlated with this seam. The Nebo coal occurs in large lens-shaped bodies. It may be found in one locality, while nearby it is absent, only to reappear in another place. It is, however, an excellent coal and contains less impurities than any other coal in western Kentucky except the Bell coal. At Nebo it is 6 to 7 feet thick without parting. It is a bright, shiny coal somewhat softer than No. 9. At Nebo it contains a rider of coal 1½ to 2 inches thick, 3 to 5 feet above the top of the main body of the coal. In Webster and Henderson counties this rider has thinned to

one inch or less in thickness. It has a soft shale roof which requires almost solid timbering. At Circle City about 18 inches of coal is left in the top as a protection.

GENERAL ANALYSIS

Moisture	8.70
Volatile Matter	35.30
Fixed Carbon	47.00
Ash	9.00
Sulphur	2.90
B. T. U.	11,900

Mannington Seam. (Known also as the Empire Seam.) (Mined in Christian county.)

The lowest coal worked in Christian county is the Mannington coal, which has been worked as a commercial product at a number of places between Empire and Crab Orchard Creek. It is easily recognized by a thin, impure limestone which comes 30 to 45 feet above the coal. It is traceable through the hills to Dawson Springs and Charleston, where it has been worked for a number of years. From Delton eastward to Morgantown, it thickens up in places and becomes of considerable local importance as a source of fuel. At Empire the average thickness of the coal is about 36 inches, with individual measures varying from 32 to 46 inches. At Mannington the coal is thickened to 4 feet with an average thickness of 41 inches. A thin clay parting occurs from 5 to 6 inches above the bottom of the bed. The Mannington coal is free burning and has a reputation for superior quality as a steam producer. Although it averages only about 3½ feet in thickness, it is easily and cheaply mined and has been of considerable importance in Christian county. The fire clay below is hard and the shale roof gives very little trouble and stands in 22-foot rooms with little or no timbering. The quality of the coal at Empire is greatly enhanced by a banding of cannel coal 7 inches thick, which occurs near the bottom of the seam.

GENERAL ANALYSIS

Moisture	10.80
Volatile Matter	35.70
Fixed Carbon	49.70
Ash	3.80
Sulphur	1.85
B. T. U.	12,400

*Bulletin No. 19, Serial No. 26, Kentucky Geological Survey.

PREPARATION OF COAL

The preparation of Kentucky coals is attended by practically all the modern devices of the day. Much of the coal from this State competes in the domestic markets with coal from Ohio, Pennsylvania, West Virginia and Illinois, and its condition as it leaves the mine is of the utmost importance to its lasting popularity with the trade.

Shaker screens are much used, screening generally into four sizes. The screens are inclined and

adjustable, so that by the action of gravity and reciprocating motion perfect screening can be obtained with the most delicate handling of the coal. The four sizes are slack, nut, egg and lump. The egg and lump coal pass from the screens to a picking table, where a thorough cleaning of the product is effected. After cleaning, the coal is lowered into the railroad cars by means of an adjustable boom. In this way, the breakage of coal is minimized.

For additional information on uses and analyses of Kentucky coals, see the descriptive advertisements on coal mines following Supplementary Analyses.

Analyses of Kentucky Seams by Counties and Localities

(ALL ANALYSES MADE ON MINE SAMPLES "AS RECEIVED")

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carbon	Oxygen	RATIOS		
											Carbon	F. C.	V. M.
											oxy. + ash		
* Bell	Union, 2½ mi. s. w. of Sturgis	Bell	5.46	20.99	55.63	7.92	1.18	13,239	72.59	12.05	3.63	1.79	
* Blue Gem	Whitley	Burk Hollow	3.97	36.70	52.16	7.17	0.78	13,348	.....	.....	.....	1.42	
* Bolling, Lower	Letcher, 3 mi. s. w. of Flat Gap	J. H. Mullin	3.97	31.77	53.07	11.19	0.97	12,852	.....	.....	.....	1.67	
* C	Harlan, Benham	Benham	2.50	37.52	57.63	2.35	0.52	14,589	80.94	9.11	7.06	1.54	
* Cannel	Johnson, s. e. of Flambeau	Flambeau	2.36	48.40	38.75	10.49	1.20	13,770	71.98	8.70	3.75	0.80	
* Cornett	Letcher, Garner Branch	.....	6.08	32.72	58.20	3.00	0.311	.....	.....	.....	.....	1.78	
* Dawson	Hopkins, 1 mi. n. of Dawson Springs	Workman	8.84	37.83	48.28	5.05	2.78	12,568	70.34	14.46	3.61	1.28	
* Dean	Bell, 3 mi. s. w. of Fourmile	East Jellico	3.91	34.61	53.95	7.50	0.88	13,122	73.87	10.56	4.03	1.55	
* Dean	Bell, 2 mi. s. w. of Fourmile	Magnet	4.29	35.96	53.47	6.28	1.00	13,316	74.30	11.10	4.28	1.49	
* Dean	Harlan, Kitts Branch	.....	7.192	34.028	49.144	8.880	0.846	.....	.....	.....	.....	1.44	
* Dean	Knox, Bradel	Bennett No. 1	4.21	36.44	53.30	6.05	0.77	13,408	74.81	11.05	4.37	1.46	
* Dean	Perry, ½ mi. e. of Hazard	Hazard	3.78	36.90	55.80	3.52	0.66	13,919	77.77	10.73	5.46	1.51	
* Dean	Perry, Douglas	Douglas	3.61	37.08	55.93	3.38	0.71	13,982	78.78	9.81	5.97	1.51	
* Elkhorn	Letcher, Mater	Kona	3.80	36.74	55.44	4.02	1.03	13,891	77.99	9.78	5.65	1.54	
* Elkhorn	Letcher, McRoberts	Consolidation No. 213	2.91	36.33	57.53	3.23	0.53	14,170	79.86	9.12	6.47	1.58	
* Elkhorn	Letcher, near Fleming	Elkhorn No. 301	3.64	36.75	55.54	4.07	0.64	13,952	78.81	9.38	5.86	1.51	
* Elkhorn	Pike	Edgewater	1.94	35.48	59.88	2.70	0.57	14,693	81.37	8.56	7.23	1.67	
* Elkhorn, Lower	Letcher, 5 mi. n. e. of Jenkins	Pike	5.15	28.79	48.17	17.89	0.68	11,453	.....	.....	.....	1.88	
* Elkhorn, Lower	Pike, 1 mi. above Hellier	Pike	3.73	30.01	59.42	6.84	0.56	13,649	76.30	10.17	4.49	1.98	
* Elkhorn, Lower	Pike, 1 mi. above Hellier	Pike	2.90	28.59	53.70	14.81	0.49	.....	.....	.....	.....	1.89	
* Elkhorn, Upper	Letcher, 3 mi. s. w. of Jewel	Potter	3.96	32.37	61.10	2.57	0.56	.....	.....	.....	.....	1.62	
* Elkhorn, Upper	Letcher, Jenkins	Consolidation No. 204	3.61	35.81	57.96	2.59	0.51	14,242	80.06	9.93	6.39	1.81	
* Elkhorn, Upper	Pike, Hellier	Greenough	4.03	32.46	58.73	4.78	0.74	.....	.....	.....	.....	1.39	
* Empire	Christian, ½ mi. w. of Empire	Empire	10.79	35.72	49.68	3.81	1.75	12,416	70.02	16.92	3.38	1.60	
* Fire Clay	Perry	Douglas	2.18	36.72	58.90	2.19	0.79	14,110	.....	.....	.....	1.51	
* Fire Clay	Perry, Douglass	Ashless	3.61	37.08	55.93	3.38	0.71	13,982	78.78	9.81	5.97	1.47	
* Fire Clay	Perry, ½ mi. s. e. of Lothair	Hazard	4.16	36.61	53.99	5.24	0.64	13,550	76.49	10.40	4.90	1.51	
* Fire Clay	Perry, Hazard	Hazard	3.78	36.90	55.80	3.52	0.66	13,919	77.77	10.73	5.46	1.51	
* Fire Clay	Perry, ½ mi. s. w. of Hazard	Hazard-Dean	3.90	36.99	55.18	3.93	0.74	13,781	77.09	11.09	5.13	1.49	
* Fire Clay	Perry, Lennut	North Fork	3.89	37.25	54.80	4.06	0.83	13,727	76.78	11.03	5.09	1.47	
* Flag	Perry	.....	2.23	38.43	56.22	3.12	0.42	14,246	.....	.....	.....	1.46	
* Flag	Perry, 1 mi. n. of Lothair	Kentucky Jewel	4.53	35.38	52.89	7.20	0.73	13,181	73.85	11.22	4.01	1.49	
* Hance, Upper	Bell, Varilla	Varilla	2.34	37.82	55.24	4.60	1.57	14,112	78.18	7.98	6.21	1.46	
* Harlan	Harlan, 4 mi. e. of Harlan	Coxton	3.18	37.21	56.30	3.31	0.93	14,146	78.91	9.70	6.07	1.51	
* Harlan	Harlan, 2 mi. e. of Harlan	Clover Fork	3.56	37.18	56.55	2.71	0.70	14,220	79.61	9.83	6.35	1.52	
* Hazard	Perry	.....	3.50	42.99	45.46	8.05	0.71	13,144	.....	.....	.....	1.06	
* Hazard	Perry, Domino	Himyar	5.33	34.88	51.71	8.08	0.74	12,805	72.47	11.80	3.65	1.48	
* Hickory	Bell, Rim	Rim No. 4	3.43	36.98	54.38	5.21	1.01	13,790	76.87	9.61	5.19	1.77	
* Hignite	Bell, head Little Clear Creek	.....	2.30	33.90	60.40	3.40	0.629	.....	.....	.....	.....	1.68	
* Hignite	Bell, Right Fork, New Cabin	.....	2.00	35.20	59.00	7.60	0.673	.....	.....	.....	.....	1.84	
* Hignite, Lower	Bell, Bear Creek	.....	1.60	33.40	61.52	3.48	0.794	.....	.....	.....	.....	1.45	
* Hignite, Lower	Bell, 1 mi. s. e. of Chenoa	Chenoa Hignite	5.74	36.76	53.20	4.30	1.01	13,403	74.89	12.35	4.50	1.78	
* Hignite, Lower	Bell, Big Clear Creek, Major Br.	.....	2.40	33.90	60.50	3.20	0.632	.....	.....	.....	.....	1.94	
* Hignite, Lower	Bell, Yellow Creek, Stony Fork	.....	3.00	31.96	62.04	3.00	0.478	.....	.....	.....	.....	1.84	
* Hignite, Lower	Bell, Hignite Creek, Polk Br.	.....	2.20	33.40	61.60	2.80	0.601	.....	.....	.....	.....	1.84	

*Bullingtons Bureau of Mines.

†United States Geological Survey Reports.

‡State Geological Survey Reports.

§Proceedings of Kentucky Mining Institute.

(Continued on Next Page)

COAL CATALOG

ANALYSES OF KENTUCKY SEAMS BY COUNTIES AND LOCALITIES—Continued

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carbon	Oxygen	RATIOS	
											Carbon	F. C.
											Oxy. + Ash	V. M.
†Hignite, Lower.....	Bell, Stony Fork, Camp Br.....	.....	3.00	31.62	62.18	3.20	0.274	.....	.....	.....	.....	1.97
†Hignite, Lower.....	Bell, Bear Creek, Sugar Camp Br.....	.....	2.66	34.14	59.70	3.50	0.840	.....	.....	.....	.....	1.75
†Hignite, Lower.....	Bell, Hignite Creek.....	.....	3.00	30.40	64.00	2.60	0.601	.....	.....	.....	.....	2.11
†Hignite, Lower.....	Bell, Yellow Creek, Martins Br.....	.....	2.20	35.00	60.20	2.60	0.637	.....	.....	.....	.....	1.72
†Hignite, Upper.....	Bell, Bear Creek.....	.....	2.00	22.80	59.50	5.70	0.986	.....	.....	.....	.....	2.61
†Hignite, Upper.....	Bell, Bear Creek, Sugar Camp Br.....	.....	1.80	35.60	58.30	4.30	0.599	.....	.....	.....	.....	1.61
†Hignite, Upper.....	Bell, Hignite Creek.....	.....	2.50	29.70	62.80	5.00	0.554	.....	.....	.....	.....	2.18
†Hignite, Upper.....	Harlan, Seagrave Creek.....	.....	3.10	36.10	56.60	4.20	0.794	.....	.....	.....	.....	1.57
†High Splint.....	Harlan, Seagrave Creek.....	.....	4.36	35.02	56.92	3.70	0.67	13.923	77.44	11.46	5.11	1.63
†High Splint.....	Harlan, Seagrave Creek.....	.....	4.45	36.27	56.05	3.23	0.54	.....	.....	.....	.....	1.55
†High Splint.....	Letcher, Razor Fork.....	.....	1.56	35.04	60.80	2.60	0.835	.....	.....	.....	.....	1.74
†High Splint.....	Letcher, Fugitt Creek.....	.....	4.49	35.60	53.26	6.65	1.42	13.309	74.29	10.43	4.34	1.50
*Jellico.....	Knox, ½ mi. n. e. of Elys.....	.....	5.02	36.08	54.47	4.43	0.92	13.608	.....	.....	.....	1.48
*Jellico.....	Whitley, Kenesee.....	.....	1.80	34.00	59.68	4.52	0.473	.....	.....	.....	.....	1.75
†Keokee.....	Harlan, head of Clover.....	.....	1.44	33.56	62.80	2.20	0.849	.....	.....	.....	.....	1.87
†Keokee.....	Harlan, Franks Creek.....	.....	1.52	34.88	60.70	2.90	0.615	.....	.....	.....	.....	1.74
†Keokee.....	Harlan, Seagrave Creek.....	.....	3.02	38.78	58.91	2.27	0.652	14.554	.....	.....	.....	1.52
†Keokee.....	Harlan, Seagrave Creek.....	.....	1.58	31.82	63.20	3.40	1.288	.....	.....	.....	.....	1.99
†Leonard.....	Harlan, Seagrave Creek.....	.....	3.60	29.40	57.00	10.00	6.22	.....	.....	.....	.....	1.94
†Leonard.....	Harlan, Steep Hollow.....	.....	1.70	50.76	38.23	9.31	1.02	14.251	73.25	8.28	4.16	0.75
†Leonard.....	Johnson, Lesley.....	.....	2.92	37.98	56.04	3.06	0.98	14.222	79.44	9.01	6.58	1.48
*Mason.....	Bell, Tejay.....	.....	4.35	36.11	57.12	2.42	0.79	13.936	78.11	10.91	5.86	1.58
*Mason.....	Bell, 2 mi. s. e. of Chenoa.....	.....	6.95	35.03	55.99	2.03	0.48	13.687	77.20	12.55	5.04	1.52
*Mason.....	Johnson, 5 mi. s. e. of Painsville.....	.....	5.12	36.49	55.63	2.76	0.57	13.743	74.91	13.52	4.47	1.50
*Mason.....	Johnson.....	.....	6.43	36.20	54.13	3.24	1.17	13.455	73.47	13.74	4.75	1.60
*Mason.....	Johnson, Van Lear.....	.....	6.90	34.93	55.88	2.29	0.63	13.471	73.05	8.81	4.58	1.24
*Mason.....	Johnson, Van Lear.....	.....	3.80	39.83	49.23	7.14	3.58	13.371	74.58	10.87	4.76	1.27
*Mason.....	Laurel, 1½ mi. e. of Pittsburgh.....	.....	4.53	39.87	50.80	4.80	2.30	13.511	71.13	9.75	3.69	1.18
*Mason.....	Laurel, ½ mi. n. e. of E. Barnstead.....	.....	2.86	40.15	47.47	9.52	3.07	12.987	72.47	11.80	3.65	1.48
*Mason.....	Whitley, Barthell.....	.....	5.33	34.88	51.71	8.08	0.74	12.805	72.47	11.80	3.65	1.48
*Mason.....	Perry, Domino.....	.....	11.84	36.79	41.99	9.38	3.25	11.151	62.11	18.41	2.24	1.14
*Mason.....	Davies, 3 mi. w. of Owensboro.....	.....	11.57	36.47	41.20	10.76	3.81	10.897	60.24	18.39	2.07	1.13
*Mason.....	Davies, 3 mi. w. of Owensboro.....	.....	11.05	36.32	42.59	10.04	3.08	11.263	62.60	17.42	2.28	1.17
*Mason.....	Henderson, Baskett.....	.....	11.55	36.15	41.19	10.81	3.18	11.038	61.30	17.89	2.14	1.14
*Mason.....	Henderson, 1¼ mi. s. of Henderson.....	.....	8.95	37.02	45.75	8.24	8.28	11.869	66.09	15.38	2.80	1.24
*Mason.....	Hopkins, 2 mi. n. w. of St. Charles.....	.....	8.61	37.02	45.01	9.36	3.13	11.821	65.45	15.22	2.66	1.22
*Mason.....	Hopkins, 2 mi. n. e. of St. Charles.....	.....	8.54	36.36	45.89	9.21	3.48	11.884	65.94	14.55	2.78	1.26
*Mason.....	Hopkins, ½ mi. s. e. of Earlington.....	.....	9.25	38.03	43.01	9.71	3.14	11.738	65.02	15.19	2.61	1.13
*Mason.....	McLean, Island.....	.....	8.82	37.29	45.09	8.80	3.52	11.871	66.08	14.66	2.82	1.21
*Mason.....	Muhlenburg, Bevier.....	.....	8.73	37.76	45.93	7.58	2.65	12.208	67.65	15.18	2.97	1.22
*Mason.....	Muhlenburg, Central City.....	.....	8.81	36.15	46.43	8.61	3.55	11.902	65.34	15.72	2.69	1.28
*Mason.....	Muhlenburg, 2 mi. n. of Graham.....	.....	9.89	35.94	43.36	10.81	3.41	11.392	62.27	16.58	2.27	1.21
*Mason.....	Ohio, McHenry.....	.....	9.48	35.65	44.92	9.95	3.41	11.533	65.41	14.91	2.62	1.51
*Mason.....	Ohio, 1¼ mi. n. w. of Rockport.....	.....	8.04	32.63	49.28	10.05	2.97	10.233	68.26	9.99	3.15	1.31
*Mason.....	Ohio, 2 mi. w. of McHenry.....	.....	4.37	36.27	47.67	11.69	3.58	12.325	72.33	9.85	4.00	1.38
*Mason.....	Union, ¾ mi. n. e. of DeKoven.....	.....	4.49	36.63	50.65	8.23	2.59	13.019	68.26	9.99	3.15	1.31
*Mason.....	Union, 3¼ mi. n. w. of Sturgis.....	.....	4.32	37.24	47.31	11.13	3.97	12.562	69.12	9.13	3.41	1.27
*Mason.....	Union, 2 mi. n. w. of Sturgis.....	.....	3.55	36.71	49.42	10.32	3.98	12.798	70.71	8.26	3.81	1.35
*Mason.....	Union, 1½ mi. n. e. of Sturgis.....	.....	5.62	37.20	47.17	10.01	3.89	12.330	68.09	11.35	3.19	1.27
*Mason.....	Webster, ¾ mi. n. of Providence.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

*Bullietus Bureau of Mines. †State Geological Survey Reports. ‡Proceedings of Kentucky Mining Institute.

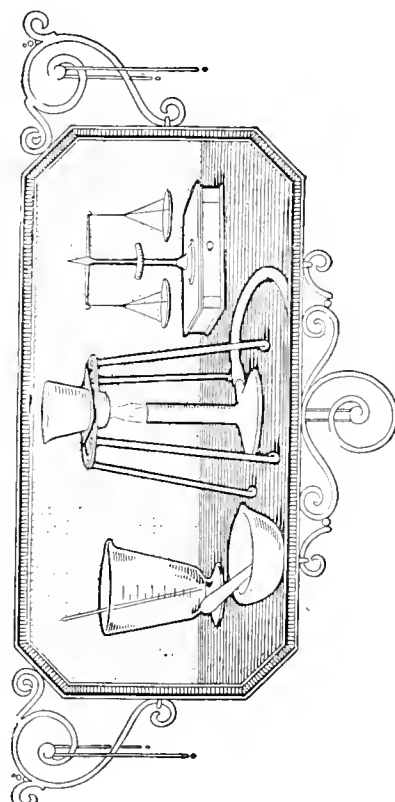
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ANALYSES OF KENTUCKY SEAMS BY COUNTIES AND LOCALITIES—Continued

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carbon	Oxygen	RATIOS	
											Carbon	F. C.
											Oxy. + Ash	V. M.
No. 9.....	Webster, 1/2 mi. n. of Sebree.....	Sebree.....	10.08	37.13	42.87	9.92	3.47	11,372	63.24	16.62	2.39	1.15
No. 11.....	Henderson, 3/4 mi. s. of Robards.....	Panama.....	9.68	37.01	43.02	10.29	...	11,259	62.21	17.01	2.28	1.16
No. 11.....	Hopkins, 1 mi. w. of Madisonville.....	Reinecke.....	6.22	39.89	46.40	7.49	3.70	12,476	69.23	12.82	3.41	1.16
No. 11.....	Hopkins, near Nortonville.....	Nortonville No. 1.....	7.87	38.89	46.27	6.97	3.54	12,283	68.51	14.19	3.14	1.19
No. 11.....	Union, 1 1/2 mi. from Montonville.....	River.....	9.31	37.77	43.59	9.33	3.58	11,660	64.30	16.00	2.54	1.15
No. 11.....	Union, 1/2 mi. n. of Morganfield.....	Morganfield.....	7.96	38.45	43.29	10.30	4.15	11,754	64.84	14.05	2.66	1.12
No. 11.....	Webster, Wheatcroft.....	W. Ky. No. 4.....	4.27	28.06	47.58	10.09	3.99	12,674	69.49	9.78	3.50	1.70
No. 11.....	Webster, Wheatcroft.....	Wheatcroft.....	5.27	35.07	45.48	14.18	4.54	11,950	64.65	10.68	2.60	1.30
No. 11.....	Webster, 1 1/2 mi. n. e. of Providence.....	Shamrock.....	6.00	37.88	46.80	9.32	3.99	12,289	68.21	11.91	3.21	1.24
No. 12.....	Henderson, Smith Mills.....	Smith Mills.....	12.96	33.39	45.40	8.25	1.80	11,209	62.90	20.14	2.92	1.36
No. 12.....	Henderson, Corydon.....	Corydon.....	11.28	35.72	41.61	11.39	2.94	10,897	60.83	18.12	2.06	1.16
No. 12.....	Webster, 1 1/4 mi. w. of Clay.....	W. Ky. No. 7.....	5.58	35.01	51.32	8.06	1.59	12,755	71.49	12.04	3.56	1.46
No. 14 (Nebo?).....	Hopkins, 3 mi. s. of Nebo.....	Nebo.....	8.85	35.29	47.51	8.35	2.79	11,921	67.21	14.72	2.91	1.35
Poplar Lick.....	Bell, Harrison.....	Mountain No. 52.....	3.37	37.52	54.03	5.08	1.01	13,709	76.50	9.83	5.13	1.44
Straight Creek.....	Bell.....	Big Hill.....	2.47	39.03	37.16	1.34	0.77	14,952	.....	.....	.....	0.95
Straight Creek.....	Bell.....	Straight Creek No. 2.....	2.30	37.69	56.85	3.16	0.899	14,641	.....	.....	.....	1.51
Straight Creek.....	Bell.....	.....	2.26	39.68	51.64	6.42	3.222	14,173	.....	.....	.....	1.30
Straight Creek.....	Bell.....	.....	2.26	38.12	57.84	1.78	1.11	13,985	.....	.....	.....	1.51
Straight Creek.....	Bell.....	.....	2.06	37.40	57.97	2.57	0.80	14,235	.....	.....	.....	2.12
Straight Creek.....	Bell, Arjay.....	Straight Creek No. 2.....	3.10	36.12	56.39	4.39	1.22	14,148	77.37	9.76	5.47	1.56
Straight Creek.....	Bell, Fox Ridge.....	Glendon.....	2.97	37.75	56.34	2.94	0.96	14,202	79.41	9.06	6.62	1.49
Straight Creek.....	Bell, Kettle Island.....	Fox Ridge.....	3.84	37.68	56.60	1.88	1.02	14,328	79.58	9.87	6.77	1.50
Straight Creek.....	Bell, Straight Creek.....	Pioneer.....	4.17	37.17	53.97	4.69	1.37	13,793	76.75	9.68	5.34	1.45
Straight Creek.....	Bell, Straight Creek.....	Straight Creek No. 2.....	2.81	37.08	57.31	2.80	0.84	.....	.....	.....	.....	1.55
Straight Creek.....	Bell, Straight Creek.....	Straight Creek No. 2.....	2.91	36.01	57.55	3.53	0.89	14,322	.....	.....	.....	1.60
Straight Creek.....	Bell, Straight Creek.....	Barker Nos. 2 and 3.....	3.27	37.51	55.42	3.80	1.31	14,024	78.06	9.28	5.97	1.48
Straight Creek.....	Bell, Straight Creek.....	Straight Creek No. 2.....	5.21	33.47	53.10	8.22	1.12	13,214	73.08	10.63	3.88	1.38
Upper.....	Bell, Big Clear Creek, Cane Br.....	.....	2.50	32.16	57.54	7.80	0.556	.....	.....	.....	.....	1.79
Wallins.....	Harlan.....	.....	4.00	36.18	54.23	5.59	0.62	.....	.....	.....	.....	1.50
Butler, 1 1/2 mi. s. w. of Morgantown.....	Butler, 1 1/2 mi. s. w. of Morgantown.....	Gillam.....	8.76	39.56	44.12	7.56	3.48	12,152	67.08	14.54	3.04	1.12

*Bullethis Bureau of Mines.

†State Geological Survey Reports.



THE CENTRAL WEST COAL AND LUMBER COMPANY

COLUMBUS, OHIO

TOLEDO, OHIO

INDIANAPOLIS, IND.

Exclusive Selling Agents for

HIMLER COAL COMPANY

Producers of

BUCK CREEK COAL

The property consists of over 9,000 acres in Martin County, Kentucky, of the No. 2 Gas seam of coal, which runs 5 feet 6 inches in thickness, is clean and of a hard, firm character, making it desirable for steam and domestic use, and particularly desirable for stocking purposes.

A railroad bridge has been constructed over Tug River, and 1½ miles of double track built to the mine proper, this connecting with the main line of the Norfolk & Western Railroad, which is recognized as being one of the most efficient coal carrying railways in the United States.

Kermit, W. Va., is the junction point, and Himlerville, Ky., the billing point.

No labor or expense has been spared in making this one of the best mines in Kentucky or West Virginia. A Link Belt Company tippie, embodying Shaking Screens, Picking Tables, Loading Booms, and every necessary appliance to make the preparation the best, has been installed.

The question of strikes and other labor trouble has been solved at this mine, as over 1,000 miners are financially interested in this property. A continuous and uninterrupted supply of coal is thus assured our customers.

The proximity of this coal to the markets, the direct transportation facilities, and the excellent quality of Buck Creek coal, constitute advantages you cannot afford to overlook.

Analysis

Moisture	1.60
Volatile	43.72
Fixed Carbon	49.98
Ash	4.70

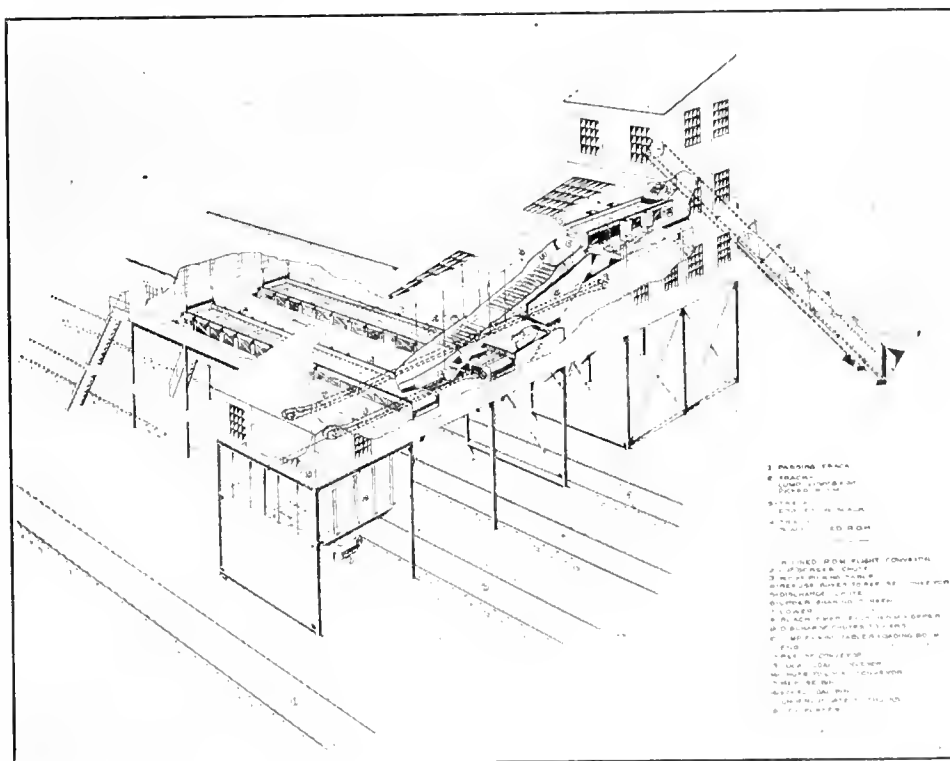
100.00

Sulphur	0.86
B. t. u.	14,675
Fusibility of Ash :2675° F.	

Ultimate Analysis

Carbon	77.84
Hydrogen	4.62
Oxygen	9.44
Nitrogen	1.54
Sulphur	0.86
Ash	4.70

100.00



AJAX-ELKHORN COAL COMPANY



Main Office
ASHLAND, KENTUCKY

Elkhorn By-Product Coking Coal Eastern Kentucky's Best

The Ajax-Elkhorn Coal Company are wholesale dealers in **EASTERN KENTUCKY'S BEST Coal**—mined in the Elkhorn No. 1 Seam. We are also the distributors of a high-grade Cannel Coal, mined in the same district as the Elkhorn Coals.

The Ajax-Elkhorn Coal Company is the sole agency for the production of the Superior Elkhorn Coal Company, The Lackey Mining Company, and the Zella Mining Company. These four companies are owned entirely by Mr. R. D. Clere, who devotes all of his time and energy to their management.



A Close-up View of Ajax-Elkhorn Block Coal

The close connection between the sales and the operating units makes for an individual responsibility and assures the buying public a uniformly satisfactory service, as well as continuously high grade of coal.

Ajax-Elkhorn Coal—Its Production

Coal marketed under this trade name is produced by the following companies:

Superior Elkhorn Coal Company

Mines at Bosco, Floyd county, Kentucky, working the Elkhorn No. 1 Seam. In addition to the small sizes, 1½-inch, 3-inch and 6-inch lump are prepared. This is a clean coal, bright and shiny, and mines in large blocks, thus making it particularly attractive to household trade. The daily capacity of this plant is from 300 to 400 tons and shipments are made both East and West over the Chesapeake & Ohio Railroad.

Lackey Mining Company

Mine at Lackey, Floyd county. This mine is also operating in the well known Elkhorn No. 1 Seam. The tippie is equipped for the preparation of the domestic sizes, such as 2-inch and 4-inch lump.

The mine, with a capacity of 300 to 400 tons daily, is on the Chesapeake & Ohio Railroad.

Zella Mining Company

The Zella Mine has the same location and works the same seam as the Lackey Mine, being for all purposes the same kind of coal in physical and chemical make up. This mine has a capacity of 300 tons daily and makes shipments over the Chesapeake & Ohio Railroad.

Ajax Cannel Coal—Its Production

Ajax Cannel Coal is produced at the Zella Mine above mentioned. A peculiarity of the Elkhorn No. 1 Seam on this property is that it contains from 18 to 20 inches of high-grade cannel coal. This cannel coal is carefully sorted out in the mine, and is loaded into cars by itself, so that a shipment of **AJAX-CANNEL** is **all cannel** and not a mixture of different kinds of coal.



Run-of-Mine Ajax-Elkhorn Coal

Ajax-Elkhorn Coal—Its Quality

Elkhorn Coal during the past ten years has been so firmly established with the trade that it needs no additional praise from us. However, we say in behalf of our Ajax-Elkhorn brand that with a B.t.u. value in excess of 14,000, and a fusion point of ash of 2,700 deg. F., it is one of the premier fuels of the country for making steam.

Its analysis will show that it is one of the world's finest coals for purposes where a high heat, low-sulphur coal is needed, such as for by-product coking, manufacture of illuminating gas, metallurgical fuel, burning of fine pottery ware, etc.

As a practical demonstration of the merits of Ajax-Elkhorn Coal for by-product usage, we submit below a certified report of an investigation made on coal from our mines by the Commercial Testing and Engineering Company, March 7, 1921.

PROXIMATE COAL ANALYSIS

	Dry	Com'l
Moisture	2.23	
Volatile Matter	42.18	41.24
Fixed Carbon	53.74	52.54
Ash	4.08	3.99
	100.00	100.00
Sulphur	0.72	0.70
B. t. u.	14,416	14,095

ULTIMATE COAL ANALYSIS

	Dry	Com'l
Moisture	2.40	
Carbon	80.48	78.55
Hydrogen	5.29	5.16
Nitrogen	1.61	1.57
Oxygen	7.82	7.63
Sulphur	0.72	0.70
Ash	4.08	3.99
	100.00	100.00

Maximum temperature in Retort, 2100 deg. F.

Coke Yield—61.05% of coal charged = 1221 lbs. per ton of coal.

Gas Yield—10,920 cu. ft. at 60 deg. F. and 30" mercury pressure and saturated with water vapor, per ton of coal = 5.46 cu. ft. per lb.

Ammonia—5.18 lbs. Ammonia (NH₃) per ton of coal.

Tar—252.4 lbs. per ton = 29.4 gallons per ton.

Calc. heat value of gas = 574.4 B.t.u. per cu. ft. at 60 deg. F. and 30" mercury pressure.

COKE YIELD

Dry Basis	
Ash	7.72
Volatile	1.84
Fixed Carbon	90.94
	100.00
Sulphur	0.55
B. t. u.	13,383
Dry Tar	
Specific Gravity	1.030
Free Carbon	2.90%

GAS ANALYSIS

Carbon Dioxide	1.20
Illuminants	4.20
Oxygen	1.30
Hydrogen	54.90
Carbon Monoxide	5.40
Methane	24.20
Ethane	2.00
Nitrogen	6.80
	100.00

MIDDLE OIL 338 Deg.—455 Deg. F.

14.98% of total tar by weight
16.23% of total tar by volume
Specific Gravity—0.950
Acids 38.00% by volume
Bases 1.20% by volume

PITCH ABOVE 572 Deg. F.

44.31% of total tar by weight
39.14% of total tar by volume
Specific Gravity—1.258
Melting Point—32 Deg. F.
Fusion Determination of Ash—2,700 Deg. F.

LIGHT OIL TO 338 Deg. F.

4.37% of total tar by weight
5.28% of total tar by volume
Specific Gravity—1.854
Acids 16.00% by volume
Bases 4.00% by volume

HEAVY OIL 455 Deg.—572 Deg. F.

36.34% of total tar by weight
39.35% of total tar by volume
Specific Gravity—0.951
Acids 12.80% by volume
Bases 2.40% by volume

Ajax Cannel Coal—Its Quality

This cannel coal is big and blocky and is the delight of the retail dealer who caters to fine trade. It contains less than one-half per cent of sulphur, about 5.20 per cent of ash, 49.50 per cent of volatile matter, and has a heat value of 14,000 B.t.u.

A sample ear will convince you that it is a wonderful coal.

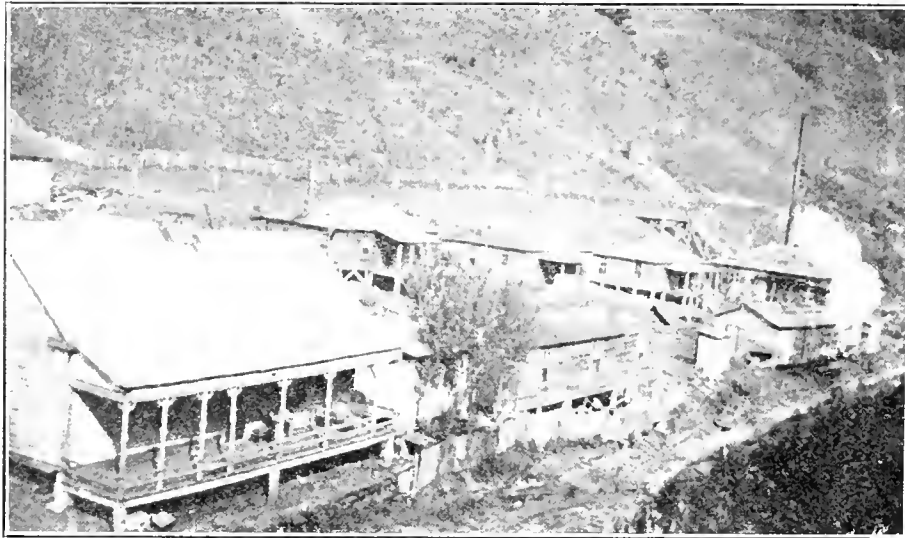


A Mine Car Load of Ajax Cannel Coal

BLUE BEAVER ELKHORN FUEL CO

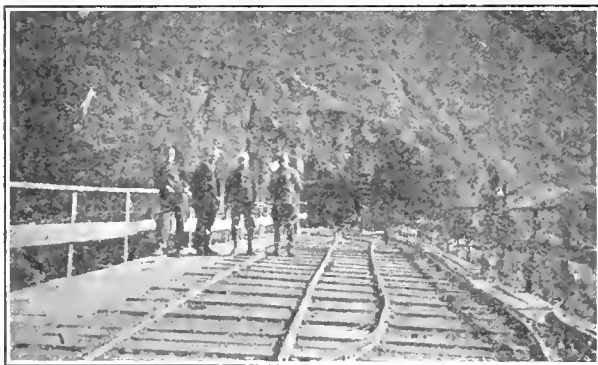
MINES LOCATED AT LIGON, FLOYD COUNTY, KENTUCKY
On Clear Creek Branch of Long Fork Railway

GENERAL OFFICES: PRESTONBURG, KY.



Partial View of Camp

Blue Beaver Elkhorn Fuel Company's mine, located on Left Fork of Beaver Creek, although one of the comparatively new mines, has now built up its production and is equipped to load 20 cars per day.



Opening of Mine No. 1

This property is located in the very heart of the Elkhorn seam, producing an Elkhorn coal that has no superior and is equal to the very best.

The No. 3 Elkhorn seam on this property averages about 72 inches in thickness, with a hard sandstone roof and floor, making it possible for us to produce an absolutely clean coal.

The mine is equipped with power plant and latest mining equipment, Jeffrey Arc Wall Machines being used, getting the coal out in the very best possible shape.

Elkhorn coal is the coal most extensively used by by-product plants and for the manufacturing of illuminating gas and, in addition, one of the very best coking steam coals.

Annual capacity 200,000 tons.

The following is an analysis on Blue Beaver Elkhorn coal:

Volatile	36.93
Carbon	59.30
Ash	3.77
	<hr/>
	100.00
Sulphur .....	.697
B. t. u.	14,673

SALES OFFICES

J. W. DYKSTRA & CO.

Hammond Building

DETROIT, MICH.

AYERS & LANG

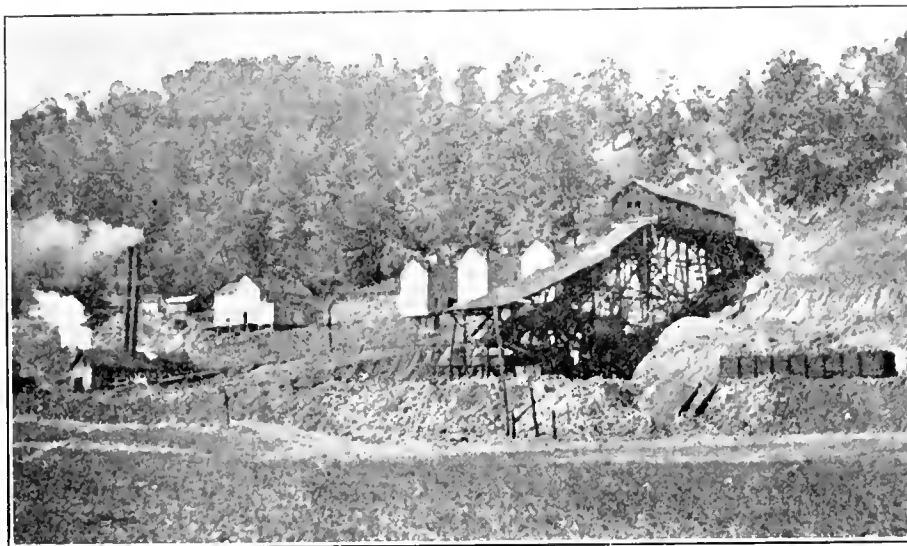
Dime Bank Building DETROIT, MICH.

BLUE BEAVER COAL CO.

MINES LOCATED AT PRESTONBURG, FLOYD COUNTY, KENTUCKY

On Big Sandy Division of C. & O. R. R.

GENERAL OFFICES: PRESTONBURG, KY.



Power Plant and Tipple Blue Beaver Coal Company

Blue Beaver Coal Company's mine, located on Middle Creek near Prestonburg, is producing one of Kentucky's most desirable Domestic coals.

The No. 1 seam on this property averages about 42 inches in thickness.

This coal is mined by most modern methods, the Jeffrey Short Wall Machine being used. The coal is screened over Morrow Shaker Screens, preparing it properly for the domestic trade. The coal is prepared in 4" Lump, this is all the coal passing over the 4" shaker screens; 4" x 2" Egg, being all the coal passing through the 4" and over the 2" shaker screens; and 2" Nut, Pea and Slack, which is all the coal passing through the 2" screens.

Blue Beaver coal is a good coal for dealers, as it stocks well and does not break up in handling. It is a dry burning coal, ignites freely and burns with a quick hot fire and very little ash.

Annual capacity 100,000 tons.

The following is an analysis on Blue Beaver coal:

• Volatile	43.33
Carbon	54.05
Ash	2.62
	<hr/>
	100.00

Sulphur	1.51
B. t. u.	14,855

SALES OFFICES

AYERS & LANG

Dime Bank Building DETROIT, MICH.

J. W. DYKSTRA & CO.

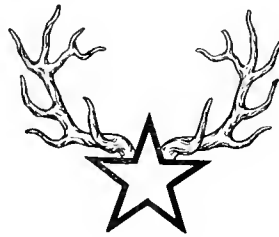
Hammond Building DETROIT, MICH.

ELKHORN STAR COAL COMPANY

INCORPORATED

Miners and Shippers of
ELKHORN STAR

General Office
ASHLAND, KY.



COAL

Mine Office
MINNIE, KY.

Shipping Point
GIBSON, KY.

Mines in Elkhorn Field

The mines of the Elkhorn Star Coal Company are located at Gibson, Floyd County, Kentucky, on the Beaver Creek branch of the Chesapeake & Ohio Railroad.

These mines are working the Upper and Lower Elkhorn seams, both of which are widely known to all coal consumers because of their remarkable purity, and are natural outlets for large acreages of the same high grade of coal lying in the rear. Nos. 1 and 2 mines are well developed and their present capacity of 800 tons daily is being increased. No. 3 mine is at the present in the process of development.

By-Product and Steam Coal

Coal from these mines is unsurpassed for by-product and general steam purposes. Its analysis shows it to be well fitted for malleable, ceramic, and, in fact, all uses where a low sulphur, low ash coal is used. There is no parting in either seam, and utmost care is used to remove all impurities before loading. We direct your attention to the following analysis of this coal made by the Pittsburgh Testing Laboratory:

Analysis "Elkhorn Star" Coal

Moisture	2.46
Volatile Matter	36.02
Fixed Carbon	57.09
Ash	4.43
Sulphur	0.62
B. t. u.	14,190

To the Export Trade

A project under way is a storage bin to hold 1,000 tons of coal to be fed by the two mines, and its capacity, plus the daily capacity of the two mines, puts us in good position to make large shipments on short notice. We have an outlet to the Tidewater via the C. C. & O. Railway, a feature especially attractive to the export trade.

Labor Conditions

Coal consumers want reasonable assurance of regularity of shipments under all conditions. Our mines are located in a non-union district and we are not subject to disturbances and interruptions so common to many coal fields of the country. This gives reasonable assurance of continuity of shipments under all conditions.

These are factors which should commend "Elkhorn Star" coal and service to your favorable consideration.

FEDERAL COAL COMPANY

Hamilton Bank Building, Chattanooga, Tenn

Miners and Shippers of

Federal Straight Creek Coal

Holdings and Location

The holdings of the Company comprise about 20,000 acres, located in Bell County, Ky., and are reached by the Straight Creek Branch of the Cumberland Valley Division of the L & N. Railroad at Pineville, Ky., the several mines being from 2 to 5 miles distance from Pineville. These mines have a total output of about 50 cars per day.

Kind and Quality of Coal Mined

The Federal Coal Company is the exclusive producer of Federal Straight Creek Coal, mined from a clean seam, a high grade, free-burning, bituminous coal and particularly suitable for domestic purposes.

Federal Straight Creek Coal kindles quickly, igniting almost as quickly as wood. It makes a lasting, hot fire, burns up clean, without cinder and with less than 1½ per cent of light, loose, red ash. It makes a minimum of smoke and soot.

Usages of Federal Straight Creek Coal

This coal is not only suitable for domestic purposes and especially adapted for use in cooking ranges, but is also excellent for steaming purposes in locomotives, power plants, brick and cement plants, cotton oil mills, and wherever a high grade of steam coal is required.

Preparation

Federal Straight Creek Coal is shaker screened, hand-picked and the utmost care taken to remove all impurities before loading.

Sizes

Our domestic sizes are 4" Block and 2" Lump and Block, and our specially prepared Gas size is 2" x4", containing lumps from the size of a goose egg to the size of a cocoanut. This size is also suitable for domestic usages.

Analyses

Attention is directed to the following analyses of Federal Straight Creek Coal, made by the Geological Survey of Kentucky and the U. S. Navy Department.

Analysis of Navy Department:		Analysis of Kentucky Geological Survey:	
Moisture	2.23	Moisture	2.47
Volatile Matter	33.17	Volatile Matter	35.03
Fixed Carbon	63.40	Fixed Carbon	57.16
Ash	1.20	Ash	1.34
100.00		100.00	
Sulphur .....	.68	Sulphur .....	.77
B. T. U. per pound	14,766	B. T. U. per pound	14,952

Had the analysis of the Kentucky Geological Survey been made from a dry sample, the coal would have been shown to contain over 15,000 B. T. U. per pound.

Coal for By-Product Purposes

Federal Straight Creek Coal is a good gas coal, as will be seen by the following results obtained from every-day practice.

Coke— 1,224 lbs. per ton of coal
Tar — 148.5 lbs. per ton of coal
Gas —12,940 cubic feet per ton of coal.

Nut and Slack Coal for Power Plants

The Company is in an especially advantageous position to furnish nut and slack coal for power and manufacturing plants, either for use with automatic stokers, or for firing on plain grates.

We direct your attention to the following analysis of a car sample of this coal, made by F. C. Brocman & Co., Cincinnati, Ohio.

Moisture, dry basis.....	1.23
Volatile Matter	36.43
Fixed Carbon	57.32
Ash	6.25
100.00	
Sulphur	1.43
B. T. U. per pound	14,198

Stocking Qualities

Federal Straight Creek Coal is hard in structure, can be handled and stocked with a minimum of breakage and without air-slacking, even when stored in the open.

Many dealers have been stocking from two to twenty thousand tons every summer for years.



20,000 Tons of Federal Straight Creek Coal in Storage

Cost Versus Quality

Federal Straight Creek Coal is not a low-priced coal, but when due consideration is given its high heating value and the fact that, with its low percentage of ash, no freight is paid on non-combustible matter, it will be found very much cheaper than coals containing higher percentages of ash and other impurities.

Testimonials

You will be interested in the results obtained by users of Federal Straight Creek Coal. Write for testimonials, which can be furnished in abundance.

All inquiries and orders will receive prompt attention.

GRUSCHOW-McCABE COAL CO

Incorporated

Anthracite—COAL—Bituminous

Old Colony Building
CHICAGO, ILL.

Sales Agents: CIRCLE CITY COAL CO., INC.

Mines: Nebo, Kentucky, the Only Mines Producing

Nebo Stray Seam Coal

Nebo Mine

The Nebo seam in Western Kentucky occurs in large lens-shaped bodies—in freak formation, as it were. Like the coal in some of the freak formations in its neighboring state, Indiana, it is of remarkable quality. It contains less impurities than any coal in the western counties, except the Bell coal, which is little worked.

At Nebo, where the mines of the Circle City Coal Company, Inc., are located, the seam is 6 to 7 feet thick without a parting. It is a bright, shiny coal, somewhat softer than No. 9 seam coal, but has less ash and runs higher in heat units.

Circle City is an excellent coal, and will give uniform satisfaction for steam and domestic purposes.

Illinois, Indiana, Ohio, Eastern Kentucky and West Virginia Coals

We are distributors for the better grades of steam and domestic coals from Illinois and Indiana; also steam, gas, malleable and domestic coals from Ohio, West Virginia and Kentucky, serving a discriminating trade north of the Ohio River.

Organization and Service

Gruschow-McCabe Coal Company, Inc., has been serving both OPERATORS and CONSUMERS for many years. Our facilities and ability for rendering a prompt and efficient service in both directions are well established.

We conduct our business on the policy that good service, not only for current requirements, but in times of stress, creates a genuine asset, valuable alike to producer and consumer.

Trade relations with our organization are a guaranty that the interests of our clients, as regards quality, service and price, will be our first consideration.

HARLAN CO-OPERATIVE COAL CO.

INCORPORATED

General Office

LEXINGTON, KENTUCKY

Producers and Shippers of

HARLAN ELKHORN COAL

The Nos. 1 and 2 mines of the company are located at Evarts, Kentucky, in the center of the famous Harlan County (Kentucky) Coal Field, on the Louisville & Nashville Railroad. Shipping Point, SIKES.

Elkhorn "C" Seam Coal

The Elkhorn "C" Seam in Harlan County is one of the purest coals mined in the United States and is good for a variety of purposes, being at once unexcelled for the production of ILLUMINATING GAS, BY-PRODUCT COKING, MALLEABLE IRON AND ANNEALING FURNACES—first class for STEAM and at the same a delightful DOMESTIC COAL.

Analysis*

The analysis given below is typical of the "C" Seam on the company's property:

Moisture	1.60%
Volatile Matter	35.72%
Fixed Carbon	59.24%
Ash	3.44%
	<hr/> 100.00%
Sulphur .....	.60%
Phosphorus .....	.013%
B. t. u. per pound.....	14,407

*Analysis made by the Pittsburgh Testing Laboratory.

Our coal is available for shipment to the Southern and Southwestern States, Central North, West and Northwestern states as far as the Dakotas, Export and Coastwise shipments through South Atlantic Ports, Gulf shipments through Mobile, Lake shipments through Toledo.

HART COAL CORPORATION

INCORPORATED

General Offices: MORTONS GAP, KY.

Miners and Shippers of the Famous
Moss Hill and Victoria Coals

Tonnage

The Hart Coal Corporation operates five mines, having a Combined Capacity of 1,000,000 tons per year. This coal is vein No. 9 and is of the highest grade produced in Western Kentucky.

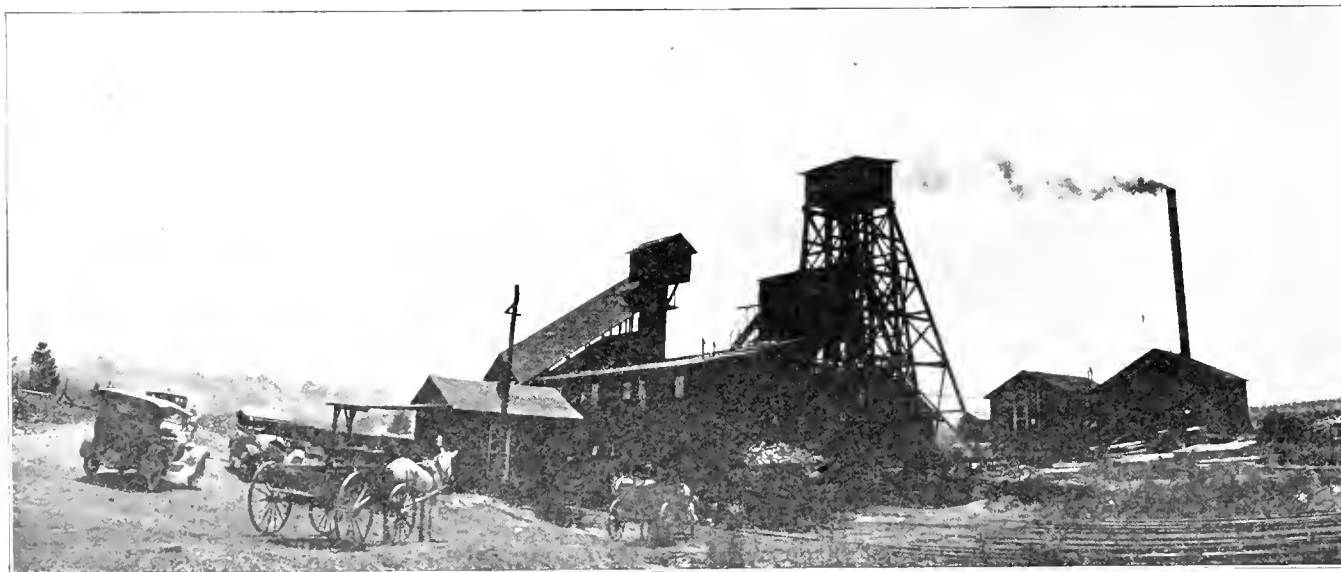


HOME OF OUR CELEBRATED VICTORIA No. 11 STEAM COAL.

Daily capacity 30 cars. Write us for prices and freight rates. We are large enough to take care of your requirements.

Location

All of these mines are located in Hopkins County, Kentucky, on the Henderson Division of the L. & N. R. R., which, with its branch line connections, enables shipments to be made as far South as New Orleans, and North to the Great Lakes.



HOME OF OUR CELEBRATED VICTORIA No. 9 DOMESTIC COAL.

Daily capacity 20 cars. Write us for prices and freight rates. We are large enough to take care of your requirements.

Preparation

Up-to-date screening devices are installed, thereby catering to the Domestic trade in Lump, Egg and Nut sizes, as well as Run of Mine and Slack for Steam trade. The equipment is such as enables the shipment of a carefully prepared and closely sized coal for Steam and Domestic use. The tipples are electrically equipped with Conveyors, Shaker Screens and Picking Tables, with adjustable Loading Booms that can be dropped close to the bottom of the railroad car and thus reduce breakage to a minimum.

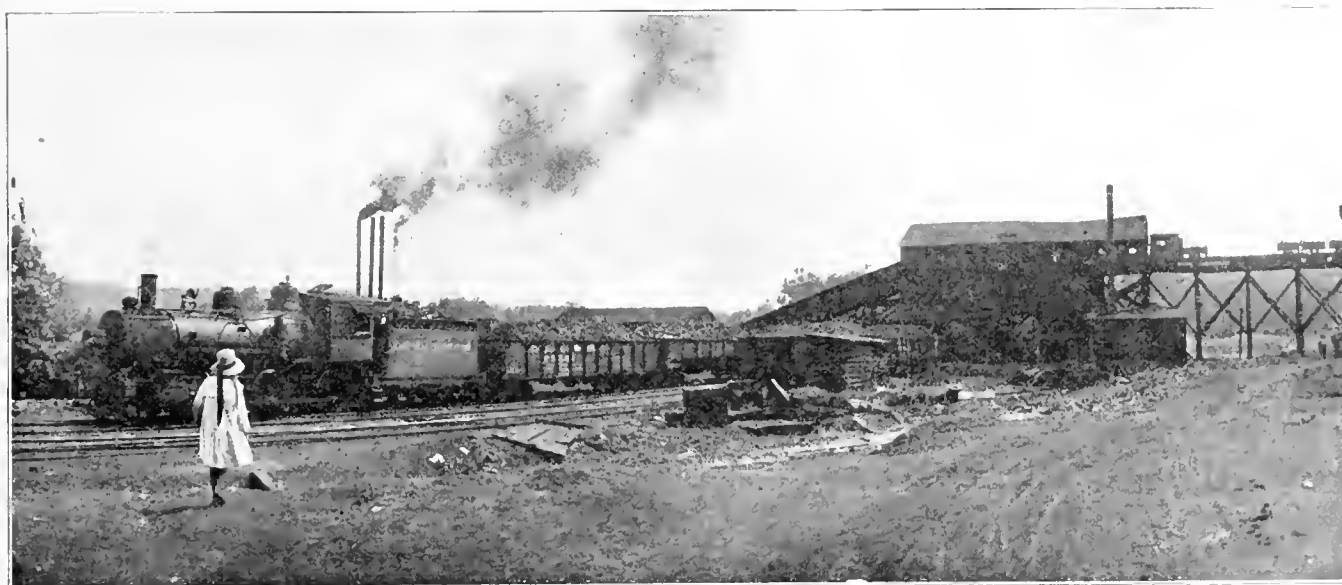
Analysis

The samples from which this analysis was made were secured by digging channels from top to bottom in the face of the coal in widely separated parts of the mines, and shows the coal in its natural state before it is mined and prepared for shipment. When the coal passes over the Screen, it is thoroughly hand picked and this greater reduces the Sulphur.

Analysis*

	Per Cent. Figured to Dry Basis	Per Cent. as Received in Laboratory
Moisture .....	.....	7.66
Volatile Matter....	43.79	40.44
Fixed Carbon	46.47	42.91
Ash	9.74	8.99
	<hr/> 100.00	<hr/> 100.00
Sulphur	3.47	3.20
B. t. u. per pound..	13,044	.....

*Commercial Testing & Engineering Company.



HOME OF OUR FAMOUS MOSS HILL No. 9 DOMESTIC COAL.

Daily capacity 50 cars. Write us for prices and freight rates. We are large enough to take care of your requirements.

SALES DEPARTMENT

MAIN OFFICE: MORTONS GAP, KY.

Branch Offices: Madisonville, Ky.; Chicago, Ill.; St. Louis, Mo.; East St. Louis, Ill.; Louisville, Ky.; Hopkinsville, Ky.; Nashville and Memphis, Tenn.



C.V. BLINDBURY
MANAGING PARTNER
803 FORD BUILDING PHONE MAIN 8820
DETROIT, MICHIGAN

WILLIAM S. HARMAN

KENTUCKY-WEST VIRGINIA-OHIO

COAL AND COKE

OFFICE: HARTMAN BUILDING
TELEPHONES MAIN 8950 CITZ 4178

COLUMBUS, OHIO

MINE OFFICES
MOSSY BOTTOM, KY.
SPRINGDALE, W. VA.
WELLSTON, OHIO

To the Trade:

ELKHORN Kentucky coal has particular merit for by-product purposes. Using average figures, this coal runs from 2 to 5% ash, with a fusing point of from 2600 to 2900 degrees. Sulphur runs from 0.50 to 0.75%, and phosphorus as low as 0.001 up to 0.002% on the average. The by-product yield, per ton of coal, will run as follows:

Tar	7.5	to	10. gallons
Benzol	2.5	to	3. free gallons
Ammonium Sul:	28.	to	34. lbs.
Surplus Gas	5000.	to	5500. cu. ft.
Field Coke	70.	to	75. per cent

The exceptionally small percentage of impurities attests the superiority of ELKHORN COAL for the manufacture of illuminating and producer gas. The figures shown above for surplus gas represent only one-half the total yield.

Our mine is located at Mossy Bottom, Pike County, Kentucky on the C & O Railroad. We mine the lower Elkhorn seam. There are no partings in the vein. We are prepared to ship clean coal.

We operate our mine on a non-union basis. Our customers need not concern themselves over the ever recurring strike periods that harass unionized fields.

We invite your inquiries. We are prepared to ship both screened and mine run coal, and give you service second to none.

Respectfully yours,

W. S. Harman.

THE HUMPHREY COAL CO.

Union Central Bldg., CINCINNATI, O.

Direct Mine Representatives

NO. 4 HAZARD, ELKHORN HARLAN, WHITESBURG, POPLAR LICK

Our No. 4 Hazard, Elkhorn and Whitesburg coal is mined on the Lexington & Eastern Division of the L. & N. R. R., the mines being located on Sand Lick Creek, one mile from Whitesburg, Ky., in Letcher county. At this point the No. 4 coal is above the jack rock parting, which is unusual.

ANALYSIS—State Geological Survey

Moisture	3.78
Volatile	36.90
Fixed Carbon	55.80
Ash	3.52
Sulphur .....	.66
B.t.u.	13,919

The Whitesburg Seam is a clean seam of exceptional merit and compares favorably with the No. 4 Hazard for By-Product, Producer Gas, Malleable, Steam and general domestic purposes.

ANALYSIS—State Geological Survey

Moisture	0.97
Volatile	38.27
Fixed Carbon	58.70
Ash	2.06
Sulphur .....	.87
B. t. u.	14,397

The Elkhorn Seam at this point is of good quality, and is extensively mined on all sides by some of the largest consumers of by-product coal.

ANALYSIS—Bureau of Mines

Moisture	3.80
Volatile	36.74
Fixed Carbon	55.44
Ash	4.02
Sulphur .....	.68
B. t. u.	14,170

The Harlan operation, which is located at Le Junior, Ky., Harlan county, on the L. & N. R. R., is considered the average of the field, and has proven very satisfactory for manufacturing illuminating and producer gas.

ANALYSIS—Bureau of Mines

Moisture	3.18
Volatile	37.21
Fixed Carbon	56.30
Ash	3.31
Sulphur .....	.90
B.t.u.	14,146

The Poplar Lick Seam, located at Harrison, Bell county, on the L. & N. R. R., finds an extensive market both north and south for general purposes, being classed with the better grades of Jellico from that field. An excellent domestic coal.

ANALYSIS—Bureau of Mines

Moisture	4.35
Volatile	36.11
Fixed Carbon	57.12
Ash	2.42
Sulphur .....	.79
B. t. u.	13,936

The Kentucky Fuel Company

Main Office
26th Floor Union Central Bldg.
CINCINNATI, OHIO

Southern Office
307 Burwell Bldg.
KNOXVILLE, TENN.

Miners and Shippers of

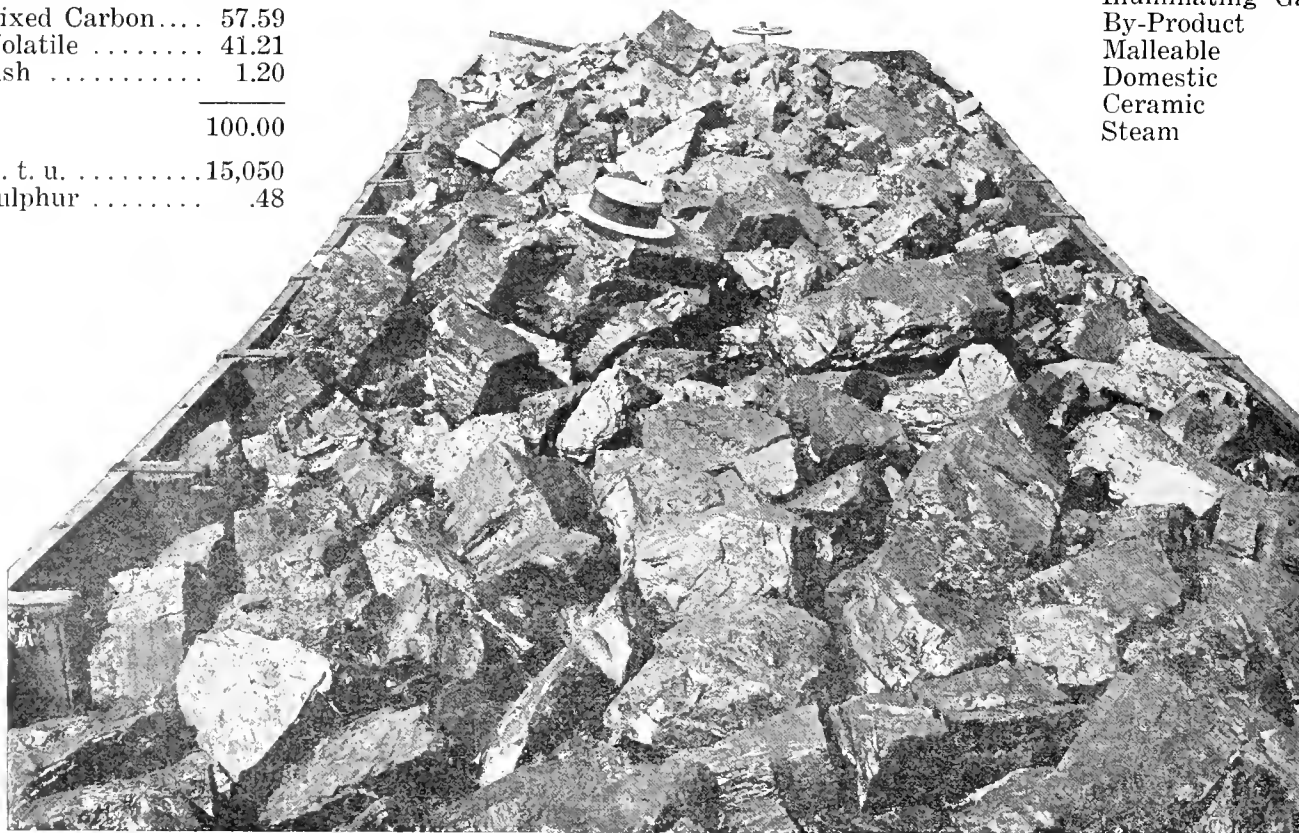
COLUMBIA

A Real Blue Ribbon Product
Mined Right in Kentucky

Proximate Analysis

Fixed Carbon....	57.59
Volatile	41.21
Ash	1.20
	<hr/> 100.00
B. t. u.	15,050
Sulphur .....	.48

For
Illuminating Gas
By-Product
Malleable
Domestic
Ceramic
Steam



This Car of COLUMBIA BLOCK COAL, L & N 33115, Shipped August 8th, 1921, Was Photographed in the Yard of the Taylor Coal Company, Chicago, Ill.

The Kentucky Fuel Company in addition to owning their own mines handles the output of seventeen other mines, all of which are modernly equipped, both inside and outside.

Careful preparation is the rule, not the exception, at all of these operations.

We prefer, however, to submit proofs for your consideration, rather than mere words.

You have observed on the opposite page a car of Block coal at its destination, with practically no trace of deterioration. There is a suggestion in that photograph for retail coal buyers. The picture tells its story better than 1,000 words of description.

Below we give a second proof, just as convincing, to those in search of a by-product or illuminating gas coal.

CERTIFIED REPORT OF COLUMBIA RUN OF MINE COAL BY-PRODUCT INVESTIGATION March 21, 1921—Lab. No. 26186

PROXIMATE ANALYSIS			ULTIMATE ANALYSIS		
	% Dry	% Com'l		% Dry	% Com'l
Moisture .....	.....	3.06	Moisture .....	.....	3.06
Volatile	41.21	39.95	Carbon	85.47	81.89
Fixed Carbon	57.59	55.83	Hydrogen	5.28	5.12
Ash	1.20	1.16	Nitrogen	1.61	1.56
			Oxygen	6.94	6.73
			Sulphur .....	.50	.48
			Ash	1.20	1.16
	100.00	100.00			
B. t. u.	15,050	14,589		100.00	100.00
Sulphur .....	.50	.48			

Fusion Point of Ash.....2894° F.

Maximum temperature in retort: 2100° F.

Coke Yield 58.79% of coal charged = 1175.8 lbs. per ton of coal.

Gas Yield 11,500 cu. ft. at 60° F. and 30" mercury pressure and saturated with water vapor, per ton of COAL = 5.75 cu. ft. per lb.

Ammonia 8.09 lbs. Ammonia per ton of coal.

Tar 240.0 lbs. per ton = 26.6 gallons per ton.

Calculated heat value of gas = 580 B. t. u. per cu. ft. at 60° F. and 30" mercury pressure.

COKE ANALYSIS		GAS ANALYSIS	
Dry Basis			
Ash	3.10	Carbon Dioxide .....(CO ₂)	.8
Volatile	1.91	Illuminants	4.1
Fixed Carbon	94.99	Oxygen .....(O ₂)	1.2
	100.00	Hydrogen .....(H ₂)	55.1
		Carbon Monoxide.....(CO)	4.8
		Methane .....(CH ₄)	25.3
		Ethane .....(C ₂ H ₆)	1.9
		Nitrogen .....(N ₂)	6.8
			100.00
B. t. u.	13,900		
Sulphur .....	.35		
Dry Tar			
Specific Gravity.....	1.084		
Free Carbon	3.97%		

Respectfully Submitted

COMMERCIAL TESTING & ENGINEERING COMPANY

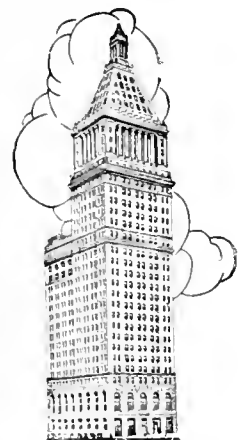
The Kentucky Fuel Company offers a third proof — the proof of SERVICE — to anyone not already familiar with their methods of taking care of the trade.

THE KENTUCKY FUEL COMPANY

Miners and Shippers

Main Office
Union Central Bldg.
CINCINNATI, O.

Southern Office
307 Burwell Bldg.
KNOXVILLE, TENN.



For a birds eye view of Cincinnati, visit us in the Union Central Building 26th Floor.

W. H. KIRKPATRICK, General Manager

M. H. SMITH, Secretary and Treasurer

W. H. KIRKPATRICK FUEL CO.

NASHVILLE, TENN.

Operating



BEECH CREEK COAL CO. and THE KIRK COAL CO.
 (Three Mines) (Two Mines)

The Beech Creek Coal Company mines are situated in Muhlenberg county, Western Kentucky, on the Owensboro & Nashville Division of the Louisville & Nashville Railroad. The three mines have a daily capacity of 3,000 tons of the best grade of No. 9 seam of coal.

These mines have been in operation sixteen years, and their coal has been giving genuine satisfaction to thousands of customers. For steam purposes it is unexcelled. We have been furnishing screenings exclusively to the City Light Plant, Nashville, for two and one-half years. The superintendent, in a report to the Commissioner of Lights, states that this coal has given better satisfaction than any other coal they ever used. Our Domestic coal is handled almost exclusively by two-thirds of the retail dealers in the city of Nashville.

Impurities are removed by hand picking and the coal is screened over the very latest type of shaker screen, making the following grades: Lump, Egg, Nut and Egg, Nut, Standard Run-of-Mine, 5-inch Run-of-Mine, Nut, Pea and Slack, and 1½-inch Screenings. One of the three mines, with a daily capacity of 1,000 tons, makes Standard Run-of-Mine exclusively. This coal is very carefully prepared and runs approximately 50% Lump, 30% Nut and 20% Pea and Slack. All of our coal is machine mined.

Analysis Beech Creek Coal*

Moisture	6.70
Volatile Matter	39.60
Fixed Carbon	45.30
Ash	8.40
Sulphur	3.09
B. t. u.	12,874

*State Geological Survey.

The Kirk Coal Company mines are also located in Muhlenberg County, working the same seam and having the same railroad connections as the Beech Creek mines. Both mines produce coal of a high quality and well prepared by means of modern tipple equipment. The same sizes are here made as for the Beech Creek mines. Daily capacity of these two mines 1,500 tons.

In addition to the splendid qualities of the No. 9 coal from these five mines for steam purposes, it will also be found an excellent coal for domestic use. It is rich in gaseous matter and makes a cheerful fire for open grates.

The Main Office of the W. H. Kirkpatrick Fuel Company is at 532 Stahlman Bldg., Nashville, Tenn., and a Branch Office at 1402 Great Northern Bldg., Chicago, Ill. Your inquiries to either office will receive our prompt and courteous attention.

LOGAN-POCAHONTAS FUEL CO.

General Office:

CHARLESTON, W. VA.

Branch Offices

DETROIT

CINCINNATI

RICHMOND

ATLANTA

PINEVILLE, KY.

The Logan-Pocahontas Fuel Company sells its own coal from the following mines:

BLACK COMET, BLACK STAR, BLACK MOLUS and BEAR BRANCH—all operations of the Wallins Creek Collieries Company in Harlan county, Kentucky, making shipments on the L. & N. Railroad. These mines have a yearly capacity of 1,500,000 tons, mined in the celebrated Harlan and Wallins seams. A recent analysis of this coal by F. C. Broeman, Cincinnati, Ohio, is as follows:

	Dry Basis
Moisture	1.50
Volatile Matter	38.30
Fixed Carbon	59.52
Ash	2.18
Sulphur	0.60
B. t. u.	14,899
Fusion point of ash	2960° F.

BLACK BEAR, CUB BEAR and CRANE CREEK mines in Bell county on the L. & N. Railroad, mining the Straight Creek and Mason seams and having a capacity of 500,000 tons yearly.

Mines on the Chesapeake & Ohio, Norfolk & Western, Kanawha & Michigan and Baltimore & Ohio railroads in West Virginia, producing the highest grades of steam, domestic, by-product, malleable, brick and tile burning, illuminating and producer gas coals. Our coals cannot be excelled for these purposes.

There's a reason why our mines are in operation every day, while many mines in the same territory are idle.

We guarantee our coal for all high-class business and exacting purposes. We stand behind every car we ship.

The following analysis was made April 6th, 1921, on BLACK MOLUS coal by the Pittsburgh Testing Laboratory. Sample taken by representative of the Laboratory.

ANALYSIS OF COAL		ANALYSIS OF COKE		ANALYSIS OF GAS	
Moisture	1.76	Ash	2.58	Carbon Dioxide	2.29
Volatile	36.72	Sulphur .....	.59	Illuminants	7.79
Fixed Carbon	59.19			Oxygen .....	.31
Ash	2.33			Carbon Monoxide	8.32
Sulphur .....	.63			Methane	29.39
Phosphorus .....	.006			Hydrogen	49.52
B. t. u. per pound	14,729			Nitrogen	2.38
GAS TEST					
Coke Yield			64.0		
Tar Yield			9.2		
Tar per Ton			18.4 Gals.		
Ammonia (N. H.3) .....			.355		
Ammonium Sulphate per Ton			27.54 Lbs.		
Gas per Ton			10,985 Cu. Ft.		
(At 60° F. and 30" Mercury, Saturated with Moisture)					
B. t. u. of Gas per Cubic Foot			640.7		
Candle Power of Gas			15.3		
B. t. u. in Gas per pound of Coal			3519.		

The above is a representative analysis of our coal in the HARLAN and WALLINS SEAMS mined at BLACK COMET, BLACK STAR, BLACK MOLUS and BEAR BRANCH MINES and the STRAIGHT CREEK SEAMS mined at BLACK BEAR and CUB BEAR MINES in KENTUCKY.

TIDEWATER PORTS—CHARLESTON, S. C., SAVANNAH GA.

PEABODY COAL COMPANY

CHICAGO, ILL.

CINCINNATI, OHIO
PINEVILLE, KENTUCKY
ST. LOUIS, MISSOURI
KANSAS CITY, MISSOURI

BRANCHES
MINNEAPOLIS, MINNESOTA
SPRINGFIELD, ILLINOIS
PEORIA, ILLINOIS

OMAHA, NEBRASKA
DEADWOOD, SOUTH DAKOTA
SHERIDAN, WYOMING
SPOKANE, WASHINGTON

Coal Mine Management

For General Summary of Peabody Management Service See Page 249

CONSTRUCTION ENGINEER

During our experience of thirty-eight years we have made and overcome almost every kind of mistake. If we, profiting by those mistakes to prevent newer and perhaps more costly ones, can be of service to you, we offer that service.

In the capacity of Construction Engineer, we undertake for our clients the development of coal lands from the raw state to completely finished operating properties.

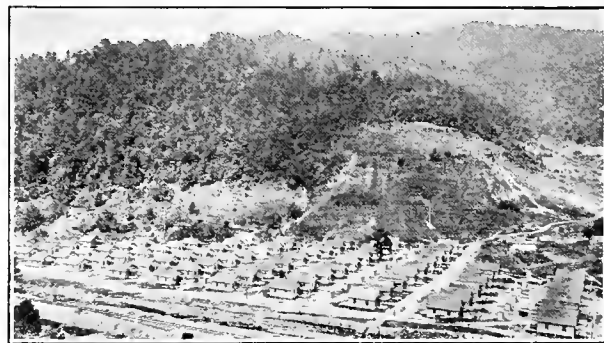
The entire construction is planned with a view to future efficient operation and permanently low operating costs, adopting methods and equipment of proven success.

In connection with this service, we assist in financing where such assistance is desired. During the past several years we have financed more than thirty million dollars of coal securities.

An example of our construction is found at Mine No. 30, Kenvir, Harlan County, Kentucky, designed and constructed by us for the Black Mountain Corporation and now operated under Peabody Management. In addition to the mine itself, an entire camp was erected consisting of several hundred miners' houses, stores, club-houses, hotel, school, recreation places and a fully equipped, modern hospital. The mine was planned for a capacity of 1,250,000 tons per year. The entire capacity output has been disposed of under contract for a period of 20 years thereby assuring continuous operation with attendant economy of production.



Mine No. 30 at Kenvir, Harlan County, Kentucky



West End of Camp at Mine No. 30, Kenvir, Harlan County, Kentucky

STEARNS COAL & LUMBER CO.

General Office: STEARNS, KY.

Owning and Operating Six (6) Mines in the

South-Eastern Kentucky and Southern Appalachian Coal Field, with an Annual Capacity of 1,000,000 Tons

BARTHELL, KY.
WORLEY, KY.

SHIPPING POINTS
YAMACRAW, KY.
FIDELITY, KY.

WHITE OAK, KY.
EXODUS, KY.

HOLDINGS—The Stearns Coal & Lumber Company owns 100,000 acres of coal and timber lands situated in McCreary County, Kentucky, and Northern Tennessee. At the present time six mines are in operation, with an annual capacity of 1,000,000 tons.

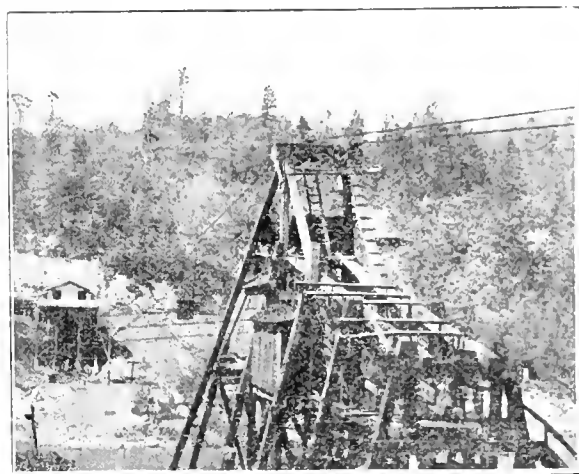
SEAMS WORKED—Three seams are worked: No. 1, with a thickness of from 5 to 6 feet; No. 1½, with the same thickness as given for

No. 1 seam; No. 2, with a thickness ranging from 4 to 5 feet.

PREPARATION—We use shaker screens and loading booms. All coal is cleaned and carefully inspected.



Mine No. 4.



Mine No. 11.

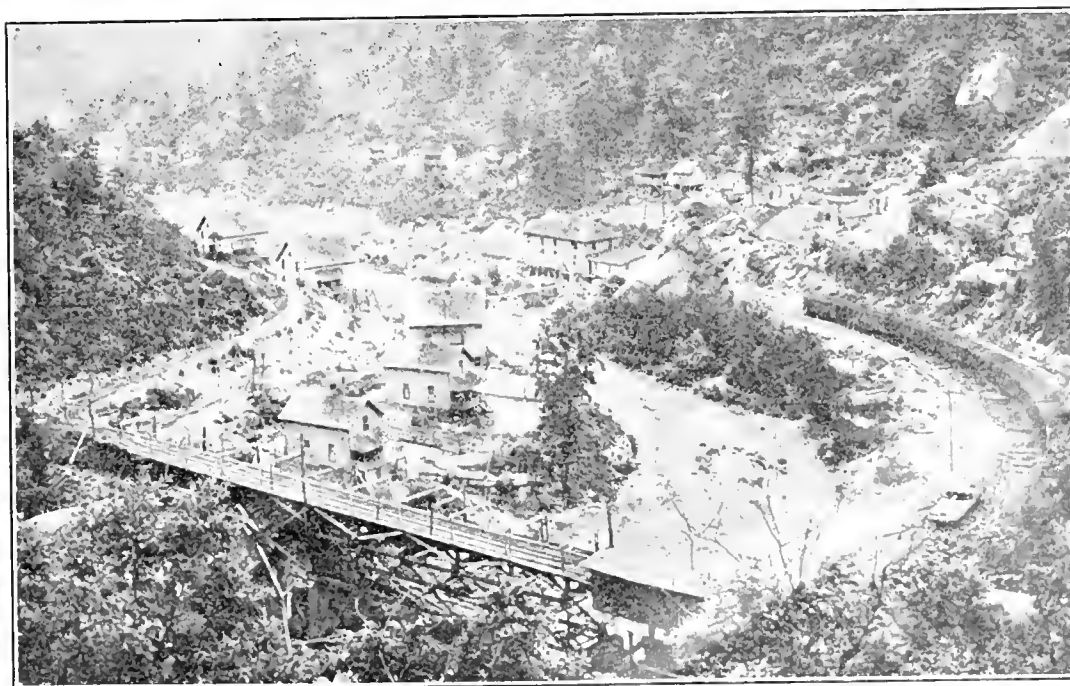
SIZES—

5" Block
2" x 5" Egg.
2" Lump.
Straight Run-of-Mine.
5" Run-of-Mine.
2" Nut and Slack.

USES—Coal from our mines is high volatile, with low percentages of moisture, ash and sulphur. It is high in heat value and makes a fine steam and domestic coal. The analysis given indicates its exceptional qualifications for malleable and ceramic usages—and in fact for every service where a high volatile low sulphur bituminous coal is required.

General Analysis

Moisture	1.12
Volatile Matter	39.52
Fixed Carbon	56.04
Ash	3.32
Sulphur	0.61
B. t. u.	14,344



Mine No. 1, Bartzell, Ky.

TIERNEY MINING COMPANY

Producers and Shippers of

TIERNEY'S POND CREEK COAL

Main Office, Powhatan, McDowell County, W. Va.

Mines, Stone, Pike County, Ky.

Sales Agents, Laurence E. Tierney Fuel Company, Powhatan, W. Va.

Location of Mines

The mines of the Tierney Mining Company are located in Pike County, Kentucky, where the Pond Creek seam, averaging from 4 to 7 feet in thickness, is mined.

This coal is one of the best of the Eastern Kentucky beds and in a few short years has established itself solidly with the trade.

Personnel of Company

Laurence E. Tierney, a pioneer of the Pocahontas field, is President of the Company, his brother, J. J. Tierney, prominent in Philadelphia coal circles, is Vice-President, and G. C. Wood, with headquarters at Stone, Ky., is General Manager.

Usages of Tierney's Pond Creek Coal

This is a fine domestic coal. It is hard and lumpy, with a firm structure, free burning and suitable for burning in open grates, furnaces, heating stoves and cooking ranges.

As a steam coal, the fact that some of the larger railroads have adopted this coal as the standard for locomotive fuel, leaves very little more to be said in its favor for that purpose.

It is a clinkerless coal, requiring little draft, no poking or shaking, is lower in ash than any other coal from the Norfolk and Western Region, and is a coking coal.

As a Gas, Coking or By-Product coal it is unexcelled.

Tierney Pond Creek coal is especially adapted for plants desiring a long-flame, non-clinkering, free-burning coal, producing a terrific heat.

A test made by the Bluefield Gas & Power Co., Bluefield, W. Va., of Tierney's Pond Creek Egg Coal showed an average yield of gas per ton of 12,666 cu. ft., and a coke yield of 65%. The absolute cleanliness of the coal was the subject of favorable comment by that concern, and the complete report of the test bears out the claims of the producers that Tierney's Pond Creek Coal is unexcelled for gas producing purposes.

Analysis*

Attention is called to the following analysis of Tierney Pond Creek coal:

Moisture	1.29%
Volatile Matter	34.55%
Fixed Carbon	60.42%
Ash	3.74%
100.00%	
Sulphur .....	.62%
B. T. U. per pound.....	14,621
Fusion point of ash.....	2,786° F.

*Analysis made by Pittsburgh Testing Laboratory, Pittsburgh, Pa.

Tipple and Preparation Equipment

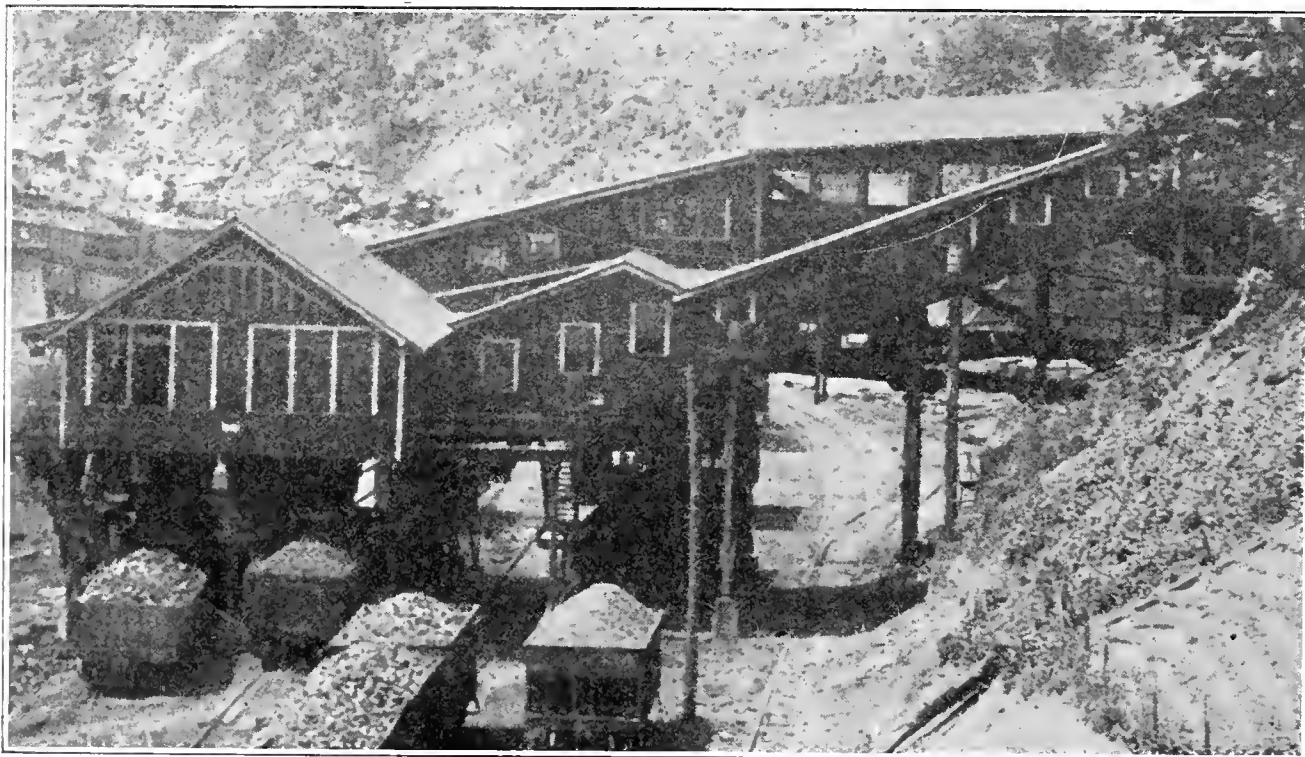
The tipple is a modern four-track structure, provided with every facility for cleaning and preparing the coal for market.

The Egg and Lump coal is not dumped into the cars by chutes, but by separate loading booms, which lower the coal into the cars with a minimum of breakage.

Picking tables are employed to remove all impurities and no detail is omitted to provide coal free from slate and other impurities.

Capacity of Mines and Sizes Shipped

The mines have a monthly capacity of 25,000 tons Run of Mine coal, the product being prepared into Lump, Egg, Nut and Slack.



Modern Four-Track Tipple at Tierney Mine.

TEST OF TIERNEY'S POND CREEK COAL

By ALFRED H. WHITE, Chemical Engineer, Ann Arbor, Mich., June 14, 1916.

Average of six tests each of 100 lbs. of air-dried coal run in a horizontal section of a retort. The highest temperature of the interior of the retort in any of the tests was 1851 degrees, F., and the lowest 1411 degrees, F. The average was approximately 1800 degrees, F. The average time in the retort was four hours and twenty three minutes.



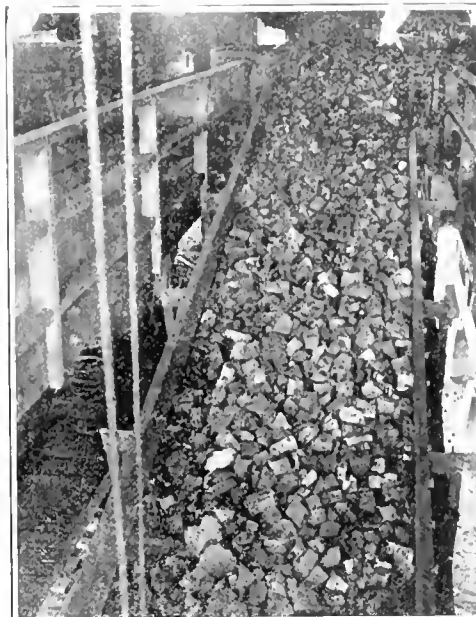
Lump Coal Being Loaded

Average Yields per 2,000 lbs. of Air-dried Coal:

Gas..... 10,298 cu. ft.
 Coke..... 1,329 lbs., with
 7.31% breeze.
 Tar..... 162.6 lbs. (17.4 gals.)
 Ammonia as NH_3 162 lbs.
 Candle power with Sugg. D.
 Argand Burner..... 17.1
 Total heating value in B. t. u.
 per cu. ft. 644.1
 Heating Value as received.....
 14029 B. t. u. per lb.
 Heating Value, dry coal.....
 14152 B. t. u. per lb.
 Heating Value, dry and free
 from ash.....
 15221 B. t. u. per lb.

Distillation Test of Tar

First runnings—up to 110
 deg. C..... 6.37%
 (mainly ammonia
 liquor)
 Light oil, 110-170 deg. C.....
 6.69%
 Heavy oil, 170-270 deg. C.....
 4.43%
 Heavy oil, 270-320 deg. C.....
 5.98%
 Pitch..... 75.50%



Egg Coal Being Loaded

The combined light oils on redistillation yielded the following percentages on weight of original tar:

Below 81 deg. C.....	0.21%	81-100 deg. C.....	0.46%
100-110 deg. C.....	0.21%		

The redistillation of the light oil fraction showed approximately 0.12 gal. benzine and toluene per ton of coal.



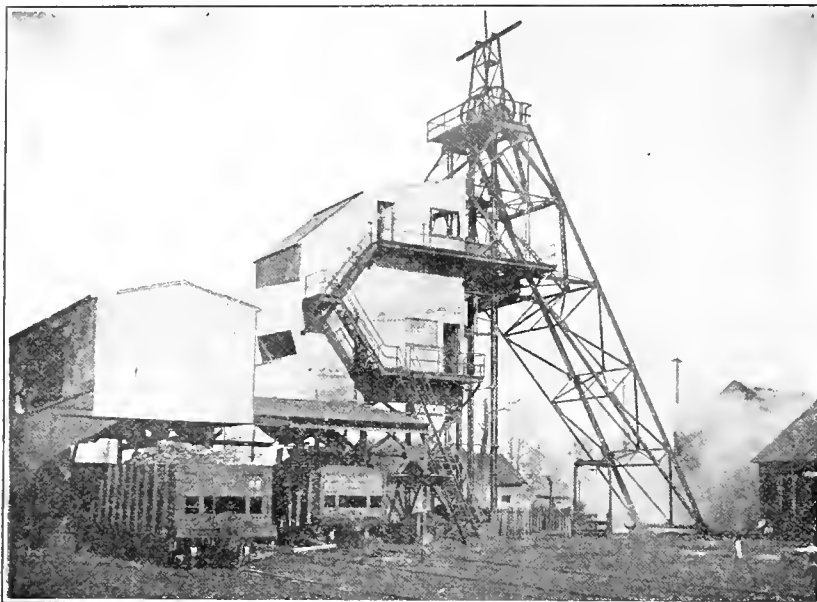
Run of Mine Coal Before Preparation

WEST KENTUCKY COAL CO.

INCORPORATED

GENERAL SALES OFFICE: PADUCAH, KY.

6,000 Tons Daily



One of Our Nine Modern Mines

Analysis Mine Run

Moisture	2.57
Volatile	38.28
Carbon	50.12
Ash	9.03

100.00

B. t. u. as received..... 12,923



"TRADEWATER" COAL

Steam and Domestic

The West Kentucky Coal Company's property includes 35,000 acres of surface and mineral rights underlaid with the No. 9, No. 11 and No. 12 Seams of coal, with a recoverable tonnage of about 252,000,000 tons of coal. The Company owns and operates nine modern mines located in Union and Webster Counties in Western Kentucky. These mines are on the lines of the Illinois Central and Louisville and Nashville Railroads, which is a guarantee of prompt and efficient shipping facilities.

The West Kentucky Coal Company owns and operates thirty-five miles of standard gauge railroad. The rolling stock of this railroad consists of three of the most modern type locomotives and one hundred and fifty drop bottom gondola cars. This enables the company to operate its mines to unusual advantage by using its own equipment in connection with the equipment furnished by the Illinois Central and the Louisville & Nashville Railroads, and insures prompt service to its customers at all times.

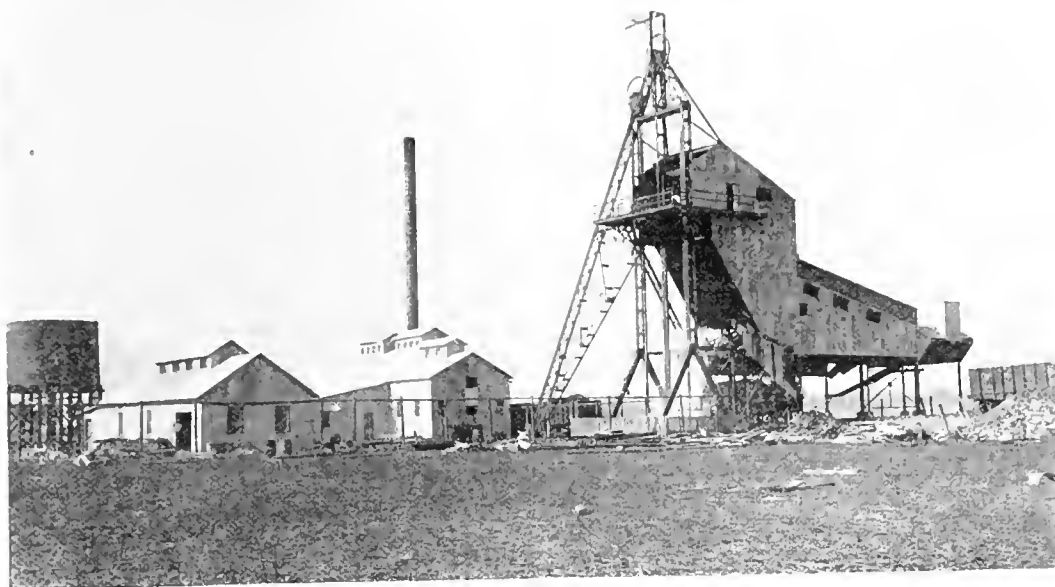
The West Kentucky Coal Company is the only coal company handling river coal on the Ohio and Mississippi Rivers south of Louisville, Kentucky. Its equipment for river deliveries consists of four large steamboats, three tugs, and two hundred barges of 600 tons capacity each, together with a full complement of pump boats and four steam diggers of the clam shell type. The company has a mammoth concrete and steel river tipple located on the Ohio River, about one mile south of Caseyville, Kentucky. This tipple is one of the best equipped loading stations on the river and is capable of handling two railroad cars at the same time, which makes the loading capacity into barges about 3,500 tons daily. Elevators for handling coal from the river to railroad cars and for local deliveries are located at Paducah, Kentucky; Memphis, Tennessee, and Donaldsonville, Louisiana.

WEST KENTUCKY COAL CO.

INCORPORATED

GENERAL SALES OFFICE: PADUCAH, KY.

6,000 Tons Daily



One of Our Nine Modern Mines

Analysis Mine-Run

Moisture	3.58
Volatile	35.04
Carbon	53.32
Ash	8.06
	<hr/>
	100.00

Sulphur	1.29
B. t. u.	13,509

Coke Analysis

Moisture	3.56	Dry
Ash	10.64	
Volatile	2.40	
Fixed Carbon.....	86.96	
	<hr/>	
	100.00	

B. t. u.	12,678
---------------	--------

Gas Yield—10,080 cu. ft. per ton.
B. t. u. of Gas—649.70 cu. ft.

By-Product Yields

Coke—1,408 lbs. per ton.
Ammonia as Sulphur Yield—
23.52 lbs.
Tar Yield—17.4 gal. per ton.

“CANEY FORK” GAS COAL

The Company's mines are equipped with shaker screens of the most modern type, including picking tables and loading booms, which insures a perfect preparation of all screened coal.

The following sizes are produced:

Mine Run	2½x11¼" Domestic Nut	2" Steam Lump
1¼" Screenings	6x11¼" Steam Egg	2½" Domestic Lump
2" Screenings	5x2" Domestic Egg	5" Fancy Lump
2½" Screenings	6x2½" Domestic Egg	6" Fancy Lump
2x1¼" Steam Nut	11¼" Steam Lump	

“Tradewater” coal, mined at Sturgis, is a coal of uniformly good quality and is well and favorably known throughout the South, especially for steam and domestic uses.

“Caney Fork” gas coal is mined in Webster county from a seam seven and one-half feet in thickness and without slate parting. It is especially well adapted for the manufacture of gas for illuminating purposes and is now in use at several such plants.

All of our coals will give the highest satisfaction when used in the burning of cement and the manufacture of brick, pottery and glass.

A full and complete description of the property, entitled “A Trip to the Mines,” will
be mailed on application

WHEELER COAL COMPANY

General Office

306-7 Burwell Building

KNOXVILLE, TENNESSEE

Miners of

High Grade High Volatile Dean Coal

The Wheeler Nos. 1, 2 and 3 mines of the Wheeler Coal Company are located at Trosper, Knox county, Kentucky.

The seam worked is the Dean, which here attains a thickness of 84 inches.

Coal from all Wheeler mines is well adapted for the manufacture of illuminating gas, owing to its high volatile and low sulphur and ash content.

For the same reason it answers every requirement for a high grade metallurgical fuel or for the burning of fine ceramic ware.

It grades high as a steam coal and is in demand owing to its high heat, its quick heat, and, further, because of its high fusion point of ash and the almost total absence of clinkers.

Retail coal dealers find that our coal meets the full demands of their trade and never fails to give satisfaction. Dean coal is free burning, makes a cheerful fire, and also a clean one.

Our mines are well and modernly equipped, and our tipple facilities permit us to make shipments in the following sizes:

Lump	Egg	Nut	Slack	Run-of-Mine
------	-----	-----	-------	-------------

All three Wheeler mines are located on the Cumberland Railroad, which connects with the Louisville & Nashville Railroad at Artemus, thus giving us entrance to northern, middle west and southern points.

YOUR INQUIRIES SOLICITED

List of Mines By Seams, Including Name of Company, General Office Address,
County, Railroad and Shipping Point

KENTUCKY

EASTERN

ALMA SEAM

Mined in Pike county. Bituminous rank. Suitable for Cement Burning, Beehive and By-Product Coking, Domestic, Export, Illuminating Gas, Locomotive Fuel, Melting, Powdered, Producer Gas, Tile and Pottery Burning and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Alma Thacker Fuel Co.	Columbus, Ohio.	No. 1.	Pike.	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, Ohio.	No. 2.	Pike.	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, Ohio.	No. 3.	Pike.	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 4.	Pike.	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 5.	Pike.	N. & W.	Matewan, W. Va.
Alburn Coal Corporation.	McCarr, Ky.	Alburn.	Pike.	N. & W.	Shurondale, Ky.
Mud Lick Coal Co.	Williamson, W. Va.	Mud Lick.	Pike.	N. & W.	Marr, Ky.
Vulcan Colliery.	Vulcan, W. Va.	Vulcan.	Pike.	N. & W.	Vulcan, W. Va.

AMBURGY SEAM

Mined in Letcher county. Bituminous rank. Suitable for Cement Burning, Beehive and By-Product Coking, Domestic, Export, Illuminating Gas, Locomotive Fuel, Melting, Powdered, Producer Gas, Tile and Pottery Burning and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Barking Coal Co.	Kimball, W. Va.	Barking.	Letcher.	L. & N.	Barking, W. Va.
Consolidated Fuel Co.	Pittsburgh, Pa.	Jessie.	Letcher.	L. & N.	Dana, Ky.
Consolidated Fuel Co.	Pittsburgh, Pa.	Sara.	Letcher.	L. & N.	Dana, Ky.

AUXIER SEAM

Mined in Pike County. Bituminous rank. Suitable for Cement Burning, Beehive and By-Product Coking, Domestic, Export, Illuminating Gas, Locomotive Fuel, Melting, Powdered, Producer Gas, Tile and Pottery Burning and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Elkhorn Gas Coal Co.	Praise, Ky.	Elkhorn.	Pike.	C. & O. & C. & O.	Elkhorn City, Ky.
Kanawha Elkhorn Collieries, Inc.	Buffalo, N. Y.	Middle Ridge or No. 3.	Pike.	C. & O. & C. & O.	Elkhorn City, Ky.
Praise Elkhorn Coal Co.	Pikeville, Ky.	Elkhorn City.	Pike.	C. & O. & C. & O.	Dunkley, Ky.
Winston Elkhorn Coal Co.	Keweenaw, Ky.	Winston.	Pike.	C. & O.	Marrowbone, Ky.

BLUE GEM SEAM

Mined in Southeastern counties. Bituminous rank. Suitable for Cement Burning, Beehive Coking, By-Product Coking, Domestic, Export, Illuminating Gas, Locomotive Fuel, Melting, Powdered, Producer Gas, Tile and Pottery Burning and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Bell Block Coal Co.	Middlesboro, Ky.	Bell Block.	Bell.	L. & N.	Pineville, Ky.
Bennett & Johnson Blue Gem Coal Co.	Gatlin, Ky.	Bennett & Johnson.	Whitley.	L. & N.	Gatlin, Ky.
Bruner Coal Co.	Manchester, Ky.	Bruner.	Clay.	C. & M.	Manchester, Ky.
Burk Hollow Coal Co.	Jillico, Tenn.	Burk Hollow.	Whitley.	L. & N.	Jellico, Tenn.
Columbia-Panama Coal Co.	Manchester, Ky.	Columbia-Panama No. 1.	Clay.	C. & M.	Manchester, Ky.
Cove Branch Coal Co.	Corbin, Ky.	Cove Branch.	Knox.	L. & N.	Woodbine, Ky.
Cumberland River Coal & Oil Co.	Nevisdale, Ky.	Cumberland.	Whitley.	L. & N.	Nevisdale, Ky.
Dessie-Allen Blue Gem Coal Co.	Williamshurg, Ky.	No. 1.	Whitley.	L. & N.	Dal, Ky.
Drake Blue Gem Coal Co.	Nevisdale, Ky.	Drake No. 1.	Whitley.	L. & N.	Nevisdale, Ky.
Drake Blue Gem Coal Co.	Nevisdale, Ky.	Drake No. 2.	Whitley.	L. & N.	Nevisdale, Ky.
Eureka Coal Co.	Gatlin, Ky.	Blue Gem.	Whitley.	L. & N.	Gatlin, Ky.
Gatlin Coal Co.	Williamshurg, Ky.	Gatlin No. 4.	Whitley.	L. & N.	Gatlin, Ky.
Gatlin Coal Co.	Williamshurg, Ky.	Gatlin No. 5.	Whitley.	L. & N.	Gatlin, Ky.
Goose Creek Coal Co.	Garrard, Ky.	Goose Creek.	Clay.	C. & M.	Add, Ky.
Gordon-Miller Coal & Coke Co.	Louisville, Ky.	Lyndale.	Knox.	L. & N.	Gray, Ky.
Herja Blue Gem Coal Co.	Barbourville, Ky.	Herja.	Knox.	C. & M.	Heldrick, Ky.
Huron Coal Co.	Barbourville, Ky.	Huron.	Knox.	C. & M., L. & M.	Heldrick, Ky.
K. D. Blue Gem Coal Co.	Barbourville, Ky.	No. 1.	Knox.	C. & M.	Penny, Ky.
Mammoth Blue Gem Coal Co.	Gatlin, Ky.	Mammoth No. 2.	Whitley.	L. & N.	Gatlin, Ky.
Miracle Blue Gem Coal Co.	Canon, Ky.	Miracle Blue Gem.	Knox.	C. & M.	Heldrick, Ky.
Packard Coal Co.	Packard, Ky.	Patterson Creek.	Whitley.	L. & N.	Y-moo, Ky.
Patterson Creek Coal Co.	Barbourville, Ky.	Blue Gem.	Knox.	C. & M.	Heldrick, Ky.
Penny Blue Gem Coal Co.	Williamshurg, Ky.	Polly.	Whitley.	L. & N.	Packard, Ky.
Polley Coal Co.	Manchester, Ky.	Queen Blue Gem.	Clay.	C. & M.	Manchester, Ky.
Pineville Blue Gem Coal Co.	Pineville, Ky.	Richland.	Knox.	L. & N.	Charlton, Ky.
Richland Coal Co.	Barbourville, Ky.	Richland Creek.	Knox.	C. & M.	Barbourville, Ky.
Richland Creek Coal Co.	Saxton, Ky.	Saxton.	Whitley.	L. & N.	Karinka, Ky.
Saxton Coal Co.	Rid Ash, Ky.	Stein.	Whitley.	L. & N. Southern.	Jellico, Tenn.
Stein Blue Gem Coal Co.	Barbourville, Ky.	Trace Branch.	Knox.	C. & M.	Canon, Ky.
Turner-Jellico Coal Co., Inc.	2604 Union Central Bldg., Cincinnati, O.	Turner-Jellico.	Knox.	L. & N.	Trudel, Ky.
Wagner Coal Co.	Blue Field, W. Va.	Wagner.	Roll.	L. & N.	Pineville, Ky.
Wallen-Jillico Coal Co.	Gatlin, Ky.	Wallen-Jellico.	Whitley.	L. & N.	Gatlin, Ky.

CANNEL COALS

Mined in Eastern counties. Bituminous rank. Suitable for Domestic use and as an enricher in the manufacture of Illuminating Gas.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Ayers & Lang	Detroit, Mich.	Chattaroi	Johnson	C. & O.	Ofutt, Ky.
Can-Bit Coal Co. (The)	Cincinnati, O.	Can Bit	Harlan	L. & N.	Wallins & Shelby, Ky.
Kentucky Block Cannel Coal Co.	Cannel City, Ky.	No. 20	Morgan	O. & K.	Cannel City, Ky.
Premium Cannel Coal Co.	Mt. Sterling, Ky.	Premium Cannel	Morgan	L. & N.	Lenox, Ky.
Wheeler Boone Coal Co.	Wallins Creek, Ky.	Wheeler Boone	Harlan	L. & N.	Wallins, Ky.

DEAN SEAM

Mined in Knox, Perry and Bell counties. Bituminous rank. Suitable for Cement Burning, Beehive and By-Product Coking, Domestic, Export, Illuminating Gas, Locomotive Fuel, Melting, Powdered, Producer Gas, Tile and Pottery Burning, and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Carter Coal Co.	Coalwood, W. Va.	Anchor	Knox	L. & N., Cumberland	Anchor, Ky.
Carter Coal Co.	Coalwood, W. Va.	Trooper No. 1	Knox	Cumberland	Trooper, Ky.
Carter Coal Co.	Coalwood, W. Va.	Warren No. 4	Knox	Cumberland	Warren, Ky.
Charles Coal Co.	Piedmont, W. Va.	No. 4	Knox	L. & N.	Artemus, Ky.
Dean Branch Coal Co.	Bell Jellico, Ky.	No. 1	Bell	L. & N.	Blowers, Ky.
Franklin Coal Co.	Knoxville, Ky.	Franklin	Knox	L. & N.	Artemus, Ky.
Greasy Gap Coal Co.	Wheeler, Ky.	Greasy Gap	Knox	Cumberland	Wheeler, Ky.
Jackson Coal Mining Co.	Knoxville, Tenn.	Dean	Knox	L. & N.	Artemus, Ky.
Jaybee Jellico Coal Co.	Pineville, Ky.	East Jellico	Bell	L. & N.	Surran, Ky.
Pine Ridge Coal Mining Co.	Cincinnati, O.	Italy	Bell	L. & N.	Artemus, Ky.
Vinson-Harlan Coal Co.	Louisville, Ky.	Over the Top	Bell	L. & N.	Stilson, Ky.
Vinson-Kolb Coal Co.	Louisville, Ky.	Vinson Kolb	Bell	L. & N.	Stilson, Ky.
Wheeler Coal Co.	106-7 Burwell Bldg. Knoxville, Tenn.	Trooper	Knox	Cumberland, L. & N.	Artemus, Ky.
Wheeler Coal Co.	306-7 Burwell Bldg. Knoxville, Tenn.	No. 2 Power	Knox	Cumberland, L. & N.	Bennettsville & Artemus, Ky.

ELKHORN SEAM (Known also as the NO. 3, ROCK HOUSE and SANDY LICK SEAM; NORTH-FORK SEAM; ALMA SEAM of the Tug Fork section)

Mined in Letcher, Floyd and Pike counties. Bituminous rank. Suitable for Cement Burning, Beehive Coking, By-Product Coking, Domestic, Export, Illuminating Gas, Locomotive Fuel, Melting, Powdered, Producer Gas, Tile and Pottery Burning and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Acme By-Product Co.	Fleming, Ky.	Etna	Letcher	L. & N.	Fleming, Ky.
Bailey Ferguson Coal Co., Inc.	Prestonsburg, Ky.	No. 1	Floyd	B. V. (C. & O.)	Dunwood, Ky.
Beaver Creek Coal Co.	Johnson City, Tenn.	Beaver Creek	Floyd	B. & O.	Dunwood, Ky.
Beaver Elkhorn Coal Co.	Ashland, Ky.	No. 1	Floyd	B. & O.	Buckingham, Ky.
Bentley, J. D., Jr., Coal Co.	Jenkins, Ky.	Bentley	Letcher	S. V. E.	Jenkins, Ky.
Big Elkhorn Coal Co.	Betsy Layne, Ky.	Big Elkhorn	Floyd	C. & O.	Betsy Layne, Ky.
Big Elkhorn Coal Co.	Betsy Layne, Ky.	No. 2	Floyd	C. & O.	Betsy Layne, Ky.
Big Hollow Coal Co.	Pikeville, Ky.	Big Hollow	Pike	C. & O.	Pikeville, Ky.
Blackburn Coal Co., The	Alpharetta, Ky.	No. 1	Floyd	C. & O.	Dunwood, Ky.
Blackburn Coal Co., The	Alpharetta, Ky.	No. 2	Floyd	C. & O.	Dunwood, Ky.
Blue Beaver Elkhorn Coal Co.	Prestonsburg, Ky.	No. 1	Floyd	C. & O.	Clear Creek, Ky.
Blue Beaver Elkhorn Coal Co.	Prestonsburg, Ky.	No. 2	Floyd	Long Fork	Clear Creek, Ky.
Blue Beaver Elkhorn Coal Co.	Prestonsburg, Ky.	No. 3	Floyd	Long Fork	Clear Creek, Ky.
Blue Beaver Elkhorn Coal Co.	Prestonsburg, Ky.	No. 4	Floyd	Long Fork	Clear Creek, Ky.
Broad Bottom Mining Co.	Pikeville, Ky.	Broad	Pike	C. & O.	Broad Bottom, Ky.
Buckfield Coal Co.	Jenkins, Ky.	Buckfield	Pike	S. V. & E.	Collins, Ky.
Bucks Branch Coal Co.	Law Bldg. Lynchburg, Va.	Bucks Branch	Floyd	C. & O.	Martin, Ky.
Caney Fork Collieries Co.	Ashland, Ky.	Can y Fork Collieries	Floyd	C. & O.	Lacey, Ky.
Caudill Coal Co.	Whitesburg, Ky.	Whitesburg	Letcher	L. & N.	Whitesburg, Ky.
Christie Sowards Mining Co.	Pikeville, Ky.	Broad Bottom No. 1	Pike	C. & O.	Pikeville, Ky.
Christie Sowards Mining Co.	Pikeville, Ky.	Broad Bottom No. 2	Pike	C. & O.	Pikeville, Ky.
Coal Run Mining Co.	Coal Run, Ky.	Coal Run	Pike	C. & O.	Coal Run, Ky.
Collins Mining Co.	Ashland, Ky.	Rush	Floyd	S. V. & E.	Lacey, Ky.
Consolidation Coal Co. (The)	Munson Bldg. 67 Wall St. N. W. York, N. Y.	Consolidation No. 213	Letcher	L. & N., L. & E.	McRoberts, Ky.
Consolidation Coal Co.	Munson Bldg. 67 Wall St. N. W. York, N. Y.	Consolidation No. 201	Letcher	S. V. & E.	Burdine, Ky.
Consolidation Coal Co.	Munson Bldg. 67 Wall St. N. W. York, N. Y.	Consolidation No. 202	Letcher	S. V. & E.	Burdine, Ky.
Consolidation Coal Co.	Munson Bldg. 67 Wall St. N. W. York, N. Y.	Consolidation No. 203	Letcher	S. V. & E.	Jenkins, Ky.
Consolidation Coal Co.	Munson Bldg. 67 Wall St. N. W. York, N. Y.	Consolidation No. 204	Letcher	B. & O., S. V. & E.	Jenkins, Ky.
Consolidation Coal Co.	Munson Bldg. 67 Wall St. N. W. York, N. Y.	Consolidation No. 205	Letcher	B. & O., S. V. & E.	Jenkins, Ky.
Consolidation Coal Co.	Munson Bldg. 67 Wall St. N. W. York, N. Y.	Consolidation No. 206	Letcher	B. & O., S. V. & E.	Jenkins, Ky.
Consolidation Coal Co.	Munson Bldg. 67 Wall St. N. W. York, N. Y.	Consolidation No. 207	Letcher	B. & O., S. V. & E.	Jenkins, Ky.
Consolidation Coal Co.	Munson Bldg. 67 Wall St. N. W. York, N. Y.	Consolidation No. 208	Letcher	B. & O., S. V. & E.	Jenkins, Ky.
Consolidation Coal Co.	Munson Bldg. 67 Wall St. N. W. York, N. Y.	Consolidation No. 210	Letcher	L. & N.	McRoberts, Ky.
Consolidation Coal Co.	Munson Bldg. 67 Wall St. N. W. York, N. Y.	Consolidation No. 211	Letcher	L. & N.	McRoberts, Ky.
Consolidation Coal Co.	Munson Bldg. 67 Wall St. N. W. York, N. Y.	Consolidation No. 212	Letcher	L. & N.	McRoberts, Ky.
Consolidation Coal Co.	Munson Bldg. 67 Wall St. N. W. York, N. Y.	Consolidation No. 214	Letcher	L. & N.	McRoberts, Ky.
Consolidation Coal Co.	Munson Bldg. 67 Wall St. N. W. York, N. Y.	Consolidation No. 215	Letcher	L. & N.	McRoberts, Ky.
Cow Creek Coal Co.	Prestonsburg, Ky.	Cow Creek	Floyd	C. & O.	Enma, Ky.
Cumberland Coal & Coke Co.	Shawsville, Va.	Cumberland No. 1	Floyd	B. & O.	Edvin, Ky.
Dwal Coal Co., Inc.	Ashland, Ky.	Dwal	Floyd	C. & O.	Beaver Creek, Ky.
Edgmont Fuel Co.	Syracuse, N. Y.	Edgmont	Floyd	B. & O.	Gibson, Ky.
Edgewater Coal Co.	Syracuse, N. Y.	Big Branch	Pike	C. & O.	Big Branch, Ky.
Edgewater Coal Co.	Syracuse, N. Y.	Henry Clay	Pike	C. & O.	Henry Clay, Ky.
Edgewater Coal Co.	Syracuse, N. Y.	Lookout	Pike	C. & O.	Lookout, Ky.
Edgewater Coal Co.	Syracuse, N. Y.	Coaldale No. 1	Pike	C. & O.	Hellier, Ky.
Elk Horn Coal Corporation	67 Wall St. N. W. York, N. Y.	No. 301	Letcher	L. & N.	Fleming, Ky.
Elk Horn Coal Corporation	67 Wall St. N. W. York, N. Y.	No. 302	Letcher	L. & N.	Fleming, Ky.
Elk Horn Coal Corporation	67 Wall St. N. W. York, N. Y.	No. 303	Letcher	L. & N.	Fleming, Ky.
Elk Horn Coal Corporation	67 Wall St. N. W. York, N. Y.	No. 304	Letcher	L. & N.	Fleming, Ky.
Elk Horn Coal Corporation	67 Wall St. N. W. York, N. Y.	No. 305	Letcher	L. & N.	Fleming, Ky.
Elk Horn Coal Corporation	67 Wall St. N. W. York, N. Y.	No. 306	Letcher	L. & N.	Fleming, Ky.
Elk Horn Coal Corporation	67 Wall St. N. W. York, N. Y.	No. 307	Letcher	L. & N.	Fleming, Ky.
Elk Horn Coal Corporation	67 Wall St. N. W. York, N. Y.	No. 325	Floyd	C. & O.	Wayland, Ky.
Elk Horn Coal Corporation	67 Wall St. N. W. York, N. Y.	No. 326	Floyd	C. & O.	Wayland, Ky.
Elk Horn Coal Corporation	67 Wall St. N. W. York, N. Y.	No. 327	Floyd	C. & O.	Wayland, Ky.
Elk Horn Coal Corporation	67 Wall St. N. W. York, N. Y.	No. 328	Floyd	C. & O.	Wayland, Ky.
Elk Horn Coal Corporation	67 Wall St. N. W. York, N. Y.	No. 329	Floyd	C. & O.	Wayland, Ky.

(Continued on Next Page)

ELKHORN SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Elk Horn Coal Corporation	67 Wall St., New York, N. Y.	No. 30	Floyd	C & O	Wayland, Ky.
Elk Horn Coal Corporation	67 Wall St., New York, N. Y.	No. 331	Floyd	C & O	Wayland, Ky.
Elk Horn Coal Corporation	67 Wall St., New York, N. Y.	No. 377	Floyd	B & O	Whitcomb, Ky.
Elk Horn Coal Corporation	67 Wall St., New York, N. Y.	No. 378	Floyd	B & O	Whitcomb, Ky.
Elk Horn Coal Corporation	67 Wall St., New York, N. Y.	No. 379	Floyd	B & O	Whitcomb, Ky.
Elk Horn Coal Corporation	67 Wall St., New York, N. Y.	No. 380	Floyd	B & O	Whitcomb, Ky.
Elk Horn Coal Corporation	67 Wall St., New York, N. Y.	No. 381	Floyd	B & O	Whitcomb, Ky.
Elkhorn Block Coal Co., Inc.	Ashland, Ky.	Elkhorn Block	Floyd	B & O	Whitcomb, Ky.
Elkhorn Coal Co.	Lexington, Ky.	Elkhorn No. 1	Letcher	L & N	Wayland, Ky.
Elkhorn Coal Co.	Lexington, Ky.	Elkhorn No. 2	Letcher	L & N	Wayland, Ky.
Elkhorn Colleries Co., Inc., The	1717 Dime Bank Bldg., Detroit, Mich.	Cannal No. 1	Letcher	L & N	Wayland, Ky.
Elkhorn Colleries Co., Inc., The	Detroit, Mich.	Winters No. 1	Letcher	L & N	Wayland, Ky.
Elkhorn Colleries Co., Inc., The	Detroit, Mich.	Winters No. 2	Letcher	L & N	Wayland, Ky.
Elkhorn Colleries Co., Inc., The	Detroit, Mich.	Winters No. 3	Letcher	L & N	Wayland, Ky.
Elkhorn Gas Coal Co.	Philo, Ky.	Elkhorn Gas	Floyd	C & O	Wayland, Ky.
Elkhorn Junior Coal Co.	Millstone, Ky.	Elkhorn Junior	Letcher	L & N	Wayland, Ky.
Elkhorn Marrowbone Coal Co.	Pikeville, Ky.	Elkhorn Marrowbone	Pike	C & O	Wayland, Ky.
Elkhorn Piney Coal Mining Co.	Milwaukee, Wis.	No. 1	Floyd	B & O	Wayland, Ky.
Elkhorn Piney Coal Mining Co.	Milwaukee, Wis.	No. 2	Floyd	B & O	Wayland, Ky.
Elkhorn Piney Coal Mining Co.	Milwaukee, Wis.	No. 3	Floyd	B & O	Wayland, Ky.
Elkhorn Piney Coal Mining Co.	Milwaukee, Wis.	No. 4	Floyd	B & O	Wayland, Ky.
Elkhorn Piney Coal Mining Co.	Milwaukee, Wis.	No. 5	Floyd	B & O	Wayland, Ky.
Elkhorn Piney Coal Mining Co.	Milwaukee, Wis.	No. 6	Floyd	B & O	Wayland, Ky.
Elkhorn Piney Coal Mining Co.	Milwaukee, Wis.	No. 7	Floyd	B & O	Wayland, Ky.
Elkhorn Steam Colleries Co.	Bramwell, W. Va.	Vall y	Pike	B & O	Wayland, Ky.
Elkhorn Star Coal Co.	Ashland, Ky.	Elkhorn Star No. 1	Floyd	Long Fork	Wayland, Ky.
Elkhorn Star Coal Co.	Ashland, Ky.	Elkhorn Star No. 2	Floyd	Long Fork	Wayland, Ky.
Elkhorn Superior Coal Co.	Elmington, Ky.	Elkhorn	Letcher	L & N	Wayland, Ky.
Elkhorn & Shilby Creek Coal Co.	Huntington, W. Va.	Can y No. 1	Pike	S. V. & E.	Wayland, Ky.
Elkhorn & Shilby Creek Coal Co.	Allen, Ky.	Gorg	Floyd	C & O	Wayland, Ky.
Elkhorn Consolidated Colleries	Johnson City, Tenn.	Floyd Elkhorn	Floyd	Long Fork, B. & O.	Wayland, Ky.
Ford Elkhorn Mining Co.	1804 First Natl. Bk. Bldg., Cincinnati, O.	Ford Elkhorn No. 1	Pike	S. V. & E.	Wayland, Ky.
Ford Elkhorn Mining Co.	1804 First Natl. Bk. Bldg., Cincinnati, O.	Ford Elkhorn No. 2	Pike	S. V. & E.	Wayland, Ky.
Funk Coal Co.	Sutton, Ky.	No. 1	Pike	C & O	Wayland, Ky.
Furnace Coal Mining Co.	Ashland, Ky.	Furnace	Pike	C & O	Wayland, Ky.
Gloria Coal Co.	Huntington, W. Va.	Gloria	Floyd	C & O	Wayland, Ky.
Goodin & Barn y Coal Co.	Garr tt, Ky.	No. 1	Floyd	C & O	Wayland, Ky.
Greenough Coal Co.	10 State St., Boston, Mass.	Greenough	Pike	C & O	Wayland, Ky.
Harlan Co-operative Coal Co.	Lexington, Ky.	No. 1	Harlan	L & N	Wayland, Ky.
Harlan Co-operative Coal Co.	Lexington, Ky.	No. 2	Harlan	L & N	Wayland, Ky.
Harold Coal & Coke Co.	Rouoke, Va.	Harold	Floyd	C & O	Wayland, Ky.
Hatch r, James Coal Co.	Kys r, Ky.	James Hatch r	Pike	C & O	Wayland, Ky.
Huntington By-Product Coal Co.	Huntington, W. Va.	Huntington	Letcher	S. V. & E.	Wayland, Ky.
Huntington Coal & Mining Co.	Huntington, W. Va.	No. 3	Floyd	L & N	Wayland, Ky.
Imperial Elkhorn Coal Co.	Detroit, Mich.	No. 25	Letcher	L & N	Wayland, Ky.
Imperial Elkhorn Coal Co.	Detroit, Mich.	No. 26	Letcher	L & N	Wayland, Ky.
Imperial Elkhorn Coal Co.	Detroit, Mich.	No. 27	Letcher	L & N	Wayland, Ky.
J. B. Elkhorn Coal Co.	1018 Union Central Bldg., Cincinnati, O.	No. 1	Pike	B. & O	Wayland, Ky.
Jacks Creek Coal Co.	Garrett, Ky.	Smallwood No. 1	Floyd	B & O	Wayland, Ky.
Jacks Creek Coal Co.	Garrett, Ky.	Smallwood No. 2	Floyd	B & O	Wayland, Ky.
Jones Bros. Coal Co.	Jackson, Ky.	Jones Bros.	Boatright	C & O	Wayland, Ky.
Kanawha-Elkhorn Colleries, Inc.	Buffalo, N. Y.	Bentley or No. 5	Pike	C & O	Wayland, Ky.
Kanawha-Elkhorn Colleries, Inc.	Buffalo, N. Y.	Carson or No. 4	Pike	C & O	Wayland, Ky.
Keel Coal Co.	Pikeville, Ky.	Elkhorn	Pike	C & O	Wayland, Ky.
Kentucky Beaver Colleries Co.	Pikeville, Ky.	Elkhorn No. 2	Pike	C & O	Wayland, Ky.
Kentucky Block Fuel Co.	Chicago, Ill.	Kentucky Beaver	Floyd	C & O	Wayland, Ky.
Kentucky Elkhorn By-Product Coal Co.	Peachunas, Va.	Kentucky Block	Pike	S. V. & E.	Wayland, Ky.
Kentucky Elkhorn By-Product Coal Co.	Huntington, W. Va.	Dorton No. 1	Pike	S. V. & E.	Wayland, Ky.
Kentucky Elkhorn By-Product Coal Co.	Huntington, W. Va.	Dorton No. 2	Pike	S. V. & E.	Wayland, Ky.
Keyser Coal Co.	Cannel City, Ky.	Five Mile	Boatright	C & O	Wayland, Ky.
Lackey Coal Mining Co.	Keyser, Ky.	Keyser No. 1	Pike	C & O	Wayland, Ky.
Layne Coal Mining Co.	Ashland, Ky.	Lackey	Floyd	C & O	Wayland, Ky.
Logan Elkhorn Coal Corp.	Harold, Ky.	No. 1	Floyd	C & O	Wayland, Ky.
Long Branch Coal Co.	Huntington, W. Va.	Parsons No. 7	Letcher	L & N	Wayland, Ky.
Lorraine Elkhorn Coal Co.	Minneapolis, Minn.	Long Branch	Floyd	Long Fork	Wayland, Ky.
McGuire Elkhorn Coal Co.	Prestonsburg, Ky.	Lorraine	Floyd	B & O	Wayland, Ky.
McKinney Steel Co., The	Smalley, Ky.	No. 1	Floyd	C & O	Wayland, Ky.
Malone Elkhorn Coal Co.	Cleveland, O.	Wolfert	Pike	C & O	Wayland, Ky.
Marrowbone Mining Co.	Huntington, W. Va.	Malone-Elkhorn	Floyd	C & O	Wayland, Ky.
Marrowbone Mining Co.	First National Bank Bldg., Cincinnati, O.	Marrowbone No. 1	Pike	C & O	Wayland, Ky.
Marrowbone Mining Co.	First Natl. Bank Bldg., Cincinnati, O.	Marrowbone No. 2	Pike	C & O	Wayland, Ky.
Martha Leslie Coal Co.	Prestonsburg, Ky.	Martha Leslie	Floyd	C & O	Wayland, Ky.
Marking Coal Corp.	Mayking, Ky.	May King	Letcher	L & N	Wayland, Ky.
Northern Elkhorn Coal Co.	No. 1	No. 1	Floyd	C & O	Wayland, Ky.
Northern Elkhorn Coal Co.	Prestonsburg, Ky.	No. 2	Floyd	C & O	Wayland, Ky.
Okey Meadows Elkhorn Coal Co.	Prestonsburg, Ky.	Okey Meadows Elkhorn	Morgan	M & N F	Wayland, Ky.
Paragon Elkhorn Colleries Co.	Cincinnati, O.	Paragon-Elkhorn	Pike	C & O	Wayland, Ky.
Peabody Coal Co.	Dunleavy, Ky.	No. 28	Pike	C & O	Wayland, Ky.
Pine Creek Coal Co.	Winchester, Ky.	Pine Creek	Letcher	L & N	Wayland, Ky.
Pivot Rock Coal Co., Inc.	Smalley, Ky.	Elkhorn	Floyd	B & O	Wayland, Ky.
Polley, J. E. Coal Co., Inc.	Philly, Ky.	Philly	Pike	C & O	Wayland, Ky.
Porter Mining Co.	Ashland, Ky.	Argonne	Floyd	L & B. V.	Wayland, Ky.
Royal Block Coal Co.	Twin Branch, W. Va.	Royal Block	Floyd	C & O	Wayland, Ky.
R. H. Elkhorn Coal Co.	Shelbana, Ky.	Roham	Pike	S. V. & E.	Wayland, Ky.
Rogers Elkhorn Coal Co.	Virgie, Ky.	Virgie	Pike	S. V. & E.	Wayland, Ky.
Rolley Colleries Co., The	Luckey, Ky.	Vimy Ridge	Floyd	FAVY, J. & C.	Wayland, Ky.
Royal Elkhorn Coal Co., The	McDowell, Ky.	Royal No. 1	Floyd	Long Fork	Wayland, Ky.
St. Paul Coal Co.	Betsy Layne, Ky.	St. Paul	Floyd	C & O	Wayland, Ky.
Samsonet Coal Corp.	Boufield, W. Va.	Samson	Floyd	C & O	Wayland, Ky.
Shilby Coal Mining Co., The	531 N. Park Ave., Warren, O.	Shilby	Pike	C & O	Wayland, Ky.
South-East Coal Co.	1732 Commercial Trust Bldg., Philadelphia, Pa.	No. 1	Letcher	L & N	Wayland, Ky.
South-East Coal Co.	1732 Commercial Trust Bldg., Philadelphia, Pa.	No. 2	Letcher	L & N	Wayland, Ky.
Standard Elkhorn Coal Co.	Garrett, Ky.	No. 1	Floyd	C & O	Wayland, Ky.
Storer Elkhorn Coal Co.	Fish r Bldg., Chicago, Ill.	Holly	Floyd	C & O	Wayland, Ky.
Superior Elkhorn By-Products Coal Co.	Bevinsville, Ky.	Superior Elkhorn	Floyd	Long Fork	Wayland, Ky.
Superior Elkhorn Coal Co.	Ashland, Ky.	Gorgia	Floyd	C & O	Wayland, Ky.
Trivette Elkhorn Coal Co.	Pikeville, Ky.	Trivette Elkhorn	Floyd	Long Fork	Wayland, Ky.
Triff d States Coal & Coke Co.	Carnegi Bldg., Pittsburg, Pa.	Lynch	Harlan	C & O	Wayland, Ky.
Wells-Elkhorn Coal Co., (The)	Ashland, Ky.	No. 1	Floyd	C & O	Wayland, Ky.
Wells-Elkhorn Coal Co., (The)	Ashland, Ky.	No. 2	Floyd	C & O	Wayland, Ky.
Wells Elkhorn Coal Co.	Ashland, Ky.	No. 3	Floyd	B & O	Wayland, Ky.
Wells Elkhorn Coal Co.	Ashland, Ky.	No. 4	Floyd	B & O	Wayland, Ky.
Wells Elkhorn Coal Co.	Ashland, Ky.	No. 5	Floyd	B & O	Wayland, Ky.
Wells Elkhorn Coal Co.	Ashland, Ky.	No. 6	Floyd	B & O	Wayland, Ky.
Winston Elkhorn Coal Co.	Ashland, Ky.	Winston	Pike	C & O	Wayland, Ky.
Zella Mining Co.	Kwanee, Ky.	Zella	Pike	C & O	Wayland, Ky.

FIRE CLAY SEAM

Mined in Perry, McCreary, Breathitt, Pike and Letcher counties. Bituminous rank. Suitable for Cement Burning, Beehive and By-Product Coking, Domestic, Export, Illuminating Gas, Locomotive Fuel, Melting, Powdered, Producer Gas, Tile and Pottery Burning, and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Ajax Coal Co.	Hazard, Ky.	"Ajax"	Perry	L. & N.	Duane, Ky.
Ashless Coal Corporation	Lothair, Ky.	No. 1	Perry	L. & N.	Lothair, Ky.
Ashless Coal Corporation	Lothair, Ky.	Ashless No. 2	Perry	L. & N.	Lothair, Ky.
Barwick Coal Co.	Barwick, Ky.	Barwick	Breathitt	L. & N.	Barwick, Ky.
Blackey Coal Co.	Blackey, Ky.	Tayma	Letcher	L. & N.	Tayma, Ky.
Blackey Coal Corporation	Blackey, Ky.	Blackey	Letcher	L. & N.	Blackey, Ky.
Bry-Mae Coal Co.	Roberta, Tenn.	West Jellico	McCreary	C. N. O. & T. P.	Silversville, Ky.
Carrs Fork Coal Co.	Lexington, Ky.	Carrs Fork No. 1	Perry	L. & N.	Vi o. Ky.
Clinton Coal Co.	Hazard, Ky.	Clinton	Perry	L. & N.	Coyros, Ky.
Columbus Mining Co.	Chicago, Ill.	No. 3	Perry	L. & N.	Christopher, Ky.
Columbus Mining Co.	Chicago, Ill.	No. 4	Perry	L. & N.	Allais, Ky.
Davis, R. T. Coal Co., Inc.	Jackson, Ky.	Davis	Breathitt	L. & N.	Jackson, Ky.
Diamond Block Coal Co., Inc.	Diablock, Ky.	No. 1	Perry	L. & N.	Karles, Ky.
Elk Creek Coal Co.	Blackey, Ky.	Elk Creek	Letcher	L. & N.	Blackey, Ky.
Elkhorn & Jellico Coal Co.	Whitesburg, Ky.	Elkhorn Jellico No. 1	Letcher	L. & N.	Whitesburg, Ky.
Elkhorn Hazard Coal Co.	Raphine, Va.	Elkhorn Hazard	Letcher	L. & N.	Whitesburg, Ky.
Fort Branch Coal Co.	Fusonia, Ky.	No. 1	Perry	L. & N.	Fusonia, Ky.
Foursam Block Collieries Co.	Goodwill, W. Va.	Foursam No. 1	Perry	L. & N.	Lothair, Ky.
Marian Coal Co.	City Natl. Bank Bldg., Lexington, Ky.	Marian	Letcher	L. & N.	Blackey, Ky.
Masons Creek Coal Co.	Viper, Ky.	Masons Creek	Perry	L. & N.	Viper, Ky.
No. 4 Superior Coal Co.	City Natl. Bank Bldg., Lexington, Ky.	Superior	Perry	L. & N.	Lennut, Ky.
Peacock Coal Co.	Altro, Ky.	Peacock	Breathitt	L. & N.	Altro, Ky.
Riverside Coal Co.	15 Broad St., New York, N. Y.	Riverside	Breathitt	L. & N.	Frozen, Ky.
Rockhouse Coal Co.	Blackey, Ky.	Rockhouse	Letcher	L. & N.	Harther, Ky.
Ruthanne Coal Co.	Wolfcoal, Ky.	Ruthanne No. 1	Breathitt	L. & N.	Wolfcoal, Ky.
Ruthanne Coal Co.	Wolfcoal, Ky.	Ruthanne No. 2	Breathitt	L. & N.	Wolfcoal, Ky.
Silver Leaf Coal Co.	Hazard, Ky.	Silver Leaf	Perry	L. & N.	Hazard, Ky.
South Eastern Kentucky Coal Co.	Hazard, Ky.	No. 1	Perry	L. & N.	Perritt, Ky.
Steele Coal Co. (The)	Dayton, O.	Steele	Pike	C. & O.	Wagner, Ky.
Storm King Coal Co., Inc.	Hamilton Ohio	Storm King No. 1	Perry	L. & N.	Storm King, Ky.
Ulvah Coal Co.	Bluefield, W. Va.	Ulvah	Letcher	L. & N.	Pershing, Ky.
York Coal Corporation	148 E 57th St. New York, N. Y.	York	Perry	L. & N.	Krypton, Ky.

FLAG SEAM (Known also as NO. 7 SEAM)

Mined in Boyd, Carter, Knott, Breathitt and Perry Counties. Bituminous rank. Suitable for Cement Burning, Beehive Coking, By-Product Coking, Domestic, Export, Illuminating Gas, Locomotive Fuel, Melting, Powdered, Producer Gas, Tile and Pottery Burning and Steam uses. Known as a block and splint coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Acup Creek Coal Co.	Lawyer Bldg., Covington, Ky.	Acup Creek	Perry	L. & N.	Acup, Ky.
Algoma Block Coal Co.	Huntington, W. Va.	Algoma Block	Perry	L. & N.	Lothair, Ky.
Ashland Iron & Mining Co.	Ashland, Ky.	Coalton No. 7	Boyd	A. C. & I.	Rush, Ky.
Ashland Iron & Mining Co.	Ashland, Ky.	Fish No. 12	Boyd	A. C. & I.	Rush, Ky.
Ashland Iron & Mining Co.	Ashland, Ky.	Winslow No. 8	Boyd	A. C. & I.	Rush, Ky.
Carlson Mining Co.	Ashland, Ky.	Carlson	Boyd	A. C. & I.	Surgill, Ky.
Carrs Fork Coal Co.	702 First & City Bldg., Lexington, Ky.	Carrs Fork No. 2	Perry	L. & N.	Veco, Ky.
Cle Creek Co.	Coalton, Ky.	Clear No. 1	Boyd	A. C. & I.	Coalton, Ky.
Fried-Kash Coal Co.	Irvin, Ky.	Fried-Kash	Breathitt	L. & N.	Whick, Ky.
Hardison-Walker Refractories Co.	Pittsburgh, Pa.	Carter	C. & O.		Straight Creek, Ky.
Hardy-Burlingham Mining Co.	Newport, Ky.	Hardbury	Perry	L. & N.	Hardbury, Ky.
Hazard Blue Grass Coal Corp.	Johnson City, Tenn.	No. 1	Perry	L. & N.	Hazard, Ky.
Hazard Blue Grass Coal Corp.	Johnson City, Tenn.	No. 2	Perry	L. & N.	Hazard, Ky.
Hazard Jellico Coal Co.	P. nobset Bldg., Detroit, Mich.	Harvey	Perry	L. & N.	Dowlas, Ky.
Hombre Coal Co.	Hombre, Ky.	Palmer	Perry	L. & N.	Cudjidge, Ky.
Kennont Coal Co.	Nicholas Bldg., Toledo, O.	Keamont	Perry	L. & N.	Hamdin, Ky.
Kentucky Block Mining Co.	Lexington, Ky.	Kentucky Block	Perry	L. & N.	Hayslen, Ky.
Kentucky Gem Coal Co.	Ashland, Ky.	Kentucky Gem	Carter	C. & O.	North Branch, Ky.
Kentucky River Coal Mining Co.	1127 Transportation Bldg., Chicago, Ill.	Whittett No. 1	Perry	L. & N.	Whittett, Ky.
Lick Creek Coal Co.	Willard, Ky.	Lick Creek	Carter	Eastern Kentucky	Willard, Ky.
Lincoln Coal Co. (The)	Cincinnati, O.	Lincoln	Perry	L. & N.	Napfor, Ky.
Lots Creek Coal Co.	Williamsburg, Ky.	Lots Creek	Perry	L. & N.	Duane, Ky.
Maynard Coal Co. The	Columbus, O.	No. 7	Perry	L. & N.	Lennut, Ky.
Maynard Coal Co. The	Columbus, O.	No. 8	Perry	L. & N.	Heiner, Ky.
Midland Mining Co.	Tribble, Ky.	Midland	Perry	L. & N.	Tribbey, Ky.
Perkins-Bowling Coal Corp.	Lexington, Ky.	Perkins-Bowling	Knott	L. & N.	Sassafras, Ky.
Princess Coal Co.	Princeton, Ky.	Princess	Boyd	A. C. & I.	Princess, Ky.
Reliance Coal & Coke Co.	Cincinnati, O.	Reliance	Perry	L. & N.	Glomawr, Ky.
Ruthanne Coal Co.	Wolfcoal, Ky.	Ruthanne No. 3	Breathitt	L. & N.	Wolfcoal, Ky.
Strother, J. P.	Kilgore, Ky.	Star	Carter	C. & O. & A. C. & I.	Kilgore, Ky.
Thayer, N. (Est.) Ky. Properties	Riverton, Ky.	Lost Creek	Carter	E. K.	Willard, Ky.
United Star Coal Corp.	Hazard, Ky.	United Star	Perry	L. & N.	Hazard, Ky.
Willard Coal Co.	Willard, Ky.	Willard	Carter	E. K.	Willard, Ky.

FREEBURN SEAM (Known also as POND CREEK SEAM)

Mined in Pike county. Bituminous rank. Suitable for Cement Burning, Beehive and By-Product Coking, Domestic, Export, Illuminating Gas, Locomotive Fuel, Melting, Powdered, Producer Gas, Tile and Pottery Burning and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Banner-Pond Creek Coal Co.	McDowell, W. Va.	Banner-Pond Creek	Pike	N. & W.	Belfry, Ky.
Duff Pond Creek Coal Co.	Sharondale, Ky.	Duff Pond Creek	Pike	N. & W.	Sharondale, Ky.
Grinoco Mining Co.	Bluefield, W. Va.	Grinoco	Pike	W. & P. C.	Belfry, Ky.
Pond Creek Coal Co.	Stone, Ky.	No. 1	Pike	N. & W.	Hardy, Ky.
Pond Creek Coal Co.	Stone, Ky.	No. 2	Pike	N. & W.	Hardy, Ky.
Pond Creek Coal Co.	Stone, Ky.	No. 3	Pike	N. & W.	Stone, Ky.
Pond Creek Coal Co.	Stone, Ky.	No. 4	Pike	N. & W.	Stone, Ky.
Pond Creek Coal Co.	Stone, Ky.	No. 5	Pike	N. & W.	P. z. Ky.
Pond Creek Coal Co.	Stone, Ky.	No. 6	Pike	N. & W.	McVeigh, Ky.
Pond Creek Coal Co.	Stone, Ky.	No. 7	Pike	N. & W.	McVeigh, Ky.
Pond Creek Coal Co.	Stone, Ky.	No. 8	Pike	N. & W.	Peg, Ky.
Portsmouth By-Product Coke Co.	Syracuse, N. Y.	Freeburn No. 1	Pike	N. & W.	Arrow, Ky.
Portsmouth By-Product Coke Co.	Syracuse, N. Y.	Freeburn No. 3	Pike	N. & W.	Arrow, Ky.
Tierney Mining Co.	Stone, Ky.	Tierney	Pike	W. & P.	Stone, Ky.

HARLAN SEAM (Known also as A SEAM, JELICO SEAM, STRAIGHT CREEK SEAM)
 Mined in Harlan and Bell counties. Bituminous rank. Suitable for Cement Burning, Bee-hive Coking, By-Product Coking, Domestic, Export, Illuminating Gas, Locomotive Fuel, Melting, Powdered, Producer Gas, Tile and Pottery Burning and Steam uses. Known as a block and splint coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Benito Coal Co.	Lejunior, Ky.	Benito	Harlan	L. & N.	Benito, Ky.
Berger Coal Mining Co., Inc.	Lejunior, Ky.	No. 1	Harlan	L. & N.	Shields, Ky.
Bowling Coal Mining Co.	Harlan, Ky.	Bowling	Harlan	L. & N.	Barlow, Ky.
Boyer, Wm. D. & Co., Trustee	Seranton, Pa.	Bear Branch	Harlan	L. & N.	Yrda, Ky.
Chase Coal Co., The	Middlesboro, Ky.	No. 2	Harlan	L. & N.	Ohio, Ky.
Chase Coal Co., The	Middlesboro, Ky.	No. 3	Harlan	L. & N.	Ohio, Ky.
Clover Fork Coal Co.	Kitts, Ky.	Clover Fork	Harlan	L. & N.	Kitts & Harlan, Ky.
Crown By-Product Coal Co.	Chevrolet, Ky.	Crown	Harlan	L. & N.	Chevrolet, Ky.
Devon Coal Co.	Pineville, Ky.	Devon	Bell	L. & N.	Togay, Ky.
East Harlan Coal Co.	Kilday, Ky.	East Harlan	Harlan	L. & N.	Ages, Ky.
Golden Ash Coal Co.	Williamsburg, Ky.	Golden Ash	Harlan	L. & N.	Harlan, Ky.
Harlan Collieries Co.	Ages, Ky.	Brookside	Harlan	L. & N.	Ages, Ky.
Harlan Cumberland Coal Mining Co.	Northfork, W. Va.	Harlan-Cumberland	Harlan	L. & N.	Colton, Ky.
Harlan Fuel Co.	Harlan, Ky.	Yancey	Harlan	L. & N.	Yancey, Ky.
Harlan Gas Coal Co.	Detroit, Mich.	Harlan	Harlan	L. & N.	Maholm, Ky.
Harlan Superior Coal Co.	Jackson City Bank Bldg., Birmingham, Ala.	No. 1	Harlan	L. & N.	Noll, Ky.
High Point Coal Co.	Ages, Ky.	No. 1	Harlan	L. & N.	Ages, Ky.
High Splint Coal Co.	Williamsburg, Ky.	High Splint Harlan	Harlan	L. & N.	Sagrave, Ky.
J. B. Blue Gem Coal Co.	Pineville, Ky.	Wood	Harlan	L. & N.	Wood, Ky.
Kentucky Cardinal Coal Corp.	Cardinal, Ky.	No. 1	Bell & Harlan	L. & N.	Cardinal, Ky.
Kentucky-Harlan Coal Co.	Harlan, Ky.	Rat Wing	Harlan	L. & N.	Harlan, Ky.
King Harlan Co.	71 Ingalls Bldg., Cincinnati, O.	King Harlan	Harlan	L. & N.	Kilday, Ky.
Kitts Creek Coal Co.	Harlan, Ky.	Kitts	Harlan	L. & N.	Harlan, Ky.
Lena Rue Coal Co.	Harlan, Ky.	Lena Rue No. 1	Harlan	L. & N.	Rue, Ky.
McComb Coal Co.	McComb, Ky.	McComb	Harlan	L. & N.	Harlan, Ky.
McComb Coal Co.	Harlan, Ky.	No. 1	Harlan	L. & N. W. & B. M.	Harlan, Ky.
Mary Helen Coal Corporation	Coalgood, Ky.	Mary Helen	Harlan	L. & N.	Merma, Ky.
Mathel Coal Co.	Middlesboro, Ky.	Mathel	Bell	L. & N.	Mathel, Ky.
Meleroft Coal Co.	Pittsburgh, Pa.	Coxton	Harlan	L. & N.	Coxton, Ky.
Meleroft Coal Co.	Pittsburgh, Pa.	Kayo	Harlan	L. & N.	Coxton, Ky.
Miller & Sharp Coal Co.	Lejunior, Ky.	Miller & Sharp	Harlan	L. & N.	Earls & Risley, Ky.
Mimelga-Harlan Coal Co.	Harlan, Ky.	Mimelga Harlan	Harlan	L. & N.	Harlan, Ky.
Model Coal Co.	Jellico, Tenn.	Mod 1	Harlan	L. & N.	Townsend, Ky.
Molus Coal Co.	Pineville, Ky.	Molus	Harlan	L. & N.	Molus, Ky.
Nelansburg Coal Co.	Pineville, Ky.	Harlan	Harlan	L. & N.	Harlan, Ky.
P. V. K. Coal Co.	Monongahela, Pa.	Clover Gap	Harlan	L. & N.	Stables, Ky.
Paris Coal Co.	Harlan, Ky.	Paris	Harlan	L. & N.	Sagrave, Ky.
Perkins-Harlan Coal Co.	Williamsburg, Ky.	Perkins Harlan	Harlan	L. & N.	Liggett, Ky.
Rex Coal Co.	Kitts, Ky.	Rex Red Ash	Harlan	L. & N.	Fenster, Ky.
Rocky Branch Coal Co.	Pineville, Ky.	Rocky Branch	Harlan	L. & N.	Pelzer, Ky.
Eye Hollow Coal Co.	Everts, Ky.	Springton	Harlan	L. & N.	Springton, Ky.
Sargent Coal Co.	Everts, Ky.	Sargent	Harlan	L. & N.	Everts, Ky.
Shawnee Gas Coal Co.	Harlan, Ky.	Shawnee Gas	Harlan	L. & N.	Harlan, Ky.
Smith, J. L. Coal Co., The	Kilday, Ky.	Draper	Harlan	L. & N.	Draper, Ky.
Standard Harlan Coal Co.	Indianapolis, Ind.	Ages-Geen	Harlan	L. & N.	Ag 1, Ky.
Standard Harlan Coal Co.	Indianapolis, Ind.	Brown	Harlan	L. & N.	Everts, Ky.
Standard Harlan Coal Co.	Indianapolis, Ind.	Middleton	Harlan	L. & N.	Everts, Ky.
Standard Harlan Coal Co.	Indianapolis, Ind.	Thorp's Arcadia	Bell	L. & N.	Pineville, Ky.
Superior Harlan Coal Co.	Huntington, W. Va.	Superior Harlan	Harlan	L. & N.	Everts, Ky.
Sugar Camp Mining Co.	Harlan, Ky.	Sugar Camp	Harlan	L. & N.	Everts, Ky.
Tway, R. C., Coal Co.	Louisville, Ky.	Tway	Harlan	L. & N.	Harlan, Ky.
Upper Harlan Coal Co.	Lejunior, Ky.	Upper Harlan	Harlan	L. & N.	Lejunior, Ky.
Wallins Creek Collieries Co.	Nashville, Tenn.	Comet	Harlan	L. & N.	Harlan, Ky.
White Star Coal Co.	White Star, Ky.	No. 1	Harlan	L. & N.	Willott, Ky.
White Star Coal Co.	White Star, Ky.	No. 3	Harlan	L. & N.	Willott, Ky.
White Star Coal Co.	White Star, Ky.	No. 4	Harlan	L. & N.	Willott, Ky.
Wilberr Coal Co.	Corbin, Ky.	No. 2	Bell	L. & N.	Korsal, Ky.
Willis-Harlan Coal Co.	Middlesboro, Ky.	MTJ Creek No. 1	Harlan	L. & N.	Felder, Ky.
Willis-Harlan Coal Co.	Middlesboro, Ky.	MTJ Creek No. 2	Harlan	L. & N.	Felder, Ky.
Wilson Berger Coal Co., (The)	Graves Knob, Ky.	Graves Branch	Harlan	L. & N.	Harlan, Ky.

HAZARD SEAM (Known also as NO. 6 SEAM)

Mined in Perry and Breathitt counties. Bituminous rank. Suitable for Cement Burning, Domestic, Export, Locomotive Fuel, Melting, Powdered, Producer Gas, Tile and Pottery Burning and Steam uses. Known as a splint coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Amp Creek Coal Co.	Covington, Ky.	Amp Creek	Perry	L. & N.	Amp, Ky.
Amburge Coal Co.	Louisville, Ky.	Amburge	Letcher	L. & N.	Dalma, Ky.
Ashland Coal & Fire Clay Co.	Ashland, Ky.	Ashland	Boyd	L. & N.	Ashland, Ky.
Black Joe Coal Co.	Detroit, Mich.	Leonards	Perry	L. & N.	Leonard, Ky.
Blue Diamond Coal Co.	Knoxville, Tenn.	Blue Diamond	Perry	L. & N.	Blue Diamond, Ky.
Carbon Mining Co.	Ashland, Ky.	Carbon	Boyd	L. & N.	Sturgill, Ky.
Chase Coal Co., The	Middlesboro, Ky.	No. 2	Harlan	L. & N.	Ohio, Ky.
Chase Coal Co., The	Middlesboro, Ky.	No. 3	Harlan	L. & N.	Ohio, Ky.
Columbus Mining Co.	Chicago, Ill.	No. 5	Perry	L. & N.	Alfars, Ky.
Columbus Mining Co.	Chicago, Ill.	No. 6	Perry	L. & N.	Galton, Ky.
Colwell Blythe Coal Co.	Yrkes, Ky.	Damon	Perry	L. & N.	Yrkes, Ky.
Commercial Coal Mining Co.	Lexington, Ky.	Kl new	Perry	L. & N.	Kleno, Ky.
Cowan Creek Coal Co.	Cincinnati, O.	Cowan Creek	Letcher	L. & N.	Lee, Ky.
Crawford Coal Corporation	Williamson, Ky.	Crawford	Perry	L. & N.	Perling, Ky.
East Kentucky Coal Co.	London, Ky.	East Kentucky	Perry	L. & N.	Alloway, Ky.
Eden Coal Co.	Whitesburg, Ky.	Eden	Letcher	L. & N.	Felix, Ky.
First Creek Mining Co.	Ponobscott Bldg., Detroit, Mich.	First Creek	Perry	L. & N.	Blue Diamond, Ky.
Foursam Block Collieries Co.	Goodwill, W. Va.	Foursam No. 1	Perry	L. & N.	Collier, Ky.
Foursam Block Collieries Co.	Goodwill, W. Va.	Foursam No. 4	Perry	L. & N.	Collier, Ky.
Hazard Coal Co.	Lexington, Ky.	Happy	Perry	L. & N.	Hazard, Ky.
Hazard Block Coal Co., Inc.	Hazard, Ky.	Hazard Block	Perry	L. & N.	Hazard, Ky.
Hazard Lethro Coal Co.	Detroit, Mich.	Havay	Perry	L. & N.	Hazard, Ky.
Hazard Junior Coal Co.	Typo, Ky.	Hazard Junior	Perry	L. & N.	Hazard, Ky.
Hungar Coal Corporation	Lexington, Ky.	Domino	Perry	L. & N.	Domino, Ky.
Indian Head Coal Co.	Grand Forks, N. D.	Indian Head	Perry	L. & N.	Tuley, Ky.
Kentucky River Coal Mining Co.	1125 Transportation Bldg., Chicago, Ill.	Whitson No. 1	Perry	L. & N.	Whitson, Ky.
Liberty Coal Co.	Box 1050, Knoxville, Tenn.	Liberty	Perry	L. & N.	Bowman, Ky.
Memphis Coal Mining Co.	Memphis, Tenn.	Dixie & Petersburg	Christian	L. & N.	Memphis, Ky.
Saldee Coal Co.	Saldee, Ky.	Saldee	Breathitt	L. & N.	Saldee, Ky.
Solar Coal Co., (The)	Hamilton, Ohio	Solar	Perry	L. & N., part of L. & N.	Solar, Ky.
Trace Fork Mining Co.	Lexington, Ky.	Trace Fork	Perry	L. & N.	Trace, Ky.
United Star Coal Corp.	Hazard, Ky.	United Star	Perry	L. & N.	Hazard, Ky.
Whitesburg Coal Co., Inc.	Lexington, Ky.	Whitson	Perry	L. & N.	Whitson, Ky.

HIGNITE SEAM

Mined in Bell and Knox counties. Bituminous rank. Suitable for Cement Burning, Bee-hive Coking, By-Product Coking, Domestic, Export, Illuminating Gas, Locomotive Fuel, Melting, Powdered, Producer Gas, Tile and Pottery Burning and Steam uses. Known as a block coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Atlas Coal Mining Co.	Knoxville, Tenn.	Atlas	Bell	L. & N.	Capito, Ky.
Chenoo-Hignite Coal Co.	Chenoo, Ky.	Chenoo-Hignite	Bell	L. & N.	Chenoo & Wasioto, Ky.
Crystal Coal Co.	Knoxville, Tenn.	Hignite	Bell	L. & N.	Edwood City, Ky.
Gunn, W. E. & Co.	Middlesboro, Ky.	Lower Hignite	Bell	L. & N. Sou.	Murtea, Ky.
Monarch Coal & Coke Co.	Middlesboro, Ky.	Monarch	Bell	L. & N. Southern	Wilmington, Ky.

JELLICO SEAM

Mined in Bell, Knox, Whitley, Laurel and Campbell counties. Bituminous rank. Suitable for Cement Burning, Beehive and By-Product Coking, Domestic, Export, Illuminating Gas, Locomotive Fuel, Melting, Powdered, Producer Gas, Tile and Pottery Burning and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Bon Jellico Coal Co.	Bon Jellico, Ky.	Bon Jellico	Whitley	L. & N.	Williamsburg, Ky.
Bradley-Jellico Coal Co.	Pineville, Ky.	New Hughes	Knox	L. & N.	Elys, Ky.
Cove Branch Coal Co.	Corbin, Ky.	Cove Branch	Knox	L. & N.	Woodbine, Ky.
Crescent Coal Co.	E. Bernstadt, Ky.	"Crescent"	Laurel	L. & N.	E. Bernstadt, Ky.
Evans Jellico Coal Co.	Jellico, Tenn.	Cook	Whitley	L. & N.	Jellico, Tenn.
Frantz-Jellico Coal Co.	Pariston, Ky.	Frantz-Jellico	Laurel	L. & N.	Pariston, Ky.
Gatlin Coal Co.	Williamsburg, Ky.	Gatlin No. 1	Whitley	L. & N.	Gatlin, Ky.
Gatlin Coal Co.	Williamsburg, Ky.	Gatlin No. 2	Whitley	L. & N.	Gatlin, Ky.
Gatlin Coal Co.	Williamsburg, Ky.	Gatlin No. 3	Whitley	L. & N.	Gatlin, Ky.
Horse Shoe Coal Co.	East Bernstadt, Ky.	Diamond	Laurel	L. & N.	East Bernstadt, Ky.
Indian Creek Coal Co.	Pineville, Ky.	Black Bear	Bell	L. & N.	Four Mile, Ky.
J. B. Straight Creek Mining Co.	Pineville, Ky.	Murn	Bell	L. & N.	Four Mile, Ky.
Jellico Coal Mining Co.	Knoxville, Tenn.	ML Ash	Whitley	L. & N.	ML Ash, Ky.
Kanawha Knox Coal Co.	303 Masonic Temple, Cincinnati, O.	Kanawha Knox	Knox	L. & N.	Elys, Ky.
Kentucky-Gorgia Coal Co.	East Bernstadt, Ky.	Donor	Laurel	L. & N.	E. Bernstadt, Ky.
Keystone Jellico Coal Co.	East Bernstadt, Ky.	Standard	Laurel	L. & N.	E. Bernstadt, Ky.
Kings Coal & Mining Co.	Cincinnati, O.	W. Morgan	Whitley	L. & N.	Williamsburg, Ky.
McCarthy Coal Co.	East Bernstadt, Ky.	Vulcan	Laurel	L. & N.	E. Bernstadt, Ky.
Mahan Jellico Coal Co.	Packard, Ky.	Mahan Jellico No. 1	Whitley	L. & N.	Packard, Ky.
Mahan Jellico Coal Co.	Packard, Ky.	Mahan Jellico No. 2	Whitley	L. & N.	Packard, Ky.
Main Jellico Mountain Coal Co.	Jellico, Tenn.	Kensee	Whitley	L. & N.	Kensee, Ky.
Mountain Gem Coal Mining Co.	Louisville, Ky.	Long Creek	Laurel	L. & N.	E. Bernstadt, Ky.
Mountain Gem Coal Mining Co.	801 Realty Bldg., Louisville, Ky.	Mountain Gem	Laurel	L. & N.	East Bernstadt, Ky.
New Watts Creek Jellico Coal Co.	Wofford, Ky.	Coalmont	Whitley	L. & N.	Wofford, Ky.
North Jellico Coal Co.	Louisville, Ky.	Olive Hill	Knox	L. & N.	Woodbine, Ky.
North Jellico Coal Co.	Louisville, Ky.	Wilton	Knox	L. & N.	Woodbine, Ky.
Polley Coal Co.	Williamsburg, Ky.	Polley	Whitley	L. & N.	Packard, Ky.
Proctor Coal Co.	Red Ash, Ky.	Proctor	Whitley	L. & N. Sou.	Jellico, Tenn.
Steel & Alder Coal Co.	Girdler, Ky.	Steel & Alder	Knox	C. & M.	Girdler, Ky.

KEOKEE SEAM

Mined in Harlan county. Bituminous rank. Suitable for Cement Burning, Beehive and By-Product Coking, Domestic, Export, Illuminating Gas, Locomotive Fuel, Melting, Powdered, Producer Gas, Tile and Pottery Burning and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Evarts Coal Co.	Harlan, Ky.	Evarts	Harlan	L. & N.	Evarts, Ky.
Harlan Kellioke Coal Co.	Evarts, Ky.	Harlan Kellioke	Harlan	L. & N.	Dartmont, Ky.
Kellioke Coal Co. (The)	703 4th Natl. Bank Bldg., Cincinnati, O.	Kellioke	Harlan	L. & N.	Kellioke, Ky.
Loony Creek Coal Co.	422 Book Bldg., Detroit, Mich.	Loony Creek No. 1	Harlan	L. & N.	Clutts, Ky.
Wisconsin Steel Co.	Chicago, Ill.	Wisconsin Steel	Harlan	L. & N.	Benham, Ky.
Wisconsin Steel Co.	Chicago, Ill.	No. 2	Harlan	L. & N.	Benham, Ky.

MILLERS CREEK SEAM (Known also VAN LEAR and WHEELER SEAMS; KEYSER SEAM of Levisa Fork)

Mined in Floyd and Johnson counties. Bituminous rank. Suitable for Cement Burning, Bee-hive Coking, By-Product Coking, Domestic, Export, Illuminating Gas, Locomotive Fuel, Melting, Powdered, Producer Gas, Tile and Pottery Burning and Steam uses. Known as a block and splint coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Blue Beaver Coal Co.	Prestonsburg, Ky.	Blue Beaver	Floyd	C. & O.	Prestonsburg, Ky.
Bull Creek Coal Co.	Prestonsburg, Ky.	Bull Creek Mine	Floyd	C. & O.	Bull Creek, Ky.
Cliff Coal Co. (The)	Portsmouth, O.	No. 1	Floyd	C. & O.	Cliff, Ky.
Colonial Coal & Coke Co.	Pottsville, Pa.	Colonial	Floyd	C. & O.	Prestonsburg, Ky.
Consolidation Coal Co.	Munson Bldg., 67 Wall St., New York, N. Y.	No. 151	Johnson	Millers Creek, C. & O.	Van Lear, Ky.
Consolidation Coal Co.	Munson Bldg., 67 Wall St., New York, N. Y.	No. 152	Johnson	Millers Creek, C. & O.	Van Lear Jct., Ky.
Consolidation Coal Co.	Munson Bldg., 67 Wall St., New York, N. Y.	No. 153	Johnson	Millers Creek, C. & O.	Van Lear Jct., Ky.
Consolidation Coal Co.	Munson Bldg., 67 Wall St., New York, N. Y.	No. 154	Johnson	Millers Creek, C. & O.	Van Lear Jct., Ky.
Consolidation Coal Co.	Munson Bldg., 67 Wall St., New York, N. Y.	No. 155	Johnson	Millers Creek, C. & O.	Van Lear Jct., Ky.
Eureka Coal & Mining Co. (The)	Huntington, W. Va.	Eureka	Floyd	C. & O.	Prestonsburg, Ky.
Line Branch Coal Co.	Hagerhill, Ky.	Line Branch	Johnson	B. & K. R.	Van Lear, Ky.
Majestic Collieries Co.	Majestic, Ky.	Majestic	Pike	N. & W.	Cedar, W. Va.
Middle Creek Coal Co.	Prestonsburg, Ky.	Middle Creek	Floyd	C. & O.	Prestonsburg, Ky.
Miner's Elkhorn Coal Co.	Pikeville, Ky.	Miner's Elkhorn	Johnson	B. & K.	Sherman, Ky.
Walden Coal Co., Inc.	Prestonsburg, Ky.	Walden	Floyd	C. & O.	Emma, Ky.
Winchester Coal Co.	Prestonsburg, Ky.	Winchester	Floyd	C. & O.	Emma, Ky.

POND CREEK SEAM (Known also as FREEBURN SEAM)

Mined in Pike county. Bituminous rank. Suitable for Cement Burning, Beehive and By-Product Coking, Domestic, Export, Illuminating Gas, Locomotive Fuel, Melting, Powdered, Producer Gas, Tile and Pottery Burning and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Barley, R. G. Coal Co.	Williamson, W. Va.	Barley	Pike	N. & W.	Williamson, W. Va.
Barley Fuel Co.	Charleston, W. Va.	Barley	Pike	N. & W.	Tabor, Ky.
Black Gem Coal Co.	Huntington, W. Va.	Black Gem	Pike	N. & W.	Tabor, Ky.
Blake Coal Mining Co.	Stone, Ky.	Blake	Pike	N. & W.	Pinconet, Ky.
Purnell Coal & Coke Co.	Huntington, W. Va.	Bornwell	Pike	N. & W.	Spring, W. Va.
Carry Oil Coal Co.	Welch, W. Va.	Carry Oil	Pike	N. & W.	Tabor, Ky.
Leckie Collieries	Huntington, W. Va.	No. 1	Pike	N. & W.	Letcher, Ky.
Marietta Coal Co.	Huntington, W. Va.	Marietta	Pike	N. & W.	Pinconet, Ky.
Mud Lick Coal Co.	Williamson, W. Va.	Mud Lick	Pike	N. & W.	Shirland, Ky.
Sharon Coal & Coke Co.	Sharon, Ky.	Sharon	Pike	N. & W.	Stone, Ky.
Solvay Collieries Co.	Sprague, N. Y.	Tolland	Pike	N. & W.	Belfry, Ky.
Sudduth Coal Co.	Charleston, W. Va.	Sudduth	Pike	N. & W.	Stone, Ky.
Sullivan Pond Creek Co.	Tabor, W. Va.	Pond Creek No. 1	Pike	N. & W.	Stone, Ky.
Turney Mining Co.	Stone, Ky.	Turney	Pike	W. & P.	Stone, Ky.
Triangle Coal Co.	Stone, Ky.	Triangle	Pike	N. & W.	Pinconet, Ky.

STRAIGHT CREEK SEAM

Mined in Bell and Knox counties. Bituminous rank. Suitable for Cement Burning, Beehive and By-Product Coking, Domestic, Export, Illuminating Gas, Locomotive Fuel, Melting, Powdered, Producer Gas, Tile and Pottery Burning and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
American Fuel Co.	Montgomery, Ala.	Wallsend	Bell	L. & N.	Pinoville, Ky.
Latley Coal Co.	Blanch, Ky.	Barley	Bell	L. & N.	Pinoville, Ky.
Roone Trail Coal Co.	Pinoville, Ky.	Easley No. 1	Bell	L. & N.	Straight Creek, Ky.
Roone Trail Coal Co.	Pinoville, Ky.	Lark	Bell	L. & N.	Straight Creek, Ky.
Cain Coal Co.	Middlesboro, Ky.	Kenny	Bell	L. & N.	Cary, Ky.
Coleman Mining Co.	Cary, Ky.	Fox Ridge	Bell	L. & N.	Pinoville, Ky.
Conant Coal Co.	Pinoville, Ky.	Conant	Bell	L. & N.	Jensen, Ky.
Ennis Coal Co.	Barbourville, Ky.	Tiffany	Knox	L. & N.	Hammar, Ky.
Federal Coal Co.	Cary, Ky.	Cary	Bell	L. & N.	Cary, Ky.
Federal Coal Co.	Cary, Ky.	Castro	Bell	L. & N.	Cary, Ky.
Federal Coal Co.	Cary, Ky.	Glendon	Bell	L. & N.	Arjay, Ky.
Indian Creek Coal Co.	Pinoville, Ky.	Rim No. 1	Bell	L. & N.	Four Mile, Ky.
I. B. Straight Creek Mining Co.	Pinoville, Ky.	"Raven"	Bell	L. & N.	Four Mile, Ky.
Kentucky Ridge Coal Co.	Straight Creek, Ky.	Kentucky Ridge	Bell	L. & N.	Eggen, Ky.
Kentucky Straight Creek Coal Co.	Pinoville, Ky.	Ky. Straight Creek	Bell	L. & N.	Ranoma, Ky.
Lardrum Coal Co.	Arjay, Ky.	Arjay	Bell	L. & N.	Arjay, Ky.
Liberty Coal & Coke Co.	Straight Creek, Ky.	Barker No. 4	Bell	L. & N.	Straight Creek, Ky.
New Straight Creek Mining Co.	Pinoville, Ky.	New Straight Creek	Bell	L. & N.	Logans Switch, Ky.
Pickering Branch Coal Co.	Kettle Island, Ky.	Pickering Branch	Bell	L. & N.	Kettle Island, Ky.
Pioneer Coal Co.	Louisville, Ky.	Pioneer	Bell	L. & N.	Kettle Island, Ky.
Roth Coal Co.	Pinoville, Ky.	Roth No. 1	Bell	L. & N.	Payburn, Ky.
Sewell-Jeffison Coal Co.	Winchester, Ky.	Sewell-Jeffison	Bell	L. & N.	Four Mile, Ky.
Trime Coal Co.	Pinoville, Ky.	Trime	Knox	L. & N.	Tiffany, Ky.
Utility Gas Coal Co.	Pinoville, Ky.	Traction	Bell	L. & N.	Four Mile, Ky.
Wagner Coal Co.	Bluefield, W. Va.	Wagner	Bell	L. & N.	Pinoville, Ky.

THACKER SEAM

Mined in Pike county. Bituminous rank. Suitable for Cement Burning, Beehive and By-Product Coking, Domestic, Export, Illuminating Gas, Locomotive Fuel, Melting, Powdered, Producer Gas, Tile and Pottery Burning and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Alburn Coal Corporation	McCarr, Ky.	Alburn	Pike	N. & W.	McCarr, Ky.
Alma Thacker Fuel Co.	Columbus, O.	No. 1	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 2	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 3	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 4	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 5	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 6	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 7	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 8	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 9	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 10	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 11	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 12	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 13	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 14	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 15	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 16	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 17	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 18	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 19	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 20	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 21	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 22	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 23	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 24	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 25	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 26	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 27	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 28	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 29	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 30	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 31	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 32	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 33	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 34	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 35	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 36	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 37	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 38	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 39	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 40	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 41	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 42	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 43	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 44	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 45	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 46	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 47	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 48	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 49	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 50	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 51	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 52	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 53	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 54	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 55	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 56	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 57	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 58	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 59	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 60	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 61	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 62	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 63	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 64	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 65	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 66	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 67	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 68	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 69	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 70	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 71	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 72	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 73	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 74	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 75	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 76	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 77	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 78	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 79	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 80	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 81	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 82	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 83	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 84	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 85	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 86	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 87	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 88	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 89	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 90	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 91	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 92	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 93	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 94	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 95	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 96	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 97	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 98	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 99	Pike	N. & W.	Matewan, W. Va.
Alma Thacker Fuel Co.	Columbus, O.	No. 100	Pike	N. & W.	Matewan, W. Va.

WALLINS SEAM (Believed to be identical to the NO. 7 SEAM of Lee county, Virginia)

Mined in Harlan county. Bituminous rank. Suitable for Cement Burning, Beehive Coking, By-Product Coking, Domestic, Export, Illuminating Gas, Locomotive Fuel, Melting, Powdered, Producer Gas, Tile and Pottery Burning and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Banner Fork Coal Corp.	Kenton, Ky.	Banner Fork No. 1	Harlan	L. & N.	Waller, Ky.
Banner Fork Coal Corp.	Kenton, Ky.	Banner Fork No. 2	Harlan	L. & N.	Waller, Ky.
Creech Coal Co.	Twila, Ky.	No. 1	Harlan	L. & N.	Waller, Ky.
Kentucky King Coal Co.	Pinoville, Ky.	No. 1	Harlan	L. & N.	Waller, Ky.
Wallins Creek Collieries Co.	Nashville, Tenn.	Black Star	Harlan	L. & N.	Waller, Ky.
White Star Coal Co.	White Star, Ky.	No. 2	Harlan	L. & N.	Waller, Ky.
Wilson Berger Coal Co. (The)	Grays Knob, Ky.	Grays Branch	Harlan	L. & N.	Harlan, Ky.

MISCELLANEOUS SEAMS (EASTERN KENTUCKY)

Mined in Boyd, Breathitt, Bell, Carter, Floyd, Harlan, Knox, Lee, Letcher, Lawrence, Laurel, Perry, Pike, McCreary and Rockcastle counties. All of Bituminous rank. In general suitable for Cement Burning, Bee-hive Coking, By-Product Coking, Domestic, Export, Illuminating Gas, Locomotive Fuel, Melting, Powdered, Producer Gas, Tile and Pottery Burning and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	SEAM	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Adamson Coal Co.	Jenkins, Ky.	Lemon	Adamson	Letcher	S. V. & E.	Adamson, Ky.
Alpine Collieries Co.	Harrison, Tenn.	No. 1	Alpine Collieries	Pulaski	Sou., C.N.O. & T.P.	Alpine, Ky.
Anchor Coal Co.	Princeton, Ky.	No. 8	Anchor	Floyd	C. & O.	Princeton, Ky.
Ashland Iron & Mining Co.	Ashland, Ky.	No. 8	Coalton No. 7	Boyd	A. C. & I.	Rush, Ky.
Ashland Iron & Mining Co.	Ashland, Ky.	No. 8	Wanslow No. 8	Boyd	A. C. & I.	Rush, Ky.
Ashland Iron & Mining Co.	Ashland, Ky.	No. 4	Rush No. 12	Boyd	A. C. & I.	Rush, Ky.
Baker Coal Co., The	Hazard, Ky.	No. 4	Esher	Perry	L. & N.	Dakota, Ky.
Barwick Coal Co.	Barwick, Ky.	No. 4	Breathitt	Breathitt	L. & N.	Barwick, Ky.
Bear Creek Coal Co.	Simpson, Ky.	No. 4	Bear Creek	Breathitt	O. & K.	Wilbur, Ky.
Beattyville Coal Co., The	Beattyville, Ky.	Beattyville	Beattyville	Lie	L. & N.	Beattyville, Ky.
Beattyville Fuel Co.	Beattyville, Ky.	Beattyville	Beattyville Fuel	Lee	L. & N.	Beattyville, Ky.
Bellman Coal Co.	Middlesboro, Ky.	Winona	Bellman	Bell	L. & N., Sou.	Winona, Ky.
Bennetts Fork Coal Mining Co.	Middlesboro, Ky.	Sand Stone Part g.	Bennetts Fork	Bell	South rn, L. & N.	Bennetts Fork, Ky.
Big Run Coal Co.	Winch ster, Ky.	No. 7 Coalton	Princess	Boyd	C. & O., A. C. & I.	Princess, Ky.
Blue Ridge Coal Co.	Pineville, Ky.	Mason	Blue Ridge	Boyd	L. & N.	Calvin, Ky.
Bolinger's Coal Co.	Hazard, Ky.	No. 4	Bolinger	Perry	L. & N.	Calvin, Ky.
Brooking Coal Co.	Pineville, Ky.	No. 4	Brooking	Bell	L. & N.	Calvin, Ky.
Cain, Emory	Jackson, Ky.		Jones-Cain	Breathitt	O. & K.	Calvin, Ky.
Carey Elkhorn Coal Co.	Louisia, Ky.		Carey Elkhorn	Floyd	B. & O.	K y, Ky.
China Coal Co.	Wallins Creek, Ky.		Bull Dog	Harlan	L. & N.	Wallins Creek, Ky.
Clay County Coal Co.	Hima, Ky.	Horse Creek	Clay County	Clay	C. & M.	Hima, Ky.
Clear Fork Coal & Coke Co.	Middlesboro, Ky.	Mingo	Clear Fork	Bell	South rn	Ponde, Ky.
Climax Coal Co.	Shamrock, Ky.	Sterling	Shamrock & Edgewood	Bell	L. & N., Sou.	Edgewood, Ky.
Clover Leaf Coal Co.	Middlesboro, Ky.	Sandstone Parting	Clover Leaf	Bell	Sou. and L. & N.	Middlesboro, Ky.
Comargo Coal Co.	Knoxville, Tenn.	Sandstone Parting	Comargo	McCreary	K. & T., C.N.O., T.P.	Comargo, Ky.
Congress Coal Mining Co.	Middlesboro, Ky.	Sandstone Parting	Congress	Bell	Sou. and L. & N.	Congress, Ky.
Consolidated Fuel Co.	Pittsburgh, Pa.	No. 4 Gas	Elsie	Letcher	L. & N.	Duana, Ky.
Cornett-Lewis Coal Co.	Harlan, Ky.	High Split	Harlan	Harlan	L. & N.	S. agrave, Ky.
Crane Creek Coal Co.	Pineville, Ky.	Mason	Crane Creek	Bell	L. & N.	Cross, Ky.
Cressmont Coal Co., Inc.	Cressmont, Ky.		Cressmont	Lee	K. B. & C.	Cressmont, Ky.
Crystal Coal Co.	Knoxville, Tenn.	Poplar Lick	Poplar Lick	Bell	L. & N., C. V. Div.	Ellwood, Ky.
Devine, M. E.	Havensville, Ky.		Devines	Franklin	L. H. & St. L.	Havensville, Ky.
Dry Branch Coal Co.	Guy, Ky.	Mason	Dry Branch	Bell	L. & N.	Tejay, Ky.
Dudley Coal Co.	Lexington, Ky.	No. 1	Dudley	Letcher	L. & N.	Buckey, Ky.
Dudley Park Coal Co., The	Hidderberg, Ky.	Beattyville	Dudley Park	Lee	L. & N.	Hidderberg, Ky.
Eagle Coal Co., The	30 Euclid Arcade, Cleveland, O.	Bargen Fork No. 3	Eagle	McCreary	C. N. O., Penna.	Flat Rock, Ky.
Easton Coal Co.	R unit, W. Va.	No. 2 Gas	Larston	Martin	N. & W.	R unit, W. Va.
East Point Coal Co.	Middlesboro, Ky.	Winona	East Point	Bell	L. & N., Sou.	Winona, Ky.
Elkhorn & Jellico Coal Co.	Whitesburg, Ky.	Whit'sburg	No. 2	Letcher	L. & N.	Whitesburg, Ky.
Elsie Coal Co.	Winchester, Ky.		Elisier	Breathitt	L. & N.	Gambill, Ky.
Erskine, J. D.	Parkers Lake, Ky.	No. 3	Liskine	McCreary	Southern	umbland Falls, Ky.
Furnace Gap Coal Co.	Pineville, Ky.	Horse Creek	Eureka No. 1	Clay	C. & M.	Hima, Ky.
Furnace Gap Coal Co.	Pineville, Ky.	Horse Creek	Eureka No. 2	Clay	C. & M.	Hima, Ky.
Furnace Gap Coal Co.	Pineville, Ky.	Horse Creek	Eureka No. 3	Clay	C. & M.	Hima, Ky.
Furnace Gap Coal Co.	Pineville, Ky.	Horse Creek	Eureka No. 4	Clay	C. & M.	Hima, Ky.
General Refractories Co.	1512 Chestnut St., Philadelphia, Pa.	No. 3	General Refractories	Carter	C. & O.	Hitchins, Ky.
Gravity Coal Mining Co.	Gravity, Ky.	Winona	Gravity	Bell	L. & N., Sou.	Winona, Ky.
Green Rock Coal Co.	Detroit, Mich.	No. 1	Gr. n Rock	Johnson	B. S. & K. R.	Biceville, Ky.
Gregory Branch Coal Co.	Grays, Ky.	Horse Creek	Horse Creek	Clay	C. & O.	Shurt, Ky.
Harlan-Pearock Coal Co.	Pineville, Ky.		Harlan-Pearock	Harlan	L. & N.	Tansley, Ky.
Hawley Coal Co.	Middlesboro, Ky.	Sand Stone Parting	Hawley	Bell	L. & N., Sou.	Hawley, Ky.
Hazard Blue Grass Coal Corp.	Johnson City, Tenn.	No. 4	No. 1	Perry	L. & N.	Hazard, Ky.
Hazard Blue Grass Coal Corp.	Johnson City, Tenn.	No. 4	No. 2	Perry	L. & N.	Hazard, Ky.
Hensley Coal Co.	Manchester, Ky.	Manchester	Hensley	Clay	C. & M.	Manchester, Ky.
High Split Coal Co.	Williamsburg, Ky.	High Split	High Split	Harlan	L. & N.	S. agrave, Ky.
Hignite Coal Mining Co.	Middlesboro, Ky.	Poplar Lick	Hignite	Bell	L. & N.	Middlesboro, Ky.
Himler Coal Co.	Himler, Ky.	No. 2 Gas	Himler No. 1	Martin	N. & W.	Kermit, W. Va.
Hombre Coal Co.	Hombre, Ky.	No. 4	P. rter	Perry	L. & N.	Coolidge, Ky.
Hombre Coal Co.	Hombre, Ky.	No. 8	Palm r	Perry	L. & N.	Coolidge, Ky.
J Hughes Horse Creek Coal Co.	Barbourville, Ky.	Horse Creek	Hughes	Clay	C. & N.	Shurt, Ky.
Imperial Elkhorn Coal Co.	Detroit, Mich.	No. 4	No. 25	Letcher	L. & N.	S. rgent, Ky.
Imperial Elkhorn Coal Co.	Detroit, Mich.	No. 4	No. 26	Letcher	L. & N.	S. rgent, Ky.
Imperial Elkhorn Coal Co.	Detroit, Mich.	No. 4	No. 27	Letcher	L. & N.	S. rgent, Ky.
Jackson Block Coal Co.	Jackson, Ky.	Breathitt	Jackson Block	Breathitt	L. & N.	Jackson, Ky.
Jenkins Coal & Coke Corp.	Jenkins, Ky.	No. 4	No. 1	Letcher	L. & N.	Jenkins, Ky.
Johns Run Coal Co.	Morehead, Ky.	No. 5	Johns Run No. 1	Carter	E. K.	Willard, Ky.
Kanawha-Elkhorn Cull., Inc.	Lufalo N. Y.	Millard	Sup rior or No. 2	Pike	C. & O. and C. & O.	Elkhorn City, Ky.
Kellhoka Coal Co., The	Cincinnati, O.	Leonard	Kellhoka	Harlan	L. & N.	Kellhoka, Ky.
Kelly & Lunis Coal Co.	Harlan, Ky.	High Split	Kelly & Lunis	Harlan	L. & N.	Calindo, Ky.
Kentucky Block Cannel Coal Co.	Cannel City, Ky.	No. 2	E. Brushy	Morgan	O. & K.	Cannel City, Ky.
Kentucky Elkhorn Coal Corp.	Prairie, Ky.	Elsie	Federal	Pike	C. & O.	Elkhorn, Ky.
Kentucky Fire Brick Co.	Portsmouth, O.	No. 1	No. 1	Rowan	C. & O.	Haldeman, Ky.
Kentucky Fire Brick Co.	Portsmouth, O.	No. 3	No. 3	Rowan	C. & O.	Haldeman, Ky.
Kentucky Fire Brick Co.	Portsmouth, O.	No. 4	No. 4	Rowan	C. & O.	Haldeman, Ky.
Kentucky G. m. Coal Co.	Ashland, Ky.	No. 8	Kentucky G. m.	Carter	C. & O.	North Branch, Ky.
King Blue Gem Coal Co.	Manchester, Ky.	Horse Creek	No. 1	Clay	C. & M.	Shurt, Ky.
Kroese Coal & Mining Co.	Cincinnati, O.	Mason	Callaway	Bell	L. & N.	Masten, Ky.
Layman, Callaway Coal Co.	Pineville, Ky.	Mason	Layman-Callaway	Bell	L. & N.	Correll, Ky.
Ledford Coal Co.	Krypton, Ky.	No. 4	Ledford	Perry	L. & N.	Krypton, Ky.
Lee Coal Co., The	Clearfield, Ky.	No. 2	Lee No. 1	Morgan	M. & N. F.	R. dvine, Ky.
Lee Coal Co., The	Clearfield, Ky.	No. 2	Lee No. 2	Morgan	M. & N. F.	R. dvine, Ky.
Lewis Coal Co.	Pineville, Ky.	Mason	Lewis	Bell	L. & N.	Luce, Ky.
Little Fork Coal Co.	Wyland, Ky.	No. 7	Rams	Carter	E. K. and C. & O.	Willard, Ky.
Log Mountain Coal Co., Inc.	Harrison, Ky.	Mason	Excelsior	Bell	L. & N.	Harrison, Ky.
Log Mountain Coal Co., Inc.	Harrison, Ky.	Poplar Lick	No. 1	Bell	L. & N.	Harrison, Ky.
Long Ridge Coal Co.	Middleboro, Ky.	Mason	Long Ridge	Bell	L. & N.	Kothe, Ky.
Low-Ash Mining Co.	Middleboro, Ky.	Ranner	Riverside	Bell	L. & N.	Excelsior, Ky.
Low-Ash Mining Co.	Middleboro, Ky.	Turner	Fern Lake	Bell	L. & N., Sou.	Middleboro, Ky.
Low-Ash Mining Co.	Middleboro, Ky.	Turner	Hom. Run	Bell	L. & N.	Middleboro, Ky.
McNeill Bros. Coal Co.	Pittsburg, Ky.		Klondike	Laurel	L. & N.	Viva, Ky.
McNeill Bros. Coal Co.	Pittsburg, Ky.		Jewell	Laurel	L. & N.	Viva, Ky.
McStoff Coal Co.	Superior, Ky.	M. Henry	McStoff	Lawrence	C. & O.	Superior, Ky.
Majestic Collieries Co.	Majestic, Ky.	Warfield	Majestic	Pike	N. & W.	Cedar, W. Va.
Maryland Coal Co., The	Columbus, O.	No. 1	No. 6	Perry	L. & N.	Lennut, Ky.
McN Haskins Coal Corp.	Diablock, Ky.		McN Haskins	Perry	L. & N.	Carles, Ky.
Minega-Harlan Coal Co.	Harlan, Ky.	Kellhoka	Minega-Harlan	Harlan	L. & N.	Harlan, Ky.
Montgomery Creek Coal Co.	Montago, Ky.	No. 4	Montgomery	Perry	L. & N.	Vico, Ky.
Morning Glow Coal Co.	Manchester, Ky.	Horse Creek	Morning Glow	Clay	C. & M.	Hima, Ky.
Nelson Coal Co.	Molus, Ky.	Mason	Wilkes	Harlan	L. & N.	Molus, Ky.
North East Coal Co.	Commercial Trust Bldg. Phila. Pa.	No. 1	No. 9	Johnson	C. & O.	Thealka, Ky.

(Continued on Next Page)

MISCELLANEOUS SEAMS—EASTERN KENTUCKY—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	SEAM	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
North East Coal Co.	Commercial Trust Bldg., Phila., Pa.	No. 1	No. 2	Johnson	C & O	Paintsville, Ky.
North East Coal Co.	Commercial Trust Bldg., Phila., Pa.	No. 1	No. 3	Johnson	C & O	Theada, Ky.
North East Coal Co.	Commercial Trust Bldg., Phila., Pa.	No. 1	No. 4	Johnson	C & O	Theada, Ky.
North East Coal Co.	Commercial Trust Bldg., Phila., Pa.	No. 1	No. 7	Floyd	C & O	Auxier, Ky.
North East Coal Co.	Commercial Trust Bldg., Phila., Pa.	No. 1	No. 8	Floyd	C & O	Auxier, Ky.
North East Coal Co.	Philadelph., Pa.	No. 1	No. 9	Floyd	C & O	Auxier, Ky.
North East Coal Co.	Commercial Trust Bldg., Phila., Pa.	No. 1	No. 15	Johnson	C & O	Whitehouse, Ky.
Paint Cliff Mines Co.	Paint Cliff, Ky.	No. 1	Paint Cliff	M. Crary	Southern	Oz, Ky.
Parker Elkhorn Coal Co.	Prestonsburg, Ky.	No. 5	Parkers Elkhorn	Floyd	R & O	Hale, Ky.
Paddy Coal Co.	2328 Michigan Ave., Chicago, Ill.	No. 5	No. 20	Harlan	L & N	Ewart, Ky.
Pinnacle Coal Mining Co.	Knoville, Tenn.	No. 1	Pinnacle	R. H.	L & N	Stony Fork, Ky.
Platts Fork Mining Co.	Ashland, Ky.	No. 1 Kentucky	Platts Fork	Harlan	L & N	Walton Creek, Ky.
Premier Coal Co.	Yamagaw, Ky.	No. 1	Premier	McCrory	K & T	Yamagaw, Ky.
Prestonsburg Coal Co., Inc.	Tazewell, Va.	No. 1	No. 1	Floyd	C & O	Prestonsburg, Ky.
Prestonsburg Coal Co., Inc.	Tazewell, Va.	No. 1	No. 2	Floyd	C & O	Prestonsburg, Ky.
Price Jellies Coal Co.	Middlesboro, Ky.	No. 1	Price Jellies	R. H.	L & N	Four Mile, Ky.
Progressive Coal Co.	Calla, Ky.	No. 1	Progressive	Breathitt	O & K	Vanlewe, Ky.
Purity Canal Coal Co., The	Detroit, Mich.	No. 2	Purity Canal	Floyd	C & O	Prestonsburg, Ky.
Riverside Coal Mining Co.	White Star, Ky.	R. H.	Riverside	Harlan	L & N	Pearson, Ky.
Royal Collieries Co. (The)	Jackson, O.	No. 1	Royal Collieries	Johnson	C & O	Offutt, Ky.
S & S Coal Co.	Middlesboro, Ky.	Turner	S & S	B. H.	L & N	Middleboro, Ky.
St. Michael Coal Co.	Paint Mill, Ky.	No. 2 Stearns	St. Michael	McCrory	Southern	Oz, Ky. & Stearns, Ky.
Saunders Coal Co.	Hazard, Ky.	No. 1	Saunders	R. H.	L & N	Scaddy, Ky.
Smith & Brashers Coal Co.	Middlesboro, Ky.	No. 4	Smith & Brashers	B. H.	L & N	Pittsburg, Ky.
Southern Mining Co.	Williamsburg, Ky.	Creech	Balkan	B. H.	L & N	Balkan, Ky.
Southern Mining Co.	Williamsburg, Ky.	Mason	Amn No. 1	B. H.	L & N	Colmar, Ky.
Spencer Coal Co.	Wilburst, Ky.	No. 1	Spencer No. 1	Breathitt	O & K, L & N	Wilburst, Ky.
Spencer Coal Co.	Wilburst, Ky.	No. 4	Spencer No. 2	Breathitt	O & K, L & N	Wilburst, Ky.
Star Hill Coal Co.	Barboursville, Ky.	No. 1	Star Hill	Knox	C & M	Barboursville, Ky.
Stearns Coal & Lumber Co.	Stearns, Ky.	No. 1	A.	McCrory	K & T	Stearns, Ky.
Stearns Coal & Lumber Co.	Stearns, Ky.	No. 2	No. 1	McCrory	K & T	Stearns, Ky.
Stearns Coal & Lumber Co.	Stearns, Ky.	No. 1	No. 4	McCrory	K & T	Stearns, Ky.
Stearns Coal & Lumber Co.	Stearns, Ky.	No. 1	No. 10	McCrory	K & T	Stearns, Ky.
Stearns Coal & Lumber Co.	Stearns, Ky.	No. 1	No. 11	McCrory	K & T	Stearns, Ky.
Strother, J. P.	Kilgore, Ky.	No. 7	Kilgore	Carver	C & O, A. C. & I.	Kilgore, Ky.
Sun Coal Co., The	614 Starks Bldg., Louisville, Ky.	No. 1	Manchester	Clay	L & N	Crawfish, Ky.
Sun Coal Co., The	614 Starks Bldg., Louisville, Ky.	No. 1	Flat Lick	Knox	L & N	Flat Lick, Ky.
Sunburn Coal Co.	Williamson, W. Va.	No. 1	Peach Orchard	Lawrence	C & O	Peach Orchard, Ky.
Tate & Sonleyette Co.	Indian Head, Ky.	No. 3	T. & S.	McCrory	C. N. O. & T.	Williamson, Ky.
Tazewell Coal Company	Lay, Ky.	No. 5	Tazewell	Knox	Cumberland	Myrick, Ky.
Thomas Coal Co.	Ashland, Ky.	No. 5	Horse Branch	Boyd	C & G	Ashland, Ky.
Torchlight Coal Co.	Superior, Ky.	McHenry	Torchlight	Lawrence	C & O	Superior, Ky.
United Star Coal Corp.	Lazard, Ky.	No. 4	United Star	Perry	L & N	Hazard, Ky.
Upper Elk Coal Co.	Huntington, W. Va.	No. 1	Upper Elk	Pike	Big Sandy Cumberland	Upper Elk, Ky.
Vinson Kolb Coal Co.	Louisville, Ky.	Rin.	Vinson Kolb	B. H.	L & N	Stilson, Ky.
Virginia Mining Co.	Boherta, Tenn.	No. 4	West Jellies	McCrory	So. Ky.	Silversville, Ky.
Walker Branch Fuel Corp.	New York, N. Y.	No. 4	Walker Branch	Lawrence	L & N	Walker, Ky.
Warner Coal Co.	Bondville, Ky.	No. 4	White Ash	Lee	L & N	White Ash, Ky.
Washington Coal Co.	Saldie, Ky.	No. 4	Gardner's	Breathitt	L & N	Whick, Ky.
Wheeler Heaton Coal Co.	Crossmont, Ky.	No. 4	Wheeler Heaton	Lee	K. R. & C. L. & N.	Coryton, Ky.
Wilson B-ger Coal Co. (The)	Grays Knob, Ky.	No. 1	Mill Creek	Harlan	L & N	Harlan, Ky.
Winona Coal & Coke Co.	Middlesboro, Ky.	Winona	Winona	B. H.	L & N, Southern	Winona, Ky.
Wisconsin Coal Corporation	Lexington, Ky.	No. 9	Wisconsin	Knott	L & N	Sassafras, Ky.
Wurtland Coal Co.	Kenova, W. Va.	No. 1	Wurtland	Greene	C & O	Russell, Ky.
Yanney, A. J. Coal Co.	Pikeville, Ky.	No. 1	Yanney	Pike	C & O	Pikeville, Ky.
Yellow Creek Coal Co.	Middlesboro, Ky.	Sterling	Yellow Creek	B. H.	L & N	Middleboro, Ky.
Yellow Hill Coal Co.	Middlesboro, Ky.	Turner	Yellow Hill	B. H.	L & N	Middleboro, Ky.

KENTUCKY—WESTERN

NO. 9 SEAM (Known also as the SPRINGFIELD SEAM)

Mined in Henderson, Hopkins, Daviess, Muhlenberg, McLean, Ohio, Union and Webster counties. Bituminous rank. Suitable for Cement Burning, Bee-hive Coking (when washed), Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Acup Creek Coal Co.	Covington, Ky.	Acup Creek	Perry	L & N	Acup, Ky.
Adva Coal Co.	Louisville, Ky.	Horton	Ohio	L & N	Horton, Ky.
Archbold, John, Coal Co.	Evansville, Ind.	Bluff City	Henderson	Gen. River	Bluff City, Ky.
Beaver Dam Coal Co.	Beaver Dam, Ky.	Taylor	Ohio	Ill. Cent.	Beaver Dam, Ky.
Beaver Dam Coal Co.	Beaver Dam, Ky.	Williams	Ohio	Ill. Cent.	Mellary, Ky.
Beech Creek Coal Co.	Beech Creek, Ky.	No. 1	Muhlenberg	L & N	Beech Creek, Ky.
Beech Creek Coal Co.	Beech Creek, Ky.	No. 2	Muhlenberg	L & N	Beech Creek, Ky.
B. H. Union Coal & Mining Co.	Parkway at 16th St., Philadelphia, Pa.	No. 1	Union	L & N	DeKoven, Ky.
Bevier Coal Co.	Cleaton, Ky.	Bever	Muhlenberg	L & N, O & N	Cleaton, Ky.
Bishop Coal Co.	Centerton, Ky.	Bishop	Ohio	L & N	Bishop, Ky.
Black Diamond Coal & Mng. Co.	Drakesboro, Ky.	Black Diamond No. 1	Muhlenberg	L & N	Drakesboro, Ky.
Black Diamond Coal & Mining Co.	Drakesboro, Ky.	Black Diamond No. 2	Muhlenberg	L & N	Drakesboro, Ky.
Broadway Coal Mining Co.	1214-19 Exchange Bldg., Memphis, Tenn.	Broadway	Ohio	Ill. Cent.	Mellary, Ky.
Caney Creek Coal Co.	Daniel Boone, Ky.	Caney Creek	Hopkins	L	Daniel Boone, Ky.
Caney Creek Coal Co.	Henderson, Ky.	Caney Creek	Henderson	L & N, L. H. & S. L.	Henderson, Ky.
Central Kentucky Block Coal & Mineral Co.	Hawesville, Ky.	Prosperity	West	L. H. & S. L.	Adams, Ky.
Cherty Consolidated Coal Co.	Clay, Ky.	Cherty	Hawesville	L & N	Clay, Ky.
Crescent Coal Co.	Bowen, Ky.	Crescent	Muhlenberg	L & N	Bowen, Ky.
Cummings & Day	Beaumont, Ky.	Beaumont	Ohio	Ill. Cent.	Beaumont, Ky.
Diamond Coal Co.	Provident, Ky.	Diamond No. 1	Webster	L & N	Provident, Ky.
Diamond Coal Co.	Provident, Ky.	Diamond No. 2	Webster	L & N	Provident, Ky.
Diamond Coal Co.	Provident, Ky.	Diamond No. 3	Webster	L & N	Provident, Ky.
Dixie Coal Co.	Box 606, Evansville, Ind.	Flower Hill	Henderson	L. H. & S. L.	Flower Hill, Ky.
Duncan, W. G. Coal Co.	Greenville, Ky.	Graham	Muhlenberg	Ill. Cent.	Greenville, Ky.
Duncan, W. G. Coal Co.	Greenville, Ky.	Luzerne	Muhlenberg	Ill. Cent.	Greenville, Ky.
Dunning-Gordon Mining Co.	Madisonville, Ky.	Pylon No. 1	Hopkins	L	Dunning-Gordon, Ky.
Dunning-Gordon Mining Co.	Madisonville, Ky.	Pylon No. 2	Hopkins	L	Dunning-Gordon, Ky.
E. M. T. Coal Co.	Landon, Ky.	No. 1	McLean	L & N	Land, Ky.
Gibraltar Coal Mining Co.	Memphis, Tenn.	Gibraltar	Muhlenberg	L & N	Memphis, Ky.
Gibraltar Coal Mining Co.	Memphis, Tenn.	Browne	Muhlenberg	L & N	Memphis, Ky.
Gibraltar Coal Mining Co.	Memphis, Tenn.	Holt	Muhlenberg	L & N	Clatsop, Ky.
Gibraltar Coal Mining Co.	Memphis, Tenn.	McLean	Muhlenberg	L & N	Acup, Ky.
Grapvine Coal Co.	Madisonville, Ky.	Madisonville	Hopkins	L & N	Madisonville, Ky.
Greenville Coal Co.	Greenville, Ky.	Martwick	Muhlenberg	Ill. Cent.	Martwick, Ky.
Greenville Coal Co.	Greenville, Ky.	Powderly	Muhlenberg	Ill. Cent.	Powderly, Ky.
Hall Fore Coal Co.	Provident, Ky.	Forestry	Webster	L & N	Provident, Ky.

(Continued on Next Page)

NO. 9 SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Hamilton Mining Co.	Madisonville, Ky.	Hamblett	Hopkins	L. & N.	Mortons Gap, Ky.
Hamilton, Wm.	Crownell, Ky.	Martin	Ohio	Green River	Beaver Dam, Ky.
Hamilton, Wm.	Crownell, Ky.	Pollock	Ohio	Green River	Beaver Dam, Ky.
Hart Coal Corp.	Mortons Gap, Ky.	Browning No. 3	Hopkins	L. & N.	Mortons Gap, Ky.
Hart Coal Corp.	Mortons Gap, Ky.	Moss Hill No. 1	Hopkins	L. & N.	Mortons Gap, Ky.
Hart Coal Corp.	Mortons Gap, Ky.	Moss Hill No. 2	Hopkins	L. & N.	Mortons Gap, Ky.
Hart Coal Corp.	Mortons Gap, Ky.	Victoria No. 9	Hopkins	L. & N.	Madisonville, Ky.
Isley Mining Co.	Nortonville, Ky.	"Crabtree" No. 1	Hopkins	I. C.	Isley, Ky.
Isley Mining Co.	Nortonville, Ky.	"Crabtree" No. 2	Hopkins	I. C.	Isley, Ky.
Isley Mining Co.	Nortonville, Ky.	"Rainbow"	Hopkins	I. C.	Isley, Ky.
Interchange Coal Co.	Providence, Ky.	Interchange	Webster	I. C. L. & N.	Providence, Ky.
Island Coal Co.	Island, Ky.	Island	McLean	L. & N.	Island, Ky.
Jennings Coal Co.	Henderson, Ky.	Jennings	Henderson	L. H. & St. L.	Spottsville, Ky.
Kemmont Coal Co.	Tuloso, O.	The Kemmont	Perry	L. & N.	Hamdin, Ky.
Kentucky Coke Co.	11 W. Chestnut St., Louisville, Ky.	Echols	Ohio	I. C.	Rockport, O.
Kentucky Midland Coal Co.	Central City, Ky.	Midland	Muhlenberg	Ky. Midland	Midland, Ky.
Kington Coal Mining Co.	Morganfield, Ky.	Kington	Union	I. C.	Uniontown, Ky.
Kirk Coal Co.	Beach Creek, Ky.	Kirk	Muhlenberg	L. & N.	Browder, Ky.
Kleiderer, L. P., Coal Co.	626 Fourth St., Louisville, Ky.	Kleiderer	Henderson	I. C.	Henderson, Ky.
Knott Coal Corp.	Sassafras, Ky.	Knott	Knott	L. & N.	Sassafras, Ky.
Laufer, A. C.	Nashville, Tenn.	White	McLean	L. & N. O. & N.	Island, Ky.
Leeper Coal Co.	Providence, Ky.	Leeper	Webster	Ill. Cent.	Providence, Ky.
Liberty Coal Mining Co.	Memphis, Tenn.	Woodson	Muhlenberg	I. C.	Hillside, Ky.
Lugaca Coal Co.	Island, Ky.	No. 1	McLean	L. & N.	Island, Ky.
Luton Coal Mining Co.	Providence, Ky.	Tuloso	Webster	L. & N.	Providence, Ky.
Madison Coal Corp.	910 S. Michigan Ave., Chicago, Ill.	No. 10	Muhlenberg	Ill. Central	Central City, Ky.
Madison Coal Corp.	910 S. Michigan Ave., Chicago, Ill.	No. 11	Union	Ill. Central	DeKoven, Ky.
Maglinger-Westerfield Coal Co.	Owensboro, Ky., R. F. D. No. 4	Maglinger	Daviess	I. C.	Owensboro, Ky.
Mason Mining Co.	Dawson Springs, Ky.	"Carbondale"	Hopkins	I. C.	St. Charles, Ky.
Mercer Coal Co.	Memphis, Tenn.	Mercer	Muhlenberg	I. C.	Mercer, Ky.
Middle West Coal Co.	807 Republic Bldg., Louisville, Ky.	No. 1	Muhlenberg	I. C.	Depoy, Ky.
Middle West Coal Co.	807 Republic Bldg., Louisville, Ky.	No. 2	Muhlenberg	I. C.	Depoy, Ky.
Mid-West Fuel Co.	Henderson, Ky.	Mid-West	Henderson	L. & N.	Henderson, Ky.
Nelson Creek Coal Co.	Nelson, Ky.	Nelson	Muhlenberg	I. C. R. R.	Nelson, Ky.
New Schree Mining Co.	Schree, Ky.	New Schree	Webster	L. & N.	Schree, Ky.
Nicholson Mining & Mfg. Co.	Henderson, Ky.	Hut Stuff	Henderson	L. & N., I. C.	Henderson, Ky.
Norton Coal Mining Co.	Nortonville, Ky.	No. 1	Hopkins	I. C. L. & N.	Nortonville, Ky.
Oakland Coal Co.	Grenville, Ky.	Oakland	Muhlenberg	I. C.	Hillside, Ky.
Pacific Coal Mining Co.	206 Courier Journal Bldg., Louisville, Ky.	Morgan	Muhlenberg	I. C.	Morgan, Ky.
Panama Coal Co.	Robards, Ky.	Panama	Henderson	L. & N.	Robards, Ky.
Perrod Coal Co.	Island, Ky.	Perrod	McLean	L. & N.	Island, Ky.
Perkins-Bowling Coal Corp.	Lexington, Ky.	Perkins-Bowling	Knott	L. & N.	Sassafras, Ky.
Phoenix Coal Co.	Tarma, Ky.	No. 1	Muhlenberg	L. & N.	Nonnel, Ky.
Phoenix Coal Co.	Tarma, Ky.	No. 2	Muhlenberg	L. & N.	Nonnel, Ky.
Pittsburgh Coal Co.	Baskett, Ky.	Blairs	Henderson	L. H. & St. L.	Baskett, Ky.
Providence Coal Mining Co.	Providence, Ky.	No. 2	Webster	L. & N., I. C.	Providence, Ky.
Providence Coal Mining Co.	Providence, Ky.	No. 3	Webster	L. & N., I. C.	Providence, Ky.
Ratican-Jarboe Coal Co.	Owensboro, Ky.	Ratican-Jarboe	Daviess	L. H. & St. L.	Owensboro, Ky.
Render Coal Co.	McHenry, Ky.	R-render	Ohio	I. C. R. R.	McHenry, Ky.
Rockport Coal Co.	Central City, Ky.	Rockport No. 1	Ohio	I. C. R. R.	Rockport, Ky.
Rogers Bros. Coal Co.	Pikeville, Ky.	Bevier	Muhlenberg	L. & N.	Bevier, Ky.
Ruckman Coal Co.	Providence, Ky.	Ruckman	Webster	L. & N., I. C.	Providence, Ky.
Rudy, George H., & Co.	Owensboro, Ky., R. D. No. 4	Rudy	Daviess	L. & N., I. C. & St. L.	Owensboro, Ky.
St. Bernard Mining Co.	Earlington, Ky.	No. 9	Hopkins	L. & N.	Earlington, Ky.
St. Bernard Mining Co.	Earlington, Ky.	Arnold	Hopkins	L. & N.	Earlington, Ky.
St. Bernard Mining Co.	Earlington, Ky.	Diamond	Hopkins	L. & N.	Mortons, Ky.
St. Bernard Mining Co.	Earlington, Ky.	Hecla	Hopkins	L. & N.	Earlington, Ky.
St. Bernard Mining Co.	Earlington, Ky.	Luton	Hopkins	L. & N.	Providence, Ky.
St. Bernard Mining Co.	Earlington, Ky.	St. Charles	Hopkins	Ill. Cent.	St. Charles, Ky.
Southland Coal Co.	Nashville, Tenn.	Henderson No. 1	Henderson	I. C. L. & N.	Henderson, Ky.
Southland Coal Co.	Henderson, Ky.	Henderson No. 3	Henderson	I. C. L. & N.	Henderson, Ky.
Tichenor Coal Co.	McHenry, Ky.	Tichenor	Ohio	M. H. & T.	Bishnor, Ky.
Washington Coal Co.	Providence, Ky.	Washington	Webster	I. C.	Providence, Ky.
West Hartford Coal Co.	Hartford, Ky.	West Hartford	Ohio	M. H. & E.	Hartford, Ky.
West Kentucky Coal Co.	Sturgis, Ky.	No. 1	Union	Ill. Cent.	Sturgis, Ky.
West Kentucky Coal Co.	Sturgis, Ky.	No. 2	Union	Ill. Cent.	Sturgis, Ky.
West Kentucky Coal Co.	Sturgis, Ky.	No. 6	Webster	Ill. Cent.	Wheatcroft, Ky.
West Kentucky Coal Co.	Sturgis, Ky.	No. 8	Union	Ill. Cent.	Sturgis, Ky.
West Kentucky Coal Co.	Sturgis, Ky.	No. 9	Union	Ill. Cent.	Sturgis, Ky.
Wickliff, W. A. Coal Co.	Grenville, Ky.	Browder	Muhlenberg	L. & N.	Browder, Ky.
Young & Morgan	Providence, Ky.	Young & Morgan	Webster	I. C. L. & N.	Providence, Ky.

NO. 11 SEAM (Known also as HERRIN SEAM)

Mined in Hopkins, Ohio, Union and Webster counties. Bituminous rank. Suitable for Cement Burning, Bee-hive Coking (when washed), Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Baxter Mining Co.	Janesville, Wis.	Baxter	Union	I. C.	Uniontown, Ky.
Chickasaw Coal Co.	Madisonville, Ky.	Chickasaw	Hopkins	L. & N.	Madisonville, Ky.
Coil Coal Co.	Madisonville, Ky.	No. 1	Hopkins	L. & N.	Madisonville, Ky.
Grapevine Coal Co.	Madisonville, Ky.	No. 1	Hopkins	L. & N.	Madisonville, Ky.
Hall Force Coal Co.	Devar, Okla.	Hall Force	Webster	L. & N.	Providence, Ky.
Hart Coal Corp.	Mortons Gap, Ky.	Victoria No. 11	Hopkins	L. & N.	Madisonville, Ky.
Hayden-Smith Coal Co.	617 Citizens Bank, Evansville, Ind.	No. 1	Williamsburg	I. C.	Mercer, Ky.
Hercules Coal Co., Inc.	Morganfield, Ky.	Hercules	Union	I. C. L. & N.	Morganfield, Ky.
Highland Mining Co.	Providence, Ky.	Highland	Webster	I. C. L. & N.	Providence, Ky.
Kington Coal Mining Co.	Morganfield, Ky.	Kington	Union	I. C.	Uniontown, Ky.
Morganfield Coal & Coke Co.	Morganfield, Ky.	No. 1	Union	I. C.	Morganfield, Ky.
Norton Coal Mining Co.	Nortonville, Ky.	No. 1	Hopkins	L. & N., I. C.	Nortonville, Ky.
Norton Coal Mining Co.	Nortonville, Ky.	No. 2	Hopkins	L. & N.	Nortonville, Ky.
Producers Coal Co.	302 Andrus Bldg., Minneapolis, Minn.	Midland	Union	I. C.	Waverly, Ky.
R. & A. Coal Co., Inc.	Providence, Ky.	R. & A.	Webster	I. C. L. & N.	Providence, Ky.
Reinecke Coal Mining Co. (The)	Madisonville, Ky.	Eureka	Hopkins	L. & N.	Madisonville, Ky.
Robinson-Aldridge & Co.	Providence, Ky.	Robinson-Aldridge	Webster	I. C. L. & N.	Providence, Ky.
St. Bernard Mining Co.	Earlington, Ky.	No. 11	Webster	L. & N.	Providence, Ky.
St. Bernard Mining Co.	Earlington, Ky.	Shamrock	Webster	L. & N.	Providence, Ky.
Southland Coal Co.	Henderson, Ky.	Uniontown	Union	I. C.	Uniontown, Ky.
Stirling Coal Co., Inc.	Piedmont, W. Va.	Stirling	Hopkins	I. C.	Daniel Boone, Ky.
Sunlight Collieries Co.	Nortonville, Ky.	Sunbeam	Hopkins	L. & N.	Madisonville, Ky.
Sunlight Mining Co.	Madisonville, Ky.	Sunlight	Hopkins	L. & N.	Madisonville, Ky.
West Coal Co.	Madisonville, Ky.	Royal	Hopkins	L. & N.	Madisonville, Ky.
Union County Mining Co.	Louisville, Ky.	Union	Union	I. C.	Uniontown, Ky.
West Kentucky Coal Co.	Sturgis, Ky.	No. 3	Webster	Ill. Cent.	Wheatcroft, Ky.
West Kentucky Coal Co.	Sturgis, Ky.	No. 4	Webster	Ill. Cent.	Wheatcroft, Ky.
Wynn Coal Co.	Providence, Ky.	Wynn	Webster	L. & N.	Providence, Ky.

NO. 12 SEAM

Mined in Hopkins and Webster counties. Bituminous rank. Suitable for Cement Burning, Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Kentucky Diamond Coal Co.	Corydon, Ky.	Corydon	Henderson	I. C.	Corydon, Ky.
Norton Coal Mining Co.	Nortonville, Ky.	No. 2	Hopkins	I. & N.	Nortonville, Ky.
Pennyrile Coal & Mining Co.	Henderson, Ky.	Pennyrile	Henderson	I. C.	Henderson, Ky.
Sunlight Collieries Co.	Nortonville, Ky.	Emblem	Hopkins	I. & N.	Madisonville, Ky.
Sunlight Mining Co.	Madisonville, Ky.	Sunlight	Hopkins	I. & N.	Madisonville, Ky.
West Kentucky Coal Co.	Sturgis, Ky.	No. 5	Webster	I. C.	Whitewater, Ky.
West Kentucky Coal Co.	Sturgis, Ky.	No. 7	Webster	I. & N. Ill. Cent.	Whitewater & Co., Ky.

MANNINGTON SEAM (Known also as the EMPIRE SEAM)

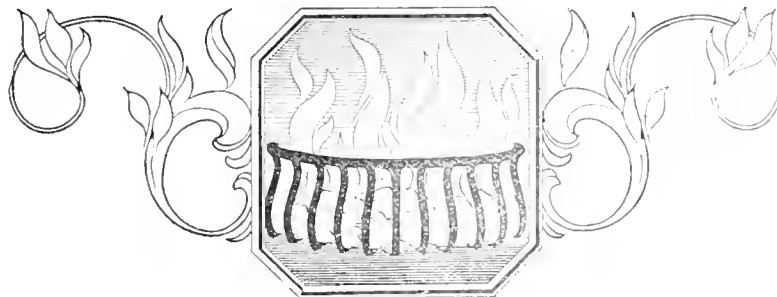
Mined in Christian county. Suitable for Cement Burning, Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Empire Coal Co.	Birmingham, Ala.	Empire	Christian	I. & N.	Empire, Ky.
Williams Coal Co.	Mannington, Ky.	Williams	Christian	I. & N.	Mannington, Ky.

MISCELLANEOUS SEAMS (WESTERN KENTUCKY)

Mined in Muhlenberg, Union and Hopkins counties. Bituminous rank. Suitable for Steam, Railroad, Producer Gas, Cement Burning and Domestic Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	SEAM	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Belton Coal Co.	Yost, Ky.	Mud River	Belton	Muhlenberg	L. & N.	Belton, Ky.
Circle City Coal Co.	Chicago, Ill.	Stray	N. 10	Hopkins	L. & N.	N. 10, Ky.
Economy Mining Co.	Providence, Ky.		Economy	Webster	L. & N.	Providence, Ky.
Green River Collieries Co.	Indianapolis, Ind.	No. 11	Green River No. 1	Muhlenberg	L. & N.	Mogg, Ky.
Holt Bros. Mining Co.	Central City, Ky.	Road	Road	Ohio	I. C.	McHenry, Ky.
Kimbley Coal Co.	Centertown, Ky.	No. 11	Kimbley	Ohio	L. & N.	Klons, Ky.
Kleiderer, L. P. Coal Co.	626 Fourth St., Louisville, Ky.	No. 14	Kleiderer	Henderson	I. C.	Henderson, Ky.
Norton Coal Mining Co.	Nortonville, Ky.	No. 14	No. 3	Hopkins	I. C., L. & N.	Nortonville, Ky.
Victory Coal Co.	Providence, Ky.	No. 2	Victory	Webster	L. & N.	Providence, Ky.
West Jellico Coal Co.	Paducah, Ky.	No. 14	West Jellico	Hopkins	I. C.	St. Charles, Ky.



KENTUCKY

Alphabetical Directory of Coal Mines Giving Complete Detailed Information Covering Each Mine

For List of Abbreviations See Page 13.

ACME BY-PRODUCT COAL CO.

PR—Randolph Harrison, Lynchburg, Va.
VP—S. H. Mow, Bluefield, W. Va.
TR—G. H. Wilkins, Lynchburg, Va.
GM—R. F. Haskins, Dismal, Ky.
GS—T. F. Brooks, Fleming, Ky.
EM—M. A. Emons, Montago, Ky.
SCO—Address the Company. Buyer, H. M. Webb, Fleming, Ky.

Etna Mine; Drift; Elkhorn Seam, 66 inches thick.
PO—Fleming, Ky.; SP—Same; CTY—Letcher; RR—L. & N.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
EMP—4. Daily tonnage 350.
SIZES SHIPT—Run of Mine.

ACUP CREEK COAL CO.

General Office, Lawyer Bldg., Covington, Ky.
PR—Harry P. Jones, Huntington, Ky.
VP—L. F. Brown, Covington, Ky.
TR—M. M. Durrett, Covington, Ky.
GM—A. L. Ware, Hazard, Ky.
GS—J. J. Burpus, Charleston, W. Va.
PA—J. J. Burpus, Charleston, W. Va.
EM—Arthur L. Ware, Jeff, Ky.
SCO—Address the Company. Buyer, S. F. Ware, Jeff, Ky.
SA—Address the Company, Lawyer Bldg., Covington, Ky.

Acup Creek Mine; Drift; Hazard No. 4, 7, 9 Seam, 66 in. thick.
PO—Jeff, Ky.; SP—Acup, Ky.; CTY—Perry; RR—L. & N.
S of H—2 elec. locos. Track gage 44 inches.
S of M—4 shortwall mach.
PP—Power purchased. M. G. sets, 150 K. W. 250 volts D. C.
EMP—100.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

ADAMSON COAL COMPANY

General Office, Jenkins, Ky.
PR—H. L. Burpo, Jenkins, Ky.
VP—J. M. Moore, Jenkins, Ky.
TR—E. L. Walters, Jenkins, Ky.
GM—Don Bowling, Jenkins, Ky.
PA—Don Bowling, Jenkins, Ky.
CTE—B. R. Evans, Jenkins, Ky.
SCO—Address the Company. Buyer, Don Bowling, Jenkins, Ky.
SA—West Virginia Standard Coal Co., Huntington, W. Va.

Adamson Mine; Drift; Lemon Seam, 48 in. thick.
PO—Jenkins, Ky.; SP—Adamson, Ky.; CTY—Letcher; RR—S. V. & E.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
EMP—10. Daily tonnage 40.
SIZES SHIPT—Run of Mine.

AJAX COAL COMPANY.

General Office, Hazard, Ky.
PR—T. C. Berger, Knoxville, Ky.
VP—J. T. Metcalf, Winchester, Ky.
TR—Geo. P. Flitz, Hazard, Ky.
GM—Geo. P. Flitz, Hazard, Ky.
PA—Geo. P. Flitz, Hazard, Ky.
SA—Bewley-Darst Coal Co., Knoxville, Tenn.

"Ajax" Mine; Drift; Hazard No. 4 Seam, 40 in. thick.
PO—Bulan, Ky.; SP—Duane, Ky.; CTY—Perry; RR—L. & N.
MS—W. A. Whitaker, Bulan, Ky.
S of H—Trolley pole type loco. Track gage 42 inches.
S of M—Shortwall mach.
PP—Power purchased, transformer 2300 volts A. C., rotary converter, 250 volts D. C.
EMP—50. Last years tonnage 400.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Loading Booms, Picking Tables.

ALCOMA BLOCK COAL CO.

General Office, Huntington, W. Va.
PR—W. J. Pritchard, Bramwell, W. Va.
VP—J. H. Bowen, Bramwell, W. Va.
TR—B. T. Pritchard, Huntington, W. Va.
GM—R. F. Pritchard, Lethair, Ky.
GS—W. E. Pritchard, Huntington, W. Va.
CE—D. C. Jones, Bramwell, W. Va.
EM—D. K. Peck, Whitesburg, Ky.
SCO—Address the Company. Buyer, W. B. Tabar, Lethair, Ky.
SA—Virginia Fuel Co., Union Central Bldg., Cincinnati, Ohio.

Algoma Mine; Drift; No. 7 Seam; 56 inches thick.
PO—Lethair, Ky.; SP—Same; CTY—Perry; RR—L. & N.
S of H—5 locos. Track gage 42 inches.
S of M—5 shortwall machs.
PP—Power purchased Transformer 2 300-250 volts, A. C. rotary converter, 1 pump.
EMP—125. Last years tonnage 120,000.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

ALLBURN COAL CORPORATION

General Office, McCarr, Ky.
PR—E. M. King, Roanoke, Va.
VP—W. W. Huff, Roanoke, Va.
TR—W. W. Phelps, Roanoke, Va.
GM—F. A. Lindsey, McCarr, Ky.
PA—F. A. Lindsey, McCarr, Ky.
EM—Meiring, Hicks Co., Williamson, W. Va.
EE—Forest Dehart, McCarr, Ky.
SCO—Address the Company. Buyer, Roscoe Chaffin, McCarr, Ky.

Allburn Mine; Drift; Thacker and Alma Seam; 42 inches thick.
PO—McCarr, Ky.; SP—McCarr, W. Va.; CTY—Pike; RR—N. & W.
MS—W. H. Turner, McCarr, Ky.
S of H—Mules, 8 trolley pole type locos. Track gage 44 inches.
S of M—4 shortwall machines.
PP—Power purchased. Transformer 2-200 to 550 volts motor gen. sets and rotary converters 550 volts D. C. 3 pumps.
EMP—100 Output, 450 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.

ALLEGHENY COKE CO.

Now Manufacturers Coke & Coal Co.

ALMA THACKER FUEL CO.

General Office, Columbus, O.
PR—C. Cohenour, Columbus, O.
VP—W. J. Means, Columbus, O.
TR—C. Cohenour, Columbus, O.
GM—C. Cohenour, Columbus, O.
GS—Glen C. Deaton, McCarr, Ky.
PA—C. Cohenour, Columbus, O.
EM—Glen C. Deaton, McCarr, Ky.
EE—J. W. Elliott, McCarr, Ky.
SCO—Address the company. Buyer, E. F. McClure, McCarr, Ky.

Nos. 1, 2, 3, 4 & 5 Mines; Drifts; Thacker and Alma Seams, 48 inches thick.
PO—McCarr, Ky.; SP—Matewan, W. Va.; CTY—Pike; RR—N. & W.
S of H—11 trolley pole type locos. Track gage 48-56 in.
S of M—8 shortwall machs.
PP—Power purchased. Transformer, 2,300 to 220 volts A. C., 2-150 K. W. rotary converters, 1-150 K. W. M. G. Set, 250 volts D. C. 4 pumps.
EMP—250. Last fiscal year output, 180,000 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Screens.

ALPINE COLLIERIES CO.

General Office, Harriman, Tenn.
PR—H. E. Bullock, 1801 Diversey Parkway, Chicago, Ill.
TR—W. J. Aklo, 1801 Diversey Parkway, Chicago, Ill.
GM—H. S. Aklo, Harriman, Tenn.
GS—E. Dykes, Alpine, Ky.
SCO—Address the Company; Buyer, E. Dykes, Alpine, Ky.

Alpine Collieries Mine; Drift; No. 1 Seam, 40 in. thick.
PO—Alpine, Ky. SP—Same. CTY—Pulaski. RR—Sou., C. N. O. & T. P.
S of H—1 steam loco. Track gage 36 inches.
S of M—Hand.
PP—1 50 H. P. fire tube boiler, 2 pumps.
EMP—50. Last fiscal year output, 20,000 tons.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Revolving and Shaker Screens, Picking Tables, Loading Booms, Washeries.

ALVA KOAL COMPANY

General Office, Louisville, Ky.
PR—L. Frankel, Louisville, Ky.
PA—L. Frankel, Louisville, Ky.

GM—Raymond Rhodes, Island, Ky.
GS—Samuel Howard, " "
CE—W. L. Gordon, Jr., Louisville, Ky.
Horton Mine; Slope and Drift; 108 to 120 in. thick.
PO—Horton, Ky.; SP—Same; CTY—Ohio; RR—L. & N.
S of H—Mules.
SIZES SHIPT—Run of Mine.

Rames Mine; Slope and Drift; 108 to 120 in. thick.
PO—Island, Ky.; SP—Same; CTY—MeLean; RR—L. & N.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine.
Old information.

AMBURGY COAL CO.

General Office, Starks Bldg., Louisville, Ky.
PR—K. U. McGuire, Louisville, Ky.
VP—Karl Jungbluth, Jr., Louisville, Ky.
TR—E. T. Quinby, Louisville, Ky.
GM—J. T. Morgan, Danna, Ky.
PA—J. T. Morgan, Danna, Ky.
CE—Ivor Livingston, Paint Cliff, Ky.
SA—Harlan Coal Co., Louisville, Ky.

Amburgy Mine; Drift; Hazard No. 4 Seam; 47 in. thick.
PO—Danna, Ky.; SP—Same; CTY—Letcher; RR—L. & N.
S of H—Mules. Track gage, 42 in.
S of M—Elec. mach.
PP—Generates power, 250 volts D. C.
EMP—50. Last years tonnage 40,000.
SIZES SHIPT—Run of Mine, Block.
PREP. EQUIPT—Bar Screens.

AMERICAN FUEL COMPANY

General Office, Montgomery, Ala.
PR—C. B. Teasley, Montgomery, Ala.
GM—A. B. Ray, Pineville, Ky.
GS—J. D. Roper, Warrior, Ala.
PA—A. B. Ray, Pineville, Ky.
EM—H. W. McFarland, Pineville, Ky.

Wallsend Mine; Drift; Straight Creek Seam, 32 in. thick.
PO—Pineville, Ky.; SP—Same; CTY—Rel; RR—L. & N.
S of H—Mules and steam hoist. Track gage 36 in.
S of M—Hand and 1 longwall mach.
PP—2 boilers, 40 H. P., 1 pump.
EMP—100. Daily tonnage 200.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.
NOTE—Formerly operated by the Arcadia Coal Co.

ANCHOR COAL COMPANY

PR—J. C. Hopkins, Prestonsburg, Ky.
GM—J. C. Hopkins, Prestonsburg, Ky.
TR—W. H. Layne, Prestonsburg, Ky.
PA—W. H. Layne, Prestonsburg, Ky.
GS—W. H. Layne, Prestonsburg, Ky.

Anchor Mine; Drift; 36 in. thick.
PO—Prestonsburg, Ky.; SP—Same; CTY—Floyd; RR—C. & O.
Daily output, 150 tons.
SIZES SHIPT—Run of Mine.
Old information.

ARCADIA COAL COMPANY

Now being operated by the American Fuel Company.

ARCHBOLD, JOHN, COAL CO.

General Office, Evansville, Indiana.
1 Mine in Kentucky and 1 in Indiana.
PR—John Archbold, Evansville, Ind.
TR—V. D. Herrenbruck, " "
GM—John Archbold, " "
GS—Edmond Archbold, Evansville, Ind.
PA—John Archbold, " "
SA—John Archbold, Evansville, Ind.

Bluff City Mine; Shaft; No. 9 Seam, 50 to 53 in. thick.
PO—Bluff City, Ky.; CTY—Henderson; RR—Green River.
MS—Dan Barrett, Bluff City, Ky.
S of H—Mules. Track gage 36 in.
S of M—Pick.
PP—2 fire tube boilers, 4 pumps.
EMP—30. Daily tonnage 150.
SIZES SHIPT—Run of Mine.

ASHER COAL MINING CO

OWNER—T. J. Asher, Pineville, Ky.
No report.

ASHLAND COAL & FIRE CLAY CO.

PR—Chas. Smith, Ashland, Ky.
TR—E. W. Farnin, Ashland, Ky.
PA—E. W. Farnin, " "
GM—S. Smith, " "
GS—Chas. Smith, " "
SCO—Address the Company; Buyer, E. W. Farnin, Ashland, Ky.
SA—Middle West Coal Co., Cincinnati, Ohio.

Ashland Mine; Drift; No. 6 Seam, 36 in. thick.
PO—Ashland, Ky.; CTY—Boyd; RR—C. & O.
S of H—Mules.
S of M—Hand.
Old information.

ASHLAND IRON & MINING CO.

General Office, Ashland, Ky.
PR—W. B. Seaton, Ashland, Ky.
VP—S. C. Peebles, Ashland, Ky.
TR—F. B. Moore, " "
GM—S. C. Peebles, " "
PA—G. C. McClure, Ashland, Ky.
CE—A. T. R. Somerville, Ashland, Ky.
EE—W. Dudley, Ashland, Ky.
SCO—Address the company, Store Dept. Mgr. of Stores, E. C. Jones, Ashland, Ky.

Rush No. 12, Winslow No. 8 and Coalton No. 7 Mines; Drifts; No. 7 and 8 Seams, 45 in. thick.
PO—Rush, Ky.; SP—Same; CTY—Boyd; RR—A. C. & I.
MS—Sam Seaton, Rush, Ky.
SM—C. A. Smith, " "
S of H—Mules and comp. air loco. Track gage 36 in.
S of M—Hand.
PP—2 fire tube boilers, 300 H. P., 2 pumps.
EMP—75. Last years tonnage 80,000.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Bar Screens.

ASHLESS COAL CORPORATION

General Office, Lethair, Ky.
PR—L. N. Buford, Washington, D. C.
VP—Alvah Stone, Roanoke, Va.
TR—Hugh Buford, Sassafras, Ky.
GM—Hugh Buford, Sassafras, Ky.
GS—D. T. Mitchell, Lethair, Ky.
PA—Hugh Buford, Sassafras, Ky.
EM—D. T. Mitchell, Lethair, Ky.

Ashless No. 1 Mine; Drift; Hazard No. 4 Seam; 48 in. thick.
PO—Lethair, Ky.; SP—Same; CTY—Perry; RR—L. & N., L. & E. Br.
S of H—Trolley pole and storage battery locos. Track gage, 48 in.
S of M—7 shortwall machs.
PP—Purchase power, transformer, 33,000 to 440 volts, M. G. sets, 250 volts D. C.
EMP—115. Last years tonnage 111,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Loading Boom, Picking Tables.

Ashless No. 2 Mine; Drift; Hazard No. 4 Seam, 48 in. thick.
PO—Lethair, Ky.; SP—Same; CTY—Perry; RR—L. & N.
S of H—Mules. Track gage, 42 in.
S of M—Hand.
EMP—25. Last years tonnage 35,000.
SIZES SHIPT—Run of Mine.

ATLAS COAL MINING COMPANY.

General Office, Knoxville, Tenn.
PR—L. C. Gunter, Knoxville, Tenn.
TR—S. W. Jayne, " "
GM—J. L. Saunders, Logmont, Ky.
GS—J. L. Saunders, " "
PA—J. L. Saunders, " "
EM—J. C. Richardson, Middleshoro, " "
Sales Agent, S. W. Jayne, Bank & Trust Bldg., Knoxville, Tenn.

Atlas Mine; Drift; Lower Higoite Seam, 42 to 48 in. thick.
PO—Ralston, Ky.; SP—Capito, Ky.; CTY—Bell; RR—L. & N., C. V. Div.
MS—J. F. Davis, Ralston, Ky.
SM—E. V. Callum, Jr., Ralston, " "
S of H—Mules, gravity and 2 storage battery loco. Track gage 44 in.
S of M—7 comp. air machs., 2 elec. machs.
PP—2 return tubular boilers, total 200 H. P., 2 air compressors and 2 pumps.
EMP—80. Last fiscal year output, 41,500 tons.
PREP. EQUIPT—Shaker Screens.
Old information.

AYERS & LANG

General Office, Detroit, Mich.
 PR—Harry S. Ayers, Detroit, Mich.
 VP—Walter E. Lang, Detroit, Mich.
 GM—Walter E. Lang, Detroit, Mich.
 GS—C. C. Ward, Williamsport, Ky.
 PA—C. C. Ward, Williamsport, Ky.
 CE—Marquus H. Ayers, Detroit, Mich.
 SCO—Address the Company, Buyer, C. C. Ward, Williamsport, Ky.

Chat-ta-Rol Mine; Drift; Canal No. 4 Seam; 42-48 inches thick.
 PO—Williamsport, Ky.; SP—Olatu, Ky.; CTY—Johnson; RR—C. & O.
 SM—N. Meade, Williamsport, Ky.
 S of H—Mules and 2 steam locos. Track gage 42 inches.
 S of M—Hand.
 EMP—50.
 SIZES SHIPT—Run of Mine, Block.

BAILEY COAL COMPANY.

General Office, Blanche, Ky.
 PR—C. R. Bailey, Blanche, Ky.
 VP—J. W. Rollins, Blanche, Ky.
 TR—Mr. Alice Bailey, Blanche, Ky.
 GM—C. R. Bailey, Blanche, Ky.
 GS—C. R. Bailey, Blanche, Ky.
 PA—C. R. Bailey, Blanche, Ky.
 CE—Johnson & Johnson, Pineville, Ky.
 SCO—Address the Company, Buyer, C. R. Bailey, Blanche, Ky.
 SA—C. R. Bailey, Blanche, Ky.

Bailey Mine; Drift; St. Creek Seam, 44 in. thick.
 PO—Blanche, Ky.; SP—Pineville, Ky.; CTY—Bell; RR—L. & N.
 S of H—Mules. Track gage 36 in.
 S of M—Hand.
 EMP—16. Daily tonnage 100.
 SIZES SHIPT—Run of Mine.

BAILEY FERGUSON COAL CO., Inc.

General Office, Prestonsburg, Ky.
 PR—H. G. Bailey, Los Angeles, Calif.
 VP—S. C. Ferguson, Prestonsburg, Ky.
 TR—S. C. Ferguson, Prestonsburg, Ky.
 GM—S. C. Ferguson, Prestonsburg, Ky.
 GS—S. C. Ferguson, Prestonsburg, Ky.
 PA—S. C. Ferguson, Prestonsburg, Ky.
 EM—Townsend Combs, Langley, Ky.

No. 1 Mine; Drift; Elkhorn 1 Seam, 73 in. thick.
 PO—Alphoretta, Ky.; SP—Dinwood, Ky.; CTY—Floyd; RR—Beaver Valley (C. & O.)
 S of H—Mules and elec. locos. Track gage 42 in.
 S of M—Shortwall machs.
 PP—Generate power, 250 volts D. C., fire tube boiler.
 SIZES SHIPT—Run of Mine, Slack, Nut, Block.
 PREP. EQUIPT—Shaker Screen.

BAILEY FUEL COMPANY

General Office, Charleston, W. Va.
 PR—John L. Dickinson, Charleston, W. Va.
 TR—C. C. Dickinson, Charleston, W. Va.
 GM—T. H. Huddy, Williamson, W. Va.
 GS—W. J. Murphy, Toler, Ky.
 EM—D. M. Good, Williamson, W. Va.
 SCO—Address the Company, Buyer, L. A. Fekner, Toler, Ky.
 SA—Dickinson Fuel Co., Charleston, W. Va.

Bailey Mine; Drift; Pond Creek Seam, 42 in. thick.
 PO—Toler, Ky.; SP—Same; CTY—Pike, RR—N. W.
 S of H—2 elec. and storage battery locos.
 S of M—5 shortwall machs.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 NOTE—Successors to Bailey Coal Co.

BAILEY, R. G., COAL COMPANY.

General Office, Williamson, W. Va.
 PR—R. G. Bailey, Box 639, Williamson, W. Va.
 GM—R. G. Bailey, Box 639, Williamson, W. Va.
 EM—Mingo P. Keadle, Williamson, W. Va.
 S O—Address the Company, Buyer, W. J. Bailey, Williamson, W. Va.
 SA—Tug Valley Fuel Co., Williamson, W. Va.

Bailey Mine; Drift; Pond Creek Seam, 42 in. thick.
 PO—Williamson, W. Va.; SP—Same; CTY—Pike; RR—N. & W.
 S of H—Storage battery locos. Track gage 44 in.
 S of M—2 shortwall machs.
 PP—1-250 K. W. generator sets, 1 pump.
 EMP—32. Last years tonnage 41,000.
 SIZES SHIPT—Run of Mine.

BAILEY'S CREEK COAL COMPANY

Now Superior Harlan Coal Company.

BAKER COAL CO., THE

General Office, Hazard, Ky.
 PR—B. W. Baker, Hazard, Ky.
 VP—F. H. Baker, Hazard, Ky.
 TR—C. L. Fuson, Hazard, Ky.
 GM—B. W. Baker, Hazard, Ky.
 GS—Arthur Gay, Viper, Ky.
 PA—Chas. Fuson, Viper, Ky.

CE—D. L. Pritchard, Hazard, Ky.
 SCO—Address the Company, Buyer, Chas. Fuson, Viper, Ky.
 SA—C. B. Rose & Co., Hazard, Ky.
 Baker Mine; Drift; No. 4 Seam, 38 in. thick.
 PO—Viper, Ky.; SP—Same and Dakota, Ky.; CTY—Perry; RR—L. & N.
 S of H—Elec. loco. Track gage 42 in.
 S of M—Shortwall mach.
 PP—1-150 K. W. gen. unit, 250 volts D. C.
 EMP—50. Daily tonnage 250.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity and Bar Screens.

BANNER FORK COAL CORP.

General Office, Kentonia, Ky.
 PR—Edsel B. Ford, Detroit, Mich.
 VP—W. F. Harwood, Lynchburg, Va.
 TR—B. J. Crake, Detroit, Mich.
 GM—A. Lunsford, Kentonia, Ky.
 PA—A. Lunsford, Kentonia, Ky.
 CE—Wm. S. Thomas, Kentonia, Ky.
 EE—H. A. Coe, Kentonia, Ky.
 Auditor—John C. McNeill, Kentonia, Ky.

Banner Fork No. 1 Mine; Drift; Wallins Seam; 72-84 inches thick.
 PO—Kentonia, Ky.; SP—Wallins, Ky.; CTY—Harlan; RR—L. & N., K. & V. Branch.
 MS—L. C. Skreen, Kentonia, Ky.
 SM—A. Vass, Kentonia, Ky.
 S of H—Mules and 2 trolley pole type locos. Track gage 42 inches.
 S of M—6 shortwall machs.
 PP—Power purchased. Transformer 2,200-250 volts A. C.
 EMP—150. Last fiscal year output, 135,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Pea, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Loading Rooms.

Banner Fork No. 2 Mine; Drift; Wallins Seam; 72-84 inches thick.
 PO—Kentonia, Ky.; SP—Wallins, Ky.; CTY—Harlan; RR—L. & N. K. & V. Branch.
 MS—Paris Mullins, Kentonia, Ky.
 SM—S. W. Turner, Kentonia, Ky.
 S of H—Mules and 2 trolley pole locos. Track gage, 42 in.
 S of M—2 shortwall machs.
 PP—Power purchased, transformer 2,200-250 volts A. C.
 EMP—150. Daily output, 800 tons.
 SIZES SHIPT—Run of Mine, Slack, Pea, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Loading Booms.

BANNER-POND CREEK COAL COMPANY

General Office, McDowell, W. Va.
 PR—H. W. Rawson, McDowell, W. Va.
 VP—J. A. Brown, McDowell, W. Va.
 TR—J. A. Brown, McDowell, W. Va.
 GM—H. W. Rawson, McDowell, W. Va.
 GS—D. J. Russmiller, Orinoco, Ky.
 PA—J. J. Russmiller, Orinoco, Ky.
 EM—H. W. Rawson, McDowell, W. Va.
 SA—Flat Top Fuel Co., Bluefield, W. Va.
 Banner-Pond Creek Mine; Drift; Freeborn or Pond Creek Seam; 52 inches thick.
 PO—Orinoco, Ky.; SP—Belfry, Ky.; CTY—Pike; RR—N. & W.
 S of H—Mules. Track gage 48 inches.
 S of M—Hand.
 EMP—14. Last years tonnage 15,000.
 SIZES SHIPT—Run of Mine.

BARKING COAL CO.

General Office, Kimball, W. Va.
 PR—R. L. Stafford, Kimball, W. Va.
 GM—W. H. Draper, Whitesburg, Ky.
 EM—G. H. Zimmerman, Whitesburg, Ky.
 SA—Richman Coal Co., Cincinnati, O.
 Barking Mine; Drift; Ambury-Low Seam; 52 inches thick.
 PO—Dalma, Ky.; SP—Barking, Ky.; CTY—Letcher; RR—L. & N.
 MS—W. H. Draper, Whitesburg, Ky.
 S of H—Mules. Track gage 42 inches.
 PP—1 pump.
 EMP—16. Daily tonnage 130.
 SIZES SHIPT—Run of Mine.
 Old information.

BARWICK COAL CO.

General Office, Barwick, Ky.
 PR—Lee Congleton, Barwick, Ky.
 VP—J. W. Congleton, Barwick, Ky.
 TR—J. R. Harper, Barwick, Ky.
 GM—Lee Congleton, Barwick, Ky.
 GS—Lee Congleton, Barwick, Ky.
 PA—Lee Congleton, Barwick, Ky.
 SCO—Address the Company, Buyer, Lee Congleton, Barwick, Ky.

Barwick Mine; Drift; No. 4 Seam, 36 inches thick.
 PO—Barwick, Ky.; SP—Same; CTY—Breathitt; RR—L. & N.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 EMP—25. Last years tonnage 800.
 SIZES SHIPT—Run of Mine, Lump, Block.
 PREP. EQUIPT—Gravity Screens.

BAXTER MINING COMPANY

General Office, Janesville, Wis.
 PR—H. L. Blackburn, Janesville, Wis.
 TR—Russell C. Parker, Janesville, Wis.
 GM—J. H. McManaman, Morganfield, Ky.
 Baxter Mine; Shaft; Seam 54 inches thick.
 PO—Morganfield, Ky.; SP—Pulwintown, Ky.; CTY—Union; RR—L. C.
 MS—J. H. McManaman, Morganfield, Ky.
 S of H—Mules.
 S of M—Hand.
 PP—Power purchased.
 Last fiscal year output, 13,532 tons.
 SIZES SHIPT—Run of Mine.
 Old information.

BEAR CREEK COAL COMPANY

General Office, Simpson, Ky.
 PR—J. W. Baker, Simpson, Ky.
 VP—T. G. Baker, Simpson, Ky.
 TR—L. B. Dickerson, Simpson, Ky.
 GM—J. W. Baker, Simpson, Ky.
 GS—J. W. Baker, Simpson, Ky.
 EM—Jno. B. Conley, Simpson, Ky.

Bear Creek Mine; Slope; No. 4 Seam, 36 inches thick.
 PO—Simpson, Ky.; SP—Wilbur, Ky.; CTY—Breathitt; RR—O. & K.
 MS—Royd Engle, Simpson, Ky.
 S of H—Mules.
 S of M—Hand.
 EMP—25. Daily tonnage 75.
 SIZES SHIPT—Run of Mine.

BEATTYVILLE COMPANY, THE

General Office, Beattyville, Ky.
 PR—Patrick Calhoun, Sr., Beattyville, Ky.
 VP—Patrick Calhoun, Jr., Beattyville, Ky.
 TR—Geo. W. Anderson, Jr., Beattyville, Ky.
 GM—Geo. W. Anderson, Jr., Beattyville, Ky.
 GS—Geo. W. Anderson, Jr., Beattyville, Ky.
 PA—Geo. W. Anderson, Jr., Beattyville, Ky.
 EM—A. P. Hodges, Beattyville, Ky.
 SCO—Riverside Co. Store, Buyer, W. C. Moore, Beattyville, Ky.
 SA—Frankfort Elevator Coal Co., Frankfort, Ky.
 Beattyville Mine; Drift; Beattyville Seam, 40 inches thick.
 PO—Beattyville, Ky.; SP—Same; CTY—Lee.
 MS—J. W. Ivester, Beattyville, Ky.
 S of H—Mules. Track gage 42 inches.
 S of M—Hand.
 EMP—75. Last years tonnage 35,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.
 Old information.

BEATTYVILLE FUEL COMPANY.

General Office, Beattyville, Ky.
 PR—Samuel Hurst, Beattyville, Ky.
 VP—J. E. Jones, Beattyville, Ky.
 TR—J. E. Jones, Beattyville, Ky.
 GM—J. E. Jones, Beattyville, Ky.
 GS—J. E. Jones, Beattyville, Ky.
 CE—A. P. Hodges, Beattyville, Ky.
 EM—A. P. Hodges, Beattyville, Ky.
 SCO—Address the Company.
 Buyer, J. E. Jones, Beattyville, Ky.
 SA—H. A. Paynter Coal Co., Winchester, Ky.

Beattyville Mine; Drift; Beattyville No. 1 Seam, 30-42 inches thick.
 PO—Beattyville, Ky.; SP—Same; CTY—Lee; RR—L. & N.
 MS—H. C. Childers, Beattyville, Ky.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 PP—1 pump.
 SIZES SHIPT—Run of Mine, Lump, Block.
 PREP. EQUIPT—Screen.
 Old information.

BEAVER CREEK COAL CO.

General Office, Johnson City, Tenn.
 PR—S. R. Jennings, Johnson City, Tenn.
 VP—F. A. Garth, Johnson City, Tenn.
 TR—F. Zulantz, Johnson City, Tenn.
 GM—F. A. Garth, Johnson City, Tenn.
 GS—C. K. Holt, Garth, Ky.
 PA—F. Zulantz, Johnson City, Tenn.
 EM—Erwin Mullins, Garth, Ky.
 EE—C. K. Holt, Garth, Ky.
 SCO—Address the Company, Buyer, J. H. Greener, Garth, Ky.
 SA—Bellanca Coal & Coke Co., Cincinnati, Ohio.

Beaver Creek Mine; Drift; No. 2 Elkhorn Seam, 40 inches thick.
 PO—Alphoretta, Ky.; SP—Dinwood, Ky.; CTY—Floyd; RR—B. & O.
 S of H—4 Trolley pole type locos. Track gage 42 in.
 S of M—3 shortwall machs.
 PP—2-150 H. P. fire tube boilers, 1-250 K. W. gen. unit, 250 volts D. C., 3 pumps.
 EMP—70. Last years tonnage 30,000.
 SIZES SHIPT—Run of Mine, Lump.
 PREP. EQUIPT—Shaker Screens.

BEAVER DAM COAL CO

General Office, Beaver Dam, Ky.
 PR—W. S. Spalding, Louisville, Ky.
 VP—F. M. Sackett, Louisville, Ky.
 TR—C. D. Major, " "
 GM—A. P. Barnard, McHenry, Ky.
 GS—R. Baker, Beaver Dam, Ky.
 PA—C. C. Watts, " "
 CE—R. H. Shelby, Central City, Ky.
 SCO—Address the Company, Buyer, R. C. Hacker, Beaver Dam, Ky.
 Sales Mgr., B. F. Reed, Louisville, Ky.

Taylor Mine; Slope; No. 9 Seam; 54 inches thick.
 PO—Beaver Dam, Ky.; SP—Same; CTY—Ohio RR—Illinois Central.
 MS—T. J. Barrass, Beaver Dam, Ky.
 S of H—Mules and 5 trolley pole type locos. Track gage 39 in.
 S of M—3 comp. air machs.
 PP—3 water tube boilers, total 750 H. P., 2 Gen. units, 1-100 K. W. and 1-175 K. W., 1-200 K. W. and 3-150 K. W. rotary converters, 250 volts D. C., 3 air comp., 11 pumps.
 EMP—229. Last fiscal year output, 161,913 tons.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

Williams Mine; Shaft; No. 9 Seam; 48 to 54 in. thick.
 PO—McHenry, Ky.; SP—Same; CTY—Ohio; RR—Ill. Central.
 SM—R. C. Hacker, McHenry, Ky.
 S of H—Mules and 5 trolley pole type locos. Track gage 39 in.
 S of M—8 shortwall machs.
 PP—3 water tube boilers, total 900 H. P., 1-750 K. W., 1-200 K. W., 1-100 K. W. Turbines, 250 volts D. C., 6 pumps.
 EMP—211. Last fiscal year output, 122,037 tons.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens.

BEAVER ELKHORN COAL CO.

General Office, Ashland, Ky.
 PR—Jno. E. Buckingham, Paducah, Ky.
 VP—Gen. P. Archer, Prestonsburg, Ky.
 TR—E. M. Clay, Bevinsville, Ky.
 GM—C. W. Moorman, Ashland, Ky.
 GS—J. A. Perry, Bevinsville, Ky.
 PA—C. W. Moorman, Ashland, Ky.
 EM—E. A. Smith, Estill, Ky.
 SCO—Address the Company, Buyer, J. A. Perry, Bevinsville, Ky.
 Beaver Elkhorn Mine; Drift; Elkhorn Seam, 46 in. thick.
 PO—Bevinsville, Ky.; SP—Buckingham, Ky.; CTY—Floyd; RR—B. & O.
 S of H—Mules. Track gage, 42 in.
 S of M—Hand.
 EMP—30. Last years tonnage 7,397.
 SIZES SHIPT—Run of Mine.

BEECH CREEK COAL CO.

PR—S. T. Kirkpatrick, Ripley, Tenn.
 VP—L. Z. Kirkpatrick, Beech Creek, Ky.
 TR—A. D. Kirkpatrick, Beech Creek, Ky.
 GM—A. D. Kirkpatrick, " "
 GS—W. H. Chumley, Beech Creek, Ky.
 PA—A. D. Kirkpatrick, " "
 EE—W. H. Hines, " "
 SCO—Beech Creek Coal Co. Buyer, S. M. Arnold, Beech Creek, Ky.
 For Additional Information See Page 476.

Beech Creek Nos. 1 and 2, Shaft and Drift, No. 9 Seam, 5 1/2 to 6 1/2 ft. thick.
 PO—Beech Creek, Ky.; SP—Same. CTY—Muhlenberg; RR—L. & N., O. & N. Div.
 S of H—Mules, rope and 2 elec. locos. Track gage 36 inches.
 S of M—9 elec. machines.
 VP—W. E. Cabell, Middleboro, Ky.
 PP—6 return tubular boilers, total 750 H. P., 3 gen. units, 250 volts D. C., 1 pump.
 EMP—150. Last fiscal year output 200,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens.

No. 3 Mine; Drift.
 PO—Drakesboro, Ky.; SP—Monday, Ky.
 MS—H. H. Pogue, Drakesboro, Ky.
 S of H—Elec. locos.
 S of M—Elec. machs.
 PP—1-200 H. P. tube boiler, electric power being installed.

BELL BLOCK COAL CO.

General Office, Middleboro, Ky.
 PR—C. S. M., North, Va.
 VP—R. W. Dyer, Charleston, W. Va.
 TR—O. S. M., Middleboro, Ky.
 GM—O. S. M., Middleboro, Ky.
 PA—O. S. M., Middleboro, Ky.
 B. Block Mine; Drift; Seam, 32 to 42 in. thick.
 PO—Pineville, Ky.; SP—Same; CTY—Bell; RR—L. & N.
 S of H—Mules. Track gage, 30 to 32 in.
 S of M—Hand.
 Daily output, 50 tons.
 SIZES SHIPT—Run of Mine.
 Old information.

BELLS TRACE COAL COMPANY

Bells Trace, Ky.
No report.

BELL UNION COAL & MINING CO.

General Office, Parkway at 16th St., Philadelphia, Pa.
PR—John J. Coyle, Philadelphia, Pa.
VP—Charles M. Town, Philadelphia, Pa.
TR—Charles M. Town, Philadelphia, Pa.
GM—Charles M. Town, Philadelphia, Pa.
GS—Joseph W. Andrew, Curlew, Ky.
PA—Charles M. Town, Philadelphia, Pa.
SC—Norman R. Orcutt, Morganfield, Ky.
SCO—Address the Company, Buyer, Randolph F. Kuser, Curlew, Ky.

Bell Union Mine; Slope; No. 9 Seam, 60 inches thick.
PO—Curlew, Ky.; SP—De Koven, Ky.; CTY—Union; RR—Ill. Cent.
S of H—Mules. Track gage 36 in.
S of M—5 shortwall machs.
PP—2 fire tube boilers, total 300 H. P., 1—150 K. W. gen. unit, 250 volts D. C., 5 pumps.
EMP—180. Last years tonnage 150,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens.

Town Mine; Slope; No. 6 Seam, 47 inches thick.
PO—Curlew, Ky.; SP—De Koven, Ky.; CTY—Union; RR—Ill. Cent.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—2 fire tube boilers, 200 H. P., 4 pumps.
EMP—50. Last years tonnage 40,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
NOTE—Town Mine formerly operated by the Town Coal Company.

BELLMAN COAL CO.

General Office, Middlesboro, Ky.
PR—J. L. Manning, Middlesboro, Ky.
TR—F. E. Hess, Middlesboro, Ky.
GM—P. T. Colgan, Middlesboro, Ky.
GS—H. J. Fallon, Bosworth, Ky.
PA—Robt. Lyons, Middlesboro, Ky.
EM—J. C. Richardson, Middlesboro, Ky.
SCO—Winona Coal & Coke Co.; Buyer, R. Lyon, Gravity, Ky.
SA—Manning Coal Exchange, Middlesboro, Ky.

Bellman Mine; Drift; Winona Seam, 48 inches thick.
PO—Bosworth, Ky.; SP—Winona, Ky.; CTY—Bell; RR—L. & N. and Sou.
S of H—Mules and 1 storage battery loco. Track gage, 36 in.
S of M—1 shortwall mach.
PP—Power purchased. Transformer 2300-230 volts A. C., rotary converters, 250 volts D. C., 3 pumps.
EMP—50. Daily tonnage 300.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Washeries.

BELTON COAL COMPANY.

PR—B. P. Browning, Lewisburg, Ky.
TR—H. C. Thompson, Yost, Ky.
PA—H. C. Thompson, " "
GM—O. C. Evans, " "
CS—O. C. Evans, " "
EE—L. Quinn, " "
SCO—Belton Merc. Co. Buyer, P. A. Forsythe, Yost, Ky.

Belton Mine; Shaft; Mud River Seam; 48 in. thick.
PO—Yost, Ky.; SP—Belton, Ky.; CTY—Muhlenberg; RR—L. & N., O. & N. Div.
S of H—1 elec., 1 gasoline, 1 steam and 1 comp. air loco.
S of M—1 comp. air and 1 chain breast mach.
PP—2 water tube boilers.
SIZES SHIPT—Run of Mine.
Old information.

BENITO COAL COMPANY

General Office, Lejunior, Ky.
PR—Samuel Bennett, Lejunior, Ky.
VP—S. E. Bennett, Lejunior, Ky.
TR—S. E. Bennett, Lejunior, Ky.
GM—P. E. Bennett, Lejunior, Ky.
PA—Samuel Bennett, Lejunior, Ky.
EM—O. E. Fox, Harlan, Ky.

Benito Mine; Drifts; Harlan Seam, 50 in. thick.
PO—Lejunior, Ky.; SP—Benito, Ky.; CTY—Harlan; RR—L. & N.
MS—Chas. R. Brooks, Lejunior, Ky.
S of H—Trolley pole type locos. Track gage 42 in.
S of M—Shortwall mach.
PP—Power purchased. Transformer 4400-220 volts A. C., rotary converters, 250 volts D. C.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

BENNETT & JOHNSON BLUE GEM COAL COMPANY

General Office, P. O. Box 47, Gatlin, Ky.
PR—Jas. Bennett, Gatlin, Ky.

VP—J. L. Johnson, Gatlin, Ky.
TR—C. S. Bennett, Gatlin, Ky.
GM—Jas. Bennett, Gatlin, Ky.
GS—C. S. Bennett, Gatlin, Ky.
PA—Jas. Bennett, Gatlin, Ky.

Bennett & Johnson Mine; Drift; Blue Gem Seam, 26 inches thick.
PO—Gatlin, Ky.; SP—Same; CTY—Whitely; RR—L. & N. (Pine Mt. Div.)
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—10. Last years tonnage 2,200.
SIZES SHIPT—Slack, Block.
NOTE—Formerly operated by the Ellison & Bennett Blue Gem Coal Co.

BENNETTS FORK COAL MINING CO.

General Office, Middlesboro, Ky.
PR—J. E. Evans, Middlesboro, Ky.
VP—F. F. Sharp, Middlesboro, Ky.
TR—J. E. Evans, Middlesboro, Ky.
GM—F. F. Sharp, Middlesboro, Ky.
GS—F. F. Sharp, Middlesboro, Ky.
PA—J. A. Sharp, Bosworth, Ky.
SCO—Address the Company, Buyer, J. A. Sharp, Middlesboro, Ky.

Bennetts Fork Mine; Drift; Sand Stone Parting Seam; 42 inches thick.
PO—Bosworth, Ky.; SP—Same; CTY—Bell; RR—Sou. and L. & N.
MS—W. O. Roberts, Bosworth, Ky.
S of H—Mules and electric loco. Track gage 44 inches.
S of M—Elec. machs.
PP—Purchase power.
EMP—75. Last fiscal year output, 37,222 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Shaker Screens.
Old information.

BENTLEY, J. O., JR., COAL CO.

General Office, Jenkins, Ky.
PR—J. H. Bentley, Jenkins, Ky.
VP—J. D. Bentley, Jr., Jenkins, Ky.
TR—J. D. Bentley, Jr., Jenkins, Ky.
GM—J. D. Bentley, Jr., Jenkins, Ky.
SA—J. D. Bentley, Jr., Jenkins, Ky.

Bentley Mine; Drift; Elkhorn No. 3 Seam, 78-96 1/2 inches thick.
PO—Jenkins, Ky.; SP—Same; CTY—Letcher; RR—S. V. E.
MS—W. A. Beechur, Jenkins, Ky.
S of H—Mules.
S of M—Comp. air punchers.
EMP—25. Daily tonnage 150.
SIZES SHIPT—Run of Mine.

BERGER COAL MINING CO., INC.

General Office, Lejunior, Ky.
PR—T. C. Berger, 1415 Laurel Ave., Knoxville, Tenn.
VP—G. Darst, Knoxville, Tenn.
TR—Chas. E. Balston, Harlan, Ky.
GM—Chas. E. Balston, Harlan, Ky.
PA—Earl E. Turner, Lejunior, Ky.
CE—Henry Gross, Harlan, Ky.
SCO—Address the Company, Buyer, Earl E. Turner, Lejunior, Ky.
SA—Bewley-Darst Coal Co., Knoxville, Tenn.

No. 1 Mine; Drift; Harlan Seam, 48 in. thick.
PO—Lejunior, Ky.; SP—Shields, Ky.; CTY—Harlan; RR—L. & N.
MS—R. F. Williams, Lejunior, Ky.
S of H—2 trolley pole type locos. Track gage 42 in.
S of M—3 under cutters.
PP—Power purchased, 250 volts D. C.
EMP—60. Last years tonnage 53,913.
SIZES SHIPT—Run of Mine.
NOTE—Successors to T. C. Berger & Co.

BERGER, T. C. & CO.

Now Berger Coal Mining Co., Inc.

BEVIER COAL CO.

General Office, Cleaton, Ky.
PR—J. W. Bastin, Nelson, Ky.
TR—J. P. Cox, Cleaton, Ky.
GM—J. P. Cox, Cleaton, Ky.
GS—J. P. Cox, Cleaton, Ky.
PA—J. P. Cox, " "
CE—R. H. Shelby, Central City, Ky.
PR—M. C. Napier, Cleaton, Ky.
SCO—Address the Company, Buyer, J. A. Warren, Cleaton, Ky.
SA—Bewler Coal Co., Cleaton, Ky.

Bevier Mine; Shaft; West Kentucky No. 9 Seam; 66 to 74 in. thick.
PO—Cleaton, Ky.; SP—Same; CTY—Muhlenberg; RR—L. & N.
MS—Harry Sudwager, Central City, Ky.
S of H—Mules, 3 trolley pole type locos
S of M—1 chain breast, 5 shortwall machs
PP—5 water tube boilers, total 700 H. P., 2 gen. units, 125 K. W. and 150 K. W., 250 volts D. C., 6 pumps.
EMP—250. Last years tonnage 178,730.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens.

BIG ELKHORN COAL CO.

General Office, Betsy Layne, Ky.
PR—M. C. Justice, Pikeville, Ky.
VP—Cadwalader Jones, Betsy Layne, Ky.
TR—G. H. Justice, Betsy Layne, Ky.

GM—M. C. Justice, Betsy Layne, Ky.
GS—G. C. Scott, Betsy Layne, Ky.
PA—G. C. Scott, Betsy Layne, Ky.
CE—G. C. Scott, Pikeville, Ky.
EE—D. Norris, Betsy Layne, Ky.
SCO—Address the Company, Buyer, E. V. Kendrick, Betsy Layne, Ky.
SA—Interstate Coal & Dock Co., Cincinnati, Ohio.

Nos. 1 and 2 Mines; Drifts; Elkhorn Seams, 44-56 in. thick.
PO—Betsy Layne, Ky.; SP—Same; CTY—Floyd; RR—C. & O.
MS—H. E. Peters, Betsy Layne, Ky.
S of H—1 trolley type and 4 storage battery locos. Track gage 44 in.
S of M—3 shortwall machs.
EMP—100. Last years tonnage 50,000.
PP—2 fire tube boilers, 125 H. P., 1—150 K. W. gen. unit, 250 volts D. C., 4 pumps.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Shaker Screens.

BIG HOLLOW COAL COMPANY.

General Office, Pikeville, Ky.
PR—C. C. Bowles, Pikeville, Ky.
VP—W. M. Connolly, Pikeville, Ky.
GM—T. N. Huffman, " "
GS—T. N. Huffman, " "
PA—T. N. Huffman, " "
EM—W. T. Grimb, Pikeville, Ky.
Big Hollow Mine; Drift; Elkhorn Seam 60 in. thick.
PO—Pikeville, Ky.; SP—Same; CTY—Pike; RR—C. & O., Big Sandy Div.
MS—J. L. Allen, Pikeville, Ky.
S of H—Mules. Track gage, 44 in.
S of M—Hand.
EMP—35 to 40. Last years tonnage 10,000.
SIZES SHIPT—Run of Mine.
Old information.

BIG RUN COAL CO.

General Office, Winchester, Ky.
PR—D. S. Gay, Winchester, Ky.
TR—D. S. Gay, " "
GS—George W. McNeal, Princess, Ky.
SCO—Address the Company, Buyer, Geo. W. McNeal, Princess, Ky.

Princess Mine; Drift; No. 7 Coalton Seam; 36 to 66 in. thick.
PO—Princess, Ky.; SP—Same; CTY—Boyd, RR—C. & O., and A. C. & I.
S of H—3 trolley pole type locos. Track gage 42 inches.
S of M—3 elec. mach.
PP—1 water tube boiler, 150 H. P., 1 generating unit, 250 volts D. C., 1 pump.
EMP—75.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.
Old information.

BIG SHELBY COAL COMPANY

Shelby Mine.
PO—Shelbiana, Ky.; SP—Shelby, Ky.; CTY—Pike; RR—C. & O.
No report.

BISHOP COAL CO.

General Office, Centertown, Ky.
PR—Oscar Bishop, Centertown, Ky.
VP—J. S. Victor, Middlesboro, Ky.
TR—O. M. Bishop, Centertown, Ky.
GM—Oscar Bishop, Hartford, Ky.
GS—O. M. Bishop, Centertown, Ky.
SA—Southern Coal Co., Memphis, Tenn.

Rishp Mine; Drift; No. 9 Seam, 52 in. thick.
PO—Centertown, Ky.; SP—Bishnor, Ky.; CTY—Ohio; RR—L. & N.
S of H—Mules. Track gage, 44 in.
S of M—Hand.
EMP—25. Daily tonnage 200.
SIZES SHIPT—Run of Mine.

BLACK DIAMOND COAL COMPANY.

Now Wells Elkhorn Coal Co.

BLACK DIAMOND COAL & MINING CO.

PR—W. W. Bridges, Drakesboro, Ky.
VP—T. A. Isaac, Drakesboro, Ky.
TR—F. E. Jones, Drakesboro, Ky.
ASST. GM—J. P. Jones, Drakesboro, Ky.
SECY—J. P. Jones, Drakesboro, Ky.
PA—T. A. Isaac, Drakesboro, Ky.
EE—L. J. Wilkins, Drakesboro, Ky.
SCO—Address the company, Buyer, T. A. Isaac, Drakesboro, Ky.
SA—Southwestern Fuel Co., 412 Starks Bldg., Louisville, Ky.

Black Diamond No. 1 Mine; Shaft; No. 9 Seam, 64 in. thick.
PO—Drakesboro, Ky.; SP—Same; CTY—Muhlenberg; RR—L. & N.
MS—Harry Mills, Drakesboro, Ky.
S of H—Mules, trolley pole type loco. Track gage 36 inches.
S of M—Chainbreast type and shortwall machs.
PP—3 150 H. P. 2 fire tube boilers, 2—300 K. W. gen. units, 250 volts D. C., 3 pumps.
EMP—250. Daily output, 700 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables.

Black Diamond No. 2 Mine; Shaft; No. 9 Seam, 64 in. thick.
PO—Drakesboro, Ky.; SP—Same; CTY—Muhlenberg; RR—L. & N.
MS—Harry Mills, Drakesboro, Ky.
S of H—Trolley pole type locos. Track gage 42 inches.
S of M—Shortwall machs.
PP—4 250 H. P. water tube boilers, 2—300 K. W. gen. unit, 250 volts D. C., 5 pumps.
EMP—250. Daily tonnage 1,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables.

BLACK GEM COAL COMPANY

General Office, Huntington, W. Va.
PR—H. S. Brown, Bramwell, W. Va.
TR—Wood Bouldin, Huntington, W. Va.
GM—Wood Bouldin, Huntington, W. Va.
EM—D. M. Good, Williamson, W. Va.
SA—H. S. Brown, Bramwell, W. Va.

Black Gem Mine; Drift; Pond Creek or Frechurn Seam, 48 inches thick.
PO—Toler, Ky.; SP—Same; CTY—Pike; RR—N. & W.
MS—J. S. Leedy, Toler, Ky.
SM—Mike Allen, Toler, Ky.
S of H—Mules, 1 trolley pole type loco. Track gage 48 inches.
S of M—2 longwall machs.
PP—Power purchased. Transformer 2,200 to 440 volts A. C., motor gen. set, 100 K. W., 250 volts D. C.
EMP—80. Last years tonnage 40,000.
SIZES SHIPT—Run of Mine.
Old information.

BLACK JOE COAL COMPANY

General Offices, Detroit, Mich.
PR—E. H. Jewett, Detroit, Mich.
VP—E. L. Douglass, Cincinnati, Ohio.
TR—H. H. Stone, New York, N. Y.
VP—L. W. Brooks, Penobscot Bldg., Detroit, Mich.
ASST. GM—G. P. Foley, Staub, Ky.
GS—E. Rigby, Staub, Ky.
GENERAL PA—Geo. L. Washburne, Cincinnati, O.
CE—M. Bayles, Cincinnati, Ohio.
SCO—J. E. Stores, Co. Buyer, O. C. Day, Typo, Ky.
SA—Jewett Bigelow & Brooks, Detroit, Mich., and Cincinnati, Ohio.

Leonards Mine; Drift; No. 6 Seam; 59 inches thick.
PO—Typo, Ky.; SP—Ex., Same; Ft. Leonard, Ky.; CTY—Perry; RR—L. & N.
S of H—Mules. Track gage 48 in.
S of M—Hand.
EMP—70.
SIZES SHIPT—Run of Mine, Slack, Lump, Block.
PREP. EQUIPT—Shaker Screen.

BLACK MOUNTAIN CORPORATION

Now Peabody Coal Co.

BLACKBURN COAL COMPANY, THE

General Office, Alpharetta, Ky.
PR—Fred Blackburn, Lackey, Ky.
VP—John Blackburn, Alpharetta, Ky.
TR—U. G. Music, Alpharetta, Ky.
GM—John Blackburn, Alpharetta, Ky.
GS—U. G. Music, Alpharetta, Ky.
PA—John Blackburn, Alpharetta, Ky.
CE—Edward Holly, Ashland, Ky.
EM—Townsend Combs, Langley, Ky.
SA—West Virginia Standard Coal Co. 1st Nat'l Bank Bldg., Huntington, W. Va.

No. 1 and 2 Mines; Drift; Elkhorn Seam, 48 inches thick.
PO—Alpharetta, Ky.; SP—Dinwood, Ky.; CTY—Floyd; RR—C. & O.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
PP—1 fire tube boiler, 25 H. P.
EMP—35. Daily tonnage 300.
SIZES SHIPT—Run of Mine.
Old information.

BLACKKEY COAL CO.

General Office, Blackey, Ky.
PR—E. B. Taylor, Williamsburg, Ky.
VP—L. J. Madden, Blackey, Ky.
TR—H. E. Taylor, Blackey, Ky.
GM—H. E. Taylor, Blackey, Ky.
GS—Frank Sellers, Blackey, Ky.
PA—Pat West, Blackey, Ky.
EM—H. E. Taylor, Blackey, Ky.
SCO—Address the Company, Buyer, Pat West, Blackey, Ky.

Tayma Mine; Drift; No. 4 Seam, 48 inches thick.
PO—Blackey, Ky.; SP—Tayma, Ky.; CTY—Letcher; RR—L. & N.
S of H—1 4-ton gathering elec. loco. Track gage 44 inches.
S of M—1 shortwall mach.
PP—Power purchased, rotary converter, 1—100 K. W., 250 volts D. C.
EMP—60. Last years tonnage 30,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

BURK HOLLOW COAL CO.

General Office, Jellico, Tenn.
PR—J. T. Moore, Jellico, Tenn.
VP—Elizabeth Moore, Jellico, Tenn.
TR—Raymond Moore, Jellico, Tenn.
GM—Raymond Moore, Jellico, Tenn.
GS—F. M. Hildreth, Jellico, Tenn.
PA—J. T. Moore, R. D. No. 1, Jellico, Tenn.
EM—B. L. Lloyd, Jellico, Tenn.
SCO—Address the Company, Buyer, J. T. Moore, Jellico, Tenn.
SA—Southern Jellico Coal Co., Jellico, Tenn.

Burk Hollow Mine; Drift; Blue Gem Seam, 21 in. thick.
PO—Jellico, Tenn.; SP—Same; CTY—Wendley; RR—L. & N.
S of H—Mul s. Track gage 42 in.
S of M—Hand.
PP—3 pumps.
EMP—100. Last years tonnage 22,182.
SIZES SHIPT—Run of Mine, Slack, Lump, Block.
PREP. EQUIPT—Gravity Screens.

BURNS BLUE CEM COAL CO.

Now part of the Gatliff Coal Co.

BURNWELL COAL & COKE COMPANY

General Office, Huntington, W. Va.
Mine in Kentucky, tipple in W. Va.
PR—W. J. Pritchard, Bramwell, W. Va.
VP—J. H. Bowen, Bramwell, W. Va.
TR—D. T. Pritchard, Huntington, W. Va.
GM—W. E. Pritchard, Huntington, W. Va.
GS—J. S. Henry, Sprigg, W. Va.
PA—J. S. Henry, Sprigg, W. Va.
CE—D. C. Jones, Bramwell, W. Va.
EE—W. Va. Engineering Co., Huntington, W. Va.
SCO—Address the company, Buyer, Wm. J. Thomas, Sprigg, W. Va.
SA—Virginia Fuel Co., Union Central Bldg., Cincinnati, O.

Burnwell Mine; Drift; Pond Creek Seam, 58 inches thick.
PO—Sprigg, W. Va.; SP—Same (Prepay); CTY—Pike; RR—N. & W.
S of H—4 trolley pole type locos. Track gage 48 inches.
S of M—5 shortwall machs.
PP—Power purchased. Transformer 2300 volts A. C., M. G. sets, 1—200 K. W. gen. units 250 volts A. C.
EMP—85. Last years tonnage 50,000.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Gravity Screens, Picking Tables.

CAIN COAL COMPANY

General Office, Middlesboro, Ky.
PR—M. I. Hutchison, Louisville, Ky.
VP—J. D. Cain, Middlesboro, Ky.
TR—H. H. Hutchison, Middlesboro, Ky.
GM—J. D. Cain, Middlesboro, Ky.
GS—J. D. Cain, Middlesboro, Ky.
PA—J. D. Cain, Middlesboro, Ky.

Keeney Mine; Drift; Straight Creek Seam; 30 to 40 inches thick.
PO—Cary, Ky.; SP—Same; CTY—Bell; RR—L. & N.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
EMP—30. Daily output, 120 tons.
SIZES SHIPT—Run of Mine.
Old Information.

CAIN, EMORY

General Office, Jackson, Ky.
OWNER—Emory Cain, Jackson, Ky.

Jones-Cain Mine; Drift.
PO—Jackson, Ky.; SP—R. & K.; CTY—Brathitt; RR—O. & K., main line.
S of H—Mule.
S of M—Hand.
EMP—45. Daily tonnage 200.
SIZES SHIPT—Run of Mine.
NOTE—Formerly the Jones-Cain Coal Co.
Old Information.

CALVIN COAL & COKE CO.

Out of business.

CAMP BRANCH COAL CO.

General Office, Ivel, Ky.
PR—W. W. Bentley, Ivel, Ky.
TR—W. E. Johnson, Ivel, Ky.
GM—W. W. Bentley, Ivel, Ky.
GS—W. W. Bentley, Ivel, Ky.
PA—W. W. Bentley, Ivel, Ky.
CE—C. G. Evans, Pikeville, Ky.
SA—Tidley Coal Co., Cincinnati, Ohio.

Camp Branch No. 1 Mine; Drift; Elkhorn No. 2 & 4 Seams, 52 in. thick.
PO—Ivel, Ky.; SP—Same; CTY—Floyd; RR—L. & N.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
EMP—25. Daily tonnage 200.
SIZES SHIPT—Run of Mine.

CAN-BIT COAL CO. (THE)

General Office, Cincinnati, O.
PR—L. E. Armentrout, Cincinnati, O.
TR—W. W. Austin, Cincinnati, O.
GS—C. H. Adams, Wallins Creek, Ky.
EM—N. R. Denham, Harlan, Ky.

STEAM ENGR—J. C. Crigger, Wallins

Creek, Ky.
SA—Borderland Coal Sales Co., 703 4th Nat'l Bank Bldg., Cincinnati, O.

Can-bit Mine; Slope; Wallins Creek Canal Seam, 44 inches thick.
PO—Wallins Creek, Ky.; SP—Wallins, Ky.; and S-bay, Ky. CTY—Harlan; RR—L. & N.
S of H—Mules and rope. Track gage 42 in.
S of M—Hand.
PP—1 fire tube boiler.
EMP—30. Daily output, 120 tons.
SIZES SHIPT—Run of Mine, Block.

CANEY CREEK COAL COMPANY

General Office, Daniel Boone, Ky.
GM—J. L. Hughett, Daniel Boone, Ky.
GS—John Hughett, Daniel Boone, Ky.
PA—J. L. Hughett, Daniel Boone, Ky.

Caney Creek Mine; Drift; No. 9 Seam, 60 inches thick.
PO—Daniel Boone, Ky.; SP—Same; CTY—Hankins; RR—Illinois Central.
S of H—Mules. Track gage 34 inches.
S of M—Hand.
EMP—30. Last years tonnage 150,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.

CANEY FORK COLLIERIES COMPANY

General Office, Ashland, Ky.
PR—W. F. Ellis, Ashland, Ky.
VP—George C. Borchardt, Ashland, Ky.
TR—O. W. Miller, Ashland, Ky.
GM—W. F. Ellis, Ashland, Ky.
GS—W. F. Ellis, Ashland, Ky.
PA—W. F. Ellis, Ashland, Ky.

SA—Ellis Coal Company, Ashland, Ky.
Drift; No. 4 Elkhorn Seam; 59 in. thick.
PO—Ashland, Ky.; SP—Lackey, Ky.; CTY—Floyd; RR—C. & O.
S of H—Trolley pole type locos. Track gage 42 inches.
SIZES SHIPT—Run of Mine, Slack, Lump.

CANOE CREEK COAL COMPANY

General Office, Henderson, Ky.
GM—Morgan S. McCormick, Henderson, Ky.
GS—F. H. Hart, Henderson, Ky.
PA—Morgan S. McCormick, Henderson, Ky.

Canoe Creek Mine; Shaft; No. 9 Seam, 48 inches thick.
PO—Henderson, Ky.; SP—Same; CTY—Henderson; RR—L. C. L. & N. and L. H. & St. L.
S of H—Mules. Track gage 36 inches.
S of M—Hand and shortwall mach.
PP—Power purchased. Transformer 2300 volts A. C.
EMP—25.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.

CANNON MINING COMPANY

General Office, Ashland, Ky.
PR—Oliver M. Elam, Ashland, Ky.
VP—O. D. Jones, Ashland, Ky.
TR—Oliver M. Elam, Ashland, Ky.
GS—Grover C. Hatfield, Ashland, Ky.
SCO—Address the Company Buyer, Oliver M. Elam, Ashland, Ky.

Carbon Mine; Drift; Nos. 6 and 7 Seams, 36-48 inches thick.
PO—Ashland and Princess, Ky.; SP—Crescent; RR—L. & N.; CTY—Bond; RR—A. C. & I.
S of H—Mule.
S of M—7 puncher machs.
PP—Boiler and air comp.
EMP—40. Daily tonnage 150.
SIZES SHIPT—Run of Mine, Lump, Nut, Slack.

CARBONDALE COAL & COKE CO.

Now being operated by the Mason Mining Company.

CAPEY ELKHORN COAL COMPANY

General Office, Louisa, Ky.
PR—H. J. Burchett, Jr., Louisa, Ky.
VP—G. C. Burchett, Louisa, Ky.
TR—D. J. Burchett, Jr., Louisa, Ky.
GM—D. J. Burchett, Jr., Louisa, Ky.
GS—T. W. Ratcliff, Alfordita, Ky.
CE—Townsend Combs Langley, Ky.
SA—W. E. Duggans Coal Company, Huntington, W. Va.

Capey Elkhorn Mine; Drift; Seam 424, 28-52 in. thick.
PO—Alfordita, Ky.; SP—Dinwood, Ky.; CTY—Floyd; RR—R. & O.
S of H—Mules. Track gage 42 in.
EMP—25. Daily output 160 tons.
SIZES SHIPT—Run of Mine.

CARRS FORK COAL COMPANY.

General Office, 702 First & City Bank Bldg., Lexington, Ky.
PR—H. E. Bullock, Lexington, Ky.
VP—J. B. Allen, Sassafras, Ky.
TR—P. A. Crossman, Lexington, Ky.
GM—J. B. Allen, Sassafras, Ky.

GS—J. B. Allen, Sassafras, Ky.

PA—J. B. Allen, Sassafras, Ky.
EM—T. R. Evans, Sassafras, Ky.
SCO—Address the Company, Buyer, E. H. Griffith, Alcock, Ky.
SA—H. E. Bullock, Lexington, Ky.

Carrs Fork No. 1 Mine; Drift; Fire Clay Seam, 42 in. thick.
PO—Alcock, Ky.; SP—Vieco, Ky.; CTY—Perry; RR—L. & N.
SM—L. D. Davis, Lexington, Ky.
S of H—4 trolley pole type locos. Track gage 48 in.
S of M—4 shortwall machs.
PP—Power purchased. Transformer 2300-250 volts, M. G. Sets, 250 volts D. C., 3 pumps.
EMP—150. Last years tonnage 25,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Loading Rooms.

Carrs Forks No. 2 Mine; Drift; No. 7 Seam, 60 in. thick.
PO—Alcock, Ky.; SP—Vieco, Ky.; CTY—Perry; RR—L. & N.
S of H—2 trolley pole type locos. Track gage 48 in.
S of M—2 shortwall machs.
PP—Power purchased. Transformer 2300 volts A. C., M. G. sets, 1—200 K. W. gen. units 250 volts A. C.
EMP—50. Daily tonnage 400.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Loading Rooms.

CARRY-ON COAL COMPANY

General Office, Huntington, W. Va.
PR—H. S. Brown, Bramwell, W. Va.
TR—Wood Bouldin, Huntington, W. Va.
GM—Wood Bouldin, Huntington, W. Va.
EM—D. M. Good, Williamson, W. Va.
SA—H. S. Brown, Bramwell, W. Va.

Carry-On Mine; Drift; Pond Creek or Freeburn Seam, 50 inches thick.
PO—Toler, Ky.; SP—Same; CTY—Pike; RR—N. & W.
MS—J. S. Leedy, Toler, Ky.
S of H—Mules, 1 trolley pole type loco. Track gage 48 inches.
S of M—1 longwall mach.
PP—Power purchased. Transformer 2200 to 440 volts A. C., motor gen. set, 100 K. W., 250 volts D. C.
EMP—60. Last years tonnage 8,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.
Old Information.

CARTER COAL CO.

Operations in West Virginia, Virginia and Kentucky.

General Office, Coalwood, W. Va.
PR—Geo. L. Carter, Coalwood, W. Va.
VP—J. W. Carter, Coalwood, W. Va.
TR—C. A. Hall, Coalwood, W. Va.
GM—J. W. Carter, Coalwood, W. Va.
GS—J. W. Carter, Coalwood, W. Va.
PA—M. M. King, Coalwood, W. Va.
SCO—Address the Company, Buyer, M. M. King, Coalwood, W. Va.
SA—Carter Coal Co., Coalwood, W. Va., and Dixie Terminal Bldg., Cincinnati, O.

Warren No. 4 Mine; Drift; Dean Seam, 48-72 in. thick.
PO—Warren, Ky.; SP—Same; CTY—Knox; RR—Cumberland.
MS—R. W. Jennings, Warren, Ky.
S of H—12 trolley pole type locos. Track gage, 48 in.
S of M—15 shortwall machs.
PP—water tube boilers, 625 H. P., 3 gen. units, 250 volts D. C.
EMP—190. Daily output, 180 tons.

Trosper Mine; Drift; Dean Seam, 48-72 in. thick.
PO—Trosper, Ky.; SP—Same; CTY—Knox; RR—Cumberland.
MS—R. W. Jennings, Warren, Ky.
SM—V. J. Haney, Trosper, Ky.
S of H—Mules and 1 trolley pole type loco. Track gage, 42 in.
S of M—5 shortwall machs.
PP—5 water tube boilers, 625 H. P., 3 pumps.
EMP—50. Daily output, 75 tons.

Anchor Mine; Drift; Dean Seam, 48 in. thick.
PO—Anchor, Ky.; SP—Same; CTY—Knox; RR—Cumberland.
MS—R. W. Jennings, Warren, Ky.
SM—W. W. Dalton, Anchor, Ky.
S of H—3 trolley pole type locos. Track gage, 48 in.
S of M—3 shortwall machs.
PP—2 fire tube boilers, 250 H. P., 1 gen. unit, 250 volts D. C.

CAUOILL BRANCH COAL CO.

Now Hudley Coal Company.

CAUOILL COAL CO.

General Office, Whitesburg, Ky.
PR—W. R. Wyatt, Rockhold, Ky.

VP—L. B. Croley, Williamsburg, Ky.

TR—J. W. Peckin, Williamsburg, Ky.
GM—C. A. Moss, Williamsburg, Ky.
GS—F. S. Foster, Whitesburg, Ky.

Whitesburg Mine; Drift; Elkhorn No. 4 Seam, 60 inches thick.
PO—Whitesburg, Ky.; SP—Same; CTY—Letcher; RR—L. & N.
SM—Chas. Greene, Whitesburg, Ky.
S of H—Trolley pole type locos. Track gage, 44 in.
S of M—2 elec. punchers, longwall mach. PP—1 water tube boiler, 150 H. P., gen. units, 250 volts D. C., 2 pumps.
EMP—50. Daily tonnage 500.
SIZES SHIPT—Run of Mine, Nut, Lump, Block.
PREP. EQUIPT—Gravity Screens.
Old Information.

CENTERTOWN COAL COMPANY.

Now part of Rockport Coal Company.

CENTRAL KENTUCKY BLOCK COAL & MINERAL BLOCK COMPANY.

PR—C. E. McDavitt, St. Louis, Mo.
VP—S. H. Allen, Hawesville, Ky.
TR—D. G. Duncan, Hawesville, Ky.
GM—L. S. Powers, Hawesville, Ky.
GS—L. S. Powers, " "
PA—L. S. Powers, " "

Prosperity Mine; Drift; No. 9 Seam, 60 in. thick.
PO—Hawesville, Ky.; SP—Adams, Ky.; CTY—Hancock; RR—L. H. & St. L.
MS—D. G. Duncan, Hawesville, Ky.
S of H—Combination locos.
S of M—Shortwall machs.
PP—2 fire tube boilers, 100 H. P., 4 pumps.
EMP—100.
SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Egg, Lump, Block.

CHAPPELL COAL CO.

Now Wagner Coal Company.

CHARLES COAL COMPANY

General Office, Piedmont, W. Va.
PR—Arthur P. Hoffa, Barton, Md.
TR—Arthur P. Hoffa, Barton, Md.
GM—James Hoffa, Artemus, Ky.
GS—D. W. Arnold, Artemus, Ky.
PA—James Hoffa, Artemus, Ky.
SCO—Hoffa Supply Co., Buyer, Porter T. White, Artemus, Ky.
SA—Campbell Coal Co., Piedmont, W. Va.

No. 4 Mine; Drift; Dean Seam; 36 inches thick.
PO—Artemus, Ky.; SP—Same; CTY—Knox; RR—L. & N.
S of H—Mules, rope. Track gage 40 inches.
S of M—Hand.
EMP—30. Last fiscal year output, 2,500 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

CHASE COAL COMPANY, THE

General Office, Middlesboro, Ky.
PR—Chas. E. Herd, Middlesboro, Ky.
TR—C. H. Chase, Middlesboro, Ky.
PA—C. H. Chase, Middlesboro, Ky.

Nos. 2 and 3 Mine; Drift; Hazard-Harlan Seams, 72-48 in. thick.
PO—Wallins Creek, Ky.; SP—Ohio, Ky.; CTY—Harlan; RR—L. & N.
S of H—Mules. Track gage 42 in.
S of M—Hand.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

CHENOA-HIGNITE COAL CO.

General Office, Chenoa, Ky.
PR—D. C. Swab, Harlan, Tenn.
VP—Wm. Costello, Middlesboro, Ky.
TR—M. S. Hollingsworth, Middlesboro, Ky.
GM—William Costello
GS—W. H. Hollingsworth, Middlesboro, Kentucky.

PA—W. H. Hollingsworth, Middlesboro, Kentucky.
EM—W. H. Hollingsworth, Middlesboro, Ky.
EE—Jas. Essany, Chenoa, Ky.
SCO—Chenoa-Hignite Coal Co. Store, Buyer, Thomas Walden, Chenoa, Ky.

Chenoa-Hignite Mine; Drift; Hignite Seam; 42 to 58 in. thick.
PO—Chenoa, Ky.; SP—Same and Wadsworth, Ky.; CTY—Bell; RR—L. & N., Chenoa Branch.
S of H—3 trolley pole type locos. Track gage 44 inches.
S of M—4 shortwall machines.
PP—2 return tubular boilers, total 300 H. P., 1—200 K. W. gen. unit, 250 volts D. C., 4 pumps.
EMP—90. Last fiscal year output, 49,825 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens.

CHICKASAW COAL COMPANY

PR—B. C. Mitchell, Madisonville, Ky.
VP—J. Basel Ramsey, Madisonville, Ky.
TR—R. H. Gatten, Madisonville, Ky.
GM—B. C. Mitchell, Madisonville, Ky.
GS—B. C. Mitchell, Madisonville, Ky.
PA—B. C. Mitchell, Madisonville, Ky.

Chickasaw Mine; Slope; No. 11 Seam, 78 in. thick.
PO—Madisonville, Ky.; SP—Same; CTY—Hopkins; RR—L. & N.
MS—H. M. Graves, Madisonville, Ky.
S of H—Mules and rope. Track gage 42 inches.
S of M—Hand.
PP—1 pump.
EMP—27. Daily tonnage 300.
SIZES SHIPT—Run of Mine.

CHINA COAL COMPANY

General Office, Wallins Creek, Ky.
PR—B. F. Howard, Wallins Creek, Ky.
GM—John L. Howard, Wallins Creek, Ky.

Bull Run Mine; Drift; Bituminous Seam; 53 inches thick.
PO—Wallins Creek, Ky.; SP—Same; CTY—Hurlan; RR—L. & N.
S of H—Mules. Track gage 42 inches.
S of M—Hand, shortwall and longwall machs.
Old Information.

CHRISTIE-DARBY MINING COMPANY

Now Christie Sowards Mining Co.

CHRISTIE SOWARDS MINING CO.

General Office, Pikeville, Ky.
PR—J. J. Christie, Pikeville, Ky.
VP—E. H. Sowards, Pikeville, Ky.
TR—J. J. Christie, Pikeville, Ky.
GM—J. J. Christie, Pikeville, Ky.
GS—J. J. Christie, Pikeville, Ky.
PA—J. J. Christie, Pikeville, Ky.
CE—A. J. Baldwin, Pikeville, Ky.
SCO—Address the Company, Buyer, J. J. Christie, Pikeville, Ky.
SA—Eaton Rhodes & Co., Cincinnati, O.

Broad Bottom No. 1 and 2 Mines; Drift; Upper and Lower Elkhorn Seams, 42-70 in. thick.
PO—Mossy Bottom, Ky.; SP—Pikeville, Ky.; CTY—Pike; RR—C. & O.
S of H—Mules. Track gage 42 in.
S of M—Hand.
PP—Purchase power, M. G. Set, 250 volts D. C.
EMP—75. Last years tonnage 10,000.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by the Christie-Darby Mining Co.

CIRCLE CITY COAL COMPANY.

General Office, 1315 Old Colony Bldg., Chicago, Ill.
PR—R. H. Gruschow, 1315 Old Colony Bldg., Chicago, Ill.
VP—Frank Fehr, Louisville, Ky.
TR—B. N. Johnson, 1315 Old Colony Bldg., Chicago, Ill.
GM—R. H. Gruschow, 1315 Old Colony Bldg., Chicago, Ill.
GS—R. A. Gruschow, Nebo, Ky.
PA—B. N. Johnson, 1315 Old Colony Bldg., Chicago, Ill.
CE—R. A. Gruschow, Nebo, Ky.
SCO—Address the company, Buyer, Thos. F. Ashmore, Nebo, Ky.
SA—Robert A. Gruschow, Inc., 1315 Old Colony Bldg., Chicago, Ill.; J. N. McCabe, V. P., Charge of Sales.

For Additional Information See Page 468.

Nebo Mine; Slope; Stray Seam; 84 in. thick.
PO—Nebo, Ky.; SP—Same; CTY—Hopkins; RR—L. & N.
S of H—2 elec. locos, trolley pole type. Track gage 42 inches.
S of M—3 longwall machs.
PP—3 return tubular boilers, total 450 H. P., 1 generator, 250 volts D. C.
EMP—100. Last years tonnage 88,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.
Note—Successors to Nebo Consolidated Coal & Coking Co.

CLAY COUNTY COAL CO., INC.

General Office, Hima, Ky.
PR—T. H. Buchanan, Hima, Ky.
VP—W. R. Buchanan, Hima, Ky.
TR—J. W. Buchanan, Hima, Ky.
GM—T. H. Buchanan, Hima, Ky.
GS—W. R. Buchanan, Hima, Ky.
PA—C. A. Winstead, Hima, Ky.
EM—J. C. Murphy, Barbourville, Ky.
SCO—Address the Company, Buyer, C. A. Winstead, Hima, Ky.

Clay County Mine; Drift; Horse Creek Seam, 40 inches thick.
PO—Hima, Ky.; SP—Same; CTY—Clay; RR—C. & M.
S of H—Mules, Track gage 36 inches.
S of M—Hand.
EMP—100. Last years tonnage 21,800.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
PREP. EQUIPT—Bar Screens.
NOTE—Successors to the Clay County Coal Company.

CLEAR FORK COAL & COKE CO.

General Office, Middleshoro, Ky.
PR—J. D. Temple, Middleshoro, Ky.
VP—R. J. Langford, Fonde, Ky.
TR—B. T. Milan, Middleshoro, Ky.
GM—J. D. Temple, Middleshoro, Ky.
GS—W. A. Yeager, Fonde, Ky.
PA—W. A. Yeager, Fonde, Ky.
EM—James Brackett, Fonde, Ky.
EM—Richardson & Oley, Middleshoro, Ky.
SCO—Address the Company, Buyer, J. C. Baldwin, Fonde, Ky.

Clear Fork Mine; Drift; Mingo Seam, 55 inches thick.
PO—Fonde, Ky.; SP—Same; CTY—Bell; RR—Southern Railway.
S of H—Elec. locos.
S of M—7 shortwall machs.
EMP—260.
SIZES SHIPT—Run of Mine.

CLERE COAL COMPANY.

General Office, Coalton, Ky.
LESSEE—Frank H. Clere, Coalton, Ky.
SCO—Coalton Store, Buyer, Frank H. Clere, Coalton, Ky.
SA—Ashland Iron & Mining Co., Ashland, Ky.

Clere No. 1 Mine; Drift; No. 7 Seam; 24 to 48 inches thick.
PO—Coalton, Ky.; SP—Same. CTY—Royd, RR—A. C. & I.
S of H—Mules.
S of M—Hand.
EMP—25. Last years tonnage 3,862.
NOTE—This mine is leased from the Ashland Iron & Mining Co. and entire output consumed by them.

CLIFF COAL COMPANY (THE).

General Office, Portsmouth, Ohio.
PR—B. F. Vincent, Portsmouth, O.
TR—B. F. Vincent, Portsmouth, O.
GM—H. C. Stalder, Portsmouth, O.
GS—G. B. Hughes, Cliff, Ky.
PA—H. C. Stalder, Cliff, Ky.
SCO—Address the Company, Buyer, G. B. Hughes, Cliff, Ky.
Sales Agents, The Wonderland Coal Co., Portsmouth, O.

The Cliff Mine; Slope; No. 1 Seam, 40 inches thick.
PO—Cliff, Ky.; SP—Frt., Cliff, Ky., Exp., Prestonsburg, Ky.; CTY—Floyd; RR—C. & O., Big Sandy Div.
S of H—Trolley pole type locos. Track gage 36 inches.
S of M—2 chn breast type, 2 short-wall and 1 longwall machs.
PP—2 water tube boilers, 125 H. P., 1—100 K. W. gen. unit, 250 volts D. C., 2 pumps.
EMP—40. Last years tonnage 21,000.
SIZES SHIPT—Run of Mine, Slack, Pea Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screen.

CLIFTY CONSOLIDATED COAL COMPANY

General Office, Clay, Ky.
PR—R. R. Moody, Springfield, Mass.
VP—Norman N. Fowler, Springfield, Mass.
TR—W. R. Young, Bon Air, Tenn.
GM—R. D. Holt, Clay, Ky.
GS—R. D. Holt, Clay, Ky.
SALES MGR.—R. H. Lovejoy, Clay, Ky.
CE—T. O. Long, Providence, Ky.
SCO—Address the company, Buyer, Chas. Hill, Clay, Ky.
SA—R. H. Lovejoy, Clay, Ky.

Clifty Mine; Shaft; Western Kentucky No. 9 Seam; 57 inches thick.
PO—Clay, Ky.; SP—Same; CTY—Webster; RR—L. & N.
S of H—15 mules, electric and storage battery locos. Track gage 36 inches.
S of M—Hand, comp. air and shortwall machs.
PP—2 fire tube boilers, 150 H. P., 1 150 K. W. gen. units, 250 volts D. C.
EMP—135. Daily output, 700 tons.
SIZES SHIPT—Run of Mine, Slack, Pea Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picklog Tables.

CLIMAX COAL COMPANY

General Office, Shamrock, Ky.
PR—N. C. Rockhill, Fort Wayne, Ind.
VP—R. E. Howe, Shamrock, Ky.
TR—R. E. Howe, Shamrock, Ky.
GM—R. E. Howe, Shamrock, Ky.
GS—R. E. Howe, Shamrock, Ky.
PA—R. E. Howe, Shamrock, Ky.
SCO—Address the Company, Buyer, J. H. Brown, Shamrock, Ky.
SA—Clineb River Coal Co., Knoxville, Tenn.; Kentucky Fuel Co., Cincinnati, Ohio.

Shamrock & Edgewood Mine; Drift; Sand Stone Parting and Sterling Seams, 42-48 inches thick.
PO—Shamrock, Ky.; SP—Edgewood, Ky.; CTY—Bell; RR—L. & N. & Sou.
S of H—Mules and 4 trolley pole type locos. Track gage 44 inches.
S of M—5 shortwall machs.
PP—Power purchased, Transformer 2300-180 volts A. C., rotary converters 250 volts D. C., 1 pump.

EMP—125. Last years tonnage 62,000
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picklog Tables, Loading Booms, Washers.

CLINTON COAL COMPANY

General Office, Hazard, Ky.
PR—A. M. Grass, Hazard, Ky.
VP—D. C. Combs, Hazard, Ky.
TR—E. C. Wootton, Hazard, Ky.
GM—D. Y. Wootton, Hazard, Ky.
GS—M. A. Petry, Hazard, Ky.
PA—D. Y. Wootton, Hazard, Ky.
EM—J. L. Morrison, Hazard, Ky.
SCO—Clinton Coal Co. Store, Buyer, D. Y. Wootton, Hazard, Ky.

Clinton Mine; Drift; No. 4 Seam, 72 inches thick.
PO—Joff, Ky.; SP—Cogross, Ky.; CTY—Perry; RR—L. & N.
SM—L. J. Mullins, Happy, Ky.
S of H—Mules, Track gage 36 inches.
S of M—Hand.
EMP—14. Daily tonnage 50.
SIZES SHIPT—Run of Mine.
Old Information.

CLOVER CREEK COAL CO.

Now Economy Mining Company.

CLOVER FORK COAL COMPANY

General Office, Kittis, Ky.
PR—A. F. Whitfield, Kittis, Ky.
TR—A. F. Whitfield, Jr., Kittis, Ky.
GM—E. F. Whitfield, Kittis, Ky.
GS—E. F. Whitfield, Kittis, Ky.
PA—A. F. Whitfield, Jr., Kittis, Ky.
EE—E. F. Whitfield, Kittis, Ky.
SCO—Address the Company, Buyer, Chas. Johnson, Kittis, Ky.
SA—Bowley-Darst Coal Co., Knoxville, Tenn.

Clover Fork Mine; Drift; Harlan Seam; 50 inches thick.
PO—Kittis, Ky.; SP—Same and Harlan, Ky.; CTY—Harlan; RR—L. & N.
S of H—5 trolley pole type locos. Track gage 42 in.
S of M—7 shortwall machs.
PP—Power purchased, Transformer 2200-250 volts A. C., M. G. Set, 250 volts D. C., 2 pumps.
EMP—115. Last years tonnage 121,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Loading Booms.

CLOVER LEAF COAL CO.

General Office, Middleshoro, Ky.
PR—E. P. Nicholson, Middleshoro, Ky.
VP—H. A. McCaney, Middleshoro, Ky.
TR—P. E. Bass, Middleshoro, Ky.
GM—J. H. Chesney, Middleshoro, Ky.
GS—T. J. Yeary, Middleshoro, Ky.
EM—J. C. Richardson, Middleshoro, Ky.
SA—J. H. Chesney, Middleshoro, Ky.

Clover Leaf Mine; Drift; Sandstone Parting Seam, 42 inches thick.
PO—Middleshoro, Ky.; SP—Same; CTY—Bell; RR—Sou. and L. & N.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
EMP—40. Daily output, 180 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.
NOTE—Successors to Copper Fork Coal Company.

COAL RUN MINING CO.

General Office, Coal Run, Ky.
PR—Stoney Amick, Pikeville, Ky.
TR—H. H. Funk, Sutton, Ky.
GM—H. H. Funk, Sutton, Ky.
GS—H. H. Funk, Sutton, Ky.
PA—H. H. Funk, Sutton, Ky.
CE—Stoney Amick, Pikeville, Ky.
SCO—Coal Run Mining Co., Commissary Buyer, Emuel Gilliam, Coal Run, Ky.
SA—West Virginia Standard, Huntington, W. Va.

Coal Run Mine; Drift; Elkhorn Seam, 42-60 in. thick.
PO—Coal Run, Ky.; SP—Same; CTY—Pike; RR—C. & O.
S of H—Mules. Track gage, 42 in.
S of M—Hand.
EMP—18. Daily tonnage 150.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

COIL COAL CO.

General Office, Madisonville, Ky.
TR—W. D. Coll, Madisonville, Ky.
GM—H. H. Coll, " "
GS—John Carroll, " "
PA—H. H. Coll, " "
MM—Phel Croft, " "
EM—N. E. Stone, " "
SCO—W. D. Coll Mercantile Co., Buyer, F. E. Coll, Madisonville, Ky.

Coil Mine; Shaft; No. 11 Seam; 72 to 78 in. thick.
PO—Madisonville, Ky.; SP—Same; CTY—Hopkins; RR—L. & N., Dialo Line.
S of H—12 ton gasoline loco. Track gage 49 in.
S of M—8 elec. mach.

PP—3 return tubular boilers, 450 H. P., 1 gen. unit, 250 volts D. C., 4 pumps.
EMP—175. Last fiscal year output, 160,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picklog Tables.
Old Information.

COLEMAN MINING CO.

PR—Daniel Scanlon, Louisville, Ky.
TR—C. W. Spears, Lexington, Ky.
VP—C. R. Coleman, " "
GM—C. R. Coleman, " "
PA—C. R. Coleman, " "
GS—A. T. Wilson, " "
MM—Tom Swanner, Cary, Ky.
EM—Johnston & Johnston, Pineville, Ky.
SCO—Coleman Mining Co., Buyer, C. R. Coleman, Cary, Ky.
For Ridge Mine, Drift, Straight Creeks Seam, 42 in. thick.
PO—Cary, Ky.; SP—Pineville, Ky.; CTY—Bell; RR—L. & N., Straight Creek Branch.

S of H—4 elec. locos. Track gage 36 in.
S of M—10 comp. air machines.
PP—3 return tubular boilers, total 300 H. P., 1 gen. unit, 250 volts D. C., 2 air comp. and 8 pumps.
EMP—100. Last years tonnage 40,800.
SIZES SHIPT—Run of Mine, Slack, Pea Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens.

COLLINS MINING COMPANY

General Office, Second National Bank Bldg., Ashland, Ky.
PR—Dr. M. M. Collins, Lackey, Ky.
VP—Jonas Collins, Lackey, Ky.
TR—Sam Porter, Ashland, Ky.
GM—Sam Porter, Ashland, Ky.
GS—John Dills, Lackey, Ky.
CE—Tomas Combs, Ashland, Ky.
SA—Hally Store Co., Chicago, Ill.

Rush Mine; Drift; Lower Elkhorn Seam, 54 in. thick.
PO—Lackey, Ky.; SP—Same; CTY—Floyd; RR—S. V. & E. C. & O.
S of H—Mules. Track gage, 42 in.
S of M—Hand.
PP—4 pumps.
EMP—35. Daily tonnage 200.
SIZES SHIPT—Run of Mine.

COLONIAL COAL & COKE COMPANY

General Office, Pottsville, Pa.
PR—Edw. E. Karcher, Pottsville, Pa.
VP—T. J. Murphy, Pottsville, Pa.
TR—Edw. E. Karcher, Pottsville, Pa.
GM—N. M. White, Prestonsburg, Ky.
GS—N. M. White, Prestonsburg, Ky.
PA—N. A. White, Prestonsburg, Ky.
EM—C. G. Evans, Prestonsburg, Ky.
EE—Laurence Gamble, Prestonsburg, Ky.
SCO—Address the Company, Buyer, I. W. May, Prestonsburg, Ky.
SA—Darby Coal Sales Co., Union Trust Bldg., Cincinnati, Ohio.

Colonial Mine; Drift; No. 1 Seam, 36-48 inches thick.
PO—Prestonsburg, Ky.; SP—Same; CTY—Floyd; RR—C. & O.
S of H—2-6 ton locos. Track gage 46 inches.
S of M—4 shortwall machs and 2 chn breast type machs.
PP—Water tube boilers, gen. units.
EMP—125. Last years tonnage 75,000.
SIZES SHIPT—Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picklog Tables.

COLUMBIA-PANAMA COAL CO.

General Office, Manchester, Ky.
PR—M. F. Hopson, Culeman, Ky.
VP—W. M. McIlonn, Horse Cave, Ky.
TR—Chas. R. Garrard, Manchester, Ky.
GM—C. R. Garrard, Manchester, Ky.
PA—C. R. Garrard, Manchester, Ky.
EM—C. R. Garrard, Manchester, Ky.

Columbia-Panama No. 1 Mine; Drift; Blue Gem Seam, 50 to 71 in. thick.
PO—Manchester, Ky.; SP—Same; CTY—Clay; RR—Cumberland & Manchester.
MS—W. L. Winchester, Manchester, Ky.
S of H—Mules and 1 steam loco. Track gage 36 inches.
S of M—Hand.
PP—6 200 H. P. fire tube boilers, M. G. Set, 250 volts D. C., 4 pumps.
EMP—38. Daily tonnage 100 to 250.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

COLUMBUS MINING CO.

General Office, Chicago, Ill.
PR—J. J. Allais, McCormick Bldg., Chicago, Ill.
VP—Wm. Zeller, Brazil, Ind.
TR—J. B. Hilton, Chicago, Ill.
GM—Edw. Allais, Sr., Terre Haute, Ind.
GS—P. F. Allais, Hazard, Ky.
PA—J. B. Hilton, Chicago, Ill.
CE—Allen & Garcia, Chicago, Ill.
EM—R. H. Ingle, Hazard, Ky.

(Continued on Next Page)

Columbus Mining Co.—Cont

EE—A. F. Barbloux, Hazard, Ky.
SCO—Address the Company; Buyer, G. W. Norman, Hazard, Ky.
SA—H. A. Requa, McCormick Bldg., Chicago, Ill.

No. 3 Mine; Drift; Hazard No. 4 Seam, 41 in. thick.
PO—Hazard, Ky.; SP—Christopher, Ky.; CTY—Perry; RR—L. & N.
MS—Samuel Allais, Christopher, Ky.
SM—N. Allais, Christopher, Ky.
S of H—4 trolley pole type locos. Track gage, 36 in.
S of M—4 shortwall machs.
PP—Power purchased, gen. units, D. C., 6 pumps.
EMP—78. Daily output, 600 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens.

No. 4 Mine; Drift; No. 4 Hazard Seam, 49 in. thick.
PO—Hazard, Ky.; SP—Allais, Ky.; CTY—Perry; RR—L. & N.
MS—R. H. Ingle, Hazard, Ky.
SM—G. W. Norman, Hazard, Ky.
S of H—7 trolley pole type locos. Track gage 42 in.
S of M—8 shortwall machs.
PP—Power purchased, 6 pumps.
EMP—120. Daily output, 700 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

No. 5 Mine; Drift; No. 6 Hazard Seam, 46 in. thick.
PO—Hazard, Ky.; SP—Allais, Ky.; CTY—Perry; RR—L. & N.
MS—A. F. Barbloux, Hazard, Ky.
SM—G. W. Norman, Hazard, Ky.
S of H—8 trolley pole type locos. Track gage 42 in.
S of M—8 shortwall machs.
PP—Power purchased, D. C., 4 pumps.
EMP—120. Daily output, 700 tons.
SIZES SHIPT—Run of Mine, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

No. 6 Mine; Drift; Hazard No. 4 Seam, 42 inches thick.
PO—Hazard, Ky.; SP—Hilton, Ky.; CTY—Perry; RR—L. & N.
MS—N. G. Gastal, Hazard, Ky.
SM—G. W. Norman, Hazard, Ky.
S of H—Trolley pole type locos. Track gage 42 inches.
S of M—Shortwall machs.
PP—Power purchased, M. G. Sets.
EMP—50.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Gravity Screens, Picking Tables.

COLVAN MINING COMPANY
Now Old House Coal Co.

COLWELL BLYTHE COAL CO.

General Office, Yerkes, Ky.
PR—S. C. Colwell, Yerkes, Ky.
VP—M. H. Blythe, Yerkes, Ky.
TR—S. C. Colwell, Yerkes, Ky.
GM—M. H. Blythe, Yerkes, Ky.
PA—M. H. Blythe, Yerkes, Ky.
EM—J. B. Allen Eng. & Co., Hazard, Ky.
SCO—S. C. Colwell, Buyer, S. C. Colwell, Yerkes, Ky.
SA—Webb Fuel Co., Cincinnati, O.
Dacon Mine; Drift; No. 6 Seam, 54 in. thick.
PO—Yerkes, Ky.; SP—Same; CTY—Perry; RR—L. & N.
S of H—Mules. Track gage 36 in.
S of M—Hand.
EMP—20. Daily tonnage 100.
SIZES SHIPT—Run of Mine, Nut, Lump, Block.
PREP. EQUIPT—Bar Screens.
NOTE—Formerly operated by the Buckhorn Coal & Lbr. Co.

COMARGO COAL CO.

General Office, 400 Empire Bldg., Knoxville, Tenn.
PR—L. I. Coleman, Knoxville, Tenn.
VP—E. H. Wedekind, Louisville, Ky.
TR—L. I. Coleman, Knoxville, Tenn.
GM—E. C. Jones, Lacleman, Ky.
SM—B. E. Robinson, Lacleman, Ky.
PA—Jas. G. Vinsant, Lacleman, Ky.
CE—C. D. Lynch, Block, Tenn.
SCO—Address the Company, Buyer, Jas. G. Vinsant, Lacleman, Ky.

Comargo Mine; Drift; Seam, 54 inches thick.
PO—Lacleman, Ky.; SP—Comargo, Ky.; CTY—McCreary; RR—K. & E. C. N. O. T. P.
S of H—Mules and 2 steam locos. Track gage 36 inches.
S of M—Hand.
EMP—160. Daily tonnage 350.
SIZES SHIPT—Run of Mine.

COMMERCIAL COAL MINING COMPANY

General Office, 615 Fayette Bank Bldg., Lexington, Ky.
PR—W. H. Hoover, Nicholasville, Ky.
VP—W. H. Courtney, Lexington, Ky.
TR—J. Henry Hall, Lexington, Ky.
GM—J. Henry Hall, Lexington, Ky.
GS—J. Henry Hall, Lexington, Ky.
PA—J. Henry Hall, Lexington, Ky.

Klenco Mine; Drift; Hazard No. 4 Seam, 50 inches thick.
PO—Ulva, Ky.; SP—Klenco, Ky.; CTY—Perry; RR—L. & N.
MS—R. H. McGlone, Ulva, Ky.
S of H—Electric loco. Track gage 42 in.
S of M—Shortwall mach.
PP—Power purchased Transformer 6600-180 volts, rotary converters, 275 volts D. C.
EMP—50. Daily tonnage 300.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens.
NOTE—Formerly operated by the Klenckole Mining Co.

CONANT COAL COMPANY

General Office, Pineville, Ky.
PR—M. D. Bell, Pineville, Ky.
VP—J. E. Bell, Pineville, Ky.
TR—Edw. Pursfull, Pineville, Ky.
GM—M. D. Bell, Pineville, Ky.
PA—M. D. Bell, Pineville, Ky.

Conant Mine; Drift; Straight Creek Seam, 42 inches thick.
PO—Pineville, Ky.; SP—Jensen, Ky.; CTY—Bell; RR—L. & N.
MS—John C. Allison, Pineville, Ky.
S of H—Mules.
S of M—Hand.
Daily tonnage 260.
SIZES SHIPT—Run of Mine.

CONEVA COAL CORPORATION.

Property operated by Johnson-Hogg Coal Company.

CONGRESS COAL MINING CO.

General Office, Middlesboro, Ky.
PR—Ray Moss, Middlesboro, Ky.
VP—H. C. Moss, Middlesboro, Ky.
TR—F. M. Gordon, Middlesboro, Ky.
GM—Ray Moss, Middlesboro, Ky.
GS—H. C. Moss, Middlesboro, Ky.
EM—C. P. Davidson, Middlesboro, Ky.

Congress Mine; Slope; Sand Shore Parting Seam, 45-53 inches thick.
PO—Shamrock, Ky.; SP—Congress, Ky.; CTY—Bell; RR—Sou. and L. & N.
S of H—Mules.
S of M—Hand.
Last years tonnage 450.
SIZES SHIPT—Run of Mine.

CONSOLIDATED FUEL COMPANY

General Office, 1203 Chamber of Commerce Bldg., Pittsburgh, Pa.
PR—J. J. Jenkins, Pittsburgh, Pa.
VP—J. E. Stewart, Pittsburgh, Pa.
TR—S. Jones, Pittsburgh, Pa.
GM—J. E. Stewart, Pittsburgh, Pa.
PA—N. A. Burnhart, Pittsburgh, Pa.
CE—M. D. Gibson, Pittsburgh, Pa.
SCO—Four States Supply Co., Pittsburgh, Pa.
SA—Bertha Coal Company, Pittsburgh, Pa.

Jessie Mine; Drift; Amburgy Seam, 54 inches thick.
PO—Dalna, Ky.; SP—Same; CTY—Letcher; RR—L. & N.
MS—P. M. Connor, Dalna, Ky.
S of H—Storage battery locos. Track gage 42 inches.
S of M—Shortwall machs.
PP—Power purchased Transformer 6600-2200 volts A. C. M. G. Set, 250 volts D. C.
SIZES SHIPT—Run of Mine, Slack, Block.
PREP. EQUIPT—Gravity Screens.

Elsie Mine; Drift; No. 4 Gas Seam, 60 inches thick.
PO—Dalna, Ky.; SP—Same; CTY—Letcher; RR—L. & N.
MS—P. M. Connor, Dalna, Ky.
S of H—Storage battery loco. Track gage 42 inches.
S of M—Shortwall machs.
PP—Power purchased Transformer 6600-2200 volts A. C. M. G. Set, 250 volts D. C., 1 fire tube boiler, 150 H. P.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

Sara Mine; Drift; Amburgy Seam, 54 inches thick.
PO—Dalna, Ky.; SP—Same; CTY—Letcher; RR—L. & N.
MS—P. M. Connor, Dalna, Ky.
S of H—Storage battery loco. Track gage 42 inches.
S of M—Shortwall machs.
PP—Power purchased Transformer 6600-2200 volts A. C. M. G. Set, 250 volts D. C.

SIZES SHIPT—Run of Mine, Slack, Block.

PREP. EQUIPT—Gravity Screens.
NOTE—Formerly operated by West Virginia & Kentucky Coal Co.

CONSOLIDATION COAL COMPANY

General Office, Munson Bldg., 67 Wall St., New York, N. Y.
100 Mines in Maryland, West Virginia, Pennsylvania and Kentucky.
PR—C. W. Watson, New York, N. Y.
ASST. TO PR—Brooks Fleming, Jr., Fairmont, W. Va.
VP—S. D. Camden, New York, N. Y.
VP—Arthur Hale, Continental Bldg., Baltimore, Md.
VP (Operating)—F. R. Lyon, Fairmont, W. Va.
VP (Transportation)—W. L. Andrews, Continental Bldg., Baltimore, Md.
VP—Eastern Sales—F. W. Wilshire, New York, N. Y.
VP (Western Sales)—E. M. Mancourt, Dim: Bank Bldg., Detroit, Mich.
GEN. AUDITOR—A. K. Bowles, New York, N. Y.
ASST. GEN. AUDITOR—H. H. Snodderly, New York, N. Y.

TR—S. L. Watson, Fairmont, W. Va.
ASST. TR—T. K. Stuart, Baltimore, Md.
ASST. TR—Walton Miller, Fairmont, W. Va.
ASST. TR—D. P. Carey, New York, N. Y.
SECTY.—T. K. Stuart, Baltimore, Md.
ASST. SECTY. & ASST. TR—H. H. Warfield, New York, N. Y.
PA (General)—A. T. Watson, Fairmont, W. Va.
PA (Asst. General)—F. C. Davis, Fairmont, W. Va.
CE—Frank Haas, Fairmont, W. Va.
ASST. CE—J. C. Caskill, Fairmont, W. Va.
SUPT. P. & M. DEPT. (All Divisions)—R. L. Kingsland, Fairmont, W. Va.
ENGR. OF TESTS—R. E. Rightmire, Fairmont, W. Va.
ASST. ENGR. OF TESTS—W. D. Barrington, Fairmont, W. Va.
LIVE STOCK BUYER—Frank Amos, Fairmont, W. Va.
DIRECTOR (Employment-Relationship Department)—C. L. Green, Fairmont, W. Va.
DIRECTOR OF SAFETY—J. W. Reed, Fairmont, W. Va.
COAL INSPECTOR, GENERAL—C. F. Ice, Fairmont, W. Va.

ELKHORN DIVISION.

GM—J. G. Smythe, Jenkins, Ky.
GS—J. C. Hunsacker, Jenkins, Ky.
LOCAL AUDITOR—J. M. Kinzer, Jenkins, Ky.
SUPT. OF P. & M. DEPT.—P. H. Flaherty, Jenkins, Ky.
EM—L. B. Abbott, Jenkins, Ky.
PA—W. C. Lyne, Jenkins, Ky.

Consolidation Nos. 201 Mine; Drift; Elkhorn Seam, 79 to 110 in. thick.
PO—Burdine, Ky.; SP—Same; CTY—Letcher; RR—B. & O., S. V. & E. Br.
MS—G. T. Rumberger, Burdine, Ky.
SM—Glenn Crosby, Burdine, Ky.
S of H—6 ton and 1 ton elec. locos. Track gage 42 in.
S of M—Electric machs.
PP—1 return tubular boiler, 125 H. P., 2 gen. units, 176 volts A. C., 3 phase, 60 cycles and 275 volts D. C., 9 pumps, Power from Central Plant.
EMP—207. Last years tonnage 114,268.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

Consolidation No. 202 Mine; Drift; Elkhorn Seam, 80 to 89 in. thick.
PO—Burdine, Ky.; SP—Same; CTY—Letcher; RR—S. V. & E.
MS—G. T. Rumberger, Burdine, Ky.
SM—Glenn Crosby, Burdine, Ky.
S of H—6 ton gathering loco. Track gage 42 in.
S of M—3 electric machs.
PP—1 return tubular boiler, 100 H. P., 2 gen. units, 40,000-176 volts A. C., 3 phase, 60 cycles, 275 volts D. C., 3 phase, 60 cycles, sub-station.
EMP—99. Last years tonnage 92,687.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

Consolidation No. 203 Mine; Drift; Elkhorn Seam, 70 to 110 in. thick.
PO—Jenkins, Ky.; SP—Same; CTY—Letcher; RR—B. & O., S. V. & E. Br.
MS—J. M. Cardwell, Jenkins, Ky.
SM—W. R. McLaughlin, Jenkins, Ky.
S of H—6 ton battery loco, for gathering, 10 ton elec. loco. Track gage 42 in.
S of M—Mining mach.
PP—1 return tubular boiler, 100 H. P., 1 gen. unit, 40,000-176 volts A. C., 3 phase, 60 cycles, 275 volts D. C., Power from Central Plant.
EMP—159. Last years tonnage 131,116.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

Consolidation No. 204 Mine; Drift; Elkhorn Seam, 72 in. thick.

PO—Jenkins, Ky.; SP—Same; CTY—Letcher; RR—B. & O., S. V. & E.
GS—H. S. Carpenter, Jenkins, Ky.
MS—J. F. Daniels, Jenkins, Ky.
SM—L. B. Browning, Jenkins, Ky.
S of H—Electric locos. Track gage 42 in.
S of M—Mining mach.
PP—1 return tubular boiler, 125 H. P., 2 gen. units, 2,300 volts A. C., 176 volts A. C., 1 pump. Power from Central Plant.
EMP—253. Last years tonnage 213,577.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

Consolidation No. 205 Mine; Drift; Elkhorn Seam, 85 to 125 in. thick.
PO—Jenkins, Ky.; SP—Same; CTY—Letcher; RR—B. & O., S. V. & E.
GS—J. F. Daniels, Jenkins, Ky.
S of H—Electric locos. Track gage 42 in.
S of M—Mining mach.
PP—1 return tubular boiler, 100 H. P., 1 gen. unit, 176 volts A. C., 3 phase, 60 cycles, 275 volts D. C., 2 pumps. Power from Central plant.
EMP—210. Last years tonnage 189,678.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

Consolidation No. 206 Mine; Slope; Elkhorn Seam, 78 to 108 in. thick.
PO—Dunham, Ky.; SP—Jenkins, Ky.; CTY—Letcher; RR—B. & O., E. V. & E.
MS—W. A. Woody, Dunham, Ky.
SM—W. B. Day, Dunham, Ky.
S of H—6-ton and 10-ton elec. locos.
S of M—Mining machs.
PP—1 return tubular boiler, 150 H. P., 1 gen. unit, 40,000-176 volts A. C., 3 phase, 60 cycles, 275 volts D. C., Power from Central Plant.
EMP—206. Last years tonnage 163,265.
PREP. EQUIPT—Shaker Screens.
SIZES SHIPT—Run of Mine, Slack, Lump.

Consolidation Nos. 207-208 Mines; Drift; Elkhorn Seam, 78 to 108 in. thick.
PO—Dunham, Ky.; SP—Jenkins, Ky.; CTY—Letcher; RR—B. & O., S. V. & E.

MS—W. A. Woody, Dunham, Ky.
SM—W. B. Day, Dunham, Ky.
S of H—Electric locos. Track gage 42 in.
S of M—Mining machs.
PP—1 return tubular boiler, 150 H. P., 2 gen. units, 40,000-176 volts A. C., 3 phase, 60 cycles, 275 volts D. C., 1 pump. Power from Central Plant.
EMP—206. Last years tonnage 143,354.
SIZES SHIPT—Run of Mine, Slack.
PREP. EQUIPT—Bar Screens.

Consolidation Nos. 210, 211 and 212 Mines; Drifts; Elkhorn Seam; 73 to 100 in. thick.
PO—McRoberts, Ky.; SP—Same; CTY—Letcher; RR—L. & N., L. & E. Br.
MS—Walter Williams, McRoberts, Ky.
SM—C. S. Moss, McRoberts, Ky.
S of H—Electric and haulage locos. Track gage 42 in.
S of M—Mining machs.
PP—15 H. P. and 1-20 H. P. locos., 2 gen. units, 40,000-176 volts A. C., 3 phase, 60 cycles, 275 volts D. C., Power from Central Plant to Sub-Station.
EMP—193. Last years tonnage 159,206.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

Consolidation No. 213 Mine; Drift; Elkhorn Seam, 77 to 144 in. thick.
PO—McRoberts, Ky.; SP—Same; CTY—Letcher; RR—L. & N., L. & E. Br.
MS—Walter Williams, McRoberts, Ky.
SM—C. S. Moss, McRoberts, Ky.
S of H—Combination battery and haulage locos. Track gage 42 in.
S of M—Mining machs.
PP—1 return tubular boiler, 100 H. P., 1 gen. unit, 40,000-176 volts A. C., 3 phase 60 cycles, 275 volts D. C., Power from Central Plant.
EMP—148. Last years tonnage 91,881.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

Consolidation No. 214 Mine; Drift; Elkhorn Seam, 60 to 102 in. thick.
PO—McRoberts, Ky.; SP—Same; CTY—Letcher; RR—L. & N., L. & E. Br.
GS—G. W. Hay, McRoberts, Ky.
SM—M. H. Forester, McRoberts, Ky.
SM—C. S. Moss, McRoberts, Ky.
S of H—Combination battery and haulage locos. Track gage 42 in.
S of M—Mining machs.
PP—1 return tubular boiler, 125 H. P., 2 gen. units, 40,000-176 volts A. C., 3 phase, 60 cycles, 275 volts D. C., Power from Central Plant.
EMP—232. Last years tonnage 198,148.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.

(Continued on Next Page)

Consolidation Coal Co.—Cont.

Consolidation No. 215 Mine; Slope; Elk-born Seam, 68 to 90 in. thick.
PO—McRoberts, Ky.; SP—Same; CTY—Letcher; RR—L. & N. L. & E.
MS—M. H. Forester, M. Roberts, Ky.
S of H—Combination battery and haulage locom. Track gage 42 in.
S of M—Mining machs.
PP—2 gen. units, 40,000-176 volts A. C., 3 phase, 60 cycles, 275 volts D. C., 1 pump. Power from Central Plant.
EMP—100. Last years tonnage 133,148.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

MILLERS CREEK DIVISION.

GM—E. R. Price, Van Lear, Ky.
SM—P. L. Hughes, Van Lear, Ky.
EM—William Gunning, Van Lear, Ky.
SUPT. P. & M. H. L. P. C. J. Fueter, Van Lear, Ky.
PA—C. L. Hawkins, Van Lear, Ky.

No. 151 Mine; Drift; Millers Creek No. 1 Seam, 36 to 48 inches thick.
PO—Van Lear, Ky.; SP—Van Lear Jet., Ky.; CTY—Johnson; RR—Miller's Creek, C. & O.
MS—J. A. Cook, Van Lear, Ky.
SM—P. L. Hughes, Van Lear, Ky.
S of H—4 elec. locos. Track gage 42 in.
S of M—4 elec. machs.
PP—6 water tube boilers, total 1500 H. P., 2 gen. units, 4000 volts A. C., 3 phase, 60 cycles, 250 volts D. C.
EMP—73. Last years tonnage 45,253.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker and Knecker Screens with Lump Loading Booms.

No. 152 Mine; Drift; Millers Creek No. 1 Seam, 34-54 in. thick.
PO—Van Lear, Ky.; SP—Van Lear Jet., Ky.; CTY—Johnson; RR—Miller's Creek, C. & O.
MS—J. A. Cook, Van Lear, Ky.
SM—P. L. Hughes, Van Lear, Ky.
S of H—4 elec. locos. Track gage 24 in.
S of M—4 elec. machs.
PP—6 return tubular boilers, total 1500 H. P., 2 gen. units, 4000 volts A. C., 3 phase, 60 cycles, 250 volts D. C.
EMP—68. Last years tonnage 65,742.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker and Knecker Screens.

No. 153 Mine; Drift; Millers Creek No. 1 Seam, 34-41 in. thick.
PO—Van Lear, Ky.; SP—Van Lear Jet., Ky.; CTY—Johnson; RR—C. & O. Miller's Creek R. R.
MS—Wm. H. Harrison, Van Lear, Ky.
SM—P. L. Hughes, Van Lear, Ky.
S of H—4 electric locos. Track gage, 42 in.
S of M—4 electric machs.
PP—6 return tubular boilers, total 1500 H. P., 2 gen. units, 4000 volts A. C., 3 phase, 60 cycles, 250 volts D. C.
EMP—86. Last years tonnage 448,896.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Loading Booms.

No. 154 Mine; Drift; Millers Creek No. 1 Seam, 40-54 in. thick.
PO—Van Lear, Ky.; SP—Van Lear Jet., Ky.; CTY—Johnson; RR—Miller's Creek, C. & O.
MS—Wm. H. Harrison, Van Lear, Ky.
SM—P. L. Hughes, Van Lear, Ky.
S of H—10 electric locos. Track gage 42 in.
S of M—6 electric machs.
PP—6 return tubular boilers, total 1500 H. P., 2 gen. units, 4000 volts A. C., 3 phase, 60 cycles, 250 volts D. C.
EMP—127. Last years tonnage 110,566.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Loading Booms.

No. 155 Mine; Slope; Miller Creek No. 1 Seam, 34-50 in. thick.
PO—Van Lear, Ky.; SP—Van Lear Jet., Ky.; CTY—Johnson; RR—Miller's Creek, C. & O.
MS—Wm. H. Harrison, Van Lear, Ky.
SM—J. E. Hughes, Van Lear, Ky.
S of H—7 elec. locos. Track gage 42 in.
S of M—6 elec. machs.
PP—6 return tubular boilers, total 1500 H. P., 2 gen. units, 4000 volts A. C., 3 phase, 60 cycles, 250 volts D. C.
EMP—134. Last years tonnage 73,982.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Loading Booms.

COPPER FORK COAL CO.
Now The Clover Leaf Coal Company

CORNETT-LEWIS COAL COMPANY

General Office, Harlan, Ky.
PR—Denver B. Cornett, Louisville, Ky.
VP—A. B. Cornett, Harlan, Ky.
TR—W. W. Lewis, Harlan, Ky.
GM—R. E. Lawson, Pineville, Ky.
PA—R. E. Lawson, Pineville, Ky.
CE—Henry Gross, Harlan, Ky.
EM—R. M. Watt, Pineville, Ky.
SCG—Address the Company, Buyer, Clarence Middleton, Harlan, Ky.
SA—Sun Coal Company, Dime Bank Bldg., Detroit, Mich.

Cornett-Lewis Mine; Drift; High Spint Seam, 66 inches thick.
PO—High Spint, Ky.; SP—S. Agnew, Ky.; CTY—Harlan, Ky.; RR—L. & N.
S of H—Elec. locos. Track gage 48 in.
S of M—Shortwall machs.
PP—Power purchased, Transformer 23000—250 volts, M. G. Sets 250 volts D. C.
EMP—100. Daily output 200 tons.
SIZES SHIPT—Slack, Nut, Egg, Lump and Block.
PREP. EQUIPT—Picking Tables and Loading Booms.

CORSON BY-PRODUCT COAL CORP.
Now part of Kanawha Elkhorn Collieries, Inc.

CORYDON COAL COMPANY
Now Kentucky Diamond Coal Co.

COVE BRANCH COAL COMPANY
General Office, Corbin, Ky.
PR—Frank Ward, Wilton, Ky.
VP—J. P. Lawson, Wilton, Ky.
TR—M. A. Gray, Corbin, Ky.
PA—M. A. Gray.
GM—J. P. Lawson, Wilton, Ky.

Cove Branch Mine; Drift; Jellico and Blue Gm. Seams, 54 in. thick.
PO—Wilton, Ky.; SP—Woodbine, Ky.; CTY—Knox; RR—L. & N., Wilton Branch.
S of H—Mules. Track gage 36 in.
S of M—Hand.
EMP—15. Last years tonnage 77,000.
SIZES SHIPT—Run of Mine.

COW CREEK COAL COMPANY
General Office, Prestonsburg, Ky.
PR—S. E. Allen, Prestonsburg, Ky.
VP—J. M. Weddington, Prestonsburg, Ky.
TR—Samuel L. Spradlin, Prestonsburg, Ky.
GM—S. E. Allen, Prestonsburg, Ky.
GS—S. E. Allen, Prestonsburg, Ky.
PA—S. E. Allen, Prestonsburg, Ky.
CE—W. P. Harris, Prestonsburg, Ky.
SA—Ohio & Kentucky Fuel Co., Cincinnati, Ohio.

Cow Creek Mine; Drift; No. 1 Elkhorn Seam, 48 inches thick.
PO—Emma, Ky.; SP—Same; CTY—Floyd, RR—C. & O.
MS—Elder Ball, Emma, Ky.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
EMP—30. Last years tonnage 20,000.
SIZES SHIPT—Run of Mine.

COWAN CREEK COAL COMPANY
General Office, Cincinnati, O.
PR—Fred Legg, Cincinnati, O.
VP—D. A. Vandy, Cincinnati, O.
TR—W. I. Donnelly, Cincinnati, O.
PA—J. L. Darlington, Iee, Ky.
SCG—Address the Company, Buyer, B. B. Banks, Iee, Ky.
SA—Logan Kanawha Coal Co., Cincinnati, O.

Cowan Creek Mine; Drift; Hazard No. 4 Seam, 40 inches thick.
PO—Iee, Ky.; SP—Same; CTY—Letcher; RR—L. & N.
MS—J. L. Darlington, Iee, Ky.
S of H—Mules. Track gage 44 inches.
S of M—Hand.
PP—1 150 H. P. fire tube boiler, gen. unit, 1—100 K. W., 250 volts D. C.
EMP—25. Last years tonnage 7,700.
PRODUCTS—Steam, Domestic, By Product.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Shaker Screens, Loading Booms.
Note—Formerly operated by the Cumberland & Hazard Mining Company.

CRANTREE COAL MINING CO.
Now Tradewater Coal Company.

CRANE CREEK COAL CO.
General Office, Pineville, Ky.
TR—C. P. Armbrige, Charleston, W. Va.
GM—G. H. Mitting, Pineville, Ky.
GS—L. P. Vermillion, Harlan, Ky.
PA—D. Howard, Harlan, Ky.
SCG—Address the company, Buyer, C. H. Jones, Colmar, Ky.
SA—Logan Powr Fuel Co., Charleston, W. Va.

Crane Creek Mine; Drift; Mason Seam, 44 in. thick.
PO—Colmar, Ky.; SP—Cross, Ky.; CTY—Boyle; RR—L. & N.
MS—R. L. Mattingly, Colmar, Ky.
S of H—Mules. Track gage, 44 in.

S of M—Hand.
EMP—50. Daily output, 250 tons.
SIZES SHIPT—Run of Mine, Nut, Slack, Lump.

CRAWFORD COAL CORPORATION
General Office, Williamson, Ky.
PR—J. H. Bowling, Lexington, Ky.
VP—C. A. Perkins, Knoxville, Tenn.
TR—N. B. Perkins, Williamson, Ky.
GM—J. H. Bowling, Lexington, Ky.
GS—W. L. Card, Bonnyman, Ky.
PA—J. H. Bowling, Lexington, Ky.
SCG—Address the Company, Buyer, W. V. Lindsay, Bonnyman, Ky.

SA—Southern Coal & Coke Co., Cincinnati, Ohio.
Crawford Mine; Drift; No. 6 Seam, 82 inches thick.
PO—Bonnyman, Ky.; SP—L. N. Typo, Ky.; Fr., Perling, Ky.; CTY—Perry, RR—L. & N.
S of H—Trolley pole type locos. Track gage 48 in.
S of M—3 shortwall machs.
PP—Power purchased, Transformer, 23000 volts A. C., rotary converters, 250 volts D. C., 1 pump.
EMP—210. Last years tonnage 126,498.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

CREECH COAL CO.
General Office, Talla, Ky.
PR—R. W. Creech, Pineville, Ky.
VP—H. G. Randall, Talla, Ky.
TR—Jno. E. Starbuck, Talla, Ky.
GM—R. W. Creech, Pineville, Ky.
GS—H. Silvers, Talla, Ky.
PA—R. W. Creech, Pineville, Ky.
CE—G. W. Creech, Pineville, Ky.
SCG—Address the Company, Buyer, Grover Creech, Talla, Ky.

SA—John A. Emsline, Northern Sales Mgr., 733 Union Trust Bldg., Cincinnati, Ohio; Randall Bros., Inc., Southern Sales Agt., Atlanta, Ga.
Creech Mine; Drift; Wallins Seam, 72 in. thick.
PO—Talla, Ky.; SP—Wallins, Ky.; CTY—Harlan; RR—L. & N.
SM—T. B. Riley, Talla, Ky.
S of H—9 trolley pole type locos. Track gage 48 in.
S of M—9 shortwall machs.
PP—Power purchased, transformer 4,000-250 volts A. C., 1 40 H. P. fire tube boiler, 250 volts D. C.
EMP—200. Last years tonnage 186,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Lump, Block, Steam.
PREP. EQUIPT—Shaker Screens, Loading Booms.

CREECH MINING COMPANY
Now part of Kresge Coal & Mining Co.

CRESCENT COAL CO.
General Office, Bevier, Ky.
PR—Wm. H. Lindsey, Nashville, Tenn.
VP—Frank S. Washburn, New York, N. Y.
TR—D. B. Duncan, Bevier, Ky.
GM—F. P. Wright, Bevier, Ky.
GS—F. P. Wright, Bevier, Ky.
PA—F. P. Wright, Bevier, Ky.
EE—W. W. Graham, Bevier, Ky.
SCG—Crescent Store, Buyer, John L. Faughender, Bevier, Ky.

Crescent Mine; Shaft; Western Kentucky No. 9 Seam, 60 inches thick.
PO—Bevier, Ky.; SP—Same; CTY—Mohlberg, RR—L. & N. & O. Div.
MS—R. L. Adcock, Bevier, Ky.
S of H—Mules and 4 10 ton trolley pole type locos. Track gage 36 in. S of M—10 elec. steam locom. machs.
PP—4 water tube boilers, total 600 H. P., 2—175 K. W. gen. units, 250 volts D. C., 5 pumps.
EMP—250. Last years tonnage 181,145.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens.

CRESCENT COAL CO.
General Office, E. Bernstadt, Ky.
PR—C. L. Green, Viva, Ky.
VP—Jesse Cloud, Viva, Ky.
TR—Jesse Cloud, Viva, Ky.
GM—C. C. Green, Viva, Ky.
GS—Robert Baldy, Atlanta, Ga.
PA—T. P. Watkins, E. Bernstadt, Ky.

"Crescent" Mine; Drift; "Jellico" Seam, 24 in. thick.
PO—Viva, Ky.; SP—E. Bernstadt, Ky.; CTY—Laurel; RR—L. & N.
S of H—Mules. Track gage 36 in.
S of M—Hand.
EMP—50. Last years tonnage 20,000.
SIZES SHIPT—Run of Mine, Slack, Nut.
PREP. EQUIPT—Bar Screens.

CRESSMONT COAL COMPANY, INC.
General Office, Cressmont, Ky.
PR—G. B. Wheeler, Cressmont, Ky.
VP—J. A. Hutton, Cressmont, Ky.
TR—G. P. Bahbitt, Cressmont, Ky.
GM—F. Stuberger, Cressmont, Ky.
PA—J. A. Hutton, Cressmont, Ky.

Cressmont Mine; Drift; Seam 38 inches thick.
PO—Cressmont, Ky.; SP—Ft., Caryton, Ky.; Ex., Mohlberg, Ky.; CTY—Lee; RR—K. R. & C. to Caryton, L. & N.
S of H—Mules and rope. Track gage 42 inches.
S of M—Hand.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Bar Screens.

CROWN BY-PRODUCT COAL COMPANY
PR—C. B. Wilburn, Chevrolet, Ky.
VP—R. R. Johnson, Atlanta, Ga.
TR—R. R. Johnson, Atlanta, Ga.
GM—C. B. Wilburn, Chevrolet, Ky.
PA—J. Wilburn, Chevrolet, Ky.
EM—M. C. Taylor, U. S. Steel, Ky.
SCG—Address the company, Buyer, C. F. Wilburn, Chevrolet, Ky.
SA—R. O. Campbell Coal Co., Atlanta, Ga.

Crown Mine, Drift, Harlan Seam, 54 in. thick.
PO—Chevrolet, Ky.; SP—Ft., Chevrolet; Ex., Harlan, Ky.; CTY—Harlan; RR—L. & N.
MS—J. B. DuBois, Chevrolet, Ky.
S of H—2 trolley pole type locos, 1 storage battery loco. Track gage 42 inches.
S of M—4 shortwall machs.
PP—Power purchased, 175 volts D. C., 3 pumps.
EMP—200. Daily tonnage 1,200.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

CRYSTAL BLOCK COAL COMPANY
Crystal Block Mine.
PO—Richardson, Ky.; SP—E. L. Branch, Ky.; CTY—Lawrence; RR—C. & O.
No report.

CRYSTAL COAL COMPANY.
General Office, Knoxville, Tenn.
PR—L. C. Ginter, Knoxville, Tenn.
VP—J. L. Sanders, Logmont, Ky.
TR—S. W. Jayne, Knoxville, Tenn.
GM—J. L. Sanders, Logmont, Ky.
GS—G. M. Ramsey, Logmont, Ky.
PA—J. L. Sanders, Logmont, Ky.
CE—J. C. Richardson, Middlesboro, Ky.
EE—H. A. Sparks, Ralston, Ky.
SCG—Address the Company, Buyer, A. D. Shackelford, Logmont, Ky.
Sales Agent—S. W. Jayne, Burwell Bldg., Knoxville, Tenn.

Popular, Lick and Higginse Mines; Drift; Popular, Lick and Higginse Seams.
PO—Logmont, Ky.; SP—Elwood, Ky.; CTY—Boyle; RR—L. & N., C. & V. Div.
S of H—3 elec. locos, 6 mules. Track gage 41 inches.
S of M—4 mining machs.
PP—3 water tube boilers, total 250 H. P., gen. units, 150 K. W., 250 volts D. C., 5 pumps.
EMP—75. Daily tonnage 250.
PREP. EQUIPT—Shaker Screens, Picking Tables, Washery.
Old Information.

CUMBERLAND & HAZARD MINING CO.
Out of business.

CUMBERLAND COAL & COKE CO.
General Office, Paintsville, Ky.
PR—Jno. E. Buckingham, Paintsville, Ky.
TR—E. M. Brown, Melvin, Ky.
GS—E. M. Brown, Melvin, Ky.
CE—S. B. Purcell, Paintsville, Ky.
SA—C. L. Ryley, Lexington, Ky.

Cumberland No. 1 Mine; Drift; Upper Elkhorn Seam, 48 in. thick.
PO—Melvin, Ky.; SP—Same; CTY—Floyd; RR—B. & O.
S of H—Mules. Track gage, 42 in.
S of M—Hand.
SIZES SHIPT—Run of Mine.
Old Information.

CUMBERLAND-ELKHORN COAL CO.
Now a part of the Kanawha Elkhorn Collieries Co., Inc.

CUMBERLAND RIVER COAL & OIL CO.
PR—G. C. Croft, N. Y.
TR—E. C. Croft, N. Y.
GM—G. C. Croft, N. Y.
GS—G. C. Croft, N. Y.
PA—G. C. Croft, N. Y.
SCG—Address the company, Buyer, G. C. Croft, N. Y.

SA—G. C. Croft, N. Y.
Cumberland Mine; Drift; B. Gm. Seam, 40 inches thick.
PO—Nashville, Ky.; SP—Same; CTY—Waddy; RR—L. & N., Pine Mountain Branch.
MS—Ben Crosby, Nashville, Ky.
S of H—Mules, steam locos. Track gage 36 inches.
S of M—Hand.
(Continued on Next Page)

Cumberland River Coal & Co.—Cont.

PP—1 fire tube boiler, 45 H. P.
EMP—30. Daily tonnage 50.
SIZES SHIPT—Run of Mine, Slack,
Block.
PREP. EQUIPT—Gravity Screens.

CUMMINGS & DAY

General Office, Deaneville, Ky.
PR—C. W. Wells, Deaneville, Ky.
VP—O. K. Wells, Deaneville, Ky.
TR—C. W. Wells, Deaneville, Ky.
GM—C. W. Wells, Deaneville, Ky.
GS—C. W. Wells, Deaneville, Ky.
PA—C. W. Wells, Deaneville, Ky.
CE—J. B. Hess, Central City, Ky.
SCO—Address the Company, Buyer, C. W.
Wells, Deaneville, Ky.
SA—C. W. Wells, Deaneville, Ky.

Ellis Mine; Shaft; No. 4 Seam, 58-60
inches thick.
PO—Deaneville, Ky.; SP—Same; CTY—
Ohio; RR—L. & N.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—1 pump.
EMP—31. Daily tonnage 125.
SIZES SHIPT—Run of Mine, Slack,
Lump.
Old Information.

DANIEL BOONE COAL COMPANY.

Now The Maynard Coal Company.

DARB FORK COAL COMPANY

General Office, Hazard, Ky.
PR—John Shively, Catlettsburg, Ky.
VP—C. C. Byron, Catlettsburg, Ky.
TR—A. E. Silcott, Hazard, Ky.
GM—S. R. Hardy, Hazard, Ky.
PA—S. R. Hardy, Hazard, Ky.
CE—H. S. Adkins, Hazard, Ky.
SCO—Address the Company, Buyer, H. M.
Combs, Hazard, Ky.
SA—Chesapeake & Virginia Coal Co.,
Lynchburg, Va.

Darb Fork Mine; Drift; Hazard No. 4
Seam, 42 in. thick.
PO—Hazard, Ky.; SP—Taubert, Ky.; CTY—
Perry; RR—L. & N.
MS—Ernest Bray, Hazard, Ky.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
EMP—75. Daily tonnage 300.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

DARBY-HARLAN COAL COMPANY

General Office, Everts, Ky.
PR—N. B. Smith, Evert, Ky.
VP—E. N. Early, Evert, Ky.
TR—B. C. Lewis, Harlan, Ky.
GM—N. E. Smith, Everts, Ky.
EM—E. E. Bartlett, Middleboro, Ky.
SA—Blue Diamond Coal Sales Co., Cin-
cinnati, O.

Darby-Harlan Mine; Drift; Harlan Seam,
50 in. thick.
PO—Everts, Ky.; SP—Same; CTY—Har-
lan; RR—L. & N.
MS—F. M. Sniddy, Everts, Ky.
S of H—Mules and 1 storage battery loco.
Track gage 42 in.
S of M—Shortwall machs.
PP—Power purchased. Transformer, 220
volts A. C., 1 pump.
EMP—40. Daily tonnage 150.
SIZES SHIPT—Run of Mine.

DAVIS, R. T. COAL CO., INC.

General Office, Jackson, Ky.
PR—R. T. Davis, " "
TR—Hugh Needham, " "
GM—R. T. Davis, " "
GS—R. T. Davis, " "
PA—Hugh Needham, " "
CE—J. H. Canning, " "
DAVIS Mine; Drift; No. 4 Seam; 36 to
48 in. thick.
PO—Jackson, Ky.; SP—Same; CTY—
Breathitt; RR—L. & N.
S of H—Mules. Track gauge 36".
S of M—Hand.
EMP—35.
SIZES SHIPT—Run of Mine.
Old Information.

DEAN BRANCH COAL COMPANY

General Office, Belljello, Ky.
PR—Palmer M. Johnston, Belljello,
Ky.
VP—D. C. Johnston, Belljello, Ky.
TR—J. T. Johnston, Belljello, Ky.
GM—W. McC. Johnston, Belljello, Ky.
GS—W. McC. Johnston, Belljello, Ky.
PA—W. McC. Johnston, Belljello, Ky.
SCO—Address the Company, Buyer, W.
McC. Johnston, Belljello, Ky.
SA—W. McC. Johnston, Belljello, Ky.

No. 1 Mine; Dean Seam, 72 in. thick.
PO—Belljello, Ky.; SP—Flowers; CTY—
Bell; RR—L. & N., C. V. Branch.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine, Slack, Egg,
Lump, Block.
Old Information.

DEFIANCE COAL MINING COMPANY

General Office, Happy, Ky.
PR—P. C. Harley, Defiance, O.
VP—T. C. Jacks, Happy, Ky.
GM—T. C. Jacks, Happy, Ky.
GS—T. C. Jacks, Happy, Ky.
PA—T. C. Jacks, Happy, Ky.
SA—Blue Diamond Coal Co., Cincin-
nati, O.

Defiance Mine; Drift; No. 7 Seam, 58
inches thick.
PO—Happy, Ky.; SP—Defiance, O.; CTY—
Perry; RR—L. & N.
S of H—Electric loco. Track gage 48
inches.
S of M—Shortwall mach.
PP—Purchase power. Transformer 2,300
to 440-220 volts A. C., M. G.
sets, 250 volts D. C.
EMP—50. Daily tonnage 200.
SIZES SHIPT—Run of Mine, Slack, Nut,
Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Loading
Booms.

DENVER COAL COMPANY

General Office, Denver, Ky.
GM—Paris Pelphrey, Denver, Ky.
EM—Towens Combs, Langley, Ky.
SCO—Address the Company, Buyer, Paris
Pelphrey, Denver, Ky.

Denver Mine; Drift; No. 1 Seam, 32-
42 in. thick.
PO—Denver, Ky.; SP—Same; CTY—
Johnson; RR—R. S. Ky.
S of H—Mules. Track gage 44 inches.
S of M—Hand.
EMP—40. Daily tonnage 150.
SIZES SHIPT—Run of Mine.

DESSIE-ELLEN BLUE GEM COAL CO.

General Office, Williamsburg, Ky.
PR—John Gaines, Nevisdale, Ky.
TR—P. Weesner, Williamsburg, Ky.
GM—Ell Murray, Dal, Ky.
GS—Ell Murray, Dal, Ky.
PA—P. Weesner, Williamsburg, Ky.
CE—M. G. Sullivan, Emlyn, Ky.
SCO—Address the Company, Buyer, J. P.
Weesner, Williamsburg, Ky.

Dessie Ellen Mine; Drift; Blue Gem
Seam, 28 inches thick.
PO—Williamsburg, Ky.; SP—Dal, Ky.;
CTY—Whitley; RR—L. & N.
PP—Water tube boiler.
EMP—15. Daily tonnage 50.
SIZES SHIPT—Run of Mine, Slack, Nut,
Block.
PREP. EQUIPT—Bar Screens.
Old Information.

DETROIT-KENTUCKY COAL COMPANY

Now part of Ford Elkhorn Mng. Co.

DEVINE, M. E.

General Office, Hawesville, Ky.

Devines Mine; Drift; Seam 48 inches
thick.
PO—Hawesville, Ky.; SP—Same; CTY—
Hancock; RR—L. H. & St. L.
S of M—Hand.
S of H—Electric. Track gage 36 inches.
EMP—14. Last years tonnage 4,335.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Picking Tables.

DEVON COAL COMPANY

General Office, Pineville, Ky.
PR—R. I. Cawthorne, Pineville, Ky.
VP—P. K. Salsburg, Pineville, Ky.
TR—H. R. Mitchell, Pineville, Ky.
GM—P. K. Salsburg, Pineville, Ky.
PA—H. B. Mitchell, Pineville, Ky.
EM—H. B. Mitchell, Pineville, Ky.
SA—Devon Coal Co., Pineville, Ky.

Devon Mine; Drift; Harlan Seam, 48
inches thick.
PO—Balkan, Ky.; SP—Tejay, Ky.; CTY—
Bell; RR—L. & N.
MS—J. A. Ketron, Balkan, Ky.
S of H—Mules. Track gage 44 inches.
S of M—Hand.
PP—Purchase power.
EMP—40.
SIZES SHIPT—Run of Mine, Slack, Pea,
Block.
PREP. EQUIPT—Bar Screens.

DIAMOND BLOCK COAL CO.

General Office, Diablock, Ky.
PR—Randolph Harrison, Lynchburg, Va.
VP—S. H. Meem, Bluefield, W. Va.
TR—G. H. Wilkins, Lynchburg, Va.
GM—R. F. Haskins, Jr., Diablock, Ky.
GS—C. H. Bower, Diablock, Ky.
PA—J. E. Lambert, Diablock, Ky.
CE—M. A. Emmons, Montago, Ky.
EE—John Tyree, Diablock, Ky.
SCO—J. E. Lambert, Diablock, Ky.
SA—The Matthew & Addy Co., Cincin-
nati, O.

Diamond Block Mine; Drift; No. 4 Seam,
48 in. thick.
PO—Diablock, Ky.; SP—Karlles; CTY—
Perry; RR—L. & N.
S of H—Trolley pole type locos. Track
gage, 44 in.
S of M—Shortwall machs.

PP—Power purchased, transformer 2,200-
440 volts A. C., rotary converters,
250 volts D. C., 2 pumps.
EMP—70. Last fiscal year output,
80,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut,
Egg, Block.
PREP. EQUIPT—Shaker Screens, Picking
Tables, Loading Booms.

DIAMOND COAL CO.

General Office, Providence, Ky.
PR—J. E. Palmer, Providence, Ky.
VP—J. E. Palmer, Providence, Ky.
TR—M. C. Palmer, Providence, Ky.
GM—S. D. Palmer, Providence, Ky.
GS—S. D. Palmer, Providence, Ky.
EM—M. C. Palmer, Providence, Ky.
SCO—Buyer, E. C. Morris, Providence,
Ky.

Diamond Nos. 1, 2 and 3 Mines; Slope;
No. 9 Seam, 60 in. thick.
PO—Providence, Ky.; SP—Same; CTY—
Webster; RR—L. & N.
S of H—Rope. Track gage, 42 in.
S of M—14 comp. air punchers.
PP—2 150 H. P., 1—85 H. P. and
1—70 H. P. return tubular boilers,
10 pumps.
EMP—175. Last years tonnage 135,000.
SIZES SHIPT—Run of Mine, Slack, Nut,
Egg, Lump.
PREP. EQUIPT—Shaker Screens.

DIXIE COAL CO.

General Office, Box 666, Evansville, Ind.
PR—Wm. Eichel, Evansville, Ind.
VP—Geo. S. Pritchett, Spottsville, Ky.
TR—Bert Koenig, Box 666, Evansville,
Ind.

GH—Geo. S. Pritchett, Sr., Spottsville,
Ky.
GS—Geo. S. Pritchett, Sr., Spottsville,
Ky.
PA—Bert Koenig, Box 666, Evansville,
Ind.
SA—Wm. Eichel, Box 666, Evansville,
Ind.

Flower Hill Mine; Shaft; Seam, 58 in.
thick.
PO—Spottsville, Ky.; SP—Same; CTY—
Henderson.
S of H—Mules. Track gage, 28 in.
S of M—Hand.
PP—1 70 H. P. marine boiler, 2
pumps.
EMP—25. Daily output, 100 tons.
Old Information.

DRAKE BLUE GEM COAL CO.

General Office, Nevisdale, Ky.
PR—T. B. Mahan, Williamsburg, Ky.
VP—J. C. Mahan, Williamsburg, Ky.
TR—T. J. Roberts, Williamsburg, Ky.
GM—Wm. Mahan, Williamsburg, Ky.
GS—William Stott, Nevisdale, Ky.
PA—Wm. Mahan, Williamsburg, Ky.
CE—Archie Stott, Packard, Ky.
SCO—Address the Company, Buyer, Wm.
Mahan, Nevisdale, Ky.
SA—Southern Coal & Coke Co., Cincin-
nati, O. and Knoxville, Tenn.

Drake Nos. 1 and 2 Mines; Drift; Blue
Gem Seam, 26 in. thick.
PO—Nevisdale, Ky.; SP—Same; CTY—
Whitley; RR—L. & N.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
EMP—56. Last years tonnage 18,000.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump, Block.
PREP. EQUIPT—Gravity Screens.

DRAYER COAL COMPANY

Drayer Mine.
PO—Willard, Ky.; SP—Same; CTY—
Carter; RR—Eastern Kentucky.
No report.

DRY BRANCH COAL CO.

General Office, Gray, Ky.
PR—J. T. Gray, Gray, Ky.
TR—Fred Owens, Gray, Ky.
GM—R. G. Ridner, Gray, Ky.
Dry Branch Mine; Drift; Mason Seam, 40
inches thick.
PO—Balkan, Ky.; SP—Tejay, Ky.; CTY—
Bell; RR—L. & N.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
Daily tonnage 100.
SIZES SHIPT—Run of Mine.

DRY FORK COAL COMPANY

Dry Fork Mine.
PO—Bells Trace, Ky.; SP—Same; CTY—
Carter; RR—Eastern Kentucky.
No report.

DUDLEY COAL COMPANY

General Office, Lexington, Ky.
PR—W. S. Dudley, Lexington, Ky.
VP—Geo. P. Morrison, Lexington, Ky.
TR—Geo. P. Morrison, Lexington, Ky.
GM—W. F. Mandt, David, Ky.
GS—Geo. Symon, David, Ky.
PA—W. F. Mandt, David, Ky.
CE—Z. H. Zimmerman, Whitesburg, Ky.
SCO—Address the Company, Buyer, G.
C. Rafferty, David, Ky.

Dudley Mine; Drift; Hazard No. 4 Seam,
60 inches thick.
PO—David, Ky.; SP—Blackey, Ky.; CTY—
Letcher; RR—L. & N.
S of H—2 trolley pole type locos. Track
gage 48 inches.
S of M—3 shortwall machs.
PP—Power purchased. Transformer 2200
volts A. C. M. G. Set, 250 volts
D. C.
EMP—61. Daily tonnage 800.
SIZES SHIPT—Run of Mine, Slack, Pea,
Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking
Tables, Loading Booms.

DUDLEY PARK COAL CO., THE

General Office, Heidelberg, Ky.
PR—J. Cleves Short, Heidelberg, Ky.
TR—J. Cleves Short, Heidelberg, Ky.
GS—James S. Farley, Heidelberg, Ky.
SA—Price Wilson, Heidelberg, Ky.

Dudley Park Mine; Drift; Beattyville
Seam, 40-44 in. thick.
PO—Heidelberg, Ky.; SP—Same; CTY—
Lee; RR—L. & N.
S of H—Mules. Track gage 36 to 42
inches.
S of M—Hand.
EMP—20. Daily tonnage 50.
PREP. EQUIPT—Bar Screens.

DUFF POND CREEK COAL COMPANY

General Office, Sharondale, Ky.
PR—W. J. Smith, Sharondale, Ky.
VP—Earl Goode, Williamsou, W. Va.
TR—J. H. Duff, Huntington, W. Va.
GM—J. H. Duff, Huntington, W. Va.
PA—J. H. Duff, Huntington, W. Va.
CE—D. M. Goode, Williamsou, W. Va.
EM—Earl Goode, Williamsou, W. Va.
SCO—Address the Company, Buyer, W. H.
Duff, Sharondale, Ky.
SA—W. J. Beals, Bluefield, W. Va.

Duff-Pond Creek Mine; Drift; Freeburn
Seam, 50 inches thick.
PO—Sharondale, Ky.; SP—Stone, Ky.;
CTY—Pike; RR—N. & W.
MS—Fred Bunyon, Sharondale, Ky.
S of H—Mules. Track gage 44 inches.
S of M—Hand.
PP—Power purchased.
EMP—24. Daily tonnage 100.
SIZES SHIPT—Run of Mine.
Old Information.

DUNCAN, W. G. COAL CO.

General Office, Greenville, Ky.
PR—W. G. Duncan, Greenville, Ky.
VP—C. W. Taylor, Greenville, Ky.
TR—A. W. Duncan, Greenville, Ky.
GM—C. W. Taylor, Greenville, Ky.
GS—W. G. Duncan, Jr., Greenville, Ky.
PA—C. W. Taylor, Greenville, Ky.
CE—C. M. Means, Pittsburgh, Pa.
EM—R. M. Woodson, Greenville, Ky.
EE—D. W. Christian, Greenville, Ky.
SCO—Address the Company, Buyer, R. D.
Brooks, Graham, Ky.; N. E. Harper,
Luzerne, Ky.

SA—Southern Coal Co., Memphis, Tenn.
Graham Mine; Drift; No. 9 Seam, 60
in. thick.
PO—Graham, Ky.; SP—Same; CTY—
Muhlenberg; RR—Illinois Central.
MS—A. Pollock, Graham, Ky.
S of H—Mules and 5 trolley pole type
locos. Track gage 39 in.
S of M—3 chain breast and 10 shortwall
machs.
PP—3 water tube boilers, 550 H. P.,
gen. units, 1—1000 K. W. and
1—2000 K. W., 3 M. G. Sets, 250
volts D. C., 6 pumps.
EMP—400. Last years tonnage 334,373.
SIZES SHIPT—Run of Mine, Slack, Nut,
Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking
Tables, Loading Booms.

Luzerne Mine; Drift; No. 9 Seam, 56
in. thick.
PO—Luzerne, Ky.; SP—Same; CTY—
Muhlenberg; RR—Illinois Central.

MS—A. O. Roll, Greenville, Ky.
SM—N. E. Harper, Luzerne, Ky.
S of H—Mules and 4 trolley pole type
locos. Track gage, 39 in.
S of M—3 chain breast type and 6 short-
wall machs.
PP—Power from Graham, M. G. Sets,
250 volts D. C., 6 pumps.
EMP—280. Last years tonnage 189,175.
SIZES SHIPT—Run of Mine, Slack, Nut,
Egg, Lump.
PREP. EQUIPT—Marcus Shaker Screens,
Picking Tables.

DUNNING-GORDON MINING COMPANY

General Office, Madisonville, Ky.
TRUSTEES—Ernest Dunning, Madison-
ville, Ky., and W. L. Gordon, Jr.,
Madisonville, Ky.
SA—Gordon Mining Co., Madisonville,
Ky.

Pigeon Run Nos. 1 and 2 Mines; Drift;
No. 9 Seam, 60 inches thick.
PO—St. Charles, Ky.; SP—Same; CTY—
Hopkins; RR—I. C.

(Continued on Next Page)

Dunning-Gordon Mining Co.—Cont.

S of H—Mules and steam locos. Track gage 36 inches.
S of M—Hand.
EMP—25.
SIZES SHIPT—Run of Mine, Slack, Egg.

DWALE COAL COMPANY, INC.

General Office, Shawsville, Va.
PR—J. L. Vaughan, Shawsville, Va.
VP—S. C. Spauld, Shawsville, Va.
TR—R. M. Tudor, Shawsville, Va.
GM—R. M. Tudor, Shawsville, Va.
GS—P. W. Fortune, Allen, Ky.
PA—R. M. Tudor, Shawsville, Va.
EM—A. J. Baldwin, Pikeville, Ky.
EE—Stewart, James & Cook, New York, N. Y.
SCO—Address the Company, Buyer, P. W. Fortune, Allen, Ky.

Dwale Mine; Drift; Elkhorn No. 2 Seam; 48 in. thick.
PO—Allen, Ky.; SP—Reaver Creek, Ky.; CTY—Floyd; RR—C. & O.
S of H—Mules, trolley pole type loco. Track gage 42 in.
S of M—Shortwall machs.
PP—I water tube boiler, 150 H. P., 1 100 K. W. gen. unit, 235 volts D. C.
EMP—70. Daily tonnage 400.
SIZES SHIPT—Run of Mine, Slack.

E. M. T. COAL COMPANY.

General Office, London, Ky.
PR—D. C. Edwards, London, Ky.
TR—L. B. McIlhenny, Island, Ky.
GM—L. B. McIlhenny, Island, Ky.
GS—L. B. McIlhenny, Island, Ky.
EM—Harvey Beechley, Island, Ky.

E. M. T. Mine; Shaft; No. 9 Seam, 52 to 56 in. thick.
PO—Island, Ky.; SP—Same. CTY—McLean, RR—L. & N., O. & N. Div.
S of H—Mules and motor. Track gage 36 inches.
PP—2 150 H. P. and 1 75 H. P. water tube boilers, 1—150 K. W. gen., 500 volts D. C., 5 pumps.
EMP—100. Last years tonnage 55,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
PREP. EQUIPT.—Shaker Screens.

EACLE COAL COMPANY, THE

General Office, 30 Euclid Arcade, Cleveland, Ohio.
PR—G. B. Durrell, Cleveland, Ohio.
ASST. TO PR—A. C. Pague, Cleveland, O.
TR—G. B. Durrell, Cleveland, Ohio.
PA—A. C. Pague, Cleveland, Ohio.
SCO—The Eagle Stores Co., G. N. Store Supt., H. M. Holland 118 W. 15th St., Cincinnati, Ohio.
SALES MGR—A. C. Pague, Cleveland, O.

Eagle Mine; Drift; Barren Fork No. 3 Seam, 33 inches thick.
PO—Barren Fork, Ky.; SP—Flat Rock, Ky.; CTY—McCrory; RR—C. & O. & T. P.
S of H—Mules, trolley pole type and steam locos. Track gage 36 inches.
S of M—2 shortwall machs.
PP—2 fire tube boilers, 250 H. P., 1—175 K. W. gen. unit, 250 volts D. C., 1 pump.
EMP—185. Daily tonnage 300.
SIZES SHIPT—Run of Mine, Slack, Lump, Block.
PREP. EQUIPT.—Gravity Screens.

EARLSTON COAL COMPANY

General Office, Kermitt, W. Va.
PR—H. E. Harmon, Tazewell, Va.
VP—H. T. Wilson, Detroit, Mich.
TR—Z. S. Franch, War, W. Va.
GM—J. D. McLaughlin, Kermitt, W. Va.
GS—J. D. McLaughlin, Kermitt, W. Va.
PA—J. D. McLaughlin, Kermitt, W. Va.
SA—Norfolk-Chesapeake Coal Co., Detroit, Mich.

Earlston Mine; Drift; No. 2 Gas Seam, 60 inches thick.
PO—Kermitt, W. Va.; SP—Same; CTY—Martins, (Ky.); RR—L. & N.
S of H—Mules and 1 storage battery loco. Track gage 48 in.
S of M—Hand.
PP—Gen. units, 1—100 K. W., 250 volts D. C., 1 pump.
EMP—30. Last years tonnage 9,000.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT.—Gravity screens.
NOTE—Successors to Warfield Coal Co.

EAST HARLAN COAL CO.

General Office, Kildav, Ky.
PR—Geo. J. Bippus, Huntington, Ind.
VP—Albert W. Bippus, Huntington, Ind.
TR—Geo. F. Neel, Kildav, Ky.
GM—Geo. F. Neel, Kildav, Ky.
GS—John P. Barton, Kildav, Ky.
PA—Geo. F. Neel, Kildav, Ky.
CE—Henry Gross, Harlan, Ky.
EE—D. Barnes, Kildav, Ky.
SCO—Address the Company; Buyer, G. J. Hatcher, Agers, Ky.
SA—Tullites Coal Co., Huntington, Ind.

Agers Mine; Drift; Harlan Seam, 48 in. thick.
PO—Agers, Ky.; SP—Same; CTY—Harlan, RR—L. & N.
S of H—3 elec. locos. Track gage 42 in.
S of M—4 shortwall machs.
PP—Power purchased, 250 K. W. gen. set, 2500 volts A. C.
EMP—100. Daily tonnage 300.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT.—Shaker Screens, Loading Booms.

EAST KENTUCKY COAL CO.

General Office, London, Ky.
PR—Nat. B. Sewell, London, Ky.
VP—Milton Elliott, Frankfort, Ky.
GM—Nat. B. Sewell, London, Ky.
SCO—Address the Company, Buyer, J. G. Long, Fusonia, Ky.
SA—Ohio & Kentucky Fuel Co., Cincinnati, Ohio.

East Kentucky Mine; Shaft; Hazard No. 1 Seam, 58 in. thick.
PO—Fusonia, Ky.; SP—Alloway, Ky.; CTY—Cornettsville, Ky.; RR—L. & N.
MS—J. T. Phipps, Fusonia, Ky.
S of H—Mules. Track gage 40 inches.
S of M—Hand and comp. air punchers.
PP—I water tube boiler.
EMP—40. Last years tonnage 13,000.
SIZES SHIPT—Run of Mine.

EAST POINT COAL COMPANY

General Office, Middlesboro, Ky.
PR—J. L. Manring, Middlesboro, Ky.
VP—J. L. Manring, Middlesboro, Ky.
VP—W. E. Cobell, Middlesboro, Ky.
TR—F. E. Hess, Middlesboro, Ky.
GM—P. T. Colgan, Middlesboro, Ky.
GS—H. J. Fallon, Rosworth, Ky.
CE—J. C. Richardson, Middlesboro, Ky.
SCO—Address the Company, Buyer, Robt. Lyons, Middlesboro, Ky.
SA—J. L. Manring, Middlesboro, Ky.

East Point Mine; Drift; Winona Seam, 52 in. thick.
PO—Rosworth, Ky.; SP—Winona, Ky.; CTY—B-H; RR—L. & N., Sou.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
EMP—144. Daily tonnage 50.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT.—Gravity Screens.

ECONOMY MINING COMPANY

General Office, Providence, Ky.
PR—R. G. Baynham, Providence, Ky.
TR—E. N. Rice, Providence, Ky.
GM—Jas. Bassett, Providence, Ky.
GS—Jas. Bassett, Providence, Ky.
PA—Jas. Bassett, Providence, Ky.
CE—Thos. Long, Providence, Ky.
EE—T. G. Rice, Providence, Ky.
SA—J. P. Bassett, Providence, Ky.

Economy Mine; Shaft; Stripping; Seam, 50 inches thick.
PO—Providence, Ky.; SP—Same; CTY—Webster; RR—L. & N.
S of H—Mules, rope.
S of M—Hand.
EMP—40.
SIZES SHIPT—Run of Mine.
Successor to Clover Creek Coal Co. Old Information.

EDEEN COAL COMPANY

General Office, Whitesburg, Ky.
PR—Z. G. D. Ison, Whitesburg, Ky.
VP—Rev. A. S. Petrey, Whitesburg, Ky.
TR—Felix G. Fields, Whitesburg, Ky.
GM—Felix G. Fields, Whitesburg, Ky.
GS—Felix G. Fields, Whitesburg, Ky.
PA—Felix G. Fields, Whitesburg, Ky.
CE—G. H. Zimmerman, Whitesburg, Ky.
EE—John M. Wood, Whitesburg, Ky.

Eden Mine; Drift; Hazard No. 4 Seam, 66 inches thick.
PO—David, Ky.; SP—Frt., Felix, Ky.; Exp., Blacker, Ky.; CTY—Letcher; RR—L. & N.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
PP—Power purchased. Rotary converters, 250 volts D. C.
SIZES SHIPT—Run of Mine, Slack, Block.

EDGEMONT FUEL CO.

General Office, Ashland, Ky.
PR—T. A. Field, Ashland, Ky.
VP—J. T. Field, Ashland, Ky.
TR—A. W. Humphrey, Ashland, Ky.
GM—J. W. Cockill, Pikeville, Ky.
GS—J. W. Cockill, Pikeville, Ky.
PA—J. W. Cockill, Pikeville, Ky.

EM—C. G. Evans, Pikeville, Ky.
SA—A. W. Humphrey, Ashland, Ky.
Edgemont Mine Drift; Elkhorn Seam, 40 and 48 in. thick.
PO—Minnie, Ky. SP—Gibson, Ky. CTY—Floyd, RR—B. & O., Long Fork Branch.
MS—J. H. Wilson, Minnie, Ky.
S of H—Mules. Track gage 42 in.
S of M—Hand.
EMP—40. Last years tonnage 21,060.
SIZES SHIPT—Run of Mine.

EDGEWATER COAL COMPANY.

General Office, Syracuse, N. Y.
PR—P. K. Midlin, Syracuse, N. Y.
TR—Donald H. Putnam, Ashland, Ky.
GM—A. R. Rawn, Huntington, W. Va.
GS—Ernest L. Bailey, Heller, Ky.
PA—J. R. Warner, Ashland, Ky.
EE—Edward Holley, Ashland, Ky.
EE—C. E. Moore, Heller, Ky.
SCO—Address the Company, Buyer, J. R. Warner, Ashland, Ky.

Coaldale Mine; Drift; Upper and Lower Elkhorn Seam, 48 in. thick.
PO—Heller, Ky. SP—Same. CTY—Pike, RR—C. & O.
MS—J. A. Straughn, Heller, Ky.
SM—Basil Bortley, Heller, Ky.
S of H—Mules, 10 trolley pole type and 2 storage battery locos. Track gage 48 inches.
S of M—14 longwall machs.
PP—2 water tube boilers, total 550 H. P., 1 150 K. W., 1 350 K. W. gen. units, 250 volts D. C., 12 pumps.
EMP—275. Daily tonnage 1,000.
Coke Ovens, 50. Bedlow.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT.—Picking Tables.

Henry Clay Mine; Drift; Upper and Lower Elkhorn Seam, 48 in. thick.
PO—Lookout, Ky. SPP—Henry Clay, Ky. CTY—Pike, RR—C. & O.
MS—F. L. Lang, Lookout, Ky.
S of H—3 trolley pole type and 1 storage battery loco, Track gage 48 in.
S of M—6 longwall machs.
PP—2 water tube boilers, 500 H. P., gen. units, 300 Kva., 250 volts D. C., 5 pumps.
EMP—175. Daily tonnage 300.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT.—Gravity Screens.

Big Branch Mine; Drift; Upper Elkhorn Seam, 42 in. thick.
PO—Lookout, Ky. SP—Big Branch, Ky. CTY—Pike, RR—C. & O.
MS—F. L. Lang, Lookout, Ky.
SM—R. B. Franklin, Lookout, Ky.
S of H—2 trolley pole type and 1 storage battery loco, Track gage 48 in.
S of M—5 longwall machs.
PP—Power purchased. Transformer 2250. 250 volts A. C., M. G. Sets, 250 volts D. C.
EMP—110. Daily tonnage 250.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT.—Gravity Screens.

Lookout Mine; Drift; Lower Elkhorn Seam, 48 in. thick.
PO—Lookout, Ky. SP—Same. CTY—Pike, RR—C. & O.
MS—C. H. Scott, Lookout, Ky.
SM—H. Scott, Lookout, Ky.
S of H—2 trolley pole type and 1 storage battery loco, Track gage 48 in.
S of M—5 longwall machs.
PP—Power purchased. Transformer 2250. 250 volts A. C., M. G. Sets, 250 volts D. C., 2 pumps.
EMP—160. Daily tonnage 275.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT.—Gravity Screens.

Elk Creek Coal Co.
PR—Arthur Groves, Knoxville, Tenn.
GM—L. J. Madden, Blacker, Ky.

Elk Creek Mine; Drift; Fire Clay Seam, 60 inches thick.
PO—Blacker, Ky.; SP—Same; CTY—Letcher; RR—L. & N.
S of H—Elec. loco. Track gage 44 in.
S of M—Shortwall machs.
PP—Power purchased. Transformer 6600 volts A. C., rotary converters, 220 volts D. C.

ELK HORN COAL CORPORATION
General Office, 67 Wall St., New York, N. Y.

PR—C. W. Fleming, New York City
VP—J. F. Caulfield, New York, N. Y.
TR—J. F. Caulfield, New York, N. Y.
GM—Thos. S. Hammond, Fleming, Ky.
PA—G. S. Kinzer, Wheelwright, Ky.
EM—Geo. J. Nichols, Wheelwright, Ky.
EE—R. R. Schellinger, Warland, Ky.
SCO—Address the company, Supply Dept. Buyer, G. S. Kinzer, Wheelwright, Ky.
SA—G. G. Smith, Chicago, Ill.

Mines Nos. S01 to S07; Drift; Elkhorn Seam, 72 to 84 in. thick.

PO—Fleming, Ky.; SP—Same; CTY—Letcher; RR—L. & N.; Wrights Fork, Ky.
MS—J. F. Bohannon, Fleming, Ky.
SM—M. G. Nichols, Fleming, Ky.
S of H—23 elec. locos. Track gage 42 inches.
S of M—23 elec. machs.
PP—Power purchased, 25 volts D. C., 40 pumps.
EMP—500.
SIZES SHIPT—Run of Mine, Nut, Pea, Slack, Lump.
PREP. EQUIPT.—Bar and Shaker Screens, Picking Tables, Loading Booms.

Nos. 325 to 331 Mines; Drift; Slope; Elkhorn Seam, 60 in. thick.
PO—Wayland, Ky. SP—Same. CTY—Floyd, RR—C. & O.
MS—G. J. Trotter, Wayland, Ky.
SM—J. E. Miller, Wayland, Ky.
S of H—Trolley pole type locos. Track gage 42 in.

S of M—21 shortwall machs.
PP—250 volts D. C. Purchase power.
EMP—700.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT.—Bar Screens.

Nos. 377 to 381 Mines; Drift; Elkhorn Seam, 56 in. thick.
PO—Wheelwright, Ky. SP—Same. CTY—Floyd, RR—B. & O.
MS—W. H. Trauback, Wheelwright, Ky.
SM—H. L. Beckner, Wheelwright, Ky.
S of H—Trolley pole type locos. Track gage 42 in.
S of M—16 shortwall machs.
PP—250 volts D. C. Purchase power.
EMP—500.
SIZES SHIPT—Run of Mine, Slack.
PREP. EQUIPT.—Bar Screens.

ELKHORN BLOCK COAL CO., INC.

General Office, Ashland, Ky.
PR—H. A. Borders, Orkney, Ky.
VP—J. C. Hatcher, Orkney, Ky.
TR—F. L. Stewart, Ashland, Ky.
GM—H. A. Borders, Orkney, Ky.
PA—J. C. Hatcher, Ashland, Ky.
SA—Address the Company, Ashland, Ky.

'Elkhorn Block' Mine; Drift; Elkhorn Nos. 1, 2 and 3 Seams, 47 in. thick.
PO—Orkney, Ky.; SP—Borders, Ky.; CTY—Floyd; RR—B. & O.
MS—Neah Harper, Orkney, Ky.
SM—Eli Stumbo, Orkney, Ky.
S of H—Mules. Track gage, 44 in.
S of M—2 shortwall machs.
PP—1 150 H. P. boiler, 1 Westinghouse 100 K. W. gen., 250 volts D. C.
EMP—40. Daily tonnage 200.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT.—Gravity Screens.

ELKHORN CITY COAL CO.

Now Fraise-Elkhorn Coal Co.

ELKHORN COAL COMPANY.

General Office, Lexington, Ky.
PR—S. L. Rastin, 625 E. Main St., Lexington, Ky.
VP—C. C. Winters, Detroit, Mich.
TR—T. J. Cassidy, Lexington, Ky.
GM—S. L. Rastin, Lexington, Ky.
GS—S. L. Rastin, Lexington, Ky.
PA—G. O. Smith, Mater, Ky.
EM—S. A. Morey, Mater, Ky.
SCO—Buyer, Geo. W. Smith, Mater, Ky.
SA—Cassidy Coal Company, Lexington, Ky.; Mancourt-Winters Coal Company, Detroit, Mich.

Elkhorn Nos. 1 and 2 Mines; Drift; Elkhorn Seam, 60 in. thick.
PO—Mater, Ky.; SP—Kona, Ky.; CTY—Letcher; RR—L. & N.
S of H—Mules and storage battery locos. Track gage, 36 in.
S of M—Hand.
PP—2 65 H. P. water tube boilers, 1 35 K. W. gen. units, 125 volts D. C., 2 pumps.
EMP—100. Last fiscal year output, 83,689 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT.—Shaker Screens.

ELKHORN COLLIERIES CO.

Jenkins Mine now operated by J. D. Bentley, Jr.
Bevinsville Mine now operated by Superior Elkhorn Ry-Product Coal Co.

ELKHORN COLLIERIES CO., INC., THE

General Office, 1717 Dime Bank Bldg., Detroit, Mich.
PR—C. C. Winters, 1717 Dime Bank Bldg., Detroit, Mich.
VP—A. L. Mancourt, 1717 Dime Bank Bldg., Detroit, Mich.
TR—A. F. West, 1717 Dime Bank Bldg., Detroit, Mich.
GM—S. L. Rastin, Thornton, Ky.
GS—A. L. Rastin, Thornton, Ky.
CE—S. A. Morey, Thornton, Ky.
SCO—Address the company, Buyer, A. L. Rastin, Thornton, Ky.
SA—Mancourt-Winters Coal Co., Detroit, Mich.

Winters Nos. 1, 2 & 3 and Cannel No. 1 Mines; Drift; Elkhorn Seam, 98 in. thick.
PO—Thornton, Ky.; SP—Rastin, Ky.; CTY—Letcher; RR—L. & N.
SM—A. N. Welch, Thornton, Ky.
S of H—Mules and 3 trolley pole type locos. Track gage 42 in.
S of M—2 shortwall machs.
PP—2 water tube boilers, 200 H. P. Transformer, 250 volts A. C., 2 gen. units, 250 volts D. C.
EMP—175. Daily output, 1,000 tons.
SIZES SHIPT—Run of Mine.

ELKHORN GAS COAL CO.

General Office, Praise, Ky.
 PR—David Barrowman, Praise, Ky.
 VP—J. F. Ford, Coburn, Va.
 TR—David Barrowman, Praise, Ky.
 GS—David Barrowman, Praise, Ky.
 PA—David Barrowman, Praise, Ky.
 CE—C. G. Evans, Pikeville, Ky.
 EE—R. M. Bullif, Praise, Ky.
 SCO—Address the company, Buyer, A. F. Amburgey, Praise, Ky.

Elkhorn Mine; Drift; Auxler Seam, 48 inches thick.

PO—Praise, Ky.; SP—Elkhorn City, Ky.
 CTY—Pike; RR—C. C. & O.

MS—H. H. Kennedy, Praise, Ky.
 S of H—Storage battery and elec. locos.
 Track gage 42 inches.

S of M—Hand.
 PP—Water tube boiler, 150 H. P., turbo generator, 1—100 K. W., 250 volts D. C.

EMP—75. Last years tonnage 75,000.

SIZES SHIPT—Run of Mine.

ELKHORN GAS COAL COMPANY

General Office, Bluefield, W. Va.
 PR—R. A. Crockett, Graham, Va.
 VP—J. R. Vermillion, Princeton, W. Va.
 TR—H. W. Crockett, Bluefield, W. Va.
 GM—R. A. Crockett, Graham, Va.
 GS—W. S. Frazier, Smalley, Ky.
 PA—R. A. Crockett, Graham, Va.
 EM—Townsend Combs, Langley, Ky.
 SA—H. W. Crockett, Bluefield, W. Va.

Elkhorn Gas Mine; Drift; Elkhorn Seam, 42-52 inches thick.

PO—Smalley, Ky.; SP—Martin, Ky.;

CTY—Floyd; RR—C. & O.

S of H—Mules.

S of M—Hand.

SIZES SHIPT—Run of Mine, Slack,

Lump.

PREP. EQUIPT—Bar Screens.

ELKHORN-HAZARD COAL COMPANY

General Office, Raphine, Va.
 PR—Lester G. Toney, Northfork, W. Va.
 VP—Thomas Miller, Elkhorn, W. Va.
 TR—C. B. Bell, Raphine, Va.
 GM—Edmond Cockburn, Whitesburg, Ky.
 GS—Edmond Cockburn, Whitesburg, Ky.
 PA—Edmond Cockburn, Whitesburg, Ky.
 EM—G. H. Zimmerman, Whitesburg, Ky.
 SCO—Address the company, Buyer, Edmond Cockburn, Whitesburg, Ky.
 SA—The Humphrey Coal Co., Cincinnati, O.

Elkhorn-Hazard Mine; Drift; No. 4

Hazard Seam, 60-72 in. thick.

PO—Whitesburg, Ky.; SP—Same; CTY—

Letcher; RR—L. & N.

SM—Robert Blair, Whitesburg, Ky.

S of H—Mules. Track gage 48 in.

S of M—Hand.

EMP—35. Last years tonnage 29,000.

SIZES SHIPT—Run of Mine, Slack,

Lump.

PREP. EQUIPT—Gravity Screens.

ELKHORN-JELICO COAL CO.

General Office, Whitesburg, Ky.
 PR—M. K. Marlowe, Whitesburg, Ky.
 VP—M. K. Marlowe, Whitesburg, Ky.
 TR—P. E. Marlowe, Whitesburg, Ky.
 GM—M. K. Marlowe, Whitesburg, Ky.
 GS—P. E. Marlowe, Whitesburg, Ky.
 PA—G. H. Zimmerman, Whitesburg, Ky.
 EM—M. K. Marlowe, Whitesburg, Ky.
 SCO—Address the company, Buyer, Rose Gleason, Whitesburg, Ky.
 SA—The Humphrey Coal Co., Cincinnati, Ohio.

Elkhorn-Jellico No. 1 Mine; Drift; No. 4 Hazard Seam, 60 in. thick.

PO—Whitesburg, Ky.; SP—Same; CTY—

Letcher; RR—L. & N.

S of H—Mules, 1 trolley pole type and

1 combination locos. Track gage 42

in.

S of M—Electric puncher and 1 short-

wall mach.

PP—2—200 H. P. fire tube boiler, gen.

unit, 1—100 K. W., 250 volts

D. C.

EMP—60. Last years tonnage 35,000

SIZES SHIPT—Run of Mine, Slack,

Lump, Block.

PREP. EQUIPT—Gravity Screens.

Elkhorn-Jellico No. 2 Mine; Drift;

Whitesburg Seam, 48 in. thick.

PO—Whitesburg, Ky.; SP—Same; CTY—

Letcher; RR—L. & N.

S of H—Mules

S of M—1 elec. puncher and 1 short-

wall mach.

PP—Gen. unit, 1—100 K. W., 250

volts D. C.

EMP—40. Last years tonnage 30,000

SIZES SHIPT—Run of Mine, Slack,

Lump, Block.

ELKHORN JUNIOR COAL COMPANY

General Office, Millstone, Ky.
 PR—P. W. Slomp, Millstone, Ky.
 VP—T. J. Davis, Cincinnati, O.
 TR—E. M. Radway, Cincinnati, O.
 GM—P. W. Slomp, Millstone, Ky.
 GS—A. C. Slomp, Millstone, Ky.

PA—A. C. Slomp, Millstone, Ky.
 CE—J. R. Allen Engineering Co.,
 Hazard, Ky.
 SA—Richwein Coal Co., Cincinnati, O.

Elkhorn Junior Mine; Drift; Elkhorn

Seam, 58 in. thick.

PO—Millstone, Ky.; SP—Frt., Lorraine,

Ky.; Exp., Millstone, Ky.; CTY—

Letcher; RR—L. & N.

S of H—Mules. Track gage 42 inches.

S of M—Hand.

PP—4 pumps

EMP—60. Last years tonnage 50,000

SIZES SHIPT—Run of Mine.

ELKHORN-MARROWBONE COAL CO.

General Office, Pikeville, Ky.
 PR—D. R. Coleman, Oak Hill, O.
 VP—John Star, Wolfpit, Ky.
 TR—J. E. Ratliff, Pikeville, Ky.
 GM—S. W. Ratliff, Wolfpit, Ky.
 GS—S. W. Ratliff, Wolfpit, Ky.
 PA—J. E. Ratliff, Pikeville, Ky.
 CE—C. G. Evans, Pikeville, Ky.
 SCO—Address the company, Buyer, J. E. Ratliff, Pikeville, Ky.

Elkhorn-Marrowbone Mine; Slope; Elk-

horn Seam, 67 in. thick.

PO—Wolfpit, Ky.; SP—Marrowbone, Ky.;

CTY—Pike.

MS—John Star, Wolfpit, Ky.

S of H—Mules and rope. Track gage 42

inches.

S of M—Hand.

PP—Power purchased.

SIZES SHIPT—Run of Mine.

ELKHORN PINEY COAL MINING CO.

General Office, Milwaukee, Wis.
 PR—A. A. Schlisinger, Milwaukee, Wis.
 VP—D. T. MacLeod, Milwaukee, Wis.
 TR—C. D. Weeks, Milwaukee, Wis.
 GM—J. H. Schlesinger, Milwaukee, Wis.
 GS—G. C. Wolfe, Weeksbury, Ky.
 PA—J. P. McGuigan, Milwaukee, Wis.
 EM—J. J. Fluck, Huntington, W. Va.
 EE—J. H. Edwards, Huntington, W. Va.
 SCO—Address the company, Buyer, J. B. Dailey, Huntington, W. Va.

Weeksbury Nos. 1 and 2 Mine; Drift;

Elk Horn Seam, 40 to 52 in. thick.

PO—Weeksbury, Ky.; SP—Same; CTY—

Floyd; RR—B. & O. Long Fork Br.

MS—F. M. Addis, Weeksbury, Ky.

SM—Earnest Logan, Weeksbury, Ky.

S of H—9 elec. locos. Track gage 42

in.

S of M—7 shortwall machs.

PP—Central plant, 4400 volts A. C.

Last years tonnage 195,042.

SIZES SHIPT—Run of Mine.

Weeksbury Nos. 3, 4, 5 and 7 Mines;

Drift; Elkhorn Seam, 38-46 in.

thick.

PO—Weeksbury, Ky.; SP—Same; CTY—

Floyd; RR—Long Fork.

MS—F. M. Addis, Weeksbury, Ky.

MP—J. W. Hager, Weeksbury, Ky.

S of H—6 trolley pole type locos.

S of M—4 shortwall machs.

PP—Central plant, 4400 volts A. C.

Last years tonnage 90,125.

SIZES SHIPT—Run of Mine.

Weeksbury No. 6 Mine; Drift; Elkhorn

Seam, 38-46 in. thick.

PO—Weeksbury, Ky.; SP—Same; CTY—

Floyd; RR—Long Fork.

Track gage, 42 in.

PP—Central plant, 4400 volts A. C.

For Additional Information See Page 466.

Elkhorn Star Nos. 1 and 2 Mines; Drift;

Elkhorn Nos. 1 and 2 Seam, 42 in.

thick.

PO—Minnie, Ky.; SP—Gibson, Ky.;

CTY—Floyd; RR—Long Fork.

MS—W. H. Mathis, Minnie, Ky.

S of H—Mules, rope and storage battery

locos. Track gage 42 inches.

S of H—Hand, chain breast and short-

wall machs.

PP—1 fire tube boiler, 150 H. P., gen.

units, 150 K. W., 250 volts D. C.

EMP—40. Daily tonnage 250.

SIZES SHIPT—Run of Mine, Slack, Nut,

Lump.

PREP. EQUIPT—Bar Screens, Picking

Tables.

ELKHORN & JELICO COAL CO.

General Office, Whitesburg, Ky.

PR—M. K. Marlowe, Whitesburg, Ky.

VP—McKinley Marlowe, Whitesburg, Ky.

TR—F. E. Marlowe, Whitesburg, Ky.

GS—P. E. Marlowe, Whitesburg, Ky.

PA—M. K. Marlowe, Whitesburg, Ky.

EM—G. H. Zimmerman, Whitesburg, Ky.

SCO—Address the company, Buyer, Rose

Gleason, Whitesburg, Ky.

SA—Richwein Coal Co., and Hager Coal

Coal Co., Whitesburg, Ky.

Jellico Mine; Drift; Seam, 48 inches

thick.

PO—Whitesburg, Ky.; SP—Same; CTY—

Letcher; RR—L. & N.

S of H—Mules. Track gage, 42 in.

S of M—1 elec. puncher and 1 shortwall

mach.

PP—1 water tube boiler, 100 H. P., 1—

100 K. W. gen. unit, 250 volts D. C.

EMP—10.

SIZES SHIPT—Run of Mine, Lump and

Block.

Hazard No. 4 Mine; Drift; No. 4 Seam,

68 in. thick.

PO—Whitesburg, Ky.; SP—Same; CTY—

Letcher; RR—L. & N.

S of H—Elec. locos. Track gage 42 in.

S of M—1 elec. puncher and shortwall

mach.

PP—1 water tube boiler, 100 H. P., 1—

100 K. W. gen. unit, 250 volts

D. C.

EMP—55. Daily tonnage 250.

SIZES SHIPT—Run of Mine, Slack,

Lump, Block.

Whitesburg Mine; Drift; Whitesburg

Seam, 68 in. thick.

PO—Whitesburg, Ky.; SP—Same; CTY—

Letcher; RR—L. & N.

S of H—Elec. locos. Track gage 42 in.

S of M—Hand.

PREP. EQUIPT—Gravity Screens.

ELKHORN & SHELBY CREEK COAL CO.

General Office, Huntington, W. Va.

PR—B. R. Smith, Huntington, W. Va.

VP—Don Clark, Huntington, W. Va.

TR—W. P. Neekamp, Huntington, W.

Va.

GM—Chas. W. Connor, Esco, Ky.

GS—Chas. W. Connor, Esco, Ky.

PA—Chas. W. Connor, Esco, Ky.

EE—Frank Glincy, Esco, Ky.

EM—C. G. Evans, Pikeville, Ky.

SCO—Elkhorn & Shelby Creek Coal Co.;

Ruyer, F. T. Jarrett, Esco, Ky.

SA—Litz-Smith Fuel Co., Huntington,

W. Va.

Caney No. 3 Mine; Drift; Upper Elk-

horn Seam, 66 in. thick.

PO—Esco, Ky.; SP—Caney Siding, Ky.;

CTY—Pike, RR—S. V. & E.

MS—John H. Bowling, Esco, Ky.

S of H—Mules, 3 locos. Track gage 48

inches.

S of M—3 machs.

PP—2 fire tube boilers, 250 H. P., 1

200 K. W., 1 100 K. W. gen.

units, 250 volts D. C., 3 pumps.

EMP—120. Last years tonnage 86,000.

SIZES SHIPT—Run of Mine, Slack,

Lump.

PREP. EQUIPT—Bar Screens.

ELKHORNSEAM COLLIERIES CO.

General Office, Bramwell, W. Va.

PR—T. B. Bryan, Jr., Bramwell, W. Va.

VP—C. W. Freeman, Bramwell, W. Va.

TR—E. M. Tanner, Bramwell, W. Va.

GM—T. B. Bryan, Jr., Bramwell, W. Va.

GS—D. P. Saunders, Elkseam, Ky.

PA—D. P. Saunders, Yeager, Ky.

EM—C. G. Evans, Pikeville, Ky.

EE—Roy Stevens, Elkseam, Ky.

SCO—Elkhornseam Collieries Co., Buyer,

Jerome Damron, Elkseam, Ky.

SA—Western Coal Co., Cincinnati, O.

Valley Mine; Drift; Lower Elkhorn Seam,

54 in. thick.

PO—Elkseam, Ky.; SP—Collins, Ky.;

CTY—Pike; RR—B. & O.

S of H—1 elec. loco, and 2 storage bat-

tery locos. Track gage 44 in.

S of M—2 shortwall machs.

PP—2 fire tube boilers, 150 H. P.,

gen. units, 1—76 K. W., 1—150

K. W., 250 volts D. C., 2 pumps.

EMP—50. Last years tonnage 36,000.

PREP. EQUIPT—Bar Screens.

SIZES SHIPT—Run of Mine

EUREKA COAL CO.

General Office, Gatlin, Ky.
PR—W. N. Woodward, J. Jellico, Tenn.
VP—P. M. Angel, Gatlin, Ky.
TR—Chas. Hughes, Ky.
GM—F. M. Angel, Gatlin, Ky.
PA—F. M. Angel, Gatlin, Ky.
Blue Gem Mine; Drift; Blue Gem Seam 24 to 30 in. thick.
PO—Gatlin, Ky.; SP—Same; CTY—Whitley; RR—L. & N. Pine Mt. Br.
MS—P. M. Angel, Gatlin, Ky.
S of H—Mules. Track gage 36 in.
S of M—Hand.
Closed for an indefinite period, August 13, 1921.

EVANS JELICO COAL COMPANY

General Office, Jellico, Tenn.
PR—J. C. Bird, Jellico, Tenn.
TR—L. Hicks, Everts, Ky.
GM—J. C. Bird, Jellico, Tenn.
PA—R. W. Croley, Jellico, Tenn.
CE—B. L. Loyd, Jellico, Tenn.
SCO—Address the Company, Buyer, R. W. Croley, Jellico, Tenn.

Cook Mine; Drift; Seam, 24, 30-42 in. thick.
PO—Jellico, Tenn.; SP—Same; CTY—Whitley (Ky.); RR—L. & N.
MS—Henry Horton, Jellico, Tenn.
S of H—Mules and gasoline loco. Track gage 36 inches.
S of M—Hand.
EMP—75. Last years tonnage 24,000.
SIZES SHIPT—Run of Mine, Nut, Lump, Block.
Old information.

EVARTS COAL COMPANY.

General Office, Harlan, Ky.
PR—Fred W. Smith, Harlan, Ky.
VP—W. F. Hall, Harlan, Ky.
TR—J. D. Casey, Harlan, Ky.
GM—F. E. Cawod, Harlan, Ky.
GS—C. Rice, Harlan, Ky.
PA—F. W. Smith, Harlan, Ky.
EM—P. W. Smith, Harlan, Ky.
EE—S. Taylor, Harlan, Ky.
SCO—Address the Company, Buyer, H. J. Holmes, Everts, Ky.
SA—T. D. Casey, Harlan, Ky.
Harlan Mine; Drift; Kelleoka & Harlan Seam, 48 in. thick.
PO—Everts, Ky.; SP—Same; CTY—Harlan; RR—L. & N.
MS—H. A. Barton, Everts, Ky.
S of H—Mules. Track gage 42 inches.
S of M—Chain breast type machs.
PP—Power purchased. Transformer 2300 volts A. C. M. G. S. 4, 250 volts D. C., 1 pump.
EMP—48. Daily tonnage 200.
SIZES SHIPT—Run of Mine, Slack, Lump, Block.
PREP. EQUIPT—Gravity Screens.

FEDERAL COAL COMPANY.

General Office, Cary, Ky.
PR—T. R. Preston, Chattanooga, Tenn.
TR—E. R. Thompson, Chattanooga, Tenn.
GM—R. B. Moss, Cary, Ky.
PA—F. M. Meadows, Cary, Ky.
SCO—Address the Company, Buyer, F. M. Meadows, Cary, Ky.
Sales Manager—E. R. Thompson, Chattanooga, Tenn.
For Additional Information See Page 467.

Castro Mine; Drift; Straight Creek Seam; 42 in. thick.
PO—Cary, Ky.; SP—Same. CTY—Bell. RR—L. & N.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—1 return tubular boiler.
EMP—58. Last fiscal year output, 36,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
PREP. EQUIPT—Shaking Screens.

Cary Mine; Drift; Straight Creek Seam, 30 to 48 in. thick.
PO—Cary, Ky.; SP—Same. CTY—Bell. RR—L. & N.
S of H—Mules. Track gage 42 in.
S of M—Hand.
PP—1 return tubular boiler.
EMP—89. Last fiscal year output, 52,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
PREP. EQUIPT—Shaking Screens.

Glendon Mine; Drift; Straight Creek Seam; 42 in. thick.
PO—Arjay, Ky.; SP—Same. CTY—Bell. RR—L. & N.
SM—A. D. Meadows, Arjay, Ky.
S of H—Mules and 4 elec. locos. Track gage 42 in.
S of M—3 elec. machs.
PP—2 return tubular boilers, total 300 H. P., 1 gen. unit, 250 volts D. C.
EMP—156. Last fiscal year output, 61,383 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
PREP. EQUIPT—Shaking Screens.
Arjay Mine sold to the new Arjay Coal Co.

FERN LAKE FUEL CO., INC.
Now part of Low Ash Mining Co

FIRST CREEK MINING COMPANY

General Office, Penobscott Bldg., Detroit, Mich.
PR—E. H. Jewett, Penobscott Bldg., Detroit, Mich.
VP—E. L. Douglass, 1018 Union Central Bldg., Cincinnati, O.
VP—L. H. Stone, New York, N. Y.
TR—W. Brooks, Penobscott Bldg., Detroit, Mich.
ASST. GM—G. P. Foley, Staub, Ky.
GS—E. Bowlick, Staub, Ky.
GS—E. Rigby, Staub, Ky.
GENERAL PA—G. L. Washburne, Cincinnati, O.
SA—Jewett, Bigelow & Brooks, Detroit, Mich., and Cincinnati, Ohio.

First Creek Mine; Drift; No. 6 Seam; 50 inches thick.
PO—Blue Diamond, Ky.; SP—Frt. Same; Exp. Typo, Ky.; CTY—Perry; RR—L. & N.
SM—S. H. Thorpe, Blue Diamond, Ky.
S of H—Trolley pole type and storage battery locos. Track gage 48 inches.
S of M—6 shortwall machs.
PP—Power purchased. Transformer 2,300 to 250, 2 150 K. W. motor gen. units, 250 volts D. C., 4 pumps.
EMP—175. Last fiscal year output, 209,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Pickling Tables, Loading Booms.

FLAT CREEK COAL COMPANY

Now Hambitt Mining Co.

FLOYD-ELKHORN CONSOLIDATED COLLIERIES

General Office, Johnson City, Tenn.
PR—S. R. Jennings, Johnson City, Tenn.
VP—F. A. Garth, Johnson City, Tenn.
TR—F. Z. Zelandt, Johnson City, Tenn.
GM—F. A. Garth, Johnson City, Tenn.
GS—G. C. See, Drift, Ky.
EM—Erwin Mullins, Garth, Ky.
SCO—Address the Company, Buyer, W. D. Edwin, Drift, Ky.

Floyd Elkhorn Mine; Drift; Elkhorn Seam; 40 inches thick.
PO—Drift, Ky.; SP—Same; CTY—Floyd; RR—Long Fork, B. & O. Syst. m.
S of H—Mules, electric loco. Track gage 42 inches.
S of M—Hand, shortwall mach.
PP—2—115 H. P. Rollers and gen. units, 250 volts D. C., 1—150 K. W. C.
EMP—125. Daily output 375.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Screens.

FORD ELKHORN MINING COMPANY

General Office, 1804 First National Bank Bldg., Cincinnati, O.
PR—B. N. Ford, Cincinnati, O.
TR—B. N. Ford, Cincinnati, O.
GM—T. J. Phillips, Robinson Creek, Ky.
GS—H. E. Bowling, Robinson Creek, Ky.
PA—M. E. Staton, Robinson Creek, Ky.
EM—C. G. Evans, Pikeville, Ky.
EE—King Tackett, Robinson Creek, Ky.
SCO—Address the Company, M. F. Staton, Robinson Creek, Ky.
SA—Matthew Addy Co., Cincinnati, O.

Ford Elkhorn No. 1 Mine; Drift and Slope.
PO—Robinson Creek, Ky.; SP—Same and Shelby, Ky.; CTY—Pike; RR—S. V. & E.
MS—T. J. Phillips, Robinson Creek, Ky.
S of H—Mules, trolley pole type loco.
S of M—Electric puncher, shortwall mach.
PP—1 fire tube boiler, 250 H. P. generate power, 250 volts D. C.
EMP—125. Last fiscal year output, 40,000 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens, Pickling Tables.

Ford Elkhorn No. 2 Mine; Drift and Slope.
PO—Robinson Creek, Ky.; SP—Frt. Same; Ex., Shelby, Ky.; CTY—Pike; RR—S. V. & E.
MS—H. E. Bowling, Robinson Creek, Ky.
S of H—Storage battery and trolley pole type locos.
S of M—Electric puncher and shortwall machs.
PP—1—350 H. P. and 1—150 H. P. fire tube boilers, 1—200 K. W. P., 1—100 K. W. gen. units, 250 volts D. C., 1 pump.
EMP—175. Last years tonnage 75,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens, Pickling Tables.
Note—Successors to Detroit-Kentucky Coal Co.

FORDS BRANCH COAL CO.

Out of Business.

FORT BRANCH COAL CO.

General Office, Fusonia, Ky.
PR—H. A. Brooking, Pineville, Ky.
VP—Wm. Low, Pineville, Ky.

FRANKLIN COAL COMPANY.

General Office, Knoxville, Tenn.
PR—W. B. Kinder, Artemus, Ky.
VP—Floyd E. Hann, Knoxville, Tenn.
TR—D. H. Jenkins, Knoxville, Tenn.
GM—W. B. Kinder, Artemus, Ky.
GS—W. B. Kinder, Artemus, Ky.
EM—C. P. Davidson, Middlesboro, Ky.

Franklin Mine; Drift; Dean Seam, 80 in. thick.
PO—Artemus, Ky.; SP—Same; CTY—Knox; RR—L. & N.
S of H—Mules. Track gage, 42 in.
S of M—Hand.
EMP—15.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

FOURSEAM BLOCK COLLIERIES CO.

General Office, Goodwill, W. Va.
PR—Jalrus Collins, Bramwell, W. Va.
VP—W. L. Johnston, McDowell, W. Va.
TR—E. E. Hartsock, Goodwill, W. Va.
GM—Jalrus Collins, Bramwell, W. Va.
GS—C. L. Logan, Diablock, Ky.
PA—C. L. Logan, Diablock, Ky.
CE—T. J. Dawson, Huntington, W. Va.
EM—G. H. Zimmerman, Whitesburg, Ky.
EE—J. W. Siler, Diablock, Ky.
SCO—Address the Company, Buyer, R. C. Dagley, Diablock, Ky.
SA—Western Coal Co., Cincinnati, O.

Fourseam Nos. 1, 3 and 4 Mines; Drift; Hazard No. 4 Seam, 52 in. thick.
PO—Diablock, Ky.; SP—Lothair, Ky.; CTY—Perry; RR—L. & N.
MS—G. G. McGee, Diablock, Ky.
S of H—3 trolley pole type locos. Track gage 44 in.
S of M—5 shortwall machs.
PP—Power purchased. Transformer 2200-220 volts A. C., 1—150 K. W. gen. unit, M. G. S. 4, 250 volts D. C., 2 pumps.
EMP—125. Last years tonnage 60,000.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Pickling Tables, Loading Booms.

FRANKLIN COAL COMPANY.

General Office, Knoxville, Tenn.
PR—W. B. Kinder, Artemus, Ky.
VP—Floyd E. Hann, Knoxville, Tenn.
TR—D. H. Jenkins, Knoxville, Tenn.
GM—W. B. Kinder, Artemus, Ky.
GS—W. B. Kinder, Artemus, Ky.
EM—C. P. Davidson, Middlesboro, Ky.
Franklin Mine; Drift; Dean Seam, 80 in. thick.
PO—Artemus, Ky.; SP—Same; CTY—Knox; RR—L. & N.
S of H—Mules. Track gage, 42 in.
S of M—Hand.
EMP—15.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

FRANTZ-JELICO COAL COMPANY

General Office, Fariston, Ky.
PR—B. Rich, St. Louis, Mo.
TR—Dr. S. L. Rich, Nashville, Tenn.
VP—J. U. G. Rich, Fariston, Ky.
GM—J. U. G. Rich, Fariston, Ky.
PA—J. U. G. Rich, Fariston, Ky.
EM—J. U. G. Rich, Fariston, Ky.
SA—J. U. G. Rich, Fariston, Ky.

Frantz-Jellico Mine; Drift; Jellico Seam, 33 to 45 inches thick.
PO—Fariston, Ky.; SP—Same; CTY—Laurel; RR—L. & N.
S of H—Mules and rope. Track gage 36 inches.
S of M—Hand.
PP—1—40 H. P. loco. type boiler, 4 pumps.
EMP—40. Last years tonnage 5,400.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Bar Screens.

FRIEND-KASH COAL CO.

General Office, Irvine, Ky.
PR—Robt. R. Friend, Irvine, Ky.
VP—Kelly Kash, Irvine, Ky.
TR—R. H. White, Whick, Ky.
GM—R. H. White, Whick, Ky.
PA—R. H. White, Whick, Ky.
SCO—Friend Kash Coal Co. Buyer, R. H. White, Whick, Ky.
SA—Robt. R. Friend, Irvine, Ky.

Friend Kash Mine; Drift; No. 7 Seam, 47 to 49 inches thick.
PO—Whick, Ky.; SP—Same; CTY—Brookhitt; RR—L. & N.
S of H—Mules. Track gage, 42 in.
S of M—Hand.
EMP—12 to 15.
SIZES SHIPT—Run of Mine, Slack, Block.
PREP. EQUIPT—Gravity Screens.

FUNK COAL COMPANY.

TR—H. H. Funk, Sutton, Ky.
GM—H. H. Funk, Sutton, Ky.
PA—J. E. Thacker, Sutton, Ky.
EM—Stoney Amick, Pikeville, Ky.

SCO—Address the company, Buyer, J. E. Thacker, Sutton, Ky.
Sales Agency, West Virginia Standard Coal Co., Huntington, W. Va.
Funk Mines; Drifts; Elkhorn Seam, 54 in. thick.
PO—Sutton, Ky.; SP—Ward Shidub, Ky.; CTY—Pike; RR—C. & O., Big Sandy Div.
MS—H. C. Boggs, Greasy Creek, Ky.
S of H—Mules. Track gage 42 in.
S of M—Hand.
EMP—16. Daily tonnage 75.
SIZES SHIPT—Run of Mine.

FURNACE COAL MINING CO.

General Office, Ashland, Ky.
PR—E. E. Tate, Ashland, Ky.
VP—W. J. Smith, Ashland, Ky.
TR—E. E. Scaton, Ashland, Ky.
GM—B. E. Tate, Ashland, Ky.
GS—W. J. Smith, Jr., Ashland, Ky.
PA—W. J. Smith, Ashland, Ky.
CE—C. G. Evans, Pikeville, Ky.
EE—S. Brown, Ashland, Ky.

Furnace Mine; Drift; Elkhorn Seam, 72 in. thick.
PO—Ashland, Ky.; SP—Same. CTY—Pike, RR—C. & O., Big Sandy Br.
S of H—Mules and 1 storage battery loco. Track gage 44 in.
S of M—1 Shortwall and 1 overhead mach.
PP—1 boiler, total 150 H. P., 1 gen. unit, 250 volts D. C.
EMP—10. Last fiscal year output, 27,000 tons.
SIZES SHIPT—Run of Mine, Slack, Lump, Block.
PREP. EQUIPT—Gravity Screens.

FURNACE GAP COAL CO.

General Office, Pineville, Ky.
PR—Jas. M. Gilbert, Pineville, Ky.
VP—Chas. Kavundis, Harlan, Ky.
TR—Thos. J. Gilbert, Hima, Ky.
GM—E. L. Shell, Hima, Ky.
PA—T. J. Gilbert, Hima, Ky.
EM—E. L. Shell, Hima, Ky.
SCO—Address the Company, Buyer, T. J. Gilbert, Hima, Ky.
SA—East Tennessee Coal Co. Knox, Ia., Tenn.

Eureka Nos. 1, 2, 3 & 4 Mines; Drift; Horse Creek Seam, 40 to 48 in. thick.
PO—Hima, Ky.; SP—Same; CTY—Clay; RR—C. & M.
S of H—Mules and storage battery locos. Track gage 36 in.
S of M—Hand.
PP—1 pump.
EMP—55. Last years tonnage 12,000.
SIZES SHIPT—Run of Mine, Slack, Lump, Block.
PREP. EQUIPT—Gravity Screens.

GARFIELD JELICO COAL COMPANY
Now a part of the Kresge Coal & Mining Company.

GATLIF COAL COMPANY

General Office, Williamsburg, Ky.
PR—J. R. Gatlin, Williamsburg, Ky.
VP—Ed. Gatlin, Williamsburg, Ky.
TR—N. A. Archer, Williamsburg, Ky.
GM—N. B. Perkins, Williamsburg, Ky.
GS—Ira C. Dalrymple, Williamsburg, Ky.
PA—J. R. Gatlin, Williamsburg, Ky.
CE—E. M. Dunham, Williamsburg, Ky.
SCO—Address the Company, Buyer, L. S. Safriet, Gatlin, Ky.
SA—Southern Coal & Coke Co., Knoxville, Tenn., and Cincinnati, O.

Gatlin Nos. 1, 2 and 3 Mine; Drift, Jellico Seam, 42 in. thick.
PO—Gatlin, Ky.; SP—Same; CTY—Whitley; RR—L. & N.
MS—T. H. Black, Gatlin, Ky.
S of H—Mules and 10 trolley pole type locos. Track gage 36 inches.
S of M—52 comp. air and 12 shortwall machs.
PP—8 fire tube boilers, 1200 H. P., gen. units, transformer 2300 to 275 volts A. C., 12 pumps.
EMP—525. Daily tonnage 1,500.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens.
Gatlin No. 4 Mine; Drift; Blue Gem Seam, 28 inches thick.
PO—Gatlin, Ky.; SP—Same. CTY—Whitley; RR—L. & N.
MS—T. H. Black, Gatlin, Ky.
S of H—Mules and gasoline loco. Track gage 36 inches.
S of M—Hand.
PP—1 pump.
EMP—20. Daily tonnage 45.
SIZES SHIPT—Run of Mine.
NOTE—Company operated by the Burns & McDonough Coal Co.

Gatlin No. 5 Mine; Drift; Blue Gem Seam, 28 inches thick.
PO—Gatlin, Ky.; SP—Same; CTY—Whitley; RR—L. & N.
MS—T. H. Black, Gatlin, Ky.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—2 pumps.
EMP—18. Daily tonnage 20.
SIZES SHIPT—Run of Mine.

GENERAL REFRACTORIES CO.

General Office, 1512 Chestnut St., Philadelphia, Pa.
 PR—Wm. C. Sproul, Philadelphia, Pa.
 VP—Burrows Sloan, Philadelphia, Pa.
 TR—Howard Longstrech, Chester, Pa.
 GM—J. H. France, Philadelphia, Pa.
 GS—Clayton S. Hitchins, Hitchins, Ky.
 PA—J. A. Ross, Philadelphia, Pa.
 EM—H. C. Stulting, Hitchins, Ky.
 EE—E. C. Williams, Hitchins, Ky.

General Refractories Mine; Drift; No. 3 Seam, 36 inches thick.
 PO—Hitchins, Ky.; SP—Same; CTY—Carter; RR—C. & O., Lexington Div.

MS—George Stephens, Hitchins, Ky.
 S of H—Mules and 2 elec. locos. Track gage 39 in.
 S of M—Hand and 2 elec. machs.
 PP—2 Rust water tube boilers, total 700 H. P., 2 gen. units, 480 volts A. C., 3 phase, 60 cycles.
 EMP—50.
 Mine for own use only.

GEORGE E. E. COAL COMPANY.

Now Buckfield Coal Co.

GIBRALTAR COAL MINING COMPANY

General Office, Memphis, Tenn.
 PR—Robt. L. Brown, Memphis, Tenn.
 VP—J. A. Smith, Central City, Ky.
 TR—R. F. LaCroix, Memphis, Tenn.
 GM—J. A. Smith, Central City, Ky.
 PA—J. A. Smith, Central City, Ky.
 EM—B. E. Hess, Central City, Ky.
 EE—J. O. Wallace, Central City, Ky.
 SA—Brown Coal Co., Memphis, Tenn.

Gibraltar Mine; Shaft; No. 9 Seam; 62 inches thick.

PO—Mercer, Ky.; FR—Same; EX—Central City, Ky.; CTY—Muhlenburg; RR—Ill. Central.

MS—John Grigsby, Mercer, Ky.
 SM—A. Kaufman, Mercer, Ky.
 S of H—Mules and 3 trolley pole type locos. Track gage 36 in.
 S of M—11 chain breast type machs.
 PP—3 water tube boilers, gen. units, 300 K. W.
 EMP—247. Daily tonnage 1,450.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

Mercer Mine; Shaft; No. 9 Seam, 60 in. thick.

PO—Mercer, Ky.; SP—Frl., Same; Exp., Central City, Ky.; CTY—Muhlenburg; RR—Ill. Central.

MS—Sherman Greene, Mercer, Ky.
 SM—A. Kaufman, Mercer, Ky.
 S of H—Mules and 2 trolley pole type locos. Track gage 31 in.
 S of M—6 chain breast type and 1 shortwall machs.
 PP—3 water tube boilers, 1—150 K. W. gen. units.
 EMP—155. Daily tonnage 900.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens.

Holt Mine; Shaft; No. 9 Seam, 60 in. thick.

PO—Cleaton, Ky.; SP—Same; CTY—Muhlenburg; RR—L. & N.
 MS—A. T. Baker, Central City, Ky.
 SM—Robt. Crossman, Central City, Ky.
 S of H—Mules and 1 combination loco. Track gage 36 in.

S of M—6 chain breast type machs.
 PP—3 water tube boilers, 250 K. W. gen. units.

EMP—175. Daily tonnage 940.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.

PREP. EQUIPT—Shaker Screens.
 NOTE—Formerly operated by the Holt Coal Co.

Brownie Mine; Shaft; No. 9 Seam, 60 in. thick.

PO—Central City, Ky.; SP—Same; CTY—Muhlenburg; RR—Ill. Central.

MS—J. H. Tucker, Central City, Ky.
 SM—Robert Gish, Central City, Ky.
 S of H—Mules. Track gage 40 in.
 S of M—Chain breast type machs.
 PP—2 water tube boilers, 100 K. W. gen. units.
 EMP—150. Daily tonnage 300.
 SIZES SHIPT—Run of Mine.

GLOCORA COAL COMPANY

General Office, 704-706 First National Bank Bldg., Huntington, W. Va.
 PR—Richard Williams, Huntington, W. Va.
 TR—Richard Williams, Huntington, W. Va.
 GM—C. H. Beidenmiller, Huntington, W. Va.
 PA—C. H. Beidenmiller, Huntington, W. Va.
 EM—H. G. Noble, Glo, Ky.
 EE—W. Va. Engineering Co., Charleston, W. Va.
 SA—Middle West Coal Co., First National Bank Bldg., Cincinnati, O.

Glo Mine; Drift; Elkhorn Seam, 50 inches thick.

PO—Glo, Ky.; SP—Wayland, Ky.; CTY—Floyd; RR—C. & O.

MS—C. O. Messenger, Glo, Ky.

SM—D. Baines, Glo, Ky.

S of H—3 trolley pole type locos. Track gage 42 in.

S of M—3 shortwall machs.

PP—Gen. units, 1—200 K. W., 250 volts D. C., 2 pumps.

EMP—100. Daily tonnage 375.

SIZES SHIPT—Run of Mine, Slack, Egg, Block.

PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

GOLDEN ASH COAL COMPANY.

General Office, Williamsburg, Ky.
 PR—T. B. Mahan, Williamsburg, Ky.
 VP—N. B. Perkins, Williamsburg, Ky.
 TR—A. V. Brown, " "
 GS—W. A. Ellison, " Kitts, " "
 PA—W. A. Ellison, " Kitts, " "
 GM—W. A. Ellison, " Kitts, " "
 EE—W. M. Troutman, " "
 EM—N. R. Denham, " Harlan, Ky.
 SA—Address the Company; Buyer, W. R. Eubanks, Kitts, Ky.
 SC—Southern Coal & Coke Co., Cincinnati, O., and Knoxville, Tenn.

Golden Ash Mine; Drift; Harlan Seam, 48 in. thick.

PO—Kitts, Ky.; SP—Harlan, Ky.; CTY—Harlan. RR—L. & N.

S of H—3 elec. locos. Track gage 44 in.

S of M—4 shortwall machs.

PP—Power purchased, transformer 2,300 volts A. C., M. G. sets, 250 volts D. C.

EMP—100. Daily tonnage 500.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.

PREP. EQUIPT—Shaker Screens, Loading Booms.

GOODIN & BARNEY COAL CO.

General Office, Garrett, Ky.
 PR—John G. Goodin, Ashland, Ky.
 VP—J. D. Barney, Garrett, Ky.
 TR—John G. Goodin, Ashland, Ky.
 GM—J. D. Barney, Garrett, Ky.
 PA—J. D. Barney, Garrett, Ky.
 EM—Amich & Haynes, Pikeville, Ky.
 SC—Address the Company, Buyer, E. B. May, Garrett, Ky.
 SA—H. G. Wright Coal Co., Majestic Bldg., Chicago, Ill.

No. 1 Mine; Drift; Elkhorn No. 1 Seam, 48 in. thick.

PO—Garrett, Ky.; SP—Frl. Garrett, Ky.; Exp. Lackey, Ky.; CTY—Floyd; RR—C. & O.

S of H—Mules. Track gage 42 in.

S of M—Hand.

EMP—60. Daily tonnage 250.

SIZES SHIPT—Run of Mine.

No. 2 Mine; Drift; Elkhorn No. 1 Seam, 50-54 in. thick.

PO—Garrett, Ky.; SP—Bosco, Ky.; CTY—Floyd; RR—C. & O.

S of H—Mules. Track gage 42 in.

S of M—Hand.

EMP—110. Daily tonnage 500.

SIZES SHIPT—Run of Mine.

GOOSE CREEK COAL COMPANY.

General Office, Garrard, Ky.
 PR—C. W. Brown, Garrard, Ky.
 TR—A. L. Adams, Cleaton, Ky.
 GM—C. W. Brown, Garrard, Ky.
 GS—C. W. Brown, Garrard, Ky.
 SC—Address the Company, Buyer, Walter Onkst, Garrard, Ky.

Goose Creek Mine; Drift; Blue Gem Seam, 36 inches thick.

PO—Garrard, Ky.; SP—Add, Ky.; CTY—Clay; RR—C. & M.

S of H—Mules. Track gage 36 inches.

S of M—Hand.

EMP—35. Daily tonnage 100.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.

GORDON-MILLER COAL & COKE CO.

General Office, Louisville, Ky.
 PR—Ross E. Gordon, Louisville, Ky.
 VP—J. S. Miller, Louisville, Ky.
 TR—J. S. Miller, Louisville, Ky.
 GM—R. E. Gordon, Louisville, Ky.
 PA—R. E. Gordon, Louisville, Ky.
 SC—Address the Company; Buyer, Jesse Jones, Louisville, Ky.
 SA—Standard Coal Co., Atlanta, Ga.

Lyndale Mine; Drift; Jellico Blue Gem Seam, 40 inches thick.

PO—Gray, Ky.; SP—Same; CTY—Knox; RR—L. & N.

S of H—Mules.

S of M—2 shortwall machs.

PP—2 water tube boilers, 250 H. P., 3 pumps.

EMP—85. Daily tonnage 180.

SIZES SHIPT—Run of Mine, Lump.

PREP. EQUIPT—Gravity Screens.

GRAPEVINE COAL CO.

General Office, Madisonville, Ky.

TRUSTEES—R. E. Cooper, Hopkinsville, Ky.; Mrs. Daisy A. Elgin, Madisonville, Ky.

TR—Worth Waltrip, Madisonville, Ky.
 GM—Worth Waltrip, Madisonville, Ky.

GS—J. M. Hale, R. D., Madisonville, Ky.

PA—Worth Waltrip, Madisonville, Ky.

EM—L. G. Hayes, Madisonville, Ky.

EE—John Phaup, R. D., Madisonville, Ky.

SC—Address the Company, Buyer, Bradley Britton, R. D. 5, Madisonville, Ky.

SA—W. R. Lynn, Madisonville, Ky.

Grapevine Mine; Shaft; Nos. 9 & 11 Seam, 60-72 in. thick.

PO—Madisonville, Ky.; SP—Same; CTY—Hopkins; RR—L. & N.

S of H—Mules and storage battery locos. Track gage 42 in.

S of M—Hand and 4 longwall machs.

PP—Power purchased, transformer 2,300, 220 and 400 volts A. C., 1 125 H. P. and 1—150 H. P. fire tube boilers, 1 gen. unit, 225 K. W., 2300 volts A. C., 3 phase, 60 cycles, 2 pumps.

EMP—175. Last years tonnage 175,000.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.

PREP. EQUIPT—Shaker Screens, Loading Booms, Picking Tables.

GRAVITY COAL MINING CO.

General Office, Gravity, Ky.
 PR—E. R. Short, Middlesboro, Ky.
 VP—R. Lyon, Gravity, Ky.
 TR—Geo. A. Daigle, Middlesboro, Ky.
 GM—E. R. Short, Middlesboro, Ky.
 EM—J. C. Richardson, Boone, Ky.

Gravity Mine; Drift; Winona Seam, 40 in. thick.

PO—Gravity, Ky.; SP—Winona, Ky.; CTY—Bell; RR—L. & N., Southern.

S of H—Mules. Track gage, 42 in.

S of M—Hand.

PP—2 pumps.

Last fiscal year output, 10,000 tons.

SIZES SHIPT—Run of Mine.

Old Information.

GREASY GAP COAL CO.

General Office, Wheeler, Ky.
 PR—J. Glickman, Wheeler, Ky.
 VP—Morris Easter, Pineville, Ky.

TR—J. Glickman, Wheeler, Ky.

GM—J. Glickman, Wheeler, Ky.

GS—J. Glickman, Wheeler, Ky.

PA—J. Glickman, Wheeler, Ky.

CE—A. B. Culton, Pineville, Ky.

SA—Riddle Coal Co., Pineville, Ky.

Greasy Gap Mine; Drift; Dean Seam, 48 inches thick.

PO—Wheeler, Ky.; SP—Frl. Wheeler, Ky.; Exp. Artemus, Ky.; CTY—Knox; RR—Cumberland.

MS—Tom Dye, Wheeler, Ky.

S of H—Mules. Track gage, 42 in.

S of M—Hand.

EMP—22. Daily output, 80 tons.

SIZES SHIPT—Run of Mine, Block.

PREP. EQUIPT—Gravity Screens.

Old Information.

GREEN RIVER COLLIERIES COMPANY

General Office, P. O. Box 474, Indianapolis, Ind.

PR—Edward D. Evans, Indianapolis, Ind.

VP—M. E. Mogg, Indianapolis, Ind.

TR—J. R. Barrett, Indianapolis, Ind.

GS—H. M. Stewart, Sullivan, Ind.

SC—The Mogg Grocery Co., Mogg, Ky.

Green River Mine; Shaft; No. 14 Seam; 84 in. thick.

PO—Mogg, Ky.; SP—Same (Prepay); CTY—Muhlenberg; RR—L. & N.

MS—Fred E. Roland, Mogg, Ky.

S of H—Mules and combination elec. locos. Track gage 42 in.

S of M—6 shortwall machs.

PP—2 fire tube boilers, 300 H. P., M. G. sets, 1—200 K. W., 250 volts D. C., 5 pumps.

EMP—110. Daily tonnage 1,000.

SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.

PREP. EQUIPT—Shaker Screens, Picking Tables.

GREEN ROCK COAL COMPANY

General Office, 1717 Dime Bank Bldg., Detroit, Mich.

PR—H. A. Fidler, 704 Emmet St., Ypsilanti, Mich.

SECY—A. F. West, Detroit, Mich.

TR—A. F. West, Detroit, Mich.

GM—S. K. Fidler, Riceville, Ky.

PA—H. A. Fidler, 704 Emmet St., Ypsilanti, Mich.

SC—Address the Company, Buyer, Fred Rice, Riceville, Ky.

SA—Mancourt-Winters Coal Co., Detroit, Mich.

Green Rock Mine; Drift; Ky. No. 1 Seam; 54 in. thick.

PO—Riceville, Ky.; SP—Same; CTY—Johnson; RR—R. S. & K. R.

MS—S. K. Fidler, Riceville, Ky.

S of H—Mules, storage battery, steam and gasoline locos. Track gage 33 inches.

S of M—Hand.

EMP—20. Last years tonnage 9,400.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Bar Screens.

GREENOUGH COAL CO.

General Office, 40 State St., Boston, Mass.
 PR—Caleb Loring, Boston, Mass.
 TR—Caleb Loring, Boston, Mass.
 GM—T. J. Mitchell, Uniontown, Ky.
 GS—J. M. Smith, Helier, Ky.
 EM—A. J. Baldwin, Pikeville, Ky.
 MM—G. W. Snyder, Helier, Ky.
 EE—Dean Aubury,
 SC—Address the Company, Buyer, J. M. Smith, Helier, Ky.

Greenough Mine; Drift; Elkhorn Seam, 48 in. thick.

PO—Helier, Ky.; SP—Same and Greenough, Ky.; CTY—Pike; RR—C. & O.

S of H—4 elec. locos. Track gage 44 in.

S of M—4 mining machs.

PP—2 water tube boilers, total 600 H. P., 1 air compressor, gen. units, 250 volts A. C., 5 pumps.

EMP—100. Daily tonnage 1,000.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Bar Screens.

GREENVILLE COAL CO.

General Office, Greenville, Ky.
 PR—W. A. Wickliffe, Greenville, Ky.
 VP—C. M. Martin, Greenville, Ky.
 TR—M. L. Wickliffe, Greenville, Ky.
 GM—C. M. Martin, " "
 GS—C. M. Martin, " "
 PA—C. M. Martin, " "
 EM—P. K. Wickliffe, " "
 EE—C. Carl Coats, Central City, Ky.
 SC—Address the Company; Buyers, H. C. Willis, Powderly, Ky., and D. L. Young, Martwick, Ky.
 Sales Mgr., W. A. Wickliffe, Greenville, Ky.

Powderly Mine; Shaft; No. 9 West Kentucky Seam, 4 ft. 8 in. to 5½ ft. thick.

PO—Powderly, Ky.; SP—Same, CTY—Muhlenberg; RR—Illinois Central.

MS—Herbert Myers, Powderly, Ky.

S of H—Mules and 2 trolley pole type locos. Track gage, 36 in.

S of M—9 elec., 4 chain breast type and 5 shortwall machs.

PP—4 return tubular boilers, total 700 H. P., 1 330 Kva. gen. unit, 250 volts D. C., 5 pumps.

EMP—245. Last years tonnage 187,235.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.

PREP. EQUIPT—Shaking Screens, Picking Tables, Loading Rooms.

Martwick Mine, Shaft, No. 9 West Kentucky Seam, 4 ft. 5 in. to 5 ft. thick.

PO—Martwick, Ky.; SP—Same, CTY—Muhlenberg; RR—Illinois Central.

MS—A. J. Mercer, Martwick, Ky.

S of H—Mules and 2 trolley pole type locos. Track gage, 42 in.

S of M—3 chain breast and 2 shortwall machs.

PP—3 return tubular boilers, total 500 H. P., 1 250 K. W. gen. unit, 250 volts D. C., 4 pumps.

EMP—217. Last years tonnage 163,390.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.

PREP. EQUIPT—Shaking Screens, Picking Table, Crusher.

GREGORY BRANCH COAL COMPANY

General Office, Grays, Ky.
 PR—J. T. Gray, Grays, Ky.
 GM—J. T. Gray, Grays, Ky.
 PA—J. T. Gray, Grays, Ky.
 SC—Address the Company, Buyer, M. F. Eagle, Grays, Ky.
 SA—J. T. Gray, Grays, Ky.

Horse Creek Mine; Drift; Horse Creek Seam, 42 inches thick.

PO—Sibert, Ky.; SP—Same; CTY—Clay; RR—C. & M.

MS—W. H. Lee, Grays, Ky.

S of H—Mules. Track gage 36 inches.

S of M—Hand.

EMP—30. Daily tonnage 300.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.

PREP. EQUIPT—Bar Screens.

GUNN, W. E. & COMPANY

Hatcher, Jas. Coal Co.—Cont.

PP—2 fire tube boilers, total 300 H. P.
1—200 and 1—100 K. W. gen.
unit, 250 volts D. C.
EMP—75.
SIZES SHIPT—Run of Mine.

HAWLEY COAL CO.

General Office, Middlesboro, Ky.
PR—W. E. Price, Middlesboro, Ky.
VP—P. M. Parsons, Middlesboro, Ky.
TR—W. O. Pollard, Middlesboro, Ky.
GM—W. O. Pollard, Middlesboro, Ky.
GS—W. O. Pollard, Middlesboro, Ky.
PA—W. O. Pollard, Middlesboro, Ky.
EM—C. P. Davidson, Middlesboro, Ky.
SCO—Address the Company, Buyer, H. I. Russell, Shamrock, Ky.
SA—W. O. Pollard, Middlesboro, Ky.

Hawley Mine; Drift; Sandstone Parting
Seam, 42 inches thick.

PO—Shamrock, Ky.; SP—Hawley, Ky.
CTY—Bell; RR—Southern and L. & N.

S of H—Mules. Track gage, 44 in.

S of M—Hand.

EMP—50. Last years tonnage 31,000.

SIZES SHIPT—Run of Mine, Slack, Pea,

Nut, Lump.

PREP. EQUIPT—Gravity Screens, Loading

Booms.

HAYDEN-SMITH COAL COMPANY

General Office, 617 Citizens Bank, Evansville, Ind.
PR—Lucian Hayden, Evansville, Ind.
VP—C. U. Smith, Mercer, Ky.
TR—Lucian Hayden, Evansville, Ind.
GM—C. U. Smith, Mercer, Ky.
SA—Lucian Hayden, Evansville, Ind.

Slope: No. 11 Seam; 72 inches thick.
PO—Mercer, Ky.; SP—Frt., Mercer, Ky.;
Exp., Central City, Ky.; CTY—Wil-

Hamburg; RR—L. C.

MS—E. Stewart, Mercer, Ky.

S of H—Mules.

S of M—Chain breast mch.

PP—Purchase power. 250 volts D. C.

Daily output, 100 tons.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Bar Screens.

Old Information.

HAZARD BLOCK COAL CO., INC.

General Office, Happy, Ky.
PR—Jesse Morgan, Hazard, Ky.
VP—Frank G. Foreman, Hazard, Ky.
TR—J. A. Roan, Hazard, Ky.
GM—Frank G. Foreman, Hazard, Ky.
GS—Frank G. Foreman, Hazard, Ky.
PA—Frank G. Foreman, Hazard, Ky.
CE—Frank G. Foreman, Hazard, Ky.
SCO—Address the Company, Buyer, J. P. Osborne, Happy, Ky.
SA—Tribby Coal Company, Cincinnati, Ohio.

Hazard Block Mine; Drift; Hazard No. 4
Seam, 42 inches thick.

PO—Happy, Ky.; SP—Frt., Roan, Ky.;
Exp., Hamdin, Ky.; CTY—Perry;

RR—L. & N.

S of H—Mules. Track gage 42 inches.

S of M—Hand.

EMP—20. Daily tonnage 100.

SIZES SHIPT—Run of Mine.

HAZARD BLUE GRASS COAL CORP.

General Office, Johnson City, Tenn.
PR—S. R. Jennings, Johnson City, Tenn.
VP—F. A. Garth, Johnson City, Tenn.
TR—F. A. Garth, Johnson City, Tenn.
GM—F. A. Garth, Johnson City, Tenn.
GS—C. E. Billard, Johnson City, Tenn.
EM—L. M. Malone, Hazard, Ky.
SCO—Address the Company, Buyer, C. A. Morris, Hazard, Ky.
SA—R. Hance Coal & Coke Co., Cincinnati, O., and Kenteria Coal Sales Co., Cincinnati, O.

Nos. 1 and 2 Mines; Drift; Nos. 4 and
7 Seams; 50-56 inches thick.

PO—Hazard, Ky.; SP—Same; CTY—
Perry; RR—L. & N.

S of H—Electric loco. Track gage 40-

42 inches.

S of M—11 shortwall mch.

PP—Power purchased, rotary converters,

2—150 K. W., 250 volts D. C.,

5 pumps.

EMP—425. Daily tonnage 1,900.

SIZES SHIPT—Run of Mine, Slack, Nut,

Egg, Lump, Block.

PREP. EQUIPT—Shaker Screens, Load-

ing Booms.

HAZARD COAL COMPANY

Now part of Hazard Blue Grass Coal Corp.

HAZARD JELICO COAL CO.

General Office, Penobscot Bldg., Detroit, Mich.
PR—E. H. Jewett, Detroit, Mich.
VP—E. L. Douglass, Cincinnati, Ohio.
TR—L. H. Stone, Cincinnati, O.
GM—J. T. Bradley, Pineville, Ky.
GS—E. Renwick, Staub, Ky.
ASST GM—G. P. Foley, Staub, Ky.
PA—Gen. L. Washburne, Cincinnati, O.
SA—Jewett, Biehow & Brooks, Detroit, Mich., and Cincinnati, Ohio.

Harvey Mine; Drift; Nos. 6 and 7 Seams,
49 in. thick.

PO—Staub, Ky.; SP—Freight Dowlais,
Ky.; Express Type, Ky.; CTY—
Perry; RR—L. & N.

MS—Joe Bigby, Staub, Ky.

S of H—Trolley pole type and storage

battery locos. Track gage, 48 in.

S of M—6 shortwall mch.

PP—Purchase power, 2,300 volts, 150

K. W. M. G. sets, 250 volts D. C.,

5 pumps.

EMP—125. Daily output, 800 tons.

SIZES SHIPT—Run of Mine, Slack,

Egg, Lump.

PREP. EQUIPT—Shaker Screen, Pick-

ing Tables, Loading Booms.

HAZARD JUNIOR COAL COMPANY

GM—P. F. Gorman, Typo, Ky.

GS—T. H. Hopkins, " "

CE—V. M. Parsfull, " "

Hazard Junior Mine; Drift; No. 6 Seam,

78 in. thick.

FO—Typo, Ky.; SP—Gorman, Ky.;

CTY—Perry; RR—L. & N., First

Creek Branch.

MS—J. C. Davenport, Typo, Ky.

SM—C. E. Pendleton, Typo, Ky.

PP—Purchase power.

SIZES SHIPT—Run of Mine, Slack, Nut,

Old Information.

HENSLEY COAL COMPANY

PR—E. G. Eversale, London, Ky.

TR—A. Hall, Manchester, Ky.

GM—J. C. Cloyd, Manchester, Ky.

GS—J. L. Drake, Manchester, Ky.

PA—J. C. Cloyd, Manchester, Ky.

SA—J. C. Cloyd, Manchester, Ky.

Maring Glow Mine; Drift; Manchester

Seam, 38 inches thick.

PO—Manchester, Ky.; SP—Same; CTY—

Clay; RR—C. & M.

S of H—Mules. Track gage 36 inches.

S of M—Hand.

Daily tonnage 100.

SIZES SHIPT—Run of Mine, Lump,

Block.

PREP. EQUIPT—Gravity Screens.

Old Information.

HERCULES COAL COMPANY, Inc.

General Office, Morganfield, Ky.

PR—H. L. Blackman, Janesville, Wis.

VP—R. C. Parker, Janesville, Wis.

TR & SECY—B. M. Palmer, Janesville,

Ky.

GM—J. H. McNamaman, Morganfield, Ky.

GS—J. H. McNamaman, Morganfield, Ky.

PA—J. H. McNamaman, Morganfield,

Ky.

EM—C. McElroy, Morganfield, Ky.

ENG—Frank Cartwright, Waverly, Ky.

SCO—Evansville Supply Co., Evansville,

Ind.

Sales Agent, F. J. Kennedy, Morgan-

field, Ky.

Hercules Mine; Shaft; No. 11 Seam, 54

to 60 in. thick.

PO—Morganfield, Ky.; SP—Same; CTY

Union; RR—L. C., L. & N.

S of H—Mules. Track gage 39 in.

S of M—Hand.

PP—2 water tube boilers, total 150

H. P., 1 pump.

EMP—60. Last years tonnage 60,000.

SIZES SHIPT—Run of Mine, Slack, Pea,

Nut, Lump.

HERJA BLUE GEM COAL CO.

PR—A. J. Baird, Barboursville, Ky.

TR—J. A. Kaufman, Barboursville, Ky.

GM—A. J. Baird, Barboursville, Ky.

Herja Blue Gem Mine; Drift; Blue Gem

Seam, 30 inches thick.

PO—Barboursville, Ky.; SP—Heldrick, Ky.

CTY—Knox; RR—C. & N.

S of H—Mules.

S of M—Elec. mach.

PP—Power purchased, 225 volts D. C.

EMP—10. Daily tonnage 25.

SIZES SHIPT—Run of Mine, Slack,

Lump, Block.

PREP. EQUIPT—Screens.

HICARBON COAL COMPANY

General Office, Hicarbon, Ky.

Hicarbon Mine.

PO—Hicarbon, Ky.

No report.

HIGH POINT COAL CO.

General Office, Ages, Ky.

PR—J. E. Adair, Harlan, Ky.

VP—J. S. Greene, Harlan, Ky.

TR—O. W. Adair, Ages, Ky.

GM—J. E. Adair, Harlan, Ky.

GS—J. E. Adair, Harlan, Ky.

PA—J. E. Adair, Harlan, Ky.

EM—C. P. Davidson, Middlesboro, Ky.

SCO—Address the Company; Buyer, J. S.

Greene, Harlan, Ky.

SA—L. L. Young, Louisville, Ky.

High Point Mine; Drift; Harlan Seam, 46

in. thick.

PO—Ages, Ky.; SP—Same; CTY—Har-

lan; RR—L. & N.

S of H—Mules. Track gage, 42 in.

S of M—1 shortwall mach.

PP—Power purchased, transformer 2,300-

250 volts A. C.

EMP—25. Last fiscal year output,

10,000 tons.

SIZES SHIPT—Run of Mine, Lump,

Block.

PREP. EQUIPT—Gravity Screens.

HIGH SPLINT COAL COMPANY

PR—T. B. Perkins, Williamsburg, Ky.

VP—T. E. Mabane, Williamsburg, Ky.

TR—N. A. Archer, Williamsburg, Ky.

GM—J. B. Gatliff, Williamsburg, Ky.

GS—L. C. Dalrymple, High Splint, Ky.

PA—J. B. Gatliff, Williamsburg, Ky.

CE—Ernest Denham, Williamsburg, Ky.

EE—A. C. Mabane, High Splint, Ky.

SCO—H. S. Commissary, High Splint,

Ky. Buyer, L. S. Safriet, Gatliff, Ky.

SA—Southern Coal & Coke Co., Cin-

cinnati, O., and Knoxville, Ten.

High Splint Harlan Mine; Drift; Har-

lan Seam, 46 in. thick.

PO—High Splint, Ky.; SP—Seagraves,

Ky.; CTY—Harlan; RR—L. & N.

S of H—8 10-ton trolley pole type locos.

Track gage 44 inches.

S of M—6 shortwall mch.

PP—Power purchased, Transformer 4400-

2300 volts A. C., rotary converters,

150 K. W., 250 volts D. C.

EMP—125. Daily tonnage 500.

SIZES SHIPT—Run of Mine, Slack, Nut,

Egg, Lump, Block.

PREP. EQUIPT—Shaker Screens, Picking

Tables, Loading Booms.

High Splint Mine; Drift; High Splint

Seam, 70 inches thick.

PO—High Splint, Ky.; SP—Seagraves,

Ky.; CTY—Harlan; RR—L. & N.

S of H—2 8-ton trolley pole type and

1 5-ton storage battery locos.

Track gage 44 in.

S of M—3 shortwall mch.

PP—Power purchased, Transformer 4400-

2300 volts A. C., rotary converters,

150 K. W., 250 volts D. C.

EMP—175. Daily tonnage 500.

SIZES SHIPT—Run of Mine, Slack, Nut,

Egg, Lump, Block.

PREP. EQUIPT—Shaker Screens, Picking

Tables, Loading Booms.

HIGHLAND MINING COMPANY.

General Office, Providence, Ky.

PR—A. J. Ruckman, San Antonio, Texas

VP—D. J. Ruckman, Providence, Ky.

TR—P. V. Ruckman, Providence, Ky.

GS—J. T. Aldridge, Providence, Ky.

PA—F. V. Ruckman, " "

SCO—Ruckman Store Co. Buyer, Marion

Simpson, Providence, Ky.

SA—Ruckman Coal Co., Providence, Ky.

Highland Mine; Slope; No. 11 Seam, 72

inches thick.

PO—Providence, Ky.; SP—Same; CTY—

Webster. RR—L. C. & L. & N.

S of H—Mules, main and tail rope and

trolley pole type loco. Track gage

42 inches.

S of M—6 shortwall mch.

PP—2 fire tube boilers, 400 H. P., 2—

125 K. W. each gen. units, 250

volts D. C., 3 pumps.

EMP—168. Last years tonnage 181,000.

SIZES SHIPT—Run of Mine, Slack, Pea,

Nut, Lump.

PREP. EQUIPT—Gravity Screens.

HIGNITE COAL MINING CO.

General Office, Middlesboro, Ky.

PR—John Hoffman, Covington, Ky.

TR—E. S. Helburn, Middlesboro, Ky.

HOME COAL COMPANY
New P. V. K. Coal Company.

HOME-RUN COAL COMPANY
General Office, Middleshoro, Ky.
PR—P. D. Hart, Jr., Middleshoro, Ky.
VP—E. P. Nicholson, Middleshoro, Ky.
GM—E. P. Nicholson, Middleshoro, Ky.

Home-Run Mine; Drift; Turner Seam, 60 inches thick.
PO—Middleshoro, Ky.; SP—Same; CTY—B-H; RR—L. & N., and Sou.
S of H—Mules.
S of M—Hand.
EMP—28. Last years tonnage 18,800.
SIZES SHIPT—Run of Mine.

HORSE SHOE COAL COMPANY
General Office, East Bernstadt, Ky.
PR—J. W. Creech, Richmond, Ky.
TR—Fred. Blonschl, East Bernstadt, Ky.
GM—Fred. Blonschl, East Bernstadt, Ky.
GS—John Blonschl, Richmond, Ky.
PA—Fred. Blonschl, East Bernstadt, Ky.
EM—C. A. Williams, East Bernstadt, Ky.

Diamond Mine; Drift; Jellico Seam; 36 inches thick.
PO—East Bernstadt, Ky.; SP—Same; CTY—Laurd; RR—L. & N.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—1 pump.
SIZES SHIPT—Run of Mine.

HUGHES HORSE CREEK COAL CO.
General Office, Barbourville, Ky.
PR—W. R. Hughes, Barbourville, Ky.
VP—W. R. Hughes, Barbourville, Ky.
TR—W. R. Hughes, Barbourville, Ky.
GM—W. R. Hughes, Barbourville, Ky.
GS—W. R. Hughes, Barbourville, Ky.
PA—W. R. Hughes, Barbourville, Ky.

Hughes Horse Mine; Drift; Horse Creek Seam, 40 inches thick.
PO—Sibert, Ky.; SP—Same; CTY—Clay; RR—C & N.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—25. Daily tonnage 150.
SIZES SHIPT—Run of Mine, Pea, Nut, Lump.
PREP. EQUIPT—Bar Screens.

HUNTINGTON BY-PRODUCT COAL CO.
General Office, Huntington, W. Va.
PR—B. L. Preddie, Huntington, W. Va.
VP—J. P. Ratchef, Huntington, W. Va.
TR—P. O. Renshaw, Jenkins, Ky.
GM—Fred. Easley, Huntington, W. Va.
GS—B. F. George, Burdine, Ky.
CE—C. G. Evans, Pikeville, Ky.
PA—Don Bowling, Burdine, Ky.
SA—Lake and Export Coal Corp., Huntington, W. Va.
SCO—Address the company, Buyer, F. O. Renshaw, Jenkins, Ky.

By Product Mine; Drift; Elkhorn Seam, 96 inches thick.
PO—Burdine, Ky.; SP—Same; CTY—Letcher; RR—S. V. & E. (B.&O.)
S of H—Mules. Track gage 42 inches.
S of M—Hand.
EMP—40. Daily tonnage 150.
SIZES SHIPT—Run of mine.

HUNTINGTON COAL & MINING COMPANY.
General Office, Huntington, W. Va.
PR—C. N. Morrison, Huntington, W. Va.
VP—P. W. Riffe, Hurricane, W. Va.
TR—J. M. Hall, Huntington, W. Va.
GM—J. M. Hall, Huntington, W. Va.
GS—J. M. Hall, Huntington, W. Va.
PA—J. M. Hall, Huntington, W. Va.
CE—J. B. Eaton, Huntington, W. Va.

Mine No. 3; Drift; Elkhorn Seam, 70 in. thick.
PO—Prestonsburg, Ky.; SP—Same; CTY—Floyd; RR—C & O.
S of H—Trolley pole type locos.
S of M—Hand.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

HURON COAL COMPANY
General Office, Barbourville, Ky.
PR—C. P. Kennedy, Barbourville, Ky.
VP—J. A. Williams, Whitestone, Ga.
TR—R. H. Newitt, Barbourville, Ky.
GM—C. P. Kennedy, Barbourville, Ky.
GS—Henry Branstetter, Barbourville, Ky.
PA—C. P. Kennedy, Barbourville, Ky.

Huron Mine; Drift; Blue Gem Seam; 24 to 30 in. thick.
PO—Barbourville, Ky.; SP—Heldrick, Ky.; CTY—Knox; RR—C. & M.
S of H—Mules. Track gage 30 in.
S of M—2 rotary air drills.
PP—1—40 H. P. boiler and air comp.
EMP—15.
SIZES SHIPT—Run of Mine.

IDEAL HORSE CREEK COAL COMPANY
Now Hughes Horse Creek Coal Co.

ILSLEY MINING COMPANY
General Office, Nortonville, Ky.
OWNERS—Monro B. Lanier, Birmingham, Ala.; Sterling S. Lanier, Jr., Nortonville, Ky.

TR—Monro B. Lanier Birmingham, Ala.
GM—Sterling S. Lanier, Jr., Nortonville, Ky.
PA—R. L. Schlotman, Nortonville, Ky.
EE—Mr. Jones, Nortonville, Ky.
SC—W. D. Norton, Nortonville, Ky.
SC—Crabtree Stone, Buyer, Richard J. Solomon, Ilesley, Ky.
SA—Monro Warrior Coal & Coke Co., Birmingham, Ala. and Chicago, Ill.

"Crabtree" Nos. 1 and 2 Mines; Drifts; No. 9 Seam, 66 inches thick.
PO—Hlesley, Ky.; SP—Same; CTY—Hopkins; RR—Hl. Central.
MS—J. H. Harris, Hlesley, Ky.
S of H—Mules and 3 trolley pole type locos. Track gage 40 inches.
S of M—3 shortwall mach and comp. air puncher.
PP—Power purchased, M. G. Set, 1—150 K. W., 250 volts D. C., 5 arc tube boilers, total 600 H. P., 5 pumps.
EMP—100. Last years tonnage 75,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Plekplug Tables.
NOTP—Successors to the Crabtree Coal Mining Co.

Strip Pitt No. 1 "Rainbow" Mine; Strippling; No. 9 Seam, 66 in. thick.
PO—Hlesley, Ky.; SP—Same; CTY—Hopkins; RR—Hl. Central.
S of H—2 steam locos. Track gage 30 in.
EMP—60. Daily tonnage 750.
SIZES SHIPT—Run of Mine, Slack, Lump, Block.
PREP. EQUIPT—Gravity Screens.

IMPERIAL ELKHORN COAL CO.
General Office, Hammond Bldg., Detroit, Mich.
PR—U. S. Morris, Detroit, Mich.
TR—Geo. T. Maxwell, New York, N. Y.
GM—U. S. Morris, Detroit, Mich.
GS—A. J. Laverly, Sargent, Ky.
PA—A. J. Laverly, Sargent, Ky.
CE—J. M. Roan, Columbus, O.
EM—A. K. Williams, Sargent, Ky.
SCO—Imperial Store, Buyer, R. M. Brohard, Sargent, Ky.
SA—Superior Colliery Co., Detroit, Mich.

Nos. 25, 26 & 27 Mines; Drift; No. 4 & Elkhorn Seams, 65-75 in. thick.
PO—Sargent, Ky.; SP—Same; CTY—Letcher; RR—L. & N.
S of H—2 elec. locos. Track gage 42 in.
S of M—2 arcwall machs.
PP—3 150 H. P. water tube boilers, 150 K. W. gen. units, 250 volts D. C.
EMP—200. Daily tonnage 750.
SIZES SHIPT—Run of Mine.

INDIAN CREEK COAL CO.
General Office, Pineville, Ky.
PR—M. T. Roach, Charleston, W. Va.
VP—T. T. Wright, Middleshoro, Ky.
TR—C. E. Armitage, Charleston, W. Va.
GM—G. H. Marting, Pineville, Ky.
GS—L. F. Vermillion, Harlan, Ky.
PA—O. Howard Harlan, Ky.
SA—Logan Pocahontas Fuel Co., Charleston, W. Va.

Black Bear Mine; Drift; Straight Creek Seam, 40 in. thick.
PO—Four Mile, Ky.; SP—Same; CTY—Bell; RR—L. & N.
MS—F. Watson, Four Mile, Ky.
SM—J. H. Morgan, Rlm, Ky.
S of H—Mules and 2 trolley pole type locos.
S of M—4 shortwall machs.
PP—Motor gen. sets, 250 volts D. C., 1 100 K. W. gen. unit, 2 300 H. P. water tube boilers, pumps.
EMP—100. Last fiscal year output, 20,000 tons.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Gravity Screens.

INOIAN HEAD COAL COMPANY
General Office, Grand Forks, N. D.
PR—Frank B. Feetham, Grand Forks, N. D.
VP—John H. Frame, Fargo, N. D.
TR—L. R. Feetham, Lexington, Ky.
GM—L. R. Feetham, Lexington, Ky.
GS—W. M. Heath, Hazard, Ky.
PA—W. M. Heath, Hazard, Ky.
EM—J. B. Allen, Hazard, Ky.
EE—J. B. Heath, Bluefield, Ky.
SCO—Address the Company, Buyer, H. C. Combs, Hazard, Ky.
SA—Tribbey Coal Company, Cincinnati, Ohio.

Indian Head Mine; Drift; Hazard No. 4 Seam; 40 in. thick.
PO—Hazard, Ky.; SP—Tusley, Ky.; CTY—Perry; RR—L. & N.
S of H—Electric locos. Track gage 42 inches.
S of M—Shortwall machines.
PP—Power purchased. Transformer sets, 1—300-250 volts, M. G. sets, 1—100 K. W., 250 volts D. C.
EMP—40. Last years tonnage 24,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Bar Screens.

INTERCHANGE COAL COMPANY
General Office, Providence, Ky.
PR—E. N. Rice, Providence, Ky.
VP—Than Rice, Providence, Ky.
TR—Than Rice, Providence, Ky.
GM—J. C. Trader, Providence, Ky.
GS—J. L. Herron, Providence, Ky.
PA—J. L. Herron, Providence, Ky.

Interchange Mine; Slope; No. 9 Seam; 60 inches thick.
PO—Providence, Ky.; SP—Same; CTY—Webster; RR—L. C. L. & N.
S of H—Mules, main and tall rope. Track gage 36 inches.
S of M—1 fire tube boiler 12 H. P., 7 pumps.
EMP—25. Daily output, 100 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.
Old Information.

ISLAND COAL CO.
OWNER—E. S. Randle, Island, Ky.

Island Mine; Drift; No. 9 Seam, 48 in. thick.
PO—Island, Ky. SP—Same. CTY—McLenn, RR—L. & N., O. & N. Div.
MS—Thos. Blacks, Island, Ky.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
EMP—40. Daily tonnage 200.
SIZES SHIPT—Run of Mine.
Note—Successors to Randle, E. S.

J. B. BLUE GEM COAL COMPANY
General Office, Pineville, Ky.
PR—E. H. Jewett, Detroit, Mich.
VP—E. L. Douglass, Cincinnati, Ohio.
VP—L. H. Stone, New York, N. Y.
TR—W. Brooks, Penobscot Bldg., Detroit, Mich.
GM—J. T. Bradley, Pineville, Ky.
GENERAL PA—Geo. L. Washburne, Cincinnati, O.
EM—W. R. Raney, Pineville, Ky.
SCO—J. B. Stores Co., Buyer, J. H. Locke, Black Joe, Ky.

SA—Jewett, Bigelow & Brooks, Detroit, Mich., and Cincinnati, Ohio.
Wood Mine; Drift; Harlan Seam; 48 inches thick.
PO—Black Joe, Ky.; SP—Wood, Ky.; CTY—Harlan; RR—L. & N.
S of H—4 trolley pole locos. Track gage 42 inches.
S of M—4 shortwall machs.
PP—Power purchased. Transformer 2,300-250 volts A. C., M. G. sets, 250 volts D. C., 2 pumps.
EMP—100. Last fiscal year output, 75,000 tons.
SIZES SHIPT—Run of Mine, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Loading Booms.
Note—Formerly operated by Harlan Fox Coal Co.

J. B. ELKHORN COAL CO.
General Office, 1018 Union Central Bldg., Cincinnati, O.
PR—E. H. Jewett, Detroit, Mich.
VP—E. L. Douglass, Cincinnati, Ohio.
VP—L. H. Stone, New York, N. Y.
TR—W. Brooks, Penobscot Bldg., Detroit, Mich.
GM—Geo. A. Clotts, Hildason, Ky.
GS—Geo. A. Clotts, Hildason, Ky.
GENERAL PA—Geo. L. Washburne, Cincinnati, O.
CE—M. Bayles, Cincinnati, O.
SCO—J. B. Stores Co., Buyer, D. P. Martin, Hildason, Ky.
SA—Jewett, Bigelow & Brooks, Detroit, Mich., and Cincinnati, Ohio.

Elkhorn Mine; Drift; Elkhorn Seam, 78 in. thick.
PO—Hildason, Ky.; SP—Frt., Douglass, Ky.; Exp., Shelby, Ky.; CTY—Pike; RR—C & O.
S of H—Trolley pole typ locos. Track gage, 48 in.
S of M—2 shortwall and 2 overhead cutters.
PP—Fire tube boilers, 150 H. P., gen. units, 1 100 K. W., 1 150 K. W., 250 volts D. C., 5 pumps.
EMP—53. Last fiscal year output, 34,567 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

J. B. HICKORY CANNEL COAL CO.
Operations indefinitely suspended.

J. B. STRAIGHT CREEK MINING CO.
General Office, Pineville, Ky.
PR—E. H. Jewett, Detroit, Mich.
VP—E. L. Douglass, Cincinnati, Ohio.
VP—L. H. Stone, New York, N. Y.
TR—W. Brooks, Penobscot Bldg., Detroit, Mich.
GM—J. T. Bradley, Pineville, Ky.
GENERAL PA—Geo. L. Washburne, Cincinnati, O.
EM—W. R. Raney, Pineville, Ky.
SCO—J. B. Stores Co., Buyer, Laverne Queener, Pineville, Ky.
SA—Jewett, Bigelow & Brooks, Detroit, Mich., and Cincinnati, Ohio.

Murn Mine; Drift; Jellico Seam, 48 in. thick.
PO—Four Mile, Ky.; SP—Same; CTY—Bell; RR—L. & N.
MS—John Stewart, Four Mile, Ky.
S of H—Mules. Track gage, 40 in.
S of M—2 shortwall machs.
PP—Power purchased, transformer 4000-275 volts A. C., rotary converters, 275 volts D. C.
EMP—75. Last fiscal year output, 52,400 tons.
SIZES SHIPT—Run of Mine.

Raven Mine; Drift; Straight Creek Seam, 40 in. thick.
PO—Four Mile, Ky.; SP—Same; CTY—Bell; RR—L. & N.
MS—John Stewart, Four Mile, Ky.
SM—Laverne Queener, Four Mile, Ky.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
EMP—25. Last fiscal year output, 18,500 tons.

JACKS CREEK COAL COMPANY
General Office, Garrett, Ky.
PR—A. J. Johnson, Garrett, Ky.
VP—James Salisbury, Prestonsburg, Ky.
TR—E. M. Radway, Cincinnati, Ohio.
GM—J. W. Shober, Smallwood, Ky.
GS—J. W. Shober, Smallwood, Ky.
PA—A. J. Johnson, Garrett, Ky.
SA—The Richmond Coal Co., Cincinnati, Ohio.

Smallwood Nos. 1 and 2 Mine; Drift; Elkhorn Seam, 56 in. thick.
PO—Smallwood, Ky.; SP—Jacks Creek, Ky.; CTY—Floyd; RR—B & O.
S of H—Mule and main and tail rope. Track gage 42 inches.
S of M—2 shortwall machs.
PP—250 volts D. C.
SIZES SHIPT—Run of Mine.

JACKSON BLOCK COAL COMPANY.
General Office, Jackson, Ky.
PR—M. S. Crain, Jackson, Ky.
VP—G. M. Center, Jackson, Ky.
TR—M. S. Crain, Jackson, Ky.
GM—G. M. Center, Jackson, Ky.
GS—Rody Branghan, Jackson, Ky.
PA—G. M. Center, Jackson, Ky.
CE—W. M. Purcifull, Hazard, Ky.
SA—G. M. Center, Jackson, Ky.

Jackson Block Mine; Drift; Breathlu Seam, 36 in. thick.
PO—Jackson, Ky. SP—Same. CTY—Breathitt. RR—L. & N.
S of H—Mules. Track gage, 34 in.
S of M—Hand and punchers.
PP—2 125 H. P. tube boilers, 2 Mon-arch air comp., 6 pumps.
EMP—55. Daily tonnage 250.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Bar Screens.

JACKSON COAL MINING CO.
General Office, Knoxville, Tenn.
PR—D. H. Jenkins, Knoxville, Tenn.
VP—J. B. Boyd, Knoxville, Tenn.
TR—R. W. Perry, Knoxville, Tenn.
GS—W. B. Kinder, Artemus, Ky.
PA—W. B. Kinder, Artemus, Ky.
EM—C. P. Davidson, Middleshoro, Ky.
SCO—Address the Company, Buyer, W. B. Kinder, Artemus, Ky.
SA—Tennessee & Southwestern Coal Co., Knoxville, Tenn.

Dean Mine; Drift; Dean Seam, 66 in. thick.
PO—Artemus, Ky.; SP—Same; CTY—Knox; RR—L. & N.
S of H—Mules. Track gage, 42 in.
S of M—1 shortwall mach.
PP—1 150 H. P. water tube boilers, 1 75 K. W. gen. units, 250 volts D. C.
EMP—30. Last years tonnage 14,800.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Block.
PREP. EQUIPT—Gravity Screens.

JAMESON COAL CO.
Out of business.

JAYBEE JELICO COAL COMPANY.
General Office, Pineville, Ky.
PR—E. H. Jewett, Detroit, Mich.
VP—E. L. Douglass, Cincinnati, Ohio.
VP—L. H. Stone, New York, N. Y.
TR—W. Brooks, Penobscot Bldg., Detroit, Mich.
GM—J. T. Bradley, Pineville, Ky.
GENERAL PA—Geo. L. Washburne, Cincinnati, O.
EM—W. R. Raney, Pineville, Ky.
SCO—J. B. Stores Co., Buyer, W. K. G. Smith, Pineville, Ky.
SA—Jewett, Bigelow & Brooks, Cincinnati, Ohio and Detroit, Mich.

East Jellico Mine; Drift; Dean Seam, 42 to 72 in. thick.
PO—Tinsley, Ky. SP—Surren, F. CTY—B.H. RR—L. N. C. V. PA.
MS—Chas. Harris, Tinsley, Ky.
S of H—3 elec. locos. Track gage 49 in.

(Continued on Next Page)

Jaybeo Jellico Coal Co.—Cont.

S of M—Hand and 5 elec. machs.
 PP—2 water tubular boilers and 2 gen. units, total 250 H. P., 250 volts D. C.
 EMP—125. Last fiscal year output, 90,500 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump, Block.
 PREP. EQUIPT.—Picking Table, Shaker Screens.

JELICO COAL MINING COMPANY.

General Office, Knoxville, Tenn.
 PR—Arthur Groves, Knoxville, Tenn.
 VP—F. F. Floyd, Knoxville, Tenn.
 TR—W. J. Everett, Knoxville, Tenn.
 GM—H. H. McCutchan, Mt. Asb, Ky.
 GS—S. J. Marsh, Mt. Asb, Ky.
 PA—H. H. McCutchan, Mt. Asb, Ky.
 EM—Lewis Madden, Knoxville, Tenn.
 EE—P. Foley, Knoxville, Tenn.
 SCO—Buyer, Gus Steiner, Mt. Asb, Ky.

Mt. Asb Mine; Drift; Jellico Seam, 36 in. thick.
 PO—Mt. Asb, Ky.; SP—Same; CTY—Whitley; RR—L. & N.
 S of H—5 trolley pole type locos. Track gage, 42 in.
 S of M—2 elec. and 24 comp. air punchers.
 PP—4 150 H. P. water tube boilers, 2 100 K. W. motor gen. units, A. C.
 EMP—175. Last fiscal year output, 77,000 tons.
 SIZES SHIPT—Slack, Egg, Block.
 PREP. EQUIPT—Shaker Screens, Loading Booms.

JENKINS COAL & COKE CORP.

General Office, Jenkins, Ky.
 PR—H. S. Carpenter, Jenkins, Ky.
 VP—P. H. Flaherty, Jenkins, Ky.
 TR—J. M. Martin, Jenkins, Ky.
 EM—L. B. Abbott, Jenkins, Ky.

No. 1 Mine; Drift; No. 4 Seam, 50 inches thick.
 PO—Jenkins, Ky.; SP—Same; CTY—Letcher; RR—L. & N.
 S of H—Mules. Track gage 42 inches.
 S of M—Hand.

JENNINGS COAL COMPANY.

General Office, Route 5, Henderson, Ky.
 PR—H. B. Jennings, Henderson, Ky.
 GM—H. B. Jennings, Henderson, Ky.
 GS—P. C. Connelly, Henderson, Ky.
 PA—Thos. Stokes, Henderson, Ky.

Jennings Mine; Shaft; No. 9 Seam, 18 inches thick.
 PO—Route No. 5 Henderson, Ky.; SP—Rattlesville, Ky.; CTY—Henderson; RR—L. H. & C. T. L.
 S of H—Mine.
 S of M—Hand.
 PP—1 50 H. P. fire tube boiler, 2 pumps.
 EMP—18. Daily tonnage 300.
 SIZES SHIPT—Run of Mine, Nut, Lump, Block.
 PREP. EQUIPT—Gravity Screens.

JENNY CREEK BLOCK COAL CO.

Jenny Creek Block Mine.
 PO—Denver, Ky.; SP—Same; CTY—Johnson; RR—B. S. & K.
 No report.

JEWELL, JOHN B. COAL CO.

Now Saldee Coal Co.

JOHNS RUN COAL CO.

General Office, Morehead, Ky.
 PR—S. M. Bradley, Morehead, Ky.
 VP—M. T. Bradley, Grayson, Ky.
 TR—Robert Young, Morehead, Ky.
 GM—M. T. Bradley, Grayson, Ky.
 PA—Robert Young, Morehead, Ky.
 SA—Darby Coal Sales Co., Cincinnati, O.

Johns Run No. 1 Mine; Drift; No. 5 Seam, 60 in. thick.
 PO—Reedville, Ky.; SP—Willard, Ky.; CTY—Carter; RR—E. K.
 MS—Robert Hallbrook, Johns Run, Ky.
 S of H—Mules. Track gage 42 inches.
 S of M—Elec. shortwall mach.
 PP—1 150 H. P. water tube boiler, 1—125 K. W. gen. unit, 250 volts D. C., 1 pump.
 EMP—50. Last years tonnage 29,000.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

JOHNSON-HOGG COAL COMPANY

Chavies, Ky.
 No report.

JONES BROS. COAL COMPANY

General Office, Jackson, Ky.
 GM—H. E. Jones, Jackson, Ky.
 SCO—Address the Company. Buyer, H. E. Jones, Jackson, Ky.

Jones Bros. Mine; Drift; Little Elkhorn Seam, 45 inches thick.
 PO—Jackson, Ky.; SP—O. & K. Junction, Ky.; CTY—Breathitt; RR—O. & K.
 MS—W. H. Hamick, Jackson, Ky.

S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 EMP—40. Daily tonnage 160.
 PRODUCES—Steam, Coking, Domestic, Gas.
 Note—Formerly operated by the Cane Creek Coal Company.

JONES-GAIN COAL COMPANY

Now Emory Cain.

JONES COLLIERIES COMPANY

Banner Mine.
 PO—Banner, Ky.; SP—Same; CTY—Floyd; RR—C. & O.
 No report.

KANAWHA-ELKHORN COLLIERIES, INC.

General Office, 219 Ellicott Square, Buffalo, N. Y.
 PR—W. D. Brendel, 219 Ellicott Sq., Buffalo, N. Y.
 VP—E. E. Johnston, 219 Ellicott Sq., Buffalo, N. Y.
 TR—W. H. H. Davenport, 219 Ellicott Sq., Buffalo, N. Y.
 GM—W. H. H. Davenport, 219 Ellicott Sq., Buffalo, N. Y.
 GS—R. C. Simpson, Praise, Ky.
 PA—R. C. Simpson, Praise, Ky.
 EE—C. G. Evans, Pikeville, Ky.
 EE—J. B. Cartmell, Praise, Ky.

Corson or No. 4 Mine; Drift; Upper Elkhorn Seam, 70 in. thick.
 PO—Praise, Ky.; SP—Elkhorn City, Ky.; CTY—Pike; RR—C. C. & O.
 S of H—1 trolley pole type and 2 shortwall locos. Track gage 42 in.
 S of M—2 shortwall machs.
 PP—1 water tube boiler, 250 H. P.
 EMP—65. Last years tonnage 45,000.
 SIZES SHIPT—Run of Mine.
 Note—Formerly operated by the Corson By-Product Coal Corp.

Bentley or No. 5 Mine; Drift; Upper Elkhorn Seam, 70 in. thick.
 PO—Praise, Ky.; SP—Elkhorn City, Ky.; CTY—Pike; RR—C. C. & O.
 S of H—1 storage battery loco. Track gage 36 inches.
 S of M—Hand.
 EMP—45.
 SIZES SHIPT—Run of Mine.
 Note—Formerly operated by the Cumberland-Elkhorn Coal Co.

Superior or No. 2 Mine; Drift; Millard Seam, 40 in. thick.
 PO—Praise, Ky.; SP—Elkhorn City, Ky.; CTY—Pike; RR—C. C. & O. and C. & O.
 S of H—Mules and Storage battery loco. Track gage 44 in.
 S of M—1 shortwall cutting mach.
 PP—1—150 H. P. boiler, transformer, gen. set and rotary converter, 1 pump.
 EMP—20. Last years tonnage 10,000.
 SIZES SHIPT—Run of Mine.

Middle Ridge or No. 3 Mine; Drift; Auxier Seam, 70 in. thick.
 PO—Praise, Ky.; SP—Elkhorn City, Ky.; CTY—Pike; RR—C. C. & O. and C. & O.
 S of H—Mules and rope. Track gage 42 inches.
 S of M—Hand.
 EMP—25. Last years tonnage 25,000.
 SIZES SHIPT—Run of Mine.

KANAWHA KNOX COAL COMPANY

General Office, 303 Masonic Temple, Cincinnati, O.
 PR—J. H. Martin, Cincinnati, O.
 VP—W. C. Martin, Pineville, Ky.
 TR—J. H. Martin, Cincinnati, O.
 GM—J. H. Martin, Cincinnati, O.
 GS—W. C. Martin, Pineville, Ky.
 PA—J. H. Martin, Cincinnati, O.
 EM—F. L. Lee, Middlesboro, Ky.
 EE—C. F. Davis, Pineville, Ky.
 SCO—Ely Supply Co., Buyer, Chas. Smith, Elys, Ky.

Kanawha Knox No. 1 Mine; Drift; North Jellico Seam, 54-66 in. thick.
 PO—Elys, Ky.; SP—Same; CTY—Knox; RR—L. & N.
 S of H—Mules. Rope, 2 storage battery motors. Track gage 42 in.
 S of M—3 shortwall machs.
 PP—Purchase power, 1—200 K. W. Rotary Converter.
 EMP—100. Last years tonnage 60,000.
 SIZES SHIPT—Run of Mine, Block.
 PREP. EQUIPT—Har Screen.

K. D. BLUE GEM COAL CO.

General Office, Barbourville, Ky.
 PR—B. H. Smith, Barbourville, Ky.
 VP—Burt Smith, Barbourville, Ky.
 TR—A. M. Smith, Barbourville, Ky.
 GM—B. H. Smith, Barbourville, Ky.
 GS—F. P. Jones, Barbourville, Ky.
 PA—Burt Smith, Barbourville, Ky.
 EM—Joseph Murphy, Barbourville, Ky.
 SCO—Address the Company. Buyer, Burt Smith, Barbourville, Ky.
 SA—H. S. Fuel Corporation, Chattanooga, Tenn.

No. 1 Mine; Drift; Blue Gem Seam, 26 in. thick.
 PO—Barbourville, Ky.; SP—Pennysey, Ky.; CTY—Knox; RR—C. C. & M.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 EMP—40. Last years tonnage 10,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

KEEL COAL COMPANY.

PR—J. L. Morgan, Pikeville, Ky.
 TR—J. F. Pauley, " "
 GM—J. F. Pauley, " "
 PA—D. T. Keel, " "
 EM—J. A. Baldwin, " "
 SCO—Address the company—Buyer, D. T. Keel, Pikeville, Ky.

Elkhorn Mine; Nos. 1 and 2 Elkhorn Seams, 48 to 72 in. thick.
 PO—Pikeville, Ky.; SP—Pauley, Ky.; CTY—Pike; RR—C. C. & O., Big Sandy Div.
 MS—J. L. Allen, Pikeville, Ky.
 S of H—Mules.
 S of M—Hand.
 SIZES SHIPT—Run of Mine.
 Old information.

KEETON-LYONS BLUE GEM COAL CO.

Out of business.

KELLIOKA COAL COMPANY, THE

General Office, 703 Fourth Nat'l Bank Bldg., Cincinnati, O.
 PR—Edward F. Peters, Cincinnati, O.
 VP—Robert Runt, Cincinnati, O.
 TR—W. W. Austin, Cincinnati, O.
 GM—W. W. Austin, Cincinnati, O.
 GS—George D. Batchelor, Nolasburg, Ky.
 EM—N. R. Denham, Harlan, Ky.
 SCO—Address the Company. Buyer, Geo. D. Batchelor, Nolasburg, Ky.
 SA—Borderland Coal Sales Co., Cincinnati, O.

Kellioka Mine; Drift; Kellioka & Leonard Seams, 48 in. thick.
 PO—Nolasburg, Ky.; SP—Kellioka, Ky.; CTY—Harlan; RR—L. & N.
 S of H—Mules and 1 gasoline loco. Track gage 42 in.
 S of M—Hand.
 PP—1 pump.
 Last years tonnage 11,000.
 SIZES SHIPT—Run of Mine.

KELLY & LUNIS COAL COMPANY.

General Office, Harlan, Ky.
 PR—C. J. Lunis, Pennington Gap, Va.
 TR—J. S. Kelly, Harlan, Ky.
 GM—J. S. Kelly, Harlan, Ky.
 GS—J. S. Kelly, Harlan, Ky.
 PA—J. S. Kelly, Harlan, Ky.
 EM—E. O. Fox, Harlan, Ky.
 Kelly & Lunis Mines; High Splint Seam.
 PO—Harlan, Ky.; SP—Calindo, Ky.; CTY—Harlan; RR—L. & N.
 S of H—Mules. Track gage 42 in.
 S of M—Hand.
 EMP—15. Daily tonnage 100.
 SIZES SHIPT—Run of Mine, Nut, Block.

KELLY, J. S. MINING COMPANY

Now Kelly & Lunis Coal Company.

KENMONT COAL COMPANY.

General Office, Nicholas Bldg., Toledo, O.
 PR—Elmer Miller, Toledo, Ohio.
 VP—H. K. English, Lexington, Ky.
 TR—Elmer Miller, Toledo, Ohio.
 GM—H. K. English, Lexington, Ky.
 GS—J. L. Bishop, Jeff, Ky.
 PA—J. L. Bishop, Jeff, Ky.
 EE—E. B. Jones, Jeff, Ky.
 SCO—Address the Company. Buyer, H. F. Kelly, Jeff, Ky.
 SA—The Elmer Miller Coal Company, Nicholas Bldg., Toledo, Ohio.

The Kenmont Mine; Drift; Hazard No. 7 and 9 Seam, 60 in. thick.
 PO—Jeff, Ky.; SP—Hamdin, Ky.; CTY—Perry; RR—L. & N.
 S of H—6 trolley pole type locos. Track gage 42 in.
 S of M—5 shortwall machs.
 PP—Power purchased, M. G. Sets, 250 volts D. C., 4 pumps.
 EMP—250. Last years tonnage 1,000.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

KENTUCKY BEAVER COLLIERIES CO.

General Office, 2200 Insurance Exchange Bldg., Chicago, Ill.
 PR—C. C. Whittier, Chicago, Ill.
 VP—Jas. A. Halstead, Chicago, Ill.
 TR—N. C. Nolte, Chicago, Ill.
 GM—H. L. Jones, Banner, Ky.
 GS—H. L. Jones, Banner, Ky.
 EM—L. V. Rice, Chicago, Ill.
 EE—C. G. Egans, Pikeville, Ky.
 SA—Amest Fuel Co., Cincinnati, O.

Kentucky Beaver Mine; Drift; Elkhorn Seam, 50 inches thick.
 PO—Banner, Ky.; SP—Beaver Creek, Ky.; CTY—Floyd; RR—C. & O.
 MS—Wm Peck, Beaver Creek, Ky.
 S of H—Mules. Track gage 42 inches.

S of M—2 shortwall machs.
 PP—150 H. P. water tube boiler, 1 gen. unit, 250 volts D. C., 1 pump.
 EMP—40. Daily tonnage 300.
 SIZES SHIPT—Run of Mine.

KENTUCKY BLOCK CANNEL COAL CO.

General Office, Cannel City, Ky.
 PR—L. P. Yandell, 15 Willow St., New York, N. Y.
 VP—W. DeL. Walbridge, Red Bank, N. J.
 TR—Hugh Miner, Cannel City, Ky.
 GM—M. L. Conley, " "
 PA—M. L. Conley, " "
 GE—T. J. Barr, Cannel City, Ky.
 SCO—Address the Company Store Dept. Buyer, D. S. Bowlby, Cannel City, Ky.

No. 20 and E. Brushy Mines; Drift; No. 2 Seam, 42 in. thick.
 PO—Cannel City, Ky.; SP—Same; CTY—Morgan; RR—O. & K.
 MS—T. J. Barr, Cannel City, Ky.
 S of H—1 steam loco. and mules. Track gage 42 in.
 S of M—28 comp. air punchers.
 PP—3 return tubular boilers, 300 H. P., 2 air comp., 3 pumps.
 EMP—150. Daily tonnage 250.
 SIZES SHIPT—Slack, Egg, Block.
 PREP. EQUIPT—Bar Screens.

KENTUCKY BLOCK FUEL CO.

General Office, Pocahontas, Va.
 PR—James Ellwood Jones, Pocahontas, Va.
 VP—C. K. Wagner, Jonancy, Ky.
 TR—James W. Bailey, Pocahontas, Va.
 GM—W. A. Bishop, Pocahontas, Va.
 GS—C. K. Wagner, Jonancy, Ky.
 PA—W. G. Andrews, Jonancy, Ky.
 EM—Amic & Haynes, Pikeville, Ky.
 SCO—Address the Company. Buyer, W. G. Andrews, Jonancy, Ky.
 SA—Gum & Butler, Cincinnati, O.

Kentucky Block Mine; Drift; Upper and Lower Elkhorn Seams.
 PO—Jonancy, Ky.; SP—Ellwood, Ky.; CTY—Pike; RR—S. V. & E.
 S of H—Mules and elec. locos. Track gage 44 inches.
 S of M—4 shortwall machs.
 PP—2—150 H. P. fire tube boilers, 1—250 K. W. gen. unit, 250 volts D. C.
 EMP—100. Last years tonnage 80,000.
 SIZES SHIPT—Run of Mine, Lump.
 PREP. EQUIPT—Shaker Screens.

KENTUCKY BLOCK MINING COMPANY

General Office, Lexington, Ky.
 PR—H. E. Bullock, Lexington, Ky.
 VP—John Hayslett, Typo, Ky.
 TR—V. P. Rucker, Lexington, Ky.
 GM—John Hayslett, Typo, Ky.
 GS—C. M. Wilson, Typo, Ky.
 PA—R. R. Ritchie, Typo, Ky.
 EM—D. P. Richards, Typo, Ky.
 SCO—Address the Company. Buyer, R. R. Ritchie, Typo, Ky.
 SA—H. E. Bullock, 702 City Nat'l Bank Bldg., Lexington, Ky.

Kentucky Block Mine; Drift; No. 7 Seam, 60 in. thick.
 PO—Typo, Ky.; SP—Hayslee, Ky.; CTY—Perry; RR—L. & N.
 S of H—4 trolley pole type locos. Track gage 48 in.
 S of M—4 shortwall machs.
 PP—Power purchased, Transformer 2300 volts A. C., 2—100 K. W. gen. units, M. G. Sets, 250 volts A. C.
 EMP—100. Last years tonnage 65,000.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Loading Booms.

KENTUCKY CARDINAL COAL CORP.

PR—J. C. Stras, Cardinal, Ky.
 GM—J. C. Stras, Cardinal, Ky.
 SA—The S. J. Patterson Co., Dayton, O.

No. 1 Mine; Drift; Harlan Seam, 50 in. thick.
 PO—Cardinal, Ky.; SP—Same; CTY—Harlan and Bell; RR—L. & N.
 S of H—4 elec. locos. Track gage 42 in.
 S of M—4 shortwall machs.
 PP—Power purchased, 1—150 K. W. rotary converter, 250 volts D. C.
 EMP—75. Last years tonnage 44,000.
 SIZES SHIPT—Run of Mine, Slack.

KENTUCKY COKE COMPANY

General Office, 311 W. Chestnut, Louisville, Ky.
 PR—Matt O'Doherty, Louisville, Ky.
 VP—D. McDonald, Louisville, Ky.
 TR—T. B. Wilson, Louisville, Ky.
 MINE MGR—A. W. Lee, Louisville, Ky.
 PA—Graham Davis, Louisville, Ky.
 EM—R. S. Shelly, Central City, Ky.
 SCO—Echols Store, Buyer, S. O. Maples, Echols, Ky.

Echols Mine; Shaft; No. 9 West, Ky. Seam, 56 inches thick.
 PO—Echols, Ky.; SP—Rockport, Ky.; CTY—Ohio; RR—L. C.
 MS—W. E. Hicks, Echols, Ky.

(Continued on Next Page)

Kentucky Coke Co.—Cont

S of H—Mules, electric and storage battery locos. Track gage 10 inches.
S of M—1 chain breast type mach.
PP—2 fire tube boilers, 275 H. P., 1 100 K W., 1 75 K W., gen. units, 250 volts D. C.
EMP—165. Last years tonnage 103,000.
SIZES SHIPT—Run of Mine, Slack, Nut.
PREP. EQUIPT—Bar, Revolving and Shaker Screens, Loading Boom.
Note—Echols Mine formerly operated by Louisville Gas & Electric Co. and Melleny Coal Co.

KENTUCKY COLLIERIES COMPANY
Out of business.

KENTUCKY DIAMOND COAL CO

General Office, Corydon, Ky.
PR—J. G. Chase, Nashville, Tenn.
VP—A. G. Merritt, Corydon, Ky.
TR—Turner Merritt, Corydon, Ky.
GM—A. G. Merritt, Corydon, Ky.
GS—J. D. Lewis, Corydon, Ky.
PA—A. G. Merritt, Corydon, Ky.
SC—Address the Company, Buyer, Turner Merritt, Corydon, Ky.

Corydon Mine; Shaft; No. 12 Seam, 60 in. thick.
PO—Corydon, Ky.; SP—Same; CTY—Henderson; RR—L. & N.
S of H—Mules. Track gage 36 in.
S of M—Shortwall machs.
PP—2—125 H. P. fire tube boilers, gen. unit, 250 volts D. C., 5 pumps.
EMP—60. Last years tonnage 80,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.
NOTE—Formerly operated by Corydon Coal Co.

KENTUCKY ELKHORN OY-PRODUCT COAL CO.

General Office, First National Bank Bldg., Huntington, W. Va.
PR—H. H. Morris, Huntington, W. Va.
VP—T. F. Bailey, Huntington, W. Va.
TR—Wm. J. Harvie, Huntington, W. Va.
GM—H. L. Cox, Dorton, Ky.
PA—H. L. Cox, Dorton, Ky.
EM—C. G. Evans, Pikeville, Ky.
SE—E. H. Robinson, Dorton, Ky.
SA—The C. G. Blake Company, Cincinnati, O.

Dorton Nos. 1 and 2 Mine; Drift; Elkhorn Seam, 50 in. thick.
PO—Dorton, Ky.; SP—Same; CTY—Pike; RR—S. V. & E.
MS—H. L. Cox, Dorton, Ky.
S of H—2 storage battery locos. Track gage 44 in.
S of M—2 shortwall machs.
PP—1 150 H. P. water tube boiler, 1 150 K W. gen. unit, 250 volts D. C., 1 pump.
EMP—45. Last years tonnage 39,000.
SIZES SHIPT—Run of Mine.

KENTUCKY ELKHORN COAL CORP.

General Office, Praise, Ky.
PR—F. R. Scott, Praise, Ky.
VP—H. A. Womack, Praise, Ky.
TR—F. R. Scott, Praise, Ky.
GM—H. A. Womack, Praise, Ky.
GS—W. R. Todd, Praise, Ky.
PA—H. A. Womack, Praise, Ky.
CE—H. W. Womack, Praise, Ky.

Federal Mine; Drift; Elswick Seam; 40 to 48 in. thick.
PO—Praise, Ky.; SP—Elkhorn, Ky.; CTY—Pike; RR—C. & O.
S of H—3 storage battery and 1 combination locos. Track gage 42 inches.
S of M—2 shortwall machs.
PP—1—100 H. P. boiler, 1—100 K W. gen. unit, 250 volts D. C.
EMP—50. Daily tonnage 350.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

KENTUCKY FIRE BRICK CO.

General Office, Portsmouth, Ohio.
PR—L. P. Haldeman, Portsmouth, Ohio
TR—Russell Becker, Portsmouth, Ohio
GM—D. B. Leadbetter, Haldeman, Ky.
GS—J. C. Stewart, Haldeman, Ky.
PA—J. E. Leighow, Haldeman, Ky.
EM—S. S. Cassidy, Haldeman, Ky.
SC—Address the company, Buyer, J. E. Leighow, Haldeman, Ky.
SA—Kentucky Fire Brick Co., Transcontinental Commercial Bank Bldg., Chicago, Ill.

Nos. 1, 2 & 4 Mines; Drifts; Seam, 72 inches thick.
PO—Haldeman, Ky. SP—Same. CTY—Rowan. RR—C. & O.
MS—Sink Bowen, Haldeman, Ky.
S of H—Mules. Track gage 29 inches.
S of M—Hand.
PP—2 pumps.
EMP—60

KENTUCKY FUEL & OIL COMPANY

General Office, Jackson, Ky.
PR—Retard C. Musick, Jackson, Ky.
VP—C. B. McGuire, Jackson, Ky.
TR—H. D. Huffman, Jackson, Ky.
Note—Just organized.

KENTUCKY GEM COAL CO.

General Office, Ashland, Ky.
PR—J. C. Hatcher, Ashland, Ky.
VP—F. L. Stewart, Ashland, Ky.
TR—F. L. Stewart, Ashland, Ky.
GM—J. C. Hatcher, Ashland, Ky.
GS—W. R. Stewart, Rush, Ky.
PA—W. R. Stewart, Rush, Ky.
CE—J. L. Simpson, Rush, Ky.
SC—Address the Company, Buyer, Robt. Adams, Rush, Ky.

Kentucky Gem Mine; Drift; Nos. 7 and 8 Seams, 48-72 in. thick.
PO—Rush, Ky.; SP—North Branch, Ky.; CTY—Carter; RR—C. & O.
MS—P. M. Shashan, Rush, Ky.
S of H—Mules and storage battery loco. Track gage 44 inches.
S of M—Hand.
EMP—75. Last fiscal year output, 38,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

KENTUCKY-GEORGIA COAL COMPANY

General Office, East Bernstadt, Ky.
PR—C. L. McDowell, E. Bernstadt, Ky.
VP—James Humphreys, E. Bernstadt, Ky.
TR—C. L. McDowell, E. Bernstadt, Ky.
GM—C. L. McDowell, E. Bernstadt, Ky.
SC—Address the company, Buyer, C. L. McDowell, E. Bernstadt, Ky.
SA—C. L. McDowell, E. Bernstadt, Ky.

Boner Mine; Drift; Jellico Seam, 45 inches thick.
PO—E. Bernstadt, Ky.; SP—Same; CTY—Laurel; RR—L. & N.
MS—C. L. McDowell, E. Bernstadt, Ky.
S of H—Mules. Track gage 36 inches.
S of M—15 chain breast type machs.
PP—1 30 H. P. fire tube boilers 1 pump.
EMP—35. Last years tonnage 12,000.
SIZES SHIPT—Run of Mine.

KENTUCKY-HARLAN COAL COMPANY.

General Office, Harlan, Ky.
PR—F. W. Harrop, Somerset, Ky.
VP—G. W. McCardell, Williamsport, Md.
TR—S. A. Douglas, Harlan, Ky.
GM—S. A. Douglas, Harlan, Ky.
GS—S. A. Douglas, Harlan, Ky.
PA—S. A. Douglas, Harlan, Ky.
SA—Blue Diamond Coal Sales Co., Knoxville, Tenn.

Bat Wing Mine; Drift; Harlan Seam, 50 in. thick.
PO—Harlan, Ky.; SP—Same; CTY—Harlan; RR—L. & N.
S of H—Mules and 1 storage battery loco. Track gage 42 inches.
S of M—2 chain breast type machs.
PP—250 volts D. C., 1 pump.
EMP—65. Last years tonnage 77,000.
SIZES SHIPT—Run of Mine, Nut, Block.
PREP. EQUIPT—Shaker Screens.

KENTUCKY KING COAL CO

General Office, Wallins Creek, Ky.
PR—S. E. Wolff, 14 Wall St., New York, N. Y.
VP—W. H. Barthald, 14 Wall St., New York, N. Y.
TR—W. B. Miller, Wallins Creek, Ky.
GM—W. B. Miller, Wallins Creek, Ky.
GS—W. M. Anderson, Wallins Creek, Ky.
PA—W. B. Miller, Wallins Creek, Ky.
SC—Address the Company, Buyer, J. W. Smith, Wallins Creeks, Ky.
SA—S. E. Wolff, 14 Wall St., New York, N. Y.

Kentucky-King Mine; Drift Wallins Seam, 78 inches thick.
PO—Wallins Creek, Ky.; SP—Same; CTY—Harlan; RR—L. & N.
S of H—Mules and 2 trolley pole type locos. Track gage, 42 in.
S of M—5 elec. machs.
PP—Power purchased, transformer 4,000-220 volts A. C., rotary converters, 250-275 volts D. C., 1 pump.
EMP—140. Last years tonnage 100,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

KENTUCKY MIDLAND COAL CO.

General Office, Central City, Ky.
PR—E. J. C. Realer, Cedar Rapids, Ia.
TR—Glenn M. Averill, Cedar Rapids, Ia.
GM—M. M. Wheeler, Central City, Ky.
GS—John Blackwell, Midland, Ky.
PA—M. M. Wheeler, Central City, Ky.
EM—R. H. Shelby, Central City, Ky.
SC—Address the Company; Buyer, C. L. Nicholls, Midland, Ky.
Sales Agent, M. M. Wheeler, Central City, Ky.

Midland Mine, Shaft, No. 9 Seam 4 ft. 6 in. to 5 ft. 2 in. thick.
PO—Midland, Ky.; SP—Same; CTY—Muhlenberg; RR—Kentucky Midland R. R. Co.
S of H—15 mules and 1 trolley pole type elec loco. Track gage, 40 in.
S of M—6 chain breast and 3 shortwall machs.

PP—3 return tubular buffers, total 450 H. P. 1—125 K W., 1—200 K W. gen. units, 250 volts D. C., 2 pumps.
EMP—175. Last fiscal year output, 129,003 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

KENTUCKY RIDGE COAL COMPANY.

General Office, Straight Creek, Ky.
PR—J. H. Swaris, Pineville, Ky.
VP—A. G. Smith, Louisville, Ky.
TR—E. W. Pitman, Pineville, Ky.
GM—E. W. Pitman, Pineville, Ky.
GS—E. W. Pitman, Pineville, Ky.
PA—E. W. Pitman, Pineville, Ky.

Kentucky Ridge Mine; Drift; Seam, 40 inches thick.
PO—Straight Creek, Ky.; SP—Jensan, Ky.; CTY—Bell; RR—L. & N.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—20. Last years tonnage 15,000.
SIZES SHIPT—Run of Mine.
Old Information.

KENTUCKY RIVER COAL MINING CO.

General Office, 1125 Transportation Bldg., Chicago, Ill.
PR—Ralph C. Whitsett, Chicago, Ill.
VP—A. H. Whitsett, Mt. Ida, Ark.
TR—Frank S. Robbins, Chicago, Ill.
GM—R. C. Whitsett, Chicago, Ill.
GS—Zack Gruss, Hiner, Ky.
PA—Albert Tebo, Chicago, Ill.
CE—J. B. Allen Engineering Co., Hazard, Ky.
SC—Address the Company, Buyer, J. D. Kelley, Hiner, Ky.
SA—R. C. Whitsett Coal Mining Co., 608 South Dearborn St., Chicago, Ill.

Whitsett No. 1 Mine; Drift; Hazard Nos. 6 and 7 Seams; 52 to 85 inches thick.
PO—Hiner, Ky.; SP—Frt., Whitsett, Ky.; Exp., Hazard, Ky.; RR—L. & N.
S of H—4 6-ton and 1 10-ton trolley pole type locos. Track gage 48 in.
S of M—4 shortwall machs.
PP—Power purchased, Transformer 2300-250 volts A. C., gen. units, 2—150 K W., 250 volts D. C. 3 pumps.
EMP—150. Daily tonnage 800.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

KENTUCKY RIVER MINING COMPANY

General Office, Cannel City, Ky.
PR—W. L. Day, Winchester, Ky.
VP—W. E. Bach, Lexington, Ky.
TR—P. J. Johnson, Lexington, Ky.
GM—T. J. Barr, Cannel City, Ky.
GS—John Collins, Frozen Creek, Ky.
PA—G. W. Leslie, Cannel City, Ky.
CE—T. J. Barr, Cannel City, Ky.

Five Mile Mine; Drift; No. 3 Elkhorn Seam.
PO—Cannel City, Ky.; SP—Wilburst, Ky.; CTY—Breathitt; RR—O. & K.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
Daily tonnage 40.
SIZES SHIPT—Run of Mine, Slack and Lump.

KENTUCKY STRAIGHT CREEK COAL CO.

General Office, Pineville, Ky.
PR—J. E. Settle, Pineville, Ky.
TR—R. T. Settle, Pineville, Ky.
GM—J. E. Settle, Pineville, Ky.
GS—J. E. Settle, Pineville, Ky.
PA—J. E. Settle, Pineville, Ky.
EM—J. E. Settle, Pineville, Ky.
SA—Riddle Coal Co., Chattanooga, Tenn.

Kentucky Straight Creek Mine; Drift; Straight Creek Seam, 48 in. thick.
PO—Pineville, Ky.; SP—Ramona, Ky.; CTY—Bell; RR—L. & N.
S of H—Mules. Track gage 42 in.
S of M—Hand.
PP—Power purchased.
EMP—40. Last years tonnage 20,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.

KEYSER COAL CO.

OPERATOR—Chas. M. Keyser, Keyser, Ky.
EM—Stony Amick, Pikeville, Ky.
EE—Albert Mims, Keyser, Ky.
SC—Address the Company, Buyer, Chas. M. Keyser, Keyser, Ky.

Keyser No. 1 Mine; Drift; Elkhorn No. 6 Seam, 60 in. thick.
PO—Keyser, Ky.; SP—Keyser, Prepay Freight; CTY—Pike; RR—Chesapeake & Ohio.
MS—H. I. Smith, Keyser, Ky.
SM—W. H. Esterling, Keyser, Ky.
S of H—Mules and 1 trolley pole type mach. Track gage, 42 in.
S of M—Elec. puncher, 3 shortwall machs.
PP—2 water tube boilers, 150 H. P. 1 150 K W. gen. unit, 250 volts D. C., 5 pump.
EMP—120. Daily tonnage 400.
SIZES SHIPT—Slack, Lump.
PREP. EQUIPT—Shaker Screens.

KEYSTONE JELICO COAL CO

General Office, East Bernstadt, Ky.
PR—J. E. Stringer, Pittsburgh, Ky.
GM—J. E. Stringer, Pittsburgh, Ky.
SA—Southern Jellico Coal Co., Jellico, Tenn.

Standard Mine; Drift; Jellico Seam, 32 inches thick.
PO—East Bernstadt, Ky.; SP—Same; CTY—Laurel; RR—L. & N.
MS—J. E. Stringer, Pittsburgh, Ky.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—11. Last years tonnage 6,400.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Bar Screens.
NOTE—Formerly operated by the Standard Coal Co.

KIMBLE COAL COMPANY.

General Office, Centertown, Ky.
PR—Leonard Randle, Centertown, Ky.
VP—B. C. Edgar, Nashville, Tenn.
TR—Paul M. Davis, Nashville, Tenn.
GM—Leonard Randle, Centertown, Ky.
GS—Leonard Randle, Centertown, Ky.
PA—Russ Morton, Equality, Ky.
EM—H. Crumbliss, Jr., Chattanooga, Tenn.
Sales Agent, Leonard Randle, Centertown, Ky.

Kimble Mine; Drift; No. 14 Seam, 84 to 108 in. thick.
PO—Centertown, Ky.; SP—Kronos, Ky.; CTY—Ohio; RR—L. & N.
MS—C. H. Chapman, Centertown, Ky.
SM—Russ Morton, Equality, Ky.
S of H—Mules. Track gage 40 inches.
S of M—6 comp. air machs.
PP—1 return tubular boiler, 150 H. P., 1 air compressor 4 pumps.
EMP—90. Last years tonnage 35,500.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Link-Belt Shaker Screens.
Old Information.

KING BLUE GEM COAL CO

General Office, Manchester, Ky.
PR—J. W. Petrey, Manchester, Ky.
VP—Joe E. Payne, Manchester, Ky.
TR—J. R. Petrey, Manchester, Ky.
GM—J. W. Petrey, Manchester, Ky.
SA—R. C. Abey, Louisville, Ky.

No. 1 Mine; Drift; Horse Creek Seam; 44 inches thick.
PO—Crawfish, Ky.; SP—Sibert, Ky.; CTY—Clay; RR—C. & M.
MS—Joe E. Payne, Manchester, Ky.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—10. Daily output, 30 tons.
SIZES SHIPT—Run of Mine, Slack, Block.
Old Information.

KING HARLAN COMPANY.

General Office, 34 Ingalls Bldg., Cincinnati, O.
PR—A. C. Marshall, Detroit, Mich.
VP—J. C. Layne, Jr., Cincinnati, O.
TR—R. W. Srenes, Detroit, Mich.
GS—John Harland, 34 Ingalls Bldg., Cincinnati, Ohio.
PA—John T. O'Mara, Cincinnati, O.
EM—C. P. Davidson, Middletown, Ky.
SC—Address the Company, Buyer, Chas. R. Owens, Kildav, Ky.
SA—Wayne Mining Co., Cincinnati, O.

King-Harlan Mine; Drift; Harlan Seam, 59 in. thick.
PO—Kildav, Ky.; SP—Frt. Kildav, Ky.; Exp. Everts, Ky.; CTY—Harlan; RR—L. & N.
MS—A. R. Finley, Kildav, Ky.
S of H—5 storage battery locos. Track gage 42 in.
S of M—4 machs.
PP—Power purchased, transformer 4,000-220-110 volts A. C., motor gen. Sets, 75 K W., 220-250 volts D. C.
EMP—165. Last years tonnage 96,132.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

KINGTON COAL CO.

Now part of the Hart Coal Corporation

KINGTON COAL MINING COMPANY

General Office, Morgantown, Ky.
PR—W. W. Kington, Morgantown, Ky.
VP—O. M. Kington, Morgantown, Ky.
GS—A. C. Stables, Morgantown, Ky.
PA—O. M. Kington, Morgantown, Ky.
EE—J. W. Hays, Morgantown, Ky.
SC—Address the Company, Buyer, A. C. Stables, Morgantown, Ky.
SA—O. M. Kington, Morgantown, Ky.

Kington Mine; Shaft; Nos. 9 and 11 Seams, 66 inches thick.
PO—Morgantown, Ky.; SP—Uniontown, Ky.; CTY—Union; RR—I. C.
S of H—Mules. Track gage 42 inches.
S of M—Hand and longwall machs.
PP—4 150 H. P. water tube boilers, gen. units, 150 K W., 250 volts D. C.
(Continued on Next Page)

Kington Coal Mining Co.—Cont.

EMP—100.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Shaker Screens, Picking Tables

KIRK COAL COMPANY

General Office, Beech Creek, Ky.
PR—L. Z. Kirkpatrick, Greenville, Ky.
VP—H. L. Kirkpatrick, Russellville, Ky.
TR—H. L. Kirkpatrick, Russellville, Ky.
GS—H. L. Kirkpatrick, Russellville, Ky.
GM—C. Kirkpatrick, Beech Creek, Ky.
PA—C. Kirkpatrick, Beech Creek, Ky.
SC—Kirk Mreantile Co., Buyer, Victor Jenkins, Beech Creek, Ky.
SA—Kirkpatrick Coal Co., Louisville, Ky.

Additional Information on Page 476

Kirk Mines; Drift; No. 9 Seam, 66 to 72 in. thick.
PO—Beech Creek, Ky.; SP—Browder, Ky.; CTY—Muhlenberg; RR—L. & N., Beech Creek Br.
MS—W. L. Russell, Beech Creek, Ky.
S of H—Mules and 2 trolley pole type locos. Track gage 36 in.
S of M—4 chain breast type and 1 short-wall machs.
PP—Power purchased, 220 volts A. C., 2 pumps.
EMP—150. Last fiscal year output, 132,078 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens.

KITTS CREEK COAL COMPANY

General Office, Harlan, Ky.
PR—Robert Jameson, Beattyville, Ky.
VP—Earl Jameson, Harlan, Ky.
TR—Logan Thomas, Beattyville, Ky.
GM—Earl Jameson, Harlan, Ky.
GS—Earl Jameson, Harlan, Ky.
PA—Earl Jameson, Harlan, Ky.
CE—A. P. Hodges, Beattyville, Ky.
SA—Robert Jameson, Beattyville, Ky.

Kitts Mine; Drift; Harlan Seam, 60 inches thick.
PO—Harlan, Ky.; SP—Same; CTY—Harlan; RR—L. & N.
S of H—Mules. Track gage 36 inches.
EMP—40. Last years tonnage 30,000.
SIZES SHIPT—Run of Mine.

KLEIDERER, L. P. COAL COMPANY

General Office, Henderson, Ky.
Owned by Ohio Valley Bank & Trust Co., Henderson, Ky.

Kleiderer Mine; Shaft; Nos. 9 and 14 Seams; 54 to 90 inches thick.
PO—Henderson, Ky.; SP—Same; CTY—Henderson; RR—L. & N.
S of H—Mules.
S of M—Hand.

KLENEKOLE MINING COMPANY

Now operated by Commercial Mining Co.

KNOTT COAL CORPORATION.

General Office, Sassafras, Ky.
PR—L. N. Buford, Washington, D. C.
VP—Alvah Stone, Roundo, Va.
TR—Hugh Buford, Sassafras, Ky.
GM—Hugh Buford, Sassafras, Ky.
GS—D. T. Mitchell, Lohair, Ky.

Knott Mine; Drift; No. 9 Seam, 88 in. thick.
PO—Sassafras, Ky.; SP—Same; CTY—Knott; RR—L. & N.
S of H—Mules and elec. locos. Track gage 48 in.
S of M—Overcutter mach.
PP—Power purchased, transformer, 2300 volts A. C., M. G. Sets, 250 volts 250 volts D. C.
EMP—50. Daily tonnage 100.
SIZES SHIPT—Run of Mine.

KRESGE COAL & MINING COMPANY

General Office, Room 701, St. Paul Bldg., Cincinnati, Ohio.

RECEIVER—Lyman H. Dreshach, Cincinnati, Ohio.

Mount Morgan Mine; Drift; Jellico Seam, 38 inches thick.
PO—Williamshurg, Ky.; SP—Same; CTY—Whitney; RR—L. & N.
MS—Joseph Payne, Williamshurg, Ky.
S of H—Mules. Track gage 36 inches.
S of M—Comp. air pumps.
PP—2 150 H. P. water tube boilers.
EMP—60. Daily tonnage 200.
SIZES SHIPT—Slack, Lump.
PREP. EQUIPT—Gravily Screens.
NOTE—Formerly operated by Garfield Jellico Coal Co.

Callaway Mine; Drift; Mason Seam, 42 inches thick.
PO—Callaway, Ky.; SP—Frt., Masten, Ky.; Ex., Tejav, Ky.; CTY—Bell; RR—L. & N., R. & P. Div.
MS—J. G. Creech, Callaway, Ky.
S of H—Mules. Track gage 34 inches.
S of M—Hand.
PP—2 pumps.
EMP—25. Daily tonnage 100.
SIZES SHIPT—Run of mine.

PREP. EQUIPT—Bar Screens.
NOTE—Formerly operated by the Creech Mining Company.
Pond Creek Mine now being operated by Garnett Jellico Coal Co.

LACKEY, A. C.

General Office, Nashville, Tenn.
OWNER—A. C. Lackey, Nashville, Tenn.
GM—W. H. Hill, Island, Ky.
PA—W. H. Hill, Island, Ky.
SA—Dixie Fuel Co., Nashville, Tenn., Louisville, Ky., and New Orleans, La.

White Mine; Shaft; No. 9 Seam, 54 in. thick.
PO—Island, Ky.; SP—Same; CTY—McLean; RR—L. & N., O. & N.
S of H—Mules and rope. Track gage 36 inches.
S of M—Hand.
PP—3 water tube boilers, total 350 H. P., 3 pumps.
EMP—75. Last years tonnage 45,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Lump.
PREP. EQUIPT—Gravily Screens.
NOTE—White Coal Mining Company.

LACKEY COAL MINING COMPANY

General Office, Ashland, Ky.
PR—S. S. Willis, Ashland, Ky.
VP—W. A. Millard, Ashland, Ky.
TR—H. D. Clere, Ashland, Ky.
GM—H. D. Clere, Ashland, Ky.
GS—J. P. Brown, Lackey, Ky.
PA—J. P. Brown, Lackey, Ky.
CE—Townsend Combs, Lackey, Ky.
SA—Amex-Elkhorn Coal Company, Ashland, Ky.

Additional Information on Pages 462, 463.

Lackey Mine; Drift; Elkhorn Seam, 54 in. thick.
PO—Lackey, Ky.; SP—Same; CTY—Floyd; RR—C. & O.
S of H—Mules. Track gage 44 inches.
S of M—Hand.
EMP—60. Last years tonnage 28,949.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Shaker Screens.

LANORUM COAL COMPANY

General Office, Arjay, Ky.
PR—W. E. Landrum, Pineville, Ky.
VP—J. A. Crech, Arjay, Ky.
TR—B. F. Unthank, Pineville, Ky.
GM—R. B. Winkler, Arjay, Ky.
GS—R. B. Winkler, Arjay, Ky.
PA—R. B. Winkler, Arjay, Ky.
EM—Culton & Sherwin, Pineville, Ky.
SC—Address the Company, Buyer, P. F. Rowling, Pineville, Ky.

Arjay Mine; Drift; Straight Creek Seam; 40 in. thick.
PO—Arjay, Ky.; SP—Same; CTY—Bell; RR—L. & N.
MS—Hice Griffin, Arjay, Ky.
S of H—Mules, elec. locos. Track gage 42 inches.
S of M—Hand and shortwall mach.
PP—Power purchased, transformer, 2200 to 250 volts A. C.
EMP—60. Last years tonnage 25,000.
SIZES SHIPT—Run of Mine, Slack, Egg, Block.
PREP. EQUIPT—Shaker Screens.
NOTE—Formerly operated by the New Arjay Coal Co.

LAYMAN-CALLAWAY COAL CO.

General Office, Pineville, Ky.
PR—Estill A. Smothers, Pineville, Ky.
VP—J. J. Watson, Pineville, Ky.
GM—Estill A. Smothers, Pineville, Ky.
GS—Estill A. Smothers, Pineville, Ky.
SA—Estill A. Smothers, Pineville, Ky.

Layman-Callaway Mine; Drift; Mason Seam 40 in. thick.
PO—Pineville, Ky.; SP—Correll, Ky.; CTY—Bell; RR—L. & N.
S of H—Mules. Track gage 44 in.
S of M—Hand.
EMP—35. Daily tonnage 150.
SIZES SHIPT—Run of Mine.

LAYNE COAL MINING CO. (THE).

General Office, Harold, Ky.
PR—H. H. Layne, Harold, Ky.
VP—R. C. Layne, Harold, Ky.
TR—D. Layne, Harold, Ky.
GM—R. C. Layne, Harold, Ky.
PA—H. H. Layne, Harold, Ky.
CE—C. G. Evans, Pikeville, Ky.
SC—Address the Company, Buyer, H. H. Layne, Harold, Ky.
SA—Interstate Coal & Dock Co., Ashland, Ky.

Layne Mine; Drift; Elkhorn Seam, 42 in. thick.
PO—Harold, Ky.; SP—Same; CTY—Floyd; RR—C. & O.
S of H—Mules. Track gage, 42 in.
S of M—Hand.
PP—1 pump.
EMP—20. Last years tonnage 12,000.
SIZES SHIPT—Run of Mine.
Old Information.

LECKIE COLLIERIES COMPANY

General Office, Welch, W. Va.
PR—A. F. Leckie, Welch, W. Va.
VP—W. S. Leckie, Alex, Ky.

TR—A. E. Jennings, Welch, W. Va.
GM—A. F. Leckie, Welch, W. Va.
GS—W. S. Leckie, Alex, Ky.
PA—W. S. Leckie, Alex, Ky.
EM—George Leckie, Welch, W. Va.
EE—A. C. Cunningham, Alex, Ky.
SC—Address the Company, Buyer, W. L. Ferrell, Alex, Ky.
SA—Leckie Coal Co., Columbus, Ga.

No. 2 Mine; Drift; Thacker Seam, 63 inches thick.
PO—Alex, Ky.; SP—Frt., Leckleville, Ky.; Exp., Williamson, W. Va.; CTY—Pike; RR—N. & W.
S of H—5 trolley pole type locos. Track gage 44 inches.
S of M—4 shortwall machs.
PP—Power purchased, Transformer 3200-2200 volts A. C., M. G. Set, 250 volts D. C., 2 pumps.
EMP—250. Daily tonnage 1,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables and Loading Booms.

No. 1 Mine; Drift; Pond Creek Seam, 18 inches thick.
PO—Alex, Ky.; SP—Frt., Leckleville, Ky.; Exp., Williamson, W. Va.; CTY—Pike; RR—N. & W.
S of H—3 trolley pole type locos. Track gage 44 inches.
S of M—4 shortwall machs.
PP—Power purchased, transformer 13,000-2,200 volts A. C., 3 motor gen. sets, 250 volts A. C.
EMP—125. Daily tonnage 250.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Loading Booms.

LEDFOORD COAL COMPANY

General Office, Krypton, Ky.
PR—Wm. Ledford, Krypton, Ky.
VP—J. S. Rowland, Blake, Ky.
TR—Wm. Nopier, Krypton, Ky.
GS—W. B. Nopier, Krypton, Ky.
SC—Address the Company, Buyer, Wm. Ledford, Krypton, Ky.
SA—L. R. Smith, Krypton, Ky.

Ledford Mine; Drift; No. 4 Seam, 12 inches thick.
PO—Krypton, Ky.; SP—Same; CTY—Perry; RR—L. & N.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.
Old Information.

LEE COAL CO. (THE).

General Office, Clearfield, Ky.
PR—A. W. Lee, Clearfield, Pa.
VP—F. H. McCormick, Williamsport, Pa.
TR—John W. Wrigley, Clearfield, Pa.
GS—Guy Snyder, Clearfield, Ky.
PA—Guy Snyder, Clearfield, Ky.

Lee No. 1 and Lee No. 2 Mines; Drifts; No. 2 Seam, 36 in. thick.
PO—Redwine, Ky.; SP—Same; CTY—Morgan; RR—Morehead & North Fork.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
PP—2 pumps.
EMP—16. Last years tonnage 13,729.
SIZES SHIPT—Egg, Block.

LEEPER COAL COMPANY.

PR—T. J. Montgomery, Providence, Ky.
TR—J. E. Leeper, " "
GM—T. J. Montgomery, " "
GS—J. E. Leeper, " "
PA—T. J. Montgomery, " "
CE—Thos. O. Long, " "
Sales Agent, Southern Coal Co., Memphis, Tenn.

Leeper Mine; Slope; No. 9 Seam, 58 to 64 in. thick.
PO—Providence, Ky.; SP—Same; CTY—Webster; RR—Ill. Central.
S of H—Mules and rope. Track gauge 36 in.
S of M—Hand.
PP—1 water tube boiler, total 80 H. P., 1 pump.
EMP—25. Last years tonnage 17,676.
SIZES SHIPT—Run of Mine.
Old Information.

LENA RUE COAL COMPANY

General Office, Harlan, Ky.
GM—F. F. Cawood, Harlan, Ky.
GS—E. D. Hall, Harlan, Ky.
PA—J. D. Casey, Harlan, Ky.
EM—Fred Ross, Harlan, Ky.
EE—H. J. Kennedy, Harlan, Ky.
SC—Lena Rue Store, Buyer, E. D. Hall, Harlan, Ky.

Lena Rue No. 1 Mine; Drift; Harlan Seam, 48 inches thick.
PO—Lenarue, Ky.; SP—Rue, Ky.; CTY—Harlan; RR—L. & N.
MS—Bass Warren, Lenarue, Ky.
S of H—2 6-ton electric motors. Track gage 48 inches.
S of M—Shortwall machs.
PP—Power purchased. Transformer 33,000 to 2,300 volts A. C., 150 K. V. A. Gen. unit, 250 volts D. C.

SIZES SHIPT—Run of Mine, Nut, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Loading Booms.

LENOX BITUMINOUS COAL COMPANY

Now being operated by Okey Meadows Elkhorn Coal Company.

LEONARD COAL COMPANY.

Now Black Joe Coal Company.

LEWIS COAL COMPANY

General Office, Pineville, Ky.
PR—M. H. Lewis, Pineville, Ky.
VP—C. C. Lewis, Pineville, Ky.
TR—M. H. Lewis, Pineville, Ky.
GM—M. H. Lewis, Pineville, Ky.
PA—M. H. Lewis, Pineville, Ky.
EM—Johnston & Johnston, Pineville, Ky.
SC—Address the Company, Buyer, M. H. Lewis, Pineville, Ky.

Lewis Mine; Drift; Mason Seam, 36 inches thick.
PO—Pineville, Ky.; SP—Luce, Ky.; CTY—Bell; RR—L. & N.
MS—S. Brown, Callaway, Ky.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
EMP—18. Daily output, 50 tons.
SIZES SHIPT—Run of Mine.

LIBERTY BOND COAL COMPANY. INC.

Out of Business.

LIBERTY COAL CO.

General Office, P. O. Box 1086, Knoxville, Tenn.
PR—Alexander Bonnyman, Knoxville, Tenn.
VP—Calvin Holmes, Union Central Bldg., Cincinnati, O.
TR—Robert S. Young, Knoxville, Tenn.
GM—Joseph Richards, 402 South Maple St., Winchester, Ky.
GS—W. H. Stienknecht, Bonnyman, Ky.
PA—H. L. Hammel, Bonnyman, Ky.
CE—D. L. Lindamood, Knoxville, Tenn.
EM—H. S. Richards, Blue Diamond, Ky.
EE—Harry Kivitt, Blue Diamond, Ky.
SC—Address the Company, Buyer, H. L. Hammel, Bonnyman, Ky.
SA—Blue Diamond Sales Co., Cincinnati, O.

Liberty Mine; Drift; No. 6 Seam, 72 in. thick.
PO—Bonnyman, Ky.; SP—Exp. Typo, Ky.; Frt. Bonnyman, Ky.; CTY—Perry; RR—L. & N.
S of H—3 elec. locos. Track gage 48 in.
S of M—2 shortwall machs and 2 overhead cutters.
PP—Power purchased, transformer 2300-250 volts A. C., 1—150 K. W. gen. unit, 250 volts D. C., 4 pumps.
EMP—300. Last years tonnage 87,217.
SIZES SHIPT—Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

LIBERTY COAL & COKE CO.

General Office, Straight Creek, Ky.
PR—S. Thurston Ballard, Louisville, Ky.
VP—M. S. Barker, Louisville, Ky.
TR—A. R. Anderson, Straight Creek, Ky.
GM—R. R. Atkins, Straight Creek, Ky.
GS—R. R. Atkins, Straight Creek, Ky.
PA—R. R. Atkins, Straight Creek, Ky.
CE—J. J. Hume, Pineville, Ky.
SC—Address the company, Buyer, S. J. Picklesimer, Straight Creek, Ky.
SA—K. T. Cornelius, Straight Creek, Ky.

Barker No. 4 Mine; Drift; Straight Creek Seam, 40 inches thick.
PO—Straight Creek, Ky.; SP—Same; CTY—Bell; RR—L. & N.
MS—G. C. Clark, Straight Creek, Ky.
S of H—6 trolley pole type locos. Track gage 43 inches.
S of M—9 shortwall machs.
PP—2 150 H. P. water tube boilers, 3 gen. units, 250 volts D. C., 3 pumps.
EMP—280. Last fiscal year output, 145,650 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens.

LIBERTY COAL CORPORATION

Liberty Mine.
PO—McDowell, Ky.; SP—Liberty, Ky.; CTY—Floyd; RR—Long Fork.
No report.

LIBERTY COAL MINING CO.

General Office, Memphis, Tenn.
PR—F. M. McDonald, Memphis, Tenn.
TR—J. A. McDonald, Hillside, Ky.
GM—J. A. McDonald, Hillside, Ky.
GS—E. A. Hall, Hillside, Ky.
PA—J. A. McDonald, Hillside, Ky.
CE—R. H. Shelly, Central City, Ky.
EM—John McDowell, Hillside, Ky.
LE—F. C. Sinback, Hillside, Ky.
SC—Address the Company, Buyer, Samuel Rickard, Hillside, Ky.
SA—McDonald Coal Co., Memphis, Tenn.

(Continued on Next Page)

old information.

McRAE COAL COMPANY
Out of Business**McSTOFF COAL COMPANY**

General Office, Superior, Ky.
GS—E. E. McClure, Torchlight, Ky.
PA—C. E. Stafford, Superior, Ky.
SA—Lake & Export Coal Corp., Hunting-
ton, W. Va.

M-Stoff Mine; Drift; McHenry Seam; 48
inches thick.
PO—Superior, Ky.; SP—Same (Prepay);
CTY—Lawrence; RR—C. & O.
S of H—Mules. Track gage 42 in.
S of M—Hand, shortwall mach.
PP—Power purchased.
EMP—10. Last years tonnage 4,000.
SIZES SHIPT—Run of Mine.

MADISON COAL CORPORATION.

General Office, 910 S Michigan Ave.,
Chicago, Ill.

PR—A. J. Moorhead, Chicago, Ill.
GM—A. J. Moorhead, Chicago, Ill.
TR—F. H. Wellarth, Chicago, Ill.
GS—G. E. Lyman, Glen Carbon, Ill.
PA—L. B. Koshorovich, Chicago, Ill.
CE—G. E. Lyman, Glen Carbon, Ill.
EM—D. W. Blaylock, Glen Carbon, Ill.
EE—J. A. Long, Glen Carbon, Ill.

No. 10 Mine; Shaft; No. 9 Seam, 60
in. thick.

PO—Central City, Ky. SP—Same. CTY—
Muhlenberg, RR—Ill. Central.

MS—Ward B. Mix, Central City, Ky.
S of H—Mules, 4 trolley pole type locos.

Track gage 36 in.

S of M—5 chain breast type and 8 short-
wall machs.

PP—5 fire tube boilers, total 700 H. P.,
gen. units, 3—125 K. W., 275
volts D. C., 10 pumps.

EMP—300. Last years tonnage 273,895.
SIZES SHIPT—Run of Mine, Slack.

PREP. EQUIPT—Shaker Screens, Picking
Tables.

No. 11 Mine; Slope; No. 9 Seam, 57
in. thick.

PO—DeKoven, Ky. SP—Same. CTY—
Union, RR—Ill. Central.

MS—S. J. Merritt, DeKoven, Ky.
S of H—Main and tail rope, 3 trolley
pole type locos. Track gage 44½
inches.

S of M—15 shortwall machs.

PP—6 fire tube boilers, total 900 H. P.,
gen. units, 1—200 K. W. and 1—
150 K. W., 500 volts D. C., 5
pumps.

EMP—325. Last years tonnage 247,009.
SIZES SHIPT—Run of Mine, Slack,
Lump.

PREP. EQUIPT—Shaker Screens, Picking
Tables.

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MAIN JELICO MOUNTAIN COAL CO.

PR—J. H. Barker, Jellico, Tenn.
TR—Chas. Jennings, Jellico, Tenn.
GM—J. H. Barker, Jellico, Tenn.
GS—W. F. Perkins, Jellico, Tenn.
PA—S. H. Allison, Jellico, Tenn.
CE—B. L. Loyd, Jellico, Tenn.
SCO—Kensie Commissary; Buyer, S. H.
Allison, Jellico, Tenn.

SA—East Tennessee Coal Co., Knoxville
Tenn.

Kensie Mine; Drift; Jellico Seam, 30
in. thick.

PO—Jellico, Tenn.; SP—Kensie, Ky.,
CTY—Whitley; RR—L. & N.

S of H—Mules. Track gage, 39 in.
S of M—1 shortwall mach.

EMP—55.
SIZES SHIPT—Run of Mine, Slack, Egg,
Lump, Block.

PREP. EQUIPT—Gravity Screens.

MAJESTIC COLLIERIES CO.

General Office, Majestic, Ky.
PR—W. A. Phillips, Mt. Carmel, Pa.
VP—S. W. Patterson, Vivian, W. Va.
TR—Geo. C. Graeber, Shamokin, Pa.
GM—A. J. Stewart, Bluefield, W. Va.
GS—R. G. Stevens, Majestic, Ky.
PA—R. G. Stevens, Majestic, Ky.
CE—R. G. Stevens, Majestic, Ky.
EM—C. A. Brown, Ashland, W. Va.
EE—W. W. Albert, Majestic, Ky.
SCO—Address the Company; Buyer, Noah
Walters, Majestic, Ky.

SA—Castner, Curran & Bullitt, New
York, N. Y.

Majestic Mine; Drift; Warfield and Thack-
er Seams, 78 inches thick.

PO—Majestic, Ky.; SP—Cedar, W. Va.;
CTY—Pike, RR—N. & W. Poplar
Creek Branch.

S of H—Mules and trolley pole type
locos. Track gage, 56½ in.

S of M—7 shortwall machs.

PP—Power purchased. Transformer, 2
M. G. sets, 350 K. W., 3—100
K. W. gen. units, 6 pumps.

EMP—250. Last years tonnage 150,000.
SIZES SHIPT—Run of Mine, Slack, Nut,
Egg, Lump.

PREP. EQUIPT—Shaker Screens, Picking
Tables, Loading Booms.

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Tables, Loading Booms.

PREP. EQUIPT—Shaker Screens, Picking
Tables, Loading Booms.

S of H—Trolley pole type locos. Track
gage, 44 in.

S of M—4 shortwall machs

PP—Power purchased, 250 volts D. C.,
1 pump.

SIZES SHIPT—Run of Mine, Slack, Nut,
Lump, Block.

PREP. EQUIPT—Shaker Screens.

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TR—W. G. McGaon, Three Oaks, Mich.

GM—Jos. E. Kelly, Viper, Ky.

GS—Jos. E. Kelly, Viper, Ky.

PA—Jos. E. Kelly, Viper, Ky.

CE—Jos. E. Kelly, Viper, Ky.

SCO—Mason Mine; Drift; No. 4 Hazard Seam;
40 in. thick.

PO—Viper, Ky.; SP—Same; CTY—
Perry; RR—L. & N.

S of H—Mules. Track gage 36 in.

S of M—Hand.

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MASON MINING CO.

General Office, Dawson Springs, Ky.<

Maynard Coal Co.—Cont

No. 6 Mine; Drift; No. 4 Seam, 38-42 inches thick.
 PO—Lennett, Ky.; SP—Frt., Same; Ex., Hazard, Ky.; CTY—Perry; RR—L. & N.
 MS—Luko Woods, Lennett, Ky.
 S of H—4 trolley pole type locos. Track gage 42 inches.
 S of M—8 shortwall machs.
 PP—Power purchased Transformer 33,000 to 2,300 volts A. C., M. G., Set, 2 pumps.
 EMP—200 Daily tonnage 800.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables.
 No. 7 Mine; Drift; No. 7 Seam, 51-67 inches thick.
 PO—Lennett, Ky.; SP—Same; CTY—Perry; RR—L. & N.
 MS—Luko Woods, Lennett, Ky.
 S of H—2 trolley pole type locos. Track gage 42 inches.
 S of M—7 shortwall machs.
 PP—Power purchased Transformer 33,000 to 2,300 volts A. C., M. G., Set, 2 pumps.
 EMP—100 Daily tonnage 400.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Loading Rooms, Picking Tables.
 No. 8 Mine; Drift; No. 7 Seam, 52-60 inches thick.
 PO—H. Iner, Ky.; SP—Frt., Same; Ex., Hazard, Ky.; CTY—Perry; RR—L. & N.
 MS—Wm. Easterly, H. Iner, Ky.
 SM—G. M. Ewen, H. Iner, Ky.
 S of H—1 trolley pole type locos. Track gage 42 in.
 S of M—2 shortwall machs.
 PP—Power purchased Transformer 33,000 to 2,300 volts A. C., M. G., Set, 2 pumps.
 EMP—250 Daily tonnage 1,000.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.
 NOTE—Successors to Daniel Boone Coal Company.

MEEM-HASKINS COAL CORP.

General Office, Diablock, Ky.
 PR—Randolph Harrison, Lynchburg, Va.
 VP—S. H. Mc-M, Bluefield, W. Va.
 GM—R. F. Haskins, Diablock, Ky.
 GS—C. H. Bower, Diablock, Ky.
 SCO—Address the company, Buyer, J. E. Lambert, Diablock, Ky.
 PO—Diablock, Ky.; SP—Karles, Ky.; CTY—Perry; RR—L. & N.
 S of M—Shortwall machs.
 PREP. EQUIPT—Shaker Screens.

MELCROFT COAL COMPANY

General Office, 800 Union Arcade, Pittsburgh, Pa.
 PR—H. E. Rust, Pittsburgh, Pa.
 VP—S. F. Rust, Pittsburgh, Pa.
 TR—S. T. Brown, Pittsburgh, Pa.
 GM—P. M. Medoris, Coxton, Ky.
 GS—P. M. Medoris, Coxton, Ky.
 PA—J. N. Forker, Pittsburgh, Pa.
 CE—J. P. Williams, Jr., Pittsburgh, Pa.
 EE—Thomas Frances, Coxton, Pa.
 SCO—Chesnut Ridge Supply Co. Buyer, L. Quinn, Coxton, Ky.
 SA—Pittsburgh By-Product Coke Co., Pittsburgh, Pa.
 Coxton Mine; Drift; Harlan Seam, 48 inches thick.
 PO—Coxton, Ky.; SP—Same; CTY—Harlan; RR—L. & N.
 MS—J. W. Atkins, Coxton, Ky.
 S of H—6 trolley pole type locos. Track gage 42 inches.
 S of M—6 shortwall machs.
 PP—Power purchased Transformer 13,000 to 2,200 volts A. C., M. G., Set, 1—200 K. W., 250 volts D. C., 4 pumps.
 EMP—125 Daily tonnage 500.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Loading Rooms.

Kayu Mine; Drift; Harlan Seam, 52 in. thick.
 PO—Coxton, Ky.; SP—Same; CTY—Harlan; RR—L. & N.
 MS—J. W. Atkins, Coxton, Ky.
 S of H—5 trolley pole type locos. Track gage 42 in.
 S of M—6 shortwall machs.
 PP—Power purchased Transformer 13,000 to 2,200 volts A. C., M. G., Set, 1—200 K. W., 250 volts D. C., 3 pumps.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Loading Rooms.
 NOTE—Successors to Lick Branch Coal Co., Inc.

MEMPHIS COAL MINING COMPANY

General Office, 12 S. 2nd St., Memphis, Tenn.
 PR—W. M. Flood, Broadway, New York, N. Y.
 VP—C. K. Stieg, Memphis, Tenn.
 TR—Frank Jones, Memphis, Tenn.
 GM—H. H. Purser, Mannington, Ky.
 GS—H. H. Purser, Mannington, Ky.
 PA—H. H. Purser, Mannington, Ky.
 SCO—Address the company, Buyer, A. G. Whalley, Mannington, Ky.
 Dixie & Petersburg Mine; Drift; No. 6 Seam, 12 to 18 in. thick.
 PO—Mannington, Ky.; SP—Same, Exp., Cranton, Ky.; CTY—Christian; RR—L. & N.
 MS—Mr. Davis, Mannington, Ky.
 S of H—Elee, locos. Track gage 42 in.
 S of M—Shortwall machs.
 PP—1 return tubular boiler, 150 H. P., 4 gen. units, 250 volts D. C.
 EMP—137 Last years tonnage 69,334.
 SIZES SHIPT—Run of Mine, Slack, Nut, and Lump.
 MERCER COAL COMPANY
 General Office, Memphis, Tenn.
 PR—Rdt. L. Brown, Memphis, Tenn.
 TR—R. P. LaCraix, Memphis, Tenn.
 GM—J. A. Smith, Central City, Ky.
 GS—J. A. Smith, Central City, Ky.
 PA—J. A. Smith, Central City, Ky.
 CE—R. E. Hess, Central City, Ky.
 SA—Brown Coal Co., Memphis, Tenn.
 Mercer Mine; Shaft; No. 9 Seam; 60 inches thick.
 PO—Mercer, Ky.; SP—Same; CTY—Muhlenburg; RR—Ill. Cent.
 MS—Shuman Greene, Mercer, Ky.
 S of H—Mules and trolley pole type locos. Track gage 31 inches.
 S of M—Shortwall machs.
 PP—2 fire tube boilers, 1 150 K. W. gen. units, 275 volts D. C., 1 pump.
 EMP—165 Daily tonnage 1,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

Middle Creek Coal Co. (The)
 General Office, Prestonsburg, Ky.
 PR—Geo. P. Archer, Prestonsburg, Ky.
 VP—J. T. Craft, Prestonsburg, Ky.
 TR—T. J. May, Prestonsburg, Ky.
 GM—Geo. R. Archer, Prestonsburg, Ky.
 MM—Wm. Herald, " "
 PA—Lee Salmons, " "
 CE—A. J. Baldwin, Pikeville, Ky.
 EE—J. Lee Salmons, " "
 SCO—Address the company—Buyer, A. M. Spradlin, Prestonsburg, Ky.
 Middle Creek Mine; Drift; No. 1 Seam, 42 to 60 in. thick.
 PO—Prestonsburg, Ky.; SP—Same; CTY—Floyd; RR—C. & O., Big Sandy Div.
 MS—Lee Salmons, Prestonsburg, Ky.
 S of H—1 storage battery and 3 trolley pole type locos. Track gage 42 in.
 S of M—6 elee machs.
 PP—2 water tube boilers, total 500 H. P., 2 gen. units, 225 volts D. C., 2 pumps.
 EMP—125 Last years tonnage 75,000.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens.

MIDDLE CREEK COAL CO. (THE)

General Office, Prestonsburg, Ky.
 PR—Geo. P. Archer, Prestonsburg, Ky.
 VP—J. T. Craft, Prestonsburg, Ky.
 TR—T. J. May, Prestonsburg, Ky.
 GM—Geo. R. Archer, Prestonsburg, Ky.
 MM—Wm. Herald, " "
 PA—Lee Salmons, " "
 CE—A. J. Baldwin, Pikeville, Ky.
 EE—J. Lee Salmons, " "
 SCO—Address the company—Buyer, A. M. Spradlin, Prestonsburg, Ky.

Middle Creek Mine; Drift; No. 1 Seam, 42 to 60 in. thick.
 PO—Prestonsburg, Ky.; SP—Same; CTY—Floyd; RR—C. & O., Big Sandy Div.
 MS—Lee Salmons, Prestonsburg, Ky.
 S of H—1 storage battery and 3 trolley pole type locos. Track gage 42 in.
 S of M—6 elee machs.
 PP—2 water tube boilers, total 500 H. P., 2 gen. units, 225 volts D. C., 2 pumps.
 EMP—125 Last years tonnage 75,000.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens.

MIDDLE WEST COAL COMPANY

General Office, 807 Republic Bldg., Louisville, Ky.
 PR—J. D. Sakes, New York, N. Y.
 VP—Morris Lopinsky, Scarborough, W. Va.
 TR—Louis Wenr, Louisville, Ky.
 GM—Louis Wenr, Louisville, Ky.
 GS—Max Goodman, Depoy, Ky.
 PA—Max Goodman, Depoy, Ky.

Nos. 1 and 2 Mines; Drift; No. 9 Seam; 60 inches thick.
 PO—Depoy, Ky.; SP—Same; CTY—Muhlenburg; RR—Ill. Central.
 S of H—Mules. Track gage 36 in.
 S of M—Hand.
 PP—Power purchased.
 EMP—70 Daily tonnage 350.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Bar Screens.

MIDDLETON COAL COMPANY

Now a part of the Standard Harlan Coal Company.

MIDLAND MINING COMPANY

General Office, Tribbey, Ky.
 PR—W. E. Davis, Lexington, Ky.
 VP—H. E. Bullock, Lexington, Ky.
 TR—P. H. Kinney, Cincinnati, O.
 GM—W. E. Davis, Lexington, Ky.
 GS—H. Monhollen, Tribbey, Ky.
 PA—W. E. Davis, Lexington, Ky.
 EM—D. L. Pritchard, Tribbey, Ky.
 EE—W. H. Siler, Tribbey, Ky.
 SCO—Address the company, A. G. Huff, Tribbey, Ky.
 SA—Tribbey Coal Co., Cincinnati, O.

"Midland" Mine; Drift; No. 7 Hazard Seam; 52 in. thick.
 PO—Tribbey, Ky.; SP—Frt., Same; Ex., Hazard, Ky.; CTY—Perry; RR—L. & N.
 S of H—1 trolley pole type locos. Track gage 48 in.
 S of M—4 shortwall machs.
 PP—Power purchased Transformer 33,000-2,300 volts A. C., M. G. Sets, 250 volts D. C., 3 pumps.
 EMP—150 Last years tonnage 110,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

MID-WEST FUEL COMPANY

General Office, Henderson, Ky.
 PR—Enoch R. Ellis, Henderson, Ky.
 TR—Enoch R. Ellis, Henderson, Ky.
 GS—Joseph Griffiths, Henderson, Ky.
 Mid West Mine; Shaft; No. 9 Seam; 48 inches thick.
 PO—Henderson, Ky.; SP—Same; CTY—Henderson; RR—L. & N.
 S of H—Mules and storage battery loco. Track gage 42 inches.
 S of M—Shortwall mach.
 PP—2 fire tube boilers, 150 H. P., 100 K. W. gen. unit, 250 volts D. C.
 EMP—100 Last fiscal year output, 670,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Picking Tables.
 Old Information.

MILE BRANCH COAL COMPANY.

Out of business.

MILLER AND SHARP COAL COMPANY

PR—G. P. Sharp, Leominer, Ky.
 TR—C. N. Miller, Middlesboro, Ky.
 GM—John E. Brown, Harlan, Ky.
 GS—John E. Brown, Harlan, Ky.
 PA—G. P. Sharp, Leominer, Ky.
 EM—Chas. Davidson, Middlesboro, Ky.
 SCO—Brown & Sharp Coal Co. Buyer, G. P. Sharp, Leominer, Ky.
 SA—Bailey Darsel Coal Co., Harlan, Ky.
 Miller and Sharp Mine; Drift; Harlan Seam, 53 inches thick.
 PO—Lejunior, Ky.; SP—Evarts and Risley, Ky.; CTY—Harlan; RR—L. & N.
 S of H—Mules, Track gage 42 inches.
 S of M—Hand and shortwall machs.
 EMP—35 Last years tonnage 40,000.
 SIZES SHIPT—Run of Mine.

MINEGA-HARLAN COAL CO.

General Office, Harlan, Ky.
 PR—Nelson Cory, Harlan, Ky.
 GM—C. A. Smith, Harlan, Ky.
 SA—G. A. Smith, Harlan, Ky.
 Minega-Harlan Mine; Drift; Kellhoka & Harlan Seam, 60 inches thick.
 PO—Harlan, Ky.; SP—Same; CTY—Harlan; RR—L. & N.
 S of H—Mules.
 S of M—Hand.
 PP—Power purchased Transformer 33,000 volts A. C.
 SIZES SHIPT—Run of Mine, Slack, Block.

MINER'S ELKHORN COAL CO.

General Office, Pikeville, Ky.
 PR—J. H. Adkins, Pikeville, Ky.
 VP—W. B. Taylor, Pikeville, Ky.
 TR—W. R. Mullins, Leander, Ky.
 GM—J. H. Adkins, Pikeville, Ky.
 GS—W. R. Mullins, Pikeville, Ky.
 PA—W. R. Mullins, Pikeville, Ky.
 SA—J. H. Adkins, Pikeville, Ky.
 Miner's Elkhorn Mine; Slope; Vanlear Seam, 54 in. thick.
 PO—Shuman, Ky.; SP—Same; CTY—Johnson; RR—Big Sandy and Kentucky.
 S of H—Mules, Track gage 44 in.
 S of M—Hand.
 PP—Power purchased.
 SIZES SHIPT—Run of Mine, Lump, Block.
 PREP. EQUIPT—Bar Screens.

MIRACLE BLUE GEM COAL CO.

General Office, Cannon, Ky.
 OWNER—G. W. Miracle, Cannon, Ky.
 Miracle Blue Gem Mine; Shaft; Blue Gem Seam, 28 inches thick.
 PO—Cannon, Ky.; SP—Holdrick, Ky.; CTY—Knox; RR—C. & M.
 MS—G. M. Miracle, Cannon, Ky.
 S of H—Mules, Track gage 42 inches.
 S of M—Hand.
 EMP—15 Daily tonnage 30.
 SIZES SHIPT—Run of Mine.
 Old Information.

MOORE COAL COMPANY

General Office, Jellico, Tenn.
 PR—R. L. Moore, Jellico, Tenn.
 VP—L. M. Scott, Jellico, Tenn.
 TR—F. L. Smith, Jellico, Tenn.
 GM—P. E. Bennett, Knoxville, Tenn.
 GS—J. M. Percifall, Lejunior, Ky.
 PA—R. D. Saford, Lejunior, Ky.
 EM—O. E. Fox, Harlan, Ky.
 EE—J. M. Percifall, Lejunior, Ky.
 SCO—Address the company, Buyer, R. D. Saford, Lejunior, Tenn.
 SA—P. E. Bennett, Knoxville, Tenn.

Model Mine; Drift; Harlan Seam; 48 inches thick.
 PO—Lejunior, Ky.; SP—Exp., Shields, Ky.; Fr., Townsend, Ky.; CTY—Harlan; RR—L. & N.
 S of H—1 5 ton loco. Track gage 42 in.
 S of M—2 shortwall machs.
 PP—Power purchased Transformer 4000-275 volts A. C., gen. units, 250 volt, D. C.
 EMP—65 Daily tonnage 400.
 SIZES SHIPT—Run of Mine Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Loading Rooms.

MOLUS COAL COMPANY

General Office, Pineville, Ky.
 PR—M. T. Roach, Charleston, W. Va.
 VP—T. T. Wright, Cincinnati, O.
 GM—C. F. Armitage, Charleston, W. Va.
 TR—G. H. Marling, Pineville, Ky.
 GS—L. P. Vermilion, Harlan, Ky.
 PA—H. Howard, Harlan, Ky.
 CE—A. C. Cotton, Pineville, Ky.
 EM—G. L. Canant, Pineville, Ky.
 EE—C. S. Ramsey, Mohs, Ky.
 SCO—Address the company, Buyer, Morris Saylor, Mohs, Ky.
 SA—Logan Pochontas Fuel Co., Charleston, W. Va.

Molus Mine; Drift; Harlan Seam; 60 inches thick.
 PO—Mohs, Ky.; SP—Same; CTY—Harlan; RR—L. & N.
 MS—L. Williams, Mohs, Ky.
 S of H—2 trolley pole type locos. Track gage 76 inch.
 S of M—3 shortwall machs.
 PP—1 water tube boiler, 175 H. P., 1 100 K. W. gen. unit, 250 volts D. C., 4 pumps.
 EMP—100.
 SIZES SHIPT—Run of Mine, Slack, Egg, Block.
 PREP. EQUIPT—Revolving Screens and Loading Rooms.

MONARCH COAL & COKE COMPANY

General Office, Middlesboro, Ky.
 PR—Daniel Cooper Saab, Hartcraft, Tenn.
 VP—W. M. Costello, Middlesboro, Ky.
 TR—M. S. Hollingsworth, Middlesboro, Ky.
 GM—Wm. Costello, Middlesboro, Ky.
 GS—Wm. Costello, Middlesboro, Ky.
 EM—J. C. Richardson, Middlesboro, Ky.
 SCO—Address the company—Buyer, J. H. Brown, Hollingsworth, Ky.

Monarch Mine; Drift; Lower Hignite Seam, 47 to 55 in. thick.
 PO—Hollingsworth, Ky.; SP—Wilmon, Ky.; CTY—Bell; RR—L. & N. and Son.
 SM—W. S. York, Hollingsworth, Ky.
 S of H—Mules and 2 trolley pole type locos. Track gage, 44 in.
 S of M—2 shortwall machs.
 PP—1 150 H. P. water tube boiler, 1 250 K. W. gen. unit, 4 pumps.
 EMP—40 Last years tonnage 48,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens.

MONTGOMERY CREEK COAL COMPANY

General Office, Montago, Ky.
 PR—J. W. Roddy, Sassafras, Ky.
 VP—S. B. Snyder, Hazard, Ky.
 TR—S. B. Snyder, Hazard, Ky.
 GM—C. W. Smith, Montago, Ky.
 GS—G. W. Smith, Montago, Ky.
 PA—G. W. Smith, Montago, Ky.
 SCO—Address the company, Buyer, G. W. Smith, Sassafras, Ky.
 SA—Richview Coal Co., Cincinnati, O.

Montgomery Mine; Drift; No. 4 Seam; 44 inches thick.
 PO—Montago, Ky.; SP—Viero, Ky.; CTY—Perry; RR—L. & N.
 SM—C. W. Crook, Montago, Ky.
 S of H—Mules, Track gage 42 in.
 S of M—Hand.
 EMP—32 Daily tonnage 100.
 SIZES SHIPT—Run of Mine.

MORGANFIELD COAL & COKE CO

General Office, Morganfield, Ky.
 PR—E. J. Maginnis, Girardville, Pa.
 VP—Mr. W. R. Buckley, Mr. Carmel, Pa.
 TR—J. B. Maginnis, Harlan, Ky.
 GM—J. V. Maginnis, Morganfield, Ky.
 PA—J. V. Maginnis, Morganfield, Ky.
 CE—J. B. Maginnis, Harlan, Ky.
 SA—J. V. Maginnis, Morganfield, Ky.

No. 1 Mine; Shaft; No. 11 Seam 58 in. thick.
 PO—Morganfield, Ky.; SP—Same; CTY—Lebanon; RR—L. & N.
 MS—H. Lloyd, Morganfield, Ky.
 S of H—Mules. Track gage 36 in.
 S of M—Hand.
 PP—2 return tubular boilers, 250 H. P., 3 pumps.
 EMP—60 Daily tonnage 250.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Standard Screens.
 NOTE—Formerly the Morganfield Coal & Mining Co.

MORGANFIELD COAL & MINING CO.
Now Morganfield Coal & Coke Co.**MORNING GLOW COAL COMPANY**

General Office, Manchester, Ky.
 PR—E. G. Eversole, London, Ky.
 VP—J. L. Drake, Hima, Ky.
 TR—A. D. Hall, Manchester, Ky.
 GM—W. M. Marcum, Manchester, Ky.
 EM—Joseph R. Murphy, Barbourville, Ky.
 SCO—Address the Company, Buyer, J. L. Drake, Hima, Ky.
 SA—E. T. Coal Co., Knoxville, Tenn.

Morning Glory Mine; Drift; Horse Creek Seam, 40 in. thick.
 PO—Hima, Ky.; SP—Same; CTY—Clay; RR—C & M.
 MS—J. L. Drake, Hima, Ky.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 EMP—35. Last years tonnage 4,000.
 SIZES SHIPT—Run of Mine, Slack, Lump, Block.

MOSS COAL COMPANY, THE
Out of business.**MOSS JELICO COAL COMPANY.**
Now part of Kresge Coal & Mining Co.**MOSSY BOTTOM MINING COMPANY.**
Now Christie-Darby Mining Co.

MOUNTAIN GEM COAL MINING CO.
 General Office, 801 Realty Bldg., Louisville, Ky.
 PR—C. T. Meredith, Louisville, Ky.
 VP—L. N. Birk, East Bernstadt, Ky.
 TR—Geo. Miller, Jr., Louisville, Ky.
 GM—L. N. Birk, East Bernstadt, Ky.
 GS—L. N. Birk, East Bernstadt, Ky.
 PA—L. N. Birk, East Bernstadt, Ky.
 EM—Geo. Parks, East Bernstadt, Ky.
 SA—L. N. Birk, East Bernstadt, Ky.

Mountain Gem Mine; Drift; Jellico Seam; 30 inches thick.
 PO—East Bernstadt, Ky.; SP—Same; CTY—Laurel; RR—L & N.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 PP—4 pumps.
 EMP—135. Daily tonnage 300.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Bar Screens.

Coon Creek Mine; Drift; Jellico Seam, 34 in. thick.
 PO—East Bernstadt, Ky.; SP—Same; CTY—Laurel; RR—L & N.
 S of H—Mules. Track gage 36 in.
 S of M—Hand.
 PP—2 pumps.
 EMP—55. Last years tonnage 10,000.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Picking Tables.

MOUNTAIN LAKE COAL COMPANY.
Now Fern Lake Fuel Co.

MUD LICK COAL COMPANY
 General Office, Williamson, W. Va.
 PR—W. M. York, Williamson, W. Va.
 VP—M. Hatfield, Northfork, W. Va.
 TR—A. B. York, Charleston, W. Va.
 GM—J. C. Wolford, Williamson, W. Va.
 GS—J. C. Wolford, Williamson, W. Va.
 PA—A. B. York, Charleston, W. Va. and W. M. York, Williamson, W. Va.
 EM—D. M. Good, Williamson, W. Va.
 SCO—Address the company, Buyer, Joe Mossire, Sharnsdale, Ky.
 SA—A. B. York, Box 1082, Charleston, W. Va.

Mud Lick Mine; Drift; Pond Creek and Alma 8 seams; 64 inches thick.
 PO—Sharnsdale, Ky.; SP—Same (Prepay); CTY—Pike; RR—N. & W.
 S of H—Mules. Track gage 44 inches.
 S of M—Hand.
 EMP—35. Last years tonnage 60,000.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Picking Tables.

NEBO-AMERICAN COAL CO.
Nebo, Ky.
No report.**NELSON COAL COMPANY**

General Office, Molas, Ky.
 PR—A. N. Nelson, Molas, Ky.
 TR—A. N. Nelson, Molas, Ky.
 GM—J. W. Byrd, Molas, Ky.
 GS—J. W. Byrd, Molas, Ky.
 SA—Flat Top Fuel Co., Cincinnati, O.

Wilkes Mine; Mason Seam, 34-36 inches thick.
 PO—Molas, Ky.; SP—Same; CTY—Harlan; RR—L & N.
 S of H—Mules and rope. Track gage 36 inches.
 S of M—Hand.
 EMP—30. Daily tonnage 100.

NELSON CREEK COAL CO.

PR—R. S. Lytle, Danville, Ky.
 GM—J. W. Bastin, Danville, Ky.
 GS—J. W. Bastin, Danville, Ky.
 PA—S. O. Maple, Danville, Ky.
 SCO—Address the Company; Buyer, S. O. Maple, Nelson, Ky.
 SA—Memphis Coal Co., Memphis, Tenn.

Nelson Mine; Shaft; Western Kentucky No. 9 Seam, 60 in. thick.
 PO—Nelson, Ky.; SP—Same; CTY—Muhlenberg; RR—Ill. Central.
 MS—C. R. Fulkerson, Nelson, Ky.
 S of H—Mules. Track gage 36 in.
 S of M—4 shortwall machs.
 PP—3 150 H. P. fire tube boilers, 1-125 K. W. gen. unit, 250 volts D. C., 1 pump.
 EMP—125. Daily tonnage 500.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.
 Old Information.

NEW SEBREE MINING CO.

General Office, Sebree, Ky.
 PR—G. E. Dalton, Hopkinsville, Ky.
 VP—J. D. Smith, Birmingham, Ala.
 TR—Jas. F. Fairleigh, Louisville, Ky.
 GM—J. D. Smith, Birmingham, Ala.
 GS—J. D. Smith, Birmingham, Ala.
 PA—J. D. Smith, Birmingham, Ala.
 EM—J. D. Smith, Birmingham, Ala.

New Sebree Mine; Shaft; No. 9 Seam; 54 in. thick.
 PO—Sebree, Ky.; SP—Same; CTY—Webster; RR—L & N.
 S of H—Mules. Track gage, 34 in.
 S of M—Hand.
 PP—4 80 H. P. water tube boilers, 2 pumps.
 SIZES SHIPT—Run of Mine, Slack, Nut.
 PREP. EQUIPT—Gravity Screens.

NEW STRAIGHT CREEK MINING CO.

General Office, Pineville, Ky.
 PR—Jno. W. Charlton, Pineville, Ky.
 VP—L. B. Hurst, Louisville, Ky.
 TR—H. F. Charlton, Pineville, Ky.
 GM—Jno. W. Charlton, Pineville, Ky.
 GS—G. B. Keys, Pineville, Ky.
 EM—R. F. Johnston, Pineville, Ky.
 SA—The H. L. Cory Coal Co., Chatanooga, Tenn.

New Straight Creek Mine; Drift; Straight Creek Seam, 40 inches thick.
 PO—Pineville, Ky.; SP—Logans Switch, Ky.; CTY—Bell; RR—L & N.
 S of H—Mules. Track gage, 36 in.
 S of M—2 shortwall machs.
 PP—Power purchased, 240 volts A. C.
 EMP—40. Daily output 240.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Shaker Screens.
 Old Information.

NEW WATTS CREEK JELICO COAL CO.

General Office, Wofford, Ky.
 PR—D. E. Jewell, Wofford, Ky.
 VP—W. C. Walker, Wofford, Ky.
 TR—W. C. Walker, Wofford, Ky.
 GM—W. C. Walker, Wofford, Ky.
 GS—W. C. Walker, Wofford, Ky.
 PA—W. C. Walker, Wofford, Ky.
 CE—D. E. Jewell, Wofford, Ky.

Coalmont Mine; Drift; Jellico Seam.
 PO—Wofford, Ky.; SP—Same; CTY—Whitley; RR—L & N.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 EMP—30. Last years tonnage 4,320.
 SIZES SHIPT—Run of Mine, Lump.
 PREP. EQUIPT—Gravity Screens.

NICHOLSON MINING & MFG. CO.

General Office, Henderson, Ky.
 PR—F. W. Nicholson, Henderson, Ky.
 VP—J. L. Nicholson, Henderson, Ky.
 TR—J. L. Nicholson, Henderson, Ky.
 GM—F. W. Nicholson, Henderson, Ky.
 PA—L. R. Nicholson, Henderson, Ky.
 EM—John Waple, Henderson, Ky.
 SCO—Nicholson Store, Buyer, J. L. Nicholson, Henderson, Ky.
 Sales Mgr., Leslie Nicholson.

"Hot Stuff" Mine; Shaft; No. 9 Seam, 48 in. thick.
 PO—Henderson, Ky.; SP—Same, CTY—Henderson; RR—L & N. and I. C.
 MS—John Waple, Henderson, Ky.
 S of H—Mules. Track gage 36 inches.
 S of M—2 shortwall machs.
 PP—Power purchased, 220 volts A. C. 1-100 H. P., 1-125 H. P., 1-150 H. P., return tubular boilers, 5 pumps.
 EMP—45. Last years tonnage 28,000.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Revolving Screens.

NOLANSBURG COAL COMPANY

General Office, Pineville, Ky.
 PR—C. Hurst, Pineville, Ky.
 VP—J. C. Buell, Varilla, Ky.
 TR—C. Hurst, Pineville, Ky.
 GM—C. Hurst, Pineville, Ky.
 CE—B. F. Johnston, Pineville, Ky.
 SA—C. Hurst, Pineville, Ky.

Harlan Mine; Drift; Harlan Seam, 48 inches thick.
 PO—Nolansburg, Ky.; SP—Harlan, Ky.; CTY—Harlan; RR—L & N.
 MS—C. Hurst, Pineville, Ky.
 S of H—Mules. Track gage 42 inches.

S of M—Hand.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Shaker Screens.

NORTH EAST COAL COMPANY.

General Office, 1732 Commercial Trust Bldg., Philadelphia, Pa.
 PR—A. D. W. Smith, Philadelphia, Pa.
 VP—Richard Williams, Philadelphia, Pa.
 SECY—Carl B. Metzger, Philadelphia, Pa.
 GM—H. La Viers, Paintsville, Ky.
 GS—R. C. Thomas, " "
 PA—W. H. Salyer, " "
 EM—G. E. Hoover, Paintsville, Ky.
 SCO—Address the Company; Buyer, W. R. Davis, Thealka, Ky.

Sales Agency, Middle West Coal Co., 1603 First National Bank Bldg., Cincinnati, O.

No. 1 Mine; Drift; No. 1 Seam; 42-48 in. thick.
 PO—Thealka, Ky.; SP—Same; CTY—Johnson; RR—C & O., Big Sandy Div.

MS—H. Pfening, Sr., Thealka, Ky.
 S of H—2 trolley pole type locos. Track gage, 42 in.
 S of M—5 chain breast and 7 shortwall machs.
 PP—2 return tubular boilers, total 250 H. P., 1-150 K. W. gen. unit, 250 volts D. C., 6 pumps.
 EMP—113. Last years tonnage 105,466.
 SIZES SHIPT—Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaking Screens, Boom Loader.

No. 2 Mine; Drift; No. 1 Seam, 42 in. thick.

PO—Thealka, Ky.; SP—Paintsville, Ky.; CTY—Johnson; RR—C & O., Big Sandy Div.
 MS—Lewis Yeager, Thealka, Ky.
 S of H—2 trolley pole type locos. Track gage, 42 in.
 S of M—7 chain breast machs.
 PP—2 return tubular boilers, total 250 H. P., 1-100 K. W. gen. units, 250 volts D. C., 4 pumps.
 EMP—34. Last years tonnage 25,418.
 SIZES SHIPT—Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Gravity Screens.

Nos. 3 and 4 Mines; No. 1 Seam; 42-48 in. thick.

PO—Thealka, Ky.; SP—Same; CTY—Johnson; RR—C & O., Big Sandy Div.
 MS—T. J. Davis, Thealka, Ky.
 S of H—4 trolley pole type locos. Track gage 42 in.
 S of M—4 chain breast and 8 shortwall machs.
 PP—5 fire tube boilers, 600 H. P., 1-175 K. W., 1-150 K. W. and 1-200 K. W. gen. units, 250 volts D. C., 5 pumps.
 EMP—160. Last years tonnage 106,426.
 SIZES SHIPT—Slack, Nut, Egg, Lump, Block.

Nos. 7, 8 and 9 Mines; Drifts; No. 1 Seam; 42 in. thick.
 PO—Auxier, Ky.; SP—Same; CTY—Floyd; RR—C & O., Big Sandy Div.

MS—J. L. Lavers, Auxier, Ky.
 MS—J. C. Clancy, Auxier, Ky.
 MS—F. E. Cunningham, Auxier, Ky.
 S of H—5 trolley pole type locos. Track gage, 42 in.
 S of M—4 chain breast and 6 shortwall machs.
 PP—4 return tubular boilers, total 600 H. P., 2-150 K. W. gen. units, 250 volts D. C., 7 pumps.
 EMP—160. Last years tonnage 117,536.
 SIZES SHIPT—Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaking Screens, Boom Loaders.

No. 15 Mine; Shaft; No. 1 Seam, 36-44 in. thick.
 PO—Whitehouse, Ky.; SP—Same; CTY—Johnson; RR—C & O.
 MS—H. D. Jones, Whitehouse, Ky.
 S of H—2 trolley pole type locos. Track gage, 42 in.
 S of M—2 chain breast and 5 shortwall machs.
 PP—3 fire tube boilers, 375 H. P., 2 250 K. W. gen. units, 250 volts D. C., 3 pumps.
 SIZES SHIPT—Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Loading Rooms.

NORTH JELICO COAL CO. (THE).

General Office, 315 Guthrie St., Louisville, Ky.
 PR—W. S. Speed, Louisville, Ky.
 VP—F. M. Sackett, Louisville, Ky.
 TR—C. B. Major, Louisville, Ky.
 GM—C. S. Nield, Wilton, Ky.
 GS—A. Frost, Wilton, Ky.
 PA—R. V. Strunk, Wilton, Ky.
 CE—Alex. Frost, Wilton, Ky.
 EE—C. H. Martin, Wilton, Ky.
 S of M—Address the Company, Buyer, R. V. Strunk, Wilton, Ky.
 SA—B. F. Reed, Louisville, Ky.

Wilton Mine; Drift; Jellico Seam, 42-48 in. thick.
 PO—Wilton, Ky.; SP—Woodbine, Ky.; CTY—Knox; RR—L & N.
 S of H—5 trolley pole type locos. Track gage, 36 in.
 S of M—2 chain breast type and 4 long-wall machs.
 PP—5 water tube boilers, 850 H. P., 2 250 K. W. gen. units, transformer 2,300 to 280 A. C., M. G. sets, 280 volts D. C., 5 pumps.
 EMP—200. Last years tonnage 60,483.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
 PREP. EQUIPT—Shaker Screens.

Olive Hill Mine; Drift; Jellico Seam, 42 in. thick.
 PO—Wilton, Ky.; SP—Woodbine, Ky.; CTY—Knox; RR—L & N.
 S of H—6 trolley pole type locos. Track gage, 36 in.
 S of M—10 chain breast type and 4 long-wall machs.
 PP—Power from Wilton Mine, 280 volts D. C., 2 pumps.
 EMP—300. Last years tonnage 107,406.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

NORTHERN ELKHORN COAL COMPANY.

General Office, Prestonsburg, Ky.
 PR—Cal Clark, Prestonsburg, Ky.
 TR—S. C. Ferguson, Prestonsburg, Ky.
 GM—S. C. Ferguson, Prestonsburg, Ky.
 GS—S. C. Ferguson, Prestonsburg, Ky.
 CE—Townsend Combs, Smalley, Ky.

Nos. 1 and 2 Mines; Drifts; Elkhorn Seams, 42-50 in. thick.
 PO—Prestonsburg, Ky.; SP—Northern, Ky.; CTY—Floyd; RR—C & O., Beaver Creek Branch.
 S of H—Mules.
 S of M—Hand.
 SIZES SHIPT—Run of Mine.

NORTON COAL MINING CO.

General Office, Nortonville, Ky.
 PR—Monro B. Lanier, Birmingham, Ala.
 VP—Sterling S. Lanier, Jr., Nortonville, Ky.
 TR—M. L. B. Lanier, Birmingham, Ala.
 GM—Sterling S. Lanier, Jr., Nortonville, Ky.
 GS—Byburn Pinckard, Nortonville, Ky.
 EM—L. Scholtman, Nortonville, Ky.
 EE—Mr. Jones, Nortonville, Ky.
 EE—W. D. Morton, Nortonville, Ky.
 SCO—Address the Company, Buyer, Jas. R. Harrison, Nortonville, Ky.
 SA—Monro-Warrior Coal & Coke Co., Birmingham, Ala. and Chicago, Ill.

No. 1 Mine; Shaft; No. 9 and 11 Seams, 58 to 72 in. thick.
 PO—Nortonville, Ky.; SP—Same, CTY—Hopkins, RR—L & N. I. C.
 GS—Wm. Belcher, Nortonville, Ky.
 OF—E. M. Chhorne, Nortonville, Ky.
 S of H—Mules, trolley pole type and gathering locos. Track gage 36 in.
 S of M—8 shortwall machs.
 PP—6 fire tube boilers, 900 H. P., gen. units, 2-150 K. W. and 1-300 K. W. 250 volts D. C., 14 pumps.
 EMP—200. Last fiscal year output, 200,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump and Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables and Washeries.

No. 2 Mine; Slope; Nos. 11 and 12 Seams, 60 to 72 in. thick.
 PO—Nortonville, Ky. SP—Same, CTY—Hopkins, RR—L & N.
 MF—W. R. Lindle, Nortonville, Ky.
 S of M—3 chain breast type and 1 shortwall mach.
 S of H—Mules. Track gage, 42 in.
 PP—2 pumps. Power from No. 1 plant.
 EMP—50. Last years tonnage 50,000.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Revolving and Shaker Screens, Picking Tables and Washeries.

No. 3 Mine; Slope; No. 14 Seam, 10 ft. thick.
 PO—Nortonville, Ky. SP—Same, CTY—Hopkins, RR—L & N.
 S of H—Mules.
 S of M—1 shortwall mach.
 PP—Power from No. 1 Mine, 1 pump.
 EMP—25. Last years tonnage 30,000.
 SIZES SHIPT—Run of Mine.

NUMBER FOUR COAL COMPANY.

Now Number Four Superior Coal Co.

NO. 4 SUPERIOR COAL COMPANY.
 General Office, 1304 Fayette Natl. Bank Bldg., Lexington, Ky.
 PR—C. L. Ryley, Lexington, Ky.
 VP—C. Reginald Ryley, Lexington, Ky.
 TR—J. R. Pates, Lexington, Ky.
 GM—C. R. Luttrell, Hazard, Ky.
 PA—John W. Hall, 1304 Fayette Bank Bldg., Lexington, Ky.

(Continued on Next Page)

No. 4 Superior Coal Co.—Cont.

SCO—Address the Company, Buyer, John W. Hall, Lexington, Ky.
SA—C. L. Ryley Coal Co., Lexington, Ky.

No. 1 Superior Mine; Drift; No. 4 Seam, 41 in. thick.
PO—Lennet, Ky. SP—Same. CTY—Perry.
RR—L. & N. L. & E. Br.
S of H—Mules and storage battery locos. Track gage 42 in.
S of M—Shortwall machs.
PP—Power purchased Transformer 2300-240 volts, M. G. Sets, 240 volts D. C.
EMP—60 Daily tonnage 500
SIZES SHIPT—Run of Mine, Nut and Block.
PREP. EQUIPT—Bar Screens.
Note—Formerly operated by the Number Four Coal Co.

OAKLAND COAL CO.

General Office, Greenville, Ky.
PR—W. M. Martin, Greenville, Ky.
TR—C. S. Curd, Greenville, Ky.
GM—W. M. Martin, Greenville, Ky.
GS—Thomas Mitchell, Hillside, Ky.
PA—Thomas Mitchell, Hillside, Ky.
EM—R. H. Shelby, Central City, Ky.
SCO—Address the Company Buyer, C. A. Burnett, Hillside, Ky.
SA—Kirkpatrick Coal Co., Louisville, Ky., and Memphis, Tenn.

Oakland Mine; Slope; No. 9 Seam, 58 in. thick.
PO—Hillside, Ky.; SP—Frt. Same; Exp. Greenville, Ky.; CTY—Muhlenberg; RR—L. C.
MS—J. Garrett, Hillside, Ky.
S of H—Mules and trolley pole type locos. Track gage, 44 in.
S of M—4 chain breast type and 1 shortwall machs.
PP—2 fire tube boilers, gen. units, 175 K. W. D. C. 1 pump.
EMP—110. Daily tonnage 500.
SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Lump.
PREP. EQUIPT—Shaker Screens.
Note—Formerly operated by Hillside Coal Co.

OBLO COAL COMPANY

Now Chase Coal Co.

OKEY MEADOWS ELKHORN COAL CO.

General Office, Cincinnati, O.
PR—Okey Meadows, Cincinnati, O.
TR—Rush Meadows, Cincinnati, O.
CE—Okey Meadows, Jr., Cincinnati, O.

Okey Meadows Elkhorn Mine; Drift; Elkhorn Seam, 40 in. thick.
PO—R-dvine, Ky.; SP—Same; CTY—Morgan; RR—L. & N. F.
MS—Okey Meadows, Jr., Cincinnati, O.
S of H—Mules.
S of M—Hand.
PP—Power purchased, M. G. Sets.
EMP—25. Last years tonnage 7,500.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg Lump Block.
PREP. EQUIPT—Picking Tables.
NOTE—Formerly operated by the Lenox Bituminous Coal Company.

OLD HOUSE COAL COMPANY

Hazard, Ky.
TRUSTEE—A. M. Gross, Hazard, Ky.
No report.

OLD LILY MINING COMPANY.

Out of business.

ORINOCO MINING COMPANY

General Office, Bluefield, W. Va.
PR—Philip DeRonde, 39 Broadway, New York City.
VP—R. A. Nicol, 39 Broadway, New York City.
TR—James F. Gill, 39 Broadway, New York City.
GM—Henry F. Warden, Bluefield, W. Va.
GS—J. H. Wagner, Orinoco, Ky.
PA—H. F. Warden, Bluefield, W. Va.
EM—W. D. Brown, Orinoco, Ky.
EE—E. B. Sizmore, Orinoco, Ky.
SCO—Address the Company, Buyer, W. H. Smith, Orinoco, Ky.
SA—Wm. C. Atwater & Co., New York City.

Orinoco Mine; Drift; Freeburn Seam, 52 inches thick.
PO—Orinoco, Ky.; SP—Belfry, Ky.; pre-nar CTY—Pike; RR—Williams & Pond Creek, N. & W.
MS—Richard Browning, Orinoco, Ky.
S of H—Five trolley pole type locos. Track gage 48 inches.
S of M—Five shortwall machs.
PP—Power purchased Transformer 2200-250 volts A. C., M. G. Sets, 250 volts D. C., 4 pumps.
EMP—150 Last years tonnage 100,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens, Picking Tables.

OVERALL & RAMSEY

Out of business.

P. V. K. COAL COMPANY

General Office, Monongahela, Pa.
PR—A. K. Robinson, Wilkingsburg, Pa.
VP—Springer Robinson, Le Junior, Ky.
TR—K. K. Robinson, Monongahela, Pa.
GM—R. K. Robinson, Monongahela, Pa.
PA—Edw. W. Hartland, Monongahela, Pa.
EM—John C. Rue, Follansboro, W. Va.
Clover Gap Mine; Drift; Harlan Seam, 60 inches thick.
PO—Lejunior, Ky.; SP—Shields, Ky.; CTY—Harlan; RR—L. & N.
MS—W. B. Green, Le Junior, Ky.
S of H—2 trolley pole type locos. Track gage 42 inches.
S of M—3 shortwall machs.
PP—Power purchased Transformer 4-400-220 volts, rotary converters, 240 volts D. C., 2 pumps.
EMP—100. Daily output, 500 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables.
Note Formerly operated by the Hume Coal Company.

PACIFIC COAL MINING CO.

General Office, 206 Courier Journal Bldg., Louisville, Ky.
PR—A. L. Glass, Louisville, Ky.
VP—Irvin L. Glass, New Albany, Ind.
TR—C. D. Glass, Louisville, Ky.
GM—C. D. Glass, Louisville, Ky.
GS—Irvin L. Glass, New Albany, Ind.
PA—C. D. Glass, Louisville, Ky.
EM—R. H. Sheldy, Central City, Ky.
EE—W. E. Foster, Mercer, Ky.
SCO—Address the Company, Buyer, Samuel Scott, Mercer, Ky.
SA—Pacific Coal Mining Co., Louisville, Ky.

Morgan Mine; Shaft; No. 9 Seam, 52 in. thick.
PO—Mercer, Ky.; SP—Frt., Same; Exp., Central City, Ky.; CTY—Muhlenberg; RR—L. C.
S of H—Mules and 1 trolley pole type locos. Track gage, 36 in.
S of M—5 mining machs.
PP—3 fire tube boilers, total 400 H. P., 150 K. W. G. units, 250 volts D. C., 5 pumps.
EMP—202. Last years tonnage 120,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables.

PAINT CLIFF MINES CO.

General Office, Paint Cliff, Ky.
PR—K. U. Meguire, Louisville, Ky.
VP—A. C. Van Winkle, Louisville, Ky.
TR—Jno. S. Van Winkle, Danville, Ky.
GM—Ivor Livingston, Paint Cliff, Ky.
GS—Ivor Livingston, Paint Cliff, Ky.
PA—Alex. S. Logan, Paint Cliff, Ky.
EM—Ivor Livingston, Paint Cliff, Ky.
SA—Harlan Coal Co., Louisville, Ky.

Paint Cliff Mine; Drift; No. 1 Seam, 53 in. thick.
PO—Paint Cliff, Ky.; SP—Oz, Ky.; CTY—McCreary; RR—C. N. O. & T. P.
S of H—Mules and comp. air locos. Track gage, 42 in.
S of M—Hand.
PP—Power purchased, 250 volts D. C., 0re tube boiler, 150 H. P., 3 pumps.
EMP—35. Daily tonnage 180
SIZES SHIPT—Run of Mine, Lump, Block.
PREP. EQUIPT—Gravity Screens.

PANAMA COAL CO

General Office, Robards, Ky.
PR—O. W. Rash, Henderson, Ky.
VP—O. W. Rash, Henderson, Ky.
TR—C. D. Cottingham, Robards, Ky.
GM—C. D. Cottingham, Robards, Ky.
GS—C. D. Cottingham, Robards, Ky.
PA—C. D. Cottingham, Robards, Ky.
EM—W. L. McElroy, Henderson, Ky.
EE—Brandon King, Robards, Ky.
SCO—Cottingham Bros., Buyer, C. E. Cottingham, Robards, Ky.

Panama Mine, Shaft, No. 9 Western Kentucky Seam, 60 in. thick.
PO—Robards, Ky. SP—Same. CTY—Henderson; RR—L. & N.
MS—Fount Miller, Henderson, Ky.
S of H—Mules and trolley pole type loco. Track gage 42 in.
S of M—4 shortwall machs.
PP—3 boilers, 450 H. P. gen. units, 150 K. W., 250 volts D. C., 1 pump.
EMP—100 Daily tonnage 500
SIZES SHIPT—Run of Mine, Slack, Nut, Egg Lump.
PREP. EQUIPT—Shaker Screens.

PARAGON-ELKHORN COLLIERIES CO.

General Office, Dunleary, Ky.
PR—C. E. Tuttle, 15 Broad St., New York, N. Y.
VP—O. P. Chatfield, Dunleary, Ky.
TR—L. A. Jovoux, 15 Broad St., New York, N. Y.
GM—C. E. Tuttle, New York, N. Y.

GS—O. P. Chatfield, Dunleary, Ky.
PA—O. P. Chatfield, Dunleary, Ky.
EM—J. G. Evans, Paleyville, Ky.
SCO—Address the Company, Dunleary, Ky.
SA—Tuttle Coal Co., Cincinnati, Ohio.
Paragon Mine; Drift; Upper Elkhorn Seam; 52 in. thick.
PO—Dunleary, Ky.; SP—Same; CTY—Pike; RR—C. & O., Clinchfield.
MS—G. B. Rackley, Dunleary, Ky.
SM—Fred Menfee, Dunleary, Ky.
S of H—3 trolley pole type locos. Track gage 42 in.
S of M—1 shortwall machs.
PP—1—150 H. P. fire tube boiler 1—175 K. W. turbine gen. set, 250 volts D. C., 2 pumps.
EMP—100. Last years tonnage 120,000.
SIZES SHIPT—Run of Mine.

PARKER COAL COMPANY

General Office, Harlan, Ky.
PR—Chas. McCoy, Middlesboro, Ky.
VP—A. N. Paris, High Splint, Ky.
TR—A. M. Gregory, Harlan, Ky.
GM—A. M. Gregory, Harlan, Ky.
GS—A. M. Paris, High Splint, Ky.
PA—A. M. Gregory, Harlan, Ky.
EM—Chas. Davidson, Middlesboro, Ky.

Paris Mine; Drift; Harlan Seam, 48 inches thick.
PO—High Splint, Ky.; SP—Seagrave, Ky.; CTY—Harlan; RR—L. & N.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
EMP—25. Last years tonnage 9,000.
SIZES SHIPT—Run of Mine.

PARKER ELKHORN COAL CO

General Office, Prestonsburg, Ky.
PR—Ed. Hill, Prestonsburg, Ky.
TR—J. N. Harris, Prestonsburg, Ky.
GM—Mat Adams, Smalley, Ky.

Parkers Elkhorn Mine; Drift; Seam 40 in. thick.
PO—Smalley, Ky.; SP—Hile, Ky.; CTY—Floyd; RR—B. & O.
MS—Mat Adams, Smalley, Ky.
S of H—Mules.
S of M—Hand.
EMP—15.
SIZES SHIPT—Run of Mine.

PATTERSON CREEK COAL COMPANY.

General Office, Polleyton, Ky.
PR—H. N. Hill, Polleyton, Ky.
VP—Edward H. Witham, Polleyton, Ky.
TR—Pina Hill, Polleyton, Ky.
GM—H. N. Hill, Polleyton, Ky.
SA—Superior Coal Co., Knoxville, Tenn.
Patterson Creek Mine; Drift; Blue Gem Seam, 24 in. thick.
PO—Polleyton, Ky.; SP—Same; CTY—Whit; RR—L. & N.
S of H—Mules. Track gage 36 in.
S of M—Hand.
EMP—40. Last years tonnage 10,000
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

PEABODY COAL COMPANY

General Office, 332 S. Michigan Ave., Chicago, Ill.
Chairman of Board—Francis S. Peabody, Chicago, Ill.
PR—Stuyvesant Peabody, Chicago, Ill.
VP—Clarence J. Gray, Chicago, Ill.
TR—Moses B. Peltier, Chicago, Ill.
VP—(In charge of Operations), Hiram M. Young, Chicago, Ill.
VP—(In charge of Sales and Traffic), George W. Reed, Chicago, Ill.
VP—(In charge of Finance), Chas. E. Sebrage, Chicago, Ill.
VP—(In charge of Accounts), Charles S. Ellis, Chicago, Ill.
TR—Chas. E. Shrago, Chicago, Ill.
ASST. TO VP—(In charge of Sales)—J. L. Pieroni, Chicago, Ill.
Asst. Secy.—Treasury—Walter A. Fisher, Chicago, Ill.
Mgr. of Traffic—James B. Duggan, Chicago, Ill.
Asst. to VP in charge of Operations—George C. McFadden, Chicago, Ill.
PA—Harry E. Campbell, Chicago, Ill.
Additional Information on Page 478

No. 28 Mine; Drift; Elkhorn Nos. 1 and 2 Seams 48 in.
PO—Manco, Ky.; SP—Same; CTY—Pike; RR—C. & O.
S of H—Trolley pole type locos. Track gage 44 inches.
S of M—7 shortwall machs.
PP—1 fire tube boiler, 125 H. P., 2 water tube boilers, total 600 H. P., 2 200 K. W. G. E. gen. units, 275 volts D. C., 9 pumps.
EMP—210
SIZES SHIPT—Run of Mine, Nut, Block.
PREP. EQUIPT—Crusher, Picking Tables.

No. 30 Mine; Drift; No. 5 Seam; 42 inches thick.
PO—Knox, Ky.; SP—Same; CTY—Harlan; RR—L. & N.
S of H—2 13-ton trolley pole type locos and 8 storage battery locos. Track gage 48 in.
S of M—18 shortwall machs.

PP—Power purchased Transformer 33,000 to 2,300 volts A. C., M. G. sets, 1 150 K. W., 275 volts D. C., 2 fire tube boilers, total 160 H. P., 6 pumps.
EMP—140
SIZES SHIPT—Run of Mine, Slack, Lump, Egg
PREP. EQUIPT—Shaker Screens

PEACOCK COAL COMPANY.

General Office, Alto, Ky.
PR—William Turner, Alto, Ky.
VP—Don. Riley, Alto, Ky.
TR—Gennaro Riley, Alto, Ky.
GM—William Turner, Alto, Ky.
GS—William Turner, Alto, Ky.
SA—Riverside Coal Co., Jackson, Ky.
Peacock Mine; Drift; No. 4 Seam; 34 in. thick.
PO—Alto, Ky.; SP—Same; CTY—Breatitt; RR—L. & N.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
SIZES SHIPT—Run of Mine.
Old Information

PENNYRILE COAL & MINING CO.

General Office, Henderson, Ky.
PR—N. R. Royster, Henderson, Ky.
VP—Gon. M. Royster, Henderson, Ky.
TR—S. K. Snood, Henderson, Ky.
GS—W. W. Cooper, Henderson, Ky.
PA—W. W. Cooper, Henderson, Ky.
EM—J. T. Barrett, Smith Mills, Ky.
SA—W. W. Cooper, Smith Mills, Ky.

Mine; Shaft; No. 12 Seam, 84 in. thick.
PO—Smith Mills, Ky.; SP—Henderson, Ky.; CTY—Henderson; RR—L. C.
S of H—Mules. Track gage 36 in.
S of M—2—50 H. P. fire tube boilers.
EMP—13. Last years tonnage 3,200
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
PREP. EQUIPT—Gravity and Revolving Screens.
NOTE—Formerly operated by the Smith Mills Coal & Mining Company.

PENROD COAL COMPANY.

General Office, Island, Ky.
PR—John Penrod, Island, Ky.
TR—John Penrod, Island, Ky.
GM—John Penrod, Island, Ky.
GS—John Penrod, Island, Ky.
PA—John Penrod, Island, Ky.

Penrod Mine; Drift; No. 9 Seam; 50 in. thick.
PO—Island, Ky.; SP—Same; CTY—McLean; RR—L. & N. O. & N. Div.
SM—F. B. White, Island, Ky.
SIZES SHIPT—Run of Mine.
Old Information

PENSY BLUE CEM COAL COMPANY

General Office, Barbourville, Ky.
PR—R. B. Hill, Barbourville, Ky.
VP—Charly Hill, Barbourville, Ky.
TR—Mrs. R. B. Hill, Barbourville, Ky.
GM—R. B. Hill, Barbourville, Ky.

Blue Gem Coal Mine; Drift; Blue Gem Seam; 24 inches thick.
PO—Barbourville, Ky.; SP—Heldrick, Ky.; CTY—Knox; RR—C. & M.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
SIZES SHIPT—Run of Mine, Nut, Block.
PREP. EQUIPT—Screens.
Old Information.

PERKINS-BOWLING COAL CORP.

General Office, Lexington, Ky.
PR—N. B. Perkins, Williamsburg, Ky.
VP—J. H. Bowling, Lexington, Ky.
TR—A. V. Brown, Williamsburg, Ky.
GM—J. H. Bowling, Lexington, Ky.
GS—Paul Card, Sassafras, Ky.
SCO—Address the Company, Buyer, E. C. Perkins, Sassafras, Ky.
SA—Southern Coal & Coke Co., Cincinnati, O.

Perkins-Bowling Mine; Drift; Nos. 7 and 9 Seams 60-84 in. thick.
PO—Sassafras, Ky.; SP—Frt., Same, Exp., Hamdin, Ky.; CTY—Knott; RR—L. & N.
S of H—2 trolley pole type locos. Track gage 48 in.
S of M—3 shortwall machs.
PP—Power purchased Transformer 2300 to 250-275 volts A. C., rotary converters, 250 to 275 volts D. C.
EMP—75. Daily tonnage 1,500
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Boxes.

PERKINS-HARLAN COAL CO., INC.

General Office, Williamsburg, Ky.
PR—N. B. Perkins, Williamsburg, Ky.
VP—C. F. Southard, Williamsburg, Ky.
TR—P. D. Perkins, Harlan, Ky.
GM—F. D. Perkins, Harlan, Ky.
GS—E. M. Denham, Williamsburg, Ky.
EE—F. A. Signer, Harlan, Ky.
SCO—Address the Company, Buyer, W. C. Evans, Liggett, Ky.
SA—Address the Company, Cincinnati, O. and Knoxville, Tenn.

(Continued on Next Page)

Perkins Marlan Coal Co.—Inc.

Perkins-Marlan Mine; Drift; Harlan Seam; 48 to 48 inches thick.
 PO—Luggett, Ky.; SP—Frt., Same; Exp., Harlan, Ky.; CTY—Harlan; RR—L. & N.
 MS—W. J. Harmon, Luggett, Ky.
 S of H—Electric locos. Track gage 44 in.
 S of M—Hand.
 PP—Power purchased Transformer 3,300 to 110 volts A. C., rotary converters.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Conveyor, Screens, Loading Booms.

PHOENIX COAL COMPANY

General Office, Tarma, Ky.
 PR—Jas. B. Torbert, Owensboro, Ky.
 VP—C. C. Houston, Louisville, Tenn.
 TR—P. D. Houston, Nashville, Tenn.
 GM—Jas. B. Torbert, Owensboro, Ky.
 GS—J. T. Bridge, Tarma, Ky.
 EM—Thos. Leahy, Central City, Ky.
 SCO—Address the Company, Buyer, Paul Landrum, Tarma, Ky.

Nos. 1 and 2 Mines; Shaft; No. 9 Seam; 66 inches thick.
 PO—Tarma, Ky.; SP—Nonnel, Ky.; CTY—Mubenberg; RR—L. & N.
 S of H—Locos. Track gage 36 in.
 S of M—Shortwall machs.
 PP—4 fire tube boilers, 150 H. P., 1 100 K. W., 1 50 K. W. gen. units, 250 volts D. C.
 Daily tonnage 1,750.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens.

PICKERING BRANCH COAL CO.

General Office, Kettle Island, Ky.
 PR—Dr. R. W. Bayless, Louisville, Ky.
 VP—L. R. Reams, Wilton, Ky.
 TR—L. A. Nield, Louisville, Ky.
 GM—J. M. Lock, Kettle Island, Ky.
 PA—L. R. Reams, Wilton, Ky.

Pickering Branch Mine; Drift; Straight Creek Seam, 42 in. thick.
 PO—Kettle Island, Ky.; SP—Same; CTY—Bell; RR—L. & N.
 S of H—Mules. Track gage, 42 in.
 S of M—Hand.
 PP—1 pump.
 SIZES SHIPT—Run of Mine.
 Old Information.

PIKE FLOYD COAL COMPANY

Pike Floyd Mine.
 PO—Betsy Layne, Ky.; SP—Same; CTY—Floyd; RR—C. & O.
 No report.

PINE CREEK COAL COMPANY

General Office, Winchester, Ky.
 PR—Samuel Combs, Beattyville, Ky.
 VP—J. C. McCombs, Lexington, Ky.
 TR—Green Kinser, Beattyville, Ky.
 GM—W. B. Johnson, Winchester, Ky.
 GS—W. B. Johnson, Winchester, Ky.
 PA—W. B. Johnson, Winchester, Ky.
 SA—W. B. Johnson, Winchester, Ky.

Pine Creek Mine; Drift; No. 4 Elkhorn Seam; 48 inches thick.
 PO—Mayking, Ky.; SP—Same; CTY—Letcher; RR—L. & N.
 MS—Alex Taylor, Mayking, Ky.
 S of H—Mules. Track gage 42 inches.
 S of M—Hand.
 EMP—6.
 SIZES SHIPT—Run of Mine.

PINE KNOT COAL COMPANY

Pine Knot Mine.
 PO—Lenox, Ky.; SP—Same; CTY—Morgan; RR—M. & N.
 No report.

PINE RIDGE COAL MINING COMPANY.

General Office, Cincinnati, O.
 PR—E. H. Jewett, Detroit, Mich.
 VP—E. L. Douglass, Cincinnati, Ohio.
 TR—L. H. Stone, New York, N. Y.
 GM—J. T. Bradley, Pineville, Ky.
 GENERAL PA—Geo. L. Washburne, Cincinnati, O.
 SCO—J. E. Stores Co., Buyer, A. J. McCoy, Tinsley, Ky.
 SA—Jewett, Bigelow & Brooks, Detroit, Mich., and Cincinnati, Ohio.

"Italy" Mine; Drift; Dean Seam, 54 to 84 in. thick.
 PO—Tinsley, Ky.; SP—Surren, Ky.; CTY—Bell; RR—L. & N.
 S of H—Mules and elec. loco. Track gage, 40 in.
 S of M—10 comp. air machs.
 PP—2 water tube boilers, total 300 H. P., 1 air compressor, 2 pumps.
 EMP—100. Last fiscal year output 100,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables.

PINNACLE COAL MINING CO., INC.

General Office, Knoxville, Tenn.
 PR—J. C. Cantor, Knoxville, Tenn.
 TR—S. W. Jayne, "

GM—J. L. Sanders, Ralston, Ky.
 GS—J. L. Sanders, "
 PA—J. L. Sanders, "
 EE—T. Cardell, "
 EM—J. C. Richardson, Middlesboro, Ky.
 Sales Manager—S. W. Jayne, Knoxville, Tenn.

Pinnacle Mine; Drift; Poplar Lick Seam; 48 to 96 in. thick. Operate washery.

PO—Ralston, Ky.; SP—Stony Fork, Ky.; CTY—Bell; RR—L. & N., Stony Fork Branch.

MS—Geo. R. Luke, Ralston, Ky.
 S of H—Mules, 1 elec. and 2 storage battery locos. Track gage, 44 in.

S of M—Hand
 PP—3 Return tubular boilers, total 300 H. P., 2 pumps.

EMP—75. Last fiscal year output 35,460 tons.

Old Information.

PINSON ELKHORN COLLIERY, INC.

Now J. E. Polley Coal Co., Inc.

PIONEER COAL CO.

General Office, 315 Guthrie St., Louisville, Ky.

PR—F. M. Sackett, Louisville, Ky.
 VP—W. S. Speed, Louisville, Ky.
 TR—C. D. Major, Louisville, Ky.
 GM—C. S. Nield, Kettle Island, Ky.
 GS—T. L. Frost, Kettle Island, Ky.
 PA—T. B. Hall, Kettle Island, Ky.
 EE—H. C. Craft, Kettle Island, Ky.
 SCO—Pioneer Store Co., Buyer, T. B. Hall, Kettle Island, Ky.
 SA—B. F. Reed, Louisville, Ky.

Pioneer No. 1 Mine; Drift; Straight Creek Seam, 42 in. thick.

PO—Kettle Island, Ky.; SP—Same; CTY—Bell; RR—L. & N.

S of H—6 trolley pole type locos. Track gage, 42 in.

S of M—11 shortwall machs.

PP—3 water tube boilers, 528 H. P., 1 100 K. W., 1 220 K. W., 1 75 K. W. gen. units, transformer 2,300 to 250 volts A. C., M. G. sets, 250 volts D. C., 10 pumps.

EMP—330. Last years tonnage 97,192.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.

PREP. EQUIPT—Shaker Screens, Loading Booms.

PITTSBURGH COAL CO.

General Office, Baskett, Ky.
 GM—Alexander Blair, Baskett, Ky.
 GS—Alexander Blair, Jr., Baskett, Ky.
 PA—Alexander Blair, Jr., Baskett, Ky.
 SCO—Address the Company, Buyer, C. L. Sights, Baskett, Ky.

Blairs Mine; Shaft; No. 9 Seam, 48 in. thick.

PO—Baskett, Ky.; SP—Same; CTY—Henderson; RR—L. H. & St. L.

S of H—Mules and storage battery locos. Track gage 42 in.

S of M—5 shortwall machs.

PP—3—375 H. P. fire tube boilers, 1—100 K. W. and 1—40 K. W. gen. units, 250 volts D. C., 6 pumps.

EMP—125. Last years tonnage 110,000.

SIZES SHIPT—Run of Mine, Slack, Block.

PREP. EQUIPT—Gravity Screens.

PIVOT ROCK COAL COMPANY

General Office, Smalley, Ky.
 PR—R. V. Wolfhard, Smalley, Ky.
 VP—J. A. Deaton, Toms Creek, Va.
 TR—W. S. Dodd, Cochrane, Va.
 GM—R. V. Wolfhard, Smalley, Ky.
 EM—Townsend Combs, Smalley, Ky.
 SCO—Address the Company, Buyer, R. V. Wolfhard, Smalley, Ky.

SA—The Tildesley Coal Co., Cincinnati, O.

Isborne Mine; Drift; Elkhorn Nos. 1 and 3 Seams; 36-48, 36-52 in. thick.

PO—Smalley, Ky.; SP—Martin, Ky.; CTY—Floyd; RR—B. & O.

MS—Cleveland Stephens, Smalley, Ky.
 SM—H. H. Deaton, Smalley, Ky.

S of H—Mules. Track gage 42 in.
 S of M—Hand

EMP—32. Daily tonnage 120.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Picking Tables.

PLATTS FORK COAL CO.

Now operated by Platts Fork Mining Co.

PLATTS FORK MINING CO.

General Office, Ashland, Ky.
 PR—J. W. Montgomery, Ashland, Ky.
 VP—H. Bishop, Ashland, Ky.
 TR—J. T. Miller, Ashland, Ky.
 GM—J. W. Montgomery, Ashland, Ky.
 GS—J. P. Holsing, Wallins Creek, Ky.
 PA—J. P. Holsing, Wallins Creek, Ky.
 EM—E. Creech, Harlan, Ky.
 SA—J. W. Montgomery, Ashland, Ky.

Platts Fork Mine; Slope; Seam, 42 inches thick.
 PO—Wallins Creek, Ky.; SP—Same; CTY—Harlan; RR—L. & N.

S of H—Rope. Track gage 40 inches.
 S of M—Hand.
 PP—1 50 H. P. fire tube boiler, 1 pump.
 EMP—14. Daily tonnage 120.
 SIZES SHIPT—Run of Mine, Block.
 NOTE—Formerly operated by the Platts Fork Coal Co.

P. M. C. COAL COMPANY

General Office, Sprigg, W. Va.
 Note—Mine in Kentucky. Tipple in Virginia.

PR—J. C. Palmer, Cleveland, O.
 VP—P. E. Countryman, Ashland, C.

TR—J. C. Palmer, "lar", O.
 GM—Earl McConaughy, Sprigg, "

GS—Earl McConaughy, Sprigg, "

PA—Earl McConaughy, Sprigg, "

EM—L. C. Linkous, Williamson, W. Va.
 SCO—Address the Company, Buyer, H. F. Garrett, Sprigg, W. Va.

P. M. C. Mine; Drift; Thacker Seam; 60 inches thick.

PO—Sprigg, W. Va.; SP—Same; CTY—Pike (Ky.); RR—N. & W.

S of H—3 elec. locos. Track gage 48 in.

S of M—2 shortwall machs.

PP—Power purchased. Transformer 1,250 to 250 volts.

EMP—75. Last years tonnage 50,000.

SIZES SHIPT—Run of Mine.

POLLEY COAL CO.

General Office, Williamsburg, Ky.
 PR—T. B. Mahan, Williamsburg, Ky.
 VP—B. E. Cheely, Williamsburg, Ky.

TR—T. J. Roberts, Williamsburg, Ky.
 GM—B. E. Cheely, Williamsburg, Ky.

GS—Robert Thomas, Williamsburg, Ky.
 PA—Robert Thomas, Williamsburg, Ky.

CE—Archie Stott, Packard, Ky.
 SCO—Address the Company, Buyer, Walter Douglas, Packard, Ky.

SA—Southern Coal & Coke Co., Knoxville, Tenn.

Polley Coal Mine; Drift; Blue Gem and Jellico Seams.

PO—Packard, Ky.; SP—Frt. Prepay, Packard, Ky.; Exp. Callif, Ky.

CTY—Whitley; RR—L. & N.

S of H—Mules. Track gage, 36 in.

S of M—Hand.

EMP—21.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.

POLLEY, J. E. COAL CO., INC.

General Office, Millard, Ky.
 PR—J. E. Polley, Millard, Ky.

VP—J. B. Venters, Millard, Ky.

TR—R. M. Polley, Millard, Ky.

GM—J. E. Polley, Millard, Ky.

GS—W. B. May, Millard, Ky.

PA—J. E. Polley, Millard, Ky.

CE—C. G. Engineer, Millard, Ky.

S.O.—J. Thacker, Sutton, Ky.; Buyer, J. Thacker, Sutton, Ky.

Polley Mine; Drift; Elkhorn Seam, 48-60 in. thick.

PO—Millard, Ky.; SP—Same; CTY—Pike; RR—C. C. & O.

S of H—Mules. Track gage 44 in.

S of M—Hand.

EMP—25.

SIZES SHIPT—Run of Mine.

NOTE—Successors to the Pinson Elkhorn Colliery, Inc.

POND CREEK COAL COMPANY.

General Office, 55 Congress St., Boston, Mass., and Stone, Ky.
 PR—T. B. Davis, 1 Broadway, New York, N. Y.

VP—R. S. McVeigh, Cincinnati, O.

VP—J. D. Francis, Huntington, W. Va.

TR—F. W. Bateholder, Boston, Mass.

GM—A. R. Beisel, Huntington, W. Va.

ASST. GM—H. M. Ernst, Stone, Ky.

GS—L. T. Snyder, Stone, Ky.

PA—W. T. Smythe, Huntington, W. Va.

EM—W. L. Long, Stone, Ky.

EE—C. E. Shelor, Stone, Ky.

SCO—Pond Creek Stores Co.; Buyer, G. N. Staple, Stone, Ky.

SA—Island Creek Coal Co., Huntington, W. Va.

Central Power Station at Stone, Ky.; 6 B. & W. boilers, total 1800 H. P., 2 gen. mchs. Voltage generated, 2,300 volts; transmitted, 11,000 volts, transformer to 440 A. C., 3 phase, 60 cycle used in mine, 250 volts D. C.

No. 1 Mine; Drift; Freeburn Seam, 48 to 60 in. thick.

PO—Hardy, Ky.; SP—Same; CTY—Pike; RR—N. & W., W. & P. C. Br.

MS—J. Madison, Hardy, Ky.

SM—R. J. Martin, Hardy, Ky.

S of H—5 trolley pole type locos. Track gage 44½ in.

S of M—5 shortwall machs.

PP—Power from central power plant, 1—200 K. W. M. G. set, 250 volts D. C., 5 pumps.

EMP—39. Last years tonnage 77,377.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Gravity Screens.

No. 2 Mine; Drift; Freeburn Seam, 48 to 60 in. thick.

PO—Hardy, Ky.; SP—Same; CTY—Pike; RR—N. & W., W. & P. C. Br.

MS—J. Madison, Hardy, Ky.

SM—R. J. Martin, Hardy, Ky.

S of H—5 trolley pole type locos. Track gage, 44½ in.

S of M—4 shortwall machs.

PP—Power from central power plant, 1—200 K. W. M. G. set, 250 volts D. C., 3 pumps.

EMP—47. Last year tonnage 74,835.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Shaker Screens, Picking Tables.

No. 3 Mine; Drift; Freeburn Seam, 48 to 72 in. thick.

PO—Stone, Ky.; SP—Same; CTY—Pike; RR—N. & W., W. & P. C. Br.

MS—J. T. Snyder, Stone, Ky.

SM—N. K. Martin, Stone, Ky.

S of H—6 trolley pole type locos. Track gage, 44½ in.

S of M—5 shortwall machs.

PP—Power from central power plant, 1—200 K. W. M. G. set, 250 volts D. C., 4 pumps.

EMP—63. Last years tonnage 114,737.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Shaker Screens, Picking Tables.

No. 4 Mine; Drift; Freeburn Seam; 72 in. thick.

PO—Stone, Ky.; SP—Same; CTY—Pike; RR—N. & W., W. & P. C. Br.

MS—W. A. Eads, Stone, Ky.

SM—N. K. Martin, Stone, Ky.

S of H—Mules and 1 elec. loco. Track gage, 44½ in.

S of M—3 shortwall machs.

PP—Power from central power plant, 1—150 K. W. rotary converter, 300 volts D. C.

EMP—33. Last years tonnage 80,834.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Gravity Screens.

No. 5 Mine; Drift; Freeburn Seam, 54 to 66 in. thick.

PO—Pinson Fork, Ky.; SP—Peg, Ky.; CTY—Pike; RR—N. & W., W. & P. C. Br.

MS—D. H. Johnson, Pinson Fork, Ky.

SM—B. A. Dameron, Pinson Fork, Ky.

S of H—6 trolley pole type locos. Track gage 44½ in.

S of M—5 shortwall machs.

PP—Power from central power plant, 1—200 K. W. M. G. set, 250 volts D. C., 5 pumps.

EMP—41. Last years tonnage 96,200.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Gravity Screens.

No. 6 Mine; Drift; Freeburn Seam, 48 to 72 in. thick.

PO—McVeigh, Ky.; SP—Same; CTY—Pike; RR—N. & W., W. & P. C. Br.

MS—D. W. Hogan, McVeigh, Ky.

SM—J. W. Littleton, McVeigh, Ky.

S of H—6 trolley pole type locos. Track gage 44½ in.

S of M—5 shortwall machs.

PP—Power from central power plant, 2—200 K. W. M. G. sets, 250 volts D. C., 6 pumps.

EMP—70. Last years tonnage 147,455.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Shaker Screens, Picking Tables.

No. 8 Mine; Drift; Freeburn Seam, 60 to 66 in. thick.

PO—Pinson Fork, Ky.; SP—Peg, Ky.; CTY—Pike; RR—N. & W., W. & P. C. Br.

MS—W. A. Eads, Pinson Fork, Ky.

SM—R. A. Dameron, Pinson Fork, Ky.

S of H—Mules and 2 trolley pole locos. Track gage, 44½ in.

S of M—3 shortwall machs.

PP—Power from central power plant, 1—150 K. W. rotary converter, 300 volts D. C., 3 pumps.

PORTER MINING COMPANY, THE

General Office, Ashland, Ky.
PR—J. E. Kling, Ashland, Ky.
VP—Dr. M. M. Collins, Lacey, Ky.
TR—S. S. Porter, Ashland, Ky.
GM—Fred Blackburn, Lacey, Ky.
GS—Fred Blackburn, Lacey, Ky.
PA—S. S. Porter, Ashland, Ky.
CE—Edward Holley, Ashland, Ky.
SA—King Coal Co., Ashland, Ky.

Argonne Mine; Drift; Elkhorn Seam, 54 inches thick.
PO—Lacey, Ky.; SP—Same; CTY—Floyd; RR—E. & B. V. Div., C. & O.
S of H—Mules. Track gauge 42 inches.
S of M—Hand.
SIZES SHIPT—Run of Mine.

Verdun Mine; Drift; Elkhorn Seam, 54 inches thick.
PO—Lacey, Ky.; SP—Same; CTY—Floyd; RR—E. & B. V. Div., C. & O.
S of H—Mules. Track gauge 42 inches.
S of M—Hand.
SIZES SHIPT—Run of Mine.
old Information

PORTSMOUTH CO-PRODUCT COKE CO.

General Office, Portsmouth, O.
PR—J. H. Frantz, Columbus, O.
VP—R. H. Sweetser, Columbus, O.
TR—H. K. Moore, Portsmouth, O.
GM—Thomas DeVany, Edgerton, W. Va.
GS—Address the company buyer, B. S. Shumate, Edgerton, W. Va.
PA—J. A. Whaling, Syracuse, N. Y.
EE—J. C. Wilcox, Edgerton, W. Va.

Freeburn No. 1 Mine; Drift; Freeburn seam 60 in. thick.
PO—Edgerton, W. Va.; SP—Frt., Arrow, Ky.; Exp., Delorme, W. Va.; CTY—Pike, Ky.; RR—N. & W.
MS—A. C. Lovell, Edgerton, W. Va.
S of H—1 trolley pole type electric locos. Track gauge 48 in.
S of M—1 shortwall mach.
PP—Power purchased, Transformer 33,000—2200 volts A. C., M. G. Set, 275 volts D. C., 1 pump.
EMP—60. Daily tonnage 300.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screen.

Freeburn No. 2 Mine; Drift; Thacker seam 48 in. thick.
PO—Edgerton, W. Va.; SP—Frt., Arrow, Ky.; Exp., Delorme, W. Va.; CTY—Pike, Ky.; RR—N. & W.
MS—J. E. Edwards, Edgerton, W. Va.
S of H—4 trolley pole type elec. locos. Track gauge 48 in.
S of M—4 shortwall machs.
PP—Power purchased, Transformer 33,000—2200 volts A. C., M. G. Set, 275 volts D. C., 2 pumps.
EMP—200. Last years tonnage 100,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

Freeburn No. 3 Mine; Drift; Freeburn seam 66 in. thick.
PO—Edgerton, W. Va.; SP—Frt., Arrow, Ky.; Exp., Delorme, W. Va.; CTY—Pike, Ky.; RR—N. & W.
S of H—7 trolley pole type and 2 storage battery loco. Track gauge 48 inches.
S of M—6 shortwall machs.
PP—Power purchased, Transformer 33,000—2200 volts A. C., 2 M. G. S's, 275 volts D. C., 7 pumps.
EMP—350. Last years tonnage 250,000.
SIZES SHIPT—Run of Mine.
NOTE—80 Sement-Solvay By-Product Ovens at Portsmouth, O.

POWER COAL MINING CO.

Now Wheeler Coal Co.

PRATSE ELKHORN COAL COMPANY

General Office, Pikeville, Ky.
PR—H. H. Porter, Pikeville, Ky.
VP—W. W. Gray, Pikeville, Ky.
TR—W. W. Gray, Pikeville, Ky.
GM—J. W. Cockill, Pikeville, Ky.
GS—J. W. Cockill, Pikeville, Ky.
PA—J. W. Cockill, Pikeville, Ky.
CE—C. G. Evans, Pikeville, Ky.
EE—Otis Eswick, Dunleavy, Ky.
SA—A. W. Humphrey, Ashland, Ky.

Elkhorn Cite Mine; Drift; Auxler Seam; 40 inches thick.
PO—Dunleavy, Ky.; SP—Same; CTY—Pike; RR—C. & O., C. C. & O.
MS—Kenie Eswick, Dunleavy, Ky.
S of H—Mules, storage battery loco, Track gauge 42 inches.
S of M—Shortwall machs.
PP—1 fire tube boiler, 70 H. P., 75 K. W. gen. unit, 250 volts D. C.
EMP—35. Last years tonnage 17,000.

SIZES SHIPT—Run of Mine.
Note—Formerly operated by Elkhorn City Coal Co.

PREMIER COAL CO.

General Office, Yamacraw, Ky.
PR—Dr. H. D. Hatfield, Huntington, W. Va.
VP—J. S. Browning, Jr., Pocahontas, Va.
TR—McGinnis Hatfield, Norfolk, W. Va.
GM—Walter Prockter, Yamacraw, Ky.
PA—Walter Prockter, Yamacraw, Ky.
EM—A. E. Oakley, Yamacraw, Ky.
EE—E. W. Vellenoseth, Yamacraw, Ky.

Premier Mine; Drift; No. 1 Kentucky Seam, 60 in. thick.
PO—Yamacraw, Ky.; SP—Frt. Same; Exp., Stearns, Ky.; CTY—MeCreary; RR—Kentucky & Tennessee.
MS—A. E. Oakley, Yamacraw, Ky.
S of H—Elec. locos. Track gauge 42 in.
S of M—Hand and 2 shortwall machs.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

PREMIUM CANNEL COAL COMPANY

General Office, Mt. Sterling, Ky.
OWNERS—W. C. Taylor, Winchester, Ky.; Lewis Amerson, Mt. Sterling, Ky.; Henry Clay Cox, Lenox, Ky.

Premium Cannel Mine; Drift; Cannel Coal Seam, 60 inches thick.
PO—Lenox, Ky.; SP—Same; CTY—Morgan; RR—Lenox.
S of H—Mules. Track gauge 42 inches.
S of M—Hand.
EMP—50. Daily tonnage 500.
SIZES SHIPT—Run of Mine, Egg, Lump, Block.
NOTE—Formerly operated by the Rush Coal Company

PRESTONBURG COAL CO. INC.

General Office, Tazewell, Va.
TR—Barnes Gillespie,
EM—Edward Holly,
VP—C. W. Allen, Prestonburg, Ky.
SC—Prestonburg Coal Co., Inc. Buyer, Z. S. Dickerson, Prestonburg, Ky.
Sales Agents—Easton Rhodes & Co., Cincinnati, O.

Nos. 1 and 2, Drift; No. 1 Seam; 52 to 59 in. thick.
PO—Prestonburg, Ky.; SP—Same; CTY—Floyd; RR—C. & O.
MS—J. W. Allen, Prestonburg, Ky.
S of H—2 elec loco. Track gauge 48 in.
S of M—6 elec chain machines.
PP—2 return tubular boilers, total 300 H. P., 1 gen. unit, 250 volts D. C., 1 pump.
EMP—47. No. 2 mine not in operation. Last fiscal year output 42,000 tons.
old Information.

PRICE JELICO COAL COMPANY

General Office, Middlesboro, Ky.
PR—A. C. Carr, Middlesboro, Ky.
VP—J. W. Greaver, Middlesboro, Ky.
TR—J. J. Cozatt, Middlesboro, Ky.
GM—J. J. Cozatt, Middlesboro, Ky.
EM—C. P. Davidson, Middlesboro, Ky.
SA—Bewley Darst Coal Co., Knoxville, Tenn.

Price Jellico Mine; Drift; Seam 45 inches thick.
PO—Four Mile, Ky.; SP—Same; CTY—Bull; RR—L. & N.
S of H—Mules. Track gauge 36 inches.
S of M—Hand.
EMP—20. Daily tonnage 50.
SIZES SHIPT—Run of Mine.

PRINCESS COAL CO.

General Office, Princess, Ky.
PR—C. V. Bartels, Princess, Ky.
GM—C. V. Bartels,
PA—C. V. Bartels,
EM—P. W. Gessling, Ashland, Ky.

Princess Mine; Drift; No. 7 Seam, 36 to 48 in. thick.
PO—Princess, Ky.; SP—Frt. Same; Exp., Ashland, Ky.; CTY—Boyd; RR—A. C. & I.

S of H—Mules. Track gauge 42 in.
S of M—2 comp. air machs.
PP—1 tubular boiler, 100 H. P., 1 air compressor, 2 pumps.
EMP—25. Last years tonnage 12,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

PRINTER ELKHORN COAL CO.

Now apart of the Long Branch Coal Co.

PROCTOR COAL CO.

General Office, Red Ash, Ky.
PR—Chas. Finley, Red Ash, Ky.
VP—E. E. Wood, Williamsburg, Ky.
TR—E. W. Finley, Williamsburg, Ky.
GM—Chas. Finley, Red Ash, Ky.
GS—R. B. Carter, Red Ash, Ky.
PA—G. W. Davenport, Red Ash, Ky.
CE—J. H. Hordin, Jellico, Tenn.
EE—R. L. Hicks, Red Ash, Ky.
SC—Address the Company; Buyer, G. W. Devenport, Red Ash, Ky.
SA—J. L. Boyd, Knoxville, Tenn.

Proctor Mine; Drift; Jellico Seam, 42 in. thick.
PO—Red Ash, Ky.; SP—Jellico, Tenn.; CTY—Whitley, Ky.; RR—L. & N.
MP—Tom Doyle, Red Ash, Ky.
S of H—Mules. Track gauge, 40 in.
S of M—Hand.
PP—2 water tube boilers, 300 H. P., 2 gen. units, 2,400 volts A. C., 3 phase, 60 cycles, transformer 2,300-110 volts, motor gen. sets, 250 volts D. C., 3 pumps.
EMP—70. Last fiscal year output, 25,000 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

PRODUCERS COAL CO.

Now Producers Coal Co. of Kentucky.

PRODUCERS COAL CO. OF KENTUCKY

General Office, 902 Andrus Bldg., Minneapolis, Minn.
PR—A. G. Moller, Minneapolis, Minn.
VP—L. S. Miner, Minneapolis, Minn.
TR—Thos. H. Schlosser, Minneapolis, Minn.
GM—Thos. J. Hecklin, Waverly, Ky.
GS—Thos. J. Hecklin, Waverly, Ky.
PA—Thos. J. Hecklin, Waverly, Ky.
CE—Allen & Garcia, Chicago, Ill.
EE—Louis A. Rowe, Waverly, Ky.

Midland Mine; Shaft; No. 11 Seam, 66 inches thick.
PO—Waverly, Ky.; SP—Same; CTY—Union; RR—L. C.
S of H—Mules, rope, 1 trolley pole type and steam locos. Track gauge 42 inches.
S of M—4 shortwall machs.
PP—4—150 H. P. fire tube boilers, 1—150 K. W. gen. units, 250 volts D. C., 8 pumps.
EMP—75. Daily tonnage 250 tons.
SIZES SHIPT—Run of Mine.
Note—Formerly operated by the Producers Coal Co.
old Information.

PROGRESSIVE COAL COMPANY.

General Office, Calla, Ky.
PR—F. E. McConnell, Lexington, Ky.
TR—J. G. Feltner, Calla, Ky.
GM—J. G. Feltner, Calla, Ky.
GS—J. G. Feltner, Calla, Ky.
EM—John B. Conley, Jackson, Ky.
SC—Progressive Coal Co. Store; Buyer, L. G. Baker, Calla, Ky.
SA—F. E. McConnell, Lexington, Ky.

Progressive Mine; Drift; No. 4 Seam; 36 in. thick.
PO—Calla, Ky.; SP—Arlow, Ky.; CTY—Kearthright; RR—Ohio & Ky.
S of H—Mules. Track gauge 36 in.
S of M—Hand.
PP—1 pump.
EMP—20. Daily tonnage 60.
SIZES SHIPT—Run of Mine.
old Information.

PROVIDENCE COAL MINING COMPANY.

General Office, Providence, Ky.
PR—Percy D. Berry, Providence, Ky.
VP—M. R. Cotton, Louisville, Ky.
TR—T. M. Hill, Providence, Ky.
GM—W. J. Nisbet, Providence, Ky.
GS—W. D. Barrows, Providence, Ky.
PA—W. D. Barrows, Providence, Ky.
EM—Ernest Martin, Providence, Ky.
SA—Chas. J. Mellich, Providence, Ky.
SC—Address the Company, Mgr., T. H. Waitlure, Providence, Ky.

No. 2 Mine; Shaft; Kentucky No. 9 Seam; 60 in. thick.
PO—Providence, Ky.; SP—Same; CTY—Webster; RR—L. & N., I. C.
MS—C. E. Wynn, Providence, Ky.
S of H—Mules and 2 trolley pole type locos. Track gauge 42 1/2 in.
S of M—1 chain breast type and 3 shortwall machs.
PP—3—150 H. P. fire tube boilers, 2 gen. units, 250 volts D. C., 10 pumps.
Daily tonnage 600.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

No. 3 Mine; Shaft; Kentucky No. 9 Seam; 60 in. thick.
PO—Providence, Ky.; SP—Same; CTY—Webster; RR—L. & N., I. C.
MS—A. L. Donan, Providence, Ky.
S of H—Mules and 2 trolley pole type locos. Track gauge 42 1/2 in.
S of M—2 chain breast type and 4 shortwall machs.

PP—3—150 H. P. fire tube boilers, 2 gen. units, 250 volts D. C., 5 pumps.
Daily tonnage 800.
SIZES SHIPT—Run of Mine, Slack, Nut, Pear, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

PURITY CANNEL COAL CO. (The).

General Office, Detroit, Mich.
PR—Hiram Harris, Prestonsburg, Ky.
TR—John Hunley, Prestonsburg, Ky.
GM—John Hunley,
GS—John Hunley,
PA—Sam L. Sgradlin,
CE—A. J. Baldwin,
SA—Ohio & Kentucky Fuel Co., Cincinnati, O.

Purity Cannel Mine; Drift; No. 2 Seam, 52 in. thick.
PO—Prestonsburg, Ky.; SP—Same; CTY—Floyd; RR—C. & O.
S of H—Mules. Track gauge, 42 in.
S of M—Hand.
PP—Power purchased.
EMP—100. Last fiscal year output, 20,000 tons.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Picking Tables.

QUEEN BLUE GEM COAL CO.

General Office, Manchester, Ky.
PR—R. B. Winken, Harlan, Ky.
TR—R. B. Winken, Harlan, Ky.
GM—R. A. Winken, Manchester, Ky.
GS—A. Miller, Manchester, Ky.
PA—R. A. Winken, Manchester, Ky.
SA—South in Coal Exchange, Middlesboro, Ky.

Queen Blue Gem Mine; Drift; Blue Gem Seam, 20 inches thick.
PO—Manchester, Ky.; SP—Same; CTY—Clay; RR—Cumberland & Manchester.
S of H—Mules. Track gauge 36 inches.
S of M—Hand.
PP—2 pumps.
EMP—25. Daily tonnage, 80.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.
Note—Formerly operated by the Love Coal Company.
old Information.

R. & A. COAL COMPANY, INC.

General Office, Providence, Ky.
PR—J. D. Spense, Providence, Ky.
VP—P. V. Rickman, Providence, Ky.
TR—W. B. Snow, Providence, Ky.
GM—J. A. Aldridge, Providence, Ky.
GS—W. Fred Hump, Providence, Ky.

R. & A. Mine; Drift; No. 11 Seam; 72 inches thick.
PO—Providence, Ky.; SP—Same; CTY—Webster; RR—L. C., L. & N.
S of H—Mules. Track gauge 42 inches.
S of M—Hand.
EMP—52. Daily output, 375 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

RATICAN-JARBOE COAL COMPANY

General Office, P. O. Box 248, Owensboro, Ky.
PR—Emmet Ratican, Owensboro, Ky.
VP—Annie Ratican, Owensboro, Ky.
TR—A. W. Jarboe, Owensboro, Ky.
GS—J. A. Deane, Owensboro, Ky.
PA—Emmet Ratican, Owensboro, Ky.
EM—Wm. Ewing, Owensboro, Ky.

Shaft; No. 9 Seam, 52 inches thick.
PO—Owensboro, Ky.; SP—Same; CTY—Davess; RR—L. H. & St. L.
MS—Wm. Ewing, Owensboro, Ky.
S of H—Mules. Track gauge 37 inches.
S of M—Hand, chain breast type.
PP—1 fire tube boiler, 30 H. P.
EMP—18. Daily tonnage, 60.

REGAL BLOCK COAL COMPANY.

General Office, Twin Branch, W. Va.
PR—Jasper Fleming, Twin Branch, W. Va.
TR—Dr. J. Howard Anderson,
GM—Jasper Fleming,
PA—Jasper Fleming,
CE—C. G. Fleming,
SC—Address the Company, Buyer, R. E. Fleming,
SA—William S. Harmon, Columbus, O.

Regal Block Mine; Drift; Elkhorn Seam, 74 in. thick.
PO—Tad, Ky.; SP—Harold, Ky.; (put off at 1st); CTY—Floyd; RR—C. & O., Big Sandy Div.
MS—R. L. Ellis, Ivy, Ky.
S of H—Mules.
S of M—Hand.
Daily tonnage 100.
SIZES SHIPT—Run of Mine.

REINECKE COAL MINING CO. (THE)

General Office, Madisonville, Ky.
 PR—Caroline Penn., Belleville, Ill.
 VP—E. M. Reinecke, Belleville, Ill.
 TR—Grace Reinecke, Madisonville, Ky.
 GM—J. D. Overall, Madisonville, Ky.
 GS—E. Braun, " "
 PA—J. D. Overall, " "
 EM—N. E. Stone, " "
 EE—C. W. Roberts, Madisonville, Ky.

Eureka Mine; Shaft; No. 11 Seam; 72 in. thick.

PO—Madisonville, Ky. SP—Same. CTY—Hopkins; RR—L. & N., Henderson Div.

S of H—3 15 ton trolley pole type locos. Track gage, 42 in.

S of M—10 chain breast type and 4 shortwall machs.

PP—8 water tube boilers, total H. P. 1100, 3 150 K. W. gen. units, 500 volts D. C., 6 pumps.

EMP—230. Last fiscal year output, 256,000 tons.

SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.

PREP. EQUIPT.—Revolving and Shaker Screens.

RELIANCE COAL & COKE CO.

General Office, Cincinnati, O.
 PR—Otis Fleischmann, New York, N. Y.

VP—J. T. Hatfield, Cincinnati, O.
 TR—Irvin Davis, Cincinnati, O.

GM—Wm. W. Miller, Cincinnati, O.
 PA—S. E. Daniels, Glomawr, Ky.

CE—J. T. Dawson, Huntington, W. Va.
 EM—L. N. Caudill, Glomawr, Ky.

EE—Ernest McClancey, Glomawr, Ky.
 SCO—Address the Company, Buyer, W. L. Owen, Glomawr, Ky.

Reliance Mine; Drift; No. 7 Seam; 54 in. thick.

PO—Glomawr, Ky.; SP—Same; CTY—Perry; RR—L. & N. L. & E. Div.

MS—John Fitzpatrick, Glomawr, Ky.
 S of H—4 trolley pole type and 3 storage battery locos. Track gage 42 in.

S of M—5 shortwall machs.
 PP—Power purchased. Transformer 33,000 to 2,200 volts A. C., M. G. set, 250 volts D. C.

EMP—150. Daily output 600 tons.

SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.

PREP. EQUIPT.—Shaker Screens, Loading Booms.

RENDER COAL COMPANY.

General Office, McHenry, Ky.
 PR—A. J. Carley, Louisville, Ky.

VP—Mrs. L. L. Stewart, Central City, Ky.
 TR—L. L. Stewart, Central City, Ky.

SA—A. J. Early, Louisville, Ky.

Render Mine; Drift; No. 9 Seam, 55 in. thick.

PO—McHenry, Ky.; SP—Same; CTY—Ohio; RR—I. C.

MS—C. L. Laury, McHenry, Ky.
 S of H—Mules and elec. locos. Track gage 36 in.

S of M—Hand.

PP—Power purchased. Transformer 350-250 volts A. C., gen. units, 1-50 K. W., 250 volts D. C., 1-100 H. P. fire tub. boiler.

EMP—85. Last years tonnage 56,800.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT.—Bar Screens.

REX COAL COMPANY.

General Office, Kitts, Ky.
 PR—Thos. Bennett, Perkins, K.

VP—C. V. Bennett, Harlan, Ky.
 TR—H. H. Bennett, Harlan, Ky.

CM—C. V. Bennett, Harlan, Ky.
 GS—C. V. Bennett, Harlan, Ky.

PA—H. H. Bennett, Harlan, Ky.
 SCO—Address the Company, Buyer, Isaac Wardfield, Kitts, Ky.

SA—Bewley-Darst Coal Co., Knoxville, Tenn.

Rex Red Ash Mine; Drift; Harlan Seam, 50 to 60 in. thick.

PO—Kitts, Ky. SP—Forester, Ky. CTY—Harlan; RR—L. & N., Washtata & Black Mtn. Br.

S of H—3 trolley pole type locos. Track gage 42 in.

S of M—3 shortwall machs.
 PP—Power purchased. Transformer 2300 volts A. C., 1-150 K. W. Rotary converter, 250 volts D. C., 1 pump.

EMP—60. Last years tonnage 39,658.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.

PREP. EQUIPT.—Shaker Screens.

R-H ELKHORN COAL COMPANY

General Office, Shelbyana, Ky.
 PR—J. M. Hamilton, Cincinnati, Ohio.

VP—Linton Levette, Pikeville, Ky.
 TR—Guy H. Hamilton, Shelbyana, Ky.

GM—J. M. Hamilton, Cincinnati, Ohio.
 PA—Guy H. Hamilton, Shelbyana, Ky.

EM—C. G. Evans, Pikeville, Ky.
 SCO—Address the company Buyer, Guy H. Hamilton, Shelbyana, Ky.

SA—Guy H. Hamilton, Shelbyana, Ky.

Richman Mine; Drift; Elkhorn Seam, 54 in. thick.

PO—Shelbyana, Ky.; SP—Richman, Ky.; CTY—Pike; RR—S. V. & E.

S of H—Rope.
 S of M—Hand.

PP—1 50 H. P. water tube boiler.
 EMP—38. Daily tonnage 60.

SIZES SHIPT—Run of Mine.
 PREP. EQUIPT.—Shaker Screens.

RICHFIELD COAL COMPANY, INC., THE.

General Office, Pineville, Ky.
 PR—A. R. Tinley, Pineville, Ky.

VP—Dr. H. G. Petrie, White Star, Ky.
 GM—A. R. Tinley, Pineville, Ky.

GS—A. R. Tinley, Pineville, Ky.
 PA—A. R. Tinley, Pineville, Ky.

EM—Ed Johnston, Pineville, Ky.
 SCO—Richland Coal Company, Charlton, Ky.; Buyer, A. R. Tinley, Pineville, Ky.

SA—O. O. Campbell Coal Co., Atlanta, Ga.

Richland Mine; Drift; Blue Gem Seam, 28 in. thick.

PO—Emanuel, Ky.; SP—Charlton, Ky.; CTY—Knox; RR—L. & N.

S of H—Mules.
 S of M—Hand.

PP—1 35 H. P. fire tube boiler, 1 pump.
 Last fiscal year output, 10,042 tons.

Old Information.

RICHLAND CREEK COAL COMPANY

General Office, Barboursville, Ky.
 PR—A. M. Decker Jr., Barboursville, Ky.

TR—A. M. Decker, Jr., Barboursville, Ky.
 GM—A. B. Coone, Barboursville, Ky.

PA—A. M. Decker, Jr., Barboursville, Ky.
 SCO—Decker & Co., Buyer, A. M. Decker, Jr., Barboursville, Ky.

Richland Creek Mine; Drift; Blue Gem Seam; 28 inches thick.

PO—Barboursville, Ky.; SP—Same; CTY—Knox; RR—C. & M.

MS—A. B. Coone, Barboursville, Ky.
 S of H—Mules and gathering locos.

S of M—Hand and electric machs.
 PP—Power purchased, 220 volts A. C.

EMP—20. Last years tonnage 3,000.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT.—Bar Screens, Old Information.

RIKER, C. M., COAL COMPANY

General Office, 15 Broad St., New York, N. Y.

PR—C. E. Tuttle, 15 Broad St., New York, N. Y.

VP—R. T. Gunn, Gunn, Ky.

TR—L. A. Joyeux, New York, N. Y.

GM—R. T. Gunn, Gunn, Ky.

PA—R. T. Gunn, Gunn, Ky.

SCO—Address the Company, Buyer, J. E. Stivers, Gunn, Ky.

Riverside Mine; Drift; No. 4 Seam; 42 in. thick.

PO—Gunn, Ky.; SP—Frozen, Ky.; CTY—Breathitt; RR—O. & K., L. & N.

MS—J. W. Gordon, Gunn, Ky.
 S of H—Mules. Track gage 42 in.

S of M—Hand.

EMP—35. Last years tonnage 25,000.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT.—Bar Screens.

RIVERSIDE COAL MINING COMPANY

General Office, White Star, Ky.

PR—M. L. George, Middlesboro, Ky.

VP—Robt. Eustar, Middlesboro, Ky.

TR—Albert Bingham, White Star, Ky.

GM—M. L. George, Middlesboro, Ky.

GS—M. L. George, Middlesboro, Ky.

PA—M. L. George, Middlesboro, Ky.

CE—C. P. Davidson, Middlesboro, Ky.

SCO—Pearson Store, Buyer, E. A. Bingham, White Star, Ky.

SA—Kenluck Fuel Co., Cincinnati, O.

Riverside Mine; Shaft; Rex Seam; 60 inches thick.

PO—White Star, Ky.; SP—Pearson, Ky.; CTY—Harlan; RR—L. & N.

S of H—Elec. locos. Track gage 44 inches.

S of M—Mining machs.

PP—2 150 H. P. boilers, 1-160 H. P. boiler, gen. units, 250 volts D. C., 4 pumps.

EMP—35. Daily tonnage 150.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.

PREP. EQUIPT.—Screens.

RIVERVIEW COAL COMPANY

General Office, Providence, Ky.

PR—T. O. Ruckman, Providence, Ky.

VP—T. O. Ruckman, Providence, Ky.

TR—T. O. Ruckman, Providence, Ky.

GM—T. O. Ruckman, Providence, Ky.

PA—T. O. Ruckman, Providence, Ky.

EM—T. O. Ruckman, Providence, Ky.

SCO—Address the Company, Buyer, I. N. Crowe, Pikeville, Ky.

SA—C. E. Fibbals, McDowell, Ky.

TR—W. R. Snow, Providence, Ky.

GM—Jno. T. Aldridge, Providence, Ky.

GS—J. Wilson, Providence, Ky.

PA—W. Fred Hume, Providence, Ky.

Robison-Aldridge Mine; Slope; No. 11 Seam, 60 inches thick.

PO—Providence, Ky.; SP—Same; CTY—Weston; RR—I. C. & L. N.

MS—J. A. Lohetter, Providence, Ky.
 S of H—Mules.

S of M—Hand.

EMP—15. Daily output, 150 tons.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Block.

PREP. EQUIPT.—Bar Screens, Old Information.

ROCKHOUSE COAL COMPANY

General Office, Blackey, Ky.

PR—S. T. Wabolt, Toledo, O.

VP—Chas. T. Harther, Toledo, O.

TR—Carel Robinson, Blackey, Ky.

GM—Carel Robinson, Blackey, Ky.

GS—Carel Robinson, Blackey, Ky.

PA—H. M. Stone, Blackey, Ky.

SCO—Address the Company, Buyer, C. C. Johnson, Indian Bottom, Ky.

SA—Central States Coal Co., 2nd Nat. Bk. Bldg., Toledo, O.

Rockhouse Mine; Drift; No. 4 Seam; 60 inches thick.

PO—Blackey, Ky.; SP—Exp., Same, Frt., Harther, Ky.; CTY—Letcher; RR—L. & N.

MS—Alvis Mercer, Blackey, Ky.

SM—C. C. Price, Blackey, Ky.

S of H—Mules and electric loco. Track gage 44 inches.

S of M—2 shortwall machs.

PP—1-200 K. W. M. G. Sets, 250 volts D. C.

EMP—80. Last years tonnage 50,000.

SIZES SHIPT—Run of Mine, Slack, Lump, Block.

PREP. EQUIPT.—Bar Screens.

ROCKPORT COAL CO.

General Office, Central City, Ky.

PR—H. L. Tucker, Central City, Ky.

VP—R. C. Reid, Rockport, Ky.

TR—John T. May, Central City, Ky.

GM—H. L. Tucker, Central City, Ky.

PA—H. L. Tucker, Central City, Ky.

EM—K. D. Rivers, Centertown, Ky.

EE—R. C. Herrin, Rockport, Ky.

SCO—Address the Company, Buyer, L. F. Gibbs, Rockport, Ky.

SA—Crown Coal Co., Central City, Ky.

Rockport No. 1 Mine; Shaft; No. 9 Seam; 52 in. thick.

PO—Rockport, Ky.; SP—Same; CTY—Ohio; RR—I. C.

MS—H. L. Tucker, Central City, Ky.

MF—J. L. Jenkins, Rockport, Ky.

S of H—Mules and 2 trolley pole type locos. Track gage 48 in.

S of M—7 electric chain type and 2 shortwall machs.

PP—3 water tube boilers, total 450 H. P., 2 gen. units, 250 volts D. C., 4 pumps.

EMP—93. Last years tonnage 96,032.

SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.

PREP. EQUIPT.—Shaker Screens, Picking Tables, Loading Booms.

ROCKY BRANCH COAL COMPANY

General Office, Pineville, Ky.

PR—Carter Howard, Felder, Ky.

TR—A. W. Bahhage, Pineville, Ky.

GM—I. T. York, Pineville, Ky.

GS—I. T. York, Pineville, Ky.

PA—I. T. York, Pineville, Ky.

CE—Culton & Sherwin, Pineville, Ky.

SCO—Address the Company, Buyer, I. T. York, Pineville, Ky.

Rocky Branch; Drift; Lower Harlan Seam, 44 in. thick.

PO—Pineville, Ky.; SP—Felder, Ky.; CTY—Harlan; RR—L. & N.

S of H—Mules. Track gage 36 inches.

S of M—Hand.

PP—1 pump.

EMP—25. Daily tonnage 200.

SIZES SHIPT—Run of Mine, Lump.

PREP. EQUIPT.—Gravity Screens.

ROGERS BROS. COAL CO.

General Office, Pikeville, Ky.

PR—Fon Rogers, Pikeville, Ky.

VP—J. L. Rogers, Greenville, Ky.

TR—Lon Rogers, Ashland, Ky.

GM—John L. Rogers, Greenville, Ky.

GS—T. G. Rogers, Bevier, Ky.

PA—T. G. Rogers, Bevier, Ky.

EM—B. H. Shelley, Central City, Ky.

EE—C. H. Maddox, Bevier, Ky.

SCO—Address the Company, Buyer, I. N. Crowe, Pikeville, Ky.

Revier Mine; Drift; No. 9 Seam, 60 in. thick.

PO—Revier, Ky.; SP—Same; CTY—Muhlenberg; RR—L. & N.

S of H—Mules and trolley pole type locos.

S of M—6 shortwall machs.

PP—2 water tube boilers, gen. units, 250 volts A. C.

EMP—250. Last years tonnage 122,773.

SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.

PREP. EQUIPT.—Shaker Screens.

Virgie Mine
 Now operated by the Rogers Elkhorn Coal Company.

ROGERS ELKHORN COAL CO.

General Office, Virgie, Ky.

PR—J. B. Rogers, Virgie, Ky.

EM—A. J. Baldwin, Pikeville, Ky.

EE—H. L. Moreland, Virgie, Ky.

Virgie Mine; Drift; Elkhorn Seam, 75 inches thick.

PO—Virgie, Ky.; SP—Same; CTY—Pike; RR—Sandy Valley & Elkhorn.

MS—T. E. Rogers, Virgie, Ky.

S of H—Mules and elec. loco. Track gage 48 inches.

S of M—Shortwall mach.

PP—water tube boiler,

RUCKMAN COAL CO.

General Office, Providence, Ky.
PR—D. J. Ruckman, Providence, Ky.
VP—D. J. Ruckman, Providence, Ky.
TR—D. J. Ruckman, Providence, Ky.
GM—D. J. Ruckman, Providence, Ky.
GS—J. T. Adridge, Providence, Ky.
PA—W. Fred Hume, Providence, Ky.
CE—Thos. O. Long, Providence, Ky.
MM—Thos. O. Long, Providence, Ky.
EE—Carney Cates, Providence, Ky.
SCO—Address the Company, Buyer, Marion Simpson, Providence, Ky.
SA—W. Fred Hume, Providence, Ky.

Ruckman Mine; Shaft; No. 9 Seam, 40 in. thick.
PO—Providence, Ky.; SP—Same; CTY—Webster, RR—L. & N. 1. C.
MS—Barley Fugate, Providence, Ky.
S of H—Mules and 2 trolley pole type locos. Track gage 36 in.
S of M—5 longwall machs.
PP—2-15 H. P. water tube boilers, 1—100 K. W. and 1-75 K. W. gen. units, 250 volts D. C., 4 pumps.
EMP—110. Last years tonnage 70,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Shaker Screens.

RUDY, GEORGE H. & CO.

General Office, Owensboro, Ky.
PR—G. H. Rudy, Owensboro, Ky.
VP—G. H. Rudy, Owensboro, Ky.
TR—G. H. Rudy, Owensboro, Ky.
GM—G. H. Rudy, Owensboro, Ky.
GS—R. W. Maglinger, Owensboro, Ky.
PA—G. H. Rudy, Owensboro, Ky.
SCO—Address the Company, Buyer, Geo. H. Rudy, Owensboro, Ky.
SA—Geo. H. Rudy, Owensboro, Ky.

Rudy Mine; Shaft; No. 9 Seam, 4 ft. thick.
PO—Owensboro, Ky.; R. D. No. 4; SP—Same; CTY—Davis; RR—L. & N.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—1-35 H. P. water tube boiler, 3 pumps.
EMP—30. Daily tonnage 100.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
PREP. EQUIPT—Bar Screens.

RUSH BRANCH COAL CO.

Now being operated by the Premium Cannel Coal Company.

RUSSELL COAL COMPANY

Russell Mine.
PO—Richardson, Ky.; SP—Peach Orchard, Ky.; CTY—Lawrence; RR—C. & O.
No report.

RUTHANNE COAL COMPANY

General Office, Wolfcreek, Ky.
PR—J. M. Moore, Huntington, W. Va.
VP—B. J. Hiner, Huntington, W. Va.
TR—J. M. Moore, Huntington, W. Va.
GM—J. M. Moore, Huntington, W. Va.
GS—Address the company, Buyer, H. F. Davis, Wolfcreek, Ky.
SA—Logan & Kanawha Coal Co., Cincinnati, O.

Ruthanne Nos. 1, 2 & 3 Mines; Drift; Hazard Nos. 4 & 7 Seams, 42-44 in. thick.
PO—Wolfcreek, Ky.; SP—Same; CTY—Brecht; RR—L. & N.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—25. Last years tonnage 5,340.
SIZES SHIPT—Run of Mine.

RYE HOLLOW COAL COMPANY

Now Harlan-Liberty Coal Co.

S. & S. COAL COMPANY

General Office, Middlesboro, Ky.
PR—E. G. Sheaffer, Middlesboro, Ky.
VP—E. G. Sheaffer, Middlesboro, Ky.
TR—H. C. Smith, Middlesboro, Ky.
GM—E. G. Sheaffer, Middlesboro, Ky.
GS—F. S. Lee, Middlesboro, Ky.
PA—F. S. Lee, Middlesboro, Ky.
SCO—Day Bros. Buyer, Geo. W. Day, Middlesboro, Ky.
SA—Consumers Fuel Co., Middlesboro, Ky.

S. & S. Mine; Drift; Turner Seam, 52 inches thick.
PO—Middlesboro, Ky.; SP—Same; CTY—Bell; RR—L. & N.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—18. Daily tonnage 50.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens, Picking Tables.

ST. BERNARD MINING CO

General Office, Earlinton, Ky.
PR—Frank D. Rash, Earlinton, Ky.
VP—Don M. Evans, Earlinton, Ky.
TR—A. G. Spillman, Earlinton, Ky.
GM—A. G. Rash, Earlinton, Ky.
PA—W. E. Cahn, Earlinton, Ky.
CHIEF ENGR—F. D. Cahn, Earlinton, Ky.
EE—N. W. Umstead, Earlinton, Ky.
SCO—St. Bernard Mining Co., Buyer, W. R. Coyle, Earlinton, Ky.
SA—M. B. Ray, Madisonville, Ky.

No. 9 Mine, Slope, No. 9 Kentucky series, Seam 4 to 6 ft. thick. Washery at Coke Ovens.
PO—Earlington, Ky.; SP—Same; CTY—Hopkins, RR—L. & N., (H. Div.).
MS—E. R. Barnett, Earlinton, Ky.
S of H—Mules, rope and 2 elec. loco. Track gage 44 inches.
S of M—5 shortwall machs.
PP—2 water tube boilers. Power from central station, 250 volts.
Coke Ovens, 155 Bre Hive, consuming slack from No. 9 and 11 Mines.
EMP—156. Last years tonnage 119,857.
SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Lump.
PREP. EQUIPT—Shaker Screens.

No. 11 Mine, Drift, No. 11 Seam, 5 ft. 10 in. to 7 ft. thick.
PO—Earlington, Ky.; SP—Same; CTY—Hopkins, RR—L. & N., (H. Div.).
MS—Jas. C. Joren, Earlinton, Ky.
S of H—2 electric locos. Track gage, 44 in.
S of M—5 shortwall machs.
PP—Power from central station, 250 volts D. C.
EMP—104. Last years tonnage 218,226.
SIZES SHIPT—Run of Mine, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

PP—Central power station, Earlinton, Ky., 3-552 H. P. super-heater boilers, Westinghouse stokers, 2-1,500 K. W. Curtis turbines.

Hecla Mine, Drift, No. 9 Seam, 4½ to 5 ft. thick.
PO—Earlington, Ky.; SP—Same; CTY—Hopkins, RR—L. & N., (H. Div.).
MS—Dell Bowles, Earlinton, Ky.
S of H—Mules and 3 trolley pole type locos. Track gage, 37½ in.
S of M—5 longwall machs.
PP—Power from central power station.
EMP—175. Last years tonnage 101,497.
SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Lump.
PREP. EQUIPT—Shaker Screens, Loading Booms.

Diamond Mine, Drift, No. 9 Seam, 4 ft. 4 in. to 5 ft. thick.
PO—Mortons Gap, Ky.; SP—Mortons; CTY—Hopkins, RR—L. & N., (H. Div.).
MS—J. H. Harris, Mortons Gap, Ky.
SM—Henry L. Browning, Mortons Gap, Ky.
S of H—Mules and 3 electric locos. Track gage, 44 in.
S of M—5 shortwall machs.
PP—Power from central power station.
EMP—188. Last years tonnage 146,945.
SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Lump.
PREP. EQUIPT—Shaker Screens.

Arnold Mine, Drift, No. 9 Seam, 4 to 5 ft. thick.
PO—Earlington, Ky.; SP—Same; CTY—Hopkins, RR—L. & N., (H. Div.).
MS—Lee Nickols, Earlinton, Ky.
S of H—Mules and 3 trolley pole type locos. Track gage, 44 in.
S of M—5 shortwall machs.
PP—Power from central power station.
EMP—182. Last years tonnage 132,183.
SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Lump.
PREP. EQUIPT—Shaker Screens.

St. Charles Mine, Drift, No. 9 Seam, 4½ to 5 ft. thick.
PO—St. Charles, Ky.; SP—Same; CTY—Hopkins, RR—Ill. cent. (Lou. Div.).
MS—Willis T. Sisk, St. Charles, Ky.
SM—Jesse Phillips, St. Charles, Ky.
S of H—Mules and 3 trolley pole type locos. Track gage, 44 in.
S of M—6 shortwall machs.
PP—Power from central power station.
EMP—223. Last years tonnage 151,871.
SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Lump.
PREP. EQUIPT—Shaker Screens.

Luton Mine, Shaft, No. 9 Seam, 5 to 6 ft. thick.
PO—Providence, Ky.; SP—Same; CTY—Hopkins; RR—L. & N.
MS—John J. Harlan, Providence, Ky.
SM—Joseph Teague, Providence, Ky.
S of H—Mules and 1 electric loco. Track gage, 44 in.

S of M—5 longwall machs.
PP—3-150 H. P. water tube boilers, 1-150 K. W., 1-100 K. W. gen. units, 250 volts D. C., 3 pumps.
EMP—102. Last years tonnage 96,177.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.

Shamrock Mine, Shaft, No. 11 Seam, 5 to 10 in. to 6½ ft. thick.
PO—Providence, Ky.; SP—Same; CTY—Webster, RR—L. & N., (H. Div.).
MS—John J. Harlan, Providence, Ky.
SM—Joseph Teague, Providence, Ky.
S of H—Mules and 3 trolley pole type locos. Track gage, 44 in.
S of M—9 shortwall machs.
PP—5 return tubular boilers, total 600 H. P., 1-150 K. W., 1-100 K. W. gen. units, 250 volts D. C., 6 pumps.
EMP—223. Last years tonnage 231,120.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens.

ST. MICHEL COAL COMPANY

General Office, Paint Cliff, Ky.
PR—Sol L. Smith, Williamsburg, Ky.
VP—Ivor Livingston, Paint Cliff, Ky.
TR—Alex S. Logan, Paint Cliff, Ky.
GM—Sol L. Smith, Williamsburg, Ky.
GS—Henderson Ramsey, Paint Cliff, Ky.
PA—Alex S. Logan, Paint Cliff, Ky.
EM—Ivor Livingston, Paint Cliff, Ky.

St. Michel Mine; Drift; No. 2 Stearns Seam, 48 in. thick.
PO—Paint Cliff, Ky.; SP—Oz, Ky., via Stearns, Ky.; CTY—McCreary; RR—Southern.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—40. Daily tonnage 100.
SIZES SHIPT—Run of Mine.

ST. PAUL COAL COMPANY

General Office, Betsy Layne, Ky.
PR—W. C. Hows, Betsy Layne, Ky.
VP—A. M. Layne, Betsy Layne, Ky.
TR—O. J. Williams, Betsy Layne, Ky.
SA—Ohio & Kentucky Fuel Co., Cincinnati, O.

St. Paul Mine; Shaft; Elkhoro Seam, 46 in. thick.
PO—Betsy Layne, Ky.; SP—Same (Put off St. Paul); CTY—Floyd; RR—R. K. C. & O.
S of H—Mules and storage battery loco. Track gage 36 in.
S of M—Hand.
PP—1 water tube boiler, 60 H. P., gen. unit, 250 volts D. C.
EMP—40. Daily tonnage 200.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

SALDIE COAL CO.

General Office, Saldee, Ky.
PR—J. A. Myer, 382 South Broadway, Lexington, Ky.
TR—M. G. Yingling, Saldee, Ky.
GM—M. G. Yingling, Saldee, Ky.
GS—M. G. Yingling, Saldee, Ky.
PA—M. G. Yingling, Saldee, Ky.
SCO—Address the Company, Buyer, M. G. Yingling, Saldee, Ky.
SA—M. G. Yingling, Saldee, Ky.
Saldee Mine; Drift; Hazard No. 5 Seam, 36 in. thick.
PO—Saldee, Ky.; SP—Copland, Ky.; CTY—Breathitt; RR—L. & N.
S of H—Mules. Track gage 36 in.
S of M—Hand.
EMP—30. Last years tonnage 12,000.
SIZES SHIPT—Run of Mine.
NOTE—Successors to the John B. Jewell Coal Company.

SALT LICK COAL COMPANY

General Office, Prestonsburg, Ky.
Salt Lick Mine.
PO—Prestonsburg, Ky.; SP—Same; CTY—Floyd; RR—C. & O.
No report.

SAMOSSET FUEL CORPORATION

General Office, Bluefield, W. Va.
PR—W. J. Cole, Bluefield, W. Va.
VP—M. Mitchell, Bluefield, W. Va.
TR—H. E. Ryan, Bluefield, W. Va.
GM—S. G. Bralley, Bluefield, W. Va.
GS—J. M. Meredith, Smalley, Ky.
PA—J. M. Meredith, Smalley, Ky.
CE—Townsel Combs, Bluefield, W. Va.
SCO—Address the Company, Buyer, J. M. Meredith, Bluefield, W. Va.
SA—Glenalum Fuel Co., Cincinnati, O.
Samosset Mine; Drift; Elkhorn Seam, 48 in. thick.
PO—Smalley, Ky.; SP—Martin, Ky.; CTY—Floyd; RR—C. & O.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine.

SAXTON COAL COMPANY

General Office, Saxton, Ky.
PR—S. Dougherty, Saxton, Ky.
TR—S. Dougherty, Saxton, Ky.
EM—N. W. Dougherty, Knoxville, Tenn.

Saxton Mine; Blue Gem Seam; 24 in. thick.
PO—Saxton, Ky.; SP—Katinka, Ky.; CTY—Whitley; RR—L. & N.
S of H—Mules. Track gage 36 in.
S of M—Hand.
EMP—15.
Old Information.

SCUDDY COAL COMPANY

General Office, Hazard, Ky.
PR—C. G. Bowman, Lexington, Ky.
VP—Wm. J. Brown, Jr., Hazard, Ky.
TR—J. A. Roan, Hazard, Ky.
GM—Wm. J. Brown, Jr., Hazard, Ky.
GS—T. B. White, Hazard, Ky.
PA—Wm. J. Brown, Jr., Hazard, Ky.
CE—Fox, Peck & Purcell, Hazard, Ky.
SA—Tribbey Coal Co., Cincinnati, O.

Scuddy Mine; Drift; No. 4 Seam, 50 inches thick.
PO—Happ, Ky.; SP—Frt., Scuddy, Ky.; CTY—Ferry; RR—L. & N.
S of H—Elec. loco. Track gage 42 in.
S of M—Shortwall machs.
PP—Power purchased. Transformer 2300 volts A. C., M. G. sets, 250 volts D. C.
EMP—100.
SIZES SHIPT—Run of Mine, Slack, Block.
PREP. EQUIPT—Bar Screens.

SERCENT COAL COMPANY

PR—M. H. Sergeant, Everts, Ky.
VP—Grant Martin, Everts, Ky.
GM—J. U. Deen, Everts, Ky.
GS—Frank Shelby, Everts, Ky.
PA—R. L. Brown, Everts, Ky.
CE—J. D. Fox, Everts, Ky.

Sercent Mine; Harlan Seam; 72 inches thick.
PO—Everts, Ky.; SP—Same; CTY—Harlan; RR—L. & N.
S of H—Mules.
S of M—Hand.
Old Information.

SEWELL-JELICO COAL COMPANY

General Office, Winchester, Ky.
PR—R. F. Lane, Pineville, Ky.
VP—Foster Lane, Pineville, Ky.
TR—J. P. Trimble, Winchester, Ky.
SA—Paynter Coal Co., Winchester, Ky.

Sewell-Jellico Mine; Drift; Straight Creek Seam, 45 in. thick.
PO—Four Mile, Ky.; SP—Same; CTY—Bell; RR—L. & N.
S of H—Mules.
S of M—Hand.
PP—Purchase power.
EMP—20. Daily tonnage 50.
SIZES SHIPT—Run of Mine.

SHARON COAL & COKE CO.

General Office, Sharondale, Ky.
PR—John J. Tierney, 1503 North American Bldg., Philadelphia, Pa.
VP—L. E. Tierney, Poshatan, W. Va.
TR—J. L. Tierney, Rhefield, W. Va.
GM—J. L. Tierney, Sharondale, Ky.
GS—E. M. Tierney, Sharondale, Ky.
PA—J. L. Tierney, Sharondale, Ky.
EM—M. Charles Eccles, Stone, Ky.
SCO—Address the Company, Buyer, W. H. Duff, Sharondale, Ky.
SA—J. J. Tierney, 1503 North American Bldg., Philadelphia, Pa.

Sharon Mine; Drift; Pond Creek Seam, 48 in. thick.
PO—Sharondale, Ky.; SP—Stone, Ky.; CTY—Pike; RR—Norfolk & Western.
S of H—6 trolley pole type locos. Track gage 48 in.
S of M—6 shortwall machs.
PP—1-150 H. P. return tubular boilers, gen. units, 1-300 K. W., 250 volts D. C., 4 pumps.
EMP—90. Last years tonnage 50,950.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

SHAWNEE GAS COAL COMPANY

General Office, Harlan, Ky.
PR—E. M. Howard, Harlan, Ky.
VP—W. J. R. Howard, Harlan, Ky.
TR—H. C. Smith, Harlan, Ky.
GM—H. C. Smith, Harlan, Ky.
PA—H. C. Smith, Harlan, Ky.
SCO—Address the Company, Buyer, Charles Middleton, Harlan, Ky.
EM—N. R. Beaman, Harlan, Ky.
SA—McKard Coal Co., Cincinnati, O.

Shawnee Gas Mine; Drift; Harlan Seam; 40 in. thick.
PO—Harlan, Ky.; SP—Same; CTY—Harlan; RR—L. & N.
S of H—Mules. Track gage 12 inches.
S of M—15 comp. air machs.
EMP—75. Daily tonnage 350.
SIZES SHIPT—Run of Mine.
Old Information.

SHELBY COAL MINING CO. (THE).

General Office, 531 N. Park Avenue, Warren, O.
 PR—D. A. Geiger, Warren, O.
 TR—L. L. Jones, " "
 GM—Wesley H. Ott, " "
 PA—David Johnson, Shelbyana, Ky.
 EM—Stoney Amick, Pikeville, Ky.
 SCO—Address the Company, Buyer, David Johnson, Shelbyana, Ky.
 Sales Agent—Wesley H. Ott, 531 N. Park Avenue, Warren, O.

Shelby Mine; Drift; Elkhorn No. 4 Seam, 28 to 60 in. thick.
 PO—Shelblana, Ky.; SP—Shelby; CTY—Pike; RR—C. & N.
 MS—T. S. Eskridge, Shelbyana, Ky.
 S of H—Mules and gravity. Track gauge 42 in.
 S of M—Hand.
 EMP—25.
 SIZES SHIPT—Run of Mine, Slack.
 Old Information

SILVER LEAF COAL COMPANY.

General Office, Hazard, Ky.
 LEESSEE—M. A. Petrey, Hazard, Ky.

Silver Leaf Mine; Entry; No. 4 or Dean Seam; 48 in. thick.
 PO—Hazard, Ky.; SP—Same; CTY—Perry; RR—L. & N., L. & E. Div.
 S of H—Mules.
 S of M—Hand.
 SIZES SHIPT—Run of Mine.
 Old Information

SMITH, J. L. COAL CO., THE

General Office, Kildav, Ky.
 PR—Albert W. Bippus, Huntington, Ind.
 VP—George J. Bippus, Huntington, Ind.
 TR—G. J. Noel, Kildav, Ky.
 EM—George F. Noel, Kildav, Ky.
 GS—John P. Barton, Kildav, Ky.
 PA—G. F. Noel, Kildav, Ky.
 EM—Henry Groos, Harlan, Ky.
 EE—D. D. Barnes, Kildav, Ky.
 SCO—Draper Mercantile Co., Buyer, A. M. Hatch, Kildav, Ky.
 SA—Utilities Coal Co., Huntington, Ind.

Draper Mine; Drift; Harlan Seam; 48 inches thick.
 PO—Kildav, Ky.; SP—Draper, Ky.; CTY—Harlan; RR—L. & N.
 S of H—2 elec. locos. Track gauge 42 in.
 S of M—4 shortwall machs.
 PP—Power purchased, 250 K. W. A. 4000 volts.
 EMP—100 Daily tonnage 500.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg Lump, Block.
 PREP. EQUIPT—Shaker Screens, Loading Booms, Disk Conveyor.

SMITH MILLS COAL & MINING CO.

Operations leased to Pennyrile Coal & Mining Co.

SMITH & BRASHEAR COAL CO.

TR—E. E. Smith, Middleshoro, Ky.
 GM—J. Brashear, Middleshoro, Ky.
 GS—J. Brashear, Middleshoro, Ky.
 SCO—Address the company—Buyer, J. Brashear, Middleshoro, Ky.

Smith & Brashear Mine; Drift; Pittsburg Seam, 40 in. thick.
 PO—Middleshoro, Ky.; SP—Pittsburg, Ky.; CTY—Bell; RR—L. & N.
 S of H—Mules.
 S of M—Hand.
 Daily output, 20 tons.
 SIZES SHIPT—Run of Mine, Block.
 Note—Successors to Ferndale Coal Co. (Old Information)

SMOOT CREEK COAL & COKE CO.

Now part of Consolidated Fuel Co.

SOLAR COAL CO. (THE).

General Office, Hamilton, O.
 PR—W. S. Harlan, Hamilton, O.
 VP—R. C. Vandever, Middletown, O.
 TR—Edw. H. Nein, Middletown, O.
 GM—C. E. Darragh, Hamilton, O.
 GS—W. G. Tucker, Yerkes, Ky.
 PA—W. G. Tucker, Yerkes, Ky.
 CE—L. B. Allen, Hazard, Ky.
 SCO—Address the Company; Buyer, R. E. Howling, Yerkes, Ky.
 SA—The Sloat—Darragh Coal Co., Hamilton, O.

Solar Mine; Drift; No. 6 Seam, 61 in. thick.
 PO—Yerkes, Ky.; SP—Same; CTY—Perry; RR—L. & N.
 MS—C. L. Carder, Yerkes, Ky.
 S of H—Mules and trolley pole type locos. Track gauge 48 in.
 S of M—2 shortwall machs.
 PP—Power from Kentucky River Power Company. Transformer 33,000-2,200 volts A. C., rotary converters, 250 volts D. C., 1 pump.
 EMP—75. Last years tonnage 50,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg Lump.
 PREP. EQUIPT—Gravity Screens.

SOLNER MINING COMPANY

Out of business.

COAL CATALOG**SOLVAY COLLIERIES COMPANY.**

General Office, Syracuse, N. Y.
 PR—P. K. Malin, Syracuse, N. Y.
 VP—A. B. Rawn, Huntington, W. Va.
 TR—E. L. Lancaster, Syracuse, N. Y.
 GM—A. B. Rawn, Huntington, W. Va.
 PA—J. A. Whaling, Syracuse, N. Y.
 CE—J. C. Rawn, Harrisburg, Pa.
 EM—G. L. Cox, Huntington, W. Va.
 SCO—Address the Company; Buyer, W. C. Petty, Huntington, W. Va.

Tolland Mine; Drift; Pond Creek Seam; 48 in. thick.
 PO—Ep. Ky.; SP—Belfry, Ky.; CTY—Pike; RR—N. & W., T. R. & K. R.
 MS—E. W. Price, Ep. Ky.
 SM—J. H. Gamble, Ep. Ky.
 S of H—2 trolley pole type and 5 storage battery locos. Track gauge, 48 inches.
 S of M—6 shortwall machs.
 PP—Power purchased. Transformer 33,000 to 440 volts A. C., M. G. set, 250 volts D. C.
 EMP—125. Last years tonnage 118,514.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Picking Tables.

SOUTH-EAST COAL COMPANY.

General Office, 1732 Commercial Trust Bldg., Philadelphia, Pa.
 PR—A. D. W. Smith, Philadelphia, Pa.
 TR—A. D. W. Smith, 1732 Commercial Trust Bldg., Philadelphia, Pa.
 SECY—Carl B. Metzger, " "
 GM—Henry La Viers, Paintsville, Ky.
 SUPT—Henry Pfening, Jr., Seco, " "
 PA—Henry Pfening, Jr., " "
 EM—W. B. Goldsmith, " "
 SCO—Seco and Millstone Stores, Buyer, W. T. Davis, Seco, Ky.
 SA—Middle West Coal Co., 1603 First National Bank Bldg., Cincinnati, O.

No. 1 Mine; Drift; Elkhorn Seam, 48 to 66 in. thick.
 PO—Seco, Ky.; SP—Same; CTY—Letcher; RR—L. & N., L. & E. Div.
 MS—A. J. Leach, " "
 S of H—6 trolley pole type and 2 storage battery locos. Track gauge 42 in.
 S of M—8 chain breast and 2 shortwall machs.
 PP—2 fire tube boilers, 300 H. P., 150 K. W. gen. units, 230 volts D. C., 5 pumps.
 EMP—300 Daily tonnage, 1,800.
 SIZES SHIPT—Slack, Nut, Egg, Lump, Block Run of Mine.
 PREP. EQUIPT—Shaker Screens, Boom Loaders.

No. 2 Mine; Drift; Elkhorn Seam, 48 to 66 in. thick.
 PO—Millstone, Ky.; SP—La Vier, Ky.; CTY—Letcher; RR—L. & N., L. & E. Div.
 MS—C. E. Williams, Millstone, Ky.
 SM—W. T. Davis, Millstone, Ky.
 S of H—1 trolley pole type and 2 storage battery locos. Track gauge, 42 inches.
 S of M—4 shortwall machs.
 PP—3 return tubular boilers, total 300 H. P., 150 K. W. gen. unit, 230 volts D. C., 2 pumps.
 EMP—150 Daily tonnage 1,200.
 SIZES SHIPT—Slack, Nut, Egg, Lump, Block Run of Mine.
 PREP. EQUIPT—Shaker Screens, Boom Loaders.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg Lump, Block.
 PREP. EQUIPT—Shaker Screen, 1 Loading Boom

SOUTHLAND COAL COMPANY

General Office, Henderson, Ky.
 PR—A. E. Potter, Nashville, Tenn.
 VP—W. L. Hughes, Henderson, Ky.
 TR—Edw. Potter, Jr., Nashville, Tenn.
 GM—W. L. Hughes, Henderson, Ky.
 PA—W. L. Hughes, Henderson, Ky.
 EE—Frank Porter, Henderson, Ky.
 Henderson Nos. 1 and 3 Mines; Shift; No. 9 Seam, 52 in. thick.
 PO—Henderson, Ky.; SP—Same; CTY—Henderson; RR—L. C. L. & N.
 MS—Will Duval, Henderson, Ky.
 S of H—Mules and elec. storage battery locos. Track gauge, 36 in.

SOUTH EASTERN KENTUCKY COAL CO.

General Office, Hazard, Ky.
 PR—J. C. Burton, Matoaka, W. Va.
 VP—C. W. Hurst, Hazard, Ky.
 TR—J. E. Garnett, Hazard, Ky.
 GM—J. C. Burton, Matoaka, W. Va.
 GS—J. C. Burton, Matoaka, W. Va.
 PA—J. C. Burton, Matoaka, W. Va.
 SCO—Address the Company, Buyer, C. W. Hurst, Hazard, Ky.
 SA—Address the Company, Hazard, Ky.
 No. 1 Mine; Drift; No. 4 Seam; 46 to 60 inches thick.
 PO—Kenton, Ky.; SP—Perritt, Ky.; CTY—Perry; RR—L. & N.
 S of H—Mules. Track gauge 37 in.
 S of M—Hand.
 PP—Power purchased. Transformer 33,000 to 2,200 volts, motor gen. unit, 230 volts D. C.
 EMP—25.

SIZES SHIPT—Run of Mine, Slack, Lump, Block.
 PREP. EQUIPT—Gravity Screens.

SOUTHERN MINING COMPANY

General Office, Williamsburg, Ky.
 PR—T. B. Mahan, Williamsburg, Ky.
 VP—J. B. Gatliff, Williamsburg, Ky.
 TR—E. C. Mahan, Knoxville, Tenn.
 GM—N. B. Perkins, Williamsburg, Ky.
 GS—J. C. Gilbert, Williamsburg, Ky.
 PA—N. B. Perkins, Williamsburg, Ky.
 CE—F. C. Mahan, Colmar, Ky.
 EE—L. Birch, Balkan, Ky.
 SCO—Address the Company, Buyers, E. R. Roberts, Balkan, Ky., and L. F. Gatliff, Colmar, Ky.

SA—Southern Coal & Coke Co., Cincinnati, O., and Knoxville, Tenn.
 Amru No. 1 Mine; Drift; Mason Seam, 38 in. thick.
 PO—Colmar, Ky.; CTY—Bell; RR—L. & N.
 MS—F. C. Mahon, Colmar, Ky.
 S of H—Trolley pole type locos. Track gauge 44 inches.
 S of M—5 elec. punchers.
 PP—Power purchased. Transformer 33,000 to 2,300 volts A. C., M. G. sets, 250 volts D. C., 5 pumps.
 EMP—115. Daily tonnage 750.
 SIZES SHIPT—Run of Mine.
 Balkan Mine; Drift; Creech Seam; 52 inches thick.
 PO—Balkan, Ky.; SP—Balkan, Tejay, Express; CTY—Bell; RR—L. & N.
 MS—J. C. Gilbert, Balkan, Ky.
 S of H—8 trolley pole type locos. Track gauge 44 inches.
 S of M—Hand.
 PP—Power purchased. Transformer 33,000 to 2,300 volts A. C., M. G. sets, 250 volts D. C., 1 300 K. W. gen. unit, 250 volts D. C., 3 pumps.
 EMP—270 Daily tonnage 1500.
 S of M—19 shortwall machs.
 PP—Power purchased, transformer 2200 to 220 volts A. C., M. G. sets, 220 volts D. C., 2 pumps.
 EMP—90 Daily output, 300 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

Uniontown Mine; Shaft; No. 11 Seam, 60 in. thick.
 PO—Uniontown, Ky.; SP—Same; CTY—Union; RR—L. C.
 MS—S. R. Hughes, Uniontown, Ky.
 S of H—Mules.
 S of M—3 shortwall machs.
 PP—1 150 K. W. gen. unit, volts D. C., 2 pumps.
 EMP—60 Daily output, 350 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 Formerly operated by Uniontown Coal & Mining Co.

SPENCER COAL COMPANY

PR—Henry L. Spencer, Wilhurst, Ky.
 VP—Robt. H. Cafe, Wilhurst, Ky.
 TR—Robt. Cafe, Wilhurst, Ky.
 GM—Henry L. Spencer, Wilhurst, Ky.
 GS—Henry L. Spencer, Wilhurst, Ky.
 CE—Ino. B. Conley, Wilhurst, Ky.
 SA—Harlan Coal Co., Louisville, Ky., and Kentenia Coal Co., Cincinnati, O.

Spencer No. 1 Mine; Drift; No. 1 Seam, 30 in. thick.
 PO—Frozen Creek, Ky.; SP—Wilhurst, Ky.; CTY—Breathitt; RR—O. & K., L. & N.
 S of H—Mules. Track gauge 36 in.
 S of M—Hand.
 EMP—20. Last years tonnage 7,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.
 Spencer No. 2 Mine; Drift; No. 4 Seam, 30-40 in. thick.
 PO—Frozen Creek, Ky.; SP—Wilhurst, Ky.; CTY—Breathitt; RR—O. & K. and L. & N.
 S of H—Mules. Track gauge 36 in.
 S of M—Hand.
 EMP—20. Last years tonnage 5,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

SPRING BRANCH COAL COMPANY

Now Rye Hollow Coal Co.

STANDARD ELKHORN COAL COMPANY

General Office, Garrett, Ky.
 PR—J. R. Warcum, Huntington, W. Va.
 VP—J. A. Johnson, Garrett, Ky.
 TR—J. E. King, Ashland, Ky.
 GM—A. J. Johnson, Garrett, Ky.
 GS—A. J. Johnson, Garrett, Ky.
 PA—A. J. Johnson, Garrett, Ky.
 CE—Edw. Holly, Ashland, Ky.
 SA—Lake & Export Coal Corp., Leeco Bldg., Huntington, W. Va.
 Standard Mine; Drift; Elkhorn No. 1 Seam, 42 in. thick.
 PO—Garrett, Ky.; SP—Lackey, Ky.; CTY—Floyd; RR—C. & O., Beaver Creek Br.

S of H—Mules and rope. Track gauge 42 in.
 S of M—Hand.
 PP—Power purchased, 1—37½ K. W. gen. unit, 250 volts D. C., 1—125 H. P. return tubular boiler, 3 pumps.
 EMP—60. Last years tonnage 57,000.
 SIZES SHIPT—Run of Mine.

STANDARD HARLAN COAL COMPANY

General Office, Indianapolis, Ind.
 PR—T. C. Hughes, Indianapolis, Ind.
 TR—E. J. Purcell, Milwaukee, Wis.
 SA—Harlan Coal Co., Louisville, Ky.
 Thorpe Arcadia Mine; Drift; Straight Creek Seam, 36 in. thick.
 PO—Pineville, Ky.; SP—Same; CTY—Bell; RR—L. & N.
 S of H—Mules and one storage battery loco. Track gauge 36 inches.
 S of M—Hand.
 PP—Power purchased.
 EMP—160.
 SIZES SHIPT—Run of Mine.
 Middleton Mine; Drift; Harlan Seam, 66 inches thick.
 PO—Evaris, Ky.; SP—Same; CTY—Harlan; RR—L. & N.
 MS—J. P. Alred, Evaris, Ky.
 S of H—Mules and storage battery loco. Track gauge 42 inches.
 S of M—2 chain breast type machs.
 PP—Power purchased.
 EMP—125.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
 PREP. EQUIPT—Bar Screens, Picking Tables.

NOTE—Formerly operated by the Middleton Coal Co.
 Brown Mine; Drift; Harlan Seam, 47 inches thick.
 PO—Evaris, Ky.; SP—Same; CTY—Harlan; RR—L. & N.
 MS—J. P. Alred, Evaris, Ky.
 S of H—Storage battery loco. Track gauge 42 inches.
 S of M—2 shortwall machs.
 PP—Power purchased.
 EMP—100.
 SIZES SHIPT—Run of Mine.
 NOTE—Formerly operated by R. L. Brown Coal & Coke Co.

Agnes-Green Mine; Drift; Harlan Seam, 44 inches thick.
 PO—Agnes, Ky.; SP—Same; CTY—Harlan; RR—L. & N.
 MS—J. D. Cain, Agnes, Ky.
 S of H—Mules.
 S of M—2 shortwall machs.
 PP—Power purchased.
 EMP—125.
 SIZES SHIPT—Run of Mine, Slack, Lump, Block.
 PREP. EQUIPT—Bar Screens, Picking Tables.
 NOTE—Formerly operated by the Harlan Gem Coal Co.

STAR HILL COAL COMPANY

General Office, Barbourville, Ky.
 PR—E. W. Roach, Barbourville, Ky.
 VP—J. B. Rogers, Barbourville, Ky.
 TR—G. W. Nicholas, Barbourville, Ky.
 GM—E. W. Roach, Barbourville, Ky.
 GS—E. W. Roach, Barbourville, Ky.
 PA—E. W. Roach, Barbourville, Ky.
 SA—E. W. Roach, Barbourville, Ky.

Star Hill Mine; Drift; 28 inches thick.
 PO—Barbourville, Ky.; SP—Same; CTY—Knox; RR—Cumberland & Maechester.
 S of H—Mules. Track gauge 42 inches.
 S of M—Hand.
 EMP—15.
 SIZES SHIPT—Run of Mine.
 Old Information.

STEARNS COAL & LUMBER CO.

General Office, Stearns, Ky.
 PR—J. S. Stearns, Ludington, Mich.
 VP—E. E. Barthill, Chicago, Ill.
 TR—W. T. Culver, Ludington, Mich.
 TR—R. L. Stearns, Ludington, Mich.
 ASST. TR—J. E. Butler, Stearns, Ky.
 SECY—R. L. Stearns, Ludington, Mich.
 ASST. SECY—J. E. Butler, Stearns, Ky.
 GM—J. E. Butler, Stearns, Ky.
 ASST. GM—B. W. Henderson, Stearns, Ky.
 PA—R. W. Henderson, Stearns, Ky.
 CE—Allen & Garcia, Chicago, Ill.
 EE—Geo. M. Humble, Stearns, Ky.
 EE—C. L. Larmee, Stearns, Ky.
 Additional Information on Page 479.

No. 1 Mine; Drift; No. 2 Seam, 42 in. thick.
 PO—Barthill, Ky.; SP—Stearns, Ky.; CTY—McCreary; RR—K. & T.
 MS—J. M. McGuffey, Barthill, Ky.
 SM—George Walker, Barthill, Ky.
 S of H—Mules and trolley pole type locos. Track gauge, 42 in.
 S of M—Hand.
 PP—Central power station, 1 100 K. W. gen. unit transformer, 13,000-575 volts A. C., motor gen. sets, 250 volts D. C., use 575 volts A. C., 250 volts D. C. in mine, 5 pumps.
 (Continued on Next Page)

Stearns Coal & Lumber Co., Inc.

EMP—135. Last years tonnage 83,726.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

No. 4 Mine; Drift; No. 1 Seam, 60 in. thick.
PO—Worley, Ky.; SP—Stearns, Ky.; CTY—McCreary; RR—K. & T. L. & N.
MS—Jos. Cain, Worley, Ky.
SM—E. S. Stephens, Worley, Ky.
S of H—Mules and trolley pole type locos. Track gage, 42 in.
S of M—9 shortwall machs.
PP—Power from central station, transformer 13,000-575 volts A. C., M. G. set, 250 volts D. C., 5 pumps.
EMP—200. Last years tonnage 83,726.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

A Mine; Drift; No. 1 Seam, 51 in. thick.
PO—Shoupman, Ky.; SP—Stearns, Ky.; CTY—McCreary; RR—K. & T. L. & N.
MS—John Wright, Knobs, Ky.
SM—J. W. Shoupman, Shoupman, Ky.
S of H—Mules and trolley pole type locos. Track gage, 42 in.
S of M—8 chain machs.
PP—Power from central station, 575 volts A. C., 250 volts D. C.
EMP—125. Last years tonnage 87,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Row Chute, Belt Conveyor.

No. 10 Mine; Drift; No. 1 Seam, 60 in. thick.
PO—Yamarcaw, Ky.; SP—Stearns; CTY—McCreary; RR—K. & T. L. & N.
MS—W. T. Head, Yamarcaw, Ky.
SM—Herman Stephens, Yamarcaw, Ky.
S of H—Mules and gasoline locos. Track gage, 42 in.
S of M—Hand.
PP—Power from central station, transformer 13,000-575 volts A. C., M. G. sets, 250 volts D. C., 5 pumps.
EMP—50. Last years tonnage 39,083.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Loading Booms.

No. 11 Mine; Drift; No. 1 Seam, 66 in. thick.
PO—Yamarcaw, Ky.; SP—Stearns; CTY—McCreary; RR—K. & T. L. & N.
MS—W. T. Head, Yamarcaw, Ky.
SM—L. L. Creekmore, Yamarcaw, Ky.
S of H—Mules and trolley pole type locos. Track gage, 42 in.
S of M—Hand.
PP—Power from central station, 575 A. C., 250 volts D. C. in mine.
EMP—175. Daily tonnage 700.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Loading Booms.

STEEL & ALDER COAL COMPANY

General Office, Girdler, Ky.
PR—W. R. Steele, Pounding Mill, Va.
VP—R. E. Steele, Pounding Mill, Va.
TR—P. M. Alder, Girdler, Ky.
GM—P. M. Alder, Girdler, Ky.
PA—P. M. Alder, Girdler, Ky.

Steele & Alder Mine; Drift; Jellico Seam, 36 to 38 in. thick.
PO—Girdler, Ky.; SP—Same; CTY—Knox; RR—C. & M.
MS—Marvin F. Alder, Girdler, Ky.
S of H—Mules and gasoline locos.
S of M—Hand.
EMP—15. Daily tonnage 40.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
PREP. EQUIPT—Gravity Screens.

STEELE COAL CO. (THE)

General Office, Dayton, O.
PR—Edward R. Wright, Dayton, O.
VP—W. P. Grimes, Dayton, O.
TR—Edw. B. Wright, Dayton, O.
GM—Fred Stone, Mossy Bottom, Ky.
PA—Edw. B. Wright, Dayton, O.
EM—Stoney Alder, Pikeville, Ky.
SCO—Address the Company, Buyer, Fred Stone, Mossy Bottom, Ky.
Sales Agents—The Sheridan Coal Co., Dayton, O.

Steele Mine; Slope; No. 4 Seam, 50 to 60 in. thick.
PO—Mossy Bottom, Ky.; SP—Wagner, Ky.; CTY—Pike; RR—C. & O.
S of H—Mules and 5 elec. locos. Track gage 48 in.
S of M—4 shortwall machs.
PP—2 water tube boilers total 250 H. P. gen. units, 1—150 K. W., 1—40 K. W., 250 volts D. C., 6 pumps.
EMP—195. Last years tonnage 75,000.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Gravity and Revolving Screens, Loading Booms.

STEIN BLUE GEM COAL COMPANY

General Office, Red Ash, Ky.
PR—Henry Stein, Red Ash, Ky.
VP—Thomas Francis, Coxton, Ky.
TR—Louis Francis, Jellico, Tenn.
GM—Louis Francis, Jellico, Tenn.
GS—Henry Stein, Red Ash, Ky.
PA—Louis Francis, Jellico, Tenn.
EM—Louis Francis, Jellico, Tenn.
SA—J. H. Saddereth Coal Co., Knoxville, Tenn.

"Stein" Mine; Drift; "Blue Gem" Seam, 22-26 in. thick.
PO—Red Ash, Ky.; SP—Jellico, Tenn.; CTY—Whitley; RR—L. & N., Sou.
S of H—Mules. Track gage 40 in.
S of M—Hand.
EMP—40. Last years tonnage 10,675.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

STIRLING COAL COMPANY, INC.

Now Stirling Coal Co. of Ky., Inc.

STIRLING COAL CO. OF KY., INC.
General Office, Piedmont, W. Va.
PR—Carroll Pattison, Piedmont, W. Va.
VP—Wm. F. Coale, Cumberland, Md.
TR—Paul P. Gannon, Daniel Boone, Ky.
GM—Paul P. Gannon, Daniel Boone, Ky.
GS—Paul P. Gannon, Daniel Boone, Ky.
PA—Paul P. Gannon, Daniel Boone, Ky.
EM—Wm. E. Stone, Madisonville, Ky.
EE—Wm. E. Compton, Daniel Boone, Ky.
SCO—Address the Company, Buyer, O. C. Hooker, Daniel Boone, Ky.
SA—Paul P. Gannon, Daniel Boone, Ky.

Daniel Boone Mine; Slope; No. 11 Seam, 72 in. thick.
PO—Daniel Boone, Ky.; SP—Same; CTY—Hopkins; RR—Ill. Central.
S of H—Mules, rope and elec. trolley pole type loco. Track gage 42 in.
S of M—5 elec. chain breast machs.
PP—3 150 H. P. return airblast boilers, 1—150 K. W. generator, 250 volts D. C., 3 pumps.
EMP—115. Last years tonnage 126,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.

Seminole Mine; Drift; No. 14 Seam, 120 in. thick.
PO—Daniel Boone, Ky.; SP—Same; CTY—Hopkins; RR—Illinois Central.
S of H—Mules. Track gage 42 in.
S of M—2 chain breast type machs.
PP—Power from Daniel Boone Mine, 250 volts D. C., 1 pump.
EMP—20. Last years tonnage 14,500.
SIZES SHIPT—Run of Mine.

STORM KING COAL CO., INC.

General Office, Hamilton, O.
PR—F. E. Hadley, New York, N. Y.
VP—C. E. Barragh, Hamilton, O.
TR—F. E. Hadley, New York, N. Y.
GM—C. E. Barragh, Hamilton, O.
GS—C. A. Batty, Storm King, Ky.
PA—C. A. Batty, Storm King, Ky.
CE—Fox Peck & Pursiful, Hazard, Ky.
SCO—Address the Company, Buyer, G. K. Harmon, Storm King, Ky.
SA—Slout-Barragh Coal Co., Hamilton, O.

Storm King Mine; Drift; No. 4 Seam; 35 inches thick.
PO—Jeff, Ky.; SP—Fr., Storm King, Ky.; Ex.; Hamden, Ky.; CTY—Perry; RR—L. & N.
S of H—1 trolley pole type and 1 combination locos. Track gage 42 inches.
S of M—4 shortwall machs.
PP—Power purchased. Transformer 33,000 to 250 volts A. C., rotary converters, 2 pumps.
EMP—65. Last years tonnage 50,000.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

STOVER-ELKHORN COAL COMPANY.

General Office, Fisher Bldg., Chicago, Ill.
PR—Holly Stover, Fisher Bldg., Chicago, Ill.
TR—F. H. Hall, Fisher Bldg., Chicago, Ill.
EM—Amlek & Hayes, Pikeville, Ky.
SCO—Holly Stover Co., Inc., Fisher Bldg., Chicago, Ill.

Holly Mine; Drift; Elkhorn No. 1 Seam, 54-57 in. thick.
PO—Lackey, Ky. SP—Same. CTY—Floyd; RR—C. & O.
MS—Branch Robertson, Lackey, Ky.
S of H—2 trolley pole type locos. Track gage, 36 in.
S of M—3 shortwall machs.
PP—1 250 H. P. water tube boiler, 1 100 K. W. gen. unit, 250 volts D. C., 2 pumps.
EMP—47. Last fiscal year output, 37,000 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

STROTHER, J. P.

PR—J. P. Strother, Kilgore, Ky.
GM—J. P. Strother,
PA—J. P. Strother,

Star Mine; Drift; No. 7 Seam; 42 to 48 in. thick.
PO—Kilgore, Ky.; SP—Same; CTY—Carter; RR—C. & O., & A. C. & I., Lexington Div.
MS—J. P. Strother, Kilgore, Ky.
S of H—Mules.
S of M—Hand.
(Old Information)

SUDDUTH COAL COMPANY

Now operated by the Sudduth Fuel Co.

SUDDUTH FUEL COMPANY

General Office, Charleston, W. Va.
PR—John S. Dickinson, Charleston, W. Va.
VP—A. H. Land, Charleston, W. Va.
TR—C. C. Dickinson, Charleston, W. Va.
GM—T. H. Hudby, Charleston, W. Va.
GS—T. H. Hudby, Charleston, W. Va.
EM—D. M. Good, Williamson, W. Va.
PR—John S. Dickinson, Charleston, W. Va.

Sudduth Mine; Drift; Pond Creek Seam, 51 inches thick.
PO—Stone, Ky.; SP—Same; CTY—Pike; RR—N. & W.
MS—Pearl Bassham, Stone, Ky.
S of H—Elec. loco. Track gage 48 inches.
S of M—Shortwall machs.
PP—Power purchased. Transformer 44,000 to 2,200 volts A. C., M. G. set, 250 volts D. C.
EMP—105. Daily tonnage 800.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.
NOTE—Formerly operated by the Sudduth Coal Co.

SUGAR CAMP MINING COMPANY

General Office, Harlan, Ky.
PR—Frank K. Kelly, Harlan, Ky.
TR—Dave Kelly, Harlan, Ky.
GM—W. B. Kelly, Harlan, Ky.
GS—W. B. Kelly, Harlan, Ky.
PA—Moss Shackelford, Harlan, Ky.
CE—Kitt Jones, Harlan, Ky.
EM—Moss Jones, Harlan, Ky.
SCO—Address the company, Buyer, Susie Eldridge, Harlan, Ky.
SA—W. E. Kelly, 503 W. Main St., Harlan, Ind.

Sugar Camp Mine; Shift and Stripping; Harlan Seam, 60 in. thick.
PO—Harlan, Ky.; SP—Same; CTY—Harlan; RR—L. & N.
S of H—Mules.
S of M—Hand.
EMP—15. Daily output, 200 tons.
SIZES SHIPT—Run of Mine.

SULLIVAN POND CREEK COMPANY

General Office, Tralee, W. Va.
PR—J. C. Sullivan, Tralee, W. Va.
TR—J. C. Sullivan,
GM—J. C. Sullivan,
PA—C. B. Helwig, Tralee, W. Va.
EE—J. P. Barksdale, Tralee, W. Va.
SA—C. & O. Coal Agency, Boston, Mass.; Wyoming Coal Sales Co., Bluefield, W. Va.
Pond Creek No. 1 Mine; Drift; Pond Creek Seam, 60 in. thick.
PO—Stone, Ky.; SP—Same; CTY—Pike; RR—N. & W.
S of H—1 trolley pole type elec., 1 storage battery and 1 combination loco. Track gage 44 in.
S of M—2 shortwall machs.
SIZES SHIPT—Run of Mine, Nut, Egg, Block.

SUN COAL COMPANY, THE

General Office, 614 Starks Bldg., Louisville, Ky.
PR—Col. J. W. McCulloch, Louisville, Ky.
VP—C. F. Lowther, Louisville, Ky.
TR—P. R. Lancaster, Louisville, Ky.
GM—C. F. Lowther, Louisville, Ky.
PA—C. F. Lowther, Louisville, Ky.
EM—Thos. Hubbard, Hima, Ky.
SCO—Address the Company, Buyer, J. Kelley, Louisville, Ky.
SA—The Allied Coal Co., Louisville, Ky.

Flat Lick Mine; Drift; Seam 30 to 36 inches thick.
PO—Flat Lick, Ky.; SP—Same; CTY—Knox; RR—L. & N.
MS—James Hubbard, Flat Lick, Ky.
S of H—Mules. Track gage 42 in.
S of M—Hand.
EMP—15.
SIZES SHIPT—Run of Mine, Nut, Slack, Lump.
PREP. EQUIPT—Bar Screens.

Manchester Mine; Drift; Seam 30 to 36 inches thick.
PO—Crawfish, Ky.; SP—Same; CTY—Clay; RR—L. & N.
MS—John F. Baker, Hima, Ky.
S of H—Mules. Track gage 42 in.
S of M—Hand.
EMP—15.
SIZES SHIPT—Run of Mine, Nut, Slack, Lump.

PREP. EQUIPT—Bar Screens.

Note—New development. Formerly operated by Manchester Coal Co.
Old Information.

SUNLIGHT COLLIERIES COMPANY

General Office, Nortonville, Ky.
PR—Monro B. Lander, Birmingham, Ala.
VP—Stirling S. Lander, Jr., Nortonville, Ky.
TE—Monro B. Lander, Birmingham, Ala.
GM—Stirling S. Lander, Jr., Nortonville, Ky.
SA—R. L. Reinhold, Nortonville, Ky.
GEN. CONTRACTOR—Sunlight Mining Co., Madisonville, Ky.
SA—Monro Warrior Coal & Coke Co., Birmingham, Ala. and Chicago, Ill.

Sunbeam Mine; Stripping; Nos. 11 and 12 Seams, 72-80 inches thick.
PO—Madisonville, Ky.; SP—Same; CTY—Hopkins; RR—L. & N.
S of H—5 18-ton steam locos. Track gage—36 inches.
S of M—1 steam shovel.
EMP—60. Last years tonnage 120,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
PREP. EQUIPT—Revolving and Shaker Screens, Picking Tables, Loading Booms, Washeries.

SUNLIGHT MINING CO.

General Office, Madisonville, Ky.
PR—T. W. Crow, 109 16th Ave., Nashville, Tenn.
VP—W. M. Buchanan, Jr., Shreveport, La.
TR—J. Basil Ramsey, Madisonville, Ky.
GM—J. B. Boddie, Madisonville, Ky.
PA—Thas. R. Crow, Madisonville, Ky.
SA—Monro Warrior Coal & Coke Co., Birmingham, Ala.

Sunlight Mine; Stripping; Nos. 11 and 12 Seams, 60-80 in. thick.
PO—Madisonville, Ky.; SP—Same; CTY—Hopkins; RR—L. & N.
FOREMAN—J. H. Angel, Madisonville, Ky.
S of H—5 18-ton locos. Track gage 36 inches.
S of M—Steam shovels.
EMP—75. Daily tonnage 2,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Tipples.

SUNSET COAL CO.

General Office, Madisonville, Ky.
PR—W. D. Coll, Madisonville, Ky.
TR—H. H. Coll,
GM—H. H. Coll,
CS—W. E. Carroll,
PA—H. H. Coll,
EM—N. E. Stone,
NM—C. W. Webb,
Sales Agents—Coll Coal Co., Madisonville, Ky.

Royal Mine; Shaft; No. 11 Seam, 72 to 80 in. thick.
PO—Madisonville, Ky. SP—Same. CTY—Hopkins; RR—L. & N.
S of H—1 elec. loco. and mules. Track gage 42 in.
S of M—20 elec. machs.
PP—2 return tubular boilers, total 300 H. P., 1 gen. unit, 250 volts D. C., 3 pumps.
EMP—160. Last fiscal year output, 160,000 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.
Old Information.

SUPERIOR COAL COMPANY

Now Lower Elkhorn Coal Company.

SUPERIOR ELKHORN BY-PRODUCTS COAL CO.

General Office, Bevinville, Ky.
PR—J. W. Lawton, Bevinville, Ky.
VP—J. P. Ratcliff, Huntington, W. Va.
TR—W. W. Lindsey, Bevinville, Ky.
GM—J. W. Lawton, Bevinville, Ky.
GS—W. W. Lindsey, Bevinville, Ky.
PA—W. W. Lindsey, Bevinville, Ky.
EM—Townsend Combs, Lackey, Ky.
SCO—Address the Company, Buyer, W. W. Lindsey, Bevinville, Ky.
SA—Richwin Coal Co., Cincinnati, O.

Superior Elkhorn Mine; Drift; Elkhorn No. 3 Seam, 52 in. thick.
PO—Bevinville, Ky.; Jacks Creek, Ky.; CTY—Floyd; RR—Long Fork.
S of H—Mules. Track gage 42 in.
S of M—Hand.
EMP—40. Daily tonnage 170.
SIZES SHIPT—Run of Mine.

SUPERIOR ELKHORN COAL CO.

General Office, Ashland, Ky.
PR—W. A. Marshall, Ashland, Ky.
VP—S. S. Wadsworth, Ashland, Ky.
TR—B. D. Clere, Ashland, Ky.
GM—B. D. Clere, Ashland, Ky.
GS—J. F. Brown, Lackey, Ky.
CE—Townsend Combs, Lackey, Ky.
SA—Avay Elkhorn Coal Co., Ashland, Ky.
Additional Information on Pages 462, 463

(Continued on Next Page)

Superior Elkhorn Coal Co.—Cont.

Basco Mine; Drift; Elkhorn Seam, 54 in. thick.
 PO—Lucky, Ky.; SP—Same; CTY—Floyd; RR—C. & O.
 S of H—Mules. Track gage 44 in.
 S of M—Hand.
 EMP—50. Last years tonnage 19,716.
 SIZES SHIPT—Run of Mine.

SUPERIOR HARLAN COAL CO.

General Office, Huntington, W. Va.
 PR—W. J. Pritchard, Bramwell, W. Va.
 VP—J. H. Bower, Bromwell, W. Va.
 TR—D. T. Pritchard, Huntington, W. Va.
 GM—W. E. Pritchard, Huntington, W. Va.
 GS—J. O. Armstrong, Everts, Ky.
 CE—Cultar & Sherwin, Pineville, Ky.
 SCO—Address the company. Buyer, J. D. Pugh, Everts, Ky.
 SA—Virginia Fuel Co., Cincinnati, O.

Superior Harlan Mine; Drift; Harlan Seam, 66 inches thick.
 PO—Everts, Ky.; SP—Same; CTY—Harlan; RR—L. & N.
 S of H—Electric loco. Track gage 48 in.
 S of M—Shortwall mach.
 PP—Power purchased. Transformer 2200 to 220 volts A. C., rotary converters, 250 volts D. C.
 EMP—65. Six months tonnage 18,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

SUREBURN COAL COMPANY

General Office, Williamson, W. Va.
 PR—H. H. Randolph, Williamson, W. Va.
 TR—H. H. Randolph, Williamson, W. Va.
 GM—M. O. Randolph, Peach Orchard, Ky.
 GS—M. O. Randolph, Peach Orchard, Ky.
 PA—M. O. Randolph, Peach Orchard, Ky.
 EM—John L. Hubbard, Peach Orchard, Ky.
 SCO—Address the Company. Buyer, M. O. Randolph, Peach Orchard, Ky.
 SA—The Tidestley Coal Co., Cincinnati, O.

Peach Orchard Mine; Drift; Peach Orchard Seam; 60 inches thick.
 PO—Peach Orchard, Ky.; SP—Same; CTY—Lawrence; RR—C. & O.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 EMP—25. Last years tonnage 7,200.
 SIZES SHIPT—Run of Mine, Block.
 PREP. EQUIPT—Bar Screens.

TATE & SOULEYRETTE CO.

General Office, Indian Head, Ky.
 PR—W. S. Tate, Indian Head, Ky.
 GM—W. S. Tate, Indian Head, Ky.
 GS—H. P. Souleyrette, Indian Head, Ky.
 SCO—Address the Company; Buyer, W. S. Tate, Indian Head, Ky.

T & S Mine; Drift; No. 3 Seam, 48 in. thick.
 PO—Indian Head, Ky.; SP—Same; CTY—McCreary; RR—C. N. O. & T.
 S of H—Mules and gasoline motor. Track gage 36 in.
 S of M—Hand.
 PP—1 pump.
 EMP—32. Daily output, 100 tons.
 SIZES SHIPT—Run of Mine.
 Old Information.

TAZWELL COAL COMPANY.

PR—Louis Manning, Lay, Ky.
 TR—John Manning, Lay, Ky.
 GM—Louis Manning, Lay, Ky.
 GS—Louis Manning, Lay, Ky.
 PA—Louis Manning, Lay, Ky.

Tazwell Mine; Seam, 30 in. thick.
 PO—Lay, Ky. SP—Myrick, Ky. CTY—Knox. RR—Cumberland, Bush Creek Branch.
 MS—John Manning, Lay, Ky.
 S of H—Mules.
 Daily capacity, 50 tons.
 SIZES SHIPT—Run of Mine.
 (Old Information)

THAYER, N. (Est.) Ky Properties.

General Office, Riverton, Ky.
 GM—Sturgis G. Bates, Riverton, Ky.
 PA—Sturgis G. Bates.
 SCO—Willard Store; Buyer, L. Duncan, Partlow, Ky.

Lost Creek Mine. Drift. Kentucky No. 1 Seam, 32 to 52 in. thick.
 PO—Partlow, Ky. SP—Willard, Ky. CTY—Carter; RR—E. K.
 MS—L. Duncan, Partlow, Ky.
 S of H—Mules. Track gage, 36 in.

S of M—Hand.
 EMP—30. Last years tonnage 11,125.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

THOMAS COAL COMPANY

General Office, Ashland, Ky.
 PR—J. C. King, Ashland, Ky.
 TR—R. J. Thomas, Ashland, Ky.
 GM—R. J. Thomas, Ashland, Ky.

Horse Branch Mine; Drift; No. 5 Seam; 46 in. thick.
 PO—Ashland, Ky.; SP—Same; CTY—Eggs; RR—C. & O.
 MS—C. G. Davis, Ashland, Ky.
 S of H—Mules. Track gage 42 in.
 S of M—Elec. puncher.
 PP—220 volts A. C., 60 cycles, 1 pump.
 Last years tonnage 4,000.
 SIZES SHIPT—Run of Mine.
 Old Information.

TICHENOR COAL COMPANY

General Office, McHenry, Ky.
 PR—Alney Tichenor, McHenry, Ky.
 VP—Everett Tichenor, McHenry, Ky.
 TR—M. R. Tichenor, McHenry, Ky.
 GS—Alney Tichenor, McHenry, Ky.
 PA—Alney Tichenor, McHenry, Ky.
 EM—J. S. Ford, McHenry, Ky.
 SA—Southern Coal Co., Memphis, Tenn.

Tichenor Mine; Drift; No. 9 Seam, 52 in. thick.
 PO—McHenry, Ky.; SP—Bishnor, Ky.; CTY—Ohio; RR—M. H. & E.
 MS—J. S. Ford, McHenry, Ky.
 S of H—Mule. Track gage 36 inches.
 S of M—Hand.
 PP—2 pump.
 EMP—60. Daily tonnage 302.
 SIZES SHIPT—Run of Mine.

TIERNEY MINING COMPANY

General Office, Stone, Ky.
 PR—L. E. Tierney, Powhatan, W. Va.
 TR—L. E. Tierney, Powhatan, W. Va.
 GM—G. C. Wood, Stone, Ky.
 PA—G. C. Wood, Stone, Ky.
 EM—C. O. Echols, Stone, Ky.
 FE—N. H. Hale, Stone, Ky.
 SA—Lawrence E. Tierney Fuel Co., Powhatan, W. Va.

Additional Information on Pages 480, 481.

Tierney Mine; Drift; Seam, 54 in. thick.
 PO—Stone, Ky.; SP—Same; CTY—Pike; RR—W. & P.
 S of H—Mules, 9 trolley pole type locos. Track gage 44 in.
 S of M—6 shortwall machs.
 PP—3 return tube boilers, gen. units, 250 volts D. C., 5 pumps.
 EMP—300. Last years tonnage 225,000.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

TORCHLIGHT COAL CO.

General Office, Superior, Ky.
 PR—W. L. Taylor, Baltimore, Md.
 VP—C. E. Stafford, Superior, Ky.
 TR—M. S. Taylor, Welch, W. Va.
 GM—C. E. Stafford, Superior, Ky.
 GS—C. E. Stafford, Superior, Ky.
 PA—C. E. Stafford, Superior, Ky.
 CE—G. J. Cooper, Welch, W. Va.
 EE—C. P. Shannon, Louisa, Ky.

Torchlight Mine; Drift; McHenry, 48 in. thick.
 PO—Superior, Ky.; SP—Same (Prepay); CTY—Lawrence; RR—C. & O.
 S of H—Mules and trolley pole type locos. Track gage, 42 in.
 S of M—Shortwall and chain breast type machs.
 PP—2 300 H. P. fire tube boilers, 250 K. W. gen. units, 250 volts A. C.
 EMP—20. Last years tonnage 18,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

TOWN COAL COMPANY

Now a part of Bell Union Coal & Mng. Co.

TRACE BRANCH COAL COMPANY, INC.

General Office, Barbourville, Ky.
 PR—R. B. Minton, Barbourville, Ky.
 TR—N. E. Minton, Barbourville, Ky.
 SECY—N. F. Minton, Barbourville, Ky.
 GM—R. B. Minton, Barbourville, Ky.

Trace Branch Mine; Slope; Blue Gem Seam, 22 in. thick.
 PO—Barbourville, Ky.; SP—Cannon, Ky.; CTY—Knox; RR—C. & M.
 Daily output, 20 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

TRICE FORK MINING COMPANY

General Office, 1204 Fayette Bank Bldg., Lexington, Ky.
 PR—C. L. Ryley, Lexington, Ky.
 VP—C. Reginald Ryley, Lexington, Ky.

TR—J. R. Pates, Lexington, Ky.
 GM—C. R. Luttrell, Hazard, Ky.
 PA—John W. Hall, Lexington, Ky.
 EM—B. T. Peck, Hazard, Ky.
 SCO—Address the Company. Buyer, J. W. Hall, Lexington, Ky.
 SA—C. L. Ryley Coal Co., 1304 Fayette Bank Bldg., Lexington, Ky.

Trace Fork Mine; Drift; Hazard No. 4 Seam, 44 in. thick.
 PO—Bulan, Ky.; SP—Frt., Tesley, Ky.; Exp., Hazard, Ky.; CTY—Perry; RR—L. & N.
 S of H—Mules and storage hattery loco. Track gage 42 in.
 S of M—Shortwall machs.
 PP—Power purchased. Transformer 2,300 to 220 volts A. C., rotary converters, 220 volts D. C.
 EMP—50. Daily tonnage 345.
 SIZES SHIPT—Run of Mine.

TRADEWATER MINING COMPANY

Now Hsley Mung Co.

TRIANGLE COAL COMPANY

General Office, Stone, Ky.
 PR—W. S. Mustard, Bluefield, W. Va.
 VP—C. C. Broskie, Bluefield, W. Va.
 TR—R. S. Sale, Stone, Ky.
 PA—R. S. Sale, Stone, Ky.
 SA—The Tidestley Coal Co., Cincinnati, O.

Triangle Mine; Drift; Pond Creek Seam; 60 inches thick.
 PO—Stone, Ky.; SP—Pinson Jct., Ky.; CTY—Pike; RR—N. & W.
 MS—R. S. Sale, Stone, Ky.
 S of H—Mules. Track gage 48 inches.
 S of M—Hand.
 PP—Gen. unit, 250 volts D. C.
 EMP—30. Last fiscal year output, 15,000 tons.
 SIZES SHIPT—Run of Mine.
 Old Information.

TRIUNE COAL COMPANY

General Office, Pineville, Ky.
 PR—M. D. Bell, Chicago, Ill.
 VP—J. E. Bell, Chicago, Ill.
 TR—Edw. Pursiful, Pineville, Ky.
 GM—Ed. Pursiful, Pineville, Ky.
 PA—Ed. Pursiful, Pineville, Ky.
 SCO—Address the Company. Buyer, Ed. Pursiful, Pineville, Ky.
 SA—Ed. Pursiful, Pineville, Ky.

Triune Mine; Drift; Straight Creek Seam; 42 inches thick.
 PO—Himyar, Ky.; SP—Tiffany, Ky.; CTY—Knox; RR—L. & N.
 MS—Ed. Pursiful, Pineville, Ky.
 S of H—Mules. Track gage 42 inches.
 S of M—Hand.
 EMP—25. Last years tonnage 3,000.
 SIZES SHIPT—Run of Mine.
 Old Information.

TRIVETTE ELKHORN COAL CO.

General Office, Pikeville, Ky.
 PR—Linton Trivette, Pikeville, Ky.
 VP—C. G. Evans, Pikeville, Ky.
 TR—W. G. Andrews, Jonancy, Ky.
 GM—C. G. Evans, Pikeville, Ky.
 PA—W. G. Andrews, Jonancy, Ky.
 EM—C. G. Evans, Pikeville, Ky.
 SCO—Address the company. Buyer, W. G. Andrews, Jonancy, Ky.
 SA—C. G. Evans, Pikeville, Ky.

Trivette Elkhorn Mine; Drift; Elkhorn Seam, 40 in. thick.
 PO—Smalley, Ky.; SP—Frt., Hite, Ky.; Exp., Martin, Ky.; CTY—Floyd; RR—Long Fork.
 MS—Dave Maers, Smalley, Ky.
 S of H—Mules. Track gage 44 inches.
 S of M—Hand.
 EMP—20. Last years tonnage 20,000.
 SIZES SHIPT—Run of Mine.

TURNER ELKHORN COAL CO.

General Office, Drift, Ky.
 PR—J. D. Turner, Lexington, Ky.
 TR—John I. Claybrooke, Maysville, Ky.
 GM—W. G. Reese, Drift, Ky.
 SA—Kentonia Coal Co., Cincinnati, O.
 Turner Elkhorn Mine; Drift; Elkhorn No. 2 Seam, 48 in. thick.
 PO—Drift, Ky.; SP—Martin; CTY—Floyd; RR—Long Fork.
 MS—W. G. Reese, Drift, Ky.
 S of H—Mules. Track gage 42 in.
 S of M—Hand.
 EMP—14.
 SIZES SHIPT—Run of Mine, Slack, Lump.

TURNER-JELICO COAL COMPANY

General Office, 2604 Union Central Bldg., Cincinnati, O.
 PR—L. F. Koring, Cincinnati, O.
 VP—John Hoffman, Cincinnati, O.
 GS—Wm. H. Jackson, Gray, Ky.
 PA—John Hoffman, Cincinnati, O.
 SCO—Address the Company. Buyer, Wm. H. Jackson, Gray, Ky.
 SA—Kentucky Fuel Co., Cincinnati, O.

Turner-Jellico Mine; Drift; Blue Gem Seam; 42 inches thick.
 PO—Emanuel, Ky.; SP—Trudel, Ky.; CTY—Knox; RR—L. & N.
 S of H—Mules. Track gage 36 inches.
 S of M—Electric machs.
 EMP—16.
 SIZES SHIPT—Run of Mine.

TWAY, R. C. COAL COMPANY

General Office, Louisville, Ky.
 PR—R. C. Tway, Louisville, Ky.
 VP—L. A. Shafer, Louisville, Ky.
 TR—J. W. Middlekamp, Louisville, Ky.
 GM—R. C. Tway, Louisville, Ky.
 GS—T. M. Gibson, Harlan, Ky.
 PA—R. C. Tway, Louisville, Ky.
 CE—A. B. Culton, Pineville, Ky.
 EE—Price Brumback, Harlan, Ky.
 SCO—Address the Company. Buyer, R. L. Anderson, Harlan, Ky.
 SA—R. C. Tway Coal Sales Co., Louisville, Ky.

Tway Mine; Drift; Harlan Seam; 48 inches thick.
 PO—Harlan, Ky.; SP—Same; CTY—Harlan; RR—L. & N.
 S of H—Mules, elec. locos. Track gage 42 inches.
 S of M—Shortwall machs.
 PP—Power purchased. Transformer 2,300-206-103 volts A. C., 150 K. W. gen. units, 250 volts D. C.
 EMP—250. Last year tonnage 138,298.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens.

ULVAH COAL CO.

General Office, Box 856, Bluefield, W. Va.
 PR—O. W. Frazer, Bluefield, W. Va.
 VP—D. H. Jenks, Cincinnati, O.
 TR—W. D. Garwood, McComas, W. Va.
 GM—O. W. Frazer, Bluefield, W. Va.
 GS—F. M. Tompkins, Bluefield, W. Va.
 PA—O. W. Frazer, Bluefield, W. Va.
 EM—J. E. Allen Engr. Co., Hazard, Ky.
 SCO—Address the Company. Buyer, E. W. Taylor, Bluefield, Ky.
 SA—Producers Coal Co., Cincinnati, O.

Ulvah Mine; Drift; Hazard No. 4 Seam, 56 in. thick.
 PO—Bluefield, Ky.; SP—Pershing, Ky.; CTY—Letcher; RR—L. & N.
 S of H—1 elec. loco. Track gage 48 in.
 S of M—2 mining machs.
 PP—Power purchased.
 EMP—35. Daily tonnage 150.
 SIZES SHIPT—Run of Mine.

UNION COUNTY MINING COMPANY

General Office, 444 4th St., Louisville, Ky.
 PR—D. H. Long, Louisville, Ky.
 VP—W. L. Jarvis, Uniontown, Ky.
 TR—Fred Reiss, Louisville, Ky.
 GM—W. L. Jarvis, Uniontown, Ky.
 GS—W. L. Jarvis, Uniontown, Ky.
 PA—D. H. Long, Louisville, Ky.
 EM—W. L. Jarvis, Uniontown, Ky.
 SCO—Address the Company. Buyer, W. L. Jarvis, Uniontown, Ky.
 SA—M. G. Sackett, Louisville, Ky.

Union Mine; Shaft; No. 11 Seam, 68 in. thick.
 PO—Uniontown, Ky.; SP—Same; CTY—Union; RR—Illinois Central.
 MS—A. D. Reid, Uniontown, Ky.
 S of H—Mules, trolley pole type locos. Track gage 42 in.
 S of M—2 electric punchers.
 PP—2—150 H. P. fire tube boilers, gen. units, 1—100 K. W., 250 volts D. C., 4 pumps.
 EMP—100. Daily tonnage 300.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Note—New mine.

UNIONTOWN COAL & MINING CO.

Now part Southland Coal Co.

UNITED STAR COAL CORP.

General Office, Hazard, Ky.
 PR—H. T. Taylor, Hazard, Ky.
 VP—M. M. Gorden, 311 Stark Bldg., Louisville, Ky.
 TR—L. F. Brashers, Hazard, Ky.
 SECY—W. E. Faulkner, Hazard, Ky.
 Drift; Nos. 4, 6 and 7 Seams; 42, 70 and 48 inches thick.
 S of H—Electric loco. Track gage 44 inches.
 S of M—Electric mach.
 Old Information.

UNITED STATES COAL & COKE CO.

General Office, Carnegie Bldg., Pittsburgh, Pa.
 PR—W. H. Clingerman, Carnegie Bldg., Pittsburgh, Pa.
 TR—John D. McCreery, 1456 Frick Bldg. Annex, Pittsburgh, Pa.
 SECY—John D. McCreery, 1456 Frick Bldg. Annex, Pittsburgh, Pa.
 GS—E. G. Toole, Gary, W. Va.
 Auditor—C. P. Parker, Pittsburgh, Pa.
 PA—T. S. Duncan, Carnegie Bldg., Pittsburgh, Pa.
 (Continued on Next Page)

United States Coal & Coke Co.—Cont.
 EE—El Clemens, Gary, W. Va.
 SGO—United Supply Co.; Buyer, C. Boughner, Gary, W. Va.
 Lynch Mine; Drift; Elkhorn C Seam; 56 inches thick.
 PO—Lynch Mines, Ky.; SP—Lynch, Ky.; CTY—Harlan; RR—L. & N.
 MS—E. V. Albright, Lynch Mines, Ky.
 S of H—20 locos. and 1 storage battery gathering and 1 trolley pole type locos. Track gage 48 in.
 S of M—40 shortwall machs.
 PP—3 750 H. P. boilers in central station and 2—1,500 K. W. 6,600 volt generators, central station, 200 K. W. 275 volt D. C. rotary converters in sub-station.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

UNITED STATES COAL MINING CO.
 Out of Business.

UPPER ELK COAL CO.
 General Office, 802 6th St., Huntington, W. Va.
 PR—J. P. Mitchell, Huntington, W. Va.
 VP—M. Mitchell, Huntington, W. Va.
 TR—J. P. Mitchell, Huntington, W. Va.
 GM—J. P. Mitchell, Huntington, W. Va.
 GS—R. C. Mitchell, Argo, Ky.
 PA—G. W. Thomson, Argo, Ky.
 SCO—Address the Company, Buyer, G. W. Thomson, Argo, Ky.
 EM—Robert Hart, Woodman, Ky.
 SA—A. A. Mitchell, Argo, Ky.

Upper Elk Mine; Drift; Seam, 40 in. thick.
 PO—Argo, Ky.; SP—Upper Elk, Ky.; CTY—Pike; RR—Big Sandy, Cumberland.
 S of H—Mules, comp. air and steam locos. Track gage, 42 in.
 S of M—4 air punchers and 6 shortwall machs.
 PP—1—125 H. P. water tube boiler, 1 pump.
 EMP—18 Last years tonnage 11,711.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

UPPER HARLAN COAL COMPANY.
 General Office, Lejunior, Ky.
 PR—W. L. Bailey, Harlan, Ky.
 TR—J. W. Farmer, Harlan, Ky.
 GM—T. L. Sharpe, Jr., Lejunior, Ky.
 GS—G. T. Howard, Harlan, Ky.
 EM—G. T. Howard, Harlan, Ky.
 SCO—Address the Company, Buyer, W. T. Holmes, Lexington, Ky.

Upper Harlan Mine; Drift; Harlan Seam; 48 in. thick.
 PO—Lejunior, Ky.; SP—Same; CTY—Harlan; RR—L. & N.
 S of H—Mules.
 S of M—Hand.
 SIZES SHIPT—Run of Mine, Nut, Egg.

UTILITY GAS COAL CO.
 General Office, Pineville, Ky.
 PR—E. W. Fowler, Peoria, Ill.
 VP—W. R. Morrison, Pineville, Ky.
 TR—J. W. Bussbury, Peoria, Ill.
 GM—W. R. Morrison, Pineville, Ky.
 GS—W. R. Morrison, Pineville, Ky.
 PA—W. R. Morrison, Pineville, Ky.
 EM—Ed Johnston, Pineville, Ky.
 SCO—Address the Company, Buyer, W. R. Morrison, Pineville, Ky.
 SA—W. L. Moss Coal Co., Pineville, Ky.

Traction Mine; Drift; Straight Creek Seam, 36 in. thick.
 PO—Four Mile, Ky.; SP—Same; CTY—Bell; RR—L. & N.
 MS—Nath Centers, Four Mile, Ky.
 S of H—Mules. Track gage, 36 in.
 S of M—2 shortwall machs.
 PP—Power purchased, transformer 4000-220 volts A. C., 3 pumps.
 EMP—50 Last years tonnage 26,422.
 SIZES SHIPT—Slack, Pea, Lump.
 PREP. EQUIPT—Gravity Screens.

VARILLA MINING COMPANY
 Now Asher Coal Mining Co.

VICTOR COAL COMPANY
 Out of Business.

VICTORIA COAL COMPANY
 Now a part of the Hart Coal Corp.

VICTORY COAL COMPANY
 General Office, Providence, Ky.
 PR—Edgar M. Young, Providence, Ky.
 VP—Jas. E. Morgan, Providence, Ky.
 TR—D. D. Woodson, Providence, Ky.
 GM—Edgar M. Young, Providence, Ky.
 GS—Jas. E. Morgan, Providence, Ky.
 EM—C. M. Butterfield, Providence, Ky.

Victory Mine; Slope; No. 2 Seam; 72 inches thick.
 PO—Providence, Ky.; SP—Same; CTY—Webster; RR—L. & N.
 MS—W. B. Melton, Providence, Ky.
 S of H—Rope. Track gage 48 inches.
 S of M—Hand.
 SIZES SHIPT—Run of Mine.

VINSON-HARLAN COAL CO
 General Office, 205 Norton Bldg., Louisville, Ky.
 PR—J. M. O'Brien, Louisville, Ky.
 VP—C. Kolb, Louisville, Ky.
 TR—C. Kolb, Louisville, Ky.
 GM—E. E. Hughes, Pineville, Ky.
 GS—E. E. Hughes, Pineville, Ky.
 PA—E. E. Hughes, Pineville, Ky.
 CE—Johnson & Johnson, Pineville, Ky.
 SA—C. Kolb, Louisville, Ky.
 Over the Top Mine; Drift; Dean Seam, 18 in. thick.
 PO—Pineville, Ky.; SP—Stilson, Ky.; CTY—Bell; RR—L. & N.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 EMP—12
 SIZES SHIPT—Run of Mine, Slack, Lump, Block.
 PREP. EQUIPT—Bar Screens.

VINSON-KOLB COAL COMPANY
 General Office, 205 Norton Bldg., Louisville, Ky.
 PR—Guy Vinson, Chesterfield, Ky.
 TR—Conrad Kolb, 724 E. Walnut St., Louisville, Ky.
 GM—Guy Vinson, Chesterfield, Ky.
 GS—Geo. Heuson, Cargo, Ky.
 PA—J. Qualls, Cargo, Ky.
 SCO—Address the Company, Buyer, J. Qualls, Cargo, Ky.
 SA—Walton Bledsoe & Co., Cincinnati, O.

Vinson Kolb Mine; Drift; Dean & Rlm Seam, 41 in. thick.
 PO—Box 297, Pineville, Ky.; SP—Stilson, Ky.; CTY—Bell; RR—L. & N.
 MS—E. E. Hughes, Pineville, Ky.
 S of H—Mules. Track gage 36 in.
 S of M—Hand.
 PP—1 pump.
 Daily tonnage 120.
 SIZES SHIPT—Run of Mine, Lump, Block.
 PREP. EQUIPT—Bar Screens.

VIRGINIA COAL & MINING COMPANY
 Out of business.

VIRGINIA MINING COMPANY.
 General Office, Roberts, Tenn.
 PR—L. E. Bryant, Roberts, Tenn.
 VP—W. S. Glaze, Danville, Ky.
 TR—D. E. Bryant, Danville, Ky.
 GM—L. E. Bryant, Roberts, Tenn.
 GS—L. E. Bryant, Roberts, Tenn.
 PA—L. E. Bryant, Roberts, Tenn.
 SCO—Address the Company, Buyer, C. R. Proctor, Strunk, Ky.
 SA—J. C. Lee, Chattanooga, Tenn.

West Jellie Mine; Drift; No. 4 Seam, 36 inches thick.
 PO—Strunk, Ky. SP—Silersville. CTY—McCreary RR—So. Ky.
 S of M—Hand.
 EMP—200 Last years tonnage 60,000.
 SIZES SHIPT—Run of Mine, Block.
 PREP. EQUIPT—Bar Screens.

VULCAN COLLIERY
 General Office, Vulcan, W. Va.
 GS—W. A. Wilson, Vulcan, W. Va.
 PA—P. J. Winn, Vulcan, W. Va.
 EM—J. H. Dickerson, Vulcan, W. Va.
 SCO—Address the Company, Buyer, D. H. Howell, Vulcan, W. Va.

Vulcan Mine; Drift; Alma Thacker Seam, 56 inches thick.
 PO—Vulcan, W. Va.; SP—Same; CTY—Pike; RR—N. & W.
 MS—P. J. Winn, Vulcan, W. Va.
 S of H—6 electric and 2 storage battery locos. Track gage 56 inches.
 S of M—Shortwall mach.
 PP—Power purchased, Transformer 33-000 to 2,200 volts A. C., M. G. sets, 250 volts D. C.
 EMP—150 Last years tonnage 120,000.
 SIZES SHIPT—Run of Mine, Egg.
 PREP. EQUIPT—Picking Tables.
 Note—Formerly operated by the Vulcan Coal Company

WAGNER COAL COMPANY
 General Office, Bluefield, W. Va.
 PR—C. L. Borden, Bluefield, W. Va.
 VP—C. A. Wagner, Bailey, Va.
 TR—H. F. Warden, Bluefield, W. Va.
 GM—E. M. Wagner, Blanch, Ky.
 SA—Astel Coal Co., Cleveland, O.

Wagner Mine; Drift and Slope; Blue Gem and Straight Creek Seams, 30-45 in. thick.
 PO—Blanch, Ky.; SP—Pineville, Ky.; CTY—Bell; RR—L. & N.
 MS—E. M. Wagner, Blanch, Ky.
 S of H—Mules, rope.
 S of M—Hand.
 PP—Power purchased, Transformer 4,400 to 440 volts A. C., 2 water tube boilers.
 Daily tonnage 150.
 SIZES SHIPT—Run of Mine.

WALDON COAL CO.
 General Office, Prestonsburg, Ky.
 PR—John Hardley, Prestonsburg, Ky.
 TR—S. L. Spauldin, Prestonsburg, Ky.
 GM—S. E. Allen, Prestonsburg, Ky.
 GS—S. E. Allen, Prestonsburg, Ky.
 PA—S. E. Allen, Prestonsburg, Ky.
 EM—W. P. Harris, Prestonsburg, Ky.
 SA—Twin States Coal Co., Huntington, W. Va.

Waldon Mine; Drift; No. 1 Elkhorn Seam; 48 in. thick.
 PO—Emma, Ky.; SP—Same; CTY—Floyd; RR—C. & O.
 MS—E. Pomil, Emma, Ky.
 S of H—Mules. Track gage, 42 in.
 S of M—Hand.
 EMP—25 Last years tonnage 8,000.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Picking Tables.

WALKERS BRANCH FUEL CORP.
 General Office, 266 Grand St., New York City, N. Y.
 PR—I. R. Rorger, 266 Grand St., New York City, N. Y.
 VP—I. R. Isaac, 266 Grand St., New York City, N. Y.
 TR—A. J. Borsky, 266 Grand St., New York City, N. Y.
 GM—Edwin Berger, Hazard, Ky.
 GS—Edwin Berger, Hazard, Ky.
 PA—Edwin Berger, Hazard, Ky.
 SCO—Address the Company, Buyer, Edwin K. Berger, Hazard, Ky.
 SA—Baldane Coal & Coke Co., Cincinnati, O.

Wabaco Mine; Drift; No. 4 Seam, 40 inches thick.
 PO—Hazard, Ky.; SP—Wabaco, Ky.; CTY—Perry; RR—L. & N.
 S of H—Elec. locos. Track gage 42 in.
 S of M—Shortwall and longwall machs.
 PP—Power purchased Transformer 2200 250 volts A. C., 2 pumps.
 EMP—85, Daily tonnage 300.
 SIZES SHIPT—Run of Mine, Lump, Block.
 PREP. EQUIPT—Bar Screens.
 NOTE—Formerly operated by the Walkers Branch Mining Co.

WALKERS BRANCH MINING CO.
 Now operated by the Walkers Branch Fuel Corporation.

WALLEN JELICO COAL COMPANY.
 General Office, Gatlin, Ky.
 PR—George M. Wallen, Williamsburg, Ky.
 TR—W. E. Wallen, Gatlin, Ky.
 GM—Geo. M. Wallen, Williamsburg, Ky.
 GS—Geo. M. Wallen, Williamsburg, Ky.
 PA—W. E. Wallen, Gatlin, Ky.
 SCO—Address the Company, Buyer, W. E. Wallen, Gatlin, Ky.
 SA—Cherokee Coal & Coke Co., Knoxville, Tenn.

Wallen Jellico Mine; Drift; Blue Gem Seam, 26 in. thick.
 PO—Gatlin, Ky.; SP—Same; CTY—Whitley; RR—L. & N. Pige Mountain Br.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 PP—1 gasoline pump.
 EMP—20 Last years tonnage 6,122.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
 PREP. EQUIPT—Bar Screen.

WALLINS CREEK COAL COMPANY
 Now Wallins Creek Collieries Co.

WALLINS CREEK COLLIERIES CO.
 General Office, Nashville, Tenn.
 PR—Wm. D. Boyer, Seranton, Pa.
 TR—Geo. G. Brooks, Seranton, Pa.
 GM—Geo. H. Marking, Pineville, Ky.
 GS—L. F. Vermillion, Harlan, Ky.
 PA—D. H. Howard, Harlan, Ky.
 EM—H. B. Coleman, Harlan, Ky.
 SCO—Address the Company, Buyer, D. H. Howard, Harlan, Ky.
 SA—Logan Pocahontas Fuel Company, Charleston, W. Va.

Additional Information on Page 477.
 Black Star Mine; Drift; Wallins Seam, 74 in. thick.
 PO—Wallins, Ky.; SP—Wallins, Ky.; CTY—Harlan; RR—L. & N.
 MS—H. P. Southard, Wallins Creek, Ky.
 SM—C. T. Kirby, Wallins Creek, Ky.
 S of H—Mules and 3 trolley pole type locos. Track gage 42 in.
 S of M—6 shortwall machs.
 PP—Power purchased, transformer 2300 to 220 volts, M. G. sets, 250 volts D. C., 1 pump.
 EMP—176 Daily tonnage 1,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

Comet Mine; Drift; Harlan Seam, 47 in. thick.
 PO—Harlan, Ky.; SP—Same; CTY—Harlan; RR—L. & N.
 MS—J. W. Esley, Harlan, Ky.
 SM—Theo. Hall, Harlan, Ky.
 S of H—Mules, gasoline and 1 steam locos. Track gage, 42 in.

S of M—30 comp. air punchers.
 PP—Purchase power, transformer 2300 to 220 volts A. C., 2 150 H. P. fire tube boilers, air compressor, 5 pumps.
 EMP—313 Daily tonnage 1,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

WARFIELD COAL COMPANY
 Now Earlston Coal Co.

WARNER COAL COMPANY.
 PR—A. H. Warner, Beattyville, Ky.
 TR—C. Beatty, Beattyville, Ky.
 GM—A. H. Warner, Beattyville, Ky.
 GS—A. H. Warner, Beattyville, Ky.
 CE—Laurian Durlan, Beattyville, Ky.

White Ash Mine; Drift; Seam 40 in. thick.
 PO—Beattyville, Ky.; SP—White Ash, Ky.; CTY—Lee; RR—L. & N.
 S of H—Mules. Track gage 36 in.
 EMP—15.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
 Old Information.

WASHINGTON COAL COMPANY
 General Office, Saldee, Ky.
 PR—G. W. Gambill, Saldee, Ky.
 GM—G. W. Gambill, Saldee, Ky.
 SCO—Address the Company, Buyer, G. W. Gambill, Saldee, Ky.

Gambill's Mine; Drift; No. 4 Seam, 35 inches thick.
 PO—Saldee, Ky.; SP—White, Ky.; CTY—Breathitt; RR—L. & N.
 MS—Marlon Roberts, Saldee, Ky.
 S of H—Electric locos. Track gage 36 inches.
 S of M—Electric punchers.
 PP—Gen. units 200 K. W., 250 volts D. C.
 SIZES SHIPT—Run of Mine, Nut, Slack, Block.
 PREP. EQUIPT—Bar Screens.

WASHINGTON COAL COMPANY.
 PR—H. Foxwell, Providence, Ky.
 TR—J. A. Foxwell, " "
 PA—J. A. Foxwell, " "
 GM—John S. Davidson, " "
 GS—John S. Davidson, " "
 EM—Squire Pitt, " "
 MM—Jos. Janung, " "

Washington Mine; Slope; No. 9 Seam, 60 in. thick.
 PO—Providence, Ky.; SP—1 C. R. R. Station; CTY—Webster; RR—III Central.
 S of H—Mules and 1 steam loco.
 S of M—Hand.
 EMP—30.
 SIZES SHIPT—Run of Mine.
 Note—Successors to Harris Coal Co. (Old Information)

WELLS ELKHORN COAL COMPANY
 General Office, Ashland, Ky.
 PR—John E. Buckingham, Ashland, Ky.
 GM—H. C. Howes, Estill, Ky.
 VP—G. B. Archer, Prestonsburg, Ky.
 TR—J. K. Wells, Paintsville, Ky.
 ASST. TO PRES.—C. W. Moorman, Ashland, Ky.
 GS—J. B. Meek, Estill, Ky.
 PA—H. C. Howes, Estill, Ky.
 CE—C. W. Moorman, Ashland, Ky.
 EM—E. A. Smith, Estill, Ky.
 EE—J. B. Meek, Estill, Ky.

No. 1 Mine; Drift; No. 1 Elkhorn Seam, 46 inches thick.
 PO—Estill, Ky.; SP—Lacey, Ky.; CTY—Floyd; RR—C. & O.
 MS—Frank Cooley, Huesville, Ky.
 S of H—Mules. Track gage 42 inches.
 S of M—Hand.
 SIZES SHIPT—Run of Mine.
 NOTE—Formerly operated by Salt Lick Coal Company

No. 2 Mine; Drift; No. 1 Elkhorn Seam, 48 inches thick.
 PO—Estill, Ky.; SP—Lacey, Ky. CTY—Floyd; RR—C. & O.
 MS—T. E. Sullivan, Lacey, Ky.
 S of H—Mules. Track gage 42 inches.
 S of M—Hand.
 EMP—60 Last years tonnage 50,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables.
 NOTE—Formerly operated by Black Diamond Co.

No. 3 Mine; Drift; No. 1 Elkhorn Seam, 46 inches thick.
 PO—Estill, Ky.; SP—Lacey, Ky.; CTY—Floyd; RR—C. & O.
 MS—T. E. Sullivan, L. & N. Ky.
 S of H—Mules. Track gage 42 inches.
 S of M—Hand.
 EMP—35 Last years tonnage 50,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables.

(Continued on Next Page)

Wells Elkhorn Coal Co.—Cont.

No. 4 Mine; Drift; No. 1 Elkhorn Seam, 54 inches thick.
 PO—Estill, Ky.; SP—Lacey, Ky.; CTY—Floyd; RR—C. & O.
 MS—James Sparks, Estill, Ky.
 S of H—4 trolley pole type locos.
 S of M—3 shortwall machs.
 PP—2 100 H. P. water tube boilers, 2 150 K. W. gen. units, 250 volts D. C.

EMP—60. Last years tonnage 60,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables.

No. 5 and 6 Mines; Drifts; No. 1 Elkhorn Seam, 52 inches thick.
 PO—Estill, Ky.; SP—Lacey, Ky.; CTY—Floyd; RR—C. & O.
 MS—Noah Burton, Estill, Ky.
 S of H—1 trolley pole type loco.
 S of M—1 shortwall mach.
 PP—2 100 H. P. fire tube boilers, 1—150 K. W. gen. unit, 250 volts D. C.

EMP—30. Daily tonnage 150.
 SIZES SHIPT—Run of Mine, Slack, Nut, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables.

WEST HARTFORD COAL COMPANY

General Office, Hartford, Ky.
 PR—W. H. Parks, Hartford, Ky.
 VP—H. T. Holbrook, Hartford, Ky.
 TR—H. T. Holbrook, Hartford, Ky.

West Hartford Mine; Slope; No. 9 Seam, 48 inches thick.
 PO—Hartford, Ky.; SP—Same; CTY—Ohio; RR—M. H. & E.
 S of H—Mules. Track gage 42 inches.
 S of M—Hand.
 EMP—21. Daily tonnage 150.
 SIZES SHIPT—Run of Mine.

WEST JELICO COAL COMPANY.

General Office, Paducah, Ky.
 PR—C. F. Richardson, Sturgis, Ky.
 VP—W. F. Bradshaw, Jr., Paducah, Ky.
 TR—W. F. Bradshaw, Jr., Paducah, Ky.
 GM—T. E. Jenkins, Sturgis, Ky.
 GS—O. H. Wilcox, Nortonville, Ky.
 PA—O. H. Wilcox, Nortonville, Ky.
 CE—T. E. Jenkins, Sturgis, Ky.
 SA—H. L. Richardson, Paducah, Ky.

West Jelico Mine; Slope; No. 14 Seam, 108 in. thick.
 PO—Nortonville, Ky.; SP—St. Charles, Ky.; CTY—Hopkins; RR—I. C.
 MS—Johnson Franklin, Nortonville, Ky.
 S of H—Mules. Track gage, 44 in.
 S of M—Hand.
 PP—3 pumps.
 EMP—100. Daily tonnage 400.
 SIZES SHIPT—Run of Mine.

WEST KENTUCKY COAL COMPANY

General Office, Sturgis, Ky.
 PR—C. F. Richardson, Sturgis, Ky.
 VE—T. E. Jenkins, Sturgis, Ky.
 TR—J. N. Rawlins, Sturgis, Ky.
 GM—C. F. Richardson, Sturgis, Ky.
 GS—Thos. Christian, Sturgis, Ky.
 Mgr of Mines—T. E. Jenkins, Sturgis, Ky.
 PA—W. S. Williams, Sturgis, Ky.
 EM—Davis Read, Sturgis, Ky.
 EE—Sherman Melton, Sturgis, Ky.
 SCO—Address the Company, Buyer, H. H. Smith, Sturgis, Ky.
 SA—H. L. Richardson, Paducah, Ky.
 Additional information on Pages 482, 483.

No. 1 Mine; Slope; No. 9 Seam, 58 in. thick.
 PO—Sturgis, Ky.; SP—Same; CTY—Union; RR—III. Cent.
 MS—W. A. Jones, Sturgis, Ky.
 S of H—Mules, rope and 1 trolley pole type elec. loco. Track gage 36 in.
 S of M—2 shortwall machs.
 PP—2 return tubular boilers, total 300 H. P., 1 gen. unit, 250 volts D. C., 4 pumps.
 EMP—70. Last fiscal year output, 82,044 tons.
 SIZES SHIPT—Run of Mine.

No. 2 Mine; Shaft; No. 9 Seam, 58 in. thick.
 PO—Sturgis, Ky.; SP—Same; CTY—Union; RR—III. Cent.
 MS—W. A. Jones, Sturgis, Ky.
 S of H—Mules, rope and 1 trolley pole type elec. loco. Track gage 40 in.
 S of M—6 shortwall machs.
 PP—3 water tube boilers, total 750 H. P., 2 gen. units, 250 volts D. C., 7 pumps.
 EMP—115. Last fiscal year output, 154,367 tons.
 SIZES SHIPT—Run of Mine, Nut, Slack, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Loading Booms.

No. 3 Mine; Slope; No. 11 Seam, 72 in. thick.
 PO—Wheatcroft, Ky.; SP—Same; CTY—Webster; RR—III. Cent.
 MS—W. W. Kirk, Wheatcroft, Ky.
 S of H—Mules and 2 trolley pole type elec. locos. Track gage 40 in.

S of M—4 shortwall machs.
 PP—4 return tubular boilers, total 600 H. P., 2 gen. units, 250 volts D. C., 3 pumps.
 EMP—85. Last fiscal year output, 77,467 tons.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

No. 4 Mine; Slope; No. 11 Seam, 72 in. thick.
 PO—Wheatcroft, Ky.; SP—Same; CTY—Webster; RR—III. Cent.
 MS—W. W. Kirk, Wheatcroft, Ky.
 S of H—Mules and 3 trolley pole type elec. locos. Track gage 40 in.
 S of M—6 shortwall machs.
 PP—4 return tubular boilers, total 600 H. P., 2 gen. units, 250 volts D. C., 3 pumps.
 EMP—90. Last fiscal year output, 88,982 tons.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.

No. 5 Mine; Shaft; No. 12 Seam, 72 in. thick.
 PO—Clay, Ky.; SP—Wheatcroft, Ky.; CTY—Webster; RR—III. Cent.
 MS—Jas. Palmer, Sturgis, Ky.
 S of H—Mules and 2 trolley pole type elec. locos. Track gage 36 in.
 S of M—3 shortwall machs.
 PP—2 return tubular boilers, total 300 H. P., 1 gen. unit, 250 volts D. C., 2 pumps.
 EMP—55. Last fiscal year output, 75,530 tons.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Gas.
 PREP. EQUIPT—Shaker Screens.

No. 6 Mine; Shaft; No. 9 Seam, 58 in. thick.
 PO—Wheatcroft, Ky.; SP—Same; CTY—Webster; RR—III. Cent.
 MS—W. W. Kirk, Wheatcroft, Ky.
 S of H—Mules. Track gage 40 in.
 S of M—Hand.
 PP—1 return tubular boiler, total 100 H. P., 3 pumps. Receives power from No. 4 Mine.
 Note—Not working.

No. 7 Mine; Shaft; No. 12 Seam, 90 in. thick.
 PO—Clay, Ky.; SP—Same and Wheatcroft, Ky.; CTY—Webster; RR—III. Cent., L. & N.
 MS—Jas. Palmer, Sturgis, Ky.
 S of H—Mules and 4 elec. locos. Track gage 40 in.
 S of M—12 elec. machs.
 PP—5 return tubular boilers, total 750 H. P., 2 gen. units, 250 volts D. C., 5 pumps.
 EMP—220. Last fiscal year output, 293,538 tons.
 SIZES SHIPT—Run of Mine, Pea, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Loading Boom.

No. 8 Mine; Slope; No. 9 Seam, 58 in. thick.
 PO—Sturgis, Ky.; SP—Same; CTY—Union; RR—III. Cent.
 MS—W. A. Jones, Sturgis, Ky.
 S of H—Mules and rope. Track gage 40 in.
 S of M—5 elec. machs.
 PP—3 return tubular boilers, total 450 H. P., 1 gen. unit, 250 volts D. C., 1 pump.
 EMP—85. Last fiscal year output, 116,198 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Loading Booms.

No. 9 Mine; Shaft; No. 9 Seam, 58 in. thick.
 PO—Sturgis, Ky.; SP—Same; CTY—Union; RR—III. Cent.
 MS—W. A. Jones, Sturgis, Ky.
 S of H—Mules and 2 elec. locos.
 S of M—7 elec. machs.
 PP—1 return tubular boilers, total 600 H. P., 1 gen. unit, 250 volts D. C.
 EMP—85. Last fiscal year output, 100,545 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Box Car Loader.

WEST VIRGINIA & KENTUCKY COAL CO.

Now part of Consolidated Fuel Co.

WHEELER BOONE COAL COMPANY.

PR—Eli Taylor, Nuttallburg, W. Va.
 TR—Wheeler Boone, 733 Union Trust Bldg., Cincinnati, O.
 GM—Wheeler Boone, Cincinnati, O.
 PA—Wm. B. Brunswyler, Wallins Creek, Ky.
 EM—Wm. B. Brunswyler, Wallins Creek, Ky.
 SCO—Address the Company, Buyer, Wm. B. Brunswyler, Wallins Creek, Ky.
 Wheeler Boone Mine; Drift; Terries Fork Cannel Seam; 52 in. thick.
 PO—Wallins Creek, Ky.; SP—Wallins, Ky.; CTY—Harlan; RR—L. & N.

MS—Wm. B. Brunswyler, Wallins Creek, Ky.
 SIZES SHIPT—Run of Mine, Lump.

WHEELER COAL COMPANY

General Office, 306-307 Burwell Bldg., Knoxville, Tenn.
 PR—R. R. Wheeler, Knoxville, Tenn.
 VP—R. L. Wheeler, Trooper, Ky.
 TR—R. R. Wheeler, Knoxville, Tenn.
 GM—R. L. Wheeler, Trooper, Ky.
 GS—R. L. Wheeler, Trooper, Ky.
 PA—J. H. Wheeler, Artemus, Ky.
 EM—C. P. Davidson, Middlesboro, Ky.
 SCO—Address the Company, Buyer, J. H. Wheeler, Artemus, Ky.
 Additional information on Page 484.

Trooper No. 1 Mine; Drift; Dean Seam, 84 in. thick.
 PO—Trooper, Ky.; SP—Artemus, Ky.; CTY—Knox; RR—Cumberland and L. & N.
 S of H—Mules and comp. air locos. Track gage 42 in.
 S of M—Comp. air punchers.
 PP—2—300 H. P. fire tube boilers, 3 pumps.
 EMP—150. Daily tonnage 400.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
 PREP. EQUIPT—Gravity Screens and Picking Tables.
 Power No. 2 Mine; Drift; Dean Seam, 84 in. thick.
 PO—Trooper, Ky.; SP—Artemus, Ky.; CTY—Knox; RR—Cumberland and L. & N.
 S of H—Mules. Track gage 40 in.
 S of M—Hand.
 EMP—50. Daily tonnage 200.
 SIZES SHIPT—Run of Mine.

WHEELER HEATON COAL CO.

General Office, Cressmont, Ky.
 PA—J. A. Heaton, Cressmont, Ky.
 Wheeler Heaton Mine; Drift; Beattyville Seam, 40 inches thick.
 PO—Cressmont, Ky.; SP—Frt., Caryton, Ky.; EM—Heidelberg, Ky.; CTY—Lee; RR—K. R. & C. L. & N.
 MS—Pryce Cabell, Cressmont, Ky.
 S of H—Mules. Track gage 40 in.
 S of M—Hand.
 Daily tonnage 150.
 SIZES SHIPT—Run of Mine, Lump, Nut, Slack.
 PREP. EQUIPT—Bar Screens.

WHEELER JELICO COAL COMPANY

Now Wheeler Coal Co.

WHITE, B. P., JR., COAL COMPANY

Out of business.

WHITE COAL MINING COMPANY.

Now A. C. Lackey.

WHITE STAR COAL CO.

General Office, White Star, Ky.
 PR—H. C. Abell, 120 Broadway, New York, N. Y.
 VP—Jas. Lawrence, 120 Broadway, New York, N. Y.
 TR—W. C. De Berg, 120 Broadway, New York, N. Y.
 GM—W. L. Hammond, White Star, Ky.
 GS—Samuel Boaze, White Star, Ky.
 PA—W. L. Hammond, White Star, Ky.
 CE—N. E. Cullen, Pineville, Ky.
 EE—R. L. White Star, Ky.
 SCO—Address the Company, Buyer, M. R. Ball, White Star, Ky.

No. 1 Mine; Drift; Harlan Seam, 42 in. thick.
 PO—White Star, Ky.; SP—Wilhoit, Ky.; CTY—Harlan; RR—L. & N.
 S of H—Trolley pole type locos. Track gage, 36 in.
 S of M—2 shortwall machs.
 PP—Power purchased, 1 150 K. W. gen. unit, 220 volts D. C., 1 pump.
 EMP—30. Daily tonnage 300.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Loading Booms.

No. 2 Mine; Drift; Wallins Seam, 84 in. thick.
 PO—White Star, Ky.; SP—Same.
 CTY—Harlan; RR—L. N.
 S of H—Trolley pole type locos. Track gage, 48 in.
 S of M—3 shortwall machs.
 PP—Power purchased, 1 150 K. W. gen. units, 220 volts D. C., 2 pumps.
 EMP—60. Daily output 700.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Loading Booms.

No. 3 Mine; Drift; Harlan Seam, 46 in. thick.
 PO—White Star, Ky.; SP—Same.
 CTY—Harlan; RR—L. N.
 S of H—Trolley pole type locos. Track gage, 42 in.
 S of M—2 shortwall machs.

PP—Power purchased, 1 150 K. W. gen. units, 220 volts D. C., 2 pumps.
 EMP—60. Daily output 400.
 SIZES SHIPT—Run of Mine, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Loading Booms.

No. 4 Mine; Drift; Harlan Seam, 44 in. thick.
 PO—White Star, Ky.; SP—Same.
 CTY—Harlan; RR—L. N.
 S of H—Trolley pole type locos. Track gage, 42 in.
 S of M—1 shortwall mach.
 PP—Power purchased, 220 volts D. C.
 EMP—15. Daily tonnage 200.
 SIZES SHIPT—Run of Mine, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Loading Booms.

No. 5 Mine; White Star Seam; 41 in. thick.
 Note—This mine is just being developed.

WHITESBURG COAL COMPANY, INC.

General Office, Lexington, Ky.
 PR—W. H. Hoover, Nicholasville, Ky.
 VP—W. H. Courtney, Lexington, Ky.
 TR—J. Henry Hall, Lexington, Ky.
 GM—J. Henry Hall, Lexington, Ky.
 PA—J. Henry Hall, Lexington, Ky.
 SCO—Address the Company, Buyer, J. Henry Hall, Lexington, Ky.
 SA—Whitesburg Coal Co., Lexington, Ky.

White Mine; Drift; Hazard No. 4 Seam; 44 in. thick.
 PO—White, Ky.; SP—Same; CTY—Letcher; RR—L. & N.
 MS—W. L. Matthews, Lexington, Ky.
 S of H—3 trolley pole type locos. Track gage 42 in.
 S of M—2 shortwall machs.
 PP—2 fire tube boilers, 250 H. P., 1—150 K. W. gen. units, 250 volts D. C., 3 pumps.
 EMP—100. Daily tonnage 500.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens.

WHITLEY ELKHORN COAL COMPANY.

Now Imperial Elkhorn Coal Company.

WICKLIFF, W. A., COAL CO.

General Office, Greenville, Ky.
 PR—W. A. Wickliffe, Greenville, Ky.
 VP—E. J. Puryear, Greenville, Ky.
 TR—M. L. Wickliffe, Greenville, Ky.
 GM—C. M. Martin, Greenville, Ky.
 GS—C. M. Martin, Greenville, Ky.
 PA—C. M. Martin, Greenville, Ky.
 EM—P. B. Wickliffe, Greenville, Ky.
 EE—C. Carl Cotts, Central City, Ky.
 SCO—Address the Company, Buyer, F. M. Puryear, Browder, Ky.
 Sales Mgr., W. A. Wickliffe, Greenville, Ky.

Browder Mine; Shaft; No. 9 Seam, 72 in. thick.
 PO—Browder, Ky.; SP—Same; CTY—Muhlenberg; RR—L. & N., O. & N. Div.
 MS—D. F. Cather, Browder, Ky.
 S of H—3 trolley pole type locos. Track gage, 36 in.
 S of M—4 chain breast, 5 longwall and 9 elec. machs.
 PP—2 water tube boilers, 350 H. P., 1—300 K. W., 1—150 K. W., 250 volts D. C., 4 pumps.
 EMP—275. Last years tonnage 205,376.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Marcus Shaker, Picking Tables, Loading Booms.

WILLARD COAL COMPANY

General Office, Willard, Ky.
 PR—H. B. Fraley, Willard, Ky.
 VP—L. M. Bays, Willard, Ky.
 TR—Charles Sexton, Willard, Ky.
 GM—L. M. Bays, Willard, Ky.
 PA—Chas. Sexton, Willard, Ky.
 EM—B. N. Kreig, Rosedale, Ky.
 SCO—Willard Supply Co., Buyer, Chas. Sexton, Willard, Ky.
 SA—Darby Coal Sales Co., Cincinnati, O.

Willard Mine; Drift; No. 7 Seam; 36 in. thick.
 PO—Willard, Ky.; SP—Same; CTY—Carter; RR—Eastern Kentucky.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 EMP—14. Last years tonnage 7,568.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

WILLHORN COAL COMPANY

General Office, Corbin, Ky.
 PR—H. W. Horr, Corbin, Ky.
 VP—Miss Goldie Horr, Corbin, Ky.
 TR—Miss Goldie Horr, Corbin, Ky.
 GM—H. W. Horr, Corbin, Ky.
 GS—Jack Berry, Box 529, Middleboro, Ky.

(Continued on Next Page)

Willhorr Coal Co.—Cont

PA—Miss Goldie Herr, Corbin, Ky.
CE—Mr. Cultors, Pineville, Ky.
SCO—Address the Company, Buyer, Miss Goldie Herr, Corbin, Ky.
SA—H. A. Brookling, Pineville, Ky.

No. 2 Mine; Slope; Straight Creek Seam, 31 inches thick.
PO—Middleboro, Ky.; SP—Korval, Ky.; CTY—Bell; RR—L. & N.
S of H—Mules and main rope, steam loco. Track gage 42 inches.
S of M—Hand.
PP—1 fire tube boiler, 60 H. P., 3 pumps.
EMP—30. Daily output, 50 to 60 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

WILLIAMS BY-PRODUCT COAL COMPANY.
Now part of Crown By-Product Coal Co.

WILLIAMS COAL COMPANY.

General Office, Mannington, Ky.
PR—John S. Crenshaw, Cadiz, Ky.
VP—B. D. Williams, Jr., Mannington, Ky.
TR—B. D. Williams, Jr., Mannington, Ky.
GM—B. D. Williams, Jr., Mannington, Ky.
PA—R. D. Williams, Jr., " "
CE—B. D. Williams, Jr., " "

Williams Mine; Slope; Mannington Seam, 50 inches thick.
PO—Mannington, Ky.; SP—Same; CTY—Christian; RR—L. & N., Mannington Br.
MS—T. J. Nance, Mannington, Ky.
S of H—Mules. Track gage 40 inches.
S of M—Hand.
PP—1 pump.
EMP—65. Daily tonnage 400.
SIZES SHIPT—Run of Mine, Pea, Nut, Lump.
PREP. EQUIPT—Bar Screens.

WILLIS-HARLAN COAL CO.

General Office, Middleboro, Ky.
PR—John Hoffman, Cincinnati, Ohio.
VP—M. L. George, Middleboro, Ky.
TR—L. F. Koring, Cincinnati, Ohio.
GM—M. L. George, Middleboro, Ky.
GS—C. W. Willis, Middleboro, Ky.
PA—C. W. Willis, Middleboro, Ky.
EM—C. P. Davidson, Middleboro, Ky.
SCO—P. L. Taylor Store, Buyer, P. L. Taylor, Pathfork, Ky.
SA—Kentucky Fuel Co., Cincinnati, O.

Mill Creek Nos. 1 and 2 Mines; Drifts, Harlan Seam, 78 inches thick.
PO—Pathfork, Ky.; SP—Felder, Ky.; CTY—Harlan; RR—L. & N.
S of H—Mules. Track gage 44 inches.
S of M—Hand.
PP—Power purchased, 2—100 K. W. gen. units, 230 volts D. C., 2 fire tube boilers.
EMP—40. Daily tonnage 100.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Washeries.

WILSON BERGER COAL CO. (THE).

General Office, Grays Knob, Ky.
PR—W. M. Gravatt, Blackston, Va.
VP—T. J. Collings, Crewe, Va.
TR—R. E. Wilson, Grays Knob, Ky.
GM—S. V. Preston, Grays Knob, Ky.
GS—S. V. Preston, Grays Knob, Ky.
PA—S. V. Preston, Grays Knob, Ky.
EE—P. M. Brown, Grays Knob, Ky.
SCO—Address the Company, Buyer, I. J. Sullivan, Grays Knob, Ky.
SA—Bewley Darst Coal Co., Knoxville, Tenn.

Mill Creek Mine; Drift; Smith Seam, 114 in. thick.
PO—Grays Knob, Ky.; SP—Harlan, Ky.; CTY—Harlan; RR—L. & N.
S of H—7 trolley pole type locos. Track gage 48 in.
S of M—2 overhead cutter machs.
PP—Power purchased, transformer 2200 to 220 volts A. C., rotary converters, 250 volts D. C., 2 pumps.
EMP—125. Last years tonnage 110,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Loading Booms.

Grays Branch Mine; Drift; Harlan & Wallus Seam, 48 in. thick.
PO—Grays Knob, Ky.; SP—Harlan, Ky.; CTY—Harlan; RR—L. & N.
S of H—2 trolley pole type locos. Track gage 48 in.
S of M—1 shortwall machs.
PP—Power purchased, transformer 2200 to 220 volts A. C., 250 volts D. C. in mine, 1 pump.
EMP—25. Last years tonnage 20,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

WINCHESTER COAL COMPANY

General Office, Prestonburg, Ky.
PR—N. M. White, Jr., Prestonburg, Ky.
VP—B. L. Porter, Emma, Ky.
TR—W. D. Judy, Jr., Prestonburg, Ky.
GM—B. L. Porter, Emma, Ky.
EM—C. G. Evans, Pikeville, Ky.
SA—Roberts-Brenneman Coal Co., Toledo, Ohio.

Winchester Mine; Drift; Millers Creek Seam, 52 in. thick.
PO—Emma, Ky.; SP—Same; CTY—Floyd; RR—C. & O.
MS—B. L. Porter, Emma, Ky.
S of H—Mules and rope. Track gage 42 in. S of M—Hand.
PP—1—150 H. P. fire tube boiler, 1—110 K. W. M. G. Set, 250 volts D. C., 2 pumps.
SIZES SHIPT—Run of Mine, Slack, Lump, Block.
PREP. EQUIPT—Gravity Screens, Loading Booms.

WINONA COAL & COKE COMPANY

General Office, Middleboro, Ky.
PR—J. L. Manning, Middleboro, Ky.
VP—W. E. Cahell, Middleboro, Ky.
TR—F. E. Hess, Middleboro, Ky.
GM—P. T. Colgan, Middleboro, Ky.
GS—H. J. Fallon, Rosworth, Ky.
PA—Robt. Lyons, Middleboro, Ky.
EM—J. C. Richardson, Middleboro, Ky.
SCO—Winona Store, Buyer, Robt. Lyons, Middleboro, Ky.
SA—Manning Coal Exchange, Middleboro, Ky.

Winona Mine; Drift; Winona Seam; 48 in. thick.
PO—Rosworth, Ky.; SP—Winona, Ky.; CTY—Bell; RR—L. & N., Sou.
S of H—Mules, 2 trolley pole type and 3 storage battery locos. Track gage 36 in.
S of M—Hand.
PP—Power purchased, Transformer 2,300 to 230 volts A. C., rotary converter, 1—150 K. W., 250 volts D. C., 7 pumps.
EMP—150. Daily tonnage 500.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Washeries.

WINSTON ELKHORN COAL CO.

General Office, Kewanee, Ky.
PR—D. R. Coleman, Kewanee, Ky.
VP—W. H. Price, Kewanee, Ky.
TR—Wm. Coleman, Kewanee, Ky.
GM—D. R. Coleman, Kewanee, Ky.
GS—W. H. Price, Kewanee, Ky.
PA—Wm. Coleman, Kewanee, Ky.
CE—Amick & Haynes, Pikeville, Ky.
SCO—Alvin Francis Co., Kewanee, Ky.

Winston Mine; Drift; Elkhorn Seam, 54 in. thick.
PO—Kewanee, Ky.; SP—Same; CTY—Pike; RR—C. & O.
S of H—2 trolley pole type locos. Track gage, 44 in.
S of M—3 electric punchers.
PP—2 water tube boilers, 100 H. P., gen. units, 250 volts A. C., 1 pump.
EMP—75-100. Last fiscal year output, 60,000 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.
Note—This mine formerly operated by Roger Bros. Coke Co.

Winston Mine; Drift; Auxier Seam, 48 in. thick.
PO—Regina, Ky.; SP—Marrowbone, Ky.; CTY—Pike; RR—C. & O.
S of H—Mules, Track gage, 42 in. S of M—Hand.
EMP—50. Daily output, 100 tons.
SIZES SHIPT—Run of Mine.
Old Information.

WISCONSIN COAL CORPORATION

General Office, Lexington, Ky.
PR—A. G. Hill, Beaver Dam, Wis.
VP—J. H. Rowling, Lexington, Ky.
TR—M. A. Jacobs, Beaver Dam, Wis.
GM—J. H. Rowling, Lexington, Ky.
GS—Paul Card, Sassafras, Ky.
CE—J. H. Rowling, Lexington, Ky.
EM—Paul R. Shields, Hazard, Ky.
SCO—Address the Company, Buyer, Russell Hibbs Sassafras, Ky.
SA—Southern Coal & Coke Co., Cincinnati, O.

Wisconsin Mine; Drift; No. 9 Seam, 80 in. thick.
PO—Sassafras, Ky.; FR—Same; EX—Hamdin, Ky.; CTY—Knott; RR—L. & N.
S of H—Trolley pole type locos. Track gage 48 in.
S of M—3 shortwall machs.
PP—Power purchased, Transformer 2,300 volts A. C., rotary converters, 250-275 volts D. C.
EMP—75. Daily tonnage 1,250.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

WISCONSIN STEEL COMPANY.

General Office, 606 Michigan Ave., Chicago, Ill.
PR—Herbert F. Perkins, 606 Michigan Ave., Chicago, Ill.
VP—C. F. Bigger, Chicago, Ill.
TR—W. M. Gale, 606 Michigan Ave., Chicago, Ill.
GS—R. W. Batchelder, Nashua, N.H.
PA—W. B. Edgar, 606 Michigan Ave., Chicago, Ill.
EM—R. E. Gilbreath, Benham, Ky.
EE—J. J. Gregory, Benham, Ky.
SCO—Address the Company, Buyer, P. T. Robinson, Benham, Ky.
Sales Agent, C. F. Bigger, 606 Michigan Ave., Chicago, Ill.

Wisconsin Steel Mine; Drift; C Seam 60 in. thick.
PO—Benham, Ky.; SP—Same; CTY—Harlan; RR—L. & N.
MS—F. J. O'Connell, Benham, Ky.
S of H—24 elec. locos. Track gage 44 in.
S of M—18 shortwall machs.
PP—3 water tube boilers, total 1,000 H. P., 4 gen. units, 250 volts D. C., 26 pumps.
EMP—600. Daily tonnage 2,000. Coke ovens, 408 Bee Hive.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
PREP. EQUIPT—Shaker Screens, Loading Booms, Box Car Loaders.
No. 2 Mine; Drift; C Seam; 66 in. thick.
PO—Benham, Ky.; SP—Same; CTY—Harlan; RR—L. & N.
MS—F. J. O'Connell, Benham, Ky.
S of H—10 elec. locos.
S of M—8 shortwall machs.
PP—2 pumps.
EMP—300. Daily tonnage 1,000.
SIZES SHIPT—Run of Mine.

WURLAND COAL COMPANY

General Office, Kenova, W. Va.
PR—George Washington, Russell, Ky.
VP—S. T. LeMaster, Kenova, W. Va.
TR—S. E. Way, Kenova, W. Va.
GM—George Washington, Russell, Ky.
Wurland Mine; Drift; 72 inches thick.
PO—Wurland, Ky.; SP—Russell, Ky.; CTY—Greenup; RR—C. & O.
S of H—Not decided.
S of M—Hand.
PP—Power purchased.
SIZES SHIPT—Run of Mine.

WYNN COAL COMPANY

General Office, Providence, Ky.
PR—Dr. E. N. Rice, Providence, Ky.
VP—J. C. Trader, Providence, Ky.
TR—Thas G. Rice, Providence, Ky.
GM—J. L. Herron, Providence, Ky.
GS—J. C. Trader, Providence, Ky.
PA—J. L. Herron, Providence, Ky.

Wynn Mine; Slope; No. 11 Seam; 72 in. thick.
PO—Providence, Ky.; SP—Same; CTY—Webster; RR—L. & N.
MS—J. L. Herron, Providence, Ky.
S of H—Mules, rope, steam. Track gage 36 in. S of M—Hand.
PP—1 80 H. P. boiler, 2 pumps.
EMP—35. Last years tonnage 20,000.
SIZES SHIPT—Run of Mine.

YAWNCE, A. J. COAL COMPANY

General Office, Pikeville, Ky.
PR—A. J. Yawnce, Pikeville, Ky.
Yawnce Mine.
PO—Pikeville, Ky.; SP—Same; CTY—Pike; RR—C. & O.
S of H—Mules and rope.
S of M—Hand.
SIZES SHIPT—Run of Mine, Lump.

YELLOW CREEK COAL CO.

General Office, Middleboro, Ky.
PR—J. G. Fitzpatrick, Middleboro, Ky.
VP—A. H. Rennebaum, Middleboro, Ky.
TR—E. S. Helburn, Middleboro, Ky.
GM—J. F. Bosworth, Middleboro, Ky.
PA—Geo. Veal, Middleboro, Ky.
EM—J. C. Richardson, Middleboro, Ky.
SCO—Address the Company, Buyer, F. W. Kitchens, Middleboro, Ky.

Yellow Creek Mine; Drift; Sterling Seam, 54 in. thick.
PO—Rosworth, Ky.; SP—Middleboro, Ky.; CTY—Bell; RR—L. & N., and Sou.
MS—Geo. Veal, Middleboro, Ky.
S of H—1 13-ton, 2 7-ton, 1 5-ton locos. Track gage 44 in.
S of M—4 shortwall machs.
PP—Power purchased. Test form r, 33,000-250 volts A. C., rotary converter, 150 K. W., 250 volt D. C.

EMP—250. Daily tonnage 700.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Washeries.

YELLOW HILL COAL CO.

General Office, Middleboro, Ky.
PR—B. T. Culbertson, Dunganon, Va.
VP—R. F. Swann, St. Paul, Va.
TR—W. E. Dinos, Dunganon, Va.
GM—R. L. Smythe, St. Paul, Va.
CE—N. H. Perkins, Middleboro, Ky.
SA—Chas. G. Smythe, Middleboro, Ky.

Yellow Hill Mine; Drift; Turner Seam, 48 in. thick.
PO—Middleboro, Ky.; SP—Same; CTY—Bell; RR—L. & N.
MS—J. Paul Johnson, Middleboro, Ky.
S of H—Mules. Track gage 44 in.
S of M—Hand and longwall machs.
EMP—25. Daily tonnage 100.
SIZES SHIPT—Run of Mine.

YERKES COAL COMPANY.

General Office, Hazard, Ky.
PR—G. W. Fleenor, Winchester, Ky.
TR—W. W. Perryhouse, Hazard, Ky.
GS—W. W. Perryhouse, " "
PA—W. W. Perryhouse, " "
CE—J. B. Allen, Yerkes, Ky.

No. 6 Mine; Drift; No. 6 Seam; 36 in. thick.
PO—Yerkes, Ky.; SP—Same; CTY—Perry; RR—L. & N., L. & E. Br.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine.
Old Information.

YORK COAL CORPORATION

General Office, 118 E. 57th St., New York, N. Y.
PR—Dr. Schulliser, New York, N. Y.
VP—L. M. Palay, New York, N. Y.
TR—L. S. Moissac, New York, N. Y.
GM—Max Meyer, Krypton, Ky.
PA—Max Meyer, Krypton, Ky.
CE—J. B. Allen Eng. Co., Hazard, Ky.
SCO—Address the Company, Buyer, Max Meyer, Krypton, Ky.
SA—Max Meyer, Krypton, Ky.

York Mine; Drift; No. 4 Hazard Seam, 44 inches thick.
PO—Krypton, Ky.; SP—Same; CTY—Perry; RR—L. & N.
S of H—Mules, Track gage 42 in.
S of M—Hand.
PP—1 15 H. P. fire tube boiler, 2 pumps.
EMP—50. Daily tonnage 250.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.

YOUNCE COLLIERIES COMPANY

Younce Mine.
PO—Mossy Bottom, Ky.; SP—Same; CTY—Pike; RR—C. & O.
No report.

YOUNG & MORGAN

General Office, Providence, Ky.
PR—E. M. Young, Providence, Ky.
TR—E. M. Young, Providence, Ky.
GS—E. M. Young, Providence, Ky.
PA—E. M. Young, Providence, Ky.
CE—C. M. Butterfield, Providence, Ky.
SCO—Address the Company, Buyer, E. M. Young, Providence, Ky.

Young & Morgan Mine; Slope; No. 9 Seam, 58 inches thick.
PO—Providence, Ky.; SP—Same; CTY—Webster; RR—L. & N., L. & N.
S of H—Rope. Track gage 42 inches.
S of M—Hand.
PP—1 fire tube boiler, 100 H. P.
EMP—35.
PREP. EQUIPT—Shaker Screens.

ZELLA MINING COMPANY

General Office, Ashland, Ky.
PR—S. S. Willis, Ashland, Ky.
VP—W. A. Miller, Ashland, Ky.
TR—R. D. Clark, Ashland, Ky.
GM—J. P. Brown, Ashland, Ky.
GS—J. P. Brown, Ashland, Ky.
CE—J. P. Brown, Ashland, Ky.
SA—Ashland Coal Co., Ashland, Ky.

Additional Information on Pages 462, 463.
Zella Mine; Drift; Elkhorn Seam, 54 in. thick.
PO—Lacey, Ky.; SP—Same; CTY—Floyd; RR—C. & O.
S of H—Mules. Track gage 44 in.
S of M—Hand.
EMP—50. Last years tonnage 33,000.
SIZES SHIPT—Run of Mine.

Directory of Mines by Counties

KENTUCKY

Company.	Mines.	Post Office of Mines.
Atlantic Fuel Co.	Wallsand	Pineville
Atlas Coal Mining Co.	Atlas	Kalston
Barley Coal Co.	Bailey	Blaucha
Bell Block Coal Co.	Bell Block	Pineville
Bellman Coal Co.	Bellman	Bosworth
Bonita's Fork Coal Mining Co.	Bennetts Fork	Bosworth
Blue Ridge Coal Co.	Slope	Pineville
Boon's Trail Coal Co.	Boone Trail	Pineville
Boon's Trail Coal Co.	Easley No. 1, Lark	Straight Creek
Brooking Coal Co.	Brooking Mine	Pineville
Cain Coal Co.	Keeney	Cary
Chenow-Hignite Coal Co.	Chenow-Hignite	Chenow
Clear Fork Coal & Coke Co.	Clear Fork	Fonde
Climax Coal Co.	Shamrock & Edgewood	Shamrock
Clover Leaf Coal Co.	Clover	Middlesboro
Coleman Mining Co.	Fox Ridge	Cary
Conant Coal Co.	Conant	Pineville
Congress Coal Mining Co.	Congress	Shamrock
Crane Creek Coal Co.	Crane Creek	Colmar
Crystal Coal Co.	Popular, Lick and Hignite	Logmont
Dean Branch Coal Co.	No. 1	Belljellico
Devon Coal Co.	Devon	Balkan
Dry Branch Coal Co.	Dry Branch	Balkan
East Point Coal Co.	East Point	Bosworth
Federal Coal Co.	Castro and Cary	Cary
Federal Coal Co.	Glendon	Arjay
Gravity Coal Mining Co.	Gravity	Gravitt
Gunn, W. E. & Co.	Lower Hignite	Middlesboro
Hawley Coal Co.	Hawley	Shamrock
Hignite Coal Mining Co.	Hignite	Shamrock
Home-Run Coal Co.	Home-Run	Middlesboro
Indian Creek Coal Co.	Black Bear	Four Mile
J. B. Straight Creek Mining Co.	Murn and Raven	Four Mile
Jaybee Jellico Coal Co.	East Jellico	Tinsley
Kentucky Cardinal Coal Corp.	No. 1	Cardinal
Kentucky Ridge Coal Co.	Kentucky Ridge	Straight Creek
Kentucky Straight Creek Coal Co.	Kentucky Straight Creek	Pineville
Kruse Coal & Mining Co.	Callaway	Callaway
Landrum Coal Co.	Arjay	Arjay
Layman Callaway Coal Co.	Layman Callaway	Pineville
Lewis Coal Co.	Lewis	Pineville
Liberty Coal & Coke Co.	Barker No. 4	Straight Creek
Log Mountain Coal Co., Inc.	Poplar Lick No. 4	Harrison
Long Ridge Coal Co.	Long Ridge	Hulen
Low-Ash Mining Co.	Excelsior, Howe Run and Fern Lake	Middlesboro
Mathel Coal Co.	Mathel	Callaway
Monarch Coal & Coke Co.	Monarch	Hollingsworth
New Straight Creek Mining Co.	New Straight Creek	Pineville
Pickering Branch Coal Co.	Pickering Branch	Kettle Island
Pine Ridge Coal Mining Co.	"Italy"	Tinsley
Pinnacle Coal Mining Co., Inc.	Pinnacle	Kalston
Pioneer Coal Co.	Pioneer No. 1	Kettle Island
Pine-Jellico Coal Co.	Pine Jellico	Four Mile
Roth Coal Co.	Roth No. 1	Arjay
S.W.H-Jellico Coal Co.	S.W.H-Jellico	Four Mile
Smith & Brashear Coal Co.	Smith and Brashear	Middleboro
Southern Mining Co.	Amru No. 1	Colmar
Southern Mining Co.	Balkan	Balkan
S. & S. Coal Co.	S. & S.	Middlesboro
Standard Harlan Coal Co.	Thorpe Arcadia	Pineville
Utility Gas Coal Co.	Traction	Four Mile
Vander-Harlan Coal Co.	Over the Top	Pineville
Vinson-Kelb Coal Co.	Vinson Kelb	Box 297, Pineville
Wagner Coal Co.	Wagner	Blancie
Willthor Coal Co.	No. 2	Middlesboro
Winona Coal & Coke Co.	Winona	Bosworth
Yellow Creek Coal Co.	Yellow Creek	Bosworth
Yellow Hill Coal Co.	Yellow Hill	Middlesboro

BOYD COUNTY		
Ashland Coal & Fire Clay Co.	Ashland	Ashland
Ashland Iron & Mining Co.	Rush No. 12, Winslow No. 8 & Coalton No. 7	Ashland
Big Run Coal Co.	Princess	Princess
Carbon Mining Co.	Carbon	Ashland
Carbon Mining Co.	Carbon	Princess
Clare Coal Co.	Clare No. 1	Coalton
Princess Coal Co.	Princess	Princess
Thomas Coal Co.	Horse Branch	Ashland

BREATHITT COUNTY		
Barwick Coal Co.	Barwick	Barwick
Bear Creek Coal Co.	Bear Creek	Simpson
Cain, Emory	Jones-Cain	Jackson
Davis, R. T. Coal Co., Inc.	Davis	Jackson
Ellis Coal Co.	Ellis	Saldee
Friend-Kash Coal Co.	Friend	Whick
Jackson Block Coal Co.	Jackson Block	Jackson
Jones Bros. Coal Co.	Jones Bros.	Jackson
Kentucky River Mining Co.	Five Mile	Cannel City
Peacock Coal Co.	Peacock	Altro
Progressive Coal Co.	Progressive	Calla
Riverside Coal Co.	Riverside	Gum
Butthanne Coal Co.	Butthanne Nos. 1, 2 and 3	Wolfcreek
Saldee Coal Co.	Saldee	Saldee
Spencer Coal Co.	Spencer No. 1	Frozen Creek
Washington Coal Co.	Gambill's	Saldee

CAMPBELL COUNTY		
Proctor Coal Co.	Indian Mountain	Red Ash

CARTER COUNTY		
Drayer Coal Co.	Drayer	Willard
Dry Fork Coal Co.	Dry Fork	Bells Trace
General Refractories Co.	General Refractories	Hitekins
Harbison-Walker Refractories Co.	Harbison-Walker	Hinton
Johns Run Coal Co.	Johns Run No. 1	Leedville
Kentucky Gem Coal Co.	Kentucky Gem	Rush

Company.	Mines.	Post Office of Mines.
Lick Creek Coal Co.	Lick	Willard
Little Fork Coal Co.	Kauns	Willard
Strother, J. P.	Star	Kilgore
Thayer, N.	Lost Creek	Partlow
Willard Coal Co.	Willard	Willard

CHRISTIAN COUNTY		
Empire Coal Co.	Empire	Empire
Memphis Coal Mining Co.	Dixie & Petersburg	Mannington
Williams Coal Co.	Williams	Mannington

CLAY COUNTY		
Bruner Coal Co.	Bruner	Manchester
Clay County Coal Co., Inc.	Clay County	Hima
Columbia-Panama Coal Co.	Columbia-Panama No. 1	Manchester
Furnace Gap Coal Co.	Eureka Nos. 1, 2, 3 and 4	Hima
Goose Creek Coal Co.	Goose Creek	Girard
Gregory Branch Coal Co.	Gregory Creek	Sibert
Hensley Coal Co.	Marling Glow	Manchester
Hughes Horse Creek Coal Co.	Hughes Horse	Sibert
King Blue Gem Coal Co.	No. 1	Crawfish
Morning Glow Coal Co.	Morning Glow	Hima
Queen Blue Gem Coal Co.	Queen Blue Gem	Manchester

CLUTTS COUNTY		
Looney Creek Coal Co.	Looney Creek No. 1	Pee Vee

DAVIESS COUNTY		
Maglinger Westerfield Coal Co.	Maglinger	Owensboro
Ratican-Jarboe Coal Co.	Ratican-Jarboe	Owensboro
Rudy, Geo. H. & Co.	Rudy	Owensboro

FLOYD COUNTY		
Anchor Coal Co.	Anchor	Prestonsburg
Bailey Ferguson Coal Co., Inc.	No. 1	Alphoretta
Beaver Creek Coal Co.	Beaver Creek	Alphoretta
Beaver Elkhorn Coal Co.	No. 1	Betinsville
Big Elkhorn Coal Co.	Nos. 1 and 2	Betsy Layne
Blackburn Coal Co.	No. 1 and 2	Alphoretta
Blue Beaver Coal Co.	Beaver Pond	Prestonsburg
Blue Beaver Elkhorn Coal Co.	Nos. 1, 2, 3 and 4	Ligon
Bucks Branch Coal Co.	Bucks Branch	Smalley
Bull Creek Coal Co.	Bull Creek	Prestonsburg
Camp Branch Coal Co.	Camp Branch	Lyle
Cancy Fork Collieries Co.	Drift	Asbland
Carey Elkhorn Coal Co.	Carey Elkhorn	Alphoretta
Cliff Coal Co., The	Cliff	Cliff
Collins Mining Co.	Bush	Lackey
Colonial Coal & Coke Co.	Colonial	Prestonsburg
Cow Creek Coal Co.	Cow Creek	Emma
Cumberland Coal & Coke Co.	Cumberland No. 1	Malvin
Dwale Coal Co., Inc.	Dwale	Malvin
Edgmont Fuel Co.	Edgmont	Malvin
Elkhorn Gas Coal Co.	Elkhorn Gas	Smalley
Elk Horn Coal Corp.	Nos. 325 to 331	Wayland
Elk Horn Coal Corp.	Nos. 377 to 381	Wheelwright
Elkhorn Block Coal Co., Inc.	Elkhorn	Orkey
Elkhorn Piney Coal Mining Co.	Weeksbury Nos. 1, 2, 3, 4, 5, 7	Weeksbury
Elkhorn Star Coal Co.	Elkhorn Star Nos. 1 and 2	Minnie
Emm-Elkhorn Coal Co.	George	Allen
Eureka Coal & Mining Co., The	Eureka	Prestonsburg
Floyd-Elkhorn Consolidated Collieries	Floyd-Elkhorn	Drift
Glogora Coal Co.	Glo	Glo
Gondy & Barney Coal Co.	Nos. 1 and 2	Gretz
Harold Coal & Coke Co.	Harold	Harold
Holly Collieries Co.	Vimy Ridge	Lackey
Huntington Coal Mining Co.	Mine No. 3	Prestonsburg
Jacks Creek Coal Co.	Smallwood	Bevinsville
Jackson Creek Coal Co.	Smallwood Nos. 1 and 2	Smallwood
Jon's Collieries Co.	Banner	Banner
Kentucky Beaver Collieries Co.	Kentucky Beaver	Banner
Lackey Coal Mining Co.	Lackey	Lackey
Layne Coal Mining Co., The	Layne	Harold
Liberty Coal Corp.	Liberty	McDowell
Long Branch Coal Co.	Long Branch	Ashland
Long Branch Coal Co.	Printer Elkhorn	Printer
Loyal Elkhorn Coal Co.	Loyal	Malvin
McGuire Elkhorn Coal Co.	No. 1	Smalley
Malone-Elkhorn Coal Co.	Malone Elkhorn	Allen
Martha Leslie Coal Co.	Martha Leslie	Emma
Middle Creek Coal Co., The	Middle Creek	Prestonsburg
North East Coal Co.	Nos. 7, 8 and 9	Aux-r
North Elkhorn Coal Co.	Nos. 1 and 2	Prestonsburg
Parker Elkhorn Coal Co.	Parkers Elkhorn	Smalley
Pike Floyd Coal Co.	Pike Floyd	Betsy Layne
Pivot Rock Coal Co.	Osborne	Smalley
Porter Mining Co.	Argonne and Verdun	Lackey
Prestonsburg Coal Co., The	Nos. 1 and 2	Prestonsburg
Purity Cannel Coal Co., The	Purity Cannel	Prestonsburg
Regal Block Coal Co.	Regal Block	Leel
Royal Elkhorn Coal Co., The	Royal No. 1	McDowell
St. Paul Coal Co.	St. Paul	Betsy Layne
Samost Fuel Corp.	Samost	Smalley
Standard Elkhorn Coal Co.	Standard	Garr-tt
Stover-Elkhorn Coal Co.	Holly	Lackey
Superior Elkhorn By-Products Coal Co.	Superior Elkhorn	Bevinsville
Superior Elkhorn Coal Co.	Basco	Lackey
Trivette Elkhorn Coal Co.	Trivette Elkhorn	Smalley
Turner Elkhorn Coal Co.	Turner	Drift
Waldon Coal Co.	Waldon	Emma
Wells Elkhorn Coal Co.	Nos. 1, 2, 3, 4 and 5	Estill
Winchester Coal Co.	Winchester	Emma
Zella Mining Co.	Zell	Lackey

GREENUP COUNTY		
Wurtland Coal Co.	Wurtland	Wurtland

HANCOCK COUNTY		
Central Kentucky Block Coal & Mineral Co.	Prosperity	Hawesville
Devine, M. E.	Devines	Hawesville

HARLAN COUNTY		
Company.	Mines.	Post Office of Mines.
Banner Fork Coal Corp.	Banner Fork Nos. 1 and 2.	Kentonia
Benito Coal Co.	Benito	Lejunior
Berger Coal Mining Co., Inc.	No. 1	Lejunior
Bowling Coal Mining Co.	Bowling	Harlan
Hoyer, Wm. D. & Co., Trustee.	Bear Branch	Verda
Can-Bit Coal Co., The.	Can-Bit	Wallins Creek
Chase Coal Co., The.	Nos. 2 and 3.	Middleboro
China Coal Co.	Bull Dog	Wallins Creek
Clover Fork Coal Co.	Clover Fork	Kitts
Cornett-Lewis Coal Co.	Cornett-Lewis	High Split
Creech Coal Co.	Creech	Tallia
Crown By-Product Coal Co.	Crown	Chevrolet
Darby-Harlan Coal Co.	Harlan	Evarts
Evarts Coal Co.	Harlan	Evarts
East Harlan Coal Co.	Ages	Ages
Golden Ash Coal Co.	Golden Ash	Kitts
Harlan Collieries Co.	Brookside	Ages
Harlan Co-Operative Coal Co.	Nos. 1 and 2	Evarts
Harlan-Cumberland Coal Mining Co.	Harlan-Cumberland	Totz
Harlan Fuel Co.	Yancey	Harlan
Harlan Gas Coal Co.	Harlan	Harlan
Harlan Kelliloka Coal Co.	Harlan Kelliloka	Harlan
Harlan-Peacock Coal Co.	Harlan-Peacock	Pineville
High Split Coal Co.	High Split Harlan and High Split	High Split
Harlan Superior Coal Co.	Superior	Chevrolet
High Point Coal Co.	High Point	Ages
J. R. Blue Gem Coal Co.	Wood	Black Joe
Kelliloka Coal Co., The.	Kelliloka	Nolanburg
Kelly & Luns Coal Co.	Kelly & Luns	Harlan
Kentucky Cardinal Coal Corp.	No. 1	Cardinal
Kentucky-Harlan Coal Co.	Bat Wing	Harlan
Kentucky-Harlan Coal Co.	Kentucky Harlan	Harlan
Kentucky King Coal Co.	Kentucky King	Wallins Creek
King Harlan Co.	King Harlan	Kildav
Kitts Creek Coal Co.	Kitts	Harlan
Lena Rue Coal Co.	Lena Rue No. 1	Lenore
Mary Helen Coal Corp.	Mary Helen	Coalgood
McComb Coal Co.	McComb	Elcomb
Meisroff Coal Co.	Cuxton, Kayu	Coxton
Miller and Sharp Coal Co.	Miller and Sharp	Lejunior
Mingelga-Harlan Coal Co.	Mingelga Harlan	Harlan
Model Coal Co.	Model	Lejunior
Molus Coal Co.	Molus	Molus
Nelson Coal Co.	Wilkes	Molus
Nolanburg Coal Co.	Harlan	Nolanburg
P. V. K. Coal Co.	Clover Gap	Lejunior
Paris Coal Co.	Paris	High Split
Peabody Coal Co.	No. 20	Kenvir
Perkins-Harlan Coal Co., Inc.	Perkins-Harlan	Elgett
Platts Fork Mining Co.	Platts Fork	Wallins Creek
Rex Coal Co.	Rex Red Ash	Kitts
Riverside Coal Mining Co.	Riverside	White Star
Rocky Branch Coal Co.	Rocky Branch	Pineville
Bye Hollow Coal Co.	Springton	Evarts
Sargent Coal Co.	Sargent	Evarts
Shawnee Gas Coal Co.	Shawnee Gas	Harlan
Smith, J. L. Coal Co., The.	Draper	Kildav
Standard Harlan Coal Co.	Ages-Green	Ages
Standard Harlan Coal Co.	Middleton and Brown	Evarts
Sugar Camp Mining Co.	Sugar Camp	Evarts
Superior Harlan Coal Co.	Superior Harlan	Evarts
Tway, R. C. Coal Co.	Tway	Harlan
United States Coal & Coke Co.	Lynch	Lynch Minea
Upper Harlan Coal Co.	Upper Harlan	Lejunior
Wallins Creek Collieries Co.	Black Star	Wallins Creek
Wallins Creek Collieries Co.	Comet	Harlan
Wheeler Boone Coal Co.	Wheeler Boone	Wallins Creek
Willis-Harlan Coal Co.	Mill Creek Nos. 1 and 2	Pathfork
Wilson Berger Coal Co. (The).	Mill Creek, Grays Branch	Grays Knob
Wisconsin Steel Co.	Wisconsin Steel and No. 2	Benham

HENDERSON COUNTY		
Archbold, John Coal Co.	Bluff City	Bluff City
Canoe Creek Coal Co.	Canoe Creek	Henderson
Dixie Coal Co.	Flower Hill	Spotsville
Jennings Coal Co.	Jennings	Route No. 5 Henderson
Kentucky Diamond Coal Co.	Corydon	Corydon
Kleiderer, L. P. Coal Co.	Kleiderer	Henderson
Mid-West Fuel Co.	Mid-West	Henderson
Nicholson Mining & Mfg. Co.	"Hot Stuff"	Henderson
Panama Coal Co.	Panama Mine	Rohards
Pennyrile Coal & Mining Co.	Pennyrile	Smith Mills
Pittsburgh Coal Co.	Blairs	Baskett
Southland Coal Co.	Henderson Nos. 1 and 3	Henderson

HOPKINS COUNTY		
Caney Creek Coal Co.	Caney Creek	Daniel Boone
Chickasaw Coal Co.	Chickasaw	Madisonville
Circle City Coal Co.	Circle	Neha
Coll Coal Co.	Coll	Madisonville
Dunning Gordon Mining Co.	Pigeon Run Nos. 1 and 2	St. Charles
Grapevine Coal Co.	Grapevine	Madisonville
Hamblett Mining Co.	Hamblett	Madisonville
Hart Coal Corp.	Browning No. 3, Victoria Nos. 9 and 11 and Moss Hill Nos. 1 and 2	Mortons Gap
Isley Mining Co.	Crabtree Nos. 1 and 2, Strip Pitt	Isley
Mason Mining Co.	No. 1	Isley
Norton Coal Mining Co.	Carbondale	Dawson Springs
St. Bernard Mining Co.	Nos. 1, 2 and 3	Nortonville
St. Bernard Mining Co.	Nos. 9 and 11, Hecla, Arnold	Earlington
St. Bernard Mining Co.	Diamond	Mortons
St. Bernard Mining Co.	Luton	Providence
Stirling Coal Co. of Ky., Inc.	St. Charles	St. Charles
Sunlight Collieries Co., Inc.	Daniel Boone, Seminole	Daniel Boone
Sunlight Mining Co.	Sunbeam	Madisonville
Sunset Coal Co.	Sunlight	Madisonville
West Jellico Coal Co.	Royal	Madisonville
	West Jellico	Nortonville

JOHNSON COUNTY		
Ayers & Lang.	Chat-ta-rol	Williamsport
Consolidation Coal Co., The.	Nos. 151, 152, 153, 154 and 155.	Van Lear
Denver Coal Co.	Denver	Denver
Green Rock Coal Co.	Green Rock	Riceville
Jenny Creek Block Coal Co.	Jenny Creek Block	Denver
Line Branch Coal Co.	Line Branch	Hagerhill
Minor's Elkhorn Coal Co.	Minor's Elkhorn	Sherman
North East Coal Co.	Nos. 1, 2 and 4	Thelka
North East Coal Co.	No. 15	Whitehouse
Royal Collieries Co., The.	Royal Collieries	Offutt

KNOX COUNTY		
Company.	Mines.	Post Office of Mines.
Knott Coal Corp.	Knott	Sassafras
Perkins-Bowling Coal Corp.	Perkins-Bowling	Sassafras
Wisconsin Coal Corp.	Wisconsin	Sassafras

KNOX COUNTY		
Bradley-Jellico Coal Co.	New Hughes	Elys
Carter Coal Co.	Warren No. 4	Warben
Carter Coal Co.	Trosper	Trosper
Carter Coal Co.	Anchor	Anchor
Charles Coal Co.	No. 4	Artemus
Cove Branch Coal Co.	Cove Branch	Wilton
Eunis Coal Co.	Tuffany	Himyar
Franklin Coal Co.	Franklin	Artemus
Greasy Gap Coal Co.	Greasy Gap	Wheeler
Gordon-Miller Coal & Coke Co.	Lyndale	Gray
Herja Blue Gem Coal Co.	Herja Blue Gem	Barbourville
Huron Coal Co.	Huron	Barbourville
Jackson Coal Mining Co.	Dean	Artemus
Kanawha Knott Coal Co.	Kanawha Knott No. 1	Elys
K. D. Blue Gem Coal Co.	No. 1	Barbourville
Knott Blue Gem Coal Co.	Blue Gem	Barbourville
Miracle Blue Gem Coal Co.	Miracle Blue Gem	Cannon
North Jellico Coal Co., The.	Wilton, Olive Hill	Wilton
Richland Coal Co.	Richland	Emanuel
Richland Creek Coal Co.	Richland Creek	Barbourville
Star Hill Coal Co.	Star Hill	Barbourville
Steel & Alder Coal Co.	Steel & Alder	Girdler
Sun Coal Co.	Flat Lick	Flat Lick
Tazewell Coal Co.	Tazewell	Lay
Trace Branch Coal Co., Inc.	Trace Branch	Barbourville
Trine Coal Co.	Trine	Himyar
Turner-Jellico Coal Co.	Turner-Jellico	Emanuel
Wheeler Coal Co.	Trosper No. 1 and Power No. 2	Trosper

LAUREL COUNTY		
Crescent Coal Co.	Crescent	Viva
Frantz-Jellico Coal Co.	Frantz-Jellico	Fariston
Horse Shoe Coal Co.	Diamond	East Bernstadt
Kentucky-Georgia Coal Co.	Boat	East Bernstadt
Keystone Jellico Coal Co.	Standard	East Bernstadt
McCarthy Coal Co.	Vulcan	East Bernstadt
McNeill Bros. Coal Co.	Jewell & Klondike	Viva
Mountain Gem Coal Mining Co.	Mountain Gem	East Bernstadt

LAWRENCE COUNTY		
Crystal Block Coal Co.	Crystal Block	Richardson
McStoff Coal Co.	McStoff	Superior
Seaburn Coal Co.	Peach Orchard	Peach Orchard
Torchlight Coal Co.	Torchlight	Superior

LEE COUNTY		
Beattyville Coal Co.	Beattyville	Beattyville
Cressmont Coal Co., Inc.	Cressmont	Cressmont
Dudley Park Coal Co., The.	Dudley Park	Heidelberg
Warner Coal Co.	White Ash	Beattyville
Wheeler Heaton Coal Co.	Wheeler Heaton	Cressmont

LETCHER COUNTY		
Acme By-Product Coal Co.	Etna	Fleming
Adamson Coal Co.	Adamson	Jenkins
Amberg Coal Co.	Amberg	Dalna
Barking Coal Co.	Barking	Dalna
Barking Coal Co., Jr. Coal Co.	Bentley	Jenkins
Blackey Coal Co.	Blackey	Blackey
Blackey Coal Co.	Tayma	Blackey
Candill Coal Co.	Whitesburg	Whitesburg
Consolidation Coal Co., The.	Consolidation Nos. 201 and 202	Burdine
Consolidation Coal Co., The.	Consolidation Nos. 203, 204 and 205.	Jenkins
Consolidation Coal Co., The.	Consolidation Nos. 206, 207 and 208.	Dunham
Consolidation Coal Co., The.	Consolidation Nos. 210, 211, 212, 213, 214 and 215.	McRoberts
Consolidated Fuel Co.	Jessie, Elsie, Sara	Dalna
Cowan Creek Coal Co.	Cowan Creek	Ice
Dudley Coal Co.	Dudley	David
Eden Coal Co.	Eden	David
Elk Creek Coal Co.	Elk Creek	Blackey
Elk Horn Coal Corp.	Nos. 301 to 307	Fleming
Elkhorn Coal Co.	Elkhorn Nos. 1 and 2	Mater
Elkhorn Collieries Co., Inc., The.	Winters Nos. 1, 2 and 3 and Cannel No. 1	Thornton
Elkhorn Hazard Coal Co.	Elkhorn-Hazard	Whitesburg
Elkhorn & Jellico Coal Co.	Elkhorn, Hazard and Whitesburg	Whitesburg
Elkhorn-Jellico Coal Co.	Elkhorn-Jellico Nos. 1 and 2	Whitesburg
Elkhorn Junior Coal Co.	Elkhorn Junior	Millstone
Huntington By-Product Coal Co.	By-Product	Burdine
Imperial Elkhorn Coal Co.	Nos. 25, 26 and 27	Sargent
Jenkins Coal Co.	No. 1	Jenkins
Logan Elkhorn Coal Corp.	Parsons No. 7	Fleming
Marian Coal Co.	Marian	Blackey
Mayking Coal Co.	Mayking	Mayking
Pine Creek Coal Co.	Pine Creek	Mayking
Rockhouse Coal Co.	Rockhouse	Blackey
South-East Coal Co.	No. 1	Millstone
South-East Coal Co.	No. 2	Millstone
Utah Coal Co.	Utah	Bluefield
Whitesburg Coal Co., Inc.	Whiteo	Whitesburg

MARTIN COUNTY		
Earlston Coal Co.	Earlston	Kermit W. Va.
Himler Coal Co.	Himler No. 1	Himlerville

McCREARY COUNTY		
Bry-Mac Coal Co.	West Jellico	Strunk
Comargo Coal Co.	Comargo	Laclemman
Eagle Coal Co., The.	Eagle	Barren Fork
Erskine, J. D.	Erskine	Parkers Lee
Paint Cliff Mines Co.	Paint Cliff	Paint Cliff
Premier Coal Co.	Premier	Yamacraw
St. Mihel Coal Co.	St. Mihel	Paint Cliff
Stearns Coal & Lumber Co.	No. 1	Shoupman
Stearns Coal & Lumber Co.	No. 4	Barthell
Stearns Coal & Lumber Co.	Nos. 10 and 11	Worley
Tate & Souleuvre Co.	T. & S.	Indian Head
Virginia Mining Co.	West Jellico	Strunk

McLEAN COUNTY		
Company.	Mines.	Post Office of Mines.
Alva Coal Co.	Rames	Island
E. M. T. Coal Co.	E. M. T.	Island
Island Coal Co.	Island	Island
Lackey, A. C.	White	Island
Lingard Coal Co.	No. 1	Island
Penrod Coal Co.	Penrod	Island

MINGO COUNTY		
Tharcker Coal Mining Co.	Tharcker	Rose Siding, W. Va.

MORGAN COUNTY		
J. B. Hickory Cannel Coal Co.	Meadows	Redwine
Kentucky Block Cannel Coal Co.	No. 20 and E. Brushy	Cannel City
Lee Coal Co.	Lee No. 1 and Lee No. 2	Redwine
Okey Meadows Elkhorn Coal Co.	Okey Meadows Elkhorn	Redwine
Premium Cannel Coal Co.	Premium Cannel	Lenox

MIDDLEBURY COUNTY		
Beech Creek Coal Co.	Beech Creek Nos. 1 and 2	Beech Creek
Beech Creek Coal Co.	No. 3	Drakesboro
Elton Coal Co.	Elton	Yost
Evil Coal Co.	Evil	Cleaton
Black Diamond Coal & Mining Co.	Black Diamond Nos. 1 and 2	Drakesboro
Crescent Coal Co.	Crescent	Bevier
Duncan, W. G. Coal Co.	Graham	Graham
Duncan, W. G. Coal Co.	Luzerne	Luzerne
Gibraltar Coal Mining Co.	Gibraltar	Mercer
Gibraltar Coal Mining Co.	Holt	Cleaton
Gibraltar Coal Mining Co.	Brownie	Central City
Green River Collieries Co.	Green River	Mog
Greenville Coal Co.	Powderly	Powderly
Hayden-Smith Coal Co.	Martwick	Martwick
Kentucky Midland Coal Co.	Hayden-Smith	Mercer
Kirk Coal Co.	Midland	Midland
Liberty Coal Mining Co.	Kirk	Beech Creek
Madison Coal Corp.	Woodsoo	Hillside
Mercer Coal Co.	No. 10	Central City
Middle West Coal Co.	Mercer	Mercer
Nelson Creek Coal Co.	Nos. 1 and 2	Depoy
Oakland Coal Co.	Nelson	Nelson
Pacific Coal Mining Co.	Oakland	Hillside
Phoenix Coal Co.	Morgan	Mercer
Rogers Bros. Coal Co.	Nos. 1 and 2	Tarma
Wickliff, W. A. Coal Co.	Bevier	Bevier
	Browder	Browder

OHIO COUNTY		
Alva Coal Co.	Horton	Horton
Beaver Dam Coal Co.	Taylor	Beaver Dam
Bishop Coal Co.	Williams	McHenry
Broadway Coal Mining Co.	Bishop	Centertown
Cummings & Day	Roadway	Simmons
Hamilton, Wm.	Ellis	Deanfield
Holt Bros. Mining Co.	Martin and Pallock	Cromwell
Kentucky Coke Co.	Render	McHenry
Kimbley Coal Co.	Echols	Echols
McHenry Coal Co.	McHenry	Centertown
Render Coal Co.	Render	McHenry
Rockport Coal Co.	Rockport No. 1	Rockport
Tichenor Coal Co.	Tichenor	McHenry
West Hartford Coal Co.	West Hartford	Hartford

PERRY COUNTY		
Acup Creek Coal Co.	Acup Creek	Jeff
Ajax Coal Co.	"Ajax"	Bullay
Algoma Block Coal Co.	Algoma	Lothair
Ashless Coal Corp.	Ashless Nos. 1 and 2	Lothair
Baker Coal Co., The	Baker	Viper
Black Joe Coal Co.	Bonards	Typo
Blue Diamond Coal Co.	Blue Diamond	Blue Diamond
Bollinger-Jones Coal Co.	Bollinger	Charles
Carrs Fork Coal Co.	Carrs Fork Nos. 1 and 2	Albion
Clinton Coal Co.	Clinton	Jeff
Columbus Mining Co.	Nos. 3, 4, 5 and 6	Hazard
Calwell Rlyth Coal Co.	Dacon	Y rles
Commercial Coal Mining Co.	Klenoe	Elviah
Crawford Coal Corp.	Crawford	Bonnyman
Darh Fork Coal Co.	Darh Fork	Hazard
Defiance Coal Mining Co.	Defiance	Happy
Diamond Block Coal Co.	Diamond Block	Diablock
East Kentucky Coal Co.	East Kentucky	Pisonia
First Creek Mining Co.	First Creek	Blue Diamond
Fort Branch Coal Co.	Fort Branch	Pisonia
Fourseam Block Collieries Co.	Fourseam Nos. 1, 2, 3 and 4	Diablock
Happy Coal Co.	Happy	Happy
Hardy Burlington Mining Co., The	Hard-Burly	Hardbury
Hazard Block Coal Co., Inc.	Hazard Block	Happy
Hazard Blue Grass Coal Corp.	Nos. 1 and 2	Hazard
Hazard Jellico Coal Co.	Harvey	Staub
Hazard Junior Coal Co.	Hazard Junior	Typo
Himvar Coal Co.	Domino	Domino
Hombre Coal Co.	Palm r	Hombre
Indian Head Coal Co.	Indian Head	Hazard
Kentucky Block Mining Co.	Kentucky Block	Typo
Kennont Coal Co.	Kennont	Jeff
Kentucky River Coal Mining Co.	Whitsett No. 1	Heiner
Leaford Coal Co.	Leaford	Krypton
Liberty Coal Co.	Liberty	Bonnyman
Lincoln Coal Co., The	Lincoln	Krypton
Lots Creek Coal Co.	Lots Creek	Bulan
Masons Creek Coal Co.	Mason	Viper
Maverard Coal Co.	Nos. 6 and 7	Lenout
Maynard Coal Co.	No. 8	Heiner
Mem-Haskins Coal Corp.	Mem-Haskins	Diablock
Midland Mining Co.	"Midland"	Tribbey
Montgomery Creek Coal Co.	Montgomery	Montgo
No. 4 Superior Coal Co.	No. 4 Superior	Lenout
Relance Coal & Coke Co.	Relance	Glenawr
Soudy Coal Co.	Soudy	Happy
Silver Leaf Coal Co.	Silver Leaf	Hazard
Solar Coal Co., The	Solar	Yerkes
South Eastern Kentucky Coal Co.	No. 1	Krypton
Storm King Coal Co., Inc.	Storm King	Jeff
Trace Fork Mining Co.	Trace Fork	Bulan
Walkers Branch Fuel Corp.	Wabaco	Hazard
Yerkes Coal Co.	No. 6	Yerkes
York Coal Corp.	York	Krypton

PIKE COUNTY		
Alburn Coal Corp.	Alburn Coal Corp.	McCarr
Alma Thacker Fuel Co.	Nos. 1, 2, 3, 4 and 5	McCarr
Bailey Fuel Co.	Bailey	Toler
Banner-Pond Creek Coal Co.	Banner-Pond Creek	Orinoco

Company.	Mines.	Post Office of Mines.
Bailey, R. G. Coal Co.	Bailey	Williamson
Big Hollow Coal Co.	Big Hollow	Pikeville
Big Shelby Coal Co.	Shelby Mine	Shelbiana
Black Gem Coal Co.	Black Gem	Toler
Blake Coal Mining Co.	Blake	Stone
Broad Bottom Mining Co.	Broad	Pikeville
Buckfield Coal Co.	Buckfield	Elksam
Burnell Coal & Coke Co.	Burnell	Sprigg, W. Va.
Carry-On Coal Co.	Carry-On	Toler
Christie Sowards Mining Co.	Broad Bottom No. 1 and 2	Mossy Bottom
Coal Run Mining Co.	Coal Run	Coal Run
Duff Pond Creek Coal Co.	Duff Pond Creek	Sharondale
Edgewater Coal Co.	Coudale	Heller
Edgewater Coal Co.	Henry Clay, Big Branch and Lookout	Heller
Elkhorn Gas Coal Co.	Elkhorn	Praise
Elkhorn-Marrowbone Coal Co.	Elkhorn-Marrowbone	Wolfpit
Elkhorn Seam Collieries Co.	Valley	Elksara
Elkhorn & Shelby Creek Coal Co.	Caney No. 3	Esco
Ford Elkhorn Mining Co.	Ford Elkhorn Nos. 1 and 2	Robinson Creek
Funk Coal Co.	Funk	Sutton
Furnace Coal Mining Co.	Furnace	Boldman
Greenough Coal Co.	Greenough	Heller
Hatcher, James Coal Co.	Big Shoal	Big Shoal
J. B. Elkhorn Coal Co.	Elkhorn	Hildason
Kanawha-Elkhorn Collieries, Inc.	Corson or No. 4, Bentley or No. 5, Superior or No. 2 Middle Ridge or No. 3	Praise
Keel Coal Co.	Elkhorn	Pike
Kentucky Block Fuel Co.	Kentucky Block	Jonaney
Kentucky Elkhorn By-Product Coal Co.	Berton No. 1	Borton
Kentucky Elkhorn Coal Corp.	Federal	Praise
Kysor Coal Co.	Kysor No. 1	Kysor
Leckle Collieries Co.	Nos. 1 and 2	Alex
Majestic Collieries Co.	Majestic	Majestic
Marietta Coal Co.	Marietta	Pinson Fork
Marrowbone Mining Co.	Marrowbone Nos. 1 and 2	Lookout
McKinney Steel Co.	Wolfpit	Wolfpit
Mud Lick Coal Co.	Mud Lick	Sharondale
Orinoco Mining Co.	Orinoco	Orinoco
P. M. C. Coal Co.	P. M. C.	Sprigg, W. Va.
Paragon-Elkhorn Collieries Co.	Paragon-Elkhorn	Dunleary
Pinson Elkhorn Colliery, Inc.	No. 28	Heller
Polley, J. E. Coal Co., Inc.	Pinson Elkhorn	Millard
Pond Creek Coal Co.	Polley	Millard
Pond Creek Coal Co.	Nos. 1 and 2	Hardy
Pond Creek Coal Co.	Nos. 3 and 4	Stone
Pond Creek Coal Co.	Nos. 5 and 8	Pinson
Pond Creek Coal Co.	Nos. 6 and 7	McVeigh
Portsmouth Solvay Coke Co.	Nos. 1, 2 and 3	Edgarton, W. Va.
Praise Elkhorn Coal Co.	Elkhorn City	Dunleary
Rogers Bros. Coal Co.	Virgie	Virgie
Sharon Coal & Coke Co.	Sharon	Sharondale
Shelby Coal Mining Co., The	Shelby	Shelbiana
Sitvay Collieries Co.	Tolland	Ep
Steele Coal Co.	Steele	Mossy Bottom
Sudduth Fuel Co.	Sudduth	Stone
Sullivan Pond Creek Co.	Pond Creek No. 1	Stone
Tierney Mining Co.	Tierney	Stone
Triangle Coal Co.	Triangle	Arzo
Upper Elk Coal Co.	Upper Elk	Stone
Vulcan Colliery	Vulcan	Vulcan
Winston Elkhorn Coal Co.	Winston	Kwanee
Winston Elkhorn Coal Co.	Winston	R-gina
Yawnee, A. J. Coal Co.	Yawnee	Pikeville

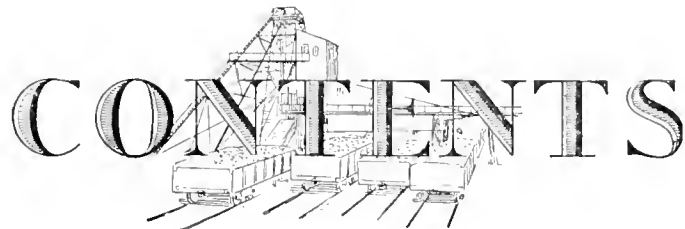
PULASKI COUNTY		
Alpine Collieries	Alpine Collieries	Alpine

ROWAN COUNTY		
Kentucky Fire Brick Co.	Nos. 1, 3 and 4	Haldeman

UNION COUNTY		
Baxter Mining Co.	Baxter	Morganfield
Bell Union Coal & Mining Co.	Bell Union and Town	Curlew
Hend's Coal Co. Inc.	Hend's	Morganfield
Madison Coal Corp.	No. 11	De Koven
Morganfield Coal & Coke Co.	No. 1	Morganfield
Producers Coal Co. of Kentucky	Midland	Waverly
Southland Coal Co.	Uniontown	Uniontown
Union County Mining Co.	Union	Uniontown
West Kentucky Coal Co.	Nos. 1, 2, 8 and 9	Sturgis

WEBSTER COUNTY		
Clifty Consolidated Coal Co.	Clifty	Clay
Diamond Coal Co.	Diamond Nos. 1, 2 and 3	Providence
Economy Mining Co.	Economy	Providence
Hall-Force Coal Co.	Forceytha	Providence
Highland Mining Co.	Huehland	Providence
Interchange Coal Co.	Interchange	Providence
Leeper Coal Co.	Leeper	Providence
Luton Mining Co.	Fulno	Providence
New Sebree Mining Co.	New Sebree	Sebree
Providence Mining Co.	Nos. 2 and 3	Providence
R & A. Coal Co., Inc.	R & A.	Providence
Robinson-Aldridge & Co.	Robinson-Aldridge	Providence
Ruckman Coal Co.	Buckman	Providence
St. Bernard Mining Co.	Shamrock	Providence
Victory Coal Co.	Victory	Providence
Washington Coal Co.	Washington	Providence
West Kentucky Coal Co.	Nos. 3, 4 and 6	Whatecroft
West Kentucky Coal Co.	Nos. 5 and 7	Clay
Wynn Coal Co.	Wynn	Providence
Young & Morgan	Young & Morgan	Providence

WHITLEY COUNTY		
Bennett & Johnson Blue Gem Coal Co.	Bennett & Johnson	Gatliff
Bon Jellico Coal Co.	Bon Jellico	Bon Jellico
Burk Hollow Coal Co.	Burk Hollow	Jellico, Tenn.
Cumberland River Coal & Oil Co.	Cumberland	Nevisdale
Dessie-Ellen Blue Gem Coal Co.	Dessie-Ellen	Williamsburg
Drake Blue Gem Coal Co.	Drake Nos. 1 and 2	Nevisdale
Eureka Coal Co.	Blue Gem	Gatliff
Evans Jellico Coal Co.	Cook	Jellico, Tenn.
Gatliff Coal Co.	Gatliff Nos. 1, 2, 3, 4 and 5	Gatliff
Jellico Coal Mining Co.	Mt. Ash	Mt. Ash
Kresge Coal & Mining Co.	Mount Morgan	Williamsburg
Mahan Jellico Coal Co.	Mahan-Jellico Nos. 1 and 2	Packard
Mammoth Blue Gem Co.	Kensie	Jellico
New Watts Creek Jellico Coal Co.	Mammoth No. 2	Gatliff
Patterson Creek Coal Co.	Coalmont	Wofford
Polley Coal Co.	Polley	Pollyton
Proctor Coal Co.	Proctor	Red Ash
Stein Blue Gem Coal Co.	Stein	Red Ash
Walken Jellico Coal Co.	Walken Jellico	Gatliff



Map of Mining Field.....	534
Sectional View of Coal Formations.....	534
General Description of Coal Resources.....	535

Upper Sewickley Seam.....	536
Pittsburgh Seam (Big Vein).....	536
Bakerstown Seam.....	536
Upper Freeport Seam.....	537
Lower Freeport Seam.....	537
Upper Kittanning Seam.....	537
Lower Kittanning Seam.....	537
Clarion Seam.....	538
Brookville Seam.....	538

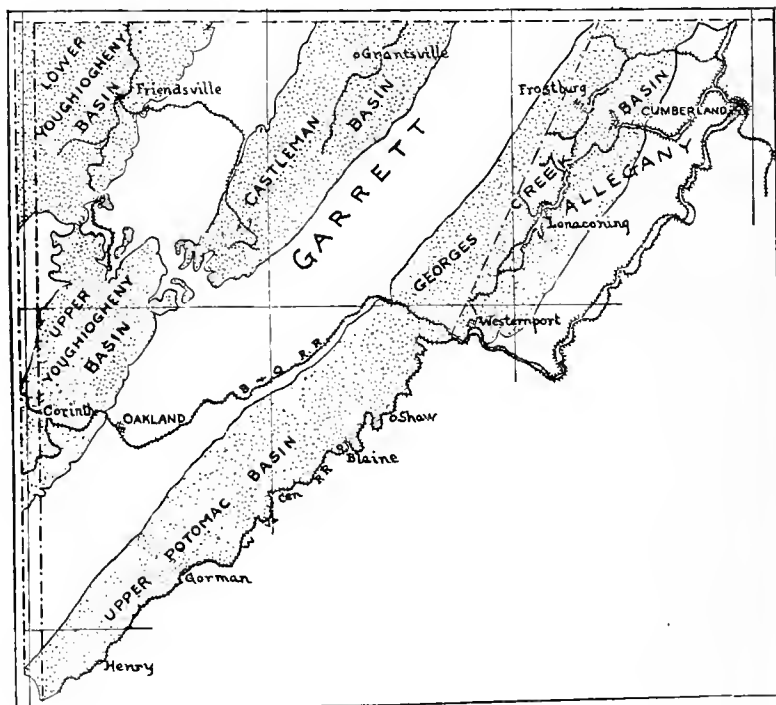
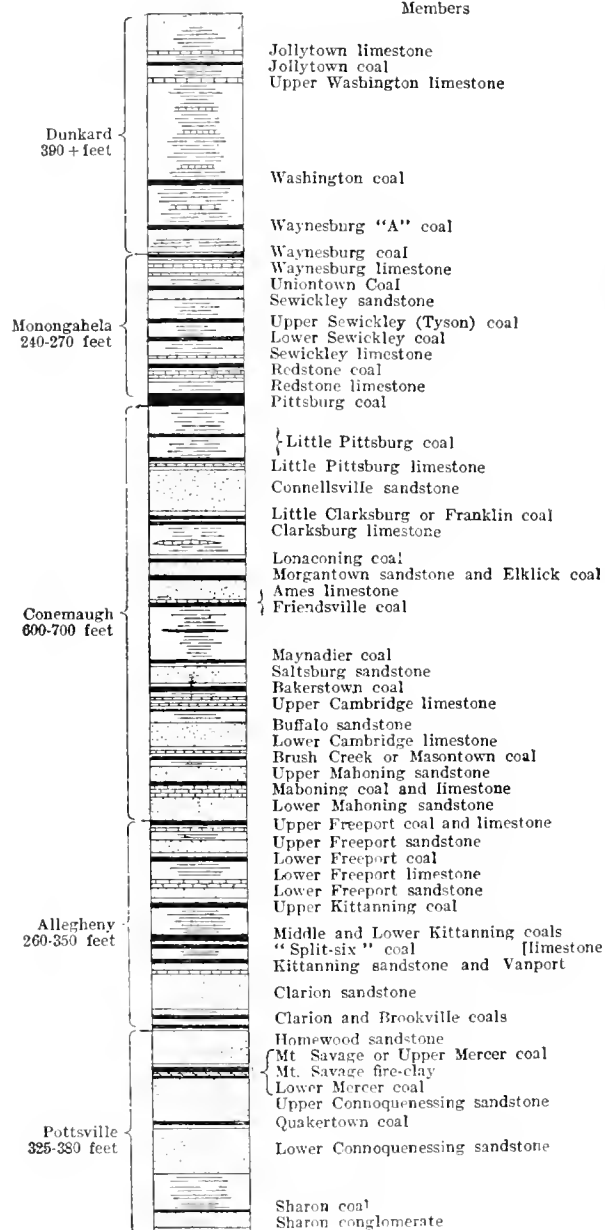
Preparation and Sizing of Coal.....	538
Supplementary Analyses.....	539
List of Mines by Seams.....	540, 541
Alphabetical Directory of Coal Mines.....	542 to 545

MARYLAND

COAL MEASURES*

Formations

Members



MAP SHOWING LOCATION OF
COAL BASINS*

(See Also Map of West Virginia)

SECTION SHOWING RELATIVE
POSITIONS OF
PROMINENT BEDS

*From Coats of Maryland, 1905, Maryland Geological Survey.

MARYLAND*

General Description of the Geology of the Region With the Ranks of Coal Produced;
Treats of the Mining Districts, With a Map Showing Their Location, All
Seams Lying Within the Territory, and the Railroads Serving Same;
Description of the Producing Seams Showing Their Geological
Order, Kinds of Coal, General Analysis, Etc.

The coal deposits of Maryland are confined to the two western counties of Allegany and Garrett, where for more than half a century they have afforded the basis of the most important mineral industry within the state.

The rocks in this region are entirely sedimentary and have been but little altered since they were deposited. Like most sedimentary rocks they were originally deposited in an almost horizontal position, but have since been thrown into a series of folds with axes trending toward the northeast and southwest. The major folds situated in part in the region are seven; four of them being synclines, and three anticlines. There is a long syncline (the Georges Creek-Potomac syncline) forming the eastern boundary, and it is here that the celebrated coals of the Georges Creek basin have been mined. The folds throughout the field are in general unsymmetrical, the steepest dips being on eastern limbs of the synclines and western limbs of the anticlines. In other words, the northwestward dips are steeper than the southeastward. This is in general true throughout the entire Appalachian province. The amount and regularity of the dip decrease from the southeastern to the northwestern part of the district.

This region presents a structure which is similar to that of the adjacent regions on the northeast and southwest, but different from the adjacent regions on the southeast and northwest. Faults are small, infrequent and inconspicuous. They do not affect the areal distribution of the formations, or the general character of the structure.

The coal deposits of Maryland are confined to synclines or, as they are called when they contain coal seams, "coal basins." There are five of these coal basins in the state. The Georges Creek basin lies along the eastern margin of the district between Wills and Savage mountains, partly in Allegany and partly in Garrett counties. The Upper Potomac basin lies in the southern and southeastern parts of Garrett county, to the east and south of Backbone Mountain. The Potomac River flows near the axis of this basin, so only half of it is within Maryland. The basin is structurally the continuation of the Georges Creek basin. The Castleman basin lies in the north-central part of Garrett county, between Meadow and Negro mountains. It is the continuation of the Salisbury basin of Pennsylvania. The Upper Youghiogheny basin lies in the west-central part of Garrett county, between Snaggy Mountain and a ridge which is the continuation of Meadow Mountain, parts of which are here called Roman Nose and Halls Hill. The Lower Youghiogheny basin lies in the northwest part of Garrett county, to the west of Winding Ridge and to the north of Dog Ridge. It is the continuance of the Confluence basin of Pennsylvania.

The coal deposits of Maryland constitute part of the series of Coal Measures of the northern Appalachian field, and are therefore of the same age as the like coals of Pennsylvania and West Virginia. They have frequently in the past been considered by geologists independently of the deposits of the same age in the adjacent states and a local classification of formations and coal beds has been at various times proposed. This has been in a large measure due to the fact that the study of the Maryland Coal Measures has been mainly confined to the Georges Creek basin, a deep synclinal trough that presents the only full representation of the formations of the Coal Measures within the limits of the state, but which is entirely detached from the main areas of the Coal Measures in the adjoining states. Very little consideration has been given in the past to the less complete series of coal deposits found to the westward in Garrett county, for the reason that these relatively less important basins have been left practically undeveloped until within the later years.

All the coals of Maryland of commercial value are semibituminous and have wide fame as steam and smithing coals. They are all coking coals, but due to their relatively low yield of coke to coal charged, and principally because of their high value for steaming, are not used for making coke.

The railroads entering this region are the Cumberland & Pennsylvania, Georges Creek & Cumberland, Western Maryland, and Baltimore & Ohio.

There is but one generally recognized mining division in Maryland, known as the Georges Creek district.

*We are indebted to Vol. 5, Part 4, of the Maryland Geological Survey for most of the descriptive matter presented on this state.

MONONGAHELA SERIES

Upper Sewickley Seam. (Known in the Georges Creek region as the Tyson Seam or Gas Coal.)

A seam of great persistence and considerable economic importance is found at from 105 to 120 feet above the Pittsburgh coal. It falls within the position of the Sewickley coal and probably corresponds to the upper split of the Sewickley in western Pennsylvania and eastern Ohio.

Like the Pittsburgh coal, this seam thickens from north to south and has its maximum development in the lower end of the Georges Creek basin. It varies from 3 to 6 feet in thickness, the thinner beds being quite free from inter-bedded shale, while the thicker seams have one or two streaks of impurities near the center of the bed. It ranks next to the Pittsburgh seam in point of number of shipping mines.

GENERAL ANALYSIS

Moisture . . . . .	.80
Volatile Matter	20.20
Fixed Carbon	70.15
Ash	8.85
Sulphur	1.40
B. T. U.	14,000

Pittsburgh Seam. (Known also as Elk garden Seam; Fourteen-foot Seam; Big Vein.)

This seam is the most important mined in the Georges Creek valley at the present time and has been the chief source of production in Maryland for more than fifty years. It is restricted almost exclusively to the Georges Creek basin, only one small area having been found in the upper Potomac valley, and that long since exhausted. Its position is identical with that of the Pittsburgh bed of Pennsylvania and West Virginia, and, as in these states, is found at the base of the Monongahela formation.

This seam is at the present time being rapidly mined and the time is not far distant when the bed will become entirely exhausted, after which the Maryland coal industry will have to depend largely upon the smaller seams, and especially those of the older formations, on account of their much greater areal extent than those overlying the "Big Vein." This seam is locally known as the "Fourteen-foot" or "Big Vein" in the Georges Creek valley, from the usual thickness of the seam at the southwestern end of the basin near Piedmont, W. Va., and Westernport, Md. At this end

of the basin the coal is thickest and its thickness gradually decreases toward the northeast. At Frostburg the height of the coal is not more than 8 to 9 feet, and at the latter point a parting of shale or "slate" of considerable thickness appears between the upper and lower benches of the coal and extends northeastward to the northern limits of the basin.

This bed was described under the name of Elk-garden seam in the Piedmont folio of the U. S. Geological Survey, this latter name being originally followed in the report on the geology of Allegany county. As this coal is unquestionably equivalent to the Pittsburgh seam of Pennsylvania, that name is now adopted since it has priority.

The various component parts of the Big Vein are constant and characteristic in number and relative position, though the relative thickness of the individual parts varies from place to place. From the Pittsburgh region toward the southeast there is a gradual increase in the thickness of the "breast" coal, which reaches a maximum in the southern end of the Georges Creek basin, where the entire bed has been found at a single locality to reach 22 feet in thickness. There is greater change within the limits of the Georges Creek basin than there is between the central part of the Georges Creek basin and the Pittsburgh region. This change consists chiefly in an increase in the number and thickness of the shales at the expense of the "breast" coal.

A peculiarity in this coal is the absence of cleats, such as is customarily found in the Pittsburgh coals from other states. It has a jet-black and glossy appearance. The large masses are friable and become very much pulverized in the course of transportation and handling. This is in a measure compensated in burning it for steam purposes, by its melting and crusting over. When partially coked this crust can be broken up and burnt again like lump coal. Big Vein coal has a nationwide reputation as an excellent smithing and steam coal. It is one of the standard bunkering coals, having a high heat value, and because of its low-volatile content is classed as a smokeless coal.

GENERAL ANALYSIS

Moisture . . . . .	.70
Volatile Matter	18.80
Fixed Carbon	73.25
Ash	7.25
Sulphur	1.00
B. T. U.	14,213

CONEMAUGH SERIES

Bakerstown Seam. (Known also as the Four-foot or Three-foot in the Georges Creek and Potomac basins; Honeycomb seam in the Castleman basin; Barton coal in the Maryland Geological Survey Report, 1900.)

The Bakerstown seam is very persistent, and in some basins is of considerable economic importance. It occurs at an interval varying from 90 to

135 feet above the Brush Creek coal, and varies in thickness from 2 to 5 feet. This seam occupies the stratigraphic position of the Bakerstown coal of Pennsylvania, but apparently not that of the Barton coal of the Pennsylvania reports. In the Georges Creek basin it is somewhat variable in thickness, but is very persistent and in its thickest areas has much economic value. With the exhaus-

tion of the Pittsburgh coal, it will no doubt be extensively mined in the future.

In the Potomac basin it is somewhat variable in thickness, ranging from 2 to 4 feet, the thickest and best development of the coal being found in the northern part of the basin. It is known as the Honeycomb seam in the Castleman basin, where it is something over 2 feet in thickness. The seam is variable, however, and may sometimes almost

disappear, while at other times it may reach nearly, if not quite, 3 feet in thickness.

GENERAL ANALYSIS

Moisture	1.00
Volatile Matter	18.00
Fixed Carbon	71.50
Ash	9.50
Sulphur	1.85
B. t. u.	14,000

ALLEGHENY SERIES

Upper Freeport Seam. (Known as the Rock Vein, Three-foot or Four-foot in the Georges Creek Basin; Three-foot or Four-foot in the Potomac Basin; Sandrock Seam in the Lower and Upper Youghiogheny Basins; Thomas Coal in the 1900 Maryland Geological Survey Report; Bayard Seam in Piedmont folio U. S. G. S.)

At the top of the Allegheny formation is a very persistent seam of coal, which in its relationship to the overlying and underlying strata, corresponds to the Upper Freeport coal of Pennsylvania. It lies at an interval of from 20 to 60 feet below the Lower Mahoning Sandstone and from 165 to 210 feet above the Lower Kittanning coal.

In the Georges Creek basin it is a very persistent seam and commonly contains a clean, workable bench of high grade coal. It is somewhat variable in thickness and is, in general, much better developed in the Potomac basin than in the Georges Creek basin. Here it commonly contains from 2 to 4 feet of good coal, but may at times exceed 5 feet in thickness, especially in the southern part of the Potomac, where at times it may be worked from the same shaft as the Lower Kittanning coal.

This seam is very poorly developed in the Castleman basin, but boreholes have shown a thickness of somewhat under 3 feet separated into two benches by bone and shale. It is possible that further exploration in this basin will result in locating this coal in workable quantities.

In the Upper Youghiogheny basin this seam commonly contains from 3 to 4 feet of coal and can be reached to a large extent by drifts, as it is found mainly above water level.

GENERAL ANALYSIS

	Potomac Basin	Lower Youghiogheny Basin
Moisture . . . . .	.90	2.30
Volatile Matter	18.30	25.50
Fixed Carbon	73.90	64.35
Ash	6.90	7.85
Sulphur . . . . .	.95	1.05
B. t. u.	14,380	13,775

Lower Freeport Seam.

The Lower Freeport coal is of variable thickness, sometimes appearing at a distance of from 35 to 60 feet below the top of the Allegheny formation.

This seam probably will not be found to occur with sufficient thickness to possess much or any commercial value, besides being much less persistent in occurrence and less uniform in character than the other seams of the series.

In the Castleman basin it is badly broken up by shale and bone coal.

GENERAL ANALYSIS

	Georges Creek Basin	Castleman Basin
Moisture . . . . .	.65	.70
Volatile Matter	18.60	24.05
Fixed Carbon	67.20	66.75
Ash	13.55	8.50
Sulphur	5.25	1.45
B. t. u.		13,970

Upper Kittanning Seam.

The Upper Kittanning coal is separated from the Middle Kittanning by from 30 to 60 feet of shale and sandstone. It reaches from 1 to 3½ feet in thickness.

This seam has not been recognized in the Georges Creek basin, but has been found in the Upper Potomac region, where it is known to be workable in the region around Harrison. It here attains a thickness of between 3 and 4 feet of clean coal. It is probable, however, that it is much less persistent than either the Lower Kittanning or Upper Freeport seams, as it is apparently absent or unimportant at many points.

GENERAL ANALYSIS

Moisture . . . . .	.60
Volatile Matter	18.25
Fixed Carbon	68.20
Ash	12.95
Sulphur	3.35
B. t. u.	13,520

Lower Kittanning Seam. (Known as the Six-foot in the Georges Creek basin; Six-foot and Five-foot in the Potomac basin; Corinth or Four-foot in the Upper Youghiogheny basin; White Rock or Four-foot in the Lower Youghiogheny basin; Davis coal in the Maryland Geological Survey Report, 1900.)

The Lower Kittanning seam is of great importance and can be seen at almost every point where strata of this horizon are exposed, occurring at an interval of from 90 to 140 feet above the base and from 170 to 210 feet below the top of the Allegheny formation. The Middle Kittanning seam, equally important, is found at a distance of from a few inches to 30 feet above the top of the Lower Kittanning coal. Over broad areas it is so close to the Lower Kittanning that the two form practically one seam. It is one of the most persistent seams in the state, and next to the "Big Vein" the most valuable.

It has been mined to some extent in the lower Georges Creek basin. At times the shale and bone

partings thicken, increasing the expense of working to such an extent that the coal sometimes locally has little commercial value. In addition the coal is sometimes badly squeezed, the seam on one or both sides of the middle shale disappearing entirely. The effect of this disturbance has been to interfere seriously with mining operations, although persistence in the development has shown that the coal again reappears along the bedding and may offer a wide area without further disturbance.

It is the most important seam in the Potomac basin, covering a large part of the region, especially in the southern part of the valley, where it underlies the entire area. The entire seam varies from 4 to 6 feet in thickness, which in the southern end of the basin may at times reach nearly 8 feet in thickness. The seam is deeply buried over most of the Castleman basin, so that but little is known of the coal, but it has less thickness than in the Georges Creek and Potomac basins. In the Lower Youghiogeny basin it attains a thickness of from 4 to 6 feet and is the most widely extended and most important coal.

GENERAL ANALYSIS

	Georges Creek	Potomac	Upper Youghiogeny
Moisture . . . . .	.70	1.65	1.20
Volatile Matter . .	16.80	18.95	23.05
Fixed Carbon . .	71.00	68.15	63.85
Ash	11.50	11.25	11.90
Sulphur	1.50	1.65	2.10
B. t. u.	13,820	13,455	13,255

Clarion Seam. (Known as the Railroad seam in the Georges Creek and Potomac basins; Parker seam in the Maryland Geological Survey, 1900.)

The Clarion coal is found at from 12 to 30 feet above the Brookville seam, and like the latter coal is found mainly developed in the northern part of the Georges Creek basin. It is variable in thickness, but commonly contains about two feet of coal, but may thicken locally to four feet or more when it is generally broken up by shale partings. The Clarion seam has been often confused with the Mount Savage coal, but can be readily distinguished from the latter by being associated with iron ore

rather than with fire clay even when its stratigraphic position is not clear.

The Clarion seam contains between 2 and 4 feet of coal in the Potomac basin, although the various benches are frequently separated by partings of bone and slate. In the Castleman basin the Clarion seam is deeply buried except around the margins, and more prospecting work will be required before the extent and character of the coal can be fully determined. It shows a thickness of over 3 feet of good coal.

GENERAL ANALYSIS

Moisture . . . . .	.70
Volatile Matter	18.90
Fixed Carbon	72.10
Ash	8.30
Sulphur	2.70
B. t. u.	14,595

Brookville Seam. (Known as the Bluebaugh seam in the Georges Creek basin.)

The Brookville seam is found very near the base of the Allegheny formation. It is very variable in thickness, ranging from 1 to 4 feet. Its best development is around the northern rim of the Georges Creek basin. It generally contains bands of shale and some bone coal. Throughout much of the northeastern portion of the Georges Creek valley it will probably be found to have important economic value. It is not yet known how far it extends beneath the upper coal toward the central part of the basin, but it largely disappears before the lower part of this area is reached and is practically undeveloped in the Potomac basin, where it is not probable that it will be found at any point of sufficient thickness to have commercial value.

The Brookville coal has not been opened at any point within the Maryland portion of the Castleman basin, and it probably is of little economic importance there.

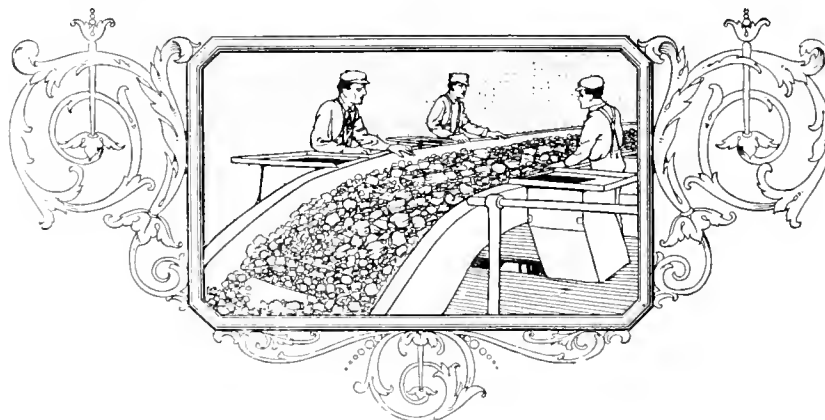
GENERAL ANALYSIS

Moisture . . . . .	.90
Volatile Matter	22.00
Fixed Carbon	67.30
Ash	9.80
Sulphur	1.05
B. t. u.	13,900

PREPARATION OF COAL

Because of the great excellence of Maryland coals for steam generating purposes, the greatest proportion of its output finds its way to the boilers, hence there are but few installations of complete

sizing and preparing equipment, such as found in fields serving a domestic trade. The simple bar screen generally serves to separate the finer material where a lump coal is desired.



Analyses of Maryland Seams by Counties and Localities

(ALL ANALYSES MADE ON MINE SAMPLES "AS RECEIVED")

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carbon	RATIOS	
										Oxygen	F. C. 0.87 + Ash V. M.
†Bakerstown.....	Allegany, Barton.....	Shaw.....	0.82	17.33	72.00	9.85	1.55	14,100	.....	.....	4.15
†Bakerstown.....	Allegany, Franklin.....	Penn.....	0.72	17.95	73.11	8.22	1.77	14,029	.....	.....	4.07
†Bakerstown.....	Allegany, Koontz.....	Wier.....	1.16	16.32	66.17	16.41	1.81	.....	.....	.....	4.05
†Bakerstown.....	Allegany, Lonaconing.....	Eckhart.....	0.92	18.44	62.17	18.47	1.74	.....	.....	.....	3.37
†Bakerstown.....	Allegany, Morrison.....	.....	0.59	17.18	73.50	8.73	1.29	13,626	.....	.....	4.28
†Bakerstown.....	Allegany, Mt. Savage.....	Mt. Savage.....	1.00	18.66	69.20	11.14	2.59	.....	.....	.....	3.71
†Bakerstown.....	Allegany, Westernport.....	Michael.....	1.40	17.21	76.82	4.57	1.72	.....	.....	.....	4.46
†Bakerstown.....	Garrett, Bittinger.....	Breneman.....	2.01	22.40	68.72	6.87	1.37	14,142	.....	.....	3.07
†Bakerstown.....	Garrett, Jennings.....	.....	1.16	21.36	68.60	8.88	2.39	14,004	.....	.....	3.21
†Bakerstown.....	Garrett, Swanton.....	Sharpless.....	0.51	18.26	72.64	8.59	1.28	14,168	.....	.....	3.97
†Bakerstown.....	Garrett, 2 mi. n. of Westernport.....	Washington No. 3.....	2.33	16.11	68.43	13.13	1.49	13,255	.....	.....	4.25
†Brookville.....	Allegany, Warrior Run.....	.....	0.45	22.93	66.11	10.51	1.79	14,009	.....	.....	2.88
†Clarion.....	Allegany, Barrellville.....	Green.....	0.94	18.34	76.50	4.22	0.95	14,908	.....	.....	4.17
†Clarion.....	Allegany, Westernport.....	.....	0.38	19.60	71.08	8.94	1.35	14,252	.....	.....	3.93
†Clarion.....	Garrett, Bittinger.....	Mertins.....	0.61	26.94	57.24	14.91	4.69	12,767	.....	.....	2.12
†Davis.....	Allegany, Mertins.....	.....	3.48	19.93	65.85	10.74	2.47	13,381	.....	.....	3.30
†Freeport, Lower.....	Garrett, Bittinger.....	Morrison.....	0.63	24.08	67.03	8.26	0.91	14,040	.....	.....	2.78
†Freeport, Upper.....	Allegany, Morrison.....	Gorman.....	0.55	15.37	74.26	9.82	1.56	13,881	.....	.....	4.83
†Freeport, Upper.....	Allegany, Franklin.....	Tacoma.....	0.72	19.23	60.18	19.87	2.72	.....	.....	.....	3.13
†Kittanning, Lower.....	Allegany, Franklin.....	.....	0.55	14.97	74.53	9.95	1.47	13,365	.....	.....	4.98
†Kittanning, Lower.....	Allegany, Franklin.....	Buxton.....	0.54	16.70	69.40	13.36	1.48	.....	.....	.....	4.16
†Kittanning, Lower.....	Allegany, Piedmont.....	Green.....	0.59	15.80	75.85	7.76	1.22	14,090	.....	.....	4.80
†Kittanning, Lower.....	Allegany, Westernport.....	.....	0.49	16.44	76.61	6.46	1.21	14,596	.....	.....	4.66
†Kittanning, Lower.....	Garrett, Crelin.....	Taskers.....	0.76	24.89	64.05	10.30	1.29	13,738	.....	.....	2.57
†Kittanning, Upper.....	Garrett, Swanton.....	Ocean No. 3½.....	0.49	17.05	69.85	12.61	2.75	13,725	.....	.....	4.10
†Pittsburgh.....	Allegany, Eckhart.....	Hoffman.....	2.7	14.5	74.0	8.8	1.0	13,910	.....	4.86	5.80
†Pittsburgh.....	Allegany, Hoffman.....	Ocean No. 7.....	0.73	17.75	74.07	7.45	0.80	14,105	.....	.....	4.17
†Pittsburgh.....	Allegany, Lord.....	Ocean No. 8.....	2.63	16.19	73.85	7.32	0.94	14,238	.....	.....	4.56
†Pittsburgh.....	Allegany, Midland.....	.....	3.42	17.65	71.84	7.09	0.84	14,162	.....	5.73	4.07
†Pittsburgh.....	Allegany, Mt. Savage.....	Caledonia.....	3.1	15.5	74.5	6.9	0.86	14,070	.....	5.32	4.80
†Pittsburgh.....	Allegany, Barton.....	.....	0.57	18.37	66.74	14.32	0.94	13,241	.....	.....	3.63
†Sewickley, Upper.....	Allegany, Koontz.....	Tyson No. 9.....	0.59	19.59	65.87	13.95	1.49	.....	.....	.....	3.36
†Sewickley, Upper.....	Allegany, Lonaconing.....	Kingsland.....	0.81	20.06	73.55	5.58	1.92	14,427	.....	.....	3.67
†Sewickley, Upper.....	Allegany, Frostburg.....	.....	0.81	20.18	70.24	8.77	1.23	14,009	.....	.....	3.48
†Tyson.....	Allegany, ½ mi. n. of Lonaconing.....	.....	2.79	17.21	71.50	8.50	2.05	13,946	.....	.....	4.15
†Tyson.....	Allegany, Lord.....	.....	3.28	20.44	68.30	7.98	1.27	13,864	.....	5.15	3.34
†Tyson.....	Allegany, Midland.....	.....	3.3	16.5	73.2	7.0	0.98	14,080	.....	5.94	4.44
†Tyson.....	Allegany, Midland.....	Ocean No. 8.....	3.66	16.88	71.41	8.05	1.02	13,927	.....	.....	4.23

*Bullietins Bureau of Mines. †State Geological Survey Reports.

List of Mines By Seams Including Name of Company, General Office Address
County, Railroad, and Shipping Point

MARYLAND

BAKERSTOWN SEAM (Known also as the **FOUR-FOOT** or **THREE-FOOT** in the Georges Creek and Piedmont basins; **HONEYCOMB SEAM** in the Castleman basin; **BARTON COAL** in the Maryland Geological Survey Report)

Mined in the Georges Creek district. Semibituminous rank. Suitable for Producer Gas, Locomotive Fuel, Steam, Domestic, Smithing, Export and Bunker uses. Known as Smokeless Coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Allegheny Coal Co.	Westernport, Md.	Tacoma	Allegheny	C. & P.	Westernport, Md.
Baum, W. W.	Jennings, Md.	Dodge	Garrett	Jennings	Worth, Pa. (Prepay)
Braddock Coal Co., The	Cumberland, Md.	Barton	Allegheny	C. & P.	Barton, Md.
Caledonia Coal Co.	Piedmont, W. Va.	Moscow No. 1	Allegheny	Cumb. & Penna.	Barton, Md.
Chapman Coal Mining Co.	Baltimore, Md.	Swanton	Allegheny	Cumb. & Penna.	Barton, Md.
Clair Coal Co.	Philadelphia, Pa.	Penn.	Allegheny	C. & P.	Gannon, Md.
George's Creek & Phoenix Mng. Co.	Philadelphia, Pa.	The six	Allegheny	C. & P.	Barton, Md.
Harvey Hutchinson & Browning Coal Co.	Mountain Lake Park, Md.	Connell	Garrett	Branch B. & O.	Hutton, Md.
Hoover, G. O.	Jennings, Md.	Hoover	Garrett	Jennings	Worth, Pa.
Maryland Coal Co.	New York, N. Y.	No. 4	Allegheny	W. M.	Lonaconing, Md.
Moscow-Georges Creek Mng. Co.	Cumberland, Md.	Moscow No. 3	Barton	C. & P.	Barton, Md.
Piedmont & George's Creek Coal Co.	Frostburg, Md.	Washington No. 5	Allegheny	C. & P.	Gannon, Md.
Potomac & Cumberland Coal Co., The	Philadelphia, Pa.	No. 3	Allegheny	C. & P.	Mt. Savage, Md.
Ross-Ambrose Coal Mines, Inc.	Jennings, Md.	Ross No. 1	Garrett	B. & O.	Jennings, Md.
Ross-Ambrose Coal Mines, Inc.	Jennings, Md.	Ross No. 2	Garrett	B. & O.	Jennings, Md.
Stanton, U. M.	Grantsville, Md.	Stanton 172	Garrett	B. & O.	North Jet., Pa.

BROOKVILLE SEAM (Known also as the **BLUEBAUGH SEAM** in the Georges Creek basin)
Mined in the Georges Creek district. Semibituminous rank. Suitable for Producer Gas, Locomotive Fuel, Steam, Domestic, Smithing, Export and Bunker uses. Known as Smokeless Coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Mt. Savage Georges Creek Coal Co.	Frostburg, Md.	Mt. Savage No. 1	Allegheny	C. & P.	Mt. Savage, Md.
Mt. Savage Georges Creek Coal Co.	Frostburg, Md.	Mt. Savage No. 2	Allegheny	W. Md.	Mt. Savage, Md.

CLARION SEAM (Known as the **RAILROAD SEAM** in the Georges Creek and Potomac basins; **PARKER SEAM** in the Maryland Geological Survey Reports)

Semibituminous rank. Suitable for Producer Gas, Locomotive Fuel, Steam and Domestic uses. Known as Smokeless Coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Miller & Greene Coal Co.	Westernport, Md.	M. & G. No. 1	Allegheny	C. & P.	Franklin, Md.
Miller & Green Coal Co.	Westernport, Md.	M. & G. No. 2	Allegheny	C. & P.	Franklin, Md.

FREEPORT, LOWER SEAM

Mined in the Georges Creek district. Semibituminous rank. Suitable for Producer Gas, Locomotive Fuel, Steam, Domestic, Smithing, Export and Bunker uses. Known as Smokeless Coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Potomac & Cumberland Coal Co., The	Philadelphia, Pa.	No. 1	Allegheny	C. & P.	Mt. Savage, Md.
Potomac & Cumberland Coal Co., The	Philadelphia, Pa.	No. 3	Allegheny	C. & P.	Mt. Savage, Md.

FREEPORT, UPPER SEAM (Known also as the **ROCK VEIN**, **THREE-FOOT** or **FOUR-FOOT** in the Georges Creek basin; **THREE-FOOT** or **FOUR-FOOT** in the Potomac basin; **SANDROCK SEAM** in the Lower and Upper Youghiogheny basins; **THOMAS COAL** in the 1900 Maryland Geological Survey Report; **BAYARD SEAM** in the Piedmont Folio, U. S. G. S.)

Mined in the Georges Creek district. Semibituminous rank. Suitable for Producer Gas, Locomotive Fuel, Steam, Domestic, Smithing, Export and Bunker uses. Known as Smokeless Coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Cass Coal Co.	Morgantown, W. Va.	Cass	Garrett	B. & O., Preston, Br.	Hellin, Md.
Georges Creek & Phoenix Mining Corp.	Philadelphia, Pa.	Lander	Allegheny	C. & P.	Barton, Md.
Kendall Lumber Co.	Pittsburgh, Pa.	Arnold Run	Garrett	B. & O.	Hutton, Md.
Mt. Savage Fuel Co.	Mt. Savage, Md.	Newtown	Allegheny	C. & P.	Mt. Savage, Md.
Potomac & Cumberland Coal Co., The	Philadelphia, Pa.	No. 2	Allegheny	C. & P.	Mt. Savage, Md.
Ross-Ambrose Coal Mines, Inc.	Jennings, Md.	Ross No. 1	Garrett	B. & O.	Jennings, Md.
Ross-Ambrose Coal Mines, Inc.	Jennings, Md.	Ross No. 2	Garrett	B. & O.	Jennings, Md.
Taylor-Offutt Coal Co., Inc.	300 Chestnut St., Philadelphia, Pa.	Taylor-Offutt No. 1	Garrett	B. & O.	Offutt, Md.

KITTANNING, LOWER SEAM (Known as the **SIX-FOOT** in the Georges Creek basin; **SIX-FOOT** and **FIVE-FOOT** in the Potomac basin; **CORINTH** or **FOUR-FOOT** in the Upper Youghiogheny basin; **WHITE ROCK** or **FOUR-FOOT** in the Lower Youghiogheny basin; **DAVIS COAL** in the Maryland Geological Survey Report)

Mined in the Georges Creek district. Semibituminous rank. Suitable for Producer Gas, Locomotive Fuel, Steam, Domestic, Smithing, Export and Bunker uses. Known as Smokeless Coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Alfred Coal Company	Washington, D. C.	Stover	Garrett	W. M.	Stover, Md.
Bloomington Coal Co.	Bloomington, Md.	Bloomington	Garrett	B. & O.	Bloomington, Md.
Clair Coal Co.	1001 Finance Bldg., Philadelphia, Pa.	Penn. No. 2	Allegany	C. & P.	Gannon, Md.
Garrett County Coal & Mining Co.	Richfield, Pa.	Dodson No. 1	Garrett	Western Md.	Harrison, W. Va.
Manor Coal Co., The	Johnstown, Pa.	Manor No. 1	Garrett	W. M.	Chadler, Md.
Miller & Greene Co.	Westport, Md.	M. & G. No. 2	Allegany	C. & P.	Franklin, Md.
North Maryland Coal Mining Co.	107 Main St., Johnstown, Pa.	Mont L.	Allegany	W. Md.	Vertus Station, Md.
Pond past & Ashby	Hutton, Md.	Pondsgast	Garrett	Preston	Hutton, Md.
Piedmont & Georges Creek Coal Co.	Frostburg, Md.	Washington No. 1	Allegany	C. & P.	Gannon, Md.
Westport Coal Co.	Westport, Md.	Western Port No. 1	Allegany	C. & P.	Western Port, Md.
Wolf Den Coal Co., Inc.	New York, N. Y.	Wolf Den	Garrett	W. M.	Dodson, Md.

PITTSBURGH SEAM (Known also as **ELKGARDEN SEAM**; **FOURTEEN-FOOT SEAM**; **BIG VEIN**)

Mined in the Georges Creek district. Semibituminous rank. Suitable for Producer Gas, Locomotive Fuel, Steam, Domestic, Smithing, Export and Bunker uses. Known as Smokeless Coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Adams Coal Co.	Box 23, Cumberland, Md.	Midlothian	Allegany	C. & P.	Midlothian, Md.
Allegany Big Vein Coal Co.	Frostburg, Md.	No. 1	Allegany	C. & P.	Frostburg, Md.
Allegany Big Vein Coal Co.	Frostburg, Md.	No. 2	Allegany	C. & P.	Frostburg, Md.
Allegany Big Vein Coal Co.	Frostburg, Md.	No. 3	Allegany	C. & P.	Frostburg, Md.
Armin & J. Fries	Frostburg, Md.	Union No. 1	Allegany	C. & P.	Altoona, Md.
Armin & J. Fries	Frostburg, Md.	Union No. 2	Allegany	C. & O.	Altoona, Md.
Bratler Mining Company	Mt. Savage, Md.	Bald Knob	Allegany	C. & P.	Mt. Savage, Md.
Calonia Coal Co.	Piedmont, W. Va.	Calonia	Allegany	Cumberland & Penna.	Barton, Md.
Clifton Big Vein Coal Co.	Frostburg, Md.	Clifton	Allegany	C. & P.	Frostburg, Md.
Consolidation Coal Co. (The)	67 Wall St., Munson Bldg., New York, N. Y.	Consolidation No. 1	Allegany	Cumberland & Penna.	Ocean, Md.
Consolidation Coal Co. (The)	67 Wall St., Munson Bldg., New York, N. Y.	Consolidation No. 3	Allegany	Cumberland & Penna.	Hoffman, Md.
Consolidation Coal Co. (The)	67 Wall St., Munson Bldg., New York, N. Y.	Consolidation No. 4	Allegany	Cumberland & Penna.	Eckhart, Md.
Consolidation Coal Co. (The)	67 Wall St., Munson Bldg., New York, N. Y.	Consolidation No. 7	Allegany	Cumberland & Penna.	Lord, Md.
Consolidation Coal Co. (The)	67 Wall St., Munson Bldg., New York, N. Y.	Consolidation No. 12	Allegany	Cumberland & Penna.	Rord'n Shaft, Md.
Consolidation Coal Co. (The)	67 Wall St., Munson Bldg., New York, N. Y.	Consolidation No. 13	Allegany	Cumberland & Penna.	Consolidation, Md.
Consolidation Coal Co., The	67 Wall St., Munson Bldg., New York, N. Y.	Consolidation No. 14	Allegany	C. & P.	Zihlman, Md.
Consolidation Coal Co.	New York, N. Y.	Cons. No. 15	Allegany	C. & P., Eckhart Br.	Vale Summit, Md.
Consolidation Coal Co., The	67 Wall St., Munson Bldg., New York, N. Y.	Consolidation No. 16	Allegany	C. & P.	Vale Summit, Md.
Cumberland Big Vein Coal Company	Cumberland, Md.	Conway No. 1	Allegany	C. & P.	Eckhart Mines, Md.
Egan Mine	Midland, Md.	Pagan	Allegany	W. Md.	Midland, Md.
Fitzpatrick Coal Co.	Pekin, Md.	Pekin	Allegany	C. & P.	Lonaconing, Md.
Frostburg Big Vein Coal Co.	Frostburg, Md.	No. 1	Allegany	C. & P.	Zihlman, Md.
Georges Creek Coal Mining Co.	Pittsburgh, Pa.	Barton	Allegany	C. & P.	Lonaconing, Md.
Georges Creek Coal Mining Co.	Fricks Bldg., Pittsburgh, Pa.	Jackson	Allegany	C. & P.	Lonaconing, Md.
Green's Coal Co.	Lonaconing, Md.	Little Pittsburgh	Allegany	W. Md.	Lonaconing, Md.
Maryland Coal Company	25 Beaver St., New York, N. Y.	Kingsland	Allegany	W. Md.	Lonaconing, Md.
Maryland Coal Co.	New York, N. Y.	Waynesburg	Allegany	W. Md.	Lonaconing, Md.
Midland Mining Co.	Cumberland, Md.	Neff Run No. 1	Allegany	C. & P.	Midland, Md.
Midlothian Coal Co.	Cumberland, Md.	Midlothian	Allegany	B. & O.	Midlothian, Md.
Moscow Georges Creek Mining Co.	Cumberland, Md.	Moscow No. 2	Barton	C. & P.	Barton, Md.
McKee Coal Company	Frostburg, Md.	McKee No. 1	Allegany	C. & P.	Lord, Md.
Pekin Coal Co.	Piedmont, Md.	Brydon	Allegany	C. & P.	Lonaconing, Md.
Pond past & Ashby	Hutton, Md.	Pondsgast	Garrett	Preston	Hutton, Md.
Sullivan Bros. Coal Company	Frostburg, Md.	No. 1	Allegany	C. & P.	Eckhart, Md.
Sullivan Bros. Coal Co.	Frostburg, Md.	Sullivan No. 2	Allegany	C. & P.	Frostburg, Md.
United Big Vein Coal Company	Meersdale, Pa.	Trimble	Allegany	W. Md. C. & P.	Mt. Savage, Md.

UPPER SEWICKLEY SEAM (Known also as the **TYSON SEAM** or **GAS COAL**)

Mined in the Georges Creek district. Semibituminous rank. Suitable for Producer Gas, Locomotive Fuel, Steam, Domestic, Smithing, Export and Bunker uses. Known as Smokeless Coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Brophy-Hitchins Coal Co.	Frostburg, Md.	Bowery Furnace No. 2	Allegany	C. & P.	Frostburg, Md.
Consolidation Coal Co., The	67 Wall St., Munson Bldg., New York, N. Y.	Consolidation No. 6	Allegany	C. & P.	Carlos Junction, Md.
Consolidation Coal Co.	67 Wall St., Munson Bldg., New York, N. Y.	Consolidation No. 9	Allegany	Cumb. & Penna.	No. 9 Station, Frostburg, Md.
Consolidation Coal Co.	67 Wall St., Munson Bldg., New York, N. Y.	Consolidation No. 10	Allegany	Cumb. & Penna.	Eckhart Mines, Md.
Consolidation Coal Co.	67 Wall St., Munson Bldg., New York, N. Y.	Consolidation No. 11	Allegany	Cumb. & Penna.	Border Shaft, Md.
Consolidation Coal Co.	New York, N. Y.	Cons. No. 13	Allegany	C. & P.	Consolidation, Md.
Georges Creek Coal Co.	Lonaconing, Md.	Georges Creek No. 1	Allegany	W. M.	Lonaconing, Md.
Georges Creek Coal Co.	Cumberland, Md.	Nos. 2, 3 & 4	Allegany	W. M.	Lonaconing, Md.
Georges Creek Coal Mining Co.	Pittsburgh, Pa.	Barton	Allegany	C. & P.	Lonaconing, Md.
Georges Creek Coal Mining Co.	Fricks Bldg., Pittsburgh, Pa.	Jackson	Allegany	C. & R.	Lonaconing, Md.
Green's Coal Co.	Lonaconing, Md.	Green's	Allegany	W. M.	Lonaconing, Md.
Maryland Coal Co.	New York, N. Y.	Tyson	Allegany	W. M.	Lonaconing, Md.
McKee Coal Co., The	Frostburg, Md.	McKee No. 2	Allegany	C. & P.	Lonaconing, Md.
McNitt Coal Co.	Frostburg, Md.	McNitt No. 2	Allegany	C. & P.	Border Shaft, Md.
Piedmont & Georges Creek Coal Co.	Frostburg, Md.	Washington No. 2	Allegany	C. & P.	Eckhart, Md.
Sullivan Bros. Coal Company	Frostburg, Md.	No. 1	Allegany	C. & P.	Eckhart Mines, Md.

MISCELLANEOUS SEAMS

Mined in the Georges Creek district. Semibituminous rank. Suitable for Producer Gas, Locomotive Fuel, Steam, Domestic, Smithing, Export and Bunker use. Known as Smokeless coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Brophy-Hitchins Coal Co.	Frostburg, Md.	Bowery Furnace	Allegany	Cumberland & Penna.	Frostburg, Md.
Garrett County Coal & Mining Co.	Dodson, Md.	Dodson No. 1	Garrett	W. Md.	Harrison, W. Va.
Mount Savage Mining Company	Cumberland, Md.	Liberty	Allegany	C. & P., B. & O.	Mt. Savage, Md.
Rowe C. J. & Bros.	Meersdale, Pa.	Parker	Allegany	C. & P.	Mt. Savage, Md.

MARYLAND

Alphabetical Directory of Coal Mines, Giving Complete Detailed Information Covering Each Mine

For List of Abbreviations See Page 13.

ABERDEEN COAL COMPANY

General Office, 718 Evans Bldg., Washington, D. C.
 PR—Walter Leonard, Washington, D. C.
 TR—Geo. S. Rees, Washington, D. C.
 GM—A. S. Brady, Elkins, W. Va.
 GS—A. S. Brady, Elkins, W. Va.
 PA—A. D. Brady, Elkins, W. Va.
 CE—A. B. Brady, Elkins, W. Va.
 SCO—Aberdeen Supply Co., Buyer, J. W. Brook, Steyer, W. Va.
 SA—C. W. Arbogast, Elkins, W. Va.

Steyer Mine; Drift; Kittanning Seam; 60-72 in. thick.
 PO—Steyer, Md.; SP—Same; CTY—Garrett; RR—W. M.
 MS—Chas. Ulery, Steyer, Md.
 S of H—1 gasoline loco. Track gage 42 in.
 S of M—Hand.
 EMP—40. Last years tonnage 20,000.
 SIZES SHIPT—Run of Mine.

ADAMS COAL COMPANY

General Office, Box 23, Cumberland, Md.
 OWNER—Alex Adams, Box 32, Cumberland, Md.

Midlothian Mine; Drift; Pittsburgh Seam; 110 inches thick.
 PO—Midlothian, Md.; SP—Same; CTY—Allegany; RR—C. & P.
 MS—Robert Duncan, Midlothian, Md.
 S of H—Horses. Track gage 36 inches.
 S of M—Hand.
 EMP—31. Daily tonnage 150.
 SIZES SHIPT—Run of Mine.
 Note—Successors to New Central Coal Co.

ALLEGANY BIG VEIN COAL COMPANY

General Office, Frostburg, Md.
 PR—Wm. R. Gunter, Frostburg, Md.
 TR—Ulysses Hanna, Frostburg, Md.
 GS—Ulysses Hanna, Frostburg, Md.

Nos 1, 2 and 3 Mines; Drift; Big Vein Seam; 96 inches thick.
 PO—Frostburg, Md.; SP—Same; CTY—Allegany; RR—C. & P.
 S of H—6 mules. Track gage 36 inches.
 S of M—Hand.
 EMP—30. Daily tonnage 100.
 SIZES SHIPT—Run of Mine.
 Note—Successors to New York Mining Co.

ALLEGANY COAL CO.

General Office, Westernport, Md.
 PR—E. J. Roberts, Westernport, Md.
 TR—R. C. Roberts, Westernport, Md.
 GM—E. J. Roberts, Westernport, Md.
 GS—R. C. Roberts, Westernport, Md.
 PA—E. J. Roberts, Westernport, Md.
 CE—Wm. Harvey, Westernport, Md.
 EM—R. C. Roberts, Westernport, Md.
 SA—Coale & Co., Cumberland, Md.; Ganley Mining Co., New York, N. Y.

Tacoma Mine; Drift; Bakerstown Seam, 40 in. thick.
 PO—Westernport, Md.; SP—Same; CTY—Allegany; RR—C. & P.
 S of H—Mules and gasoline locos. Track gage 42 inches.
 S of M—Hand.
 PP—Power purchased. 1 pump.
 EMP—65. Last years tonnage 120,000.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

ANDERSON COAL COMPANY

New the Braddock Coal Co.

ANNAN & JEFFRIES

PR—Robert Annan, Frostburg, Md.
 GM—C. S. Jeffries, Frostburg, Md.
 GS—W. H. R. Thomas, Frostburg, Md.
 PA—C. S. Jeffries, Frostburg, Md.
 EM—Maxwell Mathias, Frostburg, Md.
 EE—Dewey Sanson, Mt. Savage, Md.

Union No. 1 Mine; Drift; Georges Creek Big Vein Seam, 96 in. thick.
 PO—Allegany, Md.; SP—Same; CTY—Allegany; RR—C. & P.
 S of H—Mules and 5 trolley pole type locos. Track gage 48 inches.
 S of M—Hand.
 PP—Power purchased. Transformer 250 volts A. C., gen. unit, 250 volts D. C.
 EMP—150. Daily tonnage 400.
 SIZE SHIPT—Run of Mine.
 PREP. EQUIPT—Shaker Screens and Picking Tables

Union No. 2 Mine; Drift; Creek Big Vein Seam, 108 inches thick.
 PO—Allegany, Md.; SP—Same; CTY—Allegany; RR—C. & O.

S of H—Mules. Track gage 48 inches.
 MS—W. H. R. Thomas, Frostburg, Md.
 S of M—Hand.
 PP—Power purchased. Transformer 220 volts A. C., 3 pumps.
 EMP—35. Daily tonnage 150.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Shaker Screens, Picking Tables

BARTON COAL MINING COMPANY

Barton, Md.
 No report.

BAUM, W. W.

General Office, Jennings, Md.
 TR—W. W. Baum, Jennings, Md.
 GM—Christ Yommer, Jennings, Md.
 PA—W. W. Baum, Jennings, Md.
 SA—Boynton Coal Co., Elk Lick, Pa.

Dodge Mine; Drift; Honeycomb Seam; 28 inches thick.
 PO—Jennings, Md.; SP—Worth, Pa. (Prepay); CTY—Garrett; RR—Jennings.
 S of H—Mules. Track gage 26 inches.
 S of M—Hand.
 EMP—5. Daily output, 10 tons.
 SIZES SHIPT—Run of Mine.
 Old Information.

BLOOMINGTON COAL COMPANY

TR—L. E. Brydon, Bloomington, Md.
 GM—L. E. Brydon, Bloomington, Md.
 GM—L. E. Brydon, Bloomington, Md.
 GS—L. E. Brydon, Bloomington, Md.

Bloomington Mine; Drift; Kittanning Seam, 66 in. thick.
 PO—Bloomington, Md. SP—Same. CTY—Garrett. RR—B. & O.
 S of H—Mules. Steam locos. Track gage, 42 in.
 S of M—Hand.
 EMP—75.
 SIZES SHIPT—Run of Mine.
 Old information.

THE BRADDOCK COAL COMPANY

General Office, 31 Little Frederick St., Cumberland, Md.
 PR—Geo. O. Golden, Cumberland, Md.
 VP—John A. Anderson, Cumberland, Md.
 TR—Geo. O. Golden, Cumberland, Md.
 GM—Geo. O. Golden, Cumberland, Md.
 PA—Geo. O. Golden, Cumberland, Md.
 SA—E. H. Reichenbach, Cleveland, O.

Barton Mine; Bakertown Seam, 48 in. thick.
 PO—Barton, Md.; CTY—Allegany; RR—C. & P.
 MS—Arch Michaels, Barton, Md.
 S of H—Mules.
 S of M—Hand.
 EMP—10. Daily tonnage 50.
 SIZES SHIPT—Run of Mine.
 NOTE—Formerly operated by the Anderson Coal Co.

BRAILER MINING COMPANY

General Office, Mt. Savage, Md.
 PR—Geo. C. Brailer, Mt. Savage, Md.
 TR—David Brailer, Mt. Savage, Md.
 GM—Geo. C. Brailer, Mt. Savage, Md.
 EM—J. Max Mathias, Frostburg, Md.
 Bald Knob Mine; Drift; Pittsburgh Seam, 60 to 72 in. thick.
 PO—Mt. Savage, Md.; SP—Same; CTY—Allegany; RR—C. & P.
 MS—Joseph Jenkins, Mt. Savage, Md.
 S of H—Mules. Track gage, 42 in.
 S of M—Hand.
 PP—Power purchased, electric hoist, 440 volts A. C.
 EMP—90. Last years tonnage 65,000.
 SIZES SHIPT—Run of Mine.

BROPHY-HITCHINS COAL CO.

General Office, Frostburg, Md.
 PR—John S. Brophy, Frostburg, Md.
 VP—Howard Hitchins, Frostburg, Md.
 TR—Emery G. Hitchins, Frostburg, Md.
 GM—John S. Brophy, Frostburg, Md.
 PA—Alex. G. Close, Frostburg, Md.
 EM—Gale Townsend, Frostburg, Md.
 SA—Piedmont & George's Creek Coal Co., Frostburg, Md.

Bowery Furnace Mine; Drift; Redstone Seam, 84 in. thick.
 PO—Midlothian, Md.; SP—Frostburg, Md.; CTY—Allegany; RR—Cumberland & Pennsylvania
 MS—Harry Hitchins, Frostburg, Md.
 S of H—Mules and electric locos. Track gage, 42 in.
 S of M—2 arewall machs.

PP—Power purchased, transformer 6600-250 volts A. C.
 EMP—58. Last years tonnage 20,971.
 SIZES SHIPT—Run of Mine.

Bowery Furnace Mine No. 2; Drift; Tyson Seam; 38 to 46 in. thick.
 PO—Midlothian, Md.; SP—Frostburg, Md.; CTY—Allegany; RR—Cumberland & Penna.
 MS—Harry Hitchins, Frostburg, Md.
 S of H—4 trolley pole type locos. Track gage 42 in.
 PP—Power purchased. Transformer 6,600 to 250 volts A. C., 250 volts D. C.
 EMP—94. Last years tonnage 30,419.
 SIZES SHIPT—Run of Mine.

CALEDONIA COAL CO. (THE)

General Office, Piedmont, W. Va.
 PR—E. Richard Brydon, Piedmont, W. Va.
 TR—H. P. Brydon, Piedmont, W. Va.
 GM—E. Richard Brydon, Piedmont, W. Va.
 GS—E. Richard Brydon, Piedmont, W. Va.
 PA—Richard Brydon, Piedmont, W. Va.
 SA—H. P. Brydon, Piedmont, W. Va.

Caledonia Mine; Drift; Big Vein; 73-120 in. thick.
 PO—Barton, Md.; SP—Same; CTY—Allegany; RR—Cumberland & Penna.
 S of H—Mules and steam locos. Track gage, 36 in.
 S of M—Hand.
 EMP—60. Last fiscal year output 60,000 tons.
 SIZES SHIPT—Run of Mine.

Moscow Mine; Drift; Bakerstown Seam, 28 in. thick.
 PO—Barton, Md.; SP—Same; CTY—Allegany; RR—C. & P.
 S of H—Mules. Track gage, 42 in.
 S of M—Hand.
 PP—Power purchased, 550 volts A. C., 1 pump.
 Last fiscal year output, 37,000 tons.
 SIZES SHIPT—Run of Mine.

CASS COAL COMPANY

General Office, Morgantown, W. Va.
 PR—J. M. Wood, Morgantown, W. Va.
 VP—U. R. Smith, Crellin, Md.
 TR—W. R. Chapman, Morgantown, W. Va.
 GM—U. R. Smith, Crellin, Md.

Cass Mine; Drift; Upper Freeport Seam, 54 inches thick.
 PO—Crellin, Md.; SP—Same; CTY—Gurlett; RR—E. & O., Preston Br.
 MS—U. R. Smith, Crellin, Md.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 EMP—18.
 SIZES SHIPT—Run of Mine.
 NOTE—Successors to Snowy Creek Coal Company.

CHAFFEE COAL CO.

New Manor Coal Company.

CHAPMAN COAL MINING COMPANY

General Office, Sharp and Lombard Sts., Baltimore, Md.
 PR—W. J. Chapman, Baltimore, Md.
 TR—E. N. Chapman, Baltimore, Md.
 GM—W. J. Chapman, Baltimore, Md.
 GS—John D. Frenzel, Barton, Md.
 PA—J. L. Chapman, Barton, Md.
 EM—J. L. Chapman, Barton, Md.

Swanton Mine; Drift; Bakerstown, Tyson and Big Vein Seams; 32-60-120 in. thick.
 PO—Barton, Md.; SP—Same; CTY—Allegany; RR—C. & P.
 S of H—Mules, rope and steam loco. Track gage 42 in.
 S of M—Hand.
 PP—250 volts D. C.
 EMP—100. Last years tonnage 74,107.
 SIZES SHIPT—Run of Mine.

CLAIR COAL CO.

General Office, 1004 Finance Bldg., Philadelphia, Pa.
 PR—V. H. Burton, Osceola Mills, Pa.
 VP—H. L. Burton, Philadelphia, Pa.
 TR—C. P. Burton, Philadelphia, Pa.
 GM—V. H. Burton, Osceola Mills, Pa.
 GS—T. S. Harris, Westernport, Md.
 PA—V. H. Burton, Westernport, Md.
 EM—Jos. Sillyman & Co., Altoona, Pa.

EE—Jos. Sillyman & Co., Altoona, Pa.
 SCO—Penn Supply Co.; Buyer, L. E. Harris, Westernport, Md.
 SA—Burtner Coal Co., 1004 Finance Bldg., Philadelphia, Pa.

Penn Mine; Drift; Bakertown Seam, 43 in. thick.
 PO—Westernport, Md.; SP—Sannon; CTY—Allegany; RR—C. & Penna.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 EMP—78. Daily output, 300 tons.
 SIZES SHIPT—Run of Mine.

Penn No. 2 Mine; Drift; Six Foot Seam, 74 in. thick.
 PO—Westernport, Md.; SP—Sannon; CTY—Allegany; RR—C. & Penna.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 EMP—78. Daily output, 300 tons.
 SIZES SHIPT—Run of Mine.

CLIFTON BIG VEIN COAL COMPANY

PR—Uriah Jones, Frostburg, Md.
 TR—H. G. Evans, Frostburg, Md.
 SEC'Y—D. D. Price, Frostburg, Md.
 GM—William Harvey, Frostburg, Md.
 EM—William Harvey, Frostburg, Md.
 EE—D. D. Price, Frostburg, Md.

Clifton Mine; Drift; Pittsburgh Big Seam, 108 to 144 in. thick.
 PO—Frostburg, Md.; SP—Same; CTY—Allegany; RR—C. & P.
 MS—no Harvey, Frostburg, Md.
 S of H—Mules.
 S of M—Hand.
 Daily output 50 tons.
 SIZES SHIPT—Run of Mine.
 Old information.

CONSOLIDATION COAL COMPANY

General Office, Munson Bldg., 67 Wall St., New York, N. Y.
 100 mines in Maryland, West Virginia, Pennsylvania and Kentucky.
 PR—C. W. Watson, New York, N. Y.
 Asst. to PR—Brooks Fleming, Jr., Fairmont, W. Va.
 VP—S. D. Camden, New York, N. Y.
 VP—Arthur Hale, Continental Bldg., Baltimore, Md.
 VP (Operating)—F. R. Lyon, Fairmont, W. Va.
 VP (Transportation)—W. L. Andrews, Continental Bldg., Baltimore, Md.
 VP—(Eastern Sales)—F. W. Wilsbire, New York, N. Y.
 VP (Western Sales)—E. M. Maneourt, Dime Bank Bldg., Detroit, Mich.
 GEN. AUDITOR—A. K. Bowles, New York, N. Y.

ASST. GEN. AUDITOR—H. H. Snoderly, New York, N. Y.
 TR—S. L. Watson, Fairmont, W. Va.
 Asst. TR—T. K. Stuart, Baltimore, Md.
 ASST. TR—Walton Miller, Fairmont, W. Va.
 ASST. TR—D. P. Carey, New York, N. Y.
 SECY—T. K. Stuart, Baltimore, Md.
 ASST. SECY & ASST. TR—H. H. Warfield, New York, N. Y.
 REAL ESTATE AGENT—C. H. Bradfield, New York, N. Y.
 PA (General)—A. T. Watson, Fairmont, W. Va.
 PA (Asst. General)—F. C. Davis, Fairmont, W. Va.
 CE—Frank Haas, Fairmont, W. Va.
 Asst. CE—J. C. Gaskill, Fairmont, W. Va.
 SUPT. P. & M. DEPT. (All Divisions)—R. L. Kingsland, Fairmont, W. Va.
 ENGR. OF TESTS—R. E. Rightmire, Fairmont, W. Va.
 Asst. ENGR. OF TESTS—W. D. Barrington, Fairmont, W. Va.
 LIVE STOCK BUYER—Frank Amos, Fairmont, W. Va.
 DIRECTOR (Employment-Relationship Department)—C. L. Green, Fairmont, W. Va.
 DIRECTOR OF SAFETY—J. W. Reed, Fairmont, W. Va.
 COAL INSPECTOR, GEN.—C. F. Ice, Fairmont, W. Va.

MARYLAND DIVISION

CM—G. M. Gillette, Frostburg, Md.
 GS—Harry Martin, Frostburg, Md.
 PA—T. R. Middleton, Frostburg, Md.
 CE—Md. Div., J. D. Snyder, Frostburg, Md.
 MM—Md. Div., E. C. Tucker, Frostburg, Md.
 LOCAL AUDITOR—A. C. Jenkins, Frostburg, Md.

(Continued on Next Page)

Consolidation Coal Company—Cont.

Consolidation No. 1 Mine, Slope, Pgh Seam, 7 ft. 3 in. to 10 ft. 9 in. thick.
PO—Ocean, Md. SP—Same. CTY—Allegany, RR—Cumb. & Penna., Main Line.
MS—Peter Hoge, Ocean, Md.
S of H—Mules and 1 elec. loco. Track gage 36 in.
S of M—Hand.
PP—9 return tubular boilers, total 600 H. P., 2 gen. units, 250 volts D. C., 1—220 volts D. C., single phase, 60 cycles, 25 pumps.
EMP—183. Last years tonnage 128,300. SIZES SHIPT—Run of Mine.
Consolidation No. 3 Mine, Slope; Pittsburg Seam, 108 in. thick.
PO—Eckhart, Md. SP—Hod- man, Md. CTY—Allegany, RR—Cumb. & Penna., Eckhart Branch.
MS—R. L. Edwards, Eckhart Mines, Md.
S of H—Mules and rope, 1 elec. loco. Track gage 36 inches.
S of M—Hand.
PP—16 return tubular boilers, 3 gen. units, 125 volts D. C., 4 comp., 15 pumps.
EMP—139. Last years tonnage 91,103. SIZES SHIPT—Run of Mine.
Consolidation No. 4 Mine, Slope, Pgh. or Big Seam, 6 ft. to 10 ft. thick.
PO—Eckhart, Md. SP—Same. CTY—Allegany, RR—Cumb. & Penna., Eckhart Branch.
MS—Hugo Bumpel, Eckhart Mines, Md.
S of H—Mule, 1 elec. loco. and rope. Track gage 36 in.
S of M—Hand.
PP—3 return tubular boilers, total 290 H. P., 1 gen. unit, 250 volts D. C., 6 pumps.
EMP—99. Last years tonnage 66,453. SIZES SHIPT—Run of Mine.
Consolidation No. 6 Mine; Drift; Sewickley or Tyson Seam, 36 to 44 in. thick.
PO—National, Md.; SP—Carlos Junction, Md.; CTY—Allegany; RR—C. & P., Carlos Branch.
MS—Frank Williams, Lord, Md.
S of H—Mules.
S of M—Hand.
EMP—22. Last years tonnage 10,277. SIZES SHIPT—Run of Mine.
Consolidation No. 7 Mine; Slope; Pittsburg Seam, 120 inches thick.
PO—Lord, Md. SP—Same. CTY—Allegany, RR—Cumb. & Penna., No. 7 Branch.
MS—Frank Williams, Lord, Md.
S of H—Mule and rope. Track gage 3 ft.
S of M—Hand.
PP—7 return tubular boilers, 2 gen. units, 115 volts D. C., 2 pumps.
EMP—87. Last years tonnage 61,018. SIZES SHIPT—Run of Mine, Slack, Lump.
Consolidation No. 9 Mine, Drift, Sewickley or Tyson Seam, 2.4 ft. to 3.7 ft. thick.
PO—Frostburg, Md. SP—No. 9 Station, Frostburg, Md. CTY—Allegany, RR—Cumb. & Penna., Main Line.
MS—J. D. Woodson, Frostburg, Md.
S of H—Mules and 5 elec. locos. Track gage 42 in.
S of M—Hand.
PP—2 return tubular boilers, total 500 H. P., 2 gen. units, 250 volts D. C. Purchase power.
EMP—165. Last years tonnage 109,492. SIZES SHIPT—Run of Mine.
Consolidation No. 10 Mine, Drift, Sewickley or Tyson Seam, 2.7 ft. to 4 ft. thick.
PO—Eckhart, Md. SP—Eckhart Mine, CTY—Allegany, RR—Cumb. & Penna., Eckhart Br.
MS—James Darrow, Frostburg, Md.
S of H—Mules and 3 elec. locos. Track gage 42 in.
S of M—Hand.
PP—6 pumps; power from No. 4 mine.
EMP—75. Last years tonnage 60,578. SIZES SHIPT—Run of Mine.
Consolidation No. 11 Mine; Drift and Shaft; Sewickley or Tyson Seam, 31 to 44 inches thick.
PO—Frostburg, Md.; SP—Border Shaft, Md.; CTY—Allegany; RR—Cumb. & Penna.
MS—James Darrow, Frostburg, Md.
S of H—Mules and 2 elec. locos. Track gage 42 in.
S of M—Hand.
PP—Power from No. 3 Mine.
EMP—70. Last years tonnage 43,183. SIZES SHIPT—Run of Mine.
Consolidation No. 12 Mine, Shaft, Pgh. Seam, 6 ft. to 10.6 ft. thick.

PO—Borden Shaft, Md.; SP—Same; CTY—Allegany, RR—Cumb. & Penna.
MS—A. V. Neal, Frostburg, Md.
S of H—Mules and 1 elec. loco. Track gage 36 in.
S of M—Hand.
PP—2 return tubular boilers, total 140 H. P., 1 gen. unit, 125 volts D. C., 1 air comp.
EMP—126. Last years tonnage 120,747. SIZES SHIPT—Run of Mine.
Consolidation No. 13 Mine; Drift; Pittsburg and Sewickley or Tyson Seam, 29 to 42 in. thick.
PO—Frostburg, Md.; SP—Consolidation, Md. CTY—Allegany, RR—Cumb. & Penna.
MS—Charles Shields, Frostburg, Md.
S of H—Mules and 1 steam loco. Track gage 36 in.
S of M—Hand.
EMP—92. Last years tonnage 55,234. SIZES SHIPT—Run of Mine.
Consolidation No. 14 Mine; Drift; Pittsburg or Big Vein Seam, 66 to 88 in. thick.
PO—Frostburg, Md. SP—Zihman, Md. CTY—Allegany, RR—Cumberland & Penna., Main Line.
MS—Elmer Knight, Frostburg, Md.
S of H—Mules and rope.
S of M—Hand.
EMP—24. Last years tonnage 11,505. SIZES SHIPT—Run of Mine.
Consolidation No. 15 Mine; Slope; Pittsburg Seam, 96 to 102 in. thick.
PO—Vale Summit, Md.; SP—Same; CTY—Allegany; RR—C. & P., Eckhart Branch.
MS—George Richardson, Vale Summit, Md.
S of H—Mule and rope.
S of M—Hand.
PP—1 70 H. P. boiler, 1 air comp.
EMP—17. Last years tonnage 11,505. SIZES SHIPT—Run of Mine.
Consolidation No. 16 Mine; Drift and Slope; Pittsburgh Seam, 96 to 120 inches thick.
PO—Vale Summit, Md.; SP—Same; CTY—Allegany; RR—C. & P., Eckhart Branch.
MS—George Richardson, Vale Summit, Md.
S of H—Mules and rope.
S of M—Hand.
EMP—84. Last years tonnage 62,930. SIZES SHIPT—Run of Mine.

CUMBERLAND BIG VEIN COAL CO.

General Office, Cumberland, Md.
PR—L. Lee Lichtenstein, Cumberland, Md.
TR—F. Blaine White, Cumberland, Md.
GM—John W. Kreitzburg, Eckhart Mines, Md.
PA—John W. Kreitzburg, Eckhart Mines, Md.
EM—Max Mathias, Frostburg, Md.

Conway No. 1 Mine; Drift; Big Vein Seam, 84 inches thick.
PO—Eckhart Mines, Md.; SP—Same; CTY—Allegany; RR—C. & P.
S of H—Mules and 2 steam locos. Track gage 36 and 42 inches.
S of M—Hand.
EMP—50. Last years tonnage 20,973. SIZES SHIPT—Run of Mine.

EAGAN MINE.

General Office, Midland, Md.
OWNER—Chas. J. Eagan, Midland, Md.
Eagan Mine; Drift; Pittsburgh Big Vein, 108 in. thick.
PO—Midland, Md.; SP—Same; CTY—Allegany; RR—Western Md.
MS—Chas. J. Eagan, Midland, Md.
S of H—Mules and rope. Track gage 42 inches.
S of M—Hand.
EMP—10. Daily tonnage 70. SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by the Eagan Mining Company.

EAGAN MINING COMPANY

Now Eagan Mine.

FITZPATRICK COAL CO.

General Office, Pekin, Md.
PR—John W. Fitzpatrick, Pekin, Md.
GM—John W. Fitzpatrick, Pekin, Md.
GS—John W. Fitzpatrick, Pekin, Md.
PA—John W. Fitzpatrick, Pekin, Md.
SA—Pekin Coal Co., Piedmont, W. Va.
Pekin Mine; Drift; Big Vein Seam, 108 in. thick.
PO—Pekin, Md.; SP—Lonaconing, Md.; CTY—Allegany; RR—C. & P.
S of H—Mules and horses. Track gage, 42 in.
S of M—Hand.
EMP—25. Daily output, 80 tons. SIZES SHIPT—Run of Mine.
Old Information.

FROSTBURG BIG VEIN COAL COMPANY.

General Office, Frostburg, Md.
PR—Robertson, Frostburg, Md.
GM—C. S. Jeffries, Frostburg, Md.
GS—W. H. R. Thomas, Frostburg, Md.
PA—C. S. Jeffries, Frostburg, Md.
EM—Maxwell Mathias, Frostburg, Md.
No. 1 Mine; Drift; Pittsburgh Big Vein Seam, 84 in. thick.
PO—Zihman, Md.; SP—Same; CTY—Allegany, RR—C. & P.
S of H—Mules. Track gage, 48 in.
S of M—Hand.
PP—Power purchased, 250 volts D. C. EMP—80. Daily output, 200 tons. SIZES SHIPT—Run of Mine.

GARRETT COUNTY COAL AND MINING CO

General Office, Bethlehem, Pa.
PR—P. N. Dodson, Bethlehem, Pa.
VP—Allen C. Dodson, Bethlehem, Pa.
TR—G. R. Radford, Bethlehem, Pa.
GM—W. H. Gibson, Dodson, Md.
PA—J. B. Connel, Bethlehem, Pa.
SCO—Dodson Supply Co., Buyer, J. B. Connel, Bethlehem, Pa.
Sales Agency—Weston-Dodson & Co., Inc., Bethlehem, Pa.

Dodson Mine; Drift; Upper and Lower Kittanning Seams, 48 to 72 in. thick.
PO—Dodson, Md.; SP—Harrison, W. Va.; CTY—Garrett; RR—Western Maryland.
MS—A. J. Garrett, Dodson, Md.
SM—R. L. Dellinger, Dodson, Md.
S of H—Mules and 4 trolley pole type locos. Track gage, 42 in.
S of M—2 shortwall and 2 overhead cutter machines.
PP—Water tube boilers, 450 H. P., 400 Kva. gen. units, transformer 2200-400 volts A. C., rotary converters, 275 volts D. C., 3 pumps.
EMP—135. Last years tonnage 90,900. SIZES SHIPT—Run of Mine.
PIEP—EQUIP—Shaker Screens, Picking Tables.

GEORGES CREEK & PHOENIX MINING CORPORATION

General Office, 316 Parkway Bldg., Philadelphia, Pa.
PR—J. H. Thompson, St. Marys, Pa.
TR—A. C. Haw, Philadelphia, Pa.
GS—John Casy, Phoenix, Md.
PA—A. C. Haw, Philadelphia, Pa.
EM—Wm. Harvey, Frostburg, Md.
EE—A. Bland, Phoenix, Md.
SA—F. C. Heigle, 316 Parkway Bldg., Philadelphia, Pa.

Lander Mine; Drift; Freeport Seam, 45 inches thick.
PO—Franklin, Md.; SP—Barton, Md.; CTY—Allegany; RR—C. & P. A.
S of H—Trolley pole type loco. Track gage 42 inches.
S of M—Hand.
PP—Purchase power. 1 pump.
EMP—50. Last years tonnage 15,000. SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by A. K. Alt-house & Co.

GEORGE'S CREEK COAL COMPANY.

PR—H. E. Weber, Cumberland, Md.
TR—Robt. L. Stallings, " "
GM—J. F. Coale, " "
GS—J. R. Hamilton, Lonaconing, Md.
WM—Natahshi Somerville, " "
PA—J. R. Hamilton, " "
EE—Theo. Hardegan, Lonaconing, Md.

George's Creek Mines, Sections No. 1, 2, 3 and 4; Drifts; Tyson or Sewickley Seam, 36 to 48 in. thick.
PO—Lonaconing, Md.; SP—Same; CTY—Allegany; RR—Western Md.
S of H—3 elec. locos. Track gage 42 in.
S of M—Hand.
PP—Motor generator set, 1—200 K. W. at Mine No. 3, and 1—500 K. W. at Mine No. 4. Purchase power EMP—360. Daily tonnage 1,160. SIZES SHIPT—Run of Mine, Slack, Lump.

GEORGES CREEK COAL MINING COMPANY

General Office, Frick Bldg., Pittsburgh, Pa.
PR—Engene S. Bolly, Pittsburgh, Pa.
VP—L. A. Quinn, Pittsburgh, Pa.
TP—F. E. Peabody, " "
GM—L. A. Quinn, Pittsburgh, Pa.
GS—E. L. Carpenter, Lonaconing, Md.
PA—P. F. Merritt, 408 Frick Bldg., Pittsburgh, Pa.
SA—Eastern Fuel Co., Pittsburgh, Pa.

Jackson & Barton Mines; Drift; Big Vein and Tyson Seams, 40 to 120 in. thick.
PO—Lonaconing, Md.; Barton, Md.; CTY—Same; RR—C. & P.
S of H—None and locos.
S of M—Hand.
EMP—175. SIZES SHIPT—Run of Mine.

GEORGES CREEK & PHOENIX MINING CO.

General Office, Empire Bldg. Philadelphia, Pa.
PR—James H. Thompson, St. Marys, Pa.

VP—H. L. Montgomery, Philadelphia, Pa.
TR—A. C. Han, Kersy, Pa.
GM—C. Scott Ferguson, Philadelphia, Pa.
GS—J. P. Powell, Westernport, Md.
PA—A. C. Han, Kersy, Pa.
CE—Wm. E. Harvey, Frostburg, Md.
EM—William E. Harvey, Frostburg, Md.
SA—F. C. Heigle, Philadelphia, Pa.

Phoenix Mine; Drift; Baker-town Seam, 30 in. thick.
PO—Westernport, Md.; SP—Barton, Md.; CTY—Allegany; RR—C. & P.
S of H—Trolley pole type locos. Track gage, 42 in.
S of M—3 overhead cutter machines.
PP—Power purchased, 2 water tube boilers, 325 H. P., 250 volts D. C., 1 pump.
EMP—125. Last years tonnage 90,000. SIZES SHIPT—Run of Mine, Slack, Lump.
PIEP—EQUIP—Shaker Screens, Picking Tables.

GREEN COAL MINING CO.

Now a part of George's Creek Coal Mining Co.

GREEN'S COAL COMPANY.

General Office, Lonaconing, Md.
PR—A. F. Green, Lonaconing, Md.
TR—A. F. Green, Lonaconing, Md.
GM—P. F. Green, Lonaconing, Md.
GS—Thos. MacFarlane, Mdhall, Md.
PA—A. F. Green, Lonaconing, Md.
EM—A. F. Green, Lonaconing, Md.

Green's Mine; Drift; Upper Sewickley Seam, 42 in. thick.
PO—Lonaconing, Md.; SP—Same; CTY—Allegany; RR—W. M.
S of H—Mules. Track gage 42 in.
PP—Power purchased, Transformer 2200 volts A. C.
EMP—30. SIZES SHIPT—Run of Mine.

Little Pittsburgh Mine; Drift; Little Pittsburgh Seam, 30 in. thick.
PO—Lonaconing, Md.; SP—Same; CTY—Allegany; RR—W. M.
MS—Odilo Bauman, Lonaconing, Md.
S of H—Mules. Track gage 42 in.
S of M—Hand.
EMP—10. Last years tonnage 1,000. SIZES SHIPT—Run of Mine.

HAMPSHIRE BIG VEIN COAL CO

General Office, Piedmont, W. Va.
Hampshire Nos. 1 and 2 Mines.
PO—Martins, Md.; RR—C. P.
No Report.

HARPER, THOS. COAL CO.

General Office, Turtle Creek, Pa.
TR—Thos. R. Harper, Turtle Creek, Pa.
GM—Thos. R. Harper, Turtle Creek, Pa.
GS—Thos. R. Harper, Turtle Creek, Pa.
PA—Thos. R. Harper, Turtle Creek, Pa.
EM—Harrop & Hopkins, Pittsburgh, Pa.
EE—Turtle Creek Electric Co., Turtle Creek, Pa.
SA—Eaton Rhodes & Co., Pittsburgh, Pa.

Harper No. 4 Mine; Drift and Slope; R Seam, 48 in. thick.
PO—Ellerslie, Md.; SP—Cooks Mills, Pa.; CTY—Somerset; RR—B. & O.
MS—W. E. Harper, Ellerslie, Md.
S of H—Mules. Track gage 36 inches.
S of M—1 shortwall mach.
PP—2 boilers, total 165 H. P. M. G. set, 250 volts D. C., 1 175 K. W. gen. units, 1 pump.
EMP—25. Daily output, 100 tons. SIZES SHIPT—Run of Mine.

HARVEY HUTCHINSON & BROWNING COAL CO.

General Office, Mountain Lake Park, Md.
PR—R. B. Browning, Mountain Lake Park, Md.
TR—E. C. Hutchinson, Mountain Lake Park, Md.
GM—R. W. Harvey, Mountain Lake Park, Md.
GS—R. W. Harvey, Mountain Lake Park, Md.
PA—R. W. Harvey, Mountain Lake Park, Md.
CE—R. W. Harvey, Mountain Lake Park, Md.
EM—R. W. Harvey, Mountain Lake Park, Md.
SA—W. R. Nethkin, Coal Co., Cumberland, Md.

Connell Mine; Drift; Baker-town Seam, 38 inches thick.
PO—Mt. Lake Park, Md.; SP—Hutton, Md.; CTY—Garrett; RR—Branch R. & H.
S of H—Mule. Track gage 36 inches.
S of M—Hand.
EMP—10. Daily tonnage 60. SIZES SHIPT—Run of Mine.

HOOVER, GEO.

General Office, Jennings, Md.
PR—Geo. Hoover, Jennings, Md.
GS—George Hoover, Jennings, Md.
PA—George Hoover, Jennings, Md.
SCO—Address the Company, Buyer, Mrs. Roy R. Wilburn, Jennings, Md.
(Continued on Next Page)

Hoover, Geo.—Cont.

Hoover Mine; Slope; Low Volatile Seam; 30 inches thick.
 PO—Jennings, Md.; SP—Worth, Pa.; CTY—Garrett; RR—Jennings.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 PP—1 pump.
 EMP—10. Last years tonnage 2,901.
 SIZES SHIPT—Run of Mine.

KENDALL LUMBER CO.

General Office, Oliver Bldg., Pgh., Pa.
 PR—J. L. Kendall, Pittsburgh, Pa.
 TR—W. F. Schatz, " "
 GM—F. Cunningham, " "
 GS—Chas. W. Ream, " "
 MM—M. C. Thompson, " "
 SCO—Kendall Supply Co., Ruyter, H. K. Friend, Crellin, Md.

Arnold Run Mine; Drift; Upper Freeport Seam; 48 to 54 in. thick.
 PO—Crellin, Md.; SP—Hutton, Md.; CTY—Garrett. RR—B. & O., Preston Branch.

S of H—Mules; track gage 36 in.
 S of M—Hand.
 EMP—22. Average daily output, 500 tons.
 SIZES SHIPT—Run of Mine.

KILDOW COAL CO.

(See West Virginia Data.)

LAUREL RUN COAL COMPANY.

(See West Virginia Data.)

McKEE COAL COMPANY, THE

General Office, Frostburg, Md.
 PR—Jonathan Jenkins, Frostburg, Md.
 VP—Henry McKee, Sr., Frostburg, Md.
 TR—Robt. T. Shaw, Frostburg, Md.
 GS—James Jenkins, Frostburg, Md.
 PA—E. G. Metzger, Frostburg, Md.
 SA—Jenkins & McCall Coal Co., Frostburg, Md., and 602 Stewart Bldg., Baltimore, Md.

McKee No. 1 Mine; Slope; Pittsburgh Seam; 102 inches thick.
 PO—Lord, Md.; SP—Same; CTY—Allegheny; RR—C. & P.
 MS—Henry McKee, Jr., Lord, Md.
 S of H—Mules and rope, gasoline loco. Track gage 36 inches.
 S of M—Hand.
 PP—1 pump.
 EMP—40. Last years tonnage 25,407.
 SIZES SHIPT—Run of Mine.

McKee No. 2 Mine; Drift; Swickley Seam; 42 inches thick.
 PO—Lonaconing, Md.; SP—Same; CTY—Allegheny; RR—W. M.
 MS—Walter Kalmyer, Lonaconing, Md.
 S of H—Mules and rope. Track gage 36 in. S.

S of M—Hand.
 PP—2 fire tube boilers, 3 pumps.
 EMP—70. Last years tonnage 45,149.
 SIZES SHIPT—Run of Mine.
 Note—McKee No. 2 Mine was formerly the Komtz Mine of New Central Coal Co.

McNITT BIG VEIN COAL COMPANY, THE.

Now McNitt Coal Co.

McNITT COAL COMPANY

General Office, Frostburg, Md.
 PR—Jas. H. Fuller, Frostburg, Md.
 TR—B. T. Bradley, Frostburg, Md.
 GM—Jonathan Jenkins, Baltimore, Md.
 GS—Jas. Jenkins, Frostburg, Md.
 PA—Earl Metzger, Frostburg, Md.
 SA—Jenkins & McCall Coal Co., Frostburg, Md., and 602 Stewart Bldg., Baltimore, Md.

McNitt No. 2 Mine; Drift; Swickley Seam, 42 in. thick.
 PO—Midlothian, Md.; SP—Borden Shaft, Md.; CTY—Allegheny; RR—C. & P.
 MS—John Fatkin, Carlos, Md.
 S of H—Mules and main and tail rope, steam locos. Track gage 42 in.
 S of M—Hand.
 PP—1 fire tube boiler.
 EMP—94. Last years tonnage 35,788.
 SIZES SHIPT—Run of Mine.
 NOTE—Formerly operated by the McNitt Big Vein Coal Co.

MANOR COAL CO., THE

General Office, Farmers Trust Bldg., Johnstown, Pa.
 PR—Andrew B. Crichton, Johnstown, Pa.
 TR—H. A. Crichton, Johnstown, Pa.
 GM—H. A. Crichton, Johnstown, Pa.
 GS—Stephen Trowton, Vindex, Md.
 PA—H. A. Crichton, Johnstown, Pa.
 EM—A. B. Crichton, Johnstown, Pa.
 SCO—Vindex Supply Co., Vindex, Md.
 SA—Johnstown Coal & Coke Co., Johnstown, Pa.

Manor No. 1 Mine; Drift; Lower Kittanning Seam, 72 inches thick.
 PO—Vindex, Md.; SP—Chaffee W. Va.; (Prepay) CTY—Garrett; RR—Western Md.
 SM—H. H. Grace, Vindex, Md.
 S of M—Mules and 2 trolley pole type locos. Track gage 42 in.

S of M—2 shortwall machs.
 PP—3 fire tube boilers, 260 H. P., gen. units, 1—175 K. W., 250 volts D. C.
 EMP—175. Daily tonnage 900.
 PREP. EQUIPT—Gravity Screens, Picking Tables.
 NOTE—Successors to Chaffee Coal Co.

MARYLAND COAL COMPANY

General Office, 25 Beaver St., New York, N. Y.
 PR—J. W. Galloway, New York, N. Y.
 1st VP—J. E. McGowan, New York, N. Y.
 2nd VP—G. Smith, New York, N. Y.
 GM—J. W. Galloway, New York, N. Y.
 GS—Elkins Read, Lonaconing, Md.
 PA—Elkins Read, Lonaconing, Md.
 CE—Elkins Read, Lonaconing, Md.
 EM—P. C. Fell, Lonaconing, Md.
 EE—E. C. Gastral, Lonaconing, Md.
 SA—Maryland Coal Co. of W. Va., 25 Beaver St., New York, N. Y.

Kingsland Mine; Drift; Georges Creek Big Vein, 120 in. thick.
 PO—Lonaconing, Md.; SP—Same; CTY—Allegheny; RR—W. M.
 S of H—Mule and 1 12-ton steam loco. S of M—Hand.
 EMP—74. Daily tonnage 250.
 SIZES SHIPT—Run of Mine.

Tyson Mine; Drift; Tyson (Upper Swickley) Seam; 42 in. thick.
 PO—Lonaconing, Md.; SP—Same; CTY—Allegheny; RR—W. M.

S of H—1 10-ton, 1 8-ton, 1 6-ton loco. Track gage 42 in.
 S of M—Hand.
 PP—Power purchased from Edison Electric Illuminating Co. Transformer 33,000 to 2,200 volts A. C., M. G. sets, 2—200 K. W., 3—75 K. V. A. and 3—150 K. V. A., 250 volts D. C.
 EMP—106. Daily tonnage 300.
 SIZES SHIPT—Run of Mine.

Waynesburg Mine; Drift; Waynesburg Seam, 56 in. thick.
 PO—Lonaconing, Md.; SP—Same; CTY—Allegheny; RR—W. M.
 S of H—2 10-ton locos.
 S of M—2 arewall machs.
 EMP—84. Daily tonnage 350.
 SIZES SHIPT—Run of Mine.

No. 4 Mine; Bakerstown Seam, 30 in. thick.
 PO—Lonaconing, Md.; SP—Same; CTY—Allegheny; RR—W. M.
 S of H—Mules.
 S of M—1 shortwall mach.
 PP—M. G. Sets, 1—75 K. W.
 EMP—30. Daily tonnage 100.

MIDLAND MINING CO.

General Office, Cumberland, Md.
 PR—J. W. P. Somerville, Cumberland, Md.
 TR—W. A. S. Somerville, Cumberland, Md.
 GM—J. W. P. Somerville, Cumberland, Md.
 PA—J. S. Askey, Lonaconing, Md.
 CE—Wm. Harvey, Frostburg, Md.

Neff Run Mine; Drift; Georges Creek Big Vein Seam, 166 in. thick.
 PO—Midland, Md.; SP—Same; CTY—Allegheny; RR—C. & P.
 MS—J. S. Askey, Lonaconing, Md.
 S of H—Mules and rope. Track gage, 36 in.
 S of M—Hand.
 EMP—74. Last years tonnage 62,000.
 SIZES SHIPT—Run of Mine.

MIDLOTHIAN COAL COMPANY.

General Office, Cumberland, Md.
 PR—Carl C. Hetzel, Cumberland, Md.
 VP—W. F. Coale, Cumberland, Md.
 TR—Robert Stallings, Cumberland, Md.
 GM—Wm. Walters, Frostburg, Md.
 GS—Wm. Walters, Frostburg, Md.
 PA—Wm. Walters, Frostburg, Md.
 SA—Coale & Co., Inc., Cumberland, Md.

Midlothian Mine; Drift; Big Vein and Tyson Seams; 108-50 in. thick.
 PO—Midlothian, Md.; SP—Borden Shaft, Md.; CTY—Allegheny; RR—B. & O.
 S of H—Mules and rope. Track gage, 36 in.
 S of M—Hand.
 PP—1 pump.
 EMP—50. Daily tonnage 150.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

MILLER & GREENE COAL COMPANY

General Office, Westport, Md.
 PR—J. P. Miller, Westport, Md.
 TR—J. P. Miller, " "
 GM—J. O. J. Greene, " "
 PA—J. O. J. Greene, " "
 EM—Wm. Harvey, Frostburg, Md.

M. & G. Nos. 1 and 2 Mines; Drift; Clarion or Parker Seam and Lower Kittanning Seam, 36 and 66 in. thick

PO—Westernport, Md.; SP—Franklin, Md.; CTY—Allegheny; RR—C. & P.
 S of H—Mules and 1 elec. loco. Track gage 42 in.
 S of M—Hand.
 PP—1 boiler, total 50 H. P.
 EMP—60. Last fiscal year output, 24,000 tons.
 SIZES SHIPT—Run of Mine.
 Old Information.

MOSCOW-GEORGES CREEK MINING CO.

General Office, Cumberland, Md.
 PR—J. W. P. Somerville, Cumberland, Md.
 VP—C. D. Willard, Cumberland, Md.
 TR—W. A. S. Somerville, Cumberland, Md.
 GM—J. W. P. Somerville, Cumberland, Md.
 PA—J. W. P. Somerville, Cumberland, Md.
 EM—Wm. Harvey, Frostburg, Md.

Moscow Nos. 2 and 3 Mines; Drift and Georges Creek Seam, 48-166 in. thick.
 PO—Barton, Md.; SP—Same; CTY—Barton, Md.; RR—C. & P.
 MS—R. R. Brennan, Barton, Md.
 S of H—Mules and rope. Track gage, 42 in.
 S of M—Hand.
 PP—Power purchased.
 EMP—85. Last years tonnage 65,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

MT. SAVAGE FUEL CO.

General Office, Mt. Savage, Md.
 PR—L. R. Barth, Mt. Savage, Md.
 TR—Clinton Ubl, Mt. Savage, Md.
 GM—L. R. Barth, Mt. Savage, Md.
 GS—L. R. Barth, Mt. Savage, Md.
 PA—Clinton Ubl, Mt. Savage, Md.
 SA—Address the Company, Mt. Savage, Md.

Newton Mine; Drift; Rock Vein Seam, 32 in. thick.
 PO—Mt. Savage, Md.; SP—Same; CTY—Allegheny; RR—C. & P.
 S of H—Elec. locos. Track gage 42 in.
 S of M—Elec. puncher and shortwall machine.
 PP—Power purchased. Transformer 6600 to 220 volts A. C.
 EMP—12. Last years tonnage 4,500.
 SIZES SHIPT—Run of Mine.

MT. SAVAGE GEORGES CREEK COAL CO

General Office, Frostburg, Md.
 PR—George Stern, Frostburg, Md.
 VP—Harry Finn, New York, N. Y.
 TR—Julius Abramson, Frostburg, Md.
 GM—George Stern, Frostburg, Md.
 GS—C. Roberts, Frostburg, Md.
 PA—H. B. Avery, Mt. Savage, Md.
 CE—S. G. Haverstick, Frostburg, Md.
 EF—H. S. Riewick, Mt. Savage, Md.

No. 1 Mine; Drift; C Prime Seam; 48 in. thick.
 PO—Mt. Savage, Md.; SP—Same; CTY—Allegheny; RR—C. & P.
 S of H—Trolley pole type locos. Track gage, 42 in.
 S of M—Overhead cutter machines.
 PP—Power purchased. Transformer 6,600 to 440 volts A. C., M. G. sets, 220 and 440 volts D. C., 4 pumps.
 EMP—114. Last years tonnage 67,517.
 SIZES SHIPT—Run of Mine.

No. 2 Mine; Drift; C Prime Seam; 48 in. thick.
 PO—Mt. Savage, Md.; SP—Same; CTY—Allegheny; RR—W. M.
 S of H—Mules. Track gage, 42 in.
 S of M—Hand.
 SIZES SHIPT—Run of Mine.

MOUNT SAVAGE MINING COMPANY

General Office, Cumberland, Md.
 PR—R. H. Riggs, Cumberland, Md.
 VP—F. R. Jennev, Cumberland, Md.
 TR—J. W. Young, Cumberland, Md.
 GM—J. W. Young, Cumberland, Md.
 GS—B. H. Riggs, Cumberland, Md.

Liberty Mine; Slope; Maynadler Seam, 28-32 inches thick.
 PO—Mt. Savage, Md.; SP—Same; CTY—Allegheny; RR—C. & P., R. & O.
 S of H—Mules and gasoline locos.
 S of M—Overcutter mach.
 PP—Transformer 220-110 A. C., 60 cycles, 3 phase.
 EMP—23. Daily tonnage 150.
 SIZES SHIPT—Run of Mine.

MYERS COAL COMPANY

General Office, Grantsville, Md.
 Reachy Mine.
 PO—Grantsville, Md.; RR—Jennings.
 No report.

NEW CENTRAL COAL COMPANY

Big Vein Mine now Green's Coal Co.
 Midlothian Mine. Now the Adams Coal Co.
 Koomtz Mine now the McKee No. 2 Mine of McKee Coal Co.

NORTH MARYLAND COAL MINING CO.
 General Office, 407 Main St., Johnstown, Pa.
 PR—Park J. Alexander, Pittsburgh, Pa.
 TR—J. F. Walton, Pittsburgh, Pa.
 GM—A. B. Crichton, Johnstown, Pa.
 GS—Thos. Richardson, Frostburg, Md.
 PA—A. R. Crichton, Johnstown, Pa.
 EM—A. B. Crichton, Johnstown, Pa.
 SA—Johnstown Coal & Coke Co., Johnstown, Pa.

Montel Mine; Drift; Lower Kittanning Seam; 72 inches thick.
 PO—Frostburg, Md.; SP—Mertens Station, Md.; CTY—Allegheny; RR—Western Maryland.
 S of H—Mules and elec. locos. Track gage 36 in.
 S of M—Hand.
 PP—Power purchased.
 EMP—100. Daily output, 300 tons.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Screens, Picking Tables.

PEKIN COAL COMPANY

General Office, Piedmont, W. Va.
 PR—S. B. Brydon, Piedmont, W. Va.
 TR—H. P. Brydon, Piedmont, W. Va.

Brydon Mine; Drift; Big Vein Seam, 144 inches thick.
 PO—Nikop, Md.; SP—Lonaconing, Md.; CTY—Allegheny; RR—C. & P.
 MS—S. B. Brydon, Piedmont, W. Va.
 S of H—Mules. Track gage 42 inches.
 S of M—Hand.
 EMP—20. Daily tonnage 100.
 SIZES SHIPT—Run of Mine.

PENDERGAST & ASHBY.

General Office, Hutton, Md.
 GM—M. W. Pendergast, Hutton, Md.
 PA—M. W. Pendergast.

Pendergast Mine; Drift; Kittanning Seam; 48 in. thick.
 PO—Hutton, Md.; SP—Same; CTY—Garrett; RR—Preston.
 MF—G. Castel, Crellin, Md.
 S of H—Mules.
 S of M—Hand.
 EMP—20. Daily tonnage 100.
 SIZES SHIPT—Run of Mine.

PIEDMONT & GEORGE'S CREEK COAL CO.

General Office, Frostburg, Md.
 PR—J. S. Brophy, Frostburg, Md.
 TR—Martin Condy, Frostburg, Md.
 GM—John S. Brophy, Frostburg, Md.
 PA—Alex. G. Close, Frostburg, Md.
 EM—G. G. Townsend, Jr., Frostburg, Md.
 SA—Piedmont & Georges Creek Coal Co., 20 Church St., New York, N. Y.

Washington No. 1 Mine; Drift; Lower Kittanning Seam, 44 to 54 in. thick.
 PO—Westernport, Md.; SP—Gannons, Md.; CTY—Allegheny; RR—C. & P.
 MS—M. T. O'Rourke, Westernport, Md.
 S of H—2 trolley pole type locos. Track gage, 42 in.
 S of M—2 arewall machs.
 PP—Power purchased, transformer 2200 to 440 volts A. C., M. G. sets, 250 volts D. C., 2 pumps.
 EMP—62. Last years tonnage 52,141.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Revolving and Shaker Screens.

Washington No. 2 Mine; Drift; Tyson Seam; 38-46 in. thick.
 PO—Eckhart, Md.; SP—Same; CTY—Allegheny; RR—C. & P., Eckhart Br.
 MS—Martin Condy, Frostburg, Md.
 S of H—4 trolley pole type locos. Track gage 42 in.
 S of M—Hand and 1 shortwall machs.
 PP—2 return tubular boilers, total 350 H. P., 1 gen. unit, 250 volts D. C.
 EMP—26. Last years tonnage 11,662.
 SIZES SHIPT—Run of Mine.

Washington No. 5 Mine; Drift; Bakertown Seam, 28 to 42 in. thick.
 PO—Westernport, Md.; SP—Gannons, Md.; CTY—Allegheny; RR—C. & P.
 MS—M. T. O'Rourke, Westernport, Md.
 S of H—4 trolley pole type locos. Track gage, 42 in.
 S of M—4 shortwall machs.
 PP—Power purchased, transformer 2200 to 440 volts A. C., 1 150 H. P. water tube boiler, M. G. sets, 250 volts D. C.
 EMP—80. Last years tonnage 58,601.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Revolving and Shaker Screens.

PINE HILL COAL COMPANY

General Office, Lonaconing, Md.
 Pine Hill Mine.
 PO—Midland Jct., Md.; RR—W. M.
 No report.

POTOMAC & CUMBERLAND COAL CO., THE
General Office, 520 Commercial Trust Bldg., Philadelphia, Pa.
PR—J. H. Casanave, Philadelphia, Pa.
VP—F. B. Casanave, Jr., Philadelphia, Pa.
TR—F. D. Casanave, Philadelphia, Pa.
GS—Thos. Morgan, Mt. Savage, Md.
PA—J. H. Casanave, Philadelphia, Pa.
SA—Potomac & Cumberland Coal Co., 810 Penn Square Bldg., Philadelphia, Pa.

Nos. 1, 2 and 3 Mines; Drift; Lower Freeport, Upper Freeport and Bakerstown Seams, 52, 48 and 42 in. thick.
PO—Mt. Savage, Md.; SP—Same; CTY—Allegany; RR—C. & P.
S of H—Mules. Track gage 36 inches.
S of M—Hand and shortwall machs.
PP—Power purchased. Transformer 6000-440 volts A. C. and 220 volts A. C.
EMP—40. Daily tonnage 100.
SIZES SHIPT—Run of Mine.

ROSS-AMBROSE COAL MINES, INC.
General Office, Jennings, Md.
PR—R. J. Ross, Westernport, Md.
VP—E. Ambrose, Poughkeepsie, N. Y.
TR—E. Ambrose, Poughkeepsie, N. Y.
GM—W. E. Ambrose, Cumberland, Md.
GS—Louis Durst, Jennings, Md.
PA—R. J. Ross, Westernport, Md.
CE—William Harvey, Frostburg, Md.
SCO—Jennings Bros. Co., Jennings, Md.
SA—Jno. Willis, Inc., Philadelphia, Pa.

Ross Nos. 1 and 2 Mines; Drift; Freeport and Bakerstown Seams, 30-60 inches thick.
PO—Jennings, Md.; SP—Same; CTY—Garrett; RR—B. & O.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
EMP—41. Daily tonnage 100.
SIZES SHIPT—Run of Mine.

ROWE, C. J. & BROS.
General Office, Meyersdale, Pa.
PR—C. J. Rowe, Cumberland, Md.
VP—C. F. Rowe, Meyersdale, Pa.
TR—P. E. Rowe, Meyersdale, Pa.
GM—Fred Rowe, Sr., Meyersdale, Pa.
GS—Fred Rowe, Sr., Meyersdale, Pa.
PA—C. J. Rowe, Cumberland, Md., and Fred Rowe, Sr., Meyersdale, Pa.
CE—L. H. Rowe, Meyersdale, Pa.
EE—Jas. Shank, Wellersburg, Pa.

SCO—Parker Supply Co. Buyer, Ralph Rowe, Mt. Savage, Md.
SA—F. E. Rowe, Meyersdale, Pa.
Parker Mine; Drift; C Seam, 42 in. thick.
PO—Mt. Savage, Md.; SP—Same; CTY—Allegany; RR—C. & P.
MS—C. J. Rowe, Cumberland, Md.
S of H—Mules. Track gage 42 inches.
S of M—Shortwall mach.
PP—Power purchased. Transformer 6600-275 volts A. C.
EMP—60. Daily tonnage 100.
PREP. EQUIPT—Picking Tables.

SNOWY CREEK COAL COMPANY.
Now Cass Coal Company

STANTON, U. M.
OWNER—U. M. Stanton, Grantsville, Md.
Stanton No. 172 Mine; Drift; Bakerstown Seam; 30 in. thick.
PO—Grantsville, Md.; SP—North Jct., Md.; CTY—Garrett; RR—B. & O.
S of H—Mules.
S of M—Hand.
EMP—10 to 12.
SIZES SHIPT—Run of Mine.
Old information.

STANTON GEORGE'S CREEK COAL CO.
General Office, Frostburg, Md.
Stanton No. 1 Mine.
PO—Short Gap, Md.; RR—C. & P.
No report.

SULLIVAN BROS. COAL COMPANY.
PR—Dennis Sullivan, Frostburg, Md.
VP—William J. Sullivan, Frostburg, Md.
TR—J. A. Sullivan, Frostburg, Md.
GM—J. A. Sullivan, Frostburg, Md.
PA—J. A. Sullivan, Frostburg, Md.
EM—Maxwell Mathias, Frostburg, Md.
EE—Thomas J. Price, Frostburg, Md.
SA—R. B. Sparks, 208 Fidelity Bldg., Baltimore, Md.

Sullivan No. 1 Mine; Drift; Tyson and Pittsburgh Seams, 48-72 in. thick.
PO—Eckhart Mines, Md.; SP—Same; CTY—Allegany.
MS—Jno. P. Barry, Eckhart Mines, Md.
S of H—Mules and trolley pole elec. type locos. Track gage, 42 in.
S of M—Hand.
PP—Power purchased, 250 volts D. C., 2 pumps.

LMP 220. Last fiscal year output, 69,250 tons.
SIZES SHIPT—Run of Mine.
Sullivan No. 2 Mine; Drift; Pittsburgh Seam, 198 in. thick.
PO—Frostburg, Md.; SP—Same; CTY—Allegany; RR—C. & P.
MS—R. B. Rymer, Frostburg, Md.
S of H—Mules and 1 trolley pole type loco.
S of M—Hand.
PP—2 fire tube boilers, total 300 H. P., 1 gen. unit, 250 volts D. C.
EMP—165. Last fiscal year output, 63,737 tons.
SIZES SHIPT—Run of Mine.

TAYLOR-OFFUTT COAL CO., INC.
General Office, 300 Chestnut St., Philadelphia, Pa.
PR—Hollinshead N. Taylor, 300 Chestnut St., Philadelphia, Pa.
VP—W. R. Offutt, Oakland, Md.
TR—Edward S. Lewis, 300 Chestnut St., Philadelphia, Pa.
PA—Harry Muschenheim, 300 Chestnut St., Philadelphia, Pa.
CE—N. Allen Stockton, Real Estate Trust Bldg., Philadelphia, Pa.

Taylor-Offutt No. 1 Mine; Drift; Kittanning Seam; 42 inches thick.
PO—Oakland, Md.; SP—Offutt, Md.; CTY—Garrett; RR—B. & O.
S of H—Rope. Track gage 42 inches.
S of M—Hand.
PP—1 return tubular boiler, 125 H. P., 1 pump.
EMP—20.
SIZES SHIPT—Run of Mine.

TURNER DOUGLAS COAL CO.
(See West Virginia Data.)

UNITED BIG VEIN COAL COMPANY
General Office, Meyersdale, Pa.
PR—C. F. Rowe, Meyersdale, Pa.
SECY—L. H. Rowe, Meyersdale, Pa.
TR—Fred Rowe, Sr., Meyersdale, Pa.
GM—Fred Rowe, Sr., Meyersdale, Md.
GS—Fred Rowe, Sr., Meyersdale, Pa.
PA—C. J. Rowe, Cumberland, Md.; Fred Rowe, Sr., Meyersdale, Pa.

Trimble Mine; Drift; Pittsburgh Seam, 60 inches thick.
PO—Mt. Savage, Md.; SP—Same; CTY—Allegany; RR—C. & P.

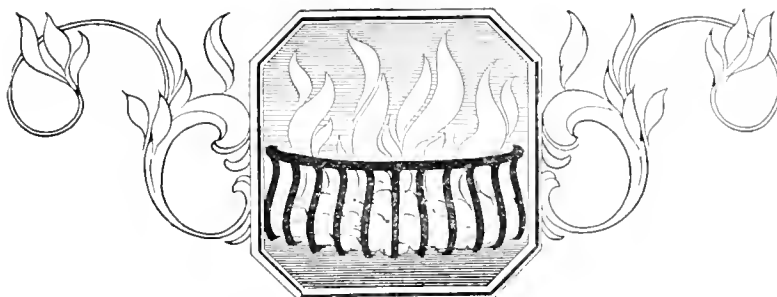
MS—H. W. Rowe, Mt. Savage, Md.
S of H—Mules, rope and elec. locos.
Track gage, 42 in.
S of M—Hand and shortwall machs.
PP—Power purchased. Transformer, rotary converters, 250 volts D. C.
EMP—60. Last years tonnage 30,000.
PREP. EQUIPT—Picking Tables.

WESTERNPORT COAL CO.
General Office, Westernport, Md.
PR—W. G. Paul, Westernport, Md.
VP—M. T. Dailey, Westernport, Md.
TR—H. P. Whitmoth, Westernport, Md.
GM—Thomas Dailey, Westernport, Md.
PA—Horace Whitworth, Westernport, Md.
SA—Lee Lichtenstein, Cumberland, Md.

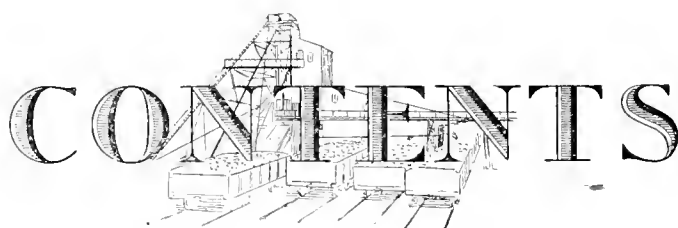
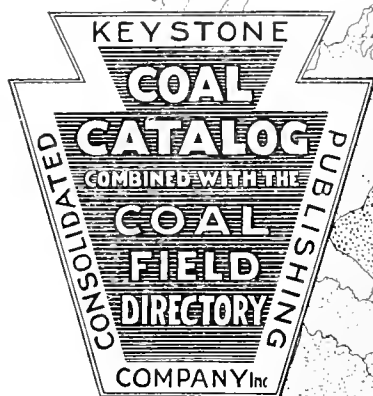
Western Port No. 1 Mine; Drift; Lower Kittanning Seam; 72 inches thick.
PO—Westernport, Md.; SP—Same; CTY—Allegany; RR—Cumberland & Penn.
MS—M. T. Dailey, Westernport, Md.
S of H—Mules. Track gage 42 in.
S of M—Hand.
PP—1-5 H. P., 1-15 H. P., 1-20 H. P. motor, 1 pump.
EMP—10. Daily tonnage 225.
SIZES SHIPT—Run of Mine.

WOLF DEN COAL COMPANY, INC.
General Office, 25 Beaver St., New York, N. Y.
PR—W. A. Marshall, 25 Beaver St., New York, N. Y.
VP—Robert H. Burrows, New York, N. Y.
TR—H. L. Morrison, 25 Beaver St., New York, N. Y.
GM—W. E. Wilson, Johnstown, Pa.
GS—Thomas Griffiths, Dodson, Md.
PA—Thomas Griffiths, Dodson, Md.
SCO—Schallmar Supply Co. Buyer, J. C. Meyers Dodson, Md.
SA—W. A. Marshall & Co., 25 Beaver St., New York, N. Y.

Wolf Den Mine; Drift; Lower Kittanning Seam, 52-60 in. thick.
PO—Dodson, Md.; SP—Frt., Same; Exp., Harrison, W. Va.; CTY—Garrett; RR—W. Md.
S of H—Mules, Electric Storage Battery Locos. Track gage 42 in.
S of M—Hand, shortwall machs.
PP—2-150 H. P. fire tube boilers. Gen. units 1-200 K. W., 1-300 K. W., 250 volts D. C.
EMP—150. Last years tonnage 144,871.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.



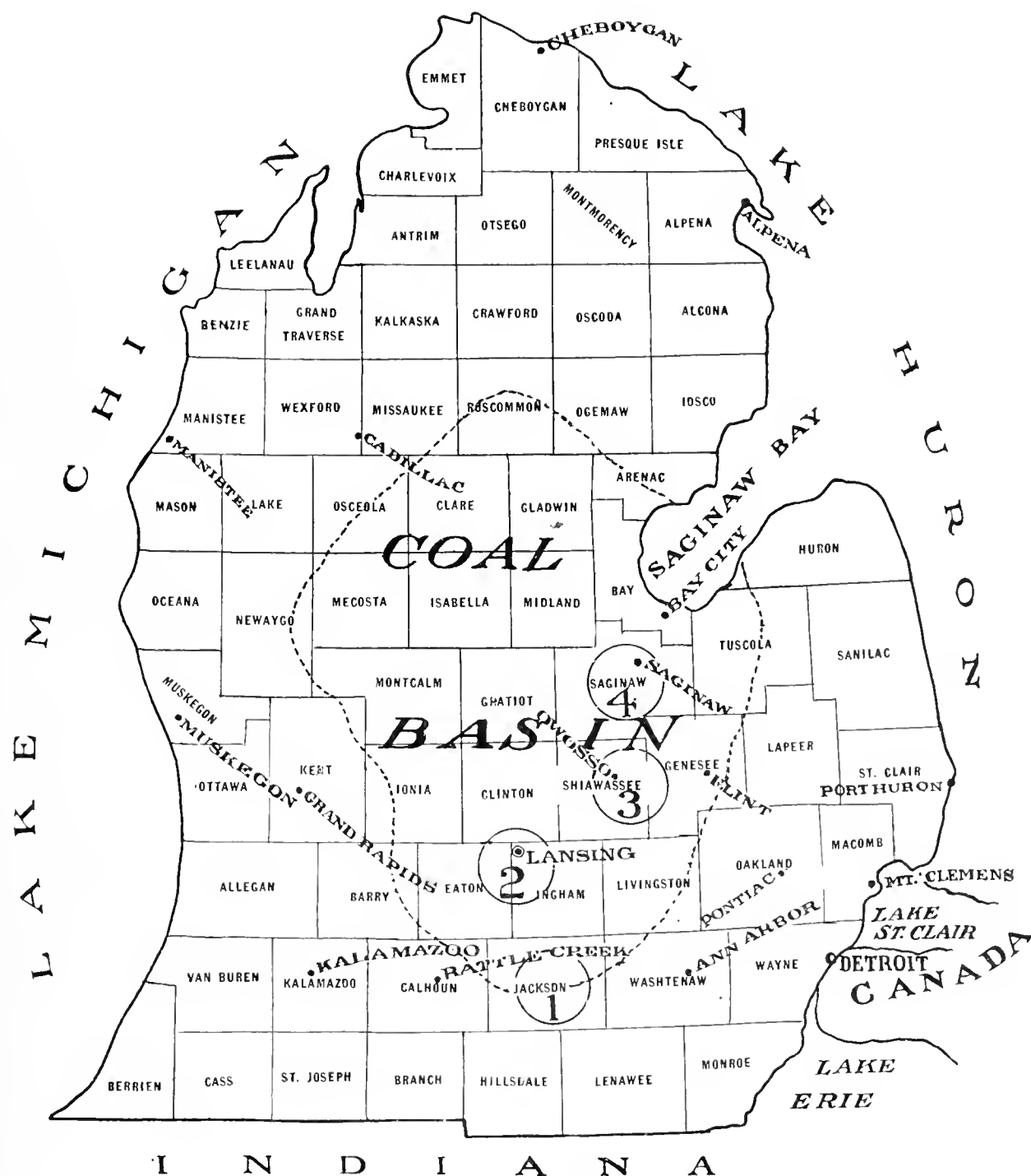
MICHIGAN



Map of Coal Basins.....	547
Sectional Views of Coal Formations.....	548
General Description of Coal Resources....	549 to 553
Surface Features.....	549
Accessibility	549
Geology	549
Character of the Coal Beds.....	549
Thickness of the Coal Measures....	550
Occurrence of the Coal.....	551
Quality of the Coal.....	552
Mining Conditions.....	552
Subdivisions of the Field.....	553
Preparation and Sizing of Coal.....	553
Supplementary Analyses.....	554
List of Mines.....	555
Alphabetical Directory of Coal Mines.....	556

MICHIGAN

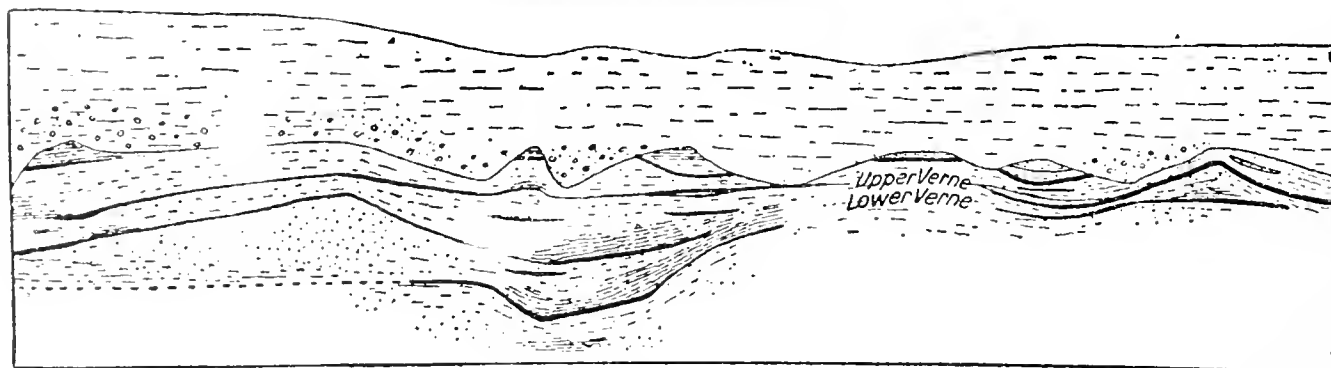
(Southern Peninsula)



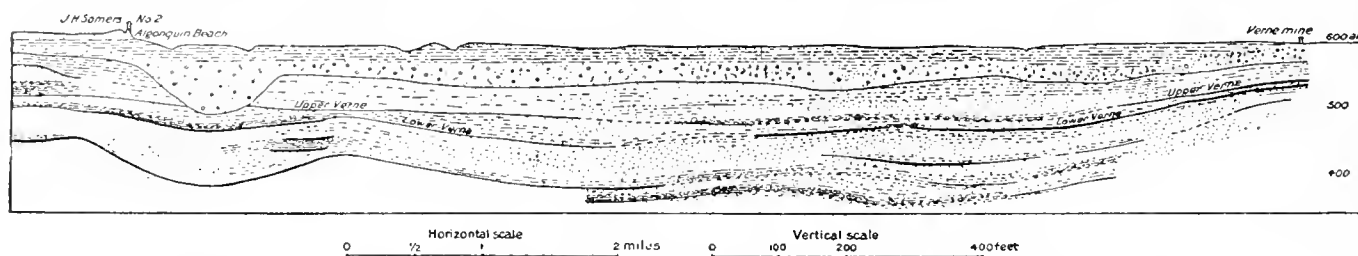
MAP OF COAL BASIN

SECTIONS OF COAL FORMATIONS

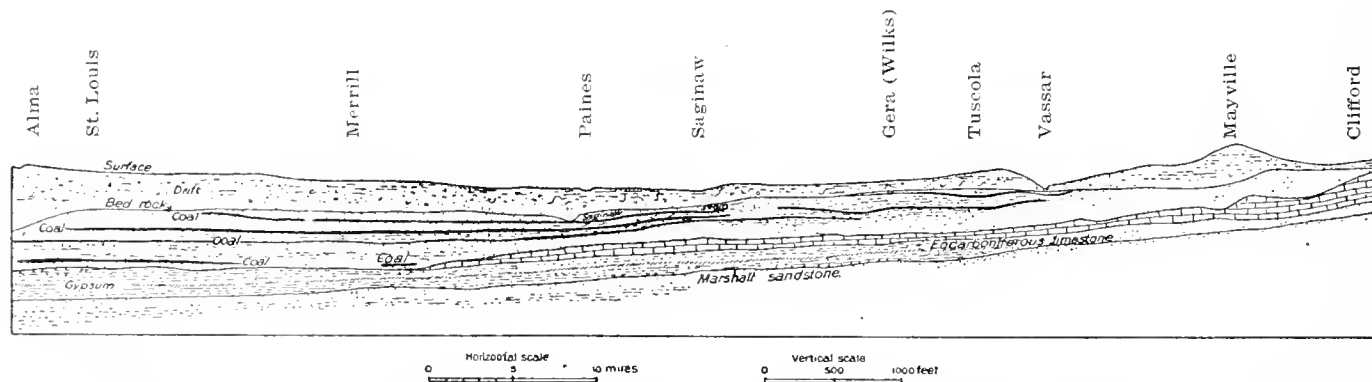
MICHIGAN*



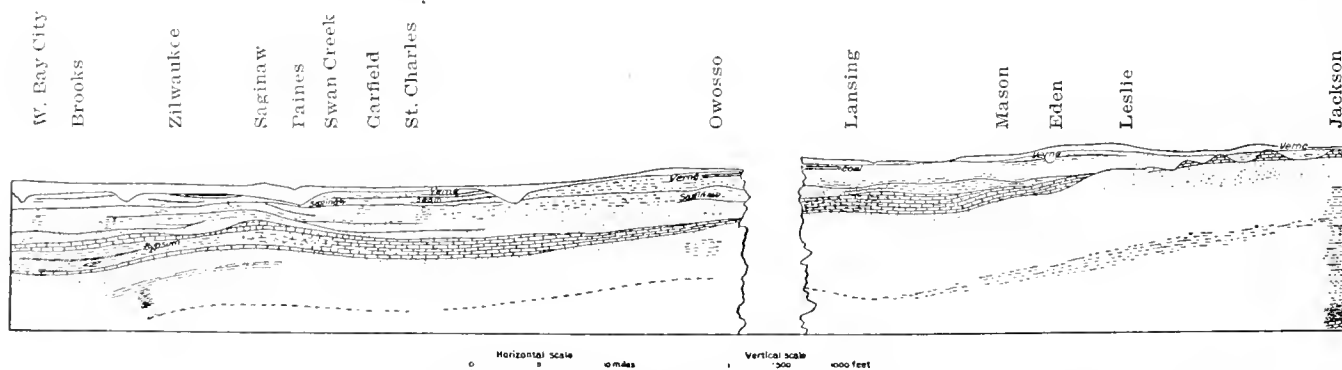
Section from Amelith shaft N. 30° E. to the Central and Michigan mines, Bay City.



Section from Somers No. 2 shaft S. 80° E. to the Verne mine, Saginaw county.



Section on the line of Pere Marquette Railway from Alma eastward through Saginaw to Clifford.



Section on the line of the Michigan Central Railway from Bay City southward to Jackson.

*From the 22nd Annual Report, Part 3, U. S. G. S.

MICHIGAN*

General Description of the Coal Resources of the State, With the Rank of Coal Produced; Treats In a General Way of the Seams Mined and Mining Conditions; Map of State Showing Districts, and Cross Sectional Views Showing Formation of Coal; Analyses, Etc.

The Michigan Coal Basin is the only coal field in the St. Lawrence drainage basin. It covers an area of about 11,000 square miles almost in the geographic center of the Southern Peninsula, extending from the central part of Tuscola county on the east to the western part of Newaygo county on the west and from the south central part of Roscommon and Ogemaw counties on the north to the central portion of Jackson county on the south.

The limits of the Coal Basin on the south and east have been approximately determined, but the margin is more or less irregular. On the north and northwest the boundary is more uncertain owing to the thick screen of surface deposits.

GENERAL DESCRIPTION OF MINING REGIONS AND COALS

Surface features

The greater part of the Coal basin lies in a low flat to gently undulating region bordered by a rim of higher and more broken land, broken on the northeast by Saginaw Bay and on the west by the valley of the Grand. The low flat portion of the interior basin, largely included in Saginaw Valley, has an elevation ranging from about 580 feet above sea level to 800 feet, and the higher undulating portions from 800 to 1,000 feet above sea level. The marginal higher broken tracts on the south and east rise from a height of about 1,000 feet above Lakes Huron and Michigan.

To a large extent the rim of high land is due primarily to an underlying rim of hard limestone (Bayport) and heavy sandstone (Marshall) of the Upper Mississippian. On the northeast this rock rim is breached by Saginaw Bay and on the northwest by an old pre-glacial valley which runs southwest from the head of the bay through northern Gratiot county and, veering to the west and then northwest through Montcalm and Newaygo counties, enters the basin of Lake Michigan in western Mason and Manistee counties. The height of the rim was further accentuated in the Pleistocene period by a greater piling up of glacial debris along the rim than in the interior of the basin.

Though the rock surface is very uneven, the mantle of drift is so thick that nearly everywhere it completely buries and conceals the Coal Measures. Southwest of a line from the mouth of Saginaw River to Grand Rapids the drift over the Coal Basin is generally 50 to 150 feet thick and only in a few places is it more than 200 feet. Northwest of this line, excepting in Arenac county, the drift is generally much thicker. Particularly is this true along the northern and northwestern margin and over the old pre-glacial valley previously noted, where the glacial deposits are usually from 300 to 600 feet or more in thickness. This excessive thickness of drift has been an effective barrier to exploration and development.

The areas in the Coal Basin in which the drift is thin or absent are few and small. Most of the exposures of the Coal Measures are generally along stream courses, as along the Rifle River in Arenac county; the Cass and some of its tributaries near Tuscola, Tuscola county; the Flint near Flushing,

Genesee county; the Shiawassee from Corunna, Shiawassee county, north to the Saginaw county line; the Cedar and the Grand from Williamson, Ingham county, to six miles below Grand Ledge, Eaton county; and the Grand and its tributaries around Dimondale and Eaton Rapids, Eaton county; Ionia, Ionia county, and Jackson, Jackson county.

Accessibility

The Coal Basin, especially the more developed southeastern half, lies in a thickly populated and rapidly growing industrial section of the state. Saginaw Bay breaks through the rim on the northeast and, with its estuary, Saginaw River, penetrates to the heart of the chief coal districts. Numerous manufacturing cities within or just outside the Basin, a natural route to the Great Lakes, and a web of railroads radiating in every direction from Saginaw and Bay City, the chief coal centers, afford exceptional means for transportation and marketing.

Geology

In structure the coal field is that of a very flat synclinerium with its longer axis extending north and south. The strata in general do not conform to the basin-like structure of the pre-coal measure formations, but are nearly flat except for minor undulations and folds. Locally the strata are faulted, but most of the observed faults are small, having a throw or displacement of only a few inches or feet. Recently several faults of considerable size have been found and one in Bay county has a displacement of over 50 feet. Further observations may show that faults are much more prevalent in the coal series than formerly supposed.

Character of the Coal Beds

The Coal Measures belong to the Upper Carboniferous or Pennsylvanian, and consist of an upper productive portion called the Saginaw formation, and a lower barren one, the Parma sandstone.

The Saginaw formation is essentially a series of relatively thin beds of white shale or so-called fire clays, blue or gray and black shales, sandstones and coal seams. Limestone is uncommon, but locally thin seams of black-band ore (siderite) and

*The information here given on Michigan coals has been taken from Publication 19 and Volume 8 of the Michigan Geological Survey; and from the 22nd Annual Report of the United States Geological Survey.

nodules of the same with zinc blend and iron pyrites occur in the coal or the associated shales.

In general the beds vary markedly in thickness and character within relatively short distances. Many of the beds are merely local lenses and few are continuous over any considerable area. The cross sections on page 548, which, for reason of the incontinuity of seams is offered in place of a vertical section, show this very clearly. Rapid variation is also characteristic of the coal seams. They generally undulate sharply and the rise and fall may be more than 20 feet in a few hundred feet. Locally the coal thins, pinches out, or grades into black shale, or is cut out entirely by sandstone. In some localities, however, the strata are predominantly sandstone, in others, shale. The manner of the occurrence of coal is similar; in some areas there are several beds and in others none.

There is a more or less orderly sequence of the different strata. Generally white shale, the "fire" or "underclay" of miners, underlies the coal seams. The coal beds usually grade upward into so-called "cannel" or "bone" coal, or into black shale which in turn is followed by blue shale. Sandstone may succeed the shale or it may cut out the shale entirely and rest directly on the coal. The "fire" clays are locally very sandy or may be replaced by sandstone. These clays are not true fireclays, since they do not possess particularly high refractory properties. The blue shales above the coal locally contain thin bands and nodules of siderite or iron carbonate. Some of the nodules contain sulphides of iron and zinc, and also kaolin. In some places carbonaceous material replaces the blue shale. Sandstones, some of which are very massive, occur at any horizon, but the repetition of the sequence upward—white shale or "fire clay" coal, "cannel" or "bone" coal, black shale, blue shale or limestone and in many places sandstone, for each of the coal beds is characteristic.

The Parma is a white sandstone locally conglomeratic. The pebbles, generally of very white quartz, are small and scattering. The Parma is to be considered as the basemental and shoreward facies of the overlying Saginaw formation, hence is not referable to a definite age. It is very persistent, being continuous over most of the Coal Basin, and varies in thickness from about 170 feet to a feather edge. Locally, however, it is either absent or not present as a sandstone. Generally it yields an abundance of water, fresh near the margin and saline in the central part of the Basin. Its waters and brines contain a relatively high content of sulphates in comparison with the waters and brines of the Marshall sandstone below.

The Coal Measures were deposited upon the much eroded surface of the Grand Rapids group of the upper Mississippian, hence, in Michigan, there is a great unconformity separating the Mississippian and the Pennsylvanian. The erosion which followed the continental uplift in North America at the close of the Mississippian was so severe that deep valleys were carved in the land surface and in places these cut completely through the Bayport limestone and into or even through the Michigan Series below. The topography was much rougher than that of the present land surface. Along much of the southeastern side of the Coal Basin both the Bayport limestone and the Michigan Series appear to be absent, probably having been removed by

erosion, or perhaps never deposited. As a consequence, the Parma sandstone locally rests directly but unconformably on the Marshall sandstone and, since the two are lithologically similar, they cannot be readily distinguished in well records. In northern Jackson and northeastern Calhoun counties and perhaps along the southeastern margin of the Coal Basin, coal measures were deposited in the bottom of valleys between ridges and hills capped with Bayport limestone and rocks belonging to the Michigan series.

Thickness of the Coal Measures

The Coal Measures in some parts of the Coal Basin vary greatly in thickness within very short distances. This is due to two causes: first, they were deposited upon a very uneven basement, the eroded surface of the Grand Rapids group, as noted above, and second, their upper surface has been heavily eroded. The Appalachian Revolution, the general upheaval at the end of the Pennsylvanian permanently converted the Michigan sea and its bordering swamps into a land surface probably a thousand feet higher at least than the present. During the ensuing long period of erosion, extending to the Pleistocene, the surface of Michigan was greatly dissected. A large drainage system trending to the west was developed in the central portion of the Southern Peninsula. The trunk stream, represented by the old pre-glacial channel previously noted, headed in Saginaw Bay, ran southwest into the center of the Coal Basin, and then, veering northwest through Manistee county, entered the valley or basin now occupied by Lake Michigan. The bottom of this channel at the head of Saginaw Bay is nearly 200 feet below the surface of Lake Huron, over 325 feet in Gratiot county, and more than 700 feet below Lake Michigan in Manistee county, or over 100 feet below sea level. Numerous tributary streams dissected other parts of the Coal Basin, producing a topography much rougher than that of the present land surface. The relief of the former surface was later more or less modified by the ice invasions of the Pleistocene, which, in general, smoothed and rounded off the sharper topographic features.

The pre-glacial channels or "washouts," as they are termed by the miners, are now filled with drift, in places heavily water bearing. They cut out the coal beds and make mining uncertain and hazardous, particularly in the upper veins. In numerous instances, miners in driving entries have encountered these drift-filled channels, sometimes with serious consequences from floods of water and quicksand. The amount of coal lost through pre-glacial erosion is very considerable, but the data necessary for its calculation is insufficient. Few of the present rivers have cut through the thick mantle of drift, hence little coal has been lost through post-glacial erosion.

The troughlike deposits of the productive Coal Measures along the southern margin are very thin, being generally less than 100 feet in thickness. In the vicinity of Saginaw the thickness is from 260 to about 325 feet, near Bay City about 350 feet, and nearer the center of the Coal Basin at Mt. Pleasant and Midland 410 and 525 feet, respectively. Around the northern and northwestern border no drillings of reliable record penetrate completely through the productive Measures, hence little definite information is known of their average

thickness in that part of the basin. In the central part of the Coal Basin, however, the thickness averages about 300 to 400 feet and probably nowhere is it much more than 500 feet.

Occurrence of the Coal

Coal does not occur in all parts of the Coal Basin. In several borings near the center of the Basin which penetrate completely through the coal bearing series neither coal nor black shale were found, the Saginaw formation being a series of sandstones and gray shales. Coal beds are apparently thicker and more numerous toward the margin of the Basin and tend to thin and disappear toward the center.

Thousands of test drillings have shown the presence of more than a dozen coal seams, most of which are too thin for mining under present conditions. Lane recognized seven distinct beds and made the following provisional series: Lower Coal, Lower Rider, Saginaw Coal, Middle Rider, Lower Verne, Upper Verne and Upper Rider. Cooper added seven more, making fourteen in all, the complete series from bottom upwards being: Bangor Coal, Bangor Rider, Lower Coal, Lower Rider, Saginaw Coal, Middle Rider, Lower Verne and Lower Verne Rider, Upper Verne and Upper Verne Rider, Salzburg Coal, and Salzburg Rider.

When it is considered that the whole coal series is characterized by extreme variation, that the fourteen or more coal seams occur in a section of barely 400 feet, that a given coal bed may rise or fall from 30 to 50 feet or more in a quarter of a mile, thicken, thin or pinch out entirely in a few hundred feet, or split into two or more distinct seams, that many of the seams are merely local lenses or "pockets," that faults occur locally and that all the above phenomena may be observed in a single mine, little weight should be attached to such an elaborate system of correlations. None of the coal beds extend continuously over the whole Basin and few are continuous over any considerable part of it, and most of the areas in which the coal is of minable thickness are very small indeed. A rider of coal may or may not occur over each prominent coal seam, but some beds have two or three lenses or so-called riders over them in the deeper troughs or valleys. The prominent coal seam of one locality may be unimportant in another and the main coal of the latter may correspond to a rider in the former. This reflects the transfer of favorable coal forming conditions from one part of the basin to another.

In the field of Wolverine Mine No. 3, Bay county, no less than ten seams of coal, not including the parts of split seams, occur in a section barely 175 feet in thickness, the seams averaging but little more than 15 feet apart. Deeper drilling in adjacent territory shows that there are at least three or four coal beds lower down. Of the upper ten beds only the so-called Verne, a split seam, is of minable thickness over any considerable area, while some of the beds appear to be only thin lenses or "pockets" of coal of very limited extent. The "Verne Split" is continuous over a relatively large area, but it is variable in thickness, quality of the coal and number and distance apart of its members. Generally it is composed of two parts, the "Upper" and the "Lower Verne" seams, separated by a parting of "bone" coal or black shale. The bed in the field of Wolverine Mine No. 3 has a

combined thickness of 4 to 7 feet exclusive of the parting of shale. In turn either or both of the parts of the Verne may divide into a number of seams too thin for mining. Other coal beds exhibit this tendency to divide, and it is certain that the "Verne" seams of one locality are not always related to the "Verne" of other localities.

It is generally impossible to satisfactorily correlate the thin lenses or "pockets" of coal encountered in different parts of the same field and it is very difficult to trace accurately the thicker and more continuous beds even with closely spaced drillings on account of the great variation in thickness, character and elevation. In test hole No. 956, in the field of Wolverine Mine No. 3, the split seam between 180 and 183 feet occurs at the depth at which the "Verne" split might be expected and it was not definitely known that the group of splits between 191 and 196 feet was the "Verne" until a tunnel entry was driven through the coal at this point. It is possible that the upper split represents the "Upper Verne" and the lower the "Lower Verne." In one part of the Bliss mine at Swan Creek, Saginaw county, test holes showed a thin coal seam at the depth at which the main bed should occur, and this part of the field was marked on the mine maps as unminable. Mining operations later showed that the main seam at this point was depressed into a trough and occurred at some distance below the thin seam in greater thickness than the average for the field.

In the field of Wolverine Mine No. 2 several faults have been discovered, and one has been encountered in the mine workings for more than a quarter of a mile along the southern limit of the coal area, where the coal bed on the south and the fault line has been upthrown approximately 55 feet.

Since it is so difficult to make satisfactory correlations between coal seams in different parts of the same field, correlations between different fields and over long distances, where tests holes are far apart, must be very uncertain, and any elaborate system of coal seams based on such data can have very little value.

Of the fourteen or more distinct coal beds but four or five are known to contain areas of minable coal of any considerable size. The minable deposits are in the form of concave lenses, though generally very irregular in outline and thickness. Most of the proven areas of minable coal contain less than 150 acres, only a few more than 250 acres, and none exceed 2,000 acres.

Few of the deposits average more than three feet in thickness and some of them average only about 30 inches, which in Michigan appears to be the lower limit of average thickness at which coal can be profitably mined, unless other conditions are exceptionally favorable. Even in these thicker areas the coal in places is inferior in quality, too thin for profitable mining, or is cut out entirely. The undulating floor of the coal basins results in a series of "rolls" or hills and valleys, which make haulage of coal and drainage of water to the central shaft difficult. The irregular form of the coal basins and the rapid variation in thickness and quality of the coal necessitates close and careful drilling in proving up a coal field. Some fields not sufficiently tested by drilling have proved to be so "pockety" or variable in the quality of the coal that mining operations were unprofitable.

Quality of the Coal

All the coals of Michigan are bituminous, but are of the domestic variety, non-coking for the greater part. In general the coals are of a lower grade than those of Ohio, Pennsylvania and West Virginia, but the quality varies greatly not only in the different seams but also in the same seam within very short distances. The shallow and marginal beds are characteristically high in ash and sulphur and low in fixed carbon. Most of the coal formerly mined near Jackson, Jackson county; at Owosso and Corunna, Shiawassee county; and at Grand Ledge, Eaton county, contains from 2% to 14% of ash, 3% to 7% of sulphur, and only 40% to 45% of fixed carbon. Much of the coal mined in Bay county is similar in that it is high in ash and low in fixed carbon. The sulphur, however, is low in some beds and very high in others, the range being from 1.5% to 6% and over. Some of the Bay county coals resemble lignite in their weak, physical character, low specific gravity, and high content of volatile matter.

The coals mined in the vicinity of Saginaw and St. Charles, Saginaw county, are of better grade, the ash varying from 1% to 7%, the sulphur from 0.5% to 2%, and the fixed carbon from about 50% to 58%.

Many of the Michigan coals are characterized by a high content of moisture, the extreme range being from 2% to about 13%. The Bay county coals contain on the average from 3% to 8%, and those from Saginaw county from 6% to over 12%. While most of the coals are high in volatile matter and many of them are coking coals, they are not used for gas and coke making. The coke is usually inferior, being light and friable; the sulphur injures the quality of both the coke and gas, and the moisture gives more or less trouble in the ordinary types of gas producers. The Saginaw and St. Charles coals, though low in sulphur, are largely non-coking and high in moisture.

Most of the coals are good to excellent domestic coals and fair to good steam coals. Unfortunately they are weak and friable and do not stand long shipment well or permit of stocking. On exposure to the action of the air, sun and rain, many of the coals are rapidly reduced to slack. Owing to these qualities there is also a relatively large amount of slack produced in mining, especially in thin veins when shot "off the solid."

The ash content in most seams varies greatly from place to place. In portions of some fields the coal is so high in ash that it is not marketable. Such coal is popularly called "cannel" coal, but it is not true cannel, as it burns with much smoke. At the bottom or top of coal beds there is locally an inch to a foot or more of shaly and, in places, pyritous coal termed by the miners "Black Jack" or "dirty" coal. The early drillers failed to recognize this impure coal, and some of the areas of supposedly good coal have been found later to contain much "cannel" or "Black Jack" coal. This is the case in certain parts of the St. Charles coal field in Saginaw county.

Mining Conditions

The irregular form of the minable coal areas and the variable thickness and quality of the coal makes systematic plans of mining difficult or impracticable to carry out. Some of the coal basins

are very irregular in form, being made up of several subordinate basins. For ease in handling the coal and water the shaft should be sunk in the lowest part of the basin, but the uneven bottom makes the location of this uncertain without thorough drilling. Even when located at the most advantageous point, the numerous hills and valleys are so pronounced that it is difficult to drain the water to the central shaft. In some mines auxiliary pumps are installed at various points to pump the water over the "rises" or to the surface through drill holes. To take advantage of gravity in hauling the coal to the shaft the entries follow the troughs in the coal bed as far as possible, but heavy grades cannot always be avoided and auxiliary power must be provided at these points. The areas of "cannel," "Black Jack" or thin coal are very irregular in extent and mining plans must be constantly changed to meet the varying conditions. As a consequence, maps of the workings of some mines resemble gigantic spiders.

Faults have been observed in a number of mines, but most of faults are very small, the vertical displacement being measured in inches or two or three feet at most. In the Wolverine No. 2 a large fault has been discovered in the workings for more than a quarter of a mile along the south side of the field. The coal bed on the south side of the fault has been upthrown a vertical distance of 55 feet along a fault plane having a hade of 35° to the south. Such faults are apparently very rare in the Coal Measures of Michigan and most of the faults are so small that they interfere but little with mining operations.

Practically all of the coal seams except at Grand Ledge and Williamston are below the water table and largely in artesian territory, hence the most of the mines are very wet. The water comes in through the roof, the foot wall or both, or from the coal seam itself. Water has caused the abandonment of several mines and it is a serious menace to the successful operation of some of the present mines. The drift generally contains thick beds of quicksand and gravel, heavily water bearing. This makes shaft sinking very costly and uncertain. Several shafts have been lost owing to the quicksands and floods of water encountered. The erosion channels or "washouts," which are numerous in Bay county, are very wet and a source of great danger. Several mines have been flooded, some permanently, and such channels were encountered in mining. In general, water is very troublesome and its control and removal forms an important item in mining costs, especially in summer, when the mines are practically idle.

Most of the proven areas of minable coal in Michigan have an average thickness of only about three feet, therefore the maximum yield of coal per acre which can be expected is relatively small. It follows that a larger acreage is required for a tonnage sufficiently great to warrant mining operations. The rapid variation in the thickness of the coal beds give rise to local areas of thin coal, perhaps too thin for profitable mining. The coal in such areas is not only lost, but much expense is entailed by the extra dead work of driving entries through or around these areas. Areas of "bone," "cannel" or "Black Jack" coal further reduce the total expected tonnage. In general the greater acreage, the irregular form of the coal bodies, their

variable thickness and the uneven bottom necessitate longer and more numerous entries, greater trackage and more dead work to win a given amount of coal than in Ohio, West Virginia or Pennsylvania. The roof is generally weak and treacherous, requiring heavy and costly timbering to support it. In places the shale roof slacks upon exposure to the air and breaks into innumerable fragments. The cost of sustaining such a roof is usually prohibitive. The "fire" or "underclays" beneath the coal likewise slack upon exposure to air and water and become soft and plastic. The pressure from the overlying strata forces them up into the workings, causing constant trouble and expense through heaving the tracks and choking the entries.

Subdivisions of the Field

Any subdivisions that may be made will be to a large extent artificial, and will really represent the spread of development from the different centers of exploitation, which usually owe their beginning to the accidental discovery of coal. In their historical order they will be taken as follows:

1. The Jackson field, dating back to 1835, includes the mines around Jackson.
2. The Cedar Grand field includes various small coal banks around Grand Ledge and the coal which has been found at one time and another around Williamston. All the work done in this region has been in an area 20 miles each way from Lansing. The work has been mainly in Eaton and Ingham counties.
3. The Owosso district includes all the mines which have been opened in the neighborhood of Owosso and Corunna. Within this same district

may be included the little coal that has been obtained near Flushing and Elk, Genessee county, as well as Shiawassee.

4. The Saginaw district includes Saginaw county, the mines developed around Saginaw and St. Charles, and also the Verne mine, which might, however, better be attached to the Owosso district.

5. The Bay field includes the counties bordering on Saginaw Bay—Arenac, Tuscola and Bay counties, and the Sebawaing field of Huron county.

The order here given is very nearly that of their exploitation, except that the Sebawaing field is older in point of development than the Saginaw district. Although these subdivisions are not wholly artificial, since they correspond to certain peculiarities of the coal, their boundaries are arbitrary and must be so in the present state of our knowledge.

The Saginaw district produces practically all the coal mined, which averages annually about 1,000,000 tons.

The railroads entering the coal field of Michigan are: Michigan Central; Pere Marquette; New York Central; Grand Trunk; Detroit, Bay City & Western.

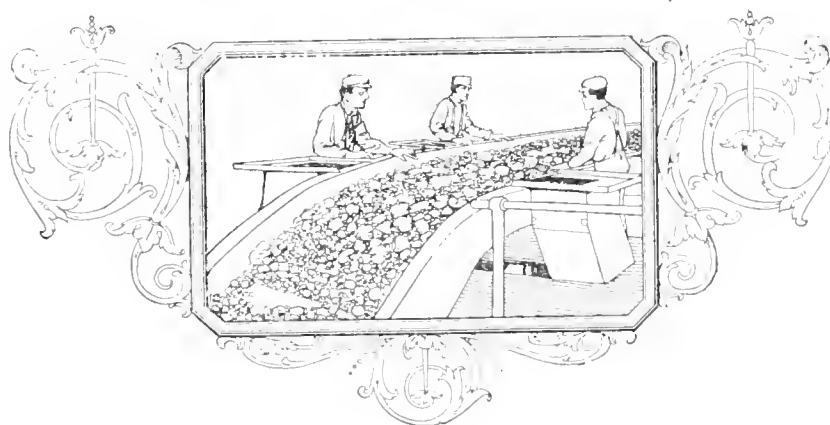
The following analyses may be taken as fairly representative of the general character of Michigan coals. It is to be noted that the Bay county coals are in general lower in fixed carbon and higher in sulphur than those of Saginaw county.

GENERAL ANALYSIS		
	Bay County	Saginaw County
Moisture	6.00	9.00
Volatile Matter	37.80	34.00
Fixed Carbon	50.00	53.20
Ash	6.20	3.80
Sulphur	2.10	1.05
B. T. U.	13,200	12,750

PREPARATION OF COAL

The mines of Michigan bring the coal to the surface through shaft openings. Self-dumping cages are used, and after the coal is riddled over the $\frac{7}{8}$ -inch bar screen it is weighed in a basket.

From the basket it passes over or through shaking screens and is sized into domestic lump, steam lump, run-of-mine, stove, nut and slack before going by gravity to the cars.



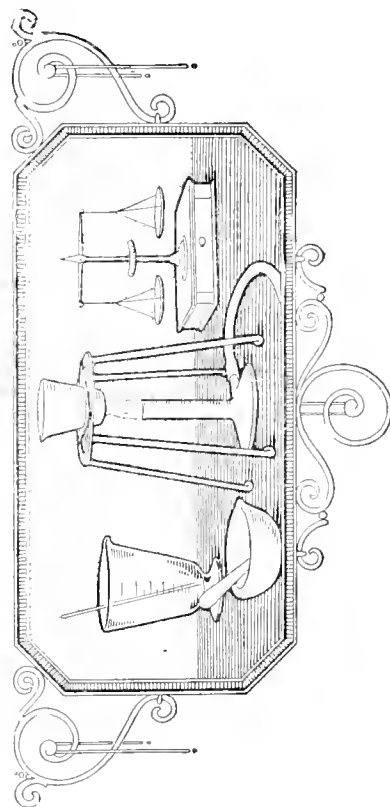
Analyses of Michigan Seams by Counties and Localities

(ALL ANALYSES MADE ON MINE SAMPLES "AS RECEIVED")

COUNTY AND LOCATION	SEAM	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carbon	Oxygen	RATIO'S		
											Oxy. + Ash	Carbon	F. C.
Arenac, Rifle River.	† Lower Verne.	.....	11.35	35.80	41.10	11.87	5.84	.....	.....	.....	.....	.....	1.15
Bay.	† Upper Verne.	.....	8.71	38.45	41.16	11.68	2.72	12,359	.....	.....	.....	.....	1.07
Bay.	.....	.....	3.78	41.18	49.34	5.70	2.50	13,489	.....	.....	.....	.....	1.20
Bay, Wenona.	Lower Verne.	.....	2.06	41.4	51.89	4.65	2.07	.....	.....	.....	.....	.....	1.25
Clare.	.....	.....	4.52	40.57	42.16	12.75	6.92	12,099	.....	.....	.....	.....	1.04
Clinton, Kniffen.	.....	.....	0.36	32.92	28.76	42.96	7.68	.....	.....	.....	.....	.....	0.87
Crawford, Corunna.	.....	.....	3.03	38.78	43.44	11.17	3.57	.....	.....	.....	.....	.....	1.12
Eaton, Grand Lodge.	.....	Jenkins.	7.00	39.10	46.40	7.50	3.42	.....	.....	.....	.....	.....	1.19
Jackson, Cannel.	.....	.....	2.00	49.00	45.00	2.00	2.00	.....	.....	.....	.....	.....	0.92
Jackson, New Hope.	.....	.....	5.58	46.73	45.28	2.41	2.83	13,569	.....	.....	.....	.....	0.97
Kalamazoo, Scotts.	.....	.....	1.99	40.03	44.89	13.29	.....	.....	.....	.....	.....	.....	1.12
Lake, Owosso.	.....	Owosso.	7.58	35.70	52.96	3.76	1.50	13,016	.....	.....	.....	.....	1.48
Lake, Verne.	.....	.....	5.82	39.79	45.15	9.24	3.83	12,861	.....	.....	.....	.....	1.13
Mason, Flushing.	.....	.....	10.425	29.70	52.365	6.575	0.935	.....	.....	.....	.....	.....	1.71
Mecosta, Saginaw.	.....	Saginaw.	7.60	37.895	50.73	3.77	0.99	.....	.....	.....	.....	.....	1.34
Newaygo, Pere Marquette.	.....	.....	6.33	33.90	57.88	1.89	.....	.....	.....	.....	.....	.....	1.71
Newaygo.	No. 2.	.....	1.98	43.49	53.20	0.97	0.394	.....	.....	.....	.....	.....	1.22
Newaygo.	† No. 1.	Pere Marquette No. 1.	10.15	33.14	53.95	2.76	1.10	12,726	.....	.....	.....	.....	1.63
Otsego, Standard.	.....	.....	10.67	33.59	53.80	1.94	1.01	12,868	.....	.....	.....	.....	1.60
Rosecommon, Sebawaing.	.....	Standard.	6.09	39.54	46.06	8.26	5.72	12,714	.....	.....	.....	.....	1.16
Rosecommon, Sebawaing.	.....	.....	4.46	47.92	40.25	4.04	0.305	.....	.....	.....	.....	.....	0.84
Saginaw.	.....	.....	4.84	40.13	51.49	3.54	2.22	.....	.....	.....	.....	.....	1.28
Saginaw, St. Charles.	† No. 1.	Robt. Gage No. 1.	7.79	34.74	52.58	4.89	1.01	12,863	.....	.....	.....	.....	1.39
Saginaw, Saginaw.	* Saginaw.	Barnard.	11.91	31.50	49.75	6.84	1.24	11,781	66.56	18.33	2.64	.....	1.58
Saginaw, Saginaw.	* Saginaw.	Barnard.	11.55	31.65	53.55	3.25	0.95	12,442	69.46	19.21	3.09	.....	1.69

*Bulletins Bureau of Mines.

†State Geological Survey Reports.



List of Mines, Including Name of Company, General Office Address, County,
Railroad and Shipping Point

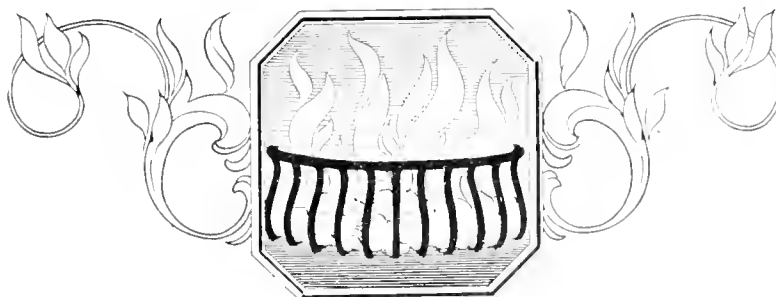
MICHIGAN

MISCELLANEOUS SEAMS

Mined in Bay, Calhoun, Saginaw, Shiawasee and Tuscola counties. Bituminous rank. Suitable for
Cement Burning, Locomotive Fuel, Producer Gas, Steam and Domestic uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Albion Coal Co.	Albion, Mich.	Albion	Calhoun	N. Y. C.	Albion, Mich.
Banner Coal Co.*	Saginaw, Mich., R. F. D. No. 2	Banner	Saginaw	Mich. Cent.	Paines, Mich.
Beaver Coal Co.	Bay City, Mich.	Beaver	Bay	Mich. Cent.	Bay City, Mich.
Bliss Coal Co.	Saginaw, Mich.	Bliss	Saginaw	M. C.	Swan Creek, Mich.
Consolidated Coal Co.	Saginaw, Mich.	Riverside	Saginaw	P. M.	Saginaw, Mich.
Consolidated Coal Co.*	Saginaw, Mich.	Shiawasee	Saginaw	P. M., M. C.	Saginaw, Mich.
Consolidated Coal Co.*	Saginaw, Mich.	Uncle Henry No. 2	Saginaw	P. M.	Saginaw, Mich.
Consolidated Coal Co.*	Saginaw, Mich.	Wolverine No. 2	Saginaw	P. M., M. C.	Bay City, Mich.
Gage, Robt. Coal Co.	212 Davidson Bldg., Bay City, Mich.	Beaver	Bay	Michigan Central	Bay City, Mich.
Gage, Robt. Coal Co.	212 Davidson Bldg., Bay City, Mich.	Black Diamond No. 7	Bay	Michigan Central	Coryell, Mich.
Gage, Robt. Coal Co.	212 Davidson Bldg., Bay City, Mich.	No. 3	Saginaw	Michigan Central	St. Charles, Mich.
Gage, Robt. Coal Co.	212 Davidson Bldg., Bay City, Mich.	Big Chief	Saginaw	Michigan Central	St. Charles, Mich.
Handy Bros. Mining Co.	Bay City, Mich.	Akron No. 2	Tuscola	D. B. C. & W.	Akron, Mich.
What Cheer Coal Mining Co.†	Bay City, Mich.	What Cheer No. 1	Bay	P. & M.	So. Bay City, Mich.

*Saginaw Seam. †St. Charles Seam. ‡What Cheer Seam.



MICHIGAN

Alphabetical Directory of Coal Mines Giving Complete Detailed Information Covering Each Mine

For List of Abbreviations See Page 13.

ALBION COAL COMPANY.

General Office, Albion, Mich.
 PR—Geo. W. Schneider, Albion, Mich.
 VP—C. C. Fritz, Albion, Mich.
 TR—Geo. W. Schneider, Albion, Mich.
 GM—C. C. Fritz, Albion, Mich.
 GS—Jas. Love, Albion, Mich.

Albion Mine; Shaft; Seam 48 in. thick.
 PO—Albion, Mich.; SP—Same; CTY—Calhoun; RR—N. Y. C.
 S of H—Mules. Track gage 33 in.
 S of M—2 shortwall machs.
 PP—3—100 H. P. fire tube boilers, gen. units, 1—100 K. W., 250 volts D. C., 6 pumps.
 EMP—50. Last years tonnage 30,000.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens.
 NOTE—Formerly operated by the E. S. K. Coal Mining Company.

B. S. K. COAL MINING CO.

Now Albion Coal Company.

BANNER COAL COMPANY.

General Office, Saginaw, Mich., R. F. D. No. 2.
 PR—O. L. Dittmar, Saginaw, Mich.
 VP—M. J. Jordan, Saginaw, Mich.
 TR—L. K. Cooper, Saginaw, Mich.
 GM—W. B. Carmichael, Saginaw, Mich.
 GS—W. B. Carmichael, Saginaw, Mich.
 PA—W. B. Carmichael, Saginaw, Mich.
 EM—Robt. Nicol, Bridgeport, Mich.
 EE—Elmer Smith, Saginaw, Mich.
 SCO—Banner Mine Store, Buyer, Alf Jones, Saginaw, Mich.
 SA—W. B. Carmichael, Saginaw, Mich.

Banner Mine; Shaft; Saginaw Seam, 30 in. thick.
 PO—Saginaw, Mich.; R. F. D. No. 2; SP—Paines, Mich.; CTY—Saginaw; RR—M. C.
 MS—Matt Meissner, Saginaw, Mich.
 S of H—Mules. Track gage 30 inches.
 S of M—Hand and 6 shortwall machs.
 PP—3 return tubular boilers, total 350 H. P. gen. units, 250 volts D. C., 7 pumps.
 EMP—125. Last years tonnage 48,840.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

BEAVER COAL CO

General Office, Bay City, Mich.
 PR—Chas. Coryell, Bay City, Mich.
 VP—Jas. E. Davidson, Bay City, Mich.
 TR—F. W. Uch, Bay City, Mich.
 GM—Chas. Coryell, Bay City, Mich.
 GS—John Coryell, Bay City, Mich.
 PA—C. A. Coryell, Bay City, Mich.
 EE—Geo. MacPhail, Bay City, Mich.
 EE—Jos. Bressette, Bay City, Mich.
 SCO—Address the Company; Buyer, C. A. Coryell, Bay City, Mich.
 SA—Robt. Gage Coal Co., 212 Davidson Bldg., Bay City, Mich.

Beaver Mine; Shaft; Seam, 3½ ft. thick.
 PO—Bay City, Mich. SP—Same. CTY—Bay, RR—Mich. Central.
 MS—Frank Heath, Bay City, Mich.
 S of H—Mules and 2 trolley pole type locos. Track gage, 36 in.
 S of M—9 electric shortwall machs.
 PP—Power purchased, transformer 23,000 to 2200 volts A. C., motor gen. sets, 200 K. W., 250 volts D. C., 3 fire tube boilers, 9 pumps.

EMP—250. Daily output, 550 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

BLISS COAL COMPANY.

General Office, Saginaw, Mich.
 PR—J. F. Brand, Saginaw, Mich.
 VP—C. H. Brand, Saginaw, Mich.
 TR—C. H. Brand, Saginaw, Mich.
 GM—C. E. Linton, Saginaw, Mich.
 GS—J. T. Phillips, Saginaw, Mich.
 PA—W. H. Reed, Saginaw, Mich.
 SCO—Address the Company, Buyer, W. H. Reed, Saginaw, Mich.
 Sales Agent, C. E. Linton, Saginaw, Mich.
 Bliss Mine; Shaft; Bliss Seam, 36 in. thick.
 PO—Saginaw, Mich.; SP—Saginaw Creek, Mich.; CTY—Saginaw; RR—M. C.
 S of H—Mules and trolley pole type loco. Track gage, 34 in.
 S of M—11 shortwall machs.
 PP—4 return tubular boilers, 250 volts D. C., gen. units.
 EMP—185. Daily output, 500 tons.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Loading Booms.

CONSOLIDATED COAL COMPANY.

PR—Wm. Wickes, Saginaw, Mich.
 TR—Otto Schupp, " "
 GM—Robt. M. Randall, " "
 GS—B. B. Russell, " "
 MM—B. B. Russell, " "
 PA—J. P. Sullivan, " "
 CE—J. H. Barnes, " "
 EE—Alex. Liddle, " "
 EE—Jos. Minnis, " "
 SCO—Address the Company, Buyer, J. P. Sullivan, Saginaw, Mich.

Shlawasee Mine; Shaft; Saginaw Seam, 32 in. thick.
 PO—Saginaw, Mich. SP—Same. CTY—Saginaw. RR—P. M.
 MS—A. Westwood, Saginaw, Mich.
 S of H—Mules and 5 elec. locos. Track gage 31 inches.
 PP—3 250 H. P. water tube boilers, gen. unit, 250 volts D. C., 11 pumps.
 EMP—180. Last years tonnage 88,817.
 SIZES SHIPT—Slack, Pea, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

Choppell & Fordey No. 2 Mines abandoned.

Riverside Mine; No. 2 Mine; Shaft; Saginaw Seam, 39 in. thick.
 PO—Saginaw, Mich. SP—Same. CTY—Saginaw. RR—P. M.
 MS—Thomas Westwood, Saginaw, Mich.
 S of H—4 elec. locos. Track gage 31 in.
 S of M—5 shortwall machs.
 PP—2 water tube boilers, total 500 H. H., 250 volts D. C., gen. units, 5 pumps.
 EMP—225. Last years tonnage 120,021.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
 PREP. EQUIPT—Shaker Screens
 Uncle Henry No. 2 Mine; Shaft; Saginaw Seam, 42 in. thick.
 PO—Saginaw, Mich. SP—Same. CTY—Saginaw. RR—P. M.
 MS—Robert Johnson, Saginaw, Mich.
 S of H—5 elec. locos. Track gage 36 in.
 S of M—8 shortwall machs.

PP—3 300 H. P. water tube boilers, gen. unit, 300 K. W., 250 volts D. C., 5 pumps.
 EMP—250. Last years tonnage 143,000.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

Wolverine No. 2 Mine; Shaft; Upper and Lower Seam, 42 in. thick.
 PO—Saginaw, Mich. SP—Bay City, Mich. CTY—Saginaw. RR—P. M.
 MS—Alex. McIlhenny, Saginaw, Mich.
 S of H—Mules and 5 elec. locos. Track gage 36 inches.
 S of M—7 shortwall machs.
 PP—3 300 H. P. water tube boilers, gen. units, 250 volts D. C., 19 pumps.
 EMP—214. Last years tonnage 91,709.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.
 Wolverine No. 3 Mine abandoned.

CORUNNA COAL MINING COMPANY.

Out of business.

GAGE, ROBT. COAL CO.

General Office, 212 Davidson Bldg., Bay City, Mich.
 PR—Chas. Coryell, Bay City, Mich.
 VP—Jas. E. Davidson, Bay City, Mich.
 TR—L. W. Uch, Bay City, Mich.
 GM—Chas. Coryell, Bay City, Mich.
 GS—John A. Coryell, Bay City, Mich.
 PA—Chas. A. Coryell, Bay City, Mich.
 CE—Geo. MacPhail, Bay City, Mich.
 EE—Jos. Bressette, Bay City, Mich.
 SCO—Address the company, Buyer, Chas. A. Coryell, Bay City, Mich.

Black Diamond Mine No. 7; Shaft; Pocket Formation Seam, 36 in. thick.
 PO—Auburn, Mich.; SP—Coryell, Mich.; CTY—Bay; RR—Mich. Central.
 MS—Ed. Gunther, Auburn, Mich.
 S of H—Mules and 2 trolley pole type locos. Track gage, 36 in.
 S of M—8 shortwall machs.
 PP—Power purchased, transformer 2200-250 volts A. C., 3 150 H. P. fire tube boilers, motor gen. sets, 220-250 volts D. C., 8 pumps.
 EMP—175. Daily output, 450 tons.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

Big Chief Mine No. 8; Shaft; Pocket Formation Seam, 42 in. thick.
 PO—St. Charles, Mich.; SP—Same; CTY—Saginaw; RR—Mich. Cen.
 MS—Jas. Campbell, St. Charles, Mich.
 S of H—Mules and 2 trolley pole type locos. Track gage, 42 in.
 S of M—10 shortwall machs.
 PP—6 150 H. P. fire tube boilers, 1 100 K. W., 1 150 K. W. gen. units, 220 and 250 volts D. C., 10 pumps.
 EMP—400. Daily output, 1,100 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Marcus Shaker Screens, Picking Tables, Loading Booms.

Beaver Mine; Shaft; Pocket Formation Seam, 42 in. thick.
 PO—Bay City, Mich.; SP—Same; CTY—Bay; RR—Mich. Central
 MS—Frank Heath, Bay City, Mich.

S of H—Mules and 1 trolley pole type loco. Track gage, 36 in.
 S of M—7 shortwall machs.
 PP—Power purchased, transformer 2200-250 volts A. C., motor gen. sets, 220-250 volts D. C., 5 pumps.
 EMP—230. Daily output, 600 tons.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

Mine No. 3; Shaft; Pocket Formation Seam, 36 in. thick.
 PO—St. Charles, Mich.; SP—Same; CTY—Saginaw; RR—Mich. Cen.
 MS—Barney Langley, St. Charles, Mich.
 S of H—Mules and 2 trolley pole type locos. Track gage, 36 in.
 S of M—6 shortwall machs.
 PP—4 150 H. P. fire tube boilers, 2 100 K. W. gen. units, 220-250 volts D. C., 5 pumps.
 EMP—150. Daily output, 400 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

HANDY BROTHERS MINING CO.

General Office, Bay City, Mich.
 PR—Thos. L. Handy, Bay City, Mich.
 VP—Chas. W. Handy, Bay City, Mich.
 TR—Geo. W. Handy, Bay City, Mich.
 SECY—F. S. Handy, Bay City, Mich.
 GM—Chas. W. Handy, Bay City, Mich.
 GS—Jas. E. Gallagher, Bay City, Mich.
 PA—A. B. Covey, Bay City, Mich.
 CE—Wm. N. Boyd, Bay City, Mich.
 EE—Fred Webber, Bay City, Mich.
 SCO—Address the Company, Buyer, A. E. Covey, Bay City, Mich.
 SA—A. B. Covey, Bay City, Mich.

Akron No. 2 Mine; Shaft; Akron Seam, 48 inches thick.
 PO—Akron, Mich.; SP—Same; CTY—Tuscola; RR—D. B. C. & W.
 S of H—Mules, elec. loco. Track gage 36 inches.
 S of M—Hand; shortwall machs.
 PP—Power purchased, 250-220 volts A. C., M. C. Set, 250 volts D. C., 5—100 H. P. water tube boilers.
 EMP—170. Daily output, 375 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

LIBERTY COAL CORPORATION.

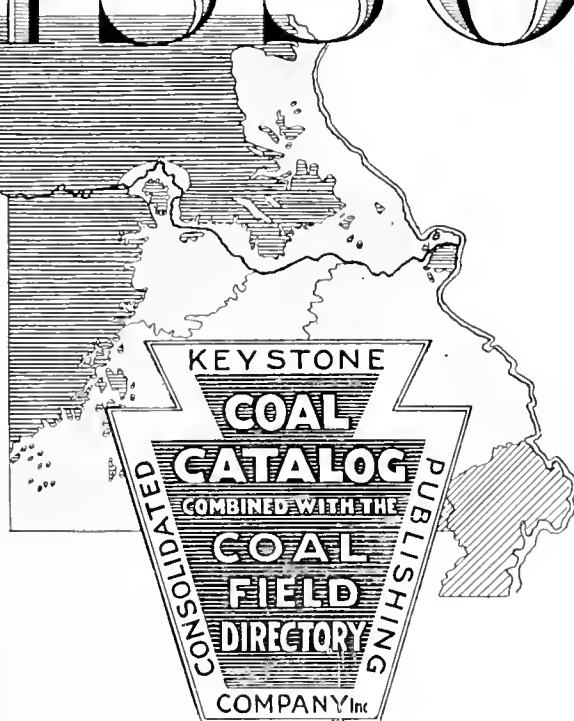
Out of business.

WHAT CHEER COAL MINING COMPANY.

PR—W. I. Foss, Bay City, Mich.
 TR—W. I. Foss, " "
 GM—W. I. Foss, " "
 GS—Jack Abbs, Bay City, Mich.
 EM—Geo. MacPhail, Bay City, Mich.
 SCO—Address the Company, Buyer, H. W. Bean, Bay City, Mich.
 SA—H. W. Bean, Bay City, Mich.

What Cheer No. 1 Mine; Shaft; What Cheer Seam, 20 to 30 in. thick.
 PO—Munger, Mich.; SP—So. Bay City, Mich.; CTY—Bay; RR—P. & M.
 S of H—3 elec. locos. Track gage 40 in.
 S of M—7 elec. machs.
 PP—5 return tubular boilers, 250 volts D. C., total 250 H. P., 3 pumps.
 EMP—165. Last fiscal year output, 85,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaking Screens.
 What Cheer No. 2 Mine abandoned.

MISSOURI



Map of Mining Districts.....	558
Sectional View of Pennsylvania Series.....	559
General Description of Coal Resources.....	560
Bevier Seam.....	560
Cainsville Seam.....	561
Jordan Seam.....	561
Lexington Seam.....	561
Lower Rich Hill Seam.....	561
Lower Weir-Pittsburg Seam.....	561
Montserrat Seam.....	561
Mulberry Seam.....	562
Mulky Seam.....	562
Tebo Seam.....	562
Waverly Seam.....	562
Cannel Coals of Missouri.....	562
Preparation and Sizing of Coal.....	562
Supplementary Analyses.....	563
List of Mines by Seams.....	564, 565
Alphabetical Directory of Coal Mines.....	566 to 569



From Transactions American Institute of Mining and Metallurgical Engineers, Vol. 35, pg. 903, "The Coal Fields of Missouri," by B. F. Bush.

GENERALIZED COLUMNAR SECTION OF THE PENNSYLVANIA SERIES IN MISSOURI*

SERIES	GROUP	FORMATION	SECTION	THICK- NESS (feet)	CHARACTER OF ROCK
PENNSYLVANIAN	MISSOURI	Wabaunsee		100+	Shale and sandstone ¹ with thin persistent beds of limestone
		Shawnee		350-475	Shale and sandstone with many persistent beds of limestone and two thin coal beds
		Douglas		200-300	Shale and sandstone with thin limestones, one the Cread at the top - persistent two or more thin coal beds in places
		Lansing		100-140	Shale and sandstone with thin limestones - two in the upper half of the formation being persistent
		Kansas City		200-225	Limestone and shale with a few thin and len- sular beds of sandstone
	DE S MOINES	Pleasanton		100-225	Shale and sandstone with one or two non- persistent limestones and a few coal beds
		Henrietta		26-110	Limestone, shale and sandstone with one or two thin coal beds
		Cherokee		75-710	Shale and sandstone with a few thin limestones in the upper 100 feet and a number of coal beds. The upper part contains thick limestones locally

*From Vol. 13, Second Series, Missouri Bureau of Geology and Mines.

MISSOURI*

General Description of the Geology of the Field With the Ranks of Coal Produced;
Treats of the Mining Districts, With a Map Showing Their Location, All
Seams Lying Within the Territory, and the Railroads Serving Same;
Description of the Producing Seams Showing Their Geological
Order, Kinds of Coal, General Analysis, Etc

The coal fields of Missouri, situated in the northern and western portions of the state, are distributed, in whole or in part, over 57 counties and embrace a total area of about 23,000 square miles, two-thirds of which is probably productive.

The Coal Measure formations are all of Carboniferous age. The Pennsylvania series alone contains important coal beds. In structure this series is very simple for the rocks are nearly horizontal over moderately large areas. From their outcrop on the eastern and southeastern borders of the field they dip west to northwest at a rate not exceeding 10 to 20 feet to the mile. Recent geological work in the coal area of Missouri has determined a remarkable regional persistency in many of the coal beds, several of which have been traced diagonally across the state from Kansas to Iowa with hardly a break. This does not mean, of course, that the coal beds are of the same thickness and character in every locality or that every piece of land known to contain a certain coal bed or horizon can have its mineral fuel content exactly estimated. Neither does it imply the absence of breaks in continuity whereby the seam has been wholly or partially removed by erosion of streams.

A region occupying a broad band lying east of the main body of the Pennsylvanian and extending well up into the central Ozarks bears scattered over its surface numerous isolated Coal Measure pockets of unique character. The age of many of them is uncertain, though those bordering and underlying the main body of Coal Measures are certainly older than the more regular Pennsylvanian beds of the same district. Deposits of this character are now known to occur in at least 35 counties, and it is probable that future geologic work will disclose many others.

Throughout the coal areas small gentle folds and normal faults with a maximum throw of 8 feet occur but are of slight importance. Highly inclined clay veins are also found, variously known as "troubles", "wants", "clay slips" or "horses". The productive coal seams vary from 18 inches to 5 feet in thickness.

The annual production of coal in this state is in the neighborhood of 5,000,000 tons. All the coals, with the exception of a few deposits of cannel coal, are of a distinctively bituminous nature and are of medium grade. They are comparatively soft and suffer quickly from exposure or excessive handling. Owing to the large proportions of moisture, sulphur and ash their use is generally restricted to domestic and steam producing purposes. The demand and markets for Missouri coals are limited, chiefly on account of the higher grade coals entering from the surrounding states. The Cartersville and Springfield districts of Illinois are the chief competitors of the local mines. Practically none of Missouri's coal is sent to St. Louis and only a fair portion to Kansas City and St. Joseph. The markets are restricted, therefore, largely to the rural population and to the railroads. A second limiting factor in the development of the industry is the competition from the oil and natural gas fields of the adjoining states. Furthermore the fact that the seams of Missouri are thin and the mining costs high has done much to depress the industry.

The railroads traversing the coal fields are the Missouri Pacific; St. Louis and San Francisco; Wabash; Chicago and Alton; Chicago, Rock Island and Pacific; Missouri, Kansas and Texas; Chicago, Burlington and Quincy; Atchison, Topeka and Santa Fe; Kansas City Southern; Iowa and St. Louis; Quincy, Omaha and Kansas City; Bevier and Southern; St. Louis and Hannibal; Kansas City, Clinton and Springfield; and the Lexington and Sedalia.

The mining districts of Missouri are designated either by counties or by the seam or seams worked as is shown by the map on the preceding page.

Bevier Seam. (Mined in Macon, Adair, Randolph, Howard, Boone, Callaway, Sullivan, Chariton, Carroll and Putnam counties.)

The Bevier is by far the most important coal horizon in Missouri, and produces more than half the total output of coal. In nearly every part of the coal-bearing region are reserves still untouched. The Bevier bed carries from a few inches to six feet of coal in most counties in which the Cherokee shale outcrops and has been penetrated in many drillings and shafts in areas in which higher rocks appear at the surface. The seam lies 100 feet below the top of the Cherokee shale in central and northeastern Missouri, and 25 to 50 feet lower in the northwestern and west-central

part of the state. The Bevier is easily identified, as it is the only bed that has a limestone bottom-rock and no limestone cap-rock. Over it are 10 to 40 feet of shale and sandstone which were laid down during a short period of shallow and disturbed water. The coal itself and the beds immediately below it were deposited under remarkably uniform conditions. Clay or shale partings 3 inches or less thick occupy the same positions in the coal under tens and hundreds of square miles. It is in great demand as a steam coal.

*For a full report on the coals of Missouri see Vol. 11, Second Series, Missouri Bureau of Geology and Mines, "The Coal Deposits of Missouri," by Henry Hinds, from which much of the descriptive matter on Missouri coals has been taken.

GENERAL ANALYSIS

Moisture	11.75
Volatile Matter	34.50
Fixed Carbon	40.70
Ash	13.05
Sulphur	4.80
B. t. u.	11,150

Cainsville Seam. (Mined in Harrison and Mercer counties.)

The Cainsville bed lies 300 feet below the top of the Cherokee shale and 180 feet below the Bevier horizon in Harrison and Mercer counties. The coal is of excellent appearance, being bright and so hard that hand work is difficult. Some white gypsum scale and a little pyrite occurs in small vertical and horizontal lenses, but the bed as a whole is clean. It is 44 to 60 inches thick, with an average of 4 feet. The roof is a hard black shale while the floor is a very hard clay, almost a sandstone. The bed undulates slightly but shows no regular dip. Cainsville coal is highly regarded as a steam, railroad and domestic fuel.

GENERAL ANALYSIS

Moisture	10.70
Volatile Matter	40.00
Fixed Carbon	36.00
Ash	13.30
Sulphur	5.00
B. t. u.	11,100

Jordan Seam. (Mined in Henry and St. Clair counties.)

Mining in this seam is restricted largely to the vicinity of Clinton and Deepwater. Here are irregular basins or lenses of coal, probably 85 to 120 feet below the Bevier and about 200 feet below the top of the Cherokee. The average thickness of the coal is about 3 feet. The roof is a shale of variable composition that contains well-known fossil-plant floras. The output from this seam is steadily diminishing as the thicker basins have been exhausted. Most of the coal produced is used for steam purposes.

GENERAL ANALYSIS

Moisture	10.50
Volatile Matter	34.25
Fixed Carbon	43.75
Ash	11.50
Sulphur	4.00
B. t. u.	11,400

Lexington Seam. (Known also as the Mendota seam; correlates with the Mystic seam of Iowa and the Fort Scott red coal of Kansas.) (Mined in Lafayette, Ray, Putnam and Adair counties.)

The Lexington is one of the most persistent seams in the state and produces about one-third of the yearly output. In most of the region it is less than 2 feet thick and is thickest in Putnam and adjacent counties, where it bears about 3 feet of coal. It lies at or within a few feet of the top of the Cherokee shale. Much limestone is associated with it, for its cap-rock is the lowest limestone of the Henryetta formation, and in north Missouri it has also a well developed limestone bottom rock. The Lexington bed is a favorite for domestic users and the coal can be mined very economically. The roof is a strong limestone, in many localities separated from the coal by a thin stratum of shale that can be conveniently taken down to make the required height along the face and used to build gob

walls. The nature of the rock overlying the Lexington makes it an ideal bed for longwall mining, the only system in vogue. The coal is hard and bright, contains very little visible pyrite, has commonly considerable white gypsum scale on the well developed quadrangular cleavage joints, and stands shipping and stocking exceptionally well.

GENERAL ANALYSIS

Moisture	11.50
Volatile Matter	33.75
Fixed Carbon	39.25
Ash	12.50
Sulphur	3.70
B. t. u.	10,615

Lower Rich Hill Seam. (Mined in Bates and Vernon counties.)

The Lower Rich Hill is the name given to a seam which lies 150 to 190 feet below the top of the Cherokee and occupying, probably, the Bevier horizon. It is very irregular in thickness, having apparently been deposited in basins. A thin seam of little commercial value and known as the Upper Rich Hill is closely associated with the lower bed. Where mined the Lower Rich Hill is commonly 4 to 6 feet thick, but it is by no means uniform. The thick coal lies in many small basins and in some localities the beds at its horizon are barren. It is a good steam coal and even the partly weathered "dead coal" of old strippings is in demand for zinc smelting.

GENERAL ANALYSIS

Moisture	9.00
Volatile Matter	34.30
Fixed Carbon	42.60
Ash	14.10
Sulphur	5.00
B. t. u.	11,300

Lower Weir-Pittsburg. (Mined in Barton county.)

On the western edge of Barton county is a persistent bed that is very extensively mined in Crawford and Cherokee counties, Kansas. It is undoubtedly the same as the Lower Rich Hill and, consequently, very probably lies at the Bevier horizon. In conformity with the nomenclature used in the adjacent Kansas field, however, the bed in this state is generally termed the Weir-Pittsburg. The coal is of fairly uniform thickness and lies about 180 feet below the top of the Cherokee shale. In Missouri it occupies a strip only one-half to three miles wide next to the state line extending from a point just south of Minden to Oskaloosa, and several outliers near Liberal. In this area it is about 30 inches thick. It furnishes a good steam coal. The coal is brittle and shoots almost too easily, much slack being produced by the universal practice of shooting off the solid.

GENERAL ANALYSIS

Moisture	5.65
Volatile Matter	31.00
Fixed Carbon	53.15
Ash	10.20
Sulphur	1.30
B. t. u.	12,660

Montserrat Seam. (Mined in Johnson county.)

The Montserrat bed, in east-central Johnson county, is 120 feet below the horizon of the Bevier coal and not far from that of the Waverly. It was formerly extensively mined near Montserrat, where it was 7 feet or less in thickness but was in part very dirty. West of Montserrat it thins but is of

good thickness at least as far east as Knobnoster. The bed lies too low to outcrop except in a very few localities, such as on Clear Fork near Burtville, where it contains 36 inches of coal. As it can be found only by drilling and as very little drilling has been done except near the railroads, it is very possible that important deposits of better quality than those formerly mined will be found at this horizon. A characteristic of this seam is that it slacks quickly and contains much pyrite.

GENERAL ANALYSIS

Moisture	12.10
Volatile Matter	34.25
Fixed Carbon	37.45
Ash	16.20
Sulphur	5.00

Mulberry Seam. (Mined in Bates county.)

The Mulberry coal is mined for local use and by small shipping mines in the western half of Bates county. Where mined near Foster, Sprague and Hume it averages 30 to 36 inches in thickness. Farther north it is more variable and is thin in places. The roof is normally a thick shale, though in northwestern Bates county there is locally a limestone rock. The coal has very fair steaming qualities.

GENERAL ANALYSIS

Moisture	10.80
Volatile Matter	31.20
Fixed Carbon	44.20
Ash	13.80
Sulphur	3.30
B. t. u.	11,250

Mulky Seam. (Mined in Montgomery, Ralls, Audrian, Macon, Randolph, Chariton, Carroll, Lafayette and Johnson counties.)

The Mulky coal bed is rarely more than 2 feet thick, though in some fields it is as much as 3 feet. A notable peculiarity is its uniformity in character and associations over large areas in deposits that are widely separated from one another by stretches of barren territory. In most instances it is mined only to supply local trade. It is, however, worked on a fairly large scale in and near Macon City

where it is of excellent quality and possesses a very strong roof.

GENERAL ANALYSIS

Moisture	10.50
Volatile Matter	39.50
Fixed Carbon	38.70
Ash	11.30
Sulphur	5.10
B. t. u.	11,460

Tebo Seam. (Mined in Linn, Brundy, Chariton and Henry counties.)

The Tebo coal lies from 15 to 50 feet below the Bevier horizon and is the lowest bed that has a limestone cap-rock. When this coal was deposited somewhat more stable conditions prevailed than during earlier Pennsylvanian time. There is some coal at this horizon in most parts of the coal area, though not everywhere in beds of workable thickness. It is mined generally by the longwall system and much of the output is used to supply local trade.

GENERAL ANALYSIS

Moisture	12.25
Volatile Matter	36.50
Fixed Carbon	40.00
Ash	11.25
Sulphur	4.30
B. t. u.	11,200

Waverly Seam. (Mined in Lafayette county.)

The Waverly bed lies 200 feet below the Lexington. Little is known as to its actual acreage and it is possible that it underlies considerable territory. Winslow estimates it at 60 square miles. The coal is reached by shafts and there are but a few mines working in this seam. At Waverly the coal is 3 to 4 feet thick and the roof requires careful timbering. The coal is worked by the room and pillar method and is shot off the solid. The bed contains considerable pyrite in streaks and lenses.

GENERAL ANALYSIS

Moisture	11.50
Volatile Matter	33.00
Fixed Carbon	39.75
Ash	15.75
Sulphur	6.90
B. t. u.	10,500

CANNEL COALS OF MISSOURI

It has long been known that cannel coals are to be found in Missouri and that mining in a primitive sort of way has been going on in Morgan and Moniteau counties for many years.

The cannel coal occurs in a number of places in remarkable deposits or pockets. About 10 miles southeast of Versailles the coal is creditably reported to be 70 feet thick and unusual thicknesses have been reported in other localities.* George H. Ashley† gives the extent of a deposit in Moniteau county as 400 feet long by 150 feet wide, and states the thickness of the cannel to be 45 feet where it lies level.

In spite of these gratifying indications, it is exceedingly unwise to assume the continuity of any of these cannel coal deposits, and experts who

have examined this section all agree that it is in every case necessary to test the ground systematically with drill holes, placed close together in order not to be deceived by imaginary quantities. The State Bureau of Geology and Mines advises that while "these deposits have in the aggregate a considerable quantity of coal, yet it is practically certain that this quantity is not sufficient in any case or in any great number of cases to warrant the necessary expense to mine them on a large scale."

GENERAL ANALYSIS

Moisture	2.75
Volatile Matter	52.50
Fixed Carbon	38.75
Ash	6.00

PREPARATION OF COAL

Owing to a restricted trade, preparation of Missouri coals is usually simple. Payment to the miner is made on the run of mine basis and since much of the coal is shot from the solid there is a large amount of slack and small sizes produced. One, two or three sets of bar screens are often used, making at the most four sizes; through 1¼-

inch, through 2½-inch, then through 4, 5 or 6-inch, and a large lump over this size. In some of the larger sized mines round hole shaker screens, picking tables and loading booms are being used to assist in the preparation of the coal.

*Walter M. Brodie, "Curious Coal Deposits in Missouri," Coal Age, Vol. 16, No. 22.

†Cannel Coals of the United States.

(CALL ANALYSES MADE ON MINE SAMPLES "AS RECEIVED")

Bull. U. S. Bureau of Mines.

COMPL. CATALOG

List of Mines By Seams, Including Name of Company, General Office Address.
County Railroad and Shipping Point

MISSOURI

BEVIER SEAM

Mined in Macon, Adair, Randolph, Howard, Boone, Callaway, Sullivan, Chariton, Carroll and Putnam counties. Bituminous rank. Suitable for Producer Gas, Steam, Domestic and Locomotive Fuel.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Adair County Coal Co.	Kansas City, Mo.	No. 22.	Adair.	C. B. & Q.	Novinger, Mo.
Arcite Coal & Mining Co.	Novinger, Mo.	No. 2.	Adair.	Q. O. & K. C.	Novinger, Mo.
Big Creek Coal Co.	Kirksville, Mo.	No. 1.	Adair.	Wab. Q. O. & K. C.	Kirksville, Mo.
Bradley Coal Co.	Huntsville, Mo.	No. 1.	Randolph.	Wab. M. K. & T.	Huntsville, Mo.
Callaway County Coal Co.	Fulton, Mo.	Carrington.	Callaway.	C. & A.	Carrington, Mo.
Central Coal & Coke Co.	Kansas City, Mo.	No. 24.	Macon.	C. B. & Q.	Ardmore, Mo.
Central Coal & Coke Co.	Kansas City, Mo.	No. 66.	Macon.	C. B. & Q.	Keota, Mo.
Central Coal & Coke Co.	Kansas City, Mo.	No. 68.	Macon.	C. B. & Q.	Keota, Mo.
Chariton Coal & Mining Co.	Novinger, Mo.	Chariton.	Adair.	C. B. & Q.	Novinger, Mo.
Columbia Coal Co.	Columbia, Mo.	Columbia.	Boone.	Wabash.	Columbia, Mo.
Cronan Coal Co.	Moberly, Mo.	Cronan.	Randolph.	Wabash.	Moberly, Mo.
Fulton Fire Brick Co.	Fulton, Mo.	Powell.	Callaway.	C. & A.	Fulton, Mo.
Hanks Coal Co.	Kansas City, Mo.	No. 5.	Randolph.	Wabash.	Huntsville, Mo.
Jacksonville Coal Co.	Jacksonville, Mo.	Jacksonville.	Randolph.	Wabash.	Jacksonville, Mo.
Kansas City Midland Coal & Mng. Co.	Novinger, Mo.	No. 4.	Adair.	C. B. & Q.	Novinger, Mo.
Kansas City Midland Coal & Mng. Co.	Novinger, Mo.	No. 7.	Adair.	C. B. & Q.	Novinger, Mo.
Marriott Coal Co.	Moberly, Mo.	No. 1.	Randolph.	Wabash. M. K. & T.	Moberly, Mo.
Mitchell & Lovell Coal Co.	Huntsville, Mo.	Mitchell & Lovell.	Randolph.	Wabash.	Huntsville, Mo.
Powhatan Coal Co.	Keith & Perry Bldg., Kansas City, Mo.	No. 1.	Randolph.	Wabash.	Huntsville, Mo.
Spring Creek Coal Company.	Novinger, Mo.	Spring Creek.	Adair.	Q. O. & K. C.	Novinger, Mo.
Walton Coal Co.	Higbee, Mo.	Walton.	Randolph.	C. & A. M. K. & T.	Higbee, Mo.

JORDAN SEAM

Mined in Henry and St. Clair counties. Bituminous rank. Suitable for Steam, Domestic, Producer Gas and Locomotive Fuel.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Anaconda Coal Co.	Deepwater, Mo.	Anaconda.	Henry.	Frisco, K. C. C.	Deepwater, Mo.
R-liance Coal Co.	Clinton, Mo.	R-liance.	Henry.	A. T. & S. F.	Brownington, Mo.

LEXINGTON SEAM (Known also as the **MENDOTA SEAM**; identical with the Fort Scott Seam of Kansas and the Mystic Seam of Iowa)

Mined in Lafayette, Ray, Putnam and Adair counties. Bituminous rank. Suitable for Steam, Domestic, Producer Gas and Locomotive Fuel.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Armstrong Coal Co.	Cincinnati, Ia.	No. 2.	Putnam.	C. B. & Q.	Mendota, Mo.
Belt Line Coal & Mining Co.	Kansas City, Mo.	No. 7.	Ray.	Wabash, Santa Fe.	Camden, Mo.
Bertha Mining & Coal Co.	Howland, Mo.	Bertha.	Putnam.	C. R. & Q.	Mendota & Unionville, Mo.
Central Coal & Coke Co.	Kansas City, Mo.	No. 67.	Ray.	A. T. & S. F. Wab.	Camden, Mo.
Corder Coal Co.	Higginsville, Mo.	Corder.	Lafayette.	C. & A.	Higginsville, Mo.
Diamond Coal Co.	Corder, Mo.	Wilson.	Lafayette.	C. & A.	Corder, Mo.
Farmers Fuel Co.	432-35 Rialto Bldg., Kansas City, Mo.	No. 1.	Lafayette.	C. & A.	Higginsville, Mo.
Farmers Fuel Co.	432-35 Rialto Bldg., Kansas City, Mo.	No. 7.	Lafayette.	C. & A.	Higginsville, Mo.
Farmers Fuel Co.	432-35 Rialto Bldg., Kansas City, Mo.	No. 9.	Lafayette.	C. & A.	Higginsville, Mo.
Hubbell Coal Co.	Richmond, Mo.	No. 10.	Ray.	A. T. & S. F.	Richmond, Mo.
Imperial Coal Co.	Corder, Mo.	Imperial.	Lafayette.	Chicago & Alton.	Corder, Mo.
Lanig-Harris Coal & Grain Co.	Kansas City, Mo.	Daisy.	Lafayette.	Mo. Pac.	Wellington, Mo.
McGrew Coal Co.	Lexington, Mo.	No. 1.	Lafayette.	Mo. Pac.	Lexington, Mo.
McGrew Coal Co.	Lexington, Mo.	Grady.	Lafayette.	Mo. Pac.	Lexington, Mo.
McGrew Coal Co.	Lexington, Mo.	No. 3.	Lafayette.	Mo. Pacific.	Wellington, Mo.
Melbourne Coal & Iron Co.	Melbourne, Mo.	Harrison.	Harrison.	Q. O. & K. C.	Melbourne, Mo.
Mercantile Coal & Mining Co.	Richmond, Mo.	No. 17.	Ray.	A. T. & S. F.	Richmond, Mo.
Missouri Block Coal Co.	Unionville, Mo.	Missouri.	Putnam.	C. B. & Q.	Unionville, Mo.
Missouri City Coal Co.	Missouri City, Mo.	Missouri.	Clay.	Wabash.	Missouri City, Mo.
Orrick Coal Co.	Orrick, Mo.	Albany.	Ray.	Wabash.	Orrick, Mo.
Perry Joseph & Son, Lessees	Lexington, Mo.	Macey.	Lafayette.	Missouri Pac.	Myrick, Mo.
Pickering Coal Co.	Richmond, Mo.	No. 4.	Ray.	A. T. & S. F.	Richmond, Mo.
Pickering Coal Co.	Richmond, Mo.	No. 6.	Ray.	A. T. & S. F.	Richmond, Mo.
Pickering Coal Co.	Richmond, Mo.	No. 9.	Ray.	A. T. & S. F.	Richmond, Mo.
Pickering Coal Co.	Richmond, Mo.	No. 11.	Ray.	A. T. & S. F.	Richmond, Mo.
Pickering Coal Co.	Richmond, Mo.	Pickering No. 12.	Ray.	A. T. & S. F.	Richmond, Mo.
Pickering Coal Co.	Richmond, Mo.	No. 16.	Ray.	A. T. & S. F.	Richmond, Mo.
Plattensburg Coal Co.	Lexington, Mo.	Plattensburg.	Lafayette.	L. & S.	Lexington, Mo.
Plattensburg-Vibbard Coal Mining Co.	Plattensburg, Mo.	Plattensburg-Vibbard.	Ray.	A. T. & S. F.	Vibbard, Mo.
Prairie Block Coal Co.	Elmira, Mo.	No. 6.	Ray.	C. M. & St. P.	Elmira, Mo.
Raven Coal Company.	Catesville, Mo.	Raven.	Schuyler.	I. & St. L.	Schuyler, Mo.
Ray County Coal Co.	Richmond, Mo.	No. 23.	Ray.	A. T. & S. F.	Richmond, Mo.
Trenton Mining Co.	Trenton, Mo.	Trenton.	Grundy.	Q. O. & K. C.	Trenton, Mo.
Ward Coal Co.	Richmond, Mo.	No. 15.	Ray.	Santa Fe.	Richmond, Mo.
Western Coal & Mining Co.	St. Louis, Mo.	Current.	Lafayette.	Mo. Pac.	Lexington, Mo.
Western Coal & Mining Co.	St. Louis, Mo.	East.	Lafayette.	Mo. Pac.	Lexington, Mo.
Western Coal & Mining Co.	St. Louis, Mo.	Midway.	Lafayette.	Mo. Pac.	Lexington, Mo.
Western Coal & Mining Co.	St. Louis, Mo.	South.	Lafayette.	Mo. Pac.	Lexington, Mo.
Western Coal & Mining Co.	St. Louis, Mo.	South East.	Lafayette.	Mo. Pac.	Lexington, Mo.
Western Coal & Mining Co.	St. Louis, Mo.	Summit.	Lafayette.	Mo. Pac.	Lexington, Mo.
Western Coal & Mining Co.	St. Louis, Mo.	West.	Lafayette.	Mo. Pac.	Lexington, Mo.

LOWER RICH HILL SEAM

Mined in Bates and Vernon counties. Bituminous rank. Suitable for Steam, Domestic, Producer Gas and Locomotive Fuel.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Engle & Sons.....	Rich Hill, Mo.....	Engle.....	Bates.....	Missouri Pacific.....	Rich Hill, Mo.
Jones Coal Co.....	Rich Hill, Mo.....	No. 1.....	Vernon.....	Mo. Pac.....	Panama, Mo.
Ferry-McMahan Coal Co.....	Kansas City, Mo.....	Steam Shovel.....	Bates.....	Mo. Pac.....	Panama, Mo.
Ritchie Coal Mng. Co.....	Rich Hill, Mo.....	Ritchie.....	Bates.....	Mo. Pac.....	Rich Hill, Mo.

LOWER WEIR PITTSBURG SEAM

Mined in Barton county. Bituminous rank. Suitable for Cement Burning and Steam, Domestic, Producer Gas and Locomotive Fuel.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Barney Cherokee Coal Co.....	Chicago, Ill.....	Carney No. 1.....	Barton.....	K. C. S.....	Mulberry, Kan.
Domestic Fuel Company (The).....	Pittsburg, Kan.....	No. 1 Strip.....	Barton.....	St. L. & S. F.....	Mulberry, Kan.
Klaner, J. F. Coal Co.....	Pittsburg, Kan.....	Klaner.....	Bates.....	Kansas City Southern.....	Hum, Mo.
Liberal Coal & Mining Co.....	Pittsburg, Kan.....	No. 1.....	Barton.....	Frisco.....	Liberal, Mo.
Minden Coal Co.....	Joplin, Mo.....	Minden No. 1.....	Barton.....	Mo. Pac.....	Mindenmines, Mo.
Mulberry Coal Co., The.....	Pittsburg, Kan.....	Mulberry No. 1.....	Barton.....	K. C. Southern.....	Pittsburg, Kan.
Pittsburg & Midway Coal Mining Co.....	Pittsburg, Kan.....	Nos. 8 & 10.....	Barton.....	K. C. & S. and Frisco.....	Pittsburg, Kan.
Pittsburg-Oskaloosa Coal Co., The.....	Pittsburg, Kan.....	No. 1.....	Barton.....	Kan. City So.....	Oskaloosa, Mo.
Sheridan Coal Company.....	Omaha, Neb.....	No. 1.....	Barton.....	K. C. & S. and Frisco.....	Mulberry, Kan.
Stout, R. A.....	Lockwood, Mo.....	Stout's.....	Dade.....	St. L. & S. F.....	Lockwood, Mo.
United States Coal Co.....	Pittsburg, Kans.....	No. 1.....	Barton.....	St. L. & S. F.....	Alston, Mo.
United States Coal Co.....	Pittsburg, Kans.....	No. 2.....	Barton.....	Mo. Pac.....	Alston, Mo.

MULKY SEAM

Mined in Montgomery, Ralls, Audrain, Macon, Randolph, Chariton, Lafayette and Johnson counties. Bituminous rank. Suitable for Cement Burning and Steam, Domestic, Producer Gas and Locomotive Fuel.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Clark Coal Co.....	Perry, Mo.....	Clark.....	Ralls.....	St. L. & H.....	Perry, Mo.
Eagle Coal Co.....	Vandalia, Mo.....	Eagle.....	Audrain.....	C. & A.....	Vandalia, Mo.
Goran-Gatson Coal & F. C. Co.....	Vandalia, Mo.....	Goran-Gatson.....	Audrain.....	C. & A.....	Vandalia, Mo.
Home Coal Co.....	Macon, Mo.....	No. 1.....	Macon.....	C. B. & Q.....	Macon, Mo.
Home Coal Co.....	Macon, Mo.....	Home No. 2.....	Macon.....	Wabash.....	Macon, Mo.
Martinsburg Coal & Mining Co.....	Martinsburg, Mo.....	Martinsburg.....	Audrain.....	Wabash.....	Martinsburg, Mo.
Yates Coal Co.....	Yates, Mo.....	Yates.....	Randolph.....	C. & A.....	Yates, Mo.

TEBO SEAM

Mined in Linn, Grundy, Chariton and Henry counties. Bituminous rank. Suitable for Steam, Domestic, Producer Gas and Locomotive Fuel.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Chariton County Coal & Coke Co.....	Marceline, Mo.....	Chariton County.....	Chariton.....	A. T. & S. F.....	Marceline, Mo.
Marceline Coal & Mining Co.....	1510-14 Commerce Bldg., Kansas City, Mo.....	No. 2.....	Linn.....	A. T. & S. F.....	Marceline, Mo.

MISCELLANEOUS SEAMS

Bituminous rank. Suitable for Cement Burning, Steam, Domestic, Producer Gas and Locomotive Fuel uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Blackfoot Coal Company.....	Columbia, Mo.....	Blackfoot.....	Boon.....	Wabash & M. K. & P.....	Boon, Mo.
Bowen Coal & Mining Co.....	Windsor, Mo.....	No. 6.....	Johnson.....	M. K. & T.....	Windsor, Mo.
Southern Kansas Coal Co.....	Weir, Kan.....	Shovel No. 2.....	Bates.....	St. L. & S. F.....	Weir, Mo.
Standard Coal Company.....	Pleasanton, Mo.....	Standard No. 1.....	Bates.....	Mo. Pac.....	Standard, Mo.
Waverly Coal Co.....	Kansas City, Mo.....	Buckham.....	Lafayette.....	Mo. Pac.....	Waverly, Mo.
Worland Coal & Mining Company.....	Worland, Mo.....	Worland.....	Bates.....	K. C. S.....	Worland, Mo.

MISSOURI

Alphabetical Directory of Coal Mines, Giving Complete Detailed Information Covering Each Mine

For List of Abbreviations See Page 13.

ADAIR COUNTY COAL COMPANY

General Office, Dwight Bldg., Kansas City, Mo.

PR—E. S. Nevius, Kansas City, Mo.
 VP—J. D. Crowe, Jr., Kansas City, Mo.
 TR—H. D. Buchanan, Kansas City, Mo.
 GM—E. S. Nevius, Kansas City, Mo.
 PA—E. S. Nevius, Kansas City, Mo.
 EM—E. C. Burkhardt, Macon, Mo.
 SA—Cherokee Fuel Co., Kansas City, Mo.

No. 22 Mine; Shaft; Bevier Seam; 44 inches thick.

PO—Novinger, Mo.; SP—Same; CTY—Adair; RR—C. B. & Q. H. R. C. C.

NS—Henry Dixon, Novinger, Mo.

S of H—Mules. Track gauge 36 inches.

S of M—Hand.

PP—2 fire tube boilers, 170 H. P.

EMP—112. Last fiscal year output, 18,215 tons.

SIZES SHIPT—Run of Mine, Slack, Nut.

PREP. EQUIPT—Bar and Shaker Screens.

ANACONDA COAL CO.

GM—H. T. Demaree, Clifton, Mo.

PA—H. T. Demaree, " "

Anacoda Mine; Shaft; Bituminous Seam, 30 to 36 in. thick.

PO—Deepwater, Mo. SP—Same. CTY—Henry, RR—Frisco, K. C. C. and Springfield Br.

S of H—Mules. Track gauge, 36 in.

S of M—Hand.

SIZES SHIPT—Slack, Nut.

ARCTIC COAL MINING CO.

General Office, Novinger, Mo.

PR—John Giachino, Novinger, Mo.

VP—Ben Pigotti, Novinger, Mo.

TR—Ben Pigotti, Novinger, Mo.

GM—O. M. Blackorby, Novinger, Mo.

GS—Elmer Sines, Novinger, Mo.

PA—O. M. Blackorby, Novinger, Mo.

EM—Edgar C. M. Burkhardt, Macon, Mo.

SA—Midland Coal Co., Kansas City, Mo.

No. 2 Mine; Shaft; Bevier Seam, 42 in. thick.

PO—Youngstown, Mo.; SP—Novinger, Mo.; CTY—Adair; RR—Q. O. & K. C.

S of H—Mules. Track gauge, 36 in.

S of M—Hand.

PP—2 80 H. P. fire tube boilers, 2 pumps.

EMP—150. Last years tonnage 78,952.

SIZES SHIPT—Run of Mine, Slack, Egg, Lump.

PREP. EQUIPT—Gravity Screens.

ARMSTRONG COAL CO.

General Office, Cincinnati, Ia.

PR—E. R. Dusky, Kansas City, Mo.

VP—W. D. Ketcham, Mendota, Mo.

TR—G. B. McPherson, Kansas City, Mo.

GM—W. D. Ketcham, Mendota, Mo.

GS—W. D. Ketcham, Mendota, Mo.

PA—W. D. Ketcham, Mendota, Mo.

SA—Star Coal Co., Kansas City, Mo.

No. 2 Mine; Shaft; Seam, 36 in. thick.

PO—Mendota, Mo.; SP—Same; CTY—Putnam; RR—C. B. & Q.

NS—Geo. Allen, Mendota, Mo.

S of H—Mules and steam loco.

S of M—Hand, room and pillar, longwall mach.

PP—2 fire tube boilers, 125 H. P.

EMP—56. Last years tonnage 24,817.

SIZES SHIPT—Slack, Block.

PREP. EQUIPT—Bar Screens.

ATLAS COAL COMPANY.

Out of business.

BATES COAL MINING & MERCANTILE COMPANY.

Out of business.

BELT LINE COAL & MINING CO.

General Office, Kansas City, Mo.

PR—C. G. Hubbell, Kansas City, Mo.

VP—D. E. Martin, Kansas City, Mo.

TR—C. G. Hubbell, Kansas City, Mo.

GM—C. H. Hubbell, Kansas City, Mo.

GS—Jos. McBrien, Richmond, Mo.

PA—C. G. Hubbell, Kansas City, Mo.

EE—Hark McElrath, Kansas City, Mo.

SCO—Martin & Hubbell; Buyer, F. D. Hubbell, Camden, Mo.

SA—Martia & Hubbell, Kansas City, Mo.

No. 7 Mine; Shaft; Richmond Seam; 18 in. thick.

PO—Camden, Mo.; SP—Same; CTY—Ray; RR—Santa Fe., Wabash.

MS—David Gingan, Orrick, Mo.

S of H—Mules.

S of M—Hand.

No. 22 Mine; Shaft; Richmond Seam; 24 in. thick.

PO—Richmond, Mo.; SP—Same; CTY—Ray; RR—Santa Fe.

MS—Harry Brown, Richmond, Mo.

S of H—Mules.

S of M—Hand.

Old information.

BERTHA MINING & COAL CO.

PR—W. A. Rappelye, Kansas City, Mo.

VP—P. A. Hilderbran, Howland, Mo.

TR—Bertha C. Collins, 311 Felix St., St. Joseph, Mo.

GM—R. A. Hilderbran, Howland, Mo.

GS—R. A. Hilderbran, Howland, Mo.

PA—R. A. Hilderbran, Howland, Mo.

CE—Pete Anderson, Exline, Ia.

Bertha Mine; Shaft; Seam 36 in. thick.

PO—Howland, Mo.; SP—Mendota & Unionville, Mo.; CTY—Putnam; RR—C. B. & Q.

S of H—Mules. Track gauge 28 in.

S of M—Hand.

PP—1 pump.

EMP—50.

NOTE—Successors to the Superior Coal Co.

BIG CREEK COAL CO.

General Office, Kirksville, Mo.

PR—H. M. Still, Kirksville, Mo.

VP—M. D. Campbell, Kirksville, Mo.

TR—Ethel Conner, " "

GM—W. J. Richardson, " "

GS—W. J. Richardson, Kirksville, Mo.

CE—C. J. Barter, Kirksville, Mo.

EM—Philip Eschway, Kirksville, Mo.

EE—Lert McKinley, Kirksville, Mo.

SA—Big Creek Coal Co., Kirksville, Mo.

No. 1 Mine; Shaft; Bevier Seam, 42 in. thick.

PO—Kirksville, Mo.; SP—Same; CTY—Adair; RR—Wab., Q. O. & K. C.

MS—Chas. Athoff, Kirksville, Mo.

S of H—Elec. loco. and mules; track gauge, 36 in.

S of M—Hand.

PP—2 gen. units, 220 volts A. C., 3 phase, 60 cycles.

EMP—550. Daily tonnage 1,250.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.

PREP. EQUIPT—Shaker Screens, Pickling Tables.

BLACKFOOT COAL COMPANY

General Office, 109 North 9th St., Columbia, Mo.

PR—A. J. Estes, Columbia, Mo.

VP—W. J. Hetzler, Columbia, Mo.

TR—W. R. Prather, Columbia, Mo.

GM—W. R. Prather, Columbia, Mo.

GS—W. R. Prather, Columbia, Mo.

PA—W. R. Prather, Columbia, Mo.

EM—W. R. Prather, Columbia, Mo.

EE—J. W. Groom, Columbia, Mo.

SCO—Montague & Prather, Buyer, H. D. Montague, Columbia, Mo.

SA—Ruth Gay, Columbia, Mo.

Blackfoot Coal Mine; Shaft; Bituminous Seam; 42 inches thick.

PO—Columbia, Mo.; SP—Same; CTY—Boone; RR—Wabash and M. K. & P.

S of H—Mules. Track gauge 36 inches.

S of M—Shortwall machs.

PP—Power purchased, Transformer 6600-110 volts A. C., rotary converters, 220 volts D. C., 2 pumps.

EMP—35. Last years tonnage 9881.

PREP. EQUIPT—Crusher and bar screens.

BOWEN COAL & MINING CO.

General Office, Windsor, Mo.

PR—John Bowen, Windsor, Mo.

VP—Thos. R. Bowen, Windsor, Mo.

TR—R. J. Bowen, Windsor, Mo.

GM—John Bowen, Windsor, Mo.

GS—R. J. Bowen, Windsor, Mo.

PA—R. J. Bowen, Windsor, Mo.

EE—B. Madole, Windsor, Mo.

No. 6 Mine; Shaft; Seam, 66 in. thick.

PO—Windsor, Mo.; SP—Same; CTY—Johnson; RR—M. K. & T.

MS—D. C. Lewis, Windsor, Mo.

SM—W. W. Pharis, Windsor, Mo.

S of H—Mules and 2 gasoline locos.

Track gauge, 34 in.

S of M—Hand.

PP—3 70 H. P. water tube boilers, 5 pumps.

EMP—150.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.

BRADLEY COAL CO.

General Office, Huntsville, Mo.

GM—D. L. Bradley, Huntsville, Mo.

PA—D. L. Bradley, Huntsville, Mo.

Bradley Mine; Shaft; Bevier Seam, 48 inches thick.

PO—Huntsville, Mo.; SP—Same; CTY—Randolph, RR—Wabash and M. K. & T.

S of H—Mules. Track gauge 28 in.

S of M—Hand and shortwall machs.

PP—Purchase power, 1-16 H. P. water tube boiler.

EMP—12.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Bar Screens.

Old information.

BUCKLIN COAL CO.

Out of business.

CALLAWAY COUNTY COAL CO.

General Office, Fulton, Mo.

PR—F. L. Crosby, Mexico, Mo.

VP—Mrs. M. C. Sears, La Plata, Mo.

TR—Carter Norris, Fulton, Mo.

GM—Carter Norris, Fulton, Mo.

PA—Carter Norris, Fulton, Mo.

Carrington Mine; Stripping; Bevier Seam, 24 in. thick.

PO—Carrington, Mo. SP—Same. CTY—Callaway, RR—C. & A., Jefferson City Br.

MS—Ed. Hallacy, Carrington, Mo.

S of H—1 steam loco. Track gauge, 36 in.

S of M—1 steam shovel.

PP—3 fire tube boilers, 100 H. P., 4 pumps.

EMP—25. Daily output, 100 tons.

SIZES SHIPT—Slack, Nut, Lump.

PREP. EQUIPT—Shaker Screens.

CENTRAL COAL & COKE CO.

General Office, Kansas City, Mo.

PR—C. S. Keith, Kansas City, Mo.

VP—H. N. Taylor, Kansas City, Mo.

TR—E. E. Riley, Kansas City, Mo.

GS—Wm. Harkes, Kansas City, Mo.

PA—Thos. Mackie, Kansas City, Mo.

EM—J. S. O'Flaherty, Kansas City, Mo.

No. 24 Mine; Shaft; Bevier Seam, 48 in. thick.

PO—Ardmore, Mo.; SP—Same; CTY—Macon; RR—B. & S., C. B. & Q.

MS—H. J. Pierce, Kansas City, Mo.

SM—F. W. Dooley, Kansas City, Mo.

S of H—Mules and rope. Track gauge, 36 in.

S of M—Hand.

PP—4 fire tube boilers, 80 H. P., 9 pumps.

EMP—300. Last years tonnage 200,104.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Shaker Screens, Washeries.

No. 66 Mine; Shaft; Bevier Seam, 48 in. thick.

PO—Keota, Mo.; SP—Same; CTY—Macon; RR—B. & S., C. B. & Q.

MS—H. J. Pierce, Kansas City, Mo.

SM—F. W. Dooley, Kansas City, Mo.

S of H—Storage battery and gasoline locos. Track gauge, 36 in.

S of M—Hand.

PP—4 fire tube boilers, 80 H. P., 1 35 K. W. D. C. gen. unit, 9 pumps.

EMP—210. Last years tonnage 160,983.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Shaker Screens, Washeries.

No. 67 Mine; Shaft; Lexington Seam, 22 in. thick.

PO—Orrick, Mo.; SP—Camden, Mo.; CTY—Ray; RR—A. T. & S. F., Wabash.

MS—E. A. Misenbiller, Orrick, Mo.

S of H—Trolley pole type loco. Track gauge, 43 in.

S of M—5 longwall machs.

PP—2 fire tube boilers, 100 H. P., 1 100 K. W. gen. unit, 250 volts D. C., 3 pumps.

EMP—70. Last years tonnage 33,314.

SIZES SHIPT—Run of Mine.

No. 68 Mine; Shaft; Bevier Seam, 48 in. thick.

PO—Keota, Mo.; SP—Same; CTY—Macon; RR—B. & S., C. B. & Q.

MS—H. J. Pierce, Kansas City, Mo.

S of H—Mules. Track gauge, 36 in.

S of M—Hand.

PP—4 fire tube boilers, 80 H. P., 150 K. W. gen. units, 220 volts D. C., 3 pumps.

EMP—170. Last years tonnage 134,759.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Shaker Screens, Washeries.

CHARITON COAL & MINING CO.

General Office, Novinger, Mo.

PR—I. Novinger, Novinger, Mo.

TR—J. J. Wells, Novinger, Mo.

GM—T. Orek, Novinger, Mo.

PA—J. J. Wells, Novinger, Mo.

SA—J. J. Wells, Novinger, Mo.

Chariton Mine; Shaft; Seam, 42 in. thick.

PO—Novinger, Mo.; SP—Same; CTY—Adair; RR—C. B. & Q.

S of H—Mules. Track gauge, 32 in.

S of M—Hand.

PP—1 fire tube boiler.

EMP—80. Daily output, 200 tons.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.

CHARITON COUNTY COAL & COKE CO.

General Office, Marceline, Mo.

PR—M. J. Campbell, Marceline, Mo.

VP—J. J. Owens, Marceline, Mo.

TR—G. W. Green, Marceline, Mo.

GM—M. J. Campbell, Marceline, Mo.

GENERAL FOREMAN—Allen Cochran, Marceline, Mo.

PA—M. J. Campbell, Marceline, Mo.

Chariton County Mine; Shaft; Tebo Seam, 26-32 in. thick.

PO—Marceline, Mo.; SP—Same; CTY—Chariton; RR—A. T. & S. F.

S of H—Mules. Track gauge 36 in.

S of M—Longwall mach.

PP—Power purchased, transformer 2300-220 volts A. C.

EMP—10.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Bar Screens.

CLARK COAL CO.

General Office, Perry, Mo.

PR—D. B. Fitzpatrick, Perry, Mo.

VP—D. B. Fitzpatrick, Perry, Mo.

TR—J. W. Fitzpatrick, Perry, Mo.

GM—D. B. Fitzpatrick, Perry, Mo.

GS—Jno. Ledford, Perry, Mo.

EE—M. E. Fitzpatrick, Perry, Mo.

SA—Elmer Wells, Perry, Mo.

Clark Mine; Shaft; Longwall Seam; 28 in. thick.

PO—Perry, Mo.; SP—Same; CTY—Ralls; RR—St. L. & H.

S of H—Mules. Track gauge 25 in.

S of M—1 elec. pucker and 1 short-wall machs.

PP—Power purchased, Transformer 2300-220 volt A. C., M. G. Sets, 220 volts D. C.

EMP—35. Last years tonnage 9,713.

SIZES SHIPT—Run of Mine, Slack.

CRONAN COAL CO.

General Office, Moberly, Mo.
PR—C. B. Clapp, Moberly, Mo.
VP—J. W. Faessler, Moberly, Mo.
GM—J. C. Reighard, Moberly, Mo.
EE—J. C. Reighard, Moberly, Mo.
SA—Moberly Fuel Co., Moberly, Mo.

Cronan Mine; Shaft; Seam, 48 in. thick
PO—Moberly, Mo.; SP—Same; CTY—
Randolph.
S of H—Mules. Track gage, 32 in.
S of M—Hand.
PP—Power purchased, transformer 2200
to 220 volts A. C., 2 pumps.
EMP—25. Last fiscal year output,
12,500 tons.
SIZES SHIPT—Run of Mine, Slack, Lump
PREP. EQUIPT—Gravity Screens.

DIAMOND COAL CO.

General Office, Corder, Mo.
PR—G. A. Frerking, Corder, Mo.
VP—H. F. Kleinschmidt, Corder, Mo.
TR—Wm. Groves, Corder, Mo.
GS—Fred Morgan, Corder, Mo.
PA—Fred Morgan, Corder, Mo.
EM—Neils Welliver, Corder, Mo.

Wilson Mine; Shaft; Seam, 22 in. thick
PO—Corder, Mo.; SP—Same; CTY—
Lafayette; RR—C. & A.
S of H—Mules. Track gage, 24 in.
S of M—2 shortwall machs.
PP—2 fire tube boilers, 100 H. P.,
gen. units 150 K. W., 220 volts
D. C., 5 pumps.
EMP—50. Daily output, 80 tons.
SIZES SHIPT—Run of Mine.

EAGLE COAL CO.

General Office, Vandalia, Mo.
PR—W. H. Haas, Vandalia, Mo.
VP—W. E. Callaway, Vandalia, Mo.
GM—W. H. Haas, Vandalia, Mo.
GS—Daotel Morgan, Vandalia, Mo.

Eagle Mine; Shaft; Seam, 28 in. thick
PO—Vandalia, Mo.; SP—Same; CTY—
Audrain; RR—C. & A.
S of H—Mules.
S of M—Hand.
EMP—10-25. Last fiscal year output,
4,691 tons.
SIZES SHIPT—Run of Mine.
Old Information.

ENGELS & SONS.

General Office, Rich Hill, Mo.
GM—J. T. Engels, Rich Hill, Mo.
GS—Leo F. Engels, Rich Hill, Mo.

Engels & Sons Mine; Slope and Strip-
ping; Seams, 24, 36, 48 in. thick.
PO—Rich Hill, Mo.; SP—Same; CTY—
Bates; RR—Missouri Pacific.
MS—J. T. Engels, Rich Hill, Mo.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
EMP—7. Last fiscal year output, 2,720
tons.
SIZES SHIPT—Run of Mine, Slack, Nut.
PREP. EQUIPT—Gravity Screens.
Old Information.

FARMERS FUEL COMPANY.

General Office, 432-35 Rialto Bldg., Kan-
sas City, Mo.
PR—F. W. Lukins, Kansas City, Mo.
VP—N. H. Lukins, Kansas City, Mo.
GM—F. W. Lukins, Kansas City, Mo.
TR—W. C. Duvall, Kansas City, Mo.
GS—N. R. Andrews, Higginville, Mo.
PA—R. E. Moss, Kansas City, Mo.

No. 1 Mine; Shaft; Lexington Seam, 14
to 18 in. thick.
PO—Higginville, Mo.; SP—Same; CTY—
Lafayette; RR—C. & A.
MS—Geo. C. Ridge, Higginville, Mo.
S of H—2 trolley pole type locos. Track
gage, 26 in.
S of M—6 longwall machs.
PP—1 water tube boiler, 100 H. P.,
and 1 return tubular boiler, 250
H. P., gen. units, 1 200 K. W., 1
100 K. W., 250 volts D. C., 9
pumps.
EMP—90. Last years tonnage 25,928.
SIZES SHIPT—Lump.

No. 7 Mine; Drift; Lexington Seam, 14
to 18 in. thick.
PO—Higginville, Mo.; SP—Same; CTY—
Lafayette; RR—C. & A.
MS—Louis Jung, Higginville, Mo.
S of H—2 trolley pole type locos. Track
gage, 26 in.
S of M—8 elec. machs.
PP—Gen. power from No. 1 mine.
EMP—100. Last years tonnage 37,472
SIZES SHIPT—Lump.

No. 9 Mine; Drift; Lexington Seam, 14
to 18 in. thick.
PO—Higginville, Mo.; SP—Same; CTY—
Lafayette; RR—C. & A.
S of H—Mules. Track gage, 27 in.
S of M—3 elec. machs.
PP—Power from No. 1 mine.
SIZES SHIPT—Lump.
Mine not operating.

FULTON FIRE BRICK COMPANY.

General Office, 1000 Westminster Ave.,
Fulton, Mo.
PR—L. U. Nickell, Fulton, Mo.
VP—LeGrand Farish, 30 Church St.,
New York, N. Y.
TR—T. B. Jones, Fulton, Mo.
GM—C. O. McNamee, Fulton, Mo.
GS—C. F. Smith, Fulton, Mo.
PA—T. B. Jones, Fulton, Mo.

Powell Mine; Shaft; Beaver Seam; 36
in. thick.
PO—Fulton, Mo. SP—Same. CTY—
Callaway. RR—C. & A.
MS—Wm. Gamaway, Fulton, Mo.
S of M—Hand.
PP—20 H. P. motor, 1 pump.
EMP—18. Last years tonnage 13,250.
SIZES SHIPT—Run of Mine.

GORAN-GATSON COAL & F. C. CO.

PR—Jno. F. Goran, Vandalia, Mo.
PA—Jno. F. Goran, " "
TR—Foster Pellock, " "
GM—U. S. Goran, " "
GS—W. H. Goran, " "
CE—W. H. Goran, " "

Goran-Gatson Mine; Shaft; Seam 32 in.
thick.
PO—Vandalia, Mo.; SP—Same; CTY—
Audrain; RR—C. & A.
S of H—Mules. Track gage 16 in.
S of M—Hand.
SIZES SHIPT—Run of Mine, Slack, Nut.
Lump.
Old Information.

GRAND RIVER COAL COMPANY

Out of business.

HERROLD-BREIVOGEL COAL CO.

Out of business.

HANKS COAL COMPANY.

General Office, Commerce Bldg., Kansas
City, Mo.
PR—O. S. Hanks, Kansas City, Mo.
SA—Southern Coal Co., Kansas City, Mo.
No. 5 Mine; Slope; Beaver Seam, 52 in.
thick.
PO—Huntsville, Mo.; SP—Same; CTY—
Randolph; RR—M. & W.
S of H—Mules. Track gage 32 in.
S of M—Hand.
EMP—80. Daily tonnage 350
PREP. EQUIPT—Bar Screens.

HOME COAL CO.

General Office, Macon, Mo.
PR—H. J. Whetsel, Macon, Mo.
VP—L. F. Bennett, Macon, Mo.
TR—W. S. Forney, Macon, Mo.
GM—H. J. Whetsel, Macon, Mo.
GS—H. J. Whetsel, Macon, Mo.
PA—H. J. Whetsel, Macon, Mo.
EM—H. J. Whetsel, Macon, Mo.
Home No. 1 Mine; Shaft; Mulkey Seam,
22 in. thick.
PO—Macon, Mo.; SP—Same; CTY—
Macon; RR—C. B. & Q.
S of H—Mules.
S of M—3 longwall machs.
PP—Power purchased, motor gen. sets.
I 60 H. P. water tube boiler.
EMP—100. Last years tonnage 41,000
SIZES SHIPT—Block.

Home No. 2 Mine; Shaft; Mulkey Seam,
22 in. thick.
PO—Macon, Mo.; SP—Same; CTY—
Macon; RR—Wabash.
MS—Tom Moss, Macon, Mo.
S of M—1 longwall mach.
PP—Power purchased, motor gen. sets.
EMP—35. Last years tonnage 12,000.
SIZES SHIPT—Block.

HUBBELL COAL COMPANY

PR—C. G. Hubbell, Kansas City, Mo.
VP—D. E. Martin, Kansas City, Mo.
TR—C. G. Hubbell, Kansas City, Mo.
GM—C. G. Hubbell, Kansas City, Mo.
GS—Henry Brown, Richmond, Mo.
PA—C. G. Hubbell, Kansas City, Mo.
EE—Mark McBrien, Kansas City, Mo.
SA—Martin & Hubbell, Kansas City, Mo.
No. 10 Mine; Shaft; Richmond Seam;
18 to 24 inches thick.
PO—Richmond, Mo.; SP—Same; CTY—
Ray; RR—A. T. & S. F., St. Joseph
Branch.
MS—James M. Brian, Richmond, Mo.
S of H—Mules. Track gage 30 in.
S of M—4 elec. machs.
PP—Power purchased, 1 return tubular
boiler, total 50 H. P., 1 gen. unit,
250 volts D. C.
EMP—60. Last years tonnage 35,353.
SIZES SHIPT—Block.

IMPERIAL COAL CO.

General Office, Corder, Mo.
PR—D. G. Jackson, Corder, Mo.
VP—H. Wolleman, Corder, Mo.
TR—C. J. Wolleman, Corder, Mo.
GM—K. P. Kramer, Corder, Mo.
PA—K. P. Kramer, Corder, Mo.
SA—K. P. Kramer, Corder, Mo.

Imperial Mine; Shaft; Bituminous Seam,
22 in. thick.
PO—Corder, Mo.; SP—Same; CTY—
Lafayette; RR—C. & A.
MS—Butler Thomas, Corder, Mo.
S of H—Mules. Track gage, 27 in.
S of M—Longwall mach.
PP—Purchase power, transformer 23,000-
220 volts A. C.
EMP—25. Daily tonnage 150
SIZES SHIPT—Block.

JACKSONVILLE COAL COMPANY

General Office, Jacksonville, Mo.
PR—G. C. Gray, Kansas City, Mo.
VP—E. R. Sweeney, Kansas City, Mo.
TR—T. B. Bryan, Kansas City, Mo.
GM—C. G. Shaw, Missouri City, Mo.
GS—Geo. W. Morris, Jacksonville, Mo.
PA—C. G. Shaw, Missouri City, Mo.

Jacksonville Mine; Shaft; Beaver Seam,
40 in. thick.
PO—Jacksonville, Mo.; SP—Same; CTY—
Randolph; RR—Wabash.
S of H—Mules.
S of M—Hand.
PP—1 pump.
EMP—120. Daily tonnage 300.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Gravity Screens, Crush-
er.

JOHNS, GEO.

Out of business.

IONES COAL COMPANY

General Office, Rich Hill, Mo.
PR—J. Elmer Jones, Rich Hill, Mo.
VP—John M. Heck, Rich Hill, Mo.
TR—J. W. Jamison, Rich Hill, Mo.
GM—J. Elmer Jones, Rich Hill, Mo.
GS—J. Elmer Jones, Rich Hill, Mo.
PA—J. Elmer Jones, Rich Hill, Mo.

Jones Mine; Shaft; Rich Hill Seam;
42-60 in. thick.
PO—Rich Hill, Mo.; SP—Panama, Mo.;
CTY—Vernon; RR—Mo. Pac.
S of H—Mules. Track gage 36 in.
S of M—Shooting from the solid.
PP—1 pump.
EMP—45. Daily tonnage 125.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Screens.

KANSAS CITY MIDLAND COAL & MNG. CO

General Office, Nowinger, Mo.
PR—Ed. J. Corrigan, Nowinger, Mo.
VP—H. C. Kellogg, Nowinger, Mo.
GM—Emmet Corrigan, Nowinger, Mo.
PA—Emmet Corrigan, Nowinger, Mo.
SA—Midland Coal Co., Kansas City, Mo.

No. 4 Mine; Shaft; Beaver Seam, 42 in.
thick.
PO—Nowinger, Mo.; SP—Same; CTY—
Adair; RR—C. B. & Q.
MS—B. T. Ward, Nowinger, Mo.
S of H—Mules and 2 storage battery
locos. Track gage 36 in.
S of M—Hand.
PP—4 water tube boilers, 600 H. P.
EMP—400. Last fiscal year output,
200,000 tons.
SIZES SHIPT—Run of Mine, Slack, Egg,
Lump.
PREP. EQUIPT—Gravity Screens, Pick-
Tables.

No. 7 Mine; Shaft; Beaver Seam, 42 in.
thick.
PO—Nowinger, Mo.; SP—Same; CTY—
Adair; RR—C. B. & Q.
MS—John Barron, Nowinger, Mo.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
PP—4 water tube boilers, 600 H. P.
SIZES SHIPT—Run of Mine, Slack, Nut,
Egg, Lump, Block.
PREP. EQUIPT—Gravity and Revolving
Screens.
Note—Mine just being developed.

KLANER, J. F. COAL CO.

General Office, 205 Globe Bldg., Pittsburg,
Kan.
OWNER—J. F. Klaner, Pittsburg, Kan.
GS—L. J. Carder, Pittsburg, Kan.
SA—Sinclair Coal Co., 501 Gloyd Bldg.,
Kansas City, Mo.

Klaner Mine; Strippling; Cherokee Seam
20 inches thick.
PO—Hume, Mo.; SP—Sam; CTY—Bates;
RR—Kansas City Southern.
MS—L. E. Carder, Hume, Mo.
S of H—Mules and 2 steam locos. Track
gage 42 in.
S of M—Steam shovel.
PP—1 fire tube boiler, 150 H. P., 2
pumps.
EMP—40. Last years tonnage 35,000
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
PREP. EQUIPT—Shaker Screens.

LANING-HARRIS COAL & GRAIN CO

General Office, Kansas City, Mo.
PR—Chas. Nushbaum, Chicago, Ill.
VP—L. D. Luning, Kansas City, Mo.
TR—L. D. Luning, Kansas City, Mo.
GM—C. F. Biebert, Wellington, Mo.
PA—C. F. Biebert, Wellington, Mo.

Daisy Mine; Drift; Seam 18 in. thick.
PO—Wellington, Mo. SP—Same. CTY—
Lafayette. RR—Mo. Pacm., Lex-
ington Branch.
S of H—Trolley pole type locos. Track
gage, 18 in.
S of M—8 longwall machs.
PP—2 return tubular boilers, total 200
H. P., 2 gen. units, 450 and 100
amps., 275 volts D. C.
EMP—145. Last years tonnage 56,378.
SIZES SHIPT—Run of Mine.

LIBERAL COAL & MINING CO

General Office, Pittsburg, Kas.
PR—J. H. Vincent, Pittsburg, Kas.
VP—E. A. Sheppardson, Tulsa, Okla.
TR—W. T. Embree, " "
GM—J. H. Vincent, Pittsburg, Kas.
PA—J. H. Vincent, " "

No. 1 Mine; Strippling; Seam 28 to 33
in. thick.
PO—Liberal, Mo.; SP—Same; CTY—
Barton; RR—Frisco.
S of H—2 steam locos. Track gage 36
in.
S of M—1 steam shovel.
PP—2 160 H. P. water tube boilers.
EMP—50. Daily output, 350 tons.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
PREP. EQUIPT—Shaker Screens.
Old Information.

McGREGG COAL COMPANY

General Office, Lexington, Mo.
PR—E. J. McGregg, Lexington, Mo.
GM—E. J. McGregg, Lexington, Mo.
GS—J. C. McGregg, Lexington, Mo.
EM—H. C. Rogers, Lexington, Mo.
EE—J. W. Bills, Lexington, Mo.
PA—J. C. McGregg, Lexington, Mo.
SA—McGregg Coal Co., Lexington, Mo.

No. 1 Mine; Drift; Lexington Seam, 22
in. thick.
PO—Lexington, Mo.; SP—Same; CTY—
Lafayette; RR—Mo. Pacific.
S of H—3 trolley pole type locos. Track
gage, 29 in.
S of M—6 longwall machs.
PP—3 return tubular boilers, 700 H. P.,
2 gen. units, 250 volts D. C., 4
pumps.
EMP—178. Last years tonnage 39,780
SIZES SHIPT—Run of Mine.

Graddy Mine; Drift; Lexington Seam, 22
in. thick.
PO—Lexington, Mo.; SP—Same; CTY—
Lafayette; RR—Mo. Pacific.
S of H—Mules. Track gage, 29 in.
S of M—9 longwall machs.
PP—Power from No. 1 mine.
EMP—309. Last years tonnage 76,900
SIZES SHIPT—Run of Mine.

No. 2 Mine; Shaft; Lexington Seam, 22
in. thick.
PO—Wellington, Mo.; SP—Same; CTY—
Lafayette; RR—Mo. Pacific.
S of H—Mules. Track gage 24 in.
S of M—6 longwall machs.
PP—3 return tubular boilers, 500 H. P.,
1 gen. unit, 250 volts D. C., 4
pumps.
EMP—148. Last years tonnage 48,600
SIZES SHIPT—Run of Mine.

MARCELINE COAL & MINING CO.

General Office, 1510-1514 Commerce
Bldg., Kansas City, Mo.
PR—C. P. A. Clough, 1510-1514 Com-
merce Bldg., Kansas City, Mo.
TR—J. A. Parkins, 1510-1514 Com-
merce Bldg., Kansas City, Mo.
Supt—J. H. mings, Marcelline, Mo.
PA—R. R. Miller, Commerce Bldg.,
Kansas City, Mo.
MM—Geo. Colville, Marcelline, Mo.
SCO—Marcelline Mre. & Supply Co.,
Buyer, J. H. mings, Marcelline, Mo.

Marcelline No. 2 Mine; Shaft; Seam 30
in. thick.
PO—Marcelline, Mo.; SP—Same; CTY—
Linn; RR—A. T. & S. F.
S of H—Mules. Track gage 36 in.
S of M—7 shortwall machs.
PP—Purchase power, Transformer 230-
220 volts A. C., M. G. Sets, 250
volts D. C., 3 return tubular boil-
ers, 1 pump.
EMP—285. Last fiscal year output,
118,000 tons.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Shaker, Crush-
er, Pick Tables, Picking Table.

MARLETT COAL COMPANY

General Office, Moberly, Mo.
PR—Harry Stull, Moberly, Mo.
VP—A. E. Marr, Moberly, Mo.
GM—A. F. Marr, Moberly, Mo.
GS—A. F. Marr, Moberly, Mo.
PA—A. E. Marr, Moberly, Mo.

No. 1 Mine; Beaver Seam.
PO—Moberly, Mo.; SP—Same; CTY—
Randolph; RR—Wabash, M. K.
& T.

(Continued on Next Page)

Marriott Coal Co.—Cont.

MS—Wm. Bowman, Moberly, Mo.
S of H—Mules. Track gage 30 in.
S of M—2 longwall machs.
PP—Power purchased. Transformer 13,000 to 2,300-220 volts A. C., fire tube boiler, water tube boiler, 1 pump.
EMP—100.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
Note—Successors to Smith-Marriott & Co.

MARTINSBURG COAL & MINING CO.

General Office, Martinsburg, Mo.
PR—J. Krieger, Martinsburg, Mo.
VP—W. P. Moser, Martinsburg, Mo.
TR—F. G. Jacob, Martinsburg, Mo.
GM—W. P. Moser, Martinsburg, Mo.
GS—J. F. Moser, Martinsburg, Mo.
PA—R. W. Moser, Martinsburg, Mo.
CE—W. P. Moser, Martinsburg, Mo.
SA—W. P. Moser, Martinsburg, Mo.

Martinsburg Mine; Shaft; Second Seam, 32 in. thick.
PO—Martinsburg, Mo.; SP—Same; CTY—Audrain; RR—Wabash.
SM—R. W. Moser, Martinsburg, Mo.
S of H—Mules. Track gage 30 in.
S of M—1 longwall mach.
PP—1 fire tube boiler, 100 H. P., 2 pumps.
EMP—15. Last years tonnage 5,000.
SIZES SHIPT—Run of Mine, Lump.

MELBOURNE COAL & IRON CO.

General Office, Melbourne, Mo.
PR—John Greenall, Melbourne, Mo.
VP—Thos. Fitzsimmons, Melbourne, Mo.

Melbourne Mine; Shaft; Lexington Seam, 20 inches thick.
PO—Melbourne, Mo.; SP—Same; CTY—Harrison; RR—Q. O. & K. C.
MS—Herbert Mather, Melbourne, Mo.
S of H—Mules. Track gage 30 inches.
S of M—Hand and longwall machs.
PP—1 80 H. P. water tube boiler, gen. units, 300 volts A. C.
EMP—24. Last years tonnage 15,800.
SIZES SHIPT—Run of Mine.

MENDOTA MINING COMPANY

Now Armstrong Coal Co.

MERCANTILE COAL & MINING CO.

General Office, Richmond, Mo.
PR—F. R. Atwill, Richmond, Mo.
VP—E. M. Atwill, Richmond, Mo.
TR—F. R. Atwill, Richmond, Mo.
GS—Robt. Blair, Richmond, Mo.
EE—Murry Clevering, Richmond, Mo.

No. 17 Mine; Shaft; Richmond Seam, 24 in. thick.
PO—Richmond, Mo.; SP—Same; CTY—Ray; RR—A. T. & S. F.
S of H—Mules. Track gage 30 in.
S of M—6 longwall machs.
PP—Power purchased, 220 volts A. C., 3 pumps.
EMP—150. Daily tonnage 250.
SIZES SHIPT—Lump, Block.

MINDEN COAL CO.

General Office, Joplin, Mo.
PR—J. G. Starr, Joplin, Mo.
VP—H. J. Sternberg, St. Louis, Mo.
TR—Geo. H. Houk, Joplin, Mo.
GM—H. J. Sternberg, St. Louis, Mo.
GS—O. S. Hubert, Mindenmines, Mo.
Sales Agency, Midland Coal Co., Kansas City, Mo.

Minden Mine; Stripping; Cherokee Seam; 28-42 in. thick.
PO—Mindenmines, Mo.; SP—Same; CTY—Barton; RR—Mo. Pac., Pgh. & Nevada Br.
S of H—4 steam locos. Track gage, 42 in.
S of M—Hand, 2 steam shovels and 2 steam loaders.
PP—17 steam eng., 785 H. P., and 3 gasoline 48 H. P. boilers, 5 pumps.
EMP—100. Last years tonnage 60,906.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Screens.

MISSOURI BLOCK COAL CO.

General Office, Unionville, Mo.
PR—W. H. Harrison, Unionville, Mo.
GM—W. H. Harrison, Unionville, Mo.
PA—W. H. Harrison, Unionville, Mo.

Missouri Mine; Drift; Seam, 34 in. thick.
PO—Unionville, Mo.; SP—Same; CTY—Putnam; RR—C. R. & Q.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
EMP—25. Daily output, 50 tons.
SIZES SHIPT—Slack.
Old information.

MISSOURI CITY COAL CO.

General Office, Missouri City, Mo.
PR—Geo. C. Gray, Kansas City, Mo.
TR—C. G. Shaw, Missouri City, Mo.
GM—Chas. G. Shaw, Missouri City, Mo.
GS—C. G. Shaw, Missouri City, Mo.

PA—Chas. G. Shaw, Missouri City, Mo.
EE—R. Hicklin, Missouri City, Mo.
SCO—Shaw & Donovan; Buyer, L. E. Donovan, Missouri City, Mo.
SA—Gray, Bryan & Sweeney Coal Co., Kansas City, Mo.

Missouri Mine, Shaft, Lexington Seam, 22 in. thick.
PO—Missouri City, Mo. SP—Same. CTY—Clay. RR—Wabash.
S of H—Mules and steam loco. Track gage 30 in.
S of M—Longwall machs.
PP—2 fire tube boilers, 2 pumps.
EMP—40. Last fiscal year output, 22,040 tons.
SIZES SHIPT—Lump.
PREP. EQUIPT—Bar Screens.

MITCHELL & LOVELL COAL CO.

PR—W. E. Mitchell, Huntsville, Mo.
VP—Alfred Lovell, Huntsville, Mo.
TR—Alfred Lovell, " "
GM—W. E. Mitchell, Huntsville, Mo.
PA—W. E. Mitchell, Huntsville, Mo.
SA—W. E. Mitchell, Huntsville, Mo.

Mitchell & Lovell Mine; Drift; Bituminous Seam, 48 in. thick.
PO—Huntsville, Mo.; SP—Same; CTY—Randolph; RR—Wabash.
MS—W. E. Mitchell, Huntsville, Mo.
S of H—Mules. Track gage 31 in.
S of M—Hand.
EMP—16. Last years tonnage 11,860.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

MULLBERRY COAL CO., THE

General Office, 205 Glob. Bldg., Pittsburg, Kan.
PR—J. F. Klauer, Pittsburg, Kan.
VP—Mrs. J. F. Klauer, Pittsburg, Kan.
TR—J. A. Meyers, Pittsburg, Kan.
GM—J. F. Klauer, Pittsburg, Kan.
GS—L. J. Carder, Pittsburg, Kan.
PA—L. J. Carder, Pittsburg, Kan.
SA—Sinclair Coal Co., 501 Gloyd Bldg., Kansas City, Mo.

Mullberry No. 1 Mine; Stripping; Cherokee-Pittsburg Seam, 30 in. thick.
PO—Pittsburg, Kan.; SP—Same; CTY—Barton, Mo.; RR—K. C. Southern.
MS—Thos. Davison, R. F. D. No. 1, Arcadia, Kan.
S of H—2 steam locos. Track gage 36 in.
S of M—Steam loading shovel.
PP—2—85 H. P. fire tube boilers, 15 pumps.
EMP—35. Last years tonnage 50,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

NORTHERN CENTRAL COAL COMPANY.

NOTE—Company disposed of operations. Now holding company.

NORTHWESTERN COAL & MINING CO.

Out of business.

ORRICK COAL COMPANY

PR—M. R. Clark, Orrick, Mo.
VP—W. C. Windsor, Orrick, Mo.
GS—M. R. Clark, Orrick, Mo.
TR—M. R. Clark, Orrick, Mo.

Albany Mine; Shaft; Lexington Seam, 32 in. thick.
PO—Orrick, Mo.; SP—Same; CTY—Ray; RR—Wabash.
S of H—Mules. Track gage, 26 in.
S of M—Hand.
PP—1 return tubular boiler, total 35 H. P.
SIZES SHIPT—Lump.
Note—Formerly operated by Albany Coal Co.
Old information.

PERRY, JOSEPH & SON, LESSEES

General Office, R. F. D. No. 3, Lexington, Mo.
GM—John Perry, Lexington, Mo.
GS—Joseph Perry, Sr., Lexington, Mo.
SCO—Address the Company, Buyer, G. E. Perry, Lexington, Mo.
SA—John Perry, Lexington, Mo.
SALES MGR—R. Perry, Lexington, Mo.

Macey Mine, Drift, Seam 22 in. thick.
PO—Lexington, Mo. SP—Myrick. CTY—Lafayette. RR—Missouri Pac.
S of H—Mules.
S of M—Hand.
PP—2 pumps.
EMP—60. Last years tonnage 185,336.

PERRY-McMAHAN COAL CO.

General Office, Kansas City, Mo.
PR—W. C. Perry, Kansas City, Mo.
TR—W. C. Perry, " "
CS—E. O. McMahon, Rich Hill, Mo.

"Steam Shovel" Mine; Stripping; Rich Hill Seam, 48 to 72 in. thick.
PO—Rich Hill, Mo.; SP—Panama, Mo.; CTY—Bates; RR—Mo. Pac.
S of H—2 steam locos. Track gage 42 in.
S of M—Hand.

PP—5 fire tube boilers, 270 H. P., 1 water tube boiler, 10 H. P., 8 pumps.

EMP—40. Last fiscal year output, 43,809 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.
Old information.

PICKERING COAL COMPANY.

General Office, Richmond, Mo.
PR—I. Pickering, Richmond, Mo.
VP—George Pickering, Richmond, Mo.
TR—I. Pickering, Richmond, Mo.
GM—I. Pickering, Richmond, Mo.
GS—I. Pickering, Richmond, Mo.
Asst. Supt.—Chas. Pickering, Richmond, Mo.
PA—I. Pickering, Richmond, Mo.
SCO—Pickering & Co.; Buyer, George Pickering, Richmond, Mo.
SA—F. M. Brinson, 607 Corbey & Feson Bldg., St. Joseph, Mo.

No. 6 Mine; Shaft; Richmond Seam, 22 to 24 in. thick.
PO—Richmond, Mo.; SP—Same; CTY—Ray; RR—A. T. & S. F.
S of H—Mules, storage battery and com. bination locos. Track gage, 30 in.
S of M—Longwall machs.
PP—Power purchased, 1 125 H. P. fire tube boiler, 11 pumps.
EMP—165. Daily tonnage 300.
SIZES SHIPT—Lump.

No. 4 Mine; Shaft; Camden Seam, 18 to 19 in. thick.
PO—Richmond, Mo.; SP—Same; CTY—Ray; RR—A. T. & S. F.
S of H—Mules. Track gage, 30 in.
PP—1 return tubular boiler, total 75 H. P., 2 pumps.
EMP—35. Daily tonnage 52.
SIZES SHIPT—Lump.

No. 9 Mine; Shaft; Richmond Seam, 22 to 24 in. thick.
PO—Richmond, Mo.; SP—Same; CTY—Ray; RR—A. T. & S. F.
S of H—Storage battery loco. Track gage, 30 in.
PP—Power purchased, 1 75 H. P. fire tube boiler.
EMP—70. Daily tonnage 250.
SIZES SHIPT—Lump.

No. 11 Mine; Shaft; Richmond Seam, 22 to 24 in. thick.
PO—Richmond, Mo.; SP—Same; CTY—Ray; RR—A. T. & S. F.
S of H—1 storage battery loco. Track gage, 30 in.
S of M—Longwall machs.
EMP—45. Daily tonnage 67.
PP—Power purchased, 1 75 H. P. fire tube boiler, 2 pumps.
SIZES SHIPT—Lump.

No. 16 Mine; Shaft; Richmond Seam, 18 to 22 in. thick.
PO—Richmond, Mo.; SP—Same; CTY—Ray; RR—A. T. & S. F.
S of H—Mules. Track gage, 30 in.
S of M—2 longwall machs.
PP—1 150 H. P. fire tube boiler, 1 150 K. W. gen. unit, 220 A. C., 5 pumps.
EMP—45. Daily tonnage 100.
SIZES SHIPT—Lump.

Pickering No. 12 Mine; Shaft; Richmond Seam, 22 in. thick.
PO—Richmond, Mo.; SP—Same; CTY—Ray; RR—A. T. & S. F.
S of H—Mules. Track gage, 30 in.
S of M—3 longwall machs.
PP—Power purchased, 220 volts A. C.
EMP—40. Daily tonnage 150.
SIZES SHIPT—Lump.

PITTSBURG & MIDWAY COAL MINING CO.

PR—C. P. Spencer, Pittsburg, Kan.
TR—W. O. Myers, Pittsburg, Kan.
GM—C. F. Spencer, Pittsburg, Kan.
GS—L. E. Compton, Pittsburg, Kan.
PA—L. E. Compton, Pittsburg, Kan.
CE—J. E. Donohoe, Pittsburg, Kan.
SCO—Address the Company, Buyer, D. R. Kerr, Pittsburg, Kan.
SA—A. F. McElheine, Kansas City, Mo.

No. 8 Mine; Stripping; S. E. Kansas Seam 36 in. thick.
PO—Pittsburg, Kan.; SP—Same; CTY—Barton, Mo.; RR—A. T. M. P. & Frisco.
MS—Ed. Beauchamp, Pittsburg, Kan.
S of H—Mules and 2 steam locos. Track gage 42 in.
S of M—1 steam shovel.
PP—Power purchased.
EMP—50. Last years tonnage 84,961.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

No. 10 Mine; Stripping; S. E. Kansas Seam, 36 in. thick.
PO—Pittsburg, Kan.; SP—Same; CTY—Barton, Mo.; RR—A. T. M. P. & Frisco.
MS—Wm. Morgan, Pittsburg, Kan.
S of H—2 steam locos. Track gage 42 in.
S of M—1 elec. shovel.
PP—Power purchased.

EMP—55. Last years tonnage 55,436.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

PITTSBURG-OSKALOOSA COAL CO., THE

General Office, Pittsburg, Kan.
PR—Solomon Degen, Clinton, Mo.
VP—J. R. Ellwood, Pittsburg, Kan.
TR—Sam. M. Degen, Pittsburg, Kan.
GM—J. R. Ellwood, Pittsburg, Kan.
GS—J. R. Ellwood, Pittsburg, Kan.
PA—J. R. Ellwood, Pittsburg, Kan.
EM—J. R. Ellwood, Pittsburg, Kan.
SA—P. & M. Coal Mining Company, Pittsburg, Kan.

No. 1 Mine; Stripping; Cherokee Seam; 28 inches thick.
PO—Oskaloosa, Mo.; SP—Same; CTY—Barton, Mo.; RR—Kan. City So.
MS—R. E. Malle, Oskaloosa, Mo.
S of H—Steam locos. Track gage 36 inches.
S of M—Stripping.
PP—1 water tube boiler 60 H. P.
EMP—30. Last fiscal year output, 16,000 tons.
SIZES SHIPT—Slack, Nut.
PREP. EQUIPT—Shaker Screens.

PLATTENBURG COAL CO.

LESSEE—Mat Atwood, Lexington, Mo.
Plattensburg Mine; Drift; Bituminous Seam 18 to 24 in. thick.
PO—Lexington, Mo.; SP—Same; CTY—Lafayette; RR—Lexington & Sedalia.
MS—Mat Atwood, Lexington, Mo.
S of H—Mules.
S of M—Hand.
PP—1 pump.
EMP—25. Last years tonnage 3,154.

PLATTSBURG-VIBBORD COAL MINING CO.

General Office, Plattsburg, Mo.
PR—G. A. Shepherd, Plattsburg, Mo.
VP—A. C. Hartell, Plattsburg, Mo.
TR—W. E. Sanders, Plattsburg, Mo.
GM—E. Mohler, Plattsburg, Mo.
GS—E. Mohler, Plattsburg, Mo.
PA—E. Mohler, Plattsburg, Mo.
SA—E. Mohler, Plattsburg, Mo.

Plattsburg-Vibbord Mine; Shaft; 28 inches thick.
PO—Rayville, Mo.; SP—Vibbord, Mo.; CTY—Ray; RR—A. T. & S. F.
MS—Joseph Seek, Rayville, Mo.
S of H—Mules. Track gage 30 in.
S of M—Hand.
PP—150 H. P. boiler, 1 pump.
EMP—50. Daily tonnage 135.
SIZES SHIPT—Run of Mine.

POWHATAN COAL COMPANY

General Office, Keith & Perry Bldg., Kansas City, Mo.
PR—D. E. Ingersoll, Huntsville, Mo.
VP—Wm. Harkes, Kansas City, Mo.
TR—C. Whalen, Kansas City, Mo.
GM—H. N. Taylor, Kansas City, Mo.
GS—Wm. Harkes, Kansas City, Mo.
PA—Wm. Harkes, Kansas City, Mo.
EM—Wm. Harkes, Kansas City, Mo.
SA—Star Coal Co., Commerce Bldg., Kansas City, Mo.

No. 1 Mine; Slope; Beaver Seam; 42 inches thick.
PO—Huntsville, Mo.; SP—Same; CTY—Randolph; RR—Wabash.
MS—D. E. Ingersoll, Huntsville, Mo.
S of H—Mules.
S of M—Hand.
PP—Power purchased. Transformer 1,300 to 440 volts.
EMP—60. Daily output, 500 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.

PRACTICAL COAL CO., THE

Out of business.

PRAIRIE BLOCK COAL CO.

General Office, Elmira, Mo.
PR—A. G. Widmer, Elmira, Mo.
VP—W. E. Widmer, Elmira, Mo.
TR—J. E. Delaney, Elmira, Mo.
PA—W. E. Widmer, Elmira, Mo.
EM—W. E. Widmer, Elmira, Mo.
EE—A. G. Shaffer, Elmira, Mo.

No. 6 Mine; Shaft; Lexington Seam, 33 inches thick.
PO—Elmira, Mo.; SP—Same; CTY—Ray; RR—C. M. & St. P.
MS—George Jones, Elmira, Mo.
S of H—Mules.
S of M—Longwall machs.
PP—2 100 H. P. boilers, 2 pumps.
EMP—100. Daily tonnage 250.
SIZES SHIPT—Egg, Block, Lump.
PREP. EQUIPT—Gravity Screens.

RAVEN COAL COMPANY

General Office, Coatesville, Mo.
PR—Jas. D. Boudouant, Jr., Kirksville, Mo.
VP—Milton Mills, Kirksville, Mo.
TR—Chas. F. Carter, Lancaster, Mo.
GM—Chas. F. Carter, Lancaster, Mo.
GS—Chas. F. Carter, Lancaster, Mo.

(Continued on Next Page)

Raven Coal Company—Cont.

PA—Chas. F. Carter, Lancaster, Mo.
EE—Dan McDade, Coatsville, Mo.
SA—Chas. F. Carter, Lancaster, Mo.
SCO—Mayo & Co., Lancaster, Mo.

Raven Mine; Slope; Seam, 44-52 in. thick.
PO—Coatsville, Mo.; CTY—Schuyler; RR—L. & St. L.
S of H—Mules.
S of M—Hand and shortwall mach.
PP—1 boiler, 125 H. P., 2 35 K. W. gen. units, 250 volts D. C.
EMP—50
SIZES SHIPT—Run of Mine, Slack, Lump.

RAY COUNTY COAL CO.

General Office, Richmond, Mo.
PR—R. E. Bates, Richmond, Mo.
VP—T. L. Greenleaf, St. Joseph, Mo.
TR—R. W. Bates, Richmond, Mo.
GM—R. E. Bates, Richmond, Mo.
GS—Thos. Woods, Richmond, Mo.
PA—L. S. Hall, Richmond, Mo.
SA—T. L. Greenleaf, St. Joseph, Mo.

No. 23 Mine; Shaft; Richmond Seam; 23 in. thick.
PO—Richmond, Mo.; SP—Same; CTY—Ray; RR—A. T. & S. F.
S of H—Mules. Track gage 30 in.
S of M—4 longwall machs.
PP—Power purchased, 2—80 H. P. fire tube boilers, 220 volts A. C., 3 pumps.
EMP—150. Last years tonnage 55,000.
SIZES SHIPT—Block.

RELIANCE COAL COMPANY.

General Office, Clinton, Mo.
PR—J. D. Livingston, St. Louis, Mo.
TR—F. C. Livingston, Windsor, Mo.
GM—J. D. Livingston, St. Louis, Mo.
GS—A. B. Church, Brownington, Mo.
PA—W. J. Livingston, Clinton, Mo.

Reliance Mine; Stripping; Blair Seam, 36 in. thick.
PO—Brownington, Mo.; SP—Same; CTY—Henry; RR—A. T. & S. F.
S of H—Mules, comp. air and steam locos. Track gage 30 inches.
S of M—Hand.
PP—3 water tube boilers, total 200 H. P., 3 pumps.
EMP—30. Last years tonnage 25,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

RITCHIE COAL MNG. COMPANY.

PR—H. C. Ritchie, .. Rich Hill, Mo.
PA—Wm. Ritchie.
GS—Wm. Ritchie.....Rich Hill, Mo.

Ritchie Mine; Shaft; Seam, 48-75 in. thick.
PO—Rich Hill, Mo. SP—Same. CTY—Bates, RR—Mo. Pacific, Fort Scott & Wichita branch.
S of H—Mules and rope. Track gage 36 in.
S of M—Hand.
PP—3 boilers, 45 H. P., 3 pumps.
EMP—8. Last years tonnage 3,700.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Bar Screens.
Old Information.

ROGERS COAL MINING CO.

Out of business.

SHERWOOD-LESTER COAL COMPANY

Operations abandoned.

SOUTHERN KANSAS COAL COMPANY

General Office, Weir, Kan.
PR—James Hamilton, Weir, Kan.
GM—James Hamilton, Weir, Kan.
GS—W. R. Hamilton, Weir, Kan.
PA—James Hamilton, Weir, Kan.
EM—James Brown, Pittsburg, Kan.
SA—Hamilton Coal & Coke Co., Dwight Bldg., Kansas City, Mo.

Shovel No. 2 Mine; Stripping; Mo. Tho Seam, 24 in. thick.
PO—Hume, Mo.; SP—Same; CTY—Bates; RR—St. L. & S. F.
MS—T. McGow, Hume, Mo.
S of H—Mules and 1 steam loco. Track gage, 36 in.
S of M—1 loading mach.
PP—Total 150 H. P., 3 pumps.
EMP—20. Last fiscal year output, 7,902 tons.
SIZES SHIPT—Run of Mine, Slack, Not. Lump.
PREP. EQUIPT—Shaker Screens.

SPRING CREEK COAL COMPANY

General Office, Novinger, Mo.
PR—Fred Shafer, Kirksville, Mo.
VP—Arthur Thomas, Novinger, Mo.
TR—Ruth Clawson, Novinger, Mo.
GM—Fred Shafer, Kirksville, Mo.
GS—M. Anderson, Novinger, Mo.
PA—J. J. Wells, Novinger, Mo.

Spring Creek Mine; Slope; Seam 46 in. thick.
PO—Novinger, Mo.; SP—Same; CTY—Adair; RR—Q. O. & K. C.
S of H—Mules, rope, steam loco. Track gage 30 inches.
S of M—Hand.
PP—1 150 H. P. water tube boiler, 2 pumps.
EMP—48. Daily tonnage 150.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Gravity Screens.

STANDARD COAL COMPANY

General Office, Pleasanton, Kan.
PR—Floyd T. Small, Pleasanton, Kan.
VP—Thomas McGuire, Pleasanton, Kan.
GM—F. T. Small, Pleasanton, Kan.
PA—Thos. McGuire, Pleasanton, Kan.
EM—Floyd T. Small, Pleasanton, Kan.
SA—John Wach, Weir, Kan.

Standard No. 1 Mine; Shaft; Worland Seam, 36 inches thick.
PO—Worland, Mo.; SP—Same; CTY—Bates; RR—Mo. P.
MS—Weaver Smith, Worland, Mo.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—1 pump.
EMP—19. Daily tonnage 100.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Screens.
Old Information.

STOUT, R. A.

General Office, Lockwood, Mo.
Stout's Mine; Shaft; Seam, 26 in. thick.
PO—Lockwood, Mo.; SP—Same; CTY—Dade; RR—St. L. & S. F.
S of H—Mules. Track gage, 26 in.
S of M—Hand.
EMP—10. Last fiscal year output, 2,720 tons.
Old Information.

SUPERIOR COAL COMPANY

Now the Bertha Mining & Coal Co.

TRENTON MINING COMPANY.

General Office, Trenton, Mo.
PR—W. O. Garlin, Trenton, Mo.
VP—N. F. Hoffman, Trenton, Mo.
TR—W. E. Austin, Trenton, Mo.
GM—Alex Young, Trenton, Mo.
GS—Alex Young, Trenton, Mo.
PA—Alex Young, Trenton, Mo.

Trenton Mine; Shaft; Bituminous Seam, 18 in. thick.
PO—Trenton, Mo. SP—Same. CTY—Grandy. RR—Q. O. & K. C. Br.
S of H—Mules. Track gage, 30 in.
S of M—Longwall machs.
PP—Power purchased, transformer 2300 to 220 volts A. C., 1 pump.
EMP—43. Last years tonnage 11,644.
Old Information.

UNION COAL CO.

Out of business.

UNITED STATES COAL CO.

General Office, Pittsburg, Kans.
PR—J. E. McFarland, Pittsburg, Kan.
VP—W. W. Patterson, Pittsburg, Kans.
TR—J. O. Majors, Girard, Kans.
GM—J. E. McFarland, Pittsburg, Kan.
GS—J. F. Lewis, Pittsburg, Kans.
PA—J. P. Powis, Pittsburg, Kan.
SA—Midland Coal Co., Kansas City, Mo.

No. 1 Mine; Stripping; Cherokee Seam, 36 in. thick.
PO—Pittsburg, Kans.; SP—Alston, Mo.; CTY—Barton, Mo.; RR—St. L. & S. F.
S of H—Steam locos. Track gage, 36 inches.
S of M—Hand.
PP—4 fire tube boilers, 300 H. P., 5 pumps.
EMP—28. Last fiscal year output, 40,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

No. 2 Mine; Stripping; Cherokee Seam, 36 in. thick.
PO—Pittsburg, Kans.; SP—Alston, Mo.; CTY—Barton, Mo.; RR—Mo. P.
S of H—Steam loco. Track gage 30 in.
S of M—Hand.
PP—4 fire tube boilers, 300 H. P., 4 pumps.
EMP—27. Last fiscal year output, 50,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

WALTON COAL COMPANY

General Office, Higbee, Mo.
PR—R. G. Hadelich, Boonville, Mo.
VP—R. R. Walton, Higbee, Mo.
TR—John Cosgrove, Boonville, Mo.
GM—T. H. Walton, Higbee, Mo.
GS—R. R. Walton, Higbee, Mo.
PA—T. H. Walton, Higbee, Mo.
EM—R. R. Walton, Higbee, Mo.

Walton Mine; Shaft; Revier Seam, 41 in. thick.
PO—Higbee, Mo.; SP—Same; CTY—Randolph; RR—C. & A. M. K. & T.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—1 fire tube and 1 water tube boilers, 250 H. P., 2 pumps.
EMP—266. Last fiscal year output, 123,577 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
PREP. EQUIPT—Revolving and Shaker Screens.

WARD COAL COMPANY

General Office, Richmond, Mo.
GM—W. O. Ward.....Richmond, Mo.
GS—W. O. Ward, " "
PA—W. O. Ward, Jr., " "
SA—Pickering Coal Co., Richmond, Mo.

No. 15 Mine; Shaft; Domestic Coal Seam; 24 in. thick.
PO—Richmond, Mo.; SP—Same; CTY—Ray; RR—Santa Fe.
S of H—Mules. Track gage 30 in.
S of M—Hand.
PP—1 50 H. P. fire tube boiler.
EMP—30. Daily output, 50 tons.
SIZES SHIPT—Run of Mine.

WAVERLY COAL COMPANY

General Office, Rialto Bldg., Kansas City, Mo.
PR—F. B. Drage, Kansas City, Mo.
VP—Herbert Drage, England.
TR—F. W. Lukins, Kansas City, Mo.
GM—F. W. Lukins, Kansas City, Mo.

PA—R. E. Moss, Rialto Bldg., Kansas City, Mo.
EM—N. R. Andrews, Higginsville, Mo.
SCO—Address the Company; Buyer, R. E. Moss, Kansas City, Mo.
SA—R. E. Moss, Rialto Bldg., Kansas City, Mo.

Buckhorn Mine; Shaft; Seam 42 to 48 in. thick.
PO—Waverly, Mo.; SP—Same; CTY—Lafayette; RR—Mo. Pac.
MS—H. H. Griffin, Waverly, Mo.
S of H—1 10-ton elec. haulage loco. and 6 5-ton elec. gathering locos. Track gage 36 inches.
S of M—7 elec. shortwall machs.
PP—3 return tubular boilers, total 450 H. P., 1 gen. unit, 250 volts D. C., 7 pumps.
EMP—120. Last years tonnage 68,558.
SIZES SHIPT—Run of Mine, Mth, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

WESTERN COAL & MNG. CO.

General Office, 1166 Railway Exchange Bldg., St. Louis, Mo.
4 mines in Missouri, 8 mines in Kansas, 1 mine in Illinois, 3 mines in Arkansas.
PR—W. P. Hawkins, ... St. Louis, Mo.
VP—A. F. Barnes, St. Louis, Mo.
TR—E. S. Johnson, " "
GM—W. P. Hawkins, " "
GS—A. W. Dickinson, St. Louis, Mo.
PA—M. A. Bush, " "
EM—A. W. Dickinson, " "
SCO—Address the Company, Buyer, M. A. Bush, St. Louis, Mo.
SA—Geo. J. L. Wolff, Railway Exchange, Kansas City, Mo.

4 Mines; shaft; Lexington Seam, 19 in. thick.
PO—Lexington, Mo.; SP—Myrick, Mo.; CTY—Lafayette; RR Missouri Pac.
MS—R. T. Wiley, ... Lexington, Mo.
S of H—Mules. Track gage 24 inches.
S of M—26 longwall machs.
PP—11 fire tube boilers, total 1,650 H. P., 11—1125 K. W. gen. units, 250 volts D. C.
EMP—759. Last years tonnage 442,875.
SIZES SHIPT—Run of Mine, Block.

WORLAND COAL & MINING COMPANY

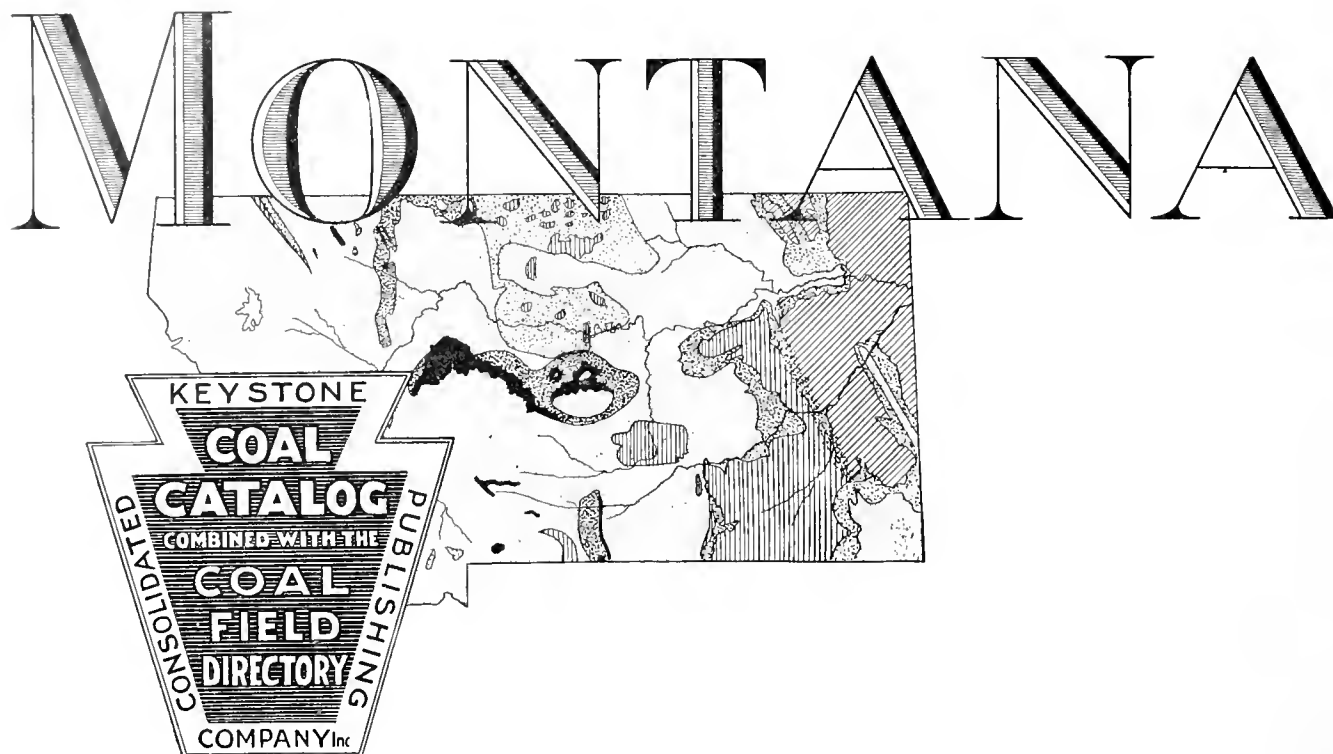
General Office, Worland, Mo.
PR—August Kepken, Worland, Mo.
PA—Henry Kepken, Worland, Mo.

Worland Mine; Slope; Seam 36 inches thick.
PO—Worland, Mo.; SP—Same; CTY—Bates; RR—K. C. S.
MS—August Kepken, Worland, Mo.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
SIZES SHIPT—Run of Mine, Lump.

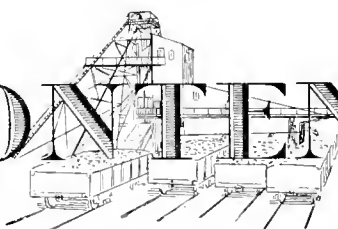
YATES COAL CO.

General Office, Yates, Mo.
PR—Mike Bottino, Yates, Mo.
VP—Mike Bottino, Yates, Mo.
TR—Jus. Ghisaberti, Yates, Mo.
GM—Bert Ghisaberti, Yates, Mo.
GS—Chas. Bottino, Yates, Mo.
PA—Peter Bottino, Yates, Mo.

Yates Mine; Slope; Bituminous Seam, 48 in. thick.
PO—Yates, Mo.; SP—Same; CTY—Randolph; RR—C. & O.
S of H—Tail rope and 1 gasoline loco. Track gage, 32 in.
S of M—Hand.
EMP—6. Last fiscal year output, 2,604 tons.
SIZES SHIPT—Lump.
PREP. EQUIPT—Gravity Screens.
Old Information.



CONTENTS



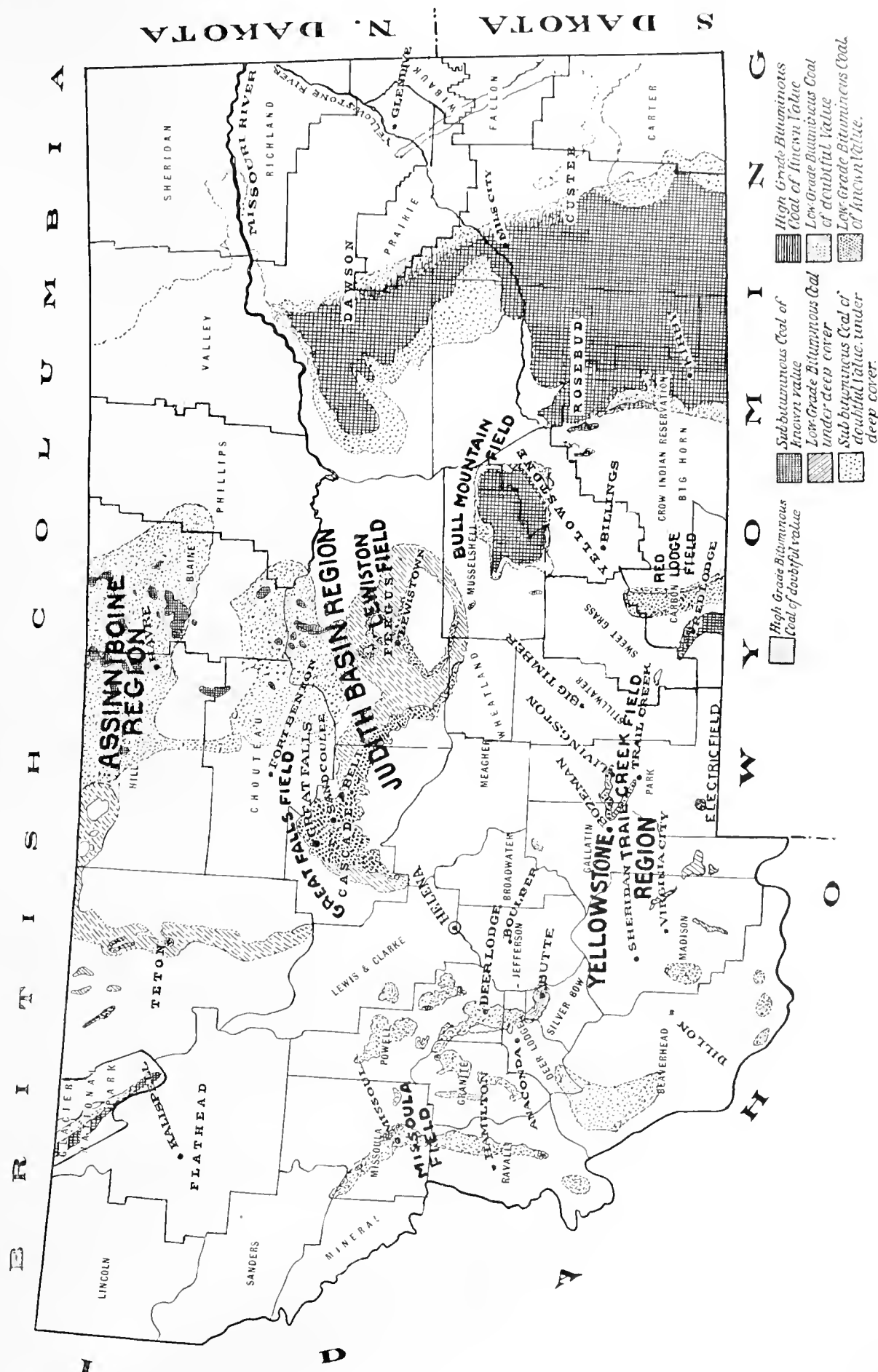
The word "CONTENTS" is written in a large, serif, outlined font. Behind the letters, there is a detailed illustration of a coal mine. It shows a large, multi-story mine building with a complex system of pipes and structural beams. In the foreground, a train of several coal cars is on tracks, moving towards the mine.

Map of Mining Fields.....	571
Sectional View of Coal Formations.....	572
General Description of Coal Resources.....	573

Carbon County Coal.....	573
Musselshell County Coal.....	574
Cascade County Coal.....	574
Park County Coal.....	575
Trail Creek County Coal.....	575
Fergus County Coal.....	575
Chouteau County Coal.....	575
Custer County Coal.....	575
Dawson County Coal.....	575

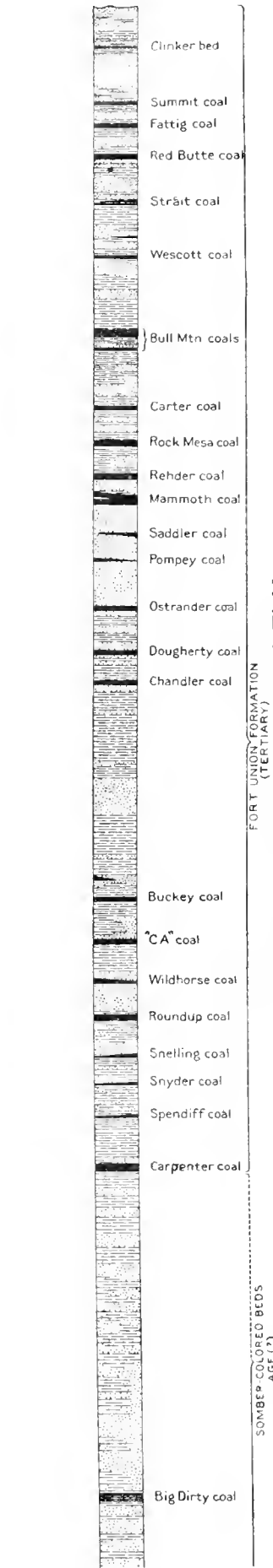
Preparation and Sizing of Coal.....	575
Supplementary Analyses.....	576, 577
List of Mines by Counties.....	578
Alphabetical Directory of Coal Mines.....	579, 580

Map of Mining Fields—MONTANA

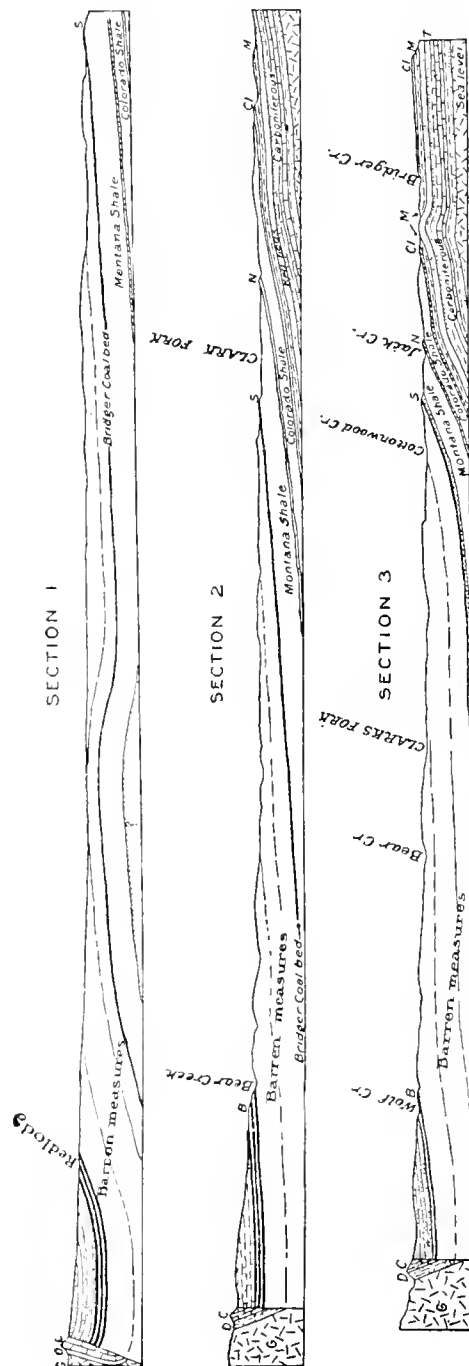


MONTANA

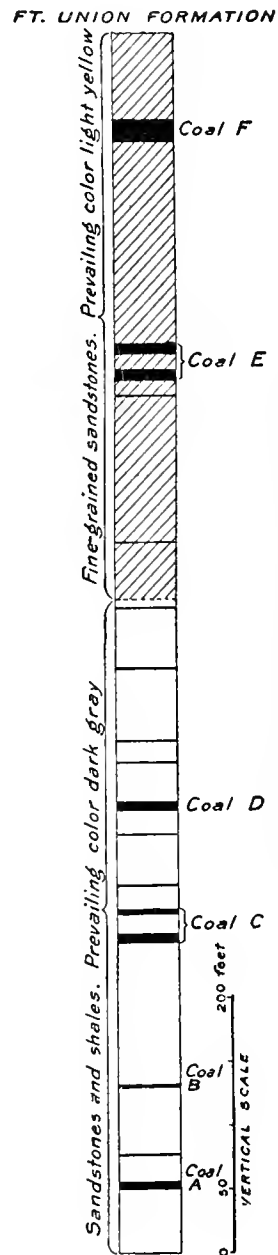
Cross Sections Showing Arrangement of Coal Seams*



Vertical section Bull Mountain Coal Field.



Horizontal sections of coal basin in Carbon county.



Vertical section Miles City Coal Field.

MONTANA*

General Description of the Coal Resources of the State, With the Ranks of Coal Produced; Treats of the Counties In Which the Producing Beds Occur; Map of the State Showing Mining Fields; Sections of Formations; Analyses, Etc

The coal bearing formations of this state have a greater range in the geologic scale than elsewhere in the Rocky Mountain region. This range is from the Jurassic to the Tertiary, though most of the coal is of Cretaceous age. There is a small area of Jurassic rocks which contain one seam of coal, but not of workable thickness. The formations containing valuable coal deposits occupy the entire range of the Cretaceous.

The plains region to the east of the Rocky Mountains is underlain by beds of lignitic coal of varying quality. Westward from the plains the coal gradually changes in character. The beds adjacent to the outlying spurs contain a higher grade of lignitic coal, while in those along the base of the main range are found bituminous and coking coals.

The coal fields of Montana are probably more extensive than those of any other state, forming a nearly continuous belt extending in a northwest-southeast direction entirely across the state. They are, however, not very well known except along the main lines of railroads, where mines have been opened either to supply fuel for locomotive use or for the great copper smelters of the Butte district. Generally the coal beds are extremely variable in quality. The gradation from coal to bone or shale is very abrupt, while the coal is sometimes entirely cut out by a bed of sandstone. As a rule only the better grades are being worked at the present time.

The total production yearly is between 4,000,000 and 5,000,000 tons, the great bulk of which comes from Carbon, Musselshell and Cascade counties. Counties having small productions are Park, Hill, Blaine, Fergus, Sheridan, Choteau, Custer, Missoula and Dawson. The Chicago, Milwaukee & St. Paul, Northern Pacific and Great Northern railroads operate mines from which the entire production is used as locomotive fuel. Other railroads entering the coal fields are the Montana, Wyoming & Southern and the Yellowstone Park.

The coal production of Montana will be discussed by counties.

CARBON COUNTY

Carbon county leads the state in the tonnage of coal produced. The Cretaceous system is represented by more than 10,000 feet of sedimentary rocks, of which only a small portion near the base are believed to be Lower Cretaceous. The mining area is included in the Red Lodge field, which in structure is a monocline extending southwestward from the western slope of the Pryor Mountain uplift. In the eastern part of the area the dips are relatively steep, averaging 10 degrees, but to the west and southwest they diminish to less than half that amount, and in some areas the strata are horizontal. There are three mining divisions in this field, known as the Red Lodge, Bear Creek and Bridger districts. According to the classification of coals, all the beds in Carbon county are a high-grade subbituminous, closely approaching the bituminous class. The coal usually cleaves in small blocks and at some places breaks into prisms, but weathering generally develops the platy structure along the bedding planes. They do not stock well and are therefore placed below the bituminous class, though in heat value they approach some of the bituminous coals of the Mississippi Valley. In the area over which the coal is distributed there are no extensive coal-consuming plants except the smelters at Butte and Anaconda, hence it is probable that the utilization of the coal will remain as it is now for locomotive fuel, smelting and domestic purposes.

There are ten coal beds in the Red Lodge District, having an aggregate workable thickness of about 85 feet, including thin partings in some of the beds. The most extensive operations are in bed No. 4.

The principal seams in the Bear Creek field are known as No. 2, having a thickness of 6½ feet, and No. 3, which yields about 10 feet of coal.

The Bridger Seam, which is mined in the Bridger District, is considerably thinner than the seams of the Bear Creek or the Red Lodge Districts, averaging about 2 feet 6 inches, and it is also more difficult to mine, due to its hardness. The coal is superior in many respects to coals from the other districts in this county, its superiority consisting chiefly in its better keeping qualities, due largely to its hardness and compactness, and it is said for this reason it sells in the Montana market at a higher price than the competing coals in this state. Bridger coal shows the first indication of slacking in about two months after it is mined, but the deterioration is not sufficient to affect the value of the coal for about one year. When kept in stock it is much less subject to spontaneous combustion than the Sheridan, Bear Creek and other coals of the Fort Union formation.

GENERAL ANALYSIS

	Red Lodge District	Bear Creek District	Bridger District
Moisture	11.40	9.40	8.80
Volatile Matter . .	35.30	35.60	32.00
Fixed Carbon . .	42.80	45.60	45.80
Ash	10.50	9.10	13.10
Sulphur	1.70	2.40	0.65
B. T. U.	9,900	10,700	10,400

The information here presented on Montana coals has been gathered largely from Contributions to Economic Geology in U. S. G. S. Bulletins 316, 341, 381 and 471.

MUSSELSHELL COUNTY

The coal fields of Musselshell county are found in the Bull Mountain coal field, whose length from north to south is nearly 25 miles and from east to west 35 to 40 miles, the area being 750 square miles. The rocks in which the coal beds occur extend as far west as Dean Creek, but the coals thin out in that direction, and hence the area underlain by workable coal beds may be regarded as bounded on the west by the divide between Golden and Wild Horse Creeks. All the coals of Musselshell county may be classed as a good grade of subbituminous. Most of the beds are lenticular in shape, showing a wide variation in thickness at different points on the outcrop. The average thickness of all the coal beds will probably reach a total of about 35 feet, and, named in the order of the lowest workable bed and continuing upward to the highest bed in the Bull Mountains proper, they are as follows: Glendive, Wild Horse, Buckey, Dorrity, Pompey, Mammoth, Rehder, Rock Mesa, Matt, Bull Mountain, Wescott, Strait, Red Butte, Fattig and Summit.

The Glendive coal is of very poor quality, though the bed reaches a general thickness of 3 to 6 feet.

The Wild Horse coal is a much better quality than the Glendive, but its extent is somewhat less. Its average thickness is 35 to 40 inches.

The Buckey bed is very erratic, but in places reaches considerable thickness and appears to be of good quality. It is extremely irregular in thickness in certain portions of the field, but may be said to average about 3 feet.

The Dorrity coal is a very persistent coal, uniform both in quality and thickness, with ranges between 2 and 3 feet.

The Mammoth bed is the most important coal in this region, presenting a greater thickness than any other bed. It is well developed at the southern base of the Bull Mountains proper. In some localities it

attains a thickness ranging from 8 to 15 feet. It is burned at some points, but it is believed that this burning extends only a short distance back from the outcrop, where the cover is reasonably thick.

The Matt bed usually carries three or four thin partings, one of which near the center attains a thickness of about a foot.

All the coals lying above the Mammoth have no commercial value, owing to the lenticular nature of deposition, extreme thinness and erratic nature of the partings.

The coals of this region are soft and rather easily reduced to a fine granular mass on exposure to rain and sun. This disintegration is accompanied by the escape of gases, which may be detected for some distance from the outcrop. On fresh surfaces the coal presents generally a lustrous black appearance with minute alternate layers of dull and lustrous coal. The fracture of the coal is markedly conchoidal. It burns with a yellowish flame of moderate length and gives off a strong pungent odor of sulphur. The remaining ash is fine, grayish and not inclined to be clinkery unless the coals are dirty. Some of the coals contain amber-colored resin and also small amounts of pyrite. The latter is in places distributed in thin flakes along the joint planes. Even the best coals of the region contain fragments of plants that are still brown and apparently unaffected by the carbonization which the coal beds have undergone.

GENERAL ANALYSIS

	County	At Roundup
Moisture	23.00	13.50
Volatile Matter	25.30	28.00
Fixed Carbon	44.90	52.10
Ash	6.80	6.40
Sulphur	0.75	0.40
B. T. U.	8,800	11,100

CASCADE COUNTY

The coals of Cascade county occur in that division known as the Great Falls coal field, which, owing to its geographic position and relation to other coal fields, is destined to remain one of the most important coal mining districts of Montana. Throughout the Great Falls field coal occurs in the lower part of the Lower Cretaceous formation, mainly at one horizon, which is 60 feet above the base of the formation. Coal of workable thickness is not continuous, however, at this horizon, but varies locally. The minor faults are more or less common throughout the coal area, especially in the vicinity of Belt, where they have caused some difficulty in mining the coal. The irregularity in the occurrence of workable coal at the horizon above referred to is a characteristic feature of the beds of this field. The rocks dip at relatively small angles to the northeast away from the adjoining mountains. The prevailing dip is from 4° to 15° degrees, although in the vicinity of Skull Butte the pitches increase to 25°. Analyses show that the coals of the Great Falls region are to be regarded

as medium grade bituminous. They contain on an average about 49% of fixed carbon, 26% of volatile matter, 18% of ash and 3% of sulphur. The sulphur occurs largely in the form of iron pyrite nodules, which, together with other impurities, are present in such abundance as to render it necessary to wash the coal before placing it on the market. The sulphur nodules, however, being separated from bone, shale and other impurities, are sold as a by-product to the large smelters at Anaconda, where they are utilized in the process of pyritic smelting. There are two mining districts in Cascade county, known as the Otter Creek and the Sand Coulee.

The Otter Creek basin contains about 38 square miles. It is underlain by one bed of coal which ranges in thickness, as indicated by exposure, from 3 to 6 feet. The maximum thickness, however, in the center of the basin probably exceeds 6 feet. The coal generally occurs in two benches, although three distinct benches have been observed. The maximum thickness of workable coal is about 4 feet.

The Sand Coulee basin is underlain by one coal-bearing bed of commercial importance. In this bed, consisting of coal interbedded with layers of bone, shale and clay, the coal content ranges in thickness from 6 to 14 feet in different parts of the field. At Belt, near the northeast end of the basin, the average thickness is 4 feet 7 inches, while at Sand Coulee an average of 8 feet 7 inches prevails, and along Smith River an average of 7 feet 6 inches of coal is shown. In the vicinity of Belt the coal is divided into three distinct benches. The lower and upper benches are about equal in thickness. The middle bench is considerably thinner. At Sand

Coulee the coal occurs in two principal benches, the upper much thicker than the lower. The output from this district is used for steam and domestic purposes.

GENERAL ANALYSIS

	Outer Creek Basin	Sand Coulee Basin
Moisture	9.50	7.00
Volatile Matter	25.25	25.00
Fixed Carbon	47.75	49.00
Ash	17.50	19.00
Sulphur	3.50	2.70
B. T. U.	10,000	10,000

MINOR PRODUCING COUNTIES

Park County

The coal of Park county is subbituminous and presents a wide variation in physical appearance and character, ranging from a blocky, compact variety to a soft, crushed and coking coal.

Trail Creek County

In the Trail Creek field the coal is not crushed and can be sized without difficulty. It is a bituminous coal, but of a somewhat lower grade than the typical coal of the Livingston field, of which Park county is a part.

Fergus County

The bituminous coals of Fergus county lie in the Sage Creek basin, situated in the eastern part of the Great Falls coal field. So far as known, there is only one coal bed in this basin with a thickness, including partings, ranging from 6 to 18 feet. The coal usually occurs in the form of three distinct benches, the lower of which has a thickness of about 2 feet, and is regarded as the best coal mined.

Chouteau County

Chouteau county includes the Milk River coal field, all the coals of which may be classed as a fair grade of subbituminous. Most of the beds are lenticular in shape, showing a variation in thickness from a fraction of an inch to 9 feet at different points on the outcrop. These beds are noticeably thinner and of a lower grade in the eastern part of the field than in the western part, so that beds of considerable thickness and good quality in the vicinity of Havre contain little or no coal near Harlem. The most remarkable feature of this basin is the wonderful disturbance of the strata. So much are the beds disturbed and blended together by forces acting from beneath that it seems almost hopeless to obtain a section showing with perfect accuracy the order of super-position of the different strata. The coals of the Milk River field burn with

a medium-low orange-colored flame, which is smoky under ordinary conditions. Their low heating value and their poor keeping quality indicate that they should be classed as subbituminous.

Custer County

Coal beds ranging from a few inches to many feet in thickness occur throughout the stratigraphic section in this region. They seem to be fairly constant in thickness and quality over considerable areas, but too much reliance should not be placed on this continuity, for shale seams appear in many places, rendering a coal valueless which at another locality is workable. That the coal is subbituminous rather than lignite may be questioned. It lies on the border line between the two. On the whole, it resembles more the subbituminous coals of the Sheridan field than the lignites, which occur east of Miles City, being darker than the latter and containing a greater amount of material in which no woody structure is apparent.

Dawson County

Considerable lignite has been mined from stripped pits and local mines in Dawson county. It is questionable whether these coals are lignites or subbituminous. There are two workable beds, the upper of which consists largely of a brown lignity coal, while the coal from the lower bed is black and probably should be classed as subbituminous. Like other lignite, this coal slacks quickly when exposed to the air, and hence is not suitable for open storage in large quantities.

GENERAL ANALYSIS

	Subbituminous (Chouteau County)	Lignite
Moisture	22.00	31.50
Volatile Matter	29.00	28.60
Fixed Carbon	37.00	33.60
Ash	12.00	6.30
Sulphur	1.20	0.65
B. T. U.	8,200	6,880

PREPARATION OF COAL

Because of the large quantity of slate and sulphur occurring in the coal seams of Montana it is necessary that some means be taken to eliminate these impurities from the good coal. Usually this cleaning is done by picking and screening. At many mines washeries are in use to separate the large amount of impurities found in the machine-mined coal. The iron-pyrite nodules removed by this

process are shipped, in some instances, as a by-product to large copper smelters, where they are used as additional fuel and flux in the blast-furnace charge.

Where the coal is screened the sizes made are known to the trade as broken egg, stove, nut, pea and slack.

Analyses of Montana Seams by Counties and Localities

(ALL ANALYSES MADE ON MINE SAMPLES "AS RECEIVED")

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carbon	Oxygen	RATIOS		
											Carbon	F. C.	V. M.
											Oxy. + Ash		
*	Broadwater, Lombard.....	.....	3.22	20.05	39.79	36.94	7.12	8,667	46.95	5.29	1.11	1.98	
*	Broadwater, 1 mi. w. of Lombard.....	.....	3.04	19.69	39.50	37.77	7.69	8,105	44.16	6.73	0.99	2.00	
*	Carbon, 1½ mi. w. of Bear Creek.....	.....	8.56	32.36	45.69	13.39	0.54	10,685	60.39	19.56	1.83	1.41	
*	Carbon, 2 mi. w. of Bear Creek.....	.....	8.74	34.99	45.72	10.55	2.93	10,604	59.59	20.20	1.94	1.31	
*	Carbon, 1 mi. w. of Bear Creek.....	.....	10.05	37.22	46.71	6.02	1.44	11,194	59.64	26.09	1.86	1.25	
*	Carbon, 1½ mi. w. of Bear Creek.....	.....	8.60	34.52	43.57	13.31	2.78	10,183	56.94	20.49	1.68	1.26	
*	Carbon, 1½ mi. w. of Bear Creek.....	.....	9.80	34.74	47.19	8.27	2.17	10,883	60.20	22.74	1.94	1.36	
*	Carbon, 1 mi. n. w. of Bear Creek.....	.....	9.76	27.66	46.16	10.68	1.99	10,472	59.54	21.21	1.87	1.34	
*	Carbon, 1 mi. w. of Fromberg.....	.....	9.31	34.14	45.87	16.42	0.63	10,235	56.19	20.66	1.52	1.67	
*	Carbon, 1 mi. w. of Fromberg.....	.....	8.51	31.58	44.52	15.39	0.60	10,478	58.96	18.99	1.72	1.41	
*	Carbon, 2½ mi. s. w. of Joliet.....	.....	8.81	30.61	43.84	16.74	0.65	9,787	55.46	25.05	1.50	1.43	
*	Carbon, Red Lodge.....	.....	11.69	36.14	40.19	11.98	1.05	.....	.....	.....	1.11	1.11	
*	Carbon, Red Lodge.....	.....	11.26	33.46	42.51	9.96	2.05	.....	.....	.....	1.27	1.27	
*	Carbon, Red Lodge.....	.....	11.22	34.08	43.26	11.40	1.14	.....	.....	.....	1.25	1.25	
*	Carbon, Red Lodge.....	.....	10.38	36.43	45.38	6.97	0.83	.....	.....	.....	1.13	1.13	
*	Carbon, Red Lodge.....	.....	10.55	35.98	40.62	13.02	1.89	.....	.....	.....	1.18	1.18	
*	Carbon, Red Lodge.....	.....	9.58	36.39	43.02	10.04	2.23	.....	.....	.....	1.26	1.26	
*	Cascade, Armstrong.....	.....	3.51	23.24	52.54	14.94	2.00	9,932	58.74	19.37	1.71	2.05	
*	Cascade, Armstrong.....	.....	7.05	26.39	50.60	19.50	3.74	10,881	61.51	10.44	2.05	1.92	
*	Cascade, 2 mi. n. e. of Eden.....	.....	4.82	25.47	49.34	18.14	1.67	10,121	58.10	17.09	1.65	1.94	
*	Cascade, 6 mi. s. w. of Eden.....	.....	8.76	27.03	46.13	21.88	2.84	10,040	56.98	13.22	1.62	1.70	
*	Cascade, 7 mi. s. w. of Geyser.....	.....	7.49	27.03	52.03	14.77	4.36	10,939	61.62	13.89	2.15	1.92	
*	Cascade, 1 mi. s. of Sand Coulee.....	.....	11.26	25.72	50.36	15.16	3.91	10,127	58.93	16.81	1.84	1.96	
*	Cascade, Sage Creek Area.....	.....	9.27	27.29	51.44	13.78	2.32	11,007	62.21	16.13	2.08	1.88	
*	Cascade, Sage Creek Area.....	.....	4.54	25.85	46.49	16.40	4.56	9,220	53.47	20.37	1.45	1.80	
*	Cascade, Sand Coulee Area.....	.....	6.17	27.44	47.95	15.26	3.96	10,215	58.13	17.08	1.80	1.55	
*	Cascade, Sand Coulee Area.....	.....	4.82	27.03	52.03	14.77	4.36	10,472	58.66	12.08	1.82	1.75	
*	Cascade, Sand Coulee Area.....	.....	10.88	27.17	46.13	21.88	2.84	10,040	61.62	13.89	2.15	1.92	
*	Cascade, Sand Coulee Area.....	.....	13.07	20.27	41.97	26.88	1.79	7,742	47.37	19.72	1.02	2.07	
*	Cascade, Sand Coulee Area.....	.....	6.37	21.79	43.26	21.88	1.30	8,350	49.95	21.95	1.14	1.99	
*	Cascade, Stockett.....	.....	6.01	27.55	45.20	20.88	2.04	9,866	56.14	16.29	1.51	1.64	
*	Chouteau, 2½ mi. s. e. of Ada.....	.....	16.83	28.43	51.42	14.14	2.38	11,153	63.61	14.50	2.22	1.81	
*	Chouteau, 6 mi. e. of Big Sandy.....	.....	12.07	34.71	43.78	11.50	1.19	9,563	54.37	26.22	1.45	1.57	
*	Chouteau, 4 mi. w. of Chinook.....	.....	22.89	28.76	39.32	9.03	0.56	9,598	55.85	25.80	1.50	1.20	
*	Chouteau, 6 mi. n. w. of Chinook.....	.....	23.60	26.71	37.23	12.46	0.55	8,433	55.85	25.80	1.50	1.20	
*	Chouteau, 10 mi. n. w. of Harlem.....	.....	24.12	26.58	38.97	10.33	0.69	7,673	45.62	34.83	0.96	1.37	
*	Chouteau, 1½ mi. n. of Havre.....	.....	24.67	27.90	35.37	12.06	0.88	6,914	40.39	40.30	0.77	0.45	
*	Chouteau, 1½ mi. n. of Havre.....	.....	21.96	23.80	43.90	10.34	0.60	8,213	46.00	34.41	0.99	1.27	
*	Custer, 1 mi. n. of Miles.....	.....	29.21	26.15	35.45	9.19	0.75	7,668	47.98	34.42	1.07	1.84	
*	Guster, 5 mi. s. e. of Miles.....	.....	29.13	25.33	30.51	15.03	0.55	6,662	40.09	38.19	0.75	1.20	
*	Dawson, 8 mi. n. w. of Glendive.....	.....	34.55	35.34	22.91	7.20	1.10	7,090	42.40	42.13	0.86	0.65	
*	Fergus, 1½ mi. w. of Forest Grove.....	.....	11.35	29.74	46.56	12.35	4.48	10,518	58.91	18.42	1.92	1.56	
*	Fergus, 2 mi. s. w. of Giltedge.....	.....	15.65	27.05	49.67	7.63	1.82	9,545	56.70	28.02	1.59	1.84	

COAL CATALOG

(Continued on Next Page)

*Bulletins Bureau of Mines. †U. S. Geological Survey.

ANALYSES OF MONTANA SEAMS BY COUNTIES AND LOCALITIES—Continued

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carbon	Oxygen	RATIOS	
											Carbon	F. C. Oxy. + Ash V. M.
*	Fergus, 2 mi. s. e. of Lewiston.	Spring Creek.	15.35	28.27	48.08	8.30	4.53	10,615	61.15	19.89	2.17	1.70
*	Fergus, 5 mi. n. w. of Maiden.	Mace.	2.84	27.35	54.29	15.52	4.87	11,722	57.31	26.52	1.68	2.00
*	Fergus, 9 mi. s. e. of Lewiston.	Peper.	18.88	25.18	48.34	7.60	2.72	9,751	58.27	25.10	1.80	1.92
*	Fergus, 9½ mi. s. e. of Moore.	Cooper.	16.86	30.23	45.60	7.31	3.03	10,307	58.27	25.10	1.80	1.92
*	Fergus, 2 mi. w. of Ulica.	Showan.	9.95	24.87	44.22	20.96	5.51	9,869	58.13	17.08	1.80	1.78
*	Fergus, 5 mi. s. w. of Windham.	Seman.	9.27	29.57	45.90	15.26	3.96	10,215	58.13	17.08	1.80	1.78
*	Gallatin, Chestnut.	Beede & Bailey.	2.05	16.42	73.22	8.31	0.86	10,949	62.53	21.78	6.36	4.46
*	Gallatin, 8 mi. s. of Chestnut.	Hoffman.	12.40	36.83	42.26	8.51	0.61	10,949	62.53	21.78	6.36	4.46
*No. 2.	Gallatin, Storrs.	Storrs No. 3.	4.13	29.63	35.38	30.86	0.52	9,035	50.85	12.78	1.17	1.19
*	Gallatin, ½ mi. e. of Storrs.	Washoe No. 1.	5.77	34.14	50.52	10.57	0.50	12,281	69.23	13.31	2.90	1.48
*	Granite, Drummond.	.....	19.39	37.72	25.97	16.92	1.37	8,696	59.22	25.78	1.78	1.73
*	Musselshell, 15 mi. n. w. of Buckeye.	.....	12.69	28.71	50.90	7.77	0.54	11,034	64.26	21.18	2.22	1.77
*Roundup.	Musselshell, 6 mi. e. of Musselshell.	Robbins.	22.77	27.00	45.58	4.65	0.32	8,863	53.49	35.14	1.34	1.70
*Carpenter.	Musselshell, 7 mi. n. w. of Musselshell.	Homesteader's.	18.14	27.22	50.49	4.15	0.88	10,420	60.48	28.26	1.87	1.85
*Homestead.	Musselshell, 8 mi. s. of Musselshell.	Grant.	16.66	27.85	48.05	7.42	1.00	10,226	59.22	25.78	1.78	1.73
*Buckeye.	Musselshell, 9½ mi. e. of Musselshell.	Grant.	29.40	25.50	38.60	6.50	0.35	7,170	.....	.....	.....	1.51
*McCleary.	Musselshell, 1 mi. w. of Roundup.	Republic No. 1.	13.40	28.00	52.40	6.20	0.40	11,050	.....	.....	.....	1.87
*Roundup.	Park, Aldridge.	Commercial.	14.30	28.00	51.80	5.90	0.50	11,050	70.57	8.95	3.05	1.85
*	Park, Aldridge.	Aldridge.	3.96	22.53	59.34	14.17	0.58	12,764	64.40	6.35	2.15	2.77
*No. 1.	Park, Aldridge.	Aldridge.	1.87	19.79	54.74	23.60	0.44	11,320	73.60	8.21	3.82	1.91
*No. 3.	Park, Aldridge.	Aldridge.	5.20	35.33	40.07	19.40	0.62	10,687	53.48	26.64	1.33	1.33
*Maxey Nine-Foot.	Park, Aldridge.	Foster.	3.02	29.55	56.35	11.08	0.85	13,286	53.48	26.64	1.33	1.33
*	Park, Chimney Rock.	Maxey.	16.33	30.12	40.05	13.50	0.41	9,247	64.07	9.33	2.22	1.79
*	Park, Electric.	Newton.	4.25	27.34	48.92	19.49	1.33	11,414	53.79	13.64	1.35	1.21
*	Park, Livingston.	Kendrick.	6.26	30.60	36.88	26.28	0.68	9,792	48.66	40.59	1.11	1.30
*Kendrick.	Rosebud, 12 mi. s. e. of Birney.	Kendrick.	28.86	29.50	38.36	3.28	0.32	8,231	61.47	15.45	1.93	1.37
*	Sweet Grass, 6 mi. n. of Nye.	Loffer.	6.75	32.37	44.18	16.41	0.53	10,679	62.92	17.00	2.14	1.25
*	Teton, 22 mi. n. w. of Browning.	Stone.	8.00	35.37	44.18	12.45	1.00	11,047	60.71	16.03	2.03	0.97
*	Teton, 8 mi. n. w. of Valer.	Blair.	6.56	40.36	39.19	13.89	3.08	10,926	36.21	51.08	0.65	1.04
*Red Bank.	Valley, 3 mi. n. e. of Bainville.	Red Bank.	42.81	25.72	26.83	4.64	0.24	6,105	.....	.....	.....	1.32
*G.	Valley, 8 mi. n. e. of Culbertson.	Bruegger.	43.16	22.03	28.99	5.82	0.29	5,999	.....	.....	.....	1.41
*	Valley, 3 mi. n. of Culbertson.	Cow Gulch.	21.56	30.46	43.02	4.96	0.72	9,016	.....	.....	.....	1.30
*	Yellowstone, Huntley.	.....	29.70	29.00	37.20	4.10	0.35	7,155	.....	.....	.....	1.75
*Perry.	Yellowstone, 6 mi. n. w. of Waco.	.....	20.70	26.50	46.30	6.50	0.45	9,270	.....	.....	.....	1.75
*McCleary.	Yellowstone, 2 mi. n. of Wolf Spring.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

*Bullietins Bureau of Mines.

List of Mines by Counties, Including Name of Company, General Office Address, Railroad and Shipping Point

MONTANA

CARBON COUNTY

Coals are of Subbituminous rank. Suitable for Locomotive Fuel, Melting, Steam, Producer Gas and Domestic purposes.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Anaconda Copper Mng. Co. (Coal Dept.)	Butte, Mont.	Washee No. 2	Carbon	M. W. & S.	Red Lodge, Mont.
Bear Creek Coal Co.	Bear Creek, Mont.	No. 2 Vein	Carbon	M. W. & S.	Bear Creek, Mont.
Bear Creek Coal Co.	Bear Creek, Mont.	No. 3	Carbon	M. W. & S.	Bear Creek, Mont.
Bear Creek Coal Co.	Bear Creek, Mont.	No. 4	Carbon	M. W. & S.	Bear Creek, Mont.
Bridger Coal Mining Co.	Bridger, Mont.	Bridger	Carbon	Northern Pacific	Bridger, Mont.
Eagle Coal Co.	Red Lodge, Mont.	Eagle	Carbon	M. W. & S.	Bear Creek, Mont.
Fromberg Coal Co.	Fromberg, Mont.	Fromberg	Carbon	N. P.	Fromberg, Mont.
International Coal Co.	Bear Creek, Mont.	International No. 3	Carbon	M. W. & S.	Bear Creek, Mont.
Montana Coal & Iron Co.	Washoe, Mont.	No. 1	Carbon	M. W. & S.	Bear Creek, Mont.
Montana Coal & Iron Co.	Washoe, Mont.	No. 2	Carbon	M. W. & S.	Bear Creek, Mont.
Northwestern Improvement Co.	Tacoma, Wash.	East Side	Carbon	Northern Pacific	Red Lodge, Mont.
Northwestern Improvement Co.	Tacoma, Mont.	Sunset	Carbon	N. P.	Red Lodge, Mont.
Smokeless & Sootless Coal Co.	Red Lodge, Mont.	No. 2	Carbon	M. W. & S., N. P.	Bear Creek, Mont.
Smokeless & Sootless Coal Co.	Red Lodge, Mont.	No. 3	Carbon	M. W. & S., N. P.	Bear Creek, Mont.

CASCADE COUNTY

Coals are of Bituminous rank. Suitable for Locomotive Fuel, Melting, Steam, Producer Gas and Domestic purposes.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Anaconda Copper Mining Co.	Butte, Mont.	Sandcoulee No. 2	Cascade	Great Northern	Sandcoulee, Mont.
Anaconda Copper Mining Co.	Butte, Mont.	Sandcoulee No. 4	Cascade	Great Northern	Sandcoulee, Mont.
Brodie, James, & Son	Belt, Mont.	North Montana	Cascade	Great Northern	Belt, Mont.
Calone & Johnson	Belt, Mont.	Calone & Johnson	Cascade	Great Northern	Belt, Mont.
Carbon Coal & Coke Co.	Sandcoulee, Mont.	Carlton	Cascade	Great Northern	Sandcoulee, Mont.
Cottonwood Coal Co.	St. Paul, Minn.	No. 5	Cascade	Great Northern	Stockett, Mont.
Cottonwood Coal Co.	St. Paul, Minn.	No. 6	Cascade	Great Northern	Stockett, Mont.
Merkle, G. W. Coal Co.	Belt, Mont.	A. C.	Cascade	Great Northern	Belt, Mont.
Millard Coal Co.	Belt, Mont.	Millard	Cascade	Great Northern	Belt, Mont.
National Coal Co.	Sandcoulee, Mont.	Zenith	Cascade	Great Northern	Sandcoulee, Mont.
Nelson Coal Co.	Great Falls, Mont.	No. 1	Cascade	Great Northern	Sandcoulee, Mont.
Nelson Coal Co.	Great Falls, Mont.	Nelson No. 2	Cascade	Great Northern	Sandcoulee, Mont.

MUSSELSHELL COUNTY

Coals are of Subbituminous rank. Suitable for Locomotive Fuel, Melting, Steam, Producer Gas and Domestic purposes.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Blair-Collins Coal Co.	Billings, Mont.	Keene	Musselshell	C. M. & St. P.	Roundup, Mont.
Foncannon, C. B.	Aberdeen, Mont.	Foncannon	Musselshell	C. M. & St. P.	Meistone, Mont.
Jeffries Coal Mining Co.	Roundup, Mont.	Jeffries	Musselshell	C. M. & St. P.	Roundup, Mont.
Republic Coal Co.	Chicago, Ill.	Davis No. 4	Musselshell	C. M. & St. P.	Roundup, Mont.
Republic Coal Co.	Chicago, Ill.	Klein No. 2	Musselshell	C. M. & St. P.	Roundup, Mont.
Roundup Coal Mining Co.	Omaha, Neb.	Roundup No. 3	Musselshell	C. M. & St. P.	Roundup, Mont.
Roundup Coal Mining Co.	Omaha, Neb.	Carpenter Creek No. 5	Musselshell	C. M. & St. P.	Geneva, Mont.
Star Coal Co.	Musselshell, Mont.	Star	Musselshell	C. M. & St. P.	Musselshell, Mont.

MISCELLANEOUS SEAMS

Coals are of Subbituminous rank. Suitable for Locomotive Fuel, Melting, Steam, Producer Gas and Domestic purposes.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Akron Coal Co.	Havre, Mont.	Akron	Hill	Great Northern	Havre, Mont.
Cottonwood Coal Co.	St. Paul, Minn.	Lehigh Nos. 1 & 2	Judith Basin	Great Northern	Lehigh, Mont.
Havre, Louis	Havre, Mont.	Harry's	Hill	Great Northern	Havre, Mont.
Jennison Mining Co.	Fairview, Mont.	Jennison	Richland	Great Northern	Fairview, Mont.
Mackton Coal Co. (The)	Big Sandy, Mont.	Mackton	Chouteau	Great Northern	Big Sandy, Mont.
Milk River Coal Co.	Chinook, Mont.	Milk River	Blaine	Great Northern	Chinook, Mont.
Pine Creek Coal Co.	Roundup, Mont.	Pine Creek	Park	N. P.	Emigrant, Mont.
Redstone Coal Mining Co.	Redstone, Mont.	Redstone	Sheridan	Great Northern	Redstone, Mont.
Roby Gulch Mining Co.	Zortman, Mont.	Roby Gulch	Phillips	Great Northern	Dodson, Mont.

MONTANA

Alphabetical Directory of Coal Mines, Giving Complete Detailed Information Covering Each Mine

For List of Abbreviations See Page 13.

AKRON COAL CO.

General Office, Havre, Mont.
PR—J. Blair, Havre, Mont.
TR—A. C. MacBryne, Havre, Mont.
GM—R. A. MacBryne, Havre, Mont.
GS—Charles A. Carlson, Havre, Mont.
PA—Charles A. Carlson, Havre, Mont.
Akron Mine; Shaft; Cretaceous Seam, 60 in. thick.
PO—Havre, Mont.; SP—Same; CTY—Hill; RR—G. N.
S of H—Mules.
S of M—Hand.
PP—1—12 H. P. water tube boiler.
EMP—50. Daily tonnage 150.
SIZES SHIPT—Run of Mine, Slack, Pea, Lump.
PREP. EQUIPT—Bar Screens.

ANACONDA COPPER MNG. CO.

Coal Department.
General Office, Butte, Mont.
PR—C. P. Kelley, New York, N. Y.
VP—B. H. Thayer, New York, N. Y.
TR—A. H. McIn.
GM—F. W. C. Whyte, Anaconda, Mont.
PA—D. A. Welch, Butte, Mont.
Sales Agent, Geo. Blinn, 104 W. Granite St., Butte, Mont.
Washoe No. 2 Mine; Slope; Bearcreek Seam, 72 in. thick.
PO—Washoe, Mont.; SP—Red Lodge, Mont.; CTY—Carbon; RR—M. W. & S.
MS—Thos. Good, Washoe, Wyo.
S of H—Mules, trolley pole type and storage battery locos. Track gage 36 in.
S of M—5 shortwall machs.
PP—Power purchased, transformer 50000-2300 volts, M. G. Sets, 250 and 440 volts D. C., gen. units, 1—100 K. W., 250 volts D. C., 6 fire tube boilers, 150 H. P., 8 pumps.
EMP—206. Daily tonnage 1,200.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.
Sandcoulee No. 2 Mine; Drift; Sandcoulee Seam, 84 to 192 in. thick.
PO—Sandcoulee, Mont.; SP—Same; CTY—Cascade; RR—Great Northern.
MS—R. R. Vail, Sandcoulee, Mont.
S of H—Mules, trolley pole type elec. loco. Track gage, 36 in.
S of M—10 elec. machs.
PP—250 volts D. C., 4 pumps. Purchase power.
EMP—180. Last fiscal year output, 256,544 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.
Sandcoulee No. 4 Mine; Drift; Sandcoulee Seam, 84 to 192 in. thick.
PO—Sandcoulee, Mont.; SP—Same; CTY—Cascade; RR—G. N. R.
MS—R. R. Vail, Sandcoulee, Mont.
S of H—Mules, trolley pole type loco. Track gage, 36 in.
S of M—2 shortwall machs.
PP—250 volts D. C. Purchase power.
EMP—100. Daily output, 600 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

BAIR-COLLINS COAL COMPANY

General Office, Billings, Mont.
PR—F. V. H. Collins, Billings, Mont.
VP—F. V. H. Collins, Billings, Mont.
TR—F. V. H. Collins, Billings, Mont.
GM—Albert Griffin, Roundup, Mont.
PA—Albert Griffin, Roundup, Mont.
EE—Carl Rasford, Roundup, Mont.
SA—Triangle Fuel Co., Roundup, Mont.
Keene Mine; Shaft; Roundup Seam, 36 inches thick.
PO—Roundup, Mont.; SP—Same; CTY—Musselshell; RR—C. M. & St. P.
MS—Sim Philpott, Roundup, Mont.
S of H—Mules and elec. loco. Track gage 42 inches.
S of M—Hand and shortwall machs.
PP—Power purchased. Transformer 2300 to 220-440 volts A. C. rotary converters, 250 volts D. C.
EMP—55.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.
NOTE—Formerly operated by the Carbon Coal Co.

BEAR CREEK COAL CO.

General Office, Bear Creek, Mont.
PR—Peter Yegen, Billings, Mont.
TR—C. P. Hamrick, Bear Creek, Mont.
GM—Christian Yegen, Billings, Mont.
PA—C. P. Hamrick, Bear Creek, Mont.
CE—F. A. Roberts, Red Lodge, Mont.

CHIEF ELEC. — Wm. Snodgrass, Bear Creek, Mont.

SA—Sturm & Yaw, Great Falls, Mont., and Miles City, Mont.; H. H. Griffith, Butte, Mont.
No. 2 Vein Mine; Slope; Seam, 72 in. thick.
PO—Bear Creek, Mont.; SP—Same; CTY—Carbon; RR—Montana, Wyoming & Southern.
MS—M. J. McCabe, Bear Creek, Mont.
S of H—Mules and 1 trolley pole type loco. Track gage, 40 in.
S of M—2 chain breast type machs.
PP—4 water tube boilers, 600 H. P., 2 gen. units, 250 volts D. C.
EMP—190. Last fiscal year output, 123,920 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.
No. 3 Vein Mine; Slope; Seam, 66-72 in. thick.
PO—Bear Creek, Mont.; SP—Same; CTY—Carbon; RR—Montana, Wyoming & Southern.
S of H—Mules. Track gage, 40 in.
S of M—3 chain breast type machs.
PP—1 pump.
No. 4 Vein Mine; Slope; Seam, 48 in. thick.
PO—Bear Creek, Mont.; SP—Same; CTY—Carbon; RR—Montana, Wyoming & Southern.
S of H—1 trolley pole type loco. Track gage, 40 in.
S of M—1 shortwall and 2 chain breast type machs.
PP—1 pump.
Old Information.

BRIDGER COAL MINING CO.

General Office, Bridger, Mont.
PR—W. E. Pinkney, Bridger, Mont.
TR—J. S. Emmett, Bridger, Mont.
GM—W. E. Pinkney, Bridger, Mont.
GS—Mason J. Sanger, Bridger, Mont.
PA—W. E. Pinkney, Bridger, Mont.
PA—Tom Clemons, Billings, Mont.
CE—M. G. Swan, Fromberg, Mont.
EE—Geo. W. Arrington, Bridger, Mont.
SCO—Bridger Coal Mining Co.; Buyer, J. S. Emmett, Bridger, Mont.
SA—Thomas Clemon, Nation Fuel Co., Billings, Mont.
Bridger Mine; Slope; Bridger Seam, 36 to 60 in. thick.
PO—Bridger, Mont.; SP—Same; CTY—Carbon; RR—N. Pac.
S of H—Mules and rope, trolley pole type and 2 steam locos. Track gage, 36 in.
S of M—Hand and 2 shortwall machs.
PP—Power purchased, transformer 50,000 to 2300 volts A. C., M. G. set, 125 K. W., 500 volts D. C., 500 H. P., 6 pumps.
EMP—40. Last years tonnage 5,695.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT—Gravity and Shaker Screens.
Old Information.

BRODIE, JAMES & SON.

General Office, Belt, Mont.
GM—Jas. Brodie, Belt, Mont.
GS—Jas. Brodie, Belt, Mont.
EM—I. M. Snelair, Belt, Mont.
SA—I. C. Blesing & Co., Great Falls, Mont.
North Montana Mine; Drift; Seam 60 in. thick.
PO—Belt, Mont.; SP—Same; CTY—Cascade; RR—Great Northern.
S of H—Mules. Track gage, 36 in.
S of M—Electric punchers and chain breast type machs.
PP—Power purchased, transformer 2200 volts A. C., 1 pump.
EMP—30. Last years tonnage 12,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Gravity Screens, Picking Tables.

BROWN, J. R.

Sand Coulee, Mont.
No report.

CALONE & JOHNSON.

General Office, Belt, Mont.
TR—Frank Calone, Belt, Mont.
GM—Frank Calone, Belt, Mont.
GS—Frank Calone, Belt, Mont.
PA—C. G. Johnson, Belt, Mont.
Calone & Johnson Mine; Drift; East Belt Seam, 72 in. thick.
PO—Belt, Mont.; SP—Same; CTY—Cascade; RR—Great Northern.
MS—C. G. Johnson, Belt, Mont.

S of H—Mules, rope and 1 elec. hoist. Track gage 36 in.
S of M—1 elec. mach.
PP—Power purchased, 440 volts A. C., 1 pump.
EMP—30. Daily tonnage 80.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Bar and perforated Screens.

CARBON COAL & COKE COMPANY

General Office, Sand Coulee, Mont.
PR—George Wilson, Sand Coulee, Mont.
VP—P. H. Sturm, Great Falls, Mont.
TR—H. E. Dawson, Simms, Mont.
GM—George Wilson, Sand Coulee, Mont.
GS—William Navin, Sand Coulee, Mont.
PA—George Wilson, Sand Coulee, Mont.
EM—R. R. Vail, Sand Coulee, Mont.
SA—Sturm & Yaw, Great Falls, Mont.
Carbon Mine; Drift; Kootenai Seam, 90 inches thick.
PO—Sand Coulee, Mont.; SP—Same; CTY—Cascade; RR—G. N.
S of H—Mules and main and tail rope. Track gage 36 inches.
S of M—9 comp. air machs.
PP—4 water tube boilers, total 400 H. P., 6 pumps.
EMP—89. Last years tonnage 66,746.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Link Belt, Shaker Screens, Picking Tables.

COTTONWOOD COAL COMPANY

General Office, St. Paul, Minn.
PR—James T. Maher, St. Paul, Minn.
VP—Geo. H. Hess, Jr., St. Paul, Minn.
GM—Jos. H. Meagher, Lehigh, Mont.
GS—R. W. Wilson, Lehigh, Mont.
SUPT—R. J. Brown, Stockett, Mont.
PA—F. A. Bashnell, St. Paul, Minn.
EM—R. A. Wolfe, Lehigh, Mont.
EE—Jas. M. Simpson, Lehigh, Mont.
SCO—Address the Company, Buyer, A. J. Krieger, Lehigh, Mont.
Lehigh Nos. 1 and 2 Mines; Shaft.
PO—Lehigh, Mont.; SP—Same; CTY—Judith Basin; RR—Great Northern.
S of H—Mules, rope and elec. locos.
S of M—Shortwall machs.
PP—Power purchased, M. G. Sets.
EMP—450.
SIZES SHIPT—Run of Mine, Slack and Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.
Stockett Nos. 5 and 6 Mine; Tunnels.
PO—Stockett, Mont.; SP—Same; CTY—Cascade; RR—Great Northern.
S of H—Mules, rope and elec. locos.
S of M—Punching machs.
PP—Power purchased, M. G. Sets.
EMP—300.
SIZES SHIPT—Run of Mine, Slack and Lump.
PREP. EQUIPT—Dryer and washery.

EAGLE COAL COMPANY

General Office, Red Lodge, Mont.
PR—J. T. Flaherty, Red Lodge, Mont.
VP—H. A. Simmons, Red Lodge, Mont.
TR—J. V. Flaherty, Red Lodge, Mont.
SA—James Danson, Billings, Mont.
Eagle Mine; Drift; No. 3 Seam, 66 in. thick.
PO—Bear Creek, Mont.; SP—Same; CTY—Carbon; RR—Mont. Wyo. & Sou.
MS—James F. Lohdell, Bear Creek, Mont.
S of H—Mules and 1 6-ton loco.
S of M—3 chain breast machs.
EMP—15. Daily tonnage 225.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Bar Screens, Shaker Screens.

FONCANNON, C. B.

General Office, Aberdeen, S. D.
SA—T. H. Howard, Melstone, Mont.
Foncannon Mine; Drift; McLeary-Carpenter Seams, 72-96 inches thick.
PO—Melstone, Mont.; SP—Same; CTY—Musselshell; RR—C. M. & St. P.
MS—T. Howard, Melstone, Mont.
S of H—Mules.
S of M—Hand and shortwall machs.
Last years tonnage 500.
SIZES SHIPT—Run of Mine.

FROMBERG COAL COMPANY

General Office, Fromberg, Mont.
PR—W. E. Pinkney, Bridger, Mont.
GS—J. P. Johnston, Fromberg, Mont.
PA—W. E. Pinkney, Bridger, Mont.
SA—Western Products Co., Mandan, N. D.

Fromberg Mine; Slope; Seam 66 inches thick.
PO—Fromberg, Mont.; SP—Same; CTY—Carbon RR—N. P.
S of H—Mules, rope, electric loco. Track gage 42 inches.
S of M—Hand, shortwall mach.
PP—Purchase power. Transformer 2,200 to 220-440 volts A. C.
EMP—21. Last years tonnage 4,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Bar Screens.

HARY, LOUIS

OWNER—Louis Hary, Havre, Mont.
SCO—F. A. Buttrey & H. E. Clerk Co.
Harys Mine; Slope; Seam 54-67 inches thick.
PO—Havre, Mont.; SP—Same; CTY—Hill; RR—Great Northern.
S of H—Mules. Track gage 30 inches.
S of M—Hand.
EMP—10. Last years tonnage 2,200.
SIZES SHIPT—Run of Mine.

INDEPENDENT MINING COMPANY

Now Jeffries Coal Mining Co.
INTERNATIONAL COAL CO.
General Office, Bearcreek, Mont.
PR—W. A. Talmage, Joliet, Mont.
VP—B. G. Shorey, Billings, Mont.
TR—J. Harry Wright, Bearcreek, Mont.
GM—J. Harry Wright, Bearcreek, Mont.
PA—Harry Owens, Bearcreek, Mont.
EM—Fred A. Roberts, Red Lodge, Mont.
EE—Alex Hawthorne, Bearcreek, Mont.
SA—International Coal Co., Bearcreek, Mont.

International Mine; Drifts and Slope; Nos. 5 and 6 Beds, 44-60 in. thick.
PO—Bearcreek, Mont.; SP—Same; CTY—Carbon; RR—M. W. & S.
S of H—Mules and rope, 1 trolley pole type loco. Track gage, 36 in.
S of M—4 chain breast type and 1 room and pillar machs.
PP—4 150 H. P. water tube boilers, 1 200 K. W. gen. unit, 250 volts D. C., 2 pumps.
EMP—32.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.
Old Information.

JEFFRIES COAL MINING CO.

General Office, Roundup, Mont.
PR—G. J. Jeffries, Roundup, Mont.
VP—M. J. Jeffries, Roundup, Mont.
TR—C. E. Jeffries, Roundup, Mont.
GM—G. J. Jeffries, Roundup, Mont.
GS—G. J. Jeffries, Roundup, Mont.
PA—G. J. Jeffries, Roundup, Mont.
EE—Paul La Plater, Roundup, Mont.
Jeffries Mine; Slope; Roundup Seam, 36 in. thick.
PO—Roundup, Mont.; SP—Same; CTY—Musselshell; RR—C. M. & St. P.
MS—C. E. Jeffries, Roundup, Mont.
S of H—Mules and rope. Track gage 24 inches.
S of M—1 longwall mach.
PP—Power purchased, M. G. sets, 250 volts D. C., 1 pump.
EMP—25. Daily tonnage 100.
SIZES SHIPT—Steam, Lump, Block.
PREP. EQUIPT—Bar Screens.
NOTE—Successors to the Independent Mining Company.

JENNISON MINING CO.

General Office, Fairview, Mont.
PR—H. O. Frank, Minneapolis, Minn.
VP—Wm. J. Miller, Minneapolis, Minn.
TR—C. W. Jennison, Williston, N. Dak.
GM—Warren Jennison, Fairview, Mont.
GS—George Brennan, Fairview, Mont.
PA—Warren Jennison, Fairview, Mont.
EM—George Brennan, Fairview, Mont.
EE—J. Warford, Fairview, Mont.
SA—J. McCollins, Fairview, Mont.

Jennison Mine; Slope; Lighter Seam, 73 in. thick.
PO—Fairview, Mont.; SP—Same; CTY—Musselshell; RR—H. B. & N.
S of H—Mules and elec. loco. Track gage 42 inches.
S of M—Hand and 1 P. fire tube boilers, gen. units.
EMP—10. Last years tonnage 25,000.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Revolving Screens.

MACC, C. C.

Out of Business.

MACKTON COAL CO. (THE)

General Office, Big Sandy, Mont.
 PR—W. R. Hensen, Chinook, Mont.
 VP—Julius Leifeldt, Chinook, Mont.
 GM—W. R. Hensen, Chinook, Mont.
 PA—Hans H. Leifeldt, Big Sandy, Mont.
 SCO—Mackton Commissary, Ryer, Hans H. Leifeldt, Big Sandy, Mont.
 Mackton Mine; Slope; Fort Union Seam, 108 inches thick.
 PO—Big Sandy, Mont.; SP—Same; CTY—Chouteau. RR—Great Northern.
 S of H—8-ton skip bolst. Track gage 36 inches.
 S of M—Hand and 3 elec. machs.
 PP—4 return tubular boilers, total 450 H. P., 2 gen. units, 500 volts D. C., 7 pumps.
 EMP—10. Last years tonnage 2,548.
 SIZES SHIPT—Run of Mine, Lump.
 PREP. EQUIPT.—Shaker Screens, Picking Tables, Loading Booms, Washeries.

MERKLE, G. W., COAL COMPANY.

GM—G. W. Merkle, Belt, Mont.
 PA—G. W. Merkle, Belt, Mont.
 GS—R. E. Davis, Belt, Mont.
 SCO—Address the company—Merc. Dept., Buyer, G. W. Merkle, Belt, Mont.
 A C Mine; Drift; Seam, 72 in. thick.
 PO—Belt, Mont. SP—Same. CTY—Cascade, RR—Great Northern.
 S of H—Mules, trolley pole type loco. Track gage, 42 in.
 S of M—1 chain breast type mach.
 PP—Power purchased, 250 volts D. C., 4 pumps.
 EMP—100. Last years tonnage 70,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT.—Installing Crusher, Picking Tables, Shaker Screens.

MILK RIVER COAL CO.

General Office, Chinook, Mont.
 PR—Jurgen Kuhr, Chinook, Mont.
 VP—Henry Eaven, Fort Benton, Mont.
 TR—Thos. O'Hanlon, " "
 GM—W. H. Duke, Chinook, Mont.
 GS—Clarence Sargent, Chinook, Mont.
 PA—W. H. Duke, Chinook, Mont.
 Milk River Mine; Shaft; Lignite Seam, 72 in. thick.
 PO—Chinook, Mont. SP—Same. CTY—Blaine. RR—Great Northern.
 S of H—Mules, Track gage 30 inches.
 S of M—Hand.
 PP—1 gasoline engine, 26 H. P.
 EMP—10. Last years tonnage 6,000.
 SIZES SHIPT—Nut, Lump.
 PREP. EQUIPT.—Gravily Screens.

MILLARD COAL COMPANY

General Office, Belt, Mont.
 GS—H. W. Millard, Belt, Mont.
 Millard Mine; Drift; Millard Seam; 66 to 72 in. thick.
 PO—Belt, Mont.; SP—Same; CTY—Cascade, RR—G. N. R.
 S of H—Mules.
 S of M—1 comp. air mach.
 PP—30 H. P. motor, 1 compressor. Power purchased.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT.—Shaker Screens.
 NOTE—Not operating.

MONTANA COAL & IRON CO

General Office, Washoe, Mont.
 PR—Thomas M. Kearney, Racine, Wis.
 GM—J. M. Freeman, Washoe, Mont.
 GS—W. B. Freeman, Washoe, Mont.
 PA—George McMillan, Washoe, Mont.
 FE—R. B. Vail, Washoe, Mont.
 EE—Thomas Freeman, Washoe, Mont.
 SA—W. B. Jones & Co., Billings, Mont.; National Fuel Co., Billings, Mont.
 Montana No. 1 Mine; Slope; Fort Union Seam, 66 in. thick.
 PO—Washoe, Mont.; SP—Bearcreek, Mont.; CTY—Carbon; RR—MW & S.
 SM—George McMillan, Washoe, Mont.
 S of H—Mules and 3 trolley pole type locos. Track gage, 36 in.
 S of M—9 chain breast type machs.
 PP—3 water tube boilers, 200 H. P., gen. units, 250 volts D. C., transformer, 2400 to 220 volts A. C., 8 pumps.
 EMP—300. Last years tonnage 300,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT.—Shaker Screens
 Montana No. 2 Mine; Drift; Fort Union Seam, 66 in. thick.
 PO—Washoe, Mont.; SP—Bearcreek, Mont.; CTY—Carbon; RR—MW & S.
 S of H—Mules and 2 trolley pole type locos. Track gage 36 in.
 S of M—7 chain breast type machs.
 EMP—100. Last years tonnage 100,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT.—Shaker Screens

NATIONAL COAL COMPANY

GM—James R. Brown, Sand Coulee, Mont.
 GS—James R. Brown, Sand Coulee, Mont.
 PA—James R. Brown, Sand Coulee, Mont.
 SA—J. A. Blessing Co., Great Falls, Mont.

Zenith Mine; Drift.

PO—Sand Coulee, Mont.; SP—Same; CTY—Cascade; RR—G. N.
 MS—D. C. Johnson, Sand Coulee, Mont.
 S of H—Mules and main and tail rope. Track gage 36 inches.
 S of M—4 comp. air punchers.
 PP—Purchase power. Transformer 2,300 to 240 volts A. C., 2—60 H. P. fire tube boilers, 3 pumps.
 EMP—20. Last years tonnage 22,000.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT.—Shaker Screens.
 Note—Formerly operated by the National Coal Mining Co.

NELSON COAL COMPANY

General Office, Box 1273, Great Falls, Mont.
 PR—J. W. McClure, Great Falls, Mont.
 VP—G. E. McClure, Great Falls, Mont.
 GM—J. W. McClure, Great Falls, Mont.
 EE—Harry Thomas, Sandcoulee, Mont.
 SA—Geo. E. McClure, Great Falls, Mont.
 Nelson No. 1 and 2 Mine; Kootenia Seam, 84 in. thick.
 PO—Sandcoulee, Mont. SP—Same. CTY—Cascade. RR—Great Northern.
 MS—Geo. Cooley, Sand Coulee, Mont.
 S of H—Mules and 2 trolley pole type locos. Track gage, 36 in.
 S of M—Comp. air and shortwall machs.
 PP—Power purchased, transformer 2200 volts A. C., 1 100 H. P. water tube boiler, M. G. Set, 110 volts D. C., 4 pumps.
 EMP—134. Last years tonnage 76,537.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT.—Bar and Shaker Screens, Picking Tables.

NORTHWESTERN IMPROVEMENT CO.

General Office, Tacoma, Wash.
 PR—Howard Elliott, New York, N. Y.
 VP—Charles Donnelly, St. Paul, Minn.
 TR—E. A. Gay, New York, N. Y.
 GM—C. C. Andersen, Tacoma, Wash.
 Comptroller—J. L. Taggard, " "
 PA—F. G. Prest, St. Paul, Minn.
 ASST PA—D. S. Kinney, Tacoma, Wash.
 EM—D. R. Swem, Tacoma, Wash.
 East Side and Sunset Mines; Slope; Red Lodge Nos. 1, 2, 3, and 4 Seams, 60 to 96 inches thick.
 PO—Red Lodge, Mont. SP—Same. CTY—Carbon. RR—Northern Pacific.
 MS—Wm. Haggerty, Red Lodge, Mont.
 S of H—Trolley pole type locos. Track gage 36 inches.
 S of M—Hand.
 PP—7 water tube boiler, 4 return tube boilers, total 2200 H. P., 5 gen. units, 2,300 volts A. C., single phase 60 cycles and 250 volts D. C., 3 pumps.
 EMP—830. Last year tonnage 1,021,775.
 SIZES SHIPT—Pea, Nut, Lump.
 PREP. EQUIPT.—Revolving Screens, Picking Tables and Washeries.
 All Coal mined used by Northern Pacific Ry. Co.

PEARCE COAL CO.

Operations exhausted.

PINE CREEK COAL COMPANY

General Office, 148 Main St., Roundup, Mont.
 Not operating, October 1 1921.

REDSTONE COAL MINING COMPANY

General Office, Redstone, Mont.
 PA—Ed. Engelbriest, Redstone, Mont.
 Redstone Mine; Drift; Seam 66 inches thick.
 PO—Redstone, Mont.; SP—Same; CTY—Sheridan; RR—Great Northern.
 MS—Jack White, Redstone, Mont.
 S of H—Gasoline locos. Track gage 34 inches.
 S of M—Hand.
 SIZES SHIPT—Lump.
 PREP. EQUIPT.—Bar Screens.

REPUBLIC COAL CO

General Office, 63 E. Adams St., Chicago, Ill.
 PR—E. D. Sewall, Chicago, Ill.
 VP—Eurtion Hanson, Chicago, Ill.
 TR—A. G. Loomis, Chicago, Ill.
 GM—James Needham, Chicago, Ill.
 GS—James Needham, Chicago, Ill.
 PA—F. E. Fernkorn, Chicago, Ill.
 EM—C. F. Brenn, Chicago, Ill.
 Klein No. 2 and Davis No. 4 Mine; Shaft; Slope; Roundup Seam, 48 to 70 in. thick.
 PO—Roundup, Mont.; SP—Same; CTY—Musselshell; RR—C. M. & St. P.
 MS—Albert Gately, Roundup, Mont.
 S of H—Mules and 4 trolley pole type locos. Track gage, 42 in.
 S of M—9 longwall machs.
 PP—Power purchased, transformer 2200 volts A. C., rotary converters, 6 1000 H. P. fire tube boilers, 2 250 K. W. gen. units, 250 volts D. C.
 EMP—485. Last years tonnage 656,360.
 SIZES SHIPT—Run of Mine, Lump.
 PREP. EQUIPT.—Gravity Screens.

ROUNDUP COAL MINING CO. (THE).

General Office, Omaha, Neb.
 PR—W. F. Megawath, Omaha, Neb.
 VP—J. E. Megawath, Omaha, Neb.
 TR—G. A. Rehm, Omaha, Neb.
 GM—H. S. Hopka, Roundup, Mont.
 GS—L. J. Calk, Roundup, Mont.
 PA—H. S. Hopka, " "
 EM—L. J. Calk, " "
 WM—Geo. C. Dorris, " "
 EE—Geo. C. Dorris, " "
 Roundup No. 3 Mine; Slope; 72 in. thick.
 PO—Roundup, Mont.; SP—Same; CTY—Musselshell; RR—C. M. & St. P.
 S of H—5 elec. locos.
 S of M—7 elec. machs.
 PP—Power purchased, 3—150 K. W. rotary converters.
 EMP—300. Last years tonnage 300,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT.—Shaker Screen, Box Car Loader.
 Carpenter Creek No. 5 Mine; Shaft; 72 in. thick.
 PO—Carpenter Creek, Mont.; SP—General, Mont.; CTY—Musselshell; RR—C. M. & St. P.
 MS—J. Sanderson, Carpenter Creek, Mont.
 S of H—2 elec. locos.
 S of M—4 elec. machs.
 PP—Power purchased, 3—150 K. W. rotary converters.
 EMP—220. Last years tonnage 150,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

RUBY GULCH MINING CO.

General Office, Zortman, Mont.
 PR—B. D. Phillips, Phillips, Mont.
 VP—Chas. Whitcomb, Helena, Mont.
 TR—A. L. Smith, Helena, Mont.
 GM—R. D. Phillips, Phillips, Mont.
 GS—W. W. Phillips, Zortman, Mont.
 Ruby Gulch Mine; Drift; Seam, 51 in. thick.
 PO—Zortman, Mont.; SP—Judson, Mont. CTY—Phillips; RR—G. N.
 S of H—Mid S. and rope.
 S of M—Hand.
 PP—7 fire tube boilers, 700 H. P., 2 water tube boilers, 400 H. P., gen. units, 1—350 K. W., 1—250 K. W., 1—150 K. W., 220 volts A. C.
 EMP—200. Daily tonnage 50.
 SIZES SHIPT—Run of Mine.

SMOKELESS & SMOOTLESS COAL CO.

General Office, Red Lodge, Mont.
 PR—J. F. Brophy, Red Lodge, Mont.
 VP—J. F. Brophy, Frostburg, Md.
 TR—K. C. Brophy, Red Lodge, Mont.
 GM—J. F. Brophy, Red Lodge, Mont.
 GS—J. F. Brophy, Red Lodge, Mont.
 PA—J. F. Brophy, Red Lodge, Mont.
 CE—J. F. Brophy, Red Lodge, Mont.
 EE—Carl Johnson, Red Lodge, Mont.
 SA—Peabody Coal Co., Sheridan, Wyo.
 No. 2 & 3 Mine; Drift; No. 2 Seam, 72-78 in. thick.
 PO—Red Lodge, Mont.; SP—Frt. Bearcreek, Mont.; Exp. Red Lodge, Mont.; CTY—Carbon; RR—M. W. & S. R. R. & N. P.
 S of H—Mules, rope. Track gage 36 in.
 S of M—4 chain breast type machs.
 PP—Power purchased, 250 volts D. C., 2 water tube boilers, 2 pumps.
 EMP—85. Daily tonnage 200.
 SIZES SHIPT—Run of Mine, Slack, Pea, Egg, Lump.
 PREP. EQUIPT.—Shaker Screens.

STAR COAL CO.

General Office, Musselshell, Mont.
 VP—Frank O'Meara, Billings, Mont.
 TR—W. B. Gray, Musselshell, Mont.
 GM—I. T. Robinson, Musselshell, Mont.
 GS—I. T. Robinson, Musselshell, Mont.
 PA—I. T. Robinson, Musselshell, Mont.
 EM—W. B. Strang, Musselshell, Mont.
 Star Mine; Slope; McClary Seam, 62 in. thick.
 PO—Musselshell, Mont.; SP—Same; CTY—Musselshell; RR—C. M. & St. P.
 S of H—Mules and rope. Track gage, 42 in. thick.
 S of M—2 shortwall machs.
 PP—3 125 H. P. fire tube boilers, 220 volts A. C., 4 pumps.
 EMP—60. Last fiscal year output, 31,057 tons.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
 PREP. EQUIPT.—Shaker Screens, Picking Tables.
 Old Information

Alaska

ALASKAN ENGINEERING COMMISSION
 General Office, Anchorage, Alaska.
 COMMISSIONER—Col. Fredrick Mears, Anchorage, Alaska.
 PA—C. E. Dole, Seattle, Wash.
 EM—Sammer S. Smith, Chickaloon, Alaska.
 Eskia Mine; Drift; Seam, 36 in. thick.
 PO—Eskia, Alaska; SP—Frt., U. S. Gov., Anchorage, Alaska; RR—U. S. Government.
 S of H—Mules and 1 steam loco. Track gage 36 in.
 S of M—Hand.

PP—2s fire tube boiler, 25 H. P., 1—15 K. W. gen. unit, D. C., 1 pump.
 EMP—85. Last years tonnage 38,975.
 SIZES SHIPT—Run of Mine, Lump, Nut.
 PREP. EQUIPT.—Shaker Screens, Picking Tables.
 Chickaloon Mine; Slope; Seam, 36-102 inches thick.
 PO—Chickaloon, Alaska; SP—Frt., Same; Exp., Anchorage, Alaska; RR—U. S. Government.
 S of H—Mules, Track gage 36 inches.
 S of M—Hand.
 PP—4—125 H. P. water tube boilers, 1—50 K. W. M. G. Set, 110 volts D. C., 6 pumps.
 EMP—225. Last years tonnage 3,977.
 SIZES SHIPT—Run of Mine.

CHICKALOON COAL COMPANY

Out of Business.

DOHERTY COAL COMPANY.

Operations discontinued.

California**STONE CANON COAL COMPANY**

General Office, Stone Canon, Cal.
 PR—John H. Leavelle, Stone Canon, Cal.
 CE—Earl W. Brooks, Stone Canon, Cal.
 EM—A. E. Evans, Stone Canon, Cal.
 EE—J. G. Brown, Stone Canon, Cal.
 SA—Sinclair Coal Co., 369 Pine St., San Francisco, Cal.
 Stone Canon Mine; Slope; Seam, 180 inches thick.
 PO—Stone Canon, Cal.; SP—McKay, Cal.; CTY—Monterey; RR—Coalfields.
 S of H—Main and tail rope, 3 trolley pole type locos, Track gage 42 in.
 S of M—Comp. air machs.
 PP—4 250 H. P. water tube boilers, gen. units, 3—115 K. W., 250 volts D. C., 10 pumps.
 EMP—200.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT.—Shaker Screens, Picking Tables, Loading Booms, Washeries.

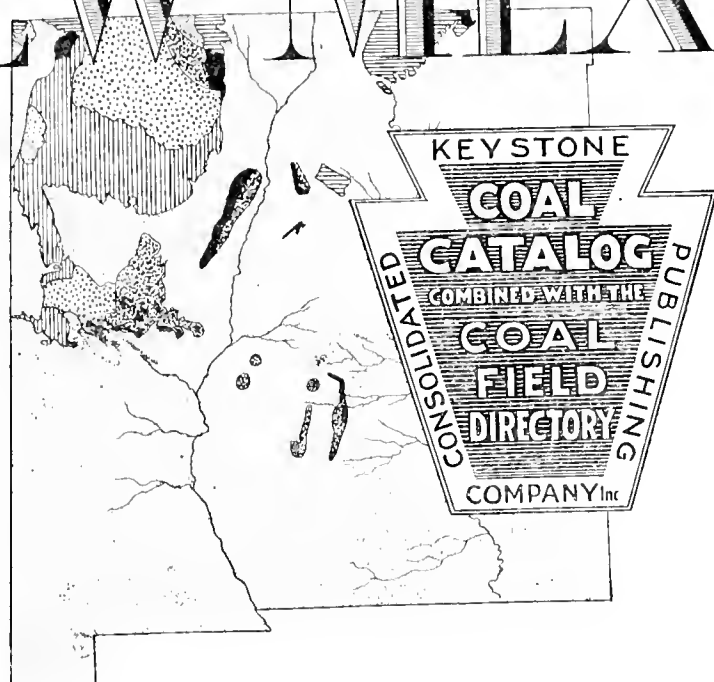
Mexico**AMERICAN SMELTING & REFINING CO.**

General Office, 120 Broadway, New York, N. Y.
 PR—G. P. Bartholomew, New York, N. Y.
 VP—C. L. Baker, El Paso, Texas.
 TR—R. E. Mora, La Mutua, Mexico, D. F.
 GM—G. P. Bartholomew, New York, N. Y.
 GS—D. D. Dodge, Rosita, Coah., Mex.
 PA—Andres Valdes, R. & E. R. Reits, New York, N. Y.
 EM—W. K. Mallette, Rosita, Coah., Mexico.
 EE—M. C. Mellinger, Rosita, Coah., Mexico.
 SCO—Compania Commercial De Mexicana, Buyer, W. H. O'Brien, 1108 Mills Bldg., El Paso, Texas.
 Rosita No. 5 Mine; Shaft; Rosita Seam, 72 in. thick.
 PO—Rosita, Coah., Mex.; SP—Same; CTY—Rosita; RR—National de Mexico.
 MS—E. R. Jones, Rosita, Coah., Mexico.
 SM—J. P. Carr, Rosita, Coah., Mexico.
 S of H—Mules and rope. Track gage 36 inches.
 S of M—Hand.
 PP—6—200 H. P. water tube boilers, gen. units, 500 K. W., 250 volts D. C., 440 volts A. C., 10 pumps.
 EMP—500. Daily tonnage 970.
 SIZES SHIPT—Run of Mine, Slack, Pea.
 PREP. EQUIPT.—Shaker Screens.
 Rosita No. 6 Mine; Shaft; Rosita Seam, 72 in. thick.
 PO—Rosita, Coah., Mex.; SP—Same; CTY—Rosita; RR—National de Mexico.
 MS—E. R. Jones, Rosita, Coah., Mex.
 SM—J. P. Carr, Rosita, Coah., Mex.
 S of H—Trolley pole type locos. Track gage 42 in.
 S of M—Center Cutters.
 PP—6—20 H. P. water tube boilers, gen. units, 500 K. W., 250 volts D. C. and 440 volts A. C., 2 pumps.
 EMP—800. Daily tonnage 970.
 SIZES SHIPT—Run of Mine, Slack, Pea.
 PREP. EQUIPT.—Shaker Screens.

Nevada**DARMS COAL MINING CO.**

General Office, Tonopah, Nev.
 PR—H. A. Darms, Coaldale, Nev.
 VP—Geo. A. Trimby, Tonopah, Nev.
 TR—J. C. Martin, Tonopah, Nev.
 GM—H. A. Darms, Coaldale, Nev.
 GS—H. A. Darms, " "
 PA—H. A. Darms, " "
 Darms Mine; Shaft; 21 to 84 in. thick.
 PO—Tonopah, Nev.; SP—Same; CTY—Esmeralda; RR—T. and G. R. R.
 S of H—Steam loco. Track gage 30 in.
 S of M—Hand.
 PP—1 better, total H. P. 60., 1 air comp., 3 pumps.
 EMP—6 to 8.
 Note—At present engaged in development work.

NEW MEXICO



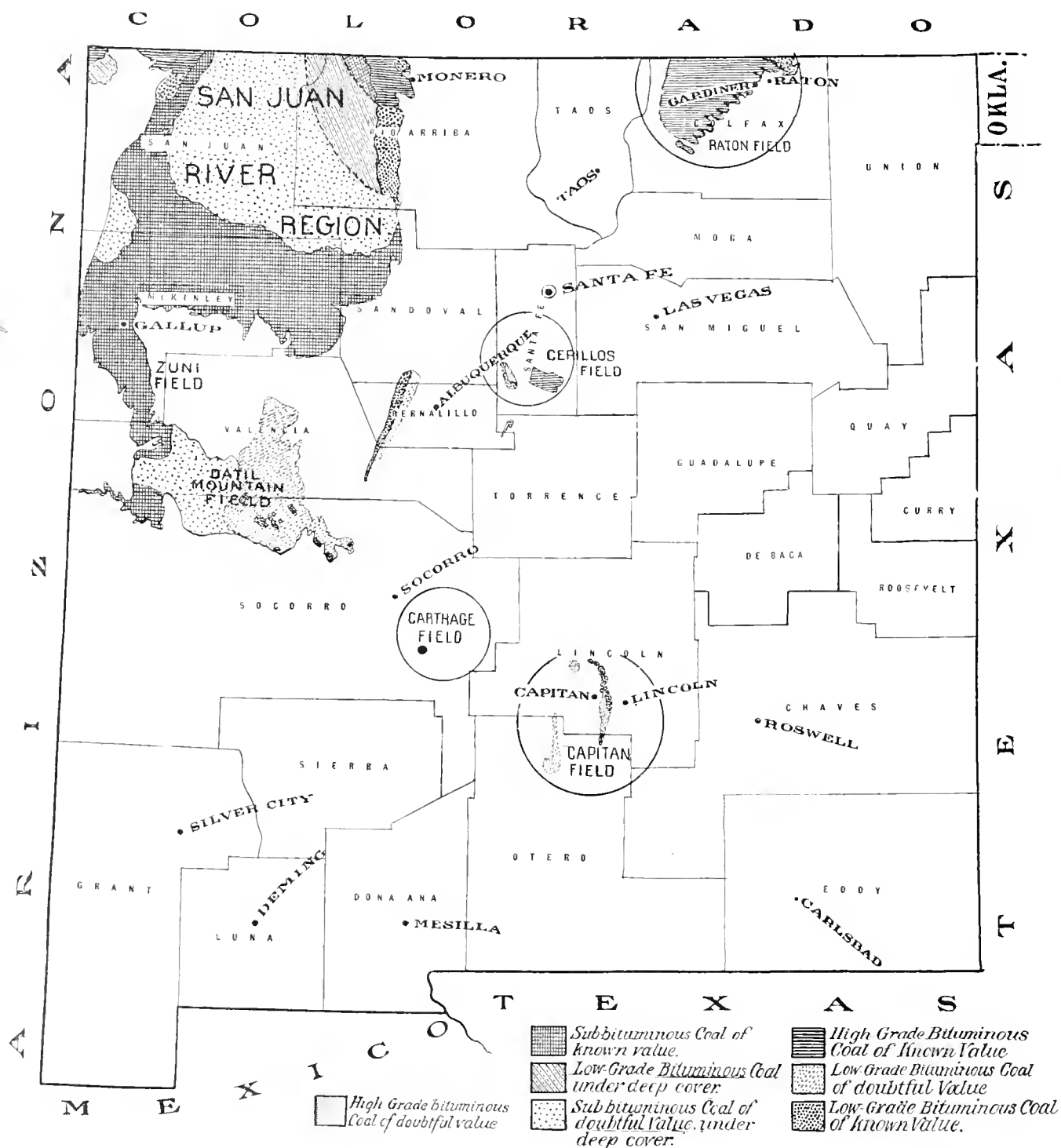
CONTENTS

Map of Mining Fields.....	582
Sectional View of Coal Formations.....	583
General Description of Coal Resources....	584 to 586

Colfax County Coal.....	584
McKinley County Coal.....	584
San Juan County Coal.....	584
Rio Arriba County Coal.....	584
Socorro County Coal.....	585
Santa Fe County Coal.....	585
Lincoln County Coal.....	586
Sandoval County Coal.....	586

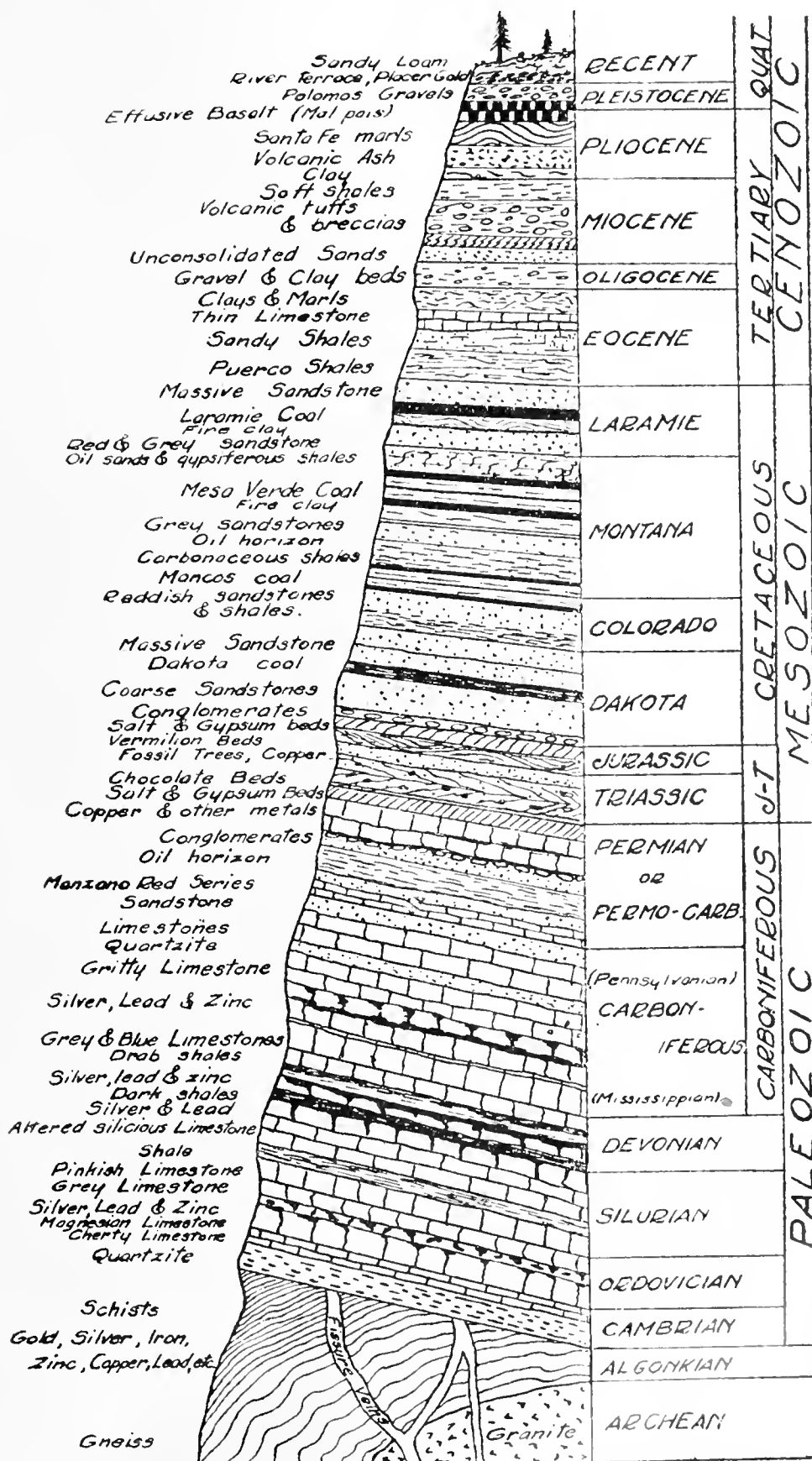
Preparation and Sizing of Coal.....	586
Supplementary Analyses.....	587
List of Mines by Counties.....	588
Alphabetical Directory of Coal Mines.....	589, 590

Map of Mining Fields NEW MEXICO



Geological Column^{*}

NEW MEXICO



^{*}From Epitome of the Economic Geology of New Mexico, 1908. By Fayette A. Jones, geologist.

NEW MEXICO*

General Description of the Coal Resources of the State, With the Ranks of Coal Produced; Treats of the Counties In Which the Producing Beds Occur; Map of the State, Showing Mining Fields; Column of Formations; Analyses, Etc.

The coal formations of New Mexico belong to the coal fields of the Rocky Mountain region. Practically all of the coal is contained in beds of Cretaceous age, and a large proportion is found in the Laramie formation. The larger fields are located in the northern part of the state; through the center there are a number of small, isolated tracts, some of which have been developed and contain producing mines. So far the only horizon that has developed coal beds of value is the Laramie, although it is by no means certain that some of the other formations may not also contain valuable deposits.

Although the yearly production of coal in New Mexico is only around 4,000,000 tons, yet it presents a variety of coals not found in the larger producing states. Anthracite and semianthracite coal is mined in Santa Fe county, where intrusions of eruptive rocks have altered the original deposits. Semibituminous coal is found in McKinley county, while bituminous and lignite coals are widely scattered. About 400,000 tons of coke is produced annually, used largely by the copper smelters. The coal from New Mexico finds a ready market for steam and domestic purposes in Arizona, New Mexico and Mexico, and in the western parts of Oklahoma, Kansas and Texas.

Colfax county is the principal mining center, about 75% of all the coal mined coming from here; other mining counties are McKinley, Socorro, San Juan, Santa Fe, Lincoln, Rio Arriba. The correlation of coals in the various counties is difficult and oftentimes impossible, although much light has been shed on possible relationships by the latest reports of the United States Geological Survey. In some fields there is much trouble caused by both faults of displacement and faults of erosion; in other sections the deposits are lenticular. Because of the resulting uncertainty in the continuity of seams, and the wide variety of coals produced, the description of New Mexico coals will be by counties.

The railroads traversing the mining localities are: Atchison, Topeka & Santa Fe; New Mexico Central; Denver & Rio Grande; El Paso & Southwestern; St. Louis, Rocky Mountain & Pacific.

COLFAX COUNTY

Colfax county lies in the southern end of the Raton field of Colorado, which extends from the state line south to the Cimarron River, a distance of 40 miles. The western border is at the base of the main Rocky Mountain Range, from which it extends 50 miles to the east. The strata at the southern border are badly broken, owing to the eruptive activity which has centered in the Raton Mountains. There are frequent rolls, which tend to reduce the thickness of the coal in places below the limit of profitable mining. The thickness in the producing district varies from 3 to 6 feet.

Colfax county leads the State in the matter

of production. It yields a good grade of bituminous coal and is the only county in which coke is being made. For this purpose, slack is generally used, consisting of the finer coal taken out of that prepared for the steam and domestic trade.

GENERAL ANALYSIS

Moisture	3.10
Volatile Matter	34.60
Fixed Carbon	49.90
Ash	12.40
Sulphur	0.65
B. T. U.	12,650

McKINLEY, SAN JUAN AND RIO ARriba COUNTIES

These counties comprise the Durango-Gallup coal field of New Mexico, including a total area of 13,500 square miles, of which 1,900 lie in Colorado and the remainder in New Mexico.

The tonnage of the field is estimated at three billion short tons, made up of coal beds of the Cretaceous formation and ranging from high grade bituminous to high grade semibituminous. The maximum thickness of the coal is 80 feet, but the average of the workable beds is 10 feet. The thicker coal beds occur in the Laramie and are of better quality than those in the Mesaverde.

The altitude of this field varies from 5,000 feet to 9,000 feet, the average being 6,500 feet.

Throughout the Durango-Gallup field the coals have a bright luster and are clean to handle. When freshly mined they are hard but brittle and break badly with handling, thus producing a high percentage of fine coal. This fine coal or slack is wasted in the greater part of the area, as the coals, except those in the Durango region, do not coke. In the Gallup district this waste amounts to nearly 20 per cent of the run-of-mine coal. In the vicinity

*The information here presented on New Mexico coals has been gathered largely from U. S. G. S. Bulletins Nos. 316, 341, 351, 471; and the 22nd Annual Report, Part 3.

of Durango, however, the fine coal is coked and the product used in the smelters of the region. The coke gives excellent satisfaction, but is reported not to bear shipment well, being somewhat brittle.

In the Gallup district the coals have a low specific gravity and give the best satisfaction under stationary boilers, as unburned fragments of the coal blow out of the stacks of locomotives on account of high forced draft. Throughout the field the coals are good domestic and steam-producing coals.

McKinley County

McKinley county is the chief producing county in this field and ranks second in the state in the point of output. The coal here is of subbituminous rank and finds a ready market for domestic and manufacturing purposes as far west as Los Angeles. Much of the production of the mines is used in the metal mines and smelters in Arizona.

GENERAL ANALYSIS

	Subbituminous
Moisture	11.50
Volatile Matter	39.10
Fixed Carbon	42.60
Ash	6.80
Sulphur	0.70
B. T. U.	11,300

Rio Arriba County

Rio Arriba county is the foremost of this group in the production of bituminous coal. The Mesa-verde in the vicinity of Monero contains three workable beds of excellent quality. The most of the coal is sold to the railroads for locomotive fuel.

GENERAL ANALYSIS

Moisture	2.90
Volatile Matter	38.10
Fixed Carbon	51.40
Ash	7.60
Sulphur	1.70
B. T. U.	13,300

San Juan County

There has been but little development in San Juan county, where the beds are very irregular as to thickness and horizontal extension. The deposits are lenticular and appear at different horizons in different localities. The coal is a high grade lignitic type, similar to that mined in the Gallup field 60 miles to the west.

GENERAL ANALYSIS

Moisture	11.70
Volatile Matter	35.10
Fixed Carbon	43.40
Ash	9.80
Sulphur	1.25
B. T. U.	10,800

SOCORRO COUNTY

Socorro county contains the most southernmost coal area in this part of the southwest. This is known as the Carthage field and the seam worked is known as the Carthage. The workable area is very limited, owing to the thinning out of the coal beds and to the extensive faults which traverse the measures. The dip varies from 15° to 28° east. There are several coal beds in the lower part of the measures, but only the lowest is of a workable thickness, varying from 4 feet to 10 feet, and averaging 5 feet. The coal formation here is probably older than the Laramie, and lies either in the

upper Colorado or lower Montana formation.

Socorro county produces a good quality of coal having a black shiny luster and containing very little physical impurities. It is capable of producing a fair quality of coke.

GENERAL ANALYSIS

Moisture	3.00
Volatile Matter	37.60
Fixed Carbon	48.30
Ash	11.10
Sulphur	0.85
B. T. U.	12,730

SANTA FE COUNTY

Santa Fe county includes the Los Cerrillos field, located in the central part of the county. This field contains all the isolated area of the Laramie formation about 1,000 feet in thickness, covering 35 square miles, and disappearing under the Tertiary beds to the east. The only disturbances that seriously affect the strata occur in connection with the period of eruptive activity, the results being very noticeable in the alteration of the coal, and in the dislocation of the strata.

The measures have an average inclination of 18° to the east. There are three coal beds in this vicinity varying in thickness from 2½ to 7 feet, the beds at the northern edge being thinner than those farther south, but of greater economic value, owing to the better grade of coal. At the northern end of the field an intrusive sheet of diorite has penetrated the strata in close proximity to the coal beds. This has resulted in the alteration of the coal to an

anthracite of good grade, averaging 3½ feet in thickness. At one place badly altered semianthracite is found and even graphite has been noted at several localities. The coal towards the south passes into coking and semicoking varieties of semibituminous rank, this transfer being very gradual. Anthracite mined in the northern portion of the area finds a ready market for domestic purposes from Denver to San Francisco. The semibituminous product goes to the market of New Mexico, Arizona and Texas.

GENERAL ANALYSIS

	Anthracite	Bituminous
Moisture	6.40	3.70
Volatile Matter	4.70	35.00
Fixed Carbon	81.00	49.50
Ash	7.70	11.80
Sulphur	0.72	1.00
B. T. U.	12,680	12,800

LINCOLN COUNTY

The coal formations of Lincoln county are found in the White Oaks field, although there is at least one valuable bed of workable thickness in the vicinity of Capitan.

The White Oaks field extends 40 miles north from the town of Three Rivers and has a width of about 20 miles. The coal-bearing strata has been eroded in such a manner as to leave six separate areas. In the White Oaks district there are five beds ranging from 4 feet to 5½ feet in thickness. The character of the coal in various parts of the field depends entirely upon its proximity to some

body of eruptive rock, hence the coal ranges from semibituminous coal to coking, to anthracite. The market for this field is El Paso, Texas, 135 miles south of the mines, and the several railroads diverging from that point.

GENERAL ANALYSIS	
	Bituminous
Moisture	2.50
Volatile Matter	34.60
Fixed Carbon	46.00
Ash	16.90
Sulphur	0.75
B. T. U.	12,000

SANDOVAL COUNTY

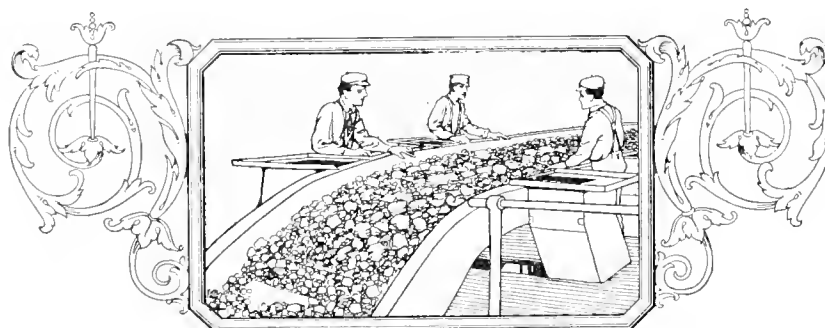
The Una de Gato and Pimo Vititis coal fields are located in the southeastern part of Sandoval county. The coal occurs between sandstone beds of Cretaceous age and has a thickness ranging from 4 feet to 5 feet 6 inches. The dip of the beds is about 15 degrees. The coal is bituminous of good grade.

GENERAL ANALYSIS	
Moisture	6.25
Volatile Matter	40.40
Fixed Carbon	47.55
Ash	5.80
Sulphur	0.60

PREPARATION OF COAL

In Colfax county, where coking is done, a separation of the small sizes from the lump is made. The slack is charged into the ovens, and the lump sizes are supplied to the steam and domestic trade.

Throughout the various fields the local household trade is furnished with either lump or run-of-mine coal, while that used for steam purposes is largely as run-of-mine.



Analyses of New Mexico Seams by Counties and Localities

(ALL ANALYSES MADE ON MINE SAMPLES "AS RECEIVED")

COUNTY AND LOCATION	SEAM	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carbon	RATIOS		
										Oxygen	Carbon	F. C.
										Oxy. + Ash		V. M.
Bernalillo, Albuquerque.....	*	Holmes.....	1.61	31.11	36.14	31.14	3.24	10,046	.....	.....	.....	1.16
Bernalillo, Holmes.....	†	Holmes.....	1.6	31.1	36.2	31.1	3.24	10,050	.....	.....	.....	1.16
Bernalillo, Tocco.....	†	Tocco.....	1.4	36.2	53.6	8.8	0.87	13,900	.....	.....	.....	1.48
Colfax, Blossburg.....	†	Dutchman.....	2.72	31.85	50.86	14.57	0.69	12,539	69.96	8.73	3.00	1.60
Colfax, Brilliant.....	*	Brilliant.....	2.78	34.31	48.34	14.57	0.61	12,294	68.51	9.74	2.82	1.41
Colfax, Dawson.....	*	Dawson No. 2.....	3.32	35.68	48.66	12.34	0.71	12,757	70.35	10.10	3.14	1.36
Colfax, Gardiner.....	*	Raton.....	2.34	36.70	45.73	15.23	0.64	12,256	67.91	9.79	2.71	1.25
Colfax, Koehler.....	*	Koehler No. 1.....	3.64	36.10	49.22	12.60	0.70	12,623	69.76	10.98	3.04	1.34
Colfax, 3 mi. n. e. of Raton.....	*	Sugarite.....	2.12	36.06	50.22	11.60	0.64	12,965	69.96	11.53	3.02	1.39
Colfax, Sugarite.....	*	Sugarite No. 1.....	3.83	38.12	49.12	8.93	0.56	13,073	72.37	10.85	3.66	1.31
Colfax, Van Houten.....	*	Willow.....	2.23	31.42	51.25	15.10	0.67	12,438	.....	.....	.....	1.63
Colfax, Van Houten.....	*	Yankee No. 3.....	3.45	32.06	47.82	16.67	0.73	11,893	66.19	10.23	2.46	1.49
Colfax, Yankee.....	*	Llewellyn.....	5.58	35.78	45.47	13.17	0.55	12,019	66.76	13.03	2.55	1.27
Colfax, 3 mi. s. e. of Yankee.....	*	Yankee.....	9.04	34.89	48.89	7.18	0.54	12,263	67.48	18.24	2.65	1.40
Colfax, Yankee.....	*	Wilcat.....	5.71	37.37	44.64	12.28	1.09	11,977	66.31	13.45	2.58	1.19
Lincoln, White Oaks.....	*	Black Diamond.....	2.52	34.63	45.99	16.86	0.76	11,956	66.65	9.44	2.54	1.33
McKinley, Allison.....	*	Zuni Indian School.....	14.76	37.25	36.69	8.30	0.50	10,703	60.78	23.33	1.92	0.98
McKinley, 10 miles n. e. Blackrock.....	*	Clark.....	7.76	37.60	38.66	15.98	1.54	11,246	60.55	25.33	1.93	1.03
McKinley, Blackrock.....	*	St. Michaels.....	14.69	34.93	41.56	8.82	0.79	10,809	60.93	22.52	1.94	1.19
McKinley, Clarkville.....	*	Otero.....	13.95	38.43	42.12	5.50	0.59	.....	.....	.....	.....	1.10
McKinley, 14 mi. n. w. of Clarkville.....	*	St. Michaels.....	9.68	41.42	40.82	8.08	1.55	11,468	63.41	25.08	2.19	1.20
McKinley, 1½ miles e. Gallup.....	*	Otero.....	10.79	33.82	36.73	18.66	1.26	9,907	55.07	18.84	1.47	1.09
McKinley, Gallup.....	*	Weaver.....	11.00	42.63	42.41	3.93	0.55	11,885	.....	.....	.....	1.00
McKinley, Gallup.....	*	Weaver.....	16.92	42.63	42.35	4.10	.....	.....	.....	.....	.....	0.99
McKinley, 3 miles n. Gallup.....	*	Weaver.....	12.29	34.58	46.14	6.99	0.63	11,252	63.31	22.22	2.17	1.33
McKinley, 3 mi. n. of Gallup.....	*	Navajo.....	12.55	38.86	39.42	9.17	0.43	10,804	60.85	22.57	1.92	1.01
McKinley, 3 mi. n. of Gallup.....	*	Jones.....	15.40	38.15	41.34	5.11	0.92	11,131	62.95	23.64	2.19	1.08
McKinley, 7 mi. s. w. of Gallup.....	*	Tiefen.....	15.03	37.26	41.97	5.74	0.60	.....	.....	.....	.....	1.13
McKinley, 16 mi. n. e. of Chaves.....	*	Burns-Biggs.....	1.71	36.26	55.11	6.92	0.65	13,725	75.38	10.28	4.38	1.52
Rio Arriba, Lumberton.....	*	Kutz.....	3.04	39.02	48.28	9.65	3.52	12,933	70.72	9.05	3.73	1.24
Rio Arriba, Monero.....	*	Rio Arriba.....	3.99	39.03	51.04	5.94	1.01	.....	.....	.....	.....	1.31
Rio Arriba, Algodones.....	*	Sloan.....	9.68	42.32	41.36	6.64	0.66	.....	.....	.....	.....	0.98
Sandoval, Hagan.....	†	Hagan.....	6.25	40.40	47.56	5.78	0.62	.....	.....	.....	.....	1.18
Sandoval, Pina Vititos.....	†	Vititos.....	9.03	42.35	41.17	4.45	0.66	.....	.....	.....	.....	1.04
Sandoval, Sloan.....	†	Sloan.....	7.28	42.49	43.60	6.63	0.67	.....	.....	.....	.....	1.03
San Juan, Fruitland.....	*	Young.....	9.89	38.44	41.48	10.19	0.64	11,297	.....	.....	.....	1.08
San Juan, 1 mile w. Putnam.....	*	Pueblo Bonita.....	17.46	32.92	41.26	8.36	2.44	.....	.....	.....	.....	1.35
San Juan, 1½ miles n. e. Pendleton.....	*	Jones.....	8.30	35.36	47.89	8.25	0.69	.....	.....	.....	.....	1.39
San Juan, 5 miles n. e. Pendleton.....	*	Cowles.....	7.14	33.54	46.73	12.59	0.57	9,970	55.74	25.79	1.59	1.14
San Juan, 30 miles w. Putnam.....	*	White Ash.....	15.79	34.99	39.85	9.37	1.92	.....	.....	.....	.....	2.31
San Miguel, Coates.....	*	White Ash.....	1.72	22.27	51.39	21.62	2.75	.....	.....	.....	.....	39.51
Santa Fe, Madrid.....	*	Madrid No. 1.....	5.76	2.18	86.13	5.92	0.69	13,268	82.87	6.81	6.50	1.65
Santa Fe, Madrid.....	*	White Ash.....	3.76	34.42	56.93	4.89	0.57	13,478	75.36	12.33	4.38	1.47
Santa Fe, Madrid.....	*	Anthracite No. 4.....	7.55	7.25	75.88	9.32	0.76	12,101	78.97	7.85	4.60	10.47
Santa Fe, Madrid.....	*	Helen.....	3.65	35.05	49.47	11.83	0.96	12,821	69.89	10.99	3.06	1.41
Santa Fe, Madrid.....	*	Cooke & White.....	4.62	26.41	61.34	7.60	1.27	13,594	75.94	8.59	4.69	2.32
Santa Fe, Madrid.....	*	Blacksmith.....	3.16	41.37	44.46	11.01	1.59	12,452	69.71	11.17	3.14	1.07
Santa Fe, Madrid.....	*	Peacock.....	2.96	37.20	45.12	14.72	0.79	12,215	67.73	10.72	2.66	1.21
Socorro, Carthage.....	*	Bernal.....	3.03	38.03	51.56	7.38	0.92	13,294	73.27	11.86	3.80	1.36
Socorro, 20 mi. n. w. of Magdalena.....	*	Hilton.....	6.48	34.51	51.92	7.09	0.50	11,392	69.35	16.57	2.93	1.50
Prospect.....	*	Prospect.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

*Bulliet's Bureau of Mines.

†United States Geological Survey Reports.

COAL CATALOG

List of Mines by Counties, Including Name of Company, General Office Address
Railroad and Shipping Point

NEW MEXICO

COLFAX COUNTY COAL

Bituminous rank. Suitable for Cement Burning, Bee-hive Coking, Domestic, Illuminating Gas, Locomotive Fuel, Melting, Powdered, Producer Gas, Tile and Pottery Burning and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Phelps Dodge Corp. (Stag Canon Branch)	99 Johns St. New York, N. Y.	No. 1	Colfax	El Paso & Southwestern	Dawson, N. M.
Phelps Dodge Corp. (Stag Canon Branch)	99 Johns St. New York, N. Y.	No. 2	Colfax	El Paso & Southwestern	Dawson, N. M.
Phelps Dodge Corp. (Stag Canon Branch)	99 Johns St. New York, N. Y.	No. 3	Colfax	El Paso & Southwestern	Dawson, N. M.
Phelps Dodge Corp. (Stag Canon Branch)	99 Johns St. New York, N. Y.	No. 4	Colfax	El Paso & Southwestern	Dawson, N. M.
Phelps Dodge Corp. (Stag Canon Branch)	99 Johns St. New York, N. Y.	No. 5	Colfax	El Paso & Southwestern	Dawson, N. M.
Phelps Dodge Corp. (Stag Canon Branch)	99 Johns St. New York, N. Y.	No. 6	Colfax	El Paso & Southwestern	Dawson, N. M.
Phelps Dodge Corp. (Stag Canon Branch)	99 Johns St. New York, N. Y.	No. 7	Colfax	El Paso & Southwestern	Dawson, N. M.
Phelps Dodge Corp. (Stag Canon Branch)	99 Johns St. New York, N. Y.	No. 8	Colfax	El Paso & Southwestern	Dawson, N. M.
Phelps Dodge Corp. (Stag Canon Branch)	99 Johns St. New York, N. Y.	No. 9	Colfax	El Paso & Southwestern	Dawson, N. M.
St. Louis, Rocky Mtn. & Pacific Co.	Raton, N. M.	Brilliant	Colfax	A. T. & S. F.	Dillon, N. M.
St. Louis, Rocky Mtn. & Pacific Co.	Raton, N. M.	Gardiner	Colfax	A. T. & S. F.	Dillon, N. M.
St. Louis, Rocky Mtn. & Pacific Co.	Raton, N. M.	Van Houten No. 5	Colfax	A. T. & S. F.	Preston, N. M.
St. Louis, Rocky Mtn. & Pacific Co.	Raton, N. M.	Van Houten No. 6	Colfax	A. T. & S. F.	Preston, N. M.
St. Louis, Rocky Mtn. & Pacific Co.	Raton, N. M.	Koehler No. 1	Colfax	A. T. & S. F.	Koehler Junction, N. M.
St. Louis, Rocky Mtn. & Pacific Co.	Raton, N. M.	Koehler No. 2	Colfax	A. T. & S. F.	Koehler Junction, N. M.
St. Louis, Rocky Mtn. & Pacific Co.	Raton, N. M.	Koehler No. 3	Colfax	A. T. & S. F.	Koehler Junction, N. M.
St. Louis, Rocky Mtn. & Pacific Co.	Raton, N. M.	Sugarite No. 1	Colfax	A. T. & S. F.	Sugarite, N. M.
St. Louis, Rocky Mtn. & Pacific Co.	Raton, N. M.	Sugarite No. 2	Colfax	A. T. & S. F.	Sugarite, N. M.
St. Louis, Rocky Mtn. & Pacific Co.	Raton, N. M.	Swastika	Colfax	A. T. & S. F.	Dillon, N. M.
St. Louis, Rocky Mtn. & Pacific Co.	Raton, N. M.	Van Houten No. 1	Colfax	A. T. & S. F.	Preston, N. M.
St. Louis, Rocky Mtn. & Pacific Co.	Raton, N. M.	Van Houten No. 2	Colfax	A. T. & S. F.	Preston, N. M.
St. Louis, Rocky Mtn. & Pacific Co.	Raton, N. M.	Van Houten No. 3	Colfax	A. T. & S. F.	Preston, N. M.
Seven Point Coal Co., Inc.	Raton, N. M.	Seven Point	Colfax	Barton Eastern	Yankee, N. M.

LINCOLN COUNTY COAL

Anthracite, Semibituminous and Bituminous rank. Suitable, according to rank, for Cement Burning, Domestic, Locomotive Fuel, Melting, Powdered, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Lincoln County Light & Power Co.	Carrizozo, N. M.	White Oaks	Lincoln	El Paso & Southwestern	Carrizozo, N. M.
Pack City Coal Co.	White Oaks, N. M.	Pack City	Lincoln	E. P. & S. W.	Carrizozo, N. M.

McKINLEY COUNTY COAL

Semibituminous and Lignite rank. Suitable, according to rank, for Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Defiance Coal Co.	Albuquerque, N. M.	Defiance	McKinley	A. T. & S. F.	Gallup & Dillon, N. M.
Defiance Coal Co.	Albuquerque, N. M.	Dillon	McKinley	A. T. & S. F.	Dillon, N. M.
Diamond Coal Co., The	Albuquerque, N. M.	Coal Basin	McKinley	A. T. & S. F.	Gallup, N. M.
Diamond Coal Co. (The)	Albuquerque, N. M.	Diamond	McKinley	A. T. & S. F.	Gallup, N. M.
Enterprise Coal Co.	Gallup, N. M.	Enterprise	McKinley	A. T. & S. F.	Gallup, N. M.
Gallup American Coal Co.	Gallup, N. M.	Heaton	McKinley	A. T. & S. F.	Gallup, N. M.
Gallup American Coal Co.	Gallup, N. M.	Narajo	McKinley	A. T. & S. F.	Gallup, N. M.
Gallup American Coal Co.	Gallup, N. M.	Weaver	McKinley	A. T. & S. F.	Gallup, N. M.
Gallup Southwestern Coal Co., Ltd.	Gallup, N. M.	Atherton	McKinley	A. T. & S. F.	Gallup, N. M.
Government Mine	Black Rock, N. M.	Zuni	McKinley	A. T. & S. F.	Gallup, N. M.
Lawrence Coal Co.	Gallup, N. M.	Lawrence	McKinley	A. T. & S. F.	Defiance, N. M.

RIO ARRIBA COUNTY COAL

Bituminous rank. Suitable for Cement Burning, Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Pack Creek Coal Co.	Monero, N. M.	Pack Creek	Rio Arriba	D. & R. G.	Monero, N. M.

SANTA FE COUNTY COAL

Anthracite, Semianthracite and Semibituminous rank. Suitable, according to rank, for Cement Burning, Domestic, Locomotive Fuel, Melting, Powdered, Producer Gas, Tile and Pottery Burning and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Albuquerque & Cerillos Coal Co.	Albuquerque, N. M.	No. 4 Anthracite	Santa Fe	A. T. & S. F.	Waldo, N. M.
Albuquerque & Cerillos Coal Co.	Albuquerque, N. M.	Jon S.	Santa Fe	A. T. & S. F.	Waldo, N. M.
Santa Fe County Coal Mining Co.	1102 N. First St., Albuquerque, N. M.	Omni	Santa Fe	N. M. C. A. T. & S. F.	Clarke, N. M.

SOCORRO COUNTY COAL

Bituminous rank. Suitable for Cement Burning, Bee-hive Coking, Domestic, Illuminating Gas, Locomotive Fuel, Melting, Powdered, Producer Gas, Tile and Pottery Burning and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Carthage Fuel Co.	San Antonio, N. M.	Government	Socorro	N. M. Midland	Carthage, N. M.
Kinney, B. H. Coal Mine	Tokay, N. M.	Kinney	Socorro	N. M. Midland	Carthage, N. M.
Prairie Coal Co.	Socorro, N. M.	Prairie	Socorro	N. M. Midland	Carthage, N. M.

NEW MEXICO

Alphabetical Directory of Coal Mines, Giving Complete Detail
Information Covering Each Mine

For List of Abbreviations See Page 13.

ALBUQUERQUE & CERRILLOS COAL CO.

General Office, Albuquerque, N. M.
PR—G. A. Kaseman, Albuquerque, N. M.
VP—O. Huber, Madrid, N. M.
TR—G. A. Kaseman, Albuquerque, N. M.
GM—G. A. Kaseman, Albuquerque, N. M.
GS—O. Huber, Madrid, N. M.
PA—G. A. Kaseman, Albuquerque, N. M.
EM—Jas. Yates, Madrid, N. M.
EE—O. Huber, Madrid, N. M.
SC—Madrid Supply Co.; Buyer, R. L. Wilson, Madrid, N. M.
SA—G. A. Kaseman, Albuquerque, N. M.

Jones Mine; Slope; Cook & White Seam, 36-48 in. thick.
PO—Madrid, N. M.; SP—Waldo, N. M.; CTY—Sante Fe; RR—A. T. & S. F.
S of H—Mules and rope, trolley pole type locus. Track gage, 40 in.

S of M—6 shortwall macks.
PP—3 water tube boilers, total, 1020 H. P., 2—375 Kva. Gen. units, transformers 2300-440 A. C. motor gen. units, 250 volts D. C., 6 pumps.

EMP—200. Last years tonnage 113,000.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Loading Booms.

No. 4 Anthracite Mine; Slope; White Ash Bed Seam, 30 in. thick.
PO—Madrid, N. M.; SP—Waldo, N. M.; CTY—Sante Fe; RR—A. T. & S. F.
S of H—Mules and rope, gasoline loco. Track gage, 40 in.
S of M—Hand and 2 shortwall macks.
PP—3 water tube boilers, total 1020 H. P., 2—375 Kva. Turbo gen. units, transformers, 2300-440 volts A. C., 12 pumps.
Last years tonnage 74,000.
SIZES SHIPT—Grate, Egg, Store, Nut, Pea, Buckwheat, Crib.
PREP. EQUIPT—Revolving Screens, Picking Tables, Spirals.

BLOCK COAL FUEL COMPANY

Out of Business.

CARTHAGE FUEL CO.

General Office, San Antonio, N. Mex.
PR—Powell Stackhouse, Jr., San Antonio, N. Mex.
TR—E. C. Brechtel, San Antonio, N. Mex.
GM—Powell Stackhouse, Jr., San Antonio, N. Mex.
PA—Powell Stackhouse, Jr., San Antonio, N. Mex.
SC—Carthage Merg. Co.; Buyer, Wm. Marbough, Carthage, N. Mex.
SA—Powell Stackhouse, Jr., San Antonio, N. Mex.

Government Mine; Slope; Carthage Seam, 66 in. thick.
PO—Carthage, N. Mex.; SP—Same; CTY—Socorro; RR—N. Mex. Midland.
MS—R. E. Munday, Carthage, N. Mex.
S of H—Mules and rope. Track gage 36 inches.

S of M—4 comp. air macks.
PP—2 150 H. P. fire tube boilers, 1 100 K. W., 1 150 K. W. gen. units, transformer 2400 to 240 volts A. C., 10 pumps.

EMP—175. Last years tonnage 43,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

DEFIANCE COAL CO.

General Office, Albuquerque, N. M.
PR—G. A. Kaseman, Albuquerque, N. M.
TR—R. A. Kistler, Albuquerque, N. M.
GM—G. A. Kaseman, Albuquerque, N. M.
GS—G. A. Kaseman, Albuquerque, N. M.
PA—G. A. Kaseman, Albuquerque, N. M.
EM—Jas. Yates, Albuquerque, N. M.
MM—Geo. Miksch, Gallup, N. M.
SA—G. A. Kaseman, Albuquerque, N. M.

Defiance Mine; Slope; Seam, 72 in. thick.
PO—Montmore, N. M. via Gallup, N. M.; SP—Gallup and Dillon, N. M.; CTY—McKinley; RR—A. T. & S. F.
S of H—Rope. Track gage, 40 in.
S of M—Hand and shortwall macks.
PP—2—100 H. P. tubular boilers.
EMP—42. Monthly tonnage 5,000.
PREP. EQUIPT—Shaker Screens.

Dileo Mine; Slope; Nos. 1, 2 & 3 Seams, 42 in. thick.
PO—Montmore, N. M.; SP—Dileo, N. M.; CTY—McKinley; RR—A. T. & S. F.

S of H—Rope.
S of M—1 longwall and 1 shortwall mack.
PP—2 return tube boilers, total 250 H. P., 1 air comp., 2 gen. units, 4100 volts A. C., 2 pumps.
EMP—40.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

DIAMOND COAL CO. (THE).

General Office, Albuquerque, N. Mex.
PR—T. E. Pollock, Flagstaff, Ariz.
VP—R. K. Pollock, Cooley, Ariz.
TR—A. B. Litts, Albuquerque, N. M.
GM—B. B. Hanger, Albuquerque, N. M.
GS—J. B. McKinley, Allison, N. M.
PA—B. B. Hanger, Albuquerque, N. Mex.
EM—J. R. Brennan, Allison, N. M.
EE—E. J. Atherton, Allison, N. M.
SC—Address the Company, Buyer, M. L. Moore, Allison, N. M.

Diamond Mine; Shaft; Nos. 1 and 2 Seams, 54-120 in. thick.
PO—Allison, N. Mex.; SP—Gallup, N. Mex.; CTY—McKinley; RR—A. T. & S. F.

S of H—Mules and rope. Track gage, 36 in.
S of M—2 shortwall macks.
PP—Gen. units, 1—500 K. W. and 1—1000 K. W., transformer 6600-440 volts A. C., 3 pumps.
EMP—250. Daily output, 600 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

Coal Basin Mine; Shaft; Nos. 1 and 2 Seams, 48 in. thick.
PO—Allison, N. Mex.; SP—Gallup, N. Mex.; CTY—McKinley; RR—A. T. & S. F.

S of H—Mules. Track gage, 36 in.
S of M—2 shortwall macks.
PP—3 water tube boilers, 350 H. P., 1 500 and 1—1000 K. W. gen. units, transformer 6600-440 volts A. C., 5 pumps.
EMP—125. Daily output, 400 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

DIRECT LINE COAL COMPANY

Now Defiance Coal Co.

ENTERPRISE COAL COMPANY

PR—G. A. Kaseman, Albuquerque, N. M.
VP—H. F. Bogh, Albuquerque, N. M.
TR—R. I. Crouch, Albuquerque, N. M.
GM—G. A. Kaseman, Albuquerque, N. M.
PA—G. A. Kaseman, Albuquerque, N. M.
EM—Jas. Yates, Albuquerque, N. M.
SA—G. A. Kaseman, Albuquerque, N. M.

Enterprise Mine; Drift; Lignite Seam; PO—Gallup, N. M.; SP—Sam; CTY—McKinley; RR—A. T. & S. F.
S of H—Gasoline motor. Track gage 40 inches.
S of M—Hand.
PP—1 fire tube boiler, 100 H. P.
PREP. EQUIPT—Gravity Screens.

GALLUP AMERICAN COAL COMPANY

General Office, Gallup, New Mexico.
Sales and Business Office, Gallup, N. M.
PR—H. C. Jackling, 1800 Hobart Bldg., San Francisco, Calif.
TR—J. R. Dillon, 25 Broad St., New York, N. Y.
Mng. Director—John M. Sully, Hurley, N. M.
Asst. TR—Geo. L. Webster, Hurley, N. M.
Cashier—J. W. Pontems, Gallup, N. M.
GS—Horace Moses, Gibson, N. M.
PA—C. F. Jennings, Desert Bldg., Salt Lake City, Utah.
ASST. PA—L. D. Akord, Hurley, N. M.
CE—E. J. Franklin, Desert Bldg., Salt Lake City, Utah.
SC—Gibson Stores Company, Buyer, L. H. Barlett, Salt Lake City, Utah.
SA—K. H. Alt, Albuquerque, N. M.
ASST. SM—Charles K. Ross, Gallup, N. Mexico.

Weaver Mine; Slope.
PO—Gibson, N. M.; SP—Gallup, N. M.; CTY—McKinley; RR—A. T. & S. F.
MS—Thomas Husband, Gibson, N. M.

S of H—Mules and rope. Track gage 40 in.
S of M—Hand and mach.
PP—Purchase power from central plant.

Henton Mine; Slope.
PO—Gibson, N. M.; SP—Gallup, N. M.; CTY—McKinley; RR—A. T. & S. F.
MS—Robt. Denard, Gibson, N. M.

S of H—Mules and rope. Track gage 40 in.
S of M—Hand.
PP—Purchase power from central plant.

Navajo Mine; Slope.
PO—Gibson, N. M.; SP—Gallup, N. M.; CTY—McKinley; RR—A. T. & S. F.
MS—Robt. Denard, Gibson, N. M.
S of H—Mules and rope. Track gage 40 in.
S of M—Hand.
PP—Purchase power from central plant.

GALLUP SOUTHWESTERN COAL CO. LTD

General Office, Box 608 Gallup, N. M.
PR—Samuel Atherton, Shrewsbury, Eng.
VP—Sharp Hanson, Gallup, N. M.
TR—W. H. Morris, Gallup, N. M.
GM—Sharp Hanson, Gallup, N. M.
CE—Gallup American Coal Co., Gallup, N. M.
Sales Agents—Gallup American Coal Co., Gallup, N. M.

Atherton Mine; Slope; Black Diamond Seam, 60 to 72 in. thick.
PO—Gallup, N. M.; SP—Same; CTY—McKinley; RR—A. T. & S. F.
MS—Matt. Pies, Gallup, N. M.
S of H—Mules, storage battery and elec. locos.
S of M—Hand, 2 elev. mach.
PP—Power purchased, 440 volts A. C., 2 pumps.
EMP—110. Last years tonnage 84,300.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

GOVERNMENT MINE.

GM—R. J. Bauman, Black Rock, N. M.
CS—R. J. Bauman, Black Rock, N. M.

Drift.

PO—Black Rock, N. M.; SP—Gallup, N. M.; CTY—McKinley.
S of H—Gravity.
S of M—Hand, 1 longwall mach.
EMP—2. Last fiscal year output, 600 tons.
PREP. EQUIPT—Bar Screens.

KINNEY, B. H. COAL MINE

General Office, Tokay, N. M.
GM—E. H. Kinney, Tokay, N. M.
ASST. MGR—C. G. Linn, Tokay, N. M.
EM—G. G. Linn, Tokay, N. M.
SC—Address the Company, Buyer, B. H. Kinney, Tokay, N. M.

Kinney Mine; Slope; Carthage Seam, 66 in. thick.
PO—Tokay, N. M.; SP—Carthage, N. M.; CTY—Socorro; RR—New Mex. Midland.
MS—J. M. Wylie, Tokay, N. M.
S of H—Rope and stationary holsts. Track gage, 36 in.
S of M—Hand.
PP—Power purchased, transformer 2200 to 220 volts A. C., 1 fire tube boiler, 2 pumps.
Last years tonnage 50,000.
SIZES SHIPT—Run of Mine.

LAWRENCE COAL COMPANY

General Office, Gallup, N. M.
PR—F. S. Lawrence, Gallup, N. M.
GM—F. S. Lawrence, Gallup, N. M.
SA—F. S. Lawrence, Gallup, N. M.
Lawrence Mine; Slope; Mancos Seam, 48 in. thick.
PO—Gallup, N. M.; SP—Defiance, N. M.; CTY—McKinley; RR—A. T. & S. F.
S of H—Mules.
S of M—Hand.
EMP—50. Daily output, 150 tons.
SIZES SHIPT—Run of Mine, Slack, Nut.

LEWISOWN ESTATE (THE).

Now operated under lease by Sante Fe County Coal Mining Co., Santa Fe, N. M.

LINCOLN COUNTY LIGHT & POWER CO

General Office, Carrizozo, N. M.
PR—J. H. Palmer, Parsons, N. M.
VP—A. B. Graham, Mishawaka, Ind.

TR—Jos. P. Schwab, Mishawaka, Ind.
GS—John E. Wright, Carrizozo, N. M.
PA—John E. Wright, Carrizozo, N. M.
EE—John E. Wright, Carrizozo, N. M.

White Oaks Mine; Slope; Seam, 18 in. thick.
PO—White Oaks, N. M.; SP—Carrizozo, N. M.; CTY—Lincoln.
MS—Ed. Sullivan, White Oaks, N. M.
S of H—Main and tail rope and steam loco. Track gage 24 inches.
S of M—Hand.
PP—2 fire tube boilers, 250 H. P., 1 water tube boiler, 225 H. P., transformer 11,000 2300 volts A. C., gen. units, 1 200 K. W. and 1 500 K. W., 220-210 volts A. C., 5 pumps.
EMP—8. Last years tonnage 2,810.
SIZES SHIPT—Lump.
PREP. EQUIPT—Gravity Screens.

LUCETTI COAL CO

Now Peacock Coal Co.

PASS CITY COAL COMPANY

General Office, White Oaks, N. M.
PR—A. G. Bennett, White Oaks, N. M.
TR—A. G. Bennett, White Oaks, N. M.
EM—A. G. Bennett, White Oaks, N. M.

Pass City Mine; Slope; Seam 46 inches thick.
PO—White Oaks, N. M.; SP—Carrizozo, N. M.; CTY—Lincoln; RR—E. P. & S. W.
S of H—Mules. Track gage 26 inches.
S of M—Hand.
PP—1 fire tube boiler 20 H. P., gen. unit, 100 K. W., 250 volts D. C.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.
Old Information.

PEACOCK COAL COMPANY

General Office, Monero, N. M.
PR—A. Lucetti, Monero, N. M.
VP—Levi Martinez, Monero, N. M.
TR—Bridget Lucetti, Monero, N. M.
GM—A. Lucetti, Monero, N. M.
SC—Peacock Coal Co. Commissary, Buyer, Manuel Garcia, Monero, N. M.

Peacock Mine; Slope; Amargo Seam, 36-48 inches thick.
PO—Monero, N. M.; SP—Same; CTY—Rio Arriba; RR—D. & R. G.
MS—A. Lucetti, Monero, N. M.
S of H—Rope and mules. Track gage 30 inches.
S of M—Shortwall macks.
PP—Gen. unit, 100 K. W., 1 pump.
EMP—15. Last years tonnage 8,029.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
NOTE—Successors to Lucetti Coal Co.

PHELPS DOOGIE CORP.

(Star Canon Branch)
General Office, 99 John St., New York, N. Y.

PR—Walter Douglas, New York, N. Y.
VP—A. C. James, New York, N. Y.
TR—Geo. Netman, Newman, N. Y.
GM—W. D. Brennan, Dawson, N. M.
PA—W. D. Hanbridge, New York, N. Y.
CE—C. Lagrand, Douglas, Ariz.
EM—W. C. Holman, Dawson, N. M.
SC—Phelps Dodge, Merg. Co., Buyer, W. D. Hanbridge, Dawson, N. M.
SA—Dawson Fuel Sales Co., Dawson, N. M.

Nos. 1, 2, 3, 4, 5, 6, 7, 8 & 9 Mines; Drift; Raton Seam, 72 in. thick.
PO—Dawson, N. M.; SP—Sante Fe; CTY—Colfax; RR—E. P. & S. W. System.
MS—Scott Duran, Dawson, N. M.
S of H—Mules, rope and steam loco. Track gage 24 in.
S of M—Hand and pillar shortwall macks.
PP—2 fire tube boilers, total 5000 H. P., 2 4—180 K. W. gen. units, 1 1500 K. W. transformer, 250 2300 volts A. C., 1 1380. Last years tonnage 1,500,000.

SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms, Washeries.

PRAIRIE COAL COMPANY

General Office, Socorro, N. M.
 PR—H. O. Bursum, Socorro, N. M.
 VP—Robt. E. Law, Carthage, N. M.
 TR—C. N. Hilton, Socorro, N. M.
 GM—Robt. E. Law, Carthage, N. M.
 PA—Robt. E. Law, Carthage, N. M.

Prairie Mine; Slope; Carthage Seam, 32 in. thick
 PO—Carthage, N. M.; SP—Same; CTY—Socorro; RR—N. M. Midland.
 S of H—Rope. Track gage 36 in.
 S of M—Hand.
 SIZES SHIPT—Run of Mine.

ST LOUIS, ROCKY MTN. & PACIFIC CO.

General Office, Raton, New Mexico.
 PR—J. Van Houten, Raton, N. M.
 Chairman of Board of Directors—Charles Springer, Raton, N. M.
 VP—Hugo A. Koehler, St. Louis, Mo.
 VP—L. C. White, Raton, N. M.
 TR—Charles Springer, Raton, N. M.
 GM—Allan French, Raton, N. M.
 GS—Allan French, Raton, N. M.
 PA—Allan French, Raton, N. M.
 EM—Frank A. Young, Raton, N. M.
 EE—John Laus, Raton, N. M.
 SC0—Blossburg Mercantile Co.; Buyer, C. W. Wildenstein, Raton, N. M.
 SA—J. C. Larkin, Raton, N. M.

Koehler Nos. 1, 2 and 3 Mines; Drift; Raton Seam, 4 to 12 ft. thick.
 PO—Koehler, N. M.; SP—Koehler Junction, N. M.; CTY—Colfax; RR—A. T. & S. F.
 MS—Walter Lovett, Koehler, N. M.
 SM—M. R. Boyer, Koehler, N. M.
 S of H—Mules and 7 trolley pole type locos. Track gage, 40 in.
 S of M—Hand and shortwall machs.
 PP—Power purchased, transformer 44,000 to 2200 volts A. C., M. G. sets, 550 volts D. C., 3 pumps.
 EMP—354. Last years tonnage 547,129. Coke ovens, 210 Bee Hive, Coke pulling mach.
 SIZES SHIPT—Slack, Lump.

PREP. EQUIPT—Bar and Shaker Screens, Picking Tables, Loading Booms, Washeries.

Van Houten Nos. 1, 2, 3, 5 and 6 Mines; Drift; Baton Seam, 4 to 12 ft. thick.

PO—Van Houten, N. M.; SP—Preston, N. M.; CTY—Colfax; RR—A. T. & S. F., Hebron Branch.

MS—J. L. Caruthers, Van Houten, N. M.
 SM—E. S. Kintzel, Van Houten, N. M.
 S of H—Mules and 5 trolley pole type locos. Track gage, 40 in.
 S of M—Hand and 13 shortwall machs.
 PP—Power purchased, transformer 44,000 to 2200 volts A. C., M. G. sets, 550 volts D. C.

EMP—275. Last years tonnage 346,853.
 SIZES SHIPT—Run of Mine; Slack, Pea, Nut, Lump.

PREP. EQUIPT—Bar and Shaker Screens, Picking Tables, Loading Booms.

Brilliant Mine, Drift, "Brilliant" Seam, 4 to 7 ft. thick.

PO—Brilliant, N. M.; SP—Dillon, N. M.; CTY—Colfax; RR—A. T. & S. F., Dillon Branch.

MS—James McDougall, Brilliant, N. M.
 SM—J. B. Waggoner, Brilliant, N. M.
 S of H—Mules and 3 trolley pole type locos. Track gage, 40 in.

S of M—Hand and 10 shortwall machs.
 PP—Power purchased, transformer 44,000 to 2200 volts A. C., M. G. sets, 550 volts D. C.

EMP—140. Last years tonnage 210,674.
 SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens, Picking Tables, Loading Booms.

Gardiner Mine, Drift, "Raton" Seam, 4 to 7 ft. thick, operate washery.

PO—Gardiner, N. M. SP—Dillon, N. M. CTY—Colfax. RR—A. T. & S. F., Dillon Branch.

MS—Wm. Pratt, Gardiner, N. M.
 SM—S. W. Davis, Gardiner, N. M.

S of H—Mules and 1 trolley pole type loco. Track gage, 40 in.

S of M—Hand and 3 elec. machs.

PP—Power purchased, transformer 44,000 to 2200 volts A. C., M. G. sets, 550 volts D. C.

EMP—57. Last years tonnage 81,267. Coke ovens, 374 Bee Hive, 91,408 tons.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Bar Screens, Washeries.

Sugarite Nos. 1 and 2 Mines; Drift; "Raton" Seam, 4 to 6 ft. thick.

PO—Sugarite, N. M. SP—Same. CTY—Colfax; RR—A. T. & S. F.

MS—Alexander Stewart, Sugarite, N. M.

SM—Charles Irvin, Sugarite, N. M.

S of H—Mules and 2 trolley pole type locos. Track gage, 40 in.

S of M—Hand and 4 shortwall machs.

PP—Power purchased, transformer 44,000 to 2200 volts A. C., M. G. sets, 550 volts D. C.

EMP—121. Last years tonnage 171,630.

SIZES SHIPT—Slack, Pea, Nut, Egg, Lump, Run of Mine.

PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

Swastika Mine; Drift; "Raton" Seam, 60 in. thick.

PO—Swastika, N. M.; SP—Dillon, N. M.; CTY—Colfax; RR—A. T. & S. F.

MS—Vincent Bonati, Swastika, N. M.

SM—E. P. Sammis, Swastika, N. M.

S of H—Mules and 1 trolley pole type loco. Track gage, 40 in.

S of M—2 shortwall machs.

PP—Power purchased, transformer 44,000 to 2200 volts A. C., M. G. sets, 550 volts D. C.

EMP—56. Last years tonnage 106,447.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.

SANTA FE COUNTY COAL MINING CO.

General Office, 1102 N. First St., Albuquerque, N. M.

PR—L. J. Miller, Albuquerque, N. M.

VP—F. E. Nuding, Santa Fe, N. M.

TR—L. J. Miller, Albuquerque, N. M.

GM—L. J. Miller, Albuquerque, N. M.

GS—P. G. Van Cott, Lamay, N. M.

PA—L. J. Miller, Albuquerque, N. M.

SC0—Address the Company, Buyer, P. G. Van Cott, Lamay, N. M.

SA—L. J. Miller, Albuquerque, N. M.

Omera Mine; Slope; Second and Third Seams; 60 and 36 inches thick.

PO—Albuquerque, N. M.; SP—Clarke, N. M.; Exp., Lang, N. M.; CTY—Santa Fe; RR—A. T. & S.

F. N. Mex. Central.

MS—Michael Girando, Los Cerrillas, N. M.

S of H—Rope. Track gage 36 inches.

S of M—Hand.

PP—2 fire tube boilers, 50 H. P., 2 pumps.

EMP—35. Daily output, 60 ton.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.

Note—Formerly operated by Estate of Leonard Lewisohn Coal Mine, 11 Broadway, N. Y.

SEVEN POINT COAL CO., INC.

General Office, Rotb Block, Raton, N. M.

PR—M. A. Sweney, Raton, N. M.

TR—C. A. Gray, Raton, N. M.

GM—M. A. Sweney, Raton, N. M.

PA—M. A. Sweney, Raton, N. M.

SA—M. A. Sweney, Raton, N. M.

Seven Point Mine; Slope; Seam 72 inches thick.

PO—Yankee, N. M.; CTY—Colfax; RR—Barton Eastern.

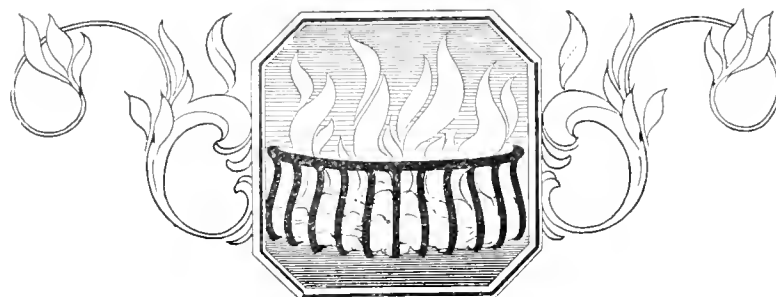
S of H—Mules. Track gage 32 inches.

S of M—Hand.

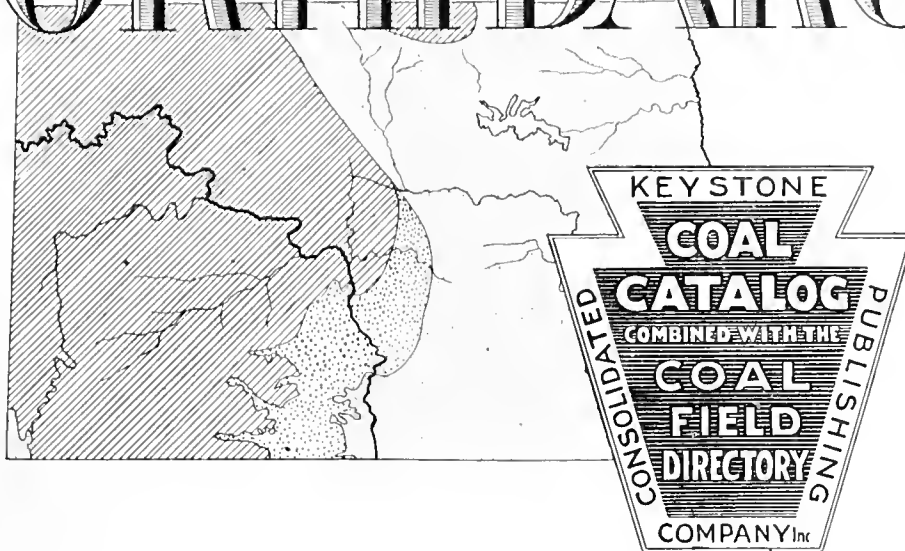
EMP—10. Daily output, 20 tons.

SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.

PREP. EQUIPT—Bar Screens.



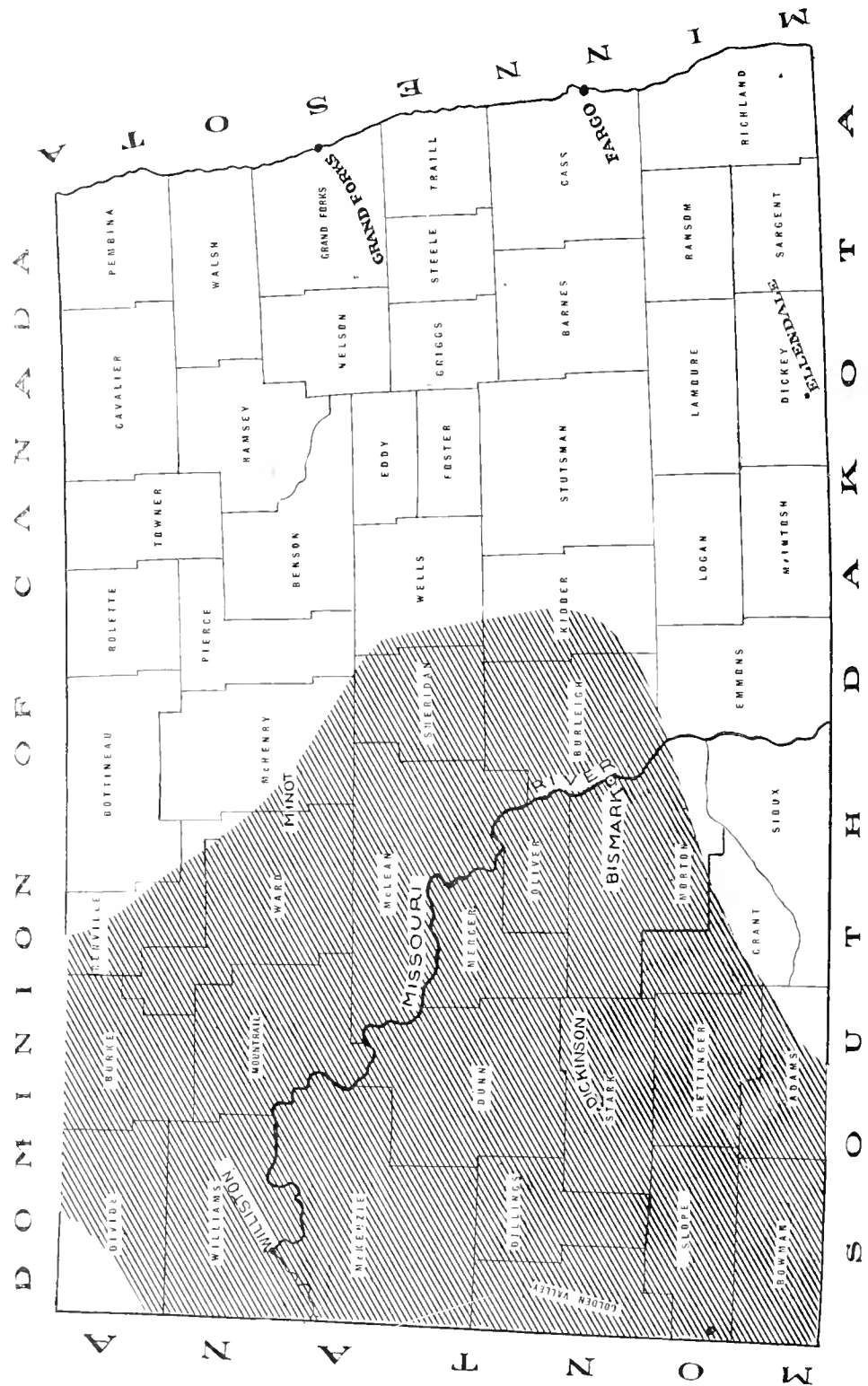
NORTH DAKOTA




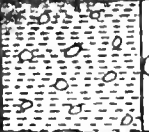

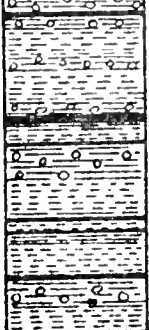
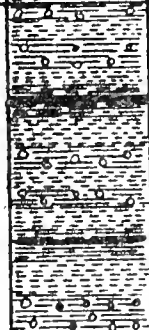



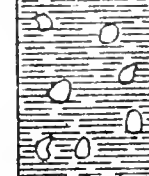
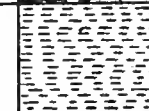
Map of Lignite Area.....	592
Sectional View of Coal Formations.....	593
General Description of Coal Resources.....	594, 595
Preparation and Sizing of Coal.....	595
Supplementary Analyses.....	596
List of Mines.....	597
Alphabetical Directory of Coal Mines.....	598, 599

Map of Lignite Area (Shaded)

NORTH DAKOTA



GEOLOGICAL COLUMN OF FORMATIONS IN NORTH DAKOTA

SYS- TEM	SER- IES	FORMATION NAME	COLUMNAR SECTION	THICK- NESS FEET	CHARACTER OF ROCKS
QUATER- NARY		LAKE SILT —Unconformity—		0-30	<i>Finely laminated, sandy clay.</i>
		GLACIAL DRIFT —Unconformity—		0-400	<i>Boulder clay, sand, gravel, and boulders</i>
TERTIARY	OLIG- OCENE	WHITE RIVER FORMATION —Unconformity—		40 to 300	<i>Coarse sandstone contain- ing pebbles, calcareous clay, and fresh-water limestone</i>
	EOCENE	FORT UNION FORMATION		1000	<i>Yellow and ash-gray shale, sandstone, and clay, with numerous beds of lignite</i>
		LANCE FORMATION		1000	<i>Cannonball marine member Dark sandy shale, and shaly sandstone Yellow sandstone containing marine shells 0-300 feet Ludlow lignitic member—Sandy shale, calcareous sandstone, and lignite. 0-350 feet Dark shale, yellow sandstone, thin lignite beds 400-525 ft</i>
CRETACEOUS		—Unconformity— FOX HILLS SANDSTONE		125	<i>Yellow sandstone, concretions, and marine shells.</i>
	MONTANA GROUP	PIERRE SHALE		900	<i>Blue shale containing marine shells.</i>
		NIOBRARA FORMATION		200	<i>Chalky limestone and calcareous shale</i>
	COLORADO GROUP	BENTON SHALE		500	<i>Dark-colored marine shale</i>
		DAKOTA SANDSTONE		250	<i>Sandstone containing many plant remains</i>

NORTH DAKOTA

General Description of the Geology of the Field With the Rank of Coal Mined;
Treats of the Area in Which Lignite Is Produced, With a Map Showing
Its Location; Railroads Serving Same; Kinds of Coal, General
Analyses, Supplementary Analyses, Preparation Etc.

The coal resources of North Dakota are extensive, both as to the area covered by the coal bearing rocks and in the number and thickness of the coal beds, which consist entirely of brown lignite. Thin beds of lignite occur in the eastern part of the state, but the workable beds are limited largely to the western half where they seem to occur in considerable number and thickness, ranging from 3 to 25 feet and occurring at depths of from 5 to 200 feet.

All of the stratified rocks of the lignite bearing measures belong to the early Eocene (Tertiary) formation, and consist generally of sands, clays and sandy clays in about equal proportions in alternating layers, with beds of lignite scattered throughout.* Considerable areas of subbituminous coal of usable quality and workable thickness are believed to underlie portions of the lignite areas, but no attempt to exploit these lower coals has been made.

Little effort has been made to trace and correlate the various lignite beds, and it is generally supposed that they are local in their development, that is, not continuous, and that no bed extends to any great distance geographically.

The United States Geological Survey estimates the amount of coal in the state as 697,000,000,000 short tons, counting beds over 3 feet thick and within 1000 feet of the surface. If this amount were formed into a cubical mass, in the compact form in which it lies in the ground, it would make a cube 5 miles long, 5 miles broad and 5 miles high. The yearly output is around 600,000 tons. Burleigh county leads in production, with Ward, Divide and Stark counties following in the order named. A considerable portion of the output is gotten by stripping where the overburden is light. All mines are worked on the room and pillar system. It is very seldom that explosive gases are encountered, while an additional feature for safety is that lignite dust is not dangerous.

Practically all of the lignite mined is used for domestic purposes, being used chiefly to supply fuel to settlers in the western part of the state, where it is burned on the grate. In summer time the demand is light and little mining is done, but during the winters, which are exceedingly cold, much fuel is needed. It is also successfully used for the burning of brick for which its sootless qualities and relatively low cost make it adaptable.

Although the lignite of North Dakota is of poor quality, in comparison with the bituminous coals of the Appalachian region, and is at present used only in a small way, it constitutes a vast fuel resource which will in time become of great value. As a steam coal it is lightly regarded owing to its high moisture content and low calorific value. Like all lignites it loses its moisture readily, which causes it to slack and fall to pieces. Three methods

for its efficient utilization have been suggested and much experimentation has been done to determine their feasibility.

First. Pulverized lignite. "There is little doubt that the most perfect combustion of highly gaseous coals like lignite could be brought about by burning the pulverized material in a properly constructed combustion chamber in a draft of air. Such a method, to a limited degree, has been employed with bituminous waste for years in connection with several industries in which large ovens are used, but the machinery and appliances required have hitherto been too large and costly to permit their general adoption in small heating or boiler plants. There seems no good reason why some satisfactory method of using lignite in this manner in small plants can not eventually be evolved. Pulverization of highly gaseous lignites produces fuel with properties closely similar to those of crude petroleum or crude gas, in fact, pulverized highly gaseous coal like dry lignite, when fed into a furnace with an air blast, gives very largely a gaseous fuel."†

Second, briquetting. The ordinary method of briquetting, as practiced with anthracite and bituminous coals, is to produce by the aid of pressure a compact briquet in which the particles of coal are firmly held together, usually with the aid of a pitch binder. A similar method employed with North Dakota lignite would fail to remove the objection due to the high moisture content and the high freight charges paid on water. The method evolved at the School of Mines, University of North Dakota, under the direction of Dean E. J. Babcock, eliminates the water, inasmuch as the lignite is carbonized in retorts, the gas being saved for its by-products, and the resulting coke being briquetted. For a binder pitch is used having a melting point of about 145 degrees.‡ This process has been adopted by the Northern Briquetting Company at Minot, where the first practical briquetting plant in North Dakota has been established.

Third, converting the lignite into producer gas. Relative to this use the following is of interest, having reference to the tests made on North Dakota lignites at the fuel testing plant at St. Louis. "When the first car of brown lignite was received at the testing plant, experiments were made on the briquetting machine, but with little success. A test was attempted under a steam boiler, but the equipment of the testing plant was not designed for this class of fuel and no satisfactory results were obtained. At this time it was not thought possible to use such fuel successfully in the gas producer, but by the time the second car load had been received at the plant, the opinion had gained

*Contributions to Economic Geology 1908, Part II, Carl D. Smith.

†B. of M. Bulletin No. 89, Economic Methods of Utilizing Western Lignites, by E. J. Babcock.

ground that producer gas could be made from this lignite, and so a trial run was made. The expectations were of so doubtful a nature in the mind of the superintendent of the producer plant that the gas engine was run on a two-thirds load, as it was feared the product of gas would not be sufficient to enable the engine to operate at its full capacity. To the surprise of everyone, the lignite worked well in the producer and the gas had a higher calorific value than that from any other coal used.* Test of the quality of the gas under the boiler showed that the gas from two pounds of lignite produced as much electrical horse power as with the use of three pounds of the best West Virginia steam coal. This means that North Dakota lignite, with the moisture eliminated, will do more work when used in a producer gas plant than the best coal of the country will do in a steam plant.

Four great railroad systems pass through the lignite fields, as follows: Chicago, Milwaukee and

St. Paul; Northern Pacific; Great Northern, and Minneapolis, St. Paul and Sault Ste. Marie.

Although there are 19 counties in which lignite is being mined, there is no clear cut grouping into mining districts as is so often found in the older mining states; also, as has been already stated, there has been no correlation of the various deposits. Practically all of the beds are incontinuous and no attempt will therefore be made to describe any particular seam or location. A general analysis of North Dakota lignite is about as follows:

GENERAL ANALYSIS

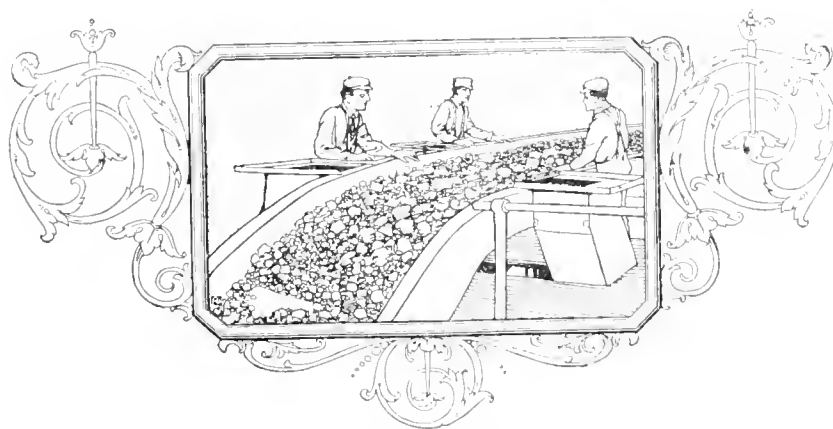
Moisture	36.00
Volatile Matter	29.00
Fixed Carbon	28.00
Ash	7.00
Sulphur	0.65
B. T. U.	6,600

*U. S. G. S. Professional Paper No. 48, Part I, pg. 110.

PREPARATION OF COAL

There is no careful sizing or preparation of the lignite unless it consists of the separation of the slack from the lumpy coal. Sometimes this is done in the mine, the coal being loaded into the mine cars with forks, thereby eliminating the necessity of screens on the tippie. The slack remains in the mine. Most of the lignite is used for domestic purposes and a shipment usually contains sizes rang-

ing from large lumps to pieces about the size of those in slack. Such lignite as is used for steam purposes is supplied in the same manner, having lumps from 25 to 50 pounds frequently intermixed. In such large sizes combustion is slow owing to the lack of oxidizing surface. It is recommended that for all purposes the coal be first broken at the mine and graded for use in stove, heating plants and steam boilers.



Analyses of North Dakota Seams by Counties and Localities

(ALL ANALYSES MADE ON MINE SAMPLES "AS RECEIVED")

COUNTY AND LOCATION	SEAM	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carbon	Oxygen	RATIOS		
											Carbon	F. C.	V. M.
											Oxy. + Ash		
Adams, Haynes.....			33.16	30.72	29.88	6.24	0.98	7,385	....	....	....	0.97	
Billings, Bowman.....			46.18	26.66	21.72	5.44	0.64	5,250	....	....	....	0.82	
Billings, Medora.....			36.97	26.32	28.67	8.04	1.84	....	....	....	....	1.09	
Billings, 3 mi. s. of Sentinel Butte.....	*		43.51	25.23	24.87	6.39	1.04	5,814	....	....	....	0.99	
Bowman, Scranton.....			36.80	30.03	25.74	7.43	1.20	6,660	....	....	....	0.85	
Burke, Columbus.....			34.32	26.30	28.35	11.03	0.41	6,507	....	....	....	1.06	
Burke, Larson.....			32.31	28.30	30.63	8.76	0.43	7,006	....	....	....	1.08	
Burke, Stampede.....			35.30	30.08	27.55	7.07	0.32	6,663	....	....	....	0.92	
Burleigh, Wilton.....			38.00	30.33	26.38	5.29	0.89	6,525	....	....	....	0.87	
Divide, Noonan.....			30.27	30.28	32.30	7.15	0.32	7,165	....	....	....	1.07	
McLean, Garrison.....			39.95	29.72	27.14	3.19	0.26	6,610	....	....	....	0.91	
McLean, Underwood.....			36.46	33.00	26.86	3.68	0.45	6,900	....	....	....	0.81	
McLean, Washburn.....			35.64	32.33	24.32	6.71	0.92	6,560	....	....	....	0.75	
McLean, Wilton.....	*	Wilton.....	35.96	31.92	24.37	7.75	1.15	7,069	41.43	41.92	0.83	0.76	
Morton, Leith.....		Jones.....	36.2	29.8	25.3	8.70	0.68	6,700	39.45	43.82	0.85	0.77	
Morton, Hebron.....			34.10	29.24	31.01	5.65	0.92	6,646	....	....	....	1.06	
Morton, New Salem.....			33.44	30.58	28.98	7.00	1.90	6,845	....	....	....	0.95	
Mountrail, Amanda.....			38.00	30.10	22.00	9.90	1.23	5,370	....	....	....	0.73	
Mountrail, Epworth.....			43.66	25.27	26.00	5.07	0.33	5,865	....	....	....	1.03	
Mountrail, Palermo.....			39.75	30.57	24.65	5.03	0.61	6,236	....	....	....	0.81	
Mountrail, Stanley.....			35.63	23.94	22.08	18.35	1.92	5,180	....	....	....	0.92	
Mountrail, White Earth.....	†		37.85	30.06	24.32	7.77	0.61	6,225	....	....	....	0.81	
Oliver, Center.....			36.90	27.20	29.42	6.48	0.88	6,540	....	....	....	1.08	
Oliver, Hanover.....			35.80	33.53	28.86	6.81	0.84	6,840	....	....	....	0.71	
Renville, Carpio.....			36.50	28.42	28.66	6.42	1.37	6,745	....	....	....	1.00	
Stark, Lehigh.....	*	Lehigh.....	32.64	29.19	26.75	11.42	3.54	6,970	39.53	38.87	0.79	0.91	
Stark, Belfield.....			42.86	26.63	25.88	4.63	0.57	5,990	....	....	....	0.97	
Stark, Dickinson.....			39.83	26.03	25.34	8.80	1.78	6,070	....	....	....	0.97	
Stark, Zenith.....			40.00	26.53	26.66	6.81	0.80	5,935	....	....	....	1.00	
Ward, Bowbells.....			31.45	31.52	29.92	7.11	0.36	6,980	....	....	....	0.95	
Ward, Burlington.....			33.40	27.86	29.57	9.17	0.15	6,430	....	....	....	1.06	
Ward, Donnybrook.....			34.85	30.80	28.85	5.50	0.50	6,925	....	....	....	0.94	
Ward, Kennare.....			36.46	33.00	26.86	3.68	0.45	6,900	....	....	....	0.81	
Ward, Tasker.....			33.92	31.93	26.11	8.04	0.37	6,580	....	....	....	0.82	
Ward, Velva.....			38.06	28.57	29.20	4.17	0.17	6,715	....	....	....	1.02	
Williams.....	*Middle.....	Williston.....	38.92	25.54	30.15	5.39	0.48	6,739	39.34	47.22	0.75	1.18	
Williams, Williston.....			37.80	30.01	26.71	5.48	0.82	6,850	....	....	....	0.89	

*Bulleins Bureau of Mines. †United States Geological Survey Reports.

List of Mines, Including Name of Company, General Office Address,
County, Railroad and Shipping Point

NORTH DAKOTA

Lignite Seams. (Because of the nature of the North Dakota deposits and the absence of correlation of the seams, all of the shipping mines in the state are here given under one head.) Mined in the following counties: Adams, Billings, Bowman, Burke, Burleigh, Divide, Dunn, Golden Valley, Hettinger, McLean, Mercer, Morton, Mountrail, Oliver, Renville, Stark, Ward and Williams. Lignite Rank. Suitable for Steam, Locomotive Fuel, Producer Gas and Domestic Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Aaby Light & Power Co.	New England, N. D.	Aaby Light	Hettinger	C. M. & St. P.	New England, N. D.
Avoca Coal Co.	Williston, N. D.	Avoca	Williams	G. N.	Avoca, N. D.
Backman Coal Co.	Wilton, N. D.	Backman	McLean	N. P.	Wilton, N. D.
Bartley Coal Co.	Underwood, N. D.	Bartley	McLean	So. Line	Underwood, N. D.
Beulah Coal Mining Co.	Bismarck, N. D.	Beulah	McLean	Mo. Pac.	Beulah, N. D.
Black Butte Coal Co.	Hanks, N. D.	Black Butte	Williams	G. N.	Hanks, N. D.
Burlington City Coal Mine	Burlington, N. D.	Burlington City	Williams	So. Line	Burlington, N. D.
Center Coal Co.	Leith, N. D.	Center	Gardner	C. M. & St. P.	Leith, N. D.
Cherry Vale Lignite Coal Co.	Burlington, N. D.	Cherry Vale	Ward	So. Line	Burlington, N. D.
Consolidated Lignite Collieries Co.	New Salem, N. D.	No. 1	Morton	N. P.	New Salem, N. D.
Crescent Lignite Coal Co.	Washburn, N. D.	Crescent Lignite	McLean	So. Line	Washburn, N. D.
Dodge Coal Mine	Dodge, N. D.	Dodge	Dunn	N. P.	Dodge, N. D.
Edith Coal Co.	Williston, N. D.	Edith	Williams	G. N.	Williston, N. D.
Emmett Coal Mining Co.	Williston, N. D.	Emmett	Hettinger	C. M. & St. P.	Regent, N. D.
Falkirk Mining Co.	Washburn, N. D.	Falkirk	McLean	So. Line	Washburn, N. D.
Fenster Coal Co.	Larson, N. D.	Fenster	Burke	G. N.	Larson, N. D.
Foxholm Coal Co.	Foxholm, N. D.	Foxholm	Ward	So. Line	Foxholm, N. D.
Grimm Coal Mine	St. John Butte, N. D.	Grimm	Golden Valley	N. P.	St. John Butte, N. D.
Hanks Coal Co.	Hanks, N. D.	Hanks	Williams	Great Northern	Hanks, N. D.
Haynes Co-operative Coal Mining Co.	Haynes, N. D.	Haynes	Adams	C. M. & St. P.	Haynes, N. D.
Heron Fuel & Prosser Brick Co.	Heron, N. D.	Heron	Morton	N. P.	Heron, N. D.
High Carbon Lignite Mines	Werner, N. D.	High Carbon Lignite	Dunn	N. P.	Werner, N. D.
High Grade Lignite Coal Co.	Medora, N. D.	High Grade Lignite	Billings	N. P.	Medora, N. D.
Hought Coal Company	Noonan, N. D.	Hought	Divide	G. N.	Noonan, N. D.
Hummel Coal Co.	Burlington, N. D.	Hummel	Ward	So. Line	Burlington, N. D.
Hygrade Coal Co.	Dunn Center, N. D.	Hygrade	Dunn	N. P.	Dunn Center, N. D.
Johnson Fuel Co.	Sheridan, N. D.	Johnson	McLean	C. M. & St. P.	Sheridan, N. D.
Kays Coal Co.	Garrison, N. D.	Kays	McLean	So. Line	Garrison, N. D.
Kidhook & Wixon	Columbus, N. D.	Kidhook	Burke	G. N. & So. Line	Columbus, N. D.
Kimball Coal Co.	Noonan, N. D.	Kimball	Davids	G. N. & So. Line	Noonan, N. D.
Kinn y. Lymon	Hanks, N. D.	Blue Vein	Williams	G. M.	Hanks, N. D.
Kunze, H. G. Coal Mining Co.	Reeder, N. D.	Kunze	Adams	C. M. & St. P.	Reeder, N. D.
Leason Coal Co.	Fowler, N. D.	Leason West	Ward	M. & St. L.	Sawyer, N. D.
Lignite Diamond Coal Co.	Columbus, N. D.	Lignite Diamond	Burke	G. N.	Columbus, N. D.
Land Bros Coal Co.	Wilton, N. D.	Land	McLean	So. Line	Wilton, N. D.
Little Missouri Coal Co.	Medora, N. D.	Little Mo	Billings	M. P.	Medora, N. D.
Logelin Coal Co.	Noonan, N. D.	Square Deal	Davids	G. N. & So. Line	Noonan, N. D.
Lorbeski Coal Co.	Noonan, N. D.	Lorbeski Coal Co.	Divide	Great Northern	Noonan, N. D.
Lucky Strike Coal Co.	Zap, N. D.	Lucky Strike	Vineer	N. P.	Zap, N. D.
Midway Coal Co.	Mannequins, Minn.	Midway	Ward	So. Line	Midway Siding, N. D.
Montgomery Mine	Harvey, N. D.	Montgomery	McLean	Stanton	Stanton, N. D.
North Creek Coal Co.	South Heart, N. D.	North Creek	Stark	N. P.	South Heart, N. D.
Pearl Butte Mine	Haynes, N. D.	Pearl Butte	Adams	C. M. & St. P.	Haynes, N. D.
Peoples Power, Fuel & Clay Products Co.	Fargo, N. D.	Peoples Power	Ward	So. Line	Kennard, N. D.
Pittsburgh Coal Mining Co.	Duckson, N. D.	Pittsburgh	Stark	N. P.	High N. D.
Rupp Coal Co.	Garrison, N. D.	Rupp	McLean	Southern	Garrison, N. D.
South Dakota Coal Mine Commission	Ferre, N. D.	Com No. 1	Adams	N. P.	Glenn, N. D.
Square Deal Coal Co.	Williston, N. D.	Square Deal	Williams	G. N.	Williston, N. D.
Star Coal & Ice Co.	Williston, N. D.	Star	Williams	G. N.	Williston, N. D.
Sunlight Coal Co.	Columbus, N. D.	Sunlight	Burke	So. Gr. & Northern	Columbus, N. D.
Tripp Mine	Center, N. D.	Tripp	Oliver	N. P.	Port Clark, N. D.
U. S. Reclamation Service	Williston, N. D.	Reclamation	Williams	G. N.	Williston, N. D.
Vizina Coal Co.	Williston, N. D.	Vizina	Williams	G. N.	Williston, N. D.
Washburn Lignite Coal Co., The	Wilton, N. D.	Wilton No. 2	Burleigh	So. N. P.	Wilton, N. D.
Whittier Crockett Coal Co.	Columbus, N. D.	Whittier Crockett	Burke	G. N.	Stanton, N. D.
Williston Coal & Ice Co.	Williston, N. D.	Bus by	Williams	Great Northern	Williston, N. D.
Wood Mining Co.	Vedva, N. D.	Wood	Ward	So. Line	Vedva, N. D.
Zenth Lignite Mines	Fargo, N. D.	Zenth Lignite	Stark	N. P.	Zenth, N. D.

NORTH DAKOTA

Alphabetical Directory of Coal Mines, Giving Complete Detailed Information Covering Each Mine

For List of Abbreviations See Page 13.

AABY LIGHT & POWER COMPANY
General Office, New England, N. D.
PR—W. L. Gosdner, New England, N. D.
VP—C. H. Aaby, New England, N. D.
TR—J. J. Murphy, New England, N. D.
GM—W. L. Gosdner, New England, N. D.

Aaby Light Mine; Slope; Seam 108 inches thick.
PO—New England, N. D.; SP—Same; CTY—Hettinger; RR—C. M. & St. P.

S of H—Mules. Track gage 36 inches.
S of M—Hand and electric puncher.
PP—1 150 H. P. fire tube boiler, Transformer 2300 to 220-110 volts A. C. M. G. sets, 30 K. W., 120 K. W. and 60 K. W., 220 volts D. C.
EMP—12. Last years tonnage 5,000.
SIZES SHIPT—Run of Mine, Lump.

AVOCA COAL COMPANY.
General Office Williston, N. D.
GM—E. F. Lowjoy, Williston, N. D.

Avoca Mine; Draft; Brugger Vein, 120 inches thick.
PO—Williston, N. D.; SP—Avoca, N. D.; CTY—Williams; RR—G. N.

S of H—Mules. Track gage 20 in.
S of M—Hand.
EMP—35. Last years tonnage 19,470.
SIZES SHIPT—Run of Mine, Lump.

BACKMAN COAL COMPANY
General Office, Wilton, N. D.
GM—Nels Johnson, Wilton, N. D.

Backman Mine; Slope; Level Seam, 120 inches thick.
PO—Wilton, N. D.; SP—Same; CTY—

McLean; RR—N. P.

MS—Nels Johnson, Wilton, N. D.
S of H—Mules, gasoline loco. Track gage 20 inches.
S of M—Hand.
Last years tonnage 3,908.
SIZES SHIPT—Slack, Lump.
PREP. EQUIPT—Bar Screens.

BARTLEY COAL COMPANY
General Office, Underwood, N. D.
Bartley Mine; Shaft.
PO—Underwood, N. D.; SP—Same; CTY—McLean; RR—So.

MP—Dewey Palmberg, Underwood, N. D.
S of H—Mules. Track gage 20 in.
S of M—Hand.
Last years tonnage 3,540.
SIZES SHIPT—Run of Mine, Lump.

BEULAH COAL MINING COMPANY
General Office, Beulah, N. D.
PR—C. B. Ehl, Beulah, N. D.
VP—E. A. H., Beulah, N. D.
TR—E. A. H., Beulah, N. D.
GM—W. L. Gosdner, Beulah, N. D.
PA—W. L. Gosdner, Beulah, N. D.
EM—M. J. Gosdner, Beulah, N. D.
SA—W. L. Gosdner, Beulah, N. D.

Beulah Coal Mine; Slope; Seam 108 inches thick.
PO—Beulah, N. D.; SP—Same; CTY—McLean; RR—McLean; N. P.

MS—H. P. OH set, 120 K. W., 120 K. W. and 60 K. W., 220 volts D. C. Track gage 42 in.
S of M—2. Area all miels.
PP—5. Boilers total 600 H. P., 1—(Continued on Next Page)

Beulah Coal Mining Co.—Cont.

35 K. W. 1—75 K. W. 1—150
K. W. gen. units, 220 volts D. C.,
10 pumps.
EMP—100 Last years tonnage 120,000.
SIZES SHIPT—Run of Mine, Slack, Egg,
Lump.
PREP. EQUIPT—Shaker Screens.

BLACK BEAUTY COAL COMPANY

GM—Fred M. Gotham, Hanks, N. D.

Black Beauty Mine; Drift; Lignite Seam,
96 inches thick.
PO—Hanks, N. D.; SP—Same; CTY—
Williams; RR—G. N.
S of H—Mules. Track gage 30 inches.
S of M—Hand.
Last years tonnage 2,000.
SIZES SHIPT—Run of Mine, Block.
PREP. EQUIPT—Bar Screens.

BROOK COAL MINING COMPANY

Now operated by the Reid Trail Coal Co.

BURLINGTON CITY COAL MINE

PR—J. W. Perlebeck, Burlington, N. D.
GM—J. W. Perlebeck, " "
PA—J. W. Perlebeck, " "
Burlington City Mine Slope; Lignite
Seam; 108 to 120 in. thick.
PO—Burlington, N. D.; SP—Same; CTY—
Ward; RR—Soo Line.
S of H—Mules.
S of M—Hand.
EMP—18. Last fiscal year output,
9,000 tons.
Old information.

CENTER COAL COMPANY

GM—S. L. Houser, Leith, N. D.
SA—S. L. Houser, Leith, N. D.

Center Mine; Shaft; Lignite Seam, 96
inches thick.
PO—Leith, N. D.; SP—Same; CTY—
Grant; RR—C. M. & St. P.
S of H—Mules. Track gage 30 inches.
S of M—Electric mach.
EMP—10. Last years tonnage 7,000.
SIZES SHIPT—Slack, Pea, Nut, Egg,
Lump.
PREP. EQUIPT—Bar Screens.

CHERRY VALE LIGNITE COAL CO.

OPERATOR—David Houston, Sr., Box
213, Burlington, N. D.
SA—Northwestern Lignite Coal Co., Bur-
lington, N. D.

Cherry Vale Mine; Slope; Seam, 132 in.
thick.
PO—Burlington, N. D.; SP—Same; CTY—
Ward; RR—Soo.
S of H—Mules. Track gage 32 in.
S of M—Hand.
PP—1 rotary pump.
EMP—14 Last years tonnage 5,000.
SIZES SHIPT—Lump.
PREP. EQUIPT—Pick Mining.
Old information.

CLERMONT COAL CO.

Now operated by the South Dakota Coal
Mine Commission

CONSOLIDATED LIGNITE COLLIERIES CO.

General Office, New Salem, N. D.
PR—Jacob Barreth, Zealand, N. D.
VP—W. H. Mann, New Salem, N. D.
TR—F. G. Weinrich, New Salem, N. D.
GM—Fred Kraemer, New Salem, N. D.
PA—Fred Kraemer, New Salem, N. D.

Consolidated Lignite Mine; Slope; Second
Seam; 90 in. thick.
PO—New Salem, N. D.; SP—Same; CTY—
Morton; RR—Northern Pacific.
S of H—Mules. Track gage 42 in.
S of M—Hand.
PP—1 22 H. P., 1 15 H. P. tubular
boilers, 1 pump.
EMP—13 Daily tonnage 90.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.

CRESCENT LIGNITE COAL COMPANY.

OWNER—Thos. Figenkan, Washburn,
N. D.

Crescent Lignite Mine; Shaft; Lignite
Seam, 126 in. thick.
PO—Washburn, N. D.; SP—Same; CTY—
McLean; RR—Soo Line.
S of H—Mules. Track gage 32 in.
EMP—20. Last years tonnage 15,000.
SIZES SHIPT—Run of Mine, Slack,
Lump.

DAKOTA LIGNITE MINES CO.

Now Pittsburg Coal Mining Co.

DIAMOND COAL COMPANY

Out of Business.

DODGE COAL MINE

OWNER—Wm. Thurston, Dodge, N. D.

Dodge Mine; Slope and Stripping; Lignite
Seam, 96 inches thick.
PO—Dodge, N. D.; SP—Same; CTY—
Dunn; RR—Northern Pacific.
MS—Wm. Thurston, Dodge, N. D.

S of H—Mules. Track gage 24 inches
S of M—Hand.
Last years tonnage 3,800.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.

ELLITHORPE, C.

PR—J. D. Beaton, Williston, N. D.
VP—W. H. Huber, Williston, N. D.
GM—W. H. Huber, Williston, N. D.
GS—C. Ellithorpe, Williston, N. D.
PA—C. Ellithorpe, Williston, N. D.
SA—C. Ellithorpe, Williston, N. D.

Carbon Coal Mine; Drift; Middle Seam,
120 in. thick.
PO—Williston, N. D.; SP—Same; CTY—
Williams; RR—G. N.
MS—W. H. Huber, Williston, N. D.
S of H—Mules. Track gage 32 in.
S of M—Hand.
PP—1 pump.
EMP—7. Last years tonnage 4,000.
SIZES SHIPT—Lump.

EQUITY COAL MINING COMPANY

General Office, Mellette, S. D.
PR—M. Dunke, Mellette, S. D.
VP—B. M. Child, Mellette, S. D.
TR—John McCall, Mellette, S. D.
GM—E. A. Child, Coalbank, N. D.
GS—T. N. Child, Mellette, S. D.
SC—Equity Star Co., Coalbank, N. D.
SA—Cannon Ball Coal Co., Mellette,
S. D.

Cannon Ball Mine; Slope; Seam 144-156
inches thick.
PO—Coalbank, N. D.; SP—Regent, N.
D.; CTY—Hettinger; RR—C. M. &
St. P.
S of H—Mules. Track gage 32 inches
S of M—Hand.
PP—50 H. P. water tube boiler.
EMP—10. Last years tonnage 7,000.
SIZES SHIPT—Lump.
Note—Formerly operated by the Sadler
Coal Mining Company.

FALKIRK MINING COMPANY

General Office, Washburn, N. D.
PR—John Saib, Falkirk, N. D.
VP—Carl Elchhorse, Falkirk, N. D.
TR—Geo. Swanson, Falkirk, N. D.
GM—Edw. Kugler, Washburn, N. D.
GS—Edw. Kugler, Washburn, N. D.
PA—Edw. Kugler, Washburn, N. D.
EM—G. W. Smith, Washburn, N. D.

Kugler Mine; Drift and Shaft; Lignite
Seam, 120 inches thick.
PO—Washburn, N. D.; SP—Same; CTY—
McLean; RR—Soo Line.
MS—G. W. Smith, Washburn, N. D.
S of H—Mules. Track gage 32 inches.
S of M—Chain breast mach.
EMP—20. Last years tonnage 9,000.
SIZES SHIPT—Run of Mine, Slack,
Lump.
NOTE—Formerly the Kugler Coal Co.

FENSTER COAL COMPANY.

PR—Alvin Fenster, Larson, N. D.
VP—Albert Cole, Larson, N. D.
GM—Henry Fenster, Larson, N. D.
GS—Joe Souther, Larson, N. D.

Fenster Mine; Stripping; 72 in. thick.
PO—Larson, N. D.; SP—Same; CTY—
Burke; RR—Great Northern.
SIZES SHIPT—Lump.

FOXHOLM COAL CO.

PR—Mach Hendricks, Foxholm, N. D.
VP—H. J. Linnertz, Foxholm, N. D.
TR—R. W. Kann, Foxholm, N. D.
GM—W. Archibald, Foxholm, N. D.
SC—Address the Company; Buyer, W.
Archibald, Foxholm, N. D.

Foxholm Mine; Shaft; Lignite Seam, 120
in. thick.
PO—Foxholm, N. D.; SP—Same; CTY—
Ward; RR—Soo Line.
MS—Louis Kaufman, Foxholm, N. D.
S of H—Mules.
S of M—Hand.
PP—1 pump.
EMP—40. Daily output, 150 tons.
SIZES SHIPT—Lump.
Old information.

GARRISON COAL, LIGHT & POWER CO.

Now operated by the Rupp Coal Company.

GRIMM COAL MINE.

Grimm Mine; Drift; Lignite Seam, 28
in. thick.
PO—Sentine Butte, N. D.; SP—Same;
CTY—Golden Valley; RR—N. P.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine.

HANKS COAL COMPANY

General Office, Hanks, N. D.
PR—James E. Hought, Noonan, N. D.
VP—David Hought, Noonan, N. D.
TR—F. Kohlman, Noonan, N. D.
GM—John Nelms, Noonan, N. D.
PA—John Nelms, Noonan, N. D.

Hanks Mine; Drift; Lignite Seam; 90
inches thick.
PO—Hanks, N. D.; SP—Same; CTY—
Williams; RR—Great Northern.
MS—John Nelms, Noonan, N. D.
S of H—Mules. Track gage 34 inches.
S of M—Hand.
EMP—28. Daily tonnage 62.
SIZES SHIPT—Run of Mine, Nut, Lump.
PREP. EQUIPT—Gravty Screens.

HAYNES CO-OPERATIVE COAL MINING CO

General Office, 308 Citizens Bank Bldg.,
Aberdeen, S. D.
PR—J. E. Slosson, Aberdeen, S. D.
VP—C. J. Gustafson, Aberdeen, S. D.
TR—E. F. Taylor, Aberdeen, S. D.
GM—J. E. Slosson, Aberdeen, S. D.
GS—J. B. Slosson, Aberdeen, S. D.
PA—D. J. Moriarty, Aberdeen, S. D.
SC—Address the Company, Buyer, Wm.
Hall, Haynes, N. D.
SA—D. J. Moriarty, Aberdeen, S. D.

Haynes Mine; Slope; Haynes Seam, 180
inches thick.
PO—Haynes, N. D.; SP—Same; CTY—
Adams; RR—C. M. & St. P.
MS—Louis Fahlenkamp, Haynes, N. D.
S of H—Mules, 1 gasoline and 1 steam
loco. Track gage 36 in.
S of M—Hand.
PP—1 150 H. P. water tube boiler.
EMP—80. Last years tonnage 50,000.
SIZES SHIPT—Run of Mine, Slack,
Lump.

HEBRON FIRE & PRESSED BRICK CO.

General Office, Fargo, N. D.
PR—Chas. Weigel, Hebron, N. D.
VP—A. M. Halstead, Jamestown, N. D.
TR—J. H. Holman, Hebron, N. D.
GM—Chas. Weigel, Hebron, N. D.
PA—Chas. Weigel, Hebron, N. D.

Hebron Mine; Drift; Seam 84 to 108
inches thick.
PO—Hebron, N. D.; SP—Same; CTY—
Morton.
MS—Frank Benek, Hebron, N. D.
S of H—Mules. Track gage 24 inches.
S of M—Hand.
EMP—20. Daily tonnage 100.

HIGH CARBON LIGNITE MINES.

General Office, Werner, N. D.
PR—T. J. Anders, Werner, N. D.
VP—E. Stolzman, Durbin, N. D.
TR—M. E. Fasutt, Durbin, N. D.

High Carbon Lignite Mine; Slope; Seam,
192 in. thick.
PO—Werner, N. D.; SP—Same; CTY—
Dunn; RR—Northern Pac.
S of H—Mules. Track gage 36 in.
S of M—Shortwall machs.
PP—1—150 H. P. fire tube boiler, M.
G. Sits, 250 volts D. C., gen.
units 100 K. W.
EMP—150 Daily tonnage 600.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Bar Screens.

HIGH GRADE LIGNITE COAL COMPANY.

PR—N. D. Nichols, Medora, N. D.
VP—B. Nichols, Medora, N. D.
GM—N. D. Nichols, Medora, N. D.
GS—W. J. Ray, Medora, N. D.
PA—W. J. Ray, Medora, N. D.
CE—G. E. Burgers, Medora, N. D.
SC—High Grade Store, Buyer, W. J.
Ray, Medora, N. D.

Lignite Mine; Slope; Seam, 120 in.
thick.
PO—Medora, N. D.; SP—Same; CTY—
Billings; RR—N. P.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
PP—Pumps.
EMP—60. Last years tonnage 30,000.
SIZES SHIPT—Run of Mine, Slack,
Lump, Block.
PREP. EQUIPT—Gravty Screens.

HOUGHT COAL CO.

PR—James E. Hought, Noonan, N. D.
PA—James E. Hought, Noonan, N. D.

Hought's Mine; Slope; Lignite Seam, 84
in. thick.
PO—Noonan, N. D.; SP—Same; CTY—
Divide; RR—Great Northern.
MS—James E. Hought, Noonan, N. D.
S of H—Mules. Track gage, 34 in.
S of M—Hand.
EMP—21. Last years tonnage 13,265.
SIZES SHIPT—Lump.
PREP. EQUIPT—Gravty Screens.

HUNNEWELL COAL COMPANY

OWNER—R. J. Hunnewell, Burlington,
N. D.
SA—Al Shipton, Burlington, N. D.

Hunnewell Mine; Drift; Lignite Seam,
142 in. thick.
PO—Burlington, N. D.; SP—Same; CTY—
Ward; RR—Soo Line.
MS—Al Shipton, Burlington, N. D.
S of H—Mules. Track gage 36 in.
S of M—Hand.
Daily tonnage 45.
SIZES SHIPT—Lump.
PREP. EQUIPT—Screens.

HYGRADE COAL COMPANY

General Office, Dunn Center, N. D.
PR—A. H. Pelton, Dunn Center, N. D.
VP—Nettie Pelton, Dunn Center, N. D.
SECY—W. F. Burnett, Dickinson, N. D.

Hygrade Mine; Shaft; Seam 240 inches
thick.
PO—Dunn Center, N. D.; SP—Same;
CTY—Dunn RR—North. Pacific.
S of H—Steam locos. Track gage 36
inches.
S of M—Hand.
PP—60 H. P. fire tube boiler.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Bar Screens.

JOHNSON FUEL COMPANY

General Office, Scranton, N. D.
PR—Chas. A. Johnson, Fairfax, S. D.
VP—S. W. Clark, R. field, S. D.
TR—Chas. A. Johnson, Fairfax, S. D.
GM—P. C. Kittle, Scranton, N. D.
GS—Andrew Kalishak, Scranton, N. D.
PA—C. Jobason, Scranton, N. D.
CE—S. M. Darling, Scranton, N. D.
EE—Edgar Perry, Scranton, N. D.
SC—Address the Company, Buyer, C.
Johnson, Scranton, N. D.
SA—Chris. Gullstrap, Crystal Lake, Ia.

John Mine; Slope; Lignite Seam; 246
in. thick.
PO—Scranton, N. D.; SP—Same; CTY—
Bowman; RR—C. M. & St. P.
S of H—Mules and 1 elec. hoist. Track
gage 30 in.
S of M—2 elec. machs.
PP—3 boilers, total 750 H. P. 1—500
K. W. Turbine, 1—150 H. P. engine,
220 volts D. C., 9 pumps.
EMP—55 Last years tonnage 20,000.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Shaker Screens

KEYS COAL CO.

GM—C. E. Keys, Garrison, N. D.
Keys Mine; Slope; Seam 96 in. thick.
PO—Garrison, N. D.; SP—Same; CTY—
McLean; RR—Soo
MS—Claude Keys, Garrison, N. D.
S of H—Rope. Track gage 32 in.
S of M—Hand.
EMP—11. Daily tonnage 75.
SIZES SHIPT—Lump.

KIELHOCK & WIXOM

GM—R. J. Wixom, Columbus, N. D.
Kielhock Mine; Stripping; No. 1 Seam;
108 inches thick.
PO—Columbus, N. D.; SP—Same; CTY—
Burke; RR—G. & N., Soo.
S of H—Mules, gasoline locos. Track
gage 28 inches.
S of M—Hand.
EMP—12 Last fiscal year output,
9,000 tons.
SIZES SHIPT—Lump.
PREP. EQUIPT—Bar Screens.
Old information.

KIMBALL COAL COMPANY

GM—A. F. Kimball, Noonan, N. D.
plant.

Kimball Mine; Shaft; Lignite Seam, 92
inches thick.
PO—Noonan, N. D.; SP—Same; CTY—
Divide; RR—Great Northern, Soo.
MS—Henry Greenwood, Noonan, N. D.
S of H—Mules. Track gage 27 inches.
S of M—Hand.
Last years tonnage 8,188.
SIZES SHIPT—Run of Mine, Nut, Lump,
Block.
PREP. EQUIPT—Bar Screens.

KINNEY, LYMAN

PR—O. P. Lein, Hanks, N. D.
GM—Lyman Kinney, Hanks, N. D.

Blue Vein Mine; Drift.
PO—Hanks, N. D.; SP—Same; CTY—
Williams; RR—Great Mountain.
S of H—Mules. Track gage 32 in.
S of M—Hand.
EMP—12.
SIZES SHIPT—Run of Mine.
Old information.

KNUTSEN, K.

General Office, Reeder, N. D.
PR—K. Knutsen, Reeder, N. D.

Leff Mine; Stripping; Seam 96 inches
thick.
PO—Reeder, N. D.; SP—Same; CTY—
Adams; RR—C. M. & St. P.
S of H—Mules, rope.
S of M—Hand.
Last years tonnage 700.
SIZES SHIPT—Egg, Lump.

KUGLER COAL MINE.

Now Crescent Lignite Coal Co.

KUNZE, H. O. COAL MINING COMPANY
Out of Business.

LEASON COAL COMPANY

PR—J. J. Leason, Sawyer, N. D.
GM—J. J. Leason, Sawyer, N. D.
Leason West Mine; Drift; Seam 168-216 inches thick.
PO—Sawyer, N. D.; SP—Same; CTY—Ward; RR—M. & St. L.
MS—Chas. Balding, Sawyer, N. D.
S of H—Mules. Track gage 27 inches.
S of M—Hand.
EMP—7. Last years tonnage 2,000.

LIGNITE DIAMOND COAL COMPANY

OPERATOR—Carl M. Larsen, Columbus, N. D.
Lignite Diamond Mine; Stripping; Seam 90 inches thick.
PO—Columbus, N. D.; CTY—Burke; RR—G. N.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—10. Last fiscal year output, 10,000 tons.
SIZES SHIPT—Lump.
PREP. EQUIPT—Shaker Screens.

LIND BROS. COAL COMPANY.

GM—A. W. Lind, Wilton, N. D.
PA—A. W. Lind, Wilton, N. D.
Lind Mine; Slope; Lignite Seam, 132 inches thick.
PO—Wilton, N. D.; SP—Same; CTY—McLean.
S of H—Mules. Track gage 18 in.
S of M—Hand.
PP—Power purchased, 220 volts D. C.
SIZES SHIPT—Run of Mine.

LITTLE MISSOURI COAL CO.

PR—Fred Jessel, Medora, N. D.
GM—J. H. Craig, Medora, N. D.
GS—Hugh Lochray, Medora, N. D.
EM—J. H. Craig, Medora, N. D.
Little Mo. Mine; Drift; Lignite Seam, 84 in. thick.
PO—Medora, N. D.; SP—Same; CTY—Killings; RR—Mo. Pac.
S of H—Mules. Track gage 30 in.
S of M—Hand and shortwall mach.
EMP—18. Daily tonnage 100.
SIZES SHIPT—Run of Mine, Nut, Lump.
PREP. EQUIPT—Bar Screens.

LLOYD COAL COMPANY.

Out of business.
LOGELIN COAL COMPANY
OWNER—Alex M. Logelin, Noonan, N. D.
Square Deal Mine; Slope; Seam 84 inches thick.
PO—Noonan, N. D.; SP—Same; CTY—Divide; RR—G. N. Soo.
MS—E. J. Logelin, Noonan, N. D.
S of H—Mules. Track gage 27½ inches.
S of M—Hand.
EMP—25. Daily tonnage 100.
SIZES SHIPT—Bar Screens.

LORBESKI COAL CO

OWNER—J. Lorbekski, Noonan, N. D.
Lorbekski Mine; Slope; Seam, 84 in. thick.
PO—Noonan, N. D.; SP—Same. CTY—Divide; RR—Great Northern.
MS—J. Lorbekski, Noonan, N. D.
S of H—Mules and gasoline loco. Track gage 33 in.
S of M—Hand.
PP—1 pump.
EMP—25. Last years tonnage 7,089.
SIZES SHIPT—Nut, Lump.
PREP. EQUIPT—Gravity Screens.

LUCKY STRIKE COAL CO.

General Office, Zap, N. D.
PR—A. L. Farr, Fargo, N. D.
VP—Geo. M. Slowey, Baulab, N. D.
TR—R. M. Stroup, Zap, N. D.
GM—F. L. Anders, Fargo, N. D.
Lucky Strike Mine; Drift; Seam, 84 in. thick.
PO—Zap, N. D.; SP—Same; CTY—Mercer; RR—Northern Pacific.
MS—John Thompson, Zap, N. D.
S of H—Mules. Track gage 36 in.
S of M—Overcutter mach.
PP—1 fire tube boiler, 150 H. P., 1—100 K.V.A. and 1—100 K. W., gen. units, 250 volts D. C. and A. C.
EMP—75. Daily tonnage 150.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

MIDWAY COAL COMPANY

General Office, Metropolitan Bank Bldg., Minneapolis, Minn.
PR—E. C. Pratt, Minneapolis, Minn.
GS—Hadley Graves, Burlington, N. D.
PA—B. A. Pratt, Minneapolis, Minn.
Midway Mine; Slope; Seam, 84 in. thick.
PO—Burlington, N. D.; SP—Midway Striking, N. D.; Ex., Burlington, N. D.
CTY—Ward; RR—Soo Line.

S of H—Mules. Track gage 30 inches.
S of M—Elec. mach.
PP—Power purchased, 220 volts A. C., 1 pump.
EMP—35. Last years tonnage 25,000.
SIZES SHIPT—Lump.

MONTGOMERY MINE

General Office, Harvey, N. D.
Montgomery Mine; Drift; Seam 88 inches thick.
PO—Stanton, N. D.; SP—Same; CTY—McLean; RR—Stanton.
S of H—Mules.
S of M—Hand.
Last years tonnage 2,100.
SIZES SHIPT—Lump.
PREP. EQUIPT—Shaker Screens.

NORTH CREEK COAL COMPANY

OPERATOR—Dean Wiley, South Heart, N. D.
North Creek Mine; Stripping; Seam 168 inches thick.
PO—South Heart, N. D.; SP—Same; CTY—Stark; RR—N. P.
S of M—Hand.
EMP—10. Last years tonnage 2,000.
SIZES SHIPT—Run of Mine.

PEARL BUTTE MINE.

GM—Clarence Holdridge, Haynes, N. D.
Pearl Butte Mine; Drift; Seam 120 in. thick.
PO—Haynes, N. D.; SP—Same; CTY—Adams; RR—C. M. & St. P.
S of H—Mules, rope and gasoline locos. Track gage 30 in.
S of M—Hand.
Daily output 900.
SIZES SHIPT—Lump.
PREP. EQUIPT—Bar Screens.
PP—1—100 H. P. fire tube boiler, M.

PEOPLES COAL COMPANY

Now Peoples, Power, Fuel & Clay Products
General Office, Fargo, N. D.
PR—Porter Kimball, Fargo, N. D.
VP—C. O. Swenson, Northwood, N. D.
CE—S. E. Cullum, Fargo, N. D.
Peoples Power Mine; Shaft; Seam 72 inches thick.
PO—Kenmare, N. D.; SP—Same; CTY—Ward; RR—Soo.
MS—Wallace Hodgson, Kenmare, N. D.
S of H—Mules, electric loco.
S of M—Undercutter.
PP—Power purchased, Volts D. C.
SIZES SHIPT—Lump.
PREP. EQUIPT—Shaker Screens.
Old Information.

PEOPLES POWER, FUEL & CLAY PRODUCTS COMPANY

General Office, Fargo, N. D.
PR—Porter Kimball, Fargo, N. D.
VP—C. O. Swenson, Northwood, N. D.
CE—S. E. Cullum, Fargo, N. D.
Peoples Power Mine; Shaft; Seam 72 inches thick.
PO—Kenmare, N. D.; SP—Same; CTY—Ward; RR—Soo.
MS—Wallace Hodgson, Kenmare, N. D.
S of H—Mules, electric loco.
S of M—Undercutter.
PP—Power purchased, Volts D. C.
SIZES SHIPT—Lump.
PREP. EQUIPT—Shaker Screens.
Old Information.

PITTSBURG COAL MINING CO.

General Office, Dickinson, N. D.
PR—E. A. Hughes, Bismarck, N. D.
VP—C. B. Little, Bismarck, N. D.
TR—O. N. Dunham, Bismarck, N. D.
GM—Henry Truelsen, Lehigh, N. D.
GS—Mike Bertone, Lehigh, N. D.
PA—Henry Truelsen, Lehigh, N. D.
SA—Dakota Lignite Mines Co., Dickinson, N. D.

Pittsburg Mine; Slope; Lehigh Seam, 72 inches thick.
PO—Lehigh, N. D.; SP—Same; CTY—Stark; RR—Northern Pacific.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—2 pumps.
EMP—30. Daily tonnage 125.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
Old Information.

RED TRAIL COAL CO

General Office, Medora, N. D.
No report.

RUPP COAL COMPANY

PR—Ed. Rupp, Garrison, N. D.
Rupp Mine; Shaft; Seam, 84 in. thick.
PO—Garrison, N. D.; SP—Same; CTY—McLean; RR—Southern.
MS—John Dixon, Garrison, N. D.
S of H—Mules and elec. locos. Track gage 36 in.
S of M—Shortwall and chain breast machs.
PP—Power purchased, 250 volts D. C.
EMP—28. Last years tonnage 16,000.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT—Bar Screens.
NOTE—Formerly operated by the Garrison Coal & Light Co.

SANTHER COAL COMPANY

Out of Business.

SOUTH DAKOTA COAL MINE COMMISSION

PR—Gov. W. H. McMaster, Pierre, S. D.
TR—R. A. Phillips, Haynes, N. D.
GM—E. O. Raush, Haynes, N. D.
PA—E. O. Raush, Haynes, N. D.
CE—D. F. Radcliff, Pierre, S. D.
SA—R. Boyd, Phillip, S. D.

Com. No. 1 Mine; Drift; Lignite Seam, 158 inches thick.
PO—Raynes, N. D.; SP—Same; CTY—Adams; RR—C. M. & St. P.
S of H—Mules and main and tail rope. Track gage 30 inches.
S of M—Hand and 1 shortwall mach.
G. Set, 250 volts.
EMP—25. Daily tonnage 300.
SIZES SHIPT—Run of Mine, Slack, Lump.

SPRING VALLEY PRODUCTS CO.

General Office, Glen Ullin, N. D.
PR—H. H. Lidstrom, Glen Ullin, N. D.
GM—A. A. Truelsen, Glen Ullin, N. D.
PA—H. A. Warner, Glen Ullin, N. D.
CE—J. M. Hansen, Bismarck, N. D.
SA—Dr. A. Schutt, Bismarck, N. D.

Spring Valley Products No. 1 and No. 2 Mines; Drifts; Lignite Nos. 1 and 2 Seams, 120-108 inches thick.
PO—Glen Ullin, N. D.; SP—Same; CTY—Morton; RR—North Pacific.
MS—L. C. Lidstrom, Glen Ullin, N. D.
S of H—Mules. Track gage 42 inches.
S of M—1 shortwall.
PP—Power purchased, 1—150 H. P. fire tube boiler, 1—100 K. W. gen. unit, 220 volts A. C., 1 pump.
EMP—30. Last years tonnage 2,200.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

SQUARE DEAL COAL COMPANY

PR—F. W. Frye, Williston, N. D.
GM—F. A. Lyman, Williston, N. D.
PA—W. S. Lyman, Williston, N. D.
EM—F. W. Frye, Williston, N. D.

Square Deal Mine; Drift; Seam 108 inches thick.
PO—Williston, N. D.; SP—Same; CTY—Williams; RR—Great Northern.
MS—Fred Frye, Williston, N. D.
S of H—Mules. Track gage 30 inches.
S of M—Hand.
Last years tonnage 3,200.
SIZES SHIPT—Lump.
PREP. EQUIPT—Bar Screens.

STAR COAL & ICE COMPANY

OPERATORS—Dr. Mars and Dr. Gardner, Williston, N. D.

Star Mine; Shaft; Lignite Seam, 108 inches thick.
PO—Williston, N. D.; SP—Same; CTY—Williams; RR—G. N.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—10. Daily tonnage 75.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Screens.

SUNLIGHT COAL COMPANY

GM—J. S. Greenup, Columbus, N. D.
SA—Trox Coal Co., Columbus, N. D.

Sunlight Mine; Stripping.
PO—Columbus, N. D.; SP—Same; CTY—Burke; RR—Soo, G. N.
S of H—Mules.
S of M—Steam shovel.
Last fiscal year output, 8,000 tons.
SIZES SHIPT—Lump.
Old Information.

TRIPP MINE

GM—N. O. Nelson, Center, N. D.
Tripp Mine; Stripping; Seam 120 inches thick.
PO—Center, N. D.; SP—Fort Clark, N. D.; CTY—Olliver; RR—N. P.
S of H—Mules.
S of M—Hand.
Last years tonnage 3,176.

TRUAX COAL COMPANY

PR—E. M. Truax, Columbus, N. D.
VP—A. H. Truax, Columbus, N. D.
GM—E. M. Truax, Columbus, N. D.
Greenup Mine; Stripping; Seam, 120 inches thick.
PO—Columbus, N. D.; SP—Same; CTY—Burke; RR—G. N.
S of H—2 14-ton steam locos. Track gage 36 inches.
S of M—Stripping.
EMP—25.
SIZES SHIPT—Run of Mine, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

U. S. RECLAMATION SERVICE.

General Office, Williston, N. D.
GM—Wm. S. Arthur, Williston, N. D.
GS—W. J. Vergett, Williston, N. D.
PA—Wm. S. Arthur, Williston, N. D.
FE—A. C. Brown, Williston, N. D.
SCO—J. R. S. Mercantile Store; Buyer, Wm. S. Arthur, Williston, N. D.
Reclamation Mine; Drift, 72 to 108 in. thick.
PO—Williston, N. D.; SP—Same; CTY—Williams; RR—G. N.

S of H—Mules. Track gage, 36 in.
S of M—Hand.
PP—Water tube boilers, 2000 H. P., 2 300 K. W., 1 500 K. W. gen. units, transformer, 22000 to 2200 volts A. C.
EMP—30. Last years tonnage 15,000.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Bar Screens.
Note—This mine operated solely to generate power for irrigation purposes and for city lighting and power.

VIZINA COAL CO.

PR—Mr. and Mrs. Vizina, Williston, N. D.
Vizina Mine; Drift; Blandet Ledge Seam, 9 ft. thick.
PO—Williston, N. D.; SP—Same; CTY—Williams; RR—Great Northern.
MS—C. S. Vizina, Williston, N. D.
S of H—Mules. Track gage 26 in.
S of M—Hand.

WASHBURN LIGNITE COAL CO. (THE).

PR—W. P. Macomber, Wilton, N. D.
VP—Stanley Washburn, Minneapolis, Minn.
TR—W. H. Keller, Minneapolis, Minn.
GM—W. P. Macomber, Wilton, N. D.
GS—J. L. Enright, Wilton, N. D.
PA—F. M. Pettygrove, Wilton, N. D.
CE—David Wilson, Sr., Wilton, N. D.
LE—J. G. Iverson, Wilton, N. D.
SCO—Address the Company, Buyer, F. M. Pettygrove, Wilton, N. D.

Wilton No. 2 Mine; Shaft; Seam, 122 in. thick.
PO—Wilton, N. D.; SP—Same; CTY—Burleigh; RR—Soo, N. P.
S of H—Mules and 3 trolley pole type locos. Track gage 42 in.
S of M—9 chain breast type machs.
PP—5 fire tube boilers, 600 H. P., 3 225 K. W., D. C., 1 160 Kva., A. C. gen. units, transformer 2300 to 220 volts A. C., M. G. sets, 220 volts D. C., 10 pumps.
EMP—300. Last years tonnage 244,695.
SIZES SHIPT—Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

WHITTIER CROCKETT COAL CO.

General Office, Columbus, N. D.
OWNERS—H. A. Whittier, Northfield, Minn.; E. R. Crockett, Columbus, N. D.

Whittier Crockett Mine; Drift and Stripping; Lignite Seam, 96 in. thick.
PO—Columbus, N. D.; SP—Same and Stamped, N. D.; CTY—Burke; RR—Great Northern.
S of M—Steam shovels.
PP—2 water tube boilers, total 250 H. P.
EMP—40. Last years tonnage 51,000.
SIZES SHIPT—Run of Mine, Nut, Lump, Block.
PREP. EQUIPT—Shaker Screens.

WILLISTON COAL & ICE CO.

PR—J. A. Husbye, Williston, N. D.
TR—Louis Hanson, Williston, N. D.
GM—J. A. Husbye, Williston, N. D.
GS—Mack Hendricks, Williston, N. D.

Husbye Mine; Drift; Upper Seam, 120 in. thick.
PO—Williston, N. D.; SP—Same; CTY—Williams; RR—G. N.
S of H—Mules, 1 gasoline loco, 1 steam loco. Track gage, 36 in.
PP—Power purchased, transformer 2200 to 220 volts A. C.
EMP—38. Last years tonnage 23,705.
SIZES SHIPT—Lump, Block.
PREP. EQUIPT—Gravity Screens.

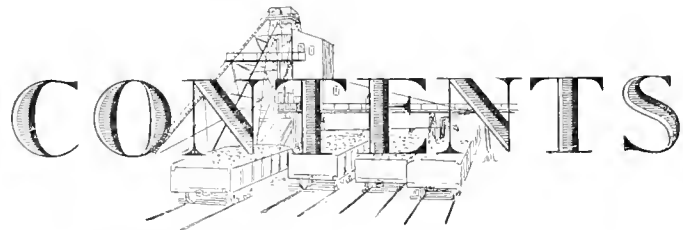
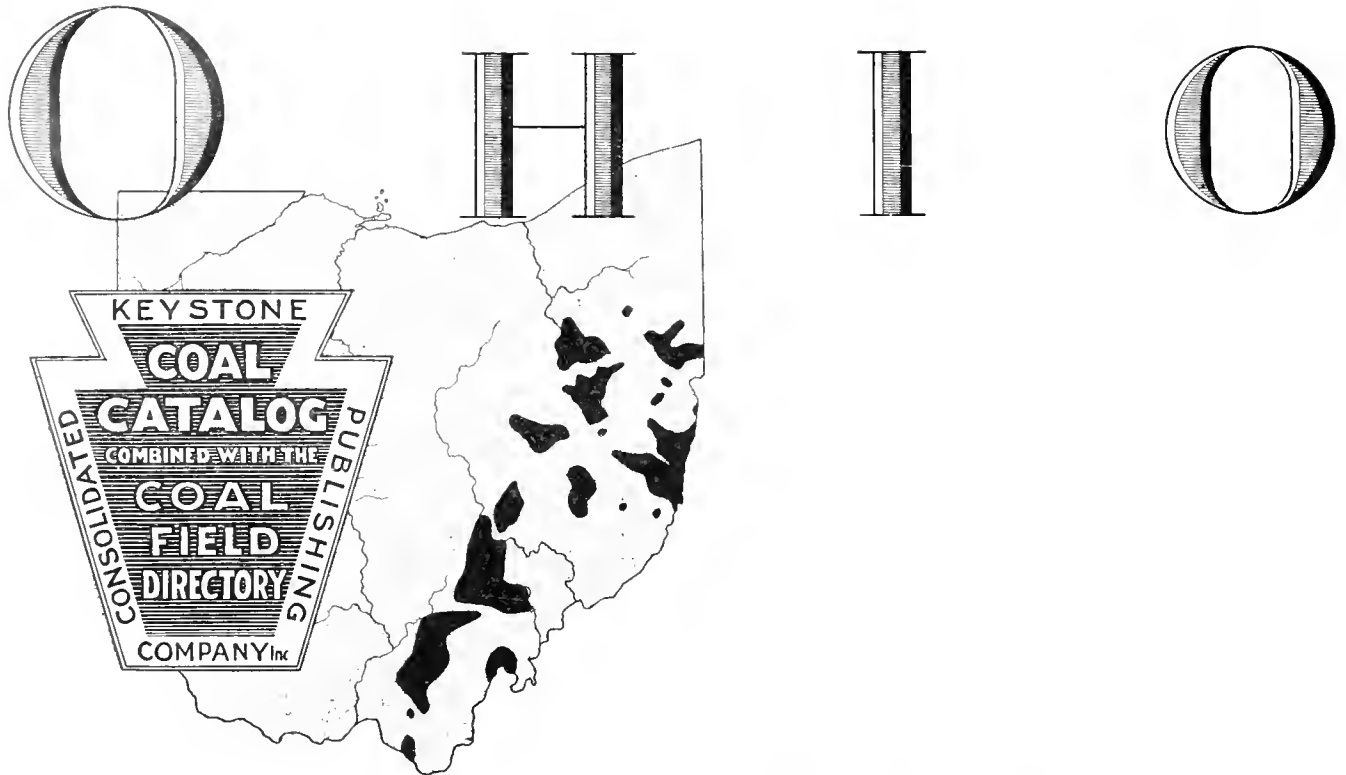
WOOD MINING COMPANY

GM—Milo G. Wood, Velva, N. D.
Wood Mine; Drift; First Seam, 144 inches thick.
PO—Velva, N. D.; SP—Same; CTY—Ward; RR—Soo.
MS—Will Paimly, Velva, N. D.
S of H—Rope and gasoline loco.
S of M—Hand and shortwall machs.
Last years tonnage 2,066.
SIZES SHIPT—Run of Mine.

ZENITH LIGNITE MINES

General Office, Fargo, N. D.
PR—Hansen Exsmch, Fargo, N. D.
VP—Ruggles Exsmch, Fargo, N. D.
GM—Hansen Exsmch, Fargo, N. D.
PA—C. R. Ruggles, Zenith, N. D.
SCO—Zenith M. & Ice Co. Buyer, C. C. Ruggles, Zenith, N. D.

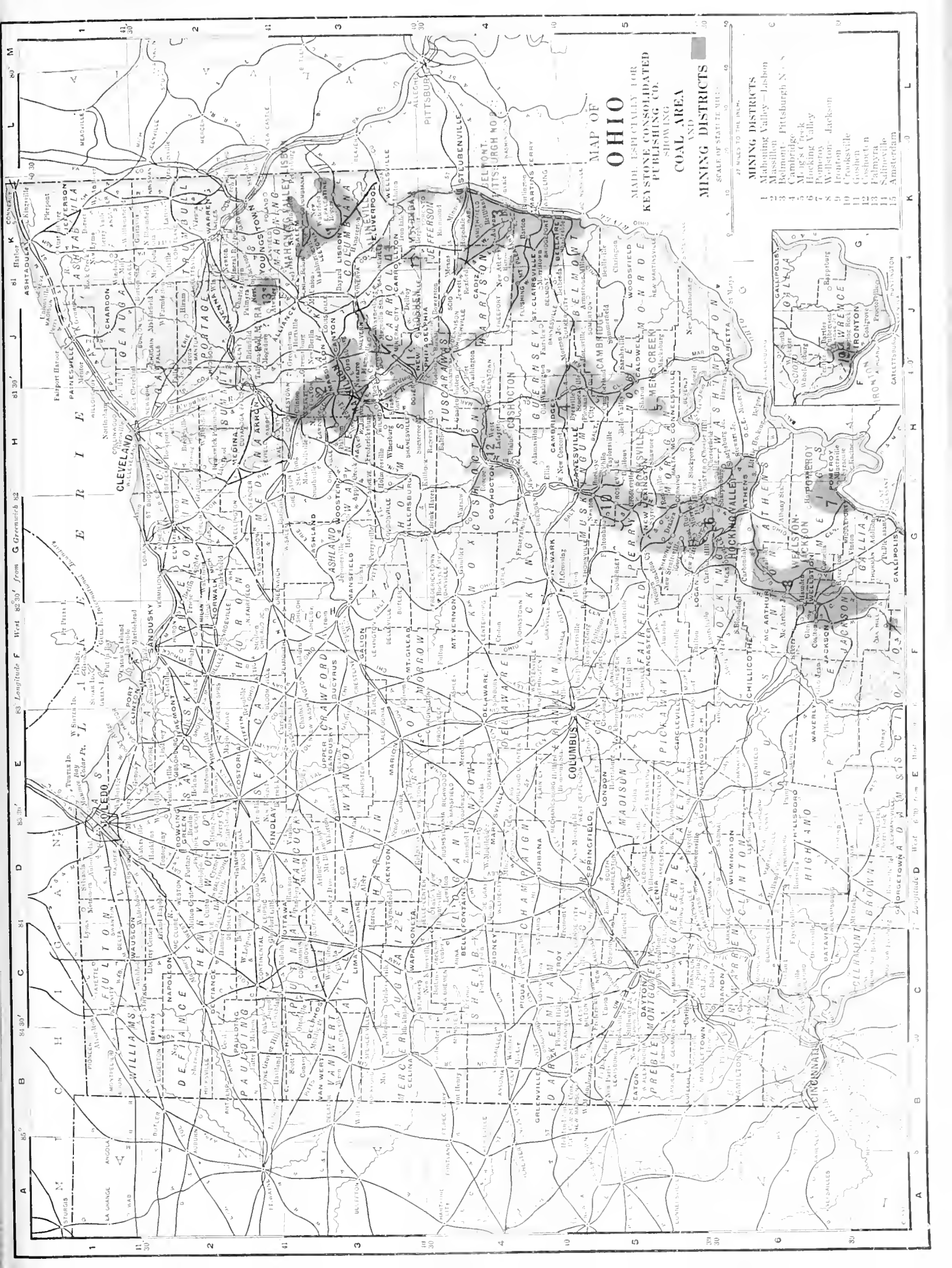
Zenith Lignite Mine; Slope; Zenith Seam, 22 feet thick.
PO—Zenith, N. D.; SP—Same; CTY—Stark; RR—Northern Pacific.
MS—Valentine Soule, Zenith, N. D.
S of H—Mules and rope, steam loco. Track gage 30 inches.
S of M—Hand and longwall machs.
PP—2 150 H. P. water tube boilers.
Last years tonnage 30,000.



Map of Mining Districts.....	opp. page 600
Sectional View of Coal Formations.....	opp. page 601
General Description of Coal Resources.....	601, 602

Meigs Creek Seam.....	602
Redstone Seam.....	602
Pittsburgh Seam.....	602
Upper Freeport Seam.....	603
Lower Freeport Seam.....	603
Middle Kittanning Seam.....	603
Lower Kittanning Seam.....	604
Brookville Seam.....	604
Clarion Seam.....	604
Upper Mercer Seam.....	605
Lower Mercer Seam.....	605
Quakertown Seam.....	605
Sharon Seam.....	605

Preparation and Sizing of Coal.....	606
Supplementary Analyses.....	607 to 609
Descriptive Advertisements.....	610, 611
List of Mines by Seams.....	612 to 620
Alphabetical Directory of Coal Mines....	621 to 651
List of Mines by Counties.....	652 to 654



MAP OF OHIO
MADE ESPECIALLY FOR
KEYSTONE CONSOLIDATED
PUBLISHING CO.
SHOWING
COAL AREA
AND
MINING DISTRICTS

27 MILES TO THE INCH.
SCALE OF STATUTE MILES

- MINING DISTRICTS
- 1 Mahoning Valley - Lisbon
 - 2 Massillon
 - 3 Belmont - Pittsburgh N. S.
 - 4 Cambridge
 - 5 M. G. S. Creek
 - 6 Hocking Valley
 - 7 Pomeroy
 - 8 Wellston - Jackson
 - 9 Ironton
 - 10 Crooksville
 - 11 Goshen
 - 12 Coshocton
 - 13 Palmyra
 - 14 Salineville
 - 15 Amsterdam

































GEOLOGICAL COLUMN OF OHIO COAL STRATA













































Arranged from Columns

by

R. M. HASELTINE and
W. G. BURROUGHS

OHIO COAL STRATA—Continued

Geo- logical Series	Strata	Section	Feet
Upper Barren Measures or Dunkard	Limestone.....		7
	Sandstone.....		40
	Jollytown Seam.....		1—2
	Sandstone and Shale.....		70
	Washington Seam.....		1—6
	Sandstone and Shale.....		20—40
	Waynesburg Seam.....		1½—4
	Fire-clay.....		1
	Sandstone and Shale.....		30
	Limestone.....		6
Upper Coal Measures Monongahela	Sandstone.....		45
	Meigs Creek Seam.....		3—6
	Fire-clay.....		3
	Sandstone.....		35—40
	Redstone Seam.....		2½
	Fire-clay.....		1½
	Limestone.....		30—70
	Black Shale.....		2—10
	Pittsburg Seam.....		4—8
	Fire-clay.....		3
Lower Barren Measures Conemaugh	Limestone.....		4—30
	Sandstone and Shale.....		110
	Shale.....		5—10
	Crinoidal Limestone.....		2—8
	Shale.....		1—17
	Norwich Seam No. 7b.....		1½—4
	Fire-clay.....		2
	Sandstone and Shale.....		50—100
	Shale.....		2—10
	Groff or Stripe Seam.....		1—6
	Fire-clay.....		
	Sandstone and Shale.....		50

Geo- logical Series	Strata	Section	Feet
Lower Coal Measures Alleghany	Upper Freeport Seam.....		0—5
	Fire-clay.....		3
	Limestone.....		2—10
	Sandstone.....		0—50
	Gray Shale.....		0—50
	Buff Limestone.....		0—10
	Black Band Iron Ore.....		0—14
	Fire-clay.....		3—5
	Limestone.....		0—10
	Lower Freeport Seam.....		3—5
	Sandstone and Shale.....		40—50
	Upper Kittanning Seam.....		0—6
	Fire-clay.....		3—5
	Sandstone.....		0—50
	Gray or Black Shale.....		5—50
	Middle Kittanning Seam.....		3—12
	Fire-clay.....		3—5
	Limestone.....		3—5
	Gray or Black Slate.....		25—50
	Lower Kittanning Seam.....		2—5
	Fire-clay.....		3—6
	Sandstone and Shale.....		20—40
	Limestone.....		2—8
	Upper Clarion Seam.....		1—7
	Fire-clay.....		2—12
	Sandstone.....		6
	Brookville Seam.....		2
	Sandstone and Shale.....		10—60
	Tionesta Seam.....		3
	Sandstone and Shale.....		10—20
	Bruce Seam.....		2—3
	Limestone with Iron Ore.....		2—6
	Lower Mercer Seam.....		3
	Fire-clay.....		5—15
	Sandstone and Shale.....		30—50
	Quakertown Seam.....		1—5
	Fire-clay.....		1—2
	Shale.....		20—50
	Sandstone.....		20—80
	Gray Shale.....		5—40
Pottsville Conglomerate	Sharon Seam.....		3—6
	Fire-clay.....		2—5
	Sandstone and Shale.....		10—50
	Conglomerate.....		

OHIO*

General Description of the Geology of the State With the Ranks of Coal Produced;
Treats of the Mining Districts, With a Map Showing Their Location, All
Seams Lying Within the Territory, and the Railroads Serving Same;
Description of the Producing Seams Showing Their Geological
Order, Kinds of Coal, General Analysis, Etc.

The coal fields of Ohio are situated in the eastern and southeastern parts of the state and embrace an area of about 12,600 square miles. The actual area underlaid with workable coal is however much less than this. The Ohio field constitutes the most northern part of the great Appalachian region and is a direct continuation westward of the bituminous fields of Pennsylvania. All of the coals are of bituminous rank with a high volatile content, and in comparison with like coals of Pennsylvania are characterized by a larger quantity of moisture, ranging from 4 to 10 per cent., and a correspondingly reduced thermal value. Coal is mined in 30 counties from one or more of the twelve minable seams.

The Carboniferous formations, as found throughout the state, are very regular, and with very little dip. Few, if any, folds are encountered and but a small number of low and gentle arches. Faults are practically non-existent.

In addition to its valuable coal beds, Ohio has in the northern half of the state an area of 155,000 acres underlaid with peat deposits of an average thickness of about 10 feet, and in many places of such good quality as to be adaptable for fuel purposes. Although there is little probability that these peat beds will be worked for many years to come, yet they constitute an important reserve in the mineral wealth of the state.

Ohio coals are used almost entirely for domestic, steaming and locomotive fuel purposes. A small amount of coke is produced from the Lower Kittanning seam, but in most localities this seam, like all others in Ohio, contains too much sulphur to entitle it to metallurgical usage. For the same reason these coals are impossible for the manufacture of illuminating gas, and but few of them are adapted to the burning of ceramic ware. The Quakertown seam, however, is without a superior for kiln firing. Several of the seams produce a coal suitable for special purposes such as rolling mill and blast furnace work.

Ohio is well provided with railroads, the following serving to tap the various coal fields: Hocking Valley, Toledo and Ohio Central; Baltimore and Ohio; Erie Railroad; Wheeling and Lake Erie; Cleveland, Lorrain and Wheeling; Cleveland, Akron and Columbus; Zanesville and Western; Toledo Division of the Pennsylvania Railroad; Lake Erie, Alliance and Wheeling; Marietta, Columbus and Cleveland Railway; Detroit Southern; Pittsburgh and West Virginia Railroad, and Kanawha and Michigan Railroad.

There are ten mining districts of major importance in Ohio, as follows:

MINING DISTRICTS OF OHIO

- 1 Mahoning Valley. Seams mined are the Upper Freeport and Middle Kittanning. These produce steam, railroad and domestic fuel. Railroads serving are the Pennsylvania lines and the Erie.
- 2 Massillon. Seams mined are the Brookville, Sharon, Upper Freeport and Middle Kittanning. These produce steam, railroad and domestic fuels. Railroads serving are the Pennsylvania lines; Wheeling and Lake Erie, and Cleveland, Akron and Cincinnati Railroad.
- 3 Belmont. Seams mined are the Pittsburgh and Lower Freeport. These produce steam, railroad and domestic fuels. Railroads serving are Pennsylvania lines; Wheeling and Lake Erie, and Baltimore and Ohio, C. L. & W. division.
- 4 Cambridge. Seams mined are the Pittsburgh and Upper Freeport. These produce steam, locomotive and domestic fuels. The railroads serving are the Baltimore and Ohio and Marietta, Columbus and Cleveland.
- 5 Meigs Creek. Seams mined are the Meigs Creek and Pittsburgh. These produce steam, railroad and domestic fuels. The railroad serving is the Baltimore and Ohio.
- 6 Hocking Valley. Seams mined are the Upper Freeport and Middle Kittanning. These produce steam, railroad and domestic fuels. Railroads serving are Baltimore and Ohio Southwestern; Kanawha and Michigan; Hocking Valley; Zanesville and Western; Toledo and Ohio Central.
- 7 Pomeroy. Seams mined are the Redstone and Pittsburgh. These produce steam, railroad and domestic fuels. Railroad serving is the Hocking Valley.
- 8 Wellston. Seams mined are the Quakertown, Brookville and Sharon. These produce steam, railroad, domestic and kiln burning coals. Railroads serving are Cincinnati, Hamilton and Dayton; Hocking Valley; Baltimore and Ohio Southwestern, and Detroit Southern.
- 9 Ironton. Seams mined are the Lower Kittanning and Brookville. These produce steam, railroad and domestic fuels. Railroads serving are Detroit Southern and Cincinnati, Hamilton and Dayton.
- 10 Crooksville. Seam mined is Middle Kittanning. This produces a steam, railroad and domestic fuel. Railroads serving are the Baltimore and Ohio; Wheeling and Lake Erie, and Zanesville and Western.
- 11 Goshen. Seams mined are the Upper Freeport, Lower Kittanning and Middle Kittanning. Used principally as steam, railroad and do-

*For much of the information on Ohio coals, we are indebted to the following: Bulletin No. 9 and Volume 7 of the Ohio Geological Survey; Professional Paper 169-B, by J. A. Bownocker, State Geologist; "Coals of Ohio and Their Limitations for By-Product Coke," by Wilber Stout, Assistant State Geologist, in Bulletin A. I. M. M. E.; "The Coal Fields of Ohio," by N. G. Burroughs in Colliery Engineer, Vol. 33, pg. 544; "The Coal Fields of Ohio," by J. S. Burrows in Coal Age, Vol. 7, pg. 124.

- mestic fuels. Railroads serving are the Pennsylvania, Baltimore and Ohio, Wheeling and Lake Erie.
- 12 Coshocton. Seams mined are the Middle Kittanning, Lower Kittanning and Mercer. Used principally as steam, railroad and domestic fuels. Railroads serving are the Pennsylvania and Wheeling and Lake Erie.
- 13 Palmyra. Seam mined is the Sharon, suitable for melting, tile and pottery burning and domestic uses. Railroad serving is the New York Central.
- 14 Salineville. Seam mined is the Upper Freeport. Used principally for steam, railroad and domestic uses. Railroad serving is the Pennsylvania.
- 15 Amsterdam. Seams mined are the Lower Freeport and Middle Kittanning. Used principally for steam, railroad and domestic uses. Railroad serving is the New York Central.

The coal seams of Ohio will be described in the descending order, beginning with the Meigs Creek seam, which is the highest seam of commercial importance in the state.

UPPER PRODUCTIVE COAL MEASURES

Meigs Creek Seam. (Known also as No. 9 Seam; Macksburgh Seam; it is the equivalent of the Sewickley Seam of Pennsylvania and West Virginia.) (Mined in Meigs Creek district.)

The place of this seam in the series is 75 to 100 feet above the Pittsburgh coal. Its outcrop has been traced in Muskingum, Guernsey, Morgan, Noble, Monroe, Washington, Belmont and Harrison counties, but in the first two named it is hardly in sufficient quantity to be workable. The seam lacks the persistence and regularity of the Pittsburgh coal, and is also its inferior in quality. Sometimes it is divided into two benches by a prominent bed of shale or clay, but more often this structure is wanting. Sometimes the seam is without any parting, but usually one or more bands of shale, clay or pyrite is found. Both floor and roof are irregular, rising or dipping, and thus modifying the thickness of the seam. Especially is this true of the roof which may suddenly cut out the coal.

In its best condition it shows a thickness of 4 feet 6 inches of marketable coal, but in many localities it falls to 4, 3 and 2 feet. It is used for steam, locomotive and domestic uses.

GENERAL ANALYSIS

Moisture	4.00
Volatile Matter	36.00
Fixed Carbon	48.50
Ash	11.50
Sulphur	4.25
B. t. u.	12,250

Redstone Seam. (Known also as No. 8a Seam; Pomeroy Seam.) (Mined in Meigs, Gallia and Lawrence counties.)

This seam is very generally known as the Pomeroy coal, and for many years as such was supposed to be the same as the Pittsburgh seam. Later investigation, however, clearly proved that the Pomeroy coal was a higher coal and that it should be correlated with the Redstone coal of Pennsylvania and West Virginia. It is at its best in Meigs county. It is found above drainage wherever due, and in the southern part provides one of the important coal fields of the state. In the northern part the seam is underlain by the

Pittsburgh, and between them is usually found a thin bed of limestone. Farther south the Pittsburgh coal entirely disappears. Overlying the Redstone seam is a massive sandstone, sometimes resting directly on the coal, but occasionally it is separated from it by a bed of shales of varying thickness. Redstone coal is of very little importance in Athens county, but is found in minable thicknesses in the three counties mentioned above.

The top section of the seam is usually a dirty or impure coal which is rejected in mining. The output of the mines is used for steam, railroad and domestic purposes.

GENERAL ANALYSIS

Moisture	6.75
Volatile Matter	35.00
Fixed Carbon	47.75
Ash	10.50
Sulphur	2.40
B. t. u.	11,875

Pittsburgh Seam. (Known also as No. 8 Seam; Federal Creek in Morgan and Athens counties.) (Mined in Cambridge, Meigs Creek and Belmont districts.)

The Pittsburgh coal, lying at the base of the Monongahela formation, outcrops over a wide area in Ohio, but the member has workable thickness only in three fields which are widely separated. Outside of these fields the coal is thin and usually worthless. In its extension from the great districts in Pennsylvania into eastern Ohio, this coal increases in sulphur and ash, loses in coking and heating qualities, and shrinks in thickness. In importance, however, the Pittsburgh coal ranks second in the state, being surpassed only by the Middle Kittanning.

The Belmont is by far the largest of the three fields. It includes nearly the whole of Belmont county, the southern two-fifths of Jefferson county, the southeastern third of Harrison county, and smaller portions of Guernsey, Noble and Monroe counties. Although coal has been mined in the Belmont field since 1825, the quantities yet available are sufficient to last for many years, according to Stout. The thickness of the bed is from 2 to 6 feet, with always a few thin partings of no particular trouble in mining.

The Straight Creek field lies in the southwest corner of Morgan county, and in the northeast part

of Athens county. The bed varies from 3 to 6 feet in thickness and, beside thin partings, is regularly divided by a structure of clay about 1 foot thick. Much of the coal from this field is mined for railroad shipment.

The third field of Pittsburgh coal lies in southern Gallia county, but the area is small and the coal of poor quality.

In some localities the roof conditions are very bad. In the Belmont field the top consists of a stratum of clay and limestone mixed irregularly and in places stratified to some extent with slate. It varies from 3 to 20 feet in thickness and is soft

and easily disintegrated by moisture. It is difficult to hold and often comes down without warning. The coal in this field is a bright, well jointed, and well faced coal. It is fairly tough and strong, mines in good sized blocks and stands transportation well. The coal finds a ready sale for steam, railroad and domestic purposes.

GENERAL ANALYSIS

Moisture	4.75
Volatile Matter	36.35
Fixed Carbon	49.80
Ash	9.10
Sulphur	3.80
B. t. u.	12,560

LOWER COAL MEASURES

Upper Freeport Seam. (Known also as No. 7 Seam; Black Band coal in Stark and Tuscarawas counties; Big Vein of Salineville; Del Ray and Sherrodsville coal; Cambridge coal; Alexander coal of Muskingum county; Blue Rock coal of the Muskingum Valley; Bayley's Run and Norris coal of the Hocking Valley; Waterloo coal of Gallia county.) (Mined in the Cambridge, Hocking Valley, Mahoning Valley and Massillon districts.)

This seam extends from the Ohio-Pennsylvania line, in Columbiana county, southwesterly across the state to the Ohio river, in Lawrence county. The bed lacks the persistency of the Middle Kittanning, but at that it ranks third in importance. In places it is well developed and worked on a large scale, but throughout more extensive areas it is thin and of little value.

In Columbiana county, the Upper Freeport coal has been mined for many years near East Palestine and Salineville and, according to Stout, the fields are yet far from exhaustion. The normal thickness of the bed here is between 5 and 6 feet.

The most important field in Ohio centers about Cambridge in Guernsey county, where the bed has been extensively mined for many years. Large quantities of coal, however, are yet available. The sulphur content, about 1.30 per cent, is considerably less than the general average. "This coal has been successfully used in the by-product oven but the structure of the coke is not up to standard. By mixing it with other coals, more satisfactory results should be obtained. When coked alone, the yield is about 60 per cent, and the sulphur not above 1.25 which may be considerably lowered by careful selection and preparation. This field has possibilities for by-product coke plants that are worthy of investigation."*

The Upper Freeport on the whole does not carry an excessive amount of ash, but is rather high in sulphur. It is somewhat lacking in physical strength and therefore does not bear transportation as well as the Lower Kittanning seam. It is used for steam, railroad and domestic purposes.

GENERAL ANALYSIS

Moisture	6.50
Volatile Matter	36.00
Fixed Carbon	50.50
Ash	7.00
Sulphur	2.00
B. t. u.	12,600

Lower Freeport Seam. (Known also as No. 6b Seam; Roger coal; Whan coal of Lisbon; Steubenville Shaft coal; Hamden Furnace coal of Vinton county; Hatcher coal of Lawrence county.) (Mined in Jefferson county.)

This seam is thin and uncertain except in the Steubenville district along the Ohio River, where it attains a thickness of nearly 4 feet and is mined to some extent. At no other point does it attain importance enough to warrant mining in a large way at the present time. In the Hocking Valley it is occasionally fairly well developed, attaining a maximum thickness of 3 feet. The coal is of good quality, though not consistently so. It is used mostly for steam and domestic purposes.

GENERAL ANALYSIS

Moisture	3.75
Volatile Matter	36.95
Fixed Carbon	52.20
Ash	7.10
Sulphur	2.50
B. t. u.	13,320

Middle Kittanning Seam. (Known also as No. 6 Seam; Hocking Valley coal; Osnaburg coal of Stark county; Pike Run and Dennison coal of Tuscarawas county; Coshocton coal; Upper Zanesville coal; Upper New Lexington coal; Nelsonville and Straitsville coal; Great Vein of the Hocking Valley; Carbondale and Mineral City coal; Upper Zaleskie coal; Washington Furnace coal; Block bed; Hammondville strip bed; Dry Run coal, and Sheridan coal.) (Mined in Hocking, Perry, Tuscarawas, Athens, Coshocton, Carroll and Muskingum counties.)

Because of its quantity and quality this is the most valuable seam in Ohio. According to Bownocker, it is found along the state line in Columbiana county, and can not only be followed with ease across the state to Lawrence county, on the Ohio river, but it is worked in every county where it should appear above drainage and in most of them on a large scale. The following description by Doctor Orton refers to the Hocking Valley field, where this seam has its maximum development: "In structure the Hocking Valley coal always has the three benches of the normal Middle Kittanning seam, with some additions of its own. In other words, the great deposit consists of the normal three bench seam of the Middle Kittanning system

*Coals of Ohio and Their Limitations for Byproduct Coke, by Wilbur Stout, Asst. Geologist, Geol. Surv. of Ohio, in Vol. LXIII Trans. A. I. M. E.

covered and reinforced by a Hocking Valley supplementary seam, the latter consisting of one or two, or more benches. The supplementary seam is separated from the original seam by a thin shale parting which is often disregarded in mining, but which is for the most part distinctly recognizable when looked for. The supplementary seam of the Hocking Valley is, in the general view, counted with the upper bench of the normal seam, the whole being known as the top coal. It has a maximum thickness of 10 feet. All the thickness of the Hocking Valley seam in excess of 6 feet, and in many parts of the field in excess of $4\frac{1}{2}$ feet, is to be credited to the supplementary seam. There are numerous irregular partings in this top coal when it becomes thick, only one of which is widely extended and measurably regular. A 4-inch black slate, known as the third slate, and charged with *Sigillaria* impressions, is found 8 to 9 feet above the bottom of the great deposit, everywhere throughout Monroe township in the Sunday Creek Valley. As it now appears it is the same horizon at which a constant layer of cannel coal is found throughout the western portions of the deposit. The coal above the slate becomes a rider seam. It runs too high in ash in most of the field where it occurs to be fairly marketable. It reaches a maximum thickness of 4 feet, but most of it is left in the mines. The composition of the coal is fairly uniform. Taken as a whole it is an open burning coal, but the lower bench, burned by itself, is somewhat cementing. It is distinctly laminated and holds a moderate portion of mineral charcoal. It ignites easily, swells slightly in burning, and leaves a white or gray ash. It is well approved for steam generation, and also for rolling mill fuel. For household use it is admirably adapted, rivaling in this line of service the block coals of the Mahoning and Tuscarawas valleys."

GENERAL ANALYSIS

	Athens.	Coshocton.	Tuscarawas.
Moisture	6.75	4.85	5.10
Volatile Matter ..	34.50	38.20	39.00
Fixed Carbon ..	51.45	48.50	48.65
Ash	7.30	8.45	7.25
Sulphur	1.25	4.50	3.80
B. t. u.	12,410	12,350	12,750

Lower Kittanning Seam. (Known also as No. 5 Seam; Leetonia Seam; Creek Vein; Hammondville coal; Potter's Vein; Clay Vein; Mineral Point coal; Lower New Lexington coal, and New Castle coal of Lawrence county.) (Mined in the Iron-ton district.)

This seam of the Lower Coal Measures can be traced from Mahoning county southwest across Ohio to Lawrence county, on the western side of which it is important, being known as the New Castle coal. It is a notably persistent bed, being found in nearly every county in the coal fields of the state. The bed lies nearly flat and from 20 to 30 feet above the ferriferous limestone. It carries considerable "sulphur" and also shale partings. In thickness this coal is generally less than 3 feet, although in a few places it increases to 4 or 5 feet. It has a good development in Columbiana county, and in Tuscarawas county, where it reaches its

greatest thickness, it is the source of a considerable output. Extensive development of the Lower Kittanning seam has been retarded by the presence of two seams, the Quakertown and the Clarion, both of which are more valuable. The product of the mines is used chiefly for steam, railroad and domestic purposes.

GENERAL ANALYSIS

Moisture	5.00
Volatile Matter	38.00
Fixed Carbon	48.40
Ash	8.60
Sulphur	3.30
B. t. u.	12,800

Clarion Seam. (Known also as No. 4a Seam; county.) (Important in Columbiana, Vinton, Jackson, Gallia, Lawrence and Scioto counties.)

In quality the Clarion seam is rated low amongst Ohio coals. It lies directly below the ferriferous limestone and by reason of this is limited principally to the southwestern extension of the Ohio coal fields. In some places it is separated from the limestone by a thin bed of shale. It varies in thickness from 1 to 6 feet. This seam being in the same regions geographically as the Wellston coal, has forced it into competition with the latter and thus its development has been retarded. Furthermore, it is a high sulphur, high ash coal and forms much clinker in burning. As the Limestone coal of Jackson, Gallia and Vinton counties it is, however, an important source of fuel. It enters the market chiefly as a steam and domestic fuel. Small deposits, varying from 3 to 4 feet in thickness, have been worked in Columbiana county for railroad use.

GENERAL ANALYSIS

Moisture	6.00
Volatile Matter	39.00
Fixed Carbon	43.50
Ash	11.50
Sulphur	4.75
B. t. u.	11,980

Brookville Seam. (Known also as No. 4 Seam; Gray Limestone coal; Winter's coal of Vinton county; Flint Run coal, and Conway coal of Lawrence county.) (Mined in Stark and Vinton counties.)

This seam is included in the Lower Coal Measures and lies nearly flat. It ranges from 2 to 4 feet in thickness and carries a regular bone and shale parting, and other partings that are irregular. It is a relatively unimportant bed, being mined only in a few places, and is used as a steam and domestic fuel.

GENERAL ANALYSIS

Moisture	5.30
Volatile Matter	39.00
Fixed Carbon	45.00
Ash	10.70
Sulphur	4.30
B. t. u.	12,200

CONGLOMERATE COAL MEASURES

Upper Mercer Seam. (Known also as No. 3a Seam; Bedford Cannel Coal.) (Mined in Coshocton county.)

The Upper Mercer seam lies directly below the Upper Mercer limestone. It is unsteady in extent and thickness and variable in composition and structure. The best known field is in Coshocton county, where it has excellent thickness over a few square miles and where it is represented by both cannel and bituminous coal. The thickness varies from 3 to 9 feet, but averages about 5 to 6 feet. The bituminous coal occurring with the cannel is usually of poor quality, as it is high in ash. Mining conditions are good.

GENERAL ANALYSIS (Cannel Coal)	
Moisture	2.35
Volatile Matter	47.05
Fixed Carbon	37.00
Ash	13.60
Sulphur	2.35

Lower Mercer Seam. (Known also as No. 3 Seam; Wilbur Seam; Flint Ridge coal; No. 2 coal of Mahoning county; Blue Limestone coal.) (Mined in Carroll and Mahoning counties.)

This coal belongs to the Pottsville formation. It is found around the entire margin of the Ohio Coal Measures averaging 3 feet in thickness, but is generally of little commercial value. Where thick enough to justify mining, the seam is so much mixed with slate as to be a most unsatisfactory fuel. The coal, however, is of good quality, provided it is cleanly mined. This bed is developed to a small extent in the counties named, and is used largely as a domestic fuel.

GENERAL ANALYSIS	
Moisture	3.25
Volatile Matter	36.50
Fixed Carbon	55.00
Ash	5.25
Sulphur	2.00

Quakertown Seam. (Known also as No. 2 Seam; Wellston coal; Jackson Hill coal.) (Mined in the Wellston district, Jackson county, and near McArthur in Vinton county.)

This seam is found between the two divisions of the Pottsville formation. Where both the Quakertown and the Sharon coals occur the distance between them, according to Haseltine, ranges from 45 to 75 feet. It is generally a thin and commercially unimportant bed, but is the principal seam of Jackson county, where it has been extensively mined at Wellston, although this area is more than 60 per cent. worked out. The thickest portion of the bed (from 3 to 4½ feet) has been exhausted and in the sections now working the coal will average but a little over 2 feet 6 inches.

The Wellston coal is fairly tender and does not stand mining and transportation well. Nevertheless it has enjoyed a wide reputation for many years as a domestic fuel. Sulphur and ash are low and what ash there is falls through the grate bars like wood ashes. It does not cake or clinker in burning, and is one of the best in the country for burning ceramic ware, even surpassing the famous West

Virginia coals. It burns freely with a long flame, which impinging on the face of the ware, produces a clear bright color and a thorough bonding of the components. Its other commercial uses are as steam, railroad and domestic fuels.

In Vinton county, near McArthur, the coal averages about 3 feet in thickness, but the known area is only a few square miles. The quality of the fuel is excellent, being low in both sulphur and ash.

GENERAL ANALYSIS

Moisture	7.50
Volatile Matter	32.50
Fixed Carbon	57.00
Ash	3.00
Sulphur	0.80
B. t. u.	12,500

Sharon Seam. (Known also as No. 1 Seam; Palmyra coal; Mahoning block coal; Brier Hill coal; Massillon coal; Wadsworth coal; Jackson Shaft coal in Jackson county.) (Mined in the Massillon field of Stark county, and in Jackson county.)

Although now nearly exhausted, this seam was extensively mined in the earlier years, beginning about 1828. It is the lowest of Ohio coal beds and is workable in only the extreme parts of the coal fields of the State—at Massillon and vicinity in Stark county and at Jackson and vicinity in Jackson county. The latter field is almost negligible in importance, and it is estimated that at the present low rate of production, the Massillon district will be worked out in ten years.

The Massillon coal attains thicknesses of from 4½ to 5 feet, but it changes sharply and may pinch out in a short distance. Changes are due to unevenness in both roof and floor, usually the former. The average thickness is close to 4 feet. It does not cake in burning, has a lustrous appearance, has well defined joints and comes from the mine in large lumps or blocks. The great use for this coal has always been for domestic purposes. It is clean, ignites easily, makes a hot fire and produces little ash. At one time it was used quite extensively in the raw state for iron smelting in the Youngstown district.

The Sharon seam in Jackson county varies from 2 to 5 feet in thickness, with an average close to 3 feet. It contains less sulphur than any other coal in the state, is hard, and analyzes low in ash. It is one of the few coals of the country that are still being used raw in the blast furnace for making pig iron. It is also much sought for domestic use, but unfortunately nearly all of this coal has been mined out.

GENERAL ANALYSIS Massillon Field

Moisture	5.30
Volatile Matter	37.00
Fixed Carbon	53.50
Ash	4.20
Sulphur	0.80
B. t. u.	12,300

PREPARATION OF COAL

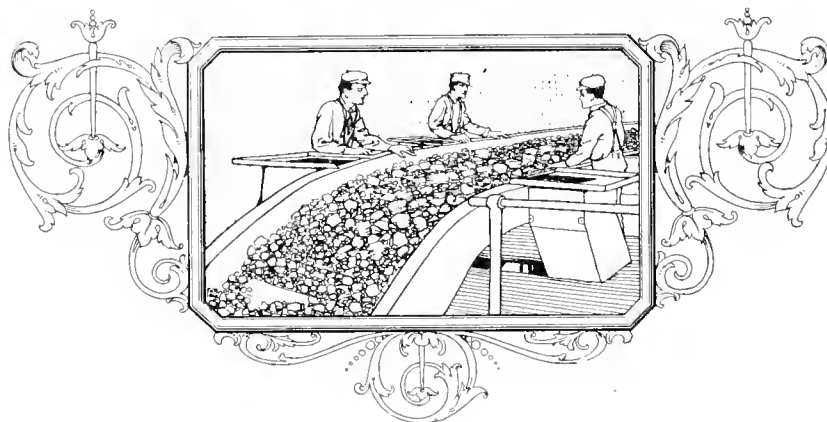
The laws of Ohio require that the miner be paid for his coal on a run-of-mine basis. This tends to the production of a larger percentage of fine coal than where the mining rate is based on the weight of the lump coal passing over the screen. Previous to the enactment of this law, the initial preparation was governed by an agreement between the coal operators and the United Mine Workers of America which specified as follows:

"Screens hereby adopted for the state of Ohio shall be uniform in size, six feet wide by twelve feet long, built of flat or Akron shaped bars of not less than $\frac{5}{8}$ of an inch surface with $1\frac{1}{4}$ inches between bars, free from obstructions, and that such

screen will rest upon a sufficient number of bearings to hold the bars in proper position." These screens and sizes as indicated are still retained by many operators. The fine coal passing through the $1\frac{1}{4}$ -inch screen may be rescreened over a bar screen having $\frac{1}{2}$ or $\frac{3}{4}$ -inch screens, making pea and slack.

A goodly portion of the Ohio coals enter the domestic markets, and these meet the competition from surrounding states. This requires careful cleaning and sizing, which is accomplished, in many instances, by the use of shaker screens, picking tables and loading booms.

For additional information on uses and analyses of Ohio coals, see the descriptive advertisements on coal mines following the Supplementary Analyses.



Analyses of Ohio Seams by Counties and Localities

(ALL ANALYSES MADE ON MINE SAMPLES "AS RECEIVED")

See Descriptive Advertisements of Ohio Mines for Additional Analyses

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carbon	Oxygen	RATIOS	
											Carbon	F. C.
											Oxy. + Ash	V. M.
*Bakerstown.....	Guernsey, 1 mi. s. e. of Hartford.....	Slovak.....	4.33	40.21	45.07	10.39	3.75	12,492	68.30	10.67	3.24	1.12
*Brookville.....	Jackson, 9 mi. s. e. of Wellston.....	No. 10.....	7.71	38.32	42.02	11.95	4.61	11,515	62.49	14.43	2.37	1.10
*Brookville.....	Vinton.....	Clarion.....	6.79	40.01	45.54	7.66	3.34	12,514	....	....	....	1.14
*Clarion.....	Jackson, Kitchen.....	Halls.....	4.90	35.75	45.65	13.70	6.14	11,628	62.57	11.47	....	1.25
*Clarion.....	Jackson, Milton Twp.....	Iron Valley.....	5.61	38.92	47.38	8.09	3.70	12,280	67.30	14.16	2.02	1.22
*Clarion.....	Lawrence, Decatur Twp.....	Hall.....	6.11	38.43	45.52	9.94	3.61	11,960	65.53	14.28	2.71	1.18
*Clarion.....	Lawrence, Decatur Twp.....	McGuigan & Co.....	6.34	35.30	40.95	17.41	5.29	10,741	57.92	13.40	1.88	1.16
*Clarion.....	Lawrence, Washington Twp.....	Edwards.....	6.00	39.16	42.98	11.86	5.10	11,734	63.32	13.24	2.52	1.10
*Clarion.....	Scioto, Effort Station.....	Morgan & Horton.....	6.80	37.92	45.94	9.34	3.45	11,839	65.30	15.35	2.65	1.21
*Clarion.....	Vinton, Elk Twp.....	Dickson.....	4.95	39.17	46.56	9.32	3.53	12,450	67.17	13.28	2.97	1.19
*Clarion.....	Vinton, Vinton Twp.....	Hanging Rock.....	5.02	40.31	46.52	8.15	2.87	12,530	68.52	13.69	3.14	1.15
*Clarion.....	Vinton, Vinton Twp.....	Vinton.....	4.61	41.35	42.94	11.10	5.28	12,050	64.91	12.05	2.80	1.04
*Clarion.....	Vinton, Wilkesville Twp.....	Keck.....	4.72	39.88	44.19	11.21	4.16	12,050	65.04	12.95	2.69	1.11
*Clarion.....	Jefferson, Amsterdam.....	Amsterdam.....	3.50	37.98	51.08	7.44	3.09	13,286	73.39	9.19	4.41	1.34
*Freeport, Lower.....	Jefferson nr. Bergholtz.....	Eastern Ohio.....	3.69	37.97	49.59	8.75	2.82	13,109	71.76	9.96	3.84	1.31
*Freeport, Lower.....	Jefferson, Steubenville.....	La Belle.....	3.82	35.90	53.43	6.83	1.90	13,352	74.20	10.36	4.31	1.49
*Freeport, Upper.....	Coshocton, Clarke Twp.....	Dart.....	6.40	37.92	52.49	3.19	2.01	13,185	72.72	15.16	3.96	1.38
*Freeport, Upper.....	Gallia, Walnut Twp.....	Sanders.....	7.62	32.85	47.14	12.39	1.81	11,468	63.48	15.85	2.25	1.44
*Freeport, Upper.....	Guernsey, Danford.....	Forsythe.....	6.65	33.94	48.86	10.55	3.13	12,179	67.38	12.44	2.32	1.44
*Freeport, Upper.....	Guernsey, 1 mi. s. e. of Hartford.....	Waldbonding No. 2.....	6.49	35.41	52.57	5.53	0.88	12,940	73.41	13.32	3.89	1.48
*Freeport, Upper.....	Guernsey, 1 mi. w. of Lore City.....	Black Top.....	6.07	35.04	51.56	7.33	1.95	12,712	71.24	12.72	3.55	1.47
*Freeport, Upper.....	Guernsey, 1 1/2 mi. s. e. of Senecaville.....	Cleveland.....	6.00	34.22	51.95	7.83	1.98	12,721	71.38	12.11	3.60	1.52
*Freeport, Upper.....	Guernsey, 1 1/2 mi. s. e. of Senecaville.....	Peach.....	8.77	31.70	50.82	8.71	0.76	11,860	66.88	17.08	2.60	1.60
*Freeport, Upper.....	Lawrence, Symmes Twp.....	Sanders.....	7.13	33.65	50.31	8.91	1.31	12,089	67.09	16.08	2.68	1.50
*Freeport, Upper.....	Lawrence, Walnut Twp.....	Maynard.....	7.20	32.85	49.88	10.67	2.33	11,470	65.03	15.69	2.47	1.52
*Freeport, Upper.....	Muskingum, Brush Creek Twp.....	Blue Rock.....	4.82	43.47	44.25	7.56	5.00	12,680	68.27	12.30	3.44	1.02
*Freeport, Upper.....	Muskingum, Harrison Twp.....	Zanesville.....	4.89	42.35	44.98	7.78	4.36	12,499	67.74	13.42	3.20	1.06
*Freeport, Upper.....	Muskingum, Wayne Twp.....	Noble.....	5.11	35.50	46.79	12.60	3.84	11,800	64.81	12.39	2.59	1.32
*Freeport, Upper.....	Noble, 1 mi. n. w. of Belle Valley.....	No. 10.....	5.15	37.34	49.00	8.51	2.94	12,733	70.51	11.12	3.59	1.31
*Freeport, Upper.....	Jackson, 9 mi. s. e. of Wellston.....	No. 11.....	9.01	35.85	43.80	11.34	4.02	11,495	62.79	15.27	2.36	1.22
*Kittanning, Lower.....	Jefferson, Milton Twp.....	Gr. Western.....	8.39	35.18	49.01	7.42	2.65	12,190	66.63	16.46	2.79	1.39
*Kittanning, Lower.....	Jefferson, Toronto.....	Smith.....	2.46	38.48	51.66	7.40	3.82	13,660	74.20	7.93	4.84	1.34
*Kittanning, Lower.....	Mahoning, Washingtonville.....	Lutz.....	5.23	36.86	53.19	4.72	2.17	11,704	73.84	12.36	4.32	1.44
*Kittanning, Lower.....	Muskingum, Washington Twp.....	Coplin.....	5.05	39.75	47.43	7.77	4.80	12,569	68.07	12.81	3.31	1.19
*Kittanning, Lower.....	Perry, Pike Twp.....	McMonigals.....	6.85	35.22	47.77	10.16	4.72	11,860	64.78	13.86	2.70	1.36
*Kittanning, Lower.....	Perry, Pike Twp.....	Huff Run No. 1.....	6.74	37.05	49.09	7.12	2.58	12,393	68.31	15.25	3.05	1.32
*Kittanning, Lower.....	Tuscarawas, Mineral City.....	Huff.....	5.30	38.73	48.26	7.71	3.25	12,900	69.75	12.65	3.43	1.25
*Kittanning, Lower.....	Tuscarawas, Mineral City.....	Huff.....	4.49	40.55	47.43	7.53	2.93	12,958	69.64	12.93	3.40	1.17
*Kittanning, Lower.....	Tuscarawas, Mineral City.....	Huff.....	4.49	40.55	47.43	7.53	2.93	12,958	69.64	12.93	3.40	1.17
*Kittanning, Middle.....	Athens, Athens Twp.....	Continental.....	6.17	36.40	49.61	7.82	0.90	12,362	69.22	15.33	2.99	1.36
*Kittanning, Middle.....	Athens, Athens Twp.....	Continental.....	6.36	34.19	50.96	8.49	0.51	12,450	69.25	14.92	2.96	1.49
*Kittanning, Middle.....	Athens, Dover Twp.....	Continental.....	7.14	34.22	51.92	6.72	1.65	12,350	69.32	15.45	3.13	1.52
*Kittanning, Middle.....	Athens, Trimble Twp.....	Continental No. 4.....	7.28	32.38	53.61	6.75	0.86	12,410	69.46	16.16	3.03	1.62
*Kittanning, Middle.....	Athens, Waterloo.....	Carbondale.....	6.7	35.4	51.2	6.75	2.28	12,460	69.21	15.09	3.17	1.45
*Kittanning, Middle.....	Carroll, Sherrodsville.....	Somers.....	3.76	39.11	50.34	6.79	3.06	13,028	71.99	11.40	3.91	1.29
*Kittanning, Middle.....	Columbiana, Dry Run.....	Blackford.....	3.60	36.16	55.64	4.60	1.76	14,020	77.06	9.74	5.37	1.54
*Kittanning, Middle.....	Coshocton, Crawford Twp.....	Baker.....	4.70	39.20	44.81	11.29	5.60	11,870	61.78	11.98	2.78	1.14

(Continued on Next Page)

*Bullietus Bureau of Mines. †United States Geological Survey Reports. ‡State Geological Survey Reports.

COAL CATALOG

ANALYSES OF OHIO SEAMS BY COUNTIES AND LOCALITIES—Continued

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determin'd B, T, U.	Carbon	Oxygen	RATIOS		
											Carbon	F. C.	V. M.
†Kittanning, Middle.	Coshocton, Franklin Twp.	Best.	4.33	41.11	48.97	5.59	4.00	13.080	71.42	12.36	3.98	1.19	
†Kittanning, Middle.	Coshocton, Keene Twp.	McClure.	5.40	39.92	49.60	5.08	3.18	12.949	70.90	14.02	3.71	1.24	
†Kittanning, Middle.	Coshocton, Lafayette Twp.	Patton.	4.50	37.73	50.80	5.97	3.63	12.910	61.59	14.23	3.05	1.35	
†Kittanning, Middle.	Coshocton, Linton Twp.	.....	10.93	34.00	48.43	6.64	2.03	11.040	...	...	...	1.43	
†Kittanning, Middle.	Coshocton, Linton Twp.	Hammersly.	5.02	38.16	47.25	9.56	5.97	12.164	63.08	21.73	2.22	1.24	
†Kittanning, Middle.	Coshocton, White Eyes Twp.	McFarland.	5.60	34.69	46.43	13.28	4.87	11.200	70.94	12.63	2.70	1.34	
†Kittanning, Middle.	Gallia, Greenfield Twp.	Black Diamond.	8.08	37.53	45.87	8.52	3.64	12.031	65.71	15.47	2.74	1.22	
†Kittanning, Middle.	Hocking, Ward Twp.	No. 2.	9.72	32.44	53.41	4.43	2.57	12.247	69.50	18.58	3.02	1.65	
†Kittanning, Middle.	Hocking, Green Twp.	Haydenville.	6.55	37.30	49.18	6.97	2.57	12.420	68.40	15.43	3.05	1.32	
†Kittanning, Middle.	Hocking, Starr Twp.	Washburn.	6.52	38.30	47.15	8.03	3.53	12.330	67.33	15.45	2.87	1.23	
†Kittanning, Middle.	Hocking, Ward Twp.	Green & Hite.	7.40	34.17	43.43	5.00	1.06	12.650	70.58	16.49	3.28	1.27	
†Kittanning, Middle.	Holmes, Walnut Creek Twp.	Zatmer.	7.31	34.92	53.56	4.21	1.00	12.514	70.62	17.31	3.28	1.53	
†Kittanning, Middle.	Muskingum, Harrison Twp.	Wells.	4.67	40.32	45.18	9.83	4.10	12.370	67.71	11.82	3.13	1.12	
†Kittanning, Middle.	Muskingum, Newton Twp.	Jones.	5.02	38.16	47.26	9.56	5.97	12.164	65.88	12.18	3.03	1.24	
†Kittanning, Middle.	Muskingum, Washington Twp.	Lacey.	5.44	39.15	46.13	9.28	3.77	12.280	67.16	13.27	2.98	1.18	
†Kittanning, Middle.	Perry, Bearfield Twp.	National No. 34.	5.90	36.58	47.42	10.10	4.96	12.040	65.43	13.03	2.83	1.30	
†Kittanning, Middle.	Perry, Dixie.	Dixie.	7.55	38.00	46.08	8.37	2.84	12.128	67.02	15.00	2.87	1.21	
†Kittanning, Middle.	Perry, Harrison Twp.	Crescent.	5.70	38.83	47.02	8.45	3.38	12.330	67.77	13.85	3.04	1.21	
†Kittanning, Middle.	Perry, Monroe Twp.	S. C. C. No. 8.	6.79	35.45	51.85	5.91	1.00	12.570	70.30	16.00	3.21	1.46	
†Kittanning, Middle.	Perry, Pike Twp.	Tharp.	5.25	38.85	46.04	9.86	3.43	12.190	66.05	14.10	2.76	1.19	
†Kittanning, Middle.	Perry, Shawnee.	Gosline & Barber.	9.90	33.66	44.86	11.58	1.81	11.277	63.06	17.04	2.20	1.33	
†Kittanning, Middle.	Stark, Alliance.	Slout.	5.99	39.05	50.14	4.82	3.61	13.165	71.83	12.86	4.06	1.28	
†Kittanning, Middle.	Stark, Nimshillen Twp.	McGinty.	5.65	38.51	45.76	10.08	4.13	12.360	66.92	12.39	2.98	1.19	
†Kittanning, Middle.	Tuscarawas, Bucks Twp.	Troyer.	3.15	40.79	48.15	5.87	3.55	12.820	70.12	13.51	3.62	1.18	
†Kittanning, Middle.	Tuscarawas, near Newcomerstown.	Stonebrook.	3.45	40.02	48.46	7.67	5.22	12.840	70.02	10.53	3.85	1.22	
†Kittanning, Middle.	Tuscarawas, Waynesburg.	Whitacre.	6.66	36.24	48.88	8.22	2.66	12.560	68.94	13.61	3.16	1.35	
†Kittanning, Middle.	Vinton, Swan Twp.	Cherry.	4.90	39.16	45.79	8.22	2.66	12.321	66.26	12.71	2.90	1.17	
†Meigs Creek.	Belmont, 1 mi. s. w. of Barnesville.	Davy.	4.34	38.95	45.50	11.21	3.65	12.492	68.17	10.46	3.15	1.17	
†Meigs Creek.	Belmont, Barnesville.	Malden.	4.47	35.31	47.15	13.07	3.27	12.000	65.83	11.71	2.66	1.34	
†Meigs Creek.	Belmont, Flushing.	Flushing.	4.98	33.30	48.90	12.82	2.41	11.970	66.31	12.32	2.64	1.47	
†Meigs Creek.	Belmont, Goshen Twp.	Statler.	3.40	35.72	45.94	14.94	4.39	.....	68.32	11.86	2.90	1.59	
†Meigs Creek.	Belmont, Laferly.	Lodge.	4.31	32.47	51.54	11.68	1.94	.....	64.77	9.96	2.60	1.29	
†Meigs Creek.	Belmont, Union Twp.	Dunbar.	4.17	35.09	51.14	9.60	3.11	.....	69.90	11.33	3.34	1.46	
†Meigs Creek.	Harrison, Barnesville.	.....	4.47	35.31	47.15	13.07	3.27	12.002	68.67	12.38	3.03	1.55	
†Meigs Creek.	Harrison, New Athens.	Kirk.	5.35	33.09	51.27	10.29	2.20	12.393	67.04	12.26	2.96	1.24	
†Meigs Creek.	Morgan, Bristol Twp.	Lawrence.	5.05	37.83	46.75	10.37	4.30	12.110	67.04	12.11	2.91	1.26	
†Meigs Creek.	Morgan, Reinersville.	Grandstaff.	4.07	37.61	47.66	10.66	5.07	12.202	66.19	12.11	2.76	1.22	
†Meigs Creek.	Noble, Brookfield Twp.	Pickinbaugh.	3.54	37.41	45.82	13.23	6.21	11.956	64.44	10.12	2.76	1.22	
†Meigs Creek.	Noble, Enoch Twp.	Grandstaff.	2.90	37.24	49.70	10.16	4.27	12.690	68.53	10.78	3.27	1.34	
†Meigs Creek.	Noble, 3 mi. s. e. of Quaker City.	Griffin.	4.14	38.42	44.82	12.62	3.61	12.130	66.87	10.48	2.89	1.11	
†Meigs Creek.	Noble, 1 mi. w. of Steamtown.	Moore.	3.57	41.53	44.37	10.53	4.87	12.505	68.15	10.09	3.30	1.07	
†Meigs Creek.	Noble, Summerfield.	Hague.	3.12	37.36	46.67	12.85	5.60	12.130	65.61	9.93	2.88	1.25	
†Meigs Creek.	Washington, Elba.	Schimmel.	3.49	37.95	49.07	9.58	5.03	12.749	68.33	10.85	3.34	1.29	
†Meigs Creek.	Columbiana, New Lisbon.	.....	1.30	37.10	57.15	4.45	1.95	.....	.....	.....	.....	1.54	
†Mercer, Lower.	Holmes, Millersburg.	.....	4.20	32.20	56.60	7.00	3.34	.....	.....	.....	.....	1.76	
†Mercer, Lower.	Holmes, Nashville.	.....	3.90	40.50	49.95	5.65	1.55	.....	.....	.....	.....	1.23	
†Pittsburgh.	Summit, Greentown.	.....	3.25	38.75	55.05	2.95	1.73	.....	.....	.....	.....	1.42	
†Pittsburgh.	Athens, Lathrop.	Black Diamond.	3.75	37.43	48.79	8.00	4.19	12.300	67.55	14.17	3.05	1.30	
†Pittsburgh.	Belmont, Bailey's Mills.	Cochran No. 2.	3.88	43.09	43.96	9.07	4.36	12.838	69.97	9.87	3.69	1.02	
†Pittsburgh.	Belmont, 3 1/2 mi. s. w. of Barnesville.	Bixler No. 2.	3.9	43.1	43.9	9.07	4.36	12.840	69.97	9.87	3.70	1.02	
†Pittsburgh.	Belmont, Bellaire.	Empire No. 1.	4.14	39.30	47.18	9.38	3.96	12.874	69.58	10.69	3.47	1.20	
†Pittsburgh.	Belmont, Bridgeport.	Aetna-Standard.	3.39	36.84	51.91	7.86	2.97	12.990	71.45	11.27	3.73	1.41	

*Bulletins Bureau of Mines. †United States Geological Survey Reports. ‡State Geological Survey Reports.

(Continued on Next Page)

COAL CATALOG

ANALYSES OF OHIO SEAMS BY COUNTIES AND LOCALITIES—Continued

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined E. T. U.	Carbon	Oxygen	RATIOS		
											Carbon	E. C.	V. M.
											oxy. + Ash		
*Pittsburgh.	Belmont, Neffs.	Neff No. 1.	5.31	36.72	49.45	8.52	3.33	12,843	70.71	10.93	3.63	1.35	
†Pittsburgh.	Belmont, Washington Twp.	Caprina.	2.8	37.9	49.9	9.42	5.09	12,990	69.76	9.39	3.71	1.32	
†Pittsburgh.	Gallia, Green Twp.	Odell.	6.73	34.34	45.90	13.03	4.37	11,440	62.30	14.05	2.30	1.34	
†Pittsburgh.	Gallia, Harrison Twp.	Houck.	7.83	34.15	48.26	9.76	3.89	11,780	64.59	15.49	2.56	1.41	
*Pittsburgh.	Gallia, Harrison Twp.	Kerns.	6.98	36.14	47.85	9.03	5.21	11,850	64.91	14.60	2.75	1.32	
*Pittsburgh.	Guernsey, 1½ mi. n. w. Quaker City.	Sayre.	4.36	41.14	45.76	8.74	4.85	12,710	69.30	10.48	3.61	1.11	
†Pittsburgh.	Harrison, Athens Twp.	Edwards.	5.98	34.35	53.70	5.97	1.35	12,960	72.22	13.71	3.67	1.55	
*Pittsburgh.	Harrison, Blairmont.	Majestic.	2.60	43.4	49.40	7.20	3.55	13,266	72.22	13.71	3.67	1.11	
†Pittsburgh.	Harrison, Cadiz.	Glover.	3.83	36.70	48.59	10.88	4.38	12,300	67.70	10.68	3.14	1.32	
†Pittsburgh.	Harrison, Short Creek Twp.	Dunlap.	6.54	35.48	51.25	6.74	2.10	12,710	70.19	13.66	3.46	1.44	
*Pittsburgh.	Jefferson, near Adena.	Adena.	4.18	36.95	50.65	8.25	2.83	12,890	71.20	11.13	3.67	1.37	
†Pittsburgh.	Jefferson, Bradley.	Crow Hollow.	3.53	37.45	49.90	9.12	3.47	13,072	71.66	9.29	3.89	1.33	
*Pittsburgh.	Jefferson, Brilliant.	Cox.	4.89	33.10	51.55	10.46	4.09	12,520	68.01	11.29	3.13	1.56	
†Pittsburgh.	Jefferson nr. Brilliant.	Goucher No. 2.	4.11	37.96	50.23	7.70	3.84	13,014	71.69	10.15	4.01	1.32	
†Pittsburgh.	Jefferson, Rush Run.	Rush Run No. 1.	4.34	35.53	52.83	7.30	1.72	13,178	72.65	11.70	3.82	1.49	
†Pittsburgh.	Jefferson, 2 mi. e. of Smithfield.	Plum Run No. 1.	4.80	35.90	54.00	5.31	0.98	13,350	74.13	12.77	4.10	1.50	
†Pittsburgh.	Jefferson, 2 mi. s. w. of Smithfield.	Piney Fork No. 1.	4.90	36.60	51.20	7.25	2.60	12,990	71.91	11.50	3.84	1.40	
†Pittsburgh.	Jackson, Coal Twp.	.....	8.77	28.33	61.78	1.12	0.75	.....	.....	.....	.....	2.18	
Quakertown.	Jackson, Coalton.	.....	7.46	36.40	54.97	1.17	0.68	.....	.....	.....	.....	1.51	
Quakertown.	Jackson, Milton Twp.	.....	5.50	35.44	56.60	2.46	0.91	.....	.....	.....	.....	1.60	
†Redstone.	Gallia.	.....	8.21	34.32	46.10	11.46	2.18	11,500	62.95	16.91	2.22	1.34	
†Redstone.	Meigs, near Hobson.	Edwards.	5.51	38.19	45.72	10.58	4.17	.....	65.55	13.35	2.74	1.20	
†Redstone.	Meigs, Pomeroy.	Logan.	7.22	32.82	50.67	9.29	1.32	12,000	66.47	16.43	2.58	1.54	
†Redstone.	Meigs, Pomeroy.	Peacock.	7.33	34.59	49.39	8.69	2.05	12,105	66.71	15.96	2.71	1.43	
†Redstone.	Meigs, Rutland.	Maynard.	7.63	33.33	48.11	10.93	1.83	11,722	65.29	15.12	2.45	1.44	
†Redstone.	Meigs, Syracuse.	Bartels.	4.85	36.28	46.35	12.52	2.94	11,923	65.29	12.76	2.38	1.28	
*Sharon.	Hocking, 5 mi. w. of Jackson.	Decatur No. 1.	13.60	31.75	50.42	4.23	0.86	11,684	.....	.....	.....	1.59	
Sharon.	Jackson.	.....	9.05	35.50	48.98	6.47	0.43	.....	.....	.....	.....	1.38	
Sharon.	Jackson.	.....	7.75	31.27	58.95	2.03	0.53	.....	.....	.....	.....	1.89	
Sharon.	Stark, Massillon.	.....	6.95	32.38	57.49	3.18	0.88	.....	.....	.....	.....	1.78	
*Uniontown.	Belmont, 2 mi. e. of Hunter.	Kemp.	4.70	34.21	45.75	15.34	2.85	11,662	63.71	11.82	2.35	1.34	
*Uniontown.	Monroe, 2½ mi. e. of Coats Station.	Mobley.	4.85	35.93	43.90	15.32	3.96	11,542	63.57	11.07	2.41	1.22	
Washington.	Belmont, 1½ mi. s. w. of Alledonia.	Moore.	4.08	33.69	41.23	21.00	2.86	10,822	59.93	10.36	1.91	1.22	
Waynesburg.	Belmont, 1 mi. s. w. of Alledonia.	Stoffel.	4.57	36.81	44.17	14.45	2.59	11,833	.....	.....	.....	1.20	
Waynesburg.	Belmont, 2 mi. e. of Boston.	Geo. Thomas.	4.46	36.60	44.19	14.75	3.02	11,795	65.32	10.65	2.57	1.21	
†Waynesburg.	Belmont, 1½ mi. n. e. of Hunter.	Milhoan.	4.3	35.3	44.2	16.22	3.53	11,610	64.10	9.97	2.44	1.25	
*Waynesburg.	Belmont, 2 mi. s. e. of Somerton.	Howard Brown.	4.40	37.10	43.06	15.44	2.90	11,657	.....	.....	.....	1.16	

*Bull. tins Bureau of Mines.

†United States Geological Survey Reports.

‡State Geological Survey Reports.

THE CONSOLIDATED MINING CO.

Miners and Shippers of

HOCKING COALS

General Office

8 East Broad Street, COLUMBUS, OHIO

The Consolidated Mining Company is the Sales Agent for each of the following companies, all operating in the No. 6 or Hocking Valley coal seam and located in the state of Ohio:

Name—The Paskell Coal Company.
Location—New Lexington.
Daily Capacity—200 tons.
Sizes Shipped—1½" lump; run-of-mine.

Name—Southern Perry Coal Company.
Location—New Straitsville.
Daily Capacity—150 tons.
Sizes Shipped—Run-of-mine.

Name—Royal Flush Mining Company.
Location—Columbus.
Daily Capacity—50 tons.
Sizes Shipped—Run-of-mine.

Name—Pittsburgh White Oak Coal Company.
Location—Shawnee.
Daily Capacity—150 tons.
Sizes Shipped—Run-of-mine.

Name—Cable Coal Company.
Location—Columbus.
Daily Capacity—300 tons.
Sizes Shipped—3" and 1½" lump.

Name—Humphrey Coal Company.
Location—Shawnee.
Daily Capacity—50 tons.
Sizes Shipped—Run-of-mine.

Name—Primrose Coal Company.
Location—Shawnee.
Daily Capacity—350 tons.
Sizes Shipped—Run-of-mine.

Name—Coalgate Coal Company.
Location—New Straitsville.
Daily Capacity—150 tons.
Sizes Shipped—1½" lump; run-of-mine.

Name—Big Six Coal Company.
Location—Shawnee.
Daily Capacity—200 tons.
Sizes Shipped—1½" lump; run-of-mine.

Name—Shawnee & McCuneville Coal Company.
Location—Shawnee.
Daily Capacity—100 tons.
Sizes Shipped—Run-of-Mine.

Analysis

The following analysis made on a sample taken from the Southern Perry mine is believed to be representative of shipments from all mines:

Moisture	5.45
Volatile Matter	39.78
Fixed Carbon	46.05
Ash	8.72
	100.00
Sulphur	1.96
B. t. u.....	12,461

Seam and Service

The Hocking Valley seam, in which all of the above mentioned mines operate, is widely known as the most valuable seam in Ohio.

It is held in high regard in all quarters as a steam and domestic coal.

With the output of 10 mines to draw upon, The Consolidated Mining Company is in position to render a satisfactory service to all customers.

We will welcome an opportunity to quote you prices.

THE LORAIN COAL & DOCK CO.

General Offices
Huntington Bank Bldg., Columbus, O.

Branch Offices
813-815 Kirby Bldg., Cleveland, O.

Producers of

Number Eight Pittsburgh Coal

It is generally conceded that to The Lorain Coal & Dock Company belongs the credit for the development of the Number Eight Pittsburgh Field along the lines which later made it such a great producing field. It may be safely said that this Company was the pioneer producer in this field. Prior to the advent of The Lorain Coal & Dock Com-

pany, quality and preparation. Number Eight Pittsburgh coal is primarily a steam and domestic coal. As a steam coal, its reputation for uniformly high quality has earned for it the name of the "Standard Steam Coal."

The great bulk of this coal finds a ready market for railroads, manufacturing plants, steel mills, cement plants and factories, flour mills, brick and tile companies, in fact all kinds of manufacturing where an efficient steam coal is necessary. A large amount is used in making retort gas. It is also attracting favorable attention as a by-product coal.

The coal from this field, and particularly that of this Company, has long been one of the most popular coals for lake shipment. Its hard, blocky structure makes it an ideal storage coal.

Analysis*

Moisture	2.20
(Dry Basis)	
Volatile Matter	43.24
Fixed Carbon	50.42
Ash	6.34
	100.00
Sulphur	3.28
B. T. U.	13,864

*Average of 15 analyses made by W. J. Rattle & Son, Cleveland, Ohio.



Tipple at Blaine Mine

pany, modern methods of preparing coal were unknown in the section from which this coal comes. By the installation of up-to-date coal handling and screening methods, making possible economical production of coal, it was demonstrated that the Number Eight Pittsburgh coal was of such uniformly high quality as to make it one of the country's foremost steam coals.

The enormous production of coal in this field at the present time can only be explained by the fact that the demand for the coal exceeds the supply.

The great body of the Number Eight Pittsburgh Seam lies in Belmont County, Ohio, and it is from this county that 25% of all of the coal produced in Ohio comes. Of the producers in the Number Eight Pittsburgh Seam, The Lorain Coal & Dock Company—since its entrance into the field—has always been, and is now, the leading producer.

Location and Number of Mines

The holdings of the Company lie along the Cleveland, Lorain and Wheeling Branch of the Baltimore and Ohio Railroad, and are so situate as to make possible the most economical development of the five large mines which are now operated. The daily production is 8,500 tons.

A Steam and Domestic Coal

The coal in the Number Eight Pittsburgh Seam is, of all the seams in the country, one of the most uniform in quality and structure; thus it is possible to ship from all of the five mines, coal of uniform



Tipple at Crescent Mine

Labor Supply

The five mines are all closely adjacent to the City of Wheeling and towns of Bridgeport, Martins Ferry and Bellaire, Ohio.

An interurban line passes four of the mines and is within a very short distance of the fifth. The National Highway passes through the center of the property.

From these cities and the mining towns around each mine, an adequate supply of labor is at all times available.

List of Mines By Seams, Including Name of Company, General Office Address
County, Railroad and Shipping Point

OHIO

BROOKVILLE SEAM (Known also as NO. 4 SEAM; GRAY LIMESTONE COAL; WINTER'S COAL of Vinton County; FLINT RUN COAL; CONWAY COAL of Lawrence County)
Mined in Jackson, Vinton, and Stark counties. Bituminous rank. Suitable for Steam, Cement Burning, Locomotive Fuel, Producer Gas and Domestic Purposes.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Acme Coal Co.	Alliance, O.	Acme	Stark	P. R. R.	Alliance, O.
Battle Ax Coal Co., The	Massillon, O.	Battle Ax	Stark	W. & L. E.	Massillon, O.
Bear Run Mining Company	Jackson, O.	Bear Run	Scioto	B. & O.	Elfort, Ohio.
Black Hawk Coal Co., The	Hawks, O.	Black Hawk	Vinton	Hocking Valley	Hawks, O.
Cardiff Coal & Clay Co.	Zaleski, O.	Cardiff	Vinton	B. & O.	Zaleski, O.
Christman-Stoner Mining Co.	Massillon, O.	No. 1	Stark	W. & L. E., B. & O.	Justus, Ohio.
Coal, Clay & Rock Products Co.	Akron, O.	Junod	Stark	B. & O.	North Industry, O.
Edgfield Coal Company	21 Arcade Bldg., Canton, Ohio.	Edgfield	Stark	W. & L. E.	Canton, Ohio.
Fulton Coal Co.	Canal Fulton, O.	Fulton	Stark	Penna.	North Industry, O.
Harbison-Walker Refractories Co.	Pittsburgh, Pa.	York	Lawrence	B. & O.	Firebrick, O.
Industrial Mining Co., The	Canton, O.	Fox Run	Stark	B. & O.	North Industry, O.
Lawler, John L. & Son	Columbus, Ohio	Lawler No. 7	Vinton	Hocking Valley	Minerton, O.
Lawler, John L. & Son	Columbus, Ohio	No. 8	Vinton	Hocking Valley	Minerton, O.
Minglewood Coal Co.	Wellston, O.	Minglewood No. 4	Jackson	B. & O., H.V., D.T. & I.	Wellston, O.
Minglewood Coal Co.	Wellston, O.	Minglewood No. 5	Jackson	B. & O., H.V., D.T. & I.	Wellston, O.
Myers, Theo.	North Canton, O.	Myers & Varner	Stark	B. & O.	North Canton, O.
Oak Hill Fire Brick & Coal Co. (The)	Oak Hill, Ohio.	Oak Hill	Jackson	B. & O.	Oak Hill, Ohio.
Portsmouth Refractories Co.	Portsmouth, O.	No. 4	Lawrence	R. & O.	Firebrick, Ohio.
Puro Clay Products Co., The	Oak Hill, O.	Puro	Jackson	B. & O.	Oak Hill, O.
Scott & Harper	Coalton, O.	Jackson No. 2	Vinton	D. T. & I., H. V.	Dundas, O.
Scott & Harper	Coalton, O.	Jackson No. 4	Vinton	D. T. & I., H. V.	Dundas, O.
Sonnhalter, A. F., Coal Co.	Canton, O.	Sonnhalter No. 1	Stark	B. & O.	Canton, O.
Thompson Coal Co.	Columbus, O.	Thompson's	Vinton	H. V.	Radcliff, O.
Wellston Rich Run Coal Co. (The)	Wellston, O.	No. 1	Jackson	B. & O.	Wellston, O.
Wellston Rich Run Coal Co. (The)	Wellston, O.	No. 2	Jackson	B. & O.	Wellston, O.
Wellston Rich Run Coal Co. (The)	Wellston, O.	No. 3	Jackson	B. & O.	Wellston, O.
Wellston Rich Run Coal Co. (The)	Wellston, O.	No. 4	Jackson	R. & O.	Wellston, O.
Wellston Rich Run Coal Co. (The)	Wellston, O.	No. 5	Jackson	R. & O.	Wellston, O.
Wellston Rich Run Coal Co. (The)	Wellston, O.	No. 6	Jackson	B. & O.	Wellston, O.

CLARION SEAM (Known also as NO. 4a SEAM; LIMESTONE COAL of Jackson, Gallia and Vinton Counties; NO. 4 SEAM of Mahoning County)
Important in Vinton, Jackson, Gallia, Lawrence and Scioto counties. Bituminous rank. Suitable for Steam, Cement Burning, Railroad, Producer Gas and Domestic Purposes.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Hocking Fuel Co.	Huntington, W. Va.	Hocking Fuel	Vinton	Hocking Valley	Radcliffe, O.
Iron Valley Coal Co.	P. O. Box 67, Athens, O.	Iron Valley	Jackson	D. T. & I.	Wellston, O.
Jasper Coal Co.	Wellston, O.	Jasper	Jackson	D. T. & I.	Wellston, O.
Minerton Coal Co., The	Columbus, O.	Minerton	Gallia	H. V.	Minerton, O.
New York Coal Co.	Columbus, O.	Orton	Athens	H. V.	Radcliffe, O.
Raccoon Coal Co., The	Wellston, O.	Raccoon	Jackson	D. T. & I.	Wellston, O.
Superior Colliery Co.	Detroit, Mich.	No. 11	Jackson	B. & O.	Wellston, O.
Superior Colliery Co.	Detroit, Mich.	No. 20	Jackson	B. & O.	Wellston, O.

FREEPORT, LOWER SEAM (Known also as NO. 6b SEAM; WHAN COAL of Lisbon; STEUBEN-VILLE SHAFT COAL; HAMDEN FURNACE COAL of Vinton County; HATCHER COAL of Lawrence County)
Mined in Jefferson county. Bituminous rank. Suitable for Steam, Cement Burning, Railroad, Producer Gas, Locomotive Fuel and Domestic Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
American Vitified Products Co.	Akron, O.	Forest City No. 13	Jefferson	Penna.	Toronto, O.
American Vitified Products Co.	Akron, O.	Forest City No. 14	Jefferson	Penna.	Toronto, O.
Enga, F. L. Coal Co.	Newcomerstown, O.	Myrtle	Tuscarawas	Penna.	Wolf, Newcomerstown, O.
Follansbee Bros. Co.	Pittsburgh, Pa.	Markle	Jefferson	C. & P.	Toronto, O.
Kaul Clay Mfg. Co. (The)	Toronto, O.	Kaul	Jefferson	" & P.	Toronto, O.
La Belle Iron Works	Steubenville, O.	La Belle	Jefferson	W. & L. E.	Steubenville, O.
Ohio & Pennsylvania Coal Co.	Cleveland, O.	O. & P. No. 1	Jefferson	N. Y. C.	Rergholz, O.
Ohio & Pennsylvania Coal Co.	Cleveland, O.	O. & P. No. 2	Jefferson	N. Y. C.	Amsterdam, O.
Steubenville Coal & Mining Co.	Steubenville, O.	"High Shaft"	Jefferson	P. C. C. & St. L.	Steubenville, O.
Toronto Fuel Co.	Toronto, O.	Toronto	Jefferson	Penna.	Toronto, O.

FREEPORT, UPPER SEAM (Known also as NO. 7 SEAM; BLACK BAND COAL in Stark and Tuscarawas Counties; BIG VEIN of Salineville; DEL RAY and SHERODSVILLE COAL; CAM-BRIDGE COAL; ALEXANDER COAL of Muskingum County; BLUE ROCK COAL of the Muskingum Valley; BAYLEY'S RUN and MORRIS COAL of the Hocking Valley; WATERLOO COAL of Gallia County)

Mined in the Cambridge, Hocking Valley, Mahoning Valley and Massillon districts. Bituminous rank. Suitable for Steam, Cement Burning, Railroad, Producer Gas, and Domestic Purposes.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Akron Coal Co.	Akron, O.	Moss	Guernsey	Penna.	Pleasant City, O.
Akron Coal Co.	Akron, O.	Murry Hill	Guernsey	B. & O.	Klondyke Mine, O.
Akron Coal Co.	Akron, O.	Kings	Guernsey	B. & O.	Kings Mine, O.
Akron Coal Co.	Akron, O.	Goodyear	Guernsey	B. & O.	Lori City, O.
Akron Coal Co.	Akron, O.	Right	Guernsey	B. & O.	Seneca, O.

FREEPORT, UPPER SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Ann Miller Edington Coal Co.	Nelsonville, O.	A & E.	Athens	Hocking Valley	Doanville, O.
Atwood Coal Co.	Shadysville, O.	Atwood No. 1	Carroll	W & L. E.	Shadysville, O.
Berne Coal Co.	Columbus, Ohio	Berne	Perry	B. & O.	Shawnee, O.
Bertram Coal Mining Co., The	Wheeling, W. Va.	No. 1	Maskingum	Penna.	Romine, O.
Bertram Coal Mining Co., The	Wheeling, W. Va.	No. 2	Maskingum	Penna.	Romine, O.
Big Bailey Mining Co., The	Nelsonville, O.	No. 76	Athens	K & M	Chauncey, O.
Big Bailey Mining Co.	Nelsonville, O.	No. 70 Carr Run	Athens	K & M	Chauncey, O.
Bluerock Coal Co.	Zanesville, O.	Bluerock	Maskingum	B. & O.	Merriam, O.
Burns Coal Co.	Conning, O.	Burns	Perry	C & W	Rundell, O.
Caldwell Coal Co., The	Caldwell, O.	Fresh	Noble	Penna.	Caldwell, O.
Cambridge Collieries Co. (The)	Cleveland, Ohio	Coal Ridge	Noble	Penna.	Coal Ridge, Ohio
Cambridge Collieries Co. (The)	Cleveland, Ohio	Caldwell	Noble	Penna.	Caldwell, Ohio
Cambridge Collieries Co. (The)	Cleveland, Ohio	Buffalo	Garnsey	Penna.	Byssville, Ohio
Cambridge Collieries Co. (The)	Cleveland, Ohio	Idal	Garnsey	Penna.	Byssville, Ohio
Cambridge Collieries Co. (The)	Cleveland, Ohio	Trail No. 1	Garnsey	Penna.	Byssville, Ohio
Cambridge Collieries Co. (The)	Cleveland, Ohio	Trail No. 2	Garnsey	Penna.	Byssville, Ohio
Cambridge Collieries Co. (The)	Cleveland, Ohio	Bann r.	Garnsey	Penna.	Pleasant City, Ohio
Cambridge Collieries Co. (The)	Cleveland, Ohio	Walwhonding No. 2	Garnsey	Penna.	Buffalo, O.
Cambridge Collieries Co. (The)	Cleveland, Ohio	Blue Bell	Garnsey	Penna.	Opperman, Ohio
Cambridge Collieries Co. (The)	Cleveland, Ohio	Hartford	Garnsey	B. & O.	Buffalo, Ohio
Cambridge Glass Co. (The)	Cambridge, O.	Elm Tree	Garnsey	B. & O.	Cambridge, O.
Carr Run Coal Co., The	Nelsonville, O.	No. 71	Athens	T. & O. C.	Chauncey, O.
Central Mining Co.	Lisbon, O.	Lisbon	Columbiana	Y. & O. C.	Gilmore, O.
Champion Collieries Co., The	Pittsburgh, Pa.	Cambridge	Guernsey	B. & O.	Cambridge, O.
Chauncey Coal Co., The	Nelsonville, O.	Chauncey	Athens	T. & O. C.	Chauncey, O.
Clark Coal & Mining Co., The	Urichsville, Ohio	Clark	Harrison	P. C. & St. L.	Philadelphia Roads, O.
Columbiana Coal & Clay Co.	Philadelphia, Pa.	Columbia	Columbiana	C. & P.	Salinville, O.
Crab Orchard Mining Co.	S. East Long St., Columbus, Ohio	Crab Orchard	Harrison	B. & O.	Freeport, Ohio
Doanville Coal Co.	Nelsonville, Ohio	Doanville	Athens	Hocking Valley	Nelsonville, Ohio
Fair Oaks Coal Co., The	Zanesville, O.	Fair Oaks	Maskingum	Penna.	Romine, O.
Forsythe Coal Company	Cambridge, Ohio	Forsythe	Garnsey	B. & O.	Mineral Siding, Ohio
Forsythe Coal Company	Cambridge, Ohio	Imperial	Noble	Penna.	Belle Valley, Ohio
Freeport Fuel Mining Co., The	Athens, O.	Freeport	Athens	T. & O. C.	Millfield, O.
Goshen Central Coal Co., The	Massillon, O.	Laurel Valley	Tuscarawas	B. & O.	Stillwater, O.
Grant Coal Co., The	Cleveland, O.	Grant	Columbiana	Penna.	Salinville, O.
Hazel Ridge Coal Co.	Nelsonville, O.	Manner	Athens	H. V.	Floodwood, O.
Hazel Ridge Coal Co.	Nelsonville, O.	Pee Wee	Athens	H. V.	Floodwood, O.
Hazel Ridge Coal Co.	Nelsonville, O.	Poston No. 1	Athens	H. V.	Floodwood, O.
Home Coal Co.	Athens, O.	Home	Athens	K. & M.	Chauncey, O.
Juniper, Ed. L. Coal Co.	Nelsonville, O.	No. 7	Athens	Hocking Valley	Nelsonville, O.
Lincoln Highway Mining Co.	Cleveland, O.	Dorr	Columbiana	Penna.	Kensington, O.
Middle States Coal Co., The	Columbus, O.	No. 24	Athens	T. & O. C.	Jacksonville, O.
Middle States Coal Co., The	Columbus, O.	No. 68	Athens	T. & O. C.	Jacksonville, O.
Midland Coal Company	Byssville, Ohio	Midland	Garnsey	Penna.	Byssville, Ohio
Millfield-Bailey Coal Co.	Millfield, O.	Millfield-Bailey	Athens	T. & O. C.	Millfield, O.
Morris Coal Corp.	Cleveland, Ohio	Cleveland	Garnsey	B. & O.	S. New castle, Ohio
Morris Coal Corp.	Cleveland, Ohio	Black Top	Garnsey	B. & O.	Lore City, Ohio
Mt. Zion Coal Co.	Byssville, O.	Mt. Zion	Guernsey	Penna.	Byssville, O.
National Coal Co.	Cleveland, Ohio	Little Katie No. 1	Garnsey	P. R. R.	Byssville, Ohio
National Coal Co., The	Cleveland, O.	Little Katie No. 2	Garnsey	Penna.	Byssville, O.
National Coal Co., The	Cleveland, O.	Murray	Garnsey	Penna.	Byssville, O.
National Coal Co.	Cleveland, Ohio	Minnehaha	Garnsey	P. R. R.	Byssville, Ohio
National Coal Co.	Cleveland, Ohio	Harryette	Garnsey	P. R. R.	Byssville, Ohio
Negley Coal Co., The	Negley, O.	Pleasant Valley	Columbiana	P. L. & W. P. Erie	Negley, O.
Nelsonville Coal Co.	804 Spitzer Bldg., Toledo, O.	Nelsonville	Athens	H. V.	Kimberly, Ohio
Nelsonville Mining Co., The	Nelsonville, O.	Nelsonville	Athens	H. V.	Nelsonville, O.
New Pocock Coal Co.	Massillon, O.	Cambridge No. 1	Guernsey	B. & O.	Point Blue Bell, O.
New Pocock Coal Co.	Massillon, O.	Maple Leaf No. 1	Tuscarawas	B. & O.	Urichsville, O.
New York Coal Co.	Columbus, O.	No. 34	Athens	H. V.	Floodwood, O.
New York Coal Co.	Columbus, O.	No. 36	Athens	H. V.	Bochtel, O.
Nicholson Clay Products Co.	Cambridge, Ohio	Nicholson	Guernsey	P. R. R.	Bressler, Ohio
North Hill Coal Co., The	Nelsonville, O.	No. 75	Athens	T. & O. C.	Chauncey, O.
Nyce Coal Co., The	Byssville, O.	Boch Grove	Guernsey	Penna.	Byssville, O.
Packard Coal Mining Co., The	Columbus, O.	Packard	Athens	Hocking Valley	Nelsonville, O.
Poston Cons. Coal Co. (The)	Athens, O.	No. 7	Athens	T. & O. C.	Millfield, O.
Poston, L. D. Coal Co.	Athens, O.	No. 65	Athens	K. & M.	Millfield, O.
Puritan Coal Co. (The)	Cambridge, Ohio	Puritan	Guernsey	C. & M.	Byssville, Ohio
Railway Fuel & Supply Co.	Newark, O.	Newton	Harrison	Penna.	Philadelphia Roads, O.
Reiser, A. W., & Co.	New Philadelphia, O.	Riser	Tuscarawas	B. & O.	New Philadelphia, O.
Reitler Coal Co., The	Cambridge, O.	Reitler	Guernsey	B. & O. Penna.	Cambridge, O.
Rice, W. P., Mining Co. (The)	Dayton, O.	Palas	Athens	T. & O. C.	Glonster, O.
River Ridge Coal Mining Co.	Cleveland, O.	Diamond	Jefferson	Penna.	Yellow Creek, O.
Ross Clay Products Company	Urichsville, Ohio	Ross	Tuscarawas	P. C. C. & St. L.	Dennison, Ohio
Salineville Coal Mining Co.	960 Kirby Bldg., Cleveland, O.	Strahley No. 1	Columbiana	Penna.	Salineville, O.
Scott Coal Co.	Midvale, O.	R. No. 3	Tuscarawas	B. & O.	Midvale, O.
Scott, W. O.	Dennison, O.	Scott	Tuscarawas	F. C. C. & St. L.	Dennison, O.
Scott Coal Company	Midvale, Ohio	R. No. 2	Tuscarawas	B. & O.	Midvale, Ohio
Sherodsville Coal Mining Co.	908 Denison Ave., Cleveland, O.	Si rodsville	Carroll	W. & L. E.	Sherodsville, O.
Smith Bros.	Byssville, O.	Smith	Guernsey	Penna.	Byssville, O.
Spencer Hollow Coal Co.	Nelsonville, O.	Spencer Hollow	Hocking	Hocking Valley	Jobs, O.
Sterling Coal Co., Ltd.	Cleveland, O.	Sterling	Carroll	C. & P.	Salinville, O.
Sugar Tree Coal Co.	Alliance, O.	Sugar Tree	Guernsey	C. & M.	Byssville, O.
Walker-Downey Coal Co.	Salineville, O.	Mary Elizabeth	Columbiana	Penna.	Salineville, O.
Warner Collieries Co., The	Union Nat'l Bank Bldg., Cleveland, Ohio	Solalia	Athens	T. & O. C.	Jacksonville, Ohio
Western Coal & Coke Co.	Pittsburgh, Pa.	Alma	Garnsey	T. & O. C.	Cambridge, O.
White Ash Coal Co., The	Nelsonville, O.	White Ash	Athens	T. & O. C.	Chauncey, O.
Willard Gas Coal Co.	Canton, O.	Kirk	Carroll	Penna. C. & P. Div.	Salineville, O.
York Clay & Mining Co.	Columbus, O.	No. 1	Athens	H. V.	Bochtel, Ohio
York Clay & Mining Co.	Columbus, O.	No. 3	Athens	H. V.	Bochtel, O.

KITTANNING, LOWER SEAM (Known also as NO. 5 SEAM; LEETONIA SEAM; CREEK VEIN; HAMMONDVILLE COAL; POTTER'S VEIN; CLAY VEIN; MINERAL POINT COAL; LOWER NEW LEXINGTON COAL, and NEW CASTLE COAL of Lawrence County)

Mined in the Ironton district. Bituminous rank. Suitable for Steam, Railroad, Cement Burning, Producer Gas and Domestic Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Andie Coal Co., The	Padro, O.	No. 5	Lawrence		Padro, O.
Andie Coal Co., The	Padro, O.	No. 6	Lawrence	B. & O.	Padro, O.
Bowman Coal Co.	Old Hill, O.	Bowman	Lawrence	B. & O.	Old Hill, O.
Cambridge Clay Products Co.	Blackford, Ohio	Cambridge	Lawrence	B. & O. S. W.	Blackford, Ohio
Christman-Stoner Mining Co.	Massillon, O.	No. 1	Stark	W. & L. E. B. & O.	Jacks, Ohio
Coldale Products Co., The	Cincinnati, O.	Coldale	Stark	B. & O.	Zanesville, O.

(Continued on Next Page)

KITTANNING, LOWER SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Consolidated Coal Products Co.	South Canton, O.	Big 4 No. 2	Carroll	Penna.	Malvern & Oneida, O.
Crescent Ice & Coal Co.	Alliance, O.	Crescent	Stark	N. Y. C.	Paris, O.
Davis Fire Brick Co.	Oak Hill, Ohio	Davis	Jackson	B. & O.	Oak Hill, Ohio.
De Witt Coal Co., The	Dayton, O.	The De Witt	Jackson	B. & O.	Wellston, O.
Dover Fire Brick Co.	Strasburg, Ohio	Dover	Tuscarawas	B. & O.	Strasburg, Ohio.
Evans Coal Co.	Alliance, O.	Evans	Stark	W. & L. E.	Alliance, O.
Ferncliff Coal Co., The	Zanesville, O.	Ferncliff	Perry	F. & W.	Redfield, O.
Hanging Rock Iron Co.	Hanging Rock, Ohio	New Castle	Lawrence	D. T. & I., N. & W.	Hanging Rock, O.
Helsinger Coal & Mining Co., The	Toronto, O.	Loest Grove	Jefferson	Penna.	Toronto, O.
Hoover Coal & Clay Co.	Mineral City, O.	Hoover	Carroll	B. & O.	Mineral City, O.
James Brothers Coal Co.	Magnolia, O.	James No. 6	Carroll	B. & O.	Magnolia, O.
Kebota Mining Company	N. W. Lexington, O.	Redfield	Perry	Z. & W.	Saltville, Ohio.
Kimbolton Coal Mining Company	404-5 Park Bldg., Cleveland, Ohio	Walters	Guernsey	Penna.	Kimbolton, O.
Kimbolton Coal Mining Company	404-5 Park Bldg., Cleveland, Ohio	Buckhorn	Tuscarawas	Penna.	Newcomerstown, Ohio.
Laughlin Coal Co.	Mineral City, O.	Laughlin	Tuscarawas	Penna.	Mineral City, O.
Macdonal Coal Co., The	Cleveland, O.	Wilcox	Tuscarawas	B. & O.	Sandyville, O.
Maraley, George J.	Mineral City, Ohio	Acme	Tuscarawas	B. & O.	Mineral City, Ohio.
Maraley, George J.	Mineral City, Ohio	Buff Run	Tuscarawas	B. & O.	Mineral City, Ohio.
Maraley, George J.	Mineral City, Ohio	Massillon Peacock	Tuscarawas	B. & O.	Mineral City, Ohio.
Vasey, W. R.	Ironton, O.	Halley Farm	Lawrence	D. T. & I.	Ironton, O.
Minglewood Coal Co.	Wellston, Ohio	Minglewood No. 3	Jackson	B. & O., D. T. & I.	Wellston, Ohio.
Mohawk Coal Co.	Wellston, O.	Mohawk	Jackson	B. & O.	Wellston, Ohio.
Oak Hill Mining Co.	Oak Hill, O.	Liberty	Jackson	B. & O.	Oak Hill, O.
Ohio Fire Brick Co.	Oak Hill, O.	Horse Shoe	Jackson	B. & O.	Oak Hill, Ohio.
Ohio Mining & Railway Co.	Mineral City, Ohio	No. 1	Tuscarawas	B. & O.	Mineral City, Ohio.
Ohio Standard Coal Co.	10 South Fifth St., Zanesville, Ohio	No. 2	Muskingum	O. R. & W.	Zanesville, Ohio
Ohio Standard Coal Co.	10 South Fifth St., Zanesville, Ohio	No. 3	Muskingum	O. R. & W.	Zanesville, Ohio
Ohio Standard Coal Co.	10 South Fifth St., Zanesville, Ohio	No. 3	Muskingum	O. R. & W.	Zanesville, Ohio
Paul Coal Co., The	52 1/2 Ninth St., Zanesville, O.	Mill Run No. 3	Muskingum	Penna.	Zanesville, O.
Portsmouth Refractories Co.	Portsmouth, O.	No. 5	Lawrence	B. & O. S. W.	Firebrick, Ohio.
Raccoon Coal Co., The	Wellston, O.	No. 2	Jackson	D. T. & I.	Wellston, O.
Redfield Coal Co., Inc., The	Box G, Chicago Ill.	Redfield No. 1	Perry	Z. & W.	Saltville, O.
Rhulman, P. M.	Ironton, O.	Rhulman	Lawrence	D. T. & I., N. & W.	Ironton, O.
Shawnee & McConville Coal Co.	Shawnee, O.	Jaynes	Perry	B. & O.	Shawnee, O.
Strabley, James S.	Bergholz, Ohio	Strabley No. 2	Jefferson	N. Y. C.	Bergholz, Ohio.
Superior Colliery Co.	Detroit, Mich.	No. 10	Jackson	B. & O.	Wellston, O.
Superior Colliery Co.	Detroit, Mich.	No. 17	Jackson	B. & O.	Wellston, O.
Vao Kirk-Carroll Coal Co.	Cleveland, O.	Dickory	Carroll	R. & O. W. & L. E.	Mineral City, O.
Wayne Mining Co., The	34 Ingalls Bldg., Cincinnati, O.	Mary Jean	Guernsey	Penna.	Cambridge, O.
Wayne Coal Co.	Benedum-Trees Bldg., Pittsburgh, Pa.	No. 7	Tuscarawas	W. & L. E.	Dundee, O.
Wayne Coal Co.	Benedum-Trees Bldg., Pittsburgh, Pa.	No. 10	Tuscarawas	W. & L. E.	Dundee, O.
Wayne Coal Co.	Benedum-Trees Bldg., Pittsburgh, Pa.	No. 11	Perry	Penna.	New Lexington, O.
Wayne Coal Co.	Benedum-Trees Bldg., Pittsburgh, Pa.	No. 12	Perry	Penna.	New Lexington, O.
Wayne Coal Co.	Benedum-Trees Bldg., Pittsburgh, Pa.	No. 13	Perry	Penna.	New Lexington, O.
Wayne Coal Co.	Benedum-Trees Bldg., Pittsburgh, Pa.	No. 14	Perry	Penna.	New Lexington, O.
Wellston Iron Furnace Co., The	Jackson, O.	Drift	Lawrence	D. T. & I.	Superior, O.
Wellston Rich Run Coal Co., The	Wellston, O.	No. 1	Jackson	B. & O.	Wellston, O.
Wellston Rich Run Coal Co., The	Wellston, O.	No. 2	Jackson	B. & O.	Wellston, O.
Wellston Rich Run Coal Co., The	Wellston, O.	No. 3	Jackson	B. & O.	Wellston, O.
Wellston Rich Run Coal Co., The	Wellston, O.	No. 4	Jackson	B. & O.	Wellston, O.
Wellston Rich Run Coal Co., The	Wellston, O.	No. 5	Jackson	B. & O.	Wellston, O.
Wellston Rich Run Coal Co., The	Wellston, O.	No. 6	Jackson	B. & O.	Wellston, O.

KITTANNING, MIDDLE SEAM (Known also as NO. 6 SEAM; HOCKING VALLEY COAL; OSNABURG COAL of Stark County; PIKE RUN and DENNISON COAL of Tuscarawas County; COSHOCTON COAL; UPPER ZANESVILLE COAL; UPPER NEW LEXINGTON COAL; NELSONVILLE and STRAITSVILLE COAL; GREAT VEIN of the Hocking Valley; CARBONDALE and MINERAL CITY COAL; UPPER ZALESKI COAL; WASHINGTON FURNACE COAL; BLOCK BED; HAMMONDVILLE STRIP BED; DRY RUN COAL; SHERIDAN COAL)

Mined in Hocking, Perry, Tuscarawas, Athens, Coshocton, Carroll and Muskingum counties. Bituminous rank. Suitable for Cement Burning, Railroad, Producer Gas, Domestic and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
A. M. Coal Co.	Carbon Hill, O.	A. M.	Hocking	H. V.	Carbon Hill, O.
Akron Coal Co.	Akron, O.	Beaver Dam	Tuscarawas	Penna.	Boswell, O.
American Vitrified Products Co.	Akron, O.	"Diamond"	Tuscarawas	B. & O.	Urichsville, O.
Andreas Coal Co.	New Philadelphia, O.	Andreas	Tuscarawas	B. & O.	New Philadelphia, O.
Athens Hocking Coal Co., The	Nelsonville, Ohio	Athens Hocking	Hocking	H. V.	New Pittsburgh, O.
Atlas Mining Co.	Dayton, O.	Atlas	Vinton	B. & O.	Zaleski, O.
Barnes Coal & Mining Co. (The)	Coshocton, O.	Best No. 2	Coshocton	W. & L. E.	Conesville, O.
Barnes Coal & Mining Co. (The)	Coshocton, O.	Best No. 1	Coshocton	W. & L. E.	Conesville, O.
Beaumont Mining Company	601 Commerce Bldg., Columbus, O.	Beaumont	Athens	Hocking Valley	Beaumont, O.
Bergholz Coal Mining Co. (The)	Cleveland, O.	X-L Mine	Jefferson	N. Y. C.	Bergholz, O.
Bertram Coal Co.	Columbus, O.	Barick	Perry	B. & O.	New Lexington, O.
Big Bailey Mining Co. (The)	Nelsonville, O.	No. 105	Athens	K. & M.	Chauncey, O.
Big Bear Mining Co.	Carbon Hill, O.	No. 1	Hocking	Hocking Valley	Carbon Hill, O.
Black Burn Coal Co., The	Cleveland, O.	Goat Hill	Jefferson	N. Y. C.	Bergholz, O.
Blackson & Miller	Coshocton, O.	Blackson & Miller	Coshocton	W. & L. E.	Coshocton, O.
Blair-Sharshal Coal Co. (The)	Shawnee, O.	Iron Point	Perry	B. & O.	Shawnee, O.
Bluff Hill Coal & Clay Co., The	Urichsville, O.	Bluff Hill	Tuscarawas	P. C. C. & St. L.	Gradenhutt, O.
Boilinger Brothers Coal Co.	East Canton, O.	Boilinger	Stark	W. & L. E.	East Canton, O.
Bowling Coal & Mining Co., The	Dennison, Ohio	Bowling	Tuscarawas	P. C. C. & St. L.	Dennison, Ohio
Roy, John	New Straitsville, O.	Copperhead	Perry	H. V.	New Straitsville, O.
Brown, H. R. & Son Coal Co.	New Philadelphia, O.	Brown No. 2	Tuscarawas	B. & O.	New Philadelphia, O.
Brush Creek Coal Co., The	Worthington, O.	Brush Fork	Muskingum	Z. & W.	Cannelville, O.
Brush Fork Coal Co., The	Nelsonville, O.	Brush Fork	Athens	H. V.	Nelsonville, O.
Buckeye Coal Co.	Shawnee, O.	Buckeye	Perry	B. & O.	Shawnee, O.
Buckeye Fire Clay Co.	Urichsville, O.	Buckeye	Tuscarawas	Penna.	Urichsville, O.
Buckingham Coal Co.	Columbus, O.	Buckingham	Perry	Z. & W.	Drakes, O.
Burns Coal Co.	Corning, O.	Burns	Perry	C. & W.	Rundville, O.
Burton Miller Coal Co.	South Zanesville, Ohio	Sun Side	Muskingum	Penna.	So. Zanesville, Ohio
Burton-Townsend Co.	Zanesville, O.	Monitor No. 1	Muskingum	Penna.	Darlington, O.
Butler Coal Co.	New Straitsville	Butler	Perry	H. V.	New Straitsville, O.
C. & H. Coal Co.	Shawnee, O.	Caslin	Perry	Z. & W.	Shawnee, O.
Cable Coal Co.	Columbus, O.	Cable	Perry	B. & O.	Shawnee, O.
Caledonia Coal Co.	New Lexington, O.	Caledonia	Perry	T. O. C.	Nelsonville, O.
Cambria Hocking Coal Co., The	510 Schultz Bldg., Columbus, O.	Cambria	Athens	Hocking Valley	Nelsonville, O.
Canaan Coal Co. (The)	Athens, O.	Canaan	Athens	B. & O. Southwestern	Canaanville, O.
Carbon Hill Mining Co. The	Carbon Hill, O.	Carbon Hill	Hocking	H. V.	Carbon Hill, O.

(Continued on Next Page)

KITTANNING, MIDDLE SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Carbondale Coal Co., The	Chillicothe, O.	Carbondale No. 2	Athens	B. & O.	Carbondale, O.
Carroll Coal Co.	Barnesboro, Pa.	Carroll	Carroll	Penna.	Salineville, O.
Center Valley Coal Co.	Somerdale, O.	Center Valley	Tuscarawas	W. & L. E.	Somerdale, O.
Central Mining Co.	Lisbon, O.	Lisbon	Columbiana	Y. & O.	Gilmore, O.
Central Refractories Co. (The)	Columbus, O.	Moxahala	Perry	T. & O. C.	Moxahala, O.
Central Refractories Co. (The)	Columbus, O.	Shawnee	Perry	Z. & W.	Shawnee, O.
Chatfield, C. W. Coal Co.	South Point, O.	Chatfield No. 3	Lawrence	N. & W.	Coal Grove, O.
Chatfield, C. W. Coal Co.	South Point, O.	Chatfield No. 4	Lawrence	N. & W.	Coal Grove, O.
Clay Bank Coal & Mining Co.	118 Gasco Bldg., Columbus, O.	Clay Bank	Perry	T. & O. C.	Lexington, O.
Claycraft Mining & Brick Co., The	Hartman Bldg., Columbus, O.	Claycraft	Perry	B. & O., Z. & W.	Shawnee, O.
Cleveland-Canton Coal Co.	Leader News Bldg., Cleveland, O.	"C"	Tuscarawas	Penna.	Russell, O.
Coaldale Products Co., The	Chillicothe, O.	Coaldale	Muskingum	B. & O.	Zanesville, O.
Coalgate Coal Co. (The)	New Straitsville, O.	Coalgate	Perry	B. & O.	New Straitsville, O.
Coal Hollow Mining Co., The	Nelsonville, O.	Coal Hollow	Athens	H. V.	Nelsonville, O.
Columbus Coal & Mfg. Co. (The)	Coshocton, O.	Franklin	Coshocton	P. C. C. & St. L.	Coshocton, O.
Comerstown Clay & Coal Co., The	New Comerstown, O.	Comerstown No. 2	Tuscarawas	Penna.	New Comerstown, O.
Consolidated Clay Products Co.	South Canton, O.	Big 4 No. 1	Carroll	Penna.	Malvern & Theuda, O.
Consolidated Fuel Co. (The)	1203 Chamber of Com. Bldg., Pittsburgh, Pa.	Maple Hooking	Athens	H. V.	Nelsonville, O.
Corning Mining Co. (The)	40 West Gay St., Columbus, O.	No. 26	Perry	T. & O. C.	Corning, O.
Cor-Ren Coal Co.	Nelsonville, Ohio	No. 253	Perry	R. & L. C.	Randville, Ohio
Coshocton Valley Coal Co.	Coshocton, O.	Coshocton Valley	Coshocton	W. & L. E.	Coshocton, O.
Cowen Coal Co.	Saltillo, O.	No. 97	Perry	Z. & W.	Saltillo, O.
Crab Orchard Mining Co.	8 East Long St., Columbus, Ohio	Crab Orchard	Harrison	B. & O.	Fremport, Ohio
Craig Coal Co.	Nelsonville, O.	Craig	Athens	H. V.	Murray, O.
Crites Coal Co.	Circleville, O.	No. 29	Hocking	H. V.	Murray, O.
Crooksville Mining Co.	Jackson, Mich.	Crooksville	Perry	Z. & W.	Crooksville, O.
Cuthbertson Coal Co.	Murray, O.	Canter No. 2	Hocking	H. V.	Murray, O.
Dean Coal & Coke Co., The	Columbus, O.	Dean	Perry	T. & O. C.	Moxahala, O.
Dennison Sewer Pipe Co.	Dennison, O.	No. 1	Tuscarawas	P. C. C. & St. L.	Dennison, O.
Dixie Coal & Mining Co.	Corning, O.	Pike	Perry	B. & O.	Dixie, O.
Doanville Coal Co.	Nelsonville, O.	Doanville	Athens	Hocking Valley	Nelsonville, O.
East Ohio Sewer Pipe Co.	Irontdale, O.	Creek Vein	Jefferson	C. & P.	Irontdale, O.
Eckels, R. M.	Coshocton, O.	Leoust Grove	Coshocton	W. & L. E.	Coshocton, O.
Elk Coal Co. (The)	Columbus, O.	Elk	Muskingum	C. & M. V.	Rossville, O.
Elk Run Coal Co.	Salem, O.	Elk Run	Columbiana	P. L. & W.	Rogers, O.
Essex Coal Co. (The)	Columbus, O.	Esco	Perry	H. V.	New Straitsville, O.
Evans Pipe Co.	Chillicothe, O.	Evans	Tuscarawas	B. & O.	Chillicothe, O.
Excellent Coal Co., The	Zanesville, O.	Hagle	Muskingum	Z. & W.	Zanesville, O.
Fairview Mining Co.	Wabash Bldg., Pittsburgh, Pa.	Rogers	Columbiana	P. L. & W.	Rogers, O.
Farrow Coal Co., The	Columbus, O.	Farrow	Hocking	Hocking Valley	Nelsonville, O.
Friel, T. J. Coal Co.	New Straitsville, O.	T. J. Friel	Perry	Hocking Valley	New Straitsville, O.
Goshen Central Coal Co., The	Massillon, O.	Goshen Central	Tuscarawas	Penna.	New Philadelphia, O.
Goshen Central Coal Co. (The)	Massillon, O.	Laurel Valley	Tuscarawas	B. & O.	Stillwater, O.
Goshen Bidge Coal Co.	New Philadelphia, O.	Goshen Ridge No. 3	Tuscarawas	C. & P.	New Philadelphia, O.
Gosline, W. A., & Co.	Toledo, O.	Bear Run No. 1	Perry	Penna.	New Lexington, O.
Grace Coal Mining Co.	Toledo, O.	Grace No. 1	Muskingum	Z. & W.	Cannelville, O.
Graham & McMahan Coal Co.	Nelsonville, O.	Graham & McMahan	Athens	H. V.	Nelsonville, O.
Grose Coal Co.	Nelsonville, O.	Grose	Athens	H. V.	Nelsonville, O.
Hall Coal Co.	Lock Box 82, Coshocton, O.	Hall No. 2	Coshocton	W. & L. E.	Coshocton, O.
Hanna-Essex Coal Co. (The)	New Straitsville, O.	Essex	Perry	N. Y. C. & Z. & W.	Hemlock, O.
Hanna Furnace Co.	Cleveland, O.	United	Columbiana	Y. & O., Penna., Erie	Leetonia, O.
Harris & Neiman	Nelsonville, O.	Harris & Neiman	Hocking	H. V.	Nelsonville, O.
Hazleton Coal Co.	New Straitsville, O.	Gem	Perry	Hocking Valley	New Straitsville, O.
Herrold, J. A.	Nelsonville, O.	Herrold	Athens	H. V.	Nelsonville, O.
Hester, C. V.	Mineral, O.	C. V. Hester	Athens	B. & O., S. W.	Mineral, O.
Hysylvania Coal Co. (The)	Columbus, O.	No. 23	Athens	K. & M.	Trimble, O.
Hysylvania Coal Co. (The)	Columbus, O.	No. 22	Athens	K. & M.	Glouster, O.
Hocking Block Coal Co.	Columbus, O.	Big Five	Perry	H. V.	New Straitsville, O.
Hocking Block Coal Co.	Columbus, O.	Central	Perry	Hocking Valley	New Straitsville, O.
Hocking Domestic Coal Co.	Nelsonville, O.	Hocking No. 6	Athens	Hocking Valley	Nelsonville, O.
Hocking Mining Co.	Athens, O.	Del Carbo	Athens	B. & O., S. W.	Mineral, O.
Hocking Valley Fire Clay Co. (The)	Nelsonville, O.	Del Carbo	Athens	Hocking Valley	Nelsonville, O.
Hocking Valley Products Co.	175 S. High St., Columbus, O.	Greendale	Hocking	Hocking Valley	Greendale, O.
Hollow Rock Mining & Transportation Co.	Wheeling, W. Va.	Hollow Rock	Jefferson	C. & P.	Yellow Creek, O.
Hughes Coal Co., The	Shawnee, O.	Hughes No. 2	Perry	Z. & W.	Hemlock, O.
Hysell Run Coal Co., The	Zanesville, O.	No. 63	Muskingum	Z. & W.	Zanesville, O.
Ideal Coal Co. (The)	New Philadelphia, O.	Sewards	Tuscarawas	C. & P.	New Philadelphia, O.
Indian Hill Coal Co.	Cleveland, O.	Indian Hill	Tuscarawas	P. C. C. & St. L.	Chillicothe, O.
Ingham & Salvage	Coshocton, O.	Burt	Coshocton	W. & L. E.	Coshocton, O.
J. M. Coal Co., The	Welch, W. Va.	No. 1	Perry	T. & O. C.	Moxahala, O.
James Bros. Coal Co.	Magnolia, O.	James No. 6	Carroll	B. & O.	Magnolia, O.
Jenkins, D. C., & Co.	Shawnee, O.	XX	Perry	B. & O., Z. & W.	Shawnee, O.
Jones Coal Co., The	Columbus, O.	Jones	Perry	B. & O.	New Straitsville, O.
June Coal Co.	Commerce Bldg., Columbus, O.	June	Hocking	H. V.	Nelsonville, O.
Kehota Mining Co.	Zanesville, O.	Bairds Furnace	Hocking	Private Railroad	Bairds Furnace, O.
Kehota Mining Co.	New Lexington, O.	Bridford	Perry	Z. & W.	Saltillo, O.
Kehota Mining Co.	New Lexington, O.	McConesville	Perry	B. & O.	McConesville, O.
Keystone Coal Co.	Nelsonville, O.	Keystone	Athens	Hocking Valley	Nelsonville, O.
Kimberly Coal & Laid Co.	Columbus, O.	Kimberly No. 1	Athens	Hocking Valley	Nelsonville, O.
Kirk-Dunn Coal Co.	1216-17 Sweetland Bldg., Cleveland, O.	Rhea	Columbiana	Y. & O.	West Point, O.
Kirk-Dunn Coal Co.	1216-17 Sweetland Bldg., Cleveland, O.	Hazel	Columbiana	Y. & O.	Salem, O.
Klein-Moore Coal Co.	New Philadelphia, O.	Oak Hill	Tuscarawas	C. & P.	New Philadelphia, O.
Kramer Bros.	New Straitsville, O.	Rutherford	Hocking	H. V.	New Straitsville, O.
Lafayette Stamping & Enameling Co.	W. Lafayette, O.	No. 1	Coshocton	Pan Handle	W. Lafayette, O.
Lancaster Coal & Sand Co.	Lancaster, O.	Lancaster	Perry	P. R. B.	New Lexington, O.
Laughlin Coal Co.	Mineral City, O.	Laughlin	Tuscarawas	Penna.	Mineral City, O.
Levi Coal Co., The	New Lexington, O.	Levi	Perry	T. & O. C.	New Lexington, O.
Lick Run Coal & Clay Co., The	Nelsonville, O.	Lick Run	Athens	H. V.	Nelsonville, O.
Lick Run Coal Co.	Cambridge, O.	Shoemaker	Tuscarawas	Penna.	Newcomerstown, O.
Log Cabin Coal Co., The	New Straitsville, O.	White Oak	Perry	H. V.	New Straitsville, O.
Log Cabin Coal Co., The	New Straitsville, O.	Log Cabin	Perry	Hocking Valley	New Straitsville, O.
Long Hollow Coal Co., The	Carbon Hill, O.	Long Hollow	Hocking	H. V.	Carbon Hill, O.
Lost Run Coal Co.	Columbus, O.	Esco No. 2	Hocking	Hocking Valley	New Straitsville, O.
Love Brothers	Nelsonville, O.	No. 1	Hocking	Hocking Valley	Nelsonville, O.
Love Brothers	Nelsonville, O.	Globe No. 2	Hocking	H. V.	Jobs, O.
Love Brothers	Nelsonville, O.	No. 3-X	Hocking	H. V.	Jobs, O.
Loveday & Son	New Philadelphia, O.	Keller Grove	Tuscarawas	B. & O.	New Philadelphia, O.
Loyal Coal Co.	Shawnee, O.	Loyal	Perry	T. & O. C.	Moxahala, O.
Lubrig Collieries Co.	Columbus, O.	Lubrig No. 2	Athens	B. & O., S. W.	Lubrig, O.
McClellan & Wilson Coal Co.	43 S. Fourth St., Zanesville, O.	Green Hill	Muskingum	B. & O.	Green Hill, O.
McGarrey, J. A.	Zanesville, O.	Garrett No. 2	Muskingum	B. & O.	Garrett, O.
McGarrey, J. A.	Zanesville, O.	Rose Bud	Muskingum	Z. & W.	Zanesville, O.
McGraw Coal & Clay Co.	St. Clairsville, O.	Rock Camp	Columbiana	Y. & O.	East Liverood, O.
Malvern Fire Clay Co., The	Malvern, O.	Malvern	Carroll	W. V. A.	Malvern, O.
Mapleton Clay Products Co., The	Canton, O.	Mapleton No. 1	Stark	W. & L. E.	East Canton, O.
Massillon-Tuscarawas Coal Co., The	Cleveland, O.	Central Valley No. 3	Tuscarawas	W. & L. E.	New Cumberland, O.
Massillon-Tuscarawas Coal Co., The	Cleveland, O.	Central Valley No. 4	Tuscarawas	W. & L. E.	New Cumberland, O.
May Coal Co. (The)	1101 Haydon Bldg., Columbus, O.	May No. 1	Hocking	Hocking Valley	Carbon Hill, O.
May Coal Co. (The)	1101 Haydon Bldg., Columbus, O.	May No. 2	Hocking	Hocking Valley	Carbon Hill, O.
Medal Paving Brick Co., The	Cleveland, O.	Sandy Valley Clay	Stark	Penna.	Malvern, O.
Meeker Run Coal Co., The	1900 Brunson Bldg., Columbus, O.	Meeker Run	Athens	H. V.	Nelsonville, O.

(Continued on Next Page)

KITTANNING, MIDDLE SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Meenan, James J.	Nelsonville, O.	Monitor	Athens	H. V.	Nelsonville, O.
Meissner Mining Co.	New Philadelphia, O.	Meissner's	Tuscarawas	C. & P.	New Philadelphia, O.
Metropolitan Towing Brack Co.	Canton, O.	Metropolitan	Stark	C. & P.	Minerva, O.
Mid-Hocking Coal Co. (The)	New Lexington, O.	No. 85	Perry	K. & M.	Burr Oak, O.
Midvale Coal Co.	Midvale, O.	Midvale No. 4	Tuscarawas	B. & O.	Midvale, O.
Midvale Coal Co.	Midvale, O.	Midvale No. 5	Tuscarawas	B. & O.	Midvale, O.
Midvale Coal Co.	Midvale, O.	Midvale No. 6	Tuscarawas	B. & O.	Midvale, O.
Midvale-Goshen Coal Co., The	1507 Union National Bank Bldg., Cleveland, O.	Wainwright	Tuscarawas	B. & O.	Urichsville, O.
Miller Bros Coal Co., The	Youngstown, O.	Miller Bros.	Columbiana	Y. & O.	Lectonia, O.
Miller, W. J. Coal Co.	New Straitsville, O.	Miller	Perry	Hocking Valley	New Straitsville, O.
Miller & Pyle Coal Co.	Somerdale, O.	Miller & Pyle	Tuscarawas	W. & L. E.	Somerdale, O.
Milligan, C. O.	Crooksville, O.	Milligan	Perry	P. R. R.	McLaney, Sallito, O.
Mink Run Coal Co.	Columbus, Ohio	Mink Run	Perry	T. O. C.	Moxahala, Ohio
Monitor Coal Co.	Nelsonville, O.	Monitor No. 2	Athens	H. V.	Nelsonville, O.
Monitor Coal Co.	Nelsonville, O.	Monitor No. 1	Hocking	H. V.	Nelsonville, O.
Monsarrat Bros.	Columbus Sav. & Tr. Bldg., Columbus, O.	Monsarrat No. 1	Perry	Z. & W.	Hemlock, O.
Monsarrat Bros.	Columbus Sav. & Tr. Bldg., Columbus, O.	Monsarrat No. 2	Perry	Z. & W.	Drakes, O.
Monsarrat Bros.	Columbus Sav. & Tr. Bldg., Columbus, O.	Monsarrat No. 9	Perry	T. & O. C.	Bransville, O.
Moonville Mining Co.	Carbondale, O.	Moonville	Vinton	B. & O. & S. W.	Xonville, O.
Morgan Run Coal & Mining Co., The	Coshocton, O.	Morgan Run No. 4	Coshocton	W. & L. E.	Coshocton, O.
Morgan Run Coal & Mining Co., The	Coshocton, O.	Morgan Run No. 3	Coshocton	W. & L. E., P. R. R.	Coshocton, O.
Mullen & Brown	Crooksville, O.	Farm Hill	Perry	Z. & W.	Crooksville, O.
Murphy-Hocking Coal Co.	Murray, O.	Murphy-Hocking	Hocking	H. V.	Murray, O.
National Fireproofing Co.	Fulton Bldg., Pittsburgh, Pa.	Black Diamond	Hocking	Hocking Valley	Haydenville, O.
Negley Coal Co., The	Negley, O.	Pleasant Valley	Columbiana	P. L. & W. P., Erie	Negley, O.
New York Coal Co.	Columbus, O.	No. 25	Athens	T. & O. C.	Chamney, O.
New York Coal Co.	Columbus, O.	No. 26	Athens	H. V.	Nelsonville, O.
New York Coal Co.	Columbus, O.	No. 28	Athens	H. V.	Nelsonville, O.
New York Coal Co.	Columbus, O.	No. 29	Athens	H. V.	Nelsonville, O.
New York Coal Co.	Columbus, O.	No. 30	Athens	H. V.	Orbiston, O.
New York Coal Co.	Columbus, O.	No. 31	Athens	H. V.	Buchtel, O.
New York Coal Co.	Columbus, O.	No. 34	Athens	H. V.	Floodwood, O.
New York Coal Co.	Columbus, O.	No. 37	Athens	H. V.	Carbon Hill, O.
New York Coal Co.	Columbus, O.	No. 38	Athens	H. V.	Buchtel, O.
New York Coal Co.	Columbus, O.	No. 39	Athens	H. V.	Carbon Hill, O.
New York Coal Co.	Columbus, O.	No. 51	Morgan	Z. & W.	Tropic, O.
Newport Coal & Mining Co.	New Philadelphia, O.	Newport	Tuscarawas	B. & O.	Urichsville, O.
Nixon Coal Co.	Nelsonville, O.	Bertha Nixon	Athens	H. V.	Nelsonville, O.
Number Three Coal Co.	New Straitsville, O.	No. 3	Perry	B. & O.	New Straitsville, O.
Ohio Blue Ridge Coal Co.	Columbus, O.	Ohio Blue Ridge	Hocking	H. V.	Murray City, O.
Ohio Central Coal Co.	Columbus, O.	Ohio Central	Perry	T. & O. C.	Moxahala, O.
Ohio Collieries Co.	Toledo, O.	No. 209	Athens	H. V.	Poston, O.
Ohio Collieries Co.	Toledo, O.	No. 210	Athens	Hocking Valley	Poston, O.
Ohio Collieries Co.	Toledo, O.	No. 211	Athens	H. V.	Poston, O.
Ohio Collieries Co.	Toledo, O.	No. 255	Athens	T. & O. C.	Jacksonville, O.
Ohio Collieries Co.	Toledo, O.	No. 256	Athens	T. & O. C.	Gloster, O.
Ohio Collieries Co.	Toledo, O.	No. 266	Athens	T. & O. C.	Holliester, O.
Ohio Collieries Co.	Toledo, O.	No. 267	Athens	T. & O. C.	Gloster, O.
Ohio Collieries Co.	Toledo, O.	No. 268	Perry	T. & O. C.	Randville, O.
Ohio Collieries Co.	Toledo, O.	No. 281	Athens	T. & O. C.	Jacksonville, O.
Ohio Collieries Co.	Toledo, O.	No. 301	Perry	Z. & W.	Congo, O.
Ohio Collieries Co.	Toledo, O.	No. 302	Perry	Z. & W.	Congo, O.
Ohio Consolidated Coal Co.	Columbus, O.	Wilhelm	Perry	Penna.	New Lexington, O.
Ohio Mining & Railway Co.	Mineral City, O.	Clover Leaf	Tuscarawas	B. & O.	Mineral City, O.
Ohio Mining Co.	Columbus, O.	Ohio	Athens	Ohio Central	Jacksonville, O.
Ohio Standard Coal Co.	10 South Fifth St., Zanesville, Ohio	No. 1	Muskingum	O. R. & W.	Zanesville, Ohio
Ohio Standard Coal Co.	10 South Fifth St., Zanesville, Ohio	No. 2	Muskingum	O. R. & W.	Zanesville, Ohio
Ohio Standard Coal Co.	10 South Fifth St., Zanesville, Ohio	No. 3	Muskingum	O. R. & W.	Zanesville, Ohio
Old Town Coal Co. (The)	New Philadelphia, O.	Old Town No. 1	Tuscarawas	B. & O.	New Philadelphia, O.
Old Town Coal Co., The	New Philadelphia, O.	Old Town No. 2	Tuscarawas	B. & O., Penna.	New Philadelphia, O.
Oliver Coal Co.	Grove City, O.	Hope	Vinton	B. & O.	Hop Station, O.
Packard Coal Mining Co.	Columbus, O.	Packard	Athens	Hocking Valley	Nelsonville, O.
Palmer Coal Co., The	New Lexington, O.	Palmer	Muskingum	Z. & W.	New Philadelphia, O.
Paskell Coal Co., The	New Lexington, O.	Azell	Perry	B. & O.	Shawnee, O.
Patton & Barnes	Coshocton, O.	Rock Run No. 2	Coshocton	W. & L. E.	Coshocton, O.
Patton, Wm. F. Coal Co. (The)	Nelsonville, O.	Patton	Hocking	Hocking Valley	Nelsonville, O.
Peerless Coal Co. (The)	New Philadelphia, O.	Peerless	Tuscarawas	C. & P.	New Philadelphia, O.
Penn Ohio Coal Co., The	East Liverpool, O.	Ohio No. 1	Columbiana	Y. & O., Erie	East Liverpool, O.
Pine Hollow Coal Co., The	Shawnee, Ohio	Pine Hollow No. 1	Perry	Z. & W.	Shawnee, Ohio
Pittsburgh Coal Co. (The)	Columbus, O.	Greendale No. 5	Hocking	Hocking Valley	Murray, O.
Pittsburgh Coal Co. (The)	Columbus, O.	Kittanning No. 9	Athens	Hocking Valley	Beaumont, O.
Pittsburgh Coal Co. (The)	Columbus, O.	Murray City No. 7	Hocking	Hocking Valley	Murray, O.
Pittsburgh Coal Co. (The)	Columbus, O.	New Monarch No. 10	Athens	H. V.	Hocking, O.
Pittsburgh Coal Co. (The)	Columbus, O.	Pomeroy No. 20	Meigs	H. V.	Pomeroy, O.
Poston Cons. Coal Co., The	Athens, O.	No. 6	Athens	T. & O. C., K. & M.	Millfield, O.
Powell Creek Coal Co.	Nelsonville, O.	Powell Creek	Hocking	H. V.	New Pittsburgh, O.
Power Coal Co.	Coshocton, O.	Power	Coshocton	W. & L. E.	Coshocton, O.
Primrose Coal Co.	Shawnee, O.	Primrose	Perry	B. & O.	Shawnee, O.
Progress Coal Co.	Marion, O.	Imperial	Athens	H. V.	Nelsonville, O.
Redfield Coal Co., Inc. (The)	Rox G. Chicago, Ill.	Redfield No. 3	Perry	Z. & W.	Sallito, O.
Reeves Coal Co.	Dover, O.	Reeves No. 2	Tuscarawas	Penna.	New Philadelphia, O.
Rhulman, P. M.	Ironton, O.	Rhulman	Lawrence	D. T. & I. N. & W.	Ironton, O.
Rice Hocking Coal Co. (The)	Dayton, O.	Rice Hocking	Athens	B. & O.	Carbondale, O.
Biddle, F. J. Coal Co.	Murray, O.	Riddle	Hocking	Hocking Valley	Murray City, O.
Robbins Coal Co. (The)	Nelsonville, O.	Robbins	Athens	H. V.	Nelsonville, O.
Robinson & Son Sewer Pipe Co.	Urichsville, O.	Robinson & Son	Tuscarawas	B. & O.	Urichsville, O.
Rome Coal Co., The	Columbus, O.	No. 1	Hocking	H. V.	Carbon Hill, O.
Rome Coal Co., The	Columbus, O.	No. 2	Hocking	H. V.	Carbon Hill, O.
Rome Coal Co., The	Columbus, O.	No. 3	Hocking	H. V.	Carbon Hill, O.
Roseville Coal Co.	Roseville, O.	New Crescent No. 2	Perry	Penna.	Roseville, O.
Royal Flush Mining Co.	1201-8 E. Broad St., Columbus, O.	Royal Flush	Perry	B. & O.	Shawnee, O.
Rutledge Coal Co.	Midvale, O.	Rutledge	Tuscarawas	Penna.	Midvale, O.
Sattler, Edward, Coal Co.	Mineral City, O.	Sattler	Tuscarawas	R. & O.	Mineral City, O.
Scott Coal Co.	Midvale, O.	B Mine	Tuscarawas	E. & O.	Midvale, O.
Semi-Wellston Coal Co.	Chillicothe, O.	R. Mine	Athens	B. & O.	Mineral, O.
Seneca Coal Co.	Columbus, O.	No. 3	Perry	Penna., N. Y. C.	Crooksville, O.
Seneca Coal Co.	Columbus, O.	No. 5	Perry	Penna., N. Y. C.	Crooksville, O.
Seneca Coal Co.	Columbus, O.	No. 6	Perry	Penna., N. Y. C.	Crooksville, O.
Seneca Coal Co.	Columbus, O.	No. 7	Perry	Penna., N. Y. C.	Crooksville, O.
Sharon Coal Co.	New Philadelphia, O.	Sharon	Tuscarawas	B. & O.	Urichsville, O.
Sherer & Mountain	Ironton, O.	Sherer-Hughes	Lawrence	N. & W.	Ironton, O.
Sheridan Mining Co.	Ironton, O.	Sheridan	Lawrence	N. & W.	Coal Grove, O.
Shulz & Green Coal Co.	R. F. D. No. 4, Nelsonville, O.	Shulz & Green	Hocking	Hocking Valley	Carbon Hill, O.
Silver Fox Coal Co.	New Lexington, O.	Silver Fox	Perry	T. & O. C.	New Lexington, O.
Sines Bros. & Co.	New Straitsville, O.	No. 1	Perry	H. V.	New Straitsville, O.
Six-A Coal Co.	Nelsonville, O.	Six-A	Athens	Hocking Valley	Nelsonville, O.
Slatzer Coal Co.	New Straitsville, O.	Coalgate No. 228	Hocking	H. V.	Coalgate, O.
Snake Hollow Coal Co., The	Nelsonville, O.	Snake Hollow	Hocking	Hocking Valley	Nelsonville, O.
Snow Fork Coal Co.	Murray, O.	Snow Fork No. 1	Hocking	H. V.	Murray City, O.
Snow Fork Coal Co.	Murray, O.	Snow Fork No. 2	Hocking	H. V.	Murray City, O.
Southern Ohio Coal Co.	1204 Branson Bldg., Columbus, O.	Starr	Vinton	Hocking Valley	New Plymouth, O.
Southern Perry Coal Co., The	New Straitsville, O.	Advance	Perry	B. & O.	New Straitsville, O.
Southeastern Ohio Ry. Co., The	129 N. Fourth St., Zanesville, O.	Interurban	Perry	Southeastern Ohio	Roseville, O.

(Continued on Next Page)

KITTANNING, MIDDLE SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Stafford Coal Co. (The)	New Philadelphia, O.	Stafford	Tuscarawas	B. & O.	Wainwright Branch, O.
Stauffer, R. Coal Co., The	Columbus, O.	Stauffer No. 1	Hocking	H. V.	Carbon Hill, O.
Standard Hocking Coal Co.	Chicago, Ill.	Standard	Perry	Penna.	Crooksville, O.
Star Coal Co.	Shawnee, O.	Star	Perry	B. & O.	Shawnee, O.
Stark Summit Coal Co.	East Sparta, O.	Stark Summit	Stark	B. & O.	Mineral City, O.
Steinbaugh, E. R.	New Philadelphia, O.	Steinbaugh	Tuscarawas	B. & O. & P.	New Philadelphia, O.
Stillwater Coal Mining Co.	Cleveland, O.	Tippecanoe No. 1	Harrison	B. & O.	Tippecanoe, O.
Sunday Creek Coal Co.	Columbus, O.	No. 10	Athens	T. & O. C.	Gloster, O.
Sunday Creek Coal Co. (The)	Columbus, O.	No. 19	Perry	T. & O. C.	Buckingham, O.
Sunday Creek Coal Co. (The)	Columbus, O.	No. 30	Perry	T. & O. C.	Carrington, C.
Sunday Creek Coal Co. (The)	Columbus, O.	Jobs No. 2	Hocking	H. V.	Jobs, O.
Sunday Creek Coal Co. (The)	Columbus, O.	Santoy No. 1	Perry	T. & O. C.	Santoy, O.
Sunday Creek Coal Co. (The)	Columbus, O.	Santoy No. 2	Perry	T. & O. C.	Santoy, O.
Swingle, S. A.	Rossville, O.	Swingle	Lerry	Penna., C. O. & C.	Rossville, O.
Tabor Coal Co., The	Cleveland, O.	Tabor	Tuscarawas	Penna.	New Philadelphia, O.
Taylor & Neelson Coal Co.	Columbus, O.	Pringle	Perry	Z. & W.	Shawnee, O.
Tharp-Reback Coal Co.	Curling, O.	No. 50	Perry	T. & O. C.	Moxahala, O.
Thistle Coal Co., The	New Straitsville, O.	Thistle	Perry	H. V.	New Straitsville, O.
Thorn Hill Coal Co. (The)	Nelsonville, O.	Thorn Hill	Perry	B. & O.	McMunsville, O.
Tri-State Brick Tile & Coal Co.	Van Wert, O.	Tri-State	Lawrence	N. & W.	Coal Grove, O.
Tropic Mining Co. (The)	Toledo, O.	Tropic	Perry	Z. & W.	Tropic, O.
Tuscarawas Coal Co.	New Philadelphia, O.	Tuscarawas	Tuscarawas	T. & P.	New Philadelphia, O.
Twin City Coal Co. (The)	Cleveland, O.	Twin City Mine	Tuscarawas	Penna.	Dennison, O.
Tyrone Coal & Mining Co.	Coshocton, O.	Tyrone	Coshocton	A. C. & C.	Coshocton, O.
Uhrichville Clay Co. (The)	Uhrichville, O.	No. 1	Tuscarawas	P. C. C. & St. L.	Uhrichville, O.
Underhill Coal Mining Co., The	Cleveland, O.	Madison No. 1	Columbiana	Penna.	New Philadelphia, O.
Upton Brothers Mining Co.	Newark, O.	Upton	Perry	B. & O.	New Lexington, O.
Valley Coal Co.	Cleveland, O.	Valley	Coshocton	W. & L. E.	Coshocton, O.
Van Kirk Carroll Coal Co.	Cleveland, O.	Hickory	Carroll	B. & O.	Mineral City, O.
Van Kirk Carroll Coal Co.	Cleveland, O.	D. H. Roy	Carroll	B. & O., W. & L. E.	D. H. Roy, O.
Virginia Hocking Coal Co.	Dayton, O.	Virginia	Athens	B. & O.	Murray, O.
Ward Fuel Co.	Murray, O.	Murray & Swank	Hocking	H. V.	Berghold, Ohio
Warner Collieries Co., The	Union Nat'l Bank Bldg., Cleveland, Ohio.	Wolf Run	Jefferson	N. Y. C.	Coshocton, O.
Warwick Coal Co. (The)	Cleveland, O.	Warwick No. 5	Coshocton	W. & L. E.	Coshocton, O.
Wat-Eber Coal Co., The	Nelsonville, O.	Wat-Eber No. 1	Hocking	Hocking Valley	Nelsonville, O.
Western Fuel Co.	Columbus, O.	Western Fuel	Athens	Hocking Valley	Orbison, O.
Western Penna. Coal Co.	Zanesville, O.	No. 10	Meigs	Z. & W. B. & O.	Buckeye, O.
Wheeler & Mason Coal Co., The	907-909 Brunson Bldg., Columbus, O.	Saltillo	Perry	Z. & W.	Saltillo, O.
Whitacre-Greer Fireproofing Co.	Waynesburg, O.	No. 1	Carroll	Penna.	Madison, O.
Whitacre-Greer Fireproofing Co. (The)	Waynesburg, O.	Greer Beatty	Carroll	Penna.	Magnolia, O.
Whitacre-Greer Fireproofing Co.	Waynesburg, O.	Midway	Stark	P. R. R.	Waynesburg, O.
White Bros.	New Straitsville, O.	White Bros.	Perry	Hocking Valley	New Straitsville, O.
White Elm Coal Co., The	Moxahala, O.	White Elm	Perry	T. & O. C.	Moxahala, O.
Wile Coal Co. (The)	Shawnee, O.	Wile	Perry	Z. & W.	Carrington, O.
Wolf-Lanning Clay Co., The	Dennison, O.	Wolf-Lanning	Tuscarawas	P. C. C. & St. L.	Dennison, O.
Wolford, M. S.	Coshocton, O.	Plain View	Coshocton	W. & L. E.	Coshocton, O.
Woodland Coal Co.	Nelsonville, O.	Woodland	Athens	H. V.	Nelsonville, O.
York Clay & Mining Co. (The)	Columbus, O.	No. 5	Athens	Hocking Valley	Bucholtz, Ohio
York Clay & Mining Co.	Columbus, O.	No. 2	Athens	H. V.	Bucholtz, Ohio
Youghiogheny & Ohio Coal Co. (The)	Cleveland, O.	Amsterdam No. 1	Jefferson	L. E. A. & W.	Amsterdam, O.
Youghiogheny & Ohio Coal Co. (The)	Cleveland, O.	Amsterdam No. 2	Jefferson	L. E. A. & W.	Amsterdam, O.
Zanesville & Western Coal Co., The	1606 Union Com. Bk. Bldg., Cleveland, O.	Turkey Run	Muskingum	Z. & W.	Cannville, O.
Zanesville & Western Coal Co.	1606 Union Com. Bk. Bldg., Cleveland, O.	Pan-American	Muskingum	Z. & W.	Cannville, O.
Zanesville Mining Co.	Zanesville, O.	Muskingum	Muskingum	W. & L. E.	Zanesville, O.

MERCER, LOWER SEAM (Known also as NO. 3 SEAM; WILBUR SEAM; FLINT RIDGE COAL; NO. 2 COAL of Mahoning County; BLUE LIMESTONE COAL)

Mined in Columbiana and Mahoning counties. Bituminous rank. Suitable for Steam, Railroad, Cement Burning, Producer Gas and Domestic Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
American Vitified Products Co.	Alto, O.	No. 30	Columbiana	P. & L. W.	Lisbon, O.
Bedford Coal By-Product Co., The	St. Louis, Mo.	No. 1	Coshocton	P. A. & C.	Wegley, O.
Black Oak Coal Co.	Canton, O.	Black Oak	Stark	B. & O.	Canton, O.
Columbia Coal & Power Co.	N. W. Waterford, O.	Columbian	Columbiana	Penna.	New Waterford, O.
East Ohio Sewer Pipe Co.	Irondale, Ohio.	Creek Vein	Jefferson	Penna.	Irondale, Ohio.
Elk Run Coal Co., The	Salem, O.	Brier Hill	Columbiana	Erie	Lisbon, O.
Finzer Bros. Clay Co., The	Sugar Creek, O.	Finzer	Tuscarawas	W. & L. E.	Sugar Creek, O.
Flint Coal Co., The	Columbus, O.	Flint	Vinton	B. & O.	McArthur, O.
Mingwood Coal Co.	Wellston, O.	Mingwood No. 4	Jackson	B. & O., H. V., D. T. & I.	Wellston, O.
Mingwood Coal Co.	Wellston, O.	Mingwood No. 5	Jackson	B. & O., H. V., D. T. & I.	Wellston, O.
Mount Cherry Coal Company	Columbus, O.	Mt. Cherry	Holmes	Penna.	Fredricksburg, O.
Orient Coal Co.	900 Columbus Sav. & Trust Bldg., Columbus, O.	Orient	Vinton	Hocking Valley	McArthur, O.
Pascola Coal Co.	Salem, Ohio.	Pascola	Mahoning	Penna.	Sal m, O.
Reese, John F. & Son	Salem, Ohio.	Beck Hollow	Columbiana	P. P. M. & C.	Sal m, Ohio.
Salem Mining Company (The)	Windber, Pa.	Salem	Columbiana	Y. & O.	Sal m Mines, Ohio.
Stirling Coal Co., Ltd.	Cleveland, Ohio.	Delmore	Columbiana	Erie	Letchia, Ohio.
Vinton-Jackson Coal Co.	McArthur, O.	Zaleski	Vinton	B. & O.	Zaleski, Ohio.

PITTSBURGH SEAM (Known also as NO. 8 SEAM; FEDERAL CREEK COAL in Morgan and Athens Counties)

Mined in Cambridge, Meigs Creek, Belmont and Pomeroy Bend districts. Bituminous rank. Suitable for Steam, Cement Burning, Producer Gas, Locomotive Fuel and Domestic Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Adena Coal Co.	Adena, O.	Adena	Jefferson	W. & L. E.	Adena, O.
Apex Coal Company, The	Cleveland, O.	Apex No. 1	Harrison	N. Y. C., F. E. A. & W.	Adena, O.
Apex Coal Company, The	Bellaire, O.	Apex No. 2	Harrison	N. Y. C., F. E. A. & W.	Adena, O.
Bakewell Coal Co. (The)	Bellaire, O.	Knob	Belmont	B. & O.	Org. town, O.
Barth & Ronnie Coal Co., The	Bridgeport, O.	Barth & Ronnie	Belmont	B. & O.	Bridgeport, O.
Barton Coal Co. (The)	Cleveland, O.	Taggart	Belmont	B. & O.	Barton, O.
Beacon Coal Co.	Steubenville, O.	Beacon	Jefferson	I. P. A.	Unionport, O.
Bellair Mining Co.	Adena, O.	Bellaire	Jefferson	W. A. V.	Adena, O.
Beluan Coal Company	Wheeling, W. Va.	Beluan	Jefferson	P. A. V.	Smith's, O.
Bixler Coal Co., The	Columbus, O.	Cochran	Belmont	B. & O.	Rad As Mills, O.
Black Diamond Co., The	Columbus, O.	Black Diamond	Athens	H. V.	Lafayette, O.
Black Gem Coal Co., The	Smithfield, O.	Black Gem No. 1	Belmont	P. & W. V.	Smithfield, O.
Black Gem Coal Co., The	Smithfield, O.	Black Gem No. 2	Belmont	P. & W. V.	Smithfield, O.

(Continued on Next Page)

PITTSBURGH SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Brettell Coal Co., The	Mingo Junction, O.	Brettell	Jefferson	P. R. R., W. & L. E.	Mingo Junction, O.
Bridgeville-Barton Coal Co.	Bridgeville, Pa.	Barton	Belmont	B. & O.	Barton, O.
Brilliant Coal Mining Co.	Cleveland, O.	Bunny	Jefferson	P. R. R.	Brilliant, O.
Cadiz Block Coal Co., The	Cadiz, O.	Cadiz Block	Harrison	W. & L. E.	Cadiz, O.
Cambria Collieries Co., The	Toledo, O.	Webb	Belmont	C. & P.	Webb, O.
Cambridge Collieries Co., The	Toledo, O.	Pultney	Belmont	C. & P.	Bellaire, O.
Cambridge Collieries Co. (The)	Cleveland, O.	Majestic	Harrison	W. & L. E.	Adena, O.
Cambridge Collieries Co. (The)	Cleveland, O.	Shadyside	Belmont	Penna.	Wegre, O.
Carnegie Steel Co. (Coal Mining Dept.)	Pittsburgh, Pa.	Bellaire Works	Belmont	Penna.	Bellaire, O.
Central Coal Mining Company	Cleveland, O.	Clifford	Belmont	Penna.	Dille, O.
Clarkson Coal Mining Co.	Cleveland, O.	Clarkson No. 1	Belmont	W. & L. E.	Clarkson, O.
Clarkson Coal Mining Co.	Cleveland, O.	Clarkson No. 2	Belmont	B. & O.	Fairpoint, O.
Clarkson Coal Mining Co.	Cleveland, O.	Clarkson No. 3	Jefferson	W. & L. E.	Dunglen, O.
Cleveland & Western Coal Co., The	Cleveland, O.	Franklin	Belmont	B. & O.	Stewartsville, O.
Cleveland & Western Coal Co., The	Cleveland, O.	Johnson	Belmont	Penna.	Pipe Creek, O.
Cleveland-Macksburg Coal Co., The	Cleveland, O.	Peerless No. 1	Washington	Peona.	Macksburg, O.
Climax Coal Co.	Martins Ferry, O.	Climax	Jefferson	P. & W. Va.	Smithfield, O.
Coal Land Development Corp.	Pittsburgh, Pa.	Ella	Harrison	P. & W. Va.	Lopedale, O.
Colburgh Coal Co. (The)	Columbus, O.	Murphy	Belmont	B. & O.	Baileys Mills, O.
Commonwealth Coal Co.	Martins Ferry, O.	Burlington	Belmont	W. & L. E.	Martins Ferry, O.
Consolidated Coal & Coke Co.	Putler, Pa.	Consolidated No. 6	Perry	B. & O.	Shawnee, O.
Consolidated Fuel Co., The	1203 Chamber of Commerce Bldg., Pittsburgh, Pa.	Goucher	Jefferson	Peona.	Brilliant, O.
Consolidated Fuel Co., The	1203 Chamber of Commerce Bldg., Pittsburgh, Pa.	Kelly	Jefferson	Penna.	Rayland, O.
Coxe Mining Co.	Hazleton Pa.	Fernwood	Jefferson	Penna.	Fernwood, O.
Cross Creek Coal Co. (The)	Steubenville, O.	Coal Hill	Jefferson	Penna., W. & L. E.	Steubenville, O.
Crow Oil, Gas & Coal Co.	Wheeling, W. Va.	Captina	Belmont	O. R. & W.	Captina, O.
Culbertson, R. L., Coal Co.	1554 Hanna Bldg., Cleveland, O.	Culbertson	Harrison	W. & L. E.	Unionvale, Ohio
Davis, T. H. Coal Co.	Middleport, O.	Davis	Meigs	H. V.	Middleport, O.
Eldon Coal Mining Co.	Wheeling, W. Va.	Quaker	Guernsey	B. & O.	Eldon, O.
Elm Grove Mining Co.	Cleveland, O.	Oco	Belmont	C. L. & W.	Laferty, O.
Emergency Coal Co., The	Neffs, O.	Emergency	Belmont	W. & L. E., B. & O.	Neffs, O.
Emerson Coal Co.	Bellaire, O.	Frazier	Belmont	W. & L. E.	Maynard, O.
Fairview Coal Company	Cleveland, O.	Fairview	Belmont	B. & O.	Cr scent, O.
Federal Creek Coal Co., The	Nelsonville, O.	Federal Creek	Athens	T. & O. C. Fed. Valley.	Amesville, O.
Freeman, Michael Co.	Neffs, O.	McClain	Belmont	B. & O.	Neffs, O.
Giffen Coal Co.	Maynard, O.	Giffen	Belmont	B. & O., W. & L. E.	Maynard, O.
Glen's Run Coal Co.	Kirby Bldg., Cleveland, O.	Edgar No. 1	Jefferson	W. & L. E.	Unionvale, O.
Glen's Run Coal Co.	Kirby Bldg., Cleveland, O.	Edgar No. 2	Jefferson	W. & L. E.	Dillonvale, O.
Glen's Run Coal Co.	Kirby Bldg., Cleveland, O.	Rush Run No. 3	Jefferson	P. R. R.	Rush Run, O.
Glen's Run Coal Co.	Kirby Bldg., Cleveland, O.	Rush Run No. 4	Jefferson	P. R. R.	Rush Run, O.
Great Lakes Coal Mining Co.	Columbus, O.	No. 1	Harrison	W. & L. E.	Adna, O.
Great Lakes Coal Mining Co.	Columbus, O.	No. 2	Jefferson	W. & L. E.	Adna, O.
Great Lakes Coal Mining Co.	509 Spahr Bldg., 50 E. Broad St., Columbus, O.	No. 3	Belmont	W. & L. E.	Riss and Maynard, O.
Great Lakes Coal Mining Co.	509 Spahr Bldg., 50 E. Broad St., Columbus, O.	No. 4	Belmont	W. & L. E.	Riss and Maynard, O.
Great Lakes Coal Mining Co.	509 Spahr Bldg., 50 E. Broad St., Columbus, O.	No. 5	Belmont	W. & L. E.	Riss and Maynard, O.
Hall-Pickering Coal Co.	Cadiz, O.	Hall-Pickering	Harrison	Penna.	Cadiz, O.
Harmon Creek Coal Co.	729 Oliver Bldg., Pittsburgh, Pa.	Howard	Harrison	P. & W. Va.	Hopedale, O.
Harmon Creek Coal Co.	729 Oliver Bldg., Pittsburgh, Pa.	Rexford	Harrison	W. & L. E.	Jewett, O.
Harmony Coal Co.	Fairpoint, O.	Harmony	Belmont	B. & O.	Fairpoint, O.
Harper Coal Co., The	Jackson, O.	Harper	Meigs	K. & M.	Hobson, O.
Heenessey & Durst.	Pomeroy, O.	Logan	Meigs	Hocking Valley.	Pomeroy, O.
Highland City Coal Co.	Wheeling, W. Va.	Highland City	Jefferson	Penna.	Rayland, O.
Holloway Coal Co.	818 Engineers Bldg., Cleveland, O.	Locust	Belmont	B. & O., C. L. & W.	Flushing, O.
Hoover Coal Co.	Middleport, O.	Silver Run	Meigs	Hocking Valley.	Middleport, O.
Hudson, S. M. Coal & Coke Co., The	Bush Run, O.	Hudson	Jefferson	C. & P.	Rush Run, O.
Hutchinson Coal Co.	Fairmont, W. Va.	Kirkwood	Belmont	B. & O.	Bridgeport, O.
Hutsco Coal Co., The	Cleveland, O.	Hopedale No. 9	Harrison	P. & W. Va.	Hopedale, O.
Jean Coal Mining Co.	Cleveland, O.	Jean	Jefferson	Penna.	Brilliant, O.
Jefferson Coal Company (The)	Cleveland, O.	No. 1	Jefferson	N. Y. C.	Piney Fork, O.
Jefferson Coal Company (The)	Cleveland, O.	No. 2	Jefferson	N. Y. C.	Piney Fork, O.
Jefferson Coal Company (The)	Cleveland, O.	No. 3	Jefferson	N. Y. C.	Harpersville, O.
Jennings Coal Co., The	Athens, O.	Utley	Athens	T. & O. C.	Amesville, O.
Jones Coal Co.	711 Oliver Bldg., Pittsburgh, Pa.	Jones	Jefferson	Penna., W. & L. E.	Yorkville, O.
Kennon Coal & Mining Co.	825 National City Bldg., Cleveland, O.	Kennon	Belmont	B. & O.	Flushing, O.
Kenova Mining Co., The	Ashland, O.	Kenova	Meigs	K. & M.	Middleport, O.
Lake Shore Coal Co.	Cleveland, O.	Lake Shore	Belmont	B. & O.	Barton, O.
Lawrence Coal Co.	Pittsburgh, Pa.	Lawrence No. 1	Jefferson	Penna.	Rayland, O.
Lewis Coal Co., The	Rayland, O.	Lewis	Jefferson	W. & L. E.	Rayland, O.
Lomi Coal Co., The	Cadiz, O.	Lomi	Harrison	Penna.	Cadiz, O.
Lorain Coal & Dock Co.	Columbus, O.	Stanley	Belmont	B. & O.	Blaine, O.
Lorain Coal & Dock Company	Columbus, O.	Wheeling Creek	Belmont	B. & O.	Bridgeport, O.
Lorain Coal & Dock Company	Columbus, O.	Crescent	Belmont	B. & O.	Crescent, O.
Lorain Coal & Dock Company	Columbus, O.	Lansing	Belmont	B. & O.	Bridgeport, O.
Lorain Coal & Dock Company	Columbus, O.	Blaine	Belmont	B. & O.	Bridgeport, O.
Macksburg Coal Co.	Haver, O.	Morning Glory	Noble	Penna.	Macksburg, O.
Maber Collieries Co.	Cleveland, O.	No. 1	Belmont	B. & O.	Glencoe, O.
Maber Collieries Co.	Cleveland, O.	No. 2	Belmont	B. & O.	Glencoe, O.
Maber Collieries Co.	Cleveland, O.	No. 3	Belmont	B. & O.	Neffs, O.
Maber Collieries Co.	Cleveland, O.	Maber No. 5	Belmont	B. & O.	Stewartsville, O.
Maber Collieries Co.	Cleveland, O.	Maber No. 6	Belmont	B. & O., W. & L. E.	Neffs, O.
Maber Collieries Co.	Cleveland, O.	No. 7	Belmont	W. & L. E.	Neffs, O.
Maber Collieries Co.	Cleveland, O.	No. 9	Belmont	B. & O.	Neffs, O.
Maber Collieries Co.	Cleveland, O.	No. 10	Belmont	B. & O., W. & L. E.	Neffs, O.
Maber Collieries Co.	Cleveland, O.	Maber No. 12	Belmont	B. & O.	Maynard, O.
Massillon Coal Mining Co.	Cleveland, O.	Bose No. 28	Harrison	W. & L. E.	Adena, O.
Massillon Coal Mining Co.	Cleveland, O.	Rose No. 29	Belmont	W. & L. E.	Adena, O.
Meister Coal Co. (The)	Bridgeport, O.	Alice	Belmont	B. & O.	Laferty, O.
Meister, Joseph Coal Co.	Martins Ferry, O.	Sheets	Harrison	Penna., B. & O.	Martins Ferry, O.
Millwood Coal Co., The	Barnesville, O.	Sunshine	Guernsey	B. & O.	Baileys Mills, O.
Narva Coal Co.	Steubenville, O.	Narva	Harrison	Penna.	Narva, O.
National Coal Co., The	Cleveland, O.	Loomis	Belmont	B. & O.	Lamira, O.
Neff Coal Co.	Neffs, O.	X-L	Belmont	W. & L. E.	Neffs, O.
Nicholson, P. R.	Dillonvale, O.	Nicholson	Jefferson	N. Y. C.	Dillonvale, O.
North Belmont Coal Co.	Cleveland, O.	Tunnel	Belmont	B. & O.	Flushing, O.
Ohio & Pennsylvania Coal Co.	Cleveland, O.	O. & P. No. 3	Jefferson	Penna.	Yorkville, O.
Ohio & West Virginia Coal Co.	412 Front St., Wheeling, W. Va.	Nina	Belmont	C. & P.	Martins Ferry, O.
Ohio Linwood Coal Co.	Wheeling, W. Va.	Ohio Linwood	Belmont	Z. & O.	Bellaire, O.
Paisley, J. A. Coal & Coke Co.	Kirby Bldg., Cleveland, O.	Luce	Belmont	B. & O.	Neffs, O.
Pan Handle Collieries Co.	Columbus, O.	Vallett	Jefferson	P. C. C. & St. L.	Fernwood, O.
Piney Fork Coal Company	Columbus, O.	"Electro"	Jefferson	Pgh. & W. Va.	Smithfield, O.
Pomeroy Colliery Co., The	Coalton, O.	No. 1	Meigs	Hocking Valley.	Pomeroy, O.
Progress Coal Co.	Cleveland, O.	Pauline No. 1	Belmont	B. & O.	Bannock, O.
Progress Coal Co.	Cleveland, O.	Pauline No. 1	Belmont	C. L. & W., or B. & O.	Bannock, O.
Progressive Coal Co. (The)	Bellaire, O.	Morgan	Belmont	B. & O.	Bellaire, O.
Rail & River Coal Co.	Cleveland, O.	No. 1	Belmont	Penna.	Bellaire, O.
Rail & River Coal Co.	Cleveland, O.	No. 3	Belmont	Penna.	Aults, O.
Rail & River Coal Co.	Cleveland, O.	No. 6	Belmont	B. & O.	Bellaire, O.
Baven Coal Co., The	Steubenville, O.	Ravan	Jefferson	P. W. Va.	Smithfield, O.
Eidenour-Shafer Coal Co., The	Nelsonville, O.	Carl	Gallia	H. V.	Ceshire, O.
Biley Bros. Coal Co.	22 Front St., Nelsonville, O.	Liley	Meigs	K. & M.	Rutland, O.
Boby-Somers Coal Co.	521 Cuyahoga Bldg., Cleveland, Ohio.	Lorena	Belmont	W. L. E.	Adena, Ohio

PITTSBURGH SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Rosemary Coal Co. (The)	Cleveland, O.	Rosemary No. 1	Belmont	R. & O.	Flushing, O.
Rosemary Coal Co., The	Cleveland, O.	Rosemary No. 3	Belmont	R. & O.	Laferty, O.
Rothland Coal Co.	Columbus, O.	Mayraid No. 4	Adams	K. & M.	Richland, O.
Sauters Coal Co., The	Cleveland, Ohio	Gaylord No. 1	Belmont	Penna.	Martins Ferry, Ohio
Sauters Coal Co., The	Cleveland, Ohio	Gaylord No. 2	Belmont	Penna.	Martins Ferry, Ohio
Schick Co-Operative Coal Co. (The)	Bellville, O.	Schicks	Belmont	B. & O.	Bellville, O.
Shady-side Coal Co., The	Bridgeport, O.	Wolfhurst	Belmont	C. & P.	Bridgeport, O.
Short Creek Coal Co.	Pittsburgh, Pa.	No. 1	Harrison	W. & L. E.	Adena, O.
Short Creek Coal Co.	Pittsburgh, Pa.	No. 3	Harrison	W. & L. E.	Adena, O.
Short Creek Coal Co.	Pittsburgh, Pa.	No. 2	Harrison	W. & L. E.	Adena, O.
Stark & Ohio Mining Co.	Cadiz, O.	Berry	Belmont	B. & O.	Maynard, O.
Stalter & Essex Coal Co.	Columbus, O.	Stalter	Mt. Vernon	K. & M.	Pomroy, O.
Stratton Fire Clay Co. (The)	Empire, O.	Ohio River	Jefferson	C. & P.	Empire, O.
Sugar Hill Coal Co., The	Steubenville, O.	Sugar Hill	Jefferson	Penna., W. L. E.	Steubenville, O.
Superior Coal Company	Wheeling, W. Va.	Superior	Jefferson	Pgh. & W. Va.	Chandler, O.
Tasa Coal Co.	517 Oliver Bldg., Pittsburgh, Pa.	Tasa	Harrison	W. & L. E.	Keenwood, Ohio
Troll Coal Mining Co.	St. Clairsville, O.	Troll No. 1	Belmont	W. & L. E.	Fairpoint, O.
Troll Coal Mining Co.	St. Clairsville, O.	Troll No. 2	Belmont	W. & L. E.	Fairpoint, O.
Uniontown Coal Co., The	Youngstown, O.	Lee	Belmont	B. & O.	Ramock, O.
United Electric Coal Companies	Danville, Ill.	No. 7 Beech Flats	Jefferson	Penna.	Rush Run, O.
United States Coal Co. (The)	Cleveland, O.	Crow Hollow	Jefferson	W. & L. E.	Smithfield, Bradley, O.
United States Coal Co. (The)	Cleveland, O.	Plum Run	Jefferson	Penna.	Rush Run, O.
Unity Coal Co.	Steubenville, O.	Copeton	Harrison	Penna.	Folk, O.
Valley Camp Coal Co. (The)	Cleveland, O.	Columbia No. 1	Belmont	B. & O.	Fairpoint, O.
Valley Camp Coal Co. (The)	Cleveland, O.	Columbia No. 2	Belmont	B. & O.	Fairpoint, O.
Valley Grove Coal Co., The	Bellville, O.	Ohio	Belmont	B. & O.	Stewartsville, O.
Virgin Coal Co.	Partlett, O.	Virgin	Jefferson	P. & W. Va.	Wayne, O.
Warner Collieries Co., The	Union Nat'l Bank Bldg., Cleveland, Ohio.	Marion	Harrison	N. Y. C.	Hopedale, O.
Warner Collieries Co., The	Union Nat'l Bank Bldg., Cleveland, Ohio.	Russell	Jefferson	Penna., S. W.	Thionville, Ohio
Warner Collieries Co., The	Union Nat'l Bank Bldg., Cleveland, Ohio.	No. 1	Belmont	B. & O.	Fairpoint, Ohio
Warner Collieries Co., The	Union Nat'l Bank Bldg., Cleveland, Ohio.	No. 2	Belmont	B. & O.	Fairpoint, Ohio
Wayne Coal Co.	Benedum-Trees Bldg., Pittsburgh, Pa.	Wayne No. 1	Jefferson	Pgh. & W. Va.	Wayne, O.
Wayne Coal Co.	Benedum-Trees Bldg., Pittsburgh, Pa.	Wayne No. 2	Jefferson	Pgh. & W. Va.	Wayne, O.
Wayne Coal Co.	Benedum-Trees Bldg., Pittsburgh, Pa.	Wayne No. 3	Jefferson	Pgh. & W. Va.	Wayne, O.
Wayne Coal Co.	Benedum-Trees Bldg., Pittsburgh, Pa.	Wayne No. 4	Jefferson	Pgh. & W. Va.	Wayne, O.
Wayne Coal Co.	Benedum-Trees Bldg., Pittsburgh, Pa.	Wayne No. 5	Jefferson	Pgh. & W. Va.	Wayne, O.
Wayne Coal Co.	Benedum-Trees Bldg., Pittsburgh, Pa.	Wayne No. 6	Jefferson	Pgh. & W. Va.	Wayne, O.
Wayne Coal Co.	Benedum-Trees Bldg., Pittsburgh, Pa.	No. 8	Jefferson-Harrison	P. & W. Va.	Wayne, O.
Wayne Coal Co.	Benedum-Trees Bldg., Pittsburgh, Pa.	No. 9	Jefferson-Harrison	P. & W. Va.	Wayne, O.
West Wheeling Coal Co.	Bridgeport, O.	West Wheeling	Belmont	C. & P.	Bridgeport, O.
Wheeling & Lake Erie Coal Mng. Co., The	Cleveland, O.	Dillon No. 2	Jefferson	W. & L. E.	Dillonvale, O.
Wheeling & Lake Erie Coal Mng. Co., The	Cleveland, O.	Dillon No. 5	Belmont	B. & O.	Laferty, O.
Wheeling & Lake Erie Coal Mng. Co., The	Cleveland, O.	Dillon No. 4	Jefferson	W. & L. E.	Merrick, O.
Wheeling & Lake Erie Coal Mng. Co., The	Cleveland, O.	Dillon No. 3	Jefferson	W. & L. E.	Dillonvale, O.
Wheeling & Lake Erie Coal Mng. Co., The	Cleveland, O.	Dillon No. 6	Belmont	B. & O.	Laferty, O.
Wheeling & Lake Erie Coal Mng. Co., The	Cleveland, O.	Dillon No. 7	Belmont	B. & O.	Noffs, O.
Wheeling & Lake Erie Coal Mng. Co., The	Cleveland, O.	Dillon No. 8	Belmont	B. & O.	Noffs, O.
Wheeling Township Coal Mining Co.	Adena, O.	No. 1	Belmont	W. & L. E.	Bals, O.
Wheeling Township Coal Mining Co.	Adena, Ohio	No. 2	Harrison	W. & L. E.	Adena, Ohio
Whitaker-Glessner Company	Wheeling, W. Va.	Laughlin	Belmont	Penna.	Martins Ferry, O.
Witch Hazel Coal Co.	Youngstown, O.	Flaughlin	Jefferson	N. Y. C.	Parlett & Piney Fork, O.
Witch Hazel Coal Co.	Youngstown, O.	Florence No. 3	Jefferson	N. Y. C.	Parlett & Piney Fork, O.
Witch Hazel Coal Co.	Youngstown, O.	Florence No. 4	Jefferson	N. Y. C.	Parlett & Piney Fork, O.
Wolf Coal Co.	Box 144, Wheeling, W. Va.	Wolf	Belmont	B. & O.	Noffs, O.
Woodward Coal Co.	Kent, O.	Woodward No. 1	Jefferson	W. & L. E., N. Y. C.	Adena, O.
Woodward Coal Co.	Kent, O.	Woodward No. 2	Jefferson	W. & L. E., N. Y. C.	Adena, O.
Woodward Coal Co.	Kent, O.	Woodward No. 3	Jefferson	W. & L. E., N. Y. C.	Adena, O.
Yorkville Mining Co.	Martins Ferry, O.	Hell	Belmont	W. & L. E.	Yorkville, O.
Youghiogheny & Ohio Coal Co., The	Cleveland, O.	Roggs	Belmont	B. & O., C. & W. Div.	Barton, O.
Youghiogheny & Ohio Coal Co., The	Cleveland, O.	Maple Hill	Belmont	B. & O., C. & W. Div.	Barton, O.
Youghiogheny & Ohio Coal Co. (The)	Cleveland, O.	Barton	Belmont	B. & O.	Barton, O.
Youghiogheny & Ohio Coal Co., The	Cleveland, O.	Budd	Belmont	Penna.	Rayland, O.
Youghiogheny & Ohio Coal Co. (The)	Cleveland, O.	Florence	Belmont	P. & R.	Martins Ferry, O.
Youghiogheny & Ohio Coal Co. (The)	Cleveland, O.	Delora	Belmont	B. & O.	Glenow, O.
Youghiogheny & Ohio Coal Co. (The)	Cleveland, O.	Elanor	Belmont	B. & O.	Warnock, O.

QUAKERTOWN SEAM (Known also as NO. 2 SEAM; WELLSTON COAL; JACKSON HILL COAL)

Mined in the Wellston district. Bituminous rank. Suitable for Steam, Railroad, Cement Burning, Melting, Producer Gas, Tile and Pottery Burning, Powdered and Domestic Purposes.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Armstrong Coal Co.	Jackson, O.	Armstrong	Jackson	D. T. & I.	Jackson, O.
Browne Coal Co.	Wellston, Ohio	Blue Bird	Jackson	B. & O.	Wellston, Ohio
Chapman Mine The	Jackson, O.	Chapman	Jackson	D. T. & I., H. V.	Jackson, O.
Compass Hill Coal Co.	Coalton, O.	Compass Hill	Jackson	B. & O.	Coalton, O.
Domestic Coal Co. (The)	Wellston, Ohio	Domestic	Jackson	D. T. & I.	Wellston, Ohio
Elk Fork Coal Co.	Wellston, Ohio	Elk Fork No. 1	Vinton	H. V.	McArthur, O.
Elk Fork Coal Co.	Wellston, Ohio	Elk Fork No. 2	Jackson	D. T. & I.	Wellston, Ohio
Elko Colliery Co.	Wellston, O.	Elko No. 1	Vinton	B. & O.	Wellston, O.
Evans, T. J. Coal Co.	Coalton, Ohio	Evans	Jackson	B. & O., D. T. & I., H. V.	Coalton, Ohio
Glen Roy Coal Co. (The)	Jackson, Ohio	Glen Roy	Jackson	Hocking Valley	Coalton, Ohio
Jackson Colliery Company	Jackson, Ohio	Jackson Colliery Co.	Jackson	D. T. & I.	Jackson, Ohio
Jackson Hill Coal Co. (The)	Jackson, O.	Jackson	Jackson	D. T. & I.	Jackson, O.
Lawler, John L. & Son	Clarion, O.	Lawler No. 10	Vinton	Hocking Valley	Munition, O.
Maynard Coal Co.	Columbus, O.	No. 5	Jackson	B. & O.	Maynard, O.
Stroth Coal Co.	Wellston, O.	Stroth	Jackson	B. & O.	Wellston, O.
Superior Colliery Co.	Detroit, Mich.	No. 12	Jackson	B. & O.	Wellston, O.
Twin-Ada Coal Co. (The)	Coalton, Ohio	Twin-Ada	Jackson	D. T. & I.	Wellston, Ohio
Wellston Hill Coal Co.	Wellston, O.	Endorse	Jackson	B. & O.	Wellston, O.
Wellston Iron Furnace Co., The	Jackson, O.	Standard	Jackson	D. T. & I.	Wellston, O.
Wellston Rich Run Coal Co., The	Wellston, O.	No. 1	Jackson	B. & O.	Wellston, O.
Wellston Rich Run Coal Co., The	Wellston, O.	No. 2	Jackson	B. & O.	Wellston, O.
Wellston Rich Run Coal Co., The	Wellston, O.	No. 3	Jackson	B. & O.	Wellston, O.
Wellston Rich Run Coal Co., The	Wellston, O.	No. 4	Jackson	B. & O.	Wellston, O.
Wellston Rich Run Coal Co., The	Wellston, O.	No. 5	Jackson	B. & O.	Wellston, O.
Wellston Rich Run Coal Co., The	Wellston, O.	No. 6	Jackson	B. & O.	Wellston, O.

REDSTONE SEAM (Known also as NO. 8a SEAM; POMEROY SEAM)

Mined in Pomeroy district. Bituminous rank. Suitable for Steam, Railroad, Cement Burning, Producer Gas and Domestic Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Great Lakes Coal Mining Co. The...	Columbus, O.	Great Lakes No. 1	Meigs	H. V.	Pomeroy, O.
Great Lakes Coal Mining Co. The...	Columbus, O.	Great Lakes No. 12	Meigs	H. V.	Pomeroy, O.
Great Lakes Coal Mining Co. The...	Columbus, O.	Great Lakes No. 14	Meigs	H. V.	Pomeroy, O.
Great Lakes Coal Mining Co. The...	Columbus, O.	Great Lakes No. 15	Meigs	H. V.	Pomeroy, O.
Great Lakes Coal Mining Co. The...	Columbus, O.	Great Lakes No. 16	Meigs	H. V.	Pomeroy, O.
Great Lakes Coal Mining Co. The...	Columbus, O.	Thomas No. 17	Meigs	H. V.	Pomeroy, O.
Hocking Domestic Coal Co.	Nelsonville, O.	Hocking No. 5	Meigs	Hocking Valley	Hobson & Middleport, O.
Hocking Domestic Coal Co.	Nelsonville, O.	Hocking No. 7	Meigs & Gallia	H. V.	Hobson & Middleport, O.
Macphail Coal Co.	Middleport, O.	MacPhail	Meigs	K. & M.	Hobson, O.
Maynard Coal Co.	Columbus, O.	No. 2	Meigs	K. & M.	Rutland, O.
Maynard Coal Co.	Columbus, O.	Maynard No. 3	Meigs	K. & M.	Hobson, O.
Maynard Coal Co.	Columbus, O.	Maynard No. 4	Meigs	K. & M.	Rutland, O.
New Pocock Coal Co.	Massillon, O.	Belmont	Belmont	B. & O.	Flushing, O.
Skaggs, E. D.	Bethesda, O.	Skaggs	Belmont	B. & O.	Bethesda, O.
Union Coal Stripping & Mng. Co. The...	Cleveland, O.	Union	Belmont	B. & O.	Laferty, O.
Union Coal Stripping & Mng. Co. The...	Cleveland, O.	Clyde	Belmont	B. & O.	Laferty, O.
Vulcan Coal Co. The...	Stenbenville, O.	Vulcan	Meigs	K. & M.	Hobson, O.
Yankee Mining Co.	Columbus, O.	Yankee	Meigs	K. & M.	Pomeroy, O.

SHARON SEAM (Known also as NO. 1 SEAM; PALMYRA COAL; BLOCK COAL of Mahoning Valley; BRIER HILL COAL; MASSILLON COAL; WADSWORTH COAL; JACKSON SHAFT COAL)

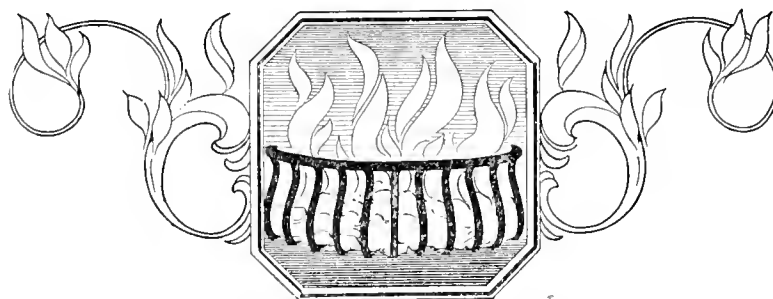
Mined in the Massillon, Palmyra and Wellston districts. Bituminous rank. Suitable for Steam, Railroad, Melting, Producer Gas, Tile and Pottery Burning, Cement Burning, Powdered and Domestic Uses. Known as a Block Coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Cleveland Massillon Coal Co.	536 Engineers Bldg., Cleveland, Ohio	Cleveland Massillon	Stark	M. & C.	Massillon, Ohio
Globe Iron Co.	Jackson, Ohio	Globe	Jackson	B. & O. S. W.	Jackson, Ohio
Hutchison Coal Company	Wadsworth, Ohio	Klondyke	Medina	Erie	Wadsworth, Ohio
Hutson Coal Co. (The)	Cleveland, Ohio	Deerfield No. 4	Portage	N. Y. C.	Deerfield, Ohio
Hutson Coal Co. The	Cleveland, O.	No. 10	Portage	N. Y. C.	Deerfield, Ohio
Jackson Iron & Steel Co. (The)	Jackson, Ohio	Jisco	Jackson	D. T. & I. E. & O. S. W.	Jackson, Ohio
Kranz, Frank	Barberton, O.	Kranz	Summit	Penna. B. & O.	Barberton, O.
McKitterick Coal Co.	Jackson, O.	McKitterick	Jackson	D. T. & I.	Jackson, O.
M. & B. Coal Co. The	Canal Fulton, O.	M. & B.	Stark	M. & C.	Canal Fulton, O.
New Pocock Coal Co.	Massillon, O.	Massillon Pocock No. 7	Stark	W. & L. E.	Navarre, O.
New Pocock Coal Co.	Massillon, O.	Massillon Pocock No. 8	Stark	W. & L. E.	Navarre, O.
Oak Hill Coal Co.	Massillon, O.	Oak	Stark	W. & L. E.	Br. w. ster, C.
Paine Coal Co.	Jackson, O.	Paine	Jackson	D. T. & I.	Jackson, O.
Paramount Coal Mining Co. The	Massillon, O.	No. 1 Dalry	Stark	B. & O.	Canal Fulton, O.
Red Oak Coal Mine No. 1	Cann-ville, O.	Red Oak No. 1	Summit	B. & O.	Clinton or Akron, O.
Bidenour-Shively Coal Co.	Jackson, O.	Bidenour	Jackson	D. T. & I.	Jackson, O.
Willow Grove Coal Co.	Massillon, O.	Willow Grove	Stark	M. & C.	Massillon, O.

MISCELLANEOUS SEAMS

Bituminous rank. Suitable for Steam, Cement, Burning, Railroad, Producer Gas and Domestic Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
American Fire Clay & Products Co.	Cleveland, O.	Fisk	Mahoning	Erie	Canfield, O.
Beaver Coal & Clay Co.	Cleveland, O.	Beaver	Columbiana	Erie	Colemans, O.
Gerstenschlager, V. & Son	Wadsworth, O.	Pleasant Valley	Medina	Erie	Wadsworth, O.
Harper Coal Co. The	Coalton, O.	Harper	Jackson	D. T. & I.	Davisville, O.
Harris Brick Co.	Zanesville, O.	Harris	Muskingum	O. R. & W.	Griffin Sta., O.
Kane Coal & Gas Co.	Schring, O.	Kane	Mahoning	Penna.	Schring, O.
Rothacker, John E.	Dover, O.	Rothacker	Tuscarawas	B. & O. C. & P.	Dover, O.



OHIO

Alphabetical Directory of Coal Mines, Giving Complete Detailed Information Covering Each Mine

For List of Abbreviations See Page 13.

A. M. COAL COMPANY

General Office, Carbon, Hill, O.
FR—J. T. Murphy, Carbon Hill, O.
TK—W. E. Evans, Carbon Hill, O.
GM—D. V. Murphy, Carbon Hill, O.
GS—D. V. Murphy, Carbon Hill, O.
PA—D. V. Murphy, Carbon Hill, O.
SA—D. V. Murphy, Carbon Hill, O.

A. M. Mine; Drift; No. 6 Seam, 60 in. thick.
PO—Carbon Hill, O.; SP—Same; CTY—Hocking; RR—H. V.
S of H—Mules. Track gage 42 in.
S of M—Chain breast type machs.
PP—Power purchased.
EMP—9. Daily tonnage 80.
SIZES SHIPT—Run of Mine.

ACME COAL COMPANY

General Office, Alliance, O.
GM—T. C. Tessem, Alliance, O.
GS—T. C. Tessem, Alliance, O.
PA—T. C. Tessem, Alliance, O.

Acme Mine; Shaft; No. 4 Seam, 48 inches thick.
PO—Alliance, O.; SP—Same; CTY—Spartan; RR—W. & L. E.
PP—Motor gen. sets, 220 volts D. C., 2 pumps.
Last years tonnage 5,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.
Note—Formerly operated by Kleogler Dietrick Coal Co.

ADENA COAL COMPANY

PR—W. S. Lockhart, Washington, Pa.
TK—Geo. E. Lockhart, Washington, Pa.
GM—H. B. Porterfield, Cadiz, O.
SA—The H. S. Odhart Coal Co., Cleveland, Ohio.

Adena Mine; Slope and Stripping; Ohio No. 8 Seam, 60 inches thick.
PO—Adena, O.; SP—Same; CTY—Jefferson; RR—W. & L. E.
MS—H. B. Porterfield, Cadiz, O.
S of H—2 steam shovels and breast machines.
PP—Purchase power.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Screen Bars, Picking Tables.

AGRICULTURAL & COMMERCIAL LIME CO., THE.

General Office, 527-31 Renkert Bldg., Canton, O.
SIZES SHIPT—Run of Mine.
Note—Operations suspended.

AKRON COAL CO.

General Office, Akron, O.
PR—Wm. Rigby, Cambridge, O.
VP—J. P. Loomis, Akron, O.
TK—J. W. Rowley, Akron, O.
GM—Jas. P. Loomis, Akron, O.
PA—John J. Rigby, Cambridge, O.
GS—N. E. Thomas, Akron, O.
EM—J. W. Stewart, Cambridge, O.
EF—E. W. Clark, Cambridge, O.

Murray Hill Mine; Slope; No. 7 Seam, 66 in. thick.
PO—Cambridge, O.; SP—Klondyke Mine, O.; CTY—Guernsey; RR—B. & O.
MS—Miles Collins, Cambridge, O.
S of H—Mules and 4 trolley pole type locos. Track gage, 42 in.
S of M—3 chain breast type machs.
PP—4 150 H. P. fire tube boilers, gen. units, 1 200 K. W., 1 150 K. W., 250 volts D. C., 6 pumps.
EMP—200. Daily output, 1,300 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

Beaver Dam Mine; Shaft; No. 6 Seam, 52 in. thick.
PO—New Philadelphia, O.; SP—Roswell, O.; CTY—Tuscarawas; RR—Penna., Baldt Br.
MS—Thos. Bradberry, New Philadelphia, Ohio.
S of H—Mules and 3 trolley pole type locos. Track gage, 36 in.
S of M—6 chain breast type and 1 shortwall machs.
PP—3 150 H. P. fire tube boilers, gen. units, 1 150 K. W., 1 100 K. W., 250 volts D. C., 5 pumps.
EMP—150. Daily output, 700 tons.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Bar Screens.
Note—Formerly operated by Beaver Dam Coal Mining Co.

NOTE—Klondyke Mine has been abandoned.
Kings Mine; Shaft; No. 7 Seam; 66 to 84 in. thick.
PO—Cambridge, O.; SP—Kings Mine, O.; CTY—Guernsey; RR—B. & O.
MS—John Hughes, Cambridge, O.
S of H—Mules and 2 trolley pole type locos. Track gage, 42 in.
S of M—4 M. G. chain breast type machs.
PP—4 150 H. P. fire tube boilers, 2 gen. units, 150 K. W., 250 volts D. C., 5 pumps.
EMP—150. Daily output, 1,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Bar Screens.

Goodyear Mine; Shaft; No. 7 Seam; 54 to 72 in. thick.
PO—Cambridge, O.; SP—Lore City, O.; CTY—Guernsey; RR—B. & O.
MS—Joseph Shooter, Cambridge, O.
S of H—2 trolley pole type locos. Track gage, 42 in.
S of M—4 chain breast type and 2 short-wall machs.
PP—3 return tube boilers, total 450 H. P., 2 gen. units, 1—200 K. W., 1—100 K. W., 250 volts D. C., 2 pumps.
EMP—150. Daily output, 1,000 tons.
SIZES SHIPT—Run of Mine, Crushed.
PREP. EQUIPT—Bar Screens, Picking Tables, Crusher.

Bigby Mine; Shaft; No. 7 Vein Seam, 48 in. thick.
PO—Cambridge, O.; SP—Seneraville, O.; CTY—Guernsey; RR—B. & O.
MS—J. S. Channell, Cambridge, O.
S of H—Mules and trolley pole type locos. Track gage, 42 in.
S of M—Hand.
PP—Power purchased, transformer 33,000, rotary converters, 250 volts D. C.
SIZES SHIPT—Lump, Slack, Nut.

Moss Mine; Shaft; No. 7 Vein, 72 in. thick.
PO—Cambridge, O.; SP—Pleasant City, O.; CTY—Guernsey; RR—Penna.
MS—Wm. Bigby, Jr., Cambridge, O.
S of H—Mules and trolley pole type loco. Track gage 42 inches.
PP—3 fire tube boilers, 200 H. P., 2—150 K. W. gen. units.
SIZES SHIPT—Lump, Crushed, Slack.

AMERICAN FIRE CLAY AND PRODUCTS COMPANY.

General Office, Cleveland, O.
PR—Britton T. Day, Cleveland, O.
VP—W. P. Champney, Cleveland, O.
TK—Robt. S. Wensley, Cleveland, O.
GS—Burt Hendricks, Canfield, O.
PA—B. T. Day, Cleveland, O.
CE—Wm. Schleicher, Cleveland, O.
SA—R. M. Moore, Cleveland, O.

Flisk Mine; Slope; 36 to 74 in. thick.
PO—Canfield, O.; SP—Same; CTY—Mahoning; RR—Erie.
MS—Alex. McMaster, Canfield, O.
S of H—Mules, rope and comp. air. Track gage, 36 in.
S of M—Hand.
PP—3 125 H. P. fire tube boilers.
EMP—12. Last fiscal year output, 4,000 tons.
SIZES SHIPT—Block.
PREP. EQUIPT—Gravity Screens.

AMERICAN SEWER PIPE COMPANY

Now American Vitrified Products Co.

AMERICAN VITRIFIED PRODUCTS CO.

General Office, Akron, O.
PR—Geo. E. Hill, Akron, O.
VP—F. P. Dyer, Akron, O.
TK—A. S. McCamie, Akron, O.
PA—W. K. Hill, Akron, O.
CE—R. H. Russell, Akron, O.
"Diamond" Mine; Drift; Seam 48 in. thick.
PO—Uhrichsville, O.; SP—Same; CTY—Tuscarawas.
MS—Levi Boss, Uhrichsville, O.
S of H—Mules. Track gage 30 in.

S of M—Hand.
PP—Power purchased.
EMP—15. Last years tonnage 7,000.
SIZES SHIPT—Run of Mine.

Forest City Nos. 13 and 14 Mines; Slope and Shaft; Seam 36 in. thick.
PO—Toronto, O.; SP—Same; CTY—Jefferson.
MS—Sherman Cornahain, Toronto, O.
S of H—Mules. Track gage 32 in.
S of M—Hand.
Last years tonnage 3,456.
SIZES SHIPT—Run of Mine.

No. 36 Mine; Drift; No. 3 Pittsburgh Seam, 36 in. thick.
PO—Lisbon, O.; SP—Same; CTY—Columbiana; RR—P. L. & W.
MS—Wm. Anderson, Lisbon, O.
S of H—Mules. Track gage 32 in.
S of M—Hand.
EMP—11. Daily tonnage 817.
SIZES SHIPT—Run of Mine.
Note—Formerly operated by the American Sewer Pipe Co.

ANDIC COAL COMPANY, THE

General Office, Pedro, O.
PR—D. D. Davis, Oak Hill, O.
VP—Simon Labold, Portsmouth, O.
TK—G. E. Carlyle, Portsmouth, O.
GM—G. E. Carlyle, Portsmouth, O.
PA—Harry Collis, Pedro, O.
EM—Fred G. Leete, Ironton, O.
SCO—Address the Company. Buyer, Frank Walker, Pedro, O.
SA—G. E. Carlyle, Portsmouth, O.

Nos. 5 and 6 Mines; Drift; No. 5 Seam, 36 in. thick.
PO—Pedro, O.; SP—Frt., Same, Exp., Ironton, O.; CTY—Lawrence; RR—D. T. & I.
MS—Andrew Destockl, Pedro, O.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—1 water tube boiler, 100 H. P., 2 pumps.
EMP—110. Last years tonnage 83,875.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Gravity Screens.
Note—Successors to the Halley Coal Co.

THE ANDREAS COAL CO.

General Office, New Philadelphia, O.
PR—A. C. Andreas, New Philadelphia, O.
TK—N. C. Parr, New Philadelphia, O.
GS—John Adamson, R.F.D., New Philadelphia, O.
PA—N. C. Parr, New Philadelphia, O.
EM—Geo. E. Arnold, New Philadelphia, Ohio.

Andreas Mine; Drift; No. 6 Seam, 54 in. thick.
PO—New Philadelphia, O.; SP—Same; CTY—Tuscarawas; RR—B. & O.
S of H—Mules. Track gage, 39 in.
S of M—Hand.
PP—2 pumps.
EMP—40. Daily output, 200 tons.
SIZES SHIPT—Run of Mine.

ANNILLER-EDINGTON COAL CO.

General Office, Nelsonville, O.
PR—John Edington, Nelsonville, O.
VP—L. E. Amiller, Nelsonville, O.
TK—N. B. Edington, Nelsonville, O.
GS—Thos. Perry, Deanville, O.
PA—John Edington, Nelsonville, O.
CE—Wm. Berry, New Straitsville, O.
SCO—Imperial Store Co.; Buyer, James Guy, Deanville, O.
SA—The Gem Coal Supply Co., Columbus, O.

A & E Mine; Drift; No. 7 Seam, 58 in. thick.
PO—Deanville, O.; SP—Same; CTY—Athens; RR—Hocking Valley.
S of H—Mules. Track gage, 42 in.
S of M—2 machs.
PP—Power purchased, 250 volts D. C., 1 pump.
EMP—18. Daily output, 140 tons.
SIZES SHIPT—Run of Mine.
Old Information.

APEX COAL CO.

General Office, 952 Kirby Bldg., Cleveland, Ohio.
PR—E. F. Hauserman, Cleveland, O.
VP—E. F. Rea, Akron, O.
TK—J. M. Jakes, Cleveland, O.
GM—A. W. Jones, Pittsburgh, Pa.
GS—E. O. Witherstay, Germano, O.

PA—S. Solomon, Cleveland, O.
PE—A. W. Jones, Pittsburgh, Pa.
SA—Kendall Coal Mining Co., Lake City Coal Co., and Lake Erie Coal Co., Cleveland, O.

The Apex No. 1 Mine; Stripping; No. 8 Pittsburgh Seam, 48 in. thick.
PO—Germano, O.; SP—Apex, O.; CTY—Harrison; RR—N. Y. C.
S of H—Steam locos. Track gage, 36 inches.
S of M—Stripping.
Last years tonnage 75,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens, Picking Tables.

Apex No. 2 Mine Stripping; No. 8 Seam, 48 in. thick.
PO—Germano, O.; SP—Apex, O.; CTY—Harrison; RR—N. Y. C.
S of H—Steam locos. Track gage, 36 inches.
S of M—Stripping.
Last years tonnage 100,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens, Picking Tables.

Deep Nos. 1 and 2 Mines; Slopes. Under development.

ARMSTRONG COAL COMPANY.

GM—David Armstrong, Jackson, O.
GS—G. Sell, Jackson, O.

Armstrong Mine; Slope; No. 2 Seam, 34 in. thick.
PO—Jackson, O. SP—Same. CTY—Jackson. RR—D. T. & I.
S of H—Mules. Track gauge, 36 in.
S of M—Hand.
PP—Water tube boiler, total 60 H. P.
EMP—50. Last fiscal year output, 43,000 tons.
SIZES SHIPT—Run of Mine.

ATHENS-HOCKING COAL CO., THE.

General Office, Nelsonville, O.
PR—J. W. Wlon, Nelsonville, O.
TK—A. Brown, Logan, O.
GM—J. W. Wlon, Nelsonville, O.
GS—Ira Blackstone, Buchtel, O.
SA—Sunday Creek Coal Co., Columbus, O.

Athens Hocking Mine; Drift; No. 6 Seam, 72 in. thick.
PO—New Pittsburgh, O.; SP—Same; CTY—Hocking; RR—H. V.
S of H—Mules and 1 elec. loco. Track gage 42 inches.
S of M—1 elec. mach.
PP—Power purchased, 1 pump.
Daily tonnage, 190.
SIZES SHIPT—Run of Mine.

ATKINSON MINING COMPANY.

Out of business.

ATLAS MINING COMPANY.

General Office, Dayton, O.
PR—W. W. Wigton, Dayton, O.
TK—T. W. Jordan, Dayton, O.
GM—H. B. Brenbarger, Dayton, O.
PA—H. B. Brenbarger, Dayton, O.
SECV—H. B. Brenbarger, Dayton, O.

Atlas Mine; Slope; No. 6 Hocking Seam, 40 in. thick.
PO—Zaleski, O. SP—Same. CTY—Vinton. RR—B. & O.
MS—Alonzo Mace, Dayton, O.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine.
(Old Information)

ATWOOD COAL CO.

General Office, Sherodsville, O.
PR—A. L. True, Sherodsville, O.
VP—Ir. B. H. Sherodsville, O.
TK—James L. True, Sherodsville, O.
GM—S. B. Creamer, Sherodsville, O.
GS—James L. True, Sherodsville, O.
PA—James L. True, Sherodsville, O.
CE—S. B. Creamer, Sherodsville, O.
EM—Ir. B. H. Sherodsville, O.

Atwood No. 1 Mine; Drift, No. 7 Seam, 60 in. thick.
PO—Sherodsville, O.; SP—Same; CTY—Vinton; RR—W. & L. E.
S of H—Mules and rope Track gage 36 inches.
S of M—Comp air punchers.
EMP—20. Daily tonnage 150.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.

BAKEWELL COAL CO. (THE)

General Office, Bellaire, O.
 PR—T. W. Pearsall, Bellaire, O.
 VP—M. C. Pearsall, Bellaire, O.
 TR—T. W. Pearsall, Bellaire, O.
 SECY—H. L. Bennett, Bellaire, O.
 GM—T. W. Pearsall, Bellaire, O.
 GS—J. S. Johnson, Bellaire, O.
 PA—H. L. Bennett, Bellaire, O.
 EM—Edkins Eng. Co., Bellaire, O.
 EE—Albert Hall, Bellaire, O.

Knob Mine, Drift, Pittsburgh Seam No. 8,

5 to 6 ft. thick.

PO—Bellaire, O.; SP—(Carloads)

Georgetown, O. (less than car-

loads), Bellaire, O.; CTY—Bel-

mont; RR—B. & O. main line.

S of H—5 trolley pole type locos. Track

gauge, 40 in.

S of M—8 chain breast type machs.

PP—2 return tubular boilers, total 300

H. P., gen. units, 250 volts D. C.,

2 pumps.

EMP—175. Last fiscal year output,

170,000 tons.

SIZES SHIPT—Run of Mine, Slack,

Lump.

PREP. EQUIPT—Gravity Screens.

BALL, ROBERT H., MINING COMPANY.

Out of business.

BANISMA COAL COMPANY (THE).

Now Climax Coal Co.

BARNES COAL & MINING CO. (THE).

General Office, Coshocton, O.
 PR—Rollin N. Barnes, Coshocton, O.
 VP—A. F. Baler, Cleveland, O.
 TR—Clyde F. Barnes, Coshocton, O.
 GM—R. N. Barnes, Coshocton, O.
 GS—Rollin N. Barnes, Coshocton, O.
 PA—Clyde F. Barnes, Coshocton, O.
 CE—H. L. Taylor, Coshocton, O.
 EE—John Hudson, Coshocton, O.
 SA—The A. F. Baler Coal Co., Cleve-

land, O.

Best No. 1 Mine; Drift; No. 6 Seam,

44-60 in. thick.

PO—Coshocton, O.; SP—Conesville, O.;

CTY—Coshocton; RR—W. & L. E.

S of H—Mules and rope. Track gauge,

32 in.

S of M—2 chain breast type and 1

shortwall machs.

PP—1 150 H. P. fire tube boiler, 1

100 K. W. gen. units, 250 volts

D. C., 4 pumps.

EMP—60.

SIZES SHIPT—Run of Mine, Slack, Nut,

Egg, Lump.

PREP. EQUIPT—Shaker Screens.

Best No. 2 Mine; Drift; No. 6 Seam,

44-60 in. thick.

PO—Coshocton, O.; SP—Conesville, O.;

CTY—Coshocton; RR—W. & L. E.

S of H—Mules and trolley pole type

locos. Track gauge, 42 in.

S of M—1 chain breast type and 2

shortwall machs.

PP—1 150 H. P. fire tube boiler, 1

100 K. W. gen. units, 250 volts

D. C., 4 pumps.

EMP—60.

SIZES SHIPT—Run of Mine, Slack, Nut,

Egg, Lump.

PREP. EQUIPT—Gravity Screens.

BARTH & RENNIE COAL CO. THE.

General Office, Bridgeport, O.
 PR—Wm. Rennie, Shadyside, O.
 TR—John E. Barth, Shadyside, O.
 GM—John E. Barth, Shadyside, O.
 GS—John E. Barth, Shadyside, O.
 PA—John E. Barth, Shadyside, O.

Barth & Rennie Mine; Drift; Pittsburgh

No. 8 Seam, 68 in. thick.

PO—Bridgeport, O.; SP—Same; CTY—

Belmont; RR—B. & O.

S of H—Mules. Track gauge 42 in.

S of M—Shortwall machs. and electric

puncher.

PP—Power purchased, transformer 4000

to 200 volts A. C. M. G. Sets, 250

volts D. C.

EMP—15.

SIZES SHIPT—Run of Mine,

BARTON COAL CO.

General Office, Cleveland, O.
 PR—H. W. Townsend, New London, O.
 TR—A. W. Dean, Cleveland, O.
 GM—E. J. Bryan, Martins Ferry, O.
 PA—D. N. Sneltinger, Cleveland, O.
 EM—John M. Davis, Lafferty, O.
 SA—Pittsburgh & Ohio Mining Co.,

Cleveland, O.

Taggart Mine; Drift; No. 8 Seam, 60

in. thick.

PO—Barton, O.; SP—Same; CTY—Bel-

mont; RR—B. & O.

MS—J. E. Christie, Barton, O.

S of H—Trolley pole type loco. Track

gauge, 42 in.

S of M—7 chain breast and 3 short-

wall machs.

PP—Power purchased, transformer 2300-

250 volts A. C., 2 M. G. Sets,

150 K. W., 250 volts D. C.

EMP—200. Last years tonnage 165,000.

SIZES SHIPT—Run of Mine, Nut, Lump.

PREP. EQUIPT—Gravity Screens.

BATES WILLIAMS COAL COMPANY.

Now Coal Land Development Corpora-

tion.

BATTLE AX COAL CO., THE.

PR—Wm. Kutz, Massillon, O.
 VP—F. Baer, Uhrichsville, O.
 TR—Wm. Kutz, Massillon, O.
 GM—Wm. Kutz, Massillon, O.
 GS—Wm. Kutz, Massillon, O.
 PA—Wm. Kutz, Massillon, O.

Battle Ax Mine; Shaft; Ohio No. 4

Seam, 45 to 51 in. thick.

PO—Massillon, O. SP—Same. CTY—

Stark. RR—W. & L. E., Massillon

Branch.

MS—Wm. Kreiger, Massillon, O.

S of H—Mules. Track gauge, 39 in.

S of M—Hand.

PP—Power purchased, 440 volts, 1 pump.

EMP—20. Last years output 7,000.

SIZES SHIPT—Run of Mine, Slack,

Lump.

PREP. EQUIPT—Bar Screens.

BEACON COAL COMPANY.

General Office, Steubenville, O.
 PR—M. F. McConnell, Steubenville, O.
 VP—Geo. Vreeland, Steubenville, O.
 TR—J. C. Cope, Steubenville, O.
 GM—M. F. McConnell, Steubenville, O.
 GS—Allen J. Perry, Hopedale, O.
 PA—A. V. Adsit, Steubenville, O.

Beacon Mine; Stripping; Pittsburgh No.

8 Seam, 50 in. thick.

PO—Hopedale, O.; SP—Culopont, O.;

CTY—Jefferson; RR—L. E. A. & E.

W.

S of H—Mules. Track gauge, 56½ in.

S of M—Hand.

EMP—50.

SIZES SHIPT—Run of Mine, Slack, Nut,

Lump.

BEAR RUN MINING CO.

General Office, Jackson, O.
 GM—B. E. Matthews, Jackson, O.

Bear Run Mine; Slope; No. 4 Limestone

Seam, 42 in. thick.

PO—Box 45, Elford, O. SP—Same. CTY—

Scioto. RR—B. & O., Portsmouth

Branch.

MS—O. T. Hughes, Elford, O.

S of H—Mules, holst rope. Track gauge,

36 in.

S of M—2 comp. air machs.

PP—2 return tubular boilers, total 300

H. P., 1 air compressor, 3 pumps.

EMP—50.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Gravity Screens.

BEAUMONT MINING CO. (THE).

General Office, Columbus, O.
 PR—W. T. Fassig, Columbus, O.
 VP—J. R. Schwartz, Columbus, O.
 TR—T. C. Collins, Columbus, O.
 GM—W. T. Fassig, Columbus, O.
 GS—J. S. Collins, Athens, O.
 PA—T. C. Collins, Columbus, O.
 SA—The Ajax Block Coal Co., 601 Com-

merce Bldg., Columbus, O.

Beaumont Mine; Shaft; Hocking No. 6

Seam, 72 in. thick.

PO—Athens, O.; SP—Beaumont, O.;

CTY—Athens; RR—Hocking Valley.

MS—Wm. Pritchard, Athens, O.

S of H—Mules and trolley pole type

loco. Track gauge, 42 in.

S of M—5 chain breast type machs.

PP—Power purchased, transformer 23-

000 to 220 volts A. C., rotary

converters, 250 volts D. C., 2

pumps.

EMP—150. Daily output, 1,200 tons.

SIZES SHIPT—Run of Mine, Slack, Egg,

Lump, Block.

PREP. EQUIPT—Shaker Screens, Picking

Tables., Loading Booms.

BEAVER COAL & CLAY CO.

General Office, Cleveland, O.
 PR—F. M. Kirk, Cleveland, O.
 VP—W. H. Dunn, Salem, O.
 TR—W. H. Dunn, Salem, O.
 GM—W. H. Dunn, Salem, O.
 GS—David Lewis, Lisbon, O.
 PA—F. M. Kirk, Cleveland, O.
 CE—W. B. Hanlon, Cleveland, O.
 EM—E. Hassler, Lisbon, O.
 SA—F. M. Kirk Coal Co., Cleveland, O.

Beaver Mine; Drift; No. 13 Seam, 42

in. thick.

PO—Salem, O.; SP—Colemans, O.; CTY—

Columbiana; RR—Erie.

S of H—2 electric haulage motors.

S of M—4 shortwall machs.

PP—Purchase power 250 volts D. C.,

gen. units, 150 K. W.

EMP—90. Daily tonnage 350.

BELLAIRE MINING CO. (TRE).

General Office, Adena, O.
 PR—Jas. W. Stewart, Bellaire, O.
 VP—Donald A. Ward, Bellaire, O.
 TR—James W. Stewart, Bellaire, O.
 GM—A. J. Harbaugh, Adena, O.
 GS—A. J. Harbaugh, Adena, O.
 PA—A. J. Harbaugh, Adena, O.
 EM—A. J. Harbaugh, Adena, O.
 EE—Clark Gilbert, Martins Ferry, O.
 SA—Montour & Northwestern Coal Co.,

Cleveland, O.

Bellaire Mine; Drift; Pittsburgh No. 8

Seam, 66 in. thick.

PO—Adena, O.; SP—Same; CTY—Jef-

fer-

son; RR—W. & L. E.

S of H—Mules and 1 storage battery

loco. Track gauge, 42 in.

S of M—3 shortwall machs.

PP—Power purchased, transformer 4400-

440 volts A. C., 1—70 K. W.

and 1—75 K. W. M. G. Sets, 250

volts D. C., 1 pump.

EMP—75. Last years tonnage 53,000.

SIZES SHIPT—Run of Mine, Slack, Nut,

Lump.

PREP. EQUIPT—Gravity Screens.

BELUAN COAL CO. (THE).

General Office, 214-322 Wheeling Steel

Bldg., Wheeling, W. Va.

PR—C. A. McFadden, Wheeling, W. Va.

VP—R. M. Rice, care LaBelle Iron

Works, Steubenville, O.

TR—C. A. McFadden, Wheeling, W. Va.

GM—O. G. Beans, Wheeling, W. Va.

GS—O. G. Beans, Wheeling, W. Va.

PA—O. G. Beans, Wheeling, W. Va.

CE—Orion Koller, Wheeling, W. Va.

Beluan Mine; Drift and Stripping; Ohio

No. 8 Seam, 54 in. thick.

PO—Weems, O.; SP—Smithfield, O.;

CTY—Jefferson; RR—Pittsburgh &

W. Va.

MS—W. W. Wild Weems, O.

S of H—Steam locos. Track gauge, 36

inches.

S of M—Hand.

PP—Power purchased, 220 volts A. C.

EMP—50. Daily tonnage 1,000.

SIZES SHIPT—Run of Mine, Slack, Nut,

Lump, Crushed.

PREP. EQUIPT—Gravity Screens, Crusher.

BERGHOLZ COAL MINING CO. (THE).

General Office, Cleveland, O.
 PR—S. H. Needs, Cleveland, O.
 TR—U. S. Needs, Cleveland, O.
 GM—S. H. Needs, Cleveland, O.
 GS—James Hardwidge, Bergholz, O.
 PA—U. S. Needs, Cleveland, O.
 CE—R. P. Millard, Cleveland, O.
 EE—James Kinney, Cleveland, O.
 SCO—Address the Company, Buyer,

Ernest Lodge, Cleveland, O.

SA—S. H. Needs & Son, Cleveland, O.

X-L Mine; Slope; No. 6 Seam, 38 in.

thick.

PO—Bergholz, O.; SP—Same; CTY—

Jefferson; RR—N. Y. C.

S of H—Trolley pole type locos. Track

gauge, 36 in.

S of M—8 shortwall machs.

PP—3 150 H. P. water tube boilers,

gen. units, 100, 200 and 250 K.

W., 250 volts D. C., 8 pumps.

EMP—75. Last years tonnage 75,000.

SIZES SHIPT—Run of Mine, Slack,

Lump, Block.

PREP. EQUIPT—Gravity Screens.

BERNE COAL COMPANY, THE.

General Office, Columbus, O.
 PR—Francis M. Thompson, 33 N. High

St., Columbus, O.

Berne Mine; Drift; No. 6 Seam, 60

in. thick.

PO—Shawnee, O.; SP—Same; CTY—

Perry; RR—B. & O.

MS—Harry Hazelton, Shawnee, O.

S of H—Mules and electric loco.

BIXLER COAL CO. (THE).

General Office, Columbus, O.
PR—Robt. H. Evans, Columbus, O.
VP—Ira E. Blaker, Pittsburgh, Pa.
TR—E. A. Evans, Zanesville, O.
GM—J. E. Jones, 1011 Col. S. & T. Bldg., Columbus, O.
GS—Otto Crum, Baileys Mills, O.
PA—J. E. Jones, 1011 Col. S. & T. Bldg., Columbus, O.
EM—J. W. Stewart, Cambridge, O.
SA—The Bixler Coal & Coke Co., Fulton Bldg., Pittsburgh, Pa.

Cochran Mine; Drift; No. 8 Seam; 45 in. thick.
PO—Baileys Mills, O.; SP—Same; CTY—Belmont; RR—B. & O.
S of H—3 trolley pole type and 3 storage battery locos. Track gage, 42 inches.
S of M—3 chain breast type and 4 shortwall machs.
PP—Power purchased, transformer 4000 to 2200 volts A. C., M. G. sets, 200 K. W., 250 volts D. C., 2 pumps.
EMP—100. Daily tonnage 400.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

BLACK BIRD COAL CO.

General Office, Toledo, O.
PR—L. Z. Netzorg, Toledo, O.
SA—L. Z. Netzorg Coal Co., Toledo, O.
Black Bird Mine; Drift; No. 6 Seam, 84 in. thick.
PO—Shawnee, O.; SP—Same; CTY—Perry; RR—Z. & W.
S of H—Mules.
S of M—1 chain breast mach.
PP—Purchase power.
Daily tonnage 100.
SIZES SHIPT—Run of Mine.

BLACK BURN COAL COMPANY, THE

General Office, 501 National City Bldg., Cleveland, O.
PR—Geo. R. Blackburn, Cleveland, O.
SECY—Wm. M. Wright, Cleveland, O.
TR—Geo. R. Blackburn, Cleveland, O.
GM—Wm. M. Wright, Cleveland, O.
GS—A. A. Smith, Bergholz, O.
PA—Geo. R. Blackburn, Cleveland, O.
EM—H. A. Ford, Cleveland, O.
EE—A. A. Smith, Cleveland, O.

Goat Hill Mine; Slope; No. 6 Seam, 42-48 in. thick.
PO—Bergholz, O.; SP—Same; CTY—Jefferson; RR—N. Y. C.
S of H—1 trolley pole type and 3 storage battery locos. Track gage 42 in.
S of M—5 shortwall machs.
PP—Power purchased, rotary converters, 250 volts D. C., 1 pump.
EMP—150. Daily tonnage 500.
SIZES SHIPT—Run of Mine.

BLACK DIAMOND COMPANY, THE

General Office, Columbus, O.
PR—J. H. Earnshaw, Columbus, O.
GM—H. Charlton, Columbus, O.
PA—H. Charlton, Columbus, O.
EM—Waldo H. Chute, Nelsonville, O.
Black Diamond Mine; Drift; Pittsburgh No. 8 Seam; 96 inches thick.
PO—Lathrop, O.; SP—Same; CTY—Athens; RR—Federal Valley.
MS—W. N. Hartley, Lathrop, O.
S of H—Mules, 2 trolley pole type locos. Track gage 42½ inches.
S of M—7 chain breast type machs.
PP—3 fire tube boilers, 450 H. P., 1 100 and 1 150 K. W. gen. units, 250 volts D. C., 4 pumps.
EMP—150. Daily output, 800 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity and revolving Screens.

BLACK GEM COAL COMPANY, THE

General Office, Smithfield, O.
PR—H. H. Sharp, Smithfield, O.
VP—W. A. Williams, Smithfield, O.
TR—M. E. Sharp, Smithfield, O.
GM—Harry Sharp, Smithfield, O.
GS—W. A. Williams, Smithfield, O.
EM—H. J. Oog, Smithfield, O.
Black Gem Mine Nos. 1 and 2; Drift; Pittsburgh No. 8 Seam, 54 in. thick.
PO—Smithfield, O.; SP—Same; CTY—Jefferson; RR—P. & W. Va.
MS—C. B. Wood, Smithfield, O.
S of H—Mules and electric locos. Track gage 36 in.
S of M—Hand and shortwall machs.
PP—Power purchased, transformer 4000-220 volts A. C., M. G. sets, 250 volts D. C.
EMP—22. Last years tonnage 2,500.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

BLACK HAWK COAL CO., THE.

PR—Charles S. Keeney, Hawks, O.
TR—W. D. Woodard, Hawks, Pa.
GM—Charles S. Keeney, Hawks, O.
GS—Charles S. Keeney, Hawks, O.
PA—Charles S. Keeney, Hawks, O.

SC0—Address the company—Buyer, Selma L. Woodard, Hawks, O.
Sales Agency, West Virginia Coal Co., Columbus Savings & Trust Bldg., Columbus, O.

Black Hawk Mine; Drift; No. 4 Seam, 56 in. thick.
PO—Hawks, O. SP—Same. CTY—Vinton. RR—Hocking Valley.
S of H—Mules. Track gauge, 42 in.
S of M—Hand.
EMP—21. Last fiscal year output, 7,418 tons.
SIZES SHIPT—Run of Mine. (old information)

BLACK OAK COAL COMPANY

General Office, Canton, O.
TR—W. R. Worley, Canton, O.
GM—E. P. Wynn, Canton, O.
GS—Marion Albright, Canton, O.
PA—Edwin Wynn, Canton, O.
EE—Chas. Spicer, Canton, O.
SA—Stiner Coal Co., Canton, O.

Black Oak Mine; Slope; No. 3 Seam, 54 inches thick.
PO—Canton, O.; SP—Same; CTY—Stark; RR—B. & O.
S of H—Mules and electric loco.
S of M—Shortwall mach.
PP—Purchase power, Transformer 2,300 to 220 volts A. C., M. G. sets, 250 volts D. C., gen. units, 100 K. W., 2 fire tube boilers, 150 H. P.
EMP—60. Daily tonnage 300.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens, Picking Tables, Loading Booms.

BLACKSON & MILLER.

OPERATOR—Perry Blackson, Coshocton, O.
Blackson & Miller Mine; Drift; No. 6 Seam; 48 in. thick.
PO—Coshocton, O.; SP—Same; CTY—Coshocton; RR—W. L. E.
S of H—Mules. Track gage, 32 in.
S of M—Hand.
PP—1 pump.
EMP—35. Daily tonnage 120.
SIZES SHIPT—Run of Mine.

BLAIRE-SHARSHAL COAL CO. (THE).

General Office, Shawnee, O.
PR—H. R. Blaire, Shawnee, O.
VP—A. L. Groff, New Straitsville, O.
TR—F. A. Sharshal, Shawnee, O.
GM—F. A. Sharshal, Shawnee, O.
GS—A. L. Groff, New Straitsville, O.
PA—F. A. Sharshal, Shawnee, O.
EM—C. J. Vaurlette, Shawnee, O.

Iron Point Mine; Drift; No. 6 Seam, 60 in. thick.
PO—Shawnee, O.; SP—Same; CTY—Perry; RR—B. & O.
S of H—1 trolley pole type loco. Track gage, 42 in.
S of M—2 shortwall machs.
PP—Power purchased, transformer 4000-250 volts A. C., rotary converters, 150 volts D. C., 1 pump.
EMP—75. Last years tonnage 60,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

BLUEROCK COAL COMPANY

PR—L. M. Breedan, Chicago, Ill.
VP—L. D. Abell, Zanesville, O.
TR—G. H. French, Zanesville, O.
GM—L. D. Abell, Zanesville, O.
GS—T. J. Huginson, Zanesville, O.
PA—L. D. Abell, Zanesville, O.
EM—Ray Larimer, Zanesville, O.
SA—Northwestern Coal & Coke Co., Chicago, Ill.

Bluerock Mine; Slope; No. 7 Seam, 54-72 in. thick.
PO—Merriam, O.; SP—Same; CTY—Muskingum; RR—B. & O.
S of H—Steam and electric locos. Track gage 42 in.
S of M—Shortwall machs.
PP—250 volts D. C.
EMP—150.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump, Egg, Block.
PREP. EQUIPT—Screens and Separator.

BLUFF HILL COAL & CLAY CO., THE

General Office, Uhrichsville, O.
PR—G. W. Blickensderfer, Uhrichsville, Ohio.
VP—J. B. Truman, Uhrichsville, O.
TR—M. L. Blickensderfer, Uhrichsville, Ohio.
GM—G. W. Blickensderfer, Uhrichsville, Ohio.
PA—G. W. Blickensderfer, Uhrichsville, Ohio.
SA—G. W. Blickensderfer, Uhrichsville, Ohio.
Bluff Hill Mine; Drift; No. 6 Seam, 46 inches thick.
PO—Gnadenbutten, O.; SP—Same; CTY—Tuscarawas; RR—P.C.C. & St. L.
S of H—Mules and gravity. Track gage 36 inches.

S of M—Elec. mach.
PP—Power purchased, Transformer 2200 volts A. C., 250 volts D. C.
EMP—45. Daily tonnage 150.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by the United States Clay Products Co.

BOLLINGER BROTHERS COAL CO.

General Office, East Canton, O.
OWNER—Albert Bollinger, East Canton, O.
Bollinger Mine; Drift; No. 6 Seam, 42 in. thick.
PO—East Canton, O.; SP—Same; CTY—Stark; RR—W. & L. E.
MS—Albert Bollinger, East Canton, O.
S of H—Mules. Track gage, 28 in.
S of M—1 comp. air mach.
PP—1-25 H. P. fire tube boiler.
EMP—6. Last years tonnage 3,080.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

BOWLING COAL & MINING CO., THE

General Office, Dennison, O.
PR—M. Moody, Uhrichsville, O.
TR—E. D. Moody, Dennison, O.
GM—H. E. Bowling, New Philadelphia, O.
ASST. Mgr.—V. W. Herrick, Dennison, O.
PA—V. W. Herrick, Dennison, O.

Bowling Mine; Slope; No. 8 Seam; 48 inches thick.
PO—Dennison, O.; SP—Same; CTY—Tuscarawas; RR—P. C. & St. L.
MS—C. A. Scott, New Philadelphia, O.
S of H—Mules and gasoline locos.
S of M—Shortwall machs.
PP—Power purchased, 2200 volts A. C. 250 D. C. 100 K. W. M. G. Sets, 2 pumps.
EMP—15. Last years tonnage 19,750.
SIZES SHIPT—Run of Mine.

BOWMAN COAL CO.

General Office, Oak Hill, O.
TR—C. A. Bowman, Oak Hill, O.
GM—C. A. Bowman, Oak Hill, O.
GS—H. E. Bowman, Oak Hill, O.
PA—C. A. Bowman, Oak Hill, O.
EM—A. E. Campbell, Jackson, O.

Bowman Mine; Drift; No. 5 Seam, 42 in. thick.
PO—Oak Hill, O.; SP—Same; CTY—Jackson; RR—B. & O.
S of H—Mules. Track gage 30 in.
S of M—Hand.
PP—3 pumps.
EMP—11. Last years tonnage 17,184.
SIZES SHIPT—Run of Mine.
NOTE—Successors to the Bowman Coal Mining Company.

BOWMAN COAL MINING COMPANY THE

Now Bowman Coal Company.
BOYLE, JOHN.
General Office, New Straitsville, O.
OPERATOR—John Boyle, New Straitsville, O.
SA—Ajax Block Coal Co., Columbus, O.
Copperhead Mine; Slope; No. 6 Seam; 45 to 72 in. thick.
PO—New Straitsville, O.; SP—Same; CTY—Perry; RR—H. V.
MS—James Boyle, New Straitsville, O.
S of H—1 loco. Track gage 42 inches.
S of M—1 elec. mach.
PP—250 volts D. C. Purchase power.
EMP—10. Last fiscal year output, 3,000 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
Old Information.

B. R. COAL & MINING CO. (THE).

Out of business.
BREITTELL COAL CO.
General Office, First Natl. Bank Bldg., Mingo Junction, O.
PR—Wm. J. Brettell, Mingo Junction, O.
VP—Chas. Armstrong, Steubenville, O.
TR—Geo. L. Thompson, Steubenville, O.
GM—Geo. L. Thompson, Steubenville, O.
GS—Geo. L. Thompson, Steubenville, O.
PA—Geo. L. Thompson, Steubenville, O.
EM—W. R. Walker, Steubenville, O.
EE—C. R. Riley, Wellsburg, W. Va.

Bretteill Mine; Drift; Pittsburgh No. 8 Seam, 58 in. thick.
PO—Mingo Junction, O.; SP—Same; CTY—Jefferson; RR—Penn., W. & L. E.
MS—David C. Reising, Mingo Junction, O.
S of H—Rope and trolley pole type loco. Track gage, 34 in.
S of M—1 chain breast type and 3 shortwall machs.
PP—Purchase power, motor gen. sets, 250 volts D. C., 2 pumps.
EMP—92. Last years tonnage 70,000.
SIZES SHIPT—Run of Mine, Slack, Lump, Mixed.

BRIDGEVILLE-BARTON COAL COMPANY

General Office, Bridgeville, Pa.
PR—S. P. McCaffrey, Bridgeville, Pa.
VP—S. C. McCaffrey, Bridgeville, Pa.

TR—F. B. Ollett, Bridgeville, Pa.
GM—S. P. McCaffrey, Bridgeville, Pa.
GS—S. P. McCaffrey, Bridgeville, Pa.
PA—F. B. Ollett, Bridgeville, Pa.
EM—Koller & Conrad, Bridgeville, Pa.

Barton Mine; Drift; Pittsburgh No. 8 Seam; 66 inches thick.
PO—Barton, O.; SP—Same; CTY—Belmont; RR—B. & O.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
PP—Power purchased 410 volts A. C. EMP—14. Last fiscal year output, 4,000 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.
Old Information.

BRILLIANT COAL MINING CO.

Operations abandoned.
BROWN, H. R., & SON COAL CO.
General Office, New Philadelphia, O.

Brown No. 2 Mine; Drift; Seam, 54 in. thick.
PO—New Philadelphia, O.; SP—Same; CTY—Tuscarawas; RR—B. & O.
S of H—Mules. Track gage 30 in.
S of M—Hand.
EMP—25. Last years tonnage 18,930.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Screens.

BROWNE COAL COMPANY

General Office, Wellston, O.
PR—Jerry Morrow, Wellston, O.
TR—J. H. Browne, Wellston, O.
GM—J. H. Browne, Wellston, O.
GS—J. H. Browne, Wellston, O.
PA—J. H. Browne, Wellston, O.
EM—Ed. Kelly, Wellston, O.
EE—Robt. Harrison, Wellston, O.
SA—The S. J. Patterson Co., Dayton, O.
Blue Bird Mine; Shaft; No. 2 Seam; 34 inches thick.
PO—Wellston, O.; SP—Same; CTY—Jackson; RR—B. & O.
MS—Dave Sanders, Wellston, O.
S of H—Mules. Track gage 38 inches.
S of M—Shortwall machs.
PP—2 water tube boilers, 80 H. P.; 1—50 K. W. gen. unit, 250 volts D. C., 2 pumps.
EMP—30. Daily output, 80 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Gravity Screens.

BRUSH CREEK COAL COMPANY, THE

General Office, Worthington, O.
PR—E. I. Washburn, Worthington, O.
VP—M. E. Vaughn, Worthington, O.
TR—S. H. Carrick, Worthington, O.
GM—E. I. Washburn, Worthington, O.
Brush Fork Mine; Drift; No. 6 Seam, 48 in. thick.
PO—Cannelville, O.; SP—Same; CTY—Muskingum; RR—Z. & W.
MS—Denzel Showers, Cannelville, O.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—Power purchased. Transformer 11,000 to 250 volts A. C., rotary converters, 250 volts D. C.
EMP—20. Last years tonnage 10,000.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Bar Screens.

BRUSH FORK COAL COMPANY, THE

General Office, Nelsonville, O.
PR—F. X. Rauch, Athens, O.
VP—H. H. Sisson, Nelsonville, O.
TR—W. D. Sisson, 72 W. Maynard Ave., Columbus, O.
GM—H. H. Sisson, Nelsonville, O.
GS—Chas. Edington, Nelsonville, O.
PA—H. H. Sisson, Nelsonville, O.
CE—Harry Hickman, Nelsonville, O.
SA—Brush Fork Coal Co., Nelsonville, O.

Brush Fork Mine; Drift; No. 6 Seam, 84 in. thick.
PO—Nelsonville, O.; SP—Same; CTY—Athens; RR—Hocking Valley.
S of H—Mules and motor. Track gage 42 in.
S of M—1 breast mach and 1 shortwall mach.
PP—Power purchased, 250 volts D. C., 2 pumps.
EMP—40. Last years tonnage 33,000.
SIZES SHIPT—Run of Mine, Lump.

BUCHER BROTHERS.

Now Carroll Coal Co.
BUCKEYE COAL CO.
General Office, Shawnee, O.
GM—D. C. Jones, Shawnee, O.
GS—D. C. Jones, Shawnee, O.

Buckeye Mine; Drift; & Slope; No. 6 Seam, 26 in. thick.
PO—Shawnee, O. SP—Same. CTY—Perry. RR—B. & O.
S of H—Mules and rope. Track gauge, 42 in.
S of M—Hand.
EMP—10. Last fiscal year output, 7,000 tons.
SIZES SHIPT—Run of Mine.
Old Information.

BUCKEYE FIRE CLAY COMPANY.

General Office, Urbichsville, O.
 PR—W. K. Eckfeld, Urbichsville, O.
 VP—R. H. McLeary, West Ray St.,
 New Philadelphia, O.
 TR—E. R. Van Ostran, Urbichsville, O.
 GM—C. L. Eckfeld, Urbichsville, O.
 GS—Theodore Schug, Urbichsville, O.
 EM—George E. Arnold,
 New Philadelphia, O.
 EE—Theo. Schug, Urbichsville, O.

Buckeye Mine; Slope; No. 6 Seam, 48 in. thick.

PO—Urbichsville, O.; SP—Same; CTY—Tuscarawas; RR—P. C. S. & St. L.
 MS—Emmet Carnes, Urbichsville, O.
 S of H—Mules. Track gage 32 in.
 S of M—Hand.
 PP—2 150 H. P. horizontal boilers, 2 pumps.

EMP—10. Last fiscal year output, 10,000 tons.

Note—Use coal for own use only.

BUCKINGHAM COAL CO.

General Office, Huntington Bank Bldg., Columbus, O.
 PR—J. A. Jones, Columbus, O.
 VP—E. Houck, Columbus, O.
 TR—L. A. Rogers, Columbus, O.
 GM—J. A. Jones, Columbus, O.
 GS—J. A. Jones, Columbus, O.
 PA—J. A. Rogers, Columbus, O.
 EM—J. A. Jones, Columbus, O.

Buckingham Mine; Drift; No. 6 Seam 108 in. thick.

PO—R. D. No. 1, Corning, O.; SP—Drakes, O.; CTY—Perry; RR—Zanesville & Western.

S of H—Mules. Track gage, 42 in.
 S of M—Chain breast mach.

PP—Power purchased, transformer 4000-220 volts A. C., 50 K. W. M. G. set, 250 volts D. C.

EMP—11. Last fiscal year output, 34,202 tons.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Bar Screens.

Old Information.

BURNS COAL COMPANY

General Office, Corning, O.
 GM—Wm. G. Burns, Corning, O.
 SA—Sunday Creek Coal Co., Corning, O.

Burns Mine; Slope; Nos. 6 and 7 Seams, 36-48 inches thick.

PO—Corning, O.; SP—Roodsville, O.; CTY—Perry; RR—C. & W.

S of H—Mules and rope.

S of M—Chain breast type mach.

PP—Power purchased, 250 volts D. C.

EMP—300.

SIZES SHIPT—Run of Mine.

BURTON MILLER COAL COMPANY

General Office, South Zanesville, O.
 PR—R. C. Burton, Zanesville, O.
 TR—V. C. Miller, South Zanesville, O.
 GS—J. F. Waugh, South Zanesville, O.
 SA—R. C. Burton, Zanesville, O.

Sum Side Mine; Drift; No. 6 Seam; 51 inches thick.

PO—South Zanesville, O.; SP—Same; CTY—Muskingum; RR—Penn.

S of H—Elec. and gasoline locos. Track gage 36 inches.

S of M—Hand.

EMP—14. Last years tonnage 5,697.

SIZES SHIPT—Run of Mine.

Old Information.

BURTON-TOWNSEND CO. (THE).

General Office, Zanesville, O.
 1st VP—W. H. Lucktenberg, Zanesville, Ohio.
 2nd VP—L. K. Brown, Zanesville, O.
 TR—L. W. Fleming, Zanesville, O.
 Chairman Board Directors—R. C. Burton, Zanesville, O.
 SECY—Leo W. Fleming, Zanesville, O.
 GM—W. H. Lucktenberg, Zanesville, O.
 Mgr. Coal Dept.—James E. Trainer, Zanesville, O.

Dist. Mgr.—Julius R. Lucktenberg, Ash-tabula, O.

Mgr. of Traffic Dept.—C. E. McLain, Zanesville, O.

PA—C. S. Shrum, Zanesville, O.

SA—Walter McKeen, Brick Dept., Zanesville, O.

Monitor Mine; Drift; Hocking No. 6 Seam, 42 in.

PO—So. Zanesville, O.; SP—Darlington; Exp. So. Zanesville, O.; RR—Penn.

MS—P. E. Simms, So. Zanesville, O.

S of H—Trolley pole type locos. Track gage, 42 in.

S of M—3 chain breast type and 2 short-wall machs.

PP—Purchase power, 550 volts A. C., 4 pumps.

EMP—75. Last fiscal year output, 69,820 tons.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.

BUTLER COAL COMPANY

General Office, New Straitsville, O.
 PR—Samuel Butler, New Straitsville, O.

GS—John W. White, Jr., New Straitsville, O.

CE—W. J. Barry, New Straitsville, O.

Butler Mine; Drift; No. 6 Seam, 148 in. thick.

PO—New Straitsville, O.; SP—Same; CTY—Perry; RR—H. V.

S of H—Mules. Track gage 42 in.

S of M—Chain breast type machs.

PP—Power purchased, 250 volts D. C., EMP—10. Daily tonnage 100.

SIZES SHIPT—Run of Mine.

C. & H. COAL COMPANY

General Office, Shawnee, O.
 PR—D. J. Caslin, Shawnee, O.
 VP—T. O. Holleran, Shawnee, O.
 TR—T. O. Holleran, Shawnee, O.
 GM—D. J. Caslin, Shawnee, O.
 GS—T. O. Holleran, Shawnee, O.
 PA—D. J. Caslin, Shawnee, O.
 SA—D. J. Caslin, Shawnee, O.
 Additional Information on Page 610.

Caslin Mine; Drift; No. 6 Seam, 96 in. thick.

PO—Shawnee, O.; SP—Same; CTY—Perry; RR—Z. & W.

MS—D. J. Caslin, Shawnee, O.

S of H—Mules. Track gage 42 in.

S of M—Hand.

PP—Power purchased, 220 volts D. C., 1 pump.

EMP—10. Daily tonnage 60.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Bar Screens.

C. D. & K. COAL CO.

Now The Tri-State Brick, Tile & Coal Co.

CABLE COAL CO. (THE).

General Office, Columbus, O.
 PR—Albert Groff, New Straitsville, O.
 VP—Earl Cable, Shawnee, O.
 TR—Henry Watkins, Columbus, O.
 GM—Albert Groff, New Straitsville, O.
 GS—Henry Watkins, Columbus, O.
 CE—C. J. Vanriette, Shawnee, O.
 SA—K. W. Rittenhouse, Columbus, O.

Cable Mine; Drift; No. 6 Seam, 17 in. thick.

PO—Shawnee, O.; SP—Same; CTY—RR—B. & O.

S of H—Mules. Track gage, 42 in.

PP—Power purchased, transformer 4000-220 volts A. C., 220 volts D. C., 1 pump.

EMP—30. Last fiscal year output, 208,741 tons.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Shaker Screens.

Old Information.

CADIZ BLOCK COAL CO., THE

General Office, Cadiz, O.
 PR—Frank Adams, Cadiz, O.
 VP—John Williams, Cadiz, O.
 TR—Wm. C. Clifford, Cadiz, O.
 GM—John Williams, Cadiz, O.
 GS—Chas. W. Wenner, Cadiz, O.
 SA—John Williams, Cadiz, O.
 SA—The H. S. Odert Coal Co., Cleveland, O.

Cadiz Block Mine; Stripping; Pittsburgh No. 8 Seam, 60 inches thick.

PO—Cadiz, O.; SP—Same; CTY—Harrison; RR—W. & L. E.

S of H—Steam loco. Track gage 36 in.

S of M—Steam shovels.

PP—1 100 H. P. fire tube boiler.

EMP—50. Last years tonnage 65,000.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

CALDWELL COAL COMPANY, THE

General Office, Caldwell, O.
 PR—H. O. Tipton, Caldwell, O.
 VP—Gay Schafer, Caldwell, O.
 TR—E. P. McGinnis, Caldwell, O.
 GM—B. F. Daugherty, Caldwell, O.

Freda Mine; Drift; Meigs Creek No. 9 Seam.

PO—Caldwell, O.; SP—Same; CTY—Noble; RR—P. R. E.

MS—R. H. Daugherty, Caldwell, O.

S of H—Mules.

S of M—Hand.

SIZES SHIPT—Run of Mine, Lump.

CALEDONIA COAL COMPANY.

General Office, New Lexington, O.
 PR—James Williamson, Columbus, O.
 VP—James Williamson, Columbus, O.
 TR—James Williamson, Columbus, O.

Caledonia Mine; Drift; Seam 54 in. thick.

PO—New Lexington, O.; SP—Same; CTY—Perry; RR—T. O. C.

MS—John A. Williamson, Columbus, O.

S of H—Mules. Track gage 42 in.

S of M—Shortwall machs.

PP—1—80 H. P. water tube boiler, 1 50 K. W. gen. unit, 250 volts D. C.

SIZES SHIPT—Run of Mine.

CALLAHAN COAL CO. (THE).

Now operated by the Pascola Coal Company.

CAMBRIA CLAY PRODUCTS CO.

PR—D. D. Davis, Oak Hill, O.
 VP—S. Labold, Portsmouth, O.
 TR—S. P. Reitz, Black Fork, O.
 PA—S. P. Reitz, Black Fork, O.
 CE—Geo. P. Shute, Black Fork, O.
 SCU—Address the Company. Buyer, J. W. Jones, Black Fork, O.

Cambria Mine; Drift; No. 4 and 5 Seam, 36 to 48 in. thick.

PO—Blackfork, O.; SP—Same; CTY—Lawrence; RR—B. & O.

S of H—Mules. Track gage, 36 in.

S of M—Hand.

PP—3 pumps.

EMP—40. Last fiscal year output, 12,000 tons.

NOTE—Mine coal for own use.

CAMBRIA COLLIERIES CO. (THE).

General Office, Toledo, Ohio.
 PR—Geo. M. Jones, Toledo, O.
 VP—T. B. Earl, " "
 PA—J. C. Blackburn, " "
 Sales Agent, The Geo. M. Jones Co., Toledo, O.

Pulney Mine, Slope, Pittsburgh No. 8 Seam, 5 to 6 ft. thick.

PO—Bellaire, O.; SP—Same; CTY—Belmont; RR—C. & P.

MS—George Morris, Bellaire, O.

S of H—4 elec. loco. Track gage 40 in.

S of M—15 elec. machs.

PP—1 water tube and 2 return tubular boilers, total 700 H. P., 1 gen. unit, 250 volts D. C., 8 pumps.

EMP—244. Last years tonnage 250,070.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Bar Screens.

Webb Mine, Shaft, Pittsburgh No. 8 Seam, 5 to 6 ft. thick.

PO—Bellaire, O.; SP—Webb, O.; CTY—Belmont; RR—C. & P.

MS—Wm. Fleming, Bellaire, O.

S of H—4 elec. locos. Track gage 40 in.

S of M—10 elec. mach.

PP—3 water tube boilers, total 550 H. P., 1 gen. unit, 250 volts D. C., 8 pumps.

EMP—587. Last years tonnage 597,398.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Bar Screens.

CAMBRIA-HOCKING COAL CO.

Columbus, Ohio.

Cambria Mine; Drift; No. 6 Seam, 78 inches thick.

PO—Nelsonville, O.; SP—Same; CTY—Athens; RR—H. V.

No report.

CAMBRIDGE COLLIERIES CO., THE.

General Office, 1050 Kirby Bldg., Cleveland, O.
 PR—A. A. Augustus, Cleveland, O.
 VP—C. D. Jury, Cleveland, O.
 TR—E. J. Hanglin, Cleveland, O.
 GM—C. D. Jury, Cleveland, O.
 GS—H. E. Cameron, Cambridge, O.
 PA—B. E. Oliver, Cleveland, O.
 EM—W. N. Bomesberger, Cambridge, O.
 MM—W. H. Davis, Byesville, O.
 EE—W. H. Davis, Byesville, O.
 SA—Jay Gaines, Cleveland, O.

Buffalo Mine; Shaft; No. 7 Seam, 54 in. thick.

PO—Buffalo, O.; SP—Byesville, O.; CTY—Guernsey; RR—Penn.

S of H—8 trolley pole type locos. Track gage 42 in.

S of M—5 breast and 5 shortwall machs.

PP—5 Horizontal tubular boilers.

EMP—385.

SIZES SHIPT—Run of Mine, Lump, Slack, Nut.

Ideal Mine; Shaft; No. 7 Seam, 54 in. thick.

PO—Byesville, O.; SP—Same; CTY—Guernsey; RR—Penn.

S of H—5 trolley pole type locos. Track gage 42 in.

S of M—7 chain breast and 1 short-wall machs.

PP—3 Horizontal tubular and 1 water tube boilers.

EMP—135.

SIZES SHIPT—Run of Mine, Lump, Nut, Slack.

Trail Run No. 1 Mine; Shaft No. 7 Seam, 54 in. thick.

PO—Byesville; SP—Same; CTY—Guernsey; RR—Penn.

S of H—Rope and 1 trolley pole type loco. Track gage 24 in.

S of M—5 breast machs.

PP—4 Horizontal tubular boilers.

EMP—135.

SIZES SHIPT—Run of Mine, Slack, Lump, Nut.

Trail Run No. 2 Mine; Shaft; No. 7 Seam, 54 in. thick.

PO—Byesville, O.; SP—Same; CTY—Guernsey; RR—Penn.

S of H—7 trolley pole type locos. Track gage 42 in.

S of M—10 breast and 1 shortwall mach.

PP—3 Horizontal tubular boilers.

EMP—338.

SIZES SHIPT—Run of Mine, Lump, Nut, Slack.

Banner Mine; Shaft; No. 7 Seam, 54 in. thick.

PO—Pleasant City, O.; SP—Same; CTY—Guernsey; RR—Penn.

S of H—3 trolley pole type locos. Track gage 42 in.

S of M—6 breast machs.

PP—3 Horizontal tubular boilers.

EMP—146.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

Walbonding No. 2 Mine; Shaft; No. 7 Seam, 54 in. thick.

PO—Buffalo, O.; SP—Same; CTY—Guernsey; RR—Penn.

S of H—4 trolley pole type locos. Track gage 42 in.

S of M—6 shortwall machs.

PP—4 Horizontal tubular boilers.

EMP—305.

SIZES SHIPT—Run of Mine, Slack, Lump, Nut.

Harford Mine; Shaft; No. 7 Seam, 48 to 72 in. thick.

PO—Buffalo, O.; SP—Same; CTY—Guernsey; RR—B. & O.

S of H—3 trolley pole type locos. Track gage, 42 in.

S of M—6 breast machs.

PP—4 Horizontal tubular boilers.

EMP—142.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

Blue Bell Mine; Shaft; No. 7 Seam, 48 to 72 in. thick.

PO—R. D. No. 3, Pleasant City, O.; SP—Upperman, O.; CTY—Guernsey; RR—Penn.

S of H—3 trolley pole type locos. Track gage, 42 in.

S of M—7 shortwall machs.

PP—4 Horizontal tubular boilers.

EMP—135.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

Coal Ridge Mine; Shaft; No. 7 Seam, 48 to 72 in. thick.

PO—Coal Ridge, O.; SP—Same; CTY—Noble; RR—Penn.

S of H—5 trolley pole type locos. Track gage 42 in.

S of M—9 breast and 2 shortwall machs.

PP—4 Horizontal tubular boilers.

EMP—268.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

Caldwell Mine; Shaft; No. 7 Seam, 48 to 72 in. thick.

PO—Caldwell, O.; SP—Same; CTY—Noble; RR—Penn.

S of H—5 trolley pole type locos. Track gage 42 in.

CANAAN COAL CO. (THE).
General Office, Athens, O.
PR—John E. Jones, Jackson, O.
VP—D. H. Armstrong, Columbus, O.
TR—Lewis V. Brown, Athens, O.
EM—Lewis V. Brown, Athens, O.
SCO—The Canaan Coal Co.; Buyer, H. B. Larimer, Canaanville, O.

Canaan Mine; Shaft; Middle Kittanning Seam; 60 in. thick.
PO—Canaanville, O.; SP—Same; CTY—Athens; RR—B. & O. (Ohio Div.)
S of H—Horses, 5 trolley pole type and 4 storage battery locos.
S of M—8 chain breast type and 3 mining machs.
PP—4 water tube boilers, total 1,200 H. P. gen. units, 1—400 K. W., 1—225 K. W., 1—100 K. W., 250 volts D. C., 1 air comp, 13 pumps.
EMP—300. Last fiscal year output, 224,000 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Gravity and Shaker Screens.

CARBON HILL MINING COMPANY, THE
General Office, Carbon Hill, O.
PR—John E. Powers, Carbon Hill, O.
VP—Pete McLaughlin, Nelsonville, O.
TR—Robert Chute, Carbon Hill, O.
GM—James Branigan, Logan, O.
GS—James Branigan, Logan, O.
PA—James Branigan, Logan, O.
EE—Ray Simis, Nelsonville, O.

Carbon Hill Mine; Drift; Hocking Thin Vein Seam, 42-54 inches thick.
PO—Carbon Hill, O.; SP—Same; CTY—Hocking; RR—Hocking Valley.
S of H—Mules and electric loco.
S of M—1 chain breast and 2 shortwall machs.
EMP—50. Last years tonnage 41,416.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Bar Screens.

CARBONDALE COAL COMPANY.
General Office, Chillicothe, O.
PR—Richard Enderlin, Chillicothe, O.
GM—Richard Enderlin, Chillicothe, O.
TR—J. H. Greenbaum, Chillicothe, O.
GS—M. H. Doolittle, Carbondale, O.
PA—M. H. Doolittle, Carbondale, O.
EM—M. H. Doolittle, Carbondale, O.
EE—E. M. Gusman, Carbondale, O.
SCO—Address the Company, Buyer, Ralph Williams, Carbondale, O.

Carbondale No. 2 Mine; Drift; Hocking No. 6 Seam, 56 in. thick.
PO—Carbondale, O.; SP—Same; CTY—Athens; RR—B. & O.
MS—Butherford Doolittle, Carbondale, O.
S of H—Mules, 4 trolley pole type and 1 storage battery locos. Track gage 42 in.
S of M—8 chain breast type machs.
PP—4 water tube boilers, total 400 H. P., 2 gen. units, 270 volts D. C., 4 pumps.
EMP—180. Last years tonnage 113,872.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

CARDIFF COAL & CLAY COMPANY
General Office, Zaleski, O.
PR—J. F. Tripp, Zaleski, O.
GM—Geo. Cavanaugh, Zaleski, O.
GS—Geo. Cavanaugh, Zaleski, O.
Cardiff Mine; Drift; No. 4 Seam, 42 in. thick.
PO—Zaleski, O.; SP—Same; CTY—Vinton; RR—B. & O.
S of H—Mules. Track gage 42 in.
S of M—Hand.
PP—8 pumps.
EMP—10. Daily tonnage 50.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.
Note—Formerly operated by the Cardiff Coal & Clay Co.

CARNEGIE STEEL CO. (COAL MINING DEPT.)
General Office, Pittsburgh, Pa.
PR—H. D. Williams, Pittsburgh, Pa.
VP—William Whigham, Pittsburgh, Pa.
TR—W. C. McCausland, " "
PA—C. R. Miller, Jr., " "
CS—E. E. Wisener, " "
GM—E. C. Brown, Pittsburgh, Pa.
EM—E. E. Bond, Bellaire, O.
EE—John Cooper, Bellaire, O.
Bellaire Works Mine; Drift; Pgh. No. 8 Seam, 57 to 75 in. thick.
PO—Bellaire, O.; SP—Same; CTY—Belmont; RR—P. R. R., C. & P. Br.
MS—Ernest F. Moore, Bellaire, O.
S of H—Mules, 1 trolley pole type, 2 combination and 1 steam locos. Track gage 42 in.
S of M—3 chain breast type and 1 shortwall machs.
PP—38 water tube boilers, total 9,794 H. P., 2—100 K. W., 1—250 K.

W. and 1—187 K. W. gen. units, 220 volts D. C., 10 pumps.
EMP—85. Last years tonnage 81,363.
SIZES SHIPT—Run of Mine.

CARR RUN COAL CO. THE.
General Office, Nelsonville, O.
PR—Dan Shay, Nelsonville, O.
VP—John Lawson, Nelsonville, O.
TR—John McMillen, Columbus, O.
GM—John Lawson, Nelsonville, O.
GS—J. Johnson, Nelsonville, O.
SA—Capitol Fuel Co., Cleveland, O.

No. 71 Mine; Slope; No. 7 Seam, 52 in. thick.
PO—Channey, O.; SP—Same; CTY—Athens; RR—T. & O. C.
MS—Lloyd Pendegrass, Channey, O.
S of H—Electric loco. Track gage 42 in.
S of M—Shortwall machs.
PP—Power purchased.
EMP—75. Daily tonnage 500.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

CARROLL COAL COMPANY.
General Office, Barnesboro, Pa.
PR—D. J. Bougher, Barnesboro, Pa.
VP—D. J. Bougher, Barnesboro, Pa.
TR—D. J. Bougher, Barnesboro, Pa.
GM—D. J. Bougher, Barnesboro, Pa.
GS—G. W. Grundy, Salfordville, Pa.
PA—D. J. Bougher, Barnesboro, Pa.

Carroll Mine; Drift; No. 6 Seam, 46 inches thick.
PO—Salfordville, O.; SP—Same; CTY—Carroll; RR—P. R. R.
S of H—5 trolley pole type locos. Track gage 38 in.
S of M—3 shortwall machs.
PP—2 150 H. P. fire tube boilers, gen. units, 250 K. W., 250 volts D. C., 4 pumps.
EMP—10. Daily tonnage 100.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by the Bucher Brothers.

CAVANAUGH & BIGHOUSE
Now Cardiff Coal & Clay Co.

CENTER VALLEY COAL COMPANY.
PR—Geo. Pringle, Somerdale, O.
TR—W. H. Morris, Somerdale, O.
LM—W. H. Morris, Somerdale, O.

Center Valley Mine; Drift; No. 6 Seam, 44 in. thick.
PO—Somerdale, O.; SP—Same; CTY—Tuscarawas; RR—W. & L. E., Johnstown Br.
MS—George Pringle, Somerdale, O.
S of H—Mules and rope. Track gage 36 inches.
S of M—Hand.
PP—1 pump.
EMP—10. Daily tonnage 70.
SIZES SHIPT—Run of Mine.

CENTRAL COAL MINING CO.
General Office, 303 Kirby Bldg., Cleveland, O.
PR—C. E. Sullivan, Cleveland, O.
VP—H. R. Sullivan, Cleveland, O.
TR—H. R. Sullivan, Cleveland, O.
GM—H. R. Sullivan, Cleveland, O.
GS—W. A. Smitherman, Moundsville, W. Va.

PA—H. R. Sullivan, Cleveland, O.
EM—Millard & Ford, Cleveland, O.
SCO—The Dille Store Co., Moundsville, W. Va.; Buyer, S. A. Barnum, California, Pa.
SA—R. S. Ballo, Cleveland, O.
Clifford Mine; Slope; Pittsburgh No. 8 Seam, 66 in. thick.
PO—Moundsville, W. Va. SP—Exp., Same Ert., Dille Station, Belmont Co., Ohio; CTY—Belmont, O.; RR—Penna.
S of H—Rope and 9 trolley pole type locos. Track gage, 42 in.
S of M—5 shortwall and 9 breast machs.
PP—Power purchased, transformer 2200 to 110 volts A. C. 200 K. W., M. G. Set, 275 volt D. C., 1—25 H. P. fire tube boiler, 8 pumps.
EMP—300. Last years tonnage 195,000.
SIZES SHIPT—Run of Mine, Slack, Lump, Crushed.
PREP. EQUIPT—Gravity Screens Picking Table.

CENTRAL MINING COMPANY
General Office, Lisbon, O.
PR—F. F. Marquard, Clairton, Pa.
VP—Dr. J. C. G. Fitzhugh, McKeesport, Pa.
TR—R. M. Baldrige, McKeesport, Pa.
GM—Phelan McShane, Lisbon, O.
GS—C. E. Kern, R. F. D. No. 6, Lisbon, O.
PA—Phelan McShane, Lisbon, O.
Lisbon Mine; Stripping; No. 6 & 7 Seam, 36 in. thick.
PO—Box 417, Lisbon, O.; SP—Gilmore, O.; CTY—Columbiana; RR—Y. & O.
PP—Purchase power. Transformer 22,000 to 220 volts A. C.

SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

CENTRAL REFRACATORIES CO. (THE).
General Office, Columbus, O.
PR—C. B. Young, Columbus, O.
VP—A. N. Spencer, Columbus, O.
TR—W. W. Lunnell, Newark, O.
GM—C. B. Young, Newark, O.
GS—L. M. Mumford, Shawnee, O.
CE—Evan Reese, New Lexington, O.
EE—Frank Clark, Shawnee, O.

Moxahala Mine; Slope; No. 6 Seam, 52 in. thick.
PO—Moxahala, O.; SP—Same; CTY—Perry; RR—T. & O. C.
MS—Geo. Christain, Moxahala, O.
S of H—Mules. Track gage 42 in.
S of M—Chain breast type mach.
PP—2 return tubular boilers, gen. units.
SIZES SHIPT—Lump, Slack.
PREP. EQUIPT—Screens.

Shawnee Mine; Slope; No. 6 Seam, 72 in. thick.
PO—Shawnee, O.; SP—Same; CTY—Perry; RR—Z. & W.
MS—E. B. Sawyer, Shawnee, O.
S of H—Mules. Track gage 42 in.
S of M—Hand.
SIZES SHIPT—Run of Mine.

CHAMPION COLLIERIES CO., THE
General Office, Bessemer Bldg., Pittsburgh, Pa.
PR—George D. Rowland, Pittsburgh, Pa.
VP—D. J. Carter, Clarksburg, W. Va.
TR—R. S. Price, Pittsburgh, Pa.
GM—George D. Rowland, Pittsburgh, Pa.
PA—George D. Rowland, Pittsburgh, Pa.
EM—W. J. Deuman, Lost Creek, W. Va.
EE—Walter Withered, Clarksburg, W. Va.
SA—Lake Erie Coal Co., Pittsburgh, Pa.

Cambridge Mine; Stripping; No. 7 Seam, 60 in. thick.
PO—Cambridge, O.; SP—Same; CTY—Guernsey; RR—B. & O.
MS—Ed W. Rowland, Cambridge, O.
S of H—Mules and steam loco. Track gage 36 in.
S of M—Hand.
EMP—35.
SIZES SHIPT—Run of Mine, Slack, Crushed.
Note—Formerly operated by the Coal Ridge Mining Co.

CHAPMAN COAL COMPANY.
Out of Business.

CHAPMAN MINE, THE.
General Office, Jackson, O.
PR—C. J. Benton, Jackson, O.
TR—C. J. Benton, Jackson, O.
GM—C. J. Benton, Jackson, O.
GS—C. J. Benton, Jackson, O.
PA—C. J. Benton, Jackson, O.

Chapman Mine; Drift; No. 2 Seam, 32-36 in. thick.
PO—Jackson, O.; SP—Same; CTY—Jackson; RR—D. T. & L. and H. V.
S of H—Mules. Track gage 34 in.
S of M—Hand.
PP—2 return tubular boilers, total 100 H. P., 2 pumps.
EMP—15. Last years tonnage 3,445.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Gravity and Shaker Screens.

CHATFIELD, C. W. COAL CO.
General Office, South Point, O.
OWNER—C. W. Chatfield, South Point, O.
SCO—Address the Company, Buyer, Frank L. Chatfield, South Point, O.
Chatfield Nos. 3 and 4 Mines; Drift; No. 6 Seam, 40 in. thick.
PO—South Point, O. SP—Coal Grove, O. CTY—Lawrence, RR—N. & W.
S of H—Mules. Track gage 36 in.
S of M—Hand.
Daily tonnage 50.
SIZES SHIPT—Run of Mine.

CHAUNCEY COAL COMPANY, THE
General Office, Nelsonville, O.
PR—M. P. Ohlinger, Nelsonville, O.
VP—Walter Wolf, Nelsonville, O.
TR—Walter Wolf, Nelsonville, O.
GM—M. P. Ohlinger, Nelsonville, O.
GS—Chas. Bagley, Nelsonville, O.
PA—Walter Wolf, Nelsonville, O.
EE—Harry Dilcher, Nelsonville, O.
SCO—Ohlinger & Wolfe, Nelsonville, O.

Chauncey Mine; Slope; No. 7 Seam, 54 in. thick.
PO—Nelsonville, O.; SP—Chauncey, O.; CTY—Athens; RR—T. & O. C.
S of H—Mules and 1 motor. Track gage 42 in.
S of M—1 breast and 2 shortwall machs.
PP—Power purchased, 1 100 K. W. rotary converter, 1 pump.
EMP—75. Last years tonnage 157.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

CHRISTMAN STONER MINING CO.

PR—C. H. Stoner, Massillon, O.
TR—W. B. Stoner, " "
GM—C. L. Stoner, " "
PA—W. B. Stoner, " "
EM—W. B. Stoner, " "
MS—Frank Bichel, " "
Sales Agent, W. B. Stoner, Massillon, O.

Drift Mine; Nos. 4 and 5 Seam, 36 to 54 in. thick.
PO—Massillon, O.; SP—Justus, O.; CTY—Stark; RR—W. & L. E., B. & O.
MS—W. B. Stoner, Massillon, O.
S of H—Mules and rope. Track gage, 38 in.
S of M—Hand.
EMP—15. Last fiscal year output, 3,396 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.
(Old Information)

CLARK COAL & MINING CO., THE

General Office, 519 Main St., Uhrichsville, O.
PR—Jos. G. Davis, Uhrichsville, O.
VP—F. L. Harrah, Uhrichsville, O.
TR—M. H. Harrah, Uhrichsville, O.
GM—M. H. Harrah, Uhrichsville, O.
SA—M. H. Harrah, Uhrichsville, O.

Clark Mine; Drift; No. 7 Seam, 50 in. thick.
PO—Station 15, O.; SP—Philadelphia Roads, Pa.; CTY—Harrison; RR—P. O. C. & St. L.
MS—M. H. Harrah, Uhrichsville, O.
S of H—Mules. Track gage 36 in.
S of M—1 shortwall machs.
PP—Power purchased, 250 volts D. C., 1 pump.
EMP—25. Daily tonnage 150.
SIZES SHIPT—Run of Mine.

CLARKSON COAL MINING COMPANY

General Office, Kirby Bldg., Cleveland, O.
PR—Worrel Clarkson, St. Paul, Minn.
TR—C. W. Gardner, St. Paul, Minn.
GM—Ezra Van Horn, St. Clairsville, O.
GS—David H. Parker, St. Clairsville, O.
PA—C. A. Murphy, Cleveland, O.
EM—J. L. Heath, St. Clairsville, O.
SCO—Fairpoint Supply Co. Buyer, H. P. Felt, Fairpoint, O.

SA—S. B. Coolidge, Cleveland, O.
Clarkson No. 1 Mine; Shaft; Pittsburgh No. 8 Seam; 63 inches thick.
PO—St. Clairsville, O.; SP—Clarkson, O.; CTY—Belmont; RR—W. & L. E.
MS—S. P. Stephens, St. Clairsville, O.
S of H—Mules and trolley pole type loco.
S of M—22 chain breast machs. and shortwall mach.
PP—6 water tube boilers, 1 air compressor, gen. units, 250 volts D. C., 6 pumps.
EMP—300. Last fiscal year output, 250,000 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

Clarkson No. 2 Mine; Drift; Pittsburgh No. 8 Seam; 63 inches thick.
PO—Fair Point, O.; SP—Same; CTY—Belmont; RR—B. & O.
MS—Geo. Richardson, Fair Point, O.
S of H—Mules and trolley pole type loco.
S of M—20 chain breast machs and shortwall mach.
PP—Gen. units, 6 pumps.
EMP—300. Last fiscal year output, 250,000 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

Clarkson No. 3 Mine; Drift; Pittsburgh No. 8 Seam, 63 in. thick.
PO—Dungen, O.; SP—Same; CTY—Jefferson; RR—W. & L. E.
MS—M. J. Meehling, Dungen, O.
S of H—Trolley pole type loco.
S of M—Chain breast and shortwall machs.
PP—Power purchased.
EMP—300. Last years tonnage 300,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens, Picking Table.

CLAY BANK COAL & MINING CO.

General Office, 418 Gasco Bldg., Columbus, O.
PR—Herbert Hannigan, Charleston, W. Va.
VP—J. M. Eddy, New Lexington, O.
TR—S. G. Smith, Columbus, O.
GM—S. G. Smith, Columbus, O.
GS—S. G. Smith, Columbus, O.
PA—S. G. Smith, Columbus, O.
SA—Kanawha & Co., Coal Co., Columbus, O.

Clay Bank Mine; Drift, No. 6 Hocking Seam, 54 in. thick.
PO—New Lexington, O.; SP—Lexington, O.; CTY—Perry; RR—T. & O. C.
MS—Thos. Bringardner, New Lexington, O.
S of H—Mules. Track gage, 34 in.
S of M—Hand.
EMP—15. Last years tonnage 10,000.
SIZES SHIPT—Run of Mine.

CLAYCRAFT MINING & BRICK CO., THE.

General Office, Columbus, O.
 PR—John W. Kaufman, Columbus, O.
 VP—W. A. Miller, Columbus, O.
 TR—E. J. Kaufman, Columbus, O.
 GM—W. H. Hagland, Columbus, O.
 GS—C. L. Heddick, Shawnee, O.
 PA—H. J. Kaufman, Columbus, O.
 CE—Ellis Lovejoy, Columbus, O.
 EM—Evan C. New Lexington, O.
 EE—Ernest Clark, Shawnee, O.
 SC—Claycraft Club Store, Buyer, P. H. Daugherty, Shawnee, O.
 SALES MGR.—W. C. Mathews, Columbus, Ohio.

Claycraft Mine; Drift; No. 6 Seam, 60 in. thick.
 PO—Shawnee, O.; SP—Same; CTY—Perry; RR—B. & O., Z. & W.
 MS—George Peacock, Shawnee, O.
 S of H—Trolley pole type locos. Track gage, 42 in.
 S of M—1 chain breast type and 2 shortwall machs.
 PP—Power purchased, rotary converters, 250 volts D. C., 2 pumps.
 EMP—74. Last years tonnage 65,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

CLEVELAND & WESTERN COAL CO., THE.

General Office, Hanna Bldg., Cleveland, Ohio.
 PR—F. E. Taplin, Cleveland, O.
 VP—A. P. King, Cleveland, O.; C. F. Taplin, Cleveland, O.; Wm. Taylor, Cleveland, O.
 TR—W. J. Semple, Cleveland, O.
 PA—R. Downing, Cleveland, O.
 CE—L. P. Creelius, Cleveland, O.
 EM—C. D. Ault, Cleveland, O.

Franklin Mine; Drift; Pittsburgh No. 8 Seam, 60-72 in. thick.
 PO—Stewartville, O.; SP—Same; CTY—Belmont; RR—B. & O.
 MS—Wm. Beyman, Stewartville, O.
 S of H—Bope and 3 trolley pole type locos. Track gage 34 inches.
 S of M—10 chain breast type machs.
 PP—Power purchased, transformer 6000-2200, 250 volts D. C., 3 pumps.
 EMP—200. Daily tonnage 1,500.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

Johnson Mine; Slope; Pittsburgh No. 8 Seam, 60-72 in. thick.
 PO—Dilles Bottom, O.; SP—Pipe Creek, O.; CTY—Belmont; RR—Penna.
 MS—William Wagner Dilles Bottom, O.
 S of H—Mules, 2 trolley pole type locos. Track gage 42 in.
 S of M—6 chain breast type and 2 shortwall machs.
 PP—3 water tube boilers, 450 H. P., 2-150 K. W. gen. units, 250 volts D. C., 3 pumps.
 EMP—175. Daily tonnage 1,200.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.
 NOTE—Formerly operated by the Morgan, A. J., Coal Co.

CLEVELAND-BELMONT COAL COMPANY

Now Rosmary Coal Company.

CLEVELAND-CANTON COAL CO. (THE).

General Office, 550 Leader News Bldg., Cleveland, O.
 PR—A. F. Baler, Cleveland, O.
 VP—T. G. Brooks, Cleveland, O.
 TR—A. D. Sawyer, Cleveland, O.
 TB—D. O. Sawyer, Cleveland, O.
 PA—T. G. Brooks, Cleveland, O.
 CE—Geo. Arnold, New Philadelphia, O.
 EE—P. Gallagher, New Philadelphia, O.
 SA—A. F. Baler Coal Co., Cleveland, O.

"C" Mine; Drift; No. 6 Seam, 52 in. thick.
 PO—New Philadelphia, O.; SP—Same; CTY—Tuscarawas; RR—C. & P.
 S of H—Mules and trolley pole type locos. Track gage, 39 in.
 S of M—Shortwall machs.
 PP—4 150 H. P. fire tube boilers, 1 100 K. W., 1 150 K. W. gen. units, 250 volts D. C., 4 pumps.
 EMP—75. Last years tonnage 75,000.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

CLEVELAND-MACKSBURG COAL CO., THE

General Office, 325 Williamson Bldg., Cleveland, O.
 PR—H. C. Schneider, New Philadelphia, O.
 TR—W. P. Kaiser, 325 Williamson Bldg., Cleveland, O.
 GM—H. C. Schneider, New Philadelphia, O.
 GS—Gomer Jenkins, Macksburg, O.
 PA—W. P. Kaiser, 325 Williamson Bldg., Cleveland, O.
 BA—Lakewood Coal & Supply Co., 325 Williamson Bldg., Cleveland, O.

Peerless No. 1 Mine; Drift; No. 8 Seam, 60 inches thick.
 PO—Macksburg, O.; SP—Same; CTY—Washington; RR—Penna. (C. & M. Div.)
 S of H—Mules, endless chain. Track gage 39 inches.

S of M—1 chain breast type mach, 1 shortwall mach.
 PP—Gen. power, 520 volts D. C., 2 pumps.
 EMP—34.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.
 Peerless Nos. 2 and 3 Mines; Drift; No. 8 Seam, 78 inches thick.
 Under development.

CLEVELAND MASSILLON COAL COMPANY

General Office, 536 Engineers Bldg., Cleveland, O.
 PR—R. B. Graham, Cleveland, O.
 VP—I. F. Orr, Cleveland, O.
 TR—R. O. Bartholomew, Cleveland, O.
 GS—R. B. Graham, Cleveland, O.

Cleveland Massillon Mine; Shaft; Massillon Seam; 66 inches thick.
 PO—Massillon, O.; SP—Same; CTY—Stark; RR—Massillon & Cleveland.
 MS—Bert Schaub, Massillon, O.
 S of H—Bope and steam locos.
 S of M—Hand.
 EMP—200. Daily output, 100 tons.
 SIZES SHIPT—Slack, Lump, Block.
 PREP. EQUIPT—Shaker Screens.
 Old Information.

CLIMAX COAL COMPANY

General Office, Martins Ferry, O.
 PR—George H. Banfield, Follansbee, W. Va.
 GM—F. W. Mahan, Wheeling, W. Va.
 PA—F. W. Mahan, Wheeling, W. Va.
 CE—W. A. Williams, Barton, O.

Climax Mine; Stripping; No. 8 Seam, 60 in. thick.
 PO—Weems, O.; SP—Smithfield, O.; CTY—Jefferson; RR—P. & W. Va.
 MS—S. M. Bixley, Weems, O.
 S of H—Steam loco. Track gage 36 in.
 S of M—Stripping.
 PP—3 pumps.
 Daily tonnage 750.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Shaker Screens, and Crusher.
 Note—Successors to Banisma Coal Co.

COAL, CLAY & ROCK PRODUCTS CO.

General Office, 637 Second Natl. Bk. Bldg., Akron, O.
 PR—Henry S. Preston, Akron, O.
 VP—J. S. McCombe, Akron, O.
 TR—E. L. Junod, Akron, O.
 GM—E. L. Junod, Akron, O.
 GS—E. L. Junod, Akron, O.
 PA—E. L. Junod, Akron, O.

Junod Mine; Drift; No. 4 Brookville Seam, 60 in. thick.
 PO—North Industry, O.; SP—Same; CTY—Stark; RR—B. & O.
 MS—Wm. Meyers, North Industry, O.
 S of H—Mules. Track gage 36 in.
 S of M—Hand.
 PP—3 pumps.
 EMP—45. Daily tonnage 200.
 SIZES SHIPT—Run of Mine.
 NOTE—Formerly operated by the Ohio Coal & Lime Company.

COAL LAND DEVELOPMENT CORP.

General Office, 504-7 Peoples Bank Bldg., Pittsburgh, Pa.
 PR—Edw. F. Gerber, Pittsburgh, Pa.
 VP—W. H. Funston, Jr., Pittsburgh, Pa.
 TR—J. G. Fulman, Pittsburgh, Pa.
 GM—Edw. F. Gerber, Pittsburgh, Pa.
 GS—Edw. F. Gerber, Pittsburgh, Pa.
 PA—H. C. Browne, Pittsburgh, Pa.
 EM—W. R. Walker, Steubenville, O.

Ella Mine; Drift; No. 8 Pittsburgh Seam; 54 in. thick.
 PO—Hopdale, O.; SP—Same; CTY—Harrison; RR—P. & W. Va.
 MS—H. A. Light, Hopdale, O.
 S of H—Mules, elec. motor and 1 loco. Track gage 36 in.
 S of M—1 chain breast and 2 shortwall machs.
 PP—Power purchased, 250 volts D. C., 2 pumps.
 EMP—100. Daily tonnage 500.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Bar, Revolving and Shaker Screens, Picking Tables, Loading Booms, Washeries.

COAL RIDGE MINING COMPANY.

Now part of Champion Collieries Co.

COALDALE PRODUCTS CO., THE

General Office, 2604 Union Central Bldg., Cincinnati, O.
 PR—John Hoffman, Cincinnati, O.
 VP—C. G. Henry, Zanesville, O.
 TR—L. F. Koring, Cincinnati, O.
 GM—L. F. Koring, Cincinnati, O.
 GS—C. G. Henry, Zanesville, O.
 PA—John Hoffman, Cincinnati, O.
 SA—Kentucky Fuel Co., 2604 Union Central Bldg., Cincinnati, O.
 Coaldale Mine; Nos. 5, 6 and 7 Hocking Seams; 60 in. thick.
 PO—Zanesville, O.; SP—Same; CTY—Muskingum; RR—B. & O.
 S of H—Mules.

S of M—Hand.
 PP—Power purchased.
 SIZES SHIPT—Lump, Slack.
 Old Information.

COALGATE COAL CO. (THE).

General Office, New Straitsville, O.
 PR—Wm. Leake, New Straitsville, O.
 VP—Samuel Slatzer, New Straitsville, O.
 TR—Frank Hoy, Jr., New Straitsville, O.
 GM—John Wahl, New Straitsville, O.
 GS—John Wahl, New Straitsville, O.
 PA—John Wahl, New Straitsville, O.
 SA—Frank Hoy, Jr., New Straitsville, O.
 Additional Information on Page 610.
 Coalgate Mine; Drift; No. 46 Seam, 52 in. thick.
 PO—New Straitsville, O.; SP—Same; CTY—Perry; RR—B. & O.
 S of H—Mules and 1 storage battery loco. Track gage, 42 in.
 S of M—1 shortwall mach.
 PP—Power purchased, rotary converters.
 EMP—30. Daily output, 200 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Lump.
 PREP. EQUIPT—Gravity Screens.

CBE HOLLOW MINING CO., THE

General Office, Nelsonville, Ohio.
 PR—P. N. Warhime, Nelsonville, O.
 TR—J. G. Francis, Nelsonville, O.
 GM—J. W. James, Nelsonville, O.
 SA—Hocking Valley Products Co., Columbus, O.

Coe Hollow Mine; Drift; Six and Six A Seams, 42-72 inches thick.
 PO—Nelsonville, O.; SP—Same; CTY—Athens; RR—H. V.
 S of H—Mules. Track gage 42 inches.
 S of M—Hand and chain breast type mach.
 PP—Power purchased, Transformer 2200 volts A. C., M. G. Set, 230 volts D. C.
 EMP—16.
 SIZES SHIPT—Run of Mine.

COLBURGH COAL CO. (THE)

General Office, Columbus, O.
 PR—L. D. Lampman, 8 E. Broad St., Columbus, O.
 VP—J. J. Archer, 8 E. Broad St., Columbus, O.
 TR—H. Long, 8 E. Broad St., Columbus, O.
 GM—P. C. Morris, Nelsonville, O.
 GS—P. C. Morris, Nelsonville, O.
 MM—Wm. Booth, Baileys Mills, O.
 PA—P. B. Verity, Nelsonville, O.
 EM—J. L. Murphy, Nelsonville, O.
 EE—P. B. Verity, Nelsonville, O.
 Sales Agents—New York Coal Co., Columbus, O.

Murphy Mine; Drift; No. 8 Seam, 54-60 inches thick.
 PO—Baileys Mills, O.; SP—Same; CTY—Belmont; RR—B. & O.
 MS—R. G. Richards, Barnesville, O.
 S of H—3 crab reel locos. Track gage 42 in.
 S of M—2 shortwall machs.
 PP—Power purchased, 250 volts D. C., 3 pumps.
 EMP—110. Last years tonnage 58,592.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.

COLUMBIA COAL & POWER CO.

General Office, New Waterford, O.
 PR—Joseph Cautlel, Johnstown, Pa.
 VP—John Mintemire, New Waterford, O.
 TR & SECY—(Miss) Kate Arthur, New Waterford, O.
 GM—Joseph Cautlel and Griffith Powell, New Waterford, O.

Columbian Mine; Shaft; Third Seam, 39 to 52 in. thick.
 PO—New Waterford, O.; SP—Same; CTY—Columbiana; RR—P. B. R.
 MS—Griffith Powell, New Waterford, O.
 S of H—Mules. Track gage 42 inches.
 S of M—Shortwall mach.
 PP—3-250 H. P. water tube boilers, 1-75 K. W. gen. unit, 250 volts D. C.
 EMP—27.
 SIZES SHIPT—Run of Mine.

COLUMBIANA COAL & CLAY CO.

General Office, 621 Weightman Bldg., Philadelphia, Pa.
 PR—W. F. Eckert, Reading, Pa.
 VP—Chas. Miller, Jr., Somerton, Pa.
 TR—Wm. M. Brinkworth, Eighth and Lehigh Ave., Philadelphia, Pa.
 PA—W. Stewart Dilks, 621 Weightman Bldg., Philadelphia, Pa.
 CE—Robt. P. Millard, Rockefeller Bldg., Cleveland, O.
 EE—no McNicol, Sallneville, O.
 SA—The Capitol Fuel Co., Leader-News Bldg., Cleveland, O.
 "Columbia" Mine; Drift; Lower Freeport or No. 6 Seam, 36 inches thick.
 PO—Sallneville, O.; SP—Same; CTY—Columbia; RR—C. & P., Penna.
 MS—Edw. B. McNicol, Sallneville, O.
 S of H—5 storage battery locos. Track gage 42 in.
 S of M—5 shortwall machs.

PP—1 water tube boiler, 175 H. P., transformer 250-220 volts A. C., 1 150 K. W. and 1 85 K. W. motor gen. sets, 220 to 250 volts D. C., 4 pumps.

EMP—80. Last fiscal year output, 40,000 tons.
 SIZES SHIPT—Run of Mine.

COLUMBUS COAL AND MNG. CO. (THE)

General Office, Coshocton, O.
 PR—Rollins N. Barnes, Coshocton, O.
 TR—Clyde F. Barnes, " " "
 GS—Rollin N. Barnes, " " "
 PA—Clyde F. Barnes, " " "
 EM—H. L. Taylor, Coshocton, O.
 EE—H. G. Patten, R.F.D. No. 5, Coshocton, O.

Franklin Mine; Drift; No. 6 Seam, 2 1/2 to 4 ft. thick.
 PO—Coshocton, O.; SP—Conesville, O.; CTY—Coshocton. RR—P. C. C. & St. L., Franklin Branch.
 S of H—Mules and 2 trolley pole type locos. Track gage, 32 in.
 S of M—Hand and 2 shortwall machs.
 PP—Power purchased, transformer 4000 to 250 volts A. C., 150 volts D. C., 2 pumps.

EMP—75.
 SIZES SHIPT—Run of Mine, Slack, Pea, Egg, Lump.
 PREP. EQUIPT—Gravity Screens.

CORNERSTOWN CLAY & COAL CO., THE

General Office, New Cornerstown, O.
 PR—W. A. McIntyre, New Cornerstown, O.
 VP—Smith Boswell, Toronto, O.
 TR—Jas. Murray, New Cornerstown, O.
 GM—W. A. McIntyre, New Cornerstown, O.
 Cornerstown No. 2 Mine; Drift; No. 6 Seam; 36 in. thick.
 PO—New Cornerstown, O.; SP—Same; CTY—Tuscarawas; RR—Penna., C. & M. Div.
 S of H—Mules.
 S of M—Hand.
 SIZES SHIPT—Run of Mine.
 Note—Formerly operated by the Novelty Brick & Coal Co. and Kopp Klay Co.

S of H—Mules.
 S of M—Hand.
 SIZES SHIPT—Run of Mine.
 Note—Formerly operated by the Novelty Brick & Coal Co. and Kopp Klay Co.

COMMONWEALTH COAL COMPANY

General Office, Martins Ferry, O.
 PR—E. K. Delaney, Martins Ferry, O.
 TR—Louis H. Helling, Martins Ferry, O.
 GM—Louis H. Helling, Martins Ferry, O.
 GS—Louis H. Helling, Martins Ferry, O.
 PA—Louis H. Helling, Martins Ferry, O.

Burlington Mine; Drift; Pittsburgh No. 8 Seam, 60 inches thick.
 PO—Martins Ferry, O.; SP—Same; CTY—Belmont; RR—W. & L. E.
 S of H—Mules and storage battery loco. Track gage 33 inches.
 S of M—Chain breast and shortwall machs.
 PP—Purchase power. Transformer 2,200 to 220 volts A. C., M. G. sets, 75 H. P. motor, 45 K. W., 250 volts.
 EMP—65. Last years tonnage 50,534.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.

COMPASS HILL COAL COMPANY

General Office, Coalton, O.
 PR—J. J. McKitterick, Jackson, O.
 TR—Allen M. Rowe, Coalton, O.
 GM—Allen M. Rowe, Coalton, O.
 PA—Allen M. Rowe, Coalton, O.

Compass Hill Mine; Drift; No. 2 Seam, 30 in. thick.
 PO—Coalton, O.; SP—Same; CTY—Jackson; RR—B. & O.
 MS—Wesley McKitterick, Coalton, O.
 S of H—Mules. Track gage 32 in.
 S of M—Hand.
 EMP—16. Last years tonnage 5,200.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.

CONSOLIDATED CLAY PRODUCTS CO.

General Office, 214 Market Ave., South Canton, O.

PR—G. O. French, Canton, O.
 VP—Frank H. Snyder, Massillon, O.
 TR—C. W. Ruff, Malvern, O.
 GM—G. B. French, Canton, O.
 GS—C. W. Ruff, Malvern, O.
 PA—G. O. French, Canton, O.
 EM—Millard & Ford Co., Cleveland, O.
 Big 4 No. 1 Mine; Drift; No. 6 Vein Seam, 30 in. thick.
 PO—Malvern, O.; SP—Malvern & Onelda, O.; CTY—Carroll; RR—Penna.
 MS—Harvey James, Malvern, O.
 S of H—1 6-ton loco. Track gage 36 in.
 S of M—2 shortwall machs.
 PP—Gen units, 175 K. W., 250 volts D. C., 2 pumps.
 EMP—15. Last years tonnage 4,652.

Big 4 No. 2 Mine; Slope; No. 5 Vein Seam, 42 in. thick.
 PO—Malvern, O.; SP—Malvern & Onelda, O.; CTY—Carroll; RR—Penna.
 SM—Harvey James, Malvern, O.
 S of H—Mules, rope. Track gage 36 in.
 S of M—Hand.
 Last years tonnage 8,201.
 Note—Formerly operated by Big Four Clay Co.

CONSOLIDATED COAL & COKE CO.

General Office, Butler, Pa.
PR—B. D. Phillips, Butler, Pa.
TR—A. M. Christley, Butler, Pa.
GM—C. C. Ferguson, Butler, Pa.
GS—C. C. Ferguson, Butler, Pa.
PA—C. C. Ferguson, Butler, Pa.
EM—Herbert & Henderson, Kittanning, Pa.
EE—James Bush, Plumville, Pa.
SCO—Plumville Supply Co., Buyer, H. F. Grant, Plumville, Pa.
SA—J. W. Trounce, 1538 Marine Trust Bldg., Buffalo, N. Y.

Consolidated No. 6 Mine; Stripping; Pittsburgh No. 8 Seam.
PO—New Straitsville, O.; SP—Shawnee, O.; CTY—Perry; RR—B. & O.
S of H—Steam loco.
S of M—Hand.
EMP—25. Daily tonnage 1,000.
SIZES SHIPT—Slack.

CONSOLIDATED FUEL COMPANY (THE).

General Office, 1203 Chambers of Commerce Bldg., Pittsburgh, Pa.
PR—Isaac J. Jenkins, Pittsburgh, Pa.
VP—Samuel Hamilton, J. E. Stewart, Pittsburgh, Pa.
TR—J. Stanley Jones, Pittsburgh, Pa.
ASST TREAS—R. J. Pearce, Pittsburgh, Pa.
SECY—D. R. Tomb, Pittsburgh, Pa.
ASST SECY—J. J. Grimm, Pittsburgh, Pa.
GM—J. E. Stewart, Pittsburgh, Pa.
GS—H. H. Kallaway, Pittsburgh, Pa.
PA—N. A. Barnhart, Pittsburgh, Pa.
CE—M. D. Gibson, Pittsburgh, Pa.
SA—Bertha Coal Company, Pittsburgh, Pa.

Goucher Mine; Drift; Pittsburgh No. 8 Seam, 57 in. thick.
PO—Brilliant, O.; SP—Same; CTY—Jefferson; RR—Penna.
MS—John Huddy, Brilliant, O.
S of H—Mules and 1 trolley pole type locos. Track gage, 38 in.
S of M—Chain breast type and shortwall machs.
PP—Power purchased, transformer 2300 to 250 volts A. C., M. G. sets, 250 volts D. C., 2 pumps.
EMP—40. Last years tonnage 93,671.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Loading Booms.

Kelly Mine; Drift; Pittsburgh No. 8 Seam 54 in. thick.
PO—Rayland, O.; SP—Same; CTY—Jefferson; RR—Penna., C. & P., River Div.
MS—Thos. Hancock, Rayland, O.
S of H—8 mules and 2 motors. Track gage, 36 in.
S of M—6 electric mining machs.
PP—M. G. Sets, 250 volts D. C.
EMP—100. Last years tonnage 92,701.
Maple Hocking Mine; Drift; No. 6 Seam.
PO—Nelsonville, O.; SP—Same; CTY—Athens; RR—H. V.
MS—William Huddy, Nelsonville, O.
S of H—7 mules and 1 electric loco. Track gage, 42 in.
S of M—4 electric mining machs.
PP—M. G. set, 250 K. W.
EMP—60. Last years tonnage 54,048.

CORNING MINING CO.

General Office, 40 W. Gay St., Columbus, Ohio.
PR—Geo. F. Germain, Columbus, O.
TR—Geo. F. Germain, Columbus, O.
GM—Geo. F. Germain, Columbus, O.
GS—Geo. F. Germain, Columbus, O.
PA—Geo. F. Germain, Columbus, O.
CE—H. J. Dusz, Jacksonville, O.
EE—Fred Fisher, Corning, O.
SCO—Address the Company, Buyer, W. D. Forsker, Corning, O.

No. 26 Mine; Slope; No. 6 Hocking Seam, 60-84 in. thick.
PO—Corning, O.; SP—Same; CTY—Perry; RR—T. & O. C.
MS—J. T. Cox, Glouster, O.
S of H—Mules and 1 6-ton trolley pole type loco. Track gage 42 inches.
S of M—3 chalo breast type machs.
PP—3 150 H. P. fire tube boilers, gen. units, 220 volts D. C., 7 pumps.
EMP—70. Last fiscal year output, 63,363 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Gravity and Revolving Screens.

COR-REN COAL COMPANY

General Office, Nelsonville, O.
PR—H. Kelley, Nelsonville, O.
GS—John Hilton, Nelsonville, O.
SCO—Sunday Creek Coal Co., Buyer, Walter Duncan, Columbus, O.
SA—Sunday Creek Coal Co., Columbus, O.

No. 253 Mine; Slope; No. 6 Seam; 56 inches thick.
PO—Nelsonville, O.; SP—Rendville, O.; CTY—Perry; RR—R. & L. C.

S of H—Mules and rope, gasoline loco. Track gage 42 inches.
S of M—Hand and electric puncher.
PP—Power purchased, Transformer 11,000 to 4,000 volts A. C., M. G. set, 250 volts D. C.
EMP—50. Daily output, 200 tons.
SIZES SHIPT—Run of Mine, Pea, Lump.
PREP. EQUIPT—Shaker Screens.
Note—Formerly operated by the Sunday Creek Coal Co.
Old Information.

COSHOCKTON VALLEY COAL CO., THE

General Office, Coshocton, O.
PR—F. M. Marshall, Coshocton, O.
VP—R. H. Mills, Coshocton, O.
TR—G. M. Marshall, Coshocton, O.
GM—F. M. Marshall, Coshocton, O.
GS—G. M. Marshall, Coshocton, O.
PA—G. M. Marshall, Coshocton, O.
EM—Robt. McCormick, East Main St., Coshocton, O.
EE—M. E. Stockum, Coshocton, O.

Coshocton Valley Mine; Drift; No. 6 Seam; 56 inches thick.
PO—Coshocton, O.; SP—Same; CTY—Coshocton; RR—Wheeling & Lake Erie.
S of H—Electric locos. Track gage 36 inches.
S of M—2 chalo breast and 1 shortwall machs.
PP—Power purchased, 1 50 K. W., M. G. set, 250 volts D. C.
EMP—20. Last years tonnage 1200.
SIZES SHIPT—Run of Mine, Slack, Block, Lump, Nut.
PREP. EQUIPT—Gravity Screens.

COWEN COAL COMPANY

General Office, Salltillo, O.
GM—D. E. Cowen, Salltillo, O.
No. 97 Mine; Drift; No. 6 Seam, 48 inches thick.
PO—Salltillo, O.; SP—Same; CTY—Perry; RR—Z. & W.
MS—D. E. Cowen, Salltillo, O.
S of H—Mules.
S of M—Hand.
EMP—15. Last years tonnage 2,700.
SIZES SHIPT—Run of Mine.

COXE MINING COMPANY.

General Office, 805 Markle Bank Bldg., Hazleton, Pa.
PR—C. A. Garner, Hazleton, Pa.
1st VP—W. H. Glasgow, Scottsdale, Pa.
TR—Wm. Lloyd, Hazleton, Pa.
GM—C. A. Garner, Hazleton, Pa.
PA—C. A. Garner, Fernwood, O.
CE—C. A. McIntyre, Scottsdale, Pa.
EM—Douglass & McKeight, Pittsburgh, Pa.
SA—Westmoreland Fuel Co., Pittsburgh, Pa.

Ferowood Mine; Drift; Pittsburgh No. 8 Seam, 58 in. thick.
PO—Fernwood, O.; SP—Same; CTY—Jefferson; RR—P. R. B.
MS—C. M. Roberts, Fernwood, O.
S of H—2 locos. Track gage 36 inches.
S of M—Hand.
EMP—50. Last years tonnage 30,754.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by the Read Coal Company.

CRABAPPLE COAL CO.

Now part of the Warner Collieries Co.

CRAB ORCHARD MINING CO.

General Office, 8 East Long St., Columbus, O.
PR—R. C. Hastings, Columbus, O.
VP—Paul Der Yue, Washington, D. C.
TR—Adam G. Inols, Columbus, O.
GM—E. E. Learned, Columbus, O.
GS—E. E. Learned, Columbus, O.
PA—E. E. Learned, Columbus, O.
EM—Waldo Chute, Nelsonville, O.
SA—E. E. Learned, Columbus, O.

Crab Orchard Mine; Slope; Conoco Seam, 48 inches thick.
PO—Freeport, O.; SP—Same; CTY—Harrison; RR—B. & O.
MS—Wm. Harris, Freeport, O.
S of H—1 storage battery loco. Track gage 36 in.
S of M—Hand.
PP—1—150 H. P. fire tube boiler, 1—100 K. W. gen. unit, 250 volts D. C., 1 pump.
EMP—20. Last years tonnage 4,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.

CRAIG COAL CO.

General Office, 27½ Public Sq., Nelsonville, O.
PR—C. W. Craig, Nelsonville, O.
TR—C. W. Craig, Nelsonville, O.
GM—C. W. Craig, Nelsonville, O.
GS—C. W. Craig, Nelsonville, O.
PA—C. W. Craig, Nelsonville, O.
SA—C. W. Craig, Box 414, Nelsonville, Ohio.

Craig Mine; Drift; No. 6 Seam, 54 inches thick.
PO—Nelsonville, O.; SP—Same CTY—Athens; RR—H. V.

S of H—Mules. Track gage 42 inches.
S of M—Hand.
PP—1 return tubular boiler, 250 H. P., gen. unit, 250 volts A. C., 1 pump.
EMP—5.
SIZES SHIPT—Run of Mine.
Old Information.

CRAWFORD HILL COAL COMPANY.

Now part of the Warner Collieries Co.

CRESCENT ICE & COAL COMPANY

General Office, Alliance, O.
PR—N. N. Stone, Alliance, O.
VP—L. N. Stone, Alliance, O.
TR—S. C. Stone, Alliance, O.
GM—S. C. Stone, Alliance, O.
GS—N. N. Stone, Alliance, O.

Crescent Mine; Slope; No. 5 Seam, 40 inches thick.
PO—Paris, O.; SP—Same; CTY—Stark; RR—N. Y. C.
S of H—Mules. Track gage, 34 inches.
S of M—Shortwall machs.
PP—1 80 H. P. water tube boiler, gen. units, 50 K. W., 250 volts D. C.
EMP—25. Daily tonnage 100.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

CRITES COAL CO.

General Office, Circleville, O.
PR—H. M. Crites, Circleville, O.
GM—Geo. H. Lowden, Nelsonville, O.
GS—Geo. H. Lowden, Nelsonville, O.

No. 29 Mine; Slope; No. 6 Seam, 84 in. thick.
PO—Murray, O.; SP—Same; CTY—Hocking; RR—Hocking Valley.
S of H—Mules, rope and 1 hoist motor, 20 H. P. Track gage 42 in.
S of M—1 chain breast mach.
PP—45 H. P. gen. units, 250 volts D. C., 6 pumps.
EMP—40. Daily tonnage 180.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Screens.
NOTE—Formerly operated by the Murray Mining Company.

CROOKSVILLE MINING COMPANY

General Office, 208 Cooper St., Jackson, Mich.
PR—F. C. Badgley, Jackson, Mich.
VP—M. Allington, Jackson, Mich.
TR—H. A. Dewey, Jackson, Mich.

Crooksville Mine; Drift; Seam 42 inches thick.
PO—Crooksville, O.; SP—Same; CTY—Perry; RR—Z. & W.
MS—C. J. Beard, Crooksville, O.
S of H—Electric loco.
S of M—Hand.
PP—Purchase power.
EMP—24.

CROSS CREEK COAL COMPANY, THE

General Office, Steubenville, O.
PR—S. E. Cover, Andrews, N. C.
VP—J. W. Brown, Andrews, N. C.
TR—J. W. Brown, Andrews, N. C.
GM—T. Frank Hinds, 422 Darlington Road, Steubenville, O.
GS—Earl E. Blair, Steubenville, O.
PA—T. Frank Hinds, 422 Darlington Road, Steubenville, O.
EM—H. Clyde Elkins, Star Jet, Pa.

Coal Hill Mine; Drift; Pittsburgh No. 8 Seam, 62 in. thick.
PO—Steubenville, O.; SP—Same; CTY—Jefferson; RR—P. C. C. & St. L., C. & P., Penna. and W. & L. E.
MS—Edward Thompson, Lincoln Ave., Steubenville, O.
S of H—3 mules. Track gage 40 in.
S of M—Shortwall mach.
PP—1 75 K. W. motor generator, 2 pumps.
EMP—25. Last years tonnage 25,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Bar Screens.
Note—Formerly operated by Coal Hill Coal Co.

CROW OIL, GAS & COAL COMPANY

General Office, Wheeling, W. Va.
PR—S. G. Crow, Wheeling, W. Va.
VP—C. J. Wolf, Wheeling, W. Va.
TR—R. S. Honecker, Wheeling, W. Va.
GM—S. G. Crow, Wheeling, W. Va.
GS—R. Mattucci, Wheeling, W. Va.
SA—C. J. Wolf, Wheeling, W. Va.

Captina Mine; Shaft; Pittsburgh No. 8 Seam.
PO—Armstrong Mills, O.; SP—Captina, O.; CTY—Belmont; RR—O. R. & W.
MS—George Boston, Armstrong Mills, O.
S of H—Mules. Track gage 36 inches.
S of M—Shortwall mach.

CULBERTSON CO. L. COAL COMPANY

General Office, 1534 Hanna Bldg., Cleveland, O.
PR—R. L. Culbertson, Cleveland, O.

GM—R. L. Culbertson, Cleveland, O.
SA—West Virginia & Ohio Coal & Coke Co., Cleveland, O.

Culbertson Mine; Stripping; Pittsburgh No. 8 Seam; 60 inches thick.
PO—Cadziz, O.; SP—Unionvale, O.; CTY—Harrison; RR—W. & L. E.
MS—Guy Price, Cadziz, O.
S of H—Steam loco. Track gage 36 inches.

S of M—Steam shovels.
PP—1 fire tube boiler, 54 H. P.
EMP—75.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Revolving Screens, Picking Tables.

CUTHBERTSON COAL COMPANY

General Office, Murray, O.
OWNER—John W. Cuthbertson, Murray, O.
SA—Sunday Creek Coal Co., Outlook Bldg., Columbus, O.

Canter No. 2 Mine; Drift; No. 6 Seam, 72 in. thick.
PO—Murray, O.; SP—Same; CTY—Hocking; RR—Hocking Valley.
S of H—Mules. Track gage 42 in.
S of M—Chain breast type mach.
PP—Power purchased, 250 volts D. C.
SIZES SHIPT—Run of Mine.

DAVIS, DAVID

Property now operated by the Tyrone Coal & Mining Co.

DAVIS FIRE BRICK CO.

General Office, Oak Hill, O.
PR—D. D. Davis, Oak Hill, O.
VP—Simon Labold, Oak Hill, O.
TR—H. M. Davis, Oak Hill, O.
GM—E. J. Davis, Oak Hill, O.
GS—E. J. Davis, Oak Hill, O.
PA—A. M. Davis, Oak Hill, O.

Davis Mine; Drift; No. 5 Seam, 36 to 48 in. thick.
PO—Oak Hill, O.; SP—Same; CTY—Jackson, O.; RR—B. & O.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—12. Last years tonnage 6,000.
SIZES SHIPT—Run of Mine, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Bar Screens.

DAVIS, T. H. COAL CO.

General Office, Middleport, O.
PR—E. F. Davis, Middleport, O.
VP—Edgar Ervin, Middleport, O.
TR—T. H. Davis, Middleport, O.
GM—T. H. Davis, Middleport, O.
GS—T. H. Davis, Middleport, O.
PA—W. G. Davis, Middleport, O.
SA—J. E. Downing, Middleport, O.

Davis Mine; Drift; Pittsburgh Velu No. 8 Seam, 60 in. thick.
PO—Middleport, O.; SP—Same; CTY—Meigs; RR—Hocking Valley.
S of H—Mules.
S of M—Hand.
PP—Gas pumps.
EMP—15.
SIZES SHIPT—Run of Mine.

DE WITT COAL CO. (THE).

General Office, Dayton, O.
PR—W. P. Rice, Dayton, O.
TR—J. W. Rice, Dayton, O.
GM—J. W. Rice, Dayton, O.
PA—J. W. Rice, Dayton, O.
SA—The W. P. Rice Mining Co., Dayton, O.

The De Witt Mine; Drift; Jackson No. 5 Seam, 36 in. thick.
PO—Wellston, O.; SP—Same; CTY—Jackson; RR—B. & O., D. & W. Branch.
MS—Willard De Witt, Wellston, O.
S of H—Mules.
S of M—1 chain breast type loco.
PP—Generator units.
Last fiscal year output, 30,000 tons.
SIZES SHIPT—Run of Mine, Nut, Slack and Lump.

DEAN COAL & COKE CO. THE

General Office, Ferris Bldg., Columbus, Ohio.
PR—S. F. L. Dean, Columbus, O.
TR—W. Daniel, Columbus, O.
GM—N. R. Hesse, Moxahala, O.
GS—N. R. Hesse, Moxahala, O.
PA—S. F. L. Dean, Columbus, O.
EM—Evan Reese, New Lexington, O.

Dean Mine; Slope; Fanning No. 6 Seam, 57 in. thick.
PO—Moxahala, O.; SP—Same; CTY—Perry; RR—B. & O. C.
S of H—Mules and electric.
S of M—Shortwall machs.
PP—2 fire tube boilers, total 200 H. P., 100 K. W. gen. unit, 250 volts D. C., 3 pumps.
EMP—50. Daily tonnage 500.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

DENNISON SEWER PIPE COMPANY

General Office, Dennison, O.
 PR—T. Lanning, Uhrichsville, O.
 VP—M. Moody, Uhrichsville, O.
 TR—E. D. Moody, Dennison, O.
 GM—S. G. McElroy, Dennison, O.
 PA—S. G. McElroy, Dennison, O.

Dennison Mine; Drift; No. 6 Seam, 44 to 50 inches thick.
 PO—Dennison, O.; SP—Same; CTY—Tuscarawas; RR—P. C. C. & St. L.
 MS—Walter Allen-Smith, Dennison, O.
 S of H—Mules.
 S of M—Hand.
 PP—4 pumps.
 EMP—4. Last years tonnage 4,000.
 Note—Mine coal for own use only.

DERBY COAL COMPANY

General Office, Bridgeport, O.
 PR—Millard Price, Wheeling, W. Va.
 VP—W. Veil, Bethesda, O.
 TR—C. Dixon, Bridgeport, O.
 GM—J. Gallagher, Kurlon, O.
 GS—M. Price, Wheeling, W. Va.
 PA—C. Dixon, Bridgeport, O.
 SA—Millard Price, Wheeling, W. Va.

PP—Gen. power, 220 volts D. C.
 Note—Mine under development.

DIXIE COAL & MINING COMPANY

General Office, Corning, O.
 PR—Jas. Miller, Corning, O.
 GM—T. J. Friel, New Straitsville, O.
 GS—T. J. Friel, New Straitsville, O.
 PA—T. J. Friel, New Straitsville, O.
 EM—C. J. Vanrite, Shawnee, O.

Pike Mine; Drift; No. 6 Seam; 48 in. thick.
 PO—New Straitsville, O.; SP—Dixie, O.; CTY—Perry; RR—B. & O.
 S of H—Mules, trolley pole type and storage battery locos. Track gage 42 in.
 S of M—Electric punchers, chain breast type and shortwall machs.
 PP—Power purchased. Transformer 4,000-220 volts A. C., 1-100 K. W. gen. unit, 250 volts D. C., 2 pumps.
 EMP—30. Daily tonnage 200.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.
 Old Information.

DOANVILLE COAL COMPANY

General Office, Nelsonville, O.
 PR—A. D. Knight, Delaware, O.
 VP—Fred H. Johnson, Nelsonville, O.
 TR—Geo. E. Johnson, Nelsonville, O.
 GM—Geo. E. Johnson, Nelsonville, O.
 GS—Frank Murphy, Nelsonville, O.
 PA—R. T. Lamb, Nelsonville, O.
 EM—Wm. Berry, New Straitsville, O.
 EE—Jess Coon, Nelsonville, O.
 SA—Geo. E. Johnson, Nelsonville, O.

Doanville Mine; Drift and Slope; Nos. 6 and 7 Seams; 72 and 60 in. thick.
 PO—Nelsonville, O.; SP—Same; CTY—Athens; RR—Hocking Valley.
 S of H—Mules, rope and 1 loco. Track gage 42 in.
 S of M—2 chain breast and 2 shortwall machs.
 PP—Power purchased, 1-150 K. V. A. M. G. set, 250 volts D. C., 7 pumps.
 EMP—100. Last years tonnage 48,000.
 SIZES SHIPT—Run of Mine, Pea, Nut, Lump.
 PREP. EQUIPT—Screens.

DOMESTIC COAL CO., THE

General Office, Wellston, O.
 PR—L. C. Voglesang, Wellston, O.
 VP—A. G. Herring, Wellston, O.
 PA—L. C. Voglesang, Wellston, O.
 TR—L. C. Voglesang, Wellston, O.
 GM—L. C. Voglesang, Wellston, O.
 GS—W. J. Collins, Wellston, O.
 EM—Edw. Kelley, Wellston, O.
 EE—Henry Gray, Wellston, O.
 SA—A. F. Herring, Wellston, O.

Domestic Mine; Shaft; No. 2 Jackson Seam, 30-36 in. thick.
 PO—Wellston, O.; SP—Same; CTY—Jackson; RR—D. T. & I.
 S of H—Mules and trolley pole type locos. Track gage, 33 in.
 S of M—2 shortwall machs.
 PP—4 return tubular boilers, total 400 H. P., gen. unit, 220 volts D. C., 3 pumps.
 EMP—75. Last years tonnage 40,000.
 SIZES SHIPT—Slack, Egg, Lump.
 PREP. EQUIPT—Gravity Screens.

DOVER FIRE BRICK CO.

PR—G. H. Ganson, Cleveland, O.
 TR—H. E. Stuhler, " "
 PA—H. E. Stuhler, " "
 GM—H. C. Euck, Strasburg, O.
 Dover Mine; Stripping; No. 5 Seam, 2½ to 3 ft. thick.
 PO—Strasburg, O.; SP—Same; CTY—Tuscarawas; RR—B. & O.

MS—R. Bowen, Strasburg, O.
 S of H—Mules, 1 gasoline loco. Track gage 34 in.
 S of M—Hand.
 Note—Mine for own use only.

EAST HILL COAL COMPANY

Out of business.

EAST OHIO SEWER PIPE COMPANY

PR—William Banfield, Follansbee, W. Va.
 TR—F. W. Owensney, Steubenville, O.
 GM—F. W. Owensney, " "
 GS—W. E. Williams, Irondale, O.
 PA—F. S. Wade, " "

Creek Vein Mine; Drift; Nos. 3 and 6 Seams; 28 to 48 in. thick.
 PO—Irondale, O.; SP—Same; CTY—Jefferson; RR—C. & P.
 S of H—Mules.
 S of M—4 elec. machs.
 PP—5 Water tube boilers, total 750 H. P., 1 gen. unit, 250 volts D. C., 3 pumps.
 EMP—25.
 SIZES SHIPT—Run of Mine.

ECKELS, R. M.

OPERATOR—R. M. Eckels, Coshocton, O.
 SA—E. L. River, Coshocton, O.

Locust Grove Mine; Drift; No. 6 Seam, 46 in. thick.
 PO—Coshocton, O.; SP—Same; CTY—Coshocton; RR—W. & L. E.
 MS—James Littick, Coshocton, O.
 S of H—Mules. Track gage, 32 in.
 S of M—Hand.
 EMP—40.
 SIZES SHIPT—Run of Mine, Slack, Pea, Lump.
 PREP. EQUIPT—Gravity Screens.
 Note—This mine formerly operated by Morgan Run Coal & Mng. Co.

EDGEFIELD COAL CO. (THE).

General Office, Canton, O.
 PR—O. W. Renkert, Canton, O.
 VP—Geo. H. Wynn, Canton, O.
 TR—John Wynn, Jr., Canton, O.
 GM—John Wynn, Jr., Canton, O.
 GS—Alexander Miller, Canton, O.
 PA—B. F. Burkle, Canton, O.
 EM—Geo. H. Wynn, Canton, O.

Edgefield Mine; Slope; No. 4 Seam, 48 in. thick.
 PO—Canton, O.; SP—Same; CTY—Stark; RR—Wheeling & Lake Erie.
 MS—Charley Rock, Canton, O.
 S of H—Mules, 1 storage battery, 1 combination storage and trolley locos. Track gage 38 in.
 S of M—5 shortwall machs.
 PP—Power purchased, transformer 2200 to 220 volts A. C., 1 40 K. W., 1 100 K. W. gen. units, 250 volts D. C., 7 pumps.
 EMP—85. Last years tonnage 83,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Picking Tables, Shaker Feed Screens.

ELDON COAL MINING COMPANY

General Office, Wheeling, W. Va.
 TR—R. J. Cotts, Wheeling, W. Va.
 GM—R. J. Cotts, Wheeling, W. Va.

Quaker Mine; Drift; Pittsburgh No. 8 Seam, 54 in. thick.
 PO—Quaker City, O.; SP—Eldon, O.; CTY—Guernsey; RR—R. & O.
 MS—Ed Betts, Quaker City, O.
 S of H—Elec. locos. Track gage 42 in.
 S of M—2 shortwall machs.
 PP—1-125 H. P. return tubular boiler, 1-100 K. W. generator, 250 volts D. C., 1 pump.
 EMP—50. Daily tonnage 250.
 SIZES SHIPT—Run of Mine.

ELECTRIC COAL CO.

Now United Electric Coal Companies.

ELK COAL & COKE CO.

General Office, 8 E. Long St., Columbus, O.
 PR—D. W. Jones, Columbus, O.
 VP—B. L. Hawke, Hebron, O.
 TR—D. E. Lewis, Hebron, O.
 GM—Jno. W. Moore, Columbus, O.
 GS—J. H. Moorefield, Roseville, O.
 PA—Jno. W. Moore, Columbus, O.
 EM—H. E. Nold, Columbus, O.

Elk Mine; Slope; Hocking No. 6 Seam, 42 in. thick.
 PO—Roseville, O.; SP—Same; CTY—Muskingum; RR—C. & M. V.
 S of H—Trolley pole type locos. Track gage 36 in.
 S of M—8 chain breast type and 3 overhead cutter machs.
 EMP—142. Last years tonnage 132,000.
 PP—Power purchased, rotary converters, 500 volts D. C., 3 pumps.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Straight Bar Screens.

ELK FORK COAL CO.

General Office, Wellston, Ohio.
 PR—Geo. B. Davis, Wellston, O.
 VP—T. M. Sellards, Detroit, Mich.
 TR—E. E. Blair, Wellston, O.
 SECY—E. E. Blair, Wellston, O.
 GM—Geo. B. Davis, Wellston, O.
 GS—Geo. B. Davis, Wellston, O.
 PA—Geo. B. Davis, Wellston, O.
 EM—E. R. Kelley, Wellston, O.
 SCU—Address the company. Buyer, E. R. Blair, Wellston, O.
 Sales Agent—F. J. Koehn, Dayton, O.

Elk Fork No. 1; Shaft; No. 2 Vein; 28 to 32 ins. thick.
 PO—McArthur, O.; R. F. D.; SP—Same; CTY—Vinton; RR—H. V.
 MS—Wm. Aleerts, Wellston, O.
 S of H—5 elec. locos, 1 storage battery locos. Track gage 36 in.
 S of M—3 elec. mach.
 PP—3 return tubular boilers, 3 pumps.
 EMP—65. Last fiscal year output, 15,000 tons.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Revolving Screens.

Elk Fork No. 2 Mine; Shaft; No. 2 Jackson Seam, 32 in. thick.
 PO—Wellston, Ohio; SP—Same; CTY—Jackson; RR—D. T. & L. Ry.
 MS—F. A. Cragg, Wellston, O.
 SM—Ed Lang, Wellston, O.
 S of H—6 storage battery locos. Track gage 36 in.
 S of M—5 elec. mach.
 PP—3 return tubular boilers, 2 pumps.
 EMP—125. Last fiscal year output, 60,000 tons.
 SIZES SHIPT—Run of Mine, Egg, Lump.
 PREP. EQUIPT—Bar Screens.

ELK RUN COAL CO. (THE).

General Office, Salem, O.
 PR—J. H. Giffin, Salem, O.
 VP—R. W. Campbell, Salem, O.
 TR—A. P. Mullins, Salem, O.
 GM—A. P. Mullins, Salem, O.

Elk Run Mine; Drift; No. 6 Seam, 34 in. thick.
 PO—Rogers, O.; SP—Same; CTY—Columbiana; RR—D. T. & L. W.
 MS—Paul Hanbent, Salem, O.
 S of H—Trolley pole type loco. Track gage 38 inches.
 S of M—3 shortwall machs.
 PP—2 fire tube boilers, 225 H. P., 1-100 K. W. gen. units, 250 volts D. C., 5 pumps.
 EMP—75. Last years tonnage 35,700.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.
 Erier Hill Mine; Drift; No. 3 Seam, 40 inches thick.
 PO—Salem, O.; SP—Lisbon, O.; CTY—Columbiana; RR—Erie.
 MS—J. H. Giffin, Salem, O.
 S of H—Rope and trolley pole type locos. Track gage 38 inches.
 S of M—1 shortwall mach.
 PP—1 fire tube boiler, 150 H. P., 1-100 K. W. gen. unit, 250 volts D. C., 2 pumps.
 EMP—36.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

ELKO COLLIERY COMPANY

PR—Jerry Morrow, Wellston, O.
 TR—J. H. Browne, " "
 GM—F. C. Morrow, " "

Elko No. 1 Mine; Shaft; Wellston No. 2 Seam, 36 in. thick.
 PO—Wellston, O.; SP—Elko, O.; CTY—Vinton; RR—B. & O.
 MS—J. H. Yeager, Wellston, O.
 S of H—Mules and trolley pole type locos. Track gage, 36 in.
 S of M—2 elec. machs.
 PP—2 water tube boilers, total 300 H. P., 1 gen. unit, 250 volts D. C., 3 pumps.
 EMP—100.
 SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

ELM GROVE MINING COMPANY

General Office, 319 Kirby Bldg., Cleveland, O.
 PR—Jas. A. Paisley, Cleveland, O.
 VP—Jas. A. Paisley, Midland, Ont., Can.
 TR—Jos. Arkwright, Elm Grove, W. Va.
 GM—Harry Kinlock, Parnassus, Pa.
 GS—H. H. Elkins, Lafferty, O.
 PA—O. F. Taylor, Lafferty, O.
 EM—John M. Davis, St. Clairsville, O.
 EE—A. W. Fielding, R. F. D. No. 1, St. Clairsville, O.
 SCU—Oco Supply Co., Buyer, F. M. Powell, Lafferty, O.
 SA—Valley Camp Coal Co., Cleveland, O.

Oco Mine; Slope; Pittsburgh No. 3 Seam, 60 in. thick.
 PO—Lafferty, O.; SP—Same; CTY—Belmont; RR—C. L. & W. Div. of B. & O.
 MS—H. H. Elkin, St. Clairsville, O.
 S of H—1 trolley pole type, 5 storage battery loco. Track gage 42 in.

S of M—6 shortwall and 1 breast machs.
 PP—Power purchased. Transformer 4,000 to 220 volts A. C., rotary converters, 250 volts D. C., 3 pumps.
 EMP—195. Last years tonnage 101,817.
 SIZES SHIPT—Run of Mine, Slack, Lump, Nut.
 PREP. EQUIPT—Gravity Screens.
 Note—This mine formerly operated by the Oco Coal Co.

EMERGENCY COAL COMPANY, THE

General Office, Neffs, O.
 OWNER—C. F. Warren, Neffs, O.
 EM—Isalab Nichols, St. Clairsville, O.

Emergency Mine; Drift; Pittsburgh No. 8 Seam; 62 inches thick.
 PO—Neffs, O.; SP—Same; CTY—Belmont; RR—W. & L. E. & O.
 MS—C. F. Warren, Neffs, O.
 S of H—Mules. Track gage 30 inches.
 S of M—Hand.
 Last years tonnage 7,000.
 SIZES SHIPT—Run of Mine.

EMERSON COAL COMPANY

General Office, Bellaire, O.
 OWNERS—Jacob Bros., Bellaire, O.

Frazier Mine; Drift; Pittsburgh No. 8 Seam, 54 inches thick.
 PO—Bellaire, O.; SP—Maynard, O.; CTY—Belmont; RR—W. & L. E.
 MS—William Ray, Bellaire, O.
 S of H—Mules, electric locos. Track gage 36 inches.
 S of M—Hand.
 PP—Purchase power. Transformer 250 volts A. C. Gen. power.
 EMP—15.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Loading Rooms.

ENGA, F. L. COAL CO.

General Office, Newcomerstown, O.
 PR—F. L. Enga, Newcomerstown, O.
 GS—Wm. Gilganao, Coshocton, O.
 PA—F. L. Enga, Newcomerstown, O.

Myrtle Mine; Drift; No. 6 "B" Seam, 60 in. thick.
 PO—Walt, O.; SP—Wolf and Newcomerstown, O.; RR—Tuscarawas; RR—T. & K.
 S of H—Mules and rope, trolley pole type locos. Track gage, 36 in.
 S of M—4 shortwall machs.
 PP—2-150 H. P. fire tube boilers, 1-100 K. W., 1-150 K. W. gen. units, 250 volts D. C., 4 pumps.
 EMP—70. Last years tonnage 48,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

ESSEX COAL CO.

General Office, Columbus, O.
 PR—Calvin Essex, Columbus, O.
 VP—J. W. Cottingham, Columbus, O.
 TR—J. W. Cottingham, Columbus, O.
 GM—Calvin Essex, Columbus, O.
 GS—Robert Essex, New Straitsville, O.
 PA—Fred Essex, Columbus, O.
 EM—C. H. Finsterwald, Nelsonville, O.
 EE—Wm. Chapplear, New Straitsville, Ohio.

Iseo No. 1 Mine; Drift; No. 6 Seam, 72 in. thick.
 PO—New Straitsville, O.; SP—Same; CTY—Perry; RR—Hocking Valley.
 S of H—2 trolley pole type locos. Track gage, 44 in.
 S of M—2 shortwall machs.
 PP—Power purchased, 3 pumps.
 EMP—100. Daily output, 500 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Revolving Screens, Picking Tables.

EVANS CLAY MFG. CO.

Now Evans Pipe Company.

EVANS COAL CO.

General Office, 281 West High St., Alliance, O.
 OWNER—B. H. Evans, Alliance, O.

Evans Mine No. 3; Slope; No. 5 Seam, 42 in. thick.
 PO—Alliance, O.; SP—Same; CTY—Stark; RR—W. & L. E.
 S of H—Mules. Track gage 39 in.
 S of M—Hand.
 PP—Power purchased, 220 volts A. C., 2 pumps.
 EMP—6. Daily tonnage 10.
 SIZES SHIPT—Slack.
 PREP. EQUIPT—Bar Screens.

EVANS PIPE COMPANY

General Office, Uhrichsville, O.
 PR—Engene Evans, Uhrichsville, O.
 VP—T. J. Evans, Jr., Uhrichsville, O.
 TR—T. J. Evans, Jr., Uhrichsville, O.
 GM—Engene Evans, Uhrichsville, O.
 GS—D. Milliken, Uhrichsville, O.
 PA—R. H. Exley, Uhrichsville, O.
 CE—M. J. Crites, Uhrichsville, O.
 EM—A. R. Richman, Uhrichsville, O.
 SCO—Evans Commissary. Buyer, R. H. Exley, Uhrichsville, O.

(Continued on Next Page)

Evans Pipe Co.—Cont.

Evans Mine; Drift; No. 6 Seam, 42 in. thick.
 PO—Thurksville, O.; SP—Same; CTY—Tuscarawas; RR—B. & O.
 MS—A. K. Richmond, Thurksville, O.
 S of H—Mules and main and tail rope. Track gage 36 in.
 S of M—Hand.
 PP—Power purchased. Transformer 2,000 to 220 volts A. C., 5 fire tube boilers, 500 H. P., 2 pumps.
 EMP—22. Last years tonnage 20,000.
 SIZES SHIPT—Run of Mine.
 Consumes entire output.

EVANS, T. J., COAL CO.

General Office, Coalton, O.
 GM—Ed. T. Evans, Coalton, O.
 GS—Ed. T. Evans, Coalton, O.
 PA—Ed. T. Evans, Coalton, O.
 SC—T. J. Evans & Co., Buyer, E. L. Hartling, Coalton, O.

Evans Mine; Drift; No. 2 Jackson Seam, 36 in. thick.
 PO—Coalton, O.; SP—Same; CTY—Jackson; RR—B. & O., D. T. & L., H. V.
 MS—H. K. Kisor, Coalton, O.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 PP—1 30 H. P. water tube boiler.
 EMP—80.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Gravity Screens.

EXCELLENT COAL COMPANY, THE

General Office, Zanesville, O.
 PR—O. J. Raile, Zanesville, O.
 VP—W. L. Bailey, Zanesville, O.
 TR—J. B. Rhoades, Zanesville, O.
 GM—O. J. Raile, Zanesville, O.
 GS—O. J. Raile, Zanesville, O.
 PA—O. J. Raile, Zanesville, O.
 EE—Harry Barrell, Zanesville, O.
 Eagle Mine; Drift; No. 6 Seam.
 PO—Zanesville, O.; SP—Same; CTY—Muskingum; RR—Z. & W.
 S of H—Mules. Track gage 36 in.
 S of M—Shortwall machs.
 PP—2 fire tube boilers, 100 H. P. each, 2—60 K. W. gen. units, 250 volts D. C.
 EMP—40. Daily tonnage 200.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.
 Old Information.

FAIR OAKS COAL CO. (THE).

General Office, Box 342, Zanesville, O.
 PR—Fred Myers, Box 342, Zanesville, O.
 VP—J. Clair Longwall, Indiana, Pa.
 TR—Fred Myers, Indiana, Pa.
 CE—Roy V. Myers, Knoxville, Tenn.
 SA—R. C. Kyle, Columbus, O.

Fair Oaks Mine; Drift; Upper Freeport No. 7 Seam, 78 in. thick.
 PO—Zanesville, O.; SP—Same; CTY—Muskingum; RR—Penna.
 MS—J. H. Brooks, Zanesville, O.
 S of H—2 Mules. Track gage 32 in.
 S of M—Hand.
 EMP—22. Daily output, 125-150 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Egg, Lump.
 PREP. EQUIPT—Bar Screens and Loading Booms.

FAIRVIEW COAL CO.

General Office, Cleveland, O.
 PR—U. C. Hatch, Cleveland, O.
 TR—A. W. Dean, Cleveland, O.
 GM—R. J. Bryan, Cleveland, O.
 GS—Jno. Wilson, Barton, O.
 PA—D. N. Snetsinger, Cleveland, O.
 EM—Jno. M. Davis, Lafferty, O.
 SA—Pittsburgh & Ohio Mining Co., Cleveland, O.

Fairview Mine; Drift; No. 8 Seam, 60 in. thick.
 PO—Barton, O.; SP—Crescent, O.; CTY—Belmont; RR—B. & O.
 S of H—5 trolley pole type locos. Track gage 42 in.
 S of M—7 chain breast machs.
 PP—Power purchased. Transformer 23,000 to 2,200 volts A. C., M. G. set, 250 volts D. C., 10 pumps.
 EMP—140. Daily tonnage 1,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

FAIRVIEW MINING CO.

General Office, Wabash Bldg., Pittsburgh, Pa.
 PR—J. Bert Ross, Buffalo, N. Y.
 VP—W. G. Rogers, Pittsburgh, Pa.
 TR—J. Bert Ross, Buffalo, N. Y.
 GM—W. G. Rogers, Pittsburgh, Pa.

Rogers Mine; Drift; No. 6 Seam, 32 to 38 inches thick.
 PO—Rogers, O.; SP—Same; CTY—Columbiana; RR—P. L. & W.
 S of H—Mules.
 S of M—Hand.
 SIZES SHIPT—Run of Mine.
 Not operating September 1, 1921.

FARROW COAL CO., THE

General Office, Columbus, O.
 PR—C. E. Farrow, Nelsonville, O.
 VP—John Farrow, Nelsonville, O.
 TR—R. B. Hurst, Columbus, O.
 GM—A. D. Farrow, Nelsonville, O.
 GS—A. D. Farrow, Nelsonville, O.
 PA—A. D. Farrow, Nelsonville, O.
 SA—The Central W. & Lumber Co., Columbus, O.

Farrow Mine; Drift; No. 6 Seam, 81 inches thick.
 PO—Nelsonville, O.; SP—Same; CTY—Hocking; RR—Hocking Valley.
 S of H—Mules and rope. Track gage 42 inches.
 S of M—1 chain breast type mach.
 PP—Power purchased, 1 pump.
 EMP—26. Last years tonnage 30,000.
 SIZES SHIPT—Run of Mine, Slack, Lump, Block.
 PREP. EQUIPT—Gravity Screens.

FEDERAL CREEK COAL CO., THE

General Office, Nelsonville, O.
 PR—Don R. McGill, Nelsonville, O.
 TR—Robt. Harris, Nelsonville, O.
 SA—Don R. McGill, Nelsonville, O.

Federal Creek Mine; Slope; Pittsburgh No. 8 Seam, 90 inches thick.
 PO—Amesville, O.; SP—Same; CTY—Athens; RR—T. & O. C., Federal Valley.
 S of H—Mules and elec. locos. Track gage 42 inches.
 S of M—Hand.
 PP—150 to 200 K. W. gen. units.
 SIZES SHIPT—Run of Mine, Slack, Pea, Lump.
 PREP. EQUIPT—Bar Screens.

FERNCLIFF COAL COMPANY, THE

General Office, Zanesville, O.
 PR—E. T. Coowell, Zanesville, O.
 VP—Fred Myers, Zanesville, O.
 TR—Guy S. Crumbaker, Zanesville, O.
 GS—Geo. Robson, Roseville, O.
 PA—E. T. Coowell, Zanesville, O.
 EM—Fred Myers, Zanesville, O.

Ferncliff Mine; Drift; No. 5 Seam, 54 inches thick.
 PO—Zanesville, O.; SP—Redfield, O.; CTY—Perry; RR—F. & W.
 S of H—Mules. Track gage 30 inches.
 S of M—Hand.
 EMP—27. Daily tonnage 150.
 SIZES SHIPT—Run of Mine, Slack, Lump, Block.
 PREP. EQUIPT—Bar Screens.
 Note—Formerly operated by the Wigton & Robson Coal Co.

FINZER BROS. CLAY CO., THE.

General Office, Sugar Creek, O.
 PR—Chas. S. Finzer, Sugar Creek, O.
 VP—V. J. Finzer, Sugar Creek, O.
 TR—R. C. Babier, Sugar Creek, O.
 GM—E. G. Finzer, Sugar Creek, O.

Finzer Mine; Drift; No. 3-A Seam, 48 in. thick.
 PO—Sugar Creek, O.; SP—Same; CTY—Tuscarawas; RR—W. & L. E.
 MS—C. S. Finzer, Sugar Creek, O.
 S of H—Mules and rope. Track gage 39 in.
 S of M—Shortwall mach.
 PP—3 fire tube boilers, total 560 H. P., transformer, 240 volts A. C., 200 K. W. gen. unit, 240 volts D. C.
 EMP—20. Daily tonnage 100.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.

FLINT COAL COMPANY, THE

General Office, 409 Gas Co. Bldg., Columbus, O.
 PR—Wm. Dauch, Delphos, O.
 VP—W. C. Fridley, Lima, O.
 TR—L. F. Bertran, Columbus, O.
 GM—L. F. Bertran, Columbus, O.
 GS—J. W. West, McArthur, O.
 PA—L. F. Bertran, Columbus, O.
 SA—L. F. Bertran, Columbus, O.

Flint Mine; Drift and Slope; Three-B Seam; 46 to 48 inches thick.
 PO—McArthur, O.; SP—Same; CTY—Vinton; RR—B. & O.
 S of H—Rope and gasoline engine.
 S of M—Hand.
 EMP—25. Daily output, 100 tons.
 SIZES SHIPT—Run of Mine, Slack, Pea, Lump.
 PREP. EQUIPT—Bar Screens.

FOLLANSBEE BROS. COMPANY

General Office, Pittsburgh, Pa.
 PR—W. U. Follansbee, Pittsburgh, Pa.
 VP—Jno. Follansbee, Pittsburgh, Pa.
 TR—Wm. D. Reid, Pittsburgh, Pa.
 GM—Wm. Banfield, Follansbee, W. Va.
 GS—Gilbert Follansbee, Toronto, O.
 PA—C. A. Wilson, Pittsburgh, Pa.
 EM—Joseph Breslove, Pittsburgh, Pa.
 EM—Millard Boyd, Toronto, O.
 SC—Address the Company, Buyer, Thos. Meholm, Toronto, O.
 SALES MGR—Jno. Follansbee, Pittsburgh, Pa.

Marble Mine; Drift; No. 1 Seam, 54 in. thick.
 PO—Toronto, O.; SP—Same; CTY—Jefferson; RR—C. & P.
 MS—John Ferguson, Toronto, O.
 S of H—Trolley pole type locos. Track gage 36 in.
 S of M—3 shortwall machs.
 PP—Power purchased. Transformer 15,000 to 2,200 volts A. C., M. G. set, 220 volts D. C., 3 pumps.
 EMP—10.
 SIZES SHIPT—Run of Mine.

FORSYTHE COAL COMPANY

General office, Cambridge, O.
 PR—H. J. Forsythe, Cambridge, O.
 TR—H. A. Forsythe, Cambridge, O.
 GM—H. A. Forsythe, Cambridge, O.
 GS—H. A. Forsythe, Cambridge, O.
 PA—H. A. Forsythe, Cambridge, O.
 EM—John W. Stewart, Cambridge, O.
 EE—H. K. Putts, Belle Valley, O.
 SA—M. A. Hanna & Co., Cleveland, O.

Forsythe Mine; Slope; Cambridge No. 7 Seam, 72 in. thick.
 PO—Cambridge, O.; SP—Mineral Siding, O.; CTY—Guernsey; RR—B. & O.
 MS—W. A. Alderman, Cambridge, O.
 S of H—Mules and 4 elec. locos. Track gage 36 in.
 S of M—5 chain breast type and 3 shortwall machs.
 PP—3 150 H. P. fire tube boilers, transformer 2200-250 volts A. C., M. G. sets, 2 200 K. W., 250 volts D. C., 5 pumps.
 EMP—250. Last years tonnage 215,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

Imperial No. 1 Mine; Shaft; No. 7 Seam, 66 in. thick.
 PO—Belle Valley, O.; SP—Same; CTY—Noble; RR—Penna., Marietta Div.
 MS—G. L. Walkensham, Caldwell, O.
 S of H—Mules and 4 elec. locos. Track gage 40 in.
 S of M—9 elec. machs.
 PP—3 150 H. P. fire tube boilers, 2 150 K. W. gen. units, 250 volts D. C., 7 pumps.
 EMP—275. Last years tonnage 200,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

FREEMAN, MICHAEL COMPANY

TR—M. Freeman, Benwood, W. Va.
 GM—M. Freeman, Benwood, W. Va.
 GS—M. Freeman, Benwood, W. Va.
 PA—M. Freeman, Benwood, W. Va.
 SC—Address the Company, 1563 Marshall St., Benwood, W. Va.
 SA—M. Freeman, Benwood, W. Va.

McClain Mine; Drift; Pittsburgh No. 8 Seam.
 PO—Neff, O.; SP—Same; CTY—Belmont; RR—B. & O.
 S of H—Mules. Track gage 34 inches.
 S of M—Hand.
 EMP—12. Last years tonnage 4,500.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Loading Booms.

FREEPORT FUEL MINING CO., THE

General Office, Athens, O.
 PR—L. D. Poston, Athens, O.
 VP—C. H. Horn, Athens, O.
 TR—V. R. Biddle, Athens, O.
 GM—L. D. Poston, Athens, O.
 PA—L. D. Poston, Athens, O.

Freeport Mine; Shaft; No. 7 Seam, 48 in. thick.
 PO—Athens, O.; SP—Millfield, O.; CTY—Athens; RR—T. & O. C.
 S of H—Mules and electric locos. Track gage 48 in.
 S of M—Shortwall machs.
 PP—Power purchased. Transformer 2,300 to 220 volts A. C., M. G. sets, 220 volts D. C.
 EMP—75. Daily tonnage 500.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

FRIEL, T. J., COAL CO.

PR—T. J. Friel, New Straitsville, O.
 GM—T. J. Friel, New Straitsville, O.
 GS—T. J. Friel, New Straitsville, O.
 PA—T. J. Friel, New Straitsville, O.
 EM—W. J. Knight, New Straitsville, O.

Friel Mine; Drift; No. 6 Seam, 108 inches thick.
 PO—New Straitsville, O.; SP—Same; CTY—Perry; RR—Hocking Valley.
 S of H—Mules. Track gage, 42 in.
 S of M—Hand and elec. mach.
 PP—Power purchased, transformer 1000 to 220 volts A. C., M. G. set, 27 K. W., 250 volts D. C.
 EMP—5. Last fiscal year output, 10,000 tons.
 SIZES SHIPT—Run of Mine.
 (Old Information)

FRY & BROOKS COAL COMPANY

Out of Business.
 FULDAE COAL COMPANY
 Out of Business.

FULTON COAL COMPANY

General Office, Canal Fulton, O.
 PR—P. J. Blank, Canal Fulton, O.
 VP—John Stucker, Canal Fulton, O.
 TR—Homer Stucker, Canal Fulton, O.
 GM—P. J. Blank, Canal Fulton, O.
 GS—John Stucker, Canal Fulton, O.
 PA—P. J. Blank, Canal Fulton, O.

Fulton Mine; Slope; No. 4 Seam, 48 inches thick.
 PO—North Indiant, O.; SP—Same; CTY—Stark; RR—P. R. R.
 S of H—Mules.
 S of M—2 shortwall machs.
 PP—Generate power, 2 pumps.
 EMP—26. Last years tonnage 10,600.
 SIZES SHIPT—Run of Mine.

GERSTENSCHLAGER, V. & SON

General office, 139 Pine St., Wadsworth, Ohio.
 PR—Ed. Gerstenschlager, Wadsworth, O.
 TR—Elizabeth Gerstenschlager, Wadsworth, O.
 GM—Edward Gerstenschlager, Wadsworth, Ohio.
 GS—Edward Gerstenschlager, Wadsworth, Ohio.
 EM—Edward Parkinson, Wadsworth, O.
 Pleasant Valley Mine; Slope; Seam, 36 in. thick.
 PO—Wadsworth, O.; SP—Same; CTY—Medina; RR—Erie.
 S of H—Mules and rope. Track gage 37 in.
 S of M—Hand.
 PP—2 fire tube boilers, total 310 H. P., 2 pumps.
 EMP—10. Last years tonnage 3,600.
 SIZES SHIPT—Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

GIFFEN COAL COMPANY

General Office, Maynard, O.
 PR—Joseph Christy, St. Clairsville, O.
 VP—Wm. A. Giffen, St. Clairsville, O.
 TR—A. L. Beck, Maynard, O.
 GM—A. L. Beck, Maynard, O.
 GS—A. L. Beck, Maynard, O.
 PA—A. L. Beck, Maynard, O.
 EM—Homer C. Althair, Bellaire, O.
 SA—A. L. Beck, Maynard, O.

Giffen Mine; Drift; Pittsburgh No. 8 Seam; 66 in. thick.
 PO—Maynard, O.; SP—Same; CTY—Belmont; RR—B. & O., W. & L. E.
 S of H—Mules. Track gage 42 inches.
 S of M—Hand and shortwall machs.
 PP—M. G. set, 250 volts D. C.
 EMP—9. Daily tonnage 40.
 SIZES SHIPT—Run of Mine.

GINN COMPANY, THE

New P. M. Rhulman.
 Glen Roy Coal Co. (THE).
 General Office, Jackson, O.
 PR—Henry Pritchard, Glen Roy, O.
 VP—O. S. Roberts, Toledo, O.
 TR—E. O. Roberts, Jackson, O.
 GM—E. O. Roberts, Jackson, O.
 GS—E. O. Roberts, Jackson, O.
 PA—E. O. Roberts, Jackson, O.

Glen Mine; Slope; No. 2 Seam, 24-30 in. thick.
 PO—Coalton, O.; SP—Same; CTY—Jackson; RR—H. V.
 MS—Geo. Richards, Coalton, O.
 S of H—Mules. Track gage, 35½ in.
 S of M—1 chain breast type and 1 shortwall machs.
 PP—1 fire tube boiler, gen. unit, 250 volts D. C., 1 pump.
 EMP—15. Last years tonnage 7,746.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Gravity Screens.

GLENS RUN COAL CO. (THE).

General Office, Kirby Bldg., Cleveland, O.
 PR—C. E. Maurer, Cleveland, O.
 VP—C. E. Sullivan, Cleveland, O.
 TR—C. E. Sullivan, Cleveland, O.
 GM—C. E. Maurer, Cleveland, O.
 GS—C. W. Maurer, Dillonvale, O.
 PA—C. W. Maurer, Dillonvale, O.
 EM—R. M. Millard, Cleveland, O.

Rush Run Nos. 3 and 4 Mines, Drifts, No. 8 Seam, 60 in. thick.
 PO—Rush Run, O.; SP—Same; CTY—Jefferson; RR—P.
 MS—A. C. E. B. Rush Run, O.
 S of H—Mules and trolley pole type locos. Track gage, 40 in.
 S of M—1 chain breast machs.
 PP—Power purchased, 250 volts A. C., 1 pump.
 EMP—100.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
 PREP. EQUIPT—Gravity Screens.
 (Continued on Next Page)

Glens Run Coal Co.—Cont.

Edgar Nos. 1 and 2 Mines; Drifts; No. 8 Seam, 60 in. thick.
 PO—Dillonville, O.; SP—Same; CTY—Jefferson; RR—W. & L. E.
 MS—W. A. Manfield, Dillonville, O.
 S of H—Mules and trolley pole type locos. Track gage, 40 in.
 S of M—12 chain breast type and 1 longwall machs.
 PP—Power purchased, 250 volts A. C., 5 pumps.
 EMP—160.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.
 Old Information.

GLOBE COAL CO., THE
Out of business.

GLOBE IRON CO.

General Office, Jackson, O.
 VP—Moses Morgan, Jackson, O.
 TR—John E. Jones, Jackson, O.
 GM—John E. Jones, Jackson, O.
 GS—Chas. P. Chapman, Jackson, O.
 PA—Chas. P. Chapman, Jackson, O.
 EM—A. E. Campbell, Jackson, O.
 EE—Wm. J. Lamb, Sr., Jackson, O.
 SCO—Address the company. Buyer, Maurice Smith, Jackson, O.

Globe Mine; Shaft; No. 1 Seam, 42 in. thick.
 PO—Jackson, O.; SP—Same; CTY—Jackson; RR—B. & O. S. W.
 MS—R. L. Lewis, Jackson, O.
 S of H—Mules and 1 trolley pole type loco. Track gage, 38 in.
 S of M—Shortwall machs.
 PP—2 200 H. P. and 1 100 H. P. fire tube boilers, 1 150 K. W. and 1 100 K. W. generators, 250 volts D. C., 6 pumps.
 EMP—65. Daily tonnage 200.
 SIZES SHIPT—Slack, Pea, Nut.
 PREP. EQUIPT—Revolving Screens.

GOSHEN CENTRAL COAL CO. (THE).

General Office, Massillon, O.
 PR—E. E. Fox, Massillon, O.
 VP—Jacob Von Gunten, Massillon, O.
 TR—J. M. Seese, Massillon, O.
 GM—E. E. Fox, Massillon, O.
 GS—E. E. Fox, Massillon, O.
 PA—E. E. Fox and R. H. Locke, Massillon, O.
 EE—E. E. Fox and W. Keena Seese, Massillon, O.
 EE—Roy Patterson, Stillwater, O., and Chas. Schlafly, New Philadelphia, O.

Goshen Central Mine; Drift; No. 6 Seam, 48 in. thick.
 PO—New Philadelphia, O.; SP—Same; CTY—Tuscarawas; RR—Penna.
 MS—Ben Miser, New Philadelphia, O.
 S of H—Mules and 2 trolley pole type locos. Track gage, 42 in.
 S of M—7 shortwall machs.
 PP—4 150 H. P. fire tube boilers, 150 K. W. gen. units, 250 volts D. C., 5 pumps.
 EMP—70. Daily tonnage 500.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
 PREP. EQUIPT—Shaker Screens.

Laurel Valley Mine; Drift and Slope; Nos. 6 & 7 Seams, 60 in. thick.
 PO—Stillwater, O.; SP—Same; CTY—Tuscarawas; RR—B. & O.
 MS—Geo. Deans, Stillwater, O.
 S of H—Mules, rope and storage battery locos. Track gage, 42 in.
 S of M—6 shortwall machs.
 PP—Power purchased, transformer, 1250 270 volts A. C., rotary converters, 220 volts D. C., 5 pumps.
 EMP—50. Daily tonnage 500.
 SIZES SHIPT—Run of Mine, Lump.
 PREP. EQUIPT—Shaker Screen.

GOSHEN RIDGE COAL COMPANY.

General Office, New Philadelphia, O.
 PR—W. K. Moore, New Philadelphia, O.
 TR—A. J. Dale, New Philadelphia, O.
 SECY—John Williams, New Philadelphia, O.
 GS—Ernest Dale, New Philadelphia, O.

Goshen Ridge Mine No. 2; Drift; No. 6 Seam; 58 in. thick.
 PO—New Philadelphia, O.; SP—Same; CTY—Tuscarawas; RR—C. & P.
 S of H—Mule. Track gage 39 in.
 S of M—Hand.
 PP—1 pump.
 EMP—21. Last years tonnage 12,000.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Screens.

GOSHEN VALLEY MINES.
Out of business.

GOSLINE, W. A. & COMPANY.

General Office, Toledo, O.
 PR—W. A. Gosline, Jr., Toledo, O.
 GM—H. W. Campbell, Toledo, O.
 PA—H. W. Campbell, Toledo, O.
 EE—J. A. Jones, Toledo, O.

Bear Run No. 1 Mine; Shaft; No. 6 Seam, 53 in. thick.
 PO—New Lexington, O.; SP—Same; CTY—Perry; RR—P. R. R.
 MS—H. G. Wilson, New Lexington, O.
 S of H—Mules, 1 trolley pole type and 1 combination loco. Track gage 42 in.
 S of M—5 chain breast type and 3 arcwall machs.
 PP—2—150 H. P. fire tube boilers, transformer, 4000-250 volts D. C., 1—5 H. P. motor, 1—30 H. P. motor, 1—20 H. P. motor, 1—100 H. P. motor gen. units 1—175 K. W., 6 pumps.
 EMP—150. Daily tonnage 500.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

GRACE COAL MINING CO.

General Office, Toledo, O.
 PR—Chas. L. France, Toledo, O.
 VP—Chas. L. France, Toledo, O.
 TR—Chas. L. France, Toledo, O.
 GM—Chas. L. France, Toledo, O.
 GS—L. S. McNeal, Cannelville, O.
 PA—Chas. L. France, Toledo, O.
 SA—France Coal Co., 564 Spitzer Bldg., Toledo, O.

Grace No. 1 Mine; Slope; Hocking No. 6 Seam, 42-44 in. thick.
 PO—Cannelville, O.; SP—Same; CTY—Muskingum; RR—Z. & W. R. R.
 S of H—Mules and rope. Track gage, 36 in.
 S of M—Hand.
 PP—1 125 H. P. water tube boiler, 1 pump.
 EMP—20. Daily tonnage 250.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Bar Screens, Loading Booms.

GRAHAM & McMAHAN COAL COMPANY

General Office, Box 115, Nelsonville, O.
 PR—J. W. Graham, Nelsonville, O.
 VP—Geo. McMahon, Nelsonville, O.
 TR—Mrs. E. J. Rosser, Nelsonville, O.
 EM—W. J. Barry, New Straitsville, O.
 SA—Hocking Valley Products Company, Columbus, O.

Graham & McMahon Mine; Drift; No. 6 Seam, 50 to 72 in. thick.
 PO—Nelsonville, O.; SP—Same; CTY—Athens; RR—Hocking Valley.
 MS—J. Walter Graham, Nelsonville, O.
 S of H—Mules. Track gage 42 in.
 S of M—1 chain breast and 1 shortwall mach.
 PP—Power purchased, transformer 11000-2200 volts A. C., 1—50 K. W. M. G. Set, 250 volts D. C., 2 pumps.
 EMP—20. Last years tonnage 6,504.
 SIZES SHIPT—Run of Mine.

GRANT COAL CO. (THE).

General Office, 550 Leader News Bldg., Cleveland, O.
 PR—H. D. Marble, Cleveland, O.
 VP—A. F. Baier, Cleveland, O.
 TR—D. O. Sawyer, Cleveland, O.
 GM—T. G. Brooks, Cleveland, O.
 GS—C. C. Blazey, Salineville, O.
 PA—T. G. Brooks, Cleveland, O.
 CE—Geo. Arnold, New Philadelphia, O.
 EE—J. E. Smith, Salineville, O.
 SA—A. F. Baier Coal Co., Cleveland, O.

Grant Mine; Drift; No. 7 Seam, 48 in. thick.
 PO—Salineville, O.; SP—Same; CTY—Columbiana; RR—Penna.
 S of H—Trolley pole type locos. Track gage, 42 in.
 S of M—1 chain breast type and 3 shortwall machs.
 PP—2 150 H. P. fire tube boilers, 1 150 K. W. gen. unit, 250 volts D. C., 3 pumps.
 EMP—60. Last years tonnage 66,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Gravity Screens.

GREAT LAKES COAL MINING CO., THE.

General Office, 509 Spahr Bldg., 50 East Broad St., Columbus, O.
 PR—Peter Reiss, Shesbogan, Wis.
 VP—G. C. Weltzell, Columbus, O.
 TR—W. A. Reiss, Shesbogan, Wis.
 ASST TR—W. D. Morse, Columbus, O.
 GM—G. C. Weltzell, Columbus, O.
 GS—F. S. Knox, Jr., Columbus, O.
 PA—R. W. Mackensen, Columbus, O.
 CE—F. S. Knox, Jr., Columbus, O.

Great Lakes No. 1 Mine; Drift; No. 8 Seam, 66 in. thick.
 PO—Robyville, O.; SP—Adena, O.; CTY—Harrison; RR—Wheeling & Lake Erie.
 MS—John Roberts, Robyville, O.
 S of H—Mules and trolley pole type locos. Track gage, 42 in.
 S of M—18 chain breast type machs.
 PP—5 150 H. P. fire tube boilers, power purchased, transformer 4000 to 275 volts A. C., 2 200 K. W. gen. units, 250 volts D. C., 8 pumps.

EMP—300. Daily output, 2,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

Great Lakes No. 2 Mine; Drift; No. 8 Seam, 66 in. thick.
 PO—Ramsey, O.; SP—Adena, O.; CTY—Jefferson; RR—Wheeling & Lake Erie.
 MS—Thos. Aspinall, Ramsey, O.
 S of H—Mules and trolley pole type locos. Track gage, 42 in.
 S of M—18 chain breast type machs.
 PP—5 150 H. P. fire tube boiler, power purchased, transformers 4000 to 275 volts A. C., rotary converters, 250 volts D. C., gen. units, 2 200 K. W., 8 pumps.
 EMP—400. Daily output, 3,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

Great Lakes No. 3 Mine; Drift; No. 8 Seam, 66 in. thick.
 PO—Maynard, O.; SP—Frt. Reiss, O.; Exp. Maynard, O.; CTY—Belmont; RR—Wheeling & Lake Erie.
 MS—Leslie Bechtold, Maynard, O.
 S of H—Mules and trolley pole type locos. Track gage, 42 in.
 S of M—10 chain breast type machs.
 PP—6 150 H. P. fire tube boilers, power purchased, transformer 4000 to 275 volts A. C., rotary converters, 1 200 K. W., 1 250 K. W. gen. units, 250 volts D. C., 6 pumps.
 EMP—200. Daily output, 1,500 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

Great Lakes No. 4 Mine; Drift; No. 8 Seam, 66 in. thick.
 PO—Maynard, O.; SP—Frt. Reiss, O.; Exp. Maynard, O.; CTY—Belmont; RR—Wheeling & Lake Erie.
 MS—Leslie Bechtold, Maynard, O.
 S of H—Mules and trolley pole type locos. Track gage, 42 in.
 S of M—10 chain breast type machs.
 PP—Power purchased, transformer 4000 to 275 volts A. C., rotary converters, 6 150 H. P. fire tube boilers, 1 200 K. W., 1 250 K. W. gen. units, 250 volts D. C., 6 pumps.
 EMP—200. Last fiscal year output, 1,500 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

Great Lakes No. 5 Mine; Drift; No. 8 Seam, 66 in. thick.
 PO—Maynard, O.; SP—Frt. Reiss, O.; Exp. Maynard, O.; CTY—Belmont; RR—Wheeling & Lake Erie.
 MS—Leslie Bechtold, Maynard, O.
 S of H—Mules and trolley pole type locos. Track gage, 42 in.
 S of M—2 chain breast type machs.
 PP—Power purchased, transformer 4000 to 275 volts A. C., rotary converters, 6 150 H. P. fire tube boilers, 1 200 K. W., 1 250 K. W. gen. units, 250 volts D. C., 6 pumps.
 EMP—50. Daily tonnage 500.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg.
 PREP. EQUIPT—Gravity Screens.

Great Lakes No. 11 Mine; Drift; No. 8-A Seam, 42 inches thick.
 PO—Pomeroy, O.; SP—Same; CTY—Meigs; RR—Hocking Valley.
 MS—Jas. Allen, Pomeroy, O.
 S of H—Mules and trolley pole type loco. Track gage 38½ inches.
 S of M—Chain breast type and shortwall machs.
 PP—Power purchased, 50 volts D. C.
 EMP—200. Daily tonnage 800.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens.

Great Lakes No. 12 Mine; Drift; No. 8-A Seam, 42 inches thick.
 PO—Pomeroy, O.; SP—Same; CTY—Meigs; RR—Hocking Valley.
 MS—Jas. Allen, Pomeroy, O.
 S of H—Mules and trolley pole type loco. Track gage 38½ inches.
 S of M—Chain breast type and shortwall machs.
 PP—Power purchased, 250 volts D. C.
 EMP—100. Daily tonnage 800.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

Great Lakes No. 14 Mine; Drift; No. 8-A Seam, 42 inches thick.
 PO—Pomeroy, O.; SP—Same; CTY—Meigs; RR—Hocking Valley.
 MS—W. E. Williams, Pomeroy, O.
 S of H—Trolley pole type loco. Track gage 42 inches.
 S of M—Chain breast type and shortwall machs.
 PP—Power purchased, 250 volts D. C.
 EMP—200. Daily tonnage 800.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

Great Lakes No. 15 Mine; Shaft; No. 8-A Seam, 42 inches thick.
 PO—Pomeroy, O.; SP—Same; CTY—Meigs; RR—Hocking Valley.
 MS—W. E. Williams, Pomeroy, O.
 S of H—Trolley pole type locos. Track gage 42 inches.
 S of M—Chain breast type and shortwall machs.
 PP—4 water tube boilers, total 1764 H. P., 1—1500 K. W. and 1—750 K. W. gen. units, 250 volts A. C.
 EMP—200. Daily tonnage 800.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

Great Lakes No. 16 Mine; Shaft; No. 8-A Seam, 42 inches thick.
 PO—Pomeroy, O.; SP—Same; CTY—Meigs; RR—Hocking Valley.
 MS—Geo. Jackson, Pomeroy, O.
 S of H—Trolley pole type locos. Track gage 42 inches.
 S of M—Chain breast type and shortwall machs.
 PP—Power purchased.
 EMP—150. Daily tonnage 800.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

NOTE—Nos. 11, 12, 14, 15, and 16 Mines formerly operated by the Peacock Coal Company.

Thomas No. 17 Mine; Shaft; Pomeroy 8-A Seam, 42 in. thick.
 PO—Pomeroy, O.; SP—Same; CTY—Meigs; RR—Ohio River Elec. Co.
 MS—Wm. Daniels, Columbus, O.
 S of H—Mules and 2 trolley pole type locos.
 S of M—2 breast and 2 shortwall machs.
 PP—2—75 H. P. fire tube boilers, 1—100 K. W. generator and 1—150 K. W. motor generating set, 3 pumps.
 EMP—100. Daily tonnage 200.
 SIZES SHIPT—Run of Mine, Slack and Lump.

GREAT WESTERN COAL & DOCK CO., THE
Now Black Burn Coal Co.

General Office, Nelsonville, O.
 PR—E. J. Kessinger, Nelsonville, O.
 VP—J. B. Dewhurst, Nelsonville, O.
 TR—George M. Merritt, Nelsonville, O.
 GM—Wm. T. Groze, Nelsonville, O.
 GS—Wm. T. Groze, Nelsonville, O.
 PA—George M. Merritt, Nelsonville, O.
 CE—Hocking Product Co., Columbus, O.
 EE—Wm. T. Groze, Nelsonville, O.
 SA—George M. Merritt, Nelsonville, O.

Gross Mine; Drift; No. 6 Seam, 78 in. thick.
 PO—Nelsonville, O.; SP—Same; CTY—Athens; RR—H. V.
 S of H—Mules and electric loco. Track gage 42 inches.
 S of M—2 chain breast machs.
 PP—Power purchased, 250 volts D. C., 2 pumps.
 EMP—20. Daily tonnage 200.
 SIZES SHIPT—Run of Mine, Block, Lump.
 PREP. EQUIPT—Bar Screens.

HALL COAL CO. (THE).

General Office, Lock Box 82, Coshocton, Ohio.
 PR—C. R. Thrapp, Coshocton, O.
 VP—John F. Hall, Coshocton, O.
 TR—C. R. Thrapp, Coshocton, O.
 GM—C. R. Thrapp, Coshocton, O.
 GS—Jesse B. Hall, Coshocton, O.
 PA—C. R. Thrapp, Coshocton, O.
 SA—The Drake Coal Co., 914 Kirby Bldg., Cleveland, O.

Hall No. 2 Mine; Drift; Coshocton No. 6 Seam, 42 in. thick.
 PO—Lock Box 82, Coshocton, O.; SP—Same; CTY—Coshocton; RR—W. & L. E.
 S of H—Mules. Track gage, 36 in.
 S of M—2 chain breast type and 1 shortwall machs.
 PP—Power purchased, transformer 4000-250 volts A. C., 1 pump.
 EMP—36. Last years tonnage 8,758.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.
 Old Information.

HALL-PICKERING COAL CO.

General Office, Cadiz, O.
 PARTNERS—C. C. Pickering, Cadiz, O.; A. H. Hall, Cadiz, O.
 SA—Philadelphia & Cleveland Coal Co., Cleveland, O.

(Continued on Next Page)

Hall-Pickering Coal Co.—Cont.

Hall-Pickering Mine; Drift; Pittsburgh No. 8 Seam, 60 in. thick.
PO—Cudiz, O.; SP—Same; CTY—Harrison; RR—Penna.
S of H—Mules and rope. Track gage 36 in.
S of M—Hand.
PP—Power purchased.
EMP—10.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.

HALLEY COAL CO. (THE).
New Andale Coal Co.

HANGING ROCK IRON CO.

General Office, Hanging Rock, O.
PR—D. R. Micaham, Carow Bldg., Cincinnati, O.
VP—J. K. Pollock, Cincinnati, O.
TR—H. C. Lammers, Cincinnati, O.
GS—W. M. Jeffers, Hanging Rock, O.
CE—F. G. Leete, Ironton, O.
SCO—Pine Grove Store, Buyer, Wm. Swartz, Hanging Rock, O.

New Castle Mine; Slope; No. 5 Seam, 36 in. thick.
PO—Hanging Rock, O.; SP—Same; CTY—Lawrence; RR—P. & L. E.
MS—Wm. Dickens, Hanging Rock, O.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
EMP—70. Daily tonnage 200.
SIZES SHIPT—Run of Mine.

HANNA-ESSEX COAL CO. (THE)

General Office, New Straitsville, O.
PR—H. H. Essex, New Straitsville, O.
VP—Stephen Callahan, New Straitsville, Ohio.
TR—N. S. Essex, New Straitsville, O.
GM—H. H. Essex, New Straitsville, O.
GS—H. H. Essex, " " " "
PA—N. S. Essex, " " " "
EM—Wade Knight, New Straitsville, O.
EE—Elden Thorpe, New Straitsville, O.
SA—Geo. M. Jones Co., Toledo, Ohio.

Essex Mine; Slope; No. 6 Seam, 60 in. thick.
PO—New Straitsville, O.; SP—Hemlock, O.; CTY—Perry; RR—N. V. C. & W. Div.
S of H—Mules, trolley pole type, combination and 3 electric locos. Track gage, 42 in.
S of M—5 chain breast type and 1 short-wall machs.
PP—Power purchased, transformer 1900-250 volts D. C., rotary converters, 3 pumps.
EMP—158. Last fiscal year output, 150,000 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.
Old Information.

HANNA FURNACE CO.

General Office, Leader-News Bldg., Cleveland, Ohio.
PR—H. M. Hanna, Jr., Cleveland, O.
VP—F. B. Richards, Cleveland, O.
TR—C. N. Osborne, Cleveland, O.
GM—Michael Gallagher, Cleveland, O.
GS—E. J. Terrey, Leetonia, O.
PA—C. K. Sheridan, Cleveland, O.
CE—R. S. Walker, Cleveland, O.
SA—M. A. Hanna & Co., Cleveland, O.

Uofied Mine; Shaft; 8 Seam, 48 in. thick.
PO—Leetonia, O.; SP—Same; CTY—Columbiana; RR—Y. & O., Penna., Erie.
S of H—Mules and electric locos. Track gage 42 in.
S of M—Chain breast machs.
PP—2 fire tube boilers, 200 H. P., 2-150 K. W. and 1-300 K. W. M. G. Sets, 250 volts D. C.
EMP—125. Daily tonnage 400.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Picking Tables.
NOTE—Formerly operated by the United Iron & Steel Co.

HARRISON-WALKER REFRACATORIES CO.

General Office, Pittsburgh, Pa.
PR—J. E. Lewis, Pittsburgh, Pa.
VP—N. McQuillen, Pittsburgh, Pa.
TR—Wm. Walker, Pittsburgh, Pa.
GM—J. E. Lewis, Pittsburgh, Pa.
GS—H. B. Campbell, Portsmouth, O.
PA—C. T. Stewart, Pittsburgh, Pa.
EM—W. E. Pick, Portsmouth, O.
EE—W. C. Ifarbh, Pittsburgh, Pa.

York Mine; Drift; No. 4 Seam, 30 in. thick.
PO—Firebrick, O.; SP—Same; CTY—Lawrence; RR—B. & O.
MS—Wm. Raynard, Firebrick, O.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—7.
Mine coal for their own use.

HARMON CREEK COAL CO.

General Office, 729 Oliver Bldg., Pittsburgh, Pa.
PR—Geo. H. Flinn, Oliver Bldg., Pittsburgh, Pa.

VP—John A. Bell, 729 Oliver Bldg., Pittsburgh, Pa.
TR—John A. Bell, Jr., 729 Oliver Bldg., Pittsburgh, Pa.
GM—E. R. Dinkle, 729 Oliver Bldg., Pittsburgh, Pa.
GS—P. J. Doyle, 729 Oliver Bldg., Pittsburgh, Pa.
PA—W. J. Turnbull, 729 Oliver Bldg., Pittsburgh, Pa.
EM—M. W. Horgan, Burgettstown, Pa.
SCO—Harmon Supply Co.; Buyer, H. W. Rhody, Burgettstown, Pa.

Reiford Mine; Stripping; No. 8 Seam, 54 in. thick.
PO—Hopdale, O.; SP—Jewett, O.; CTY—Harrison; RR—W. & L. E.
MS—Wm. Nichols, Hopdale, O.
S of H—1 steam loco. Track gage, 56½ in.
S of M—Hand.
PP—6 fire tube boilers, 1 pump.
EMP—100. Daily output, 600 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens, Picking Tables.

Howard Mine; Stripping; No. 8 Seam, 54 in. thick.
PO—Hopdale, O.; SP—Same; CTY—Harrison; RR—P. & W. V.
MS—Wm. Nichols, Hopdale, O.
S of H—1 steam loco. Track gage, 56½ in.
S of M—Hand.
PP—6 fire tube boilers, 2 pumps.
EMP—80. Daily output, 600 tons.
SIZES SHIPT—Run of Mine.

HARMONY COAL COMPANY

General Office, Fairpoint, Ohio.
PR—Ben. T. Hughes, Fairpoint, O.
VP—Roy Gummere, Fairpoint, O.
TR—W. Walter McFarland, Fairpoint, O.
GM—Ben. T. Hughes, Fairpoint, O.
GS—Ben. T. Hughes, Fairpoint, O.
CE—J. Nichol, St. Clairsville, O.
SA—W. Walter McFarland, Fairpoint, O.

Harmony Mine; Slope; Pittsburgh No. 8 Seam; 72 inches thick.
PO—Fairpoint, O.; SP—Same; CTY—Belmont; RR—B. & O.
S of H—Mules. Track gage 42 inches.
S of M—Longwall mach.
PP—Power purchased, 250 volts D. C.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Table.

HARPER COAL COMPANY (THE).

PR—J. E. HarperCoalton, O.
IR—G. E. Christman " " "
GM—J. E. Harper " " "
PA—J. E. Harper " " "

Harper Mine; Slope; Seam 30 to 48 in. thick.
PO—Coalton, O.; SP—Davisville, O.; CTY—Jackson. RR—D. T. & I.
S of H—Mules and rope.
S of M—Hand.
PP—1 Return tubular boiler, 100 H. P. 1 gen unit and 3 pumps.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Bar Screens.

HARPER COAL COMPANY, THE.

General Office, Jackson, Ohio.
PR—Edwin James, Coalton, O.
TR—J. W. Morgan, Jackson, O.
GM—R. L. Anders, Pomeroy, O.
EM—A. E. Campbell, Jackson, O.

Harper Mine; Drift; Pittsburgh No. 8 Seam, 68 in. thick.
PO—Box 474, Pomeroy, O.; SP—Hobson, O.; CTY—Meigs; RR—K. & M.
MS—R. L. Anders, Pomeroy, O.
S of H—Mules. Track gage 42 in.
S of M—Hand.
PP—1 pump.
EMP—18. Daily tonnage 150.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

HARRIS & NEWMAN

General Office, Nelsonville, O.
PR—R. T. Neiman, Nelsonville, O.
TR—Robt. A. Harris, Nelsonville, O.
SA—The Pen Ton Store, Nelsonville, O.
SA—Robt. Harris, Nelsonville, O.

Harris & Neiman Mine; Drift; Hocking No. 8 Seam, 54 inches thick.
PO—Nelsonville, O.; SP—Same; CTY—Hocking; RR—Hocking Valley.
S of H—Mules. Track gage 42 inches.
S of M—Shortwall machs.
PP—Purchase power.
EMP—25. Last years tonnage 9,000.
SIZES SHIPT—Run of Mine.

HARRIS BRICK COMPANY

General Office, Zanesville, O.
Harris Mine; Slope.
PO—Box 425, Zanesville, O.; SP—Griffin Station, O.; CTY—Muskingum; RR—O. R. & W.
MS—Chas. Hoey, Zanesville, O.
S of H—Mules. Track gage 42 inches.
EMP—18. Last years tonnage 12,620.
SIZES SHIPT—Run of Mine.

HAZEL RIDGE COAL COMPANY

PR—J. B. Poston, Athens, O.
TR—Hom r Clark, Athens, O.
GM—D. R. Poston, Nelsonville, O.
SUPT—Jos. Andrews, Nelsonville, O.
PA—D. R. Poston, Nelsonville, O.

Poston No. 1 Mine; Drift; No. 7 Seam, 50 inches thick.
PO—Nelsonville, O.; SP—Floodwood, O.; CTY—Athens; RR—H. V.
S of H—Mules and main and tail rope. Track gage 42 inches.
S of M—2 chain breast type and 1 long-wall machs.
PP—Power purchased, Transformer 11,000 to 2,300 volts A. C. rotary converters, 250 volts D. C., 2 pumps.
EMP—50. Daily tonnage 250.
SIZES SHIPT—Run of Mine.

Pee Wee Mine; Drift; No. 7 Seam, 52 inches thick.
PO—Nelsonville, O.; SP—Floodwood, O.; CTY—Athens; RR—H. V.
S of H—Mules. Track gage 42 inches.
S of M—1 chain breast type mach.
PP—Power purchased Transformer 11,000 to 2,300 volts A. C., rotary converter, 250 volts D. C., 1 pump.
EMP—27. Last years tonnage 10,725.
SIZES SHIPT—Run of Mine.

Minner Mine; Drift; No. 7 Seam, 52 inches thick.
PO—Nelsonville, O.; SP—Floodwood, O.; CTY—Athens; RR—H. V.
MS—Frank Freer, Nelsonville, O.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
PP—Power purchased. Transformer 11,000 to 2,300 volts A. C., 3 phase, 60 cycles, rotary converters, 250 volts D. C.
EMP—40. Daily tonnage 135.
SIZES SHIPT—Run of Mine.
Old Information.

HAZELTON COAL COMPANY.

General Office, New Straitsville, O.
PR—S. A. Cottingham, 1101 New Hayden Bldg., Columbus, O.
VP—D. L. Wallace, Nelsonville, O.
TR—Fred Essix, 1101 New Hayden Bldg., Columbus, O.
GM—D. L. Wallace, Nelsonville, O.
GS—Gerald Wallace, New Straitsville, O.
PA—Gerald Wallace, New Straitsville, O.
EE—Albert Corbett, New Straitsville, O.
SA—Fred Essix, 1101 New Hayden Bldg., Columbus, O.

Gem Mine; Drift; No. 6 Hocking Seam, 120 in. thick.
PO—New Straitsville, O.; SP—Same; CTY—Perry and Hocking; RR—Hocking Valley.
S of H—Elec. motor and incline.
S of M—1 chain breast type machs.
PP—Power purchased, transformer 2300, M. G. sets, 275 D. C., 4 pumps.
EMP—105. Daily tonnage 700.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Gravity Screens.

HELSINGER COAL & MINING CO. THE

General Office, Rex Theater Bldg., Toronto, O.
PR—L. H. Helsinger, Toronto, O.
VP—J. C. Helsinger, Toronto, O.
TR—C. H. Helsinger, Bedford, O.
SECY—H. H. Campbell, Toronto, O.

Locust Grove Mine; Slope; No. 5 Seam, 44 in. thick.
PO—Toronto, O.; SP—Same; CTY—Jefferson; RR—Penna.
MS—Ed. Esbaugh, Toronto, O.
S of H—Mules and rope.
S of M—Shortwall machs.
PP—Power purchased. Transformer 2,200 to 220 volts A. C., M. G. set, 220 volts D. C.
EMP—15. Daily tonnage 100.
SIZES SHIPT—Run of Mine.

HENNESSEY & OURST.

General Office, Pomeroy, O.
TR—Edward Hennessey, Pomeroy, O.
GS—John F. Durst, Pomeroy, O.

Logan Mine; Drift; No. 8 Seam, 64 in. thick.
PO—Pomeroy, O.; SP—Same; CTY—Meigs; RR—Hocking Valley.
S of H—Mules. Track gage, 38 in.
S of M—1 chain breast type mach.
PP—Power purchased, M. G. Set, 35 K. W., 250 volts D. C., 1-150 H. P. boiler, 2 pumps.
EMP—9. Daily tonnage 60.
SIZES SHIPT—Run of Mine.

HERROLD, J. A.

General Office, Nelsonville, O.
Herrold Mine; Drift.
PO—Nelsonville, O. CTY—Athens
MS—Wm. Raybould, Nelsonville, O.

S of H—Mules.
S of M—2 breast machs.
PP—Power purchased, transformer, 250 volts D. C.
EMP—24. Daily tonnage 110.
SIZES SHIPT—Run of Mine.

HESTER, C. V.

General Office, Mineral, O.
OWNER—C. V. Hester, Mineral, Ohio.
EM—S. R. Hubbard, Mineral, O.

C. V. Hester Mine; Drift; No. 6 Hocking Seam, 36-48 in. thick.
PO—Mineral, O.; SP—Same; CTY—Athens; RR—B. & O. S. W.
MS—C. V. Hester, Mineral, O.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
EMP—5. Last fiscal year output, 2,000 tons.
SIZES SHIPT—Run of Mine.
Old Information.

HIGHLAND CITY COAL COMPANY

General Office, Main and 20th Sts., Wheeling, W. Va.
OWNER—Edward Wagner, Wheeling, W. Va.

Highland City Mine; Drift; Pittsburgh No. 8 Seam, 66 inches thick.
PO—Rayland, O.; BP—Same; CTY—Jefferson; RR—Penna.
S of H—Mules. Track gage 36 inches.
S of M—Shortwall and chain breast machs.
PP—Purchase power. Transformer 2,200 to 220 volts A. C., M. G. set, 220 volts D. C.
EMP—25.
SIZES SHIPT—Run of Mine.

HISYLVANIA COAL COMPANY.

General Office, Columbus, O.
PR—J. W. Blower, Columbus, O.
VP—E. M. Blower, Trimble, O.
TR—J. W. Blower, Columbus, O.
GM—J. W. Blower, Columbus, O.
GS—E. M. Blower, Trimble, O.
PA—E. W. Blower, Columbus, O.
EM—Waldo Chute, Nelsonville, O.

Hisylyvania No. 22 Mine; Slope; No. 6 Seam, 72 in. thick.
PO—Glouster, O.; SP—Same; CTY—Athens; RR—K. & M.
S of H—Mules, rope and trolley pole type locos. Track gage, 42 in.
S of M—8 chain breast type machs.
PP—3 100 H. P. water tube boilers, 1 200 K. W. gen. unit, 250 volts D. C.
EMP—250. Last fiscal year output, 250,000 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

Hisylyvania No. 23 Mine; Slope; No. 6 Seam, 48 in. thick.
PO—Trimble, O.; SP—Same; CTY—Athens; RR—K. & M.
S of H—Mules, rope and trolley pole type locos. Track gage, 42 in.
S of M—2 chain breast type machs.
PP—3 150 H. P. water tube boilers, 1 100 K. W. gen. units, 3 pumps.
EMP—100. Last fiscal year output, 50,000 tons.
SIZES SHIPT—Run of Mine, Slack.
PREP. EQUIPT—Gravity Screens.

HOCKING BLOCK COAL CO.

General Office, Columbus, O.
PR—D. L. Wallace, Nelsonville, O.
VP—Fred Essix, 1101 New Hayden Bldg., Columbus, O.
TR—S. Cottingham, Columbus, O.
GM—D. L. Wallace, Nelsonville, O.
GS—Gerald Wallace, New Straitsville, O.
PA—S. Cottingham, Columbus, O.
CE—W. T. Berry, New Straitsville, O.
EE—J. J. Corbett, New Straitsville, O.
SA—Hocking Valley Producers and Essex Coal Co., Columbus, O.

Central Mine; Drift; No. 6 Seam, 96 in. thick.
PO—New Straitsville, O.; SP—Same; CTY—Perry; RR—Hocking Valley.
MS—James Feeney, New Straitsville, O.
S of H—2 trolley pole type locos. and mules. Track gage, 42 in.
S of M—5 chain breast type machs.
PP—Power purchased, transformer 4000 volts A. C., M. G. set, 250 volts D. C., 9 pumps.
EMP—150. Last years tonnage 120,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

Big Five Mine; Drift; Seam, 120 inches thick.
PO—New Straitsville, O.; SP—Same; CTY—Perry; RR—H. V.
MS—Herbert Gandy, New Straitsville, O.
S of H—Mules. Track gage 42 inches.
S of M—Chain breast machs.
PP—Purchase power, 250 volts D. C.
Last years tonnage 15,000.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Gravity Screens.

HOCKING DOMESTIC COAL CO.

General Office, Nelsonville, O.
 PR—J. M. Lama, Nelsonville, O.
 TR—E. R. Lama, Nelsonville, O.
 GM—E. R. Lama, Nelsonville, O.
 GS—E. R. Lama, Nelsonville, O.
 PA—E. R. Lama, Nelsonville, O.
 CE—Waldo Chute, Nelsonville, O.
 EE—M. Price, Rutland, O.

Hocking Mine No. 5; Drift; Pomeroy No. 8 Seam, 48 in. thick.

PO—Cheshire, O.; SP—Hobson and Middleport, O.; CTY—Meigs and Gallia; RR—Hocking Valley.
 MS—G. J. Hamilton, Middleport, O.
 S of H—Mules and 2 trolley pole type locos. Track gage 38 in.
 S of M—1 chain breast type and 6 short-wall mchs.

PP—3 150 H. P. fire tube boilers, 1—150 K. W. and 1—100 K. W. gen. units, 250 volts D. C., 9 pumps.

EMP—125. Last years tonnage 64,068.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
 PREP. EQUIPT—Shaker Screens.

Hocking No. 6 Mine; Drift; Hocking No. 6 Seam, 60 in. thick.

PO—Nelsonville, O.; SP—Same; CTY—Athens; RR—Hocking Valley.
 MS—C. W. Cox, Nelsonville, O.
 S of H—Mules. Track gage, 42 in.
 S of M—2 chain breast type and 1 short-wall mchs.

PP—Power purchased, transformer 2200, rotary converters, 1 100 K. W. gen. unit, 250 volts D. C., 4 pumps.

EMP—35. Last years tonnage 24,739.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

Hocking No. 7 Mine; Drift; Pomeroy Seam, 48 in. thick.

PO—Cheshire, O.; SP—Hobson and Middleport, O.; CTY—Meigs and Gallia; RR—Hocking Valley.
 MS—G. J. Hamilton, Middleport, O.
 S of H—Mules and 1 trolley pole type loco. Track gage 38 in.
 S of M—2 short-wall mchs.
 PP—Power purchased from No. 5 Mine, 1 pump.

EMP—25. Last years tonnage 35,200.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Shaker Screens.

HOCKING FUEL COMPANY

General Office, Huntington, W. Va.
 PR—J. L. Rinehart, Radcliff, O.
 TR—Jean F. Smith, Huntington, W. Va.
 GM—J. L. Rinehart, Radcliff, O.
 GS—J. L. Rinehart, Radcliff, O.
 PA—J. L. Rinehart, Radcliff, O.
 CE—C. C. Vickers, Huntington, W. Va.
 EM—E. R. Kelly, Wellston, O.
 SA—J. L. Rinehart, Radcliff, O.

Hocking Mine; Drift; Clarion Seam, 54 to 62 inches thick.

PO—Radcliff, O.; SP—Same; CTY—Vinton; RR—Hocking Valley.
 S of H—Mules. Track gage 34 inches.
 S of M—Hand.
 PP—1 pump.

EMP—40. Last years tonnage 26,000.
 SIZES SHIPT—Run of Mine.

HOCKING MINING COMPANY.

General Office, Athens, O.
 PR—C. D. Hopkins, Athens, O.
 VP—C. L. Hamilton, Columbus, O.
 TR—R. C. Hopkins, Athens, O.
 PA—C. D. Hopkins, Athens, O.
 EM—Arthur Anderson, Athens, O.
 EE—W. T. Giesecke, Mineral, O.

Del Carbo Mine; Slope; Hocking No. 8 Seam, 50 in. thick.

PO—Mineral, O.; SP—Same; CTY—Athens; RR—B. & O. S. W.
 MS—G. W. Arnold, Mineral, O.
 S of H—Mules and rope, 4 comb. locos. Track gage, 42 in.

S of M—3 chain breast type mchs.
 PP—3 150 H. P. fire tube boilers, 2 125 K. W. gen. units, 250 volts D. C., 5 pumps.

EMP—125. Last years tonnage 68,003
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

HOCKING VALLEY FIRE CLAY CO., THE

General Office, Nelsonville, O.
 PR—C. E. Jewett, Nelsonville, O.
 VP—H. B. Schaaf, Nelsonville, O.
 TR—C. E. Jewett, Nelsonville, O.
 GM—C. E. Jewett, Nelsonville, O.
 GS—H. B. Schaaf, Nelsonville, O.
 PA—H. B. Schaaf, Nelsonville, O.

Hocking Valley Mine; Drift; No. 6 Seam; 72 inches thick.

PO—Nelsonville, O.; SP—Same; CTY—Athens; RR—Hocking Valley.
 MS—C. M. Ray, Nelsonville, O.
 S of H—Mules and rope, steam loco. Track gage 42 inches.
 S of M—Chain breast mach.

PP—Power purchased. Transformer 1190 to 250 volts A. C., M. G. set, 100 K. W., 250 volts D. C.
 EMP—17. Last years tonnage 17,280.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.

HOCKING VALLEY PRODUCTS COMPANY

General Office, 175 S. High St., Columbus, O.
 PR—S. L. Chamberlaine, New York, N. Y.
 VP—S. S. Schuyler, New York, N. Y.
 TR—F. J. Shaffer, 175 S. High St., Columbus, O.
 EM—W. J. Barry, New Straitsville, O.
 SA—A. P. DeNarish, 175 S. High St., Columbus, O.

Greendale Mine; Drift; No. 6 Seam; 60 inches thick.

PO—Greendale, O.; SP—Same; CTY—Hocking; RR—Hocking Valley.
 MS—E. B. Francis, Greendale, O.
 S of H—Electric loco.
 PP—Power purchased.
 EMP—50. Last fiscal year output, 15,000 tons.
 SIZES SHIPT—Run of Mine.

HOLLOW ROCK MINING & TRANSPORTATION COMPANY

General Office, Wheeling, W. Va.
 PR—T. C. Stevenson, Wheeling, W. Va.
 TB—D. G. Brown, Wheeling, W. Va.
 GM—T. C. Stevenson, Wheeling, W. Va.
 GS—T. C. Stevenson, Wheeling, W. Va.
 PA—D. G. Brown, Wheeling, W. Va.

Hollow Rock Mine; Drift; No. 6 Seam, 60 in. thick.

PO—Irondale, O.; SP—Yellow Creek, O.; CTY—Jefferson; RR—Barges, Ohio River.

S of H—Mules and 1 trolley pole type loco. Track gage, 42 in.

S of M—2 chain breast type mchs.
 PP—Power purchased, transformer 13,000 to 440 volts A. C., M. G. set, 75 K. W., 250 volts D. C., 1 pump.

EMP—40.
 SIZES SHIPT—Run of Mine.

HOLLOWAY COAL CO. (THE)

General Office, 818 Engineers Bldg., Cleveland, O.
 PR—E. J. Maguire, Cleveland, O.
 TR—E. J. Maguire, Cleveland, O.
 GM—E. J. Maguire, Cleveland, O.
 GS—Wm. M. Kingsley, Flushing, O.
 PA—Wm. M. Kingsley, Flushing, O.
 CE—Fawcett & Rothermond, Martins Ferry, O.
 EE—C. J. Ralby, Cleveland, O.
 SCO—Address the Company, Ruyter, T. Angeleno, Flushing, O.

Locust Mine; Drift; Pittsburgh No. 8 Seam, 48 in. thick.

PO—Flushing, O.; SP—Same; CTY—Belmont; RR—B. & O.

S of H—Trolley pole type locos. Track gage, 36 in.

S of M—2 short-wall mchs.
 PP—1 fire tube and 2 water tube boilers, total 300 H. P., 1—75 K. W. and 1—100 K. W. gen. units, 250 volts D. C., 3 pumps.

EMP—60. Daily output, 300 tons.
 SIZES SHIPT—Run of Mine, Crushed.
 PREP. EQUIPT—Crusher.

HOME COAL COMPANY.

General Office, Athens, O.
 PR—L. F. Rowland, Athens, O.
 VP—Wm. Adams, Beasmont, O.
 TR—F. Scott, Athens, O.
 GM—Dan Johnson, Chauncey, O.
 GS—Dan Johnson, Chauncey, O.
 PA—Dan Johnson, Chauncey, O.

Home Mine; Shaft; Seam, 48 in. thick.

PO—Chauncey, O.; SP—Same; CTY—Athens; RR—K. & M.

S of H—Mules. Track gage 42 in.
 S of M—Chain breast mchs.

PP—1 80 H. P. fire tube boiler, gen. units 50 K. W. M. G. Sets, 250 volts D. C.

EMP—10. Last years tonnage 6,000.
 PREP. EQUIPT—Bar Screens.

HOOPER COAL COMPANY

General Office, Middleport, O.
 PR—H. M. Hoover, Middleport, O.
 GM—H. M. Hoover, Middleport, O.
 GS—H. M. Hoover, Middleport, O.
 PA—M. C. Hobart, Middleport, O.
 SA—M. C. Hobart, Middleport, O.

Silver Run Mine; Drift; No. 8 Seam, 54 inches thick.

PO—Middleport, O.; SP—Same; CTY—Meigs; RR—Hocking Valley.

S of H—4 mules, 1 trolley pole type loco. Track gage 38 inches.

S of M—1 chain breast type mach.
 PP—Power purchased, 40 K. W. gen. units, 250 volts D. C.

EMP—20.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

Note—Lease Riverview Mine of Hixsylvania Coal Co.
 Old Information.

HOOPER COAL & CLAY CO.

General Office, Mineral City, O.
 PR—Fred E. Hoover, Mineral City, O.
 TR—K. E. Hoover, Mineral City, O.
 PA—Fred Hoover, Mineral City, O.
 SA—H. M. Hoover, Mineral City, O.

Hoover Mine; Drift; No. 5 Seam, 40 inches thick.

PO—Mineral City, O.; SP—Same; CTY—Carroll; RR—B. & O.

MS—Fred Hoover, Mineral City, O.

S of H—Mules and gasoline loco. Track gage 30 inches.

S of M—Hand.
 PP—1 fire tube boiler, 70 H. P.
 EMP—15. Last years tonnage 8,000.
 SIZES SHIPT—Run of Mine.

HORGER-HELD COAL COMPANY.

Out of business.

HUDSON, S. M. COAL & COKE CO., THE

General Office, Rush Run, O.
 PR—S. M. Hudson, Terrace Park, O.
 VP—M. Hudson, Rush Run, O.
 TR—E. Hudson, Rush Run, O.
 GS—W. C. Hudson, Rush Run, O.
 GM—W. C. Hudson, Rush Run, O.
 EM—Carl Rothermond, Martins Ferry, O.

Hudson No. 3 Mine; Drift; No. 8 Seam, 54 inches thick.

PO—Rush Run, O.; SP—Same; CTY—Jefferson; RR—C. & P., Rush Run Branch.

S of H—Storage battery loco. Track gage 42 in.

S of M—3 short-wall mchs.
 PP—Power purchased, transformer 4400-250 volts A. C., 250 volts D. C., 3—70 H. P. gas engines, 4 pumps.

EMP—60. Daily tonnage 400.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

HUGHES COAL COMPANY, THE

General Office, Shawnee, O.
 PR—Wm. Shuster, Shawnee, O.
 VP—Harry G. Hughes, Shawnee, O.
 TR—P. R. Gibbon, Shawnee, O.
 GM—Thos. Humphrey, Shawnee, O.
 GS—P. R. Gibbon, Shawnee, O.
 PA—P. R. Gibbon, Shawnee, O.
 SA—Sunday Creek Coal Co., Columbus, O.

Hughes No. 2 Mine; Drift; No. 6 Seam, 78 in. thick.

PO—Shawnee, O.; SP—Hemlock, O.; CTY—Perry; RR—Z. & W.

S of H—Mules. Track gage 42 in.
 S of M—Short-wall mchs., chain breast type mchs.

PP—Power purchased, Transformer 250 volts A. C.
 EMP—30. Daily tonnage 250.
 SIZES SHIPT—Run of Mine.

HUTCHINSON COAL CO.

General Office, Fairmont, W. Va.
 8 Mines in West Virginia, 1 Mine in Ohio.

PR—M. L. Hutchinson, Fairmont, W. Va.
 VP—C. E. Hutchinson, Fairmont, W. Va.
 TR—C. H. Jenkins, Fairmont, W. Va.
 GS—C. J. Ryan, Hepzibah, W. Va.
 PA—M. C. Lough, Fairmont, W. Va.
 EM—G. J. Toothman, Hepzibah, W. Va.
 EE—W. W. Shawhan, Hepzibah, W. Va.

Kirkwood Mine, Drift, Pittsburgh No. 8 Seam, 4½ to 5½ ft. thick.

PO—Bridgeport, O.; SP—Same; CTY—Baltimore; RR—B. & O.

MS—William Heller, Bridgeport, O.
 S of H—Mules. Track gage 42 in.
 S of M—Hand.

PP—Power purchased, 2 pumps.

EMP—30. Last years tonnage 30,000.
 SIZES SHIPT—Run of Mine.

HUTCHISON COAL COMPANY.

General Office, Wadsworth, O.
 PR—J. J. Hutchinson, Wadsworth, O.
 TR—J. J. Hutchinson, Wadsworth, O.
 GM—Michael Hutchinson, Wadsworth, O.
 PA—Wm. Hutchinson, Wadsworth, O.

Klondyke Mine; Slope; Massillon No. 1 Seam, 36 to 60 in. thick.

PO—Wadsworth, O.; SP—Same CTY—Medina; RR—Edg.

MS—J. F. Malaney, R. F. D., Wadsworth, O.

S of H—Mule. Track gage 36 in.
 S of M—Hand.
 PP—1 return tubular boiler, total 50 H. P., 1 pump.

EMP—G. Last fiscal year output, 3,200 tons.
 SIZES SHIPT—Slack, Lump.
 PREP. EQUIPT—Gravity Screens.
 (Old Information)

HUTSON COAL CO. (THE)

General Office, 911 Park Bldg., Cleveland, O.
 PR—H. D. Marble, Cleveland, O.
 VP—T. J. Williams, Deerfield, O.
 TR—H. D. Marble, Cleveland, O.
 GM—H. D. Marble, Cleveland, O.

GS—T. J. Williams, Deerfield, O.
 PA—H. D. Marble, Cleveland, O.
 EM—H. D. Marble, Cleveland, O.

Deerfield No. 4, Shaft, No. 1 Seam, 3 ft. 9 in. thick, operate washery.

PO—Deerfield, O.; SP—Same; CTY—Portage; RR—N.Y.C., Alliance Div.

S of H—Mules and 1 storage battery loco. Track gage, 37 in.

S of M—Hand and 5 short-wall mchs.
 PP—4 water tube boilers, total 525 H. P., power from No. 10 mine, 250 volts D. C., 1 25 K. W. gen. unit for charging storage battery, 9 pumps.

EMP—125. Last fiscal year output, 75,953 tons.

SIZES SHIPT—Slack, Nut, Lump.
 PREP. EQUIPT—Screens.

Hopedale No. 9 Mine; Drift; No. 8 Seam, 56 in. thick.

PO—Hopedale, O.; SP—Same; CTY—Harrison; RR—P. & W. Va.

MS—H. D. Lewis, Deerfield, O.
 S of H—Mules and 1 trolley pole type loco. Track gage, 42 in.

S of M—3 short-wall mchs, total 300 PP—2 return tub. boilers, total 250 H. P., 2—100 K. W. gen. units, 250 volts D. C., 5 pumps.

EMP—105. Last fiscal year output, 79,964 tons.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Screens.

No. 10 Mine; Shaft; No. 1 Seam, 42 in. thick.

PO—Deerfield, O.; SP—Same; CTY—Portage; RR—N. Y. C.

S of H—Mules. Track gage 39 in.
 S of M—1 short-wall mach.

PP—4 return tubular boilers, total 410 H. P., 1 100 K. W. gen. unit, 250 volts D. C., 5 pumps.

EMP—44. Last fiscal year output, 9,898 tons.

SIZES SHIPT—Slack, Washed, Nut, Lump.

PREP. EQUIPT—Bar Screens.

HYSSELL RUN COAL COMPANY, THE

General Office, Zanesville, O.
 PR—W. B. Hendershot, Zanesville, O.
 TR—G. A. Wraith, Zanesville, O.
 GS—G. A. Wraith, Zanesville, O.
 CE—A. Robinson, Zanesville, O.

No. 63 Mine; Slope; No. 6 Seam, 46 in. thick.

PO—Zanesville, O.; SP—Same; CTY—Muskingum; RR—Z. & W.

S of H—Mules and rope, electric and steam locos. Track gage 36 in.

S of M—Short-wall mchs.
 PP—Power purchased, Transformer 2,200 volts A. C., 150 K. W. M. G. set, 275 and 250 volts D. C.

EMP—45. Last years tonnage 50,000.
 SIZES SHIPT—Run of Mine, Lump.
 PREP. EQUIPT—Screens.

IDEAL COAL COMPANY THE

General Office, New Philadelphia, O.
 PR—O. W. Smith, New Philadelphia, O.
 TR—J. F. Kuhn, North Seventh St., New Philadelphia, O.
 GM—O. W. Smith, New Philadelphia, O.
 GS—O. W. Smith, New Philadelphia, O.
 PA—O. W. Smith, New Philadelphia, O.
 SA—Agout, O. W. Smith, New Philadelphia, O.

Sewards Mine; Drift; No. 6 Seam, 48 in. thick.

PO—New Philadelphia, O.; SP—Same; CTY—Tuscarawas.

Daily output, 20 to 40 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 Old Information.

INDIAN HILL COAL CO

General Office, 237 Arcade, Cleveland, O.
 PR—Robt. Burnser, Cleveland, O.
 VP—R. F. Zercher, Ashtab, O.
 TR—A. A. Stephens, Cleveland, O.
 GM—Robt. Burnser, Cleveland, O.
 PA—Robt. Burnser, Cleveland, O.
 EM—J. H. Arnold, New Philadelphia, O.
 SA—Robert Burnser, Cleveland, O.

Indian Hill Mine; Drift; No. 6 Seam, 48 in. thick.

PO—Uhrichsville, O.; SP—Same; CTY—Tuscarawas; RR—P. C. C. & St. L.

MS—J. W. Shaoks, Uhrichsville, O.
 S of H—Mules and 2 trolley pole type locos. Track gage, 36 in.

S of M—4 chain breast type and 2 short-wall mchs.

PP—Power purchased, transformer 22000 to 250 volts A. C., M. G. sets, 250 volts D. C., 4 pumps.
 EMP—75. Last fiscal year output, 60,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.
 Old Information.

INDUSTRIAL COAL & COKE CO., THE

New Uniontown Coal Company.

INDUSTRIAL MINING COMPANY, THE

PR—D. P. Loomis, Canton, O.
TR—D. S. Gray, 3043 Boney Place,
Canton, O.
GM—D. P. Loomis, Canton, O.
GS—Wm. Randle, Canton, O.
PA—D. P. Loomis, Canton, O.
EE—James Waltz, Canton, O.

Fox Run Mine; Drift; No. 4 Seam, 45
in thick.
PO—North Industry, O.; SP—Frt.,
Same, Exp., Canton, O.; CTY—
Stark; RR—B. & O.

S of H—Mules.
S of M—2 shortwall machs.
PP—Power purchased 1—150 H. P. fire
tube boiler, 1—150 K. W. gen.
unit, 250 volts D. C., 2 pumps.
SIZES SHIPT—Run of Mine, Slack,
Lump.

INGHAM & SALVAGE

General Office, Coshocton, O.
PR—R. T. Salvage, Coshocton, O.
GS—John Ingham, Coshocton, O.

Burt Mine; Drift; No. 6 Seam, 56 in.
thick.
PO—Coshocton, O.; SP—Same; CTY—
Coshocton; RR—W. & L. E.
S of H—Mules; Track gage, 36 in.
S of M—Hand.
EMP—23. Daily tonnage 90.
SIZES SHIPT—Run of Mine, Slack,
Lump.

IRON VALLEY COAL COMPANY

General Office, P. O. Box 67, Athens, O.
GM—L. V. Brown, Athens, O.
GS—D. R. Welsh, Wellston, O.
PA—L. V. Brown, Athens, O.
SA—Brown Ward Company, 706 Ham-
mond Bldg., Detroit, Mich.

Iron Valley Mine; Drift; No. 4 Seam,
42 inches thick.
PO—Wellston, O.; SP—Same; CTY—Jack-
son; RR—D. T. & I.
S of H—Mules; Track gage 36 in.
S of M—Hand.
PP—4 gas engines, 25 H. P., 3 pumps.
EMP—75. Daily output, 250 tons.
SIZES SHIPT—Run of Mine.

J. M. COAL COMPANY, THE

General Office, Welch, W. Va.
PR—L. A. Osborn, Welch, W. Va.
VP—E. H. Lopinsky, Welch, W. Va.
GM—L. J. Rhoads, Welch, W. Va.
GS—A. L. Johnson, New Lexington, O.
PA—L. A. Osborn, Welch, W. Va.
EM—A. L. Johnson, New Lexington, O.
SA—Central Pocahontas Coal Company,
Welch, W. Va.

No. 1 Mine; Drift; No. 6 Hocking Seam,
60 inches thick.
PO—New Lexington, O.; SP—Moxahala,
O.; CTY—Perry; RR—T. & O. C.
SM—L. A. Osborn, Welch, W. Va.
S of H—Mules; Track gage 42 inches.
S of M—Hand.
PP—Transformer 2200-250 volts A. C.
EMP—30. Daily tonnage 100.
SIZES SHIPT—Run of Mine.

JACKSON BLOCK COAL MINING CO.

Now being operated by the McKitterick
Coal Company.

JACKSON COLLIERY COMPANY

PR—W. W. Tibbals, Toledo, O.
TR—David Armstrong, Jackson, O.
GM—Sherman Walker, " "
GS—Sherman Walker, " "
PA—Sherman Walker, " "
EM—Bea C. Bentley, " "
SA—Sales Agency, Ohio & Kentucky Coal Co.,
Toledo, O.

Jackson Colliery Co. Mine; Drift; No. 2
Seam, 36 in. thick.
PO—Jackson, O.; SP—Same; CTY—
Jackson; RR—D. T. & I.
SIZES SHIPT—Run of Mine, Slack, Nut,
Egg, Lump.
(Old Information)

JACKSON & WEST VIRGINIA FUEL CO.

Operations abandoned.

JACKSON HILL COAL COMPANY

General Office, Jackson, O.
PR—C. A. Sloan, Jackson, O.
VP—F. E. Jones, Jackson, O.
TR—David Armstrong, Jackson, O.
GM—C. J. Benton, Jackson, O.

Jackson Hill Mine; Drift; No. 2 Seam,
32 in. thick.
PO—Jackson, O.; SP—Same; CTY—
Jackson; RR—D. T. & I.
S of H—Mules.
S of M—Hand.
PP—1 40 H. P. fire tube boiler.
EMP—60. Last years tonnage 10,000.
SIZES SHIPT—Run of Mine, Slack, Egg,
Lump.
PREP. EQUIPT—Bar Screens.

JACKSON IRON & STEEL CO., (THE)

General Office, Jackson, O.
PR—Stamm Labold, Portsmouth, O.

VP—David D. Davis, Oak Hill, O.
TR—J. F. Morgan, Jackson, O.
GM—Noah G. Spangler, " "
PA—J. S. Morgan, " "
LF—Evan M. Evans, Jackson, O.
SA—Address the company, Ruyter, T. J.
Jenkins, Jackson, O.

Jisco Mine, Shaft, Wellston No. 1 Seam,
2 to 3 ft. thick.
PO—Jackson, O.; SP—Same; CTY—
Jackson; RR—D. T. & I. B. &
O. S. W.
MS—David Ridge, Jackson
S of H—Mules and trolley pole type loco.
Track gage, 36 in.
S of M—2 shortwall machs.
PP—300 K. W. turbine generator, 250
volts D. C., 4 pumps.
EMP—50. Daily tonnage 125.
SIZES SHIPT—Run of Mine, Nut, Slack.
PREP. EQUIPT—Screens.

JAMES BROTHERS COAL CO.

General Office, Magnolia, O.
PR—J. C. Holzworth, Alliance, O.
VP—F. T. Cope, Alliance, O.
TR—Richard James, Magnolia, O.
GM—Richard James, Magnolia, O.
GS—Samuel James, Magnolia, O.
PA—Richard James, Magnolia, O.
EM—Mr. Arnold, New Philadelphia, O.
SA—Samuel James, Magnolia, O.
EE—Richard James, Magnolia, O.

James No. 6 Mine; Drift and Slope;
No. 5 and 6 Seams, 42 in. thick.
PO—Magnolia, O.; SP—Same; CTY—
Carroll; RR—B. & O.
S of H—1 trolley pole type loco. Track
gage, 36 in.
S of M—1 chain breast type and 3
shortwall machs.
PP—2 water tube boilers, 200 H. P.,
1—60 K. W. and 1—100 K. W. gen.
units, 220 volts D. C., 6
pumps.
EMP—50. Daily tonnage 100.
Jackson; RR—D. T. & I.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

JASPER COAL COMPANY

General Office, Wellston, O.
GM—Newell R. Phillips, Wellston, O.
Jasper Mine; Drift; No. 4 Limestone
Seam, 54 inches thick.
PO—Wellston, O.; SP—Same; CTY—
Jackson; RR—D. T. & I.
S of H—Mules; Track gage 36 inches.
S of M—Hand.
EMP—40. Last years tonnage 14,000.
SIZES SHIPT—Run of Mine.

JEAN COAL MINING CO.

Operations abandoned.

JEANNETTE COAL CO., THE.

Out of Business.

JEFFERSON COAL COMPANY (THE)

General Office, Cleveland, O.
PR—John E. Newell, Cleveland, O.
TR—John E. Newell, Cleveland, O.
SECY—A. C. Newell, Cleveland, O.
GS—Wm. Simpson, Piney Fork, O.
PA—Robert J. Simpson, Piney Fork, O.
EM—F. C. Sanners, Piney Fork, O.
SA—Piney Fork Supply Co., Piney
Fork, O.; Harpersville Supply Co.,
Harpersville, O.
SA—The Jefferson Coal Co., Cleveland,
Ohio.

No. 1 Mine; Drift; Pittsburgh Seam, 60
in. thick.
PO—Piney Fork, O.; SP—Same; CTY—
Jefferson; RR—N. Y. C. Alliance
Div.
SM—S. C. Lughon, Piney Fork, O.
S of H—Mules and 2 trolley pole type
locos. Track gage, 42 in.
S of M—9 chain breast type and 3 short-
wall machs.
PP—Purchase power, transformers 4000
to 197 volts A. C., rotary convert-
ers, 275 volts D. C., 7 pumps.
Last fiscal year output, 275,181 tons.
SIZES SHIPT—Run of Mine, Slack, Nut
Lump.
PREP. EQUIPT—Gravity Screens.

No. 2 Mine; Drift; Pittsburgh Seam, 58
in. thick.
PO—Piney Fork, O.; SP—Same; CTY—
Jefferson; RR—N. Y. C. Alliance
Div.
SM—S. C. Lughon, Piney Fork, O.
S of H—Mules and 2 trolley pole type
locos. Track gage, 42 in.
S of M—7 chain breast type and 3 short-
wall machs.
PP—Power purchased, transformers 4000
to 197 volts A. C., rotary convert-
ers, 275 volts D. C., 7 pumps.
Last fiscal year output, 275,591 tons.
PREP. EQUIPT—Gravity Screens.

No. 3 Mine; Drift; Pittsburgh Seam,
PO—Harpersville, O.; SP—Same; CTY—
Jefferson; RR—N. Y. C.
MS—Wm. Evans, Piney Fork, O.
SM—S. C. Lughon, Piney Fork, O.

S of H—Mules and 2 trolley pole type
locos. Track gage, 42 in.
S of M—10 chain breast type and 2
shortwall machs.
PP—Power purchased, 4000 to 197 volts
A. C., rotary converters, 75 volts
D. C., 6 pumps.
Last fiscal year output, 298,914 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

JENKINS, O. C., & CO.

General Office, Shawnee, O.
PR—D. C. Jenkins, Shawnee, O.
GS—N. C. Jenkins, Shawnee, O.
SA—N. C. Jenkins, Shawnee, O.

XX Mine; Drift; No. 6 Seam, 84 to
108 in. thick.
PO—Shawnee, O.; SP—Same; CTY—
Perry; RR—B. & O. Z. & W.
S of H—Mules; Track gage, 42 in.
S of M—1 chain breast type mach.
PP—Boilers, gen. units, 250 volts D.
C., 1 pump.
EMP—15. Daily tonnage 150.
SIZES SHIPT—Run of Mine, Slack,
Lump.
Old Information.

JENNINGS COAL COMPANY, THE

General Office, Athens, O.
PR—A. G. Jennings, New York, N. Y.
VP—A. G. Jennings, Jr., New York,
N. Y.
TR—C. M. Gill, Athens, O.
GM—Geo. W. Chambers, Amesville, O.
GS—William Jackson, Athens, O.
PA—C. M. Gill, Athens, O.
EE—Ben Seaman, Stewart, O.
SA—City Store Buyer, C. M. Gill,
Athens, O.
SA—Brown Coal Company, Detroit, Mich.

Utley Mine; Drift, No. 8 Seam, 96 in.
thick.
PO—Amesville, O.; SP—Same; Frt.,
Athens, O.; CTY—Athens; RR—E.
V. and T. & O. C.
SM—Carl Linscott, Amesville, O.
S of H—Mules and rope loco, storage
battery and steam locos. Track gage
42 inches.
S of M—5 chain breast type machs.
Track gage 42 in.
PP—4 fire tube boilers, total 550 H.
P., 1—150 K. W., 1—100 K. W.
and 1—50 K. W. gen. units, 250
volts D. C., 6 pumps.
EMP—160. Last years tonnage 72,000.
SIZES SHIPT—Run of Mine, Slack, Nut.
PREP. EQUIPT—Gravity Screens.

JONES COAL COMPANY

General Office, 711 Oliver Bldg., Pitts-
burgh, Pa.
PR—W. H. Harris, Pittsburgh, Pa.
VP—J. C. Donges, Pittsburgh, Pa.
TR—J. C. Donges, Pittsburgh, Pa.
GS—W. J. Pyle, 711 Oliver Bldg., Pitts-
burgh, Pa.
GM—J. C. Donges, Pittsburgh, Pa.
PA—J. C. Donges, Pittsburgh, Pa.
EM—Blum, Weldon & Co., Pittsburgh,
Pa.

Jones Mine; Drift; Pittsburgh No. 8
Seam; 63 inches thick.
PO—Yorkville, O.; SP—Same; CTY—Jef-
ferson; RR—Penna. W. & L. E.
MS—Frank Jackson, Ilitonsville, O.
S of H—Mules; Track gage 28 inches.
S of M—Hand.
EMP—35. Daily output, 150 to 200
tons.
SIZES SHIPT—Run of Mine.
Old Information.

JONES COAL COMPANY, THE.

General Office, 439 West 6th Ave., Co-
lumbus, O.
PR—D. H. Jones, Columbus, Ohio.
VP—J. W. Jones, New Straitsville, O.
TR—John E. Jones, Columbus, O.
GM—D. H. Jones, New Straitsville, O.
GS—D. H. Jones, New Straitsville, O.
PA—D. H. Jones, New Straitsville, O.
SA—Jones Bros., Buyer, Evan Jones,
New Straitsville, O.

Jones Mine; Stripping; No. 6 Seam, 120
in. thick.
PO—New Straitsville, O.; SP—Same;
CTY—Perry; RR—B. & O.
S of H—Track gage 42 in.
S of M—Steam shovels.

JOYCE COAL CO.

General Office, Nelsonville, O.
SA—L. Z. Netzer Coal Co., Toledo, O.
Joyce Mine; Drift; Thick Vein Hocking
Seam, 84 in. thick.
PO—Nelsonville, O.; SP—Same; CTY—
Athens; RR—H. V.
S of H—Trolley pole type loco.
S of M—Shortwall machs.
PP—Power purchased.
Daily tonnage 150.
SIZES SHIPT—Run of mine.

JUNE COAL COMPANY (THE)

General Office, Columbus, O.
PR—J. H. Schwartz, Columbus, O.
VP—W. T. Fassig, Columbus, O.
TR—T. C. Collins, Columbus, O.
GS—J. S. Collins, Athens, O.
PA—T. C. Collins, Columbus, O.
EM—Waldo Clute, Nelsonville, O.
SA—The Ajax Block Coal Co., 601 Com-
merce Bldg., Columbus, O.

June Mine; Drift; Hocking No. 6 Seam,
48 in. thick.
PO—Nelsonville, O.; SP—Same; CTY—
Hocking; RR—Hocking Valley.
MS—B. R. Linton, Nelsonville, O.
S of H—Mules and trolley pole type loco.
Track gage, 42 in.
S of M—1 chain breast type and 1 short-
wall machs.
PP—Power purchased from local D. C.
plant, 250 volts D. C., 1 pump.
EMP—40. Daily tonnage 250.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Gravity Screens.

JUNIPER, ED. L. COAL COMPANY

General Office, Nelsonville, O.
GM—Ed. L. Juniper, Nelsonville, O.
GS—Ed. L. Juniper, Nelsonville, O.
PA—Ed. L. Juniper, Nelsonville, O.

No. 7 Mine; Drift; No. 7 Seam; 48
inches thick.
PO—Nelsonville, O.; SP—Same; CTY—
Athens; RR—Hocking Valley.
S of H—Mules, gasoline loco. Track gage
42 inches.
S of M—1 shortwall mach.
PP—Power purchased, Transformer 2,300
to 440 volts, motor gen. set, 50
K. W., 250 volts.
EMP—25. Last years tonnage 10,000.
SIZES SHIPT—Run of Mine.
Old information.

KANE COAL & GAS COMPANY

General Office, Sebring, O.
GM—Joseph C. Kane, Sebring, O.
PA—Joseph C. Kane, Sebring, O.
EM—Blum, Weldon & Co., Pittsburgh,
Pa.

Kane Mine; Shaft; Seam 32-48 in.
thick.
PO—Sebring, O.; SP—Same; CTY—
Mahoning.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine, Slack, Lump
Old information.

KAUL CLAY MFG. CO. (THE)

General Office, Toronto, O.
PR—Dr. H. E. Kilgus, Toronto, O.
VP—Isidore J. Kaul, St. Marys, Pa.
TR—H. H. Kaul, Toronto, O.
GM—Dr. H. E. Kilgus, Toronto, O.
GS—James Munton, Toronto, O.
EM—Frank Burns, Empire, O.

Kaul Clay Mine; Drift; No. 7 Rodger
Vein; 40 in. thick.
PO—Toronto, O.; SP—Same; CTY—Jef-
ferson; RR—C. & P.
MS—Austin Ferguson, Toronto, O.
S of H—2 mules and 1 elec. motor.
S of M—1 shortwall mach.
PP—Water tube boilers, power gener-
ated 250 volts D. C.
EMP—24. Last years tonnage 24,325.
Mine for own use only.

KENOTA MINING COMPANY

General Office, New Lexington, O.
GM—H. Littlefield, New Lexington, O.
PR—W. W. Keefer, Pittsburgh, Pa.
TR—S. A. Taylor, Pittsburgh, Pa.
PA—Geo. H. Yoos, 1st National Bank
Bldg., Pittsburgh, Pa.
CE—S. A. Taylor, Pitts. rgh. Pa.
EM—Charles F. Taylor, Nelsonville, O.
SA—Pittsburgh & Resemar Coal Co.,
Pittsburgh, Pa.

Redfield Mine; Stripping; Hocking No.
5 and 6 Seams, 36 to 48 in. thick.
PO—Saltville, O.; SP—Same; CTY—
Perry; RR—Z. & W.
MS—M. N. Long, Saltville, O.
S of H—6 locos. Track gage 42 in.
S of M—Elec. and steam shovels.
PP—Purchase power.
EMP—100. Daily tonnage 1,000.
SIZES SHIPT—Run of Mine, Slack, Egg,
Lump.

Bairds Furnace Mine; Stripping; No. 8
Seam, 48 to 84 in. thick.
PO—Bairds Furnace, O. (Not yet es-
tablished). SP—Same; CTY—Hock-
ing; RR—Private Railroad.
MS—J. B. Wharfner, New Straits-
ville, O.

S of H—Power shovels.
S of M—Hand, power shovels.
Daily tonnage 200.
McCune Mine; Stripping; No. 6
Seam, 48-84 in. thick.
PO—McCunesville, O.; SP—Same; CTY—
Perry; RR—B. & O.
MS—D. J. Campfield, McCunesville, O.
S of M—Stripping.
Daily tonnage 1,000.

KENNON COAL & MINING CO.

General Office, 825 National City Bldg., Cleveland, Ohio.
 PR—J. P. Burton, Cleveland, O.
 VP—W. R. Hier, Cleveland, O.
 TR—R. N. Smith, Cleveland, O.
 GM—J. P. Burton, Cleveland, O.
 GS—Victor Schuler, Flushing, O.
 PA—Victor Schuler, Flushing, O.
 EM—Millard & Ford, Cleveland, O.
 EE—Chas. Tuplet, Flushing, O.
 SA—The J. F. Burton Coal Co., 825 National City Bldg., Cleveland, O.

Kennon Mine; Drift; Pittsburgh No. 3 Seam, 54 in. thick.
 PO—Flushing, O.; SP—Same; CTY—Belmont; RR—B. & O.
 S of H—Mules and trolley pole type locos. Track gage, 36 in.
 S of M—6 shortwall machs.
 PP—3 fire tube boilers, 100 H. P., 2—150 K. W. gen. units, 250 volts D. C., 7 pumps.
 EMP—125. Last years tonnage 110,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

KENOVA MINING CO., THE.

General Office, Ashland, O.
 PR—L. M. Matthews, Ashland, O.
 TR—A. C. Hendrickson, Ashland, O.
 GM—R. C. McKnight, Middleport, O.
 PA—R. C. McKnight, Middleport, O.

Kenova Mine; Drift; No. 8 Seam, 66 in. thick.
 PO—Middleport, O.; SP—Same; CTY—Meigs; RR—K. & M.
 S of H—Mules and elec. locos. Track gage 36 in.
 S of M—Shortwall machs. and electric punchers.
 PP—1—125 H. P. water tube boiler, 100 K. W. gen. unit, 250 volts D. C.
 EMP—30. Daily tonnage 200.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms
 NOTE—Formerly operated by the Pomeroey Mining Co.

KEYSTONE COAL COMPANY.

General Office, Nelsonville, O.
 PR—Dr. C. E. Welch, Nelsonville, O.
 TR—Geo. E. Johnson, Nelsonville, O.
 GM—L. J. Eberle, Nelsonville, O.
 GS—John Murphy, Nelsonville, O.
 PA—L. J. Eberle, Nelsonville, O.
 SA—The Sunday Creek Coal Co., Nelsonville, O.

Keystone Mine; Drift; No. 6 Seam, 78 in. thick.
 PO—Nelsonville, O. SP—Same. CTY—Athens. RR—Hocking Valley.
 S of H—Mules. Track gage, 42 in.
 S of M—3 longwall machs.
 PP—Power purchased, 1 pump.
 EMP—60. Last years tonnage 12,562.
 SIZES SHIPT—Slack, Nut, Pea, Lump.

KIMBERLY COAL & LAND CO.

General Office, 1707 Hayden Bldg., Columbus, O.
 PR—D. L. Wallace, Nelsonville, O.
 VP—Ella Cottingham, Columbus, O.
 TR—S. Cottingham, Columbus, O.
 GM—S. Cottingham, Columbus, O.
 GS—D. L. Wallace, Nelsonville, O.
 EM—C. H. Flisterwald, Nelsonville, O.
 SA—The Essex Coal Co., Columbus, O.

Kimberly No. 1 Mine; Drift; No. 6 Seam; 60 in. thick.
 PO—Nelsonville, O.; SP—Same; CTY—Athens; RR—Hocking Valley.
 S of H—4 trolley pole type locos. Track gage, 44 in.
 S of M—1 chain breast type and 3 short-wall machs.
 PP—Power purchased, rotary converters, 2 pumps.
 EMP—150. Daily tonnage 1,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

KIMSOLTON COAL MINING CO. (THE).

General Office, 404 Park Bldg., Cleveland, O.
 PR—Charles F. Briggs, Cleveland, O.
 VP—C. L. Arthur, Cleveland, O.
 TR—Charles F. Briggs, Cleveland, O.
 GM—W. M. Walters, Cleveland, O.
 PA—H. M. Walters, Cleveland, O.
 CE—Wills E. Halloway, Cleveland, O.
 EM—Dillon Marsh, Byesville, O.
 EE—E. N. Walters, Kimbolton, O.
 SA—C. L. Arthur, 404 Park Bldg., Cleveland, O.

Buckhorn Mine; Drift; No. 5 Seam, 43 in. thick.
 PO—Newcomerstown, O.; SP—Same; CTY—Tuscarawas; RR—Penna.
 MS—R. P. Lower, Newcomerstown, O.
 S of H—Trolley pole type loco.
 S of M—2 shortwall machs.
 PP—1 fire tube boiler, gen. units, volts D. C., 1 pump.
 EMP—30. Last fiscal year output, 11,746 tons.
 SIZES SHIPT—Slack, Block.
 PREP. EQUIPT—Shaker Screens.

Walters Mine; Shaft; No. 5 Seam, 48 in. thick.
 PO—Kimbolton, O.; SP—Same; CTY—Guernsey; RR—Penna.
 MS—E. N. Walters, Kimbolton, O.
 S of H—Trolley pole type loco.
 S of M—2 shortwall machs.
 PP—Power purchased.
 EMP—41. Last fiscal year output, 13,285 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.
 Old Information.

KIRK-DUNN COAL COMPANY.

General Office, 1216-17 Swetland Bldg., Cleveland, O.
 PR—F. M. Kirk, Cleveland, O.
 VP—Fred Snyder, Massillon, O.
 TR—F. M. Kirk, Cleveland, O.
 GM—W. H. Dunn, Salem, O.
 GS—W. H. Dunn, Salem, O.
 PA—F. M. Kirk, Cleveland, O.
 EM—Geo. Arnold, New Philadelphia, O.

Bhea Mine; Drift; No. 6 Seam, 42 to 62 in. thick.
 PO—Salem, O. SP—West Point, O. CTY—Columbiana; RR—Y. & O.
 MS—W. H. Dunn, Salem, O.
 S of H—Mules and elec. locos. Track gage 36 in.
 S of M—8 elec. machs.
 PP—6 pumps. Purchase power.
 EMP—300. Last years tonnage 225,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Screens.

Hazel Mine; Drift; No. 6 Seam, 43 to 48 in. thick.
 PO—Salem, O. SP—West Point, O. CTY—Columbiana; RR—Y. & O.
 MS—W. H. Dunn, Salem, O.
 S of H—Mules and elec. locos. Track gage 36 in.
 S of M—3 elec. machs.
 PP—Purchase power.
 EMP—50.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 Note—New mine.

KLEIN-MOORE COAL COMPANY.

General Office, New Philadelphia, O.
 PR—C. J. Moore, New Philadelphia, O.
 VP—Jas. Moore, New Philadelphia, O.
 TR—C. W. Klein, New Philadelphia, O.
 GM—C. W. Klein, New Philadelphia, O.
 GS—Jas. Moore, New Philadelphia, O.
 PA—C. W. Klein, New Philadelphia, O.

Oak Hill Mine; Drift; Ohio No. 6 Seam, 54 in. thick.
 PO—New Philadelphia, O.; SP—Same; CTY—Tuscarawas; RR—P. R. B.
 MS—Abe Richardson, New Philadelphia, Ohio.
 S of H—Mules and rope. Track gage, 39 in.
 S of M—Hand.
 PP—5 pumps.
 EMP—38. Daily tonnage 200.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

KRAMER BROS.

General Office, New Straitsville, O.
 PR—J. P. Kramer, New Straitsville, O.
 TR—W. M. Breeze, New Straitsville, O.
 GM—J. P. Kramer, New Straitsville, O.
 GS—J. P. Kramer, New Straitsville, O.
 PA—J. P. Kramer, New Straitsville, O.
 EM—W. Knight, New Straitsville, O.
 SA—The Northland Coal Co., Columbus, Ohio.

Butterfly Mine; Drift; Seam, 120 in. thick.
 PO—New Straitsville, O.; SP—Same; CTY—Hocking; RR—Hocking Valley.
 S of H—Mules. Track gage, 42 in.
 S of M—Hand.
 EMP—10. Last fiscal year output, 7,980 tons.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

KRANCZ, FRANK.

OWNER—Frank Krancz, Barberton, O.
 GM—Frank Steiner, R. D. No. 36, Clinton, O.
 GS—Frank Steiner, R. D. No. 36, Clinton, O.
 PA—Frank Steiner, R. D. No. 36, Clinton, O.

Krancz Mine; Slope; Seam 39 in. thick.
 PO—Clinton, O.; SP—Same; CTY—Somerset; RR—B. & O.
 S of H—Gasoline and steam locos.
 S of M—Hand.
 PP—1 boiler and hoisting engine, 2 pumps.
 EMP—13. Daily tonnage 25.
 Old Information.

LA BELLE IRON WORKS.

Mines in Ohio, Penna., and W. Va.
 PR—D. A. Burt, Wheeling, W. Va.
 VP—H. D. Westfall, Wheeling, W. Va.
 VP—G. B. Levan, Steubenville, O.
 TR—H. P. Rewick, Wheeling, W. Va.

GM—G. B. Levan, Steubenville, O.
 GS—R. W. McCosland, Steubenville, O.
 PA—E. M. Rice, Wheeling, W. Va.
 CE—H. C. Roberts, Steubenville, O.
 EM—J. C. Gibson, " "
 EE—Jas. Farrington, " "
 SCO—Luzerne Merc. Co., Steubenville, O.
 SA—Wheeling Steel Products Co., Wheeling, W. Va.

La Belle Mine; Shaft; Lower Freeport Seam, 42 in. thick.
 PO—Steubenville, O.; SP—Same; CTY—Jefferson; RR—W. & L. E.
 MS—Jno. P. Wilson, Steubenville, O.
 S of H—Trolley pole type locos. Track gage, 30 in.
 S of M—4 elec. Longwall machs.
 PP—Power purchased, transformer 22,000 to 2200 volts A. C., M. G. set, 500 and 2000 K. W., gen. units, 275 volts A. C. and D. C., 5 pumps.
 EMP—140. Last years tonnage 172,480.
 PREP. EQUIPT—Gravity Screens.

LAFAYETTE STAMPING & ENAMELING CO.

General Office, West Lafayette, O.
 PR—Dr. H. R. McCurdy, Coshocton, O.
 VP—T. G. Strong, Coshocton, O.
 TR—T. G. Strong, Coshocton, O.
 GM—F. E. Jones, Coshocton, O.
 GS—B. Snyder, Coshocton, O.

Lafayette Mine; Drift; No. 6 Seam, 44 inches thick.
 PO—W. Lafayette, O. SP—Same. CTY—Coshocton. RR—Pan Handle.
 MS—H. Gefeler, W. Lafayette, O.
 S of H—Mules.
 S of M—Hand.
 PP—1 pump.
 EMP—8. Last years tonnage 5,592.
 SIZES SHIPT—Run of Mine, Slack.

LAKE SHORE COAL CO.

General Office, Cleveland, O.
 PR—U. C. Hatch, Cleveland, O.
 TR—F. C. Coen, Sandusky, O.
 GS—R. J. Bryan, Barton, O.
 PA—D. N. Soetsinger, Cleveland, O.
 EM—C. G. Johnson, Bridgeport, O.
 SA—Pittsburgh & Ohio Mining Co., Cleveland, O.

Lake Shore Mine; Drift; No. 8 Seam, 60 in. thick.
 PO—Barton, O.; SP—Same; CTY—Belmont; RR—B. & O.
 S of H—Mules and trolley pole type loco. Track gage, 42 in.
 S of M—2 chain breast type and 2 short-wall machs.
 PP—Power purchased, transformer 2200 to 250 volts A. C., M. G. set, 250 volts D. C.
 EMP—75. Daily output, 400 tons.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

LANCASTER COAL & SAND CO.

General Office, Lancaster, O.
 VP—D. L. Hansberger, Lancaster, O.
 TR—W. S. Sims, Lancaster, O.
 GM—D. L. Hansberger, Lancaster, O.
 GS—Frank L. Folk, New Lexington, O.
 PA—D. L. Hansberger, Lancaster, O.
 EM—W. E. Loos, New Lexington, O.
 SA—The Kendall Coal Co., Cleveland, O.

Lancaster Mine; Stripping; No. 6 Seam, 48 in. thick.
 PO—New Lexington, O. SP—Same. CTY—Perry. RR—P. R. B., C. A. & C. R.
 S of H—1 steam loco. Track gage, 56 1/2 in.
 S of M—2 steam shovels
 Daily tonnage 200.
 SIZES SHIPT—Run of Mine, Lump.

LADY COAL COMPANY.

Now Wellston Rich Run Coal Co.

LAUGHLIN COAL COMPANY

General Office, Mineral City, O.
 PR—J. W. Laughlin, Mineral City, O.
 TR—J. W. Laughlin, Mineral City, O.
 PA—J. W. Laughlin, Mineral City, O.
 EM—W. H. Hall, Canton, O.
 Laughlin Mine; Drift; Nos. 5 and 6 Seam, 42 in. thick.
 PO—Mineral City, O.; SP—Same; CTY—Tuscarawas; RR—P. R. B., Tuscarawas Br.

S of H—Mules and 1 gasoline loco. Track gage 36 in.
 S of M—2 comp. air machs.
 PP—2 pumps.
 EMP—40. Daily output, 100 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.
 Old Information.

LAUREL HILL COAL CO.

Operations suspended.

LAWLER, JOHN L. & SON

General Office, 314 Gasco Bldg., Columbus, O.
 GM—John C. Lawler, Columbus, O.
 PA—John C. Lawler, Columbus, O.
 GS—George A. Steele, Clarion, O.
 EM—E. R. Kelly, Wellston, O.
 SA—Ohio & Michigan Coal Co., Detroit, Mich.

Lawler No. 7 Mine; Slope; Jackson No. 4 Seam, 48 to 60 in. thick.
 PO—Clarion, O.; SP—Minerton, O.; CTY—Vinton; RR—Hocking Valley.
 MS—James Steele, Clarion, O.
 S of H—Mules, 2 haulage motors and 3 crab motors. Track gage 37 in.
 S of M—5 chain breast type machs.
 PP—2—150 H. P. and 2—30 H. P. fire tube boilers, gen. units, 250 volts D. C.
 EMP—150. Daily tonnage 450.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Gravity Screens.

Lawler No. 8 mine; Shaft; Jackson No. 4 Seam, 48-60 in. thick.
 PO—Clarion, O.; SP—Minerton, O.; CTY—Vinton; RR—Hocking Valley.
 MS—Bears Steele, Clarion, O.
 S of H—Mules. Track gage 42 inches.
 S of M—2 chain breast type machs.
 PP—2 water tube boilers, 100 H. P., gen. units, 250 volts D. C., 4 pumps.
 EMP—41. Last fiscal year output, 6,571 tons.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Block.
 PREP. EQUIPT—Gravity Screens.

Lawler No. 10 Mine; Slope; Jackson No. 4 Seam, 40 inches thick.
 PO—Clarion, O.; SP—Minerton, O.; CTY—Vinton; RR—Hocking Valley.
 MS—James Steele, Clarion, O.
 S of H—Mules and 1 trolley pole type loco. Track gage 42 inches.
 S of M—2 chain breast type machs.
 PP—1 water tube boiler, 150 H. P., power gen. units, 250 volts D. C., 1 pump.
 EMP—30. Last fiscal year output, 4,361 tons.
 SIZES SHIPT—Run of Mine.

LAWRENCE COAL COMPANY

General Office, 720 Highland Bldg., Pittsburgh, Pa.
 PR—J. W. Lawrence, Pittsburgh, Pa.
 VP—J. Frank Stringer, Rayland, O.
 TR—H. J. Lawrence, Jr., Haverford, Pa.
 CE—Orion Koller, Wheeling, W. Va.
 SA—Lawrence Sales Agency, Highland Bldg., Pittsburgh, Pa.

Lawrence No. 1 Mine; Drift; Pittsburgh No. 8 Seam; 60 in. thick.
 PO—Rayland, O.; SP—Same; CTY—Jefferson; RR—Penna., L. West.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 EMP—15.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

LEATHERLIPS MINING COMPANY.

Now operated by the Bertram Coal Co.

LEWIS COAL CO., THE.

PR—O. B. Lewis, Bayland, O.
 GM—O. B. Lewis, Bayland, O.
 TR—A. S. Buckingham, Steubenville, O.
 GS—J. E. Lewis, Bayland, O.
 PA—E. H. Lewis, Bayland, O.

Lewis Mine; Drift; Pittsburgh No. 8 Seam, 60 in. thick.
 PO—Bayland, O. CTY—Jefferson. RR—W. & L. E.
 MS—Peter Denny, Bayland, O.
 S of H—Mules.
 S of M—Hand.
 Daily output, 50 tons.
 SIZES SHIPT—Run of Mine.
 (Old Information)

LEXI COAL COMPANY, THE.

General Office, New Lexington, O.
 PR—Fred H. Kno Derer, New Lexington, Ohio.
 VP—Sheldon G. Smith, New Lexington, Ohio.
 TR—W. E. Newman, New Lexington, O.
 GS—Fred H. Kno Derer, New Lexington, Ohio.

Lexi Mine; Drift; No. 6 Seam, 52 in. thick.
 PO—New Lexington, O.; SP—Same; CTY—Perry; RR—T. — O. C.

LICK RUN COAL COMPANY

General Office, Cambridge, O.
 PR—Wm. Sheehan, Sr., Cambridge, O.
 VP—Wm. Sheehan, Jr., Cambridge, O.
 TR—J. E. Gregg, Cambridge, O.
 GM—Wm. Sheehan, Jr., Cambridge, O.
 GS—Wm. Sheehan, Sr., Cambridge, O.
 PA—Wm. Sheehan, Jr., Cambridge, O.

Shoemaker Mine; Drift; No. 6 Seam, 48 in. thick.
 PO—Newcomerstown, O.; SP—Same; CTY—Tuscarawas; RR—Penna.
 MS—Alver Chisser, Newcomerstown, O.
 S of H—Mules. Track gage 36 in.
 S of M—Mining mach.
 PP—250 volts D. C., 1 pump.
 EMP—50. Daily tonnage 75.
 SIZES SHIPT—Run of Mine, Slack, Lump.

LICK RUN COAL & CLAY CO., THE
General Office, Nelsonville, O.

Lick Run Mine; Drift; Hocking No. 6 Seam, 72 inches thick.
PO—Nelsonville, O.; SP—Same; CTY—Athens; RR—H. V.
S of H—Elec. locos. Track gage 42 in. S of M—Shortwall machs.
PP—Power purchased. Transformer 2200 volts A. C.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Bar Screens.

LINCOLN HIGHWAY MINING CO.

General Office, 1300 Schofield Bldg., Cleveland, O.
PR—W. A. Fay, Cleveland, O.
VP—Jed H. Folker, Cleveland, O.
TR—Earl Ross, Cleveland, O.
GM—Earl Ross, Cleveland, O.
GS—Homer Dorr, Kensington, O.
PA—Earl Ross, Cleveland, O.
EM—Geo. C. Arnold, New Philadelphia, Ohio.
SA—Earl Ross, Cleveland, O.

Dorr Mine; Slope; Freeport No. 7 Seam; 57 in. thick.
PO—Kensington, O.; SP—Same; CTY—Columbiana; RR—Penna.
S of H—Mules, rope. Track gage 26 in. S of M—Hand.
EMP—25. Daily output, 80 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Bar Screens.

LOG CABIN COAL CO., THE.

General Office, New Straitsville, O.
PR—C. N. Heldlebaugh, New Straitsville, O.
VP—Jno. W. Newman, New Straitsville, O.
TR—A. E. Falne, New Straitsville, O.
GM—C. N. Heldlebaugh, New Straitsville, O.
GS—Chas. Alvas, New Straitsville, O.
PA—A. E. Falne, New Straitsville, O.
SA—The Essex Coal Co., New Straitsville, O., and Columbus, O.

Log Cabin No. 1 Mine; Drift; No. 6 Seam, 72 inches thick.
PO—New Straitsville, O. SP—Same. CTY—Perry. RR—Hocking Valley, Lom Run Br.
S of H—Mules. Track gage 42 inches. S of M—1 elec. mach.
PP—Power from the Essex Coal Co., 250 volts D. C.
EMP—16. Daily tonnage 125.
SIZES SHIPT—Run of Mine.

White Oak Mine; Drift; No. 6 Seam, 84 inches thick.
PO—New Straitsville, O.; SP—Same; CTY—Perry; RR—Hocking Valley.
MS—C. N. Heldlebaugh, New Straitsville, O.
S of H—Mules. Track gage 42 inches. S of M—1 elec. puncher, chain breast type mach.
PP—Power from Essex Coal Co., 250 volts D. C.
EMP—10. Daily tonnage 100.
SIZES SHIPT—Run of Mine.

LONI COAL COMPANY, THE

General Office, Cadiz, Ohio.
PR—John Madden, Cadiz, Ohio.
VP—John Williams, Cadiz, Ohio.
TR—B. Moore, Cadiz, Ohio.
GM—John Williams, Cadiz, Ohio.
GS—John Williams, Cadiz, Ohio.
PA—John Williams, Cadiz, Ohio.
SA—The H. S. Odert Coal Co., Cleveland, Ohio.

Loni Mine; Drift; Pittsburgh No. 8 Seam, 66 inches thick.
PO—Cadiz, O.; SP—Same; CTY—Harrison; RR—P. R. R.
S of H—Mules, trolley pole type and steam locos.
S of M—Hand.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

LONG HOLLOW COAL CO., THE

General Office, Carbon Hill, O.
PR—W. E. McCarty, Glouster, O.
VP—L. R. Andrews, Glouster, O.
TR—C. A. Pride, Glouster, O.
GM—Frank Hawk, Glouster, O.
PA—Clifford Hawk, Carbon Hill, O.

Long Hollow Mine; Drift; No. 6 Seam, 72 inches thick.
PO—Carbon Hill, O.; SP—Same; CTY—Hocking; RR—Hocking Valley.
MS—Frank Hawk, Glouster, O.
S of H—Mules and electric loco. Track gage 42 inches.
S of M—Chain breast and shortwall machs.
PP—Purchase power, 250 volts D. C. EMP—10. Last years tonnage 19,451.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Bar Screens.

LORAIN COAL AND DOCK COMPANY.

General Office, Columbus, O.
PR—F. W. Braggins, Columbus, O.
VP—R. L. Wildermuth, Columbus, O.
2ND VP—J. L. Johnson, Columbus, O.
TR—Ray L. Phelps, " "
CM—R. L. Wildermuth, " "
Chairman, Board of Directors—Edward Johnson, Columbus, O.
FA—J. R. Johnson, Columbus, O.
CE—George W. Wyss, Bridgeport, O.
Additional Information on Page 611.

Wheeling Creek Mine; Drift; No. 8 Pittsburgh Seam, 60 to 72 in. thick.
PO—Bridgeport, O.; SP—Same; CTY—Belmont; RR—B. & O., C. L. & W. Div.
S of H—2 elec. locos.
S of M—12 elec. machs.
EMP—130. Last years tonnage 273,830.
SIZES SHIPT—Run of Mine, Slack, Lump.

Crescent Mine; Drift; No. 8 Pittsburgh Seam, 60 to 72 in. thick.
PO—Crescent, O.; SP—Same; CTY—Belmont; RR—B. & O., C. L. & W. Div.
S of H—2 elec. locos.
S of M—10 elec. machs.
EMP—320. Last years tonnage 195,187.
SIZES SHIPT—Run of Mine, Slack, Lump.

Laosung Mine; Drift; No. 8 Pittsburgh Seam, 60 to 72 in. thick.
PO—Lansing, O.; SP—Bridgeport, O.; CTY—Belmont; RR—B. & O., C. L. & W. Div.
S of H—3 elec. locos.
S of M—11 elec. machs.
EMP—380. Last years tonnage 259,076.
SIZES SHIPT—Run of Mine, Slack, Lump.

Blaine Mine; Drift; No. 8 Pittsburgh Seam, 60 to 72 in. thick.
PO—Blaine, O.; SP—Bridgeport, O.; CTY—Belmont; RR—B. & O., C. L. & W. Div.
S of H—4 elec. locos.
S of M—12 elec. machs.
EMP—345. Last years tonnage 322,942.
SIZES SHIPT—Run of Mine, Slack, Lump.

Stanley Mine; Drift; No. 8 Pittsburgh Seam, 60 to 72 in. thick.
PO—Blaine, O. SP—Same. CTY—Belmont. RR—B. & O., C. L. & W. Div.
S of H—1 trolley pole type loco.
S of M—8 chain breast type machs.
EMP—140. Last years tonnage 182,536.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

Lost Run Coal Co. (The).
General Office, Columbus, O.
PR—Calvin Essex, Columbus, O.
VP—J. W. Cottingham, Columbus, O.
TR—S. Cottingham, Columbus, O.
GM—Calvin Essex, Columbus, O.
GS—Robert Essex, New Straitsville, O.
PA—Fred Essex, Columbus, O.
EM—C. H. Finsterwald, Nelsonville, O.
BA—Essex Coal Co., Columbus, O.

Esco No. 2 Mine; Drift; No. 6 Seam, 60 in. thick.
PO—New Straitsville, O.; SP—Same; CTY—Hocking; RR—Hocking Valley.
MS—Chas. Essex, New Straitsville, O.
S of H—3 trolley pole type locos. Track gage, 44 in.
S of M—4 shortwall machs.
PP—Power purchased, 3 pumps.
EMP—125. Daily output, 800 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

Love Brothers.
No. 3-X Mine; Drift; No. 6 Seam; 84 in. thick.
PO—Nelsonville, O.; SP—Jobs, O.; CTY—Hocking; RR—H. V.
MS—John Love, Nelsonville, O.
S of H—Mules. Track gage 42 in. S of M—1 mining mach.
PP—Power purchased, 1 pump.
EMP—32. Last years tonnage 32,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

Love Bros. Globe No. 2 Mine; Drift; No. 6 Seam, 84 in. thick.
PO—Nelsonville, O.; SP—Jobs, O.; CTY—Hocking; RR—H. V.
S of H—Mules. Track gage 42 in. S of M—1 shortwall mach.
EMP—18. Last years tonnage 18,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

Love Bros. No. 1 Mine; Drift; No. 6 Seam, 84 in. thick.
PO—Nelsonville, O.; SP—Jobs, O.; CTY—Hocking; RR—H. V.
S of H—Mules. Track gage 42 in. S of M—1 shortwall mach.
EMP—18. Last years tonnage 18,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

Loveday & Son.
General Office, New Philadelphia, O.
PR—Wm. Loveday, New Philadelphia, O.
GM—John Loveday, New Philadelphia, O.

Keller Grove Mine; Drift; No. 6 Seam, 54 in. thick.
PO—New Philadelphia, O.; SP—Same; CTY—Tuscarawas; RR—B. & O.
MS—John Loveday, New Philadelphia, O.
S of H—Mules. Track gage 30 in. S of M—Hand.
PP—1 pump.
EMP—10. Last years tonnage 2,015.
SIZES SHIPT—Run of Mine.

LOYAL COAL COMPANY.

General Office, Shawnee, O.
PR—G. A. Davis, Schultz Bldg., Columbus, O.
VP—M. R. Davis, Newark, O.
TR—G. A. Davis, Columbus, O.
GM—G. A. Davis, Columbus, O.
GS—T. L. Davis, Shawnee, O.
PA—E. H. Packer, Shawnee, O.
EM—Evan Reese, New Lexington, O.

Loyal Mine; Drift; No. 6 Seam; 58 in. thick.
PO—Shawnee, O.; SP—Morabala, O.; CTY—Perry; RR—T. & O. C. Corning Br.
S of H—Mules and rope. Track gage 42 in.
S of M—1 elec. mach.
PP—2 pumps, 250 volts.
EMP—20. Daily tonnage 150.
SIZES SHIPT—Run of Mine.

LUHRIG COLLIERIES COMPANY

General Office, 8 East Broad St., Columbus, O.
PR—L. D. Lampman, Columbus, O.
VP—J. J. Archer, Jr., Columbus, O.
TR—E. H. Davis, Columbus, O.
GM—P. C. Morris, Nelsonville, O.
GS—P. C. Morris, Nelsonville, O.
PA—P. B. Verity, Nelsonville, O.
EM—J. L. Murphy, Nelsonville, O.
EE—P. B. Verity, Nelsonville, O.
SCO—Manhattan Stores Co., Buyer, F. L. Woodworth, Athens, O.
SA—New York Coal Co., Columbus, O.

Luhrig No. 2 Mine; Shaft; No. 6 Seam; 78 in. thick.
PO—Luhrig, O.; SP—Same; CTY—Athens; RR—B. & O., S. W.
MS—Chas. Fitzer, R. F. D., Athens, O.
S of H—Mules and 4 electric locos. Track gage 42 in.
S of M—6 chain breast type machs.
PP—Power purchased, 250 volts D. C., 4 pumps.
EMP—200. Last years tonnage 85,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

M. & B. COAL COMPANY, THE

PR—R. F. Myers, Canal Fulton, O.
VP—Wm. Blank, Canal Fulton, O.
TR—P. J. Blank, Canal Fulton, O.
GS—Wm. Stiltz, Canal Fulton, O.

M. & B. Mine; Shaft; No. 1 Seam, 48 inches thick.
PO—Canal Fulton, O.; SP—Same; CTY—Stark; RR—M. & C.
S of H—Mules. Track gage 39 inches. S of M—Hand.
PP—1 water tube boiler, 125 H. P. EMP—10.

MCCLELLAN & WILSON COAL CO.

General Office, 63 South Fourth St., Zanesville, O.
PR—Geo. E. McClellan, Zanesville, O.
VP—Geo. E. McClellan, Zanesville, O.
TR—James C. Wilson, Zanesville, O.
GM—Geo. E. McClellan, Zanesville, O.
GS—Geo. E. McClellan, Zanesville, O.
PA—Geo. E. McClellan, Zanesville, O.
CE—John Iunn, Zanesville, O.
SA—Geo. E. McClellan, Zanesville, O.

Green Hill Mine; Drift; No. 6 Seam, 36 inches thick.
PO—Zanesville, O.; SP—Philo, O.; CTY—Muskingum; RR—R. & O.
S of H—Mules. Track gage 36 inches. S of M—2 shortwall machs.
PP—Power purchased. Water tube boiler, 62 H. P., one 40 K. W. gen. unit, 250 volts D. C.
EMP—23. Last years tonnage 29,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Bar and Revolving Screens.
Old Information.

MCGARVEY, J. A.

PR—J. A. McGarvey, Zanesville, O.
GM—J. A. McGarvey, Zanesville, O.
GS—J. A. McGarvey, Zanesville, O.
PA—J. A. McGarvey, Zanesville, O.

Garrett No. 2 Mine; Drift; No. 6 Seam, 36 in. thick.
PO—Philo, O.; SP—Exp., Same; Frit., Garrett, O.; CTY—Muskingum, RR—B. & O.
MS—Ira Stockdale, Philo, O.
S of H—Mules. Track gage 36 in. S of M—1 continuous shortwall mach.
PP—1 75 H. P. gen. unit, 250 volts D. C., 1 pump.

EMP—16. Daily tonnage 125.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

Rose Bud Mine; Drift; No. 6 Seam, 46 in. thick.
PO—Cannelville, O. SP—Same. CTY—Muskingum. RR—Z & W.
MS—Elmer Bratton, Cannelville, O.
S of H—Mules, endless rope and steam loco. Track gage 36 in.
S of M—Hand.
PP—75 H. P., fire tube boiler, 2 pumps.
EMP—30. Daily tonnage 250.
SIZES SHIPT—Run of Mine.

McGREGG COAL AND CLAY CO.

General Office, St. Clairsville, O.
PR—John H. McGregg, St. Clairsville, O.
TR—John C. Nichols, St. Clairsville, O.
GM—Jno. C. Nichols, " "
GS—John C. Nichols, " "
PA—John C. Nichols, " "
EE—August Swanson, East Liverpool, O.
SA—John C. Nichols, St. Clairsville, O.

Rock Camp Mine; Drift; No. 6 Seam, 42 in. thick.
PO—East Liverpool, O.; SP—Same; CTY—Columbiana; RR—Youngstown & Ohio River.
S of H—Mules and gravity. Track gage, 34 in.
S of M—1 chain breast type and 1 shortwall macha.
PP—Power purchased, transformer 11-000 to 440 volts A. C., M. G. set, 250 volts D. C., 1 pump.
EMP—25.
SIZES SHIPT—Run of Mine.
(Old Information)

McKITTERICK COAL COMPANY

General Office, Jackson, O.
PR—James J. McKitterick, Jackson, O.
VP—Wesley McKitterick, Jackson, O.
TR—James J. McKitterick, Jackson, O.
GM—James J. McKitterick, Jackson, O.
GS—Wesley McKitterick, Jackson, O.
PA—James J. McKitterick, Jackson, O.
EM—James J. McKitterick, Jackson, O.

McKitterick Mine; Drift; Sharon No. 1 Seam, 36 inches thick.
PO—Jackson, O.; SP—Same; CTY—Jackson; RR—B. & O. T. & I.
MS—John D. Gilliland, Jackson, O.
S of H—Mules. Track gage 36 inches. S of M—Hand.
EMP—28. Daily tonnage 100.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
NOTE—Formerly operated by Jackson Block Coal Mining Co.

MACKSBURG COAL COMPANY.

General Office, Dover, O.
PR—Dr. S. B. McGuire, Dover, O.
VP—Marcus Webel, Dover, O.
TR—Jos. Jenkins, Dover, O.
GM—William Dyer, Macksburg, O.
PA—Jos. Jenkins, Dover, O.
EE—W. A. Chester, Macksburg, O.
SA—Address the Company, Dover, O.

Morning Glory Mine; Drift; No. 8 Seam, 66 in. thick.
PO—Macksburg, O.; SP—Same; CTY—Noble; RR—Penna.
MS—William Dyer, Macksburg, O.
S of H—Mules. Track gage, 36 in. S of M—Shortwall machs.
PP—2 tubular boilers, 125 H. P. EMP—70. Daily tonnage 200.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Bar Screens.

MACONAL COAL COMPANY (THE).

General Office, Kirby Bldg., Cleveland, O.
PR—George A. Enos, Cleveland, O.
VP—Fred S. McConnell, Cleveland, O.
TR—George A. Enos, Cleveland, O.
GM—F. S. McConnell, Cleveland, O.
GS—E. K. Trickett, East Sparta, O.
PA—Fred S. McConnell, Kirby Bldg., Cleveland, O.
SA—The George A. Enos Coal Co., Kirby Bldg., Cleveland, O.

Wilcox Mine; Stripping; No. 5 Seam, 42 inches thick.
PO—Magnolia, O.; SP—Sandyville, O.; CTY—Tuscarawas; RR—B. & O.
S of H—3 steam locos. Track gage 39 inches.
S of M—Steam shovels.
EMP—50. Last years tonnage 100,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens, Picking Tables.

MACPHAIL COAL COMPANY

General Office, Middleport, O.
PR—C. W. Ray, Bay City, Mich.
VP—W. C. Ray, Bay City, Mich.
TR—C. W. Ray, Middleport, O.
GM—R. F. MacPhail, Middleport, O.
PA—R. F. MacPhail, Middleport, O.
EE—George MacPhail, Bay City, Mich.
EE—L. B. Kilgore, Middleport, O.
SA—Republic Fuel Co., Bay City, Mich.

(Continued on Next Page)

MacPhail Coal Co.—Cont.

MacPhail Mine; Drift; No. 8 Pomeroy Seam, 60 in. thick.
 PO—Middleport, O.; SP—Hobson, O.; CTY—Meigs; RR—K. & M.
 S of H—Mules and electric loco. Track gage 42 in.
 S of M—Hand, 1 chain breast and 1 shortwall machs.
 PP—1 100 H. P. water tube boiler, 1—50 K. W. gen. unit, 250 volts D. C.
 EMP—60. Last years tonnage 40,100.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.
 Note—Formerly operated by Sherman Coal Co.

MAHER COLLIERIES COMPANY

General Office, 223 Kirby Bldg., Cleveland, O.

PR—Thos. K. Maher, Cleveland, O.
 TR—J. A. Maher, Cleveland, O.
 GM—Wm. J. Maher, St. Clairsville, O.
 GS—Harry Pollock, St. Clairsville, O.
 PA—W. G. Lewis, Cleveland, O.
 CE—Frank H. Frazier, St. Clairsville, O.
 EE—W. P. Morris, Neffs, O.

No. 1 Mine; Drift; Pittsburgh Seam, 66 inches thick.

PO—Glencoe, O.; SP—Same; CTY—Belmont; RR—R. & O.

MS—James Brooks, Glencoe, O.

S of H—2 trolley pole type locos.

S of M—10 shortwall machs.

PP—Power purchased, rotary converters, 250 volts D. C., 2 pumps.

EMP—130.

SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.

PREP. EQUIPT—Gravity Screens.

No. 2 Mine; Drift; Pittsburgh Seam, 66 inches thick.

PO—Glencoe, O.; SP—Same; CTY—Belmont; RR—R. & O. R. R.

MS—James Brooks, Glencoe, O.

S of H—3 trolley pole type locos. Track gage, 42 in.

S of M—11 shortwall machs.

PP—Purchase power, transformer 500 to 250 volts D. C., rotary converters, 250 volts D. C., 3 pumps.

EMP—225.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.

PREP. EQUIPT—Gravity Screens, Box Car Loaders.

No. 3 Mine; Drift; Pittsburgh Seam, 66 inches thick.

PO—Neffs, O.; SP—Same; CTY—Belmont; RR—R. & O.

MS—Lawrence Gardner, Neffs, O.

S of H—2 trolley pole type locos.

S of M—3 shortwall machs.

PP—Purchase power, rotary converters, 250 volts D. C., 2 pumps.

EMP—150.

SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.

PREP. EQUIPT—Gravity Screens.

Maher No. 5 Mine; Drift; Pittsburgh No. 8 Seam, 5½ ft. thick.

PO—Stewartsville, O.; SP—Same; CTY—Belmont; RR—B. & O.

MS—C. C. Bulger, Stewartsville, O.

S of H—3 elec. loco. Track gage 42 in.

S of M—12 shortwall machs.

PP—Purchase power, transformer 500 to 250 volts, rotary converters, 250 volts D. C., 3 pumps.

EMP—260.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.

PREP. EQUIPT—Gravity Screens, Crushers.

Maher No. 6 Mine; Drift; Pittsburgh No. 8 Seam, 5½ ft. thick.

PO—Neff, O.; SP—Same; CTY—Belmont; RR—R. & O. and W. & L. P.

MS—Lawrence Gardner, Neffs, O.

S of H—4 trolley pole type locos. Track gage, 42 in.

S of M—15 shortwall machs.

PP—Purchase power, transformer 500 to 250 volts, rotary converters, 250 volts D. C., 3 pumps.

EMP—362.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.

PREP. EQUIPT—Gravity Screens.

No. 7 Mine; Drift; Seam, 66 in. thick.

PO—Neff, O.; SP—Same; CTY—Belmont; RR—W. & L. E.

MS—Lawrence Gardner, Neff, O.

S of H—Storage battery locos.

S of M—Hand.

No. 9 Mine; Drift; Seam, 66 in. thick.

PO—Neff, O.; SP—Same; CTY—Belmont; RR—B. & O.

MS—Lawrence Gardner, Neff, O.

S of H—Storage battery locos.

S of M—Hand.

No. 10 Mine; Drift; Seam, 66 in. thk-k.
 PO—Neff, O.; SP—Same; CTY—Belmont; RR—W. & L. E., B. & O.
 S of H—Storage battery locos.
 S of M—Hand.

Maher No. 12 Mine; Drift; Pittsburgh No. 8 Seam, 5½ to 6 ft. thick.

PO—St. Clairsville, O.; SP—Maynard, O.; CTY—Belmont; RR—B. & O.

S of H—3 trolley pole type locos. Track gage, 42 in.

S of M—14 shortwall machs.

PP—Purchase power, transformer 500 to 250 volts, rotary converters, 250 volts D. C., 2 pumps.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.

PREP. EQUIPT—Gravity Screens, Box Car Loaders.

MAJESTIC COAL CO., THE

Now part of The Ohio Consolidated Coal Company.

MALVERN FIRE CLAY CO. (THE).

General Office, Malvern, O.

PR—W. B. Elson, Malvern, O.

VP—H. C. Downer, Malvern, O.

TR—H. C. Ross, Malvern, O.

GM—H. C. Downer, Malvern, O.

GS—H. C. Ross, Malvern, O.

PA—H. C. Downer, Malvern, O.

Sales Agent—H. C. Downer, Malvern, O.

Malvern Mine; Slope; No. 6 Seam, 33 inches thick.

PO—Malvern, O.; SP—Oneida, O.; CTY—Carroll; RR—W. Va. & L. E.

MS—Harry Richard, Malvern, O.

S of H—Mules.

S of M—Hand.

PP—3 water tube boiler, total 375 H. P., 1 gen. unit, 250 volts D. C., 4 pumps.

EMP—10. Last years tonnage 7,000.

MANNHATTAN COAL COMPANY

Now New York Coal Co.

MAPLE LEAF COAL CO., THE

Part of The New Pocock Coal Co.

MAPLETON CLAY PRODUCTS CO., THE

General Office, 302 City National Bank Bldg., Canton, O.

PR—E. J. Schario, Canton, O.

VP—Ira Pence, Canton, Ohio.

TR—Adam Merley, Canton, O.

GS—Ira Pence, Canton, O.

Mapleton No. 1 Mine; Slope; No. 6 Seam, 36 inches thick.

PO—East Canton, O.; SP—Same; CTY—Stark; RR—W. & L. E.

MS—Wm. Jones, East Canton, O.

S of H—Mules. Track gage 34 inches.

S of M—Hand.

Last fiscal year output, 12,000 tons.

SIZES SHIPT—Slack.

PREP. EQUIPT—Gravity Screens.

Consume entire output.

MARKLEY, GEORGE J.

General Office, Mineral City, O.

PR—Geo. J. Markley, Mineral City, O.

GM—Geo. J. Markley, Mineral City, O.

PA—Geo. J. Markley, Mineral City, O.

EM—Geo. E. Arnold, New Philadelphia, O.

SCO—The Markley Big Store Co. Buyer, T. A. Markley, Mineral City, O.

Acme Mine; Drift; No. 5 Seam, 30 to 54 inches thick.

PO—Mineral City, O.; SP—Same; CTY—Tuscarawas; RR—B. & O.

MS—William Black, Mineral City, O.

S of H—Mules. Track gage 36 inches.

S of M—Hand.

PP—1 return tubular boiler, total 100 H. P., 1 gen. unit.

EMP—3. Last years tonnage 1,498.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Bar Screens.

Huff Run Mine; Drift; No. 5 Seam, 30 to 54 inches thick.

PO—Mineral City, O.; SP—Same; CTY—Tuscarawas; RR—B. & O.

MS—Alex Lindsay, Mineral City, O.

S of H—Mules and 1 elec. loco. Track gage 34 inches.

S of M—Hand and 2 elec. machs.

PP—1 fire tube boiler, total 100 H. P., gen. unit, 250 volts D. C.

EMP—40. Last years tonnage 18,062.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Bar Screens.

Massillon Peacock Mine; Slope; No. 5 Seam, 30 to 60 inches thick.

PO—Mineral City, O.; SP—Same; CTY—Tuscarawas; RR—B. & O.

MS—James Criller, Sandville, O.

S of H—Mules. Track gage 30 inches.

S of M—Hand.

PP—1 gasoline engine.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Bar Screens.

MARTIN COAL CO., THE

Out of Business.

MASSILLON-BELMONT COAL CO., THE

Part of The New Pocock Coal Co.

MASSILLON CITY COAL CO. (THE).

Part of The New Pocock Coal Co.

MASSILLON COAL MINING CO.

General Office, Cleveland, O.

PR—M. Andrews, Cleveland, O.

VP—Wm. Collios, Cleveland, O.

TR—Sam W. Folsom, Cleveland, O.

GM—M. Gallagher, Cleveland, O.

GS—John Whelan, Jr., Dillonvale, O.

PA—C. K. Sheridan, Cleveland, O.

SA—M. A. Hanna & Co., Cleveland, O.

Massillon No. 27 Mine worked out.

Rose No. 28 Mine; Stripping; Pittsburgh No. 8 Seam, 60 inches thick.

PO—Cadiz, R.D. No. 2, O.; SP—Adena, O.; CTY—Harrison; RR—W. & L. E.

MS—Wm. Whelan, Cadiz, O.

S of H—Rope and elec. loco.

S of M—Stripping.

PP—4 fire tube boilers, 1—200 K. W. and 1—100 K. W. gen. units, 250 volts D. C., 3 pumps.

EMP—90. Daily tonnage 600.

SIZES SHIPT—Run of Mine, Slack, Lump, Crushed Nut.

PREP. EQUIPT—Gravity Screens, Picking Tables, Loading Booms.

Rose No. 29 Mine; Drift; Pittsburgh No. 8 Seam, 60 inches thick.

PO—Cadiz, O.; SP—Adena, O.; CTY—Harrison; RR—W. & L. E.

MS—John P. Lafferty, Cadiz, O.

S of H—Mules and elec. loco. Track gage 42 inches.

S of M—4 shortwall machs.

PP—4 fire tube boilers, 1—200 K. W. and 1—100 K. W. gen. units, 250 volts D. C., 3 pumps.

EMP—90. Daily tonnage 800.

SIZES SHIPT—Run of Mine, Slack, Crushed Nut, Lump.

PREP. EQUIPT—Gravity Screens, Picking Tables, Loading Booms.

MASSILLON-TUSCARAWAS COAL CO., THE

General Office, Electric Bldg., Cleveland, O.

PR—J. L. Deegan, Cleveland, O.

TR—B. R. Taylor, Cleveland, O.

GM—J. L. Deegan, Cleveland, O.

GS—R. W. Johns, Massillon, O.

PA—J. L. Deegan, Cleveland, O.

CE—R. W. Johns, Massillon, O.

EE—J. D. Jones, R.F.D. No. 3, Dover, Ohio.

SA—A. L. Bishop, Electric Bldg., Cleveland, O.

Central Valley No. 3 and 4 Mines; Slope; No. 6 Seam, 48 inches thick.

PO—Route No. 3, Dover, O.; SP—New Cumberland, O.; CTY—Tuscarawas; RR—W. & L. E.

MS—E. Jones, Route No. 3, Dover, O.

S of H—Mules and rope. Track gage, 39 in.

S of M—3 elec. shortwall machs.

PP—3 fire tube boilers, total 450 H. P., 9 pumps.

EMP—100. Last fiscal year output, 84,200 tons.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Gravity Screens.

MAXEY, W. R.

General Office, Ironton, O.

SA—W. R. Maxey, Ironton, O.

Halley Farm Mine; Drift; No. 5 Ohio Seam, 42 in. thick.

PO—Ironton, O.; SP—Same; CTY—Lawrence; RR—D. T. & I.

S of H—Mules. Track gage 36 in.

S of M—Hand.

EMP—75. Daily tonnage 200.

SIZES SHIPT—Run of Mine.

MAY COAL COMPANY, THE

General Office, 1101 Hayden Bldg., Columbus, O.

PR—D. L. Wallace, Nelsonville, O.

TR—S. Cottingham, Columbus, O.

GM—S. Cottingham, Columbus, O.

GS—D. L. Wallace, Nelsonville, O.

PA—S. Cottingham, Columbus, O.

EM—C. H. Finsterwald, Nelsonville, O.

SA—The Essex Coal Co., Columbus, O.

May Nos. 1 and 2 Mines; Drifts; No. 6 Seam, 72 inches thick.

PO—Carbon Hill, O.; SP—Same; CTY—Hocking; RR—Hocking Valley.

S of H—Mules and pools. Track gage 42 inches.

S of M—2 shortwall machs.

PP—2 pumps.

EMP—40. Daily tonnage 200.

SIZES SHIPT—Run of Mine.

MAYNARD COAL COMPANY.

General Office, Columbus, O.

PR—H. H. Heiner, Columbus, O.

VP—Geo. H. Barker, Columbus, O.

TR—Geo. H. Barker, Columbus, O.

GM—L. J. Heiner, Rutland, O.

GS—Edw. Kennedy, Rutland, O.

PA—L. J. Heiner, Rutland, O.

EM—William Harry, Middleport, O.

EE—A. W. Maters, Rutland, O.

SCO—Address the Company, Buyers, V. E. Dunlap, Rutland, O.; John Scott, Hobson, O.

No. 3 Mine; Drift; Pomeroy Seam, 60 in. thick.

PO—Hobson, O.; SP—Same; CTY—Meigs; RR—Kanawha & Michigan.

MS—John E. Trew, Middleport, O.

SM—John Scott, Middleport, Ohio.

S of H—Mules, 2 trolley pole type locos. Track gage 36 in.

S of M—2 shortwall machs.

MEENAN, JAMES J.
General Office, Nelsonville, O.
OWNER—James J. Meenan, Nelsonville, O.
SA—W. J. Hamilton, Nelsonville, O.
Monitor Mine; Drift; Seam 72 inches thick.
PO—Nelsonville, O.; SP—Same; CTY—Athens; RR—Hocking Valley.
MS—Walter Warner, Nelsonville, O.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
EMP—24. Last years tonnage 13,167.
SIZES SHIPT—Run of Mine.

MEISSNER MINING COMPANY.
TS—Harry Meissner, New Philadelphia, O.
GE—Alfred Meissner, New Philadelphia, O.
SA—Canton Coal Co., Canton, O.
Meissner's Mine; Drift; No. 6 Seam. 48 in. thick.
PO—New Philadelphia, O. SP—Same. CTY—Tuscarawas; RR—C. & P.
MS—Harry Meissner, New Philadelphia, O.
S of H—Mules, 3 trolley pole type locos. Track gage 39 inches.
S of M—1 chain breast type mach. 2200
PP—Power purchased, transformer 2200
250 volts A. C., M. G. Sets, 250
volts D. C., 1 pump.
EM—N. R. Denham, Huron, Ky.
EMP—15. Last years tonnage 12,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

MEISTER COAL CO.
General Office, Bridgeport, O.
PR—Jos. Meister, Bridgeport, O.
VP—George Meister, Bridgeport, O.
TR—Jacob Meister, Bridgeport, O.
GM—Jos. ph Meister, Bridgeport, O.
GS—Dave Jones, Flushing, O.
PA—Jacob Meister, Bridgeport, O.
EM—Elkins Eng. Co., Bellaire, O.
EE—John Haynes, Bellaire, O.
SA—H. S. Odhart Coal Co., Cleveland, O.
Alice Mine; No. 8-A Seam, 54-72 in. thick.
PO—Bridgeport, O.; SP—Lafferty, O.; CTY—Belmont; RR—B. & O.
S of H—Mules and 2 trolley pole type locos. Track gage 42 inches.
S of M—2 chain breast type and 5 shortwall machs.
PP—Power purchased, Transformer 2400 to 250 volts A. C., rotary converters, 250 volts D. C., 2 pumps.
EMP—87. Last years tonnage 86,000.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Gravity Screens.

MEISTER, JOSEPH COAL COMPANY
GS—Joseph Meister, Martins Ferry, O.
PA—James Ralston, Martins Ferry, O.
EM—Carl Lash, Martins Ferry, O.
EE—Ed. Miles, Martins Ferry, O.
Sheets Mine; Drift; No. 8 Seam, 72 in. thick.
PO—Martins Ferry, O.; SP—Same; CTY—Belmont; RR—Penna. and B. & O.
MS—Ed. Miles, Martins Ferry, O.
S of H—Mules and elec. haulage. Track gage 34 in.
PP—Power purchased, Transformer 2,500 volts A. C., M. G. set, 500 volts D. C., 2 pumps.
EMP—25. Last years tonnage 30,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
Note—Formerly operated by the Sheets Coal Co.

METROPOLITAN PAVING BRICK COMPANY, THE.
General Office, Canton, O.
PR—H. S. Renkert, Canton, O.
VP—C. R. Blair, Canton, O.
VP—O. W. Renkert, Canton, O.
TR—J. G. Barbour, Canton, O.
GM—O. W. Renkert, Canton, O.
GS—R. M. Schory, Minerva, O.
PA—Wm. Zengler, Minerva, O.
EM—Geo. Arnold, New Philadelphia O.
EE—Dillon Electric Co., Canton, O.
Metropolitao Mine; Slope; No. 6 Seam. 38 to 34 in. thick.
PO—Minerva, O.; SP—Same; CTY—Stark; RR—C. & P.
MS—W. Kelster, Minerva, O.
S of H—Rope and mules, 1 gasoline loco. Track gage, 30 in.
S of M—Hand.
PP—2 return tubular hollers, total 300 H. P. gen units, 1—30 K. W., 1—50 K. W., 230 volts D. C., 6 pumps.
EMP—80. Last years tonnage 42,000.

MIDDLE STATES COAL COMPANY, THE
General Office, Brunson Bldg., Columbus, Ohio.
PR—J. S. Rogers, Columbus, O.
VP—J. W. Bricker, Columbus, O.
TR—R. B. Hurst, Columbus, O.
GM—R. B. Hurst, Columbus, O.
GS—J. J. Welsh, Gloucester, O.
PA—H. E. Clory, Columbus, O.
EM—Waldo H. Chute, Nelsonville, O.
EE—John Callahan, Nelsonville, O.
SCO—G. W. Hope, Supply Company, Buyer, G. W. Hope, Gloucester, O.
No. 24 Mine; Slope; Upper Freeport Seam, 50 in. thick.
PO—Gloucester, O.; SP—Jacksonville, O.
CTY—Athens; RR—T. & O. C.
S of H—2 trolley pole type locos. Track gage 42 in.
S of M—3 shortwall machs.
PP—Power purchased, transformer 11000 to 2200 volts A. C., M. G. Sets, 150 K. W., 270 volts D. C., 2 pumps.
EMP—140. Daily tonnage 900.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.
No. 68 Mine; Slope; No. 7 Seam, 52 in. thick.
PO—Gloucester, O.; SP—Jacksonville, O.; CTY—Athens; RR—T. & O. C.
S of H—Trolley pole type locos.
S of M—4 shortwall machs.
PP—Power purchased, Transformer 11000 to 2,300 volts A. C., 150 K. W. rotary converters, 270 volts D. C., 1 pump.
EMP—140. Daily tonnage 800.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.
NOTE—This mine formerly Northern & Southern Coal Co.

MID-HOCKING COAL CO. (THE).
General Office, New Lexington, O.
PR—Samuel Frew, New Lexington, O.
VP—L. A. Saunders, New Lexington, O.
TR—R. E. Bennett, New Lexington, O.
SECY—U. S. McGonagle, New Lexington, Ohio.
GS—Samuel Frew, New Lexington, O.
EM—J. H. Dusz, Jacksonville, O.
No. 85 Mine; Shaft; No. 6 Seam, 73 in. thick.
PO—Coring, O.; SP—Burr Oak, O.
CTY—Perry; RR—K. & M.
MS—John L. Hickman, Corning, O.
S of H—2 storage battery locos. Track gage 42 inches.
S of M—1 chain breast type and 3 shortwall machs.
PP—2 fire tube boilers, 1—110 K. W. gen. unit, 220 volts D. C., 3 pumps.
EMP—200. Last years tonnage 160,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Egg, Lump.
PREP. EQUIPT—Gravity Screens

MIDVALE COAL COMPANY.
General Office, Byessville, O.
GM—Geo. McLaughlin, Byessville, O.
GS—Geo. McLaughlin, Byessville, O.
PA—Geo. McLaughlin, Byessville, O.
EM—F. F. Green, Byessville, O.
Sales Agents, Gibson-Spence Coal Co., Columbus, O.
Midvale Mine; Drift; No. 7 Seam, 64 inches thick.
PO—Byessville, O.; SP—Same; CTY—Guernsey.
S of H—Mules. Track gage 42 inches.
S of M—2 chain breast type machs.
PP—250 volts D. C. Purchase power.
EMP—70. Last years tonnage 9,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

MIDVALE COAL CO
General Office, Midvale, O.
PR—R. W. Rutledge, Midvale, O.
VP—W. D. Rutledge, Midvale, O.
TR—C. G. Knisely, New Philadelphia, O.
GM—S. H. Cook, Midvale, O.
GS—S. H. Cook, Midvale, O.
PA—R. W. Rutledge, Midvale, O.
SA—C. G. Knisely, Midvale, O.
Midvale Nos. 4, 5 and 6 Mines; No. 6 Seam, 48-60 inches thick.
PO—Midvale, O. SP—Same. CTY—Tuscarawas. RR—B. & O.
S of H—Mules and rope, 2 elec. motors. Track gage 35 inches.
S of M—5 chain breast type and 6 shortwall machs.
PP—Power purchased. 2—200 K. W. M. G. Sets, 250 volts D. C., 1 water tube boiler, 150 H. P., 9 pumps.
EMP—300. Last years tonnage 250,000
SIZES SHIPT—Run of Mine, Slack, Pea, Lump.
PREP. EQUIPT—Bar Screen and Picking Table Conveyor.

MIDVALE-GOSHEN COAL CO. THE
General Office, 1507 Union National Bank Bldg., Cleveland, O.
PR—C. L. Terry, Cleveland, O.
TR—H. M. Carpenter, Cleveland, O.
GM—C. L. Terry, Cleveland, O.
PA—C. L. Terry, Cleveland, O.
GS—J. C. Kye, Wainwright, O.
EM—Geo. E. Arnold, New Philadelphia, O.
Wainwright Mines, Slope and Drift, No. 6 Seam, 4 to 4 1/2 ft. thick.
PO—New Philadelphia, O.; SP—Hurler, ville, O.; CTY—Tuscarawas; RR—B. & O.
S of H—Mules, rope and 3 trolley pole type locos. Track gage, 35 in.
S of M—4 chain breast type and 14 shortwall machs.
PP—4 water tube boilers, Erie make, total 600 H. P., 2 gen. units, 250 volts D. C., 8 pumps, purchase some power.
EMP—250. Last years tonnage 128,974.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Gravity Screens, Loading Booms.

MILLER BROS. COAL CO., THE.
General Office, Youngstown, O.
PR—Chas. R. Cuswa, Youngstown, O.
VP—D. R. Elthorn, Youngstown, O.
TR—T. W. Miller, Youngstown, O.
GM—T. W. Miller, Youngstown, O.
GS—Tony Ross, Lectoria, O.
PA—T. W. Miller, Youngstown, O.
SM—Tony Ross, Lectoria, O.
Miller Bros. Mine; Stripping; No. 6 Seam, 72 in. thick.
PO—Lectoria, O. SP—Same. CTY—Columbiana. RR—Y. & O.
S of H—Steam and gasoline locos.
S of M—2 steam shovels.
PP—2 water tube boilers.
EMP—25. Daily output, 200 tons
SIZES SHIPT—Run of Mine.
(Old Information)

MILLER, WM. J. COAL CO. (THE).
PR—Wm. J. Miller, New Straitsville, O.
VP—R. H. Leady, New Straitsville, O.
TR—E. A. Davidson, New Straitsville, O.
PA—E. A. Davidson, New Straitsville, O.
Miller Mine; Drift; No. 6 Seam, 84 inches thick.
PO—New Straitsville, O. SP—Same. CTY—Perry, RR—Hocking Valley.
S of H—Mules. Track gage, 42 in.
S of M—1 chain breast type mach.
PP—Power purchased, Transformer 4400 to 178 volts A. C., rotary converters, 275 volts D. C., 1 pump.
EMP—17. Daily tonnage 150.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

MILLER & PYLE COAL COMPANY.
General Office, Somerdale, O.
PR—J. G. Pyle, Somerdale, O.
GM—L. G. Pyle, Somerdale, O.
GS—L. G. Pyle, Somerdale, O.
PA—L. G. Pyle, Somerdale, O.
SA—L. G. Pyle, Somerdale, O.
Miller & Pyle Mine; Drift; No. 6 Seam, 45 in. thick.
PO—Somerdale, O.; SP—Same; CTY—Tuscarawas; RR—W. & L. E.
MS—John Miller, Somerdale, O.
S of H—Mules and rope. Track gage 38 inches.
S of M—Hand.
EMP—30. Daily tonnage 180.
SIZES SHIPT—Run of Mine, Slack, Lump.

MILLFIELD-BAILEY COAL COMPANY
Millfield-Bailey Mine; Slope; No. 7 Seam, 48 inches thick.
PO—Millfield, O.; SP—Same; CTY—Athens; RR—T. & O. C.
MS—Val F. Cox, Millfield, O.
S of H—Mules. Track gage 42 inches.
S of M—Chain breast mach.
PP—Purchase power. 250 volts D. C. EMP—30.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

MILLIGAN, C. O.
General Office, Crooksville, O.
Owner—C. O. Milligan, Crooksville, O.
Milligan Mine; Drift; No. 6 Seam, 52 inches thick.
PO—Sattillo & McLaney, O.; SP—Same; CTY—Perry; RR—Penna.
S of H—Mules and elec. locos. Track gage 36 inches.
S of M—4 chain breast machs.
PP—250 volts D. C., 3 pumps.
EMP—60. Last years tonnage 50,000
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Screens.

MILLWOOD COAL COMPANY, THE
General Office, Barnesville, O.
PR—Ellis G. Eyer, Altoona, Pa.
VP—Dr. F. L. Cook, Barnesville, O.
TR—Ray K. Chalfont, Barnesville, O.
GM—Ray K. Chalfont, Barnesville, O.
GS—Chas. F. Chalfont, Barnesville, O.
PA—Ray K. Chalfont, Barnesville, O.
EM—Chas. F. Chalfont, Barnesville, O.
Sunshine Min. Drift; No. 8 Seam, 31 inches thick.

PO—Baileys Mills, O.; SP—Same; CTY—Guernsey; RR—B. & O.
S of H—Mules and motor. Track gage 38 in.
S of M—1 shortwall mach.
PP—Purchase power. Rotary converter, 250 volts D. C., 2 pumps.
EMP—50. Last years tonnage 20,000.
SIZES SHIPT—Run of Mine.

MINERTON COAL CO., THE
General Office, Columbus, Ohio.
PR—A. E. Sartain, Columbus, O.
VP—John Zuber, Columbus, O.
TR—S. M. Chase, Columbus, O.
GM—A. E. Sartain, Columbus, O.
EM—E. R. Kelley, Wellston, O.
Minerton Mine; Drift; No. 4 Seam, 54 in. thick.
PO—Alice, O.; SP—Hills, O.; CTY—Gallia; RR—H. V. R. R.
MP—Emmett Odert, Alice, O.
S of H—Mules, gasoline locos. Track gage 36 inches.
S of M—Hand.
EMP—30. Last years tonnage 12,144
SIZES SHIPT—Run of Mine.

MINGLEWOOD COAL CO
General Office, Wellston, O.
PR—J. E. Baumgartner, Wellston, O.
VP—W. R. Baumgartner, Wellston, O.
TR—W. R. Baumgartner, Wellston, O.
GM—W. R. Baumgartner, Wellston, O.
GS—J. H. Ervin, Wellston, O.
PA—W. R. Baumgartner, Wellston, O.
CE—E. M. Kelley, Wellston, O.
SA—The General Jackson Fuel Co., Dayton, O.

Minglewood Nos. 3, 4 and 5 Mines; Drift and Slope; 3, 4 and 5 Seams, 42 inches thick.
PO—Wellston, O. SP—Same. CTY—Jackson; RR—B. & O., H. V., D. T. & L.
S of H—Mules, rope and gasoline locos. Track gage 36 inches.
S of M—Hand.
PP—4 pumps, 2 water tube boilers.
EMP—85.
SIZES SHIPT—Run of Mine, Slack, Egg, Nut, Lump, Block.
PREP. EQUIPT—Bar Screens.

MINK RUN COAL COMPANY
General Office, 500 Shultz Bldg., Columbus, O.
PR—C. R. Brown, Columbus, O.
TR—Frank Schaeffring, Columbus, O.
PA—Frank Schaeffring, Columbus, O.
SA—Hitt-Davis Coal & Mining Co., Columbus, O.

Mink Run Mine; Slope; No. 6 Seam; 48 inches thick.
PO—Hills, O.; SP—Frt. Mohahala, O.; Exp., New Lexington, O.; CTY—Perry; RR—T. & O.
MS—J. H. Davis, Hills, O.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
PP—Water tube boiler.
EMP—18. Daily output, 100 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

MOHAWK COAL CO. (THE)
General Office, Wellston, O.
PR—G. W. Rittenour, Piketon, O.
VP—John H. Lockard, Wellston, O.
TR—J. A. Lockard, Wellston, O.
GM—J. A. Lockard, Wellston, O.
GS—John H. Lockard, Wellston, O.
PA—J. A. Lockard, Wellston, O.
SCO—Address the Company, Buyer, J. A. Lockard, Wellston, O.
SA—F. J. Lieb, Detroit, Mich.

Mohawk Mine; Drift; No. 5 Seam, 42 in. thick.
PO—Wellston, O.; SP—Same; CTY—Jackson; RR—B. & O.
MS—O. C. Sell, Wellston, O.
S of H—Mules. Track gage, 34 in.
S of M—Hand.
PP—1 1/2 H. P. fire tube boiler, 1 pump.
EMP—90. Last fiscal year output, 75,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Gravity Screens.
Old Information.

MONITOR COAL CO.
General Office, Nelsonville, O.
PR—James I. Meenan, Nelsonville, O.
TR—J. J. Meenan, Nelsonville, O.
GM—J. J. Meenan, Nelsonville, O.
GS—W. H. D., Nelsonville, O.
PA—J. J. Meenan, Nelsonville, O.
SA—The Nelsonville Coal Co., Columbus, O.

No. 1 Mine; Drift; Seam 60 in. thick.
PO—Nelsonville, O.; SP—Same; CTY—Athens; RR—H. V.
MS—James Smith, Nelsonville, O.
S of H—Mules. Track gage, 42 in.
S of M—Hand.
EMP—20. Last years tonnage 13,167.
SIZES SHIPT—Run of Mine.
(Continued on Next Page)

Nelsonville Coal Co.—Cont.

Nelsonville Mine; Drift; No. 7 Seam; 48 to 54 inches thick.
PO—Nelsonville, O.; SP—Kimberley, O.; CTY—Athens; RR—H. V.
S of H—Mules. Track gage 42 inches.
S of M—Shortwall machs.
PP—Power purchased. Transformer 2,200 to 220 volts A. C.
EMP—250. Daily tonnage 100.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

NELSONVILLE MINING COMPANY, THE

PR—James A. Greenwald, Toledo, O.
VP—Mark Kuhn, Toledo, O.
TR—L. L. Paxton, Toledo, O.
GM—L. S. Kuchn, Nelsonville, O.
EM—L. S. Kuchn, Nelsonville, O.
SA—Mfrs. Coal Co., Toledo, O.

Nelsonville Mine; Drift; No. 7 Seam; 54 in. thick.
PO—Nelsonville, O.; SP—Same; CTY—Athens; RR—H. V.
MS—W. J. Clause, Buchtel, O.
S of H—Mules. Track gage 42 in.
S of M—2 shortwall machs.
PP—Power purchased. Transformer 2,200 to 220 volts A. C., M. G. acts. volts D. C.
EMP—25. Daily tonnage 250.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.
Note—Successors to Nelsonville Coal Co. Old Information.

NEW POCOCK COAL CO.

General Office, Massillon, O.
PR—Wm. F. Kutz, Massillon, O.
VP—J. C. Haring, Massillon, O.
TR—Wm. F. Kutz, Massillon, O.
GM—Wm. F. Kutz, Massillon, O.
GS—W. C. Roberts, New Philadelphia, O.
PA—Wm. F. Kutz, Massillon, O.
EM—W. B. Stoner, Massillon, O.
SA—The Lake City Coal Company, Cleveland, O.

Massillon Pocock No. 7 Mine; Shaft; No. 1 Seam, 48 in. thick.
PO—Massillon, O.; SP—Navarre, O.; CTY—Stark; RR—W. & L. E.
MS—H. Patterson, Massillon, O.
S of H—Mules. Track gage 39 in.
S of M—Hand.
PP—2 150 H. P. horizontal tubular boilers, 5 pumps.
EMP—75. Last years tonnage 50,000.
SIZES SHIPT—Slack, Lump.
PREP. EQUIPT—Gravity Screens.

Massillon Pocock No. 8 Mine; Shaft; No. 1 Seam 54 in. thick.
PO—Massillon, O.; SP—Navarre, O.; CTY—Stark; RR—W. & L. E.
MS—W. J. Penman, Massillon, O.
S of H—Mules. Track gage 39 in.
S of M—Hand.
PP—2 150 H. P. Horizontal tubular boilers, 4 pumps.
EMP—125. Daily tonnage 800.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens, Picking Tables.
NOTE—This mine formerly known as the Maple Leaf Coal Co.

Belmont Mine; Shaft; No. 8-A Seam, 50 in. thick.
PO—Flushing, O.; SP—Same; CTY—Belmont; RR—B. & O.
MS—J. E. English, Flushing, O.
S of H—Mules and storage battery loco. Track gage 42 in.
S of M—6 shortwall machs.
PP—Power purchased, rotary converter, 100 K. W. 250 volts D. C., 1 150 H. P. Horizontal tubular boiler, 1 pump.
EMP—175. Daily tonnage 1,200.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.
NOTE—This mine formerly known as the Massillon City Coal Co.

Cambridge No. 1 Mine; Shaft; No. 7 Seam, 66 in. thick.
PO—Cambridge, O.; SP—Point Blue Bell, O.; CTY—Guernsey; RR—B. & O.
MS—Frank Barr, Cambridge, O.
S of H—Mules and storage battery loco. Track gage 42 in.
S of M—2 breast and 2 shortwall machs.
PP—2 150 H. P. Horizontal tubular boilers, gen. unit, 275 volts D. C., 2 pumps.
EMP—150. Daily tonnage 1,500.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.
NOTE—This mine formerly known as the Massillon Belmont Coal Co.

Maple Leaf No. 1 Mine; Drift; No. 7 Seam, 66 in. thick.
PO—Urichsville, O.; SP—Same; CTY—Tuscarawas; RR—B. & O.
MS—Wm. Crookston, Urichsville, O.
S of H—Mules and trolley motor
S of M—Shortwall mach.

PP—Power purchased, 150 K. W. rotary converter, 275 volts D. C., 1 pump.
EMP—150. Last years tonnage 100,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

NEW YORK COAL COMPANY

General Office, Columbus, O.
PR—E. M. Postom, Columbus, O.
TR—W. Thompson, Columbus, O.
GS—P. C. Morris, Nelsonville, O.
PA—P. C. Morris, Nelsonville, O.
EM—J. L. Murphy, Nelsonville, O.
MM—P. B. Verity, Nelsonville, O.
EE—P. B. Verity, Nelsonville, O.

No. 25 Mine; Shaft; No. 6 Seam, 72 in. thick.
PO—Chauncey, O. SP—Same. CTY—Athens. RR—T & O. C.
MS—M. T. Brand-nberg, Nelsonville, O.
SM—John Miller, Chauncey, O.
S of H—2 elec. locos. Track gage, 42 in.
S of M—5 chain breast type machs.
PP—2 M. geo. units, 250 volts D. C., 3 pumps. Purchase power.
EMP—177.
SIZES SHIPT—Run of Mine, Nut, Pea, Slack, Lump.
PREP. EQUIPT—Picking Tables, Shaker Screens.

No. 26 Mine; Shaft; No. 6 Seam, 72 in. thick.
PO—Nelsonville, O. SP—Same. CTY—Athens. RR—Hocking Valley.
MS—Thos. Burns, Nelsonville, O.
SM—D. F. Woodruff, Nelsonville, O.
S of H—2 trolley pole type locos. Track gage, 42 in.
S of M—3 chain breast type machs.
PP—2 M. geo. units, 250 volts D. C., 3 pumps. Purchase power.
EMP—176.
SIZES SHIPT—Run of Mine, Nut, Pea, Slack, Lump.
PREP. EQUIPT—Picking Tables, Shaker Screens.
Note—Formerly operated by Sunday Creek Company.

No. 28 Mine; Shaft; No. 6 Seam, 60 in. thick.
PO—Nelsonville, O. SP—Same. CTY—Athens. RR—Hocking Valley.
MS—Thos. Burns, Nelsonville, O.
SM—D. F. Woodruff, Nelsonville, O.
S of H—Mules. Track gage, 42 in.
S of M—2 chain breast type machs.
PP—1 M. geo. unit, 250 volts D. C., 2 pumps. Purchase power.
EMP—117.
SIZES SHIPT—Run of Mine, Nut, Pea, Slack, Lump, Block.
PREP. EQUIPT—Bar Screens.

No. 29 Mine; Shaft; No. 6 Seam, 66 in. thick.
PO—Nelsonville, O. SP—Same. CTY—Athens. RR—Hocking Valley.
MS—Amos Allen, Nelsonville, O.
S of H—Mules. Track gage, 42 in.
S of M—1 chain breast type mach.
PP—1 M. geo. unit, 250 volts D. C., 5 pumps. Purchase power.
EMP—36.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables, Shaker Screens.

No. 30 Mine; Slope; No. 6 Seam, 66 in. thick.
PO—Nelsonville, O. SP—Orhilton, O. CTY—Athens. RR—Hocking Valley.
MS—Arthur Shiff, Orhilton, O.
SM—Ode Donley, Orhilton, O.
S of H—2 Elec. locos. Track gage, 42 in.
S of M—3 chain breast type machs.
PP—Purchase power. 250 volts D. C., 7 pumps.
EMP—144.
SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

No. 31 Mine; Slope; No. 6 Seam, 66 in. thick.
PO—Nelsonville, O. SP—Buchtel, O. CTY—Athens. RR—Hocking Valley.
MS—Frank Oakley, Buchtel, O.
SM—John Kelter, Buchtel, O.
S of H—2 elec. locos. Track gage, 42 in.
S of M—3 chain breast type machs.
PP—Purchase power. 250 volts D. C., 3 pumps.
EMP—135.
SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

No. 34 Mine; Drift; Nos. 6 and 7 Seam, 42 and 48 in. thick.
PO—Nelsonville, O. SP—Floodwood, O. CTY—Athens. RR—Hocking Valley.
MS—P. W. Wickham, Nelsonville, O.
SM—D. F. Woodruff, Nelsonville, O.
S of H—Mules. Track gage, 42 in.
S of M—2 chain breast type machs.

PP—1 M. gen. unit, 250 volts D. C., 2 pumps. Purchase power.
EMP—131.
SIZES SHIPT—Run of Mine.

No. 36 Mine; Drift and Stripping, No. 7 Seam, 54 in. thick.
PO—Nelsonville, O. SP—Buchtel, O. CTY—Athens. RR—Hocking Valley.
MS—Frank Oakley, Buchtel, O.
SM—John Kelter, Buchtel, O.
S of H—6 elec. locos. Track gage 42 in.
S of M—4 chain breast type machs.
PP—1 M. gen. unit, 250 volts D. C., 3 pumps. Purchase power.
EMP—159.
SIZES SHIPT—Run of Mine, Nut, Pea, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

No. 37 Mine; Drift; No. 6 Seam, 72 in. thick.
PO—Nelsonville, O. SP—Carbon Hill, O. CTY—Athens. RR—Hocking Valley.
MS—N. Matheny, Nelsonville, O.
SM—R. E. Walker, Nelsonville, O.
S of H—2 elec. locos. Track gage, 42 in.
S of M—4 chain breast type machs.
PP—1 M. gen. unit, 250 volts D. C., 4 pumps. Purchase power.
EMP—150.
SIZES SHIPT—Run of Mine, Nut, Pea, Slack, Lump.
PREP. EQUIPT—Bar Screens.
Note—Formerly operated by New Pittsburgh Coal Co.

No. 38 Mine; Drift; No. 6 Seam, 60 in. thick.
PO—Nelsonville, O. SP—Buchtel, O. CTY—Athens. RR—Hocking Valley.
MS—M. Sheaky, Buchtel, O.
SM—John Kelter, Buchtel, O.
S of H—Mules. Track gage, 42 in.
S of M—1 chain breast type mach.
PP—1 M. gen. unit, 250 volts D. C., 1 pump. Purchase power.
EMP—11.
SIZES SHIPT—Run of Mine.

No. 39 Mine; Drift; No. 6 Seam, 60 in. thick.
PO—Nelsonville, O. SP—Carbon Hill, O. CTY—Athens. RR—Hocking Valley.
MS—E. W. Woody, Nelsonville, O.
SM—R. E. Walker, Nelsonville, O.
S of H—Mules. Track gage, 42 in.
S of M—1 chain breast type mach.
PP—250 volts D. C., 1 pump. Purchase power.
EMP—43. Last fiscal year output, 64,619 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.

Oreton Mine; Drift; No. 4-A Seam, 54 in. thick.
PO—Nelsonville, O. SP—Radcliffe, O. CTY—Athens. RR—Hocking Valley.
MS—P. Eberst, Oreton, O.
SM—C. L. Bates, Oreton, O.
S of H—1 elec. loco. Track gage, 42 in.
S of M—3 chain breast type machs.
PP—3 return tubular boilers, 450 H. P., 2 gen. units, 250 volts D. C.
EMP—79.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.
Note—Formerly operated by Alma Cement Co.

No. 51 Mine; Slope; No. 6 Seam, 48 in. thick.
PO—Rose Farm, O. SP—Tropic, O. CTY—Morgao. RE—Z. & W.
MS—James Evans, Crooksville, O.
S of H—2 elec. locos. Track gage, 42 in.
S of M—5 chain breast type machs.
PP—1 gen. unit, 250 volts D. C., 4 pumps. Purchase power.
EMP—129.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Shaker Screens, Picking Tables.
Note—Successors to Crown Coal Co.

NEWPORT COAL & MINING COMPANY, THE

General Office, New Philadelphia, O.
PR—H. E. Cole, Midvale, O.
VP—Mary A. Cole, Midvale, O.
TR—E. M. Cole, Midvale, O.
GM—E. M. Cole, Midvale, O.
GS—E. M. Cole, Midvale, O.
PA—E. M. Cole, Midvale, O.
CE—Geo. Arnold, New Philadelphia, O.

Newport Mine; Drift; No. 6 Seam, 48 to 72 in. thick.
PO—New Philadelphia, O.; SP—Urichsville, O.; CTY—Tuscarawas; RR—B. & O.
MS—L. Slingerman, Midvale, O.
S of H—Rope. Track gage, 36 in.
S of M—1 chain breast type and 3 short-wall machs.
PP—Power purchased, transformer 2300-250, M. G. sets, 3 pumps.
EMP—80. Last years tonnage 8,400.
PREP. EQUIPT—Gravity Screens.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
Old Information.

NICHOLSON CLAY PRODUCTS CO.

General Office, Cambridge, O.
PR—A. W. Nicholson, Cambridge, O.
TR—A. W. Nicholson, Cambridge, O.

Nicholson Mine; Slope; Dist. No. 6 Seam, 48 in. thick.
PO—Hyesville, O.; SP—Same; CTY—Guernsey; RR—P. R. R., Marietta Dist.
MS—John Bennett, Box 278, Hyesville, Ohio.
S of H—Mules and rope. Track gage 42 in.
S of M—Hand.
PP—2 return tubular boilers, total 250 H. P., 1 gen. unit, 250 volts D. C., 1 pump.
EMP—50. Daily tonnage 100.
SIZES SHIPT—Run of Mine.

NICHOLSON, P. R.

PR—P. R. Nicholson, Dillonvale, O.
GM—P. R. Nicholson, Dillonvale, O.
GS—W. A. Nicholson, Dillonvale, O.
PA—P. R. Nicholson, Dillonvale, O.
EM—J. B. Headley, Piney Fork, O.
EE—Chas. King, Dillonvale, O., R.F.D. Nicholson Mine; Drift; No. 8 Seam, 60 in. thick.
PO—Dillonvale, O.; SP—Same; CTY—Jefferson; RR—N. Y. C.
S of H—Mules, 1 trolley pole type and 1 elec. combination loco. Track gage, 36 in.
S of M—5 chain breast type machs.
PP—Power purchased, transformer 4000 to 220-250 volts A. C., rotary converters, 220 volts D. C., 1 pump.
EMP—75. Last fiscal year output, 67,327 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.
Old Information.

NIXON COAL COMPANY

General Office, Nelsonville, O.
GM—Bertha Nixon, Nelsonville, O.
PA—Bertha Nixon, Nelsonville, O.
SA—Bertha Nixon, Nelsonville, O.

Bertha Nixon Mine; Drift; No. 6 Seam, 72 in. thick.
PO—Hoyanville, O.; SP—Nelsonville, O.; CTY—Athens; RR—Hocking Valley.
MS—S. Vansickle, Doanville, O.
S of H—Mules.
S of M—Hand.
EMP—10. Last years tonnage 5,420.
SIZES SHIPT—Run of Mine.
Old Information.

NORTH BELMONT COAL CO.

General Office, Rockefeller Bldg., Cleveland, O.
TR—A. W. Dean, Cleveland, O.
GS—K. J. Bryan, Flushing, O.
PA—D. N. Sneltinger, Cleveland, O.
EM—Robt. P. Millard, Cleveland, O.
SA—Pittsburgh & Ohio Mining Co., Cleveland, O.

Tunnel Mine; Drift; No. 8 Seam, 48 in. thick.
PO—Flushing, O.; SP—Same; CTY—Belmont; RR—B. & O.
S of H—Trolley pole type locos. Track gage, 42 in.
S of M—2 chain breast type and 2 short-wall machs.
PP—2 fire tube boilers, 250 H. P., gen. units, D. C., 1 pump.
EMP—50. Daily output, 400 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

NORTH HILL COAL COMPANY, THE

General Office, Nelsonville, O.
PR—John McMillen, Columbus, O.
TR—C. C. Sharp, Nelsonville, O.
GM—C. C. Sharp, Nelsonville, O.
GS—C. C. Sharp, Nelsonville, O.
PA—C. C. Sharp, Nelsonville, O.
EM—E. K. Rink, Nelsonville, O.
EE—Harry Dilcher, Nelsonville, O.
SA—Central West Coal & Lumber Co., Columbus, O.

No. 75 Mine Shaft Lower Freeport No. 7 Seam, 62 in. thick.
PO—Chauncey, O.; SP—Same; CTY—Athens; RR—T & O. C.
MS—James Johnson, Nelsonville, O.
S of H—Mules, elec. locos. Track gage 42 in.
S of M—Shortwall machs.
PP—Power purchased, transformer 1000-2300 volts A. C., M. G. sets, 150 K. W., 250 volts D. C., 3 pumps.
EMP—150. Last years tonnage 42,200.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

NORTHERN MINING & FUEL COMPANY

New part of Northern & Southern Coal Co.

NORTHERN & SOUTHERN COAL CO., THE
Now operated by the Middle States Coal Company.

NUMBER THREE COAL COMPANY

GM—W. T. Phillips, Shawnee, O.
EM—W. J. Barry, New Straitsville, O.
Sales Agency—The Essex Coal Co., 1101
New Hayden Bldg., Columbus, O.

No. 3 Mine; Drift; No. 6 Middle Kit-
tanning Seam, 72 in. thick.
PO—New Straitsville, O.; SP—Same;
CTY—Perry; RR—E. & O.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine.

NYCE COAL COMPANY, THE

General Office, Bylesville, O.
PR—O. O. Beckett, Bylesville, O.
TR—Geo. McLaughlin, Bylesville, O.
GM—Geo. McLaughlin, Bylesville, O.
PA—Geo. McLaughlin, Bylesville, O.
SA—Geo. McLaughlin, Bylesville, O.

Beech Grove Mine; Drift; No. 7 Seam,
60 in. thick.
PO—Byesville, O.; SP—Same; CTY—
Guernsey; RR—Penna.
MS—John Birch, Bylesville, O.
S of H—Mules. Track gage 42 in.
S of M—Hand.
PP—Generate power, 250 volts D. C.
SIZES SHIPT—Run of Mine.

OAK HILL COAL COMPANY.

General Office, Massillon, O.
PR—John C. Albright, Massillon, O.
VP—C. A. Albright, Massillon, O.
TR—C. H. Albright, Massillon, O.
GM—C. H. Albright, Massillon, O.
GS—Geo. W. Bullach, Massillon, O.
PA—C. H. Albright, Massillon, O.
EM—B. Stone, Massillon, O.

Oak Hill Mine; Shaft; No. 1 Seam, 54
in. thick.
PO—Massillon, O.; SP—Brewster, O.;
CTY—Stark; RR—W. & L. E.
S of H—Mules. Track gage 39 in.
S of M—3 shortwall machs.
PP—3 return tubular boilers, 1 gen.
unit, 110 K. W., 250 volts D. C.,
4 pumps.
EMP—50. Daily tonnage 250.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT—Bar Screens, Washeries.
Old Information.

OAK HILL FIRE BRICK & COAL CO.

General Office, Oak Hill, O.
PR—T. J. Hughes, Oak Hill, O.
VP—E. J. Jones, Oak Hill, O.
TR—D. W. Morgan, Oak Hill, O.
GM—D. W. Morgan, Oak Hill, O.
GS—T. J. Morgan, Oak Hill, O.
PA—D. W. Morgan, Oak Hill, O.

Oak Hill Mine; Drift; No. 4 Seam, 48
in. thick.
PO—Oak Hill, O.; SP—Same; CTY—
Jackson; RR—H. & O. S. W.
MS—Geo. W. Webb, Oak Hill, O.
S of H—Mules. Track gage 30 in.
S of M—Hand.
Mine coal for own use.

OAKHILL MINING COMPANY

General Office, Oak Hill, O.
PR—J. G. Morgan, Oak Hill, O.
TR—J. G. Morgan, Oak Hill, O.
PA—J. G. Morgan, Oak Hill, O.
EM—A. E. Campbell, Oak Hill, O.
SA—Bier Coal Co., Oak Hill, O.

Liberty Mine; Drift; No. 5 Seam, 40
inches thick.
PO—Oak Hill, O.; SP—Same; CTY—
Jackson; RR—B. & O.
MS—A. E. Howell, Oak Hill, O.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—15. Last years tonnage 4,020.

OCO COAL COMPANY.

New Elm Grove Mining Co.

OHIO & PENNA. COAL CO.

General Office, Cleveland, O.
PR—Frank H. Glon, Cleveland, O.
TR—John M. Garfield, Cleveland, O.
GM—J. C. Nelms, Cleveland, O.
PA—J. C. Nelms, Cleveland, O.
SA—J. C. Nelms, Cleveland, O.

O. & P. No. 3 Mine; Drift; No. 8 Seam,
60 in. thick.
PO—Yorkville, O.; SP—Same; CTY—
Jefferson; RR—Penna.
MS—J. C. Burns, Yorkville, O.
S of H—Mules and 5 locos. Track gage
39 in.
S of M—10 chain breast machs.
PP—Power purchased, transformer 2600
to 500 volts, 2 rotary converters,
500 volts D. C., 2 gen. units, 2
pumps.
EMP—200. Last fiscal year output
213,724 tons.
SIZES SHIPT—Run of Mine, Slack, Nut,
Egg, Lump, Block.

O. & P. No. 1 Mine; Slope; Freeport
Seam, 4½ to 6 ft. thick.
PO—Bergholz, O. SP—Same. CTY—
Jefferson; RR—N. Y. C.
MS—M. Speicher, Bergholz, O.

S of H—Rope, mules and 4 trolley pole
type locos. Track gage, 42 in.
S of M—6 chain breast type and 2 short-
wall machs.
PP—4 return tubular boilers, total 600
H. P., 2 gen. units, 250 K. W.,
250 volts D. C.
EMP—250. Last fiscal year output
262,453 tons.
SIZES SHIPT—Run of Mine, Slack, Nut,
Egg, Lump, Block.

O. & P. No. 2 Mine; Shaft; Freeport
Seam, 4 to 6 ft. thick.
PO—Amsterdam, O. SP—Same. CTY—
Jefferson; RR—N. Y. C.
MS—Jno. Lees, Amsterdam, O.
S of H—Mules and 3 trolley pole type
locos. Track gage, 40 in.
S of M—6 chain breast type and 2 short-
wall machs.
PP—3 return tubular boilers, total 450
H. P., 1 gen. unit, 250 K. W.,
250 volts D. C., 4 pumps.
EMP—256. Last fiscal year output,
237,413 tons.
SIZES SHIPT—Run of Mine, Slack, Nut,
Egg, Lump, Block.

OHIO & WEST VIRGINIA COAL CO.

General Office, 412 S. Front St., Wheel-
ing, W. Va.
TR—Eva M. Johnson, Wheeling, W. Va.
GM—Eva M. Johnson, Wheeling, W. Va.
GS—Leroy R. Bruce, Martins Ferry, O.
PA—Leroy R. Bruce, R.D. No. 1, Box
23, Martins Ferry, O.

Nina Mine; Drift; Pittsburgh No. 8
Seam, 69 inches thick.
PO—Martins Ferry, O.; SP—Same; CTY—
Reimont; RR—C. & P., Penna.
Lines.
S of H—Mules. Track gage 34 inches.
S of M—Room and pillar mach.
PP—Will purchase power.
EMP—15. Last years tonnage 7,500.
SIZES SHIPT—Run of Mine.

OHIO BLUE RIDGE COAL CO.

General Office, Columbus, O.
PR—R. E. Hurst, Columbus, O.
VP—G. W. Coyle, Columbus, O.
TR—R. E. Hurst, Columbus, O.
GM—Morris Albaugh, Murray City, O.
GS—Morris Albaugh, Murray City, O.
PA—Morris Albaugh, Murray City, O.
BA—Central West Coal & Lumber Co.,
Columbus, O.

Ohio Blue Ridge Mine; Drift; No. 6
Seam, 78 in. thick.
PO—Murray City, O.; SP—Same; CTY—
Hocking; RR—Hocking Valley.
S of H—Mules.
S of M—2 shortwall machs.
PP—Power purchased, 2 pumps.
EMP—35. Last years tonnage 40,000.
SIZES SHIPT—Run of Mine, Slack,
Lump, Block.
Old Information.

OHIO CENTRAL COAL COMPANY.

General Office, 510 Schulz Bldg., Co-
lumbus, O.
PR—E. H. Glesy, Columbus, O.
SECY—F. Schaeffing, Columbus, O.
TR—D. C. Hitt, Columbus, O.
GM—R. M. Glesy, Lancaster, O.
SA—The Hitt-Davis Coal & Mining Co.,
Columbus, O.

Ohio Central Mine; Slope; Hocking No.
6 Seam, 50 in. thick.
PO—Moxahala, O.; SP—Same; CTY—
Perry; RR—T. & O. C.
MS—D. W. James, Moxahala, O.
S of H—Mules and 1 storage battery
loco. Track gage, 42 in.
S of M—Hand.
PP—1 125 H. P. water tube boiler, 1
gen. unit, 80 K. W., 240 volts
D. C., 2 pumps.
EMP—60. Last years tonnage 44,706.
SIZES SHIPT—Run of Mine, Pea, Lump.
PREP. EQUIPT—Gravity Screens.

OHIO COAL & LIME COMPANY

Now The Coal, Clay & Rock Products Co.

OHIO COLLIERIES CO. (THE).

General Office, Toledo, O.
PR—Geo. M. Jones, Toledo, O.
VP—W. I. Webb, Toledo, O.
TR—T. R. Earl, Toledo, O.
GM—G. S. Jones, Toledo, O.
PA—J. C. Blackburn, Toledo, O.
SA—The Geo. M. Jones Company, Toledo,
Ohio.

No. 209 Mine; Shaft; Ohio No. 6 Seam,
60 in. thick.
PO—Poston, O.; SP—Same; CTY—
Athens; RR—H. V.
MS—James Williams, Athens, O.
S of H—Mules and 3 trolley pole type
locos. Track gage, 42 in.
S of M—9 chain breast machs.
PP—Power purchased, 2300 volts M. C.
sets, 250 volts D. C., 3 150 H. P.
fire tube boilers, 8 pumps.
EMP—295. Last years tonnage 298,290.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
PREP. EQUIPT—Gravity Screens.

No. 210 Mine; Shaft; Ohio No. 6 Seam,
60 in. thick.
PO—Poston, O.; SP—Same; CTY—
Athens; RR—Hocking Valley.
MS—C. W. Farrar, Athens, O.
S of H—Mules and 3 trolley pole locos.
Track gage, 42 in.
S of M—11 chain breast machs.
PP—5 150 H. P. fire tube boilers, 2
150 K. W. gen. units, 250 volts
D. C., 9 pumps.
EMP—349. Last years tonnage 302,486.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
PREP. EQUIPT—Gravity Screens.

No. 211 Mine; Slope; Ohio No. 6 Seam,
72 in. thick.
PO—Poston, O.; SP—Same; CTY—
Athens; RR—H. V.
MS—Ed. Mules, Athens, O.
S of H—Mules and 3 trolley pole type
locos. Track gage, 42 in.
S of M—15 chain breast type machs.
PP—5 150 H. P. fire tube boilers, 2
200 K. W. gen. units, 250 volts
D. C., 4 pumps.
EMP—250. Last years tonnage 216,290.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
PREP. EQUIPT—Gravity Screens.

No. 255 Mine; Shaft; Ohio No. 6 Seam,
74 in. thick.
PO—Jacksonville, O.; SP—Same; CTY—
Athens; RR—T. & O. C.
MS—John T. Cox, Gloucester, O.
S of H—Mules and 4 trolley pole type
locos. Track gage, 42 in.
S of M—10 chain breast type machs.
PP—4 150 H. P. fire tube boilers, 1
200 K. W. and 1 100 K. W. gen.
units, 250 volts D. C., 7 pumps.
EMP—272. Last years tonnage 265,380.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
PREP. EQUIPT—Gravity Screens.

No. 256 Mine; Shaft; Ohio No. 6 Seam,
77 in. thick.
PO—Glouster, O.; SP—Same; CTY—
Athens; RR—T. & O. C.
MS—Wm. Miller, Gloucester, O.
S of H—Mules and 3 trolley pole type
locos. Track gage, 36 in.
S of M—9 chain breast type machs.
PP—5 150 H. P. fire tube boilers, 1
200 K. W., 1 100 K. W. gen.
units, 250 volts D. C., 17 pumps.
EMP—330. Last years tonnage 317,801.
SIZES SHIPT—Run of Mine, Slack, Nut,
Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking
Tables, Loading Booms.

No. 266 Mine; Shaft; Ohio No. 6 Seam,
78 in. thick.
PO—Hollister, O.; SP—Same; CTY—
Athens; RR—T. & O. C.
MS—John Coope, Hollister, O.
S of H—Mules and 2 trolley pole type
locos. Track gage, 42 in.
S of M—8 chain breast type machs.
PP—3 150 H. P. fire tube boilers, 2
100 K. W. gen. units, 250 volts
D. C., 10 pumps.
EMP—210. Last years tonnage 218,942.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
PREP. EQUIPT—Gravity Screens.

No. 267 Mine; Slope; Ohio No. 6 Seam,
85 in. thick.
PO—Glouster, O.; SP—Same; CTY—
Athens; RR—T. & O. C.
MS—Phillip Blower, Gloucester, O.
S of H—Mules and 2 trolley pole type
locos. Track gage, 42 in.
S of M—8 chain breast type machs.
PP—5 150 H. P. fire tube boilers, 2
150 K. W. gen. units, 250 volts
D. C., 8 pumps.
EMP—246. Last years tonnage 289,031.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Gravity Screens.

No. 268 Mine; Slope; Ohio No. 6 Seam,
108 in. thick.
PO—Rendville, O.; SP—Same; CTY—
Perry; RR—T. & O. C.
MS—Andrew Wilson, Corning, O.
S of H—Mules and 1 trolley pole type
loco. Track gage, 42 in.
S of M—5 chain breast type machs.
PP—3 150 H. P. fire tube boilers, 2
100 K. W. gen. units, 250 volts
D. C., 10 pumps.
EMP—133. Last years tonnage 131,964.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Gravity Screens.

No. 281 Mine; Shaft; Ohio No. 6 Seam,
72 in. thick.
PO—Jacksonville, O.; SP—Same; CTY—
Athens; RR—T. & O. C.
MS—Carl Pierce, R.F.D. No. 5, Glous-
ter, O.
S of H—Mules and 3 trolley pole type
locos. Track gage, 42 in.
S of M—11 chain breast machs.
PP—4 150 H. P. fire tube boilers, 3
100 K. W. gen. units, 250 volts
D. C., 9 pumps.

EMP—358. Last years tonnage 415,833.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
PREP. EQUIPT—Gravity and Shaker
Screens.

Nos. 301 and 302 Mines; Shafts; Ohio
No. 6 Seam, 108 in. thick.
PO—Congo, O.; SP—Same; CTY—
Perry; RR—Z. & W.
MS—J. J. Murray, Congo, O.
S of H—Mules and 4 trolley pole type
locos. Track gage, 42 in.
S of M—11 chain breast type and 1
shortwall machs.
PP—5 150 H. P. fire tube boilers, 2
60 K. W., 2 125 K. W. gen. units,
250 volts D. C., 14 pumps.
EMP—268. Last years tonnage 285,995.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
PREP. EQUIPT—Gravity and Shaker
Screens, Picking Tables, Loading
Booms.

OHIO CONSOLIDATED COAL CO., THE

General Office, 723-24 No. 8 E. Long St.,
Columbus, O.
PR—S. E. Ranney, Columbus, O.
VP—R. C. Kyle, Columbus, O.
TR—R. C. Kyle, Columbus, O.
GM—S. E. Ranney, Columbus, O.
GS—Wm. Blosset, Columbus, O.
PA—R. C. Kyle, Columbus, O.
SCO—Address the Company, Buyer, C.
Studer, Wilbren, O.

Wilbren Mine; Drift; No. 6 Hocking
Seam, 58 inches thick.
PO—New Lexington, O.; SP—Same; Exp.,
Wilbren, O.; CTY—Perry; RR—Pa.
S of H—Trolley pole type and storage bat-
tery locos. Track gage 42 inches.
S of M—5 chain breast type and 2 over-
head cutter machs.
PP—Power purchased, 1—150 K. W. gen.
units, 250 volts D. C., 4 pumps.
EMP—88. Daily tonnage 500.
SIZES SHIPT—Run of Mine, Slack, Egg,
Lump.
PREP. EQUIPT—Gravity Screens.

OHIO FIRE BRICK CO. (THE).

General Office, Oak Hill, O.
PR—D. Davis, Oak Hill, O.
VP—E. J. Davis, Oak Hill, O.
TR—A. M. Davis, Oak Hill, O.
GM—E. F. Davis, Oak Hill, O.
GS—E. F. Davis, Oak Hill, O.
PA—E. P. Davis, Oak Hill, O.

Ohio Mine; Drift; No. 5 Seam, 48 in.
thick.
PO—Oak Hill, O.; SP—Same; CTY—
Jackson; RR—B. & O.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
EMP—10. Last years tonnage 8,000.
SIZES SHIPT—Run of Mine, Slack, Pea,
Nut, Lump.
PREP. EQUIPT—Gravity Screens.

OHIO LINWOOD COAL COMPANY

General Office, 104 McLain Bldg.,
Wheeling, W. Va.
PR—Robert M. Ludwig, Wheeling, W. Va.
VP—F. J. Thompson, Wheeling, W. Va.
TR—John R. Rhode, Wheeling, W. Va.
GM—E. C. Fowler, Wheeling, W. Va.

Ohio Linwood Mine; Drift.
PO—Bellaire, O.; SP—Same; CTY—Bel-
mont; RR—Z. & O.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine.
Note—Mine under development.

OHIO MINING COMPANY

General Office, Columbus, O.
PR—D. L. Wallace, Nelsonville, O.
VP—J. A. Stalter, Columbus, O.
TR—Sumner Cottingham, Columbus, O.
GM—S. Cottingham, Columbus, O.
GS—D. L. Wallace, Nelsonville, O.
PA—Fred Essex, Columbus, O.
EM—C. H. Finstewald, Nelsonville, O.
SA—Essex Coal Co., Columbus, O.

Ohio Mine; Shaft; No. 6 Seam, 108
in. thick.
PO—Jacksonville, O.; SP—Same; CTY—
Athens; RR—Ohio Central.
MS—Bert Knight, Jacksonville, O.
S of H—Mules and trolley pole type elec.
locos. Track gage, 44 in.
S of M—2 shortwall machs.
PP—250 volts D. C. Purchase power.
EMP—200. Daily output, 1500 tons.
SIZES SHIPT—Run of Mine, Slack, Nut,
Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking
Tables, Loading Booms.

OHIO MINING & RAILWAY COMPANY.

General Office, Mineral City, O.
RECEIVER—Geo. J. Markley, Mineral
City, O.
GS—Lester Lyda, Magnolia, O.
EE—William Ward, Magnolia, O.
SCO—Address the Company, Buyer, T.
A. Markley, Mineral City, O.

(Continued on Next Page)

Ohio Mining & Railway Co.—Cont.

Clover Leaf & Horse Shoe Mines; Shaft and Drift; No. 5 Seam, 38 in. thick.
PO—Mineral City, Ohio; SP—Same; CTY—Tuscarawas; RR—R. & O.
 S of H—Mules, rope and storage battery loco. Track gage 36 in. to 60 in.
S of M—12 elec. machs.
PP—2 water tube boilers, total 300 H. P., gen. units, 250 volts D. C., 8 pumps.
EMP—175. Last fiscal year output, 225,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Picking Tables, Shaker Screens, Loading Booms.

OHIO STANARD COAL COMPANY

General Office, 10 South Fifth St., Zanesville, O.
PR—A. W. Sieglaff, Zanesville, O.
VP—Gus Katsmpes, Zanesville, O.
TR—F. H. Tannhill, Zanesville, O.
GM—Chas. A. Kelly, Zanesville, O.
GS—Chas. A. Kelly, Zanesville, O.
PA—A. W. Sieglaff, Zanesville, O.
EM—Geo. U. Jones, Zanesville, O.
EE—Wm. Gibbons, East Pike, Zanesville, Ohio.

Nos. 1, 2 and 3 Mines; Drift; No. 5 and 6 Seams; 30 to 48 inches thick.
PO—Zanesville, O.; SP—Same; CTY—Muskingum; RR—O. R. & W.
 S of H—Mules and rope. Track gage 38 inches.
 S of M—Hand, comp. air and elec. machines.
PP—Power purchased, 1—100 K W gen. unit, 250 volts D. C., 1—150 H. P. fire tube boiler, 1 pump.
EMP—22. Daily tonnage 100.
SIZES SHIPT—Run of Mine, Slack
PREP. EQUIPT—Screens.

OLD TOWN COAL CO., THE

General Office, New Philadelphia, O.
PR—John Marchesy, Sr., New Philadelphia, O.
VP—Mrs. Maris, Marchesy, New Philadelphia, O.
TR—John Marchesy, Jr., New Philadelphia, O.
GM—John Marchesy, Jr., New Philadelphia, O.
PA—John Marchesy, Jr., New Philadelphia, O.
SA—John Marchesy, Jr., New Philadelphia, O.

Old Town No. 1 and 2 Mines; Drift; No. 6 Seam, 54 to 60 inches thick.
PO—R. R. No. 1, New Philadelphia, O.; SP—Same; CTY—Tuscarawas; RR—B. & O., Penna. Lines.
 S of H—Mules. Track gage 39 inches.
S of M—Hand.
EMP—35.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

OLIVER COAL COMPANY, THE

General Office, Grove City, O.
PR—J. V. Oliver, Box 285, Columbus, O.
VP—J. L. Kogelmeyer, 927 E. Livingston Ave., Columbus, O.
TR—H. G. Grossman, Grove City, O.
GM—J. V. Oliver, Box 285, Columbus, O.
GS—H. G. Grossman, Grove City, O.
PA—H. G. Grossman, Grove City, O.
SC—Address the Company, Buyer, H. G. Grossman, Grove City, O.
SA—Northland Coal Co., Clinton Bldg., Columbus, O.

Hope Mine; Drift; Jackson No. 6 Seam, 46 inches thick.
PO—Zaleski, R. D. No. 1, O.; SP—Hope Station, O.; CTY—Vinton; RR—B. & O.
MS—Claude Jones, Zaleski, O.
 S of H—Mules. Track gage 36 inches.
S of M—1 shortwall mach.
PP—1 150 H. P. water tube boiler, 1—100 K. W. gen. unit, M. G. Sets, 220 volts D. C.
EMP—30. Daily tonnage 150.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

ORIENT COAL CO.

General Office, Columbus, O.
PR—Geo. W. Moss, Columbus, O.
VP—W. H. Sheeron, Columbus, O.
TR—E. H. Alten, Columbus, O.
GM—Geo. W. Moss, Columbus, O.
GS—W. H. Sheeron, Columbus, O.
PA—W. H. Sheeron, Columbus, O.
CE—F. H. Kno Derer, Columbus, O.
SA—Geo. W. Moss, Columbus, O.

Orient Mine; Drift; No. 3 Lower Mercer Seam, 48 in. thick.
PO—Columbus, O.; SP—McArthur, O.; CTY—Vinton; RR—Hocking Valley.
MS—Ralph Crow, McArthur, O.
 S of H—Mules.
S of M—Hand.
EMP—20. Daily output, 100 tons.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Gravity Screens.

OWL CREEK COAL COMPANY

Out of business.

PACKARD COAL MINING CO., THE

General Office, Columbus, O.
PR—M. L. Yuster, Columbus, O.
VP—R. W. Yuster, Columbus, O.
TR—H. S. Ridd, Columbus, O.
GM—M. L. Yuster, Columbus, O.
GS—W. E. Wheeler, Columbus, O.
PA—C. F. Bookman, Columbus, O.
CE—W. J. Barry, New Straitsville, O.
EM—W. E. Wheeler, Columbus, O.
EE—Wm. McConnell, Buchtel, O.
SA—Address the Company, Columbus, O.

Packard Mine; Slope; Nos. 6 and 7 Seams; 60 inches thick.
PO—Nelsonville, O.; SP—Same; CTY—Athens; RR—Hocking Valley.
MS—John Hilton, Sr., Nelsonville, O.
 S of H—Mules.
S of M—Electric mach.
PP—Power purchased 220 volts.
EMP—12. Last years tonnage 1,938.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut.
PREP. EQUIPT—Bar Screens, Loading Booms.

PAINE COAL COMPANY

General Office, Jackson, O.
GM—J. B. Paine, Jackson, O.
 Paine Mine; Slope; No. 1 Seam, 36 inches thick.
PO—Jackson, O.; SP—Same; CTY—Jackson; RR—H. T. & I.
MS—D. W. Kidge, Jackson, O.
 S of H—Mules, rope. Track gage 36 in.
S of M—Hand.
PP—1 fire tube boiler, 20 H. P., 2 pumps.
EMP—13. Last years tonnage 10,213.
SIZES SHIPT—Run of Mine, Nut, Pea, Slack, Lump.
PREP. EQUIPT—Bar Screens.

PAISLEY, J. A. COMPANY.

General Office, 340 Kirby Bldg., Cleveland Ohio.
PR—J. A. Paisley, Cleveland, O.
TR—Ruth P. Bradford, Cleveland, O.
GM—J. C. Halliwell, Stewartsville, O.
STPT—J. C. Halliwell, Stewartsville, O.
PA—H. H. Berry, Stewartsville, O.
SC—J. A. Paisley Supply Buyer, J. Kinsinger, Stewartsville, O.
Sales Agency—The Valley Camp Coal Co., 319 Kirby Bldg., Cleveland, O.

Lucy Mine; Drift; Pittsburgh No. 8 Seam; 66 to 72 in. thick.
PO—Stewartsville, O.; SP—Neft, O.; CTY—Belmont; RR—B. & O.
 S of H—1 10-ton, 1 15-ton, 1 6-ton and 1 8-ton locos. Track gage 42 in.
S of M—3 chain breast type and 2 short-wall machs.
PP—Power purchased, transformer 2300 to 196 volts, rotary converters, 150 K. W., 250 volts D. C., 3 pumps.
EMP—100. Last years tonnage 60,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.

PALMER COAL COMPANY, THE

General Office, New Lexington, O.
GM—P. A. McIntyre, New Lexington, O.
GS—P. A. McIntyre, New Lexington, O.
PA—P. A. McIntyre, New Lexington, O.
SA—Geo. A. Enos Coal Co., Cleveland, O.

Palmer Mine; Drift; S. Zanesville Seam, 48 in. thick.
PO—R. F. D. No. 1, Stewartown, O.; SP—Cannelville, O.; CTY—Muskingum; RR—Z. & W.
 S of H—Mules. Track gage 42 in.
S of M—Hand.
EMP—20. Last years tonnage 3,500.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by the Staton Coal Company.

PAN-AMERICAN COAL CO.

Sedalia Mine. Now part of the Warner Collieries Co.
 Pan-American Mine. Now Zanesville & Western Coal Co.
 Turkey Run Mine. Now Zanesville & Western Coal Co.

PAN HANDLE COLLIERIES CO.

General Office, 8 E. Broad St., Columbus, O.
PR—J. W. Blower, Columbus, O.
VP—D. C. Thomas, Columbus, O.
TR—J. W. Blower, Columbus, O.
GM—D. C. Thomas, Columbus, O.
PA—E. W. Blower, Columbus, O.

Wallett Mine; Drift; Pittsburgh No. 8 Seam, 60 inches thick.
PO—Fernwood, O.; SP—Same; CTY—Jefferson; RR—P. C. C. & St. L.
 S of H—Mules, Track gage 36 inches.
S of M—2 elec. machs.
EMP—20.
SIZES SHIPT—Run of Mine.

PARAMOUNT COAL MING CO., THE

General Office, 11 S. Muskingum St., Massillon, O.
PR—John Bosely, Massillon, O.

VP—Alfred Dronhard, Massillon, O.
TR—Orin Ames, Massillon, O.
GM—John Bosely, Massillon, O.
PA—Orin Ames, Massillon, O.
SA—John Bosely, Massillon, O.

No. 1 Daley Mine; Shaft; No. 1 Massillon Seam, 60 in. thick.
SP—Canal Fulton, O.; CTY—Stark; RR—B. & O.
 S of H—Mules.
S of M—Hand.
PP—2 100 H. P. fire tube boilers.
PREP. EQUIPT—Bar Screens.
 No. 2 Shamo Mine; No. 1 Massillon Seam, 60 in. thick.
SP—Canal Fulton, O.; CTY—Stark; RR—B. & O.
 S of H—Mules.
S of M—Hand.
PP—2 100 H. P. fire tube boilers.
PREP. EQUIPT—Bar Screens.

PASCOLA COAL CO.

General Office, Salem, O.
OWNER—John Pascola, Salem, O.

Pascola Mine; Shaft; No. 3 Seam, 40 in. thick.
PO—Salem, O.; SP—Same; CTY—Marietta.
 S of H—Mules. Track gage 30 in.
S of M—Hand, Chain breast mach.
PP—Purchase power, transformer, 2200—500 volts A. C., M. G. Sets, rotary converters, 250 volts D. C., 1 fire tube boiler, 50 H. P.
EMP—15.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Bar Screens.
NOTE—Formerly operated by the Callahan Coal Company.

PASKELL COAL CO., THE.

General Office, New Lexington, O.
PR—John Paskell, New Lexington, O.
VP—Samuel Paskell, New Lexington, O.
TR—D. L. Van Atta, New Lexington, O.
GM—John Paskell, New Lexington, O.
GS—John Paskell, New Lexington, O.
PA—John Paskell, New Lexington, O.
SA—P. L. Van Atta, New Lexington, O.
 Additional Information on Page 610.

Azbell Mine; Drift; No. 6 Seam, 52 in. thick.
PO—Shawnee, O.; SP—Same; CTY—Perry; RR—B. & O.
 S of H—Mules. Track gage 44 in.
S of M—Shortwall machs.
PP—Power purchased.
EMP—25. Daily tonnage 150-200.
SIZES SHIPT—Run of Mine, Lump.
NOTE—Formerly operated by the Azbell Coal Company.

PATTON & BARNES

PR—R. N. Barnes, Coshocton, O.
GS—E. E. Patton, Coshocton, O.

Rock Run No. 2 Mine; Drift; No. 6 Seam, 48 in. thick.
PO—Coshocton, O.; SP—Same; CTY—Coshocton; RR—W. & L. E., Zanesville Branch.
 S of H—Mules. Track gage 50 inches.
S of M—Hand.
 Daily output, 50 tons.
SIZES SHIPT—Run of Mine, Slacks, Nut, Lump.
Note—Successors to Rock Run Coal Co.

PATTON, WM. F. COAL CO. (THE).

General Office, Nelsonville, O.
PR—Frank Patton, Nelsonville, O.
VP—Jos. Dewhurst, Nelsonville, O.
TR—Geo. M. Merritt, Nelsonville, O.
GM—Jos. Dewhurst, Nelsonville, O.
GS—Jos. Dewhurst, Nelsonville, O.
PA—Geo. M. Merritt, Nelsonville, O.
SA—Geo. M. Merritt, Nelsonville, O.

Patton Mine; Drift; Kittanning No. 6 Seam, 78 in. thick.
PO—Nelsonville, O.; SP—Same; CTY—Hocking; RR—Hocking Valley.
 S of H—Mules. Track gage, 42 in.
S of M—2 chain breast type machs.
PP—Power purchased, 250 volts D. C., 2 pumps.
EMP—25. Last years tonnage 22,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
PREP. EQUIPT—Gravity Screens.

PAUL COAL COMPANY, THE

General Office, 52½ Nimb St., Zanesville, O.
PR—Chas. W. McShane, Zanesville, O.
VP—Frank J. Paul, Zanesville, O.
TR—Ralph Paul, Zanesville, O.
GM—Ralph Paul, Zanesville, O.

PA—Ralph Paul, Zanesville, O.
Mill Run No. 3 Mine; Slope; No. 5 Seam, 54 in. thick.
PO—Zanesville, O.; SP—Same; CTY—Muskingum; RR—Penna.
MS—Chas. Paynter, Zanesville, O.
 S of H—Mules. Track gage, 30 in.
S of M—Hand.
EMP—14. Last fiscal year output, 20,000 tons.
SIZES SHIPT—Run of Mine, Lump.
 Old Information

PEACOCK COAL CO. (THE)

Now part of Great Lakes Coal Mining Co.

PEERLESS COAL COMPANY, THE

General Office, New Philadelphia, O.
PR—Willard Greenman, 254 W. Ray St., New Philadelphia, O.
VP—Geo. Lahmers, 190 East Ave., New Philadelphia, O.
TR—Elmer Kinsey, 410 N. Broadway, New Philadelphia, O.
GM—Willard Greenman, 254 W. Ray St., New Philadelphia, O.
GS—Ben Newton, New Philadelphia, O.
PA—Ben Newton, New Philadelphia, O.

Peerless Mine; Drift; No. 6 Seam; 48 inches thick.
PO—New Philadelphia, O.; SP—Same; CTY—Tuscarawas; RR—Y. & P.
 S of H—Mules, Track gage 28 inches.
S of M—Comp. air punchers.
PP—1 80 H. P. fire tube boiler, 1 pump.
EMP—10. Daily tonnage 50.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

PENN OHIO COAL CO., THE

General Office, First Nat'l Bank Bldg., East Liverpool, O.
PR—C. W. Hammond, Bolivar, Pa.
TR—B. R. Hammond, East Liverpool, O.
GM—B. R. Hammond, East Liverpool, O.
CE—Millard & Ford, Cleveland, O.

Obio No. 1 Mine; Drift; No. 6 Seam, 48 inches thick.
PO—East Liverpool, O.; SP—Same; CTY—Columbiana; RR—Y. & O. and Erie.
MS—August Swanson, East Liverpool, O.
 S of H—Elec. locos. Track gage 36 in.
S of M—Shortwall machs. and 1 puncher.
PP—Power purchased, transformer 2200—440 volts A. C., M. G. Sets, 250 volts D. C., 1 pump.
EMP—70. Last years tonnage 20,000.
SIZES SHIPT—Run of Mine.

PERRY COAL & SAND CO., THE

Out of Business

PIKE COAL CO.

Now Dixie Coal & Mining Co.

PINE HOLLOW COAL COMPANY, THE

General Office, Shawnee, O.
PR—C. S. Geese, Shawnee, O.
TR—C. S. Geese, Shawnee, O.
GS—Wm. Oswabugh, Hemlock, O.
PA—C. S. Geese, Shawnee, O.
SC—Sunday Creek Coal Co., Hemlock, O.
SA—Buyer, J. B. Shiff, Glenster, O.
 Shawnee No. 1 Mine; Drift; No. 6 Seam; 54 inches thick.
PO—Shawnee, O.; SP—Same; CTY—Perry; RR—Z. & W.
 S of H—Mules. Track gage 42 inches.
S of M—Chain breast type mach.
PP—Power purchased.
EMP—30. Daily output, 150 tons.
SIZES SHIPT—Run of Mine.
 Old Information.

PINEY FORK COAL COMPANY.

General Office, Columbus, O.
PR—J. W. Blower, Columbus, O.
VP—D. C. Thomas, Columbus, O.
TR—J. W. Blower, Columbus, O.
GM—J. W. Blower, Columbus, O.
GS—W. C. Diekey, Weems, O.
PA—E. W. Blower, Columbus, O.

Electro Mine; Stripping; Pittsburgh No. 8 Seam, 58 to 62 in. thick.
PO—Weems, O.; SP—Smithfield, O.; CTY—Jefferson; RR—C. & W. Va.
 S of H—2 steam locos. Track gage 36 in.
PP—Power purchased, transformer 44—000 to 400 volts A. C., M. G. set, 250 volts D. C.
EMP—50. Ten months tonnage 85,000.
SIZES SHIPT—Run of Mine, Slack.
PREP. EQUIPT—Picking Tables, Conveyor.

PITTSBURGH & CLEVELAND COAL CO (THE).

Now Sauters Coal Company.

PITTSBURGH COAL COMPANY (THE).

General Office, Columbus, O.
PR—W. K. Field, Oliver Bldg., Pittsburgh, Pa.
VP—G. C. Weltzell, Columbus, O.
GM—G. C. Weltzell, Columbus, O.
TR—H. S. Mervin, Columbus, O.
PA—R. W. Mackensen, Columbus, O.
GS—F. S. Knox, Jr., Columbus, O.
EM—J. E. Lason, Nelsonville, O.

Greendys Mine No. 5, Drift, No. 6 Seam 72 to 81 in. thick.
PO—Morgantown, O.; SP—Same; CTY—Hocking; RR—Hocking Valley.
MS—John Slater, Morgantown, O.
SM—H. H. Kropp, Murray City, O.
 S of H—Mules, rope and 2 trolley pole type locos. Track gage, 42 in.
 S of M—9 chain breast type machs.

(Continued on Next Page)

Pittsburgh Coal Co.—Cont.

PP—4 return tubular boilers, 600 H. P., 2 100 K. W. gen. units, 250 volts D. C., purchase some power, transformer, 2500 to 250 volts, rotary converters, 250 volts D. C., 10 pumps.

EMP—300. Daily output, 1500 tons. SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.

PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

Murray City No. 7, Drift, No. 6 Seam. 72 to 84 in. thick.

PO—Murray, O.; SP—Same; CTY—Hocking; RR—Hocking Valley.

MS—John Slater, Murray, O.

SM—H. H. Kropp, Murray City, O.

S of H—Mules, rope and 2 trolley pole type locos. Track gage, 42 in.

S of M—7 chain breast type machs.

PP—5 return tubular boilers, 750 H. P., 2 150 K. W. gen. units, 250 volts D. C., 6 pumps.

EMP—200. Daily output, 1,200 tons. SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.

PREP. EQUIPT—Bar and Revolving Screens.

Kittanning No. 9, Shaft, No. 6 seam. 72 to 84 in. thick.

PO—Nelsonville, O.; R. F. D. No. 1; SP—Beaumont, O.; CTY—Athens; RR—Hocking Valley.

MS—Dan Sbay, R. F. D. No. 1, Nelsonville, O.

SM—J. R. Woods, R. F. D. No. 1, Nelsonville, O.

S of H—Mules and 4 trolley pole type locos. Track gage, 42 in.

S of M—8 chain breast type machs.

PP—5 return tubular boilers, 750 H. P., 2 150 K. W. gen. units, 250 volts D. C., 7 pumps.

EMP—350. Daily output, 1,800 tons. SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Bar Screens, Picking Tables, Loading Booms.

New Monarch No. 10, Shaft, No. 6 Seam, 72 to 84 in. thick.

PO—Athens, O.; R. F. D. No. 6; SP—Hocking, O.; CTY—Athens; RR—H. V.

MS—Jos. Slater, R. D. No. 6, Athens, O.

SM—J. R. Woods, R. D. No. 6, Athens, O.

S of H—Mules and 4 trolley pole type locos. Track gage, 42 in.

S of M—8 chain breast machs.

PP—5 return tubular boilers, 750 H. P., 2 150 K. W. gen. units, 250 volts D. C., 7 pumps.

EMP—300. Daily output, 1,200 tons. SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Bar and Shaker Screens.

Pomeroy No. 20 Mine; Drift; Slope; No. 6 Seam, 60 in. thick.

PO—Pomeroy, O.; SP—Same; CTY—Meigs; RR—H. V.

MS—Frank Pendergrass, Pomeroy, O.

SM—L. R. Karr, Pomeroy, O.

S of H—Mules and 5 trolley pole type locos. Track gage, 42 in.

S of M—6 chain breast and 9 shortwall machs.

PP—Purchase power, 500 volts D. C.

EMP—200. Daily output, 1,000 tons. SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.

PREP. EQUIPT—Shaker and Gravity Screens, Picking Tables, Loading Booms.

PITTSBURGH-SUPERIOR COAL COMPANY.

Now a part of Cambridge Collieries Co.

POMEROY COLLIERY CO. (THE).

General Office, Coshocton, O.

PR—Elmer Sell, Coshocton, O.

TR—Allen W. Rowe, Coshocton, O.

GM—John J. Rowe, Pomeroy, O.

GS—John J. Rowe, Pomeroy, O.

PA—John J. Rowe, Pomeroy, O.

EM—B. E. McCown, Mason, W. Va.

SA—United Coal Sales Co., Columbus, O.

Pomeroy Colliery Mine; Shaft; Pittsburg No. 8 Seam, 58 in. thick.

PO—Pomeroy, O.; SP—Same; CTY—Meigs; RR—Hocking Valley.

S of H—Storage battery locos. Track gage 38 inches.

S of M—1 shortwall and 1 longwall machs.

PP—150 H. P. motor, 100 K. W., generator, 250 volts D. C., 1 pump.

EMP—60. Last years tonnage 30,000.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Shaker Screens, Loading Booms.

POMEROY MINING COMPANY

Now The K-nova Mining Co.

PORTSMOUTH REFRACTORIES CO., THE

General Office, Portsmouth, O.

TR—W. L. Hitchcock, Portsmouth, O.

VP—R. D. York, Portsmouth, O.

TR—W. L. Hitchcock, Portsmouth, O.

GM—W. B. Hitchcock, Portsmouth, O.

GS—C. W. Potts, Firebrick, O.

PA—John E. Fritz, Portsmouth, O.

CE—W. C. Wanger, Portsmouth, O.

EM—Ed. Kelley, Wellston, O.

EE—Samuel Bocock, Portsmouth, O.

SCO—Address the Company, Buyer, W. Wasner, Firebrick, O.

No. 4 Mine; Drift and Stripping; No. 4 Seam, 18 in. thick.

PO—Firebrick, O.; SP—Same; CTY—Lawrence; RR—B. & O.

S of H—Mules. Track gage 36 in.

S of M—Hand.

PP—2 pumps.

EMP—18. Last years tonnage 12,683.

SIZES SHIPT—Run of Mine.

No. 5 Mine; Drift and Stripping; No. 5 Seam, 36 in. thick.

PO—Firebrick, O.; SP—Same; CTY—Lawrence; RR—B. & O.

S of H—Mules. Track gage 36 in.

S of M—Hand.

PP—1 pump.

EMP—6. Last years tonnage 1,580.

SIZES SHIPT—Run of Mine.

POSTON CONSOLIDATED COAL CO. (THE)

General Office, Athens, O.

PR—C. L. Poston, Athens, O.

VP—Geo. H. Smith, Chillicothe, O.

TR—T. R. Biddle, Athens, O.

GM—T. R. Biddle, Athens, O.

PA—T. R. Biddle, Athens, O.

EM—R. A. Van Dyke, Athens, O.

EF—Lewis Woods, Millfield, O.

SCO—Address the Company, Buyer, F. C. Shafer, Millfield, O.

SA—The Poston Consolidated Coal Co., 906 Citizens Bldg., Cleveland, O.

No. 6 Mine; Shaft; No. 6 Hocking Seam, 72 inches thick.

PO—Millfield, O.; SP—Same; CTY—Athens; RR—T. & O. C. N. Y. C. System.

MS—John Brewer, Millfield, O.

S of H—6 trolley pole type locos. Track gage, 42 in.

S of M—8 chain breast type machs.

PP—6 150 H. P. fire tube boilers, 2 gen. units, 250 K. W., 250 volts D. C., 11 pumps.

EMP—140. Last fiscal year output, 249,090 tons.

SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Egg, Lump, Block.

PREP. EQUIPT—Gravity and Shaker Screens, Picking Tables, Loading Booms.

No. 7 Mine; Shaft; Sedalia No. 7 Seam, 48 in. thick.

PO—Millfield, O.; SP—Same; CTY—Athens; RR—T. & O. C.

MS—Herman Theisen, Millfield, O.

S of H—5 trolley pole type locos. Track gage, 42 in.

S of M—Shortwall machs.

PP—2 150 H. P. fire tube boilers, gen. units, 150 K. W., 250 volts D. C., 8 pumps.

EMP—95. Last fiscal year output, 110,606 tons.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Gravity and Revolving Screens.

POSTON, L. D. COAL COMPANY

General Office, Athens, O.

PR—L. D. Poston, Athens, O.

TR—W. W. Ackley, Athens, O.

GM—W. W. Ackley, Athens, O.

GS—Chas. Cox, Jacksonville, O.

PA—W. W. Ackley, Athens, O.

SCO—Poston Con. Coal Co., Millfield, O., Buyer, F. C. Shafer, Athens, O.

SA—Poston Consolidated Coal Co., Cleveland, O.

No. 65 Mine; Slope; No. 7 Seam; 54 inches thick.

PO—Millfield, O.; SP—Same; CTY—Athens; RR—K. & M.

S of H—Electric loco.

S of M—Shortwall mach.

PP—Power purchased, Transformer 2,200 to 250 volts.

EMP—45. Last years tonnage 50,940.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Shaker Screens.

POWELL CREEK COAL CO.

General Office, Nelsonville, O.

PR—C. L. Preston, Nelsonville, O.

VP—V. S. Morgan, Nelsonville, O.

TR—E. L. Preston, Nelsonville, O.

GM—C. L. Preston, Nelsonville, O.

PA—C. L. Preston, Nelsonville, O.

SA—C. L. Preston, Nelsonville, O.

Powell Creek Mine; Slope; Nelsonville No. 6 Seam, 72 in. thick.

PO—Johns, O.; SP—New Pittsburg, O.; CTY—Hocking; RR—H. V.

MS—Henry Gaspar, Enfield, O.

S of H—Mules and rope. Track gage, 42 in.

S of M—2 chain breast machs.

PP—Purchased power, M. G. sets, 250 volts D. C., 2 pumps.

EMP—60. Last years tonnage 50,000.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Bar Screens.

POWER COAL CO.

General Office, Coshocton, O.

GS—A. J. Power, Coshocton, O.

PA—A. J. Power, Coshocton, O.

Power Mine; Drift; No. 6 Seam, 48-54 inches thick.

PO—Coshocton, O.; SP—Same; CTY—Same; RR—W. & L. E.

S of H—Mules. Track gage, 32 in.

S of M—2 shortwall machs.

PP—Purchase power, transformer 4000 volts A. C., M. G. set, 250 volts D. C., 4 pumps.

EMP—60. Daily output, 250 tons.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.

PREP. EQUIPT—Shaker Screens.

Old Information.

PRIMROSE COAL CO.

General Office, Shawnee, O.

PR—B. F. Sheron, Shawnee, O.

VP—D. J. Hannah, Sr., Shawnee, O.

TR—Chas. Cooper, Shawnee, O.

GM—Donald Hannah, Jr., Shawnee, O.

GS—Donald Hannah, Jr., Shawnee, O.

PA—Donald Hannah, Jr., Shawnee, O.

EM—Mr. Vanietta, Shawnee, O.

EE—Donald Hannah, Jr., Shawnee, O.

SCO—Address the company, Buyer, Donald Hannah, Jr., Shawnee, O.

SA—D. J. Hannah, Jr., Shawnee, O.

Additional information on page 610.

Primrose Mine; Slope; No. 6 Seam, 58 inches thick.

PO—Shawnee, O.; SP—Same; CTY—Perry; RR—B. & O.

S of H—Trolley pole type loco. Track gage 42 inches.

S of M—1 shortwall mach.

PP—Power purchased, Transformer 16,000 to 270 volts A. C., 250 volts D. C., 1 pump.

EMP—140. Daily tonnage 350.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Gravity Screens.

PROGRESS COAL COMPANY

General Office, 1230 Hanna Bldg., Cleveland, O.

VP—W. L. Robinson, Cleveland, O.

TR—W. L. Robinson, Cleveland, O.

GM—A. G. Squibbs, Wheeling, W. Va.

GS—A. G. Squibbs, Wheeling, W. Va.

PA—J. B. O'Neill, Cleveland, O.

EM—F. R. Hanlon, Barton, O.

EE—W. A. Williams, Barton, O.

Pauline No. 1 Mine; Shaft and Slope;

No. 8; Seam 60 to 66 in. thick.

PO—Bannock, O.; SP—Same; CTY—Belmont; RR—C. L. & W. or B. and O.

MS—H. P. Murray, Bannock, O.

S of H—Mules and elec. loco. Track gage 42 in.

S of M—6 elec. machs.

PP—4 return tubular boilers, total 500 H. P., 2 gen. units, 250 volts D. C., 1 pump.

EMP—100. Last years tonnage 80,000.

SIZES SHIPT—Run of Mine, Slack, Lump, Crushed.

PREP. EQUIPT—Screening Rig and Jeffrey Crusher.

PROGRESS COAL COMPANY

General Office, Marion, Ohio.

PR—L. C. Wogao, Marion, Ohio.

VP—C. Lash, Marion, Ohio.

TR—Geo. W. Black, Marion, Ohio.

SECY—John V. Wilson, Marion, Ohio.

GS—Geo. P. Hall, Nelsonville, Ohio.

SA—Geo. P. Hall, Nelsonville, Ohio.

John V. Wilcox, Marion, Ohio.

Imperial Mine; Drift; No. 6 Seam, 72-84 inches thick.

PO—Nelsonville, O.; SP—Same; CTY—Athens; RR—H. V.

S of H—Mules and trolley pole type locos. Track gage 42 in.

S of M—4 chain breast type machs.

PP—2 150 H. P. water tube boilers, gen. units, 100 K. W., 250 volts D. C., 8 pumps.

EMP—50. Last years tonnage, 20,000.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Gravity Screens.

NOTE—Formerly operated by the Ohio Consolidated Coal Co.

PROGRESSIVE COAL CO. (THE)

General Office, Bellaire, O.

PR—Oscar Garrett, Shadyside, O.

VP—P. F. Gilhooly, Bellaire, O.

TR—H. W. Hall, Bellaire, O.

GM—R. W. Hall, Bellaire, O.

GS—R. W. Hall, Bellaire, O.

PA—R. W. Hall, Bellaire, O.

CE—Clark Engineering Co., Bellaire, O.

Sales Agent, R. W. Hall, Bellaire, O.

Morgan Mine, Drift, Pittsburg Seam No. 8, 5½ ft. thick.

PO—Bellaire

Rail & River Coal Co., Cont.

No. 0 Mine; Drift; Pch. Seam, 90 to 72 in. thick.
PO—Bellevue, O.; SP—Same; CTY—Belmont; RR—B. & O. Main line.
 S of H—5 elec. locos. Track gage 42 in.
 S of M—17 elec. machs.
 PP—1 water tube boilers, total 400 H. P., 2 return tube boilers, total 200 H. P., 2 gen. units, 500 volts D. C.
 EMP—380. Last years tonnage 500,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.

RAILWAY FUEL & SUPPLY CO.

General Office, Church & 5th Sts., Newark, O.
 PR—W. Kellenberger, Newark, O.
 VP—George Hayden, Newark, O.
 TR—Carl J. Ankele, Newark, O.
 GM—George Hayden, Newark, O.
 GS—W. B. Milgate, Dennison, O.
 PA—O. E. Vantassel, Newark, O.
 CE—G. E. Arnold, New Philadelphia, O.
 EE—A. Chapplear, Dennison, O.
 SCO—Railway Fuel & Supply Co., Buyer, M. D. Hugh, Rowersville, O.
 SA—W. B. Milgate, Dennison, O.

Newton Mine; Slope; No. 7 Seam, 44 in. thick.
PO—Rowersville, O.; SP—Philadelphia Road, O.; CTY—Harrison; RR—P. R. R.
 MS—John M. Burt, Dennison, O.
 S of H—Mules and rope. Track gage 36 inches.
 S of M—1 shortwall and 2 breast machs.
 PP—2 fire tube boilers, 250 H. P., 1 Erie engine, 135 H. P., 1 generator, 75 K. W., 250 volts D. C., 3 pumps.
 EMP—95. Last years tonnage 35,000.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Screens.

RAVEN COAL COMPANY, THE.

General Office, 158 N. 4th St., Steubenville, O.
 PR—William Schaffer, Pittsburgh, Pa.
 VP—R. N. Merryman, Steubenville, O.
 TR—E. M. Fisher, Steubenville, O.
 GM—B. E. Graham, Steubenville, O.
 GS—B. E. Graham, Steubenville, O.
 PA—R. E. Graham, Steubenville, O.
 CE—H. C. Meyers, Steubenville, O.
 SA—Blaine Graham, Steubenville, O.

Raven Mine; Stripping; Pittsburgh No. 8 Seam, 54 in. thick.
SP—Smithfield, O.; CTY—Jefferson; RR—P. W. Va.
 SIZES SHIPT—Run of Mine, Slack, Nut, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables.

READ COAL COMPANY.

Now the Cope Mining Co.

RED OAK COAL MINE NO. 1

General Office, Canonsville, O.
 GM—C. F. Hamlin, R. D. 34, Barber-ton, O.

Red Oak No. 1 Mine; Slope; No. 1 Seam, 54 inches thick.
PO—Clinton, O.; SP—Same or Akron, O.; CTY—Summit; RR—B. & O.
 MS—John Dickerboof, Clinton, O.
 S of H—Mules, rope and steam loco.
 S of M—Hand.
 PP—2 40 H. P. fire tube boilers.
 EMP—15. Daily tonnage 50.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.

REDFIELD COAL CO., INC. (THE).

General Office, Box G, Chicago, Ill.
 GM—F. C. Mark, Zanesville, O.
 GS—C. E. Haskins, Rossville, O.
 PA—B. G. Calloway, 111 W. Washington St., Chicago, Ill.
 EM—J. S. Dennis, Zanesville, O.
 EE—Cliff Hammer, New Lexington, O.
 SCO—Address the Company, Buyer, Ray Pinnick, Rossville, O.

Redfield No. 1 Mine; Drift; No. 5 Seam, 42 in. thick.
PO—Rossville, O.; SP—Sallito, O.; CTY—Perry; RR—Zanesville & Western.

S of H—Mules and 2 trolley pole type locos. Track gage 36 in.
 S of M—4 shortwall and 1 breast mach.
 PP—2 fire tube boilers, 150 H. P., 1—100 K. W. and 1—65 K. W. gen. units, 250 volts D. C., 3 pumps.
 EMP—125. Last years tonnage 61,000.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
 PREP. EQUIPT—Gravity Screens.

Redfield No. 3 Mine; Drift; No. 6 Seam, 40 in. thick.
PO—Rossville, O.; SP—Sallito, O.; CTY—Perry; RR—Z. & W.
 MS—C. E. Haskins, Rossville, O.
 S of H—Mules and 1 trolley pole type loco. Track gage 36 in.
 S of M—2 chain breast type machs.

PP—1 150 H. P. fire tube boiler, 100 K. W. gen. unit, 250 volts D. C., 2 pumps.
 EMP—25. Daily output, 100 tons.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
 PREP. EQUIPT—Gravity Screens.

REED MINING CO.

Now Cope Mining Co.

REESE, JOHN T. & SON COAL CO.

General Office, Salem, O.
 PR—Grant Hill, Salem, O.
 VP—Thos. G. Reese, Salem, O.
 TR—Grant Hill, Salem, O.
 GS—Ed Yoder, Salem, O.
 PA—Thos. G. Reese, Salem, O.

Beech Hollow Mine; Drift; No. 3 Seam, 40 in. thick.
PO—Salem, O.; SP—Same; CTY—Columbiana; RR—P. F. M. & C.
 S of H—Mules and rope. Track gage 30 in.
 S of M—2 shortwall machs.
 PP—Power purchased, transformer, 250 volts D. C.
 Last fiscal year output, 10,000 tons.
 PREP. EQUIPT—Gravity Screens.
 Old Information.

REEVES MINING COMPANY.

General Office, Dover, O.
 PR—H. C. Grocer, Dover, O.
 VP—A. H. Reeves, Dover, O.
 TR—A. J. Kraatz, Dover, O.
 GM—J. Harris, New Philadelphia, O.
 GS—W. D. Jones, New Philadelphia, O.
 PA—M. E. Galbraith, New Philadelphia, Ohio.
 EE—Peter Pollock, New Philadelphia, O.
 SCO—New England Supply Store; Buyer, Frank Molski, New Philadelphia, O.

Reeves Mine; Slope; No. 6 Seam, 48 in. thick.

PO—New Philadelphia, O.; SP—Same; CTY—Tuscarawas; RR—Penna. R. R., C. & P. Div.

S of H—2 trolley pole type locos. Track gage 42 in.
 S of M—Electric punchers, 6 chain breast type and 4 shortwall machs.
 PP—Purchase power, transformer 6600-203 volts A. C., rotary converter, 275 volts D. C., 5 pumps.
 Daily tonnage 900.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Bar Screens.

REISER A. W. & CO.

General Office, 117 So. Broadway, New Philadelphia, O.
 PR—A. W. Reiser, New Philadelphia, O.
 VP—A. W. Reiser, New Philadelphia, O.
 TR—A. W. Reiser, New Philadelphia, O.
 GM—A. W. Reiser, New Philadelphia, O.
 GS—G. A. Reiser, New Philadelphia, O.

Mine; Drift; No. 7 Seam; 4 ft. thick.
PO—New Philadelphia, O.; SP—Same; CTY—Tuscarawas; RR—B. & O.
 S of H—Rope, gasoline loco.
 S of M—Hand.
 EMP—30. Daily tonnage 140.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.

REITLER COAL COMPANY, THE

General Office, Cambridge, O.
 PR—Sylvester Reitler, Cambridge, O.
 VP—Carl Reitler, Cambridge, O.
 TR—Henry Reitler, Cambridge, O.
 GM—Jesse J. Clark, Cambridge, O.
 SECTY—J. C. Purkey, Cambridge, O.
 SA—Jesse J. Clark, Cambridge, O.

Reitler Mine; Shaft; No. 7 Seam; 66 inches thick.
PO—Cambridge, O.; SP—Same; CTY—Lawrence; RR—B. & O., Penna.
 MS—Chris. Reitler, Cambridge, O.
 S of H—Mules. Track gage 34 inches.
 S of M—1 chain breast type mach.
 PP—1—150 H. P. water tube boilers, gen. units, 250 volts D. C., 3 pumps.
 EMP—10. Last years tonnage 12,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.

RETZLER & MARSHALL

Out of business.

RHOODES, E. A. COAL COMPANY

Out of business.

RHULMAN, P. M.

General Office, Ironton, O.
 Rhulman Mine; Drift; Nos. 5 and 6 Seams, 42-48 inches thick.
PO—Ironton, O.; SP—Same; CTY—Lawrence; RR—D. T. & L. N. & W.

S of H—Mules and rope.
 S of M—Hand.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Bar Screens.
 Note—Formerly operated by the Glinn Co.

RICE HOCKING COAL CO. (THE).

General Office, Dayton, O.
 PR—W. P. Rice, Dayton, O.
 VP—J. W. Rice, Dayton, O.
 TR—J. W. Rice, Dayton, O.
 GM—J. W. Rice, Dayton, O.
 GS—W. P. Porter, Station B, Box 1, Columbus, O.
 PA—J. W. Rice, Dayton, O.
 SA—The Rice Coal Co., Dayton, O.

The Rice Hocking Mine; Drift; Hocking No. 6 Seam, 78 inches thick.
PO—Carbondale, O.; SP—Same; CTY—Athens; RR—B. & O.
 MS—Chas. Duez, Carbondale, O.
 S of H—Steam loco. Track gage 42 in.
 S of M—4 chain breast type machs.
 PP—Generator units.
 EMP—80. Last years tonnage 100,000.
 SIZES SHIPT—Run of Mine.

RICE, W. P. MINING CO. (THE).

General Office, Dayton, O.
 PR—W. P. Rice, Dayton, O.
 TR—J. W. Rice, Dayton, O.
 GM—J. W. Rice, Dayton, O.
 GS—W. P. Porter, Station B, Box 4, Columbus, O.
 PA—J. W. Rice, Dayton, O.
 SA—The W. P. Rice Mining Co., Dayton, Ohio.

Palos Mine; Shaft; 7-A Sedalia Seam, 44 in. thick.
PO—Gloster, O.; SP—Same; CTY—Athens; RR—T. & O. C.
 MS—Joe West, Gloster, O.
 S of H—Steam loco.
 S of M—4 shortwall machs.
 PP—Gen. units, 250 volts D. C.
 EMP—90. Last years tonnage 60,000.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Loading Rooms.

RIDDLE, F. J. COAL COMPANY

PR—Ava Cohurn, Murray, O.
 TR—A. J. Curl, " "
 PA—A. J. Curl, " "

Riddle Mine; Drift; Hocking Valley No. 6 Seam, 84 in. thick.
PO—Murray, O.; SP—Murray City, O.; CTY—Hocking; RR—Hocking Valley, S. W. Fork Branch.
 MS—Ava Cohurn, Murray, Ohio.
 SIZES SHIPT—Run of Mine.
 Old information.

RIDENOUR-SHAVER COAL CO. (THE)

General Office, Nelsonville, O.
 TR—Geo. D. Ridenour, Nelsonville, O.
 VP—Guy D. Ridenour, Nelsonville, O.
 GM—Geo. D. Ridenour, Nelsonville, O.
 GS—Guy D. Ridenour, Nelsonville, O.
 PA—Geo. D. Ridenour, Nelsonville, O.

Carl Mine; Drift; No. 8 Seam, 51 in. thick.
PO—Cheshire, O.; SP—Same; CTY—Galbraith; RR—Hocking Valley.
 S of H—Mules. Track gage 38 in.
 S of M—Hand.
 PP—1 gasoline pump.
 EMP—20. Last years tonnage 15,406.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

RIDENOUR-SHIVELY COAL CO.

General Office, Jackson, O.
 PR—E. J. Shively, Jackson, O.
 VP—E. B. Ridenour, Jackson, O.
 TR—W. A. Ridenour, Jackson, O.
 GM—E. B. Ridenour, Jackson, O.

Ridenour Mine; Drift; No. 1 Jackson Seam, 32 in. thick.
PO—Jackson, O.; SP—Same; CTY—Jackson; RR—D. T. & L.
 MS—E. J. Shively, Jackson, O.
 S of H—Mules. Track gage 35 in.
 S of M—Hand.
 PP—2 pumps.
 EMP—15. Last years tonnage 8,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.

RILEY BROS. & CO.

General Office, 22 Front St., Nelsonville, Ohio
 PR—John F. Riley, New Straitsville, O.
 TR—Allen Riley, Nelsonville, O.
 GM—Allen Riley, Nelsonville, O.
 GS—Allen L. Riley, Nelsonville, O.
 PA—Allen Riley, Nelsonville, O.
 EM—Waldo Chute, Nelsonville, O.
 SA—Allen Riley, Nelsonville, O.

Riley Mine; Drift; No. 6 Seam; 60 in. thick.
PO—Middleport, O.; SP—Rutland, O.; CTY—Melges; RR—K. & M.
 S of H—1 trolley pole type loco. Track gage 39 in.
 S of M—2 chain breast type machs.
 PP—1 fire tube boiler, 1—75 K. W. gen. unit, 220 volts D. C., 1 pump.
 EMP—40. Last years tonnage 17,450.
 SIZES SHIPT—Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

RILEY COAL CO.

Now Riley Bros. & Co.

RIVER RIDGE COAL MINING COMPANY

General Office, Kirby Bldg., Cleveland, O.
 PR—C. E. Sullivan, Cleveland, O.
 VP—J. P. Burton, Citizens Bldg., Cleveland, O.
 TR—H. R. Sullivan, " "
 GM—H. R. Sullivan, " "
 GS—W. A. Smitherman, Moundsville, W. Va.
 PA—H. R. Sullivan, Cleveland, O.
 EM—Millard & Ford, Cleveland, O.
 SA—R. S. Bain, Cleveland, O.

Diamond Mine; Drift; No. 7 and 7-A Seam, 42 to 48 in. thick.
PO—Box 5, Wellsville, O.; SP—Yellow Creek, O.; CTY—Jefferson; RR—Penna. System; C. & P. Div.
 S of H—Mules and 1 trolley pole type loco. Track gage 42 in.
 S of M—2 chain breast machs.
 PP—Power purchased, 100 K. W. M. G. Set, 110 volts A. C.
 EMP—25. Last years tonnage 6,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

ROBBINS COAL CO., C. (THE)

General Office, Nelsonville, O.
 PR—John C. Baird, Nelsonville, O.
 VP—C. L. Baird, Nelsonville, O.
 TR—C. L. Baird, Nelsonville, O.
 GM—John C. Baird, Nelsonville, O.
 GS—Wm. Burdell, Nelsonville, O.
 PA—John C. Baird, Nelsonville, O.
 EM—Waldo Chute, Nelsonville, O.
 EE—Wm. Burdell, Nelsonville, O.
 SA—E. A. Cole & Co., Columbus, O.

Robbins Mine; Drift; No. 6 Hocking Seam, 4 to 7 ft. thick.
PO—Nelsonville, O.; SP—Same; CTY—Athens; RR—H. V. R. R.
 S of H—4 elec. locos. Track gage 42 inches.
 S of M—6 elec. machs.
 PP—1 gen. unit, 2,300 volts A. C., 3 phase, 60 cycle, power purchased.
 EMP—165. Last years tonnage 108,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

ROBERTS COAL & MINING COMPANY

Now the Sharp-Repack Coal Co.

ROBINSON & SON SEWER PIPE CO.

PR—Andrew Robinson, Uhrichsville, O.
 TR—Alex Robinson, " "
 GM—Alex Robinson, " "
 PA—Alex Robinson, " "
 CE—Geo. Arnold, New Philadelphia, O.

Robinson & Son Mine; Slope; No. 6 Seam, 4 to 4 1/2 ft. thick.
PO—Uhrichsville, O.; SP—Same. CTY—Tuscarawas; RR—B. & O.
 MS—John Ronald, Uhrichsville, O.
 S of H—Mules. Track gauge, 34 in.
 S of M—Hand.
 PP—2 boilers, 300 H. P., 2 pumps; Purchase power.
 EMP—20. Last fiscal year output 16,000 tons.
 SIZES SHIPT—Run of Mine.
 Old Information.

ROBY-SOMERS COAL COMPANY

General Office, 521 Cuyahoga Bldg., Cleveland, O.
 PR—O. W. Somers, Cleveland, O.
 VP—J. A. Foerster, Cleveland, O.
 TR—F. E. Baehr, Cleveland, O.
 GS—John Maloney, Adena, O.
 PA—G. E. Keldel, Cleveland, O.

Loreoa Mine; Drift; Pittsburgh No. 8 Seam; 60 inches thick.
PO—Adena, O.; SP—Same; CTY—Belmont; RR—W. L. E.
 S of H—Mules, 3 trolley pole type locos. Track gage 42 inches.
 S of M—7 chain breast type machs.
 PP—Power purchased, Transformer 23,000 to 275 volts A. C., rotary converters, 200 K. W., 250 volts D. C., 3 pumps.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.
 Old Information.

ROME COAL CO., THE

General Office, 1101-1105 Brunson Bldg., Columbus, O.
 PR—J. C. Richart, Columbus, O.
 GS—Frank Kohnke, Columbus, O.
 PA—Frank Kohnke, Columbus, O.
 SA—W. J. Hamilton Coal & Coke Co., 1103 Brunson Bldg., Columbus, O.

Nos. 1, 2 and 3 Mines; Drift; No. 6 Seam, 72 in. thick.
PO—Carbon Hill, O.; SP—Same; CTY—Hocking; RR—H. V.
 S of H—Mules and 1 trolley pole type loco. Track gage 42 in.
 S of M—2 chain breast type and 1 shortwall mach.
 PP—Power purchased, gen. unit, 125 volts D. C., 3 pumps.
 EMP—50.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.
 Old Information.

ROSEMARY COAL COMPANY, THE

General Office, Kirby Bldg., Cleveland, O.
 PR—J. V. Maher, Cleveland, O.
 VP—Thos. K. Maher, Cleveland, O.
 TR—A. J. Wolf, Cleveland, O.
 GM—D. V. Maher, Flushing, O.
 GS—D. V. Maher, Flushing, O.
 PA—D. V. Maher, Flushing, O.
 EM—Frank H. Frazier, St. Clairsville, Ohio
 EE—John Haines, Flushing, O

Rosemary No. 1 Mine; Drift; No. 8 Seam, 64 inches thick.
 PO—Flushing, O.; SP—Same; CTY—Belmont; RR—B. & O.
 MS—C. Evans, Flushing, O.
 S of H—8 trolley pole type locos. Track gage 48 inches.
 S of M—2 chain breast type and 8 short-wall machs.
 PP—Power purchased. Transformer 4400-275 volts A. C., 2 pumps.
 EMP—130. Last fiscal year output, 145,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

Rosemary No. 3 Mine; Slope; Pittsburgh No. 8 Seam, 60 inches thick.
 PO—Laferty, O.; SP—Same; CTY—Belmont; RR—B. & O.
 MS—Harry Evans, Flushing, O.
 S of H—8 trolley pole type locos. Track gage 42 inches.
 S of M—7 shortwall machs.
 PP—3 50 H. P. water tube boilers, 2 150 K. W. gen. units, 250 volts D. C., 2 pumps.
 EMP—175. Last fiscal year output, 140,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.
 NOTE—This mine formerly operated by Cleveland-Belmont Coal Company.

ROSEVILLE COAL COMPANY

General Office, Roseville, O.
 PR—David F. Sagle, Roseville, O.
 VP—R. E. Garrett, Roseville, O.
 TR—E. F. Earhart, " "
 GM—Elmer Sagle, " "
 GS—Thos. J. Sagle, " "
 PA—E. F. Earhart, Roseville, O.
 EM—C. V. Martin, Zanesville, O.
 SA—Elmer Sagle, Roseville, O

New Crescent No. 2 Mine; Drift; No. 6 Seam; 48 to 52 in. thick.
 PO—Roseville, O.; SP—Same; CTY—Perry; RR—Penna.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 EMP—65. Last years tonnage 60,343.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

ROSS CLAY PRODUCT COMPANY (THE)

General Office, Uhrichsville, O.
 PR—G. E. Calhoun, Uhrichsville, O.
 VP—Geo. A. Ross, Uhrichsville, O.
 TR—C. H. Siegrist, Uhrichsville, O.
 GM—O. L. Buzard, Uhrichsville, O.
 PA—O. L. Buzard, Uhrichsville, O.
 EM—O. L. Buzard, Uhrichsville, O.

The Ross Mine; Drift; No. 7 Seam, 42 in. thick.
 PO—Uhrichsville, O.; SP—Dennison, O.; CTY—Tuscarawas; RR—P. C. & St. L. R. R.
 MS—O. L. Buzard, Uhrichsville, O.
 S of H—Mules. Track gage, 33 in.
 S of M—1 chain breast type mach.
 PP—2 fire tube boilers, 150 H. P., 1 35 K. W. gen. units, 250 volts D. C., 1 pump.
 EMP—14. Last years tonnage 1,150.

ROTHACKER, JOHN E

General Office, 220 Lincoln Ave., Dover, O.
 PR—John E. Rothacker, Dover, O.
 TR—Ellen M. Rothacker, Dover, O.
 GM—Jno. E. Rothacker, Dover, O.

Rothacker Mine; Drift; Seam, 62 in. thick.
 PO—Dover, O.; SP—Same; CTY—Tuscarawas; RR—B. & O. and C. & P.
 S of H—Mules.
 S of M—Puncher mach.
 PP—20 pumps.
 EMP—5.
 SIZES SHIPT—Run of Mine, Egg

ROYAL FLUSH MINING CO.

General Office, 1201-8 East Broad St. Columbus, O.
 PR—Henry Watkins, 762 Wilson Ave., Columbus, O.
 VP—Albert Groff, New Straitsville, O.
 TR—Henry Watkins, 762 Wilson Ave., Columbus, O.
 GM—Albert Groff, New Straitsville, O.
 CE—C. J. Vanlette, Shawnee, O.
 SA—Kerr W. Rittenhouse, 1201-8 East Broad St. Columbus, O.
 Additional Information on Page 610.

Royal Flush Mine; Drift; No. 6 Seam, 50 in. thick.
 PO—Shawnee, O.; SP—Same; CTY—Perry; RR—B. & O.

S of H—Mules and trolley pole type locos. Track gage, 42 in.
 S of M—Shortwall machs.
 PP—Power purchased.
 EMP—12. Daily output, 60 tons.
 SIZES SHIPT—Slack, Lump.

RUTLAND COAL CO.

General Office, 20 East Broad St., Columbus, O.
 PR—H. H. Heiner, Columbus, O.
 VP—G. H. Barker, Columbus, O.
 TR—G. H. Barker, Columbus, O.
 GM—L. J. Heiner, Rutland, O.
 GS—Ed. Kennedy, Rutland, O.
 PA—L. J. Heiner, Rutland, O.
 EE—A. W. Natters, Rutland, O.
 SCG—V. E. Dunlap, Rutland, O. Buyer John Scott, Middleport, O.

Maysraid No. 4 Mine; Drift; No. 8 Seam, 72 inches thick.
 PO—Rutland, O.; SP—Same; CTY—Meigs; RR—K. & M.
 TR—Thomas Matheny, Middleport, O.
 S of H—Motors and mules.
 S of M—Shortwall machs.
 PP—250 volts D. C., 4 pumps.
 EMP—180. Daily tonnage 700.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

RUTLEDGE COAL COMPANY.

FR—R. W. Rutledge, Midvale, O.
 TR—R. W. Rutledge, " "
 GM—R. W. Rutledge, " "
 GS—R. W. Rutledge, " "
 PA—R. W. Rutledge, " "

Rutledge Mine; Drift; No. 6 Seam, 50 to 54 in. thick.
 PO—Midvale, O.; SP—Same; CTY—Tuscarawas; RR—Penna.
 S of H—Mules. Track gage, 36 in.
 PP—Power purchased, 1 pump.
 EMP—14. Last fiscal year output, 30,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.
 old Information.

SALEM MINING COMPANY (THE)

General Office, Windber, Pa.
 PR—John Lochrie, Windber, Pa.
 VP—D. T. Price, Windber, Pa.
 TR—John Lochrie, Windber, Pa.
 PA—H. Q. French, Jr., Salem, O

Salem Mine; Drift; No. 3 Seam, 42 in. thick.
 PO—Salem, O. SP—Same. CTY—Columbiana; RR—Y. & O.
 MS—H. Q. French, Jr., Salem, O.
 S of H—2 trolley pole type locos. Track gage, 38 in.
 S of M—2 shortwall machs.
 PP—1 return tubular boiler, 200 H. P., 1 gen. unit, 100 K. W., 250 volts D. C., 3 pumps.
 EMP—40. Last years tonnage 22,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

SALINEVILLE COAL MINING COMPANY

General Office, 960 Kirby Bldg., Cleveland, O.
 PR—George A. Enos, Cleveland, O.
 VP—J. W. Canavan, Cleveland, O.
 TR—George A. Enos, Cleveland, O.
 GM—E. J. Underhill, Cleveland, O.
 GS—John Strabley, Salineville, O.
 PA—E. J. Underhill, Cleveland, O.
 EM—Millard & Ford, 423 Ruby Bldg., Cleveland, O.
 SA—The George A. Enos Coal Co., 348 Kirby Bldg., Cleveland, Ohio.

Strabley No. 1 Mine; Drift; No. 7 Seam; 66 inches thick.
 PO—Salineville, O.; SP—Same; CTY—Columbiana; RR—Penna.
 S of H—Storage battery and elec. locos. Track gage 40 inches.
 S of M—Chain breast and shortwall machs.
 PP—2 180 H. P. and 1 125 H. P. boilers.
 EMP—60. Last years tonnage 54,395.
 SIZES SHIPT—Run of Mine.

SATTLER, EDWARD, COAL CO.

General Office, Mineral City, O.
 PR—Edward Sattler, Mineral City, O.
 SA—J. P. Burton Coal Co., Cleveland, Ohio.

Sattler Mine; Drift; Middle Kittanning Seam, 42 in. thick.
 PO—Mineral City, O.; SP—Same; CTY—Tuscarawas; RR—B. & O.
 MS—Edward Sattler, Mineral City, O.
 S of H—Mules. Track gage 32 in.
 S of M—Hand.
 PP—Will purchase power.
 EMP—10. Last years tonnage 2,500.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Bar Screens.

SAUTERS COAL COMPANY, THE

General Office, Cleveland, O.
 PR—W. C. Merrick, Cleveland, O.
 VP—J. D. Sauters, Pittsburgh, Pa.
 TR—C. S. Deal, Cleveland, O.
 GM—Fred D. Sauters, Cleveland, O.
 GS—J. E. Stillwell, Martins Ferry, O.

PA—C. S. Deal, Cleveland, O.
 CE—J. J. Roby, Cleveland, O.
 EM—Elkins Engineering Co., Bellaire, O.
 EE—Thos. Harper, Martins Ferry, O.

Gaylord No. 1 Mine; Drift; No. 6 Pittsburgh Seam; 60 to 84 inches thick.
 PO—Martins Ferry, O.; SP—Same; CTY—Belmont; RR—Penna.
 MS—Geo. Gibson, Martins Ferry, O.
 S of H—Trolley pole type loco. Track gage 36 inches.
 S of M—6 chain breast type and 4 short-wall machs.
 PP—Power purchased, transformer 2200-250 volts A. C., 1—150 K. W., 1—100 K. W. M. G. Sets, 250 volts D. C., 4 pumps.
 EMP—150. Last years tonnage 200,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Gravity Screens.

Gaylord No. 2 Mine; No. 8 Pittsburgh Seam; 60 to 84 inches thick.
 PO—Martins Ferry, O.; SP—Same; CTY—Belmont; RR—Penna.
 MS—David Love, Martins Ferry, O.
 S of H—Trolley pole type loco. Track gage 36 inches.
 S of M—7 chain breast type and 1 short-wall mach.
 PP—Power purchased, 1 150 K. W. M. G. set, 3 pumps.
 EMP—150. Last years tonnage 200,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Gravity Screens.
 Note—Formerly Pittsburgh & Cleveland Coal Co.

SCHICK CO-OPERATIVE COAL CO., LTO

General Office, Bellaire, O.
 PR—E. C. Mobley, Wheeling, W. Va.
 VP—Clifford L. Belt, Bellaire, O.
 TR—J. F. Mellott, Bellaire, O.
 GM—J. E. Witchey, Bellaire, O.
 GS—J. E. Witchey, Bellaire, O.
 PA—J. E. Witchey, Bellaire, O.
 CE—McDonald Eng. Co., Bellaire, O.
 SA—E. C. Mobley, Wheeling, W. Va.

Schick Mine; Drift; Pittsburgh No. 8 Seam, 60 in. thick.
 PO—Bellaire, O.; SP—Same; CTY—Belmont; RR—B. & O.
 S of H—Mules and trolley pole type loco. Track gage, 36 in.
 S of M—5 chain breast type and 1 short-wall machs.
 PP—2 fire tube boilers, 300 H. P., 150 K. W. gen. unit, 220 volts D. C., 4 pumps.
 EMP—75. Last years tonnage 50,000.
 SIZES SHIPT—Run of Mine.

SCHICK, C. E. COAL COMPANY

Out of business.

SCOTT COAL COMPANY

General Office, Midvale, O.
 PR—John S. Scott, Midvale, O.
 VP—C. O. Scott, Midvale, O.
 TR—C. O. Scott, Midvale, O.
 SECY—C. E. McPherson, Midvale, O.
 GM—John S. Scott, Midvale, O.
 GS—John S. Scott, Midvale, O.
 PA—C. E. McPherson, Midvale, O.
 EE—Jos. Meese, New Philadelphia, O.

B No. 1 Mine; Shaft; No. 6 Seam, 54 in. thick.
 PO—Midvale, O.; SP—Same; CTY—Tuscarawas; RR—B. & O.
 MS—Chas. Hostettler, Midvale, O.
 S of H—Mules, 1 trolley pole type and 1 storage battery loco. Track gage 42 in.
 S of M—4 shortwall machs.
 PP—Power purchased, transformer 2200-250 volts A. C. gen. units, 100 K. W., 250 volts D. C., 2 fire tube boilers, 6 pumps.
 EMP—100. Daily tonnage 600.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables.

B No. 2 Mine; Drift; No. 7 Seam, 48 in. thick.
 PO—Midvale, O.; SP—Same; CTY—Tuscarawas; RR—B. & O.
 MS—Chas. Hostettler, Midvale, O.
 S of H—Mules and 1 trolley pole type loco. Track gage 42 in.
 S of M—4 chain breast type machs.
 PP—Power purchased, transformer 2200-250 volts A. C., 2 pumps.
 EMP—30. Daily tonnage 250.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

B No. 3 Mine; Drift; No. 7 Seam, 48 in. thick.
 PO—Midvale, O.; SP—Same; CTY—Tuscarawas; RR—B. & O.
 MS—Chas. Hostettler, Midvale, O.
 S of H—Mules and 1 trolley pole type loco. Track gage 42 in.
 S of M—1 chain breast type mach.
 PP—Power purchased, transformer 2200-250 volts A. C., 1 pump.
 EMP—20.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

SCOTT, W. O.
 General Office, Denison, O.

Scott Mine; Drift; No. 7 Seam; 48 to 66 in. thick.
 PO—Denison, O.; SP—Same; CTY—Tuscarawas; RR—P. C. & St. L.
 MS—W. O. Scott, Denison, O.
 S of H—Mules. Track gage 30 inches.
 S of M—Hand.
 EMP—7. Last years tonnage 6,000.
 SIZES SHIPT—Run of Mine, Slack, Nut.
 PREP. EQUIPT—Bar Screens.
 old Information.

SCOTT & HARPER

General Office, Coalton, O.
 GM—A. M. Scott, Coalton, O.
 PA—A. M. Scott, Coalton, O.
 SA—A. M. Scott, Coalton, O.

Jackson Nos. 2 and 4 Mines; Drift; No. 4 Seam, 46 in. thick.
 PO—Coalton, O.; SP—Dundas, O.; CTY—Vinton; RR—D. T. & L., H. V.
 MS—Rodney Millhuff, Coalton, O.
 S of H—Mules. Track gage 34½ inches.
 S of M—Hand.
 Daily tonnage 50.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
 PREP. EQUIPT—Bar Screens.

SEMI-WELLSTON COAL COMPANY.

General Office, Chillicothe, O.
 PR—N. H. Rice, Chillicothe, O.
 VP—M. L. Jones, Chillicothe, O.
 TR—H. E. Wethey, Chillicothe, O.
 GM—John Burke, Wellston, O.
 PA—Wm. Sturgill, New Marshallfield, O.
 CE—Ed. Kelly, Wellston, O.
 EE—Arthur Angel, Wellston, O.
 SA—H. E. Wethey, Chillicothe, O.

Rennard Mine; Slope; No. 6 Seam, 43 in. thick.
 PO—Mineral, O.; SP—Same; CTY—Athens; RR—B. & O., Carbondale, O.
 MS—John Burke, Wellston, O.
 S of H—Mules, 1 trolley pole type loco. Track gage 36 inches.
 S of M—2 shortwall machs.
 PP—1—150 H. P. water tube boiler, gen. units, 250 volts D. C., 4 pumps.
 EMP—32. Daily tonnage 150.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
 PREP. EQUIPT—Bar Screens.

SENECA COAL CO.

General Office, Commerce Bldg., Columbus, O.
 PR—W. T. Fossig, Columbus, O.
 VP—J. H. Schwartz, Columbus, O.
 TR—T. C. Collins, Columbus, O.
 GS—J. S. Collins, Athens, O.
 PA—T. C. Collins, Columbus, O.
 FM—T. C. Connors, Zanesville, O.
 EE—Thomas Hughes, Crooksville, O.
 SA—Ajax Block Coal Co., Columbus, O.

Nos. 3, 5, 6 and 7 Mines; Drift; No. 6 Seam, 48 in. thick.
 PO—Crooksville, O.; SP—Same; CTY—Perry; RR—Penna.; N. Y. C.
 MS—Thos. Oph. Crooksville, O.
 S of H—Mules, electric and storage battery locos. Track gage 36 in.
 S of M—Chain breast type machs.
 PP—Power purchased, transformer 13000-440 volts A. C., rotary converters, 250 volts D. C.
 EMP—250. Daily tonnage 1,600.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.
 NOTE—Formerly operated by the Zanesville Coal Co.

SHADYSIDE COAL CO., THE

General Office, Bridgeport, O.
 PR—John E. Bartle, Shadyside, O.
 TR—Wm. Rennie, Shadyside, O.
 GM—Wm. Rennie, Shadyside, O.
 GS—Wm. Rennie, Shadyside, O.
 PA—Wm. Rennie, Shadyside, O.

Wolfhurst Mine; Drift; Pittsburgh, No. 8 Seam, 68 in. thick.
 PO—Bridgeport, O.; SP—Same; CTY—Belmont; Trucks.
 MS—Ernest Schell Bridgeport, O.
 S of H—Mules, storage battery loco. Track gage 42 in.
 S of M—Shortwall & chain breast machs.
 PP—Purchase Power, transformer 4000-440 volts A. C., M. G. Sets, 250 volts D. C.
 EMP—25. Last years tonnage 72,895.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Bar Screens.

SHARON COAL CO.

General Office, New Philadelphia, O.
 PR—P. S. Olmstead, New Philadelphia, O.
 VP—J. G. Masterton, Cleveland, O.
 TR—P. S. Olmstead, New Philadelphia, O.
 GM—P. S. Olmstead, New Philadelphia, O.
 PA—P. S. Olmstead, New Philadelphia, O.
 CE—J. C. Kyte, New Philadelphia, O.
 EM—Geo. E. Arnold, New Philadelphia, O.
 SA—The Cleveland-Charlton Coal Co., Cleveland, O.

(Continued on Next Page)

SHARON COAL CO.—Cont.

Sharon Mine; Drift; No. 6 Seam, 4' in. thick.
PO—R. F. No. 3, New Philadelphia, O.; SP—Unionville, O.; CTY—Tuscarawas; RR—B. & O., Cleveland Div.
S of H—Mules. Track gage 35½ in. S of M—Hand.
PP—2 pumps.
EMP—18. Last years tonnage 14,675.
SIZES SHIPT—Run of Mine.

SHAWNEE & MCCUNEVILLE COAL CO.

General Office, Shawnee, O.
PR—Willard Jaynes, Shawnee, O.
VP—Benj. Jones, Shawnee, O.
TR—Roy O'Hare, Shawnee, O.
GM—Elza Cox, Shawnee, O.
PA—Frank Dishon, McCuneville, O.
CTY—Perry; RR—B. & O., Cleveland Div.

Jaynes Mine; Drift; No. 5 Seam, 60 in. thick.
PO—McCuneville, O.; SP—Shawnee, O.; CTY—Perry; RR—B. & O.
MS—Roy O'Hare, Shawnee, O.
S of H—Mules. Track gage 42 in. S of M—Shortwall machs.
PP—Power purchased, 250 volts D. C.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Bar Screens.

SHEETS COAL CO.

Now Joseph Meister Coal Co.

SHERER & MOUNTAIN

General Office, Ironton, O.
GS—H. W. Mountain, Ironton, O.
Sherer-Hughes Mine; Drift; No. 6 Seam, 40 in. thick.
PO—Ironton, O.; SP—Same; CTY—Lawrence; RR—N. & W.
S of H—Mules. Track gage 35 in. S of M—2 shortwall machs.
PP—Power purchased, 250 volts D. C.
EMP—50. Daily tonnage 200.
SIZES SHIPT—Run of Mine.

SHERIDAN MINING COMPANY.

General Office, Ironton, O.
PR—F. G. Roberts, Ironton, O.
GM—H. S. Sallee, Ironton, O.
CTY—F. G. Leete, Coal Grove, O.
Sheridan Mine; Drift; No. 6 Seam, 44 in. thick.
PO—Sheridan, O. (not yet established); SP—Coal Grove, O.; CTY—Lawrence; RR—N. & W.
MS—Philip Carey, Coal Grove, O.
Daily output, 100 tons.
SIZES SHIPT—Run of Mine and Lump.
Old information.

SHERODSVILLE COAL MINING CO.

General Office, 908 Denison Ave., Cleveland, O.
OWNER—J. L. H. Stadler Rendinger & Fertilizer Co., Cleveland, O.
Sherodsville Mine; Drift; No. 7 Seam, 54 in. thick.
PO—Sherodsville, O.; SP—Same; CTY—Carroll; RR—W. & L. E.
MS—Samuel Jenkins, Sherodsville, O.
S of H—Mules and rope. Track gage 30 inches.
S of M—Hand.
PP—1—20 H. P. water tube boiler.
EMP—35. Daily tonnage 150.
SIZES SHIPT—Run of Mine.
Note—Entire output consumed by owners.

SHERMAN COAL CO.

Now McPhail Coal Co.

SHORT CREEK COAL CO.

General Office, 706 First Natl. Bk. Bldg., Pittsburgh, Pa.
PR—W. W. Keffer, Pittsburgh, Pa.
VP—Chas. F. Branson, Pittsburgh, Pa.
TR—R. Cunningham, Pittsburgh, Pa.
GM—W. W. Keffer, Pittsburgh, Pa.
GS—O. K. Ward, Adena, O.
PA—George H. Yost, Pittsburgh, Pa.
SA—Pittsburgh & Bessemer Coal Co., 706 First Natl Bank Bldg., Pittsburgh, Pa.
No. 1 Mine; Drift; Pittsburgh No. 8 Seam, 60 in. thick.
PO—Adena, O.; SP—Same; CTY—Harrison; RR—W. & L. E.
S of H—Mules and trolley pole type locos. Track gage, 42 in.
S of M—18 shortwall machs.
PP—Power purchased, transformer 1000-2300-220 volts A. C., motor gen. sets, 250 volts D. C., 6 pumps.
EMP—500. Last fiscal year output, 300,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Pickling Tables, Loading Booms.
No. 2 Mine; Drift; Pittsburgh No. 8 Seam, 60 in. thick.
PO—Adena, O.; SP—Same; CTY—Harrison; RR—W. & L. E.
S of H—Mules and trolley pole type locos. Track gage, 42 in.
S of M—18 shortwall machs.

PP—Power purchased, transformer 1000-2300-220 volts A. C., motor gen. sets, 250 volts D. C., 6 pumps.
EMP—500. Last fiscal year output 300,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Pickling Tables, Loading Booms.

No. 3 Mine; Drift; Pittsburgh No. 8 Seam, 60 in. thick.
PO—Adena, O.; SP—Same; CTY—Harrison; RR—W. & L. E.
S of H—Mules and trolley pole locos. Track gage 42 in.
S of M—Shortwall machs.
PP—Power purchased, M. G. Sets, 250 volts D. C.
Last years tonnage 65,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Pickling Tables, Loading Booms.

SHULZ & GREEN COAL COMPANY

General Office, R. F. D. No. 4, Nelsonville, O.
Shulz & Green Mine; Drift; Nos. 6 Seam, 7 in. thick; No. 7, 44 in. thick.
PO—Route No. 4, Nelsonville, O.; SP—Carbon Hill, O.; CTY—Hocking; RR—H. V.
MS—S. W. Green, Nelsonville, Route 4, Ohio.
S of H—Mules and trolley pole type loco. Track gage 42 inches.
S of M—Electric and chain breast machs.
PP—Power purchased. Transformer 2200-250 volts A. C., M. G. Set, 250 volts D. C., 5 pumps.
EMP—28. Last years tonnage 15,000.
SIZES SHIPT—Run of Mine.

SILVER FOX COAL COMPANY.

General Office, New Lexington, O.
PR—C. H. Vorhes, New Lexington, O.
VP—W. H. Bennett, New Lexington, O.
TR—J. V. Bennett, New Lexington, O.
GM—E. L. Bennett, New Lexington, O.
GS—W. H. Bennett, New Lexington, O.
PA—E. L. Bennett, New Lexington, O.
EE—E. L. Bennett, New Lexington, O.

Silver Fox Mine; Drift; No. 6 Seam, 60 in. thick.
PO—New Lexington, O.; SP—Same; CTY—Perry; RR—T. & O. C.
S of H—Mules.
S of M—Chain breast machs.
PP—Gen. units, 250 volts D. C.
EMP—20. Daily tonnage 200.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Revolving Screens.

SIX-A COAL CO.

PR—L. W. Russell, The Plains, O.
TR—J. C. Atkinson, The Plains, O.
GM—Edward Towell, The Plains, O.
GS—Edward Towell, The Plains, O.
Six-A Mine; Drift; Six-A Seam, 40 in. thick.
PO—Nelsonville, O.; SP—Same; CTY—Athens; RR—Hocking Valley.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine, Lump.
Old information.

SINES BROS. & CO.

PR—Robert Sines, New Straitsville, O.
TR—John D. Martin, New Straitsville, O.
Drift Mine; No. 6 Seam; 48 to 96 in. thick.
PO—New Straitsville, O.; CTY—Perry; RR—H. V.
S of H—Mules and 1 elec. loco. Track gage 42 in.
S of M—1 elec. mach.
PP—1 pump. Purchase power.
EMP—14. Last fiscal year output 23,000 tons.
Mine coal for own use only.

SKAGGS, E. O.

General Office, Bethesda, O.
GS—E. D. Skaggs, Bethesda, O.
Skaggs Mine; Drift; 8-A Seam.
PO—Bethesda, O.; SP—Same; CTY—Belmont; RR—B. & O.
S of H—Mules. Track gage 28 inches.
S of M—Hand.
Daily tonnage 40.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Bar Screens.

SLATZER COAL CO.

General Office, New Straitsville, O.
Coalgate No. 228 Mine; Drift; No. 6 Seam, 72 in. thick.
PO—New Straitsville, O.; SP—Coalgate, O.; CTY—Hocking; RR—Hocking Valley.
MS—Chas. Slatzer, New Straitsville, O.
S of H—Mules. Track gage 42 in.
S of M—1 chain breast type mach.
PP—Power purchased.
EMP—10.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.
NOTE—Successors to Taylor & Murdy.

SMITH CROS.

GS—H. L. Smith, Byersville, O.
Smith Mine; Drift; 18 to 72 inches thick.
PO—Byersville, O.; CTY—Garmsbury; RR—Perry.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—Power purchased.
EMP—5. Last fiscal year output, 1,200 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.
Old information.

SNAKE HOLLOW COAL CO. (THE).

General Office, Nelsonville, O.
PR—E. J. Kowdinger, Nelsonville, O.
VP—Jos. Dewhurst, Nelsonville, O.
TR—Geo. M. Merritt, Nelsonville, O.
SECY—C. L. Preston, Nelsonville, O.
GM—Geo. M. Merritt, Nelsonville, O.
GS—Jos. Dewhurst, Nelsonville, O.
PA—Geo. M. Merritt, Nelsonville, O.
EM—R. Van Dyke, Athens, O.
EE—Fred. Kelly, Nelsonville, O.

Snake Hollow Mine; Drift; No. 6 Seam, 75 in. thick.
PO—Nelsonville, O.; SP—Same; CTY—Hocking; RR—Hocking Valley.
S of H—Mules and trolley pole type loco. Track gage, 42 in.
S of M—6 chain breast type machs.
PP—5—100 H. P. water tube boilers, gen. units, 2—100 K. W., 1—150 K. W., 250 volts D. C., 3 engines, 9 pumps.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
EMP—150. Last years tonnage 59,471.
PREP. EQUIPT—Gravity, Revolving and Shaker Screens, Pickling Tables.

SNOW FORK COAL CO.

General Office, Murray, O.
PR—N. A. Chute, Logan, O.
VP—M. E. Chute, Logan, O.
TR—E. M. Chute, Logan, O.
GM—N. A. Chute, Logan, O.
GS—N. A. Chute, Logan, O.
PA—N. A. Chute, Logan, O.
SC0—Chute's Store; Ruyer, N. A. Chute, Murray, O.
SA—Sunday Creek Coal Co., 44 East Broad St., Columbus, O.

Snow Fork No. 1 Mine; Drift; No. 6 Seam, 60 in. thick.
PO—Murray, O.; SP—Murray City, O.; CTY—Hocking; RR—Hocking Valley.
S of H—Mules. Track gage, 42 in.
S of M—1 chain breast type mach.
PP—Gas engine, 18 and 35 H. P., gen. unit D. C.
EMP—9. Last fiscal year output, 4,800 tons.
SIZES SHIPT—Run of Mine.

Snow Fork No. 2 Mine; Drift; No. 6 Seam, 43 in. thick.
PO—Murray, O.; SP—Murray City, O.; CTY—Hocking, RR—Hocking Valley.
S of H—Mules.
S of M—1 chain breast type mach.
PP—250 volts D. C., 1 pump.
EMP—31. Last years tonnage 24,450.
SIZES SHIPT—Run of Mine.

SOMERS COAL CO. (THE).

Now part of Wheeling Township Coal Mining Co.

SONNHALTER, A. F. COAL CO.

General Office, 709 Harriet Ave., N. W., Canton, O.
PR—A. F. Sonnhalter, Canton, O.
VP—Geo. N. Kempton, 820 Plymouth St., N. W., Canton, O.
TR—Ralph Mengel, 1321 26th St., N. W., Canton, O.
GM—A. F. Sonnhalter, 709 Harriet Ave., N. W., Canton, O.
Sonnhalter No. 1 Mine; Shaft; No. 4 Seam, 66 inches thick.
PO—Canton, O.; SP—Same; CTY—Stark.
S of H—Mules. Track gage 39 in.
S of M—Shortwall machs.
PP—Power purchased. Transformer 2200-220 volts A. C., M. G. Sets, 250 volts D. C.
EMP—50. Last years tonnage 51,215.
PREP. EQUIPT—Bar Screens.

SOUTHEASTERN OHIO BY. CO., THE.

General Office, 129 N. Fourth St., Zanesville, O.
PR—R. W. Harner, Wheeling, W. Va.
TR—W. H. Nelckirk, Zanesville, O.
GM—W. A. Wilson, Zanesville, O.
Interurban Mine; Drift; No. 6 Seam, 36 in. thick.
PO—Rossville, O.; SP—Same; CTY—Perry; RR—Southeastern Ohio.
MS—J. C. Abert, Zanesville, O.
S of H—Mules.
S of M—Hand.
Daily output, 40 tons.
SIZES SHIPT—Run of Mine.
Note—Mine formerly owned and operated by S. R. Wigton.

SOUTHERN FUEL COMPANY.

Now part of Northern Southern Coal Company.

SOUTHERN OHIO COAL CO.

General Office, 1201 Branson Bldg., Columbus, O.
PR—J. S. McVey, Columbus, O.
VP—G. W. Coyle, Columbus, O.
TR—J. S. McVey, Columbus, O.
GM—J. S. McVey, Columbus, O.
GS—G. W. Coyle, Columbus, O.
PA—G. W. Coyle, Columbus, O.
EM—E. R. Rink, Nelsonville, O.
EE—Josh Clark, Route 1, New Plymouth, Ohio.
SC0—Warren & Coyle, Buyer, J. H. Warren, New Plymouth, O.
SA—The Central West Coal & Lumber Co., Columbus, O.

Starr Mine; Drift; No. 6 Seam, 18 in. thick.
PO—New Plymouth, O.; SP—Starr, O.; CTY—Vinton; RR—Hocking Valley.
MS—Josh Clark, New Plymouth, O.
S of H—Mules and elec. loco. Track gage 42 in.
S of M—8 elec. machs.
PP—3 return tubular boilers, total 450 H. P., 2 gen. units, 250 volts D. C., 3 pumps.
EMP—175. Daily output, 600 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screen and Pickling Table.

SOUTHERN PERRY COAL CO., THE.

General Office, New Straitsville, O.
PR—F. E. Thomas, Jr., New Straitsville, O.
VP—Samuel Spencer, New Straitsville, O.
TR—David M. Watkins, New Straitsville, O.
GM—Thomas Watkins, New Straitsville, O.
PA—David M. Watkins, New Straitsville, O.
Additional information on Page 610.

Advance Mine; Drift; No. 6 Seam, 60 inches thick.
PO—New Straitsville, O.; SP—Same; CTY—Perry; RR—B. & O.
MS—Harry Fluhart, New Straitsville, O.
S of H—Mules and elec. locos. Track gage 42 in.
S of M—Shortwall mach.
PP—Purchase power. Transformer 4,000 to 300 volts A. C., rotary converters, 275 volts D. C.
EMP—30. Last years tonnage 17,250.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

SPENCER HOLLOW COAL CO.

General Office, Nelsonville, O.
PR—C. L. Stout, Nelsonville, O.
VP—J. S. Mooney, Nelsonville, O.
TR—S. H. Lancaster, Nelsonville, O.
GM—H. A. Keleb, Nelsonville, O.
GS—Jacob Pollock, Nelsonville, O.
PA—H. A. Keleb, Nelsonville, O.
SA—The Sunday Creek Coal Co., Columbus, O.

Spencer Hollow Mine; Drift; No. 7 Seam, 48 in. thick.
SP—Jobs, Ohio; CTY—Hocking; RR—H. V.
S of H—Mules and elec. loco. Track gage 48 in.
S of M—1 shortwall mach.
PP—Power purchased, 250 volts D. C.
EMP—30. Last years tonnage 20,000.
SIZES SHIPT—Run of Mine.

STAFFSTEAD COAL COMPANY (THE)

General Office, New Philadelphia, O.
PR—H. J. N. Stafford, New Philadelphia, O.
VP—Loren Beans, Sherodsville, O.
TR—P. S. Olmstead, New Philadelphia, O.
GM—P. S. Olmstead, New Philadelphia, O.
GS—P. S. Olmstead, New Philadelphia, O.
PA—P. S. Olmstead, New Philadelphia, O.
CE—J. C. Kye, R.F.D. No. 3, New Philadelphia, O.
EM—Geo. E. Arnold, New Philadelphia, Ohio.
SA—The Cleveland-Chartiers Coal Co., New Philadelphia, O.

Staffstead Mine; Drift; No. 6 Seam, 48 in. thick.
PO—New Philadelphia, O.; SP—Wainwright Branch; CTY—Tuscarawas; RR—B. & O.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
PP—4 pumps.
EMP—18. Last years tonnage 11,191.
SIZES SHIPT—Run of Mine.

STALTER & ESSEX COAL CO.

General Office, Columbus, O.
PR—Charles F. A. Columbus, O.
VP—J. W. Cottingham, Columbus, O.
TR—Fred Essex, Columbus, O.
GM—Ben Stalter, Columbus, O.
GS—R. T. West, Pomeroy, O.
PA—R. T. West, Pomeroy, O.
EM—Herb Finnerwald, Columbus, O.
SC0—R. D. Young Store; Buyer, R. D. Young, Pomeroy, O.
SA—Fred Essex, Columbus, O.

(Continued on Next Page)

Stalter & Essex Coal Co.—Cont.

Stalter Mine; Drift; No. 8 Seam 60 in. thick.
 PO—Pomroy, O.; SP—Same; CTY—Mines; RR—K. & M.
 S of H—Electric loco. Track gage. 42 inches.
 S of M—Hand and shortwall mach.
 PP—4 boilers, 2 engines, 300 H. P., 275 volts D. C., 7 pumps.
 EMP—225. Last years tonnage 117,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—1 Picking Table.

STALTER, R. COAL CO., THE

General Office, Columbus, O.
 PR—J. A. Stalter, Columbus, O.
 VP—R. R. Stalter, Nelsonville, O.
 TR—J. A. Stalter, Columbus, O.
 GM—R. A. Stalter, Nelsonville, O.
 PA—Clyde Haub, Carbon Hill, O.
 SA—J. A. Stalter, Columbus, O.

Stalter No. 1 Mine; Drift; No. 6 Hocking Seam, 72 in. thick.
 PO—Carbon Hill, O.; SP—Same; CTY—Hocking; RR—H. V.
 S of H—Mules and rope. Track gage 42 inches.
 S of M—Chain breast type machs.
 PP—Power purchased.
 Daily tonnage 65.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Screens.

STANDARD HOCKING COAL CO.

General Office, Chicago, Ill.
 PR—Jos. P. Rend, Chicago, Ill.
 GM—Jos. P. Rend, " "
 PA—Jos. P. Rend, " "
 GS—N. B. Snell, Crooksville, O.
 MM—Lewis Stephenson, " "
 EM—T. C. Fornara, Zanesville, O.
 Sales Agent, Jos. P. Rend, McCormick Bldg., Chicago, Ill.

Rend Mine; Drift; No. 6 Seam, 3 1/2 ft. thick.
 PO—Crooksville, O.; SP—Same; CTY—Perry; RR—Penna.
 MS—Wm. Hayes, Crooksville, O.
 S of H—Mules and 3 elec. locos. Track gage 42 in.
 S of M—10 Elec. mach.
 PP—2 water tube boilers, total 300 H. P., 2 gen. units, 250 volts D. C., 2 pumps.
 EMP—200. Last years tonnage 100,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Bar Screen.

STAR COAL COMPANY

General Office, Shawnee, O.
 PR—Tom Phillips, Columbus, O.
 VP—Tom Phillips, Columbus, O.
 TR—Henry Hazelton, Shawnee, O.
 GM—Fred Phillips, Shawnee, O.
 GS—Fred Phillips, Shawnee, O.

Star Mine; Drift; Hocking No. 6 Seam, 52 in. thick.
 PO—Shawnee, O.; SP—Same; CTY—Perry; RR—B. & O.
 S of H—Tractor.
 S of M—Hand.
 Daily tonnage 100.
 SIZES SHIPT—Run of Mine.

STARK & OHIO MINING CO.

General Office, Cadiz, O.
 PR—J. S. Selway, Canton, O.
 TR—D. W. Selway, Cadiz, O.
 GM—J. S. Selway, Canton, O.
 PA—D. W. Selway, Cadiz, O.
 EM—C. J. Vietaeren, Cadiz, O.
 SA—D. W. Selway, Cadiz, O.

Berry Mine; Drift; Pittsburgh No. 8 Seam, 72 in. thick.
 PO—Maynard, O.; SP—Same; CTY—Belmont; RR—B. & O., C. L. & W. Branch.
 MS—S. Selway, Wheeling, W. Va.
 S of H—Mules. Track gage 42 in.
 S of M—2 elec. machs.
 PP—Power purchased, M. G. Set, 250 volts D. C., 1 pump.
 EMP—40. Last years tonnage 40,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 Old Information.

STARK COAL & LIME COMPANY

Out of Business.

STARK & OHIO MINING CO.

General Office, Maynard, O.
 PR—J. S. Selway, Maynard, O.
 VP—J. W. Selway, Maynard, O.
 GM—J. S. Selway, Maynard, O.
 EM—J. S. Selway, Maynard, O.
 SA—Conrad & Pugh, Wheeling, W. Va.

Berry Mine; Drift; No. 8 Seam, 72 in. thick.
 PO—Maynard, O.; SP—Same; CTY—Belmont; RR—B. & O.
 S of H—Mules. Track gage 42 in.
 S of M—2 chain breast machs.
 PP—Power purchased, Transformer 4,000 to 250 volts A. C. Motor gen. sets, 250 volts D. C., 1 pump.

EMP—30. Last years tonnage 15,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Screens.

STARK SUMMIT COAL CO. (THE).

General Office, East Sparta, O.
 RECEIVER—Geo. J. Markley, Mineral City, O.
 GS—Elmer Dine, North Industry, C.

Stark-Summit Mine; Drift; No. 6 Seam, 36 inches thick.
 PO—Mineral City, O.; SP—Same; CTY—Stark; RR—B. & O.
 S of H—Mules and 1 gasoline loco. Track gage 36 in.
 S of M—Hand.
 EMP—25. Daily output, 60 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

STATON COAL CO., THE.

Now Palmer Coal Company.

STEINBAUGH, E. R.

Steinbaugh Mine; Drift; No. 6 Seam, 48 inches thick.
 PO—New Philadelphia, O.; SP—Same; CTY—Tuscarawas; RR—B. & O. and C. P.
 S of H—Mules. Track gage, 30 in.
 S of M—Hand.
 EMP—10. Daily tonnage 100.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 Old Information.

STELLAR COAL MINING COMPANY

Out of Business.

STERLING COAL CO., LTD.

General Office, Cleveland, O.
 PR—C. B. McNaught, Toronto, Canada.
 TR—H. G. Ratcliffe, Toronto, Canada.
 GM—H. D. Hileman, Cleveland, O.
 GS—F. M. Kirk, Cleveland, O.
 PA—Geo. F. Weber, Cleveland, O.
 CE—F. M. Kirk, Cleveland, O.
 EE—Walter Holt, Sallenville, O.
 Note—Two mines in Ohio and one in West Virginia.

Sterling Mine; Drift; No. 7-A Seam, 36 in. thick.
 PO—Sallenville, O.; SP—Same; CTY—Carroll; RR—C. & P., Branch of Penna. Lines.
 MS—Richard Hetherington, Sallenville, Ohio.
 SM—M. C. Hileman, Sallenville, O.
 S of H—6 trolley pole type and 12 storage battery locos. Track gage, 42 inches.
 S of M—11 chain breast type and 10 shortwall machs.

PP—6 fire tube boilers, gen. units, 1—150 K. W. and 3—100 K. W., 250 volts D. C., 12 pumps.
 EMP—260. Last years tonnage 185,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

Delmore Mine; Slope; No. 3 Seam, 36 in. thick.
 PO—Leetonia, O.; SP—Same; CTY—Columbiana; RR—Erie.
 MS—W. L. Weikart, Washingtonville, O.
 S of H—Rope and 3 trolley pole type locos. Track gage, 39 in.
 S of M—3 shortwall machs.
 PP—2—150 H. P. fire tube boilers, gen. units, 1—150 K. W. and 1—100 K. W., 250 volts D. C.
 EMP—70. Last years tonnage 45,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity and Shaker Screens.

STEBENVILLE COAL & MINING CO., THE

General Office, 121 Liberty St., Steubenville, O.
 PR—T. J. Sherrard, Wellsburg, W. Va.
 VP—John J. Sherrard, Steubenville, O.
 TR—T. J. Sherrard, Wellsburg, W. Va.
 GM—John J. Sherrard, Steubenville, O.
 GS—B. H. Beatty, Steubenville, O.
 PA—John O. Young, Steubenville, O.
 CE—John O. Young, Steubenville, O.
 SCQ—Address the Company, Buyer, C. D. Kindvatter, Steubenville, O.
 SA—Steubenville Coal & Mining Co., Steubenville, O.

Highb Shaft Mine; Shaft; Freeport No. 6 Seam; 52 inches thick.
 PO—Steubenville, O.; SP—Same; CTY—Jefferson; RR—P. C. & St. L.
 S of H—3 trolley pole type locos. Track gage 28 in.
 S of M—5 shortwall machs.
 PP—Power purchased, Transformer, 1 M. G. Set, 200 K. W. 275 volts D. C., 1—150 H. P. water tube boiler, 3 pumps.
 EMP—120. Last years tonnage 115,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

STILLWATER COAL MINING CO.

General Office, Kirby Bldg., Cleveland, O.
 PR—E. B. Gill, Akron, O.
 VP—J. R. Giddings, Akron, O.
 TR—Ford L. Carpenter, Akron, O.
 GM—H. Sheldon, Akron, O.
 GS—J. Miller, Tippecanoe, O.
 PA—H. Sheldon, Akron, O.
 CE—Robert P. Millard, Cleveland, O.
 EE—F. L. Sessions, Cleveland, O.

Tippecanoe No. 1 Mine; Shaft; Middle Kittanning Seam, 44 to 70 in. thick.
 PO—Tippecanoe, O.; SP—Same; CTY—Harrison; RR—B. & O.
 S of H—5 trolley pole type locos. Track gage, 36 in.
 S of M—5 shortwall machs.
 PP—Power purchased, 250 volts D. C., 5 pumps.
 EMP—100. Daily tonnage 300.
 SIZES SHIPT—Block.
 PREP. EQUIPT—Shaker Screens, Loading Booms, Picking Tables.

STORM-LOOMIS COAL CO.

Now Willard Gas Coal Co.

STRABLEY, JAMES S.

General Office, Bergholz, O.
 PR—Jas. S. Strabley, Bergholz, O.
 GM—F. A. Strabley, Bergholz, O.
 GS—Jas. S. Strabley, Bergholz, O.
 PA—F. A. Strabley, Bergholz, O.
 SA—Geo. A. Enos Coal Co., Cleveland, Ohio.

Strabley No. 2 Mine; Shaft; No. 5 Seam, 40 in. thick.
 PO—Bergholz, O.; SP—Same; CTY—Jefferson; RR—N. Y. C.
 S of H—2 trolley and 2 storage battery locos. Track gage 36 in.
 S of M—3 shortwall machs.
 PP—150 H. P. fire tube boilers, gen. units 1—100 K. W. and 1—250 K. W., 250 volts D. C., 3 pumps.
 EMP—30. Last years tonnage 18,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
 PREP. EQUIPT—Gravity Screens, Loading Booms.

STRATTON FIRE CLAY CO. THE.

General Office, Empire, O.
 PR—C. M. Stratton, Empire, O.
 TR—C. M. Stratton, Empire, O.
 GM—C. M. Stratton, Empire, O.
 GS—C. M. Stratton, Empire, O.
 PA—C. M. Stratton, Empire, O.
 SCQ—Stratton Brothers Store, Buyer, E. W. Stratton, Empire, O.

Ohio River Mine; Drift; No. 8 Seam; 42 to 51 in. thick.
 PO—Empire, O.; SP—Same; CTY—Jefferson; RR—Penna.
 MS—A. Wemple, Empire, O.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 PP—One pump.
 EMP—30.
 SIZES SHIPT—Run of Mine.
 Note—Output consumed in Clay plant.

STROTH COAL COMPANY.

General Office, Wellston, O.

OWNERS—Stroth Bros., Wellston, O.

Stroth Mine; Slope; No. 2 Seam, 44 in. thick.
 PO—Wellston, O.; SP—Same; CTY—Jackson; RR—B. & O.
 MS—J. C. Stroth, Wellston, O.
 S of H—Mules and rope. Track gage 36 inches.
 S of M—Hand.
 EMP—14. Daily tonnage 75.
 SIZES SHIPT—Run of Mine.

SUGAR HILL COAL CO. THE

General Office, Steubenville, O.
 PR—Elmer H. King, Steubenville, O.
 TR—Erma P. King, " "
 GM—Elmer H. King, " "
 GS—Elmer H. King, " "
 PA—Elmer H. King, " "

Sugar Hill Mine, Drift, Pittsburgh Seam No. 8, 5 ft. thick.
 PO—Steubenville, O.; SP—Same; CTY—Jefferson
 S of H—Mules, track gage 34 in.
 S of M—Hand.
 EMP—20. Daily tonnage 50.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Bar Screens.

SUGAR TREE COAL CO., THE

General Office, Alliance, O.
 PR—F. A. Hollies, Alliance, O.
 TR—F. A. Hollies, Alliance, O.
 GM—F. A. Hollies, Alliance, O.
 PA—F. A. Hollies, Alliance, O.

Sugar Tree Mine; Drift; Cambridge No. 7 Seam; 66 inches thick.
 PO—Byesville, O.; SP—Same; CTY—Guernsey; RR—Cleveland & Marietta.
 MS—Wm. McGath, Byesville, O.
 S of H—Mules and rope. Track gage 30 inches.
 S of M—2 chain breast type machs.

PP—1 60 H. P. water tube boiler, gen. units, 250 volts D. C.
 EMP—60. Daily output, 200 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.
 Old Information.

SUNDAY CREEK COAL CO. (THE).

General Office, Columbus, O.
 PR—Jno. H. Winder, Columbus, O.
 TR—C. C. Cooke, Columbus, O.
 CHAIRMAN of the BOARD—J. S. Jones, Columbus, O.
 GM—O. S. Newton, Columbus, O.
 PA—Geo. K. Smith, Columbus, O.
 CE—F. A. Ray, Columbus, O.
 EM—G. H. Dukes, Columbus, O.
 EE—O. S. Newton, Nelsonville, O.
 SCQ—Address the Company, Buyer, G. E. Tetrick, Columbus, O.
 SA—W. E. Tytus, Columbus, O.

Jobs No. 2 Mine; Drift; No. 6 Seam, 66 in. thick.
 PO—Jobs, O.; SP—Same; CTY—Hocking; RR—H. V.
 S of H—3 trolley pole type locos. Track gage, 42 in.
 S of M—3 chain breast type machs.
 PP—Power purchased, transformer 2300-207 volts A. C., rotary converters, 250 volts D. C., 6 pumps.
 EMP—100. Daily output, 750 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

No. 90 Mine; Slope; No. 6 Seam, 66 in. thick.
 PO—Carrington, O.; SP—Same; CTY—Perry; RR—T. & O. C.
 S of H—1 trolley pole type loco. Track gage, 42 in.
 S of M—3 chain breast type machs.
 PP—Power purchased, transformer 4000-200 volts A. C., rotary converters, 250 volts D. C., 1 pump.
 EMP—100. Daily output, 700 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Shaker Screens, Loading Booms.

No. 19 Mine; Slope; No. 6 Seam, 84 in. thick.
 PO—Combs, O.; SP—Buckingham, O.; Perry; RR—T. & O. C.
 S of H—1 trolley pole type loco. Track gage, 42 in.
 S of M—3 chain breast type machs.
 PP—Power purchased, transformer 4000-200 volts A. C., rotary converters, 250 volts D. C., 3 pumps.
 EMP—100. Daily output, 750 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Shaker Screens, Loading Booms.

No. 10 Mine; Shaft; No. 6 Seam, 60 in. thick.
 PO—Glouster, O.; SP—Same; CTY—Athens; RR—T. & O. C.
 S of H—3 trolley pole type locos. Track gage, 36 in.
 S of M—6 chain breast type machs.
 PP—3 75 K. W. gen. units, 250 volts D. C., 4 fire tube boilers, 600 H. P., 6 pumps.
 EMP—150. Daily output, 1,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Shaker Screens, Loading Booms.

Santoy No. 1 Mine; Shaft; No. 6 Seam, 48 in. thick.
 PO—Santoy, O.; SP—Same; CTY—Perry; RR—T. & O. C.
 S of H—2 trolley pole type and 8 storage battery locos. Track gage, 42 inches.
 S of M—11 chain breast type machs.
 PP—4 fire tube boilers, 600 H. P., 2 100 K. W. and 1 150 K. W. gen. units, 250 volts D. C., 7 pumps.
 EMP—150. Daily output, 1,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Gravity and Shaker Screens, Picking Tables, Loading Booms, Washeries.

Santoy No. 2 Mine; Shaft; No. 6 Seam, 48 in. thick.
 PO—Santoy, O.; SP—Same; CTY—Perry; RR—T. & O. C.
 S of H—2 trolley pole type and 8 storage battery locos. Track gage, 42 inches.
 S of M—12 chain breast type and 4 shortwall machs.
 PP—4 fire tube boilers, 600 H. P., 2 100 K. W. gen. units, 250 volts D. C., 5 pumps.
 EMP—150. Daily output, 1,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Gravity and Shaker Screens, Picking Tables, Loading Booms.

SUPERIOR COAL CO.

General Office, Wheeling, W. Va.
PR—E. T. Hitchman, Wheeling, W. Va.
VP—J. J. Holloway, Wheeling, W. Va.
TR—S. M. Freese, Wheeling, W. Va.
GM—E. T. Hitchman, Wheeling, W. Va.
GS—W. P. Burruss, Chandler, O.
PA—S. M. Freese, Wheeling, W. Va.
EM—H. A. Conrads, Wheeling, W. Va.
SA—Superior Coal Co., Wheeling, W. Va.

Superior Mine; Drift and Stripping; Pittsburgh No. 8 Seam, 56 in. thick.
PO—Chandler, O.; SP—Same; CTY—Jefferson; RR—P. & W. Va.
S of H—5 steam locos. Track gage 36 in. S of M—Hand.
PP—1—100 H. P. water tube boiler, 4 pumps.
EMP—30. Last years tonnage 178,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Egg, Lump.
PREP. EQUIPT—Gravity Screens, Picking Tables.

SUPERIOR COLLIERY CO.

General Office, Hammond Bldg., Detroit, Mich.
PR—C. S. Morris, Detroit, Mich.
TR—Geo. T. Maxwell, New York, N. Y.
SECY—R. L. Hillock, New York, N. Y.
GM—U. S. Morris, Detroit, Mich.
GS—Wilfred Snowden, Wellston, O.
PA—Wilfred Snowden, Wellston, O.
CE—J. M. Roan, Columbus, O.
EM—A. K. Williams, Wellston, O.
SC0—Superior Stores, Buyer, Thomas Willis, Wellston, O.

No. 12 Mine; Shaft; No. 2 Jackson Seam, 26-53 inches thick.
PO—Wellston, O.; SP—Same; CTY—Jackson; RR—B. & O.
S of H—Trolley pole type locos. Track gage, 36 in.
S of M—4 longwall machs.
PP—3 150 H. P. water tube boilers, gen. units, 250 volts D. C.
EMP—175. Daily tonnage 500.
SIZES SHIPT—Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

No. 17 Mine; Drift; No. 5 Lower Kintanning Seam, 26-56 inches thick.
PO—Wellston, O.; SP—Same; CTY—Jackson; RR—B. & O.
SM—Tom Willis, Wellston, O.
S of H—Mules and trolley pole type locos. Track gage, 36 in.
S of M—7 shortwall machs.
PP—3 150 H. P. water tube boilers, gen. units, 250 volts D. C.
EMP—250. Daily output, 750 tons.
SIZES SHIPT—Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Gravity Screens.

No. 10 Mine; Drift; No. 5 Lower Kintanning Seam, 26-36 in. thick.
PO—Wellston, O.; SP—Same; CTY—Jackson; RR—B. & O.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
Daily output, 250 tons.
SIZES SHIPT—Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Gravity Screens.

No. 20 Mine; Drift; Clarion No. 4 Seam.
PO—Wellston, O.; SP—Same; CTY—Jackson; RR—B. & O.
SM—Tom Willis, Wellston, O.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
EMP—110.
SIZES SHIPT—Run of Mine.

No. 11 Mine; Drift; Clarion No. 4 Seam.
PO—Wellston, O.; SP—Same; CTY—Jackson; RR—B. & O.
S of H—Mules and trolley pole type locos. Track gage, 36 in.
S of M—3 chain breast type and 2 longwall machs.
PP—3 150 H. P. water tube boilers, gen. units.
EMP—160. Daily output, 500 tons.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Gravity Screens.

SWINGLE, S. A.

Swingle Mine; Drift; No. 6 Seam, 48 in. thick.
PO—Roseville, O.; SP—Same; CTY—Perry; RR—Penna.
MS—S. A. Swingle, Roseville, O.
S of H—Mules. Track gage, 31 in. S of M—Hand.
PP—1 pump.
EMP—8. Last years tonnage 38,000.
SIZES SHIPT—Run of Mine, Slack, Lump.

TABOR COAL COMPANY, THE

General Office, Cleveland, Ohio.
PR—E. J. Underhill, Cleveland, Ohio.
VP—Thomas Quinn, New Philadelphia, O.
TR—E. J. Underhill, Cleveland, Ohio.
GM—E. J. Underhill, Cleveland, Ohio.
GS—Thos. Quinn, New Philadelphia, O.

PA—E. J. Underhill, Cleveland, Ohio.
SA—The Geo. A. Enos Coal Co., Cleveland, Ohio.

Tabor Mine; Drift; No. 6 Seam, 42 inches thick.
PO—New Philadelphia, O.; SP—Same; CTY—Tuscarawas; RR—P. R. R.
S of H—Elec. motor. Track gage 42 in. S of M—Breast machs.
PP—Power purchased.
EMP—12. Last years tonnage 15,000.
SIZES SHIPT—Run of Mine.

TASA COAL COMPANY

General Office, 517 Oliver Bldg., Pittsburgh, Pa.
PR—Geo. B. Taylor, Pittsburgh, Pa.
TR—H. R. Salkeld, Pittsburgh, Pa.
GM—A. W. Jones, Pittsburgh, Pa.
SA—Verner Coal Co., Pittsburgh, Pa.; Pittsburgh & Erie Coal Co., Erie, Pa.

Tasa Mine; Stripping; No. 8 Seam, 48 to 60 in. thick.
PO—E. D. No. 2, Cadiz, O.; SP—Kenwood, O.; CTY—Harrison; RR—W. & L. E.
MS—R. E. Tucker, R. F. D. No. 2, Cadiz, O.
S of H—4 30-in. gage Dinkies.
S of M—1 steam shovel.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
PREP. EQUIPT—Picking Tables, Screens and Crushers.

TAYLOR & MURDOY

New Slater Coal Co.

TAYLOR & NEALSON COAL CO.

General Office, 8 E. Long St., Columbus, O.
PR—John M. Taylor, Columbus, O.
TR—John E. Neulson, Columbus, O.
GM—John M. Monday, Columbus, O.
CE—C. P. Vansitte, Columbus, O.
SA—John M. Taylor Coal Company, Columbus, O.

Primler Mine; Slope; No. 6 Seam, 96 in. thick.
PO—Shawnee, O.; SP—Same. CTY—Perry. RR—Z. & W.
S of H—Mules, rope and steam loco. Track gage, 42 in.
S of M—Hand and machloe.
PP—3 pumps.
EMP—15. Daily tonnage 150.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

THARP-REPACK COAL COMPANY.

General Office, Corning, O.
PR—C. S. Tharp, Corning, O.
VP—Paul R-pack, Corning, O.
TR—E. L. Murphy, Corning, O.
GM—C. S. Tharp, Corning, O.
EM—Evan Reese, New Lexington, O.

No. 56 Mine; Drift; No. 6 Seam, 60 in. thick.
PO—Corning, O.; SP—Moxahala, O.; CTY—Perry; RR—T. & O. C.
S of H—Mules. Track gage 36 in. S of M—Hand.
PP—1 pump.
EMP—20. Last years tonnage 5,000.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by the Roberts Coal & Mining Company.

THISTLE COAL CO. THE

General Office, New Straitsville, O.
PR—Davis Woodie, New Straitsville, O.
VP—David Moodie, Jr., New Straitsville, Ohio.
TR—F. E. Kramer, New Straitsville, O.
SA—Sunday Creek Coal Co., New Straitsville, O.

Thistle Mine.
S of H—Mules.
S of M—Hand.
PP—Power purchased, fire tube and water tube boilers.
EMP—17. Daily tonnage 100.
SIZES SHIPT—Run of Mine, Lump.
NOTE—Formerly operated by the Sunday Creek Coal Company.

THOMAS COAL CO

Now part of the Great Lakes Mining Company.

THOMPSON COAL COMPANY

General Office, Columbus, O.
PR—L. B. Thompson, Langsville, O.
TR—G. G. Thompson, Columbus, O.
GM—G. G. Thompson, Columbus, O.
GS—G. G. Thompson, Columbus, O.
PA—G. G. Thompson, Columbus, O.
EM—Ed. Kelley, Wellston, O.
EE—Henry Thompson, Wellston, O.

Thompson's Mine; Drift; No. 4 Seam, 48 inches thick.
PO—Radcliff, O.; SP—Same; CTY—Vinton; RR—Hocking Valley.
MS—G. G. Smith, Radcliff, O.
S of H—Mules and elec. locos. Track gage 42 inches.
S of M—Chain breast and shortwall machs.
PP—2 fire tube boilers, 150 H. P., gen. units, 150 K. W., 250 volts D. C.

EMP—100. Daily tonnage 300.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Loading Booms.

THORN HILL COAL CO. (THE).

General Office, Nelsonville, O.
PR—James Stephenson, Nelsonville, O.
TR—Jno. F. Riley, New Straitsville, O.
GM—Jno. F. Riley, New Straitsville, O.
PA—Wm. Mills, Nelsonville, O.
SA—Jas. Francis, Columbus, O.

Thorn Hill Mine; Drift; No. 6 Seam, 52 in. thick.
PO—Mcuneville, O.; SP—Shawnee, O.; CTY—Perry; RR—B. & O.
MS—C. Severance, Mcuneville, O.
S of H—1 5-ton elec. loco. Track gage 42 in.
S of M—2 shortwall and 1 breast machs.
PP—Power purchased, 220 volts A. C., rotary converters, 220 volts D. C.
EMP—10. Daily tonnage 350.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Standard Bar Screen.

TORONTO FUEL COMPANY

General Office, Toronto, O.
GM—M. O. Peters, Toronto, O.
GS—M. O. Peters, Toronto, O.
PA—M. O. Peters, Toronto, O.

Toronto Mine; Drift; Pittsburgh No. 6 Seam, 40 in. thick.
PO—Toronto, O.; SP—Same. CTY—Jefferson. RR—Penna. C. & P. Div.
MS—J. T. Wagner, Toronto, O.
S of H—Mules and 1 storage battery loco. Track gage 36 in.
S of M—Hand.
PP—Purchase power, transformer, 500 to 250 volts A. C.
EMP—20. Daily output, 75 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

TRI-STATE BRICK TILE & COAL COMPANY

General Office, Van Wert, O.
PR—J. M. King, Ashland, Ky.
VP—P. H. Voss Van Wert, O.
TR—Wm. Kline, Ironton, O.
GM—D. J. Davies, Ironton, O.
GS—D. J. Davies, Ironton, O.
PA—D. J. Davies, Ironton, O.
EM—Fred Gessling, Ashland, Ky.
EE—Philip Carey, Coal Grove, O.

Tri State Mine; Drift; Middle Kittanning Seam, 48 in. thick.
PO—Ironton, O.; SP—Coal Grove, O.; CTY—Lawrence; RR—N. & W.
S of H—Mules. Track gage 36 in. S of M—Shortwall machs.
PP—1—150 H. P. water tube boiler, gen. unit, 75 K. W., 250 volts D. C.
EMP—18. Daily tonnage 100.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.
NOTE—Formerly operated by the C. D. & K Coal Co.

TROLL COAL MINING CO.

General Office, St. Clairsville, O.
PR—C. W. Troll, St. Clairsville, O.
VP—John T. Troll, St. Clairsville, O.
TR—Jesse S. Troll, St. Clairsville, O.
GM—C. W. Troll, St. Clairsville, O.
GS—Conrad Troll, St. Clairsville, O.
PA—Conrad Troll, St. Clairsville, O.
CE—D. A. Elkins, Bellaire, O.
EE—William Morton, Maynard, O.
SA—Troll Coal Mining Co., St. Clairsville, O.

Troll No. 1 and 2 Mines; Drifts; Pittsburgh No. 8 Seam, 66 in. thick.
PO—Fairpoint, O.; SP—Same; CTY—Belmont; RR—B. & O.
S of H—1 trolley pole type and 1 storage battery loco. Track gage, 42 inches.
S of M—8 shortwall machs.
PP—Power purchased, 2—200 K. W. gen. units, 260 volts D. C., 4 pumps.
EMP—160. Daily tonnage 1,100.
SIZES SHIPT—Run of Mine, Lump.

TROPIC MINING CO. (THE)

General Office, Toledo, O.
PR—Geo. M. Jones, Toledo, O.
VP—W. I. Webb, Toledo, O.
TR—T. B. Earl, Toledo, O.
GM—G. S. Jones, Toledo, O.
PA—J. C. Blackburn, Toledo, O.
SA—The Geo. M. Jones Co., Toledo, Ohio.

Tropic Mine; Slope; Ohio No. 6 Seam, 43 in. thick.
PO—Rose Farm, O.; SP—Tropic, O. CTY—Perry; RR—Zanesville & Western.
MS—Richard Jamkins, Rose Farm, O.
S of H—Mules and 3 trolley pole type locos. Track gage, 36 in.
S of M—2 shortwall and 11 chain breast machs.
PP—Power purchased, transformer 1000-2300 A. C., M. G. set, 250 volts D. C., 2 100 K. W. gen. units, 250 volts D. C., 1 150 H. P. fire tube boiler, 8 pumps.
EMP—202. Daily output, 140,300.

SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Egg, Lump.
PREP. EQUIPT—Gravity and Shaker Screens.

TUSCARAWAS COAL COMPANY

PR—Clifford Freed, New Philadelphia, O.
TR—Arthur Paake
GM—Thomas Quilon
PA—Thomas Quilon
MM—G. O. Stomple,

Tuscarawas Coal Co. Mine; Drift; No. 6 Seam, No. 44 to 48 in. thick.
PO—New Philadelphia, O.; SP—Same. CTY—Tuscarawas. RR—C. & P.
S of H—1 elec. loco.
S of M—Hand and elec. mach.
PP—Purchase Power.
EMP—30. Last fiscal year output, 18,000 tons.
SIZES SHIPT—Run of Mine.
Old Information.

TWIN-ADA COAL CO., THE.

General Office, Coalton, O.
PR—J. McGhee, Columbus, O.
TR—J. C. Rowe, Coalton, O.
GM—A. M. Rowe, Coalton, O.
GS—Wm. J. Harper, Wellston, O.
PA—A. M. Rowe, Coalton, O.

Twin-Ada Mine; Shaft; Jackson No. 2 Seam, 42 in. thick.
PO—Coalton, O.; SP—Glenn Roy, O. CTY—Jackson. RR—D. T. & I.
S of H—Mules and rope. Track gage, 36 in.
S of M—Hand.
PP—2 return tubular boilers, total 808 H. P., 5 pumps.
EMP—35. Last years tonnage 20,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Bar Screens, Picking Tables.

TWIN CITY COAL CO., THE

General Office, Cleveland, O.
PR—U. C. Hatch, Cleveland, O.
VP—E. J. Clancy, Cleveland, O.
TR—A. W. Dean, Cleveland, O.
GM—R. J. Bryon, Martins Ferry, O.
GS—Frank Rose, Dennison, O.
PA—D. N. Snettinger, Cleveland, O.
CE—H. J. Watson, Cleveland, O.
SA—Pittsburgh & Ohio Mng. Co., Cleveland, O.

Twin City Mine; Slope; No. 6 Seam, 48-56 inches thick.
PO—Dennison, O.; SP—Same; CTY—Tuscarawas; RR—Penna.
S of H—3 haulage motors and 4 gathering motors. Track gage 36 in.
S of M—4 shortwall machs.
PP—Power purchased, 1—150 K. W. gen. units, M. G. set, 250 volts D. C., 6 pumps.
EMP—80. Last years tonnage 54,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

THE 208 COAL COMPANY

Now No. 2 Mine of Monitor Coal Co

TYRONE COAL & MINING COMPANY.

General Office, Coshocton, O.
PR—John Ingham, Coshocton, O.
VP—Peter Ingham, Coshocton, O.
TR—R. T. Salvage, Coshocton, O.

Tyrone Mine; Drift; No. 6 Seam, 48 in. thick.
PO—Coshocton, O.; SP—Same; CTY—Coshocton; RR—C. A. & C.
S of H—1 trolley pole type loco. Track gage 36 in.
S of M—2 shortwall machs.
PP—1—150 H. P. fire tube boiler, 1—125 K. W. gen. unit, 250 volts D. C.
EMP—40. Daily tonnage 200.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Gravity Screens.

UNION COAL STRIPPING & MINING CO., THE

General Office, 952 Hanna Bldg., Cleveland, O.
PR—U. R. Wagner, Hartsville, O.
VP—A. B. Tubbs, New Athens, O.
TR—A. L. Cochran, Cleveland, O.
GM—A. L. Cochran, Cleveland, O.
PA—A. L. Cochran, Cleveland, O.
CE—W. B. Hanton, Cleveland, O.
EM—A. J. White, Cleveland, O.
SA—The Reserve Fuel Co., Cleveland, O.

Clyde Mine; Drift; No. 8-A Seam, 48 inches thick.
PO—Lafayette, O.; SP—Same; CTY—Reimor; RR—B. & O.
MS—A. W. Williams, Flushing, O.
S of H—Trolley pole type locos.
S of M—1 shortwall and 2 chain breast machs.
PP—Power purchased. Transformer 4,000 to 275 volts, 250 volts in mine.
EMP—10. Last years tonnage 40,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Block.
PREP. EQUIPT—Gravity Screens.
(Continued on Next Page)

Union Coal Stripping & Mining Co.—Cont.

Union Mine; Stripping; No. 8-A Seam, 48 inches thick.
 PO—Laferty, O.; SP—Same; CTY—Belmont; RR—B. & O.
 MS—A. W. Williams, Flushing, O.
 S of H—Trolley pole type locos.
 PP—Power purchased. Transformer 4000-275 volts, 250 volts in mine.
 EMP—40. Last years tonnage 75,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Block.
 PREP. EQUIPT—Gravity Screens.

UNITON COAL COMPANY, THE

General Office, 709 Home Savings & Loan Bldg., Youngstown, O.
 PR—J. H. C. Lyon, Youngstown, O.
 VP—J. C. Irwin, Bannock, O.
 TR—C. G. Mohler, Youngstown, O.
 GS—J. C. Irwin, Bannock, O.
 EM—W. R. Walker, Steubenville, O.
 SA—The Lake City Coal Company, Cleveland, O.

Lee Mine; Drift, Stripping; Pittsburgh No. 8 Seam; 54 inches thick.
 PO—Bannock, O.; SP—Same; CTY—Belmont; RR—B. & O.
 S of H—Mules and storage battery locos. Track gage 36 in.
 S of M—1 chain breast type and 2 short-wall machs.
 PP—Power purchased, 220 volts A. C.
 EMP—112. Last years tonnage 100,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.
 NOTE—Formerly operated by the Industrial Coal & Coke Co.

UNITED ELECTRIC COAL COMPANIES.

General Office, Danville, Ill.
 PR—F. E. Butcher, Danville, Ill.
 VP—Howard Swallon, Danville, Ill.
 TR—J. B. F. McVillie, Danville, Ill.
 GM—F. E. Butcher, Danville, Ill.
 GS—Jas. Anderson, Danville, Ill.
 PA—W. Barton Scott, Danville, Ill.
 CE—F. E. Toeniges, Danville, Ill.
 SCO—Address the Company, Buyer, J. M. Schill, Danville, Ill.

No. 7 Beech Flats Mine; Stripping; No. 8 Pittsburgh Seam, 66 in. thick.
 PO—Rush Run, O.; SP—Same; CTY—Jefferson; RR—P. R. R.
 MS—Wm. Read, Rush Run, O.
 S of H—4 steam locos. Track gage 36 in. S of M—Hand.
 PP—Power purchased.
 EMP—100. Last years tonnage 175,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

UNITED IRON & STEEL COMPANY

Now operated by the Hanna Furnace Co.

UNITED STATES COAL CO. (THE).

General office, Cleveland, O.
 PR—M. A. Bradley, Cleveland, O.
 VP—W. M. Baldwin, Cleveland, O.
 TR—Alva Bradley, Cleveland, O.
 GM—H. E. Willard, Cleveland, O.
 GS—J. R. Clark, Bradley, O.
 PA—C. H. Bromley, Cleveland, O.
 EM—J. H. Crea, Bradley, O.
 Sales Agent, C. H. Bromley, Cleveland, Ohio.

Crow Hollow Mine; Drift; Pittsburgh No. 8 Seam; 60 to 72 in. thick.
 PO—Bradley, O.; SP—Smithfield and Bradley, O.; CTY—Jefferson; RR—W. & L. E. N. Y. C.
 MS—H. W. Merriman, Bradley, O.
 S of H—6 storage battery locos. Track gage, 50 in.
 S of M—17 chain breast machs.
 PP—Power purchased, transformer 500 to 250 volts A. C.
 EMP—350. Last years tonnage 282,248.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

Plum Run Mine; Drift; Pittsburgh No. 8 Seam; 60 to 72 in. thick.
 PO—Rhodesdale, O.; SP—Rush Run, O. CTY—Jefferson; RR—Penna.
 MS—J. A. Watkins, Rhodesdale, O.
 S of H—4 storage battery locos. Track gage, 50 in.
 S of M—13 chain breast type machs.
 PP—Purchase power, transformer, 500 to 250 volts A. C.
 EMP—275. Last years tonnage 261,183.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

UNITY COAL CO.

General Office, Steubenville, O.
 PR—Everett Ferguson, Steubenville, O.
 VP—G. E. Wisener, Steubenville, O.
 TR—A. G. Lee, " "
 GM—Everett Ferguson, " "
 GS—P. P. Sexton, Jewett, O.
 PA—A. V. Aditt, Steubenville, O.
 Copeton Mine; Stripping; Pittsburgh No. 8 Seam, 58 in. thick.
 PO—Jenett, O., R. F. D. No. 3; SP—Folk, O.; CTY—Harrison; RR—P. C. C. & St. L.

S of H—1 steam loco. Track gage, 56 1/2 in.
 S of M—1 steam shovel.
 EMP—50.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

UPSON COAL & MINING CO. (THE)

Now operated by Upson Brothers Mining Company.

UPSON BROTHERS MINING CO.

General Office, Newark, O.
 GM—H. H. & G. D. Upson, Newark, O.
 GS—J. M. Bell, Dixie, O.
 PA—H. H. Upson, Newark, O.
 EE—J. W. Bell, Dixie, O.
 SCO—Upson Store, Buyer, L. M. Rutberford, Dixie, O.

Dixie Mine; Drift; Hocking No. 6 Seam, 42 inches thick.
 PO—Dixie, O.; SP—New Lexington, O.; CTY—Perry; RR—B. & O.
 S of H—Elec. loco. Track gage 42 inches.
 S of M—Shortwall mach.
 PP—1 fire tube boiler, 150 H. P., 2 gen. units, 250 volts D. C.
 EMP—40. Daily tonnage 400.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.

URICHVILLE CLAY CO.

General Office, Uhrichville, O.
 PR—G. D. Haas, Dennison, O.
 VP—Dr. H. S. Clever, Tuscarawas, O.
 TR—P. A. Romig, Uhrichville, O.
 GM—P. A. Romig, Uhrichville, O.
 GS—P. A. Romig, Uhrichville, O.
 PA—P. A. Romig, Uhrichville, O.

No. 1 Mine; Drift; No. 6 Seam, 56 in. thick.
 PO—Uhrichville, O.; SP—Same; CTY—Tuscarawas; RR—P. C. C. & St. L.
 S of H—Mules.
 S of M—Hand. Mine for own use only.

UNDERHILL COAL MINING CO., THE

General Office, Cleveland, Ohio.
 PR—Geo. A. Enos, Cleveland, Ohio.
 VP—J. W. Canavan, Cleveland, Ohio.
 TR—Geo. A. Enos, Cleveland, Ohio.
 GM—E. J. Underhill, Cleveland, Ohio.
 GS—E. Goulder, New Philadelphia, O.
 PA—E. J. Underhill, Cleveland, Ohio.
 SA—The Geo. A. Enos Coal Co., Cleveland, Ohio.

Mullins No. 1 Mine; Drift; No. 6 Seam, 42 inches thick.
 PO—New Philadelphia, O.; SP—Same; CTY—Columbiana; RR—Penna.
 S of H—Elec. locos. Track gage 42 in.
 S of M—Shortwall and breast machs.
 EMP—80. Last years tonnage 75,000.
 SIZES SHIPT—Run of Mine Slack, Egg, Lump.
 PREP. EQUIPT—Gravity Screens.

VALLEY CAMP COAL CO. (THE)

General Office, 319 Kirby Bldg., Cleveland, O.
 1 mine in Ohio, 2 mines in Penna.
 PR—J. A. Paisley, Cleveland, O.
 TR—F. W. Eriser, Cleveland, O.
 GS—H. E. Kinloch, Parnassus, Pa.
 PA—H. E. Kinloch

Columbia Nos. 1 and 2 Mines; Drifts; Pittsburgh No. 8 Seam; 54 in. thick.
 PO—Fairpoint, O.; SP—Same; CTY—Belmont; RR—B. & O., C. L. & W. Div.
 MS—C. H. Hallwell, Fairpoint, O.
 S of H—Mules and 3 elec. locos. Track gage 42 in.
 S of M—11 elec. machs.
 PP—3 water tube boilers, 2 gen. units, 250 volts D. C.
 EMP—320. Last fiscal year output, 362,794 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.

VALLEY COAL COMPANY

General Office, 914 Kirby Bldg., Cleveland, O.
 PR—C. Ridgley Thrapp, Coshocton, O.
 TR—W. R. Kennedy, Cleveland, O.
 GM—C. Ridgley Thrapp, Coshocton, O.
 GS—C. Ridgley Thrapp, Coshocton, O.
 PA—C. Ridgley Thrapp, Coshocton, O.
 SA—The Drake Coal Co., 914 Kirby Bldg., Cleveland, O.

Valley Mine; Drift; Coshocton No. 6 Seam, 44 in. thick.
 PO—Lock Box 82, Coshocton, O.; SP—Same; CTY—Coshocton; RR—W. & L. E.
 S of H—Elec. locos.
 S of M—Shortwall machs. and chain breast type machs.
 PP—Power purchased, 150 K. W. gen. units, 275 volts D. C.
 EMP—46. Last years tonnage 27,747.
 SIZES SHIPT—Run of Mine, Slack, Lump.

VALLEY GROVE COAL COMPANY (THE).

General Office, Bellaire, O.
 PR—T. H. Johnson, Bellaire, O.
 VP—C. H. Eberts, Warwood, W. Va.
 TR—C. H. Eberts, Warwood, W. Va.

GM—T. H. Johnson, Bellaire, O.
 GS—T. H. Johnson, Bellaire, O.
 PA—T. H. Johnson, Bellaire, O.
 EM—Conrad & Pugh, Wheeling, W. Va.
 SA—Montour & Northwestern Coal Co., Cleveland, O.

Ohio Mine; Drift; Pittsburgh No. 8 Seam; 60 to 62 inches thick.
 PO—Stewartsville, O.; SP—Same; CTY—Belmont; RR—B. & O.
 MS—J. D. Small, Stewartsville, O.
 S of H—Mules and 1 trolley pole type loco. Track gage, 42 in.
 S of M—3 chain breast machs.
 PP—Power purchased, rotary converters, 250 volts D. C.
 EMP—70. Last years tonnage 80,000.
 SIZES SHIPT—Run of Mine.
 Note—This mine formerly operated by Ohio Consolidated Coal Co.

VAN KIRK CARROLL COAL COMPANY

General Office, Cleveland, O.
 Receiver—George W. Stone, 729 National City Bldg., Cleveland, O.
 PA—L. Stabler, 729 National City Bldg., Cleveland, O.
 SA—Van Kirk Coal & Coke Co., Kirby Bldg., Cleveland, Ohio.

Hickory Mine; Drift; Nos. 5 and 6 Seams; 42 to 60 in. chs thick.
 PO—Mineral City, O.; SP—Same; CTY—Carroll; RR—B. & O.
 MS—J. J. Williams, Magnolia, O.
 S of H—Mules, trolley pole type and storage battery locos. Track gage 36 inches.
 S of M—4 chain breast type and 4 short-wall machs.
 PP—2 fire tube boilers, total 300 H. P., gen. unit, 250 volts D. C., 3 pumps.
 EMP—125. Last fiscal year output, 60,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

Dell Roy Mine; Slope; No. 6 Seam; 42 to 60 inches thick.
 PO—Dell Roy, O.; SP—Same; CTY—Carroll; RR—W. & L. E.
 MS—J. J. Williams, Magnolia, O.
 S of H—Mules, endless rope, 2 storage battery locos. Track gage 36 inches.
 S of M—2 chain breast type and 4 short-wall machs.
 PP—2 fire tube boilers, total 300 H. P., gen. unit, 250 volts D. C., 3 pumps.
 EMP—100. Last fiscal year output, 60,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

VAN KIRK COAL & MINING COMPANY

Now part of Van Kirk Carroll Coal Co.

VICTOR COLLIERY COMPANY

Out of business.

VINTON-JACKSON COAL CO.

Operations abandoned.

VIRGIN COAL COMPANY

General Office, Parlett, O.
 OWNER—Dan Rensi, Parlett, O.
 SA—Electric Coal Co., Parlett, O.
 Virgin Mine; Drift.
 PO—Parlett, O.; SP—Wayco, O.; CTY—Jefferson; RR—P. & W. Va.
 S of H—Mules.
 S of M—Hand.
 EMP—20. Last fiscal year output, 20,000 tons.
 SIZES SHIPT—Run of Mine.
 Old Information.

VIRGINIA HOCKING COAL CO.

General Office, 801-2-3 Lindsey Bldg., Dayton, O.
 PR—F. X. Minnegan, 801-803 Lindsay Bldg., Dayton, O.
 VP—Wm. Jaffe, Sidney, O.
 TR—G. E. Nicholas, Dayton, O.
 GM—F. X. Minnegan, Dayton, O.
 PA—Geo. E. Qualman, Sidney, O.
 CE—J. A. Richards, Gloucester, O.
 SA—Address the Company, Dayton, O.

Virginia Mine; Drift Middle Kittanning Seam, 48 inches thick.
 PO—Carbondale, O.; SP—Mineral, O.; CTY—Athens; RR—B. & O.
 MS—Guy Lowery, Carbondale, O.
 S of H—Mules. Track gage 42 in.
 S of M—Hand.
 PP—1—150 H. P. water tube boiler, 250 K. W. generator, 1 pump.
 EMP—30. Last years tonnage 8,000.
 SIZES SHIPT—Run of Mine.

VULCAN COAL COMPANY, THE

General Office, Steubenville, O.
 PR—W. R. Francis, Martins Ferry, O.
 VP—John G. Belknap, Steubenville, O.
 TR—Thos. S. Jones, Charleston, W. Va.
 GM—Joseph Barna, Charleston, W. Va.
 GS—L. A. Thomas, Pomeroy, O.
 PA—Thos. S. Jones, Steubenville, O.
 SA—L. Z. Netzorg Coal Co., Toledo, O.

Vulcan Mine; Drift; Block Coal Seam, 66 inches thick.
 PO—Pomeroy, O.; SP—Hobson, O.; CTY—Meigs; RR—K. & M.
 S of H—Mules and electric locos. Track gage 42 inches.
 S of M—Shortwall and longwall machs.
 PP—5 fire tube boilers, 750 H. P., geo. units, 225 K. W., 250 volts D. C.
 EMP—250. Daily tonnage 1,200.
 SIZES SHIPT—Run of Mine, Block, Slack, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

WADSWORTH COAL COMPANY

General Office, Martins Ferry, Ohio.
 Echo Mine.
 PO—Martins Ferry, O.; CTY—Belmont; RR—B. & O.
 No report.

WALKER-DOWNEY COAL COMPANY

General Office, Salineville, O.
 PR—J. C. Walker, Vandergrift, Pa.
 TR—L. Cornelius Downey, Pittsburgh, Pa.
 GM—J. C. Walker, Vandergrift, Pa.
 GS—J. C. Walker, Vandergrift, Pa.
 PA—L. Cornelius Downey, Pittsburgh, Pa.
 CE—Frank L. Fleming, Pittsburgh, Pa.

Mary Elizabeth Mine; Shaft and Slope; Salineville Seam, 60 in. thick.
 PO—Salineville, O.; SP—Same; CTY—Columbiana; RR—Penna. (C. & P. Div.).
 S of H—Mules. Track gage 36 in.
 S of M—Hand and comp. air machs.
 PP—M. G. Sets, 210 volts D. C.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.

WALNUT HILL COAL COMPANY.

Out of business.

WARD FUEL COMPANY

General Office, Murray, O.
 PR—G. W. Vansickle, Murray, O.
 VP—Jas. Bryen, Murray, O.
 TR—T. Kenzenbach, Murray, O.
 GM—Jas. Bryen, Murray, O.
 PA—G. W. Vansickle, Murray, O.

Mryen & Swank Mine; Shaft; No. 6 Seam, 78 in. thick.
 PO—Murray, O.; SP—Same; CTY—Hocking; RR—H. V.
 MS—Jas. Bryen, Murray, O.
 S of H—Mules and rope. Track gage 42 inches.
 S of M—Hand.
 Daily tonnage 75.
 SIZES SHIPT—Run of Mine.

WARNER COLLIERIES CO., THE

General Office, Union Natl. Bank Bldg., Cleveland, O.
 PR—W. H. Warner, Cleveland, O.
 VP—H. L. Warner, Cleveland, O.
 TR—Whitney Warner, Cleveland, O.
 SECTY—C. H. Judkins, Cleveland, O.
 GM—E. L. Thrower, Cleveland, O.
 PA—F. A. Needham, Cleveland, O.
 EM—E. L. Thrower, Cleveland, O.
 SCO—Address the Company, Buyer, G. W. Henderson, Fairpoint, O.
 SA—W. H. Warner & Co., Cleveland, O.

No. 1 Mine; Pittsburgh No. 8 Seam; 62 inches thick.
 PO—Fairpoint, O.; SP—Same; CTY—Belmont; RR—B. & O.
 S of H—Mules and trolley pole type locos. Track gage 42 inches.
 S of M—1 chain breast type and 5 shortwall machs.
 PP—Power purchased, transformer 4000-2300 volts A. C., rotary converters, 250 volts D. C.
 EMP—98. Daily tonnage 700.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

No. 2 Mine; Drift; Pittsburgh No. 8 Seam, 62 inches thick.
 PO—Fairpoint, O.; SP—Same; CTY—Belmont; RR—B. & O.
 S of H—Mules and trolley pole type locos. Track gage 42 inches.
 S of M—1 chain breast type and 4 shortwall machs.
 PP—Power purchased, transformer 4,000 to 2,300 volts A. C., rotary converters, 250 volts D. C.
 EMP—10. Daily tonnage 600.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.
 Note—Nos. 1 and 2 Mines formerly operated by the Crabapple Coal Co.

Russell Mine; Drift; No. 8 Seam; 60 to 66 inches thick.
 PO—Tiltonville, O.; SP—Same; CTY—Jefferson; RR—Penna., S. W.
 MS—Seth Williams, Tiltonville, O.
 S of H—Mules and 2 elec. locos.
 S of M—Hand and 7 elec. machs.
 PP—Power purchased. 2 pumps.
 EMP—114.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 Note—Formerly operated by the Crawford Hill Coal Co.

(Continued on Next Page)

Warner Collieries Co.—Cont.

Sedalia Mine; Drift; No. 7 Seam; 54 inches thick.
PO—Jacksonville, O.; SP—Same; CTY—Athens; RR—T. & O. C.
MS—L. E. Holmes, Jacksonville, O.
S of H—Rope and trolley pole type locos. Track gage 42 inches.
S of M—10 chain breast type machs.
PP—Power purchased, 2 100 K. W. gen. units, 250 volts, 1 fire tube boiler, 150 H. P., 2 water tube boilers, 300 H. P., 8 pumps.
EMP—190.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.
Note—Formerly operated by the Pan-American Coal Co.

Wolf Run Mine; Shaft; No. 6 Seam; 42 to 60 inches thick.
PO—Wolf Run, O.; SP—Bergholz, O.; CTY—Jefferson; RR—N. Y. C. Alliance Div.
MS—Robt. Featheringham, Bergholz, O.
S of H—9 elec. locos. Track gage 42 in. S of M—11 elec. machs.
PP—5 return tubular boilers, total 700 H. P., 4 gen. unit, 250 volt D. C., 1 air comp., 3 pumps.
EMP—224.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Bar Screens.
Note—Formerly operated by Wolf Run Coal Co.

Marion Mine; Drift; No. 8 Seam, 58 in. thick.
PO—Cadiz, O.; SP—Hopedale, O.; CTY—Harrison; RR—N. Y. C.
S of H—Mules and 1 trolley loco. Track gage 12 in.
S of M—1 breast and 1 shortwall machs.
PP—Power purchased, transformer 66000-2300 volts A. C., 1—150 K. W. rotary converter, 250 volts D. C., 1 pump.
EMP—23. Daily tonnage 80.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

WARWICK COAL COMPANY (THE).
General Office, 914 Kirby Bldg., Cleveland, O.
PR—C. L. Cassingham, Cleveland, O.
VP—Charles Zettelmeyer, Cleveland, O.
TR—J. W. Warwick, Cleveland, O.
GM—C. L. Cassingham, Cleveland, O.
GS—C. R. Thrapp, Coshocton, O.
PA—W. H. Huer, Cleveland, O.
SA—The Drake Coal Company, Cleveland, O.

Warwick No. 5 Mine; Slope No 6 Seam, 50 inches thick.
PO—Coshocton, O.; SP—Same; CTY—Coshocton; RR—W. & L. E.
S of H—Trolley pole type locos.
S of M—2 chain breast type and 4 shortwall machs.
PP—Power purchased, transformers 4000 to 250 volts A. C., rotary converters, 2 pumps.
EMP—116. Last years tonnage 99,925.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Gravity Screens.

WAYNE COAL COMPANY.
General Office, Benedum-Trees Bldg., Pittsburgh, Pa.
PR—M. L. Benedum, Pittsburgh, Pa.
VP—J. C. Trees, Pittsburgh, Pa.
VP—S. M. Dunbar, Pittsburgh, Pa.
ASST TR—H. T. Taylor, Pittsburgh, Pa.
GM—Geo. P. Johnson, Pittsburgh, Pa.
GS—T. C. Pratt, Parlett, O.
GS—J. E. Moran, New Lexington, O.
PA—J. M. Casey, Pittsburgh, Pa.
CE—Geo. Warren, Steubenville, O.
EM—E. F. Benedum, Steubenville, O.
EE—H. F. Randolph, Pittsburgh, Pa.
SCU—Wyeo Supply Company, Buyer, Orville Harra, Parlett, O.
SA—Wayne Coal Co., Sales Dept., Pittsburgh, Pa.

Nos. 1, 2, 3, 4, 5, 6, 8 and 9 Mines; Stripping; Pittsburgh No. 8 Seam, 54 in. thick.
PO—Wayne, O.; SP—Same; CTY—Jefferson & Harrison; RR—P. & W. V. and P. & R.
S of H—10 steam locos. Track gage, 36-54 in.
PP—6 fire tube boilers, 2 water boilers, transformer 4000-200 volts A. C., 1—500 K. W. gen. unit.
EMP—300. Last fiscal year output, 595,457 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Gravity and Shaker Screens, Picking Tables, Loading Rooms.

Nos. 7 and 10 Mines; Stripping; Kittinghann No. 5 Seam, 42 in. thick.
PO—Dundee, O.; SP—Same; CTY—Tuscarawas; RR—W. & L. E.

S of H—5 steam locos. Track gage 54 in. PP—2 100 H. P. fire tube boilers, 2 pumps.
EMP—90. Last years tonnage 290,193.
SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Egg, Lump.

Nos. 11, 12, 13, 14 Mines; Stripping; No. 5 Hocking Seam, 48 in. thick.
PO—New Lexington, O.; SP—Same; CTY—Perry; RR—Penna.
Track gage, 36 in.
PP—Power purchased, transformer 66,000-440 volts A. C., 1 fire tube boiler, 2 pumps.
Last years tonnage 151,126.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

WAYNE MINING CO. (THE).
General Office, 34 Ingalls Bldg., Cincinnati, O.
PR—J. W. Parker, Detroit, Mich.
VP—A. C. Marshall, Detroit, Mich.
TR—S. C. Mumford, Detroit, Mich.
GS—John Marland, 34 Ingalls Bldg., Cincinnati, O.
PA—J. T. O'Mara, Cincinnati, O.
EM—E. E. Fillmore, Cambridge, O.
Mary Jean Mine; Shaft; No. 5 Seam, 46 in. thick.
PO—Cambridge, O.; SP—Same; CTY—Guernsey; RR—Penna.
S of H—6 trolley pole type locos. Track gage, 42 in.
S of M—2 chain breast type and 6 shortwall machs.
PP—3—150 H. P. fire tube boilers, 1—200 K. W. gen. unit, 250 volts D. C., 3 pumps.
EMP—150. Last years tonnage 63,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

WEBSTER DRICK COMPANY.
Out of Business.

WEL-EBER COAL CO. THE.
General Office, Nelsonville, O.
PR—Dr. C. E. Welch, Nelsonville, O.
VP—G. E. Johnson, Nelsonville, O.
TB—L. J. Eberle, Nelsonville, O.
GM—L. J. Eberle, Nelsonville, O.
GS—Howell & Smith, Nelsonville, O.
PA—L. J. Eberle, Nelsonville, O.

Wel-Eber Mine; Drift; No. 6 Seam, 72 inches thick.
PO—Nelsonville, O.; SP—Same; CTY—Hocking; RR—H. V.
S of H—Mules.
S of M—2 chain breast type machs.
PP—Power purchased, 1 pump.
EMP—42. Last years tonnage 10,560.
SIZES SHIPT—Run of Mine.

WELLSTON HILL COAL COMPANY.
General Office, Wellston, O.
PR—H. A. Goddard, Wellston, O.
VP—Grant McGhee, Wellston, O.
TR—C. E. Litter, Wellston, O.
GM—H. A. Goddard, Wellston, O.
GS—Grant McGhee, Wellston, O.

Buckeye Mine; Drift; Jackson No. 2 Seam, 34 inches thick.
PO—Wellston, O.; SP—Same; CTY—Jackson; RR—R. & O.
S of H—Mules and 1 storage battery loco. Track gage 38 inches.
S of M—Hand.
PP—250 volts D. C., 1 pump.
EMP—35.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

WELLSTON IRON FURNACE CO. THE.
General Office, Jackson, Ohio.
PR—M. L. Stephenson, Jackson, O.
VP—S. E. Stephenson, Jackson, O.
TR—S. A. Sternberger, Jackson, O.
SEC'Y—Jos. McGhee, Columbus, O.
GM—S. E. Stephenson, Jackson, O.
GS—J. G. Harding, Superior, O.
PA—F. A. Burgess, Jackson, O.
CE—Kelly & Kelly, Columbus, O.

Drift Mine; 30 to 38 in. thick.
PO—Superior, O. SP—Same. CTY—Lawrence. RR—D. T. & I.
S of H—Mules.
S of M—Hand.
Note—Formerly operated by Superior Portland Cement Co.

Standard Mine; Slope; Seam No. 2, 30 to 36 inches thick.
PO—Jackson, O.; SP—Same; CTY—Jackson; RR—D. T. & I.
MS—D. E. Woodruff, Jackson, O.
S of H—Mules.
S of M—Hand.
Last years tonnage 23,385.

WELLSTON RICH RUN COAL CO (THE).
General Office, Wellston, O.
PR—J. H. Sellers, Wellston, O.
VP—Jno. T. Ogler, Hamden, O.
TR—J. E. Kessler, Wellston, O.
GM—W. G. Anderson, Wellston, O.
PA—W. G. Anderson, Wellston, O.
EM—Ed Kelley, Wellston, O.

Nos. 1, 2, 3, 4, 5 and 6 Mines; 5 Drifts, 1 Shaft; Nos. 2, 4 and 5 Seams, 24 to 48 in. thick.
PO—Wellston, O.; SP—Same; CTY—Jackson; RR—R. & O.
S of H—Mules. Track gage, 36 in.
S of M—4 chain breast, 2 arewall and 2 shortwall machs.
PP—3 125 H. P. fire tube boilers, 1 water tube boiler, 125 H. P., 1—125 K. W. gen. unit, 250 volts D. C., 1—150 K. W. 250 volts D. C., 6 pumps.
EMP—120. Last years tonnage 75,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

WEST WHEELER COAL CO.
General Office, Bridgeport, O.
PR—Wm. C. Johnson, Bridgeport, O.
VP—Jas. C. Johnson, Bridgeport, O.
TR—H. C. Miller, Bellaire, O.
GM—Wm. C. Johnson, Bridgeport, O.
GS—Jas. C. Johnson, Bridgeport, O.
PA—Wm. C. Johnson, Bridgeport, O.
EM—Geo. W. Wyss, Bridgeport, O.
EE—Henry Towner, Bellaire, O.
SA—The Valley Camp Coal Co., Cleveland, O.

West Wheeler Mine; Drift Pittsburgh No. 8 Seam, 66 in. thick.
PO—Bridgeport, O.; SP—Same; CTY—Belmont; RR—Penna.
S of H—Mules, 3 locos. Track gage 26 inches.
S of M—7 elec. mining machs.
PP—Power purchased 500 volts D. C., 3 pumps.
EMP—95. Last years tonnage 101,973.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Bar Screens.

WESTERN COAL & COKE CO.
General Office, 43 St. Nicholas Bldg., Pittsburgh, Pa.
PR—J. Rohman, Jr., Pittsburgh, Pa.
VP—C. R. Trevaskis, Pittsburgh, Pa.
TR—C. R. Trevaskis, Pittsburgh, Pa.
GM—C. R. Trevaskis, Pittsburgh, Pa.
GS—M. C. Bremar, Cambridge, Ohio.
SA—M. A. Hanna Co., Cleveland, Ohio.

Alma Mine; Drift; Pittsburgh No. 7 Seam, 72 inches thick.
PO—Cambridge, O.; SP—Same; CTY—Guernsey; RR—B. & O.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.
NOTE—Formerly operated by the Bremer Coal Company.

WESTERN FUEL CO. (THE).
General Office, 44 Outlook Bldg., Columbus, O.
PR—Roy Brenbolts, Columbus, O.
VP—Jos. G. Guy, Nelsonville, O.
TR—Roy Brenbolts, Columbus, O.
GM—Roy Brenbolts, Columbus, O.
GS—Rert Walburn, Orhiston, O.
PA—J. G. Guy, Nelsonville, O.
EE—Thos Pierce, Orhiston, O.
SCO—Sunday Creek Coal Co., Buyer, Floyd Stiff, Murray City, O.

Western Fuel Mine; Slope; No. 6 Seam, 72 in. thick.
PO—Nelsonville, O. Box 398; SP—Orbiston, O.; CTY—Athens; RR—H. V.
S of H—Mules, rope and 2 trolley pole type locos. Track gage 42 in.
S of M—6 chain breast machs.
PP—Power purchased, transformer 11000-2200 volts A. C., motor gen. sets, 250 volts D. C., 8 pumps.
EMP—175. Daily tonnage 800.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

WESTERN PENNA. COAL CO.
General Office, 210 Masonic Temple, Zanesville, O.
VP—Norman S. Powell, Sharon, Pa.
TR—David J. Lewis, Sharon, Pa.
GM—George S. Green, McIntire Ave., Zanesville, O.
GS—Geo. S. Greene, Zanesville, O.
PA—George S. Green, McIntire Ave., Zanesville, O.
EM—Oscar Cooper, Zanesville, O.
EE—Thomas Corbet, South Zanesville, O.
SA—Geo. S. Green, McIntire Ave., Zanesville, O.

No. 10 Mine; Drift; No. 0 Seam, 48 in. thick.
PO—Buckeye, O.; SP—Same; CTY—Muskingum; RR—Z. & W. R. & O.
MS—Thos. Corbet, South Zanesville, O.
S of H—10 mules and 1 trolley pole type loco. Track gage, 36 in.
S of M—2 shortwall and 5 chain breast type machs.
PP—2 fire tube boilers, total 300 H. P., 2 100 K. W. gen. units, 250 volts D. C., 3 pumps.
EMP—55. Last years tonnage 34,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

WHEELER & MASON COAL COMPANY, THE.

General Office, 907-909 Brunson Bldg., Columbus, O.
PR—W. E. Wheeler, Columbus, O.
TR—E. A. Wheeler, Columbus, O.
GM—C. S. Wheeler, Salltillo, O.
GS—C. S. Wheeler, Salltillo, O.
PA—W. E. Wheeler, Columbus, O.
MM—Donnis Audit, Crooksville, O.
EE—Donnis Audit.
Salltillo Mine; Drift; Thin Vein No. 8, 48 to 52 in. thick.
PO—Salltillo, O.; SP—Same; CTY—Perry; RR—Z. & W.
S of H—1 elec. loco., 1 steam loco. Track gage, 36 in.
S of M—5 elec. machs.
PP—1 water tube boiler, total 150 H. P., 1 gen. unit, 250 volts D. C., 4 pumps.
EMP—75. Last fiscal year output, 25,000 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
Old information.

WHEELING & LAKE ERIE COAL MINING COMPANY, THE.

General Office, Cleveland, O.
PR—H. M. Hannas, Jr., Cleveland, O.
VP—M. Andrews, Cleveland, O.
VP—Wm. Collins Cleveland, O.
VP—Michael Gallagher, Cleveland, O.
TR—Sam. W. Folsom, Cleveland, O.
GM—Michael Gallagher, Cleveland, O.
GS—John Whelan, Jr., Dillonvale, O.
PA—C. K. Sheridan, Cleveland, O.
EE—H. S. Walker, Cleveland, O.
EM—D. D. Morgan, Dillonvale, O.
EE—C. W. Matthews, Cleveland, O.
SA—M. A. Hanna Co., Cleveland, O.

Dillon No. 2 Mine; Drift; Pittsburgh No. 8 Seam, 60 inches thick.
PO—Dillonvale, O.; SP—Same; CTY—Jefferson; RR—W. & L. E.
DS—Martha Gallagher, Dillonvale, O.
S of H—Mules and 3 trolley pole type locos. Track gage 40 inches.
S of M—10 chain breast type machs.
PP—Power purchased, Transformer 22000 volts A. C., rotary converters, 250 volts D. C., 4 pumps.
EMP—187. Daily tonnage 1,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

Dillon No. 3 Mine; Drift; Pittsburgh No. 8 Seam, 60 inches thick.
PO—Connorville, O.; SP—Dillonvale, O.; CTY—Jefferson; RR—W. & L. E.
DS—Martin Gallagher, Dillonvale, O.
S of H—Mules and rope, trolley pole type gasoline and steam locos. Track gage 40 inches.
S of M—7 chain breast type machs.
PP—4 150 H. P. fire tube boilers, 1—300 K. W. gen. unit, 250 volts D. C., 7 pumps.
EMP—104. Daily tonnage 600.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Gravity Screens.

Dillon No. 4 Mine; Drift; Pittsburgh No. 8 Seam, 60 inches thick.
PO—Morrick, O.; SP—Same; CTY—Jefferson; RR—W. & L. E.
DS—L. C. Brunswick, Dillonvale, O.
S of H—Mules, 1 trolley pole type and 2 haulage motors. Track gage 42 in.
S of M—12 chain breast type machs.
PP—2 150 H. P. fire tube boilers, gen. unit, 250 volts D. C., 6 pumps.
Daily tonnage 600.
SIZES SHIPT—Run of Mine, Slack.
PREP. EQUIPT—Gravity Screens.

Dillon No. 5 Mine; Shaft; Pittsburgh No. 8 Seam, 60 inches thick.
PO—Flushing, O.; SP—Laferty, O.; CTY—Belmont; RR—B. & O.
DS—L. C. Brunswick, Dillonvale, O.
S of H—Mules, 1 trolley pole type loco. Track gage 42 inches.
S of M—7 chain breast type and 2 shortwall machs.
PP—2 fire tube boilers, 150 H. P., 1—100 K. W. and 1—200 K. W. gen. units, 250 volts D. C., 4 pumps.
EMP—101. Daily tonnage 101.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

Dillon No. 6 Mine; Slope; Pittsburgh No. 8 Seam, 60 inches thick.
PO—Laferty, O.; SP—Same; CTY—Belmont; RR—B. & O.
DS—L. C. Brunswick, Dillonvale, O.
S of H—Mules, 1 trolley pole type and 7 haulage motors. Track gage 42 inches.
S of M—7 chain breast type and 5 shortwall machs.
PP—4 150 H. P. fire tube boilers, 1—150 K. W. and 1—200 K. W. gen. unit, 250 volts D. C., 2 pumps.
EMP—118. Daily tonnage 900.
SIZES SHIPT—Run of Mine, Nut.
PREP. EQUIPT—Gravity Screens.

(Continued on Next Page)

York Clay & Mining Co.—Cont.

No. 2 Mine; Drift; No. 6 Seam; 48 inches thick.
PO—Buechel, O.; **SP**—Same; **CTY**—Athens; **RR**—H. V.
MS—C. S. Wheeler, Buechel, O.
S of H—Mules, trolley pole type loco.
PP—1 water tube boiler, 250 K. W. gen. unit, 250 volts D. C., 5 pumps.
EMP—125.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

No. 3 Mine; Drift; No. 7 Seam, 72 inches thick.
PO—Buechel, O.; **SP**—Same; **CTY**—Athens; **RR**—H. V.
MS—W. E. Wheeler, Buechel, O.
S of H—Mules. Track gage 42 inches.
S of M—1 chain breast type mach.
PP—Get power from No. 2 Mine.
EMP—7. Daily tonnage 50.
SIZES SHIPT—Run of Mine.

No. 5 Mine; Drift; No. 6 Seam, 84 inches thick.
PO—Buechel, O.; **SP**—Same; **CTY**—Athens; **RR**—H. V.
MS—W. E. Wheeler, Buechel, O.
S of H—Mules. Track gage 42 inches.
S of M—1 chain breast type mach.
PP—Get power from No. 2 Mine.
EMP—7. Daily tonnage 50.
SIZES SHIPT—Run of Mine.

YORKVILLE MINING CO.

PR—E. Ryan, Martins Ferry, O.
VP—A. J. Holmes, Martins Ferry, O.
TR—D. M. Ryan, Martins Ferry, O.
GM—D. M. Ryan, Martins Ferry, O.
GS—D. M. Ryan, Martins Ferry, O.
PA—D. M. Ryan, Martins Ferry, O.

Hell Mine; Drift; Pittsburgh No. 8 Seam, 66 in. thick.
PO—Yorkville, O.; **SP**—Same; **CTY**—Belmont; **RR**—Penna., W. & L. E.
S of H—Mules. Track gage 36 in.
S of M—Machine.
SIZES SHIPT—Run of Mine, Slack, Lump.

VOUGHIOCHENY & OHIO COAL CO. (THE)

General Office, Cleveland, O.
 Mines in Ohio and Pennsylvania.
PR—S. H. Robbins, Cleveland, O.
VP—W. L. Robbins, Cleveland, O.
TR—W. M. Osborne, Cleveland, O.
 Chairman—J. C. Patterson, Pgh., Pa.
GS—Asst. A. G. Squibb, Barton, O.

PA—J. B. O'Neill, Cleveland, O.
EM—F. R. Haulon, Barton, O.
FE—W. A. Williams, Barton, O.
MM—W. A. Williams, Barton, O.
SCU—Y. & O. Coal Co., buyer, O. P. Parkin, Pittsburgh, Pa.
SA—H. L. Findlay, Cleveland, O.

Barton, Maple Hill and Boggs Mines; Drifts; Pgh. No. 8 Seam; 5½ ft. thick.

PO—Barton, O.; **SP**—Same; **CTY**—Belmont; **RR**—B. & O., C. L. & W. Div.

MS—(Barton Mine) Chas. Fisher, Barton, O.
MS—(Maple Hill and Boggs Mine) Jos. Martin, Barton, O.

SM—H. E. Talbott, Barton, O.
S of H—Elec. and mules; track gauge 44 in.

S of M—Elec.
PP—8 boilers, total 1200 H. P., 500 and 250 volts D. C.

EMP—350.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump and Crushed.

Florence Mine; Drift; Pgh. No. 8 Seam, 5½ ft. thick.

PO—Martins Ferry, O.; **SP**—Same; **CTY**—Belmont; **RR**—P. R. R., C. & P. Div.

MS—Sharpe Hathaway, Martins Ferry, O.
SM—R. C. Campbell, Martins Ferry, O.

S of H—Electric locos. Track gage 44 in.
S of M—Electric locos.

PP—4 boilers, total 600 H. P., 500 volts D. C.
EMP—175.

SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump and Crushed.

Amsterdam No. 1 Mine; Shaft; No. 6 Seam, 56 in. thick.

PO—Amsterdam, O.; **SP**—Same; **CTY**—Jefferson; **RR**—L. E. A. & W.

MS—Richard Jones, Amsterdam, O.
SM—Joshua Kirkland, Amsterdam, O.

S of H—Electric locos. Track gage 44 in.
S of M—Electric locos. and mules.

PP—4 boilers, total 450 H. P., 250 volts D. C.
EMP—175.

SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump and Crushed.

Delora Mine; Shaft; Pgh. No. 8 Seam; 5½ ft. thick.

PO—Glencoe, O.; **SP**—Same; **CTY**—Belmont; **RR**—B. & O., Newark Div.

MS—John E. English, Glencoe, O.
SM—H. J. Philippi, Glencoe, O.

S of H—Elec. and mules; track gauge 44 in.
S of M—Elec.

PP—6 boilers, total 600 H. P., 250 volts D. C.

EMP—150.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump and Crushed.

Eleanor Mine, Shaft; Pgh. No. 8 Seam; 5½ ft. thick.

PO—Warneck, O.; **SP**—Same; **CTY**—Belmont; **RR**—B. & O., Newark Div.

MS—John Hersh, Warneck, O.
S of H—Electric locos. Track gage 41 in.

S of M—Elec. and hand.
PP—3 boilers, total 450 H. P., 250 volts D. C.

EMP—100.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump and Crushed.

Budd Mine.

PO—Rayland, O.; **SP**—Same; **CTY**—Belmont; **RR**—Penna., C. & P. Div.

MS—P. J. Leonard, Rayland, O.
SM—A. J. Phillips, Rayland, O.

S of H—Mules and 2 electric locos.
S of M—7 electric machs.

PP—Power purchased, 1—200 K. W. rotary converter, 250 volts D. C.

EMP—200.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump and Crushed.

Amsterdam No. 2 Mine; Shaft; No. 6 Seam, 56 in. thick.

PO—Amsterdam, O.; **SP**—Same; **CTY**—Jefferson; **RR**—L. E. A. & W.

MS—A. H. Jones, Amsterdam, O.
S of H—Electric locos. Track gage, 44 inches.

S of M—Electric machs.
PP—Power purchased

SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump and Crushed.

Dorothy Mine.

PO—Rayland, O.; **SP**—Same; **CTY**—Belmont; **RR**—Penna., C. & P. Div.

MS—Henry C. Hachmeister, Zanesville, O.
TR—Henry C. Hachmeister, Zanesville, O.

GM—Lawrence J. Kampel, Zanesville, O.
GS—Edward Kampel, Zanesville, O.

SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump and Crushed.

PA—Lawrence J. Kampel, Zanesville, O.

SA—Ferdinand J. Schultz Co., Jenkins Arcade, Pittsburgh, Pa.

Muskingum Mine; Stripping; Middle Kittanning No. 6 Seam, 48 in. thick.

PO—Zanesville, O.; **SP**—Same; **CTY**—Muskingum; **RR**—W. & L. E.

S of H—Endless rope and 2 12-ton steam locos

S of M—Hand.

PP—Water tube boiler, 2 pumps.
 Daily tonnage 400.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens, Picking Tables, Loading Rooms.

ZANESVILLE & WESTERN COAL CO. (THE)

General Office, 1606 Union Commercial Bank Bldg., Cleveland, O.

PR—Whitney Warner, Cleveland, O.
TR—W. Warner, Cleveland, O.

GM—J. Walker, Cleveland, O.
GS—Fred Dunn, Cannelville, O.

PA—J. Walker, Cleveland, O.
SA—W. H. Warner & Co., Cleveland, O.

Turkey Run Mine; Drift; Hocking Seam, 42 in. thick.

PO—Zanesville, O.; **SP**—Cannelville, O.; **CTY**—Muskingum; **RR**—Z. & W.

MS—Orville Rawlings, Zanesville, O.
S of H—Trolley pole type and storage battery locos. Track gage 42 in.

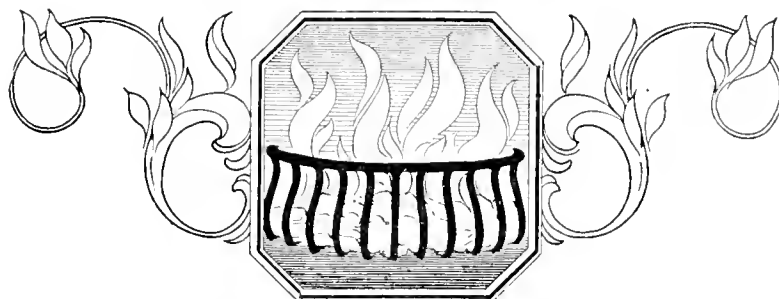
S of M—3 chain breast type and 2 short-wall machs.

PP—Power purchased. Transformer 110.-000 to 210 volts A. C., rotary converters, 275 volts D. C., 1 pump.

EMP—60. Daily tonnage 250.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Gravity Screens.



Directory of Mines by Counties

OHIO

Company.	Mines.	Post Office of Mines.
Ammiller-Edington Coal Co.	A. & E.	Doanville
Beaumont Mining Co., The	Beaumont	Athea
Big Bailey Mining Co., The	Nos. 70, 76 and 105.	Chauncey
Black Diamond Co., The	Black Diamond	Lathrop
Brush Fork Coal Co., The	Brush Fork	Nelsonville
Cambria-Hocking Coal Co.	Cambria	Nelsonville
Canaan Coal Co., The	Canaan	Canaanville
Carbondale Coal Co.	Carbondale No. 2.	Carbondale
Carr Run Coal Co., The	No. 71.	Chauncey
Chauncey Coal Co., The	Chauncey	Nelsonville
Coe Hollow Mining Co., The	Coe Hollow	Nelsonville
Consolidated Fuel Co., The	Maple Hocking	Nelsonville
Craig Coal Co.	Craig	Nelsonville
Doanville Coal Co.	Doanville	Nelsonville
Federal Creek Coal Co., The	Federal Creek	Amesville
Freeport Fuel Mining Co., The	Freeport	Athens
Graham & McMahan Coal Co.	Graham & McMahan	Nelsonville
Grose Coal Co.	Grose	Nelsonville
Hazel Ridge Coal Co.	Poston No. 1, Pee Wee and Miner	Nelsonville
Harrold, J. A.	Harrold	Nelsonville
Hester, C. V.	C. V. Hester.	Mineral
Hyslvania Coal Co.	Hyslvania No. 22.	Glouster
Hyslvania Coal Co.	Hyslvania No. 23.	Trimble
Hocking Domestic Coal Co.	Hocking No. 6.	Nelsonville
Hocking Mining Co.	Del Carbo	Mineral
Hocking Valley Fire Clay Co., The	Hocking Valley	Nelsonville
Home Coal Co.	Home	Chauncey
Jennings Coal Co., The	Utley	Amesville
Juniper, Ed. L. Coal Co.	No. 7.	Nelsonville
Keystone Coal Co.	Keystone	Nelsonville
Kimberly Coal & Land Co.	Kimberly No. 1.	Nelsonville
Lick Run Coal & Clay Co., The	Lick Run.	Nelsonville
Luhrig Collieries Co.	Luhrig No. 2.	Luhrig
Meeker Run Coal Co.	Meeker Run	Nelsonville
Meenan, James J.	Monitor	Nelsonville
Middle States Coal Co., The	Nos. 24 and 68.	Glouster
Millfield-Bailey Coal Co.	Millfield Bailey	Millfield
Monitor Coal Co.	No. 1.	Nelsonville
Nelsonville Coal Co.	Nelsonville	Nelsonville
Nelsonville Mining Co., The	Nelsonville	Chauncey
New York Coal Co.	No. 25.	Chauncey
New York Coal Co.	Nos. 26, 28, 29, 30, 31, 34, 36, 37, 38, 39 and Oreton.	Nelsonville
Nixon Coal Co.	Bertha Nixon	Doanville
North Hill Coal Co., The	No. 75.	Chauncey
Ohio Collieries Co., The	Nos. 209, 210 and 211.	Poston
Ohio Collieries Co., The	No. 255 and 281.	Jacksonville
Ohio Collieries Co., The	No. 256 and 267.	Glouster
Ohio Collieries Co., The	No. 266.	Hollister
Ohio Mining Co.	Ohio	Jacksonville
Packard Coal Mining Co., The	Packard	Nelsonville
Pittsburgh Coal Co., The	New Monarch No. 10.	Athens
Pittsburgh Coal Co., The	Kittanning No. 9.	Nelsonville
Poston Consolidated Coal Co., The	Nos. 6 and 7.	Millfield
Poston, L. D. Coal Co.	No. 65.	Millfield
Progress Coal Co.	Imperial	Nelsonville
Rice Hocking Coal Co., The	The Rice Hocking.	Carbondale
Rice, W. P. Mining Co., The	Palos	Glouster
Robbins Coal Co., The	Robbins	Nelsonville
Semi-Wellston Coal Co.	Rennard	Mineral
Six-A Coal Co.	Six-A	Nelsonville
Sunday-Ceeck Coal Co.	No. 10.	Glouster
Virginia Hocking Coal Co.	Virginia	Carbondale
Warner Collieries Co.	Sedalia	Jacksonville
Western Fuel Co., The	Western Fuel	Nelsonville
White Ash Coal Co., The	White Ash	Nelsonville
Woodland Coal Co.	Woodland	Nelsonville
York Clay & Mining Co.	Nos. 1, 2, 3 and 5.	Buchtel

BELMONT COUNTY

Bakewell Coal Co., The	Knob	Bellaire
Barth & Ronnie Coal Co., The	Barth & Ronnie	Bridgeport
Barton Coal Co.	Taggart	Barton
Rixler Coal Co., The	Cochran	Ballies Mills
Bridgeville-Rarton Coal Co.	Barton	Bellaire
Cambria Collieries Co., The	Pullney and Webb	Bellaire
Carnegie Steel Co. (Coal Mng. Dept.)	Shadyside	Shadyside
Central Coal Mining Co.	Bellare Works	Bellaire
Clarkson Coal Mining Co.	Clifford	Moundsville, W. Va.
Clarkson Coal Mining Co.	Clarkson No. 1.	St. Clairsville
Clarkson Coal Mining Co.	Clarkson No. 2.	Fair Point
Cleveland & Western Coal Co., The	Franklin	Stewartsville
Cleveland & Western Coal Co., The	Johnson	Dilles Bottom
Colburgh Coal Co., The	Murphy	Ballies Mills
Commonwealth Coal Co.	Burlington	Martins Ferry
Crow Oil, Gas & Coal Co.	Capitina	Armstrong Mills
Elm Grove Mining Co.	Deo	Laferty
Emergency Coal Co., The	Emergency	Neffs
Emerson Coal Co.	Frazier	Bellaire
Fairview Coal Co.	Fairview	Barton
Fre man, Michael Company	McClain	Neffs
Giffen Coal Co.	Giffen	Maynard
Great Lakes Coal Mining Co., The	Great Lakes Nos. 3, 4 and 5.	Maynard
Harmony Coal Co.	Harmony	Fairpoint
Holloway Coal Co., The	Locust	Flushing
Hutchinson Coal Co.	Kirkwood	Bridgeport
Kennon Coal & Mining Co.	Kennon	Flushing
Lake Shore Coal Co.	Lake Shore	Barton
Lorain Coal & Dock Co.	Whelving Creek	Bridgeport
Lorain Coal & Dock Co.	Crescent	Crescent
Lorain Coal & Dock Co.	Lansing	Lansing
Lorain Coal & Dock Co.	Blaine and Stanley.	Blaine
Maher Collieries Co.	Nos. 1 and 2.	Glencoe
Maher Collieries Co.	Nos. 3, 6, 7, 9 and 10.	Neff
Maher Collieries Co.	Maher No. 5.	Stewartsville
Maher Collieries Co.	Maher No. 12.	St. Clairsville
Meister Coal Co.	Allice	Bridgeport
Meister, Joseph Coal Co.	Sheets	Martins Ferry

Company.	Mines.	Post Office of Mines.
National Coal Co., The	Loomis	Lamira
Neff Coal Co.	X-L	Neffs
New Fork Coal Co.	Belmont	Flushing
North Belmont Coal Co.	Tunnel	Flushing
Ohio & West Virginia Coal Co.	Nina	Martins Ferry
Ohio Linwood Coal Co.	Ohio Linwood	Bellaire
Paisley, J. A. Co.	Lucy	Stewartsville
Progress Coal Co.	Pauline No. 1.	Bannock
Progressive Coal Co.	Morgan	Bellaire
Rail & River Coal Co.	Nos. 1, 3 and 6.	Bellaire
Roby-Somers Coal Co.	Lorena	Flushing
Rosemary Coal Co., The	Rosemary No. 1.	Flushing
Rosemary Coal Co.	Rosemary No. 2.	Laferty
Sauters Coal Co.	Gaylor Nos. 1 and 2.	Martins Ferry
Schick Co-operative Coal Co., Ltd.	Schick	Bellaire
Shadyside Coal Co., The	Wolfhurst	Bridgeport
Skaggs, E. D.	Skaggs	Bethesda
Stark & Ohio Mining Co.	Berry	Maynard
Troll Coal Mining Co.	Troll Nos. 1 and 2.	Fairpoint
Union Coal Stripping & Mining Co.	Clyde and Union	Laferty
Uniontown Coal Co., The	Lee	Bannock
Valley Camp Coal Co., The	Columbia Nos. 1 and 2.	Fairpoint
Valley Grove Coal Co., The	Ohio	Stewartsville
Warner Collieries Co.	Nos. 1 and 2.	Fairpoint
West Wheeling Coal Co.	West Wheeling	Bridgeport
Wheeling & Lake Erie Coal Mining Co.	Dillon No. 5.	Flushing
Wheeling & Lake Erie Coal Mining Co.	Dillon No. 6.	Laferty
Wheeling & Lake Erie Coal Mng. Co., The	Dillon Nos. 7 and 8.	Neffs
Wheeling Township Coal Mining Co.	Wheeling Township No. 1.	Adena
Wolf Coal Co.	Wolf	Stewartsville
Yorkville Mining Co.	Hell	Yorkville
Youghiogheny & Ohio Coal Co., The	Eleanor	Warnock
Youghiogheny & Ohio Coal Co., The	Barton, Maple Hill and Boggs.	Barton
Youghiogheny & Ohio Coal Co., The	Florence	Martins Ferry
Youghiogheny & Ohio Coal Co., The	Delora	Glencoe
Youghiogheny & Ohio Coal Co., The	Budd and Dorothy.	Rayland

CARROLL COUNTY

Atwood Coal Co.	Atwood No. 1.	Sherodsville
Carroll Coal Co.	Carroll	Salineville
Consolidated Clay Products Co.	Big 4 No. 1.	Malvern
Hoover Coal & Clay Co.	James No. 6.	Mineral City
James Brothers Coal Co.	James No. 6.	Magnolia
Malvern Fire Clay Co., The	The Malvern Fire Clay.	Malvern
Shadyside Coal Mining Co.	Sherodsville	Sherodsville
Sterling Coal Co., Ltd.	Sterling	Salineville
Van-Kirk Carroll Coal Co.	Hickory	Mineral City
Van-Kirk Carroll Coal Co.	Dell Roy	Dell Roy
Whitacre-Greer Fireproofing Co.	Whitacre No. 1.	Malvern
Whitacre-Greer Fireproofing Co., The	Greer Beatty	Magnolia
Willard Gas Coal Co.	Kirk	Salineville

COLUMBIANA COUNTY

American Vitriified Products Co.	No. 36.	Lisbon
Beaver Coal & Clay Co.	Beaver	Salen
Central Mining Co.	Lisbon	Box 447, Lisbon
Columbiana Coal & Clay Co.	Columbiana	Salineville
Columbiana Coal & Power Co.	Columbiana	New Waterford
Elk Run Coal Co., The	Elk Run	Salen
Elk Run Coal Co.	Elk Run	Rogers
Fairview Mining Co.	Rogers	Rogers
Grant Coal Co., The	Grant	Salineville
Hanna Furnace Co.	United	Lectonia
Kirk-Dunn Coal Co.	Rhea and Hazel	Salen
Lincoln Highway Mining Co.	Dorr	Kensington
McGraw Coal & Clay Co.	Rock Camp	East Liverpool
Miller Bros. Coal Co., The	Miller Bros.	Lectonia
Negley Coal Co., The	Pleasant Valley	Negley
Penn Oil Coal Co., The	Ohio No. 1.	East Liverpool
Reese, John T. & Son Coal Co.	Beech Hollow	Salen
Salem Mining Co., The	Salen	Salen
Salineville Coal Mining Co.	Strabury No. 1.	Salineville
Sterling Coal Co., Ltd.	Delmore	Lectonia
Underhill Coal Mining Co., The	Mullins No. 1.	New Philadelphia
Walker-Downey Coal Co.	Mary Elizabeth.	Salineville

COSHOCTON COUNTY

Barnes Coal & Mining Co., The	Best Nos. 1 and 2.	Coshocton
Bodford Coal By-Product Co., The	No. 1.	Coshocton
Blackson & Miller.	Blackson & Miller.	Coshocton
Columbus Coal & Mining Co., The	Franklin	Coshocton
Coshocton Valley Coal Co., The	Coshocton Valley	Coshocton
Eekes, R. M.	Locust Grove	Coshocton
Hall Coal Co.	Hall No. 2.	Lock Box 82, Coshocton
Ingham & Savage.	Burt	Coshocton
Lafayette Stamping & Enameling Co.	No. 1.	W. Lafayette
Morgan Run Coal & Mining Co., The	Morgan Run Nos. 3 and 4.	Lafayette
Power Coal Co.	Rock Run No. 2.	Coshocton
Tyrone Coal & Mining Co.	Power	Coshocton
Valley Coal Co.	Tyrone	Coshocton
Warwick Coal Co.	Warwick No. 5.	Coshocton
Wolford, M. S.	Plain View	Coshocton

GALLIA COUNTY

Hocking Domestic Coal Co.	Hocking No. 5 and 7.	Cheshire
Minerton Coal Co., The	Minerton	Allice
Ridenour-Shafer Coal Co.	Carl	Cheshire

GUERNSEY COUNTY

Akron Coal Co.	Murray Hill, Kings, Goodyear, Rigby and Moss.	Cambridge
Cambridge Collieries Co., The	Buffalo, Waldbonding No. 2, Hartford, Buffalo	Cambridge
Cambridge Collieries Co., The	Ideal, Trail Run No. 1, Trail Run No. 2.	Bryesville
Cambridge Collieries Co., The	Banner.	Pleasant City
Cambridge Collieries Co., The	Blue Bell.	B. D. No. 3, Pleasant City
Cambridge Glass Co., The	Elm Tree.	Cambridge

(Continued on Next Page)

Guernsey County—Continued.

Company.	Mines.	Post Office of Mines.
Champion Collieries Co., The.	Cambridge	Cambridge
Eldon Coal Mining Co., The.	Quaker	Quaker City
Forsythe Coal Co.	Forsythe	Cambridge
Kimblinton Coal Mining Co., The.	Walters	Kimblinton
Midland Coal Co., The.	Midland	Byesville
Millwood Coal Co., The.	Sunshine	Baileys Mills
Morris Coal Corp., The.	Black Top	Lane City
Morris Coal Corp., The.	Cleveland	Sonsville
Mr. Zion Coal Co., The.	Mr. Zion	Byesville
National Coal Co., The.	Monchaha Little Kate No. 1 and 2	Byesville
New Poreck Coal Co., The.	Harryetta and Murray.	Byesville
Nicholson Clay Products Co., The.	Nicholson	Byesville
Nyce Coal Co., The.	Beech Grove	Byesville
Puritan Coal Co., The.	Puritan	Byesville
Ridgely Coal Co., The.	Ridgely	Cambridge
Smith Bros. Coal Co., The.	Smith	Byesville
Sugar Tree Coal Co., The.	Sugar Tree	Byesville
Wayne Mining Co., The.	Mary Jean	Cambridge
Western Coal & Coke Co., The.	Alma	Cambridge

HARRISON COUNTY

Apex Coal Co., The.	Nos. 1 and 2	Germano
Cadiz Block Coal Co., The.	Cadiz Block	Cadiz
Cambridge Collieries Co., The.	Maple	Adena
Clark Coal & Mining Co., The.	Clark	Station 13
Coal Land Development Co., The.	Ella	Hopedale
Crah Orchard Mining Co., The.	Crah Orchard	Freeport
Culbertson, R. L. Coal Co., The.	Culbertson	Cadiz
Great Lakes Coal Mining Co., The.	Great Lakes No. 1	Bolsville
Hall-Eckering Coal Co., The.	Hall-Eckering	Cadiz
Harmon Creek Coal Co., The.	Roxford and Howard	Hopedale
Hudson Coal Co., The.	Hopedale No. 9	Hopedale
Loni Coal Co., The.	Loni	Cadiz
Massillon Coal Mining Co., The.	Rose No. 28 and 29	Cadiz
Narva Coal Co., The.	Narva	Cadiz
Ohio-Wheeling Coal Co., The.	Ohio-Wheeling No. 1	Harrisville
Railway Fuel & Supply Co., The.	Newton	Boweston
Short Creek Coal Co., The.	Nos. 1, 2 and 3	Adena
Stillwater Coal Mining Co., The.	Tippicanoe No. 1	Tippicanoe
Tasa Coal Co., The.	Tasa	R. D. No. 2, Cadiz, O.
Unity Coal Co., The.	Copeton	Janett
Warner Collieries Co., The.	Marion	Cadiz
Wayne Coal Co., The.	Nos. 1, 2, 3, 4, 5, 6, 8 & 9	Wayne
Wheeling Township Coal Mining Co., The.	Wheeling Township No. 2	Adena

HOCKING COUNTY

A. M. Coal Co., The.	A. M.	Carbo Hill
Athens-Hocking Coal Co., The.	Athens Hocking	New Pittsburgh
Big Four Mining Co., The.	Drift	Carbon Hill
Carbon Hill Mining Co., The.	Carbon Hill	Carbon Hill
Crites Coal Co., The.	No. 29	Murray
Cuthbertson Coal Co., The.	Canter No. 2	Murray
Harris & Newman.	Harris & Newman	Nelsonville
Hocking Valley Products Co., The.	Greendale	Greendale
Juno Coal Co., The.	Juno	Nelsonville
Kehota Mining Co., The.	Balders Furnace	Balders Furnace
Kramer Bros. Coal Co., The.	Butterfly	New Stratsville
Long Hollow Coal Co., The.	Long Hollow	Carbon Hill
Lost Run Coal Co., The.	Esco No. 2	New Stratsville
Love Brothers. Coal Co., The.	Love Bros. Globe No. 2 and Love Bros. No. 1	Nelsonville
Monitor Coal Co., The.	Monitor No. 2	Nelsonville
Murphy-Hocking Coal Co., The.	Murphy Hocking	Murray
National Fire Proofing Co., The.	Black Diamond	Haydesville
Ohio Blue Ridge Coal Co., The.	Ohio Blue Ridge	Murray City
Patton, Wm. F. Coal Co., The.	Patton	Nelsonville
Pittsburgh Coal Co., The.	Greendale No. 5, Murray City No. 7	Murray City
Powell Creek Coal Co., The.	Powell Creek	Jobs
Riddle, F. J. Coal Co., The.	Riddle	Murray
Rome Coal Co., The.	Nos. 1, 2 and 3	Carbon Hill
Shultz & Green Coal Co., The.	Shultz & Green	Route No. 4, Nelsonville
Slalzer Coal Co., The.	Conigate No. 228	New Stratsville
Snake Hollow Coal Co., The.	Snake Hollow	Nelsonville
Snow Fork Coal Co., The.	Snow Fork Nos. 1 and 2	Murray
Spencer Hollow Coal Co., The.	Spencer Hollow	Jobs
Stalter, R. Coal Co., The.	Stalter No. 1	Carbon Hill
Sunday-Creek Coal Co., The.	Jobs No. 2	Jobs
Ward Fuel Co., The.	Myren & Swank	Murray
Wel-Eber Coal Co., The.	Wel-Eber	Nelsonville

HOLMES COUNTY

Mount Cherry Coal Co., The.	Drift	Fredericksburg
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JACKSON COUNTY

Armstrong Coal Co., The.	Armstrong	Jackson
Brownman Coal Mining Co., The.	Brownman	Oak Hill
Browne Coal Co., The.	Blue Bird	Wellston
Chapman Coal Co., The.	Grace and Chapman	Jackson
Compass Hill Coal Co., The.	Compass Hill	Coalton
Davis Fire Brick Co., The.	Davis	Oak Hill
D-Witt Coal Co., The.	The DeWitt	Wellston
Domestic Coal Co., The.	Domestic	Wellston
Elk Fork Coal Co., The.	Elk Fork No. 2	Wellston
Evans, T. J. Coal Co., The.	Evans	Coalton
Glen Roy Coal Co., The.	Glen	Jackson
Globe Iron Co., The.	Globe	Jackson
Harper Coal Co., The.	Harper	Coalton
Iron Valley Coal Co., The.	Iron Valley	Wellston
Jackson Block Coal Mining Co., The.	Jackson Block	Jackson
Jackson Colliery Co., The.	Jackson Colliery	Jackson
Jackson Hill Coal Co., The.	Jackson Hill	Jacksoo
Jackson Iron & Steel Co., The.	Jlson	Jackson
Jasper Coal Co., The.	Jasper	Wellston
McKitterlek Coal Co., The.	McKitterlek	Jackson
Maynard Coal Co., The.	No. 5	Wellston
Minglewood Coal Co., The.	Minglewood Nos. 3, 4 and 5	Wellston
Mohawk Coal Co., The.	Mohawk	Wellston
Oak Hill Fire Brick & Coal Co., The.	Oak Hill	Oak Hill
Oakhill Mining Co., The.	Liberty	Oak Hill
Ohio Fire Brick Co., The.	Ohio	Oak Hill
Paine Coal Co., The.	Paine	Jackson
Pyro Clay Products Co., The.	Pyro	Oak Hill
Raccoon Coal Co., The.	Raccoon and No. 2	Wellston
Ridenour-Shively Coal Co., The.	Ridenour	Jackson
Superior Colliery Co., The.	Nos. 12, 17, 10, 20 and 11	Wellston
Twin-Ada Coal Co., The.	Twin-Ada	Coalton
Wellston Hill Coal Co., The.	Buckeye	Wellston
Wellston Iron Furnace Co., The.	Standard	Jackson
Wellston Rich Run Coal Co., The.	Nos. 1, 2, 3, 4, 5 and 6	Wellston

JEFFERSON COUNTY

Company.	Mines.	Post Office of Mines.
Adena Coal Co., The.	Adena	Adena
American Vitrified Products Co., The.	Forest City Nos. 13 and 14	Toronto
Beacon Coal Co., The.	Beacon	Bopdale
Bellaire Mining Co., The.	Bellaire	Adena
Bellman Coal Co., The.	Bellman	Weems
Bergholz Coal Mining Co., The.	X-1	Bergholz
Black Burn Coal Co., The.	Great Hill	Bergholz
Black Elm Coal Co., The.	Black Elm	Smith's Id
Bretell Coal Co., The.	Bretell	Mingo Junction
Brilliant Coal Mining Co., The.	Bunny	Brilliant
Clarkson Coal Mining Co., The.	Clarkson No. 3	Dungen
Climax Coal Co., The.	Climax	Weems
Consolidated Fuel Co., The.	Goucher	Brilliant
Consolidated Fuel Co., The.	Kelly	Kayland
Coxe Mining Co., The.	Fernwood	Fernwood
Cross Creek Coal Co., The.	Coal Hill	Steuensville
East Ohio Sewer Pipe Co., The.	Creek Vein	Irondale
Edgemoor Bros. Co., The.	Marble	Toronto
Glen Run Coal Co., The.	Edgar Nos. 1 and 2	Dillonville
Glen Run Coal Co., The.	Rush Run Nos. 3 and 4	Rush Run
Great Lakes Coal Mining Co., The.	Great Lakes No. 2	Ramsey
Helsinger Coal & Mining Co., The.	Leoust Grove	Toronto
Highland City Coal Co., The.	Highland City	Irondale
Hollow Rock Mining & Transportation Co., The.	Hollow Rock	Irondale
Hudson, S. M. Coal & Coke Co., The.	Hudson No. 3	Rush Run
Jean Coal Mining Co., The.	Jean	Brilliant
Jefferson Coal Co., The.	Nos. 1 and 2	Piney Fork
Jefferson Coal Co., The.	No. 3	Harpersville
Jones Coal Co., The.	Jones	Yorkville
Kaul Clay Mfg. Co., The.	Kaul	Toronto
La Belle Iron Works.	La Belle	Steuensville
Lawrence Coal Co., The.	Lawrence No. 1	Kayland
Lewis Coal Co., The.	Lewis	Kayland
Nicholson, P. R. Coal Co., The.	Nicholson	Dillonville
Ohio & Penna. Coal Co., The.	O. & P. No. 3	Yorkville
Ohio & Penna. Coal Co., The.	O. & P. No. 1	Bergholz
Ohio & Penna. Coal Co., The.	O. & P. No. 2	Amsterdam
Pan Handle Collieries Co., The.	Wallett	Fernwood
Piney Fork Coal Co., The.	Electro	Weems
Raven Coal Co., The.	Raven	Smith's Id
River Ridge Coal Mining Co., The.	Diamond	Box 5, Wellsville
Steuensville Coal & Mining Co., The.	"High Shaft"	Steuensville
Strahley, James S. Coal Co., The.	James S. Strahley No. 2	Bergholz
Stratton Fire Clay Co., The.	Ohio River	Empire
Sugar Hill Coal Co., The.	Sugar Hill	Steuensville
Superior Coal Co., The.	Superior	Chandler
Toronto Fuel Co., The.	Toronto	Toronto
United Electric Coal Companies.	No. 7 Beech Flats	Rush Run
United States Coal Co., The.	Crow Hollow	Bradley
United States Coal Co., The.	Plum Run	Rhodesdale
Virgin Coal Co., The.	Virgin	Parlett
Warner Collieries Co., The.	Russell	Tiltonville
Warner Collieries Co., The.	Wolf Run	Wolf Run
Wayne Coal Co., The.	Nos. 1, 2, 3, 4, 5, 6, 8 and 9	Wayne
Wheeling & Lake Erie Coal Mining Co., The.	Dillon No. 2	Dillonville
Wheeling & Lake Erie Coal Mining Co., The.	Dillon No. 3	Connersville
Wheeling & Lake Erie Coal Mining Co., The.	Dillon No. 4	Merrick
Witch Hazel Coal Co., The.	Flourcove Nos. 2 and 4	Parlett
Woodward Coal Co., The.	Woodward Nos. 1, 2 and 3	Adena
Youghleny & Ohio Coal Co., The.	Amsterdam Nos. 1 and 2	Amsterdam

LAWRENCE COUNTY

Andie Coal Co., The.	Nos. 5 and 6	Pudro
Cambria Clay Products Co., The.	Cambria	Blackrock
Chatfield, C. W. Coal Co., The.	Chatfield Nos. 3 and 4	South Point
Hanging Rock Iron Co., The.	New Castle	Hanging Rock
Harbison-Walker Refractories Co., The.	Harwalk and York	Firebrick
Masey, W. R. Coal Co., The.	Malley-Farm	Ironton
Portsmouth Refractories Co., The.	Nos. 4 and 5	Firebrick
Rhinman, P. M. Coal Co., The.	Rhinman	Ironton
Sherer & Mountain Coal Co., The.	Sherer-Hughes	Ironton
Sheridan Mining Co., The.	Sheridan	Sheridan
Tri-State Brick Tile & Coal Co., The.	Tri-State	Ironton
Wellston Iron Furnace Co., The.	Drift	Superior

MAKONING COUNTY

American Fire Clay & Products Co., The.	Flek	Canfield
Kane Coal & Gas Co., The.	Kane	Springs
Pascala Coal Co., The.	Pascala	Salom

MEDINA COUNTY

Gerstenschlager, V. & Son.	Pleasant Valley	Wadsworth
Hutchinson Coal Co., The.	Klondyke	Wadsworth

MEIGS COUNTY

Davis, T. H. Coal Co., The.	Davis	Middleport
Great Lakes Coal Mining Co., The.	Great Lakes Nos. 11, 12, 14, 15, 16 and Thomas No. 17	Pomeroy
Harper Coal Co., The.	Harper	Pomeroy
Hennessey & Burt.	Hennessey	Pomeroy
Hocking Domestic Coal Co., The.	Hocking Nos. 5 and 7	Cheshire
Hoover Coal Co., The.	Silver Run	Middleport
Kenova Mining Co., The.	Kenova	Middleport
MacPhail Coal Co., The.	MacPhail	Middleport
Maynard Coal Co., The.	Nos. 2 and 4	Rutland
Maynard Coal Co., The.	Maynard No. 3	Hobson
Pittsburgh Coal Co., The.	Pomeroy No. 20	Pomeroy
Pomeroy Colliery Co., The.	Pomeroy Colliery	Pomeroy
Riley Brothers Coal Co., The.	Riley	Middleport
Rutland Coal Co., The.	Maysrald No. 4	Rutland
Stalter & Essex Coal Co., The.	Stalter	Pomeroy
Vulcan Coal Co., The.	Vulcan	Pomeroy
Yankee Mining Co., The.	Yankee	Pomeroy

MORGAN COUNTY

New York Coal Co., The.	No. 51	Pomeroy
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MUSKINGUM COUNTY

Bertram Coal Mining Co., The.	Nos. 1 and 2	R. D. No. 7, Zanesville
Bluerock Coal Co., The.	Bluerock	Merriman
Brush Creek Coal Co., The.	Brush Creek	Cannelville
Burton Miller Coal Co., The.	Sun Sp	South Zanesville
Burton-Townsend Co., The.	Monitor	South Zanesville
Candale Products Co., The.	Candale	Zanesville
Elk Coal Co., The.	Elk	Roseville
Excellent Coal Co., The.	Excellent	Zanesville
Fair Oaks Coal Co., The.	Fair Oaks	Cannelville
Grace Coal Mining Co., The.	Grace No. 1	Cannelville
Harris Brick Co., The.	Harris	Box 125, Zanesville
Hessell Run Coal Co., The.	No. 63	Zanesville
McClellan & Wilson Coal Co., The.	Green Hill	Zanesville

(Continued on Next Page)

Muskingum County—Continued.

Company.	Mines.	Post Office of Mines.
McGarvey, J. A.	Garret No. 2	Philo
McGarvey, J. A.	Rose Bud	Candsville
Ohio Standard Coal Co.	Nos. 1, 2 and 3	Zanesville
Palmer Coal Co.	Palmer	Stovetown
Paul Coal Co., The	MHI Run No. 3	Zanesville
Western Penna. Coal Co.	No. 10	Buckeye
Zanesville & Western Coal Co., The	Pan-American	Canderville
Zanesville & Western Coal Co., The	Turkey Run	Zanesville
Zanesville Mining Co.	Muskingum	Zanesville

NOBLE COUNTY

Caldwell Coal Co.	Freda	Caldwell
Cambridge Collieries Co., The	Coal Ridge	Coal Ridge
Cambridge Collieries Co., The	Caldwell	Caldwell
Forsythe Coal Co.	Imperial No. 1	Belle Valley
Macksburg Coal Co.	Morning Glory	Macksburg

PERRY COUNTY

Berco Coal Co., The	Berne	Shawnee
Bertram Coal Co.	Burick	New Lexington
Blair-Sharshall Coal Co., The	Iron Point	Shawnee
Boyle, John	Copperhead	New Straitsville
Buckeye Coal Co.	Buckeye	Shawnee
Buckingham Coal Co.	Buckingham	R. D. No. 1, Corning
Buros Coal Co.	Buros	Corning
Butler Coal Co.	Butler	New Straitsville
C. & H. Coal Co.	Castio	Shawnee
Cable Coal Co., The	Cable	Shawnee
Caledonia Coal Co.	Caledonia	New Lexington
Central Refractories Co., The	Moxahala	Moxahala
Central Refractories Co., The	Shawnee	Shawnee
Clay Bank Coal & Mining Co.	Clay Bank	Hillis, Ky.
Claycraft Mining & Brick Co., The	Claycraft	Shawnee
Coalgate Coal Co., The	Coalgate	New Straitsville
Consolidated Coal & Coke Co.	Consolidated No. 6	New Straitsville
Corning Mining Co.	No. 26	Corning
Cor-Reo Coal Co.	No. 253	Nelsonville
Cowan Coal Co.	No. 97	Saltillo
Crooksville Mining Co.	Crooksville	Crooksville
Dean Coal & Coke Co., The	Dean	Moxahala
Dixie Coal & Mining Co.	Pike	New Straitsville
Essex Coal Co.	Esco No. 1	New Straitsville
Ferncliff Coal Co., The	Ferncliff	Zanesville
Friel, T. J. Coal Co.	T. J. Friel	New Straitsville
Gosline, W. A. & Co.	Bear Run No. 1	New Lexington
Hanna-Essex Coal Co., The	Essex	New Straitsville
Hazleton Coal Co.	Gem	New Straitsville
Hocking Block Coal Co.	Central and Big Five	New Straitsville
Hughes Coal Co., The	Hughes No. 2	Shawnee
J. M. Coal Co., The	No. 1	New Lexington
Jenkins, D. C. & Co.	XX	Shawnee
Jones Coal Co., The	Jones	New Straitsville
Kebota Mining Co.	Redfield	Saltillo
Kebota Mining Co.	McCunesville	McCunesville
Lancaster Coal & Sand Co.	Lancaster	New Lexington
Log Cabin Coal Co., The	Log Cabin No. 1 and White Oak	New Lexington
Loyal Coal Co.	Loyal	Shawnee
Mid-Hocking Coal Co., The	No. 85	Corning
Miller, Wm. J. Coal Co., The	Miller	New Straitsville
Mulligan, C. O.	Mulligan	Saltillo
Mullen & Brown	Fern Hill	Crooksville
Mulligan, C. D.	Mulligan	McLuney
Mink Run Coal Co.	Mink Run	Hillis
Monsarrat Bros.	Monsarrat Nos. 1 and 2	Hemlock
Monsarrat Bros.	Monsarrat No. 9	Corning
Number Three Coal Co.	No. 3	New Straitsville
Ohio Central Coal Co.	Ohio Central	Moxahala
Ohio Collieries Co., The	No. 268	Rendille
Ohio Collieries Co., The	Nos. 301 and 302	Congo
Ohio Consolidated Coal Co., The	Wilbren	New Lexington
Paskett Coal Co., The	Azbell	Shawnee
Pine Hollow Coal Co., The	Pine Hollow No. 1	Shawnee
Primrose Coal Co.	Primrose	Shawnee
Redfield Coal Co., Inc., The	Redfield Nos. 1 and 3	Roseville
Roseville Coal Co.	New Crescent No. 2	Roseville
Royal Flush Mining Co.	Royal Flush	Shawnee
Shawnee & McCuneville Coal Co.	Jaynes	McCuneville
Silver Fox Coal Co.	Silver Fox	New Lexington
Sines Bros. & Co.	Sines	New Straitsville
Southeastern Ohio Ry. Co., The	Interurban	Roseville
Southern Perry Coal Co., The	Advance	New Straitsville
Standard Hocking Coal Co.	Rend	Crooksville
Star Coal Co.	Star	Shawnee
Sunday-Creek Coal Co., The	No. 90	Carrington
Sunday-Creek Coal Co., The	No. 19	Comly
Sunday-Creek Coal Co., The	Santov Nos. 1 and 2	Santov
Swingle, S. A.	Swingle	Roseville
Taylor & Nelson Coal Co.	Primley	Shawnee
Tharp-Repack Coal Co.	No. 56	Corning
Thistle Coal Co.	Thistle	New Straitsville
Thorn Hill Coal Co., The	Thorn Hill	McCuneville
Tropic Mining Co., The	Tropic	Rose Farm
Upson Brothers Mining Co.	Dixie	Dixie
Wayne Coal Co.	Nos. 11, 12, 13 and 14	New Lexington
Wheeler & Mason Coal Co., The	Saltillo	Saltillo
White Bros.	White Bros.	New Straitsville
White Elm Coal Co., The	White Elm	Moxahala
Wile Coal Co., The	Wile	Shawnee

PORTAGE COUNTY

Hutson Coal Co., The	Deerfield Nos. 4 and 10	Deerfield
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SCIOTO COUNTY

Bear Run Mining Co.	Bear Run	Box 45, Elfort
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STARK COUNTY

Company.	Mines.	Post Office of Mines.
Acme Coal Co.	Acme	Alliance
Battle Ax Coal Co., The	Battle Ax	Massillon
Black Oak Coal Co.	Black Oak	Canton
Bollinger Brothers Coal Co.	Bollinger	East Canton
Christman Stoner Mining Co.	Drift	Massillon
Cleveland Massillon Coal Co.	Cleveland Massillon	Massillon
Coal, Clay & Rock Products Co.	Junod	North Industry
Crescent Ice & Coal Co.	Crescent	Paris
Edgefield Coal Co.	Edgefield	Edgefield
Evans Coal Co.	Evans No. 3	Canton
Fulton Coal Co.	Fulton	Alliance
Industrial Mining Co., The	Fox Run	North Industry
M. & B. Coal Co., The	M. & B.	Canal Fulton
Mapleton Clay Products Co., The	Mapleton No. 1	East Canton
Medal Paving Brick Co., The	Sandy Valley Clay	Malvern
Metropolitan Paving Brick Co., The	Metropolitan	Minerva
Myers, Theo.	Myers and Varner	North Canton
New Pocock Coal Co.	Massillon Pocock Nos. 7 and 8	Massillon
Oak Hill Coal Co.	Oak Hill	Massillon
Paramount Coal Mining Co., The	No. 1 Daley & No. 2 Shamo	Canal Fulton
Sonnhalter, A. F. Coal Co.	Sonnhalter No. 1	Canton
Stark Summit Coal Co.	Stark Summit	Mineral City
Whitacre-Greer Fireproofing Co.	Midway	Waynesburg
Willow Grove Coal Co.	Willow Grove	Massillon

SUMMIT COUNTY

Kranetz, Frank	Grove School	Barberton
Red Oak Coal Mine No. 1	Red Oak No. 1	Clinton

TUSCARAWAS COUNTY

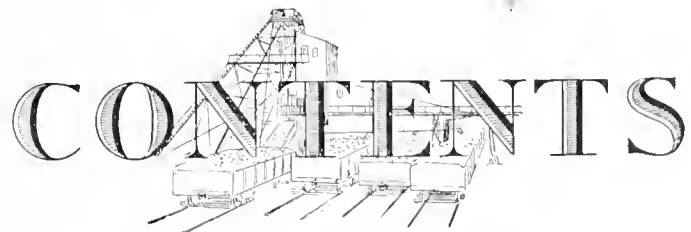
Akron Coal Co.	Beaver Dam	New Philadelphia
American Vitrified Products Co.	"Diamond"	Urichville
Andreas Coal Co., The	Andreas	New Philadelphia
Bluff Hill Coal & Clay Co., The	Bluff Hill	Gadonhuttoe
Bowling Coal & Mining Co., The	Bowling	Deonisoa
Brown, H. R. & Son Coal Co.	Brown No. 2	New Philadelphia
Buckeye Fire Clay Co.	Buckeye	Urichville
Center Valley Coal Co.	Center Valley	Somerdale
Cleveland-Canton Coal Co., The	"C"	New Philadelphia
Comerstown Clay & Coal Co., The	Comerstown No. 2	New Comerstown
Dennison Sewer Pipe Co.	Dennison	Dennison
Dover Fire Brick Co.	Dover	Strasburg
Euga, F. L. Coal Co.	Myrtle	Urichville
Evans Pipe Co.	Finzer	Sugarcreek
Finzer Bros. Clay Co., The	Goshen Central	New Philadelphia
Goshen Central Coal Co., The	Laurel Valley	Stillwater
Goshen Ridge Coal Co.	Goshen Ridge No. 2	New Philadelphia
Ideal Coal Co., The	Sewards	New Philadelphia
Indian Hill Coal Co.	Indian Hill	Urichville
Kimberlin Coal Mining Co., The	Buckhorn	Newcomertown
Klein-Moore Coal Co.	Oak Hill	New Philadelphia
Laughlin Coal Co.	Laughlin	Mineral City
Lick Run Coal Co.	Shoemaker	Newcomertown
Loveday & Son	Keller Grove	New Philadelphia
Macon Coal Co., The	Wilcox	Magnolia
Markley, George J.	Acme, Huff Run and Massillon Peacock	Mineral City
Massillon-Tuscarawas Coal Co.	Central Valley No. 3 & 4, Rt. No. 3	Dover
Meissner Mining Co.	Meissner's	New Philadelphia
Midvale Coal Co.	Midvale Nos. 4, 5 and 6	Midvale
Midvale-Goshen Coal Co., The	Wainwright	New Philadelphia
Miller & Pyle Coal Co.	Miller & Pyle	Somerdale
New Pocock Coal Co.	Maple Leaf No. 1	Urichville
Newport Coal & Mining Co., The	Newport	New Philadelphia
Ohio Mining & Railway Co.	Horse Shoe & Clover Leaf	Mineral City
Old Town Coal Co.	Old Town Nos. 1 and 2	New Philadelphia
Peerless Coal Co., The	Peerless	New Philadelphia
Reeves Mining Co.	Reiser	New Philadelphia
Reiser, A. W. & Co.	Robinson & Son	Urichville
Robinson & Son Sewer Pipe Co.	The Ross	Urichville
Ross Clay Product Co., The	Rothacker	Dover
Rothacker, John E.	Rutledge	Midvale
Rutledge Coal Co.	Sattler, Edward, Coal Co.	Mineral City
Sattler, Edward, Coal Co.	B. Nos. 1, 2 and 3	Midvale
Scott Coal Co.	Scott	Dennison
Scott, W. O.	Sharon	New Philadelphia
Sharon Coal Co.	Staffstead	New Philadelphia
Staffstead Coal Co.	Steinbaugh	New Philadelphia
Steinbaugh, E. R.	Tabor	New Philadelphia
Tabor Coal Co., The	Tuscarawas	New Philadelphia
Tuscarawas Coal Co.	Two City	Dennison
Twin City Coal Co.	No. 1	Urichville
Urichville Clay Co.	Nos. 7 and 10	Dunee
Wayne Coal Co.	The Wolf-Lanning	Dennison
Wolf-Laoning Clay Co., The		

VINTON COUNTY

Atlas Mining Co.	Atlas	Zaleski
Black Hawk Coal Co., The	Black Hawk	Hawks
Cardiff Coal & Clay Co.	Cardiff	Zaleski
Elk Fork Coal Co.	Elk Fork No. 1	McArthur
Elko Colliery Co.	Elko No. 1	Wellston
Flint Coal Co., The	Flint	McArthur
Hocking Fuel Co.	Hocking Fuel	Badchiff
Lawler, John L. & Son	Lawler Nos. 7, 8 and 10	Clarion
Moonsville Mining Co.	Moonsville	Moonsville
Orient Coal Co.	Hope	Zaleski
Orient Coal Co.	Orient	Columbus
Scott & Harper	Jackson Nos. 2 and 4	Coalton
Southern Ohio Coal Co.	Star	New Plymouth
Thompson Coal Co.	Thompson's	Radcliff
Vintoo-Jackson Coal Co.	Zaleski	McArthur

WASHINGTON COUNTY

Cleveland-Macksburg Coal Co., The	Peerless No. 1	Macksburg
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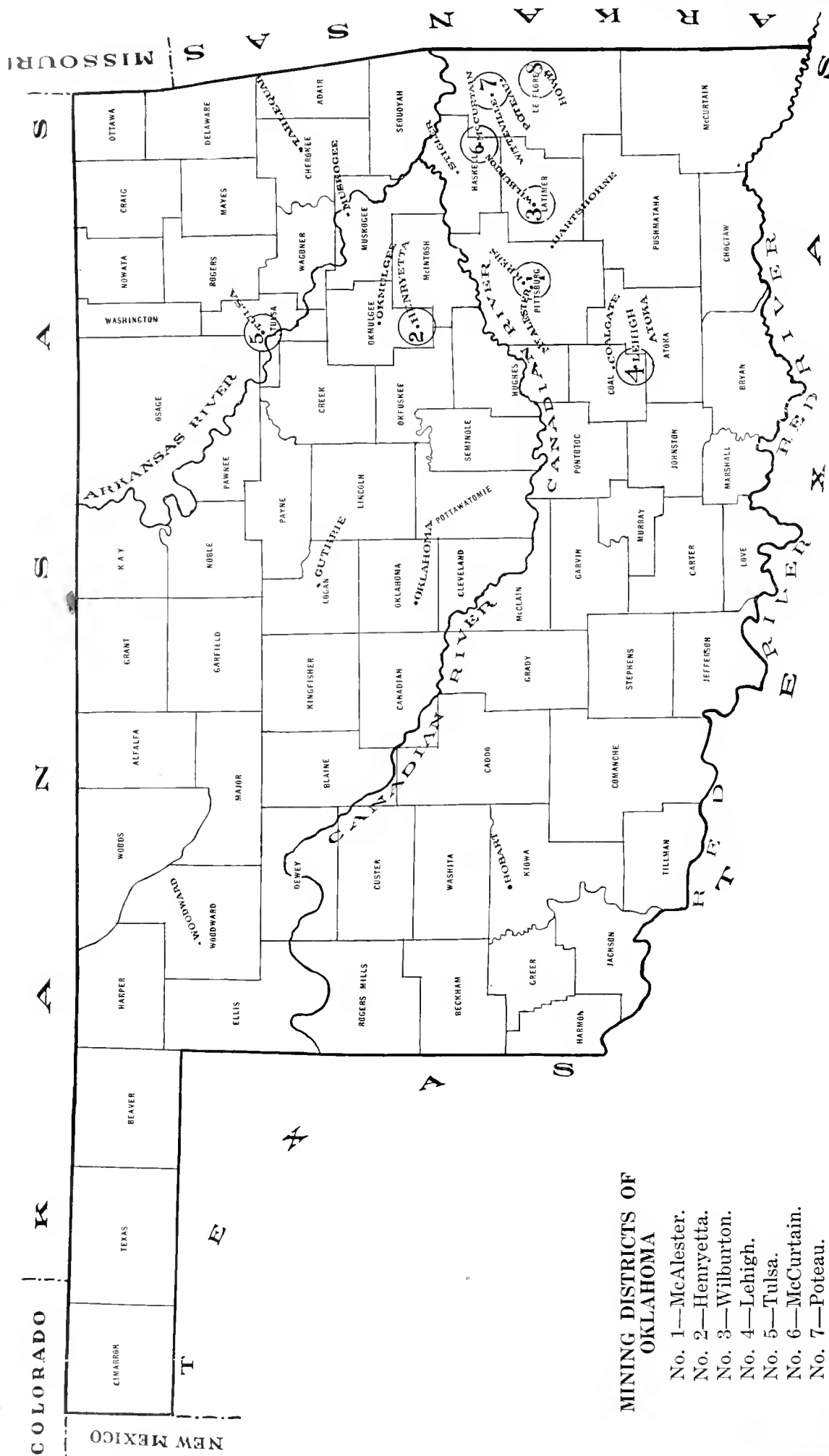


Map of Mining Districts.....	656
Sectional View of Coal Formations.....	657
General Description of Coal Resources.....	658

Hartshorne Seam.....	659
Upper Hartshorne Seam.....	659
Lower Hartshorne Seam.....	659
McAlester Seam.....	659
Witteville Seam.....	659, 660
Cavanal Seam.....	660
Henryetta Seam.....	660
Dawson Seam.....	660

Preparation and Sizing of Coal.....	660
Supplementary Analyses.....	661
Descriptive Advertisements.....	662, 663
List of Mines by Seams.....	664 to 666
Alphabetical Directory of Coal Mines.....	667 to 671

Map of Mining Districts OKLAHOMA



MINING DISTRICTS OF OKLAHOMA

- No. 1—McAlester.
No. 2—Henryetta.
No. 3—Wilburton.
No. 4—Lehigh.
No. 5—Tulsa.
No. 6—McCurtain.
No. 7—Poteau.
No. 8—Howe.

COLUMN SHOWING
BITUMINOUS
COAL BEDS IN THE
COALGATE
QUADRANGLE
OKLAHOMA

After J. A. Taff

Period	Formation Name	Thickness in Feet
	Seminole Conglomerate.....	50-|-
	Holdenville Shale.....	260
	Wewoka Formation.....	700
	Wetumka Shale.....	120
	Calvin Sandstone.....	115-240
	Senora Formation.....	140-485
	Stuart Shale.....	90-280
	Thurman Sandstone.....	80-260
	Boggy Shale.....	2000-2600
	Unnamed Coal Seam— Locally Workable.....	
Carboniferous	Savanna Sandstone.....	1000
	Unnamed (Local Coal Seam).....	
	Locally Several Thin Coal Beds— Chiefly Unworkable.....	
	Lower McAlester Coal, 3'-4' 6".....	
	McAlester Shale.....	1800-2000
	Upper Hartshorne Coal, 4' 6".....	
	Lower Hartshorne Coal, 4'.....	
	Hartshorne Sandstone.....	250
	Atoka Formation.....	3100
	(Chickachoe Chert Lenticles).....	(0-80)
	Wapanucka Limestone.....	100
Carboniferous and Probably Devonian	Caney Shale.....	800 -

OKLAHOMA*

General Description of the Geology of the State With the Ranks of Coal Produced;
Treats of the Mining Districts, With a Map Showing Their Location, All Seams
Lying Within the Coal Areas, and the Railroads Serving Same; Descrip-
tion of the Producing Seams Showing Their Geological Order.
Kinds of Coal, General and Supplementary Analyses, Etc.

The Oklahoma coal fields lie in the eastern part of the state and include about 10,000 square miles of territory. Active mining is carried on in only twelve counties. Estimates as to the total amount of coal vary widely. The United States Geological Survey states there are 79,000,000,000 tons of coal in the state. Assuming present mining conditions, with a continuance of the relatively low percentage of extraction, the available amount is much less, probably close to 8,000,000,000 tons.

The coal fields fall naturally into two divisions; those north of the Canadian River, known as the Cherokee, or Northern field, and those south of the river, known as the Choctaw field. The Cherokee coal beds are much higher, geologically, than those of the Choctaw division. They occur in the upper part of the coal measures, in the same formation as the Kansas coals. The Cherokee shales, in which the Weir-Pittsburg coal of Kansas is found, extends far into Oklahoma, increasing toward the south both in thickness and area. The structure of the field is very simple, being merely a series of beds dipping gently to the west and northwest with here and there a monoclinical fold. There are four workable seams which outcrop on the surface. The Henryetta seam, mined in Okmulgee county, is the principal of these and constitutes the main source of output in the district.

The Choctaw division is much the more important of the two. The coal measures here are a direct continuation of the coal formations of the Arkansas field. The Choctaw field is much folded and faulted, the folds consisting of long anticlines and synclines which strike northeast by east and lie in regular sequence. There are seven seams of commercial value in this field besides a large number of thin seams and lenticular beds which are at present of no value.

Oklahoma coals are principally of bituminous rank, with an approach at a few places in the eastern counties to semibituminous and semianthracite. It is clearly observed in passing from the western limits of the field toward Arkansas on the east that there is a decided rise in the percentage of fixed carbon and that the coals become harder and assume a more or less anthracite character.

Based on tests made at the coal testing plant of the United States Geological Survey at St. Louis, it is the conclusion that Oklahoma coals, when properly washed, will produce coke, but not of a character suited for iron smelting, as the sulphur is too intimately combined or mixed with the coal to be removed by washing. It will, however, do well for lead smelting.

The mines of Oklahoma usually generate large quantities of gas and the dust is highly explosive. The coal strata, as a rule, are considerably tilted, varying from a few degrees up to 70 degrees. The cost of mining at these places is naturally increased. Competition from the coal fields of Colorado and New Mexico is keenly felt in the markets in the western part of the state. Natural gas has destroyed some of the markets for domestic coal and the low price of oil has induced some of the railroads to install oil burners on their engines. Altogether these factors have served to hold down the production, which ranges yearly from 3,500,000 to 4,000,000 tons.

The railroads traversing the coal fields are the Kansas City Southern; St. Louis & San Francisco; Atchison, Topeka & Santa Fe; Chicago, Rock Island & Pacific; Choctaw, Oklahoma & Gulf (Rock Island); Missouri, Kansas & Texas; Fort Smith and Western; and Midland Valley.

There are eight mining districts in Oklahoma, each taking its name from the principal town in the district. No coal is produced in the Ardmore-Stigley-Massey field.

- | | |
|---|--|
| <p>1 McAlester. Seams mined are the Lower Hartshorne and McAlester. Railroads serving are Chicago, Rock Island & Pacific; Missouri, Kansas & Texas.</p> <p>2 Henryetta. Seam mined is the Henryetta. Railroads serving are the St. Louis & San Francisco; Missouri, Oklahoma & Gulf.</p> <p>3 Wilburton. Seams mined are the Upper and Lower Hartshorne. Railroads serving are the Missouri, Kansas & Texas; Chicago, Rock Island & Pacific.</p> <p>4 Lehigh. Seam mined is the McAlester. Railroads serving are Missouri, Kansas & Texas; Chicago, Rock Island & Pacific; Atchison, Topeka & Santa Fe.</p> | <p>5 Tulsa. Seam mined is the Dawson. Railroads serving are the Midland Valley; St. Louis & San Francisco; Missouri, Kansas & Texas.</p> <p>6 McCurtain. Seam mined is the Hartshorne (McCurtain). Railroad serving is the Fort Smith & Western.</p> <p>7 Poteau. Seams mined are the Witteville and Cavanal. Railroads serving are the Kansas City Southern; St. Louis & San Francisco; Chicago, Rock Island & Pacific.</p> <p>8 Howe. Seam mined is the Lower Hartshorne. Railroads serving are the Kansas City Southern; St. Louis & San Francisco; and Chicago, Rock Island & Pacific.</p> |
|---|--|

*We are indebted to U. S. G. S., Bulletin No. 260, by J. A. Taff, and to Bulletin No. 22, Oklahoma Geological Survey, C. W. Shannon, Director, for much of the information here presented.

Hartshorne Seam. (Known as the McCurtain seam in Haskell county; the Atoka seam in the Atoka quadrangle; as the Panama seam in the Cavanal Mountain region; and as the Grady seam.) (Mined in McAlester, Wilburton, McCurtain and Howe districts.)

The Hartshorne bed occurs in large areas and is known to be more persistent in thickness than any other bed. Geologically it is the lowest in the field. Though somewhat variable in composition in different parts of the field, this seam produces a high class bituminous coal in the McAlester district and a semibituminous coal in the eastern part of the field. Its thickness and quality are known at short intervals along the larger part of its outcrop and at numerous localities for many hundreds of feet beneath the surface in mines. Through a large part of the field there are two beds, known as the Upper Hartshorne and the Lower Hartshorne.

UPPER HARTSHORNE SEAM. (Mined in Pittsburg and Coal counties.)

This coal occurs from 40 to 60 feet above the lower bed. West of McAlester it is 5 feet in thickness and about Wilburton it is 4 feet 6 inches thick. In the extreme eastern part of the field it thins out locally to 2 feet or less. The coals here show a lower volatile content than those farther west. Although the upper bed is of more variable thickness than the lower, it is of about the same quality with the same kind of roof and bottom. It is used for locomotives and as a steam and domestic fuel.

GENERAL ANALYSIS

	Western	Eastern
Moisture	2.25	2.40
Volatile Matter	38.50	19.25
Fixed Carbon	53.30	69.55
Ash	5.95	8.80
Sulphur	1.40	1.00
B. t. u.	13,825	13,840

LOWER HARTSHORNE SEAM. (Mined in Pittsburg, Latimer and Le Flore counties.)

This seam is generally of bituminous rank, but in places passes into semibituminous. It lies directly above the Hartshorne sandstone, but in many cases it is separated from the sandstone proper by a thin layer of shale or clay. In some places, where it is being worked, it is in direct contact with the sandstone. This coal has been extensively prospected along the outcrop and is being mined at several localities. It varies from 2 feet 6 inches to 7 feet in thickness, with an average of about 4 feet. The coal breaks easily into small pieces and is clear from impurities. In the vicinity of Howe the coal is of poor quality. The roof is good, being usually a hard, slaty shale, locally replaced by sandstone. The output of the mine is used largely by the railroads.

GENERAL ANALYSIS

	Western	Eastern
Moisture	3.80	0.65
Volatile Matter	37.20	18.35
Fixed Carbon	54.00	71.50
Ash	5.00	9.50
Sulphur	1.25	1.00
B. t. u.	13,950	13,875

McAlester Seam. (Known as the Lehigh coal in the south end of the coal field in Atoka and Coal counties; as the Stigler seam in the area lying south of the junction of the Canadian and Arkansas rivers.) (Mined in Wilburton, McAlester and Lehigh districts.)

There are two McAlester seams—the upper and the lower. The upper seam occurs in the basin southwest of McAlester. It is about 3 feet in thickness, has a good roof and is well suited for mining. On account of the nearness of thicker beds, however, it has not been mined except in a small way.

The lower McAlester seam occurs from 1,200 to 1,300 feet above the Hartshorne coal, and is believed to correlate with the Paris seam in Arkansas. It has an outcrop length of 70 miles in the southern part of the field. The coal varies in thickness from 4 feet 6 inches in the western sections to about 3 feet in the eastern. It is a coal of high quality, especially in the southern part of the field, where it is uniformly good. It contains less sulphur than the Hartshorne coal and is slightly harder, giving it an advantage both in mining and shipping qualities. The output is used largely for railroad fuel. In past years some of the slack was made into coke.

The Stigler seam is thinner than the McAlester seam as found in the vicinity of McAlester, the thickness being less than 2 feet 6 inches. It is, however, well suited for shallow mining.

Several of the most important mines in the state operate in the Lehigh bed. The coal is of good quality and maintains a fairly uniform thickness of about 4 feet over its entire area.

GENERAL ANALYSIS

	McAlester	Lehigh
Moisture	2.00	7.50
Volatile Matter	37.25	35.00
Fixed Carbon	56.25	44.00
Ash	4.50	13.50
Sulphur	0.75	3.75
B. t. u.	13,500	11,300

Witteville Seam. (Known also as the Jones Creek seam.) (Mined in Poteau district.)

Here also there are two beds, known as the upper and the lower seams, separated by about 200 feet of shale and sandstone. These coals are the highest, geologically, of any found south of the Canadian River. They receive their name from the village of Witteville, located at the east end of Cavanal Mountain. The horizon of these seams has been traced completely around this mountain, and mining developments have shown that the coal is of workable thickness only around the north, east and south side of the main peak, which stands at the east end. Everywhere at the outcrop the dips are toward the center of the mountain, varying from 6 degrees to 10 degrees. At Witteville both beds are exposed and the upper bed has been extensively mined.

The seams are from 2 feet 6 inches to 4 feet in thickness, but their value is decreased in many places on account of partings of bony coal. The lower bed is inferior to the upper on account of the presence of several thin layers of bony coal occurring in the bed. The mines in this seam are few in

number and their output is used for railroad and steam purposes.

GENERAL ANALYSIS

Moisture	0.50
Volatile Matter	25.00
Fixed Carbon	66.75
Ash	7.75
Sulphur	2.90

Cavanal Seam. (Mined in Poteau district.)

The Cavanal seam is of bituminous rank and is the least important of the seams mined in the Choctaw field. It is mined only on the south and east sides of Cavanal Mountain between Wister and Poteau, where it is found of best workable thickness. The coal outcrops at the foot of and almost entirely around the mountain, the dip being toward its center at an inclination of from 6 to 10 degrees. It varies in height from 2 feet to 3 feet 6 inches and is of fair to good quality. Sometimes thin bands of shale and bony coal with sulphur concretions occur near the top of the bed, but the first two mentioned are not found within the bed. The roof is of hard, slaty shale and the floor is of compact clay. The coal is used chiefly for steam and domestic purposes.

GENERAL ANALYSIS

Moisture	0.20
Volatile Matter	23.55
Fixed Carbon	66.15
Ash	10.10
Sulphur	4.35

Henryetta Seam. (Known also as the Henryetta-Dewar seam.) (Mined in Henryetta district.)

The Henryetta seam is the one great commercial bed of the Cherokee field. The outcrop has been traced from Henryetta northeast to the Kansas state line. It averages 3 feet in thickness and has a tendency to mine in blocks. In the middle of the bed is found a band of mother coal resembling charcoal. This is productive of much

slack in mining. The coal is fairly free from impurities. In part of the field the bed is solid coal from top to bottom, but in other localities a thin bony coal and slaty parting divides the seam. The pitch varies from 5 to 20 degrees, but the general dip is southwest at the rate of about 20 feet to the mile. The coal when properly mined and shipped gives good results as a domestic coal. Considerable of the output is taken by the railroads, the balance being sold for industrial (steam) purposes.

GENERAL ANALYSIS

Moisture	6.50
Volatile Matter	34.10
Fixed Carbon	52.50
Ash	6.90
Sulphur	1.40
B. t. u.	12,900

Dawson Seam. (Mined in Tulsa district.)

This seam outcrops in the vicinity of Dawson, Tulsa and Collinsville. It is the highest coal of importance in the state, although it is but little worked. The Dawson seam occurs about 90 feet below a characteristic light blue limestone which weathers to a bright yellow and thus serves as an excellent marker in tracing its outcrop and direction. The dip is slight. It has an irregular outcrop over a considerable area and is being mined chiefly by strippings and a few shallow shafts. It is a very clean and pure bituminous coal, somewhat softer than the deeper coals, and ranges from 2 feet 6 inches to 3 feet 4 inches in thickness. At Collinsville it thins down to 18 inches. The coal mines in blocks, separating near the middle along a distinct bedding plane and resembles very closely the Henryetta coal in physical characteristics. It is used for railroad, steam and domestic purposes.

GENERAL ANALYSIS

Moisture	0.05
Volatile Matter	20.05
Fixed Carbon	78.60
Ash	1.30
B. t. u.	13,445

PREPARATION OF COAL

In general there are three grades of coal put on the market, separation being made usually by shaker screens; domestic lump in which the slack, pea and nut coal is taken out; commercial lump in which the slack and pea are taken out; and run of mine. In the eastern portion of the field the coal is generally treated as lump and as mixed nut, pea and slack, giving two-sized products only. Where

nut coal is separated the slack goes through 1¼-inch screens.*

Nearly all of the coal in the McAlester field is prepared by passing it over shaker screens. As a rule four sizes are made. The slack passes through a 5/8-inch screen, the pea through a 1¼-inch screen, and the nut through a 2½-inch screen.

*George M. Brown in *Coal Age*, Vol. 7, pg. 1090.

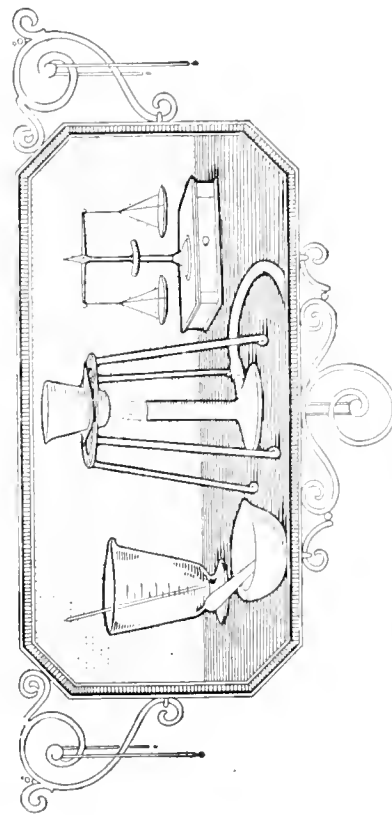
For additional information on uses and analyses of Oklahoma coals, see the descriptive advertisements on mines following the Supplementary Analyses.

Analyses of Oklahoma Seams by Counties and Localities

(ALL ANALYSES MADE ON MINE SAMPLES "AS RECEIVED")

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatil+ Matter	Fix. C Carbon	Ash	Sulphur	Determined E. T. U.	Carbon	RATIOS	
										Oxygen	Carbon oxy + Ash V. M.
* Cavanal.....	Craig, 4 mi. w. of Bluejacket....	Coates.....	4.14	37.41	48.28	10.17	6.08	12,915	69.76	7.27	4.00
* Dawson.....	Le Flore.....	Southwestern No. 1.....	0.22	23.54	66.16	10.08	4.33	12,544	.....	.....	.....
* Hartshorne, Lower.....	Tulsa, ½ mi. w. of Dawson.....	Hailey-Ola.....	6.71	36.30	48.26	8.73	3.38	.....	.....	.....	.....
* Hartshorne, Lower.....	Latimer, Lurie.....	No. 2.....	3.90	34.76	54.74	6.60	2.27	.....	.....	.....	.....
* Hartshorne, Lower.....	Le Flore, near Hughes.....	Adamson No. 4.....	3.13	31.72	58.89	6.26	0.86	14,022	78.07	7.50	5.67
* Hartshorne, Lower.....	Pittsburg, ¼ mi. s. of Adamson.....	Eclipse No. 1.....	4.33	35.51	54.04	6.12	0.84	13,574	75.81	9.91	4.73
* Hartshorne, Lower.....	Pittsburg, 1 ½ mi. e. of Adamson.....	Williams No. 1.....	4.83	35.76	55.55	3.86	1.34	13,829	77.08	10.18	5.49
* Hartshorne, Lower.....	Latimer, 3 mi. e. of Adamson.....	Adamson No. 6.....	2.63	16.48	72.22	8.67	1.00	13,799	80.06	4.30	4.98
* Hartshorne, Lower.....	Latimer, 3 mi. e. of Adamson.....	Buck No. 6.....	10.20	33.98	52.93	2.89	1.28	13,189	73.56	14.42	4.25
* Hartshorne, Lower.....	Pittsburg, Buck.....	No. 8.....	3.55	34.01	54.88	7.56	1.22	13,583	.....	.....	.....
* Hartshorne, Lower.....	Pittsburg, Hartshorne.....	Valley.....	4.45	36.15	48.40	11.00	1.32	12,607	69.49	11.15	3.44
* Hartshorne, Lower.....	Pittsburg, McAlester.....	San Bois No. 2.....	3.39	34.38	57.33	4.90	0.82	13,748	.....	.....	.....
* Hartshorne (McCurtain).....	Haskell, Chant.....	Bokoshe.....	2.37	19.26	69.54	8.83	1.03	13,840	79.39	4.63	5.90
* Hartshorne (Panama).....	Le Flore, Bokoshe.....	Panama No. 2.....	3.33	16.33	63.98	19.69	1.47	11,836	.....	.....	.....
* Hartshorne (Panama).....	Le Flore, Panama.....	No. 6.....	0.94	15.88	72.47	9.25	1.46	13,975	.....	.....	.....
* Hartshorne (Panama).....	Le Flore, Panama.....	Henryetta.....	5.11	13.65	73.21	8.03	1.18	13,662	78.97	6.17	5.52
* Hartshorne, Upper.....	Latimer, Wilburton.....	No. 1.....	2.96	35.97	55.95	5.12	1.05	13,707	.....	.....	.....
* Henryetta.....	Okmulgee, Dewar.....	Henryetta.....	6.46	36.00	53.04	10.96	2.12	12,186	.....	.....	.....
* Henryetta.....	Okmulgee, Henryetta.....	Alderson No. 38.....	8.87	34.82	47.68	8.63	1.62	12,096	.....	.....	.....
* McAlester.....	Pittsburg, 2 mi. e. of Alderson.....	Milby & Dow.....	3.19	32.71	57.06	7.04	0.50	13,475	75.57	10.04	4.42
* McAlester.....	Pittsburg, Dow.....	No. 1.....	4.07	36.11	55.89	3.93	0.52	13,574	.....	.....	.....
* McAlester.....	Pittsburg, Edwards.....	Bushy No. 5.....	4.61	37.00	47.25	5.18	0.54	12,319	67.37	11.46	2.98
* McAlester.....	Pittsburg, 2 mi. e. of McAlester.....	McAlester-Edwards No. 1.....	3.28	33.79	57.75	5.18	0.54	13,637	77.96	9.43	5.34
* McAlester.....	Pittsburg, Pittsburg.....	Turkey Creek.....	4.54	37.50	49.40	8.56	3.23	12,710	70.09	11.61	3.47
* McAlester.....	Latimer, Hughes.....	Lehigh No. 8.....	2.54	31.58	54.15	11.73	3.16	.....	.....	.....	.....
* McAlester.....	Coal, Lehigh.....	Catale No. 1.....	7.07	36.41	45.68	10.84	3.64	11,468	64.38	14.57	2.53
* McAlester.....	Rogers, 1 mi. n. e. of Catale.....	McNutt.....	4.23	38.20	47.75	9.82	5.17	12,911	69.67	8.39	3.83
* McAlester.....	Rogers, 5 mi. n. e. of Claremore.....	.....	9.39	31.68	54.31	4.62	0.81	12,874	.....	.....	.....

* Bulletins Bureau of Mines.



PEABODY COAL COMPANY

Dwight Building, KANSAS CITY, MO.

General Offices—CHICAGO, ILL.

CINCINNATI, OHIO
PINEVILLE, KENTUCKY
PEORIA, ILLINOIS
SPRINGFIELD, ILLINOIS

BRANCHES
ST. LOUIS, MISSOURI
OMAHA, NEBRASKA

MINNEAPOLIS, MINNESOTA
DEADWOOD, SOUTH DAKOTA
SHERIDAN, WYOMING
SPOKANE, WASHINGTON

Operating Thirty-Six Bituminous Mines, in Eleven Districts, with Annual Capacity of 18,000,000 Tons

Oklahoma Semi-Anthracite

Produced at our "Superior" Mine No. 29, located at Tahona, Le Flore County, Oklahoma on the Midland Valley Railroad.

Quality

This coal is a high grade, semi-anthracite. It is exceedingly high in fixed carbon, unusually low in ash and contains less than 1% sulphur. It is classed as smokeless and leaves no soot. It is particularly adapted to special work requiring low sulphur, low ash and high carbon coal.

Average Analysis "Superior" Mine Run

The figures below represent the average of a number of analyses, and are therefore thoroughly reliable.

Moisture	2.09
Volatile	14.39
Fixed Carbon	77.17
Ash	6.35
	<hr/>
	100.00
Sulphur .....	.95
B. t. u.	14,751

Trade Name

Coal from this operation is distributed under the trade name of "Superior Smokeless".



Superior Smokeless Fancy Nut

PEABODY COAL COMPANY

Dwight Building, KANSAS CITY, MO.

General Offices—CHICAGO, ILL.

CINCINNATI, OHIO
PINEVILLE, KENTUCKY
PEORIA, ILLINOIS
SPRINGFIELD, ILLINOIS

BRANCHES
ST. LOUIS, MISSOURI
OMAHA, NEBRASKA

MINNEAPOLIS, MINNESOTA
DEADWOOD, SOUTH DAKOTA
SHERIDAN, WYOMING
SPOKANE, WASHINGTON

Operating Thirty-Six Bituminous Mines, in Eleven Districts, with Annual Capacity of 18,000,000 Tons

Preparation

"Superior Smokeless" Coal is machine mined, shaker screened and hand picked. There is no parting in the seam. The lump loads blocky and there is very little fine coal in the lump, egg and nut.

A Good Stocker

The stocking qualities of "Superior" Coal are shown by the accompanying photograph of a bin of lump that had been in storage for nine months at the time the picture was taken.

Sizes Produced

Fancy Lump
Nut

Mine Run
Coarse Screenings

Freight Rates

"Superior Smokeless" moves on through rates to points in the following states:

Arkansas	Minnesota
Iowa	Missouri
Kansas	Nebraska
Louisiana	Oklahoma
	Texas

Rates to points in above states will be quoted on request.

An Ideal Coal for Domestic and Steam Purposes

"Superior" Coal is classed as smokeless and makes no soot. Its clean burning qualities, freedom from impurities, low ash and high heat, make it an ideal coal for domestic and steam purposes.



Cellar Storage of Superior Smokeless Lump
The Photo Above Was Taken After the Coal Had Been Stored for Nine Months

List of Mines By Seams, Including Name of Company, General Office Address
County, Railroad and Shipping Point

OKLAHOMA

DAWSON SEAM

Mined in Tulsa district. Bituminous rank. Suitable for Steam, Railway, Domestic and Producer Gas purposes.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Adamson, Peter Coal & Mining Co.	Tulsa, Okla.	Adamson	Tulsa	A. T. & S. F.	Dawson, Okla.
Hickory Coal & Mining Co.	R. No. 2, Tulsa, Okla.	No. 2	Tulsa	M. K. & T.	Rudd, Okla.
Hickory Coal & Mining Co.	R. No. 2, Tulsa, Okla.	No. 3	Tulsa	M. K. & T.	Rudd, Okla.
Leavell Coal Co.	Tulsa, Okla.	Leavell	Tulsa	St. L. & S. F.	Tulsa, Okla.
Seneca Coal Co.	Tulsa, Okla.	Broken Arrow	Tulsa	M. K. T.	Broken Arrow, Okla.
Seneca Coal Co.	Tulsa, Okla.	Cottinsville	Tulsa	A. T. & S. F.	Cottinsville, Okla.
Seneca Coal Co.	Tulsa, Okla.	Hickory	Tulsa	M. K. & T.	Rudd, Okla.

HARTSHORNE SEAM (Known as the McCURTAIN SEAM in Haskell county; the ATOKA SEAM in the Atoka quadrangle; the PANAMA SEAM in the Cavanal Mountain region; the GRADY SEAM)

Bituminous rank in western counties; Semibituminous rank in eastern counties. Suitable for Cement Burning, Domestic, Railway, Producer Gas, Smithing, Melting, Powdered Coal, Tile and Pottery Burning and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Great Western Mining Co.	Krebs, Okla.	No. 3 Wilburton	Latimer	C. R. I. & P.	Wilburton, Okla.
Great Western Mining Co.	Krebs, Okla.	No. 7 Wilburton	Latimer	C. R. I. & P.	Wilburton, Okla.
Hailey-Ola Coal Co.	Haileyville, Okla.	No. 1	Pittsburg	C. R. I. & P.	Haileyville, Okla.
Interstate Coal Co.	Muskogee, Okla.	Nos. 3, 4 & 5	Le Flore	C. R. I. & P. K. C. S.	Haileyville, Okla.
Kali-Inla Coal Co.	Hartshorne, Okla.	No. 1	Latimer	R. S. & P.	Hartshorne, Okla.
Keystone Coal & Mining Co.	Coalgate, Okla.	Keystone	Coal	A. T. & S. F.	Coalgate, Okla.
McAlester-Adamson Coal Co.	Hartshorne, Okla.	No. 8	Pittsburg	M. K. & T.	Adamson, Okla.
McAlester-Alderson Coal Co.	McAlester, Okla.	McAlester No. 2	Pittsburg	M. K. & T.	Bache, Okla.
McAlester-Alderson Coal Co.	McAlester, Okla.	McAlester No. 5	Pittsburg	M. K. & T.	Bache, Okla.
McAlester-Adamson Coal Co.	Hartshorne, Okla.	No. 6	Latimer	M. K. & T.	Adamson, Okla.
Peabody Coal Co.	332 S. Michigan Ave., Chicago, Ill.	No. 29	Le Flore	M. V.	Superior, Okla.
Poteau Valley Coal Co.	Cunningham Bldg., Joplin, Mo.	Lincoln	Le Flore	C. R. I. & P.	Howe, Okla.
Poteau Valley Coal Co.	Cunningham Bldg., Joplin, Mo.	No. 1	Le Flore	Rock Island	Howe, Okla.
Poteau Valley Coal Co.	Cunningham Bldg., Joplin, Mo.	No. 2	Le Flore	Rock Island	Howe, Okla.
Rock Island Coal Mining Co.	139 W. Van Buren St., Chicago, Ill.	No. 7	Pittsburg	C. R. I. & P.	Hartshorne, Okla.
Sukenis Coal Co.	Adamson, Okla.	No. 9	Pittsburg	M. K. & T. M. & W. Br.	Adamson, Okla.
Texas Coal Co.	Hughes, Okla.	No. 2	Latimer	C. R. I. & P.	Hughes, Okla.
Wilburton Coal & Mining Co.	Hartshorne, Okla.	Katigan	Latimer	Rock Island	Hartshorne, Okla.

HARTSHORNE, LOWER

Bituminous rank in western counties; Semibituminous rank in eastern counties. Suitable for Cement Burning, Domestic, Railway, Producer Gas, Smithing, Melting, Powdered Coal, Tile and Pottery Burning and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Bowerman, J. S.	Hughes, Okla.	No. 2 Le Bosquet	Le Flore	C. R. I. & P.	Hughes, Okla.
Hailey-Ola Coal Co.	Haileyville, Okla.	No. 3	Pittsburg	C. R. I. & P.	Haileyville, Okla.
Hailey-Ola Coal Co.	Haileyville, Okla.	No. 4	Latimer	C. R. I. & P.	Wilburton, Okla.
Hailey-Ola Coal Co.	Haileyville, Okla.	No. 5	Latimer	C. R. I. & P.	Wilburton, Okla.
Hailey-Ola Coal Co.	Haileyville, Okla.	No. 7	Pittsburg	C. R. I. & P.	Haileyville, Okla.
Howe-McCurtain Coal & Coke Co.	Fort Smith, Ark.	No. 2 1/2	Le Flore	C. R. I. & P. K. C. S.	Howe, Okla.
Howe-McCurtain Coal & Coke Co.	Fort Smith, Ark.	Nos. 7 & 8	Le Flore	C. R. I. & P.	Howe, Okla.
McAlester-Alderson Coal Co.	McAlester, Okla.	McAlester No. 1	Pittsburg	M. K. & T.	Bache, Okla.
McAlester Coal & Coke Co.	Buck (via Alderson P. O.), Okla.	Buck No. 21	Pittsburg	C. R. I. & P. M. K. & T.	Alderson, Okla.
McAlester Coal & Coke Co.	Buck (via Alderson P. O.), Okla.	Buck No. 22	Pittsburg	M. K. & T.	Alderson, Okla.
McAlester Colliery Co.	McAlester, Okla.	No. 1	Rock Island	Latimer	Hartshorne, Okla.
Oak Ridge Coal Co.	Red Oak, Okla.	Oak Ridge	Latimer	C. R. I. & P.	Red Oak, Okla.
Pierce Coal Co.	McAlester, Okla.	No. 1	Pittsburg	C. R. I. & P.	Manning, Okla.
Rock Island Coal Mining Co.	139 W. Van Buren St., Chicago, Ill.	No. 10	Pittsburg	C. R. I. & P.	Hartshorne, Okla.
Rock Island Coal Mining Co.	139 W. Van Buren St., Chicago, Ill.	No. 12	Pittsburg	C. R. I. & P.	Hartshorne, Okla.
Thomas Coal Co.	McAlester, Okla.	No. 1	Pittsburg	Rock Island	Blanco, Okla.
Tri-State Coal & Coke Co.	Blocker, Okla.	North	Pittsburg	Fort Smith Western	Blocker, Okla.

HARTSHORNE, UPPER

Bituminous rank in western counties; Semibituminous rank in eastern counties. Suitable for Cement Burning, Domestic, Railway, Producer Gas, Smithing, Melting, Powdered Coal, Tile and Pottery Burning and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Hailey-Ola Coal Co.	Haileyville, Okla.	No. 2	Pittsburg	C. R. I. & P.	Haileyville, Okla.

PANAMA

Bituminous rank in western counties; Semibituminous rank in eastern counties. Suitable for Cement Burning, Domestic, Railway, Producer Gas, Smithing, Melting, Powdered Coal, Tile and Pottery Burning and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Blue Ridge Coal Co.	1116 Colcord Bldg., Oklahoma City, Okla.	No. 3.	Haskell.	F. S. & W.	McCurtain, Okla.
Blue Ridge Coal Co.	1116 Colcord Bldg., Oklahoma City, Okla.	No. 4.	Haskell.	F. S. & W.	McCurtain, Okla.
Blue Ridge Coal Co.	1116 Colcord Bldg., Oklahoma City, Okla.	No. 5.	Haskell.	F. S. & W.	McCurtain, Okla.
Bokoshe Smokeless Coal Co.	Bokoshe, Okla.	No. 7.	Le Flore.	Midland Valley.	Bokoshe, Okla.
Bokoshe Smokeless Coal Co.	Bokoshe, Okla.	No. 8.	Le Flore.	Midland Valley.	Bokoshe, Okla.
Brazil River Coal Co.	Commerce Bldg., Kansas City, Mo.	Brazil River.	Le Flore.	K. C. S. & M. V.	Panama, Okla.
Buck Creek Coal Co.	Panama, Okla.	Buck Creek.	Le Flore.	Midland Valley.	Panama, Okla.
Camron Coal Co.	6 Rear-Leslie Bldg., Kansas City, Mo.	No. 2.	Le Flore.	Midland Valley.	Williams, Okla.
Choctaw Mining Co.	McAlester, Okla.	Choctaw.	Le Flore.	F. S. & W.	Milton, Okla.
East McCurtain Coal Co.	McCurtain, Okla.	East McCurtain No. 1.	Le Flore.	Ft. Smith & Western.	McCurtain, Okla.
East McCurtain Coal Co.	McCurtain, Okla.	East McCurtain No. 2.	Le Flore.	Ft. Smith & Western.	McCurtain, Okla.
Stewart Coal & Mining Co.	Panama, Okla.	Bedwell No. 1.	Le Flore.	M. V.	Panama, Okla.
Wallis-McKinney Coal Co.	Milton, Okla.	Wallis-McKinney.	Le Flore.	F. S. & W.	Milton, Okla.

HENRYETTA SEAM (Known also as the HENRYETTA-DEWAR SEAM)

Mined in the Henryetta district. Bituminous rank. Suitable for Cement Burning, Domestic, Railway, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Atlas Coal Co.	Henryetta, Okla.	Atlas No. 1.	Okmulgee.	M. O. & G.	Henryetta, Okla.
Atlas Coal Co.	Henryetta, Okla.	Atlas No. 2.	Okmulgee.	St. L. & S. F.	Henryetta, Okla.
Coalton Coal Co.	Henryetta, Okla.	Coalton.	Okmulgee.	M. O. & G.	Dewar, Okla.
Consolidated Fuel Co.	Muskogee, Okla.	No. 1.	Okmulgee.	M. O. & G.	Dewar, Okla.
Consolidated Fuel Co.	Muskogee, Okla.	No. 3.	Okmulgee.	M. O. & G.	Dewar, Okla.
Consolidated Fuel Co.	Muskogee, Okla.	No. 4.	Okmulgee.	M. O. & G.	Dewar, Okla.
Consolidated Fuel Co.	Muskogee, Okla.	No. 5.	Okmulgee.	M. O. & G.	Dewar, Okla.
Consolidated Fuel Co.	Muskogee, Okla.	No. 6.	Okmulgee.	M. O. & G.	Dewar, Okla.
Crowe Coal Co.	Kansas City, Mo.	1, 2, 4, 5 & 6.	Okmulgee.	St. L. & S. F.	Henryetta, Okla.
Crowe Coal Co.	Kansas City, Mo.	Three.	Okmulgee.	M. O. & G.	Henryetta, Okla.
Dewar Coal Mines Co., The.	Henryetta, Okla.	Green.	Okmulgee.	St. L. & S. F.	Dewar, Okla.
Dewar Coal Mines Co., The.	Henryetta, Okla.	Greenidge.	Okmulgee.	M. O. & G.	Dewar, Okla.
Dewar Coal Mines Co., The.	Henryetta, Okla.	G. E. Strip.	Okmulgee.	M. O. & G.	Dewar, Okla.
Dewar Coal Mines Co., The.	Henryetta, Okla.	Wisby Davis.	Okmulgee.	St. L. & S. F.	Schulter, Okla.
Fursman Coal Co.	Schulter, Okla.	Fursman No. 3.	Okmulgee.	M. O. & G.	Schulter, Okla.
G. M. Coal Co., The.	Henryetta, Okla.	Gem.	Okmulgee.	Frisco.	Henryetta, Okla.
Harris Coal & Mining Co.	Henryetta, Okla.	Harris.	Okmulgee.	M. O. & G.	Dewar, Okla.
Henryetta Coal & Mining Co.	Henryetta, Okla.	Wise.	Okmulgee.	St. L., A. T. & S. F.	Henryetta, Okla.
Hughes Coal & Mining Co., The.	Dewar, Okla.	Hughes No. 1.	Okmulgee.	M. O. & G.	Dewar, Okla.
Kinchel Coal & Mining Co.	Henryetta, Okla.	Kinchel.	Okmulgee.	M. O. & G.	Henryetta, Okla.
Monarch Coal & Mining Co.	Henryetta, Okla.	Monarch.	Okmulgee.	M. O. & G.	Dewar, Okla.
Pittsburg & Midway Coal Mng. Co.	Pittsburg, Kan.	No. 12.	Okmulgee.	St. L. & S. F.	Henryetta, Okla.
Southwestern Coal & Oil Co.	Okmulgee, Okla.	Backstone No. 2 & 3.	Okmulgee.	M. O. & G.	Henryetta, Okla.
Starr Coal Co., The.	Henryetta, Okla.	Starr.	Okmulgee.	M. O. & G.	Dewar, Okla.
Sun Coal Co.	Henryetta, Okla.	Sun.	Okmulgee.	St. L. & S. F.	Schulter, Okla.
Wadsworth Coal & Mining Co.	Henryetta, Okla.	Wadsworth.	Okmulgee.	M. O. & G.	Dewar, Okla.
Warren-Pullin Coal Co.	Henryetta, Okla.	Warren.	Okmulgee.	St. L. & S. F.	Frisco, Okla.

McALESTER SEAM (Known also as the LEHIGH COAL in Atoka and Coal counties; the STIGLER SEAM in Northern Haskell county)

Mined in the Wilburton, McAlester and Lehigh districts. Bituminous rank. Suitable for Cement Burning, Domestic, Locomotive Fuel, Melting, Powdered, Producer Gas and Steam purposes.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Britton Coal Co.	Coalgate, Okla.	Britton.	Coal.	M. K. & T.	Coalgate, Okla.
Calendonian Coal Co.	Haileyville, Okla.	No. 1.	Pittsburg.	M. K. & T.	Savanna, Okla.
Carbon Coal Company.	McAlester, Okla.	No. 1.	Pittsburg.	M. K. & T.	Carbon, Okla.
Carbon Coal Company.	McAlester, Okla.	No. 2.	Pittsburg.	M. K. & T.	Carbon, Okla.
Carbon Coal Company.	McAlester, Okla.	No. 3.	Pittsburg.	M. K. & T.	Carbon, Okla.
Coalgate Co. (The).	McAlester, Okla.	No. 5.	Coal.	M. K. & T.	Coalgate, Okla.
Folsom-Morris Coal Mining Co. (The).	Colcord Bldg., Oklahoma City, Okla.	No. 1.	Coal.	M. K. & T.	Lehigh, Okla.
Folsom-Morris Coal Mining Co. (The).	Colcord Bldg., Oklahoma City, Okla.	No. 5.	Coal.	A. T. & S. F., M. K. & T., C. R. I. & P.	Lehigh, Okla.
Folsom-Morris Coal Mining Co. (The).	Colcord Bldg., Oklahoma City, Okla.	No. 6.	Coal.	M. K. & T., C. R. I. & P., A. T. & S. F.	Phillips, Okla.
Folsom-Morris Coal Mining Co. (The).	Colcord Bldg., Oklahoma City, Okla.	No. 8.	Coal.	M. K. & T., C. R. I. & P., A. T. & S. F.	Lehigh, Okla.
McAlester-Edwards Coal Co.	Pittsburg, Okla.	No. 1.	Pittsburg.	M. K. & T., C. R. I. & P.	Pittsburg, Okla.
McAlester-Edwards Coal Co.	Pittsburg, Okla.	No. 2.	Pittsburg.	M. K. & T., C. R. I. & P.	Pittsburg, Okla.
McAlester-Edwards Coal Co.	Pittsburg, Okla.	No. 3.	Pittsburg.	M. K. & T., C. R. I. & P.	Pittsburg, Okla.
Milby & Dow Coal & Mining Co.	Dow, Okla.	No. 5.	Pittsburg.	M. K. & T.	Dow, Okla.
Milby & Dow Coal & Mining Co.	Dow, Okla.	No. 9.	Pittsburg.	C. K. I. & P.	Dow, Okla.
Milby & Dow Coal & Mining Co.	Dow, Okla.	No. 10.	Pittsburg.	C. R. I. & P.	Dow, Okla.
Mo., Kan. & Tex. Ry. Co. (Coal Dept.).	St. Louis, Mo.	No. 12.	Coal.	M. K. & T.	Coalgate, Okla.
Mo., Kan. & Tex. Ry. Co. (Coal Dept.).	St. Louis, Mo.	Nos. 21 & 19.	Coal.	M. K. & T.	Coalgate, Okla.
Nullen, W. P.	North McAlester, Okla.	Julian.	Pittsburg.	M. K. & T.	McAlester, Okla.
Nullen, W. P.	North McAlester, Okla.	Union No. 7.	Pittsburg.	M. K. & T.	McAlester, Okla.
North McAlester Coal Co.	North McAlester, Okla.	North McAlester.	Pittsburg.	M. K. & T.	N. McAlester, Okla.
Ossage Coal & Mining Co.	McAlester, Okla.	No. 5.	Pittsburg.	M. K. & T.	Krebs, Okla.
Ossage Coal & Mining Co.	McAlester, Okla.	No. 7.	Pittsburg.	M. K. & T.	Krebs, Okla.
Ossage Coal & Mining Co.	McAlester, Okla.	No. 8.	Pittsburg.	M. K. & T.	Krebs, Okla.
Rock Island Coal Mining Co.	139 W. Van Buren St., Chicago, Ill.	No. 5.	Pittsburg.	C. R. I. & P.	Adrian, Okla.
Rock Island Coal Mining Co.	139 W. Van Buren St., Chicago, Ill.	No. 38.	Pittsburg.	C. R. I. & P.	Adrian, Okla.
Samples Coal & Mining Co.	McAlester, Okla.	No. 4.	Pittsburg.	M. K. & T.	N. McAlester, Okla.
Southern Fuel Co.	Dallas, Tex.	Brewer No. 4.	Pittsburg.	M. K. & T.	Savanna, Okla.
Southern Fuel Co.	Dallas, Tex.	Brewer No. 3.	Pittsburg.	M. K. & T.	Savanna, Okla.
Sukonis Coal Co.	Adamson, Okla.	No. 2.	Pittsburg.	M. K. & T.	Adamson, Okla.
Sukonis Coal Co.	Adamson, Okla.	No. 9.	Pittsburg.	M. K. & T. M. A. W. R.	Adamson, Okla.

WITTEVILLE, UPPER SEAM (Known also as the JONES CREEK SEAM)

Mined in the Poteau district. Bituminous rank. Suitable for Steam, Railway, Domestic and Producer Gas purposes.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Columbia Coal & Mining Co.....	Poteau, Okla.....	No. 4.....	LeFlore.....	Ft. S. P. & W.....	Witteville, Okla

WITTEVILLE, LOWER

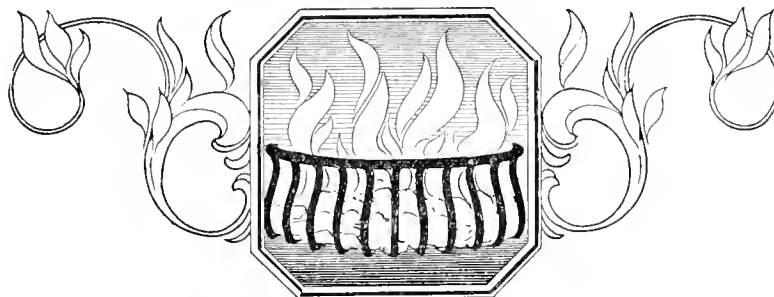
Mined in the Poteau district. Bituminous rank. Suitable for Steam, Railway, Domestic and Producer Gas purposes.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Cavanal Coal Co.....	Shady Point, Okla.....	Cavanal.....	Le Flore.....	K. C. S.....	Shady Point, Okla.
Central Coal & Coke Co.....	Kansas City, Mo.....	No. 8.....	Le Flore.....	K. C. S.....	Calhoun via Shady Pt., Okla.
Central Coal & Coke Co.....	Kansas City, Mo.....	No. 9.....	Le Flore.....	K. C. S.....	Calhoun via Shady Pt., Okla.

MISCELLANEOUS SEAMS

Bituminous rank. Suitable for Steam, Cement Burning, Railroad, Producer Gas and Domestic Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Bennett Coal Co.....	Vinita, Okla.....	Bennett.....	Craig.....	Frisco.....	Vinita, Okla.
Coats' Coal Mines.....	Blue-Jacket, Okla.....	Coats'.....	Craig.....	M. K. T.....	Blue-Jacket, Okla.
Driskill Coal Co.....	Porum, Okla.....	Driskill No. 1.....	Muskogee.....	Midland Valley.....	Porum, Okla.
Gunther City Coke, Coal & Mining Co.....	Nowata, Okla.....	Gunther City.....	Rogers.....	Mo. Pac.....	Oologah, Okla.
Winter Coal & Brick Co.....	Tulsa Okla.....	Winter.....	Rogers.....	M. P.....	Oologah, Okla.



OKLAHOMA

Alphabetical Directory of Coal Mines, Giving Complete Detailed Information Covering Each Mine

For List of Abbreviations See Page 13.

ADAMSON, PETER, COAL & MINING CO.
General Office, Route No. 1, Oklahoma.
GM—Peter Adamson, Jr., Tulsa, Okla.
GS—Peter Adamson, Jr., Tulsa, Okla.
PA—Peter Adamson, Jr., Tulsa, Okla.
SCW—Pauline or Scoles Store, Bayler,
M. E. Adamson, Tulsa, Okla.

Adamson Mine; Drift; Dawson Seam, 30
in. thick.
PO—Tulsa, Okla. SP—Dawson, Okla. CTY
—Tulsa, RR—Frisco.
EM—C. T. Shippond, Tulsa, Okla.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine, Slack,
Lump.

ALKO-NAK COAL MINING COMPANY.
Now operated by the Crowe Coal Co.

ATLAS COAL COMPANY.
General Office, Henryetta, Okla.
PR—Wm. Steckelberg, Henryetta, Okla.
VP—J. S. Steckelberg, Henryetta, Okla.
GM—Wm. Steckelberg, Henryetta, Okla.
GS—Wm. Steckelberg, Henryetta, Okla.
PA—Wm. Steckelberg, Henryetta, Okla.
SA—McAlester Fuel Co., McAlester, Okla.

No. 1 Atlas Mine; Shaft; Henryetta
Seam, 36 in. thick.
PO—Henryetta, Okla.; SP—Same; CTY
—Okmulgee; RR—M. O. & G.
S of H—Mules. Track gage, 42 in.
S of M—1 shortwall mach.
PP—Power purchased, transformers 2300-
220 volts, 2 pumps.
Last years tonnage 25,000.
SIZES SHIPT—Run of Mine.

No. 2 Atlas Mine; Drift; Henryetta
Seam, 36 in. thick.
PO—Henryetta, Okla.; SP—Same; CTY
—Okmulgee; RR—St. L. & F.
S of H—Elec. locos.
S of M—5 shortwall machs.
PP—Power purchased, transformers 2300-
200 volts.
Last years tonnage 60,000.
SIZES SHIPT—Run of Mine, Slack, Pea,
Nut.
PREP. EQUIPT—Shaker Screens.

BENNETT COAL COMPANY.
General Office, Vinita, Okla.
OWNER—E. G. Bennett, Vinita, Okla.
Bennett Mine; Shaft and Slope; Semi-
Anthracite Seam, 36 inches thick.
PO—Vinita, Okla.; SP—Same; CTY—
Frisco; RR—Frisco.
S of H—Rope. Track gage 36 in.
PP—1—4 H. P. and 1—10 H. P.
gas engines, 2 pumps.
SIZES SHIPT—Run of Mine.

BLUE RIDGE COAL COMPANY.
General Office, 1177 Colcord Bldg.,
Oklahoma City, Okla.
PR—D. J. Jordan, Oklahoma City, Okla.
TR—D. J. Jordan, " " "
GS—Walter Kerr, " " "
PA—D. J. Jordan, " " "
CE—H. O. Lewis, Fort Smith, Ark.
EM—H. O. Lewis, " " "
MM—H. B. Cole, McCurtain, Okla.

No. 3 Mine; Slope; Panama Seam; 44
to 60 in. thick.
PO—McCurtain, Okla.; SP—Same; CTY
—Haskell; RR—F. S. & W.
S of H—Mules and rope. Track gage
42 in.
S of M—5 elec. machs.
PP—4 return tubular boilers, total 600
H. P., 3 gen. units, 250 volts D.
C., 1 pump.
EMP—150. Daily output 350 tons.
SIZES SHIPT—Run of Mine, Slack, Nut,
Egg, Lump, Block.

No. 4 Mine; Slope; Panama Seam; 48
to 66 in. thick.
PO—McCurtain, Okla.; SP—Same; CTY—
Haskell; RR—F. S. & W.
S of H—Mules, rope and elec. Track
gage 42 in.
S of M—4 elec. machs.
PP—Receive power from No. 3 Mine.
EMP—75. Daily output, 400 tons.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.

No. 5 Mine; Slope; Panama Seam; 68
to 84 in. thick.
PO—McCurtain, Okla.; SP—Same; CTY
—Haskell; RR—F. S. & W.
S of H—Rope. Track gage 42 in.

S of M—Hand.
PP—1 return tubular boiler, total 150
H. P., 1 pump. Receive power from
No. 3 Mine.
EMP—40. Daily output 100 tons.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
(Old Information)

BOKOSHE SMOKELESS COAL CO.
General Office, Bokoshe, Okla.
PR—A. P. Gunther, Kansas City, Mo.
TR—Frank Gunther, Bokoshe, Okla.
GM—A. P. Gunther, Bokoshe, Okla.
PA—W. S. Sampson, Bokoshe, Okla.
EM—H. O. Lewis, Ft. Smith, Ark.
SA—McAlester Fuel Co., McAlester
Okla.

No. 7 Mine; Slope; McCurtain Seam; 66
in. thick.
PO—Bokoshe, Okla.; SP—Same; CTY—
LeFlore; RR—Midland Valley.
MS—W. E. Jones, Bokoshe, Okla.
S of H—Mules and rope. Track gage,
36 in.
S of M—Hand.
PP—2 water tube boilers, total 375
H. P., 5 pumps.
EMP—75. Last years tonnage 75,000.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
PREP. EQUIPT—Shaker Screens.

No. 8 Mine; Slope; McCurtain Seam, 66
in. thick.
PO—Bokoshe, Okla.; SP—Same; CTY—
LeFlore; RR—Midland Valley.
MS—W. E. Jones, Bokoshe, Okla.
S of H—Mules and rope. Track gage,
36 in.
S of M—Hand.
PP—2 80 H. P. water tube boilers, 5
pumps.
EMP—65. Last years tonnage 60,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

BOWERMAN, J. S.
General Office, Hughes, Okla.
GM—J. S. Bowerman, Hughes, Okla.

No. 2 LeBosquet Mine; Drift and Slope;
Lower Hartsborne Seam; 48 inches
thick.
PO—Hughes, Okla.; SP—Same; CTY—
LeFlore; RR—C. E. I. & P.
S of H—Mules, steam loco. Track gage
36 inches.
S of M—Hand.
PP—1 fire tube boiler, 80 H. P.
Note—Successors to LeBosquet Coal &
Mining Co.
Old Information.

BRAZIL RIVER COAL COMPANY
General office, 408 Commerce Bldg.,
Kansas City, Mo.
PR—J. H. Hazen, Kansas City, Mo.
TR—J. C. Stein, Kansas City, Mo.
GM—J. H. Hazen, Kansas City, Mo.
GS—J. H. Hazen, Kansas City, Mo.
PA—J. H. Hazen, Kansas City, Mo.

Brazil River Mine; Drift and Shaft;
Seam 54 inches thick.
PO—Panama, Okla.; SP—Same; CTY—
La Flore; RR—K. C. S. Mid. Val.
MS—Frank Wolfe, Panama, Okla.
S of H—Electric loco. Track gage 36
inches.
S of M—Hand, overcutter mach.
PP—Water tube boiler.

BRITTON COAL COMPANY.
General Office, Coalgate, Oklahoma.
EE—George Britton, Coalgate, Okla.
Britton Mine; Slope.
PO—Coalgate, Okla.; SP—Same; CTY—
Coal.
S of H—Mules.
EMP—5. Last years tonnage 790.
Old Information.

BUCK CREEK COAL CO.
General Office, Panama, Okla.
PR—A. W. Breckenridge, Panama, Okla.
VP—Mrs. R. M. Saxton, Panama, Okla.
TR—Ralph M. Saxton, Panama, Okla.
GM—A. W. Breckenridge, Panama, Okla.
GS—A. W. Breckenridge, Panama, Okla.
PA—Ralph M. Saxton, Panama, Okla.
EM—Lewis & Noel, Fort Smith, Ark.
SCW—Address the Company; Buyer,
Ralph M. Saxton, Panama, Okla.
SA—Bedwell Coal Co., Fort Smith, Ark.

Buck Creek Mine; Slope; Panama Seam,
44 in. thick.
PO—Panama, Okla.; SP—Same; CTY—
LeFlore; RR—Midland Valley.
S of H—Mules, rope and steam locos.
Track gage, 36 in.
S of M—Hand.
PP—150 H. P. fire tube boilers, 2
pumps.
EMP—45. Daily tonnage 100.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Gravity Screens.
Old Information.

CALEDONIAN COAL COMPANY.
General Office, Halleyville, Okla.
PR—D. C. McAlpine, Halleyville, Okla.
VP—J. E. Miller, Halleyville, Okla.
TR—H. G. Philippi, Halleyville, Okla.

No. 1 Mine; Slope; McAlester Seam,
50 in. thick.
PO—Savanna, Okla.; SP—Same; CTY—
Pittsburg; RR—M. K. & T.
S of H—Mules, rope, steam loco. Track
gage 36 in.
S of M—Hand.
PP—1 fire tube boiler, 80 H. P.
EMP—42.
SIZES SHIPT—Run of Mine.

CAMERON COAL CO.
General Office, O'Rear-Leslie Bldg., Kan-
sas City, Mo.
PR—E. J. Corrigan, Kansas City, Mo.
TR—H. G. Kellogg, Kansas City, Mo.
GM—J. C. Reid, Williams, Okla.
PA—J. C. Reid, Williams, Okla.
SA—Midland Coal Co., Kansas City, Mo.

No. 1 Mine Abandoned.
No. 2 Mine; Slope; Panama Seam, 54
in. thick.
PO—Williams, Okla.; SP—Same; CTY—
LaFlore; RR—Midland Valley.
MS—C. H. Davidson, Williams, Okla.
S of H—Mules, rope. Track gage 36 in.
S of H—Elec. machs.
PP—2—150 H. P. boilers, 2 pumps.
EMP—50.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
PREP. EQUIPT—Shaker Screens.
Note—This is a new operation, at present
in construction stage.

CARBON COAL COMPANY.
General Office, McAlester, Okla.
PR—J. G. Putterbaugh, McAlester, Okla.
TR—E. P. Joyner, McAlester, Okla.
GM—W. D. Putterbaugh, McAlester, Okla.
GS—S. K. Smith, McAlester, Okla.
PA—E. P. Joyner, McAlester, Okla.
SA—Address the Company; Buyer, B.
H. North, Carbon, Okla.
Sales Agency, McAlester Fuel Co., Mc-
Alester, Okla.

No. 1 Mine; Slope; McAlester Seam, 30
to 42 in. thick.
PO—Carbon, Okla.; SP—Same; CTY—
Pittsburg; RR—M. K. & T.
S of H—Mules. Track gage, 35 in.
S of M—2 elec. machs.
PP—3 return tubular boilers, 440 volts
A. C., 3 phase, 60 cycles, 1 pump.
Purchase power.

EMP—85.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
PREP. EQUIPT—Shaker Screens.

No. 2 Mine; Slope; McAlester Seam, 28
to 42 in. thick.
PO—Carbon, Okla.; SP—Same; CTY—
Pittsburg; RR—M. K. & T.
S of H—Mules.
PP—2 return tubular boilers, 440 volts
A. C., 3 phase, 60 cycles, 1 pump.
Purchase power.

EMP—90.
SIZES SHIPT—Run of Mine, Slack, Pea,
Nut, Lump.
PREP. EQUIPT—Shaker Screen.

No. 3 Mine; Slope; McAlester Seam, 40
to 42 in. thick.
PO—Carbon, Okla.; SP—Same; CTY—
Pittsburg; RR—M. K. & T.
S of H—Mules.
PP—3 return tubular boilers, 440 volts
A. C., 3 phase, 60 cycles, 1 pump.
Purchase power.
EMP—100.
SIZES SHIPT—Run of Mine, Slack, Pea,
Nut, Lump.
PREP. EQUIPT—Shaker Screens.

CAVANAL COAL COMPANY
General Office, Shady Point, Okla.
PR—Geo. C. Campen, Shady Point, Okla.
VP—J. A. Whithead, Kansas City, Mo.
TR—P. J. Holkins, Kansas City, Mo.
GS—H. Gedosh, Poteau, Okla.
PA—H. Gedosh, Poteau, Okla.

Cavalal Mine; Slope; Cavanal No. 6
Seam, 48 in. thick.
PO—Shady Point, Okla.; SP—Same; CTY
—Le Flore; RR—K. C. Southern.
S of H—Gasoline and steam locos.
S of M—Hand, overcutter and elec. punch-
er machs.
PP—Power purchased.
EMP—35. Daily tonnage 100.
SIZES SHIPT—Run of Mine, Lump, Egg,
Block.
PREP. EQUIPT—Bar Screens, Picking Ta-
bles.

CENTRAL COAL & COKE CO.
General Office, Kansas City, Mo.
Operations in Arkansas, Kansas, Missouri,
Oklahoma and Wyoming.
PR—Charles S. Kelth, Kansas City, Mo.
VP—Harry N. Taylor, " " "
TR—E. E. Riley, " " "
GS—Wm. Harkes, " " "
PA—Thos. Mackie, " " "
EM—J. S. O'Flaherty, " " "
ADDITION—J. C. Sherwood, Kansas City,
Mo.

**CEN. SALES MGR.—J. E. Sargent, Kan-
sas City, Mo.**
Asst. General Sales Mgr.—E. J. Kolcker-
hocker, Kansas City, Mo.

Nos. 8 and 9 Mines; Slopes; 48 to 54
in. thick.
PO—Calhoun, Okla.; SP—Calhoun Via
Shady Point; CTY—LeFlore; RR—
K. C. S., Poteau Valley Rr.
MS—S. D. Graham, Calhoun, Okla.
S of H—Rope, gravity and steam loco.
Track gage 36 in.
S of M—14 shortwall machs.
PP—3 water tube boilers, total 700 H.
P., gen. unit, 2300 volts A. C.,
3 phase, 60 cycles.
EMP—129. Last years tonnage 90,975.

CHOCTAW MINING COMPANY
General Office, McAlester, Okla.
TR—E. P. Joyner, McAlester, Okla.
GM—W. D. Putterbaugh, McAlester, Okla.
GS—S. K. Smith, McAlester, Okla.
PA—E. P. Joyner, McAlester, Okla.
SA—The McAlester Fuel Co., McAlester,
Okla.

Choctaw Mine; Slope; Semi-Anthracite
Seam, 60 in. thick.
PO—Milton, Okla.; SP—Same; CTY—
LaFlore; RR—Fort Smith & Western.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—2 water tube boilers, 300 H. P.,
2 pumps.
EMP—80. Daily tonnage 200.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Shaker Screens.
Note—Formerly operated by the Milton
Coal Mining Co.

COALGATE COAL CO.
General Office, McAlester, Okla.
PR—J. G. Putterbaugh, McAlester, Okla.
TR—E. P. Joyner, McAlester, Okla.
GM—W. D. Putterbaugh, McAlester, Okla.
GS—S. K. Smith, McAlester, Okla.
PA—E. P. Joyner, McAlester, Okla.
EM—V. C. Robbins, McAlester, Okla.
EE—John Creber, Coalgate, Okla.
SA—The McAlester Fuel Co., McAlester,
Okla.

No. 5 Mine; Shaft; L-high Seam; 52 in.
thick.
PO—Coalgate, Okla.; SP—Same. CTY
—Id. RR—M. K. & T.
S of H—Mules, main and tail rope and
tail rope type locos. Track gage
36 in.
S of M—Hand.
PP—2 80 H. P. fire tube boilers, 2—
200 K. W. gen. units, 250 volts
D. C., 4 pumps.
EMP—85. Last years tonnage 41,985.
SIZES SHIPT—Run of Mine, Slack, Pea,
Nut, Lump.
PREP. EQUIPT—Revolving and Shaker
Screens.

COALTON COAL CO.

General Office, Henryetta, Okla.
 PR—H. J. Butler, Henryetta, Okla.
 VP—D. J. Hughes, Dewar, Okla.
 TR—P. Randall, Henryetta, Okla.
 GM—D. J. Hughes, Dewar, Okla.
 GS—Robert Blackburn, Kusa, Okla.
 PA—D. J. Hughes, Dewar, Okla.
 ME—C. E. Schurch, Henryetta, Okla.
 SA—McAlester Fuel Company, McAlester, Okla.

Coalton Mine; Slope; Henryetta Seam, 36 in. thick.
 PO—Coalton, Okla.; SP—Dewar, Okla.; CTY—Okmulgee; RR—K. O. & G.
 S of H—Mules. Track gage, 42 in.
 S of M—3 chain breast type mchs.
 PP—Power purchased, transformer 2300-440 volts A. C.
 EMP—50. Last years tonnage 14,881.
 SIZES SHIPT—Run of Mine.

COATS' COAL MINES.

OPERATOR—J. E. Coats, Blue Jacket, Okla.

Coats' Mine; Drift; Seam, 36 in. thick.
 PO—Blue Jacket, Okla. SP—Same. CTY—Craig. RR—M. K. T.
 S of B—Mules.
 S of M—Hand.
 SIZES SHIPT—Run of Mine.
 (Old Information)

COLUMBIA COAL MINING COMPANY

PR—D. J. Evans, Poteau, Okla.

No. 4 Mine; Slope; Witleville Seam, 48 in. thick.
 PO—Poteau, Okla. SP—Witleville, Okla. CTY—LeFlore. RR—Ft. Smith, Poteau & Western.
 MS—Joseph Ganner, Poteau, Okla.
 S of H—Mules, rope. Track gage 36 in.
 S of M—Hand.
 P—2 water tube boilers, 300 H. P., 1-150 K. W., M. G. Set, 250 volt D. C., 2 pumps.
 EMP—150.
 SIZES SHIPT—Run of Mine, Slack Lump.
 PREP. EQUIPT—Bar Screens.

CONSOLIDATED FUEL CO.

General Office, Muskogee, Okla.
 PR—J. W. Dougherty, New York, N. Y.
 VP—H. B. Barling, Muskogee, Okla.
 GM—H. B. Barling, Muskogee, Okla.
 GS—C. P. Shockley, Henryetta, Okla.
 PA—H. B. Barling, Muskogee, Okla.
 ME—C. E. Schurch, Henryetta, Okla.
 EE—R. H. Walters, Henryetta, Okla.

No. 4 Mine; Slope; Henryetta Seam, 36 inches thick.
 PO—Coalton, Okla.; SP—Omar, Okla.; CTY—Okmulgee; RR—M. O. & G.
 MS—Chas. Paulson, Coalton, Okla.
 S of H—Mules and rope.
 S of M—3 shortwall mchs.
 PP—Power purchased, 220 volts A. C., 3 phase, 60 cycles.
 EMP—40. Last years tonnage 30,000.
 SIZES SHIPT—Run of Mine.

No. 3 Mine; Shaft; Henryetta Seam, 36 in. thick.
 PO—Coalton, Okla.; SP—Dewar, Okla.; CTY—Okmulgee; RR—M. O. & G.
 MS—Geo. Ward, Dewar, Okla.
 S of H—Mules and 2 trolley pole type locos. Track gage, 36 in.
 S of M—7 shortwall mchs.
 PP—1 160 H. P. water tube boiler, 75 K. W., motor gen. unit, 250 volts D. C.
 EMP—250. Last fiscal year output, 90,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

No. 4 Mine; Slope; Henryetta Seam, 36 in. thick.
 PO—Dewar, Okla.; SP—Same; CTY—Okmulgee; RR—M. O. & G.
 MS—Noah Ganner, Dewar, Okla.
 S of H—Mules and 1 trolley pole type loco. Track gage 42 in.
 PP—Power purchased, 1-100 K. W., M. G. Set, 250 volts D. C.
 EMP—200. Last years tonnage 95,000.
 SIZES SHIPT—Run of Mine, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.
 NOTE—Formerly operated by the Sterling Coal Company.

No. 5 Mine; Slope; Henryetta Seam, 36 in. thick.
 PO—Dewar, Okla.; SP—Same; CTY—Okmulgee; RR—M. O. & G.
 MS—John Larenz, Dewar, Okla.
 S of H—Mules. Track gage, 36 in.
 S of M—5 shortwall mchs.
 PP—3 250 H. P. water tube boilers, 225 K. W. gen. units.
 EMP—190. Last fiscal year output, 75,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens

No. 6 Mine; Slope; Henryetta Seam, 36 in. thick.
 PO—Dewar, Okla.; SP—Same; CTY—Okmulgee; RR—M. O. & G.
 MS—Luther Ingles, Dewar, Okla.
 S of H—Mules and 2 trolley pole type locos.
 S of M—9 shortwall mchs.
 PP—1 100 H. P. water tube boiler, 75 K. W., motor gen. unit, 250 volts D. C.
 EMP—300. Last fiscal year output, 100,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

COSTANSO COAL & MINING CO.

Out of Business.

CONSUMERS COAL COMPANY

Out of Business.

CRAIG COUNTY COAL COMPANY.

Now operated by Bennett Coal Co.

CREEK COAL & MINING CO. (THE).

Now operated by the Crowe Coal Co.

CROWE COAL COMPANY

General Office, Dwight Bldg., Kansas City, Mo.
 PR—J. R. Crowe, Kansas City, Mo.
 VP—H. D. Buchanan, Kansas City, Mo.
 TR—H. D. Buchanan, Kansas City, Mo.
 GM—James McGinnis, Henryetta, Okla.
 GS—E. F. Woodson, Henryetta, Okla.
 PA—A. J. Brady, Kansas City, Mo.
 ME—John S. Cameron, Henryetta, Okla.
 EE—John Williams, Henryetta, Okla.
 SCQ—Creek Store, Buyer, Walter W. Lynn, Henryetta, Okla.
 SA—Cherokee Fuel Co., Kansas City, Mo.

One Mine; Stripping.
 PO—Henryetta, Okla.; SP—Same, CTY—Okmulgee; RR—St. L. & S. F.
 MS—A. E. Brown, Henryetta, Okla.
 S of H—Steam loco.
 S of M—Hand.
 PP—Power purchased.
 EMP—18.
 SIZES SHIPT—Run of Mine.
 NOTE—Formerly operated by Alko-Nak Coal Mining Co.

Two Mine; Shaft; Henryetta Seam, 36 inches thick.
 PO—Henryetta, Okla.; SP—Same; CTY—Okmulgee; RR—St. L. & S. F.
 MS—J. L. Crox, Henryetta, Okla.
 S of H—Mules and storage battery loco.
 S of M—6 shortwall mchs.
 PP—Power purchased, Transformer 2300 to 440 volts A. C., 2 fire tube boilers, total 300 H. P., 2 pumps.
 EMP—135.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.
 NOTE—Formerly operated by Whitehead Coal Mining Co.

Three Mine; Drift; Henryetta Seam, 36 inches thick.
 PO—Coalton, Okla.; SP—Henryetta, Okla.; CTY—Okmulgee; RR—K. O. & G.

MS—P. O. Hara, Coalton, Okla.
 S of H—Mules and trolley pole type loco. Track gage 42 inches.
 S of M—5 shortwall mchs.
 PP—Power purchased, Transformer 2300 to 440 volts A. C., M. G. Set, 1-150 H. P. fire tube boiler, 2 pumps.
 EMP—150.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.
 NOTE—Formerly operated by Whitehead Coal Mining Co.

Four Mine; Shaft; Henryetta Seam, 38 inches thick.
 PO—Peasant Valley, Okla.; SP—Henryetta, Okla.; CTY—Okmulgee; RR—St. L. & S. F.
 MS—John Johnson, Peasant Valley Okla.
 S of H—Mules and main rope, storage battery loco. Track gage 42 inches.
 S of M—7 shortwall mchs.
 PP—Power purchased, Transformer 2300 to 440 volts A. C., 4 fire tube boilers, total 600 H. P., 4 pumps.
 EMP—225.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.
 NOTE—Formerly operated by Whitehead Coal Mining Co.

Five Mine; Shaft; Henryetta Seam, 36 inches thick.
 PO—Henryetta, Okla.; SP—Same; CTY—Okmulgee; RR—St. L. & S. F.
 MS—Ned Wilson, Henryetta, Okla.
 SM—L. M. Alder, Henryetta, Okla.
 S of H—Mules and trolley pole type loco. Track gage 42 inches.
 S of M—9 shortwall mchs.
 PP—4 fire tube boilers, total 600 H. P., 1 200 K. W. gen. unit, 250-275 volts D. C., 4 pumps.
 EMP—185.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 NOTE—Formerly operated by Creek Coal & Mining Co.

Six Mine; Shaft; Henryetta Seam, 34 inches thick.
 PO—Henryetta, Okla.; SP—Same; CTY—Okmulgee; RR—St. L. & S. F.
 MS—Jas. Bell, Henryetta, Okla.
 SM—Alex Rusola, Henryetta, Okla.
 S of H—Mules and trolley pole type loco. Track gage 42 inches.
 S of M—8 shortwall mchs.
 PP—4 fire tube boiler, total 600 H. P., 2-100 K. W. gen. units, 250-275 volts D. C., 2 pumps.
 EMP—200.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.
 NOTE—Formerly operated by Victoria Coal Co.

DAVISON-JOHNSON COAL COMPANY.

Now Sun Coal Company.

DEWAR COAL MINES COMPANY, THE

General Office, Henryetta, Okla.
 PR—C. E. Force, Norwalk, Conn.
 VP—S. J. Keeler, Norwalk, Conn.
 TR—A. N. Terhill, Hoboken, N. J.
 GM—D. C. Hall, Dewar, Okla.
 GS—D. C. Hall, Dewar, Okla.
 C—C. E. Schurch, Henryetta, Okla.
 EM—D. C. Hall, Dewar, Okla.
 SA—McAlester Fuel Co., McAlester, Okla.

Greenidge Mine; Slope; Greenridge Seam, 36 in. thick.
 PO—Dewar, Okla.; SP—Same; CTY—Okmulgee; RR—M. O. & G.
 S of H—Mules, rope. Track gage 38 inches.
 S of M—4 shortwall mchs.
 PP—Power purchased, Transformer 2,300 to 440 volts A. C., 2 fire tube boilers, 250 H. P., 3 pumps.
 EMP—100. Last years tonnage 68,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.
 Lilla Mine Abandoned.

Wisey Davis Mine; Shaft; Henryetta Seam; 40 inches thick.
 PO—Dewar, Okla.; SP—Schulter, Okla.; CTY—Okmulgee; RR—St. L. & S. F.

Atlas Mine; Shaft; Henryetta Seam; 40 inches thick.
 PO—Henryetta, Okla.; SP—Same; CTY—Okmulgee; RR—St. L. & S. F.
 MS—Wm. Steeleberg, Henryetta, Okla.
 S of H—Mules. Track gage 42 inches.
 S of M—2 shortwall mchs.
 PP—Power purchased, Transformer 23,000 to 220 volts A. C., 1 pump.
 EMP—30. Daily output, 150 tons.
 SIZES SHIPT—Run of Mine.

G. R. Strip Mine; Stripping; Henryetta Seam; 36 inches thick.
 PO—Dewar, Okla.; SP—Same; CTY—Okmulgee; RR—M. O. & G.
 S of H—Mules. Track gage 38 inches.
 S of M—Hand.
 EMP—6.

DRISKILL COAL COMPANY

PR—Thomas Taylor, Forum, Okla.
 TR—H. R. Plunkett, " "
 GM—Thomas Taylor, " "
 GS—Thomas Taylor, " "

Driskill No. 1 Mine; Slope; 30 in. thick.
 PO—Forum, Okla.; SP—Same; CTY—Muskogee; RR—Midland Valley.
 S of H—1 steam loco.
 S of M—1 mach.
 PP—1 water tube boiler, total 60 H. P., 1 gen. unit.
 SIZES SHIPT—Steam, Smithing.
 (Old Information)

EAST MCCURTAIN COAL COMPANY

General Office, McCurtain, Okla.
 PR—John H. Kolsem, McCurtain, Okla.
 VP—C. M. Standard, McCurtain, Okla.
 TR—John H. Kolsem, McCurtain, Okla.
 GM—John H. Kolsem, " "
 GS—John H. Kolsem, " "
 PA—John H. Kolsem, " "
 EM—H. O. Lewis, Fort Smith, Ark.

East McCurtain Nos. 1 and 2 Mines; Slopes; Panama Seam, 72 in. thick.
 PO—McCurtain, Okla.; SP—Same; CTY—LeFlore; RR—F. S. & W.
 MS—Samuel Gragg, McCurtain, Okla.
 S of M—Hand.
 PP—3 pumps.
 EMP—20. Last years tonnage 24,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

FOLSOM MORRIS COAL MINING CO., THE.

General Office, Oklahoma City, Okla.
 PR—Borst Carter, Oklahoma City, Okla.
 VP—J. H. Keefe, Railway Exchange Bldg., Chicago, Ill.

TR—John Ames, Lehigh, Okla.
 GM—P. W. Malloy, Lehigh, Okla.
 GS—P. W. Malloy, Lehigh, Okla.
 EM—A. B. Thomas, Lehigh, Okla.
 NM—William Ward, Lehigh, Okla.
 SCQ—Address the Company, Buyer, O. A. Teeter, Lehigh, Okla.
 SA—B. M. Halle, Tradesmen's Bank Bldg., Oklahoma City, Okla.

No. 1 Mine; Shaft and Slope; Lehigh Seam, 46 in. thick.
 PO—Box 128, Lehigh, Okla.; CTY—Coal; RR—A. T. & S. F., M. K. & T., C. R. I. & P.
 MS—Sam Redell, Lehigh, Okla.
 SM—P. W. Malloy, Lehigh, Okla.
 S of H—Mules and rope. Track gauge, 36 in.
 S of M—2 longwall mchs.
 PP—Power purchased, Transformer 6600-440 volts A. C. M. G. Sets, 440 volts D. C.
 EMP—27. Last years tonnage 4,820.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.
 NOTE—Formerly operated by the Ross-Caldwell Coal Mining Co.

No. 5 Mine; Shaft; Lehigh Seam, 52 in. thick.
 PO—Box 128, Lehigh, Okla.; CTY—Coal; RR—A. T. & S. F., M. K. & T., C. R. I. & P.
 MS—Chester Caldwell, Lehigh, Okla.
 S of H—Mules, rope and 1 storage battery loco. Track gage, 36 in.
 S of M—Hand.
 PP—Power purchased, transformer 6600 to 440 volts A. C., 5 fire tube boilers, 500 H. P., 2 pumps.
 EMP—104. Last years tonnage 18,884.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity and Shaker Screens.

No. 6 Mine; Shaft; Lehigh Seam, 54 in. thick.
 PO—Phillips, Okla.; SP—Same; CTY—Coal; RR—M. K. & T., A. T. & S. F., C. R. I. & P.
 MS—Wm. Thompson, Phillips, Okla.
 S of H—Mules and 1 trolley pole type elec. loco. Track gage, 36 in.
 S of M—Hand.
 PP—Power purchased, Transformer 6600 to 440 volts A. C. motor gen. set, 250 volts D. C., 5 fire tube boilers, 550 H. P., 2 pumps.
 EMP—180. Last years tonnage 87,941.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Gravity and Shaker Screens.

No. 8 Mine; Shaft; Lehigh Seam, 47 in. thick.
 PO—Box 128, Lehigh, Okla.; CTY—Coal; RR—A. T. & S. F., M. K. & T., C. R. I. & P.
 MS—Henry Pax, Lehigh, Okla.
 S of H—Mules and rope. Track gauge, 36 in.
 S of M—Hand.
 PP—4 fire tube boilers, 440 H. P., M. G. Sets, 250 volts D. C., 2 pumps.
 EMP—218. Last years tonnage 97,969.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity and Shaker Screens.

FRETWELL COAL COMPANY

Now the Pittsburgh & Midway Coal Mining Co.

FURSMAN COAL CO.

General Office, Schuler, Okla.
 PR—W. H. Fursman, Okmulgee, Okla.
 VP—Winifred Fursman, Okmulgee, Okla.
 TR—Thos. Sparks, Okmulgee, Okla.
 GM—W. H. Fursman, Okmulgee, Okla.
 GS—W. H. Fursman, Okmulgee, Okla.
 PA—W. H. Fursman, Okmulgee, Okla.
 EM—C. E. Schurch, Henryetta, Okla.
 EE—Sam Sparks, Schuler, Okla.
 SA—McAlester Fuel Co., McAlester, Okla.

Fursman No. 3 Mine; Shaft; Seam, 36 in. thick.
 PO—Schuler, Okla.; SP—Same; CTY—Okmulgee; RR—M. O. & G.
 MS—Thomas Sparks, Schuler, Okla.
 S of H—Mules. Track gage, 42 in.
 S of M—5 shortwall mchs.
 PP—Power purchased, transformer 2300 to 220 volts A. C.
 EMP—80. Daily tonnage 250.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.
 SCQ—Gunter City Town-Ship Company, Buyer, C. B. Cordes, Nowata, Okla.

GEM COAL COMPANY, THE

General Office, Henryetta, Okla.
 PR—Duncan McKay, Henryetta, Okla.
 TR—Henry Minholtz, Alamosa, Colo.
 GM—Duncan McKay, Henryetta, Okla.
 GS—Duncan McKay, Henryetta, Okla.
 PA—Duncan McKay, Henryetta, Okla.
 SA—S. Doyel, Dewar, Okla.; Duncan McKay, Henryetta, Okla.

(Continued on Next Page)

Gem Coal Co.—Cont.

Gem Mine; Slope; Shaft; Seam 26 in. thick.
 PO—Henryetta, Okla.; SP—Same; CTY—Okmulgee; RR—1 also.
 S of H—Mules. Track gage 42 inches.
 S of H—Elec. puncher, chain breast and shortwall mchs.
 PP—Power purchased. Transformer 2200-220 volts A. C., 1 fire tube boiler, 100 H. P., 1 pump.
 EMP—55. Last years tonnage 21,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

GREAT WESTERN MINING COMPANY.

General Office, Krebs, Okla.
 PR—Jas. Duncan, Altam, Ill.
 VP—C. E. Kimball, St. Louis, Mo.
 TR—C. E. Kimball, Jr., St. Louis, Mo.
 GM—Jas. Duncan, Altam, Ill.
 GS—W. H. Collins, Krebs, Okla.
 PA—L. R. Wiggins, Krebs, Okla.
 CE—S. K. Smith, Chicago, Ill.
 EM—W. C. Howard, Krebs, Okla.
 EE—T. Otterson, Krebs, Okla.
 SA—McAlester Fuel Co., McAlester, Okla.

No. 3 Wilburton Mine; Slope; Harts home Seam, 48 in. thick.
 PO—Wilburton, Okla.; SP—Same; CTY—Latimer; RR—C. R. I. & P.
 MS—G. Frame, Wilburton, Okla.
 S of H—Mules, rope, steam and comp air locos.
 S of M—Hand.
 PP—3 35 H. P. fire tube boilers, 3 pumps.
 EMP—115. Last years tonnage 27,603.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

No. 7 Wilburton Mine; Slope; Harts home Seam, 48 in. thick.
 PO—Wilburton, Okla.; SP—Same; CTY—Latimer; RR—C. R. I. & P.
 MS—Wm. Ditty, Wilburton, Okla.
 S of H—Mules.
 S of M—Hand.
 PP—2 35 H. P. fire tube boilers, 2 pumps.
 EMP—75. Last years tonnage 12,624.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

GUNTHER CITY COKE, COAL & MINING COMPANY

General Office, Nowata, Okla.
 PR—W. H. Bonn, Victor, Iowa.
 VP—A. J. Adams, Wichita, Kan.
 TR—C. B. Cordes, Nowata, Okla.
 SEY—A. C. Gunther, Nowata, Okla.
 GM—F. W. Cordes, Nowata, Okla.
 GS—J. D. Whitney, Nowata, Okla.
 Business Mgr.—C. B. Cordes, Nowata, Okla.
 PA—C. B. Cordes, Nowata, Okla.

Gunther City Mine; Stripping; Seam, 30 in. thick.
 PO—Tulala, Okla.; SP—Oologah, Okla.; CTY—Roger; RR—Mo. Pacific.
 S of H—Electric and gasoline locos.
 S of M—Hand.
 EMP—100. Daily tonnage 250.
 SIZES SHIPT—Run of Mine.
 Note—Formerly operated by Gunther City Coal & Mining Co.

HAILEY-OLA COAL COMPANY.

General Office, Galleysville, Okla.
 PR—G. L. Blackford, Denison, Tex.
 VP—Earl Cobb, Amarillo, Tex.
 TR—D. C. McAlpine, Haileyville, Okla.
 GM—D. C. McAlpine, Haileyville, Okla.
 GS—Alex Ogilvie, Haileyville, Okla.
 EM—McAlester Engineering Co., McAlester, Okla.

SCO—Address the Company, Buyer, B. C. Brewen, Lurie, Okla.
 SA—McAlester Fuel Co., McAlester, Okla.

Mine No. 1; Shaft; Hartshorne Seam, 48 to 72 in. thick.
 PO—Haileyville, Okla.; SP—Same; CTY—Pittsburg; RR—C. R. I. & P., Rock Island Br.
 S of H—Mules.
 S of M—14 comp. air mchs.
 PP—4 return tubular boilers, total 600 H. P., 2 gen. units, 2 air compressors and 1 pump.
 EMP—165. Last fiscal year output, 62,207 tons.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
 PREP. EQUIPT—Shaker Screen.

No. 2 Mine; Slope; Upper Hartshorne Seam, 36 inches thick.
 PO—Haileyville, Okla.; SP—Same; CTY—Pittsburg; RR—C. R. I. & P.
 S of H—Mules and main and tail rope. Track gage 36 inches.
 S of M—Hand.
 PP—1 80 H. P. fire tube boiler.
 EMP—50. Daily tonnage 150.
 SIZES SHIPT—Run of Mine.

No. 3 Mine; Slope; Lower Hartshorne Seam, 60 inches thick.
 PO—Haileyville, Okla.; SP—Same; CTY—Pittsburg; RR—C. R. I. & P.

S of H—Mules and main and tail rope. Track gage 36 inches.
 S of M—Hand.
 PP—2 80 H. P. fire tube boilers, 2 pumps.
 EMP—35. Daily tonnage 80.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

Mine No. 4; Slope; Wilburton Seam, 42 to 60 in. thick.
 PO—Lurie, Okla.; SP—Wilburton, Okla.; CTY—Latimer; RR—C. R. I. & P.
 MS—T. B. McAlpine, Lurie, Okla.
 S of H—Mules.
 S of M—3 comp. air mchs.
 PP—4 return tubular boilers, total 400 H. P., 1 gen. unit, 1 air comp. and 1 pump.
 EMP—125. Last years tonnage 21,000.
 PREP. EQUIPT—Shaker Screen.

Mine No. 5; Slope; Wilburton Seam.
 PO—Lurie, Okla.; SP—Wilburton, Okla.; CTY—Latimer; RR—C. R. I. & P., Rock Island Br.
 MS—T. B. McAlpine, Lurie, Okla.
 S of H—Mules.
 PP—1 return tubular boiler, total 100 H. P., 1 gen. unit, air comp. and 1 pump.
 EMP—10. Last years tonnage 105,000.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.

No. 6 Mine Abandoned.
 No. 7 Mine; Slope; Lower Hartshorne Seam, 50 inches thick.
 PO—Haileyville, Okla.; SP—Same; CTY—Pittsburg; RR—C. R. I. & P.
 S of H—Mules and main and tail rope. Track gage 36 inches.
 S of M—Hand.
 PP—1 80 H. P. fire tube boiler.
 EMP—25. Daily tonnage 75.
 SIZES SHIPT—Run of Mine.

HARRIS COAL & MINING COMPANY

General Office, Henryetta, Okla.
 PR—T. J. Harris, Henryetta, Okla.

Harris Mine; Drift.
 PR—Dewar, Okla.; CTY—Okmulgee.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 EMP—28. Last fiscal year output, 14,693 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Bar Screens.
 Old Information.

HENRYETTA COAL & MINING CO.

PR—J. M. Wise, Henryetta, Okla.
 VP—D. C. Wise, Joplin, Mo.
 TR—D. C. Wise, Joplin, Mo.
 GM—Gas L. Smith, Henryetta, Okla.
 GS—Gus L. Smith, Henryetta, Okla.
 EM—Gus L. Smith, Henryetta, Okla.
 EE—Elmer Hill, Henryetta, Okla.
 SA—McAlester Fuel Co., McAlester, Okla.

Wise Mine; Shaft; Henryetta Seam, 36 inches thick.
 PO—Henryetta, Okla.; SP—Same; CTY—Okmulgee; RR—St. L. & S. F.
 MS—Geo. R. Ogdon, Henryetta, Okla.
 S of H—Mules. Track gage 42 inches.
 S of M—6 shortwall mchs.
 PP—Power purchased. Transformer 2200-440 volts A. C., 2—80 H. P. fire tube boilers, 2 pumps.
 EMP—128. Daily tonnage 550.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

HIAWATHA COAL COMPANY

Out of Business.

HICKORY COAL & MINING CO.

General Office, R. R. No. 2, Tulsa, Okla.
 PR—Geo. A. Kelley, Tulsa, Okla.
 VP—Sol. H. Kaufman, Tulsa, Okla.
 TR—Geo. A. Kelley, Tulsa, Okla.
 GM—Geo. A. Kelley, Tulsa, Okla.
 EM—Tony McLaughlin, Tulsa, Okla.
 EE—Tom Phillips, Tulsa, Okla.
 SCO—Bailey Mercantile Company, Buyer, K. L. Kelley, Tulsa, Okla.

No. 2 Mine; Shaft; Hickory Vein Seam, 30 in. thick.
 PO—R. R. No. 2, Tulsa, Okla.; SP—Rudd, Okla.; CTY—Tulsa; RR—M. K. & T.
 S of H—Mules. Track gage 36 in.
 S of M—Hand and 1 shortwall mach.
 PP—1—80 H. P., 1—100 H. P., 1—120 H. P. water tube boilers, gen. units, 1—150 K. W., 500 volts D. C., 4 pumps.
 EMP—75.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
 PREP. EQUIPT—Gravity, Revolving and Shaker Screens, Picking Tables.

No. 3 Mine; Drift; Hickory Seam, 30 in. thick.
 PO—R. R. No. 2, Tulsa, Okla.; SP—Rudd, Okla.; CTY—Tulsa; RR—M. K. & T.
 S of H—Mules. Track gage 36 in.
 S of M—Hand.
 EMP—25.

SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity, Revolving and Shaker Screens, Picking Tables.

HOWE-McCURTAIN COAL & COKE CO.

General Office, Ft. Smith, Ark.
 PR—R. D. Martin, Ft. Smith, Ark.
 VP—S. A. Martin, Howe, Okla.
 TR—R. D. Martin, Ft. Smith, Ark.
 GM—R. D. Martin, Ft. Smith, Ark.
 GS—S. A. Martin, Howe, Okla.
 PA—R. D. Martin, Ft. Smith, Ark.
 CE—Lewis & Nod, Ft. Smith, Ark.
 SCO—Address the Company, Buyer, H. Dawes, Howe, Okla.
 SA—McAlester Fuel Co., McAlester, Okla.; Midland Coal Co., McAlester, Okla.

No. 21½ Mine; Slope and Stripping; Semianthracite - Lower Hartshorne Seam, 48 inches thick.
 PO—Howe, Okla.; SP—Same; CTY—Le Flore; RR—C. R. I. & P.
 MS—F. J. McGuire, Howe, Okla.
 SM—F. J. McGuire, Howe, Okla.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 EMP—9. Daily output, 85 tons.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

No. 3, 4 & 5 Mines now operated by Interstate Coal Company.

Nos. 7 and 8 Mines; Slopes; Lower Hartshorne Seam, 51 in. thick.
 PO—Howe, Okla.; SP—Same; CTY—Le Flore; RR—C. R. I. & P.
 MS—D. Williamson, Howe, Okla.
 S of H—Elec. steam loco. Track gage 36 inches.
 S of M—Hand.
 PP—1 water tube boiler, 125 H. P., 3 phase 60 cycles, 2300 volts A. C., 1—50 K. W. and 1—100 K. W. gen. units, 220 volts D. C., 2 pumps.
 EMP—25.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Shaker Screens.

HUGHES COAL AND MINING CO., THE.

PR—D. J. Hughes, Dewar, Okla.
 TR—H. J. Buttery, Henryetta, Okla.

Hughes No. 1 Mine; Henryetta Seam, 36 in. thick.
 PO—Dewar, Okla.; SP—Same; CTY—Okmulgee; RR—M. O. & G., Okmulgee Northern Br.
 S of H—Mules.
 S of M—Hand.
 Daily output, 50 tons.
 SIZES SHIPT—Run of Mine.
 Old Information.

INTERSTATE COAL COMPANY

General Office, Muskogee, Okla.
 PR—R. T. Price, Muskogee, Okla.
 VP—J. T. Buckner, Muskogee, Okla.
 TR—H. C. Croft, Jr., Muskogee, Okla.
 GM—R. T. Price, Muskogee, Okla.
 GS—H. A. Schmeling, Heavener, Okla.
 PA—H. C. Croft, Jr., Muskogee, Okla.
 CE—H. A. Smeling, Heavener, Okla.

No. 3, 4 and 5 Mines; Slope; Hartshorne Seam, 48 inches thick.
 PO—Heavener, Okla.; SP—Same; CTY—LeFlore; RR—C. R. I. P.; K. C. S.
 S of H—Mules, rope. Track gage 36-42 inches.
 S of M—Hand.
 PP—5 fire tube boilers, 300 H. P.; purchase power, Transformer 2300-400 A. C., 1 pump.
 EMP—120. Daily output, 250 tons.

KALI-INDIA COAL CO.

PR—J. T. Jackson, 1430 Land Title Bldg., Philadelphia, Pa.
 TR—H. C. Finley, Hartshorne, Okla.
 GM—J. T. Jackson, Philadelphia, Pa.
 GS—J. W. Patterson, Sr., Hartshorne, Okla.
 PA—Jno. McClude, Hartshorne, Okla.
 EM—H. O. Lewis, Ft. Smith, Ark.
 EE—Andrew Patterson, Hartshorne, Okla.
 SA—McAlester Fuel Co., McAlester, Okla.

Kali-India Mine; Slope; Hartshorne Seam, 48 in. thick.
 PO—Hartshorne, Okla.; SP—Same; CTY—Latimer; RR—R. S. & P.
 MS—H. B. Patterson, Hartshorne, Okla.
 S of H—Mules, rope, 1 elec. hoist, 2 storage battery locos and steam hoist. Track gage 36 in.
 S of M—10 shortwall mchs.
 PP—Power purchased, transformer 23,000-440 volts A. C., 2 fire tube boilers, 300 H. P., 3 pumps.
 EMP—150. Last fiscal year output, 100,000 tons.
 SIZES SHIPT—Slack, Pea, Nut, Lump.
 PREP. EQUIPT—Shaker Screen.

KEYSTONE COAL & MINING CO.

General Office, Coalgate, Okla.
 PR—H. L. Reager, Coalgate, Okla.
 VP—Patsy Gorman, Coalgate, Okla.
 TR—J. M. Cavington, Coalgate, Okla.

GM—H. L. Reager, Coalgate, Okla.
 GS—A. W. Schneider, Coalgate, Okla.
 PA—H. L. Reager, Coalgate, Okla.
 EM—A. W. Schneider, Coalgate, Okla.
 EE—H. L. Reager, Coalgate, Okla.
 SA—McAlester Fuel Co., McAlester, Okla.

Keystone No. 1 Mine; Slope; Lehigh-Coalgate Seam, 46 in. thick.
 PO—Coalgate, Okla.; SP—Same; CTY—Coal, RR—A. T. & S. F.
 SM—H. L. Reager, Coalgate, Okla.
 S of H—Mules and rope. Track gage 36 in.
 S of M—1 longwall mach.
 PP—Power purchased, Transformer 2300-220 volts A. C., 2 100 H. P. fire tube boiler, 2 pumps.
 EMP—80. Daily tonnage 200.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

KINCAID COAL & MINING COMPANY.

General Office, Henryetta, Okla.
 PR—J. W. Kincaid, Henryetta, Okla.
 VP—J. G. Fretwell, Henryetta, Okla.
 TR—S. T. Haynes, Henryetta, Okla.
 GM—H. J. Buttery, Henryetta, Okla.
 GS—S. T. Haynes, Henryetta, Okla.
 SA—McAlester Fuel Co., McAlester, Okla.

Kincaid Mine; Slope; Henryetta Seam; 36 to 40 in. thick.
 PO—Henryetta, Okla.; CTY—Okmulgee; RR—M. O. & G.
 S of H—Electric loco. Track gage 42 in.
 S of M—3 shortwall mchs.
 PP—1 pump.
 EMP—75. Last years tonnage 40,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

LE BOSQUET COAL & MINING CO.

Now J. S. Bowerman.

LEAVELL COAL COMPANY

General Office, 313 Atco Bldg., Tulsa, Okla.
 PR—John H. Leavell, 509 Wells Fargo Bldg., San Francisco, Calif.
 VP—Cyrus S. Avery, Tulsa, Okla.
 TR—Fred W. Insull, Tulsa, Okla.
 GM—Fred W. Insull, Tulsa, Okla.
 GS—L. R. Keele, Tulsa, Okla.
 PA—L. R. Keele, Tulsa, Okla.
 SA—Sinclair Coal Co., Gloyd Bldg., Kansas City, Mo.

Leavell Mine; Stripping; Seam, 28 in. thick.
 PO—Tulsa, Okla.; SP—Same; CTY—Tulsa; RR—St. L. & S. F.
 S of H—2—14-ton locos. Track gage 36 in.
 EMP—50. Daily tonnage 600.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

MCALISTER COAL & COKE CO.

General Office, Buck (via Alderson P. O.), Okla.
 VP—C. E. Chapman, McAlester, Okla.
 PA—D. D. Dunkin, Alderson, Okla.

Buck No. 6 Mine, Shaft, "Lower Hartshorne" Seam, 3 ft. 4 in. to ft. 6 in. thick.

Buck No. 21 Mine, Slope, "Lower Hartshorne" Seam, 3 to 5 ft. thick.
 PO—Buck, Okla.; SP—Alderson, Okla.; CTY—Pittsburg; RR—C. R. I. & P., M. K. & T.
 MS—John Fabry, Buck, (Alderson P. O.), Okla.
 SM—Geo. M. Abbott, Alderson, Okla.
 S of H—Mules and rope. Track gage 3 ft.
 S of M—Hand.
 PP—2 return tubular boilers, total 160 H. P., 2 pumps.
 EMP—45. Last fiscal year output 38,000 tons.

Buck No. 22 Mine; Slope; Lower Hartshorne Seam.
 PO—Alderson, Okla.; CTY—Pittsburg; RR—M. K. & T.
 MS—John Fabry, Buck, (Alderson P. O.), Okla.
 S of H—Mules and rope. Track gage 36 in.
 S of M—Hand.
 PP—2 return tubular boilers, total 180 H. P., 2 pumps.
 Daily output 200 tons.
 (Old Information)

MCALISTER-ADAMSON COAL COMPANY.

General Office, Hartshorne, Okla.
 PR—F. C. Ross, McAlester, Okla.
 VP—G. A. B. O., Hartshorne, Okla.
 TR—C. S. Wingate, Hartshorne, Okla.
 GM—C. S. Wingate, Hartshorne, Okla.
 GS—A. McKennon, Adamson, Okla.
 PA—C. S. Wingate, Hartshorne, Okla.
 EM—McAlester Engr. Co., McAlester, Okla.
 SCO—Baker-Riedt Merc. Co., Hartshorne, Okla.

(Continued on Next Page)

McAlester-Adamson Coal Co.—Cont.

No. 6 Mine; Slope Hartshorne Seam, 48 in. thick.
 PO—Clonsilla, Okla.; SP—Adamson, Okla.
 CTY—Latimer, RR—M. K. & T.
 MS—Ed. Dodson, Clonsilla, Okla.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 PP—4 return tubular boilers, 1 air compressor, 440 volts A. C., 4 pumps.
 EMP—80. Daily tonnage 250.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Shaker Screens.

No. 8 Mine; Slope; Hartshorne Seam, 56 in. thick.
 PO—Adamson, Okla.; SP—Same; CTY—Pittsburg, RR—M. K. & T.
 MS—J. Mossop, Adamson, Okla.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 PP—2 return tubular boilers, 2 pumps.
 EMP—80. Daily tonnage 235.
 SIZES SHIPT—Run of Mine, Slack, Nut, Chestnut, Lump.

McALESTER-ALDERSON COAL CO.

PR—E. W. Flynn, McAlester, Okla.
 VP—A. W. Harries, McAlester, Okla.
 TR—E. W. Flynn, McAlester, Okla.
 GM—E. W. Flynn, McAlester, Okla.
 GS—E. W. Flynn, McAlester, Okla.
 PA—A. W. Harries, McAlester, Okla.
 SA—McAlester Fuel Co., McAlester, Okla.

McAlester No. 1 Mine; Slope; Wilburton Seam, 36 in. thick.
 PO—Bache, Okla.; SP—Same; CTY—Pittsburg, RR—M. K. & T.
 MS—John Holstead, Krebs, Okla.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 PP—1 50 H. P. fire tube boiler, 2 pumps.
 EMP—81. Daily tonnage 125.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens

McAlester No. 2 Mine; Slope; Wilburton Seam, 36 in. thick.
 PO—Bache, Okla.; SP—Same; CTY—Pittsburg, RR—M. K. & T.
 MS—John Holstead, Krebs, Okla.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 PP—1 50 H. P. fire tube boiler, 2 pumps.
 EMP—46. Daily tonnage 75.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

McAlester No. 5 Mine; Slope; Wilburton Seam, 36 in. thick.
 PO—Bache, Okla.; SP—Same; CTY—Pittsburg, RR—M. K. & T.
 MS—John Holstead, Krebs, Okla.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 PP—1 50 H. P. fire tube boiler, 2 pumps.
 EMP—27. Daily tonnage 100.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

McALESTER COLLIERY COMPANY

General Office, McAlester, Okla.
 PR—Wm. A. Evans, McAlester, Okla.
 VP—N. E. Tuell, Hartshorne, Okla.
 TR—Sam. L. Morley, McAlester, Okla.
 GM—Wm. A. Evans, McAlester, Okla.
 PA—J. L. Johnson, McAlester, Okla.
 EM—Geo. M. Brown, McAlester, Okla.
 SA—McAlester Fuel Co., McAlester, Okla.

No. 1 Mine; Slope; Lower Hartshorne Seam; 51 inches thick.
 PO—Gowen, Okla.; SP—Hartshorne, Okla.; CTY—Latimer; RR—Rock Island.
 MS—Lee Harris, Gowen, Okla.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 PP—4 pumps.
 EMP—90.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

McALESTER-EDWARDS COAL CO.

PR—E. S. Red, Coffeyville, Kan.
 TR—F. B. Drew, McAlester, Okla.
 GM—F. B. Drew, McAlester, Okla.
 MM—M. Byrne, Pittsburg, Okla.
 EE—M. Byrne, Pittsburg, Okla.
 SA—P. H. O'Keefe, Pittsburg, Okla.
 SCO—Address the Company, Buyer, C. O. Fuqua, Pittsburg, Okla.

No. 1, 2 and 3 Mines; Slope; McAlester Seam, 48 to 60 in. thick.
 PO—Pittsburg, Okla.; SP—Same; CTY—Pittsburg, RR—M. K. & T., R. S. & P.
 MS—A. R. Cameron, Pittsburg, Okla.
 S of H—Mules. Storage battery locos. Track gage 36 in.
 S of M—Hand.
 PP—6 boilers, total 700 H. P., gen. units, 50 K. W. A. C.
 EMP—300 Last years tonnage 150,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables.

MILBY & DOW COAL & MINING COMPANY.

PR—R. C. Storrie, San Francisco, Cal.
 TR—H. C. Rice, McAlester, Okla.
 GM—H. C. Rice, McAlester, Okla.
 GS—W. J. Loyne, Dow, Okla.
 PA—H. C. Rice, Dow, Okla.
 EM—Geo. M. Brown, McAlester, Okla.
 EE—W. T. Schureman, Dow, Okla.

No. 5 Mine; Slope; McAlester Seam, 34 to 38 in. thick.
 PO—Dow, Okla.; SP—Same; CTY—Pittsburg, RR—M. K. & T.
 MS—Jno. Hutchinson, Dow, Okla.
 SM—E. R. Long, Dow, Okla.
 S of H—1 elec. loco. Track gage 42 in.
 PP—3 return tubular boilers, total 325 H. P., 1 pump. Purchase power, 180. Last fiscal year output, 80,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
 PREP. EQUIPT—Shaker and Rotary Screens.

No. 9 Mine; Shaft; McAlester Seam, 34 to 38 in. thick.
 PO—Dow, Okla.; SP—Same; CTY—Pittsburg, RR—M. K. & T.
 MS—Wm. Davall, Dow, Okla.
 S of H—Electric hoists.
 PP—5 return tubular boilers, total 550 H. P., 2 gen. units, 250 volts D. C., 1 pump.
 EMP—240. Last fiscal year output, 96,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

No. 10 Mine; Slope; McAlester Seam, 36 to 39 in. thick.
 PO—Dow, Okla.; SP—Same; CTY—Pittsburg, RR—C. R. I. & P.
 MS—D. Harris, Dow, Okla.
 PP—2 return tubular boilers, 1 pump.
 EMP—140.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Shaker Screens.

MILTON COAL MINING CO.

Now Choctaw Mining Company.

MISSOURI, KANSAS & TEXAS RY. CO.

(Coal Dept.)

General Office, St. Louis, Mo.
 PR—C. E. Schaff, St. Louis, Mo.
 TR—R. P. Roach, Parsons, Kan.
 GM—J. M. Johnston, St. Louis, Mo.
 GS—E. H. Noel, Coalgate, Okla.
 PA—G. E. Scott, St. Louis, Mo.
 CE—E. H. Noel, Coalgate, Okla.
 EE—Samuel Wells, Coalgate, Okla.
 SCO—Address the Company, Buyer, C. L. Wright, Parsons, Kan.

No. 12 Mine; Shaft; McAlester Seam, 48 in. thick.
 PO—Coalgate, Okla.; SP—Same; CTY—Coal, RR—M. K. & T.
 MS—Michel Wagner, Coalgate, Okla.
 S of H—Mules, trolley pole type and steam locos. Track gauge, 36 in.
 S of M—Hand.
 PP—Power purchased, 5 return tube boilers, total 625 H. P., gen. units, 1—200 K. W., 1—100 K. W., 250 volts D. C., 5 pumps.
 EMP—111. Daily tonnage 300.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Shaker Screens.

No. 21 and 19 Mine; Slope; McAlester Seam 48 in. thick.
 PO—Coalgate, Okla.; SP—Same; CTY—Coal, RR—M. K. & T.
 S of H—Mules, steam loco Track gauge, 36 in.
 S of M—Hand.
 PP—3 return tube boilers, total 375 H. P., 2 pumps.
 SIZES SHIPT—Run of Mine.

MONARCH COAL & MINING CO.

General Office, Henryetta, Okla.
 PR—D. J. Hughes Dewar, Okla.
 VP—H. J. Butterly Henryetta, Okla.
 TR—P. Randall, Henryetta, Okla.
 GM—D. J. Hughes, Dewar, Okla.
 CE—C. E. Schurch, Henryetta, Okla.
 SA—Hughes & Butterly Coal Co., Henryetta, Okla.

Monarch Mine; Slope and Stripping; Dewar Seam, 36 in. thick.
 PO—Henryetta, Okla.; Dewar, Okla.; CTY—Okmulgee; RR—M. O. & G.
 S of H—Rope.
 S of M—Longwall machs.
 PP—Purchase power, transformer 2300—220 volts A. C., water tube boilers.
 EMP—30 Last years tonnage 14,065.
 SIZES SHIPT—Run of Mine.

MULLEN, W. P.

General Office, North McAlester, Okla.
 GS—W. P. Mullen, North McAlester, Okla.
 CE—McAlester Eng. Co., McAlester, Okla.
 EM—R. T. Campbell, McAlester, Okla.
 SA—Edwards Coal Co., McAlester, Okla.

Julian Mine; Drift; McAlester Seam, 51 inches thick.
 PO—McAlester, Okla.; SP—Same; CTY—Pittsburg, RR—M. K. & T.

S of H—Mules and slope rope. Track gage 36 inches.
 S of M—Hand.
 PP—Purchase power, Transformer 2,200 to 220 volts A. C., 1—100 H. P. fire tube boiler, 1 pump.
 EMP—40. Daily tonnage 100.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

Union No. 7 Mine; Drift; McAlester Seam, 34 inches thick.
 PO—Adamson, Okla.; SP—Same; CTY—Pittsburg, RR—M. K. & T.
 MS—Jno. H. Snow, Adamson, Okla.
 S of H—Mules and slope rope. Track gage 36 inches.
 PP—1 75 H. P. fire tube boiler, 2 pumps.
 EMP—30. Last years tonnage 13,653.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

NORTH McALESTER COAL COMPANY.

General Office, McAlester, Okla.
 PR—W. E. Beaty, North McAlester, Okla.
 VP—G. A. Riedt, McAlester, Okla.
 TR—Allen Wright, McAlester, Okla.
 GM—W. E. Beaty, McAlester, Okla.
 GS—Alex McKinnon, McAlester, Okla.
 PA—W. E. Beaty, McAlester, Okla.
 EM—Geo. M. Brown, McAlester, Okla.
 SA—McAlester Coal Co., McAlester, Okla.

North McAlester Mine; Slope; McAlester Seam, 48 in. thick.
 PO—North McAlester, Okla.; SP—Same; RR—M. K. & T., Edward Br.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 PP—Power purchased, 440 volts for hoisting and 220 volts for pumping, 2 pumps.
 EMP—65. Last years tonnage 44,000.
 SIZES SHIPT—Run of Mine, Nut, Lump.
 PREP. EQUIPT—Ear Screens.
 Old Information.

OAK RIDGE COAL CO.

General Office, Red Oak, Okla.
 GM—J. B. Hilling, Red Oak, Okla.
 PA—J. B. Hilling, Red Oak, Okla.
 CE—H. O. Lewis, Ft. Smith, Ark.
 EM—N. C. Forbus, Red Oak, Okla.
 SCO—Address the Company, Buyer, E. E. Moore, Red Oak, Okla.
 SA—McAlester Fuel Co., McAlester, Okla.

Oak Ridge Mine; Drift; Lower Hartshorne Seam, 54 in. thick.
 PO—Red Oak, Okla.; SP—Same; CTY—Latimer; RR—C. R. I. & P.
 S of H—Mules. Track gage, 42 in.
 S of M—Hand.
 PP—4 fire tube boilers, 525 H. P., 6 pumps.
 EMP—75. Last years tonnage 22,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity and Shaker Screens.

OKLAHOMA MINING & STRIPPING CO.

Property abandoned.

OSAGE COAL & MINING COMPANY.

General Office, McAlester, Okla.
 PR—James Duncan, Alton, Ill.
 VP—C. E. Kimball, St. Louis, Mo.
 GM—Jas. Duncan, Alton, Ill.
 GS—W. H. Collins, Krebs, Okla.
 PA—J. R. Wingate, Krebs, Okla.
 CE—S. K. Smith, Chicago, Ill.
 EM—W. C. Howard, Krebs, Okla.
 SA—McAlester Fuel Company, McAlester, Okla.

No. 5 Mine; Shaft; McAlester Seam; 50 in. thick.
 PO—Krebs, Okla.; SP—Same; CTY—Pittsburg, RR—M. K. & T.
 MS—John Cairnes, Krebs, Okla.
 S of H—Mules and rope. Track gauge, 36 in.
 S of M—12 shortwall machs.
 PP—Purchase power, 220 volts D. C., 4 100 H. P. fire tube boilers, 4 pumps.
 EMP—140. Daily output, 450 tons.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

No. 8 Mine; Shaft; McAlester Seam; 50 to 52 in. thick.
 PO—Krebs, Okla.; SP—Same; CTY—Pittsburg, RR—M. K. & T.
 MS—A. Campbell, Krebs, Okla.
 S of H—Mules and rope.
 S of M—7 shortwall machs.
 PP—Purchase power, 220 volts D. C., 3 100 H. P. fire tube boilers, 3 pumps.
 EMP—140. Daily output, 400 tons.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

No. 7 Mine; Slope; McAlester Seam; 40 to 48 in. thick.
 PO—Krebs, Okla.; SP—Same; CTY—Pittsburg, RR—M. K. & T.

MS—Pasquail Malone, Krebs, Okla.
 S of H—Mules and rope.
 S of M—Hand.
 PP—2 return tubular boilers, total 300 H. P., 2 pumps.
 EMP—40. Daily output, 100 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

PEABODY COAL COMPANY

General Office, 332 S. Michigan Ave., Chicago, Ill.
 Chairman of Board—Francis S. Peabody, Chicago, Ill.
 PR—Stuyvesant Peabody, Chicago, Ill.
 Asst. to PR—Hilton G. Clabaugh, Chicago, Ill.
 VP—Clarence J. Gray, Chicago, Ill.
 VP—Moses F. Peltier, Chicago, Ill.
 VP—(In charge of Operations), Hiram M. Young, Chicago, Ill.
 Asst. to VP in charge of Operations—George C. McAden, Chicago, Ill.
 VP—(In charge of Sales and Traffic), George W. Reed, Chicago, Ill.
 ASST to VP—(In charge of Sales)—J. L. Pieroni, Chicago, Ill.
 VP—(In charge of Finance), Chas. F. Schrage, Chicago, Ill.
 Secy—Joseph Solari, Chicago, Ill.
 TR—Charles F. Schrag, Chicago, Ill.
 Asst. Secy.—Treas.—Walter A. Fisher, Chicago, Ill.
 Mgr. of Sales—Archibald W. Hamilton, Chicago, Ill.
 Mgr. of Traffic—James B. Duggan, Chicago, Ill.
 Auditor—Charles S. Ellis, Chicago, Ill.
 PA—Harry E. Campbell, Chicago, Ill.
 Additional Information on Pages 662, 663.

No. 29 Mine; Slope; Cavanal-Hartshorne Seam; 50 inches thick.
 PO—Tabona, Okla.; SP—Superior, Okla.; CTY—Le Flore; RR—M. V.
 S of H—Mules, tail rope. Track gage 42 inches.
 S of M—4 shortwall machs.

PP—2 fire tube boilers, total 250 H. P., 1 100 K. W. gen. unit, 275 volts D. C., 5 pumps.
 EMP—120. Last years tonnage 150,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.
 NOTE—Tonnage this mine handled by Peabody Coal Co., Dwight Bldg., Kansas City, Mo.; H. G. Trester, Mgr.
 Note—Formerly operated by the Superior Smokeless Coal & Mining Co.

PIERCE COAL CO.

General Office, McAlester, Okla.
 PR—J. G. Putterbaugh, McAlester, Okla.
 TR—E. P. Joyner, McAlester, Okla.
 GM—W. D. Putterbaugh, McAlester, Okla.
 GS—S. K. Smith, McAlester, Okla.
 PA—E. P. Joyner, McAlester, Okla.
 Sales Agency, McAlester Fuel Co., McAlester, Okla.

No. 1 Mine; Slope; Lower Hartshorne Seam, 48 to 60 in. thick.

PO—Adamson, Okla.; SP—Manning, Okla.; CTY—Pittsburg; RR—M. & T., Wilburton, Br.

MS—J. D. Rotenberry, Adamson, Okla.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 PP—2 return tubular boilers, total 200 H. P., 1 gen. unit, 440 volts A. C., 3 phase, 60 cycles, 4 pumps.
 EMP—85. Last fiscal year output, 25,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

PIONEER COAL & MINING CO., THE

Out of business.

PITTSBURG & MIDWAY COAL MINING CO.

PR—C. F. Spencer, Pittsburg, Kan.
 VP—E. V. Lanyon, Pittsburg, Kan.
 TR—W. O. Myers, Pittsburg, Kan.
 GM—C. F. Spencer, Pittsburg, Kan.
 GS—L. E. Compton, Pittsburg, Kan.
 PA—L. E. Compton, Pittsburg, Kan.
 CE—J. E. Donohoe, Pittsburg, Kan.
 EM—C. E. Schurch, Henryetta, Okla.
 SCO—Address the Company, Buyer, D. B. Kerr, Pittsburg, Kan.
 SA—A. F. McElheine, Kansas City, Mo.

No. 12 Mine; Shaft; Okla. Coal Seam, 36 in. thick.
 PO—Henryetta, Okla.; SP—Same; CTY—Okmulgee; RR—K. O. & G., and Frisco.
 MS—H. H. Spencer, Henryetta, Okla.
 S of H—Mules and storage battery loco. Track gage 42 in.
 S of M—Hand, 5 shortwall machs.
 PP—Power purchased, 5 transformer, 220 volts A. C., 2 fire tube boilers, 1 pump.
 EMP—90 Last years tonnage 22,555.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.
 NOTE—Formerly operated by the Fretwell Coal Co.

POTEAU VALLEY COAL COMPANY.

General Office, Cunningham Bldg., Joplin, Mo.
PR—H. E. Linda, Colorado Springs, Colo.
VP—J. G. Marcum, Joplin, Mo.
TR—C. H. Tenney, Madison, Wis.
GM—David Reid, Fort Smith, Ark.
PA—David Reid, Fort Smith, Ark.
SCO—Address the Company, Buyer, David Reid, Howe, Okla.

No. 2 Mine; Slope; Hartshorne Seam, 50 in. thick.
PO—Howe, Okla.; SP—Same; CTY—Le Flore; RR—Rock Island.
S of H—Mules, rope and steam locos. Track gage, 36 in.
S of M—Hand.
PP—125 H. P. fire tube boiler, 2 pumps.
EMP—34. Daily output, 150 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.
No. 1 Mine; Drift; Hartshorne Seam, 50 in. thick.
PO—Howe, Okla.; SP—Same; CTY—Le Flore; RR—Rock Island.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
EMP—18. Daily output, 80 tons.
SIZES SHIPT—Run of Mine.

Lincoln Mine; Drift and Slope; Hartshorne Seam, 54 in. thick.
PO—Howe, Okla.; SP—Same; CTY—Le Flore; RR—C. R. I. & P.
S of H—Mules, 1 gasoline and 2 steam locos. Track gage 36 in.
PP—3 fire tube boilers, 180 H. P., 2 pumps.
EMP—100. Last years tonnage 84,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

ROCK ISLAND COAL MINING COMPANY.

General Office, 139 W. Van Buren St., Chicago, Ill.
PR—Robt. E. Lee, Chicago, Ill.
TR—Robert E. Lee, Chicago, Ill.
GS—Wm. Jones, Hartshorne, Okla.
PA—D. M. Hedberg, Chicago, Ill.
EM—W. J. Richards, Hartshorne, Okla.
EE—Arthur Watley, Hartshorne, Okla.

No. 12 Mine; Shaft; Lower Hartshorne Seam, 44 in. thick.
PO—Hartshorne, Okla.; SP—Same; CTY—Pittsburg; RR—C. R. I. & P.
SM—N. M. Rumler, Hartshorne, Okla.
S of H—Mules, rope, Track gage 42 in.
S of M—10 shortwall machs.
PP—Power purchased. Transformer 22,000-440 volts A. C., M. G. set, 250 to 440 volts D. C., 2-125 H. P. fire tube boilers, 5 pumps.
EMP—225. Daily tonnage 700.
SIZES SHIPT—Run of Mine, Slack, Egg.
PREP. EQUIPT—Gravity Screens.
No. 10 Mine; Shaft; Lower Hartshorne Seam, 48 in. thick.
PO—Hartshorne, Okla.; SP—Same; CTY—Pittsburg; RR—C. R. I. & P.
SM—N. M. Rumler, Hartshorne, Okla.
S of H—Mules and 1 elec. loco. Track gage 42 in.
S of M—12 elec. machs.
PP—Power purchased. Transformer 22,000-440 volts A. C., M. G. sets, 250 to 440 volts D. C., 1-125 H. P. fire tube boiler, 4 pumps.
EMP—215. Daily tonnage 750.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

No. 7 Mine; Shaft; Hartshorne Seam, 38 to 48 in. thick.
PO—Hartshorne, Okla.; SP—Same; CTY—Pittsburg; RR—C. R. I. & P.
S of H—Mules, rope and 2 trolley pole type locos. Track gage 42 in.
S of M—12 elec. machs.
PP—6 125 H. P. fire tube boilers, 3 gen. units, 250 volts D. C., 10 pumps.
EMP—267. Daily tonnage 800.
SIZES SHIPT—Run of Mine, Lump, Slack.
PREP. EQUIPT—Gravity Screens.

No. 5 Mine; Shaft; McAlester Seam, 36 to 48 in. thick.
PO—Alderson, Okla.; SP—Same; CTY—Pittsburg; RR—C. R. I. & P.
SM—N. M. Rumler, Hartshorne, Okla.
S of H—Mules and 1 trolley pole type loco. Track gage 42 in.
S of M—10 shortwall and 2 longwall machs.
PP—Power purchased. Transformer 22,000-2,500 volts A. C., 3 gen. units, 250 volts D. C., 5-125 H. P. fire tube boilers, 8 pumps.
EMP—204. Daily tonnage 400.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Pick-log Tables, Washeries.
No. 33 Mine; Slope; Hartshorne Seam, 36 to 46 in. thick.
PO—Alderson, Okla.; SP—Same; CTY—Pittsburg; RR—C. R. I. & P.

MS—William Jones, Hartshorne, Okla.
SM—N. M. Rumler, Hartshorne, Okla.
S of H—Mules, rope. Track gage 42 in.
S of M—Hand.
PP—Power purchased. Transformer 22,000-440 volts A. C., 1-125 H. P. fire tube boiler, 3 pumps.
EMP—75.
SIZES SHIPT—Run of Mine.

SAMPLES COAL & MINING CO.

General Office, McAlester, Okla.
PR—Thos. W. Wheatley, McAlester, Okla.
VP—D. A. Cowden, McAlester, Okla.
GM—Thos. W. Wheatley, McAlester, Okla.
GS—Ed. Dobson, North McAlester, Okla.
PA—Thos. W. Wheatley, McAlester, Okla.
SA—McAlester Fuel Co., McAlester, Okla.

Samples No. 4 Mine; Slope; McAlester Seam, 48 inches thick.
PO—McAlester, Okla.; SP—Same; CTY—Pittsburg; RR—M. K. & T.
S of H—Mules, Track gage 36 inches.
S of M—Hand.
PP—Power purchased. Transformer 22,000 to 440 volts A. C., 2-100 H. P. water tube boilers, 1 pump.
EMP—75. Daily tonnage 180.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

SENECA COAL COMPANY

General Office, Box 391, Tulsa, Okla.
PR—Arthur L. Murphy, Tulsa, Okla.
VP—E. R. Perry, Tulsa, Okla.
GM—A. G. Marrs, Tulsa, Okla.
GS—D. S. Willy, Broken Arrow, Okla.
PA—A. G. Marrs, Tulsa, Okla.

Hickory, Collinsville and Broken Arrow Mines; Shaft and Stripping; Seam 24 inches thick.
PO—Collinsville, Broken Arrow, and Tulsa, Okla.; SP—Collinsville, Broken Arrow, and Ruid, Okla.; CTY—Tulsa and Wagoner; RR—A. T. & S. F., M. K. & T.
S of H—Mules, gasoline and steam locos. Track gage 42 inches.
S of M—Hand.
PP—10 H. P. fire tube boiler.
EMP—160. Last years tonnage 75,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.
Note—Formerly operated by the New State Coal Company.

SOUTHERN FUEL COMPANY.

General Office, Dallas, Texas.
PR—H. W. Adams, Dallas, Tex.
TR—R. H. Young, Dallas, Tex.
GM—F. F. La Grange, McAlester, Okla.
GS—Geo. C. McAlpine, Savanna, Okla.
PA—Geo. C. McAlpine.
SCO—Address the Company, Buyer, Jas. B. Cassada, Savanna, Okla.

Brewer Nos. 3 and 4 Mines; 2 Slopes; McAlester Seam, 46 to 50 in. thick.
PO—Savanna, Okla.; SP—Same; CTY—Pittsburg; RR—M. K. & T.
S of H—Mules. Track gage, 36 in.
PP—5 return tubular boilers, total 300 H. P., 6 pumps and 1 air compressor.
EMP—245.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
PREP. EQUIPT—Shaker Screens.
Old Information.

SOUTHWESTERN COAL & OIL COMPANY

General Office, Box 218, Okmulgee, Okla.
PR—Harlan Read, Okmulgee, Okla.
GM—Harlan Read, Okmulgee, Okla.
GS—W. H. Wigton, Okmulgee, Okla.
PA—L. W. Crauston, Okmulgee, Okla.

Blackstone No. 2 and 3 Mine; Slope and Drift; Henryetta Seam, 38 in. thick.
PO—Henryetta, Okla.; SP—Same; CTY—Okmulgee; RR—Frisco, K. O. & G.
MS—Pete Frem, Dewar, Okla.
S of H—30 mules, electric locos. Track gage 42-36 in.
S of M—Shortwall machs.
PP—Power purchased. Transformer, M. G. set, 1-400 K. W. gen. unit, 220 volts A. C., 3 pumps.
EMP—300. Last years tonnage 120,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
PREP. EQUIPT—Shaker Screens and Crushers.

STARR COAL COMPANY. THE

General Office, Box 744, Henryetta, Okla.
PR—M. A. Berman, Henryetta, Okla.
TR—Earl Wells, Henryetta, Okla.
GM—Wells & Berman, Henryetta, Okla.
PA—M. A. Berman, Henryetta, Okla.
SA—McAlester Fuel Co., Henryetta, Okla.

Starr Mine; Shaft; Henryetta Seam, 36 inches thick.
PO—Henryetta, Okla.; SP—Dewar, Okla.; CTY—Okmulgee; RR—K. O. & G.
MS—W. P. Bissett, Henryetta, Okla.
S of H—Mules. Track gage 42 inches.
S of M—Room and pillar method.

PP—Purchase power. Transformer 3,300-220 volts A. C., M. G. sets, 220 volts.
EMP—85. Daily tonnage 125.
SIZES SHIPT—Run of Mine.

STERLING COAL COMPANY

Now a part of the Consolidated Fuel Co.

STEWART COAL & MINING COMPANY

General Office, Panama, Okla.
PR—Robt. Ross, Panama, Okla.
TR—Jack Adams, Panama, Okla.
GM—Robt. Ross, Panama, Okla.
EM—Lewis & Noel, Fort Smith, Ark.
SA—E. D. Betwell Coal Co., Fort Smith, Ark.

Bedwell No. 1 Mine; Slope; Lower Panama Seam, 40 in. thick.
PO—Panama, Okla.; SP—Same; CTY—LeFlore; RR—Midland Valley.
MS—Robt. Ross, Panama, Okla.
S of H—Mules, main and tail rope, steam loco. Track gage 36 in.
S of M—Hand.
PP—1-100 H. P. fire tube boiler, 3 pumps.
EMP—30. Last years tonnage 20,800.
SIZES SHIPT—Run of Mine.

SUKENIS COAL COMPANY.

PR—A. T. Sukenis, Adamson, Okla.
VP—T. Sukenis, Adamson, Okla.
TR—Tina Sukenis, Adamson, Okla.
GS—A. T. Sukenis, Adamson, Okla.
PA—Andy Sukenis, Adamson, Okla.
EM—McAlester Engineering Co., Adamson, Okla.

Nos. 2 and 9 Mines; Slope; McAlester and Wilburton Seams, 48-60 inches thick.
PO—Adamson, Okla. SP—Same. CTY—Pittsburg. RR—M. K. & T., McAlester & Wilburton Br.
S of H—Steam loco.
S of M—Hand.
SIZES SHIPT—Run of Mine.
Note—Formerly operated by McAlester-Adamson Coal Company.

SUN COAL COMPANY

General Office, Box 239, Henryetta, Okla.
PR—R. E. Taylor, Frontenac, Kan.
VP—John Grigg, Joplin, Mo.
GM—1 W. Dopping, Henryetta, Okla.
PA—1 W. Dopping, Henryetta, Okla.

Sun Mine; Slope; Henryetta Seam, 40 in. thick.
PO—Schuler, Okla.; SP—Same; CTY—Okmulgee; RR—St. L. & S. F.
S of H—Mules. Track gage 42 in.
S of M—3 shortwall machs.
PP—Power purchased. Transformer 2,200 to 220 volts A. C., 200 H. P. fire tube boiler, 4 pumps.
EMP—50.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screen.

SUPERIOR SMOKELESS COAL & MINING COMPANY.

Now Peabody Coal Co.

TEXAS COAL COMPANY.

General Office, Hughes, Okla.
PR—G. L. Blackford, Denison, Tex.
GM—D. C. McAlpine, Halleyville, Okla.
PA—D. C. McAlpine, Halleyville, Okla.

No. 2 Mine; Slope; Hartshorne Seam, 48 to 52 in. thick.
PO—Hughes, Okla.; SP—Same; CTY—Latimer; RR—C. R. I. & P.
S of H—Mules.
S of M—Hand.
PP—2 return tubular boilers, total 200 H. P., 3 pumps.
EMP—45. Last fiscal year output, 16,520 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

THOMAS COAL COMPANY.

General Office, McAlester, Okla.
PR—J. H. Thomas, Blanco, Okla.
TR—E. P. Joyner, McAlester, Okla.
GS—S. K. Smith, McAlester, Okla.
PA—E. P. Joyner, McAlester, Okla.
EM—V. P. Robbins, McAlester, Okla.
SA—The McAlester Fuel Co., McAlester, Okla.

No. 1 Mine; Slope; Lower Hartshorne Seam, 48 in. thick.
PO—Blanco, Okla.; SP—Same; CTY—Pittsburg; RR—Rock Island.
MS—J. H. Thomas, Blanco, Okla.
S of H—Mules, steam locos. Track gage 36 in.
EMP—80. Daily tonnage 200.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

TRI-STATE COAL & COKE COMPANY

PR—J. E. Stillwell, Blocker, Okla.
VP—J. A. Dill, Blocker, Okla.
TR—T. E. Pounds, Blocker, Okla.
GM—J. A. Dill, Blocker, Okla.
CS—J. A. Dill, Blocker, Okla.
PA—J. A. Dill, Blocker, Okla.
SA—J. A. Dill, Blocker, Okla.

North Mine; Slope; 36 in. thick.
PO—Blocker, Okla.; SP—Same; CTY—Pittsburg; RR—Fort Smith Western.
S of H—Mules.
S of M—Hand.
PP—1 water tube boiler, total 40 H. P.
SIZES SHIPT—Run of Mine.
(Old Information)

VICTORIA COAL COMPANY

Now operated by the Crowe Coal Co.

WADSWORTH COAL & MINING CO.

General Office, Henryetta, Okla.
PR—D. J. Hughes, Dewar, Okla.
VP—W. D. Wadsworth, Dewar, Okla.
TR—H. J. Buttery, Henryetta, Okla.
GM—D. J. Hughes, Dewar, Okla.
GS—Robert Blackbird, Kusa, Okla.
EM—A. E. Schuch, Henryetta, Okla.
SA—Hughes & Buttery Coal Co., Henryetta, Okla.

Wadsworth Mine; Drift; Seam, 36 in. thick.
PO—Dewar, Okla. SP—Same. CTY—Okmulgee. RR—M. O. & G., M. O. & G. Br.
S of H—Elec. locos.
S of M—3 shortwall machs.
PP—Power purchased. Transformer 220 volts A. C. 1 pump.
EMP—50. Daily tonnage 200.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

WALLIS-MCKINNEY COAL COMPANY.

General Office, Milton, Okla.
PR—Sam. McKinney, Milton, Okla.
VP—Harry Wallis, Milton, Okla.
GM—Sam. McKinney, Milton, Okla.
PA—J. N. Adams, Fort Smith, Ark.
Sales Agent, J. N. Adams, Altus, Ark.

Wallis-McKinney Mine; Slope; Seam, 68 inches thick.
PO—Milton, Okla.; SP—Same; CTY—LeFlore; RR—Fort Smith & Western.
S of H—Mules and rope and 1 engine. Track gage 36 inches.
S of M—Hand.
PP—1 fire tube boiler, 60 H. P., 2 pumps.
EMP—10. Last years tonnage 1,200.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Bar Screens.

WARDEN-PULLEN COAL CO.

General Office, Henryetta, Okla.
PR—C. M. Pulleo, Henryetta, Okla.
VP—C. A. Pullen, Henryetta, Okla.
GM—R. M. Pullen, Henryetta, Okla.
PA—R. M. Pullen, Henryetta, Okla.
SA—F. C. Pullen, Henryetta, Okla.

Warden Mine; Shaft; Henryetta Seam, 36 in. thick.
PO—Henryetta, Okla.; SP—Frisco, Okla.; CTY—Okmulgee; RR—St. L. & S. F.
MS—R. M. Pullen, Henryetta, Okla.
S of H—Mules and tail rope. Track gage 36 inches.
S of M—4 shortwall machs.
PP—Power purchased, transformer 2300-440 volts A. C., 2 60 H. P. water tube boilers, 2 pumps.
EMP—80. Last years tonnage 36,065.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

WHITEHEAD COAL COMPANY

Now operated by the Crowe Coal Co.

WILBURTON COAL & MINING COMPANY

General Office, Hartshorne, Okla.
PR—J. J. Katigan, Hartshorne, Okla.
GM—J. J. Katigan, Hartshorne, Okla.
PA—J. M. Katigan, Hartshorne, Okla.
CE—Mr. Clark, Hartshorne, Okla.

Katigan Mine; Slope; Hartshorne Seam; 48 in. thick.
PO—Hartshorne, Okla. SP—Same; CTY—Latimer; RR—Rock Island.
S of M—Steam loco.
PP—1 boiler, 1 engine and 3 pumps.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Bar Screens.

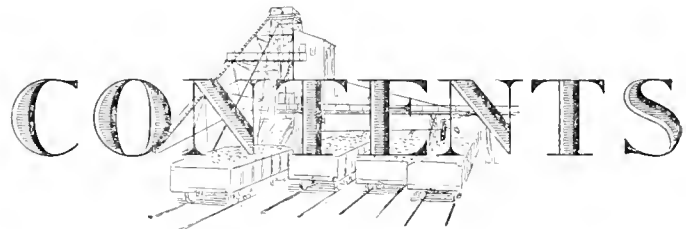
WINTER COAL & BRICK COMPANY

General Offices, Claremont and Tulsa, Okla.
PR—S. A. Gaskill, Oologah, Okla.
GM—F. M. Winter, Claremont, Okla.
GS—Joe E. Sullivan, Oologah, Okla.
PA—W. L. Sullivan, Tulsa, Okla.
SA—W. L. Sullivan, Tulsa, Okla.

Winter Mine; Stripping; Oologah Seam, 32 in. thick.
PO—Oologah, Okla.; SP—Same; CTY—Rogers; RR—M. P.
S of H—Mules and steam loco. Track gage 36 in.
S of M—Hand.
PP—1 17 1/2 H. P. fire tube boiler, 220 volts A. C.
EMP—18. Daily tonnage 300.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Bar and Shaker Screens.
Old Information

PENNSYLVANIA

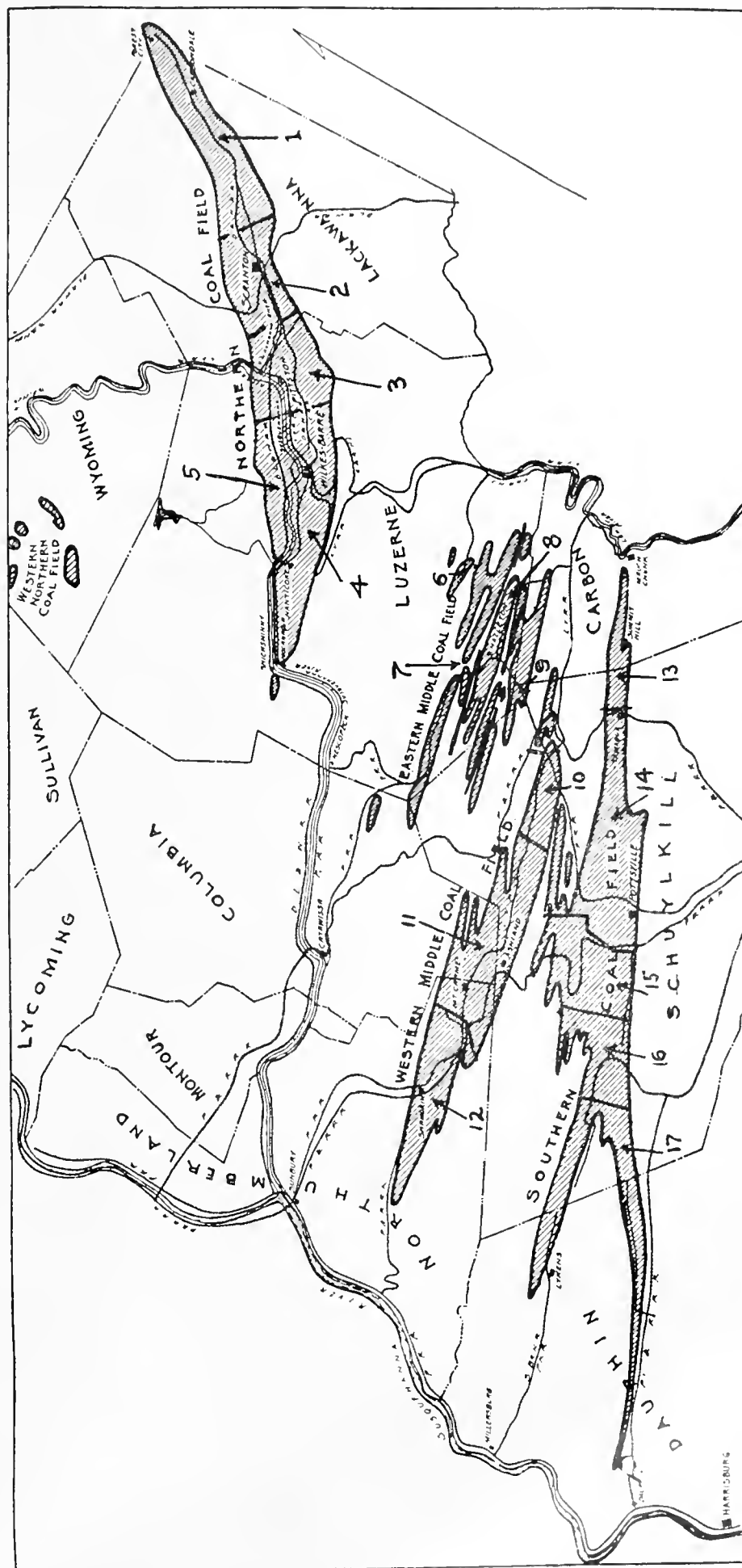
Anthracite



Map of Mining Fields and Districts.....	673
Sectional View of Coal Formations.....	674
General Description of Coal Resources...	675 to 682
Northern Coal Field.....	678
Western-Middle Coal Field.....	679
Eastern-Middle Coal Field.....	680
Southern Coal Field.....	681
Semianthracite Coals.....	682
Preparation and Sizing of Coal.....	682
Descriptive Advertisements.....	683
List of Mines by Fields.....	684 to 688
Alphabetical Directory of Coal Mines.....	689 to 699

MAP OF THE ANTHRACITE COAL FIELDS OF PENNSYLVANIA

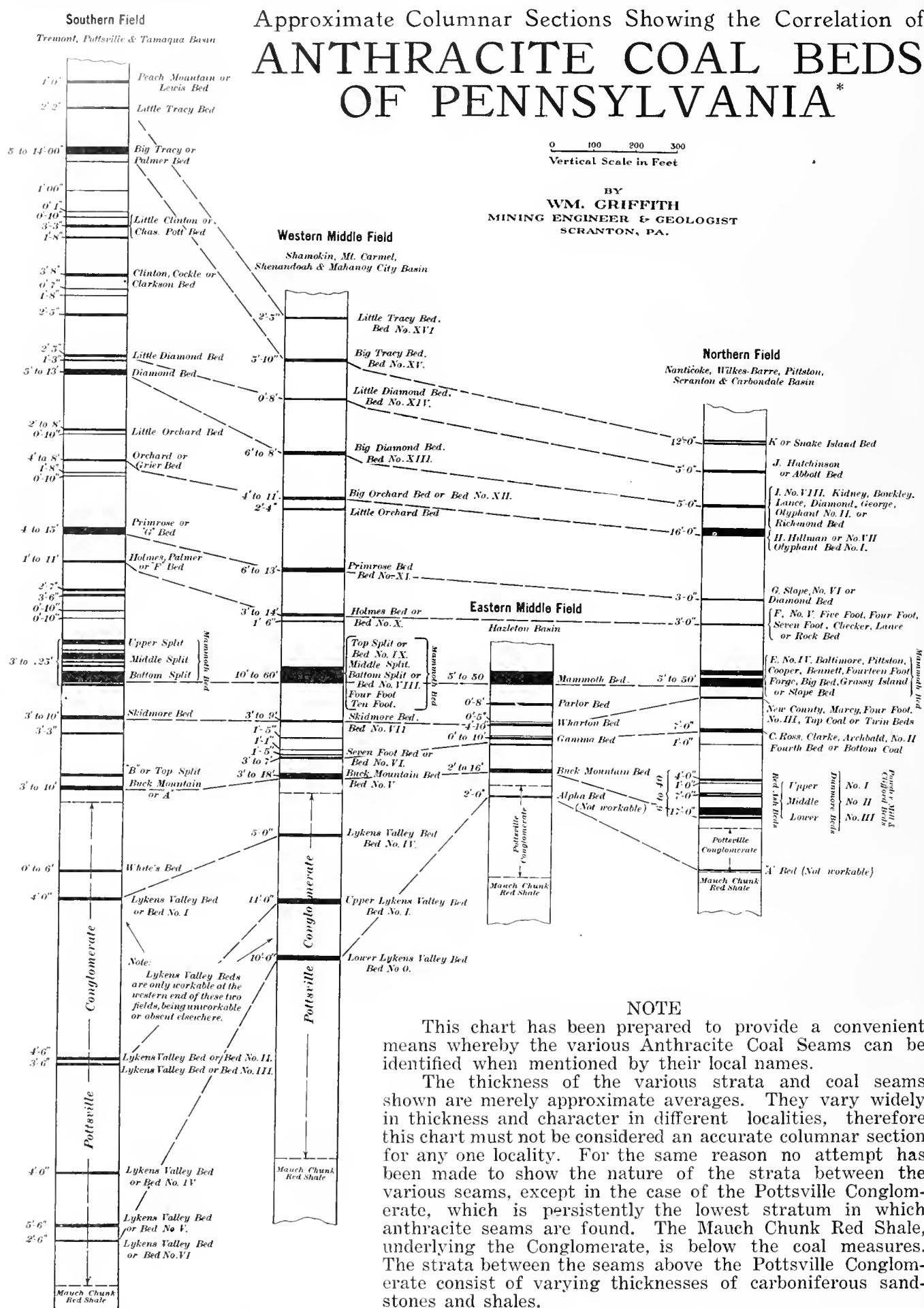
Showing Mining Districts



MINING DISTRICTS

- | | | | | |
|-------------------|-----------------------|-----------------------|----------------------|-------------------------|
| No. 1—Carbondale. | No. 4—Wilkes-Barre. | No. 7—Black Creek. | No. 10—East Mahanoy. | No. 13—Panther Creek. |
| No. 2—Scranton. | No. 5—Plymouth. | No. 8—Hazleton. | No. 11—West Mahanoy. | No. 14—East Schuylkill. |
| No. 3—Pittston. | No. 6—Green Mountain. | No. 9—Beaver Meadow. | No. 12—Shamokin. | No. 15—West Schuylkill. |
| | No. 16—Lorberry. | No. 17—Lykens Valley. | | |

See also Map of Pennsylvania in the Pennsylvania Bituminous Section.



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PENNSYLVANIA---ANTHRACITE*

General Description of the Geology of the Anthracite Fields and the Characteristics of the Coal Produced in each Field; Map Showing Location of Mining Districts, Geological Cross Sections, Analyses, Etc

The anthracite fields of Pennsylvania are unquestionably the best known in the United States. The first sustained interest in anthracite, or so-called hard coal, dates back to 1791, when, according to tradition, a hunter and trapper named Philip Ginter found several pieces of a hard black substance, which he recognized as coal, exposed amongst the roots of a fallen tree on a lonely spot on the top of Sharp Mountain, between Mauch Chunk and Summit Hill. Ginter promptly made known his discovery, and after many discouragements and dangers a few ark loads were successfully taken down the rapids of the Lehigh River to Philadelphia in 1803. The suspicious Quakers, however, did not take kindly to the burning of "black stones," and the first shipment was condemned as worthless, and the promoters as impostors.

The hostile attitude of the public, coupled with the lack of shipping facilities, greatly retarded the development of the industry, and it was not until the completion of waterways and railways leading to the important outlets on the East, about 1820, that the anthracite trade may be said to have begun.

Size and Location of Fields

The anthracite coal fields are located in the east-central part of the state, mainly within Lackawanna, Luzerne, Carbon, Schuylkill and Northumberland counties. In these five counties anthracite mining is the dominant and characteristic industry. The anthracite measures, however, overlap into Wayne, Susquehanna, Wyoming, Sullivan, Columbia, Dauphin and Lebanon counties. The region embraces a territory of about 3,300 square miles, but less than one-fifth of this total area is underlain by workable coal measures. The general trend of the valleys is N. 60 to 70 degrees E. They are arranged in echelon from northeast to southwest, making the greatest length about 120 miles along a line extending from Forest City to Dauphin. The greatest width is 30 miles between Mauch Chunk and Shickshinny, or 50 miles if the northern limits be extended to the outlying Bernice basin.

If these regions were all brought together into one body they would form only a small county, 20 miles wide and a little less than 24 miles long. This area appears insignificant when compared with the vast dimensions of some of the bituminous coal fields. But it is only on a basis of number and thickness of the coal seams, the quantity of coal per acre, the quality of coals as to their commercial value, and the tonnage of each region that a proper conception of the magnitude of the anthracite industry can be had.

Most of the mines in the anthracite regions are under the control of the transportation companies, which are as follows: Erie; Delaware & Hudson; Delaware, Lackawanna & Western; New York, Ontario & Western; Lehigh Valley; Central Rail-

road of New Jersey; Philadelphia & Reading; Pennsylvania; and Lehigh & New England.

Formation of Coal Basins

The following is an interesting account of the formation of the anthracite coal basins:† "There is but little doubt that all the anthracite coal fields are but the several portions of one great formation which, previous to assuming the present basin-form, constituted a single continuous body or mass of strata. This is evident from a careful comparison between the same parts of the series in each separate basin. The same conglomerate rocks underlie all the basins, and, notwithstanding the irregular forms into which it is now thrown, it observes a regular and manifest diminution in the size of the pebbles of which it is composed, and in the thickness of the stratum, as we pass from the Sharp Mountain, on the southern side of the southern basin, to the middle and northern basins. In the former it is 1,400 feet thick at Tamaqua, and 1,031 feet at Pottsville, and at Pine Grove considerably less. In some localities some of the pebbles are of the size of an orange or larger. Farther north the materials assume a smaller and more uniform size, and the entire mass becomes homogeneous, passing into a nearly pure quartzose conglomerate. At Girardville it does not exceed 800 feet, at Shamokin Gap 700 feet, at Nanticoke about 300 feet, and at the west end of the same valley, at Beech Grove, about 200 feet is its total thickness. This is evidence to prove that it was all formed in one connected and continuous stratum. A sedimentary rock, too, could not have been formed with the steep dips of some of the coal basins.

"Another strong point of resemblance is in the series of coal seams and their accompanying strata. There is one great coal seam which lies near the base of the coal measures, commonly the fourth above the conglomerate, and there is but one of this magnitude. It occurs in each of the basins, and in the same part of the series, with its neighboring strata bearing a close resemblance in each, with an exact identity in the vegetable fossils of the slates. This, with the want of identity with those in the higher portions of the series, furnishes ground for the belief that, where this Mammoth seam, as it is called, occurs, it is but a remaining part of an originally more widely-diffused deposit belonging to all the basins. This great seam also decreased in thickness in going northward, being 50 feet thick at Summit Hill, 28 feet at Pottsville.

*In compiling information on the anthracite regions much of the material has been extracted from the following publications: H. D. Roger's Reports of the State Geological Survey; William Griffith's articles on the anthracite regions in *The Bond Record*, 1896; Summary Final Report of the Pennsylvania Geological Survey; the final report of the U. S. G. S.; "The Pennsylvania Anthracite Coal Fields," by the U. S. G. S.; "Coal Regions of America," by James MacFarlane, H. H. Stoek; and "Coal Regions of America," by James MacFarlane. An interesting history of the anthracite regions will be found in "Coal, Iron and Oil," by Daddow and Bannan, 1866.

†From the "Coal Regions of America," by James MacFarlane, who ascribes credit to H. D. Roger's final report of the State Geological Survey, 1858, for many valuable ideas in regard to the geology of the anthracite regions.

24 feet at Beaver Meadow and Hazleton, the same at Wilkes-Barre, and 14 feet at Pittston. It also diminishes in going from east to west. There is also a general resemblance in the series of coal seams of the lower coal measures and their intervals of rocky strata, where they occur in all the basins, making proper allowances for the progressive changes always discernable in strata when traced over extensive areas.

"The usual shape and structure of all the several great anthracite tracts of this state are those of long and irregular basins. They have doubtless assumed this form from the elevation, on all sides of them, of the underlying rocks of the country in a series of nearly parallel belts, from which the strata dip in opposite directions, or, as they are technically called, anticlinal axes. The coal strata are now found only in the intermediate spaces between the lines of upheaval, in these basins or troughs, the strata dipping from both margins inward, sometimes at a high angle, caused by the tilting upward of the underlying formations, and the destruction, by the action of water, of the broken portions of the coal strata which once covered the upheaved intervals, between the basins which, consequently, are now barren of coal.* These two great causes, subterranean elevation, and superficial denudation by water, fixed the limits and produced the form, and the singular positions and disturbances of the anthracite coal regions.

"In addition to this violent upheaving action of the strata outside of or around the coal basins, enormous parallel wrinklins of the coal measures themselves have taken place within the coal basins, causing great intricacy in the internal structure of many parts of these regions. There are also great dislocations of the strata, the results of the same subterranean movements. A general idea of the structure of the region is sufficient for the reader, who will understand that these lines of upheaval were between where the several coal basins now are found, and that the bodies of coal which were preserved for our use are those found in the deepest portion of the basins, and that the deeper the basin the larger is the number of coal seams.

"But another explanation seems necessary to those who have not seen, or studied the geology of this wonderful region, namely: that the anticlinal or upheaved mountains are entirely removed over many extensive localities, and that where, if an upheaval only had occurred, a very high mountain of broken coal measures would have existed, we now, as a general rule, find deep valleys cut down into the formations below the carboniferous rocks, even the heavy strata of conglomerate which underlaid the coal being entirely swept away, with not a vestige of these great formations to be seen, and in their place are red-shale valleys which were, originally, thousands of feet below their present level. The coal basins are but fragments of a far greater formation, and the underlying formations are in an equally fragmentary condition, with enough of each remaining to show the remarkable structure of the region. It is certainly difficult even to imagine what has become of the vast mountains which have been removed and cast into the midst of the sea.

"To a visitor, nothing is more surprising than the high steep ridges which traverse the interior of the Schuylkill, Shamokin and Mahanoy coal fields. The

usual description of them as basins or troughs, bounded by mountains, prepares him for altogether a different looking country from the one he finds. They are, in fact, valleys filled, wherever they are wide enough to admit of it, with long hills running east and west, with slopes often of great steepness, and these hills and ridges are of very considerable height, sometimes rivalling in elevation the outside or boundary mountains. The entire coal fields are filled with them; those in the first, or Schuylkill basin, are very irregular in their length and position; those in the Eastern-Middle and Western-Middle fields are more regular; while those in the Northern, or Wyoming field, have assumed a more systematic arrangement. There is an evident gradation in the degree of force spent in producing them, which has become less as you go northward. This is especially observable in the Northern field, so that, when we go to the Lackawanna end of it, we see a much more uniformly shaped trough or curving valley with comparatively few undulations, contrasting strongly with the Sharp Mountain west of Pottsville, which is thrown over toward the coal basin past the perpendicular.

"To understand the extraordinary form in which the anthracite coal seams are disposed, we must, therefore, not only imagine the general structure of these troughs, or rather canoe-shaped basins, with their sharp, elevated ends, a feature which applies to all of them, but we must also bear in mind the corrugations or wrinkles which sometimes attain to great size, and which characterize the interior portions of each basin, particularly the large and more southern coal fields. The general course of these folds and flexures of the strata is east and west, or, as we pass from south to north, we would generally run across those waves, and, in going east and west, we would traverse the bottom of the troughs or synclinals, or the crests of the folds or wrinkles, called anticlinals in mining phrase.

"The series of strata consists of noble seams of coal, from 6 to 50 feet in thickness, with other smaller ones, of which no notice is taken. These coal seams, with fire-clay floors and black-shale roofs, are separated by alternate layers of sandstone and sometimes shales from 10 to 500 feet thick, each coal seam and each layer of sandstone corrugated and folded alike. "Thus, each sheet of coal extends for itself, as far as the valley does in which it lies, cleaving down through the mountain from summit to base, from end to end, passing under the adjoining valley, and reascending through the length and breadth of the mountain on the other side. Each coal bed does this independent of each other, while conforming to each other's motions, but never coming into conflict, or even actual contact, however near, except in faults.†

"In the Lackawanna region, and the more northern parts of the Wyoming Valley, these flexures do not occur in such great size, the seams of coal are more regularly disposed in a general uniform basin more nearly approaching the horizontal form of bituminous coal seams, and affording opportunity for more simple methods of mining."

Classification of coals

Various classifications have been made of the coal produced in the anthracite fields. Mr. J. H. Harris is quoted in the Annual Report of the Penn-

*It is estimated that only 6 per cent of the original deposits were left for the use of man.

†"Manual of Coals and its Topography," by J. P. Lesley.

sylvania Geological Survey, 1886, in referring to the characteristics of the coal produced from the properties of the Philadelphia & Reading Coal & Iron Company, as follows:

"Hard white ash. It is in great request for blast furnace and locomotive purposes, having, to an unusual degree, the qualities of resisting change of form under high heat and pressure, and, owing to its high percentage of carbon, it is valuable for producing steam; but for domestic use on a small scale, and for open-grate fires, it does not ignite readily enough to be a favorite.

"Free-burning white ash. The distinction between it and the hard-burning white-ash coal is that under such a fire as is ordinarily used for smelting metals or producing steam the impurities melt or clinker, which is not the case with the harder coal. This practical test is not, however, a very exact one. Some of the anthracite can be clinkered with a strong draft and with a thick bed of fire, and would, by a person who used them under such circumstances, be classed as free burning, while another, whose method of burning was more economical, would call them hard. Analysis shows that the free-burning white-ash coals are quite as rich in fixed carbon, and that they have even higher heating power, as tested by the amount of water evaporated, than the harder variety, but their limited range of usefulness, which is due to their clinkering, prevents their price rising as high as the hard white-ash coals.

"Schuylkill red ash. It is easily ignited, easy to keep burning, and where used in open grates makes less floating dust than white-ash coal, because its ash is composed of larger particles, and on account of the oxide of iron, which constitutes its coloring matter, has greater specific gravity than the ash of the white.

"Shamokin. It follows in hardness and in ease of ignition next after the free-burning white-ash coals, and is used still more, especially for domestic purposes, its lower percentage of carbon making it ill adapted for purposes requiring intense heat.

"Lorberry red ash. It burns with a little flame, and is much in request for domestic uses in the eastern markets.

"Lykens Valley red ash. It burns with considerable flame, is greatly liked in the eastern markets for open grates, or other domestic uses, and for steam and heating purposes, wherever quick heat is required.

"Trevorton or North Franklin white ash. The coal is pure, but its heating properties are rather low, and it is of so friable a nature that it does not stand transportation well."

The Wyoming red ash, Lehigh red ash and Loyalsock red ash are not referred to in Mr. Harris' report. The Wyoming red ash is similar in its general characteristics to the Schuylkill red ash. The Lehigh red ash is very similar to the hard white ash produced from the same region, with the exception of the color of the ash, due to the presence of the iron, the same as in the softer red ash from Schuylkill, while the Bernice white ash, as a fuel, is rated by many coal men as being similar to the Lykens Valley coal, except in the color of the ash. The geological structure and physical characteristics of the Bernice and Lykens Valley beds are, however, quite different.

The conditions under which the vegetable debris was originally grown and deposited and the heat and pressure to which different parts of the anthracite regions were subjected were not everywhere the same, and so we find that there are some considerable differences in the qualities of the resultant anthracite. Where the heat and pressure were less the transformation was less complete. In these areas the coals are not so compact and are free-burning, but where dynamic action was stronger the change was more pronounced and the coals are harder and burn at a slower rate than the free-burning coals. All of them burn without smoke, however; all are clean and nice to handle; all are practically free from dust, and all are absolutely safe in the stove, furnace or cellar.

In determining what character of coal to buy, the user should consider the conditions to be satisfied. If a quick, hot fire is wanted, or if the draft in the chimney is rather slow, better satisfaction will be had with a free-burning coal; but if there is a good draft and there is wanted a long-sustained fire easily controlled at will, and requiring little replenishing, one of the harder varieties will be found suited to the purpose.

The sizes of anthracite as they leave the breaker and the uses for which they are best adapted are as follows:

COMMERCIAL NAME	USED FOR
Broken.....	Gas making, other manufacture, and steam raising.
Egg.....	Domestic furnaces and open grates.
Stove.....	Kitchen ranges, base burners (sometimes mixed with chestnut coal), small furnaces, open grates.
Chestnut.....	Kitchen ranges, small stoves, base burners (sometimes mixed with stove coal), and small open grates.
Pea.....	Domestic furnaces with small openings in grate, kitchen ranges, and "banking" fires. "The poor man's coal."
Buckwheat No. 1.....	Steam making, and self-feeding domestic furnaces.
Buckwheat No. 2 or Rice...	Steam making.
Buckwheat No. 3 or Barley	Steam making.

Manner of Presenting Anthracite Region

It will be noted that in this section no attempt has been made to describe the various seams, or to give analyses of each seam, the same as has been followed in the exposition of the bituminous seams. This is because of the difference in mining methods. At a bituminous mine it is the rule to mine and ship from one seam only, while at an anthracite operation it is the rule to mine all the available beds from one opening, so that at some breakers coal from as many as ten seams may pass over the screens. Obviously no attempt is made to separate the coal of one seam from that of another, and, in fact, there is so little difference in the analysis and hardness of coals from the various seams in the same locality that nothing would be gained by such a process. While such is the case, the purpose of this book is fully met by stating the general analysis of coals from each field, and by giving the list of operating companies and mines in each district.

The geological field, character of coal, mining districts and trade names of coal coming from each district is given in the table

GEOLOGICAL FIELD	COUNTIES	CHARACTER OF COAL	MINING DISTRICT	TRADE DISTRICT
Northern	Lackawanna Luzerne Susquehanna Wayne	Free-burning White-ash Wyoming Red-ash	1 Carbondale.....	Wyoming
			2 Scranton.....	Wyoming
			3 Pittston.....	Wyoming
			4 Wilkesbarre.....	Wyoming
			5 Plymouth.....	Wyoming
Eastern Middle	Luzerne Carbon Schuylkill	Hard White-ash Lehigh Red-ash	6 Green Mountain...	Lehigh
			7 Black Creek.....	Lehigh
			8 Hazleton.....	Lehigh
			9 Beaver Meadow...	Lehigh
Western Middle	Northumberland Columbia Schuylkill	Hard White-ash Free-burning White-ash Shamokin Trevorton	10 East Mahanoy....	Schuylkill
			11 West Mahanoy....	Schuylkill
			12 Shamokin.....	Schuylkill
Southern	Dauphin Schuylkill Carbon	Schuylkill Red-ash Hard White-ash Free-burning White-ash Lorberry Red-ash Lykens Valley Red-ash	13 Panther Creek....	Lehigh
			14 East Schuylkill....	Schuylkill
			15 West Schuylkill...	Schuylkill
			16 Lorberry.....	Schuylkill
			17 Lykens Valley....	Schuylkill

NORTHERN FIELD

The northern, or Wyoming-Lackawanna, basin extends from Forest City to Shickshinny, a distance of 55 miles, and includes the Wyoming and Lackawanna valleys. The maximum width is 6 miles, and the field is crescent shaped, with the upper or northeasterly extremity bending sharply to the north. The surface elevation decreases gradually from 1,500 feet at Forest City to about 400 feet at Shickshinny. The surface is gently undulating, and both the Lackawanna and Wyoming valleys were originally extremely picturesque, but the landscape is now greatly disfigured by culm heaps and coal breakers, and through the denudation of the forests. The principal cities are Scranton and Wilkes-Barre; the smaller towns are Carbondale, Pittston, Kingston, Plymouth and Nanticoke.

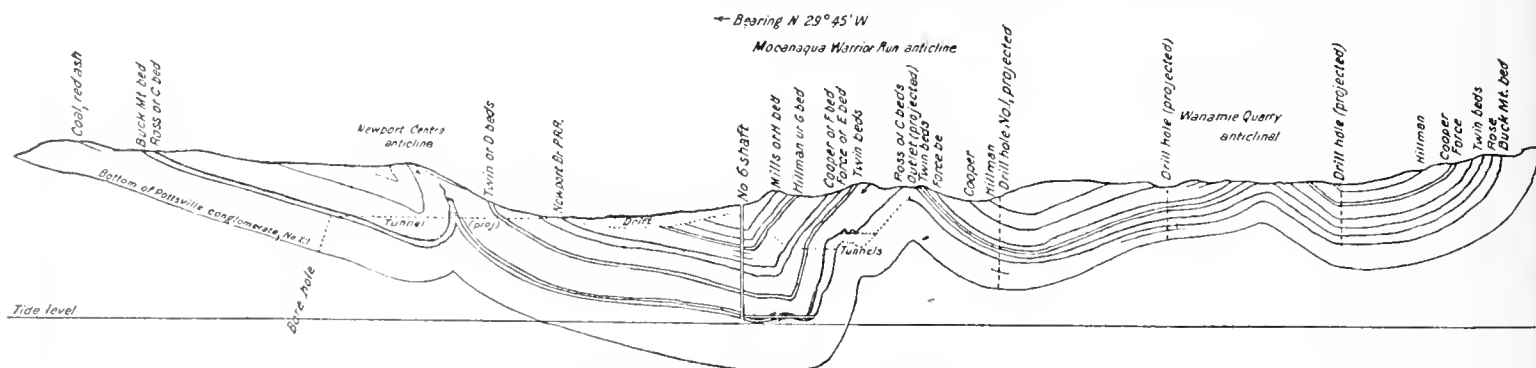
From Forest City to Pittston and from Pittston to Nanticoke, north of the Susquehanna, the maximum dips are 10 to 20 degrees, while between Pittston and Nanticoke, south of the Susquehanna, steeper dips, ranging from 60 to 70 degrees, are found, and near Glen Lyon the measures are overturned and badly broken. There are numerous anticlines and synclines in the measures, which can

sometimes be traced on the surface, the synclines being often marked by ridges and the anticlines by valleys.

A marked feature of the northern field is the buried valley of the Susquehanna, extending from Pittston to Nanticoke. This is the bed of a former glacial stream which has cut down into the Coal Measures in places, thus cutting out large areas of the upper coal beds. The valley is now filled with sand, and there are numerous pot holes in it, which adds an element of uncertainty and danger to the mining.

The Wyoming-Lackawanna basin is deepest (2,400 feet) midway between Wilkes-Barre and Nanticoke. About 4 miles above Pittston, near Lackawanna station, only 100 to 150 feet of the Coal Measures are left, but northeast from here, several miles above Scranton, the Coal Measures sink again to a depth of 700 feet, and then rise and spoon out beyond Forest City.

It is difficult to state the number of workable beds, as beds are now being worked in the upper end of the Lackawanna Valley which a few years ago were neglected and considered unworkable. The splitting of a large coal bed into several small



Section south of Nanticoke.
(From 22nd Annual Report, Part 3, U. S. G. S.)

beds, which divide and are sometimes separated by as much as 200 feet of rock, renders it impossible to correlate beds in different parts of the field until continuous sections can be made by means of actual mine workings. The seams worked about Scranton are known as the Diamond, Rock, Big or 14-Foot, New County and Clark, but names of seams differ east and west of Scranton. The Big Seam is known as the Baltimore at Wilkes-Barre, taking its name from a coal company which formerly worked it there extensively. It is here 24 feet thick, and extends for a mile and a half, when it becomes split. At Olyphant and eastward to Forest City the Big Seam is known as the Grassy Island.

As the result of measurements of 891 sections by the second geological survey of Pennsylvania, 81.8 per cent of the total coal in the Wyoming basin is or may be considered marketable coal, the remaining 18.2 per cent being imbedded slate, shale

and other refuse. The deposits in this section are particularly free from refuse, and the comparative freedom of this section from plication and folding gives a high percentage of marketable coal.

Because of the likeness of seams in the Northern field to the order of seams in the bituminous fields, there is some similarity in the methods of operation. In many of the collieries mining machines are used to undercut the coal. The room and pillar system of mining prevails, and although the seams are comparatively flat, there has been little attempt to carry on longwall mining.

GENERAL ANALYSIS

Moisture	2.00
Volatile Matter	6.00
Fixed Carbon	84.40
Ash	7.00
Sulphur	0.60
B. T. U.	13,700

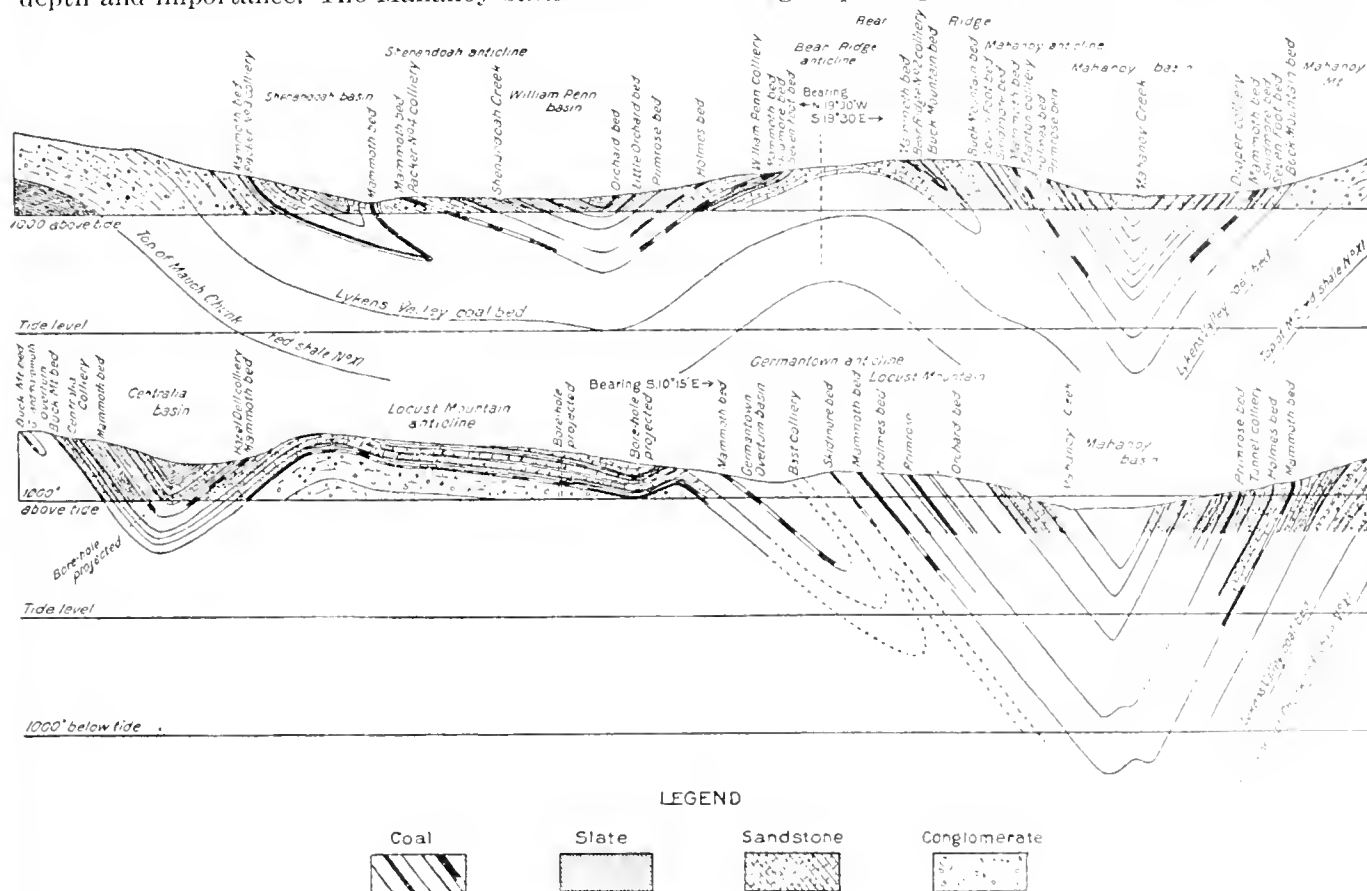
WESTERN-MIDDLE FIELD

This lies southwest of and adjoins the Eastern-Middle basin. It is north of and approximately parallel to the Southern basin, which it adjoins for a short distance. It is 36 miles long, 4 to 5 miles wide, with tapering ends, and contains 94 square miles. The elevation of the mountains enclosing the basin is 1,500 to 1,700 feet above tide, while the lowest elevations are 850 feet at Ashland Gap and 700 feet at Shamokin Gap.

There are two distinct subbasins or divisions of the Western-Middle basin, the Mahanoy and Shamokin basins, which are about equal in size, depth and importance. The Mahanoy basin extends

from Delano on the east 25 miles westward to a point 4 miles west of Locust Gap. It is $2\frac{1}{2}$ miles wide near Shenandoah, and about 2,000 feet deep to the base of the Buck Mountain bed. The Shamokin basin extends from a point just east of Centralia 30 miles westward, to the west end of the field. It is 3 miles wide near Shamokin, and 1,800 feet deep to the base of the Buck Mountain bed. The principal towns are Shenandoah, Mahanoy City, Ashland, Mount Carmel and Shamokin.

In this field the beds incline steeply, the average dip being 35 to 40 degrees. There has been



Sections of the Western-Middle Anthracite Coal Basins.
(From 22nd Annual Report, Part 3, U. S. G. S.)

much folding, sliding and shifting of strata, which has crushed the coal in many places and mixed with it slate and bony coal partings. The Coal Measures are 1,200 feet thick, and contain from 10 to 12 different beds, many of them of great thickness and with comparatively small intervening barren intervals. The Lykens Valley beds are also found in the conglomerate, and toward the western end of the field these seams are mined.

The seams in this field are known as follows: Lykens Valley, Buck Mountain, Seven-Foot, Skidmore, Mammoth, Holmes, Primrose, Orchard, Diamond and Tracy.

In the easterly half of this field the Mammoth

seam is similar to the same seam in the Lehigh region, but west of Mount Carmel it is found split into three and sometimes into four distinct and separate beds which vary in thickness from 4 to 12 feet.

The average analysis of the coals from this field:

Moisture	3.30
Volatile Matter	3.80
Fixed Carbon	81.50
Ash	10.65
Sulphur	0.75
B. T. U.	13,000
Specific Gravity	1.66

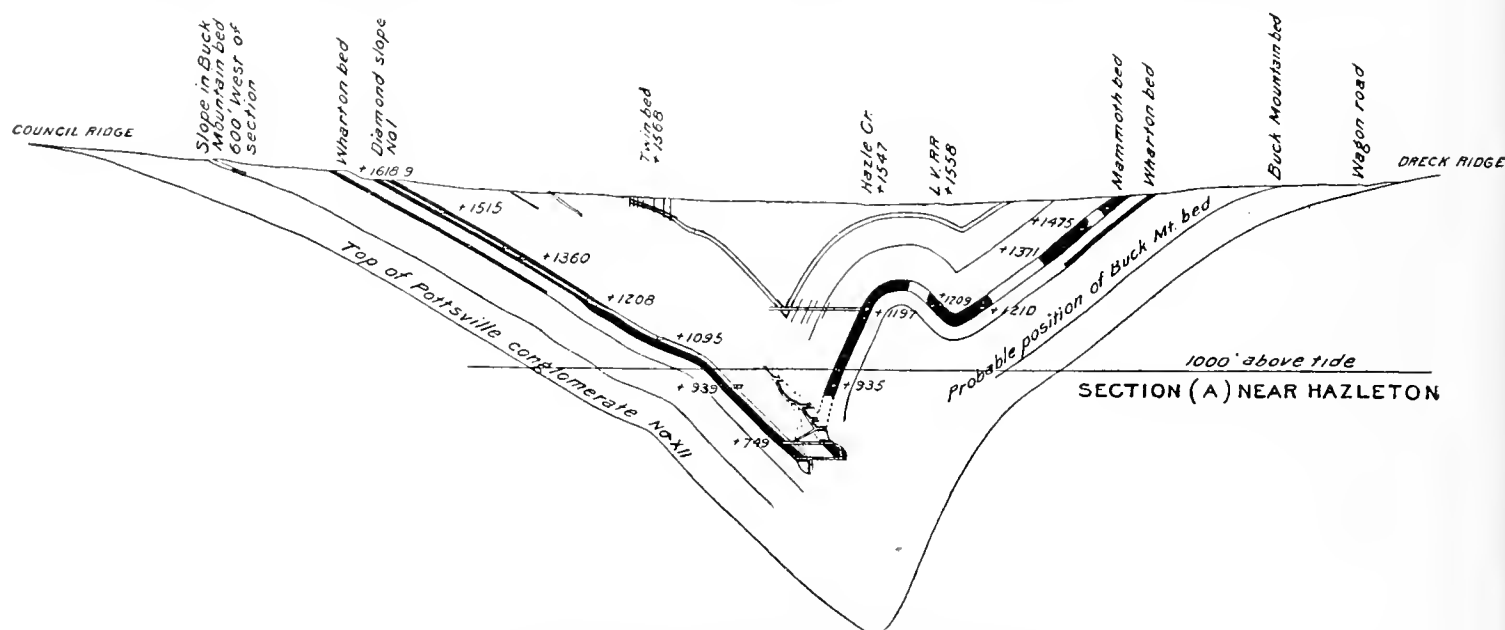
EASTERN-MIDDLE FIELD

This is the smallest of the geographic divisions and lies about 15 miles south and southwest of the western end of the northern basin, from which it is separated by a mountain range and an intervening valley. Its maximum length is about 26 miles; its greatest width about 10 miles, and the total coal area about 33 square miles. The surface is a barren, unpicturesque plateau, ranging in elevation from 1,400 to 1,700 feet. There are no large streams in the region, and, as the mountains have been entirely denuded of their timber, there is frequently a scarcity of water for mining operations during the dry seasons. The principal town is Hazleton.

The structure of this field is simple, consisting of a succession of anticlines, usually with broad flat crests and shallow intervening basins only about 500 to 600 feet deep, the sides dipping 10 degrees to 40 degrees. This gives a large extent of outcrop, and the comparative shallowness of the basins has been very favorable to mining, so that the field has been extensively developed and its structure quite thoroughly determined. The Mammoth, Buck Mountain, Primrose, Parlor, Portland, Lykens Valley, Wharton, Holmes and Gamma beds vary in thickness in different localities.

Owing to the deep and distorted basins and the steep pitches of seams, the methods of mining in this field differ altogether from those found in the Northern field. The principal seam, here, as with the other fields, is the Mammoth, which varies from 24 to 50 feet in thickness, with an average of about 30 feet. The coal is won by opening up chutes and chambers on the pitch and drawing off the loose coal through a battery into mine cars. It frequently happens after the whole seam is cut from bottom to top, the coal "runs," that is, keeps working loose and falling away from the face. Along with the coal is mixed large quantities of rock from the roof, and since there is no opportunity for an inside separation of impurities, the rock must needs be hoisted to the breaker along with the valuable portion of the seam, and after separation here dumped on the waste pile.

Coal from the Eastern-Middle field, or as known to the trade, the Lehigh region, which includes the eastern extremity of the Schuylkill field, is known everywhere for its valuable qualities. In the earlier years Lehigh coal was the standard for foundry use, being used even in the most remote parts of the country. Its special qualities consist in its large amount of carbon, its purity, and its hard-



Section of an Anthracite Coal Basin in the Lehigh Region.
(From 22nd Annual Report, Part 3, U. S. G. S.)

ness. By passing a strong current of air through it, when ignited, an intense heat can be secured, sufficient to melt cast-iron. The coal is sufficiently hard not to fall to pieces, and thus stop the draft, but retains its form until it is consumed, owing to the absence of a large amount of water. It is, however, more difficult to kindle, and less easily managed, than the softer anthracites.

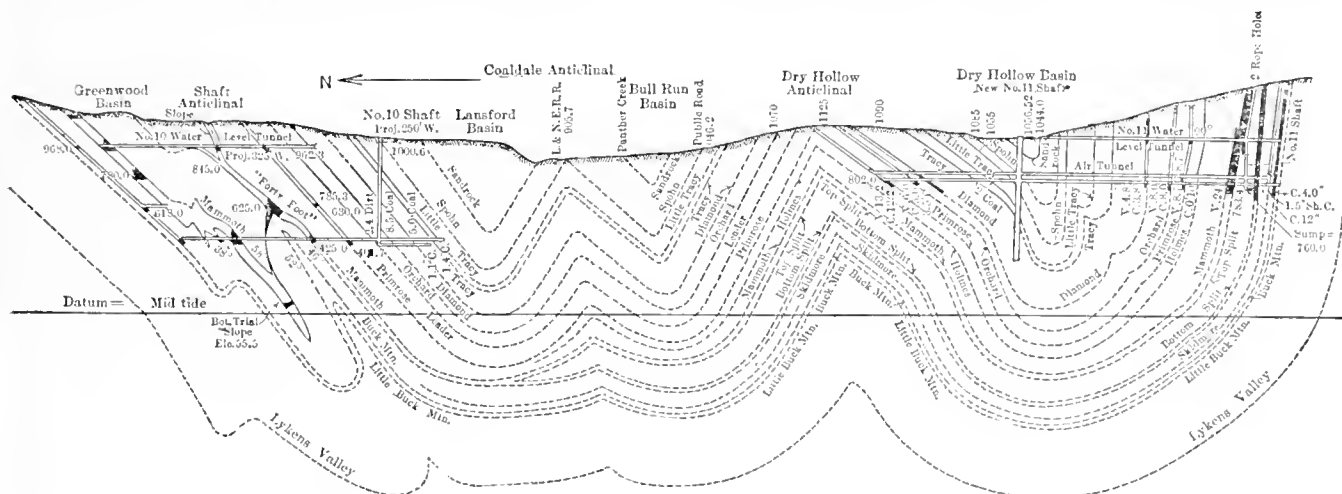
SOUTHERN FIELD

This field extends from Mauch Chunk, on the Lehigh River for 70 miles in a southwesterly direction to Dauphin on the Susquehanna River. Near Pottsville it is 8 miles wide, but tapers gradually toward both the east and west, and in the latter direction it divides into two long, narrow basins, the ends of which reach into Dauphin county. It is the largest of the fields, and contains 181 square miles. This field consists of a number of connected basins which grow gradually deeper from north to south, culminating along the foot of Sharp Mountain in very deep, highly upturned and greatly contorted measures. The large number and great extent of the seams underlying this basin indicate a reserve of coal in this field larger than that of the others.

a large amount of rock is brought to the surface with the coal, since being loaded from batteries there is no opportunity presented to make a separation of rock such as is permitted the miner in the Northern field, where the seams are of slighter inclination. There is a large percentage of culm in most instances, and consequently a lower yield of marketable sizes. The disposal of these large quantities of culm has been a perplexing problem, as without a market it represented a waste of valuable fuel. In late years the Lehigh Coal & Navigation Company has undertaken its solution by means of briquetting, and after many years of desultory results it appears that they have succeeded in the preparation of a fuel acceptable to

GENERAL ANALYSIS

Moisture	3.90
Volatile Matter	3.10
Fixed Carbon	86.40
Ash	6.00
Sulphur	0.60
B. T. U.	13,700
Specific Gravity	1.62



Cross section through Panther Creek Valley at Greenwood and Rahn Collieries.
(Reproduced by permission of Coal Age)

Extending from Middleport to the extreme western end of the Dauphin prong, a distance of 30 miles, the ponderous conglomerates of Sharp Mountain are overtilted and leaning in an inverted attitude on the coal seams, so that instead of dipping northward, or into the basin, they dip at a high angle toward the south. Sometimes they are in a perpendicular position. In consequence of this overtilting of the strata, the coal seams have sustained a more or less crushing action, the result of a sliding of the beds in the plane of stratification. The coal seams being the weakest layers are so much crumbled as to produce in preparation an excessive amount of steam sizes, and culm waste, with a correspondingly small yield of prepared or domestic sizes. This is notably true of all collieries that have been developed under Sharp Mountain, and accounts for the many failures of operations extending from Tamaqua westward and located on the south side of the basin.

East of Tamaqua the coal is less friable and broken. In the major portion of the field, however,

the steam trade and giving splendid results in domestic usage, besides overcoming difficulties in the mechanical processes and the finding of a suitable binder for the culm.

The Coal Measures in the Panther Creek Valley consist of nine seams, as follows:

The Buck Mountain, or "B" Vein, with a specific gravity of 1.62, averaging 12 feet in thickness, of which 10 feet is coal.

The Seven-Foot Vein, with an average of 11 feet 3 inches of coal.

The Skidmore, or "C" Vein, with a specific gravity of 1.64 and 3 feet of good coal.

The Mammoth, or "E" Vein, with a specific gravity of 1.61 and an average thickness of 30 feet 8 inches of coal.

The Primrose, or "F" Vein, with a specific gravity of 1.60 and showing 19 feet of nearly all good coal.

The Orchard, or "D" Vein, with a specific gravity of 1.59 and a thickness of 3 feet 3 inches, of which 2 feet 9 inches is coal.

The Diamond, or "H" Vein, with a specific gravity of 1.59 and with about 2 feet 9 inches of good coal.

The Holmes Vein, with a specific gravity of 1.58 and averaging 5 feet thick, with 4 feet of good coal.

The Lykens Valley seams are mere streaks in the Panther Creek Valley, but in the western part of the Southern field these become large and valuable. They are six in number, ranging from 3 to 10 feet in thickness. Lykens Valley coals are the premier domestic coals of the anthracite regions, and, as such, command a price from 25 to 50 cents in excess of coals from the other seams or fields.

While this basin is usually termed the Schuylkill region, or Pottsville basin, the eastern end from Tamaqua to Mauch Chunk, controlled by the Lehigh Coal & Navigation Company, is generally classed as in the Lehigh region.

GENERAL ANALYSIS		
	Panther Creek	West Schuylkill
Moisture	3.00	3.00
Volatile Matter	4.00	2.00
Fixed Carbon	88.00	85.00
Ash	5.00	10.00
Sulphur	0.60	0.80
B. T. U. . . . .	.....	13,000

SEMIANTHRACITE COALS

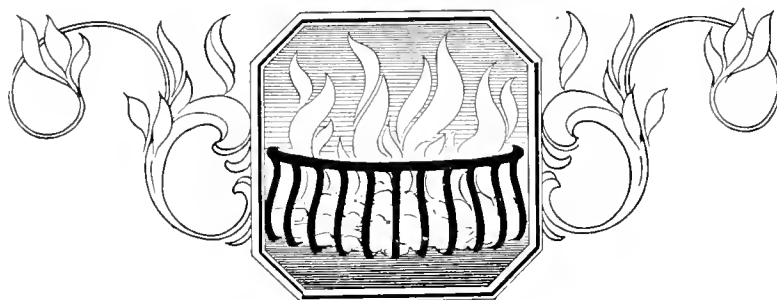
Lying to the west and northwest of the anthracite fields are the semianthracite coals of Sullivan county. This is a peculiar species of coal, lying midway between the anthracite and semibituminous regions. It has the fracture and somewhat the appearance of the semibituminous coal, but burns in all respects like anthracite of a very pure and soft variety.

GENERAL ANALYSIS	
Moisture	3.40
Volatile Matter	9.20
Fixed Carbon	75.40
Ash	12.00
Sulphur	0.80
B. T. U.	13,200

PREPARATION OF ANTHRACITE COALS

In addition to the sizes of anthracite already mentioned, a discussion of anthracite preparation will be found under the topical head, "Preparation of Coals," in Part I.

For additional information on anthracite coal, see the descriptive advertisements on mines following this section.



WHITNEY & KEMMERER

PHILADELPHIA

NEW YORK

BOSTON

One of the largest operating sales companies in the coal business. Direct shippers of various Anthracite and Bituminous coals and selling agents for the best Anthracite producers. We feel proud of our record as having maintained, for over fifty years, the high level of integrity and respect for all our clientele.

Distributors of Anthracite tonnage for all points, North, South, East or West, all rail and to all the tidewater ports of New York City, as well as Philadelphia and Baltimore.

EXCLUSIVE AGENTS FOR

ALDEN COAL COMPANY which is a free burning, white ash, bright and glassy fracture, low in ash, suitable for medium draft, producing one of the best family coals of the Wyoming Region. Shipments over the Central Railroad of New Jersey, as well as Pennsylvania to all points.

MOUNT JESSUP, free burning, attractive appearance with minimum ash. Shipments made via D. & H. to all points North, East and South.

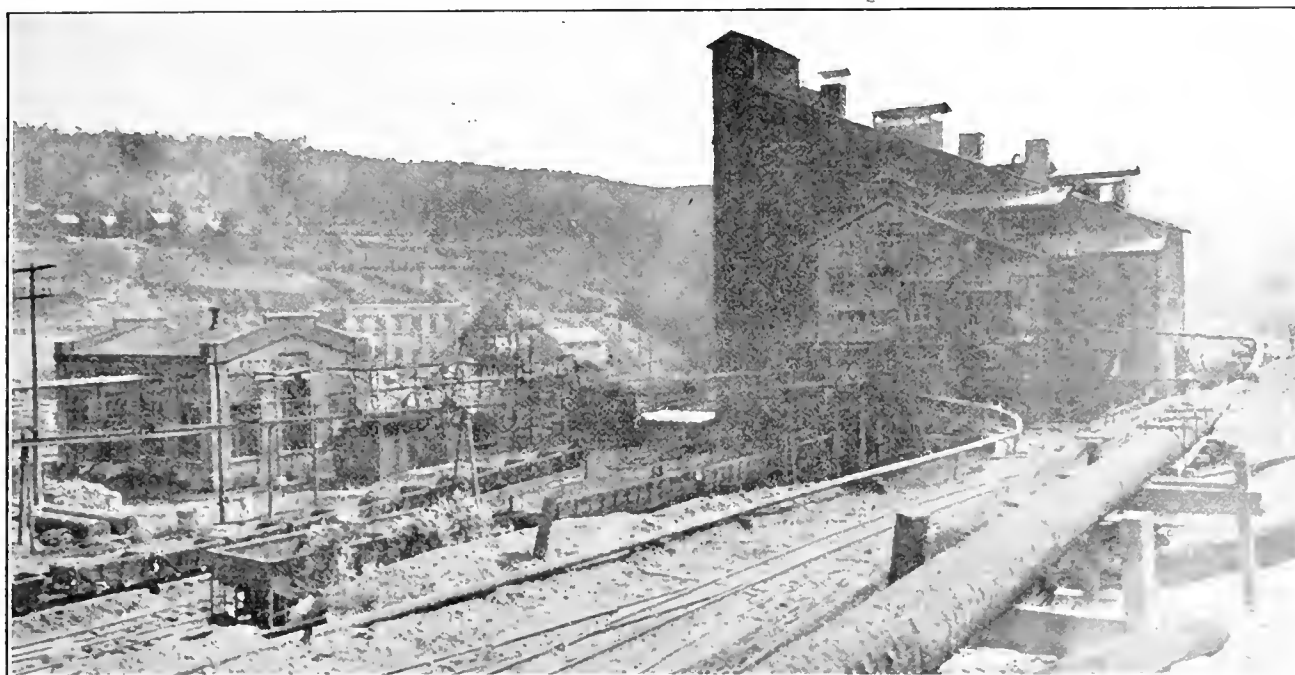
SANDY RUN, which is pure pink ash, mined near Hazelton, suitable for pottery purposes. The Buckwheats from this colliery are high in heat units and considered on the quality of Lykens Valley coal. Shipments over the Central Railroad of New Jersey and all Pennsylvania Railroad connections.

OAK HILL, Schuylkill County, white ash coal, bright and glassy fracture. Shipments over the Philadelphia & Reading and all connections.

Also Represent

LEHIGH & WILKES-BARRE COAL COMPANY'S coal, whose tonnage is available for Central Railroad of New Jersey delivery and all New England points.

PHILADELPHIA & READING COAL & IRON COMPANY, all grades and classes of their coal. **KINGSTON COAL COMPANY**, one of the best Wyoming coals mined. Shipments via D. L. & W., D. & H., Pennsylvania Railroad and C. R. R. of N. J.



ALDEN COAL COMPANY BREAKER

This breaker was constructed in 1882, the first coal passing through in February, 1883. Up to January, 1921, there have been prepared and shipped to market from this breaker a total of 9,320,698 tons of coal. This recent photograph shows Breaker, No. 1 Shaft, and Steel Head Frame, supporting two ten-foot Sheaves. The Brick Building (left center) contains Electric Hoisting Engine. The Brick Building in background is the Supply House. Miner's Dwellings at upper left. This plant was electrified in 1921.

List of Mines By Fields, Including Name of Company, General Office Address,
County, Railroad and Shipping Point

PENNSYLVANIA---ANTHRACITE

NORTHERN FIELD

1—CARBONDALE DISTRICT

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Archbald Coal Co.	Binghamton, Pa.	Archbald.	Lackawanna.	D. & H.	Archbald, Pa.
Barton Coal Co.	Scranton Life Bldg., Scranton, Pa.	Barton Washery.	Lackawanna.	O. & W.	Peckville, Pa.
Birkett Hill Coal Co.	Carbondale, Pa.	Birkett Hill.	Lackawanna.	N. Y. C. & W.	Carbondale, Pa.
Carbondale Coal Mining Co.	Carbondale, Pa.	Bolands.	Lackawanna.	D. & H.	Carbondale, Pa.
Clinton Falls Coal Co.	Scranton, Pa.	Clinton Falls.	Susquehanna.	N. Y. O. & W.	Forest City, Pa.
Grove Hill Coal Co.	Peckville, Pa.	Grove Hill.	Lackawanna.	Erie.	Peckville, Pa.
Hillside Coal & Iron Co.	Smith & Mill Sts., Dunmore, Pa.	Erie.	Lackawanna.	Erie.	Mayfield, Pa.
Hillside Coal & Iron Co.	Smith & Mill Sts., Dunmore, Pa.	Forest City.	Susquehanna.	Erie.	Forest City, Pa.
Hudson Coal Co., The.	Scranton, Pa.	Clinton.	Lackawanna.	D. & H.	Carbondale, Pa.
Hudson Coal Co., The.	Scranton, Pa.	Coal Brook.	Lackawanna.	D. & H.	Carbondale, Pa.
Hudson Coal Co., The.	Scranton, Pa.	Eddy Creek.	Lackawanna.	D. & H.	Olyphant, Pa.
Hudson Coal Co., The.	Scranton, Pa.	Gravity Slope.	Lackawanna.	D. & H.	Archbald, Pa.
Hudson Coal Co., The.	Scranton, Pa.	Jermyn.	Lackawanna.	D. & H.	Jermyn, Pa.
Hudson Coal Co., The.	Scranton, Pa.	Olyphant.	Lackawanna.	D. & H.	Olyphant, Pa.
Hudson Coal Co., The.	Scranton, Pa.	Powderly.	Lackawanna.	D. & H.	Mayfield, Pa.
Humbert Coal Co.	Jessup, Pa.	Sunnyside.	Lackawanna.	Erie.	Jessup, Pa.
John-Fibb Co., The.	New York, N. Y.	John-Fibb Washery.	Lackawanna.	L. V.	Wyoming, Pa.
Mt. Jessup Coal Co., Ltd.	Peckville, Pa.	Mt. Jessup No. 1.	Lackawanna.	D. L. & W., N. Y. O. & W., Erie.	Peckville, Pa.
Mt. Jessup Coal Co., Ltd.	Peckville, Pa.	Mt. Jessup No. 2.	Lackawanna.	O. & H.	Peckville, Pa.
Murrin Coal Co., The.	Carbondale, Pa.	Fallbrook.	Lackawanna.	N. Y. O. & W.	Carbondale, Pa.
North East Coal & Mining Co.	Box 235, Pittston, Pa.	North East.	Lackawanna.	N. Y. C. & W.	Forest City, Pa.
Racket Brook Coal Co.	Carbondale, Pa.	Racket Brook.	Lackawanna.	D. & H.	Carbondale, Pa.
Robertson Coal Co.	Scranton, Pa.	Blue Ridge.	Lackawanna.	N. Y. O. & W.	Peckville, Pa.
Scranton Coal Co.	Scranton, Pa.	Johnson.	Lackawanna.	N. Y. O. & W.	Pickens City, Pa.
Scranton Coal Co.	Scranton, Pa.	Ontario.	Lackawanna.	N. Y. O. & W.	Winton, Pa.
Scranton Coal Co.	Scranton, Pa.	Raymond.	Lackawanna.	N. Y. O. & W.	Winton, Pa.
Scranton Coal Co.	Scranton, Pa.	Riverside.	Lackawanna.	N. Y. O. & W.	Winton, Pa.
Temple Coal Co.	Scranton, Pa.	Lackawanna.	Lackawanna.	D. L. & W., Erie, N. Y. C. & W.	Olyphant, Pa.
Temple Coal Co.	Scranton, Pa.	Northwest.	Lackawanna.	N. Y. O. & W.	Carbondale, Pa.
Temple Coal Co.	Scranton, Pa.	Sterrick Creek.	Lackawanna.	D. L. & W., Erie, D. & H.	Peckville & Jessup, Pa.

2—SCRANTON DISTRICT

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Bald Mountain Coal Co.	Peckville, Pa.	Marshwood.	Lackawanna.	D. L. & W., N. Y. O. & W., Erie.	Throop, Pa.
Black Diamond Fuel Co.	Scranton, Pa.	Black Diamond Washery.	Lackawanna.	D. & H.	Minooka & Taylor, Pa.
Boland, John J., & Co.	Dunmore, Pa.	Bolands.	Lackawanna.	Erie.	Dunmore, Pa.
Carney & Brown Coal Co.	Dunmore, Pa.	Carney & Brown.	Lackawanna.	Erie.	Dunmore, Pa.
Delaware, Lackawanna & Western R.R. Co.	90 West St., New York, N. Y.	Archbald.	Lackawanna.	D. L. & W.	Scranton, Pa.
Delaware, Lackawanna & Western R.R. Co.	90 West St., New York, N. Y.	Bollevue.	Lackawanna.	D. L. & W.	Scranton, Pa.
Delaware, Lackawanna & Western R.R. Co.	90 West St., New York, N. Y.	Cayuga.	Lackawanna.	D. L. & W.	Scranton, Pa.
Delaware, Lackawanna & Western R.R. Co.	90 West St., New York, N. Y.	Diamond.	Lackawanna.	D. L. & W.	Scranton, Pa.
Delaware, Lackawanna & Western R.R. Co.	90 West St., New York, N. Y.	Dodge.	Lackawanna.	D. L. & W.	Scranton, Pa.
Delaware, Lackawanna & Western R.R. Co.	90 West St., New York, N. Y.	Hyde Park.	Lackawanna.	D. L. & W.	Scranton, Pa.
Delaware, Lackawanna & Western R.R. Co.	90 West St., New York, N. Y.	National Colliery.	Lackawanna.	D. L. & W.	Scranton, Pa.
Delaware, Lackawanna & Western R.R. Co.	90 West St., New York, N. Y.	Pine.	Lackawanna.	D. L. & W.	Taylor, Pa.
Delaware, Lackawanna & Western R.R. Co.	90 West St., New York, N. Y.	Sloan.	Lackawanna.	D. L. & W.	Scranton, Pa.
Delaware, Lackawanna & Western R.R. Co.	90 West St., New York, N. Y.	Storrs.	Lackawanna.	D. L. & W.	Scranton, Pa.
Delaware, Lackawanna & Western R.R. Co.	90 West St., New York, N. Y.	Taylor.	Lackawanna.	D. L. & W.	Taylor, Pa.
East Point Coal Co.	Scranton, Pa.	East Point.	Luzerne.	C. R. R. of N. J.	R. F. D., White Haven, Pa.
Green Ridge Coal Co.	Scranton, Pa.	Green Ridge.	Lackawanna.	Erie.	Scranton, Pa.
Hudson Coal Co., The.	Scranton, Pa.	Greenwood.	Lackawanna.	D. & H.	Minooka, Pa.
Hudson Coal Co., The.	Scranton, Pa.	Manville-Dickson Colliery.	Lackawanna.	D. & H.	Green Ridge, Pa.
Hudson Coal Co., The.	Scranton, Pa.	Marvine.	Lackawanna.	D. & H.	Providence, Pa.
Hudson Coal Co., The.	Scranton, Pa.	Marvine Washery.	Lackawanna.	D. & H.	Providence, Pa.
Jermyn & Co.	Old Forge, Pa.	Jermyn No. 1.	Lackawanna.	Erie.	Taylor, Pa.
Legitts Creek Anthracite Co.	Cleveland, O.	Legitts.	Lackawanna.	D. & H.	Providence, Pa.
Mid City Coal Co.	Scranton, Pa.	Mid City.	Lackawanna.	N. Y. C.	Scranton, Pa.
Moffat, W. Y., Lessee.	150 Cherry St., Dunmore, Pa.	Carlton.	Lackawanna.	D. L. & W.	Minooka, Pa.
Nay Aug Coal Co.	Dunmore, Pa.	Nay Aug.	Lackawanna.	Erie.	Dunmore, Pa.
Pennsylvania Coal Co.	Smith & Mill St., Dunmore, Pa.	No. 1.	Lackawanna.	Erie.	Dunmore, Pa.
Pennsylvania Coal Co.	Smith & Mill St., Dunmore, Pa.	No. 5.	Lackawanna.	Erie.	Dunmore, Pa.
Pennsylvania Coal Co.	Scranton, Pa.	Underwood.	Lackawanna.	Erie.	Dunmore, Pa.
Peoples Coal Co.	Scranton, Pa.	Peoples.	Lackawanna.	D. L. & W.	Scranton, Pa.
Petersburg Coal Co.	327 N. Wash. Ave., Scranton, Pa.	Park.	Lackawanna.	Erie.	Dunmore, Pa.
Price, Pancoast Coal Co.	Mars Bldg., Scranton, Pa.	Price, Pancoast.	Lackawanna.	O. & W., D. L. & W.	Throop, Pa.
Quinn Coal Co.	806 Mars Bldg., Scranton, Pa.	No. 6.	Lackawanna.	Erie, L. & W. V.	Dunmore, Pa.
Rhoads Coal Co.	Scranton Life Bldg., Scranton, Pa.	Anthracite Coal Washery.	Lackawanna.	N. Y. O. & W.	Winton, Pa.
Scranton Anthracite Coal Co.	Burr Bldg., Scranton, Pa.	Oak Hill.	Lackawanna.	N. Y. O. & W.	Moosic, Pa.
Scranton Avoca Coal Co.	Scranton, Pa.	Dawson Washery.	Lackawanna.	L. V., D. L. & W.	Scranton, Pa.
Scranton Coal Co.	Scranton, Pa.	Capouse.	Lackawanna.	N. Y. O. & W.	Scranton, Pa.
Scranton Coal Co.	Scranton, Pa.	Mount Pleasant.	Lackawanna.	N. Y. O. & W.	Scranton, Pa.
Scranton Coal Co.	Scranton, Pa.	Pine Brook.	Lackawanna.	N. Y. O. & W., D. L. & W.	Scranton, Pa.
Scranton Coal Co.	Scranton, Pa.	Richmond No. 3.	Lackawanna.	N. Y. O. & W.	Throop, Pa.
Scranton Coal Co.	Scranton, Pa.	West Ridge.	Lackawanna.	N. Y. O. & W.	Providence, Pa.
Scranton-Taylor Coal Co.	Taylor, Pa.	Marion Washery.	Lackawanna.	D. L. & W.	Taylor, Pa.
Slocum Coal Co.	Scranton, Pa.	Slocum.	Lackawanna.	D. & H.	Scranton, Pa.
Spencer Coal Co.	Dunmore, Pa.	Spencer.	Lackawanna.	Erie.	Dunmore, Pa.
Von Storch Collieries Co.	Scranton, Pa.	Von Storch.	Lackawanna.	Delaware & Hudson.	Green Ridge, Pa.
Willen Coal Co.	233 Connell Bldg., Scranton, Pa.	Stone.	Lackawanna.	O. & W.	Mayfield Yard, Pa.

3—PITTSBURGH DISTRICT

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Central Coal Co.	612 Coal Ex. Bldg., Wilkes-Barre, Pa.	Wyoming Colliery	Luzerne	D. & H.	Hudson, Pa.
Delaware, Lackawanna & Western R.R. Co.	20 West St., New York, N. Y.	Hallstead	Luzerne	D. L. & W.	Durrow, Pa.
Exeter Coal Co.	Wilkes-Barre, Pa.	Kintz Colliery	Luzerne	L. V., D. L. & W.	Powder Mill Switch, Pa.
Hillside Coal & Iron Co.	Smith & Mill Sts., Dunmore, Pa.	Butler	Luzerne	Erie	Pittston, Pa.
Hudson Coal Co., The	Smith & Mill Sts., Dunmore, Pa.	Consolidated	Luzerne	Erie	Avoca, Pa.
Lehigh Valley Coal Co.	Seranton, Pa.	Lafin	Luzerne	D. & H.	Lafin, Pa.
Lehigh Valley Coal Co.	Wilkes-Barre, Pa.	Exeter Colliery	Luzerne	L. V.	Wilkes-Barre, Pa.
Lehigh Valley Coal Co.	Wilkes-Barre, Pa.	Hendberg Colliery	Luzerne	L. V.	Wilkes-Barre, Pa.
Meadow Hill Coal Co.	Seranton, Pa.	Meadow Hill Washery	Luzerne	Erie	Pittston, Pa.
Pennsylvania Coal Co.	Smith & Mill Sts., Dunmore, Pa.	Barnum	Luzerne	Erie	Pittston, Pa.
Pennsylvania Coal Co.	Smith & Mill Sts., Dunmore, Pa.	Central	Lackawanna	Erie	Avoca, Pa.
Pennsylvania Coal Co.	Smith & Mill Sts., Dunmore, Pa.	Lawn	Luzerne	Erie	Pittston, Pa.
Pennsylvania Coal Co.	Smith & Mill Sts., Dunmore, Pa.	Old Forge	Lackawanna	Erie	Avoca, Pa.
Pennsylvania Coal Co.	Smith & Mill Sts., Dunmore, Pa.	No. 6	Luzerne	Erie	Pittston, Pa.
Pennsylvania Coal Co.	Smith & Mill Sts., Dunmore, Pa.	No. 9	Luzerne	Erie	Pittston, Pa.
Pennsylvania Coal Co.	Smith & Mill Sts., Dunmore, Pa.	No. 14	Luzerne	Erie	Pittston, Pa.
Quinn Coal Co.	Seranton, Pa.	Packaway	Luzerne	L. V.	Yatesville, Pa.
Suffolk Coal Co.	Seranton, Pa.	Lungcliffe	Luzerne	D. & H.	Avoca, Pa.
Temple Coal Co.	Seranton, Pa.	Mt. Lookout	Luzerne	D. L. & W., L. V.	Wyoming, Pa.
Traders Coal Co.	322 Adams Ave., Scranton, Pa.	Ridgewood	Luzerne	Erie, C. R. R. of N. J.	Hudson, Pa.
Wilkes-Barre Colliery Co.	North American Bldg., Philadelphia, Pa.	Madria	Luzerne	D. & H.	Hudson, Pa.

1—WILKES-BARRE DISTRICT

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Alden Coal Co.	Alden Station, Pa.	Alden	Luzerne	C. R. R. of N. J.	Alden Station, Pa.
Conlon, John	Hudson, Pa.	Conlon	Luzerne	D. & H.	Hudson, Pa.
Delaware, Lackawanna & Western R.R. Co.	90 West St., New York, N. Y.	Bliss	Luzerne	D. L. & W.	West Nanticoke, Pa.
Delaware, Lackawanna & Western R.R. Co.	90 West St., New York, N. Y.	Loomis	Luzerne	D. L. & W.	West Nanticoke, Pa.
Delaware, Lackawanna & Western R.R. Co.	90 West St., New York, N. Y.	Treadale	Luzerne	D. L. & W.	West Nanticoke, Pa.
East Alden Mining Co.	Wilkes-Barre, Pa.	East Alden	Luzerne	L. V.	Nanticoke, Pa.
Hillman Coal Co.	Wilkes-Barre, Pa.	Hillman	Luzerne	L. V.	Wilkes-Barre, Pa.
Hudson Coal Co., The	Seranton, Pa.	Baltimore No. 5	Luzerne	D. & H.	Parsons, Pa.
Hudson Coal Co., The	Seranton, Pa.	Baltimore Tunnel	Luzerne	D. & H.	Wilkes-Barre, Pa.
Hudson Coal Co., The	Seranton, Pa.	Delaware	Luzerne	D. & H.	Hudson, Pa.
Hudson Coal Co. (The)	Seranton, Pa.	Pin Ridge	Luzerne	D. & H.	Parsons, Pa.
Lehigh & Wilkes-Barre Coal Co.	Wilkes-Barre, Pa.	Buttonwood No. 22	Luzerne	C. R. R. of N. J.	Buttonwood, Pa.
Lehigh & Wilkes-Barre Coal Co.	Wilkes-Barre, Pa.	Hollenback No. 2	Luzerne	C. R. R. of N. J.	Wilkes-Barre, Pa.
Lehigh & Wilkes-Barre Coal Co.	Wilkes-Barre, Pa.	Maxwell No. 20	Luzerne	C. R. R. of N. J.	Ashley, Pa.
Lehigh & Wilkes-Barre Coal Co.	Wilkes-Barre, Pa.	South Wilkes-Barre No. 5	Luzerne	C. R. R. of N. J.	South Wilkes-Barre, Pa.
Lehigh & Wilkes-Barre Coal Co.	Wilkes-Barre, Pa.	Stanton No. 7	Luzerne	C. R. R. of N. J.	Wilkes-Barre, Pa.
Lehigh & Wilkes-Barre Coal Co.	Wilkes-Barre, Pa.	Sugar Notch	Luzerne	C. R. R. of N. J.	Sugar Notch, Pa.
Lehigh & Wilkes-Barre Coal Co.	Wilkes-Barre, Pa.	Wanamie No. 18	Luzerne	C. R. R. of N. J.	Wanamie, Pa.
Lehigh Valley Coal Co.	Wilkes-Barre, Pa.	Broadview	Luzerne	L. V.	Wilkes-Barre, Pa.
Lehigh Valley Coal Co.	Wilkes-Barre, Pa.	Franklin	Luzerne	L. V.	Wilkes-Barre, Pa.
Lehigh Valley Coal Co.	Wilkes-Barre, Pa.	Mineral Spring	Luzerne	L. V.	Wilkes-Barre, Pa.
Lehigh Valley Coal Co.	Wilkes-Barre, Pa.	Sea Ca.	Luzerne	L. V.	Wilkes-Barre, Pa.
Lehigh Valley Coal Co.	Wilkes-Barre, Pa.	Stevens	Luzerne	L. V.	Wilkes-Barre, Pa.
Lehigh Valley Coal Co.	Wilkes-Barre, Pa.	Warrior Run	Luzerne	L. V.	Wilkes-Barre, Pa.
Lehigh Valley Coal Co.	Wilkes-Barre, Pa.	Westmoreland Colliery	Luzerne	L. V.	Wilkes-Barre, Pa.
Lehigh Valley Coal Co.	Wilkes-Barre, Pa.	William A Colliery	Luzerne	L. V.	Wilkes-Barre, Pa.
Pittston Coal Mining Co.	Pittston, Pa.	Hadleigh	Luzerne	L. V., C. R. R. of N. J.	Sugar Notch, Pa.
Red Ash Coal Co.	Miners Bank, Wilkes-Barre, Pa.	Red Ash No. 1	Luzerne	C. R. R. of N. J.	Wilkes-Barre, Pa.
Red Ash Coal Co.	Miners Bank, Wilkes-Barre, Pa.	Red Ash No. 2	Luzerne	C. R. R. of N. J.	Wilkes-Barre, Pa.
Stackhouse, E. S. Coal Co.	Shickshinny, Pa.	Salem Colliery	Luzerne	D. L. & W.	Shickshinny, Pa.
Susquehanna Collieries Co.	Philadelphia, Pa.	Colliery No. 5	Luzerne	Penna.	Nanticoke, Pa.
Susquehanna Collieries Co.	Philadelphia, Pa.	Colliery No. 6	Luzerne	Penna.	Glen Lyon, Pa.
Susquehanna Collieries Co.	Philadelphia, Pa.	Colliery No. 7	Luzerne	Penna.	Nanticoke, Pa.
Susquehanna Collieries Co.	Philadelphia, Pa.	Nanticoke Washery	Luzerne	Penna.	Nanticoke, Pa.
West End Coal Co.	Mears Bldg., Scranton, Pa.	West End	Luzerne	Penna.	Mearns, Pa.
West Nanticoke Coal Co.	Comm'r. Tr. Bldg., Philadelphia, Pa.	West Nanticoke	Luzerne	Penna.	West Nanticoke, Pa.

5—PLYMOUTH DISTRICT

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Delaware, Lackawanna & Western R.R. Co.	90 West St., New York, N. Y.	Avondale	Luzerne	D. L. & W.	Plymouth, Pa.
Delaware, Lackawanna & Western R.R. Co.	90 West St., New York, N. Y.	Pettibone	Luzerne	D. L. & W.	Luzerne, Pa.
Delaware, Lackawanna & Western R.R. Co.	90 West St., New York, N. Y.	Woodward	Luzerne	D. L. & W.	Kingston, Pa.
East Boston Coal Co.	Kingston, Pa.	East Boston	Luzerne	D. L. & W., L. V.	Kingston & Luzerne, Pa.
Haddock Mining Co.	Wilkes-Barre, Pa.	Black Diamond	Luzerne	D. L. & W., L. V.	Luzerne, Pa.
Hudson Coal Co., The	Seranton, Pa.	Boston	Luzerne	D. & H.	Plymouth, Pa.
Hudson Coal Co. (The)	Seranton, Pa.	Long No. 2	Luzerne	D. & H.	Plymouth, Pa.
Hudson Coal Co. (The)	Seranton, Pa.	Long No. 3	Luzerne	D. & H.	Plymouth, Pa.
Hudson Coal Co. (The)	Seranton, Pa.	Long No. 4	Luzerne	D. & H.	Plymouth, Pa.
Hudson Coal Co. (The)	Seranton, Pa.	Long No. 5	Luzerne	D. & H.	Plymouth, Pa.
Inter-City Fuel Co.	New York, N. Y.	Washery	Luzerne	C. R. R. of N. J., D. L. & W.	Plymouth, Pa.
Kingston Coal Co.	Kingston, Pa.	Gaylord	Luzerne	D. & H., Penna. L. V., D. L. & W.	Kingston, Pa.
Kingston Coal Co.	Kingston, Pa.	Kingston No. 2	Luzerne	D. & H.	Kingston, Pa.
Kingston Coal Co.	Kingston, Pa.	Kingston No. 4	Luzerne	D. & H.	Kingston, Pa.
Lee, George F. Coal Co.	1200-04 Miners Bank, Wilkes-Barre, Pa.	Chauncy	Luzerne	D. L. & W.	Kingston, Pa.
Lehigh & Wilkes-Barre Coal Co.	Wilkes-Barre, Pa.	Lance No. 11	Luzerne	D. L. & W., D. & H., C. R. R. of N. J.	Kingston, Pa.
Lehigh & Wilkes-Barre Coal Co.	Wilkes-Barre, Pa.	Nottingham No. 15	Luzerne	C. R. R. of N. J.	Plymouth, Pa.
Lehigh Valley Coal Co.	Wilkes-Barre, Pa.	Maltby Colliery	Luzerne	L. V.	Wilkes-Barre, Pa.
Plymouth Red Ash Coal Co.	Plymouth, Pa.	Plymouth Red Ash	Luzerne	D. L. & W.	Plymouth, Pa.
Raub Coal Co.	Luzerne, Pa.	Louise	Luzerne	L. V., D. L. & W.	Luzerne, Pa.
Temple Coal Co.	Seranton, Pa.	Harry E. Colliery	Luzerne	L. V., D. L. & W.	Luzerne, Pa.
Temple Coal Co.	Seranton, Pa.	Forty-Fort Colliery	Luzerne	L. V., D. L. & W.	Luzerne, Pa.

EASTERN MIDDLE FIELD

6—GREEN MOUNTAIN DISTRICT

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Upper Lehigh Coal Co.	Philadelphia, Pa.	Upper Lehigh	Luzerne	C. R. R. of N. J.	Upper Lehigh, Pa.

7—BLACK CREEK DISTRICT

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Jeddo-Highland Coal Co.	Jeddo, Pa.	Ehervale	Luzerne	L. V.	Jeddo, Pa.
Jeddo-Highland Coal Co.	Jeddo, Pa.	Highland No. 2	Luzerne	L. V.	Jeddo, Pa.
Jeddo-Highland Coal Co.	Jeddo, Pa.	Highland No. 5	Luzerne	L. V.	Jeddo, Pa.
Jeddo-Highland Coal Co.	Jeddo, Pa.	Highland No. 6	Luzerne	L. V.	Jeddo, Pa.
Jeddo-Highland Coal Co.	Jeddo, Pa.	Jeddo No. 4	Luzerne	L. V.	Jeddo, Pa.
Jeddo-Highland Coal Co.	Jeddo, Pa.	Jeddo No. 7	Luzerne	L. V.	Jeddo, Pa.
Kemmerer, M. S. & Co.	143 Liberty St., New York, N. Y.	Sandy Run	Luzerne	Central R.R. of N.J., L.V.	Sandy Run, Pa.
Lehigh Valley Coal Co.	Wilkes-Barre, Pa.	Derringer Colliery	Luzerne	L. V.	Hazleton, Pa.
Lehigh Valley Coal Co.	Wilkes-Barre, Pa.	Drifton Colliery	Luzerne	L. V.	Hazleton, Pa.
Lehigh Valley Coal Co.	Wilkes-Barre, Pa.	Eckley Colliery	Luzerne	L. V.	Hazleton, Pa.
Pardee Brothers & Co., Inc.	Lattimer Mines, Pa.	Lattimer	Luzerne	L. V.	Lattimer Mines, Pa.
Wolfe Collieries Co., Inc. (The)	912 Coal Ex. Bldg., Wilkes-Barre, Pa.	Wolfe Colliery	Luzerne	L. V.	Drifton, Pa.

8—HAZLETON DISTRICT

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Cranberry Creek Coal Co.	437 Chestnut St., Philadelphia, Pa.	Cranberry Colliery	Luzerne	L. V., Penna.	Hazleton, Pa.
Harwood Coal Co.	Allentown, Pa.	Harwood	Luzerne	L. V.	Harwood Mines, Pa.
Lehigh Valley Coal Co.	Wilkes-Barre, Pa.	Beaver Meadow	Luzerne	L. V.	Hazleton, Pa.
Lehigh Valley Coal Co.	Wilkes-Barre, Pa.	Hazleton No. 1	Luzerne	L. V.	Hazleton, Pa.
Lehigh Valley Coal Co.	Wilkes-Barre, Pa.	Hazleton Shaft	Luzerne	L. V.	Hazleton, Pa.
Lehigh Valley Coal Co.	Wilkes-Barre, Pa.	Oneida Colliery	Luzerne	L. V.	Hazleton, Pa.
Lehigh Valley Coal Co.	Wilkes-Barre, Pa.	Spring Mountain	Luzerne	L. V.	Hazleton, Pa.
Wentz, J. S. & Co.	Land Title Bldg., Philadelphia, Pa.	Hazlebrook	Luzerne	L. V.	Hazlebrook, Pa.

9—BEAVER MEADOW DISTRICT

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Dodson, Chas. M. Co.	Bethlehem, Pa.	Beaver Brook	Luzerne	L. V. C. of N. J.	Audensreid, Pa.
Evans Colliery Co.	Beaver Meadow, Pa.	Evans	Carbon	Lehigh Valley	Beaver Meadows, Pa.
Lehigh & Wilkes-Barre Coal Co.	Wilkes-Barre, Pa.	Audensreid No. 4	Schuylkill	C. R. R. of N. J.	Audensreid, Pa.
Lehigh & Wilkes-Barre Coal Co.	Wilkes-Barre, Pa.	Honey Brook No. 5	Schuylkill	C. R. R. of N. J.	Audensreid, Pa.
Reese, T. R. & Son	Audensreid, Pa.	Dusky Diamond	Luzerne	C. R. R. of N. J., L. V.	Audensreid, Pa.
Van Winkle, A. S. (Est.)	Hazleton, Pa.	Colemine	Carbon	L. V. C. R. R. of N. J.	Beaver Meadows, Pa.

WESTERN MIDDLE FIELD

10—EAST MAHANOEY DISTRICT

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Lehigh Valley Coal Co.	Wilkes-Barre, Pa.	Buck Mountain	Schuylkill	L. V.	Mahanoy City, Pa.
Lehigh Valley Coal Co.	Wilkes-Barre, Pa.	Park Washery	Schuylkill	L. V.	Mahanoy City, Pa.
Lehigh Valley Coal Co.	Wilkes-Barre, Pa.	Spring Dale Washery	Schuylkill	L. V.	Mahanoy City, Pa.
Lehigh Valley Coal Co.	Philadelphia, Pa.	Middle Lehigh	Schuylkill	L. V., P. & R.	New Boston, Pa.
Mill Creek Coal Co.	Pottsville, Pa.	Ellangowa Colliery	Schuylkill	P. & R.	Yatesville, Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	Knickerbocker Colliery	Schuylkill	P. & R.	Yatesville, Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	Knickerbocker Washery	Schuylkill	P. & R.	Yatesville, Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	Mahanoy City Colliery	Schuylkill	P. & R.	Mahanoy City, Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	Maple Hill Colliery	Schuylkill	P. & R.	St. Nicholas, Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	North Mahanoy Colliery	Schuylkill	P. & R.	Mahanoy City, Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	North Mahanoy Washery	Schuylkill	P. & R.	Mahanoy City, Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	St. Nicholas Colliery	Schuylkill	P. & R.	St. Nicholas, Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	Suffolk Colliery	Schuylkill	P. & R.	St. Nicholas, Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	Tunnel Ridge Colliery	Schuylkill	P. & R.	Mahanoy City, Pa.

11—WEST MAHANOEY DISTRICT

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Black Heath Coal Co.	Minersville, Pa.	Black Heath	Schuylkill	P. & R.	Minersville, Pa.
Bischoff, T. N.	Kinghamton, N. Y.	Silverton	Schuylkill	P. & R.	Minersville, Pa.
Cambridge Coal Co.	Shenandoah, Pa.	Cambridge	Schuylkill	P. & R.	Shenandoah, Pa.
East Bear Ridge Colliery Co.	Seranton, Pa.	East Bear Ridge Colliery	Schuylkill	P. & R.	Mahanoy Plane, Pa.
Harleigh-Brookwood Coal Co.	Philadelphia, Pa.	Lawrence Colliery	Schuylkill	Penna., P. & R.	Mahanoy Plane, Pa.
Harleigh-Brookwood Coal Co.	Philadelphia, Pa.	West Bear Ridge	Schuylkill	P. & R.	Mahanoy Plane, Pa.
Harleigh-Brookwood Coal Co.	Philadelphia, Pa.	Snydertown Washery	Northumberland	P. & R.	Snydertown, Pa.
Inter-City Fuel Co.	New York, N. Y.	Wolf Creek Washery	Schuylkill	P. & R.	Minersville, Pa.
Lehigh Valley Coal Co.	Wilkes-Barre, Pa.	Centralia Colliery	Columbia	L. V.	Centralia, Pa.
Lehigh Valley Coal Co.	Wilkes-Barre, Pa.	Packer No. 4	Schuylkill	L. V.	Lost Creek, Pa.
Lehigh Valley Coal Co.	Wilkes-Barre, Pa.	Packer No. 5	Schuylkill	L. V.	Lost Creek, Pa.
Lehigh Valley Coal Co.	Wilkes-Barre, Pa.	Sayre Colliery	Columbia	L. V.	Centralia, Pa.
Locust Mountain Coal Co.	Bethlehem, Pa.	Weston	Columbia	L. V.	Shenandoah, Pa.
Locust Dale Coal Co.	Minersville, Pa.	Locust Dale Washery	Schuylkill	P. & R.	Shenandoah, Pa.
Midvalley Coal Co.	Land Title Bldg., Philadelphia, Pa.	Midvalley	Columbia	L. V.	Whitburn & Centralia, Pa.
McTurk, W. R. Coal Co.	Philadelphia, Pa.	Girard	Schuylkill	P. & R.	Girardville, Pa.

(Continued on Next Page)

11—WEST MAHANOEY DISTRICT—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Mahanoy Valley Coal Co.	Girardville, Pa.	Washery	Schuylkill	L. V. P. & R.	Girardville, Pa.
Philadelpia & Reading Coal & Iron Co.	Pottsville, Pa.	Alaska Colliery	Northumberland	P. & R.	Alaska, Pa.
Philadelpia & Reading Coal & Iron Co.	Pottsville, Pa.	Bancroft Washery	Schuylkill	P. & R.	Ashland, Pa.
Philadelpia & Reading Coal & Iron Co.	Pottsville, Pa.	Bast Colliery	Schuylkill	P. & R.	East, Pa.
Philadelpia & Reading Coal & Iron Co.	Pottsville, Pa.	Boston Run Colliery	Schuylkill	P. & R.	Gilberton, Pa.
Philadelpia & Reading Coal & Iron Co.	Pottsville, Pa.	Draper Colliery	Schuylkill	P. & R.	Gilberton, Pa.
Philadelpia & Reading Coal & Iron Co.	Pottsville, Pa.	Gilberton Colliery	Schuylkill	L. V.	Gilberton, Pa.
Philadelpia & Reading Coal & Iron Co.	Pottsville, Pa.	Hammond Colliery	Schuylkill	P. & R.	Colorado, Pa.
Philadelpia & Reading Coal & Iron Co.	Pottsville, Pa.	Indian Ridge Colliery	Schuylkill	P. & R.	Shenandoah, Pa.
Philadelpia & Reading Coal & Iron Co.	Pottsville, Pa.	Kohinoor Colliery	Schuylkill	P. & R.	Shenandoah, Pa.
Philadelpia & Reading Coal & Iron Co.	Pottsville, Pa.	Locust Gap Colliery	Northumberland	P. & R.	Locust Gap, Pa.
Philadelpia & Reading Coal & Iron Co.	Pottsville, Pa.	Locust Spring Colliery	Northumberland	P. & R.	Locust Gap, Pa.
Philadelpia & Reading Coal & Iron Co.	Pottsville, Pa.	Locust Spring Washery	Schuylkill	P. & R.	Locust Gap, Pa.
Philadelpia & Reading Coal & Iron Co.	Pottsville, Pa.	Plank Ridge Washery	Schuylkill	P. & R.	Shenandoah, Pa.
Philadelpia & Reading Coal & Iron Co.	Pottsville, Pa.	Potts Colliery	Schuylkill	P. & R.	Locustdale, Pa.
Philadelpia & Reading Coal & Iron Co.	Pottsville, Pa.	Shenandoah City Colliery	Schuylkill	P. & R.	Shenandoah, Pa.
Philadelpia & Reading Coal & Iron Co.	Pottsville, Pa.	Turkey Run Colliery	Schuylkill	P. & R.	Shenandoah, Pa.
Philadelpia & Reading Coal & Iron Co.	Pottsville, Pa.	West Shenandoah Colliery	Schuylkill	P. & R.	Shenandoah, Pa.
Raven Run Coal Co.	Philadelphia, Pa.	Raven Run Colliery	Schuylkill	P. & R.	Raven Run, Pa.
Reppner Coal Co.	Minersville, Pa.	Reppner Colliery	Schuylkill	P. & R.	Ashland, Pa.
Shamokin Red Ash Coal Co.	Shamokin, Pa.	Shamokin	Northumberland	Penna.	Mt. Carmel, Pa.
Susquehanna Collieries Co.	Philadelphia, Pa.	Lytle Colliery	Schuylkill	Penna.	Lytle, Pa.
Susquehanna Collieries Co.	Philadelphia, Pa.	Lytle Washery	Schuylkill	Penna.	Minersville, Pa.
Susquehanna Collieries Co.	Philadelphia, Pa.	Richards Colliery	Northumberland	Penna.	Mount Carmel, Pa.
Susquehanna Collieries Co.	Philadelphia, Pa.	William Penn Colliery	Schuylkill	Penna.	Shenandoah, Pa.
Thomas Colliery Co.	North American Bldg., Philadelphia, Pa.	Black Cr. No. 1 Washery	Schuylkill	L. V.	Lost Creek, Pa.
Thomas Colliery Co.	North American Bldg., Philadelphia, Pa.	Black Cr. No. 2 Washery	Schuylkill	P. & R.	Lost Creek, Pa.
Thomas Colliery Co.	North American Bldg., Philadelphia, Pa.	Kelley's Run	Schuylkill	P. & R.	Shenandoah, Pa.

12—SHAMOKIN DISTRICT

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Buck Ridge Coal Mining Co.	Shamokin, Pa.	Buck Ridge	Northumberland	P. & P. R.	Shamokin, Pa.
Colonial Colliery Co.	North American Bldg., Philadelphia, Pa.	Natalie	Northumberland	Penna., P. & R.	Natalie, Pa.
Enterprise Coal Co. (The)	Scranton, Pa.	Enterprise	Northumberland	P. & R., P. & R.	Excelsior & Fulton, Pa.
Excelsior Coal Co.	Shamokin, Pa.	Corbin	Northumberland	P. & R.	Shamokin, Pa.
Greenough Red Ash Coal Co.	Frankville, Pa.	Greenough	Northumberland	P. & R.	Mt. Carmel, Pa.
Kulp Coal Co.	Masonic Bldg., Shamokin, Pa.	Kulp	Northumberland	Penna.	R. d. Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	Bear Valley Colliery	Northumberland	P. & R.	Shamokin, Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	Big Mountain Colliery	Northumberland	P. & R.	Big Mountain, Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	Burnside Colliery	Northumberland	P. & R.	Shamokin, Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	Henry Clay Colliery	Northumberland	P. & R.	Shamokin, Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	North Franklin Colliery	Northumberland	P. & R.	Trevorton, Pa.
Shipman Coal Co.	Shamokin, Pa.	Sterling Colliery	Northumberland	P. & R.	Shamokin, Pa.
Slope Mountain Coal Co.	Shamokin, Pa.	Colbert	Northumberland	P. & R.	Shamokin, Pa.
Susquehanna Collieries Co.	Wilkes-Barre, Pa.	Slope Mountain	Northumberland	P. & R.	Shamokin, Pa.
Susquehanna Collieries Co.	Wilkes-Barre, Pa.	Cameron Colliery	Northumberland	Penna.	Shamokin, Pa.
Susquehanna Collieries Co.	Wilkes-Barre, Pa.	Hickory Ridge Colliery	Northumberland	Penna.	Shamokin, Pa.
Susquehanna Collieries Co.	Wilkes-Barre, Pa.	Luke Fidler Colliery	Northumberland	Penna.	Shamokin, Pa.
Susquehanna Collieries Co.	Wilkes-Barre, Pa.	Pennsylvania Colliery	Northumberland	Penna.	Mount Carmel, Pa.
Trevorton Colliery Co.	Clreland, O.	Katherine	Northumberland	P. & R.	Trevorton, Pa.

SOUTHERN FIELD

13—PANTHER CREEK DISTRICT

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Lehigh Coal & Navigation Co.	437 Chestnut St., Philadelphia, Pa.	Coaldale	Schuylkill	L. & N. E.	Coaldale, Pa.
Lehigh Coal & Navigation Co.	437 Chestnut St., Philadelphia, Pa.	Greenwood	Schuylkill	L. & N. E.	Seek, Pa.
Lehigh Coal & Navigation Co.	437 Chestnut St., Philadelphia, Pa.	Lansford	Carbon	L. & N. E.	Lansford, Pa.
Lehigh Coal & Navigation Co.	437 Chestnut St., Philadelphia, Pa.	Nesquehoning	Carbon	C. & D. of N. J., L. & N. E.	Nesquehoning, Pa.
Lehigh Coal & Navigation Co.	437 Chestnut St., Philadelphia, Pa.	Rahm	Schuylkill	L. & N. E.	Seek, Pa.
Lehigh Coal & Navigation Co.	437 Chestnut St., Philadelphia, Pa.	Tamaqua	Schuylkill	L. & N. E.	Tamaqua, Pa.

14—EAST SCHUYLKILL DISTRICT

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Alliance Coal Mining Co.	Philadelphia, Pa.	Alliance Colliery	Schuylkill	P. & R.	Middleport, Pa.
Darkwater Coal Co.	Minersville, Pa.	Darkwater	Schuylkill	Penna.	Darkwater, Pa.
Gorman & Campton	Tuscarora, Pa.	Bell	Schuylkill	P. & R.	Tuscarora, Pa.
Hillone Coal Co.	Scranton, Pa.	Hillone Colliery	Schuylkill	P. & R.	Gordon, Pa.
Maryd Coal Co.	Land Title Bldg., Philadelphia, Pa.	Maryd	Schuylkill	P. & R., C. & D. of N. J.	Maryd, Pa.
Mill Creek Coal Co.	Philadelphia, Pa.	Morea Colliery	Schuylkill	L. V., Penna.	Morea, Pa.
Mill Creek Coal Co.	Philadelphia, Pa.	Wolf Creek Colliery	Schuylkill	P. & R.	St. Clair, Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	Eagle Hill Colliery	Schuylkill	P. & R.	Eagle Hill, Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	Revsdale Washery	Schuylkill	P. & R.	Pottsville, Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	Silver Creek Colliery	Schuylkill	P. & R.	New Philadelphia, Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	Wadsworth Colliery	Schuylkill	P. & R.	Wadesville, Pa.
St. Clair Coal Co. (The)	Scranton, Pa.	St. Clair	Schuylkill	P. & R.	St. Clair, Pa.
Schuylkill Valley Coal Co.	Pottsville, Pa.	Progressive Colliery	Schuylkill	P. & R.	Port Carbon, Pa.
Sherman Coal Corp.	601 Thompson Bldg., Pottsville, Pa.	Sherman Colliery	Schuylkill	P. & R., P. & R., L. V.	Pottsville, Pa.

15—WEST SCHUYLKILL DISTRICT

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Buck Run Coal Co.	Minersville, Pa.	Buck Run	Schuylkill	P. & R.	Minersville, Pa.
Butcher Creek Coal Co.	St. Clair, Pa.	Laurel Run	Schuylkill	P. & R.	St. Clair, Pa.
Oak Hill Coal Co.	Minersville, Pa.	Oak Hill Colliery	Schuylkill	P. & R.	Minersville, Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	Anchor Washery	Schuylkill	P. & R.	Hillsdale, Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	Glendower Colliery	Schuylkill	P. & R.	Glendower, Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	John Velt Colliery	Schuylkill	P. & R.	Forestville, Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	Otto Colliery	Schuylkill	P. & R.	Branchdale, Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	Phoenix Park Colliery	Schuylkill	P. & R.	Forestville, Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	Pine Knot Colliery	Schuylkill	P. & R.	Hicksville, Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	Thomaston Colliery	Schuylkill	P. & R.	Thomaston, Pa.
Pine Hill Coal Co.	Scranton, Pa.	Rock Washery	Schuylkill	Penna.	Lytle, Pa.
Pine Hill Coal Co.	Scranton, Pa.	Pine Hill Colliery	Schuylkill	Penna.	Lytle, Pa.

16—LORBERRY DISTRICT

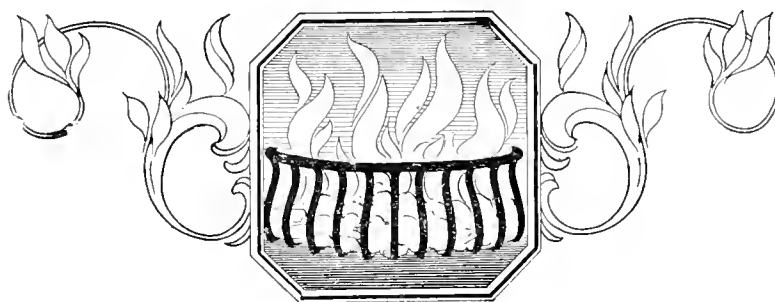
NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	Middle Creek Washery	Schuylkill	P. & R.	Middle Creek, Pa.

17—LYKENS VALLEY DISTRICT

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Lykens Valley Coal Corp.	Wilkes-Barre, Pa.	Lykens Loberry Colliery	Schuylkill	Penna.	Good Spring, Pa.
Lykens Valley Fuel Co.	Williamstown, Pa.	Lykens Valley	Dauphin	P. & R.	Williamstown, Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	Brookside Colliery	Schuylkill	P. & R.	Brookside, Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	Good Spring Colliery	Schuylkill	P. & R.	Good Spring, Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	Lincoln Colliery	Schuylkill	P. & R.	Tremont, Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	Lincoln Washery	Schuylkill	P. & R.	Tremont, Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	Rausch Creek Washery	Schuylkill	P. & R.	Tremont, Pa.
Philadelphia & Reading Coal & Iron Co.	Pottsville, Pa.	Valley View Colliery	Schuylkill	P. & R.	Valley View, Pa.
Susquehanna Collieries Co.	Wilkes-Barre, Pa.	Short Mountain Colliery	Dauphin	Penna.	Lykens & Williamstown, Pa.
Susquehanna Collieries Co.	Wilkes-Barre, Pa.	Short Mountain Washery	Dauphin	Penna.	Lykens & Williamstown, Pa.
Susquehanna Collieries Co.	Wilkes-Barre, Pa.	Williamstown Colliery	Dauphin	Penna.	Lykens & Williamstown, Pa.
Susquehanna Collieries Co.	Wilkes-Barre, Pa.	Williamstown Washery	Dauphin	Penna.	Lykens & Williamstown, Pa.

SEMIANTHRACITE FIELD

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Connell Anthracite Mining Co.	Mildred, Pa.	Connell	Sullivan	L. V.	Mildred, Pa.
Northern Anthracite Coal Co.	Lopez, Pa.	Murray	Sullivan	L. V.	Lopez, Pa.



PENNSYLVANIA ANTHRACITE

Alphabetical Directory of Coal Mines, Giving Complete Detailed Information Covering Each Mine

For List of Abbreviations See Page 13.

ALDEN COAL CO.

General Office, Alden Station, Pa.
PR—M. S. Kemmerer, Mauch Chunk, Pa.
TR—K. M. Smith, Alden Station, Pa.
GM—K. M. Smith, " "
PA—K. M. Smith, " "
EM—W. S. Norton, " "
SCO—Alden Supply Co., Ltd., Buyer, Frederick M. Cox, Alden Station.
Sales agency, Whitney & Kemmerer, New York, N. Y., and Philadelphia, Pa.
Additional Information on Page 683

Alden Mine; Shaft and Slope; Bennett Ross, Red Ash, Hillman and Cooper Seams, 36 to 96 in. thick.
PO—Alden Station, Pa. SP—Same. CTY—Luzerne. RR—C. R. R. of N. J.
IF—John E. Morris, Alden Station, Pa.
OF—Wm. W. Stair, Alden Station, Pa.
S of H—3 steam and 2 gasoline and 1 storage battery loco. Track gauge, 30 in.
S of M—Hand and 7 comp. air machs.
PP—12 return tubular boilers, total 2,400 H. P., 4 air compressors and 18 pumps.
EMP—800. Last fiscal year output, 300,000 tons.
SIZES SHIPT.—Pea, Nut, Egg, Stove, Buckwheat, Rice, Barley.
PREP. EQUIPT.—Dry, Spirals.

ALLIANCE COAL MINING CO.

General Office, 437 Chestnut St., Philadelphia, Pa.
PR—S. D. Warriner, Philadelphia, Pa.
VP—A. S. Leary, Philadelphia, Pa.
TR—H. H. Pease, Philadelphia, Pa.
GM—J. B. Warriner, Hazleton, Pa.
GS—D. C. Helm Kaska, Pa.
PA—E. Hughes, Philadelphia, Pa.
CE—R. E. Hobart, Lansford, Pa.
EM—George H. Steddie, Kaska, Pa.
EE—G. M. Kennedy, Lansford, Pa.
SCO—J. C. Bright Co. Buyer, J. C. Bright, Kaska, Pa.
SA—Lehigh Coal & Navigation Co., Philadelphia, Pa.

Alliance Mine; Drift; Top Split Mammoth, Middle Split Mammoth, Bottom Split Mammoth and Skidmore Seams, 54, 108, 120 and 48 in. thick.
PO—Kaska, Pa.; SP—Middleport, Pa.; CTY—Schuylkill; RR—P. & R., Schuylkill Valley and Alliance Branches.
MS—John McGovern, Kaska, Pa.
S of H—Mules. Track gauge, 42 in.
S of M—Hand.
PP—6 return tubular boilers, total 800 H. P., 1 air compressor, 440 volts A. C., 250 volts D. C., 7 pumps.
EMP—266. Last years tonnage 185,213.
SIZES SHIPT.—Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley.
METHOD OF PREP.—Wet.
PREP. EQUIPT.—Jigs, Spirals, Picking Tables.

ANTHRAHITE PRODUCTION CORP.

General Office, Pequea, Lancaster County, Pa.
PR—F. D. Carney, 40 Wall St., New York, N. Y.
VP—G. R. Delamater, Pequea, Pa.
TR—E. E. Lindemuth, Bradford, Pa.
GM—G. R. Delamater, Pequea, Pa.
PA—G. R. Delamater, Pequea, Pa.
SP—Sbenks Ferry, Pa.; CTY—Lancaster; RR—Penna.

ARCHBALD COAL COMPANY

PA—Charles E. Moore, Archbald, Pa.
General Office, Scranton, Pa.
PR—J. E. Allen, 34 Pine St., New York, N. Y.
VP—B. F. Pope, 34 Pine St., New York, N. Y.
TR—H. S. Very, 34 Pine St., New York, N. Y.
GM—Richard Howells, Scranton, Pa.
GS—Richard Howells, Scranton, Pa.
SA—Archbald Coal Corp., Scranton, Pa.
Archbald Mine; Slope.
PO—Archbald, Pa.; SP—Same; CTY—Lackawanna; RR—D. & H.
S of H—Mules and rope, comp. air, electric, storage battery, gasoline locos. Track gauge 36 inches.
S of M—Hand, comp. air, electric and shorttail machs.
PP—Power purchased, 4 water tube boilers, total 700 H. P.
EMP—200. Last fiscal year output, 115,000 tons.

SIZES SHIPT.—Run of Mine, Pea, Nut, Egg, Lump.
PREP. EQUIPT.—Shaker Screens, Picking Tables.

BALD MOUNTAIN COAL CO.

General Office, Peckville, Pa.
PR—M. S. Kemmerer, Mauch Chunk, Pa.
VP—K. M. Smith, Alden Station, Pa.
TR—Edw. H. Ford, Peckville, Pa.
GS—Edw. H. Ford, Peckville, Pa.
PA—Edw. H. Ford, Peckville, Pa.
EM—Jos. W. Folen, Marshwood, Pa.
EE—John Sutton, Peckville, Pa.
SCO—Address the Company, Ruyor, A. G. Hopkins, Marshwood, Pa.
Marshwood Mine; Slope; Shaft and Strip ping; Dunmore Seam.
PO—Marshwood, Pa.; SP—Throop, Pa.; CTY—Lackawanna; RR—D. L. & W., N. Y. O. & W.; Erie.
S of H—Mules and elec. loco. Track gauge 36 inches.
S of M—Hand and comp. air punchers.
PP—Power purchased.
SIZES SHIPT.—Shaker Screens, Picking Tables.
NOTE—Formerly operated by the Moosic Mountain Coal Company.

BARTON COAL COMPANY

General Office, Scranton Life Bldg., Scranton, Pa.
PR—B. J. Lynch, Scranton, Pa.
TR—F. P. Benjamin, Scranton, Pa.
GM—F. P. Benjamin, Scranton, Pa.
Barton Washery.
PO—Peckville, Pa.; SP—Same; CTY—Lackawanna; RR—D. & W. Western.
PP—Power purchased. Transformer 220 volts D. C.
EMP—35. Daily tonnage 500.
SIZES SHIPT.—Nut, Pea, Brick, Rice, Barley.
PREP. EQUIPT.—9 Jigs.

BIRKETT HILL COAL COMPANY

General Office, Carbondale, Pa.
PR—L. A. Patterson, Carbondale, Pa.
VP—M. C. Stahlbird, Carbondale, Pa.
TR—Geo. E. Giles, Carbondale, Pa.
GM—Geo. E. Giles, Carbondale, Pa.
EM—W. L. Giles, Carbondale, Pa.
Birkett Hill Mine; Stripping; Clark Seam, 168 inches thick.
PO—Carbondale, Pa.; SP—Same; CTY—Lackawanna; RR—N. Y. C. & W.
S of H—Main and tail rope, elec. and steam locos. Track gauge 36 inches.
S of M—Hand.
PP—Power purchased.
EMP—12. Daily tonnage 60.
SIZES SHIPT.—Run of Mine.

BLACK CREEK COAL COMPANY

Out of business.

BLACK DIAMOND FUEL COMPANY.

General Office, 426 Connell Bldg., Scranton, Pa.
PR—W. Gordon Thomas, 755 N. Main Ave., Scranton, Pa.
TR—W. A. Davis, 803 Connell Bldg., Scranton, Pa.
GM—W. Gordon Thomas, 755 N. Main Ave., Scranton, Pa.
GS—W. Gordon Thomas, 755 N. Main Ave., Scranton, Pa.
Black Diamond Washery Mine.
PO—Scranton, Pa.; SP—Minooka and Taylor, Pa.; CTY—Lackawanna; RR Delaware & Hudson.
MS—Emery Smith, Scranton, Pa.
PP—80 H. P. fire tube boiler, transformers 1100 to 220 volts A. C.
PREP. EQUIPT.—Shaker Screens, Washeries.

BLACK HEATH COAL COMPANY

General Office, Minersville, Pa.
OPERATOR—Jas. G. Scott, Minersville, Pa.
Black Heath Mine; Drift; Skidmore Seam, 72 in. thick.
PO—Minersville, Pa.; SP—Same; CTY—Schuylkill; RR—Phila. & Reading.
S of H—Mules.
S of M—Hand.
Daily tonnage 30.
PREP. EQUIPT.—Rolls and Screen.

BLANCHARD, C. N.

General Office, Press Bldg., Ringhamton, N. Y.
GM—C. N. Blanchard, Ringhamton, N. Y.

GS—N. G. Parke, Pottsville, Pa.
PA—N. G. Parke, Pottsville, Pa.
CE—N. G. Parke, Pottsville, Pa.
SA—Hartmann-Blanchard, Ringhamton, N. Y.

Silverton Mine; Drift; S. Salem and Tunnel Seams, 84-96 in. thick.
PO—Box 23, Pottsville, Pa.; SP—Minersville, Pa.; CTY—Schuylkill; RR—P. & R.
S of H—Mules. Track gauge 36 in.
S of M—Hand and elec. locos.
PP—Power purchased. Transformer 2200 volts A. C., 3 fire tube boilers, 200 H. P.
EMP—22.
SIZES SHIPT.—Pea, Nut, Egg, Lump, Stone.
PREP. EQUIPT.—Shaker Screens, Picking Tables, Washeries.
PREP. EQUIPT.—Jigs.

BOLAND, JOHN J. & CO.

General Office, Dunmore, Pa.
PR—John J. Boland, Dunmore, Pa.
GM—John J. Boland, Dunmore, Pa.
GS—John J. Boland, Dunmore, Pa.
Bolands Mine; Slope; Dunmore Seam, 54 inches thick.
PO—Dunmore, Pa.; SP—Same; CTY—Lackawanna; RR—Erie.
S of H—Mules. Track gauge 28 inches.
S of M—Hand, comp. air punchers.
PP—Power purchased. Transformer 220 volts A. C.
EMP—28. Last years tonnage 8,300.
SIZES SHIPT.—Pea, Nut, Egg.
PREP. EQUIPT.—Revolving and Shaker Screens, Washeries.

BRIGHT COAL COMPANY.

Out of business.

BUCK RIDGE COAL MINING CO.

General Office, 152 W. 42 St., New York, N. Y.
PR—W. J. Fallon, New York, N. Y.
TR—H. W. Harvey, New York, N. Y.
PA—John Conway, Shamokin, Pa.
EM—Baird Hallerstadt, Pottsville, Pa.
SA—Oliver A. Van Ess, 152 W. 42 St., New York, N. Y.

Buck Ridge Mine; Slope, 84 inches thick.
PO—Ranshaw, Pa.; SP—Shamokin, Pa.; CTY—Northumberland; RR—Penna. P. & R.
MS—John Conway Shamokin, Pa.
S of H—Mules, 2 steam locos. Track gauge 36 inches.
S of M—Hand.
PP—150 H. P. water tube boilers, 12 pumps.
EMP—375. Last years tonnage, 155,000.
SIZES SHIPT.—Pea, Nut, Egg, Lump, Stove, Buckwheat, Rice, Barley.
PREP. EQUIPT.—Revolving and Shaker Screens.

BUCK RUN COAL COMPANY.

General Office, Minersville, Pa.
PR—Jas. B. Neale, Minersville, Pa.
Asst. to Pres.—Jas. H. Peirce, Traciville, Pa.
VP—S. B. Thorne, New York, N. Y.
TR—Jas. H. Collier, Minersville, Pa.
PA—Ray McFadden, Minersville, Pa.
EM—Phil Russell, Minersville, Pa.
EE—P. A. McCarron, Minersville, Pa.
SCO—Peoples Store Co., Buck Run, Pa.; Buyer, Jas. Martin, Pottsville, Pa.
SA—Thorne, Neale & Co., New York, N. Y.

Buck Run Mine; Slope; Buck Mountain, Crosby, Daniel, Billy, Seven-Foot 84, 130, 120, 48, 36.
PO—Minersville, Pa. SP—Rohrersville, Pa.; CTY—Schuylkill; RR—P. & R.
MS—Geo. Conway, Minersville, Pa.
S of H—Mules and trolley pole type locs.
S of M—Hand.
S of M—Hand.
PP—Power purchased, transformer 2200-550 volts A. C., 250 volts D. C., 9 fire tube boilers, 1500 H. P., 2 air compressors, 10 pumps.
EMP—480. Last fiscal year output, 249,631 tons.
SIZES SHIPT.—Broken, Egg, Stove, Pea, Buckwheat, Rice, Barley.
METHOD OF PREP.—Wet.

BULLS HEAD COAL COMPANY

See Mid City Coal Co.

BUTCHER CREEK COAL CO.

General Office, St. Clair, Pa.
TR—L. J. Whims, St. Clair, Pa.
GM—L. J. Whims, St. Clair, Pa.
PA—L. J. Whims, " "
SCO—L. J. Whims & Co., Buyer, J. J. Whims, St. Clair, Pa.
SA—L. J. Whims & Co., St. Clair, Pa.
Laurel Run Mine, Slope and Stripping "Juggler" Seam, 30 ft. thick.
PO—Broad Mountain, Pa.; SP—St. Clair and Minersville, Pa.; CTY—Schuylkill; RR—P. & R., Mine Hill Br.
S of H—Mules and rope. Track gauge, 30 in.
S of M—Hand.
PP—5 return tubular boilers, total 500 H. P., gen. units, 440 volts A. C., 10 engines, 4 pumps.
EMP—56. Last fiscal year output, 12,000 tons.
SIZES SHIPT.—Run of Mine, Pea, Nut, Egg.
PREP. EQUIPT.—Jigs.

CAMBRIDGE COAL CO.

General Office, Shenandoah, Pa.
PR—H. H. Lineaweaver, West End Trust Bldg., Philadelphia, Pa.
TR—H. B. James, Shenandoah, Pa.
GM—H. B. James, Shenandoah, Pa.
GS—H. B. James, Shenandoah, Pa.
PA—H. B. James, Shenandoah, Pa.
Sales Agent, H. H. Lineaweaver & Co., Philadelphia, Pa.

Cambridge Mine; Drift; Primrose; Holms Seam, 3 to 12 ft. thick.
PO—Shenandoah, Pa. SP—Same. CTY—Schuylkill. RR—P. & R.
OF—Fred Herman, Box 67, Shenandoah, Pa.
S of H—Mules and 1 steam loco. Track gauge 42 in.
S of M—Hand.
PP—4 fire tube boilers, 550 H. P., 2 pumps.
EMP—50. Last years tonnage 20,000.
SIZES SHIPT.—Stove, Nut, Pea, Buckwheat, Rice, Barley.
METHOD OF PREP.—Wet.
PREP. EQUIPT.—Jigs, Spirals.

CARBON CREEK COAL COMPANY

Out of business.

CARBONDALE COAL MINING CO.

PR—John J. Boland, Carbondale, Pa.
TR—H. P. Melhot, Scranton, Pa.
GM—John J. Boland, Carbondale, Pa.
GS—John J. Boland, " "
PA—John J. Boland, " "
Polands Mine, Slope, Dunmore, Clark Seam 3 to 16 ft. thick.
PO—Carbondale, Pa.; SP—Same; CTY—Lackawanna; RR—D. & H.
MS—John Magnor, Carbondale, Pa.
S of H—Mules.
S of M—Hand.
PP—3 Return tubular boilers, 1 pump. Old information.

CARNEY & BROWN COAL CO.

PR—John Carney, Dunmore, Pa.
GM—John Carney, " "
PA—John J. Brown, " "
TR—Margaret Brown, " "
GS—John J. Brown, " "
DIV. SUPT.—Thos. Mullen, " "
DIV. SUPT.—A. F. Gillespie, Olyphant, Pa.
DIV. SUPT.—M. Halpin, Dunmore, Pa.

Carney & Brown Mine; Shaft & Slope; Clark Seam, 42 to 72 inches thick.
PO—Dunmore, Pa.; SP—Same; CTY—Lackawanna; RR—Erie, Winton Br.
IF—A. F. Gillespie, Olyphant, Pa.
OF—John J. Brown, Dunmore, Pa.
S of H—Rope and mules. Track gauge 28 in.
S of M—Hand.
PP—3 return tubular boilers, total 360 H. P.
EMP—77. Last years tonnage, 20,370.
SIZES SHIPT.—Broken, Pea, Nut, Stove, Barley.
PREP. EQUIPT.—Wet and Dry, Jigs, Cradles, Pickers.

CENTRAL COAL COMPANY.

General Office, 312 Cal Exchange Bldg., Wilkes-Barre, Pa.
PR—V. M. Noel, Montreal, Can.
VP—H. H. N. L. Wilkes-Barre, Pa.
TR—V. M. Noel, Montreal, Can.

(Continued on Next Page)

Central Coal Co.—Cont.

GM—Henry H. No. 1, Wilkes-Barre, Pa.
GS—Wm. J. Startzell, Wilkes-Barre, Pa.
PA—J. G. Lewis, Wilkes-Barre, Pa.
EM—Margaret J. Jones, Wilkes-Barre, Pa.

Wyoming Colliery; Drift and Slope; Red Ash 1 1/2 mi. Red Ash Bottom, Baltimore, Md. Seams, 48, 48, 96, 60 in. thick.

PO—Wilkes-Barre, Pa.; SP—Hudson, Pa.; CTY—Luzerne; RR—Delaware & Hudson.

IF—Andrew Liptock, Hudson, Pa.
OF—Frederick Smith, Laffin, Pa.
S of H—Mules, male and tail rope and steam loco. Track gage, 36 in.
S of M—Comp. air punchers.
PP—Power purchased, 440 volts A. C., 1 air compressor, 5 pumps.
EMP—1600. Last fiscal year output 67,000 tons.

SIZES SHIPT—Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley.
METHOD OF PREP—Wet.
PREP. EQUIPT—Jigs, Tables, Gravity Pickers.

CLINTON FALLS COAL CO.

General Office, Scranton, Pa.
PR—D. P. Pace, 26 Center St., Pottsville, Pa.

TR—J. A. Pace, Pottsville, Pa.
GM—M. A. Pace, Pottsville, Pa.
GS—D. P. Pace, 26 Center St., Pottsville, Pa.
PA—John Pace, Pottsville, Pa.
MM—Jas. Hearley, Forest City, Pa.
EM—Joseph Cleary, Forest City, Pa.

Clinton Falls Mine; Drift; Dunmore Nos. 1, 2 and 3 Seams, 36 to 80 in. thick.

PO—Forest City, Pa.; SP—Same; CTY—Susquehanna; RR—N. Y. O. & W.
MS—Joseph J. Cleary, Forest City, Pa.
S of H—1 steam loco., mules and rope. Track gage 30 in.
S of M—Hand.
PP—1 water tube boiler, 150 H. P., 3 phase. Purchase power.

COLONIAL COLLIERY COMPANY

General Office, North American Bldg., Philadelphia, Pa.

PR—Perry C. Madeira, Philadelphia, Pa.
VP—Robert C. Hill, New York, N. Y.
VP—Louis C. Madeira, New York, N. Y.
TR—John Gilbert, 900 North American Bldg., Philadelphia, Pa.
GM—E. H. Suender, Frackville, Pa.
GS—T. R. Jones, Frackville, Pa.
PA—Emlyn Evans, Frackville, Pa.
EM—Thomas J. Lewis, Centerville, Pa.
EE—W. H. Lesser, Frackville, Pa.
SCO—Natalia Store Co. Buyer, Harry Moss, Natalie, Pa.
SA—Madeira, Hill & Co., North American Bldg., Philadelphia, Pa.

Natalie Mine; Slope; Lykens, Buck Mtn., Nos. 5 and No. 6 Seams.

PO—Natalie, Pa.; SP—Same; CTY—Northumberland; RR—Penna. & Phila. & Reading, Natalie Br.
MS—George J. Jones, Mt. Carmel, Pa.
IF—Morton Lamp, Natalie, Pa.
OF—Abe Cahoon, Natalie, Pa.
S of H—Mules, trolley pole type, gasoline and steam locos. Track gage, 36 in.
S of M—Hand.
PP—Power purchased, 440 volts A. C., 250 volts D. C., 4 water tube and 4 fire tube boilers, total 1700 H. P., 4 air compressors, 14 pumps.
EMP—556. Last years tonnage 244,138.
SIZES SHIPT—Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley, Culum.
METHOD OF PREP—Wet and Dry.
PREP. EQUIPT—Jigs, Spirals.

CONLON JOHN

General Office, Hudson, Pa.
PR—John Conlon, Hudson, Pa.
PA—W. R. Conlon, Hudson, Pa.
GM—W. R. Conlon, Hudson, Pa.

Conlon Mine; Slope; Five Foot, Bennett, Cooper Seams, 60-120 in. thick.

PO—Hudson (Parsons, Pa.), Pa.; SP—Hudson, Pa.; CTY—Luzerne; RR—D. & H.
MS—John Conlon, Hudson, Pa.
S of H—Mules and rope. Track gage, 36 in.
S of M—1 comp. air puncher.
PP—Power purchased, 440 volts A. C. EMP—90. Daily tonnage 200.
SIZES SHIPT—Pea, Nut, Egg, Broken, Stove, Buckwheat, Rice, Barley.
METHOD OF PREP—Wet.
PREP. EQUIPT—Jigs.

CONNELL ANTHRACITE MINING CO.

General Office, Mildred, Pa.
PR—W. L. Connell, Scranton, Pa.
TR—J. S. McNulty, " "
GM—W. L. Connell, " "
PA—H. A. Connell, Scranton, Pa.
EM—Carl S. Motiska, Scranton, Pa.
MM—John McDonald, Mildred, Pa.

Connell Mine, Drift. Seams 3 to 8 ft. thick.

PO—Mildred, Pa.; SP—Same; CTY—Sullivan; RR—L. V., Bowman Creek Branch.
MS—T. V. McLaughlin, Mildred, Pa.
S of H—12 Elec. loco.; track gage 36 in.
S of M—14 elec. machs.
PP—7 water tube boilers, total 1,800 H. P., 10 gen. units, 250 volts D. C., 2 pumps.
EMP—485. Last years tonnage 208,508.
SIZES SHIPT—Pea, Nut, Egg, Lump.

CRANBERRY CREEK COAL COMPANY

General Office, 437 Chestnut St., Philadelphia, Pa.
PR—S. B. Warriner, Philadelphia, Pa.
TR—Henry H. Pease, Philadelphia, Pa.
GM—J. E. Warriner, Hazleton, Pa.
GS—A. L. Walbridge, Hazleton, Pa.
PA—E. Hughes, Philadelphia, Pa.
EM—A. H. Vannaucker, Hazleton, Pa.
EE—T. D. Stockdale, Hazleton, Pa.
SUPT OF PREP—E. E. Finn, Hazleton, Pa.
SCO—Harwood Store Company, Hazleton, Pa.; Buyer, Chas. Williams, Harwood, Pa.
SA—Lehigh Coal & Navigation Co., Philadelphia, Pa.

Cranberry Colliery; Shaft and Slope; Mammoth, Wharton, Pardoe, Parlor, Gamma and Buck Mountain Seams, 108 inches thick.

PO—Hazleton, Pa.; SP—Same; CTY—Luzerne; RR—L. V., Penna., Mahanoy & Hazleton Div.
IF—Geo. Gardiner, Hazleton, Pa.
OF—Conrad Hugo, Hazleton, Pa.
S of H—124 mules, 4 trolley pole type, 8 storage battery and 14 steam locos. Track gage, 42 in.
S of M—Hand.
PP—Power purchased, 440 volts A. C., 260 volts D. C., water tube boilers, 2450 H. P., 2 air compressors, 2 pumps.
EMP—1278. Last years tonnage 749,003.
MNG. DIST.—Hazleton Basin, Eastern Middle Coal Field.
SIZES SHIPT—Broken, Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley.
PREP. EQUIPT—Jigs, Tables.

DARKWATER COAL COMPANY.

General Office, Minersville, Pa.
PR—Jas. B. Neale, Minersville, Pa.
ASST TO PRES—Jas. H. Pierce, Frackville, Pa.
VP—S. B. Thorne, New York, N. Y.
TR—Jas. H. Collier, Minersville, Pa.
PA—R. J. McFadden, Minersville, Pa.
EM—Phil Russell, Minersville, Pa.
EE—P. A. McCarron, Minersville, Pa.
SCO—Peoples Store, Minersville, Pa.; Buyer, Jos. Martin, Pottsville, Pa.
SA—Thorne, Neale & Co., New York, N. Y.

Darkwater Mine; Slope and Stripping; Crosby, Mammoth, Skidmore, Sevenfoot, Buck Mtn., 192, 30, 48, 36, 72 in. thick.

PO—Minersville, Pa.; SP—Darkwater, Pa.; CTY—Schuylkill; RR—Penna.
MS—H. B. Hay, Minersville, Pa.
IF—James Parry, St. Clair, Pa.
OF—Arthur Davis, St. Clair, Pa.
S of H—Mules, 2 storage battery locos. Track gage, 36 in.
S of M—Hand.
PP—Power purchased, transformer 2300 volts A. C., 250 volts D. C., 4 fire tube boilers, 1200 H. P., 1 air compressor, 9 pumps.
EMP—250. Last fiscal year output, 160,487 tons.
SIZES SHIPT—Broken, Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley.
PREP. EQUIPT—Jigs, Spirals, Box Car Leaders, Tables, Gravity Screens.

DELAWARE, LACKAWANNA & WESTERN RAILROAD CO.

Coal Mining Department.
General Office, 90 West St., New York, N. Y.
PR—W. H. Truesdale, New York, N. Y.
VP & MGR, Coal Mining Dept.—W. W. Ingalls, Scranton, Pa.
ASST to VP & MGR, Coal Mining Dept.—Bradford Samson, Scranton, Pa.
VP & GEN COUNSEL—Wm. S. Jenney, New York, N. Y.
SECY—W. G. Van De Water, New York, N. Y.
TR—W. G. Van De Water, New York, N. Y.
ASST. SECY—TR—J. G. Enderlin, New York, N. Y.
GS—S. D. Dimmick, Scranton, Pa.
GENL. AUDITOR—R. B. Ferguson, New York, N. Y.
GENL. ATTORNEY—Daniel R. Reese, Scranton, Pa.
CHIEF ENGR—N. N. Nichols, Scranton, Pa.
PA—J. N. Shaw, Scranton, Pa.
EE—H. M. Warren, Scranton, Pa.
STOREKEEPER—Thomas Bevan, Scranton, Pa.

Archbald Colliery.
PO—Scranton, Pa.; SP—Same; CTY—Lackawanna; RR—D. L. & W.
MS—G. V. O'Hara, Scranton, Pa.
S of H—16 electric locos., mules and rope.
S of M—Hand and 2 electric machs.
PP—4 water tube boilers, total 1212 H. P., 1 gen. unit, 500 K. W., 275 volts D. C. rotary.
EMP—716.

Avondale Colliery.
PO—Chamney, Pa.; SP—Plymouth, Pa.; CTY—Luzerne; RR—D. L. & W.
MS—H. N. Smith, West Nanticoke, Pa.
S of H—2 electric locos.
PP—10 boilers, total 1695 H. P., 1 gen. unit, 300 K. W., 275-550 volts D. C. rotary.
EMP—313.

Bellevue Colliery.
PO—Scranton, Pa.; SP—Same; CTY—Lackawanna; RR—D. L. & W.
MS—John R. James, Scranton, Pa.
S of H—18 electric locos.
S of M—11 electric machs.
PP—2 300 K. W. rotary and 1 300 K. W. M. G. sets, 275 volts D. C., 7 pumps.
EMP—1,060.

Bliss Colliery.
PO—West Nanticoke, Pa.; SP—Same; CTY—Luzerne; RR—D. L. & W.
MS—R. G. Love, West Nanticoke, Pa.
S of H—16 electric and 1 steam locos.
PP—4 water tube boilers, total 2000 H. P., 1—300 K. W., 1—200 K. W. rotary converters, M. G. Sets, 550 volts D. C., 3 pumps.
EMP—858.

Cayuga Colliery.
PO—Scranton, Pa.; SP—Same; CTY—Lackawanna; RR—D. L. & W.
MS—David Girvan, Scranton, Pa.
S of H—9 electric locos.
S of M—5 electric machs.
PP—6 water tube boilers, total 1500 H. P., 1—300 K. W. rotary converters, 275 volts D. C., 2 pumps.
EMP—521.

Diamond Colliery.
PO—Scranton, Pa.; SP—Same; CTY—Lackawanna; RR—D. L. & W.
MS—T. L. Oliver, Scranton, Pa.
S of H—18 electric locos.
S of M—5 electric machs.
PP—8—250 H. P. water tube boilers and 5 loco. type boilers, total 2675 H. P., 1—300 K. W. rotary converter, 275 volts D. C., 7 pumps.
EMP—1,100.

Dodge Colliery.
PO—Scranton, Pa.; SP—Same; CTY—Lackawanna; RR—D. L. & W.
MS—J. R. James, Scranton, Pa.
S of H—15 electric locos.
S of M—6 electric machs.
PP—10 water tube boilers, total 3130 H. P., 1—500 K. W. rotary converters, 275 volts D. C., 3 pumps.
EMP—800.

Hallstead Colliery.
PO—Puryea, Pa.; SP—Same; CTY—Luzerne; RR—D. L. & W.
MS—H. E. Harris, Scranton, Pa.
PP—11 loco. type tubular boilers, total 1965 H. P., 1—20 K. W. M. G. set, 125 volts D. C., 4 pumps.
EMP—287.

Hyde Park Colliery.
PO—Scranton, Pa.; SP—Same; CTY—Lackawanna; RR—D. L. & W.
MS—G. V. O'Hara, Scranton, Pa.
S of H—18 electric locos.
S of M—10 electric machs.
PP—1 500 K. W. rotary, 275 volts D. C.
EMP—632.

Loomis Colliery.
PO—West Nanticoke, Pa.; SP—Same; CTY—Luzerne; RR—D. L. & W.
MS—H. N. Smith, West Nanticoke, Pa.
S of H—20 electric locos.
PP—4 water tube boilers, total 1600 H. P., 1—500 K. W. rotary converter, 275 volts D. C., 2 pumps.
EMP—1,327.

National Colliery.
PO—Scranton, Pa.; SP—Same; CTY—Luzerne; RR—D. L. & W.
MS—H. E. Harris, Scranton, Pa.
S of H—14 electric locos.
S of M—2 electric machs.
PP—4 water tube boilers, total 1212 H. P., 1—200 K. W. and 1—150 K. W. rotary, 275 volts D. C., 4 pumps.
EMP—515.

Pettebone Colliery.
PO—Luzerne, Pa.; SP—Same; CTY—Luzerne; RR—D. L. & W.
MS—J. L. Reynolds, Luzerne, Pa.
S of H—8 electric locos.

PP—15 loco. type tubular boilers, total 2025 H. P., 1—200 K. W. and 1—150 K. W. rotaries, 275 volts D. C., 1 pump, central power plant.
EMP—557.

Pyne Colliery.
PO—Taylor, Pa.; SP—Same; CTY—Lackawanna; RR—D. L. & W.
MS—Frank A. Gleason, Taylor, Pa.
S of H—18 electric locos.
S of M—3 electric machs.
PP—5 water tube boilers, total 1515 H. P., 1—300 K. W. rotary, 275 volts D. C., 2 pumps.
EMP—686.

Sloan Colliery.
PO—Scranton, Pa.; SP—Same; CTY—Lackawanna; RR—D. L. & W.
MS—G. V. O'Hara, Scranton, Pa.
S of H—20 electric locos.
S of M—4 electric machs.
PP—1 200 and 1 300 K. W. rotaries, 275 volts D. C., 5 pumps.
EMP—811.

Storrs Colliery.
PO—Scranton, Pa.; SP—Same; CTY—Lackawanna; RR—D. L. & W.
MS—David Girvan, Scranton, Pa.
S of H—27 electric locos.
S of M—10 electric machs.
PP—8—300 H. P. water tube boilers and 6—135 H. P. loco. type tubular boilers, total 3210 H. P., 3—300 K. W. rotaries, 275 volts D. C., 4 pumps.
EMP—1,778.

Taylor Colliery.
PO—Taylor, Pa.; SP—Same; CTY—Lackawanna; RR—D. L. & W.
MS—Frank A. Gleason, Taylor, Pa.
S of H—22 electric locos.
S of M—4 electric machs.
PP—10 loco. type boilers, total 1300 H. P., 1—500 K. W. M. G. set, 275 volts D. C., 3 pumps.
EMP—723.

Truesdale Colliery.
PO—West Nanticoke, Pa.; SP—Same; CTY—Luzerne; RR—D. L. & W.
MS—P. H. Devers, West Nanticoke, Pa.
S of H—48 electric and 1 steam loco.
PP—6 water tube boilers, total 1818 H. P., 1—500 K. W., 1—200 K. W. rotary, 1—750 K. W. M. G. Sets, 275 volts D. C., 10 pumps.
EMP—1,398.

Woodward Colliery.
PO—Kingston, Pa.; SP—Same; CTY—Luzerne; RR—D. L. & W.
MS—W. F. Powell, Kingston, Pa.
S of H—30 electric locos.
PP—8—313 H. P. water tube and 3 loco. type boilers, total 2909 H. P., 2—300 K. W., 2—200 K. W. rotaries, 1—300 K. W. M. G. Sets, 3 pumps.
EMP—1,539.

Diamond Washery Abandoned.

Hampton Power Plant.
PP—15—313 H. P. water tube boilers, 6—630 H. P. water tube boilers, total 8481 H. P., 4 gen. units, 4100 volts A. C., 3 phase 60 cycles.

Nanticoke Power Plant.
PP—10 water tube boilers, total 3030 H. P., 7 gen. units, 4100 volts A. C., 3 phase 60 cycles.

DENNINGTON COAL COMPANY, THE

General Office, Scranton, Pa.
PR—J. J. Jermyn, Scranton, Pa.
VP—Wm. Jermyn, Scranton, Pa.
TR—Geo. E. Jermyn, Scranton, Pa.
GM—E. B. Jermyn, Scranton, Pa.
PA—John Corcoran, Scranton, Pa.
EM—Leon White, Scranton, Pa.
SCO—Reedham Store Co., Old Forge, Pa.
Buyer, J. P. Corcoran, Scranton, Pa.
SA—Dennington Coal Co., Scranton, Pa.

Anthracite Washery.
PP—Purchase power.
Daily tonnage 400.

DODSON, CHAS. M., & COMPANY.

General Office, 528 No. New St., Bethlehem, Pa.
PR—A. C. Dodson, Bethlehem, Pa.
VP—T. M. Dodson, Bethlehem, Pa.
GM—B. H. Stockett, Shenandoah, Pa.
GS—J. D. Lewis, Beaver Brook, Pa.
PA—J. B. Connell, Bethlehem, Pa.
CE—W. A. Thomas, Board of Trade Bldg., Scranton, Pa.
EM—S. H. Long, Beaver Brook, Pa.
EE—A. Hinkle, Beaver Brook, Pa.
SCO—Address the company—Buyer, J. B. Connell, Bethlehem, Pa.
Sales Agency, Weston Dodson & Co., Inc., Bethlehem, Pa.

(Continued on Next Page)

GROVE HILL COAL CO.
General Office, Peckville, Pa.
PR—R. Bradley, Peckville, Pa.
GM—R. Bradley, Peckville, Pa.
PA—E. H. Bradley, Peckville, Pa.
SA—E. H. Bradley, Peckville, Pa.

HARWOOD COAL CO.
 General Office, Adams, Pa.
 PR—P. R. S. & Sons, Adams, Pa.
 VP—J. S. Wiley, Jr., Adams, Pa.
 TR—C. M. W. Wiley, Adams, Pa.
 GM—J. B. Wiley, Hazleton, Pa.
 CS—F. J. Wiley, Hazleton, Pa.
 P—F. Hughes, Philadelphia, Pa.
 CH—A. H. Vannacker, Hazleton, Pa.
 ML—R. E. Harlow, Lansford, Pa.
 FE—W. M. Kennedy, Lansford, Pa.
 SH—Harwood Store Co., Buyer, Chambersburg, Pa.
 SA—R. Williams, Harwood Mines, Philadelphia, Pa.

COAL CATALOG

Harwood Coal Co.—Cont

Harwood Mine; Shaft; H. C. 1, 100-1, 100-2, 100-3, 100-4, 100-5, 100-6, 100-7, 100-8, 100-9, 100-10, 100-11, 100-12, 100-13, 100-14, 100-15, 100-16, 100-17, 100-18, 100-19, 100-20, 100-21, 100-22, 100-23, 100-24, 100-25, 100-26, 100-27, 100-28, 100-29, 100-30, 100-31, 100-32, 100-33, 100-34, 100-35, 100-36, 100-37, 100-38, 100-39, 100-40, 100-41, 100-42, 100-43, 100-44, 100-45, 100-46, 100-47, 100-48, 100-49, 100-50, 100-51, 100-52, 100-53, 100-54, 100-55, 100-56, 100-57, 100-58, 100-59, 100-60, 100-61, 100-62, 100-63, 100-64, 100-65, 100-66, 100-67, 100-68, 100-69, 100-70, 100-71, 100-72, 100-73, 100-74, 100-75, 100-76, 100-77, 100-78, 100-79, 100-80, 100-81, 100-82, 100-83, 100-84, 100-85, 100-86, 100-87, 100-88, 100-89, 100-90, 100-91, 100-92, 100-93, 100-94, 100-95, 100-96, 100-97, 100-98, 100-99, 100-100, 100-101, 100-102, 100-103, 100-104, 100-105, 100-106, 100-107, 100-108, 100-109, 100-110, 100-111, 100-112, 100-113, 100-114, 100-115, 100-116, 100-117, 100-118, 100-119, 100-120, 100-121, 100-122, 100-123, 100-124, 100-125, 100-126, 100-127, 100-128, 100-129, 100-130, 100-131, 100-132, 100-133, 100-134, 100-135, 100-136, 100-137, 100-138, 100-139, 100-140, 100-141, 100-142, 100-143, 100-144, 100-145, 100-146, 100-147, 100-148, 100-149, 100-150, 100-151, 100-152, 100-153, 100-154, 100-155, 100-156, 100-157, 100-158, 100-159, 100-160, 100-161, 100-162, 100-163, 100-164, 100-165, 100-166, 100-167, 100-168, 100-169, 100-170, 100-171, 100-172, 100-173, 100-174, 100-175, 100-176, 100-177, 100-178, 100-179, 100-180, 100-181, 100-182, 100-183, 100-184, 100-185, 100-186, 100-187, 100-188, 100-189, 100-190, 100-191, 100-192, 100-193, 100-194, 100-195, 100-196, 100-197, 100-198, 100-199, 100-200, 100-201, 100-202, 100-203, 100-204, 100-205, 100-206, 100-207, 100-208, 100-209, 100-210, 100-211, 100-212, 100-213, 100-214, 100-215, 100-216, 100-217, 100-218, 100-219, 100-220, 100-221, 100-222, 100-223, 100-224, 100-225, 100-226, 100-227, 100-228, 100-229, 100-230, 100-231, 100-232, 100-233, 100-234, 100-235, 100-236, 100-237, 100-238, 100-239, 100-240, 100-241, 100-242, 100-243, 100-244, 100-245, 100-246, 100-247, 100-248, 100-249, 100-250, 100-251, 100-252, 100-253, 100-254, 100-255, 100-256, 100-257, 100-258, 100-259, 100-260, 100-261, 100-262, 100-263, 100-264, 100-265, 100-266, 100-267, 100-268, 100-269, 100-270, 100-271, 100-272, 100-273, 100-274, 100-275, 100-276, 100-277, 100-278, 100-279, 100-280, 100-281, 100-282, 100-283, 100-284, 100-285, 100-286, 100-287, 100-288, 100-289, 100-290, 100-291, 100-292, 100-293, 100-294, 100-295, 100-296, 100-297, 100-298, 100-299, 100-300, 100-301, 100-302, 100-303, 100-304, 100-305, 100-306, 100-307, 100-308, 100-309, 100-310, 100-311, 100-312, 100-313, 100-314, 100-315, 100-316, 100-317, 100-318, 100-319, 100-320, 100-321, 100-322, 100-323, 100-324, 100-325, 100-326, 100-327, 100-328, 100-329, 100-330, 100-331, 100-332, 100-333, 100-334, 100-335, 100-336, 100-337, 100-338, 100-339, 100-340, 100-341, 100-342, 100-343, 100-344, 100-345, 100-346, 100-347, 100-348, 100-349, 100-350, 100-351, 100-352, 100-353, 100-354, 100-355, 100-356, 100-357, 100-358, 100-359, 100-360, 100-361, 100-362, 100-363, 100-364, 100-365, 100-366, 100-367, 100-368, 100-369, 100-370, 100-371, 100-372, 100-373, 100-374, 100-375, 100-376, 100-377, 100-378, 100-379, 100-380, 100-381, 100-382, 100-383, 100-384, 100-385, 100-386, 100-387, 100-388, 100-389, 100-390, 100-391, 100-392, 100-393, 100-394, 100-395, 100-396, 100-397, 100-398, 100-399, 100-400, 100-401, 100-402, 100-403, 100-404, 100-405, 100-406, 100-407, 100-408, 100-409, 100-410, 100-411, 100-412, 100-413, 100-414, 100-415, 100-416, 100-417, 100-418, 100-419, 100-420, 100-421, 100-422, 100-423, 100-424, 100-425, 100-426, 100-427, 100-428, 100-429, 100-430, 100-431, 100-432, 100-433, 100-434, 100-435, 100-436, 100-437, 100-438, 100-439, 100-440, 100-441, 100-442, 100-443, 100-444, 100-445, 100-446, 100-447, 100-448, 100-449, 100-450, 100-451, 100-452, 100-453, 100-454, 100-455, 100-456, 100-457, 100-458, 100-459, 100-460, 100-461, 100-462, 100-463, 100-464, 100-465, 100-466, 100-467, 100-468, 100-469, 100-470, 100-471, 100-472, 100-473, 100-474, 100-475, 100-476, 100-477, 100-478, 100-479, 100-480, 100-481, 100-482, 100-483, 100-484, 100-485, 100-486, 100-487, 100-488, 100-489, 100-490, 100-491, 100-492, 100-493, 100-494, 100-495, 100-496, 100-497, 100-498, 100-499, 100-500, 100-501, 100-502, 100-503, 100-504, 100-505, 100-506, 100-507, 100-508, 100-509, 100-510, 100-511, 100-512, 100-513, 100-514, 100-515, 100-516, 100-517, 100-518, 100-519, 100-520, 100-521, 100-522, 100-523, 100-524, 100-525, 100-526, 100-527, 100-528, 100-529, 100-530, 100-531, 100-532, 100-533, 100-534, 100-535, 100-536, 100-537, 100-538, 100-539, 100-540, 100-541, 100-542, 100-543, 100-544, 100-545, 100-546, 100-547, 100-548, 100-549, 100-550, 100-551, 100-552, 100-553, 100-554, 100-555, 100-556, 100-557, 100-558, 100-559, 100-560, 100-561, 100-562, 100-563, 100-564, 100-565, 100-566, 100-567, 100-568, 100-569, 100-570, 100-571, 100-572, 100-573, 100-574, 100-575, 100-576, 100-577, 100-578, 100-579, 100-580, 100-581, 100-582, 100-583, 100-584, 100-585, 100-586, 100-587, 100-588, 100-589, 100-590, 100-591, 100-592, 100-593, 100-594, 100-595, 100-596, 100-597, 100-598, 100-599, 100-600, 100-601, 100-602, 100-603, 100-604, 100-605, 100-606, 100-607, 100-608, 100-609, 100-610, 100-611, 100-612, 100-613, 100-614, 100-615, 100-616, 100-617, 100-618, 100-619, 100-620, 100-621, 100-622, 100-623, 100-624, 100-625, 100-626, 100-627, 100-628, 100-629, 100-630, 100-631, 100-632, 100-633, 100-634, 100-635, 100-636, 100-637, 100-638, 100-639, 100-640, 100-641, 100-642, 100-643, 100-644, 100-645, 100-646, 100-647, 100-648, 100-649, 100-650, 100-651, 100-652, 100-653, 100-654, 100-655, 100-656, 100-657, 100-658, 100-659, 100-660, 100-661, 100-662, 100-663, 100-664, 100-665, 100-666, 100-667, 100-668, 100-669, 100-670, 100-671, 100-672, 100-673, 100-674, 100-675, 100-676, 100-677, 100-678, 100-679, 100-680, 100-681, 100-682, 100-683, 100-684, 100-685, 100-686, 100-687, 100-688, 100-689, 100-690, 100-691, 100-692, 100-693, 100-694, 100-695, 100-696, 100-697, 100-698, 100-699, 100-700, 100-701, 100-702, 100-703, 100-704, 100-705, 100-706, 100-707, 100-708, 100-709, 100-710, 100-711, 100-712, 100-713, 100-714, 100-715, 100-716, 100-717, 100-718, 100-719, 100-720, 100-721, 100-722, 100-723, 100-724, 100-725, 100-726, 100-727, 100-728, 100-729, 100-730, 100-731, 100-732, 100-733, 100-734, 100-735, 100-736, 100-737, 100-738, 100-739, 100-740, 100-741, 100-742, 100-743, 100-744, 100-745, 100-746, 100-747, 100-748, 100-749, 100-750, 100-751, 100-752, 100-753, 100-754, 100-755, 100-756, 100-757, 100-758, 100-759, 100-760, 100-761, 100-762, 100-763, 100-764, 100-765, 100-766, 100-767, 100-768, 100-769, 100-770, 100-771, 100-772, 100-773, 100-774, 100-775, 100-776, 100-777, 100-778, 100-779, 100-780, 100-781, 100-782, 100-783, 100-784, 100-785, 100-786, 100-787, 100-788, 100-789, 100-790, 100-791, 100-792, 100-793, 100-794, 100-795, 100-796, 100-797, 100-798, 100-799, 100-800, 100-801, 100-802, 100-803, 100-804, 100-805, 100-806, 100-807, 100-808, 100-809, 100-810, 100-811, 100-812, 100-813, 100-814, 100-815, 100-816, 100-817, 100-818, 100-819, 100-820, 100-821, 100-822, 100-823, 100-824, 100-825, 100-826, 100-827, 100-828, 100-829, 100-830, 100-831, 100-832, 100-833, 100-834, 100-835, 100-836, 100-837, 100-838, 100-839, 100-840, 100-841, 100-842, 100-843, 100-844, 100-845, 100-846, 100-847, 100-848, 100-849, 100-850, 100-851, 100-852, 100-853, 100-854, 100-855, 100-856, 100-857, 100-858, 100-859, 100-860, 100-861, 100-862, 100-863, 100-864, 100-865, 100-866, 100-867, 100-868, 100-869, 100-870, 100-871, 100-872, 100-873, 100-874, 100-875, 100-876, 100-877, 100-878, 100-879, 100-880, 100-881, 100-882, 100-883, 100-884, 100-885, 100-886, 100-887, 100-888, 100-889, 100-890, 100-891, 100-892, 100-893, 100-894, 100-895, 100-896, 100-897, 100-898, 100-899, 100-900, 100-901, 100-902, 100-903, 100-904, 100-905, 100-906, 100-907, 100-908, 100-909, 100-910, 100-911, 100-912, 100-913, 100-914, 100-915, 100-916, 100-917, 100-918, 100-919, 100-920, 100-921, 100-922, 100-923, 100-924, 100-925, 100-926, 100-927, 100-928, 100-929, 100-930, 100-931, 100-932, 100-933, 100-934, 100-935, 100-936, 100-937, 100-938, 100-939, 100-940, 100-941, 100-942, 100-943, 100-944, 100-945, 100-946, 100-947, 100-948, 100-949, 100-950, 100-951, 100-952, 100-953, 100-954, 100-955, 100-956, 100-957, 100-958, 100-959, 100-960, 100-961, 100-962, 100-963, 100-964, 100-965, 100-966, 100-967, 100-968, 100-969, 100-970, 100-971, 100-972, 100-973, 100-974, 100-975, 100-976, 100-977, 100-978, 100-979, 100-980, 100-981, 100-982, 100-983, 100-984, 100-985, 100-986, 100-987, 100-988, 100-989, 100-990, 100-991, 100-992, 100-993, 100-994, 100-995, 100-996, 100-997, 100-998, 100-999, 100-1000.

HILLMAN COAL COMPANY

General Office, Miners Bank Bldg., Wilkes-Barre, Pa.

Hillman Mine; Shaft; Baltimore, Top Bottom Red Ash, Top and Bottom Ross Seams.

PO—Wilkes-Barre, Pa.; SP—Same; CTY—Luzerne; RR—L. V.

MS—Thos. Cartwright, Wilkes-Barre, Pa. S of M—Hand.

PP—4 boilers, total 1200 H. P., gen. mot. 250 volts D. C., 1 comp. and 3 pumps.

EMP—400. Last fiscal year output, 150,000 tons.

SIZES SHIPP—All Sizes.

METHOD OF PREP.—Wet.

Other Information.

HILLMAN COAL COMPANY

General Office, Rosak State Bank Bldg., Scranton, Pa.

PR—F. P. McLaughlin, Scranton, Pa.

VP—James A. Doherty, Scranton, Pa.

TR—E. A. Rosak, Scranton, Pa.

GM—F. P. McLaughlin, Scranton, Pa.

GS—J. P. Kohler, Gordon, Pa.

PA—F. P. McLaughlin, Scranton, Pa.

SA—McLaughlin Coal Co., Scranton, Pa.

Hillman Mine; Washery.

PO—Gordon, Pa.; SP—Same; CTY—Schuylkill; RR—Phila. & Reading.

S of M—Rope and team loco.

S of M—Hand.

PP—2 fire tube boilers, 250 H. P., 1 pump.

Daily tonnage 300.

PREP. EQUIPT—Washery.

HILLSIDE COAL AND IRON COMPANY

General Office, Smith and Mill Sts., Dunmore, Pa.

PR—W. A. May, Dunmore, Pa.

ASST TO PRES—F. H. Coughlin, Scranton, Pa.

VP—A. K. Morris, Box 553, Scranton, Pa.

TR—F. H. Wright, Dunmore, Pa.

GS—J. P. Jennings and W. P. Jennings, Dunmore, Pa.

PA—W. P. Collins, 50 Church St., New York, N. Y.

EM—C. W. F. Neuffer, Dunmore, Pa.

EA—W. E. Walshall, Dunmore, Pa.

SA—Williams and Peters, No. 1 Broad way, New York, N. Y.

Forest City Mine; Shaft and Slope; Clark and Dunmore Seams, 46 72 in. thick.

PO—Forest City, Pa.; SP—Same; CTY—Susquehanna; RR—Erie.

MS—Arthur Wrightson, Forest City, Pa.

S of H—21 elec. and 3 steam locos, gravity and mules.

S of M—Hand.

PP—23 return tubular boilers, 3,300 H. P., 1-625 KVA gen. unit, 440 volts A. C., 5-750 (total) K. W. gen. units, 250 volts D. C., 29 pumps.

EMP—928. Last years tonnage 439,690.

SIZES SHIPP—Egg, Stove, Chest, Pea, Buckheat, Rice, Barley.

PREP. EQUIPT—Roller, Shaking and Circular Screens, Jigs.

Erle Mine; Shaft; Grassy and New County Seams, 120-29 inches thick.

PO—Mayfield, Pa.; SP—Same; CTY—Lackawanna; RR—Erie.

MS—Arthur Wrightson, Forest City, Pa.

S of H—5 elec. locos, gravity and mules.

S of M—Hand.

PP—3 283 H. P. water tube boilers. Purchase power, 440 volts A. C., 250 volts D. C., 6 pumps.

EMP—222. Last years tonnage 72,215.

SIZES SHIPP—Run of Mine.

PREP. EQUIPT—Rolls, Shaking Screens, Jigs.

Consolidated Mine; Shaft and Slope; Clark and Red Ash Seams, 48-36 in. thick.

PO—Avoca, Pa.; SP—Same; CTY—Luzerne; RR—Erie.

MS—John B. Jones, Avoca, Pa.

S of H—3 steam locos, gravity and mules.

S of M—Hand.

PP—9 return tubular boilers, 900 H. P.

EMP—334. Last years tonnage 121,861.

SIZES SHIPP—Egg, Stove, Chest, Pea, Buckheat, Rice, Barley.

Butler Mine; Shaft; Slope; Pittston, Marcy, Red Ash Seams, 120-3

Inter-City Fuel Co.—Cont.

Washery Mine.
PO—Plymouth, Pa.; SP—Same; CTY—Luzerne; RR—C. R. R. N. J.; D. L. & W.
PP—Power purchased.
EMP—15.
SIZES SHIPT—Stove, Chestnut, Pea, Buck, Rice, Barley.
NOTE—Formerly operated by the Plymouth Company, Inc.

Wolf Creek Washery.
PO—Minersville, Pa.; SP—Same; CTY—Schuylkill; RR—P. & R.
PP—Power purchased.
EMP—48.
SIZES SHIPT—Chestnut, Pea, Buck, Rice and Barley.

JEDDO-HIGHLAND COAL CO.

General Office, Jeddo, Pa.
PR—John Markle, Jeddo, Pa.
VP—A. B. Jessup, Jeddo, Pa.
TR—W. W. Hindmarch, Jeddo, Pa.
GM—A. B. Jessup, Jeddo, Pa.
ASST GM—C. A. Garner, Jeddo, Pa.
PA—T. C. Smith, Jeddo, Pa.
EM—A. D. Macfarlane, Jeddo, Pa.
ME—Jacob Kienberger, Jeddo, Pa.
EE—W. Biesel, Jeddo, Pa.
DS—Jacob Stehdel, Jeddo, Pa.
DS—James Kinslaw, Jeddo, Pa.
DS—Patrick Marley, Jeddo, Pa.
SCO—Jeddo Supply Co.; Buyer, Jno. K. Ellis, Jeddo, Pa.

Jeddo No. 7 Mine; Slope and Stripping, Primrose, Mammoth and Wharton Seams, 66, 288, 96 in. thick.
PO—Harleigh, Pa.; SP—Jeddo, Pa.; CTY—Luzerne; RR—L. V., Ebervale Branch.
IF—James Thomas, Harleigh, Pa.
OF—William Buck, Harleigh, Pa.
S of H—16 mules and 4 steam locos. Track gage 56½ in.
S of M—Hand.
PP—Power purchased, 2 Helme water tube boilers, total 1000 H. P., 8 pumps.
EMP—284. Last years tonnage 241,616.
SIZES SHIPT—Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley.
METHOD OF PREP.—Wet.
PREP. EQUIPT—Jigs, Spirals, Tables, Cones.

Jeddo No. 4 and Ebervale Mines; Slope, Shaft and Stripping; Orchard, Primrose, Mammoth, Wharton, Buck Mtn., 120, 36, 364, 96 in. thick.
PO—Jeddo, Pa.; SP—Same. CTY—Luzerne; RR—L. V., Ebervale Branch.
IF—James Connors, Jeddo, Pa.
IF—Anthony Carlis, Ebervale, Pa.
IF—John Brannigan, Ebervale, Pa.
OF—Jas. Quigley, Jeddo, Pa.
S of H—40 mules, 10 trolley pole type, 18 steam and 1 elec. loco. Track gage 56½ in.
S of M—Hand.
PP—Power purchased, 10 Babcock & Wilcox water tube boilers, total 2800 H. P., 5 air compressors, 275 volts D. C., 14 pumps.
EMP—854. Last years tonnage 451,143.
SIZES SHIPT—Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley.
METHOD OF PREP.—Wet.
PREP. EQUIPT—Jigs, Spirals, Tables.

Highland Nos. 2 and 6 Mine; Slope and Stripping, Gamma, Buck Mountain and Alpha Seams, 36, 144 & 148 in. thick.
PO—Jeddo, Pa.; SP—Same; CTY—Luzerne; RR—L. V., Highland Br.
IF—James Lawson, Jeddo, Pa.
IF—Thos. Newton, Jeddo, Pa.
OF—Bernard Phillips, Jeddo, Pa.
OF—Harry I. Evans, Jeddo, Pa.
S of H—Mules, 3 elec., 2 oil and 16 steam locos. Track gage 56½ in.
S of M—Hand.
PP—6 Helme and 2 Babcock & Wilcox water tube boilers, total 3600 H. P., 2 air compressors, 2 gen. units, 275 volts D. C., 21 pumps.
EMP—415. Last years tonnage 245,672.
SIZES SHIPT—Broken, Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley.
METHOD OF PREP.—Wet.
PREP. EQUIPT—Jigs, Spirals, Tables.

Highland No. 5 Mine; Slope; Gamma No. 8 Slope, No. 9 Slope; Buck Mountain Seam, 36-96, 60, 144 in. thick.
PO—Jeddo, Pa.; SP—Same; CTY—Luzerne; RR—Lehigh Valley, Highland Br.
S of H—40 mules, 6 H. K. Porter comp. air locos., 2 gen. electric trolley pole type locos., 2 steam locos. Track gage 56½ in.
S of M—Hand.
PP—Power purchased, 9 Babcock & Wilcox water tube boilers, total 2500 H. P., 3 air compressors, 275 volts D. C., 9 pumps.
EMP—321. Last years tonnage 227,777.

SIZES SHIPT—Broken, Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley.
METHOD OF PREP.—Wet.
PREP. EQUIPT—Jigs, Spirals, Tables.
NOTE—Formerly operated by the G. B. Markle Co.

JERMYN & COMPANY

General Office, Old Forge, Pa.
PR—J. J. Jermyn, Scranton, Pa.
TR—J. J. Jermyn, Scranton, Pa.
GM—R. G. Jermyn, Jr., Scranton, Pa.
GS—John P. Corcoran, Old Forge, Pa.
PA—Geo. H. Johns, Old Forge, Pa.
EM—Leon D. Whittle, Scranton, Pa.
EE—H. F. Hartman, Scranton, Pa.
MM—Wm. Dougherty, Old Forge, Pa.
SCO—Address the Company, Buyer, Thos. F. Corcoran, Old Forge, Pa.
Sales Agency—N. Y. O. & W. Coal Co., Old Forge, Pa.

Jermyn No. 1 Mine; Shaft; Donmore No. 2 & 3 Seams, 56 to 30 in. thick.
PO—Old Forge, Pa.; SP—Taylor, Pa.; CTY—Lackawanna; RR—Erie.
S of H—Mules, Steam and elec. hoists. Track gage 36 in.
PP—4 water tube boilers, total 2,000 H. P., 1 air compressor, 440 volts A. C., 20 pumps.
EMP—600. Last years tonnage 230,000.
MNG. DIST.—Wyoming.
SIZES SHIPT—Pea, Nut, Egg.
PREP. EQUIPT—Jigs, Shaker Screens.

JOHN-FIBB CO., THE

General Office, 2710 Grand Central Terminal, New York.
PR—J. W. Peale, 2710 Grand Central Sta., New York, N. Y.
TR—A. T. Simpson, 2710 Grand Central Terminal, New York, N. Y.
GM—J. W. Peale, 2710 Grand Central Sta., New York, N. Y.
GS—T. A. John, 29 Virginia Terrace, Forty Fort, Pa.
PA—T. A. John, 29 Virginia Terrace, Forty Fort, Pa.

John-Fibb Washery.
PO—Wyoming, Pa.; SP—Same; CTY—Lackawanna; RR—L. V.
PP—Power purchased.
EMP—30.
MNG. DIST.—Lackawanna.
SIZES SHIPT—Nut, Pea, Buckwheat, Rice, Barley.
METHOD OF PREP.—Wet.
PREP. EQUIPT—Jigs, Spirals.
Note—Operate washery only.

KEMMERER, M. S. & CO.

General Office, 143 Liberty St., New York, N. Y.
PR—M. S. Kemmerer, New York, N. Y.
GS—Wm. H. Grady, Minersville, Pa.
PA—Wm. H. Grady, Minersville, Pa.
SCO—Sandy Run Supply Company, Buyer, S. P. Learn, Sandy Run, Pa.

Sandy Run Colliery; Slope; Buck Mountain Seam.
PO—Sandy Run, Pa.; SP—Same; CTY—Luzerne; RR—C. R. R. of N. J., Lehigh Valley.
IF—Richard Dudley, Sandy Run, Pa.
OF—John Hauze, Sandy Run, Pa.
S of H—Mules.
S of M—Hand.
PP—Power purchased, Transformers. 1 water tube boiler, 3 pumps.
EMP—150. Last years tonnage 100,000.

KINGSTON COAL COMPANY, THE

General Office, Kingston, Pa.
PR—W. B. Chamberlin, Torresdale, Pa.
TR—E. W. Doughty, 407 Sansom St., Philadelphia, Pa.
SECY—O. E. Hawkins, Kingston, Pa.
GM—F. E. Zerby, Kingston, Pa.
GS—T. H. Williams, Edwardsville, Pa.
DS—Thomas Martin, Kingston, Pa.
DS—Neal McHugh, Kingston, Pa.
SUPT OF CONSTRUCTION—A. L. Parrish, Kingston, Pa.
PA—F. E. Zerby, Kingston, Pa.
EM—G. O. Willets, Kingston, Pa.
ME—E. L. Solomon, Kingston, Pa.
EE—W. H. Bradbury, Kingston, Pa.

Kingston No. 2 Mine; Slope and Shaft; Orchard, Lance, Cooper, Bennett, Red Ash, Eleven Foot, Ross and Ross Split Seams.
PO—Kingston, Pa.; SP—Same; CTY—Luzerne; RR—D. L. & W., D. & H., L. V.
IF—Anthony Jones, Edwardsville, Pa.
IF—D. J. Edwards, Edwardsville, Pa.
OF—Wm. E. Bonning, Kingston, Pa.
S of H—Mules, main and tail rope, 5 trolley pole type, 15 storage battery and 7 steam locos. Track gage 36 in.
S of M—Hand.
PP—6 water tube boilers, 3 return tubular boilers, total 2250 H. P., 220 volts D. C., 5 pumps.
EMP—882. Last years tonnage 386,811.
SIZES SHIPT—Broken, Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley.
METHOD OF PREP.—Wet and Dry.
PREP. EQUIPT—Jigs, Spirals, Tables, Gravity Pickers.

Kingston No. 4 Mine; Shaft, Orchard, Lance, Cooper, Bennett, Red Ash, Eleven Foot, Ross and Ross Split Seams.
PO—Kingston, Pa.; SP—Same; CTY—Luzerne; RR—D. L. & W., D. & H., P. R. R., L. V.

H. Shadach Dodd, Kingston, Pa.
IF—Wm. D. Thomas, Edwardsville, Pa.
OF—C. J. A. Lynn, Edwardsville, Pa.
S of H—Mules, main and tail rope, comp. air loco., 6 trolley pole type, 2 storage battery and 1 steam loco. Track gage, 36 in.

S of M—Hand.
PP—12 water tube boilers, 2 return tubular boilers, total 3200 H. P., 2 air compressors, gen. units, 220 volts D. C., 22 pump.
EMP—805. Last years tonnage 351,552.
SIZES SHIPT—Broken, Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley.
METHOD OF PREP.—Wet and Dry.
PREP. EQUIPT—Jigs, Spirals, Tables, Gravity Pickers.

Gaylord Colliery; Slope; Orchard, Lance, Cooper, Bennett, Checker, Ross, Red Ash Seams.
PO—Plymouth, Pa.; SP—Same; CTY—Luzerne; RR—D. L. & W., P. R. R., D. L. & W., C. R. R. of N. J.
IF—John Jopling and George Round, Plymouth, Pa.
S of H—Mules, main and tail rope, comp. air loco., 3 trolley pole type locos. Track gage, 36 in.
S of M—Hand.
PP—4 water tube boilers, total 1200 H. P., 1 air compressor, gen. units, 220 volts D. C., 6 pumps.
EMP—325. Last year tonnage 137,540.
SIZES SHIPT—Broken, Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley.
METHOD OF PREP.—Wet and Dry.
PREP. EQUIPT—Jigs, Spirals, Tables, Gravity Pickers.

KOMARA ANTHRACITE MINING COMPANY

Out of business.

KULP COAL COMPANY

General Office, Masonic Bldg., Shamokin, Pa.
PR—G. G. Kulp, Shamokin, Pa.
VP—H. D. Barr, Shamokin, Pa.
TR—G. G. Kulp, Shamokin, Pa.
GS—J. G. Whitacker, Shamokin, Pa.
PA—G. G. Kulp, Shamokin, Pa.
OF—John Worrall, Shamokin, Pa.
EM—G. H. Goff, Shamokin, Pa.
SA—H. H. Lime Weaver & Co., Philadelphia, Pa.
GM—G. G. Kulp, Shamokin, Pa.

Kulp Mine.
PO—Crown, Pa.; FS—Reed, Pa.; CTY—Northumberland; RR—P. R. R.
S of M—Hand.
PP—2—100 H. P. fire tube boilers, 2 pumps.
EMP—8. Daily tonnage 350.
SIZES SHIPT—Buckwheat, Rice, Barley.
PREP. EQUIPT—Shaker Screens, Washeries.

LEE, GEORGE F., COAL CO.

General Office, 4th Floor Miners Bank Bldg., Wilkes-Barre, Pa.
PR—N. W. Martz, Plymouth, Pa.
VP—George F. Lee, Wilkes-Barre, Pa.
TR—George F. Lee, Wilkes-Barre, Pa.
GM—George F. Lee, " " "
GS—George F. Lee, " " "
PA—R. Doland, Parson, Pa.
SCO—Address the Company. Buyer Nathan W. Martz, Plymouth, Pa.
SA—Lee Coal Co., Inc., New York, N. Y.

Channey Mine; Drift; Red Ash and Ross Seams, 21 to 27 ft. thick.
PO—Wilkes-Barre, Pa.; SP—Plymouth, Pa.; CTY—Luzerne; RR—D. L. & W., Bloomsburg Div.
MS—Bend. D. Amos, Plymouth, Pa.
OF—F. Vivian, Wilkes-Barre, Pa.
S of H—Mules, rope, 2 elec. locos. Track gage 42 in.
S of M—Hand.
PP—1 pump. Purchase power.
EMP—350.
MNG. DIST.—Wyoming.
SIZES SHIPT—Pea, Nut, Egg, Stove, Buckwheat, Rice, Barley.
PREP. EQUIPT—Wet. Jigs.

LEGITT'S CREEK ANTHRACITE CO.

General Office, Cleveland, O.
PR—J. P. Burton, Cleveland, O.
VP—Sloan Hartwell, Boston, Mass.
TR—H. N. Matthews, Boston, Mass.
GS—G. H. Jones, Scranton, Pa.
GM—G. H. Hartwell, Scranton, Pa.
OF—W. A. Thomas, Scranton, Pa.
EM—Edw. Kelley, Scranton, Pa.
EE—Henry Volker, Scranton, Pa.
SA—H. N. Hartwell & Sons, Inc., Boston, Mass.; Hartwell & Lett, Inc., New York City, N. Y.; J. P. Burton Coal Co., Cleveland, O.

Leggitts Creek Mine; 2 shafts and 4 slopes; 9 seams, 24-108 in. thick.
PO—Scranton, Pa.; SP—Plymouth, Pa.; CTY—Lackawanna; RR—D. & H.

S of H—Mules, 7 trolley and 2 steam battery locos. Track gage 36 in.
S of M—Hand.
PP—Power purchased, Transformers: 23000 2500 110 volts A. C., M. G. 8-8s, 1 200 K. W., 1 300 K. W., 250 volts D. C., 5 pumps.
EMP—690. Daily tonnage 1,000.
MNG. DIST.—Lackawanna.
SIZES SHIPT—Pea, Nut, Egg.
PREP. EQUIPT—Jigs, Shaker Screens, Picking Tables.
Note—Formerly operated by Hudson Coal Co.

LEHIGH COAL & NAVIGATION CO., THE.

General Office, 437 Chestnut St., Philadelphia, Pa.
PR—Samuel D. Warriner.

TR—Harry H. Pease, Philadelphia, Pa.
SECY—Harry H. Pease, Philadelphia, Pa.
GM—J. R. Warriner, Lansford, Pa.
MS—F. R. Nold, Lansford, Pa.
DIST SUPTS—Jas. S. Miller, Lansford, Pa.; John L. Richards, Summit Hill, Pa.; M. O. Morgans, Lansford, Pa.; E. J. Jones, Lansford, Pa.; C. D. Robert, Lansford, Pa.; D. K. Glover, Lansford, Pa.
PA—E. Hughes, Philadelphia, Pa.
ME—A. G. Frank, Lansford, Pa.
EE—G. M. Kennedy, Lansford, Pa.
MECH SUPT—R. E. Hobart, Lansford, Pa.
SUPT OF PREP—A. Leonard, Lansford, Pa.

Nesquehoning Collieries; Drift; Slope, Shaft, Stripping.
PO—Nesquehoning, Pa. SP—Same. CTY—Carbon. RR—C. R. R. of N. J. and L. & N. E.
IF—John T. Paisley, Nesquehoning, Pa.
IF—J. S. Ronemus, Nesquehoning, Pa.
OF—Harry Strohl, Nesquehoning, Pa.
S of H—16 trolley pole type and 10 steam locos. Track gage, 42 in.
S of M—Hand.
PP—Power purchased, 440 volts A. C., 3 phase 60 cycles, 275 volts D. C., 4 water tube boilers, 1100 H. P., 1 air compressors, 5 pumps.
EMP—1,258. Last years tonnage 825,288.
MNG. DIST.—Southern Anthracite Field.
SIZES SHIPT—Broken, Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley.
METHOD OF PREP.—Wet.
PREP. EQUIPT—Jigs, Spirals, Gravity Pickers.

Lansford Mine; Drift; Slope and Shaft.
PO—Lansford, Pa. SP—Same. CTY—Carbon. RR—L. & N. E.
IF—John Humphries, James G. Jones and Wm. E. Stuckler, Lansford, Pa.
OF—Harry Wynn, Lansford, Pa.
S of H—24 trolley pole type, 3 storage battery and 9 steam locos. Track gage, 42 in.
S of M—Hand.
PP—Power purchased, 440 volts A. C., 3 phase 25 cycle, 275 volts D. C., 20 water tube boilers, 5500 H. P., 6 air compressors, 8 pumps.
EMP—1,676. Last years tonnage 917,170.
MNG. DIST.—Southern Anthracite Field.
SIZES SHIPT—Broken, Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley.
METHOD OF PREP.—Wet.
PREP. EQUIPT—Jigs, Spirals, Box Car Loaders, Gravity Pickers.

Coaldale Mine; Drift; Slope, Shaft, Stripping.
PO—Coaldale, Pa. SP—Same. CTY—Schuylkill. RR—L. & N. E.
IF—W. R. Cunningham, Lansford, Pa.; J. E. Shinton, Lansford, Pa.
T. J. Evans, Coaldale, Pa.
OF—Thos. Merker, Lansford, Pa.
S of H—14 trolley pole type, 3 storage battery and 7 steam locos. Track gage, 42 in.
S of M—Hand.
PP—Power purchased, 440 volts A. C., 275 volt D. C., 23 water tube boiler 4448 H. P., 3 air compressor, 14 pumps.
EMP—1,557. Last years tonnage 848,533.

SIZES SHIPT—Steamboat, Broken, Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley.
METHOD OF PREP.—Wet.
PREP. EQUIPT—Jigs, Spirals, Box Car Loaders, Gravity Pickers.

Greenwood Mine; Drift; Slope and Stripping.
PO—Sok, Pa.; SP—Same; CTY—Schuylkill. RR—L. & N. E.
IF—B. J. Evans, Coaldale, Pa.
OF—Thos. Merker, Lansford, Pa.
S of H—14 trolley pole type, 1 storage battery and 5 steam locos. Track gage 42 in.
S of M—Hand.
PP—Power purchased, 440 volts A. C., 3 phase 25 cycles, 275 volts D. C., 16 water tube boilers, 4800 H. P., 2 air compressors, 14 pumps.
(Continued on Next Page)

Lehigh Coal & Navigation Co.—Cont.

EMP—769. Last year's tonnage 396,230.
SIZES SHIPT.—Broken, Egg, Stove, Nut,
Pea, Buckwheat, Rice, Barley.
METHOD OF PREP.—Wet.
PREP. EQUIPT.—Jigs, Spirals, Gravity
Pickers.

Rahn Collieries; Shaft, Drift.
PO—Schuylkill; RR—L. & N. E.
IF—David Yemm, Wm. J. Clements,
Coldale, Pa.
OF—A. F. Dukes, Tamaqua, Pa.
S of H—14 trolley pole type and 4 steam
locos. Track gage, 42 in.
S of M—Hand.
PP—Power purchased. 440 volts A. C.
2 water tube boilers, 200 H. P.,
2 air compressors, 7 pumps.
EMP—811. Last year's tonnage 416,186.
SIZES SHIPT.—Pea, Nut, Stove, Buck-
wheat, Rice, Broken, Barley.

Tamaqua Mine; Slope, Shaft and Strip-
ping.
PO—Tamaqua, Pa.; SP—Same; CTY—
Schuylkill; RR—L. & N. E.
IF—John T. Davis, Tamaqua, Pa.
OF—Samuel Nevins, Tamaqua, Pa.
S of H—8 trolley pole type, 1 storage
battery and 4 steam locos. Track
gage, 42 in.
S of M—Hand.
PP—Power purchased. 440 volts A. C.
10 water tube boilers, 2700 H. P.,
4 air compressors, 5 pumps.
EMP—797. Last year's tonnage 446,482.
SIZES SHIPT.—Broken, Egg, Stove, Nut,
Pea, Buckwheat, Rice, Barley.
METHOD OF PREP.—Wet.
PREP. EQUIPT.—Jigs, Picking Tables.

LEHIGH VALLEY COAL CO.

General Office, Wilkes-Barre, Pa.
PR—J. M. Humphrey, Wilkes-Barre, Pa.
ASST. TO PR—W. H. Fregans, Wilkes-
Barre, Pa.
VP—L. A. Tompkins, New York, N. Y.
TR—F. H. Silvernail, New York, N. Y.
GM—Thos. P. Thomas, Wilkes-Barre, Pa.
ASST. TO GM—H. W. Montz, Wilkes-
Barre, Pa.
COMPTROLLER—L. A. Tompkins, New
York, N. Y.
PA—F. L. Scott, Wilkes-Barre, Pa.
ME—Paul Sterling, Wilkes-Barre, Pa.
ACTING ME—A. C. Stahl, Wilkes-Barre,
Pa.
EE—E. B. Wagner, Wilkes-Barre, Pa.

Wyoming Division.
DIV. SUPT.—P. S. Warriner, Wilkes-
Barre, Pa.
DIV. ENGR.—R. G. Owen, Wilkes-Barre,
Pa.
Warrior Run, Franklin and Mineral
Spring Collieries.
PO—Wilkes-Barre, Pa.; SP—Same; CTY—
Luzerne; RR—L. V.
S of H—Comp. air, electric and steam
locos.
S of M—Hand.
EMP—3,600.

Lackawanna Division.
DIV. SUPT.—Sheldon Jones, Wilkes-
Barre, Pa.
DIV. ENGR.—K. F. Arhagast, Wilkes-
Barre, Pa.
Heidelberg, William A. Seneca and
Broadwell Collieries.
PO—Wilkes-Barre, Pa.; SP—Same; CTY—
Luzerne; RR—L. V.
S of H—Mules and steam locos.
S of M—Hand.
EMP—1,552.

Luzerne Division.
DIV. SUPT.—G. P. Gallagher, Wilkes-
Barre, Pa.
DIV. ENGR.—L. W. Winters, Wilkes-
Barre, Pa.
Malby, Westmoreland, Exeter and Ster-
vens Collieries.
PO—Wilkes-Barre, Pa.; SP—Same; CTY—
Luzerne; RR—L. V.
S of H—Comp. air and steam locos.
S of M—Hand.
EMP—1,540.

Delano Division.
DIV. SUPT.—John W. Price, Mahanoy
City, Pa.
DIV. ENGR.—M. I. Terwilliger, Mahanoy
City, Pa.
Park and Buck Mountain Collieries and
Springdale Washery.
PO—Mahanoy City, Pa.; SP—Same;
CTY—Schuylkill; RR—L. V.
S of H—Mules and steam locos.
S of M—Hand.
EMP—1,181.

Locust Mountain Division.
DIV. SUPT.—H. J. Heffner, Centralla,
Pa.
DIV. ENGR.—Ray Harlor, Centralla, Pa.
Centralla and Sayre Collieries.
PO—Centralla, Pa.; SP—Same; CTY—
Columbia; RR—L. V.
S of H—Electric and steam locos.
S of M—Hand.
EMP—1,278.

Girard Division.
DIV. SUPT.—F. H. Wagner, Lost Creek,
Pa.
DIV. ENGR.—E. O. Holderman, Lost
Creek, Pa.
Packer No. 4 and Packer No. 5 Col-
lieries.
PO—Lost Creek, Pa.; SP—Same; CTY—
Schuylkill; RR—L. V.
S of H—Electric and steam locos.
S of M—Hand.
EMP—1,321.

Lehigh Division.
DIV. SUPT.—G. R. Wood, Hazleton, Pa.
DIV. ENGR.—F. W. Holderman, Hazleton,
Pa.
Spring Mountain, Beaver Meadow, Der-
ringer and Oneida Collieries.
PO—Hazleton, Pa.; SP—Same; CTY—
Luzerne; RR—L. V.
S of H—Comp. air, steam and electric
locos.
S of M—Hand.
EMP—2,001.

Hazleton Division.
DIV. SUPT.—R. A. Evans, Hazleton, Pa.
DIV. ENGR.—Bruce Davis, Hazleton, Pa.
Hazleton No. 1, Hazleton Shaft, Drifton
and Eckley Collieries.
PO—Hazleton, Pa.; SP—Same; CTY—
Luzerne; RR—L. V.
S of H—Electric and steam locos.
S of M—Hand.
EMP—1,821.

Pottsville Division.
DIV. SUPT.—C. N. Mortimer, Pottsville,
Pa.
DIV. ENGR.—D. N. Mortimer, Pottsville,
Pa.
Blackwood Colliery.

**LEHIGH & WILKES-BARRE COAL COM-
PANY.**

General Office, Wilkes-Barre, Pa.
PR—C. F. Huber, Wilkes-Barre, Pa.
TR—F. T. Dickerson, New York, N. Y.
GS—Douglas Bunting, Wilkes-Barre, Pa.
PA—E. S. Kirkbunt, " "
EM—A. H. Lewis, " "
ME—J. H. Doughty, Wilkes-Barre, Pa.
EE—F. C. Nicholson, Wilkes-Barre, Pa.
COL. SUPTS.—L. J. Davis, Wanamie, Pa.
J. D. Joseph, Wilkes-Barre, Pa.
R. G. Carpenter, Plymouth, Pa.
J. B. Tamblin, Wilkes-Barre, Pa.
W. Fahringer, Audenreid, Pa.
T. B. Gambold, Ashley, Pa.
SA—D. A. Anthony, New York, N. Y.
Additional Information on Page 683

Hollenback No. 2 Mine; Shaft and Slope;
Abbott, Kidney, Hillman, Stanton
Five Foot, Baltimore, Ross, Top Red
Ash and Bottom Red Ash Seams.
PO—Wilkes-Barre, Pa.; SP—Same; CTY—
Luzerne; RR—C. R. B. of N. J.
OF—T. B. Robinson, Wilkes-Barre, Pa.
IF—R. T. Jones, " "
S of H—Mules, rope, 1 comp. air and
1 steam loco. Track gage 30 in.
S of M—Hand.
PP—8 return tubular boilers, total 2,000
H. P., 1 gen. unit, 4,000 volts A.
C., 3 phase, 60 cycles, 2 air com-
pressors, 15 pumps.
EMP—563. Last fiscal year output,
229,264 tons.
MNG. DIST.—Wyoming.
SIZES SHIPT.—Broken, Egg, Stove, Pea,
Chestnut, Buckwheat, Boiler.

So. Wilkes-Barre No. 5 Mine; Shaft; Ab-
bott, Kidney, Hillman, Stanton, Five
Foot, Cooper and Baltimore Seams.
PO—Wilkes-Barre, Pa.; SP—So. Wilkes-
Barre, Pa.; CTY—Luzerne; RR—
C. R. B. of N. J.
OF—J. W. Price, Wilkes-Barre, Pa.
IF—F. W. Seymour, Wilkes-Barre, Pa.
S of H—7 comp. air locos. Track gage,
36 in.
S of M—Hand.
PP—13 return tubular boilers, total
2,625 H. P., 14 pumps and 3 air
compressors.
EMP—863. Last fiscal year output,
445,256 tons.
SIZES SHIPT.—Broken, Egg, Stove, Chest-
nut, Pea, Buckwheat, Boiler.
PREP. EQUIPT.—Wet and Dry, Tables.

Honey Brook No. 5 Mine; Slope; Mam-
moth, Buck Mountain, Lykens, Whar-
ton Seams.
PO—Audenreid, Pa.; SP—Same; CTY—
Schuylkill; RR—C. R. B. of N. J.
IF—N. V. Gallagher, Audenreid, Pa.
OF—Jno. S. Davis, Audenreid, Pa.
S of H—4 steam locos. Track gage, 48
inches.
S of M—Hand.
PP—15 return tubular boilers, total
2,125 H. P., 7 pumps.
EMP—463. Last fiscal year output,
239,079 tons.
SIZES SHIPT.—Broken, Egg, Stove, Pea,
Chestnut, Buckwheat, Boiler.
PREP. EQUIPT.—Wet, Jigs, Tables.

Stanton No. 7 Mine; Shaft and Slope;
Abbott, Kidney, Hillman, Stanton,
Five Foot, Baltimore, Skidore, Ross,
Top and Bottom Red Ash Seams.

PO—Wilkes-Barre, Pa.; SP—Same; CTY—
Luzerne; RR—C. R. B. of N. J.,
Nanticoke Rr.
IF—T. S. Jones, Wilkes-Barre, Pa.
OF—John George, Wilkes-Barre, Pa.
OF—T. C. Carr, Wilkes-Barre, Pa.
S of H—6 electric and 2 steam locos.
Track gage, 36 in.
S of M—Hand.
PP—18 return tubular boilers, total
3,220 H. P., 1 gen. unit, 4000
volts A. C., 3 phase, 60 cycles, 2
air compressors and 20 pumps.
EMP—1,058. Last fiscal year output,
461,426 tons.

SIZES SHIPT.—Broken, Egg, Stove, Pea,
Chestnut, Buckwheat, Boiler.
PREP. EQUIPT.—Wet and Dry, Spirals,
Tables.

Sugar Notch No. 9 Mine; Shaft and Drift.
Kidney, Hillman, Stanton, Five Foot,
Cooper, Baltimore, Twin, Hess, Top
and Bottom Red Ash Seams.
PO—Sugar Notch, Pa.; SP—Same; CTY—
Luzerne; RR—C. R. B. of N. J.,
Nanticoke Rr.
OF—C. R. Gonld, Sugar Notch, Pa.
IF—J. R. Morris, " "
S of H—Mules, rope and 1 steam loco.
Track gage 28 in.
S of M—Hand.

PP—6 return tubular boilers, total 1,500
H. P., 1 air compressor and 13
pumps.
EMP—656. Last fiscal year output,
340,648 tons.

MNG. DIST.—Thirteenth.
SIZES SHIPT.—Broken, Egg, Steam,
Chestnut, Pea, Buckwheat, Boiler.
PREP. EQUIPT.—Wet, Jigs, Spirals,
Tables.

Buttonwood No. 22 Mine; Shaft and
Drift; Abbott, Kidney, Hillman,
Stanton, Five Foot, Cooper, Balti-
more, No. 3, 4, 5 and 6 Seams.

PO—Buttonwood, Pa.; SP—Same; CTY—
Luzerne; RR—C. R. B. of N. J.,
Buttonwood Rr.
IF—D. J. Davis, Buttonwood, Pa.
OF—J. J. Convery, Buttonwood, Pa.
S of H—Mules, rope and 5 elec. locos.
Track gage 36 in.
S of M—Hand.
PP—22 return tubular boilers, total
3,000 H. P., 3 air compressors and
1 gen. unit, 300 volts D. C., 22
pumps.
EMP—422. Last fiscal year output,
186,866 tons.

SIZES SHIPT.—Broken, Egg, Stove, Pea,
Chestnut, Buckwheat, Boiler.
PREP. EQUIPT.—Wet and Dry, Spirals,
Tables.

Audenreid No. 4 Mine; Slope; Mammoth,
Buck Mountain, Lykens and Wharton
Seams.

PO—Audenreid, Pa.; SP—Same; CTY—
Schuylkill; RR—C. R. B. of N. J.
OF—C. T. Lazarus, Audenreid, Pa.
IF—Jas. Phillips, " "
S of H—Mules, rope, 1 electric and 5
steam locos. Track gage, 48 in.

S of M—Hand.
PP—24 return tubular boilers, total
2,575 H. P., 2 air compressors and
1 gen. unit, 275 volts D. C., 1
gen. unit, 110 volts D. C., 20
pumps. Purchase power.

EMP—611. Last fiscal year output,
307,808 tons.
SIZES SHIPT.—Broken, Egg, Stove, Pea,
Chestnut, Buckwheat, Boiler.
PREP. EQUIPT.—Wet, Jigs, Tables.

Lanes No. 11 Mine; Shaft; Kidney, Hill-
man, Stanton, Five Foot, Cooper,
Baltimore, Ross, Top and Bottom
Red Ash Seams.

PO—Plymouth, Pa.; SP—Same; CTY—
Luzerne; RR—D. L. & W., D. &
H., C. R. R. of N. J.
OF—A. Ashton, Plymouth, Pa.
IF—W. T. Morgan, Plymouth, Pa.
S of H—Mules, rope and 2 comp. air
locos. Track gage 36 in.

S of M—Hand.
PP—10 return tubular boilers, total
2,250 H. P., 2 air compressors and
21 pumps.
EMP—559. Last fiscal year output,
260,532 tons.

MNG. DIST.—Twelfth.
SIZES SHIPT.—Broken, Egg, Stove, Pea,
Chestnut, Buckwheat, Boiler.
PREP. EQUIPT.—Wet and Dry, Tables.

Nottingham No. 15 Mine; Shaft; Ross,
Bottom Red Ash and Baltimore
Seams.

PO—Plymouth, Pa.; SP—Same; CTY—
Luzerne; RR—C. R. B. of N. J.,
D. L. & W., D. & H.
IF—Chas. Eaner, Plymouth, Pa.
OF—Jos. Becker, Plymouth, Pa.
S of H—Mules, rope, 5 comp. air and
1 steam loco. Track gage, 34 and
56 in.
S of M—Hand.

PP—14 return tubular boilers, total
3,300 H. P., 440 volts A. C., 3
air compressors and 29 pumps. Pur-
chase power.
EMP—913. Last fiscal year output,
556,605 tons.

SIZES SHIPT.—Broken, Egg, Stove, Pea,
Chestnut, Buckwheat, Boiler.
PREP. EQUIPT.—Wet and Dry, Tables,
Spirals.

Wanamie No. 18 Mine; Drift, Slope;
Kidney, Hillman, Cooper, Baltimore,
Ross, Top Red Ash and Bottom Red
Ash Seams.

PO—Wanamie, Pa.; SP—Same; CTY—Lu-
zerne; RR—C. of N. J.
IF—C. E. Morgan, Wanamie, Pa.
OF—Samuel Griffith, " "
OF—T. G. Faulstich, " "
S of H—Mules, 8 electric and 3 steam
locos. Track gage, 36 in.

S of M—Hand.
PP—12 water tube boilers, total 2166
H. P., 1 air compressor, 300 volts
D. C., 12 pumps. Purchase power.
EMP—824. Last fiscal year output,
559,991 tons.

SIZES SHIPT.—Broken, Egg, Stove, Nut,
Pea, Buckwheat, Boiler.
METHOD OF PREP.—Wet.
PREP. EQUIPT.—Spirals, Picking Tables.

Maxwell No. 20 Mine; Slope and Shaft;
Kidney, Hillman, Stanton, Five Foot,
Casper, Baltimore, Ross, Top Red
Ash and Bottom Red Ash Seams.

PO—Ashley, Pa.; SP—Same; CTY—Lu-
zerne; RR—C. of N. J.
OF—J. M. Osborne, Ashley, Pa.
IF—J. R. Jenkins, Ashley, Pa.
S of H—Mules, 1 comp. air and 1 steam
loco. Track gage, 42 in.

S of M—Hand.
PP—14 water tube boilers, total 2,720
H. P., 2 air compressors, 17 pumps.
EMP—757. Last fiscal year output,
379,734 tons.

SIZES SHIPT.—Broken, Egg, Stove, Nut,
Pea, Buckwheat, Boiler.
METHOD OF PREP.—Wet and Dry.
PREP. EQUIPT.—Spirals, Picking Tables.

LOCUST DALE COAL CO.

General Office, Minersville, Pa.
PR—Jas. B. Neale, Minersville, Pa.
ASST. TO PR—Jas. H. Pierce, Frackville,
Pa.
VP—S. B. Thorne, New York, N. Y.
TR—Jas. H. Collier, Minersville, Pa.
PA—Ray McFadden, Minersville, Pa.
EM—Phil Russell, Minersville, Pa.
EE—P. A. McCarron, Minersville, Pa.

SCO—Peoples Store Co., Buck Run, Pa.
Buyer, Jos. Martin, Pottsville, Pa.
SA—Thorne, Neale & Co., New York,
N. Y.

Locust Dale Washery.
PO—Ashland, Pa.; SP—Same; CTY—
Schuylkill; RR—P. & B.
MS—Chas. Yeager, Ashland, Pa.
S of H—3 steam loco.
S of M—Hand.
PP—Power purchased. Transformer 2300
volts to 2300 volts A. C., 1 water
tube boiler, 150 H. P., 1 pump.
EMP—54. Last year's tonnage 103,494.
SIZES SHIPT.—Rice, Buck, Stove, Barley.
PREP. EQUIPT.—2 Shaker Screens, 1
Picking Table, 1 Washery.

LOCUST MTN. COAL CO.

General Office, Bethlehem, Pa.
PR—J. C. Brown, Philadelphia, Pa.
TR—A. C. Dodson, Bethlehem, Pa.
GM—T. M. Dodson, " "
GS—B. H. Stockett, " "
Div. Supt.—Frank Neiman, Shenan-
doah, Pa.
PA—J. R. Connell, Bethlehem, Pa.
CE—W. A. Thomas, Board of Trade
Bldg., Scranton, Pa.
EM—J. C. McGuire, Shenandoah, Pa.
EM—W. E. Wells, Shenandoah, Pa.
EE—P. J. Paul, Shenandoah, Pa.
SCO—Shenandoah Store Co., Buyer, J. B.
Connell, Bethlehem, Pa.
Sales agency, Weston Dodson & Co.,
Inc., Bethlehem, Pa.

Weston Mine; Drift and Stripping Mam-
moth, 20 ft., Seven Foot, 8 ft.,
Skidmore, Buck Mt., 10 ft., and
Little Buck, 4 ft., Seams.

PO—Shenandoah, Pa.; SP—Same; CTY—
Schuylkill; RR—L. V. Mahanoy
& Shamokin Rr.
S of H—Trolley pole, steam locos.
Track gage 36 in.
S of M—Hand.
PP—2 water tube boilers, 4 air com-
pressors, 275 volts, 5 pumps.
SIZES SHIPT.—Broken, Egg, Stove, Chest-
nut, Pea, Buckwheat, Rice, Barley.
SYSTEM OF PREP.—Wet Buck.
PREP. EQUIPT.—Jigs, Spirals, Tables,
Gravity Pickers, Box Car Loaders.

LYKENS VALLEY COAL CORPORATION
PR—A. F. Wolfe, Wilkes-Barre, Pa.
VP—A. F. Wolfe, Wilkes-Barre, Pa.
TR—A. F. Wolfe, Wilkes-Barre, Pa.
GM—John Wolf, Wilkes-Barre, Pa.
GS—John Parry, Saint Clair, Pa.
PA—Jessie Lewis, Wilkes-Barre, Pa.
CE—Morgan Jones, Wilkes-Barre, Pa.

(Continued on Next Page)

Lykens Valley Coal Corp.—Cont.

Lykens Loherty Colliery; Slope; Seam 71 inches thick.
PO—Tremont, Pa.; SP—Good Spring, Pa.; CTY—Schuylkill; RR—Penna.
S of H—Mules and electric locos. Track gage 36 inches.
S of M—Hand.
PP—Purchase power. Transformer 22,000-400 volts A. C.
EMP—18.
SIZES SHIPT—Run of Mine, Nut, Egg, Pea.
PREP. EQUIPT—Bar and Shaker Screens.

LYKENS VALLEY FUEL COMPANY

General Office, Williamstown, Pa.
PR—Ed. F. Brennan, Williamstown, Pa.
VP—J. B. Lesher, Williamstown, Pa.
TR—J. E. Whitworth, Williamstown, Pa.
GM—J. E. Whitworth, Williamstown, Pa.
GS—E. F. Brennan, Williamstown, Pa.

Lykens Valley Mine.
PO—Williamstown, Pa.; SP—Same; CTY—Dauphin; RR—P. & R.
S of H—Mules.
S of M—Hand.
PP—Purchase power, 2 pumps.
Monthly tonnage 700.

LYTLE COAL CO.

Now Susquehanna Collieries Company.

MCTURK, W. R., COAL CO.

General Office, 314 Penna. Bldg., Philadelphia, Pa.
PR—W. R. McTurk, Philadelphia, Pa.
TR—Wm. Ebert, Jr., " "
GM—Morton H. McTurk, Girardville, Pa.
GS—Jacob M. Holt, Girardville, Pa.
PA—Morton H. McTurk, Girardville, Pa.
EM—Geo. W. Newton, Girardville, Pa.
SA—W. R. McTurk & Co., Philadelphia, Pa.

Girard Mine; Slope; Holmes, Mammoth and Buck Seams, 180 to 480 in. thick.
PO—Girardville, Pa.; SP—Same; CTY—Schuylkill; RR—P. & R.
IF—Peter Halsey, Girardville, Pa.
S of H—Mules and trolley pole and storage battery locos. Track gage 36 in.
S of M—Hand.
PP—Power purchased, water tube boiler, 2250 H. P., motor generators, 1—100 K. W., 1—50 K. W., 250 volts D. C., 6 pumps.
EMP—500. Last fiscal year output, 140,000 tons.
SIZES SHIPT—Buckwheat, Barley, Pea, Rice, Nut, Egg, Stove, Broken.
METHOD OF PREP.—Wet.
PREP. EQUIPT—Jigs, Spirals, Tables, Gravity Pickers.
Note—Plant under development.

MAHANAY VALLEY COAL COMPANY

General Office, Girardville, Pa.
PR—A. J. Farrell, Mahanay Plane, Pa.
TR—P. B. McCormick, Girardville, Pa.
GM—P. B. McCormick, Girardville, Pa.
PA—P. B. McCormick, Girardville, Pa.
EM—Thos. M. Brennan, Shamokin, Pa.
Washery.
PO—Girardville, Pa.; SP—Same; CTY—Schuylkill; RR—L. V., P. & R.
S of H—Electric and steam locos.
PP—Purchase power.

MARBLE, G. B. CO.

Now Jeddo-Highland Coal Co.

MARYO COAL CO.

General Office, Land Title Building, Philadelphia, Pa.
PR—D. B. Wentz, Philadelphia, Pa.
VP—W. C. Kent, Philadelphia, Pa.
TR—H. B. Price, Philadelphia, Pa.
GM—T. E. Snyder, Hazleton, Pa.
GS—E. P. Humphrey, Hazleton, Pa.
PA—A. J. Kotch, Hazleton, Pa.
EM—B. C. Osler, Hazleton, Pa.
ME—Isaac Beaver, Wilburton, Pa.
EE—Chas. Tyler, Hazleton, Pa.
IF—Wm. Roth, " "
SCO—Hazel Brook Supply Co., Buyer, Guy Watson, Hazleton, Pa.
SA—H. C. Barr, Philadelphia, Pa.

Maryd Mine; Shaft and Drift; Mammoth, Holmes, Primrose and Orchard Seams; 24 to 34 in. thick.
PO—Maryd, Pa.; SP—Same; CTY—Schuylkill; RR—P. & R., C. R. E. of N. J.
MS—D. S. Wolfe, Maryd, Pa.
S of H—Mules, 2 steam, 2 gasoline and 2 storage battery locos. Track gage, 42 in.
S of M—Hand.
PP—8 water tube boilers, total 2000 H. P., 2 air compressors, 2 gen. units, 125 volts D. C., 10 pumps.
EMP—294. Last fiscal year output, 237,417 tons.
MNG. DIST.—Schuylkill.
SIZES SHIPT—Broken, Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley.
METHOD OF PREP.—Wet.
PREP. EQUIPT—Jigs, Spirals.

MEADOW HILL COAL COMPANY

General Office, Scranton Lite Bldg., Scranton, Pa.
PR—Frank P. Benjamin, Scranton, Pa.
TR & SECY—W. L. Houch, Scranton, Pa.
GM—W. L. Houch, Scranton, Pa.

Op-rate Washery.
PO—Pittston, Pa.; SP—Same; CTY—Luzerne; RR—Erie.
Track gage 56½ in.
PP—Power purchased, 440 volts A. C., 2 pumps.
EMP—10. Last years tonnage 16,000.
SIZES SHIPT—Nut, Pea, Buckwheat, Rice, Barley.
PREP. EQUIPT—Jigs.
NOTE Formerly operated by the East Pittston Coal Company.

MID CITY COAL COMPANY

General Office, Scranton, Pa.
PR—S. S. Spruks, Scranton, Pa.
VP—Cornelius Comegys, Scranton, Pa.
TR—David Spruks, Scranton, Pa.
GM—David Spruks, Scranton, Pa.
GS—Jay Law, Scranton, Pa.
PA—Jay Law, Scranton, Pa.
CE—Stevenson & Knight, Scranton, Pa.
EM—Chas. H. Walker, Scranton, Pa.

Mid City Mine; Slope.
PO—Scranton, Pa.; SP—Same; CTY—Lackawanna; RR—N. Y. C.
S of H—Mules and endless rope, trolley pole type and storage battery locos. Track gage 27-36 in.
S of M—1 shortwall and 1 longwall mch.
PP—Power purchased, Transformer 4,000 to 440 volts A. C., M. G. set, 250 volts D. C., 1 water tube boiler, 200 H. P.
EMP—243. Last years tonnage 94,981.
SIZES SHIPT—Pea, Nut, Egg.
PREP. EQUIPT—Revolving and Shaker Screens.

MIDVALLEY COAL CO.

General Office, Land Title Building, Philadelphia, Pa.
PR—D. R. Wentz, Philadelphia, Pa.
VP—W. C. Kent, Philadelphia, Pa., and T. E. Snyder, Hazleton, Pa.
TR—H. B. Price, Philadelphia, Pa.
GM—H. B. Price, Philadelphia, Pa.
GS—E. P. Humphrey, Hazleton, Pa.
PA—A. J. Kotch, Hazleton, Pa.
EM—B. C. Osler, Hazleton, Pa.
EE—Chas. Tyler, Hazleton, Pa.
SCO—Hazel Brook Supply Company, Buyer, Guy Watson, Hazleton, Pa.
SA—H. C. Barr, Philadelphia, Pa.

Midvalley Mine; Mammoth, Lykeas, Holmes, Buck Min. and Skidmore Seams.
PO—Wilburton, Pa.; SP—Same; CTY—Columbia; RR—L. V.
MS—Peter Shoen, Wilburton, Pa.
SM—Wilbert Larzelen, Wilburton, Pa.
S of H—Mules, 2 steam, 3 gasoline and 2 storage battery locos. Track gage 36 in.
S of M—Hand.
PP—12 water tube boilers, total 3800 H. P., 2 gen. units, 220 volts A. C. and 15 pumps.
EMP—391. Last years tonnage 218,202.
SIZES SHIPT—Pea, Nut, Egg.
PREP. EQUIPT—Wet, Jigs, Spirals.

MILL CREEK COAL COMPANY

General Office, Philadelphia, Pa.
PR—C. M. Scherwin, New York, N. Y.
TR—A. T. Burr, New York, N. Y.
GS—F. R. Patterson, New Boston, Pa.
PA—L. M. Brobst, New Boston, Pa.
EM—E. W. Owens, New Boston, Pa.
EE—J. R. Crellin, Morea, Pa.
SCO—New Boston Trading Company, Buyer, M. G. Boddow Morea, Pa.
James Delano & Co. Buyer, William D. Comby, New Boston, Pa.

Middle Lehigh Colliery; Slope; C. Seam, 60 to 144 in. thick.
PO—New Boston, Pa.; SP—Same; CTY—Schuylkill; RR—L. V., Penna.
MS—W. L. Thomas, New Boston, Pa.
IF—Geo. D. Kreitzer, New Boston, Pa.
OF—Morgan Boddow, New Boston, Pa.
S of H—Mules and steam locos. Track gage 36 in.
S of M—Hand.
PP—Power purchased transformer 23000-2300 volts, rotary converters, 440 volts D. C.
EMP—200. Daily tonnage 800.
SIZES SHIPT—Pea, Nut, Egg.
PREP. EQUIPT—Shaker Screens, Picking Tables, Jigs.
Morea Colliery; Drift; B. Seam, 60 to 144 in. thick.
PO—New Boston, Pa.; SP—Morea, Pa.; CTY—Schuylkill; RR—L. V., Penna.
MS—W. L. Thomas, New Boston, Pa.
IF—D. M. Brennan, Morea, Pa.
OF—Louis Greis, Morea, Pa.
S of H—Elec locos. Track gage 36 in.
S of M—Hand.
PP—Power purchased, transformer 23000-2300 volts, rotary converters, 440 volts D. C.

EMP 200. Daily tonnage 800.
SIZES SHIPT—Pea Nut and Egg.
PREP. EQUIPT—Shaker Screens, Picking Tables, Jigs.

Wolf Creek Colliery; Shift; D. & E. Seam, 60 to 144 in. thick.
PO—New Boston, Pa.; SP—St. Clair, Pa.; CTY—Schuylkill; RR—P. & R.
MS—W. L. Thomas, New Boston, Pa.
S of H—Mules and rope. Track gage 36 inches.
S of M—Hand.
PP—Power purchased, transformer 23000-2300 volts, rotary converters, 140 volts D. C.
EMP—200. Daily tonnage 800.
SIZES SHIPT—Pea, Nut, Egg.
PREP. EQUIPT—Shaker Screens, Picking Tables, Jigs.

MOFFAT, W. Y., LESSEE

General Office, 150 Cherry St., Dunmore, Pa.
PR—W. Y. Moffat, Dunmore, Pa.
TR—John G. Moffat, Dunmore, Pa.
GM—W. Y. Moffat, Dunmore, Pa.
GS—P. J. Conahoy, Mineoka, Pa.
PA—W. Y. Moffat, Dunmore, Pa.
SA—W. Y. Moffat, Dunmore, Pa.

Carlton Mine; Drift, Slope, Stripping; Dunmore No. 1 Seam.
PO—150 Cherry St., Dunmore, Pa. SP—Mineoka, Pa.; CTY—Lackawanna; RR—D. L. & W.
S of H—Mules and 1 elec loco. Track gage 36 in.
S of M—Hand.
PP—Power purchased, 220 volts A. C. EMP—85. Last years tonnage 40,000.
SIZES SHIPT—Run of Mine.

MOOSIC MOUNTAIN COAL COMPANY.

Now Bald Mountain Coal Co.

MT. JESSUP COAL CO., LTD.

PR—E. H. Ford, Peckville, Pa.
TR—E. H. Ford, Peckville, Pa.
CHAIRMAN—M. S. Kemmerer, New York, N. Y.
GS—E. H. Ford, Peckville, Pa.
EM—Joseph Folen, Jessup, Pa.
EE—John Sutton, Peckville, Pa.
SCO—Ford Supply Co., Buyer, E. H. Ford, Peckville, Pa.
SA—Whitney & Kemmerer, New York, N. Y., and Philadelphia, Pa.
Additional Information on Page 683

Mt. Jessup No. 1 Mine; Drift and Slope; Three Dunmores and the Clark Seams.
PO—Peckville, Pa. SP—Same. CTY—Lackawanna, RR—D. L. & W., O & W, Erie.
IF—Wm. K. Jones, Peckville, Pa.
OF—Jas. P. Loftus, Peckville, Pa.
S of H—Mules, rope, 1 comp. air mach., 1 elec. loco. Track gage, 30 in.
S of M—Hand.
PP—Purchase power.
MNG. DIST.—Northern Anthracite.
SIZES SHIPT—Egg, Stove, Nut, Pea.
Buckwheat, Rice, Barley.
METHOD OF PREP.—Wet and Dry.
PREP. EQUIPT—Jigs, Spirals, Picking Tables.

Mt. Jessup No. 2 Mine; Drift, Slope and Shaft; Three Dunmores and Clark Seams.
PO—Peckville, Pa. SP—Same. CTY—Lackawanna, RR—D. L. & H.
IF—W. X. Jones, Peckville, Pa.
OF—P. A. Murphy, Peckville, Pa.
S of H—Mules, rope, 2 elec. locos.
S of M—Hand.
PP—Purchase power.
MNG. DIST.—Northern Anthracite.
SIZES SHIPT—Egg, Stove, Nut, Pea.
Buckwheat, Rice, Barley.
METHOD OF PREP.—Wet.
PREP. EQUIPT—Jigs, Spirals, Picking Tables.

MURRIN COAL CO., THE

General Office, Carbondale, Pa.
PR—Jas. B. Murrin, Carbondale, Pa.
VP—Frank Murrin, Carbondale, Pa.
TR—John Murrin, Carbondale, Pa.
GS—Frank Murrin, Carbondale, Pa.
PA—Jas. B. Murrin, Carbondale, Pa.

Fallbrook Mine; Drift; Archbald Seam, 72 inches thick.
PO—Carbondale, Pa.; SP—Same; CTY—Lackawanna; RR—N. Y. O. & W.
S of H—Mules, 2 elec. locos. Track gage 30 in.
S of M—Hand and comp. air machs.
PP—1 water tube boiler, 125 H. P. Power purchased.
EMP—125. Daily tonnage 150.
SIZES SHIPT—Pea, Nut, Egg.
PREP. EQUIPT—Shaker Screens, Picking Tables, Jigs, Washeries.
Formerly operated by Fallbrook Coal Co.

NAY AUG COAL COMPANY.

General Office, Dunmore, Pa.
PR—David Boles, Scranton, Pa.
VP—M. S. Knight, Scranton, Pa.
TR—C. E. Straus, Albany, N. Y.
GM—John A. Hines, Pittston, Pa.
PA—C. H. Stevens, Dunmore, Pa.
SA—H. A. Stelle, Scranton, Pa.

Nay Aug Mine; Drift; Dunmore No. 2 Seam, 96 in., Dunmore No. 3 Seam, 72 in., Dunmore No. 3 Seam, 72 in. thick.
PO—Dunmore, Pa. SP—Same. CTY—Lackawanna, RR—Erie.
MS—John A. Hines, Pittston, Pa.
IF—David Price, Dunmore, Pa.
OF—Anthony Lawrence, Dunmore, Pa.
S of H—Mules. Track gage, 22 in.
S of M—Hand.
PP—Power purchased, 220 volts A. C. EMP—150. Last years tonnage 66,965.
SIZES SHIPT—Egg, Stove, Nut, Pea.
Buckwheat, Rice, Barley.
METHOD OF PREP.—Wet.
PREP. EQUIPT—Jigs.
Old Information.

NORTH EAST COAL MINING CO

PR—J. H. Cranston, Box 235, Pittston, Pa.
VP—Max M. Markus, Box 235, Pittston, Pa.
TR—Max M. Markus, Box 235, Pittston, Pa.
GM—J. B. Shepard, Forest City, Pa.
GS—J. B. Shepard, Forest City, Pa.
PA—Max M. Markus, Box 235, Pittston, Pa.
EM—P. M. Campbell, Pittston, Pa.
SA—M. Schlosser, Pittston, Pa.

North East Mine; Drift; Clark and Dunmore Seams, 44 in. thick.
PO—Forest City, Pa.; SP—Same; CTY—Lackawanna; RR—N. Y. O. & W.
S of H—Mules, comp. air, trolley pole type and steam locos. Track gage 36 inches.
S of M—Hand.
PP—Power purchased, Transformer 2300-220 volts A. C., water tube boiler, 60 H. P.
EMP—65.
SIZES SHIPT—Pea, Nut, Egg, Stove, Buckwheat.
PREP. EQUIPT—Shaker Screens.

NORTHERN ANTHRACITE COAL CO.

General Office, Lopez, Pa.
PR—M. J. Murray, Jr., Scranton, Pa.
VP—Chas. A. Murray, Mildred, Pa.
TR—P. P. Murray, " "
GM—M. J. Murray, Jr., Scranton, Pa.
GS—Chas. A. Murray, Mildred, Pa.
OS—Matt Gehen, " "
OJ—J. W. Walsh, " "
EM—G. P. Allen, " "
PA—Peter P. Murray, Murray, Pa.
Murray Mine; Shaft; B Vein, 72 in. thick.
PO—Lopez, Pa.; SP—Same; CTY—Schuylkill; RR—L. V.
IF—Matt Gehen, Murray, Pa.
OF—J. W. Walsh, Murray, Pa.
S of H—Mules and rope. Track gage 36 inches.
S of M—Hand.
PP—C fire tube boilers, 540 H. P.
EMP—300. Last years tonnage 204,000.
SIZES SHIPT—Slack, Pea, Nut, Egg, Lump.
METHOD OF PREP.—Dry.

OAK HILL COAL COMPANY

General Office, Minersville, Pa.
AGENT—Wm. H. Grady, Minersville, Pa.
SCO—Oak Hill Store Co., Buyer, Wm. H. Grady, Minersville, Pa.
SA—C. H. Jacobs, 504 Stephen Girard Bldg., Philadelphia, Pa.

Additional Information on Page 683
Oak Hill Colliery; 1 Shaft, 2 Slopes and 2 Drifts; Little Buck to Primrose Seam.
PO—Minersville, Pa.; SP—Same; CTY—Schuylkill; RR—P. & R.
MS—Wm. H. Grady, Minersville, Pa.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—Power purchased, Transformer 440 volts A. C., M. G. set, 250 volts D. C., 4 pumps.
EMP—450. Last years tonnage 180,000.
SIZES SHIPT—Pea, Nut, Egg.
Old Information.

PAROE BROTHERS & CO., Inc.

General Office, Lattimer Mines, Pa.
PR—Ario Paroe, 447 Drexel Bldg Philadelphia, Pa.
TR—Herbert J. Warden, Philadelphia, Pa.
GM—John W. Crooks, Lattimer Mines, Pa.
PA—W. F. Tetter, Lattimer Mines, Pa.
EM—Simon Fisher, " "
SCO—Lattimer Store Co., Buyer, F. W. Patterson, Lattimer Mines, Pa.
Sales Agent, T. B. Fryer, 447 Drexel Bldg., Philadelphia, Pa.
Lattimer Mines; Slope and Shaft; Mammoth, Warton, Gamma, Buck Min. and Alpha Seams, 168 to 300 in. thick.
PO—Lattimer Mines, Pa.; SP—Same; CTY—Luzerne; RR—Lehigh Valley.
IF—Robert Fagan, Lattimer Mines, Pa.
OF—C. W. Hall, " "
S of H—Mules, trolley pole type and steam locos.

(Continued on Next Page)

Pardee Bros. & Co.—Cont.

S of M—Hand.
 PP—Power purchased, 14 water tube
 boilers, 4000 H. P., 2 air com-
 pressors, 7 pumps.
 EMP—1100.
 SIZES SHIPT—Stove, Pea, Nut, Egg,
 Rice, Buckwheat, Barley, Culm,
 Broken.
 METHOD OF PREP.—Wet and Dry.
 PREP. EQUIPT—Jigs, Spirals, Tables.

PENNSYLVANIA COAL COMPANY

General Office, Smith & Mill Sts., Dun-
 more, Pa.
 PR—W. A. May, Dunmore, Pa.
 TR—F. H. Wright, Dunmore, Pa.
 GS—Jos. P. Jennings, Dunmore, Pa.
 GS—W. R. Jennings, Dunmore, Pa.
 PA—W. R. Collins, 50 Church St., New
 York, N. Y.
 EM—C. W. F. Neuffer, Dunmore, Pa.
 EE—M. E. Walthall, Dunmore, Pa.
 SA—Williams & Peters, No. 1 Broad-
 way, New York, N. Y.

No. 14 Mine; Slope, Drift, Shaft; Hill-
 man, Diamond, Checker, Pittston and
 Marcy Seams, 86, 60, 56, 110, 60
 inches thick.
 PO—Pittston, Pa.; SP—Pittston, Pa.;
 CTY—Luzerne; RR—Erie.
 MS—John Dobbin, Pittston, Pa.
 S of H—35 elec. and 6 steam locos.,
 gravity and mules.
 S of M—3 mining mchs.
 PP—24 W. T. 3 R. T. boilers, 4848
 H. P. Purchase power, 440 volts
 A. C., 250 volts D. C., 35 pumps.
 EMP—1700. Last years tonnage 745,702
 SIZES SHIPT—Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Rolls, Shaking Screens
 and Jigs.

Ewen Mine; Shaft and Slope; Checker,
 Pittston, Marcy, Clark and Red Ash
 Seams, 72, 140, 48, 42, 72 in.
 thick.
 PO—Pittston, Pa.; SP—Same; CTY—
 Luzerne; RR—Erie.
 MS—Benjamin Milton, Pittston, Pa.
 S of H—26 elec., 3 steam locos., gravity
 and mules.

S of M—Hand.
 PP—31 W. T. boilers, 6267 H. P., 3—
 200 K.V.A. transformers, 3—200
 M. G. sets, 1—400 K.V.A., 2—
 625 K.V.A. and 1—1250 K.V.A.
 geo. bolts, A. C., 41 pumps.
 EMP—1511. Last years tonnage 587,252
 SIZES SHIPT—Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Rolls, Shaker Screens,
 Jigs and Picking Tables.

No. 6 Mine; Slope and Shaft; Checker,
 Pittston, Marcy, Clark, Babylon, Red
 Ash, Hillman, Diamond Seams, 60,
 143, 62, 41, 48, 60, 93, 56 in.
 thick.

PO—Inkerman, Pa.; SP—Pittston, Pa.;
 CTY—Luzerne; RR—Erie.
 MS—John T. Brown, Inkerman, Pa.
 S of H—19 elec. and 4 steam locos.,
 gravity and mules.

S of M—Hand.
 PP—18 W. T., 3344 H. P. boilers, 1—
 150 K. W. 1—200 K. W. gen.
 units, 1—240 K. W. rotary con-
 verters, 440 volts A. C., 250 volts D.
 C., 17 pumps.
 EMP—1595. Last years tonnage 620,977
 SIZES SHIPT—Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Rollers, Shaker and Cir-
 cular Screens, Jigs and Pickers.

No. 9 Mine; Slope and Shaft; Checker,
 Pittston, Marcy, Clark, Red Ash,
 Babylon, Fifth Seams, 84, 113,
 78, 42, 76, 46, 24 inches thick.

PO—Pittston, Pa.; SP—Same; CTY—Lu-
 zerne; RR—Erie.
 MS—Thomas Huntley, Pittston, Pa.
 S of H—46 elec. and 6 steam locos.,
 mules and gravity.

S of M—Hand and 4 mining mchs.
 PP—12 W. T. boilers, 3732 H. P., 2—
 250 K. W., 2—240 K. W. gen.
 units, 2—200 K. W. M. G. Sets,
 440 volts A. C., 250 D. C., 35
 pumps.
 EMP—1651. Last years tonnage 766,098
 SIZES SHIPT—Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Rolls, Shaking and Cir-
 cular Screens, Jigs and Pickers.

Barnum Mine; Shaft; Clark, Pittston
 Checker, Marcy, Red Ash, Babylon
 Seams, 48, 84, 96, 51, 120, 36
 inches thick.

PO—Pittston, Pa.; SP—Same; CTY—Lu-
 zerne; RR—Erie.
 MS—Thomas Huntley, Pittston, Pa.
 S of H—14 elec. locos., gravity and mules.

S of M—Hand and 2 mining mchs.
 PP—8 W. T. boilers, 1200 H. P., 3—
 100 K. W. transformer, 1—300 K.
 W. rotary converters, 440 volts A.
 C., and 250 volts D. C., 13 pumps.
 EMP—406. Last years tonnage 192,132.
 SIZES SHIPT—Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Rolls, Shaker and Cir-
 cular Screens, Pickers.

Central Mine; Slope and Shaft; Clark and
 Red Ash Seams, 60—60 inches thick.
 PO—Avoca, Pa.; SP—Same; CTY—Lack-
 awanna; RR—Erie.

MS—P. H. O'Brien, Avoca, Pa.
 S of H—12 elec. locos., gravity and mules.
 S of M—Hand.
 PP—9 R. T. boilers, 1350 H. P., 300
 K.V.A. transformers, 1—300 K.
 W. rotary converters, 440 volts A.
 C., 250 D. C., 22 pumps.
 EMP—610. Last years tonnage 262,833.
 SIZES SHIPT—Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Rolls, Ebaker and Cir-
 cular Screens, Jigs and Pickers.

Old Forge Mine; Drift, Slope, Shaft;
 Marcy, Clark and Red Ash Seams,
 95, 68, 42 inches thick.

PO—Avoca, Pa.; SP—Same; CTY—Lack-
 awanna; RR—Erie.
 MS—John N. Cooke, Avoca, Pa.
 S of H—32 elec. and 5 steam locos.
 Gravity and mules.

S of M—Hand.
 PP—10 W. T. 2830 H. P. boilers, 2—
 400 K.V.A., 1—375 K.V.A., 2—
 350 K. W. gen. units, 3—300 K.
 W. M. G. Sets, 440 volts A. C., 250
 D. C., 29 pumps.
 EMP—1442. Last years tonnage 575,433
 SIZES SHIPT—Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Rolls, Shaking Screens
 and Jigs.

No. 5 Mine; Shaft; Clark, 1st, 2nd,
 3rd Seams, 54, 58, 59, 47 in.
 thick.

PO—Dunmore, Pa.; SP—Same; CTY—
 Lackawanna; RR—Erie.

MS—H. E. Yewens, Dunmore, Pa.
 S of H—11 elec. locos., gravity and
 mules.

S of M—Hand and 4 mining mchs.
 PP—6 W. T. boilers, 900 H. P., 2—
 240 K. W., 1—125 K. W. gen.
 units, 1—120 K. W. M. G. Set,
 250 volts, D. C., 11 pumps.
 EMP—494. Last years tonnage 252,011.
 SIZES SHIPT—Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Rolls, Shaking and Cir-
 cular Screens, Jigs and Pickers.

No. 1 Mine; Slope, Drift, Shaft; Marcy,
 Clark, 1st, 2nd, 3rd, Pittston Seams,
 70, 72, 48, 54, 48, 172 in. thick.
 PO—Dunmore, Pa.; SP—Same; CTY—
 Lackawanna; RR—Erie.

MS—H. E. Yewens, Dunmore, Pa.
 S of H—25 elec. locos., gravity and
 mules.

S of M—Hand and 4 mining mchs.
 PP—13 W. T. and 3 R. T. boilers, 2500
 H. P., 1—1200 K.V.A. Turbo
 generators, 440 volts A. C., 250 D.C.,
 17 pumps.

EMP—1183. Last years tonnage 761,827
 SIZES SHIPT—Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Rolls, Shaking Screens
 and Jigs.

Underwood Mine; Shaft; Clark, New Coun-
 ty, Pittston, Rock, 2nd and 3rd
 Seams, 84, 60, 72, 108, 52, 50
 inches thick.

PO—Throop, Pa.; SP—Dunmore, Pa.;
 CTY—Lackawanna; RR—Erie.

MS—C. F. Bretham, Throop, Pa.
 S of H—41 elec. locos., gravity.

S of M—Hand and 25 mining mchs.
 PP—8 W. T. boilers, 3200 H. P., 3—
 937 K.V.A., gen. units, 1—300
 K. W. motor gen. sets, 440 volts
 A. C., 250 D. C., 25 pumps.
 EMP—886. Last years tonnage 474,607
 SIZES SHIPT—Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Rolls, Shaking Screens,
 Pickers and Jigs.

PEOPLES COAL COMPANY

General Office, 1123 Washburn St.,
 Scranton, Pa.
 PR—Frank P. Christian, Scranton, Pa.
 TR—John O. Christian, Scranton, Pa.
 GM—John G. Hayes, Scranton, Pa.
 PA—M. Coyne, Scranton, Pa.
 CE—Geo. Stevenson, Connell Bldg.,
 Scranton, Pa.
 EM—James H. Pearn, S. Main St.,
 Scranton, Pa.
 EE—Wm. Dimmick, Watson Ave.,
 Scranton, Pa.
 SCO—Oxford Store Co. Buyer, Ed
 Smithing, Scranton, Pa.

Peoples Mine; Shaft; Seam 64 in. thick.
 PO—Scranton, Pa.; SP—Same; CTY—
 Lackawanna; RR—D. L. & N.

S of H—Mules and rope, trolley pole
 type and storage battery locos. Track
 gage 36 in.

S of M—Shurtwall mchs.
 PP—3 water tube boilers, total 500 H.
 P. gen. unit, 200 K. W., 250
 volts D. C., 7 pumps.

EMP—25. Daily tonnage 450.
 SIZES SHIPT—Run of Mine, Stove, Pea,
 Nut, Egg, Buckwheat.
 PREP. EQUIPT—Shaker Screens, Wash-
 eries.
 Old Information.

PETERSBURG COAL COMPANY.

General Office, Scranton, Pa.
 PR—Peter Stupp, Sr., Scranton, Pa.
 VP—Peter Stupp, Jr., Scranton, Pa.
 TK—Harry Stupp, Scranton, Pa.
 GM—Peter Stupp, Sr., Scranton, Pa.
 GS—Peter Stupp, Sr., Scranton, Pa.
 PA—Peter Stupp, Scranton, Pa.
 CE—Anthony A. Mayer, Scranton, Pa.
 EM—W. T. Morgan, Scranton, Pa.

Park Mine; Slope; Dunmore No. 1 Seam,
 108 in. thick.

PO—Scranton, Pa. SP—Erie R. R. Dun-
 more, Pa. CTY—Lackawanna. RR—
 Erie.

MS—W. T. Morgan, Scranton, Pa.
 S of H—Mules, main rope and steam
 loco. Track gage, 28 in.

S of M—Hand.
 PP—Water tube and 1 fire tube boilers,
 total 200 H. P.

EMP—19. Last years tonnage 7,269.
 MNG. DIST.—Upper Lackawanna Valley.
 SIZES SHIPT—Egg, Stove, Nut, Pea,
 Buckwheat, Rice.
 PREP. EQUIPT—Gravity Pickers.

PHILADELPHIA & READING COAL & IRON COMPANY.

PR—W. J. Richards, Pottsville, Pa.
 GM—Geo. B. Hadesty, Pottsville, Pa.
 GS—Edw. E. Kaercher, " "
 CON SUPT—P. F. Brennan, Shamokin,
 Pa.

DS—Fred C. Caldwell, Shamokin, Pa.
 Asst DS—Morgan Bevan, Ashland, Pa.
 DS—Joseph B. Garner, Shenandoah, Pa.

DS—T. R. Van Buren, Mahanoy City, Pa.
 DS—E. J. Welmer, Pottsville, Pa.
 EM—J. F. Bevan, Pottsville, Pa.

EM—Charles Enzian, " "
 CE—George S. Clemens, " "
 DE—J. E. Klase, Shamokin, Pa.

DE—A. R. Harris, " "
 DE—W. H. Seitzinger, Mt. Carmel, Pa.
 DE—F. H. Bender, Shenandoah, Pa.

DE—G. G. Mayer, Mahanoy City, Pa.
 DE—J. B. Plerson, " "
 OE—L. D. Lamont, Pottsville, Pa.

OE—J. O. Roads, " "
 DE—Jos. Maguire, Tremont, Pa.
 EE—J. T. Jennings, Pottsville, Pa.

PA—J. D. Landis, Philadelphia, Pa.
 Additional Information on Page 683

North Franklin, Bear Valley, Boroisde,
 Shirog, Big Mountain, Henry Clay
 Collieries.

Supt—(Outside) J. P. Knapp, Shamokin, Pa.
 Supt—(Inside) J. C. Brown, Shamokin, Pa.

Asst Supt—(Inside) E. C. Jones, Shamokin, Pa.

Alaska, Locust Gap, Locust Spring, Re-
 liance Collieries; Locust Spring
 Washery.

Supt—(Outside) Peter Roos, Locust Gap, Pa.
 Supt—(Inside) J. L. Davies, Mt. Carmel Jct., Pa.

Draper & Gilbertson Collieries.
 Supt—(Outside) W. J. Brown, Ashland, Pa.

Supt—(Inside) John Bailey, Gilbertson, Pa.

Silver Creek, Eagle Hill, Wadestville Col-
 lieries; Reevesdale Washery.

Supt—(Outside) U. Wm. Tiley, Pottsville, Pa.

Supt—(Inside) David Jones, " "
 S of H—Mules and 9 steam locos.

S of M—Hand.
 PP—36 boilers, total 6690 H. P., 12
 pumps, 3 air comp.

Indian Ridge, Shenandoah City, West
 Shenandoah, Koblinoor and Turkey
 Run Collieries; Plank Ridge Washery.

Supt—(Outside) A. D. Gable, Shenandoah, Pa.

Supt—(Inside) Louis Lorenz, Shenandoah, Pa.

S of H—Mules, 10 steam, 3 air and 5
 elec. locos.

S of M—Hand.
 PP—86 tubular boilers, total 10,750 H.
 P., 14 pumps, 11 air comp.

Ellangown, Knickerbocker, St. Nicholas,
 Suffolk and Maple Hill Collieries;
 Knickerbocker Washery.

DS—J. P. McDonald, St. Nicholas, Pa.
 S of H—Mules, 13 steam, 10 air and 8
 elec. locos.

S of M—Hand.
 Boston Run, Tunnel Ridge, Mahanoy City
 and North Mahanoy Collieries; North
 Mahanoy Washery.

Supt—(Outside) F. R. Dawson, Mahanoy City, Pa.
 Supt—(Inside) W. H. Richards, Mahanoy City, Pa.

Asst Supt—(Inside) George Oliver, Mahanoy City, Pa.

Anchor Washery; Pine Knot, Glendower,
 Thomaston, Phoenix Park, John
 Velth and Otto Collieries.

Supt—(Outside) John Paul, Pottsville, Pa.
 Supt—(Inside) Chas. H. Gallagher, Pottsville, Pa.

S of H—Mules and 9 steam locos.

S of M—Hand.
 PP—36 boilers, total 6690 H. P., 12
 pumps, 3 air comp.

Potts, East, Hammond Collieries; Ban-
 croft Washery.

Supt—(Outside) W. T. Taylor, Ashland, Pa.
 Supt—(Inside) James Wilcox, Ashland, Pa.

Asst Supt—(Inside) J. J. Herrity, Ashland, Pa.

S of H—Mules, 10 steam and 5 elec.
 locos.

S of M—Hand.
 PP—52 tubular boilers, total 6500 H.
 H. P., 8 pumps, 5 air comp.

Good Spring, Lincoln, Brookside and Val-
 ley View Collieries; Rausch Creek,
 Middle Creek and Lincoln Washeries.

Supt—(Outside) Jos. H. Lee, Tremont, Pa.
 Supt—(Inside) R. J. Schneider, Tremont, Pa.

S of H—Mules, 7 steam and 6 elec. locos.
 S of M—Hand and 4 comp. air mchs.
 PP—66 return tubular boilers, total 8250
 H. P., 8 pumps.

PINE HILL COAL COMPANY.

General Office, Brooks Bldg., Scranton,
 Pa.

PR—C. B. Sturges, 17 Battery Place, New York, N. Y.

VP—F. E. Platt, Board of Trade Bldg.,
 Scranton, Pa.

TR—Jesse Dummerick, 17 Battery Place,
 New York, N. Y.

GM—Clarence B. Sturges, 17 Battery Place,
 New York, N. Y.

GS—C. H. Sturges, Minersville, Pa.
 MM—Fred Gilman, " "

PA—S. E. Lott, Minersville, Pa.
 EM—Solomon Jenkins, Minersville, Pa.

EE—Wattie Bell, Minersville, Pa.
 SCO—Pine Hill Supply Co. Store, Buyer,
 S. E. Lott, Minersville, Pa.

SA—C. B. Sturges, 17 Battery Place,
 New York, N. Y.

Pine Hill Colliery; Shaft and Drift; Buck
 Mt., Skidmore, Black Heath, Red
 Ash and White Ash Seams, 32 to
 120 in. thick. Operate washery.

PO—Minersville, Pa.; Drawer M.; SP—
 Lytle, Pa.; CTY—Schuylkill; RR—
 Penna.

S of H—Mules, rope and trolley pole type
 locos. Track gage, 36 in.

S of M—Hand.
 PP—4 water tube boilers, total 3,000 H.
 P., 2 gen. units, 250 volts D. C.,
 1 air compressor, 13 pumps.

EMP—700. Last years tonnage 204,294.
 BREAKER EQUIPT—17 Jigs, 4 Spirals,
 1 Table.

Rock Washery, Culm Banks.
 PO—Minersville, Pa.; SP—Lytle, Pa.;
 CTY—Schuylkill; RR—Penna.

SUPT—Harry Hawley, Minersville, Pa.
 SM—Sidney Lott, " "

S of H—1 trolley pole type loco.
 PP—Purchase power, 440 volts A. C.
 EMP—40. Last fiscal year output
 30,000 tons.

SIZES SHIPT—Pea, Nut, Buckwheat.
 BREAKER EQUIPT—4 Jigs, 1 Spiral.
 METHOD OF PREP.—Wet.

PITTSBURGH COAL MINING COMPANY.

General Office, Pittston, Pa.
 PR—John Brown, Pittston, Pa.

TR—M. W. O'Boyle, Pittston, Pa.
 GM—C. M. O'Boyle, Pittston, Pa.

GS—Frank E. Ward, Sugar Notch, Pa.
 PA—C. M. O'Boyle, Sugar Notch, Pa.

CE—Smith & Wells, Wilkes-Barre, Pa.
 EE—Frank Harrington, Sugar Notch, Pa.
 SA—Pittston Coal Sales Co., Pittston, Pa.

Hadleigh Colliery; Drift and Slope; Mar-
 den, Cupola, Twin, Ross, Red Ash
 Top Split and Red Ash Bottom Split
 Seams, 60, 48, 48, 120, 72 and
 120 in. thick.

PO—Sugar Notch, Pa. SP—Same, CTY—
 Luzerne. RR—C. R. R. of N. J.

SM—M. J. Cooney, Sugar Notch, Pa.
 IF—Anthony Lenahan, Sugar Notch, Pa.

OF—Thomas Dowling, Ashley, Pa.
 S of H—Mules, 2 steam and 4 elec.
 locos. Track gage 36 in.

S of M—Hand.
 PP—4 water tube boilers, 250 H. P.,
 generators, 275 volts D. C., 10
 pumps.

EMP—299. Last years tonnage 145,000.
 SIZES SHIPT—Stack, Pea, Nut, Egg.
 METHOD OF PREP.—Wet and Dry.
 PREP. EQUIPT—Jigs.

PLYMOUTH COMPANY INC.

Now a part of the Inter-City Fuel Com-
 pany.

PLYMOUTH RED ASH COAL COMPANY.

General Office, Plymouth, Pa.
 PR—D. L. Fickes, Scranton, Pa.

TR—R. H. Swingle, Scranton, Pa.
 SECY—Geo. P. Lindsay, Plymouth, Pa.
 GM—W. L. Schlager, Scranton, Pa.

PA—S. H. Swingle, Scranton, Pa.
 EM—Chas. Rowe, Plymouth, Pa.
 SA—S. H. Swingle, Plymouth, Pa.

(Continued on Next Page)

Plymouth Red Ash Coal Co.—Cont.

Plymouth Red Ash Mine; Slope, Red Ash Seam.
PO—Plymouth, Pa. **SP**—Same. **CTY**—Luzerne. **RR**—D. L. & W.
IF—John Maxwell, Plymouth, Pa.
OF—John Maxwell, Plymouth, Pa.
S of H—Mules and main and tail rope. Track gauge, 42 in.
S of M—Hand.
PP—Power purchased, 440 volts A. C.
EMP—50. Last fiscal year output, 18,000 tons.
MNG. DIST.—Wyoming.
SIZES SHIPT—Egg, Stove, Nut, Pea.
METHOD OF PREP.—Wet.
PREP. EQUIPT.—Spirals.

POT CARBON COAL CO.

General Office, Prifer Bldg., Pottsville, Pa.
PR—A. B. Benesch, 280 Madison Ave., New York, N. Y.
VP—H. D. Johnson, Pottsville, Pa.
TR—M. C. Koschnaum, Pottsville, Pa.
GM—H. D. Johnson, Pottsville, Pa.
GS—D. P. Pace, Pottsville, Pa.
PA—H. D. Johnson, Pottsville, Pa.
CE—H. C. Johnson, Pottsville, Pa.
SA—H. D. Johnson, Pottsville, Pa.

 Progressive Colliery; Slope and Drift; 9 Seams, 28-250 in. thick.
PO—Port Carbon, Pa. **SP**—Same. **CTY**—Schuylkill. **RR**—P. & B., Schuylkill Valley Br.
IF—Walter Folger, Port Carbon, Pa.
OF—Jack Bettschneider, Port Carbon, Pa.
S of H—Mules, trolley pole type and storage battery locos. Track gauge, 38 in.
S of M—Hand.
PP—Power purchased, transformer 21,000 to 440 volts A. C., 250 volts D. C.
EMP—100. Last years tonnage 60,000.
MNG. DIST.—Pottsville.
SIZES SHIPT—Pea, Nut, Egg.
METHOD OF PREP.—Wet.
PREP. EQUIPT.—Jigs, Tables.

PRICE, PANCOAST COAL COMPANY

General Office, 1007 Mears Bldg., Scranton, Pa.
PR—Wm. L. Allen, Scranton, Pa.
VP—Joseph D. Eddy, New York, N. Y.
TR—Thomas Dickson, New York, N. Y.
TR—Jesse L. Eddy, 17 Battery Pl., New York, N. Y.
SECY—T. R. Cornwall, New York, N. Y.
GM—Floyd G. Wilcox, Scranton, Pa.
GS—John R. Brydon, Jr., Throop, Pa.
PA—E. H. Ritter, Scranton, Pa.
CE—J. L. B. maly, Scranton, Pa.
ME—George H. Wilson, Scranton, Pa.
ME—Fred Moore, B. of T. Bldg., Scranton, Pa.
SA—Dickson & Eddy, 17 Battery Place, New York, N. Y.

 Price Panceast Mine; Shaft and Slope, Dunmore No. 2 and Diamond No. 3 Seam, 48 in. thick.
PO—Throop, Pa.; **SP**—Same; **CTY**—Lackawanna; **RR**—N. Y. O. & W., D. L. & W.
MS—John R. Brydon, Jr., Throop, Pa.
IF—Abraham Pierson, Throop, Pa.
IME—Robert Reid, Throop, Pa.
S of H—Rope, trolley pole locos. Track gauge 36 inches.
S of M—Hand.
PP—Power purchased, 6-300 H. P. boilers, 2-1000 K. W. turbines, 2-2000 air compressors, 440 and 275 volts D. C.
EMP—700. Last years tonnage 251,827.
SIZES SHIPT—Pea, Nut, Egg, Stove, Buckwheat.
PREP. EQUIPT—Wet, Jigs, Shaker Screens.

QUINN COAL COMPANY

General Office, 806 Mears Bldg., Scranton, Pa.
PR—K. M. Jordan, Scranton, Pa.
VP—T. M. Fogarty, Scranton, Pa.
TR—T. F. Quinn, Scranton, Pa.
GM—T. F. Quinn, Scranton, Pa.
GS—T. M. Fogarty, Scranton, Pa.
PA—T. F. Quinn, Scranton, Pa.
CE—W. A. Sunday, Scranton, Pa.
DS—Jas. Moore, Dunmore, Pa.
DS—Jas. Laub, Greenwood, Pa.
SCO—Address the Company; Buyer, J. F. O'Toole, Scranton, Pa.

 Pickaway Mine; Drift; Dunmore Nos. 2 and 3 Seams, 30 and 48 in. thick.
PO—Yatesville, Pa.; **SP**—Same; **CTY**—Luzerne; **RR**—Lehigh Valley.
IF—Jno. Carder, Yatesville, Pa.
OF—W. Monshon, Pittston, Pa.
S of H—Mules. Track gauge, 30 in.
S of M—Hand.
PP—Power purchased, Transformer 2,200 to 220 volts A. C.
EMP—120.
SIZES SHIPT—Lump, Steamboat, Nut, Broken, Stove, Pea, Buckwheat, Rice.
METHOD OF PREP.—Wet.
PREP. EQUIPT—Jigs.

No. 6 Mine; Drift; Dunmore and Clark Seams, 30 and 24 in. thick.
PO—Dunmore, Pa.; **SP**—Same; **CTY**—Lackawanna; **RR**—Erie, L. & W. V.
IF—Jno. Laub, Greenwood, Pa.
S of H—Mules. Track gauge, 30 in.
S of M—Hand.
PP—Power purchased.
EMP—80.
SIZES SHIPT—Lump, Broken, Stove, Nut, Pea, Buckwheat, Rice, Barley.
METHOD OF PREP.—Wet.
PREP. EQUIPT—Jigs.

RACKET BROOK COAL COMPANY.

General Office, Carbondale, Pa.
PR—David Boles, Scranton, Pa.
TR—Albert S. Watson, Scranton, Pa.
GM—J. A. Hines, Carbondale, Pa.
GS—J. A. Hines, Carbondale, Pa.
PA—W. H. Ahlers, Carbondale, Pa.
EM—J. A. Hines, Carbondale, Pa.
EE—Wm. Mulrooney, Carbondale, Pa.
Sales Agency, P. A. Potts & Co., 113 Liberty St., New York, N. Y.

 Racket Brook Mine; Drift, Slope, Shaft; Clark, Dunmore Nos. 1, 2 and 3 Seams, 108, 32, 26, 28 in. thick.
PO—Carbondale, Pa. **SP**—Same. **CTY**—Lackawanna. **RR**—D. & H.
MS—C. D. Winter, Carbondale, Pa.
S of H—8 electric and 3 steam locos. Track gauge 36 in.
S of M—40 comp. air machs.
PP—Power purchased, generate D. C. at 250 volts, transformer 5,000 to 400 volts A. C., 2-200 K. W. M. G. sets, 2 air compressors.
EMP—350. Last years tonnage 150,000.
SIZES SHIPT—Egg, Stove, Nut, Pea, Buckwheat, Rye.
METHOD OF PREP.—Wet.
PREP. EQUIPT.—Jigs.

RAUB COAL CO.

General Office, Luzerne, Pa.
PR—W. T. Payne, Kingston, Pa.
VP—J. L. Calo, Pittston, Pa.
TR—H. B. Schooley, Wilkes-Barre, Pa.
GM—Gwilym Edwards, Luzerne, Pa.
GS—Gwilym Edwards, Luzerne, Pa.
PA—J. B. Blackman, Kingston, Pa.
EE—Geo. Homgwell, Wilkes-Barre, Pa.

Louise Mine, Shaft, Slope and Drift, Ross and Red Ash Seams.
PO—Luzerne, Pa. **SP**—Same. **CTY**—Luzerne. **RR**—L. V.
S of H—Mule. Steam and elec. locos. Track gauge 36 in.
S of M—Hand and 2 elec. machs.
PP—3 water tube boilers, total 900 H. P., 440 volts, A. C., 3 phase, 60 cycles, 1 air comp., 6 pumps.
EMP—300.
SIZES SHIPT—Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley.
PREP. EQUIPT—Wet, Jigs.

RAVEN RUN COAL COMPANY.

General Office, Land Title Bldg., Philadelphia, Pa.
PR—Col. D. R. Wentz, Philadelphia, Pa.
VP—W. C. Kent, Philadelphia, Pa.; J. E. Snyder, Hazleton, Pa.
TR—H. B. Price, Philadelphia, Pa.
GM—T. E. Snyder, Hazleton, Pa.
GS—E. P. Humphrey, Hazleton, Pa.
PA—A. J. Kotch, Hazleton, Pa.
CE—B. C. Osler, Hazleton, Pa.
EE—Chas. L. Tyler, Hazleton, Pa.
SCA—Hazel Brook Supply Company, Buyer, Guy Watson, Hazleton, Pa.
SA—H. C. Barr, Philadelphia, Pa.

Raven Run Colliery; Drift; Slope Stripping; Brick Mountain Seam 120 in. thick.
PO—Raven Run, Pa.; **SP**—Same; **CTY**—Schuylkill; **RR**—Philadelphia & Reading.
MS—E. B. Leisenring, Raven Run, Pa.
SM—James Rowe, Raven Run, Pa.
S of H—4 trolley pole type and 4 steam locos. Track gauge 48 in.
PP—Power purchased, transformer 23000-460 volts, M. G. Sets, 250 volts, D. C., 9 pumps.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.
NOTE—Formerly operated by the Girard Mammoth Coal Company.

REO ASH COAL CO.

General Office, 748-752 Miners Bank, Wilkes-Barre, Pa.
PR—G. Frederick Parrish.
TR—W. H. Conyngnam, Wilkes-Barre, Pa.
GM—G. F. Parrish, Wilkes-Barre, Pa.
GS—Wm. D. Jones, Wilkes-Barre, Pa.
PA—J. T. Bath, Wilkes-Barre, Pa.

 Red Ash Nos. 1 and 2 Mines; Drift; Slope and Stripping.
PO—Wilkes-Barre, Pa.; **SP**—Same; **CTY**—Luzerne; **RR**—C. R. of N. J.
IF—Edward Davis, Wilkes-Barre, Pa.
OF—John Herliott, Wilkes-Barre, Pa.
S of H—Mules, endless, main and tail rope, 6 steam locos.
S of M—Hand.

PP—water tube boiler.
EMP—350. Last years tonnage 107,253.
SIZES SHIPT—Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley.
METHOD OF PREP.—Wet and Dry.
PREP. EQUIPT—Jigs, Spirals, Tables.

REESE, T. R. COAL COMPANY.

PR—T. R. Reese, Audenreld, Pa.
TR—T. R. Reese, Audenreld, Pa.
GM—T. R. Reese, Audenreld, Pa.
GS—T. R. Reese, Audenreld, Pa.
MM—Howard Reese, Meadon, Pa.
PA—L. C. Reese, Lehigh, Pa.
CE—Howard Reese, Audenreld, Pa.
SCO—Address the Company, Buyer, E. C. Reese, Eddley, Pa.

Dusky Diamond Mine; Slope; Lykens Seam, 108 in. thick.
PO—Audenreld, Pa.; **SP**—Same; **CTY**—Luzerne; **RR**—C. R. of N. J.
S of H—Mules. Track gauge 36 in.
S of M—Hand.
PP—1 return tubular boiler, total 85 H. P., 1 gen. unit. Purchase power.
EMP—75.

REPLIER COAL COMPANY.

General Office, Minersville, Pa.
PR—Jas. B. Neale, Minersville, Pa.
ASST to **PRES**—Jas. H. Pierce, Frackville, Pa.
VP—S. B. Thorne, New York, N. Y.
TR—Jas. H. Collier, Minersville, Pa.
PA—Ray McFadden, Minersville, Pa.
EM—Phil Russell, Minersville, Pa.
EE—P. A. McCarron, Minersville, Pa.
SCO—Peoples Store Co., Buck Run, Pa.; Buyer, Jos. Martin, Pottsville, Pa.
SA—Thorne, Neale & Co., New York, N. Y.

Replier Mine; Slope.
PO—Ashland, Pa.; **SP**—Same; **CTY**—Schuylkill; **RR**—P. & R.
MS—Chas. Yeager, Ashland, Pa.
PP—Power purchased, transformer 2300 volts, 4 pumps.
EMP—50. Daily tonnage 600.
SIZES SHIPT—Rice, Barley, Buck, Pea, Nut, Egg.
PREP. EQUIPT—Shaker Screens, Washeries.

RHONODA COAL COMPANY

General Office, Scranton Life Bldg., Scranton, Pa.
TR—Frank P. Benjamin, Scranton, Pa.
GM—Frank P. Benjamin, Scranton, Pa.
PA—Frank P. Benjamin, Scranton, Pa.

 Anthracite Coal Washery.
PO—Scranton, Pa.; **SP**—Winton, Pa.; **CTY**—Lackawanna; **RR**—N. Y. O. & W.
PP—Power purchased, 220 volts. Daily output, 500 tons.
SIZES SHIPT—Nut, Pea, Brick, Rice, Barley.
PREP. EQUIPT—8 Jigs.

ROBERTSON COAL COMPANY

General Office, Scranton, Pa.
PR—W. G. Robertson, Scranton, Pa.
VP—E. S. Dulph, Scranton, Pa.
TR—E. A. Judge, Jessup, Pa.
GM—W. G. Robertson, Scranton, Pa.

 Blue Ridge, Culp Dump Washery.
PO—Pottsville, Pa.; **SP**—Same; **CTY**—Lackawanna; **RR**—N. Y. O. & W.
PP—Power purchased.
PREP. EQUIPT—Shaker Screens, Washeries.
 Old Information.

ST CLAIR COAL CO. (THE)

General Office, Scranton, Pa.
PR—Wm. H. Taylor, 17 Battery Place, New York, N. Y.
TR—N. G. Taylor.
GS—H. M. Smyth, St. Clair, Pa.
PA—T. M. Voyle, Scranton, Pa.
EM—H. W. Althouse, Pottsville, Pa.
ME—H. M. Smyth, St. Clair, Pa.
EE—Morgan Cocker, St. Clair, Pa.
SCO—The Schuylkill Supply Co., Buyer, J. M. Phillips, St. Clair, Pa.

 St. Clair Colliery; Slope; Drift; Stripping; Mammoth Seam, 20 ft.; Skldmore Seam, 4 ft.; Buck Mountain Seam, 5 ft. thick.
PO—St. Clair, Pa. **SP**—Same. **CTY**—Schuylkill. **RR**—P. & R.
IF—E. Jones, St. Clair, Pa.
OF—Wm. Reese, St. Clair, Pa.
S of H—Mules, trolley pole type and steam locos. Track gauge, 36 in.
S of M—Breast mining machs.
PP—Power purchased, 250 volts D. C., 2300 volts A. C., 3 phase 60 cycle, 5 boilers, 750 H. P., 3 air compressors, 6 pumps.
EMP—700. Last years tonnage 260,000.
MNG. DIST.—Schuylkill.
SIZES SHIPT—Barley, Pea, Nut, Broken, Stove, Buckwheat, Rice, Egg.
PREP. EQUIPT—Rolls, Shakers, Jigs, Spirals.

SCHUYLKILL VALLEY COAL COMPANY

General Office, 26 South Centre St., Pottsville, Pa.
PR—A. B. Benesch, New York, N. Y.

VP—H. D. Johnson, Pottsville, Pa.
SECY—Chas. L. Benesch, New York, N. Y.
GS—Dan P. Pace, Pottsville, Pa.

Progressive Colliery.
PO—Port Carbon, Pa.; **CTY**—Schuylkill, **RR**—P. & R.
NOTE—Formerly Port Carbon Coal Co.

SCRANTON AVCO COAL COMPANY

General Office, Scranton, Pa.
GM—Hugh A. Dawson, Scranton, Pa.
SA—Hugh A. Dawson, Scranton, Pa.

 Dawson Washery.
PO—Scranton, Pa.; **SP**—Same; **CTY**—Lackawanna.
 Old Information.

SCRANTON COAL CO.

General Office, Scranton, Pa.
PR—W. L. Allen, Scranton, Pa.
VP—F. E. Platt, Scranton, Pa.
TR—R. D. Rickard, Grand Central Terminal, N. Y.
GM—Wm. L. Allen, Scranton, Pa.
GS—I. T. Catright, Scranton, Pa.
PA—W. H. Widdowfield, Scranton, Pa.
EM—Frank G. Wolfe.
Sales Agency, Dickson & Eddy, New York, N. Y.

Pine Brook, Catoize and Mt. Pleasant Mines; Shaft.

PO—Scranton, Pa.; **SP**—Same; **CTY**—Lackawanna; **RR**—N. Y. O. & W., D. L. & W.
S of H—8 Elec. and 1 steam loco.; track gauge 36 in.
S of M—Hand.
PP—1 Water tube, 18 tubular boilers, 12 cylindrical, total 3,560 H.P., 44 gen. units, 290 volts D.C., 4 compressors, 12 pumps.
EMP—1,475. Last years tonnage 595,000.
SIZES SHIPT—Grate, Egg, Stove, Chestnut, Pea, Buckwheat, Boiler.
PREP. EQUIPT—Standard Breaker.

West Ridge Mine; Slope.

PO—Scranton, Pa.; **SP**—Providence Station, Pa.; **CTY**—Lackawanna; **RR**—N. Y. O. & W.
S of H—Mules; track gauge 36 in.
S of M—Hand.
PP—6 Return tubular boilers, total 490 H.P.; 10 gen. units.
EMP—27. Last years tonnage 1,172
SIZES SHIPT—Grate, Egg, Stove, Chestnut, Pea, Buckwheat.
PREP. EQUIPT—Standard Breaker

Richmond No. 3 Mine; Shaft.

PO—Scranton, Pa.; **SP**—Throop, Pa.; **CTY**—Lackawanna; **RR**—N. Y. O. & W.
S of H—Mules; 1 steam loco.; track gauge 36 in.
S of M—Hand.
PP—4 Water tube, 2 return tubular boilers, total 1,000 H.P., 10 gen. units, 2 pumps.
EMP—267. Last years tonnage 68,098.
SIZES SHIPT—Egg, Stove, Chestnut, Pea, Buckwheat.
PREP. EQUIPT—Standard Breaker.

Johnson Mine; Shaft and slope.

PO—Dickson City, Pa.; **SP**—Same, **CTY**—Lackawanna; **RR**—N. Y. O. & W.
S of H—3 Elec., 3 steam loco. and mules; track gauge 36 in.
S of M—1 Elec. mach. and hand.
PP—17 Tubular boilers, total 2,100 H.P., 31 gen. units 550 volts D.C., 1 compressor, 8 pumps.
EMP—463. Last years tonnage 198,481
SIZES SHIPT—Grate, Egg, Stove, Chestnut, Pea, Buckwheat, Boiler.
PREP. EQUIPT—Standard Breaker.

Raymond Mine; Shaft, slope and drifts

PO—Arenhold, Pa.; **SP**—Winton, Pa.; **CTY**—Lackawanna; **RR**—N. Y. O. & W.
S of H—2 Elec., 3 steam loco and mules; track gauge 36 in.
S of M—Hand.
PP—11 Return tubular boilers, total 1,185 H.P., 10 gen. units 275 volts D. C., 1 compressor, 9 pumps.
EMP—530. Last years tonnage 211,052
SIZES SHIPT—Grate, Egg, Stove, Chestnut, Pea, Buckwheat, Boiler.
PREP. EQUIPT—Standard Breaker

Ontario Mine; Shaft, slope and drifts

PO—Pottsville, Pa.; **SP**—Same, **CTY**—Lackawanna; **RR**—N. Y. O. & W.
S of H—3 Elec., 3 steam loco. and mules; track gauge 36 in.
S of M—Hand.
PP—11 Return tubular boilers, total 1,600 H.P., 43 gen. units 275 volts D. C., 1 compressor, 7 pumps.
EMP—461. Last years tonnage 241,505
SIZES SHIPT—Egg, Stove, Chestnut, Pea, Buckwheat.
PREP. EQUIPT—Standard Breaker.
 (Continued on Next Page)

Scranton Coal Co.—Cont.

Riverside Mine; Shaft.
 PP—Winton, Pa.; SP—Same; CTY—
 Lackawanna; RR—N. Y. O. & W.
 S of H—Miles, track gauge 36 in.
 S of M—Hand.
 PP—7 return tubular boilers, total
 1,015 H. P., 12 gen. units, 1
 compressor, 2 pumps.
 EMP—575 Last years tonnage 163,541.
 SIZES SHIPT—Egg, Stove, Chestnut,
 Pea, Buckwheat.
 PREP. EQUIPT—Standard Breaker.

SCRANTON ANTHRACITE COAL CO.

General Office, Burr Building, Scranton,
 Pa.
 PR—Richard R. Walsh, Scranton, Pa.
 VP—J. J. McGuire, Scranton, Pa.
 GM—M. J. Rafferty, Scranton, Pa.
 GS—John T. O'Toole, Scranton, Pa.
 PA—M. J. Rafferty, Scranton, Pa.
 EM—Fred Campbell, Avoca, Pa.
 EE—Bernard Scanlon, Minooka, Pa.
 Oak Hill Colliery; Slope and Shaft;
 Clark and Dunmore No. 3 Seams,
 42 to 66 in. thick.
 PO—Moosic, Pa.; SP—Same; CTY—
 Lackawanna; RR—N. Y. L. & N.
 MS—Joe McCabe, Greenwood, Pa.
 S of H—Mules and 5 electric locos.
 Track gauge 36 in.
 S of M—Hand.
 PP—Power purchased, 440 volts, 12
 pumps.
 EMP—477 Last years tonnage 75,000.
 SIZES SHIPT—Pea, Nut, Egg.
 PREP. EQUIPT—Jigs, Shaker.

SCRANTON-TAYLOR COAL COMPANY.

PR—Edw. E. Scott, Scranton, Pa.
 VP—H. A. Davidson, Miller Bldg., Scranton,
 Pa.
 GM—S. J. McDonald, Scranton, Pa.
 PA—S. J. McDonald, Scranton, Pa.
 Sales Agent, H. A. Dawson, Scranton, Pa.
 Marion Washery; Culm Bank.
 PO—Taylar, Pa. SP—Same. CTY—Lack-
 awanna, RR—D. L. & W.
 S of H—Conveyor lines.
 S of M—Hand.
 PP—3 pumps.
 EMP—20
 SIZES SHIPT—Pea, Buckwheat, Rice,
 Barley.
 METHOD OF PREP—Wet.
 PREP. EQUIPT—Jigs, Pickers.

SHAMOKIN RED ASH COAL CO.

PR—D. H. McGhee, Shamokin, Pa.
 TR—Joseph J. Evans, Shamokin, Pa.
 GM—D. H. McGhee, Shamokin, Pa.
 GS—S. E. McGhee, Mount Carmel, Pa.
 PA—John Hersker, Shamokin, Pa.
 Shamokin Mine.
 PO—Shamokin, Pa.; SP—Mt. Carmel,
 Pa.; CTY—Northumberland; RR—
 P. R. R.
 Operate Washery.
 OF—Frank Rehm, Shamokin, Pa.
 S of H—Electric and steam locos.
 S of M—Hand.
 PP—2 one tube boilers, 300 H. P., 2
 pumps.
 EMP—60.
 PREP. EQUIPT—Jigs, Spirals.

SHERMAN COAL CORPORATION

General Office, Pottsville, Pa.
 PR—G. H. Sherman, Detroit, Mich.
 VP—E. O. Marty, Detroit, Mich.
 TR—Clyde R. Dunkle, Schuylkill Haven,
 Pa.
 GM—Edgar O. Marty, Detroit, Mich.
 Sherman Colliery; Drift; Mammoth, Skid-
 more and Primrose Seams, 20 to
 120 in. thick.
 PO—Pottsville, Pa.; SP—Same; CTY—
 Schuylkill; RR—P. R. R., P. & R.,
 & V.
 S of H—Mules and hoists. Track gauge
 36 in.
 S of M—Hand.
 PP—Power purchased, 440 volts A. C.,
 220 volts D. C., 1 pump.
 Daily tonnage 110.
 SIZES SHIPT—Rice, Barley, Brick, Pea,
 Nut, Egg, Stove.
 PREP. EQUIPT—Breaker, Jigs, Shakers,
 Crushers, Screens.
 Old Information.

SHIPMAN COAL COMPANY.

General Office, Shamokin, Pa.
 PR—H. H. Lineawaver, Philadelphia, Pa.
 GM—B. F. James, Pottsville, Pa.
 GS—Josiah Rhoades, Shamokin, Pa.
 PA—B. E. Fetter, Shamokin, Pa.
 ME—Joseph Winters, Shamokin, Pa.
 EE—Elmer Gass, Shamokin, Pa.
 SCO—Address the Company; Buyer, R.
 E. Fetter, Shamokin, Pa.
 Sales Agency, H. H. Lineawaver & Co.,
 Philadelphia, Pa.
 Colbert Mine; Shaft and Drift; Mam-
 moth Nos. 8, 9, 9½, Buck Mtn.
 Nos. 4 and 5, Primrose No. 11
 Seams, 72 in. thick.
 PO—Shamokin, Pa.; SP—Same; CTY—
 Northumberland, RR—Penna.
 IF—Chas. Metz, Shamokin, Pa.
 OF—Joseph Winters, Shamokin, Pa.
 S of H—Mules, 2 steam and 2 gasoline
 locos. Track gauge 44 in.

S of M—2 comp. air punchers.
 PP—6 water tube boilers, 1200 H. P.,
 1 air compressor, 6 pumps.
 EMP—350. Last years tonnage 138,000.
 SIZES SHIPT—Culm, Broken, Egg,
 Stove, Nut, Pea, Buckwheat, Rice,
 Barley.
 METHOD OF PREP—Wet.
 PREP. EQUIPT—Jigs.

SLOCUM HOLLOW COAL COMPANY

General Office, 428 Coal Exchange Bldg.,
 Scranton, Pa.
 PR—H. C. Shafer, Lincoln Trust Co.,
 Scranton, Pa.
 GM—Herbert L. Williams, 428 Coal
 Exchange Bldg., Scranton, Pa.
 Slocum Mine; Shaft and Stripping; New
 County, Clark and Dunmore Seams;
 120 inches thick.
 PO—Scranton, Pa.; SP—Same; CTY—
 Lackawanna; RR—D. L. & H.
 MS—Herbert L. Williams, 428 Coal
 Exchange Bldg., Scranton, Pa.
 S of H—Mules and steam loco. Track
 gauge 42 inches.
 S of M—Hand, comp. air puncher and
 shortwall mach.
 PP—2 150 H. P. water tube boilers.
 EMP—20. Daily tonnage 200.
 SIZES SHIPT—Run of Mine, Pea, Nut,
 Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

SLOPE MOUNTAIN COAL COMPANY

General Office, Shamokin, Pa.
 PR—J. A. Vandergrift, Shamokin, Pa.
 GM—F. W. Brown, Shamokin, Pa.
 GS—F. W. Brown, Shamokin, Pa.
 PA—C. E. Willis, Shamokin, Pa.
 SA—Emerson & Morgan Coal Mining
 Corp., 1 Broadway, New York, N. Y.
 Slope Mountain Mine; Slope, Drifts; Nos.
 14, 15 and 16 Seams, 66, 72 and
 72 inches thick.
 PO—Shamokin, Pa.; SP—Same; CTY—
 Northumberland; RR—B. & P.
 S of H—Mules, endless and main an-
 tail rope, steam loco. Track gauge
 36 in.
 S of M—Hand.
 PP—Generate power, 2—150 H. P. fire
 tube boilers, 2 pumps.
 EMP—45 Daily tonnage 200.
 SIZES SHIPT—Pea, Nut, Egg.
 PREP. EQUIPT—Shaker Screens, Pick-
 ing Tables, Washeries.

SPENCER COAL COMPANY

General Office, Dunmore, Pa.
 PR—David Spruks, Scranton, Pa.
 TR—Geo. D. Taylor, Scranton, Pa.
 GM—David Spruks, Scranton, Pa.
 GS—I. Vipord, Sr., Scranton, Pa.
 PA—McKinley Parker, Scranton, Pa.
 CE—Walter C. Hess, Scranton, Pa.
 EM—F. W. Campbell, Scranton, Pa.
 EE—M. Conway, Scranton, Pa.
 Spencer Mine; Slope and Shaft; Nos. 1,
 2 and 3 Dunmore Veins, 36 in.
 thick.
 PO—Dunmore, Pa.; SP—Same; CTY—
 Lackawanna; RR—Erie.
 MS—Thomas Baggett, Scranton, Pa.
 OF—Henry Stipp, Scranton, Pa.
 S of H—Mules and 6 trolley pole type
 locos.
 S of M—Hand and comp. air.
 PP—Power purchased, 220 volts A. C.
 EMP—160. Last years tonnage 50,257.
 SIZES SHIPT—Pea, Nut, Egg.
 PREP. EQUIPT—Jigs.

STACKHOUSE, E. S., COAL CO.

General Office, Shickshinny, Pa.
 PR—E. S. Stackhouse, Shickshinny, Pa.
 GM—E. S. Stackhouse, Shickshinny, Pa.
 GS—W. S. Ritter, Shickshinny, Pa.
 PA—Wm. C. Cortright, Shickshinny, Pa.
 EM—Chas. S. Miles, Wilkes-Barre, Pa.
 EE—Peri DeMartin, Shickshinny, Pa.
 SCO—Hill Store, Buyer, Frank Jayne,
 Shickshinny, Pa.
 Salem Colliery; Drift; Ross and Red Ash
 Seams, 2 to 10 ft. thick.
 PO—Shickshinny, Pa.; SP—Same; CTY—
 Luzerne; RR—D. L. & W.
 IF—W. G. Watkins, Shickshinny, Pa.
 S of H—6 trolley pole type locos. Track
 gauge 36 in.
 S of M—Hand and 1 shovel.
 PP—Power purchased, 440 volts A. C.,
 250 volts D. C., 1 one tube boiler,
 150 H. P., 2 pumps.
 EMP—167 Last years tonnage 75,340.
 SIZES SHIPT—Pea, Nut, Egg, Stove,
 Rice, Buckwheat, Barley.
 METHOD OF PREP—Wet and Dry.
 PREP. EQUIPT—Jigs, Spirals, Gravity
 Pickers.

STONE, H. J. COAL CO.

Now Wilben Coal Company.

SUFFOLK COAL COMPANY

General Office, Union Bank, Scranton, Pa.
 PR—E. B. Jermyn, Scranton, Pa.
 TR—E. B. Jermyn, Jr., Scranton, Pa.
 GM—E. B. Jermyn, Scranton, Pa.
 GS—W. S. Jermyn, Scranton, Pa.
 PA—W. L. White, Scranton, Pa.
 CE—J. P. Corcoran, Old Forge, Pa.
 EM—John McGinley, Avoca, Pa.
 EE—Harold Haffler, Avoca, Pa.
 SCO—Rushbrook Store Co. Buyer, R.

S. Jermyn, Jr., Avoca, Pa.
 SA—Major L. White, Scranton, Pa.

Langeliffe Mine; Shaft; Seam 66 inches
 thick.
 PO—Avoca, Pa.; SP—Same; CTY—Lu-
 zerne and Lackawanna; RR—D.
 & H.
 MS—John McGinley, Avoca, Pa.
 S of H—Mules, electric and storage ba-
 ttery locos. Track gauge 36 inches.
 S of M—Hand.
 PP—Purchase power. 3 fire tube boil-
 ers and 2 water tube boilers, M. G.
 sets, 220 volts D. C.
 EMP—525. Last years tonnage 250,000.
 SIZES SHIPT—Pea, Nut, Egg.
 PREP. EQUIPT—Shaker Screens, Wash-
 eries.

SUSQUEHANNA COLLIERIES COMPANY.

General Office, Philadelphia, Pa.
 PR—Wm. Collins, Philadelphia, Pa.
 TR—E. L. Steel, Philadelphia, Pa.
 SECY—C. H. Heffner, Philadelphia, Pa.
 GM—R. A. Quinn, Wilkes-Barre, Pa.
 PA—C. B. Dougherty, Wilkes-Barre, Pa.
 ME—H. L. Reese, Wilkes-Barre, Pa.
 EE—H. L. Reese, Wilkes-Barre, Pa.
 Sales Agency, M. A. Hanna & Co., Phila-
 delphia, Pa.
 William Reim Colliery, Shaft, Drift and
 Stripping.
 PO—Shaft, Pa. SP—Shenandoah, Pa.
 CTY—Schuylkill. RR—P. R. R.
 S of H—1 steam loco. and mules. Track
 gauge 48 in.
 S of M—Hand.
 PP—6 water tubular, 10 return tubular
 boilers, total 2300 H. P., 2 pumps.
 EMP—465. Last years tonnage 231,197.
 METHOD OF PREP—Wet and Dry.
 SIZES SHIPT—All Sizes.
 Lytle Colliery Mine, Shaft, Buck Mtn.,
 Skidmore, Mammoth, 3 Splits, Four
 Foot, Holmes, Primrose, Diamond
 and Tracy Seams, 3 to 13 ft.
 thick.
 PO—Minersville, Pa. SP—Lytle, Pa.
 CTY—Schuylkill. RR—P. R. R.,
 Minersville Branch.

DIV. SUPT.—W. W. Williams, Miners-
 ville, Pa.
 S of H—3 electric and 1 steam loco.,
 mules. Track gauge, 44 in.
 S of M—Hand.
 PP—2 water tube, 23 return tubular
 boilers, total 3950 H. P., 3 gen.
 units, 2300 volts A. C., 3 phase
 60 cycles, 2 rotary converters, 275-
 300 volts D. C., 3 compressors, 1
 pump.
 EMP—604. Last years tonnage 231,390.
 METHOD OF PREP—Wet and Dry.
 SIZES SHIPT—All Sizes.

Lytle Washery.
 PO—Minersville, Pa.; SP—Same; CTY—
 Schuylkill; RR—P. R. R.
 EMP—31. Last years tonnage 70,464

WYOMING DIVISION

DIV SUPT.—F. H. Kohlbrucker, Nanticoke,
 Pa.
 Collieries Nos. 5, 6 and 7 Mines (Wyom-
 ing Div.), Shafts, Slopes and
 Drifts, George, Mills, Hillman,
 Cooper, Forge, Twin, Ross, Lee
 Seams, Operate washery.
 PO—(5-7) Nanticoke, Pa. (6) Glen
 Lyon, Pa. SP—Same. CTY—Lu-
 zerne. RR—P. R. R., Sunbury
 Div.

S of H—30 electric, 1 storage battery,
 10 comp. air, 17 steam locos. and
 mules. Track gauge 36 and 42 in.
 S of M—1 elec. machine and hand.
 PP—54 water tube, 18 cylinder boilers,
 total 14,662 H. P., 2 gen. units,
 275 and 300 volts D. C., 5 gen.
 unit 2,300 volts A. C., 3 phase,
 60 cycles, 11 comp. and 8
 pumps.
 EMP—3,124. Last years tonnage 1,295-
 206.

METHOD OF PREP—Wet and Dry.
 SIZES SHIPT—All Sizes.
 Nanticoke Washery.
 PO—Nanticoke, Pa.; SP—Same; CTY—
 Luzerne; RR—P. R. R.

EMP—53. Last years tonnage 149,823.
 SHAMOKIN DIVISION

DIV SUPT.—David V. Randall, Shamo-
 kin, Pa.

Cameron Colliery, Slopes, Drifts and
 Shaft, Nos. 2, 4, 5, 6, 7, 7½,
 8, 9, 9½, 9¾, 10, 10½,
 11, 12, 13 and 14 Seams, 2 to
 12 ft. thick.

PO—Shamokin, Pa.; SP—Same; CTY—
 Northumberland; RR—P. R. R.
 S of H—3 Elec., 2 steam loco. and
 mules; track gauge 39 in.

S of M—Hand.
 PP—16 water tube boilers, total 1,980
 H. P., 1 gen. unit, 275-300 volts
 D. C., 1 comp., 3 pumps.

EMP—496. Last years tonnage 198,535.
 METHOD OF PREP—Wet and Dry.
 SIZES SHIPT—All Sizes.
 Luke Elder Colliery, Slopes, Drifts and
 Shaft, Nos. 2, 4, 8, 9, 10, 11
 and 12 Seams, 3 to 8 ft. thick.

PO—Shamokin, Pa. SP—Same. CTY—
 Northumberland. RR—P. R. R.

S of H—3 steam and 2 electric locos.
 mules. Track gauge, 40 in.

S of M—Hand.
 PP—10 water tube, 6 Vulcan, return
 tubular boilers, total 2,120 H. P.,
 2 gen. units, 2,300 volts A. C., 1
 rotary converter, 2 compressors, 2
 pumps.

EMP—500. Last years tonnage 210,496.
 METHOD OF PREP—Wet and Dry.

Tickory Ridge Colliery; Slopes; Nos. 4,
 8, 9, 9½ ft. Seams; 3 to 8 ft.
 thick.

PO—Shamokin, Pa.; SP—Same; CTY—
 Northumberland; RR—P. R. R.
 S of H—2 electric and 4 steam locos.,
 mules; track gauge 44 in.

S of M—Hand.
 PP—6 water tube, 16 Vulcan, return
 tubular boilers, total 3,650 H. P.,
 1 comp., 8 pumps.

METHOD OF PREP—Wet and Dry.
 Tickory Ridge Washery.

PO—Shamokin, Pa.; SP—Same; CTY—
 Northumberland; RR—Penna.
 EMP—21. Last years tonnage 183,334.

Scott Colliery; Shafts; Nos. 4, 6, 8, 9,
 9½ Seams, 3 to 8½ ft. thick.

PO—Shamokin, Pa.; SP—Kulpmont,
 Pa.; CTY—Northumberland; RR—
 P. R. R.

S of H—4 electric locos., mules. Track
 gauge, 44 in.

S of M—Hand.
 PP—16 water tube boilers, total 2,000
 H. P., 2 gen. units, 2,300 volts
 A. C., 1 compressor

EMP—695. Last years tonnage 277,107
 METHOD OF PREP—Wet and Dry
 Pennsylvania Colliery; Slopes; Nos. 4,
 5, 8, 9, 9½, 9¾, 10, 10½, 11;
 Seams, 2 to 7 ft. thick.

PO—Mount Carmel, Pa.; SP—Same;
 CTY—Northumberland; RR—P. R. R.
 S of H—7 electric and 2 steam locos.,
 mules.

S of M—Hand.
 PP—16 return tubular boilers, total
 2,400 H. P., 2 gen. units, 275, 300
 volts D. C., 6 pumps.

EMP—689. Last years tonnage 310,465.
 METHOD OF PREP—Wet and Dry.
 Richards Colliery; Slopes and drifts;
 Nos. 4, 5, 6, 8, 9, 9½, 9¾, 10, 10½
 and 11 Seams, 3 to 8
 ft. thick.

PO—Mount Carmel, Pa.; SP—Same;
 CTY—Northumberland; RR—P. R. R.
 S of H—6 electric, 4 steam locos. and
 mules; track gauge 48 in.

S of M—Hand.
 PP—18 return tubular boilers, total
 2,700 H. P., 1 gen. unit, 275-300
 volts D. C., 1 comp., 1 pump.

EMP—600. Last years tonnage 183,556.
 METHOD OF PREP—Wet and Dry.

LYKENS DIVISION
 DIV. SUPT.—E. A. Van Horn, Lykens,
 Pa.

Short Mtn. and Williamstown Collieries
 (Lykens Div.) Shaft, Slope and
 Drift, Lykens, Rock Mtn., Holmes
 and Primrose Seams, 2 to 10 ft.
 thick. Operate washeries.

PO—Lykens, Pa. SP—Same and Wil-
 lamstown, Pa. CTY—Dauphin
 RR—P. R. R., Northern Central
 Branch.

S of H—1 elec., 5 steam locos. and
 mules. Track gauge 40 and 47 8-4
 in.

PP—91 water tube, 9 loco type boilers,
 total 11,620 H. P., 1 gen. unit,
 2300 volts A. C., 5 gen. units,
 275 and 300 volts D. C., 7 air
 comps., 26 pumps.

EMP—1,559. Last years tonnage 542-
 189.
 METHOD OF PREP—Wet and Dry.
 Short Mountain and Williamstown Wash-
 eries.

PO—Lykens, Pa.; SP—Same and Wil-
 lamstown, Pa.; CTY—Dauphin;
 Penna.

EMP—47. Last years tonnage 61,049.

TEMPLE COAL COMPANY.

General Office, Scranton, Penna.
 PR—S. E. Thorne, New York, N. Y.
 VP—E. H. H. Wright, Scranton, Pa.

TR—A. M. Bingham, Scranton, Pa.
 GM—F. H. Homrigh, Scranton, Pa.
 PA—A. C. Twitcheil, Scranton, Pa.
 EM—Walter C. Hess, Scranton, Pa.
 MF—Alex. K. theil, Scranton, Pa.

DIV SUPT.—John Mellow, Carbondale,
 Pa.; Bruce Weir, Wyoming, Pa.
 DIV. SUPTS.—Bruce Weir, Carbondale,
 Pa.; John Mellow, Pottsville, Pa.;
 T. J. Aston, Wyoming, Pa.; and
 James J. McCarthy, Luzerne, Pa.

ASST. DIV. SUPT.—James P. McAndrew,
 Pottsville, Pa.
 Sales Agency, Thorne, Neale & Co., Inc.,
 17 Battery Place, New York, N. Y.
 Northwest Mine; Drift and Slope; Mills,
 Clark and No. 3 Dunmore Seams.
 PO—Carbondale, Pa. SP—Same. CTY—
 Lackawanna RR—N. Y. O. & W.
 IF—Thos. Cawley, Jermyn, Pa.
 OF—Harry Curnow, Simpson, Pa.
 S of H—Mules, rope and 3 steam locos.
 Track gauge, 36 in.

S of M—2 comp. air machs.
 PP—3 water tube boilers, total 750

Temple Coal Company—Cont.

H P., 3 air compressors, gen. units, 250 volts D. C., 6 pumps.
SIZES SHIPT.—Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley.
PREP. EQUIPT.—Jigs.
Sterck Creek Mine; Shaft Grassy, New County, Top Clark, Bottom Clark and No. 3 Dunmore Seams.
PO—Peckville, Pa. SP—Jessup-Peckville, Pa. CTY—Lackawanna, RR—Erie.
IF—Alonso Richards, Peckville, Pa.
OF—George Res, Peckville, Pa.
S of H—Mules, rope and 2 steam and 4 elec. locos. Track gauge, 36 in.
S of M—2 longwall machs.
PP—6 water tube boilers, total 2250 H. P., 1 air compressor, 3 gen. units, 300 volts D. C., 28 pumps.
SIZES SHIPT.—Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley.
PREP. EQUIPT.—Jigs, Spirals, Picking Tables.

Lackawanna Mine; Shaft: Diamond, Rock Grassy, Top, New County, Bottom, New County and No. 3 Dunmore Seams.
PO—Olyphant, Pa. SP—Same. CTY—Lackawanna RR—D. L. & W., Erie and N. Y. O. & W.
IF—D. C. Evans, Olyphant, Pa.
OF—W. H. Davis, Peckville, Pa.
OF—F. L. Barnes, Peckville, Pa.
S of H—Mules, rope, 13 elec. and 3 steam locos. Track gauge, 36 in.
S of M—6 elec. and 2 comp. air machs.
PP—9 water tube boilers, total 2310 H. P., 2 air compressors, 3 gen. units, 250 volts D. C., 20 pumps.
SIZES SHIPT.—Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley.
PREP. EQUIPT.—Jigs.
Mount Lookout Mine; Shaft: Pittston Mary, Top Ross, Bottom Ross and Red Ash Seams.

PO—Wyoming, Pa. SP—Same. CTY—Luzerne RR—D. L. & W., Lehigh Valley.
IF—Phil Williams, Wyoming, Pa.
PP—10 water tube boilers, total 2500 H. P., 3 air compressors, gen. units, 250 volts D. C., 28 pumps.
OF—Geo. Reynolds, Wyoming, Pa.
S of H—Mules, rope, 9 elec. and 1 steam loco. Track gauge, 36 in.
S of M—5 longwall machs.
SIZES SHIPT.—Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley.
PREP. EQUIPT.—Jigs, Spirals.
Forty Fort Mine; Shaft: Four Foot, Six Foot, Top Eleven Foot, Bottom Eleven Foot, Top Ross and Bottom Ross Seams.

PO—Maltby, Pa. SP—Luzerne, Pa. CTY—Luzerne RR—D. L. & W., Lehigh Valley.
IF—Wm. W. R. Forty Fort, Pa.
OF—John Callaghan, Maltby, Pa.
S of H—Mules, rope, 1 steam loco. Track gauge, 42 in.
S of M—Hand.
PP—7 water tube boilers, total 1800 H. P., 2 air compressors, 440 volts A. C., 250 volts D. C., 19 pumps.
SIZES SHIPT.—Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley.
PREP. EQUIPT.—Jigs, Spirals.
Harry E. Mine; Shaft: Eleven Foot, Top Ross, Bottom Ross and Red Ash Seams.

PO—Luzerne, Pa. SP—Same. CTY—Luzerne RR—D. L. & W., Lehigh Valley.
IF—John P. Bailey, Luzerne, Pa.
OF—M. R. Bonham, Forty Fort, Pa.
S of H—Mules, rope and 1 steam loco. Track gauge, 42 in.
S of M—3 chain breast machs.
PP—7 water tube boilers, total 1,850 H. P., 1 gen. unit, 440 volts A. C., 250 volts D. C., 23 pumps.
SIZES SHIPT.—Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley.
PREP. EQUIPT.—Jigs, Spirals, Gravity Pickers.

THOMAS COLLIER COMPANY

General office, North American Bldg., Philadelphia, Pa.
PR—Percy C. Madeira, Philadelphia, Pa.
TR—Louis C. Madeira, Philadelphia, Pa.
VP—R. H. C. Hill, New York, N. Y.
GM—E. H. Suender, Frackville, Pa.
GS—T. R. Jones, Frackville, Pa.
MM—W. H. Lesser, Frackville, Pa.
PA—Emlyn Evans, Frackville, Pa.
EE—W. H. Lesser, Frackville, Pa.
EM—Thomas J. Lewis, Centralia, Pa.
ME—Wm. H. Lesser, Frackville, Pa.
Sales Agency—Madeira, Hill & Co., North American Bldg., Phila., Pa.
Kehley's Run Mine; Slope and Drift: Little Buck Mtn., Buck Mtn., Skidmore and Mammoth Seams.
PO—Shenandoah, Pa. SP—Same. CTY—Schuylkill; RR—Phila. & Reading.
MS—George H. Lovell, Shenandoah, Pa.
IF—John Marsh, Shenandoah, Pa.
OF—John Schoffstall, Shenandoah, Pa.
S of H—Mules and 4 steam locos. Track gauge 44 in.
S of M—Hand.
PP—Power purchased, 440 volts A. C., 11 fire tube boilers, 1400 H. P., 7 pumps.
EMP—361. Last years tonnage 155,000

SIZES SHIPT.—Broken, Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley.
METHOD OF PREP.—Wet.
PREP. EQUIPT.—Jigs, Box Car Loaders, Tables.

Black Creek No. 1 Washery; Culm Banks.
PO—Shaft, Pa. SP—Lost Creek, Pa. CTY—Schuylkill; RR—Lehigh Valley. Gauge 36 in.
OF—John Dornier, Frackville, Pa.
S of H—8 steam locos.
S of M—Recovering Culm.
PP—4 fire tube boilers, 600 H. P., 4 pumps.
EMP—123. Last fiscal year output, 261,432 tons.
SIZES SHIPT.—Stove, Nut, Pea, Buckwheat, Rice, Barley.
METHOD OF PREP.—Wet.
PREP. EQUIPT.—Jigs.
Black Creek No. 2 Washery; Culm Banks.
PO—Shaft, Pa. SP—Lost Creek, Pa. CTY—Schuylkill; RR—P. & R.
OF—Lee Ebert, Shaft, Pa.
S of M—Recovering Culm.
PP—Power purchased, 440 volts A. C., 1 fire tube boiler, 50 H. P., 1 pump.
EMP—23. Last fiscal year output, 74,301 tons.
SIZES SHIPT.—Rice, Barley.
METHOD OF PREP.—Wet.

TRAVERS COAL COMPANY.

General Office, Scranton, Penna.
PR—Swan Hartwell, Boston, Mass.
VP—A. D. Stelle, Scranton, Pa.
TR—Harry N. Matthews, Boston, Mass.
SECY—Frank Wetter, Scranton, Pa.
GM—W. L. Schlager, Scranton, Pa.
GS—M. J. McHale, Parsons, Pa.
PA—Frank Wetter, Scranton, Pa.
EM—Leon Whittle, Scranton, Pa.
SA—Frank Wetter, Scranton, Pa.
Ridgewood Mine; Drift, Slope and Shaft: Baltimore, Ross and Red Ash Seams, 72, 30, 24 in. thick.
PO—Ridgewood Road, R. F. D. and Hainesville, Pa. SP—Hudson, Pa. CTY—Luzerne, RR—D. & H. and Central R. R. of N. J., N. Y. O. & W.

S of H—Mules, rope, 5 storage battery locos. Track gauge 30 in.
S of M—Hand and punchers.
PP—Power purchased 440 volts A. C., M. G. Sets, 250 volts D. C., 4 pumps.
EMP—400.
SIZES SHIPT.—Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley, SHIT.
METHOD OF PREP.—Wet and Dry.
PREP. EQUIPT.—Jigs.

TREVORTON COLLIER COMPANY.

General Office, 825 National City Bldg., Cleveland, O.
PR—J. P. Burton, Cleveland, O.
TR—W. P. Southard, Cleveland, O.
GM—J. P. Burton, Cleveland, O.
GS—Geo. H. Jones, Shamokin, Pa.
EM—W. Scott, Boyd, Shamokin, Pa.
SCO—Address the Company, Boyer, R. N. Smith, Cleveland, O.
SA—J. P. Burton Coal Co., Cleveland, O.
Katherine Mine; Drift: Lykens Valley and Buck Mountain Seams, 36-169 in. thick.
PO—Shamokin, Pa. SP—Trevorton, Pa. CTY—Northumberland; RR—P. & MS—Chas. D. Reed, Shamokin, Pa.
S of H—Mules, rope, 2 gasoline and 3 comp. air locos. Track gauge, 44 in.
S of M—Hand.
PP—3-500 H. P. return tubular boilers, 2 air compressors, 13 pumps.
EMP—265. Last years tonnage 105,283.
SIZES SHIPT.—Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley.
PREP. EQUIPT.—Wet and Dry, Box Car Loaders, Jigs.

UPPER LEHIGH COAL CO

General Office, Land Title Bldg., Philadelphia, Pa.
PR—D. B. Wentz, Philadelphia, Pa.
VP—W. C. Kent, Philadelphia, Pa.
TR—H. C. Price, Philadelphia, Pa.
GM—T. E. Snyder, Hazleton, Pa.
GS—E. J. Humphrey, Hazleton, Pa.
PA—A. J. Kotch, Hazleton, Pa.
EM—B. C. Osler, Hazleton, Pa.
EE—Chas. Tyler, Hazleton, Pa.
SCO—Hazel Brook Supply Company, Boyer, Guy Watson, Hazleton, Pa.
SA—H. C. Barr, Land Title Bldg., Philadelphia, Pa.
Upper Lehigh Colliery; Slope and Striping, Buck Mountain Seam, 3-7 ft. thick.
PO—Upper Lehigh, Pa. SP—Same. CTY—Luzerne RR—C. R. B. of N. J., Upper Lehigh Branch.
MS—D. W. Muir, Upper Lehigh, Pa.
SM—Oliver Gieking, Upper Lehigh, Pa.
IF—Adam Lesser, Upper Lehigh, Pa.
OF—Walter Williams, Upper Lehigh, Pa.
S of H—7 steam, 1 gasoline, 1 storage battery loco, and mules. Track gauge 41½ in.
S of M—Hand.
PP—5 water tube boilers, total H. P. 1,750, 2 air compressors, 9 pumps.
EMP—325. Last years tonnage 154,491

SIZES SHIPT.—Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley, Broken.
METHOD OF PREP.—Wet.
PREP. EQUIPT.—Jigs, Spirals.

VAN WICKLE, A. S. (EST.)

General office, Hazleton, Pa.
EXECUTIVE—J. P. Pardee, Hazleton, Pa.
SA—Frank Pardee, Hazleton, Pa.
GS—John Harvey, Hazleton, Pa.
PA—J. F. Gendell, Beaver Meadow, Pa.
EM—B. H. Vannauher, Hazleton, Pa.
ME—Wm. N. Fichter, Jundale, Pa.
SCO—Address the Company, Boyer, Thos. Gendell, Beaver Meadow, Pa.
SA—Henry C. Pearson, 910 Penna Bldg., Philadelphia, Pa.
Coleraine Colliery; Slope; Mammoth, 25 ft.; Wharton, 8 ft.; Buck Mountain, 4 ft.; Gamma 4 ft. thick.
PO—Jundale, Pa. SP—Beaver Meadow, Pa. CTY—Carbon; RR—L. V., C. R. R. of N. J. and J. & R.
IF—Evan Gilbon, Jundale, Pa.
OF—Wm. P. Dougherty, Jundale, Pa.
S of H—Mules and 5 steam locos. Track gauge, 42 in.
S of M—Hand.
PP—18 fire tube boilers, 2150 H. P., 1 air compressor, 9 pumps.
EMP—363. Last years tonnage 177,153.
SIZES SHIPT.—Broken, Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley.
METHOD OF PREP.—Wet.
PREP. EQUIPT.—Jigs, Spirals.

VON STORCH COLLIERIES CO.

General Office, 1635 Nay Aug Ave., Scranton, Pa.
PR—L. H. Conklin, Scranton, Pa.
VP—Warren T. Acker, Scranton, Pa.
TR—Warren T. Acker, Scranton, Pa.
GM—Warren T. Acker, Scranton, Pa.
GS—John H. Pfeiffer, Scranton, Pa.
PA—B. L. Kissinger, Scranton, Pa.
CE—Cadwallader Evans, Scranton, Pa.
EM—W. E. Soudy, Scranton, Pa.
Von Storch Mine; Slope; Eight Foot, Diamond Vein, Rock Vein Top Split, Rock Vein Bottom Split, Fourteen Foot Vein and Clark Vein Seams, 90-72, 30, 36, 96, 78 in. thick.
PO—Scranton, Pa. SP—Green Ridge, Pa. CTY—Lackawanna; RR—Delaware & Hudson.
S of H—Mules, rope, comp. air and elec. locos. Track gauge 36 inches.
S of M—Hand.
PP—Power purchased Transformer 4000 to 440-110 volts M. G. sets, 250 volts D. C.
SIZES SHIPT.—Pea, Nut, Egg.
PREP. EQUIPT.—Shaker Screens, Washeries.

WENTZ, J. S. CO.

General Office, Land Title Bldg., Philadelphia, Pa.
PR—D. B. Wentz, Philadelphia, Pa.
VP—W. C. Kent, Philadelphia, Pa.
TR—H. R. Price, Philadelphia, Pa.
GM—T. E. Snyder, Hazleton, Pa.
GS—E. J. Humphrey, Hazleton, Pa.
PA—A. J. Kotch, Hazleton, Pa.
CE—B. C. Osler, Hazleton, Pa.
EE—Chas. L. Tyler, Hazleton, Pa.
SCO—Hazelbrook Supply Co., Boyer, Guy M. Watson, Hazelbrook, Pa.
Hazelbrook Mine; Slopes; Buck Mountain Seam and Wharton Seams.
PO—Hazelbrook, Pa. SP—Same. CTY—Luzerne; RR—L. V.
MS—Walter Williams, Hazelbrook, Pa.
SM—S. V. Widsor, Hazelbrook, Pa.
IF—James Bommer, Hazelbrook, Pa.
OF—Bartel Wanda, Hazelbrook, Pa.
S of H—3 steam locos.
S of M—Hand.
PP—5 fire tube boilers, 1000 H. P., 7 pumps.
EMP—198. Last fiscal year output, 110,547 tons.
SIZES SHIPT.—Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley.
METHOD OF PREP.—Wet and Dry.
PREP. EQUIPT.—Jigs, Spirals.

WEST END COAL COMPANY.

General Office, 1007 Mears Bldg., Scranton, Pa.
PR—Wm. L. Allen, Board of Trade Bldg., Scranton, Pa.
VP—Thomas Dickson, 17 Battery Place, New York, N. Y.
2d VP—Joseph D. Eddy, 17 Battery Place, New York, N. Y.
TR—Jesse L. Eddy, 17 Battery Place, New York, N. Y.
GM—Floed G. Wilcox, 1007 Mears Bldg., Scranton, Pa.
GS—Joseph F. Hughes, Morcanaga, Pa.
PA—E. H. Ritter, Scranton, Pa.
CE—J. L. Komaly, 1007 Mears Bldg., Scranton, Pa.
EM—George H. Wilson, Scranton, Pa.
EE—David Davies, Scranton, Pa.
SA—Dickson & Eddy, 17 Battery Place, New York, N. Y.
West End Mine; Shaft, Slope and Tunnel Seams.
PO—Morcanaga, Pa. SP—Same. CTY—Luzerne; RR—C. R. R. of N. J. and P. R. R.

S of H—Mules, rope, trolley pole 351 storage battery and steam loc. Track gauge, 36 in.
S of M—Hand.
PP—Power purchased, Transformer, 440 volts A. C., 275 volts D. C., 32 pumps.
EMP—900. Last years tonnage 527,452.
SIZES SHIPT.—Egg, Stove, Nut, Pea, Nos. 1, 2, 3 and 4 Buck.
METHOD OF PREP.—Wet.
PREP. EQUIPT.—Standard Breaker.

WEST NANTICOKE COAL CO.

General Office, 1732 Commercial Trust Bldg., Philadelphia, Pa.
PR—A. D. W. Smith, Philadelphia, Pa.
VP—Alan J. Smith, Wilkes-Barre, Pa.
SA—Carl R. Metzgar, Philadelphia, Pa.
GM—A. D. W. Smith, Philadelphia, Pa.
Sales Agent, Staples & B. H. Boston, Mass.
West Nanticoke Mine; Slope, Tunnel and Drift: Red Ash, Ross Seams, 15 ft., 3 ft., 4 in. thick.
PO—Plymouth Bl.; SP—West Nanticoke, CTY—Luzerne; RR—P. R. R., Sunbury Div.
MS—E. W. Davies, Kingston, Pa.
SOH—1 Steam loco., and mules; track gauge 42 in.
S of M—Hand.
PP—Purchase power, 220 volts A. C. EMP—205. Last years tonnage 122,600.
PREP. EQUIPT.—Breaker.

WILCOX COAL COMPANY

General Office, 233 Council Bldg., Scranton, Pa.
PR—W. T. Spruks, Scranton, Pa.
VP—A. Goldberg, Scranton, Pa.
TR—B. H. Goldberg, Scranton, Pa.
GM—B. H. Goldberg, Scranton, Pa.
GS—B. H. Goldberg, Scranton, Pa.
PA—B. H. Goldberg, Scranton, Pa.
Stone Mine; Drift: County and Clark Vein Seams; 54 to 90 inches thick.
PO—Childs, Pa. SP—Mazfield Yard, Pa. CTY—Lackawanna; RR—O. & W.
MS—Frank Halupka, Childs, Pa.
S of H—Mules and hoisting engine. Track gauge 40 in.
S of M—Hand.
PP—Power purchased.
EMP—16. Daily tonnage 40.
SIZES SHIPT.—Pea, Nut, Egg.
Note—Successors to H. J. Stone Coal Co.

WILKES-BARRE ANTHRACITE COAL CO.

Now Hillman Coal Co.

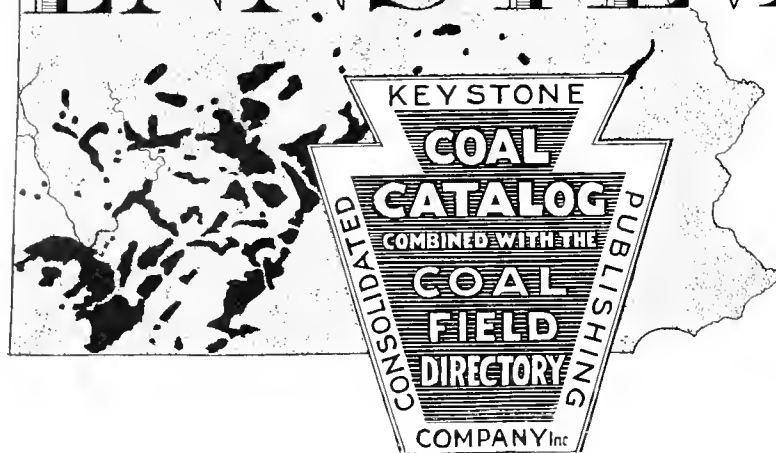
WILKES-BARRE COLLIER COMPANY.

General office, North American Bldg., Philadelphia, Pa.
PR—Percy C. Madeira, Philadelphia, Pa.
VP—Robert C. Hill, New York, N. Y.
VP—Louis C. Madeira, New York, N. Y.
TR—John Gilbert, 900 North American Bldg., Philadelphia, Pa.
CM—E. H. Suender, Frackville, Pa.
GS—T. R. Jones, Frackville, Pa.
MM—W. H. Lesser, Frackville, Pa.
PA—Emlyn Evans, Frackville, Pa.
EM—Thomas J. Lewis, Centralia, Pa.
EE—W. H. Lesser, Frackville, Pa.
SCO—Natalie Store Co., Buyer, J. H. Witter, Frackville, Pa.
Sales Agency, Madeira, Hill & Co., North American Bldg., Philadelphia, Pa.
Madeira Mine; Slope and Drift.
PO—Parsons, Pa. SP—Hudson, Pa. CTY—Luzerne; RR—D. & H.
MS—Merwyn B. Holder, Hudson, Pa.
IF—Wm. D. Powell, Miners Mills, Pa.
Wilkes-Barre, Pa.
S of H—Mules, 3 trolley pole type and 2 storage battery locos. Track gauge, 36 in.
S of M—Hand.
PP—Power purchased, 440 volts A. C., 1 fire tube boiler, 150 H. P., 1 air compressor, 6 pumps.
EMP—339. Last years tonnage 161,433.
SIZES SHIPT.—Broken, Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley.
METHOD OF PREP.—Wet.
PREP. EQUIPT.—Jigs.

WOLF COLLIERIES CO., INC.

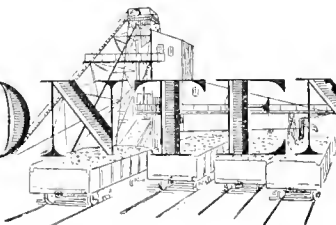
General Office, 912 Coal Exchange Bldg., Wilkes-Barre, Pa.
PR—A. F. Wolf, Wilkes-Barre, Pa.
GM—Jos. G. Sarricks, Freehold, Pa.
GS—Jos. G. Sarricks, Freehold, Pa.
PA—Geo. W. Sarricks, Freehold, Pa.
EE—John Hainze, Freehold, Pa.
SCO—Wolf Supply Store, Buyer, Geo. W. Sarricks, Freehold, Pa.
SA—Coxe Bros. & Co., Inc., New York, N. Y.
Wolf Colliery; Slope; Elmer, Mt. Seneca, 108 and 48 in. thick.
PO—Freehold, Pa. SP—Same. CTY—Delaware; RR—L. V.
IF—John G. Sarricks, Freehold, Pa.
S of H—Mules and 3 steam locos. Track gauge 42 in.
S of M—Hand.
PP—Power purchased transformer 11000 to 440-110 volts A. C., 3 fire tube boilers, 150 H. P., 5 pumps.
EMP—90. Daily tonnage 160.
SIZES SHIPT.—Broken, Egg, Stove, Nut, Pea, Buckwheat, Rice, Barley.
METHOD OF PREP.—Wet and Dry.
PREP. EQUIPT.—Shaker Screens, Picking Tables.

PENNSYLVANIA



Bituminous

CONTENTS



Map of Mining Districts.....	Opp. 700
Map of Fuel Ratios.....	701
Sectional View of Coal Formations.....	Opp. 701
General Description of Coal Resources.....	702, 703
SEAMS	
Washington	703
Waynesburg	704
Sewickley	704
Redstone	704
Pittsburgh	704
Berlin	705
Bakerstown	705
Coleman	706
Philson	706
Upper Freeport.....	706
SEAMS	
Thick Freeport.....	706
Lower Freeport.....	707
Upper Kittanning....	707
Middle Kittanning...	708
Lower Kittanning....	708
Bloss	709
Clarion	709
Brookville	710
Mercer Group.....	711
The Broad Top Coal Field.....	710
Kelly Seam.....	710
Barnett Seam.....	710
Fulton Seam.....	711
Preparation and Sizing of Coal.....	711
Supplementary Analyses.....	712 to 716
Descriptive Advertisements.....	717 to 757
List of Mines by Seams.....	758 to 781
Alphabetical Directory of Coal Mines....	782 to 862
List of Mines by Counties.....	863 to 870

PENNSYLVANIA

MADE ESPECIALLY FOR

KEYSTONE CONSOLIDATED PUBLISHING CO.

SHOWING

COAL AREAS

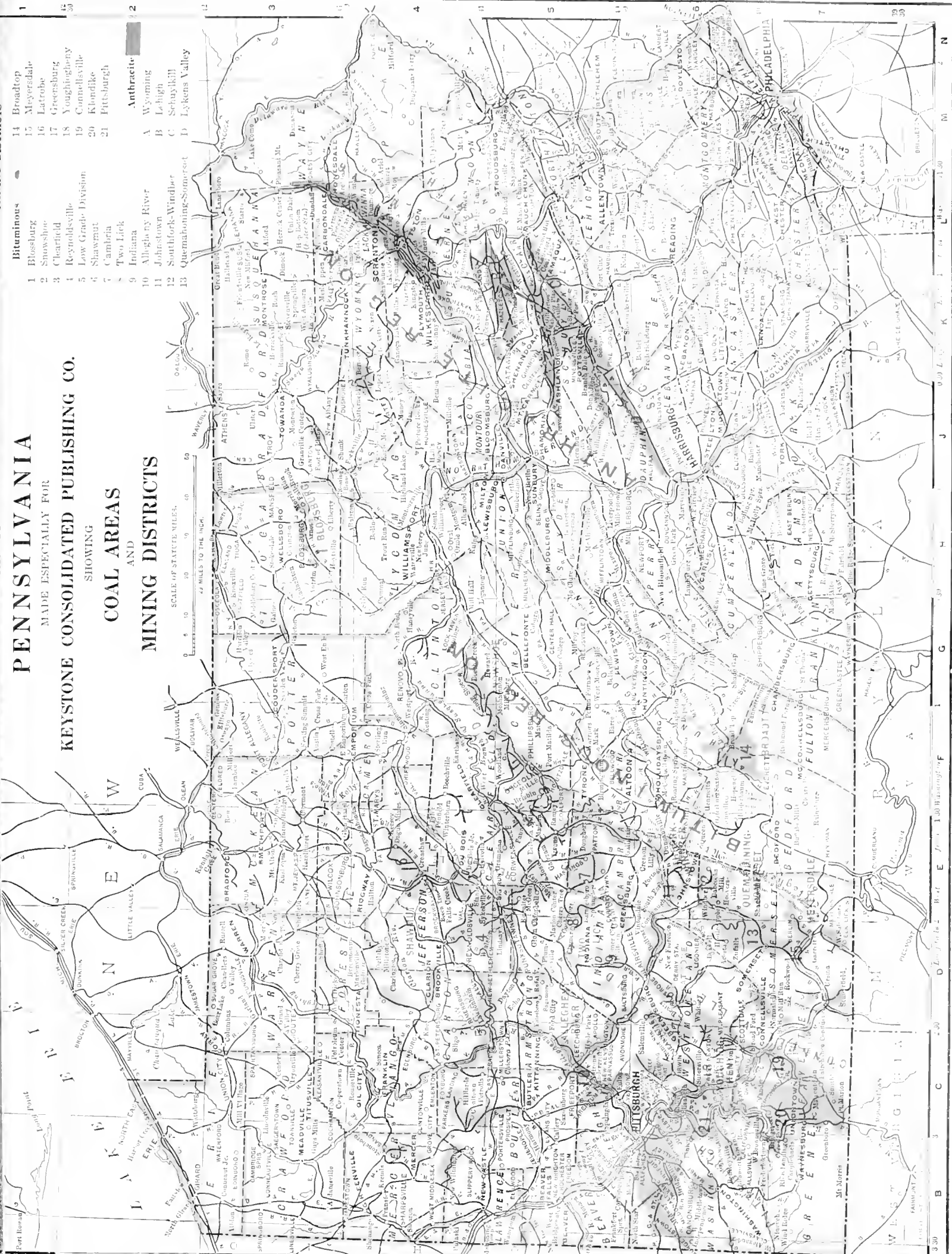
AND

MINING DISTRICTS

SCALE OF STATUTE MILES.

0 5 10 20 30 40 50
40 MILES TO THE INCH.

- | | | | |
|----|---------------------|----|--------------|
| 1 | Bituminous | 14 | Broadtop |
| 2 | Blossburg | 15 | Meyersdale |
| 3 | Snowshoe | 16 | Latrobe |
| 4 | Clearfield | 17 | Greensburg |
| 5 | Reynoldsville | 18 | Youngbush |
| 6 | Low Grade Division | 19 | Cumulusville |
| 7 | Shawmut | 20 | Klondike |
| 8 | Cambria | 21 | Pittsburgh |
| 9 | Indiana | | |
| 10 | Allegheny River | | |
| 11 | Johnstown | | |
| 12 | Southfork-Windber | | |
| 13 | Queamoning-Somerset | | |
- Anthracite
- | | |
|---|---------------|
| A | Wyoming |
| B | Lehigh |
| C | Schuykill |
| D | Lykens Valley |

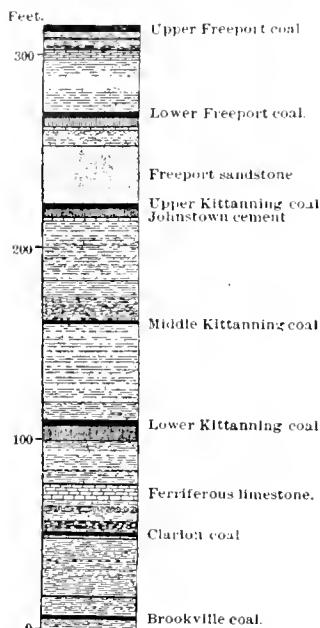


SECTIONS SHOWING TYPICAL FORMATIONS OF THE SERIES IN WHICH

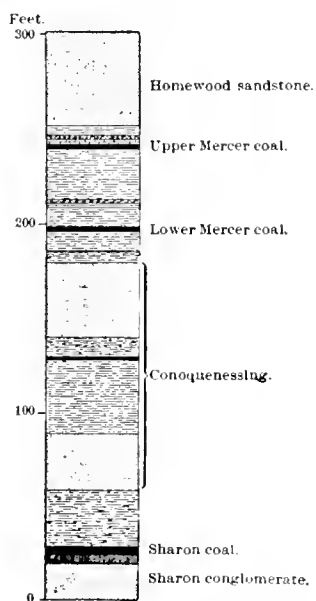
PENNSYLVANIA BITUMINOUS

COALS OCCUR

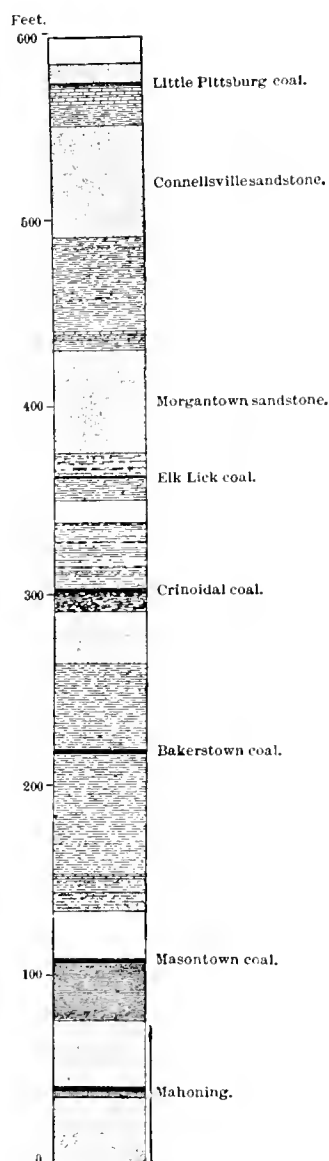
(From the 22nd Annual Report, Part 3, U. S. G. S.)



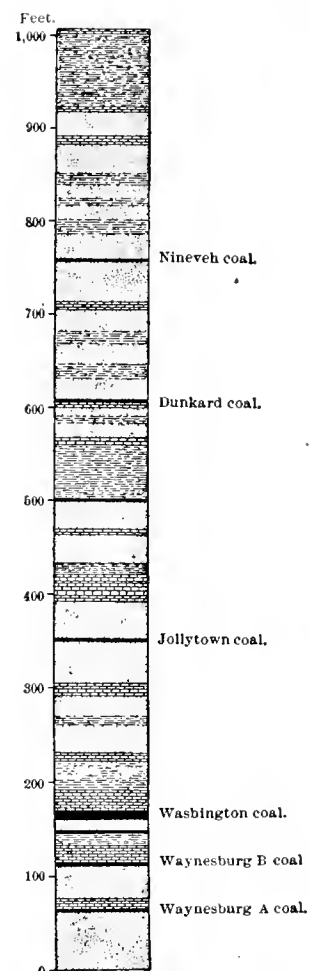
Section of the Allegheny formation on Allegheny River, Armstrong county.



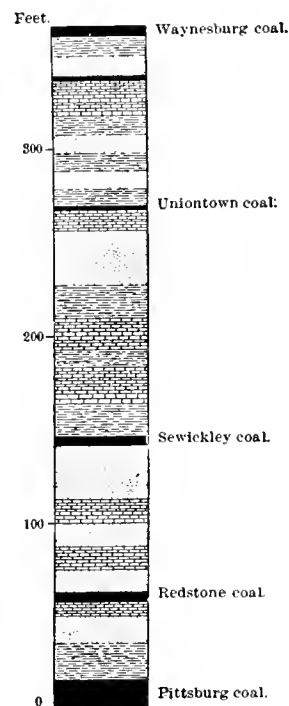
Section of the Pottsville formation in Mercer county.
(After I. C. White)



Section of the Conemaugh formation on Dunbar Creek, Fayette county.
(After I. C. White)



Section of the Dunkard formation in Greene county.
(After Stevenson)

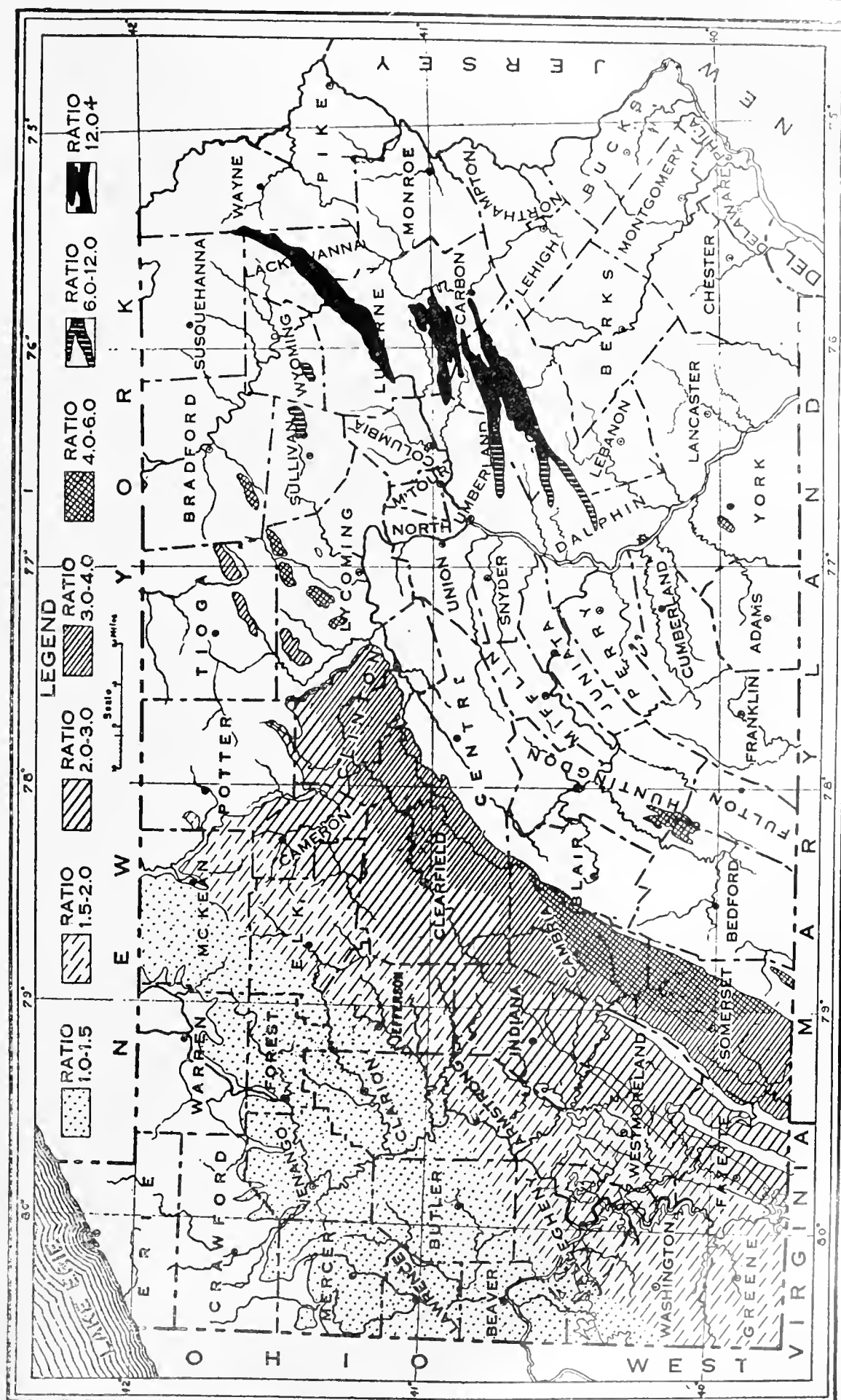


Section of the Monongahela formation in Fayette county.
(After Stevenson)

MAP OF PENNSYLVANIA

SHOWING DISTRIBUTION OF COALS BY FUEL RATIOS*

(Fuel Ratio is the Fixed Carbon divided by the Volatile Matter)



*From Report No. 9, Geological Survey Commission of Pennsylvania.

PENNSYLVANIA---BITUMINOUS*

General Description of the Geology of the Coal Fields, With the Ranks of Coal Produced; Treats of the Mining Districts, With a Map Showing Their Location, All Seams Lying Within the Region, and the Railroads Serving Same
Description of the Producing Seams, Showing Their Geological Order, Kinds of Coal, General Analysis, Etc.

Pennsylvania is by far the greatest coal producing state in the Union. The output in 1920 is estimated to be about 252,000,000 net tons, of which 89,000,000 tons were anthracite and 163,000,000 tons were bituminous. Until 1902 Pennsylvania produced each year more than half of the coal mined in the United States, but since then the State's output has fallen below one-half, by reason of the great increase in production in other states. Pennsylvania produces more coal than any country in the world except Great Britain, having in 1907 exceeded for the first time the production of Germany. Its production of coal exceeds, in fact, the combined production of all foreign countries except Great Britain and Germany.

The bituminous coal field in this state embraces the northeastern end of the great Appalachian series of the Coal Measures. It includes an area of about 12,200 square miles, lying chiefly in the western part of the state, and spreading from Ohio, West Virginia and Maryland. The boundary of the general Coal Measures area is extremely irregular. In the extreme northwestern part they occur in outlying patches capping high knobs and ridges. Farther east, where the synclinal structure is more marked, the small detached tracts are arranged in rude series in alignment with the ill-defined synclinal finger lobes. Certain of the most northeastern and isolated areas, as the Bernice (semianthracite) basin and the Barclay and Blossburg basins, are so far detached from the main territory to which they belong that they are generally treated as distinct basins or subbasins. Besides the main area, with its northern marginal fringe of more or less isolated small areas, there is what is known as the Broadtop field or basin in Huntingdon and Bedford counties.

The bituminous coals of Pennsylvania belong to the Upper Carboniferous. The lowest coals lie within the Pottsville, the basal formation of the series, and the highest are contained in the Dunkard formation, which includes the latest Paleozoic beds recognized in the Appalachian trough. A noticeable characteristic of all coals lying in this field is that beginning with the first basin in the eastern part of the area, where the coals are low-volatile, there is a rise in the percentage of volatile matter in traveling toward the west, until in the vicinity of Pittsburgh it reaches about 35 per cent. (See map showing distribution of coals by fuel ratios.)

The bituminous fields are penetrated by the numerous lines of the Baltimore & Ohio; Pennsylvania; New York Central; Erie; and Lake Shore systems, as well as by the Buffalo, Rochester & Pittsburgh; Bessemer & Lake Erie; Western Maryland; Pittsburgh & West Virginia; Pittsburgh, Shawmut & Northern; Buffalo & Susquehanna; and the Monongahela railroads.

MINING DISTRICTS OF PENNSYLVANIA

- 1 Blossburg. Seams mined are the Mercer Group, Brookville, and the Lower Kittanning. These produce steam, smithing, railway and domestic fuels. Railroads serving are the Erie, New York Central.
- 2 Snowshoe. Seams mined are the Lower Kittanning, Upper Kittanning, and the Lower Freeport. These produce steam, smithing, railway and domestic coals. Railroads serving are the Pennsylvania and New York Central.
- 3 Clearfield. Seams mined are the Lower Kittanning, Upper Kittanning, and the Lower Freeport. These produce steam, bunker, railway, domestic, and coking coals. Railroads serving are the Pennsylvania and the New York Central.
- 4 Reynoldsville. Seams mined are the Lower Kittanning, Brookville, and the Lower Freeport. These produce steam, domestic and railway coals. Railroads serving are the Buffalo, Rochester and Pittsburgh, and the Pennsylvania.
- 5 Low Grade Division. Seams mined are the Lower Kittanning, Upper Kittanning, and the Lower Freeport. These produce steam, railway and domestic coals. Railroad serving is the Pennsylvania.
- 6 Shawmut. Seams mined are the Clarion, Lower Kittanning, Lower Freeport, and Upper Freeport. These produce steam, railway and domestic coal. Railroad serving is the Pittsburg, Shawmut and Northern.
- 7 Cambria. Seams mined are the Lower Kittanning, Upper Kittanning, Lower Freeport, and Upper Freeport. These produce steam, railway, domestic, bunker and coking coals. Railroads serving are the New York Central and Pennsylvania.
- 8 Two Lick. Seams mined are the Lower Kittanning, Upper Kittanning, Lower Freeport, and Upper Freeport. These produce steam, railway, domestic, bunker and coking coals. Railroad serving is the Pennsylvania (Cherrytree and Dixonville Ry.)

*The material here given has largely been taken from the 22nd Annual Report of the United States Geological Survey, Part III., which in turn is drawn chiefly from the report volumes of the Second Geological Survey of Pennsylvania.

9. Indiana. Seams mined are the Lower Kittanning, Upper Kittanning, Lower Freeport, and Upper Freeport. These produce steam, railway, domestic and coking coals. Railroads serving are the Pennsylvania and the Buffalo, Rochester & Pittsburgh.
10. Allegheny River. Seams mined are the Lower Kittanning, Upper Kittanning, Lower Freeport, and Upper Freeport. These produce steam, railway and domestic coals. Railroad serving is the Pennsylvania.
11. Johnstown. Seams mined are the Lower Kittanning, Upper Kittanning, Lower Freeport, and Upper Freeport. These produce steam, railway, domestic and coking coals. Railroads serving are the Pennsylvania and the Baltimore & Ohio.
12. Southfork-Windber. Seams mined are the Lower Kittanning, Upper Kittanning, Lower Freeport, and Upper Freeport. These produce steam, railway, domestic and bunker coals. Railroad serving is the Pennsylvania.
13. Quemahoning. Seams mined are the Lower Kittanning and Upper Kittanning. These produce steam, railway and domestic coals. Railroad serving is the Baltimore & Ohio.
14. Broadtop. Seams mined are the Kelly, Barnett and Fulton. These produce steam, railway, domestic and coking coals. Railroad serving is the Pennsylvania (Huntingdon and Broadtop).
15. Meyersdale. Seams mined are the Upper Freeport, Berlin, and Pittsburgh. These produce steam, railway and domestic coals. Railroads serving are the Baltimore & Ohio and the Western Maryland.
16. Latrobe. Seam mined is the Pittsburgh. This produces a steam, railway, domestic and coking coal. Railroad serving is the Pennsylvania.
17. Greensburg. Seam mined is the Pittsburgh. This produces a steam, railway, domestic and coking coal. Railroad serving is the Pennsylvania.
18. Youghiogheny. Seam mined is the Pittsburgh. This produces a steam, railway, domestic, illuminating gas and coking coal. Railroads serving are the Pennsylvania, Baltimore & Ohio and Pittsburgh & Lake Erie.
19. Connellsville. Seam mined is the Pittsburgh. This produces the celebrated Connellsville coking coal, also used for steam and domestic uses. Railroads serving are the Baltimore & Ohio, Pennsylvania and Pittsburgh & Lake Erie.
20. Pittsburgh. Seams mined are the Pittsburgh and Sewickley. These produce a steam, railway, domestic and coking coal. Railroads serving are the Baltimore & Ohio, Pennsylvania, Pittsburgh & Lake Erie, Pittsburgh & West Virginia, Bessemer & Lake Erie and Pittsburgh, Shawmut & Northern.

COKE PRODUCING DISTRICTS OF PENNSYLVANIA

- Connellsville. Includes the county of Fayette and the southern half of Westmoreland county.
- Pittsburgh. Includes the vicinity of Pittsburgh, the coke being made from coal brought down the Monongahela River.
- Reynoldsville and Walston. Includes all the ovens on the Buffalo, Rochester and Pittsburgh Railroad, those on the Low Grade Division of the Allegheny Valley Railroad, and the mines on the New York, Lake Erie and Western Railway.
- Upper Connellsville. Includes the region around and north of Latrobe.
- Allegheny Mountain. Includes the ovens along the line of the Pennsylvania Railroad from Gallitzin to Altoona, and those in Somerset county. This includes also the coke ovens near Johnstown.
- Clearfield-Center. Includes the two counties of Clearfield and Center.
- Greensburg. Includes the ovens near the town of Greensburg, in the central part of Westmoreland county.
- Broad Top. Includes the ovens in the Broad Top coal field in Bedford and Huntingdon counties.
- Lower Connellsville. (Known also as the Klondike district.) Includes the ovens in the southwest extension of the Connellsville Basin.
- Irwin. Includes the ovens in the neighborhood of Irwin, in the western part of Westmoreland county.

DUNKARD SERIES

Washington Seam. (Mined in Washington and Greene counties.)

The Washington coal is often thick, but is usually so broken up with partings as to be nearly or quite worthless. It is always a multiple bed, being separated into two or three layers by divisions of shale. Sometimes these partings are numerous and the entire thickness of the bed is 8 or 10 feet, but, in all cases, the only pure or merchantable coal is the bottom portion, which seldom exceeds 2 feet 6 inches or 3 feet. It shows its best development in Washington county, where it reaches a thickness of up to 7 feet, but of this the thickest bench is not

more than 2 feet 9 inches. In western Greene county it has a total thickness of 2 to 4 feet, but over most of the county is only 18 inches to 2 feet thick. Wherever mined it is used mainly to supply local domestic trade.

GENERAL ANALYSIS

Moisture	4.50
Volatile Matter	33.00
Fixed Carbon	49.00
Ash	13.50
Sulphur	3.00
B. t. u.	12,300

MONONGAHELA SERIES

Waynesburg Seam. (Mined in Greene, Washington and Westmoreland counties.)

This bed is the highest workable bed of the Monongahela Series, and lies about 390 feet above the Pittsburgh seam. The Waynesburg coal is almost universally a double bed, being divided by a shale parting which generally ranges from 1 foot to 2 feet 6 inches in thickness. It yields a hard block coal which is frequently worthless from the high percentage of ash and sulphur. The region of the best development of the Waynesburg coal includes parts of Greene, Fayette, Washington and Westmoreland counties. In the Uniontown syncline it has an average thickness of 3 feet 6 inches. West of this it has a much greater thickness, but is usually split up with clay partings. Wherever mined it is used locally for household purposes.

GENERAL ANALYSIS

Moisture	3.50
Volatile Matter	34.00
Fixed Carbon	50.30
Ash	12.20
Sulphur	3.00

Sewickley Seam. (Known also as the Mapletown Seam.) (Mined in Fayette and Greene counties.)

This bed lies about 110 feet above the Pittsburgh coal. It is widely persistent, but it is economically valuable over a comparatively small area. Its best development is found along the Monongahela River in Greene county, where it is from 5 to 6 feet in thickness, with 2 to 3 inches of shale near the middle of the bed. Toward the north it decreases in thickness, measuring at Brownsville 4 feet 4 inches, with 2 inches of clay in the bottom part of the bed. In Fayette county it is present in workable thickness in several townships in the southern part of the county, but toward the north it becomes thin and disappears in Westmoreland county. The coal has been mined quite extensively for local domestic use at Mapletown, Greene county. Farther south it improves in composition and in West Virginia appears as a solid bench minus the shale parting.

GENERAL ANALYSIS

Moisture	2.50
Volatile Matter	33.20
Fixed Carbon	52.90
Ash	11.40
Sulphur	2.00

Redstone Seam. (Mined in Allegheny, Westmoreland, Somerset and Fayette counties.)

This is the next seam above the Pittsburgh bed, and coextensive with it, except in isolated hilltops in the country north and east of Pittsburgh too low to contain it. Owing to its close proximity to the Pittsburgh coal—from 40 to 60 feet—it is quite likely that much of the Redstone seam has been rendered inaccessible by the breaking of the strata wherever the Pittsburgh coal has been closely worked. In its best development it ranges from 3 to 4 feet in thickness, but over much of the territory in which it is due it is too thin to mine under existing conditions. In the Salisbury Basin in Somerset county it is 4 feet in thickness, but it is slaty

and of little value. On the whole the Redstone seam is of little commercial importance.

GENERAL ANALYSIS

	Washington Co.	Somerset Co.
Moisture	3.00	2.80
Volatile Matter	33.60	20.90
Fixed Carbon	49.10	67.50
Ash	14.30	8.80
Sulphur	2.40	1.85
B. t. u.	14,000	

Pittsburgh Seam. (Mined in the Meyersdale, Latrobe, Greensburg, Youghiogheny, Connellsville and Pittsburgh districts.)

The Pittsburgh seam is probably the most famous bituminous coal bed in America. It is certainly the most uniform in thickness and quality, and, for a given area, the most valuable coal in the western coal field of Pennsylvania. More than half of the coal produced in the state comes from this bed. In the Pittsburgh district proper more than 60,000,000 tons are mined each year, and if the coal mined in the Connellsville district of Fayette and Westmoreland counties is added, the figure will rise to more than 100,000,000 tons annually, or approximately one-fifth of the tonnage of the entire United States.

The main body of the coal lies in the southwestern corner of the state, embracing the whole of Greene and Westmoreland counties and extending east into Fayette county and north into Allegheny county. There are several large areas in Westmoreland county and isolated patches in Somerset and Indiana counties. It occupies an area in the state about 50 miles in length by 50 miles in breadth, with a thickness varying from 4 to 9 feet and an average thickness of 7 feet.

It is not to be expected that the quality of a seam will remain uniform over so extensive an area, nor that there will not be some areas in which the coal may be lacking. We quote the following in part from a report of the Topographic and Geologic Survey, Harrisburg, 1908, p. 229: "Starting at the east outside of the area here considered, the Pittsburgh coal occupies a limited area in the Salisbury basin in southeastern Somerset county. Here the coal has a fuel ratio (fixed carbon divided by volatile matter) of about 3.5. Analysis shows it to have about 70 per cent of fixed carbon, 20 per cent of volatile matter, 8 per cent of ash, .75 per cent of sulphur and 1.25 per cent of moisture. Coming westward a small basin of the Pittsburgh coal is found in eastern Westmoreland county in the Ligonier Valley at Ligonier. This is east of the Chestnut Ridge anticline. Here the coal shows a fuel ratio of a little under 3, with fixed carbon at about 62 per cent and volatile matter about 23 per cent. Crossing the Chestnut Ridge anticline, the fuel ratio drops to about 2, the fixed carbon becoming about 60 per cent and the volatile matter about 30 per cent. Here is the first large body of coal preserved and here is the great Connellsville-Uniontown coking district.

"Continuing westward or northwestward, the Fayette anticline is crossed. This is the last of the

sharply folded anticlines, and west of it the structure becomes gently and irregularly folded. Correspondingly west of that anticline the coals have not lost so large a proportion of their volatile constituents. The fuel ratio will there usually run under 2, and will average about 1.6. Thus most of the analyses will run from 50 to 60 per cent of fixed carbon and from 30 to 37 per cent of volatile matter. The ash runs rather high, usually from 10 to 12 per cent, and the sulphur usually between 1 and 2 per cent. Locally the ash runs down to 6 or 7 per cent and the sulphur will run under 1 per cent.

"Crossing the Monongahela river into Greene county, analyses indicate about the same grade of coal, some of the analyses giving a fuel ratio as high as 2 or even a little over, but averaging between 1.6 and 1.7. The percentage of ash is the same or lower and of sulphur about 1. In southeastern Washington county similar conditions hold. Toward the northwestern part of the county the seam shows a marked increase in the percentage of sulphur, some of the analyses showing as high as 4 per cent or over."

The Pittsburgh bed is usually divided into, first, a roof division varying from 2 inches to 8 feet (in extreme cases) and which is sometimes solid and sometimes in two benches but is always poor, and second, a main body of coal, varying from four to nine feet and always divided into four benches. Faults are practically unknown and disturbances such as faults of erosion are only found in isolated instances where the overlying sandstone rests directly on the coal. The persistency of this bed is such that the continuance of the seam between points of outcrop in a new field may be predicted with certainty.

Pittsburgh Thin-Vein District. Because the Pittsburgh seam becomes thinner in going northward from the Klondike field a differential in the wage rate was established as extra compensation for the miners working in the thin coal. In the beginning the dividing point was Lock No. 4 on the Monongahela River, but about the year 1906 the division was extended eastward to the Youghiogheny River by means of a straight line drawn from Lock

No. 1 to the Port Royal mine at Cedar Creek. About two years later the line was extended westward through a point lying north of and adjacent to the town of Bentleyville, Washington county. These lines as drawn are not to be construed as making a clean cut separation of the thin and thick Pittsburgh seam as such a line would be an irregular one. They serve as a fair average, however, even though in several instances the higher wage scale is paid for workings in the thick seam, and vice versa.

In quality the coal of the Pittsburgh bed is for many purposes equal, if not superior, to the best bituminous coal found elsewhere in the Appalachian field or in the world. It is an excellent domestic and steam fuel and mines in large blocks which stand shipment and storage without excessive degradation. It is therefore well adapted for export use. The Connellsville region furnishes the premier coking coal in North America, while the Youghiogheny coals of Westmoreland county are the standard gas coals of the country. Pittsburgh coal is in constant demand by the railroads for locomotive fuel and that coming from the low sulphur districts is more used for by-product coking than any other seam in the United States. In fact, no matter what the fuel requirements may be, they can be successfully met by some locality in which this seam is mined.

GENERAL ANALYSIS

	Meyersdale District	Westmoreland Gas District	Greensburg District
Moisture	2.80	1.00	2.80
Volatile Matter	19.30	35.00	31.00
Fixed Carbon	69.80	57.60	58.20
Ash	8.10	6.40	8.00
Sulphur	0.95	0.90	1.10
B. t. u.	14,100	14,000	13,750

	Youghiogheny District	Connellsville District	Pittsburgh District
Moisture	2.30	1.70	3.50
Volatile Matter	37.60	31.10	34.00
Fixed Carbon	51.90	59.80	57.00
Ash	5.20	7.40	5.50
Sulphur . . . . .	.80	.85	1.30
B. t. u.	13,850	13,990	13,900

CONEMAUGH SERIES

Berlin Seam. (Mined in Somerset county.)

This bed is only mined in Somerset county, along the Blue Lick Valley, where it is about four feet thick. It lies 280 feet below the Pittsburgh coal, but has never been correlated with any of the well known beds. In other parts of south-western Pennsylvania this bed and the limestone which lies ten feet beneath are scarcely recognizable. It is a fairly reliable seam with a thickness ranging from 3 feet 2 inches to 4 feet 9 inches, and produces a rich, lustrous, friable and prismatic coal.

GENERAL ANALYSIS

Moisture	3.00
Volatile Matter	21.80
Fixed Carbon	67.00
Ash	8.20
Sulphur . . . . .	.90

Bakerstown Seam. (Known as the Price seam in the Berlin basin of Somerset county.)
(Mined in Allegheny and Somerset counties.)

This coal derives its name from Bakerstown, Allegheny county, where it reaches a thickness of three feet and has long been worked. It not infrequently reaches a thickness of 2 feet 8 inches in the county, and at one point is 3 feet thick with 6 inches of cannel coal. In Beaver county it thickens at one point to 6 feet of cannel and bituminous coal. The Bakerstown coal, which is 70 to 90 feet below the Crinoidal limestone and 405 feet below the Pittsburgh coal in Allegheny county, is correlated with the Price seam, 385 feet below the Pittsburgh coal in the Berlin basin. Here it is three to four

feet thick and underlies a large area and is one of the most important coals.

GENERAL ANALYSIS		Somerset County
Moisture		3.20
Volatile Matter		20.30
Fixed Carbon		67.80
Ash		8.70
Sulphur		1.20

Coleman and Philson Seams. (Mined in Somerset county.)

The Berlin basin is remarkable both for the number and the exceptional purity of the coals of the Conemaugh formation, which are there mined somewhat extensively for shipment. Of these the lowest in the formation is the Philson bed, which is worked near Pine Hill, with a thickness of over 4 feet of fine domestic coal. It is probably the representative of the "third" coal in the Wellersburg basin, 3 feet in thickness. The bed regarded as

belonging to the same horizon in Indiana county is there the "second" coal above the Upper Freeport coal and 50 feet above the Gallitzin coal. It is mined with a thickness of 4 feet at Armagh, though generally thin and worthless in this region. In Fayette county it is said to contain 1 to 6 feet of rather impure coal, 40 to 90 feet above the Upper Freeport coal. The Coleman bed, the "second" coal above the Mahoning sandstone in the Berlin basin, is workable with about 3 feet of coal about Pine Hill, and on one farm it increases to 6 feet in thickness, but is less pure. Near Armagh, in Indiana county, a bed supposed to represent the Coleman is 3 feet thick and dirty.

GENERAL ANALYSIS		Philson Seam
Moisture		2.90
Volatile Matter		23.50
Fixed Carbon		67.10
Ash		6.50
Sulphur		3.50

ALLEGHENY SERIES

Upper Freeport Seam. (Known also as the E seam; Lemon and Cokeyard seam in Cambria county; believed to be represented by the Kelly in Bedford and Huntingdon counties, the Sawmill in the Potomac basin, 4 foot and 5 foot seams in Beaver county.) (Mined in the Shawmut, Cambria, Two Lick, Indiana, Allegheny River, Johnstown, Southfork-Windber, Broadtop and Meyersdale districts.)

The Upper Freeport seam lies just beneath the Mahoning sandstone, the lowest member of the Conemaugh formation. It is a variable and complex bed, extending in gross workable or nearly workable thickness over most of its area, although over a considerable portion of this territory it is too much broken up and too impure for profitable mining. Usually the coal is tender, crushing in handling, but when in this condition it is apt to coke well in certain districts. In the Ligonier basin it is sulphurous and in the vicinity of its type locality carries one or more thick partings. As the Kelly coal of the Broadtop field where it is extensively mined it thins to less than 2 feet. In Armstrong county, the Upper Freeport is fairly uniform and persistent, with an average thickness of 4 feet, including thin partings. Here it carries considerable sulphur, sometimes amounting to 2 per cent. It is a good fuel for steam purposes in the southern part of the county, where it occasionally furnishes a block coal for locomotive use. In Indiana county the Upper Freeport is the most important coal, and though usually of slightly inferior quality it is accessible and thick, locally attaining a thickness of 8 feet with two shale partings. In Cambria county this coal ranks next in importance to the Lower Kittanning seam. In the vicinity of Johnstown it is known as the Cokeyard or Lemon seam. Hereabouts it measures 3 feet to 3 feet 6 inches, locally exceeding 4 feet in thickness, with some bony coal and a parting near the floor. The fuel here is of good quality, though soft and tender and analyzing higher in sulphur than the Lower Kittanning. In northern Somerset county, whenever in good condition, the Upper Freeport coal is bright,

soft and columnar, and usually easily coked. It offers a large area for future development, though it is generally impaired, particularly in the second basin, by the thin parting and disseminated sulphur. In the Ligonier basin, the Upper Freeport is highly variable, occurring usually as a double, sometimes a triple and rarely as a single bed and generally carrying widely fluctuating proportions of sulphur and ash. In the Philipsburg-Houtzdale basin this bed has been locally much damaged by the removal of the Lower Freeport or Moshannon coal, which approaches to within 30 feet of it in this district. Where the coal is sulphurous it is used for steam purposes, while at places where it is low in sulphur, such as at Gracetown, in the Blairsville basin, in Blair and eastern Cambria, and in the Broadtop field it is successfully coked.

Thick Freeport Seam. (Known also as the Twin-Vein and Double Freeport seams.) (Mined in Allegheny and Westmoreland counties.)

The Thick Freeport seam is a phenomenon caused by an unusual thickening of the coal, ranging from 5 feet to 9 feet, in a proved area about 15 miles long by 8 miles broad, which is almost bisected by the Allegheny River and contains about 75,000 acres located in Allegheny, Westmoreland and Butler counties. The southern boundary of this area lies about 10 miles north-east of Pittsburgh. Detached areas are reported to have been found at Wilmerding and in the neighborhood of Saltsburg, which would indicate a much greater area for this thick coal.

The origin of this thick bed has long been a matter of conjecture, one theory being that it was merely an abnormal development of the Upper Freeport seam, while others account for it as a combination of the Upper and Lower Freeport seams, which normally are about 55 feet apart in the section under discussion. A peculiar condition is found as the Upper Freeport bed is traced down the Allegheny River to Valley Camp where the coal first begins to thicken. The bottom bench of the "thick coal" carries all the characteristics of the regular Upper Freeport bed and an examination

reveals the beginning of an additional bench on top of the bottom bench. This two-bench condition of the Upper Freeport bed is maintained over the entire area of the "thick coal" and accounts for its abnormal thickness.

A further proof that the Thick Freeport is merely a thickening of the Upper Freeport seam may be found in the stratigraphy of the area. Underlying the Upper Freeport coal is a characteristic limestone, known as the Freeport limestone, while overlying the coal is the Mahoning sandstone. This order of formations persists in places where the seam is of both normal and abnormal thickness and this, in itself, would preclude the possibility of the Upper and Lower Freeport seams having come together, inasmuch as the Lower Freeport is usually 40 feet or more below the Freeport limestone.

Most of the Thick Freeport coal is held in large blocks by large industrial concerns who mine the coal for their own use.

GENERAL ANALYSIS

	Allegheny County	Somerset County	Indiana County	Cambria County
Moisture	2.50	2.40	3.20	2.75
Volatile Matter . .	34.00	18.50	26.50	21.10
Fixed Carbon . . .	54.50	66.30	61.50	67.45
Ash	9.00	12.80	8.80	8.70
Sulphur	2.25	1.80	1.70	1.65
B. t. u.	13,400	13,350	13,750	13,850

Lower Freeport. (Known also as the D seam; Moshannon coal in Clearfield and Center counties; Limestone seam in southern Cambria county; Schantz coal in Butler county.) (Mined in the Snowshoe, Clearfield, Reynoldsville, Low Grade Division, Shawmut, Cambria, Two Lick, Indiana, Allegheny River, Johnstown and Southfork-Windber districts.)

The Lower Freeport is, next to the Lower Kittanning, the most important of the coals of the Allegheny formation in Pennsylvania. The position of this coal is 30 to 80 feet below the Mahoning sandstone, and from 6 inches to 15 feet above the lower Freeport limestone, which, though absent in portions of the field, is present throughout the greater part of the area and constitutes the chief key rock for the determination of the horizon.

The seam is usually broken up into two or more beds by partings which are sometimes so thick as to destroy the value of the bed. At other times the upper portion grades locally, especially in the Allegheny Valley, into a thin, low grade cannel. It is the source of the fuel which has given the Reynoldsville basin its great reputation and is found in its best condition in the region of Reynoldsville and Punxsutawney, in the eastern and southeastern portions of Jefferson county.

Locally the seam is greatly thickened, but such increase is generally accomplished by the introduction of partings and bony layers to the detriment of the commercial value of the bed. About Punxsutawney the Lower Freeport averages 5 feet in thickness, sometimes carrying 6 feet of good coal in one bench. The fuel here produces a high grade coke. Westward through Jefferson county the coal is of workable thickness generally, though not of the exceptional quality shown in the Reynoldsville basin. The Punxsutawney district extends for some miles into northern Indiana county, where the

Lower Freeport is still of good quality, with from 3½ to 4 feet, and sometimes 4 feet 5 inches of good coal, though in other parts of the county it thins to as low as 2 feet. It is extensively mined in the vicinity of Shawmut, in Elk county, where it occurs 130 feet above the Dagus coal and carries from 3 feet to 4 feet 6 inches of coal without partings. Here it is a first class steam coal, low in ash and sulphur.

On the eastern flank of the Phillipsburg-Houtzdale basin it is found on the slope of a few knobs of small area on the Center county side of Moshannon Creek. In this region the coal, known as the Moshannon bed, is fine for steaming purposes.

The **Moshannon bed** is the chief coal of Clearfield county. Because of its great purity and utility it has become the standard coal of the Allegheny front region. It is of low volatile content and is a justly celebrated steam coal. The demand for this coal has been so great that most of the original Moshannon coal has been mined out. Since the term Moshannon has come to signify to the trade a low-volatile, high-calorie coal, rather than fuel from one particular seam, much of the so-called Moshannon reaching the markets to-day comes from other seams than the Lower Freeport, though fulfilling the requirements equally as well as if it came from the original source.

The Lower Freeport seam is known as the "limestone" coal about Johnstown, in Cambria county, where it averages about 2 feet 6 inches. In other parts of the county it reaches a thickness of from 3 feet to 4 feet 2 inches. About Patton and in the two other basins to the westward it is the chief coal.

Throughout the most of Somerset county this coal is of little or no present commercial value. In the Ligonier basin of Fayette and Westmoreland counties the Lower Freeport is everywhere variable and unreliable. The bed is very dirty, though reported to be of locally workable thickness in southwestern Fayette county, and it generally is of no value in the Blairsville basin and farther west.

GENERAL ANALYSIS

	Somerset	Cambria	Clearfield	Armstrong
Moisture	2.25	3.20	3.00	2.20
Volatile Matter . .	18.85	22.50	23.00	33.20
Fixed Carbon . . .	72.90	66.50	68.00	59.60
Ash	8.00	7.80	6.00	5.00
Sulphur . . . . .	.75	1.50	.80	1.00
B. t. u.	14,100	13,900	14,200	....

Upper Kittanning Seam. (Known also as C Prime seam; Darlington and North Washington cannel in Beaver county; Woodland cannel in Clearfield county; Big bed in Center county; Cement in southern Cambria county; Cement or Rock vein in Somerset county; No. 4 and Creek vein in Butler county.) (Mined in the Snowshoe, Clearfield, Low Grade Division, Cambria, Two Lick, Indiana, Allegheny River, Johnstown, Southfork-Windber and Quemahoning districts.)

The topmost coal of the Kittanning group lies almost immediately above the Johnstown cement, 135 to 190 feet above the Ferriferous limestone and about 80 feet to 100 feet below the Mahoning sandstone. This seam is somewhat remarkable for the

variety of its composition, as well as for its patchy mode of occurrence. It is the horizon of most of the cannel shale; yet the areas of this bastard cannel are very restricted and isolated. In Beaver county, where it is known as the "Darlington" coal, and the "North Washington cannel coal," it contains from 6 to 12 feet of cannel in a small area.

In Indiana county the Upper Kittanning becomes thicker and is variable in composition. Though often thin or even unrecognized in the southern portion, it attains a thickness of 4 feet in Black Lick Valley, and from 18 inches to 3 feet in the Ligonier basin, in which it is mined to some extent, though it contains considerable earthy matter. Northwestward it is of better quality, the lower of the two benches being highly esteemed as a smithing coal. In Center county the principal coal, the "Middle" or "Big" bed, ranging 5 feet to 7 feet in thickness, appears to lie at the Upper Kittanning horizon. In the Snowshoe basin this coal is in three benches, which when carefully cleaned makes an excellent coke.

In Clearfield county the Upper Kittanning bed ranges in thickness from 1 foot 6 inches to 5 feet, with an average of about 2 feet for the whole county. It is generally thin in the eastern basin, but westward it improves both in quality and thickness, the latter varying from 3 to 5 feet, often with one or more partings. The coal is of excellent quality, though it does not appear to be so good as in the Snowshoe basin.

The Upper Kittanning is known as the **Cement seam** about Johnstown, where it is a bright, horizontally bedded coal, averaging about 3 feet 6 inches in a solid breast, which has long been extensively mined for the furnaces in that vicinity. As the Cement seam this is an especially important low-sulphur coal in the Second basin in Somerset county. In southern Somerset county it is but little developed on account of its reported greater impurity and the disadvantageous geographic position.

	GENERAL ANALYSIS			
	Somerset	Cambria	Beaver	Fayette
Moisture	3.50	3.00	1.80	2.60
Volatile Matter . . .	15.70	16.30	39.70	24.40
Fixed Carbon	74.00	71.20	54.90	64.30
Ash	6.80	9.50	3.60	8.70
Sulphur	0.70	2.75	2.00	2.20
B. t. u.	14,000	14,000	....	14,390

Middle Kittanning. (Known also as C seam.)

The Middle Kittanning is generally too thin and too dirty for mining, and is not only the poorest coal of the Kittanning group, but is, perhaps, the least important of the coals in the Allegheny formation. It is found in its best development and condition in the northern and eastern portions of the main field. It has no commercial value in Armstrong county; Northward, however, it is reported to be somewhat better, and it is nearly 3 feet thick and of better quality in the southern townships of Clarion county, where it is divided by a shallow parting into two benches. In Indiana county it is found to be from 2 to 5 feet thick locally, but over most of this territory it is thin and unworkable as well as often pyritous, though mined at a number of points for local use. The better conditions noted in Clarion county continue eastward into Jefferson county, in

the central portion of which it reaches 3 feet or even 4 feet in thickness. From such tests as have been reported it appears probable that the Middle Kittanning will eventually, when developed, form an important source of fuel in this county, over the greater part of which its horizon is readily accessible.

	GENERAL ANALYSIS	
	Clearfield Co.	
Moisture	2.50	
Volatile Matter	22.20	
Fixed Carbon	65.90	
Ash	9.40	
Sulphur	1.50	
B. t. u.	13,750	

Lower Kittanning Seam. (Known as the B seam; Miller or Sonman and Blacklick in Cambria county; Dagus or Daguseahonda in Elk county; Bloss in Tioga county; Barnett in Bedford and Huntingdon counties.) (Mined in Blossburg, Snowshoe, Clearfield, Reynolds-ville, Low Grade Division, Shawmut, Cambria, Two Lick, Indiana, Allegheny River, Johnstown, Southfork-Windber, Quemahoning and Broadtop districts.)

The Lower Kittanning is the most persistent, uniform and reliable coal of the Allegheny formation, although it is thinner than the Freeport coals, seldom exceeding a workable thickness of 4 feet. Its purity, regularity and extended accessibility make it first in production among the coals of the formation. The zone within which it lies less than 300 feet below the surface includes nearly one-half of the entire area of the main coal field. In 11 of the counties it is exposed in workable thickness and purity. Although locally it may be thin or worthless, its commercial output in the state is over 25,000,000 tons annually, while the number of commercial mines and country banks at this horizon is greater than in any other coal in the field except the Pittsburgh.

In the Allegheny Valley the Lower Kittanning coal lies about 45 feet above the Ferriferous limestone, and 180 to 200 feet below the Mahoning sandstone. In Clearfield county, near the Allegheny escarpment, it is 145 to 165 feet below the Mahoning sandstone. In the western part of the state its quality is not so good as to the eastward and along the Allegheny front.

The bed takes its name from Kittanning on the Allegheny River in Armstrong county, where it is mined to burn the plastic fire clay which occurs a few feet below the horizon of the coal. It is regular and fairly persistent in this county, though thin and more or less impure toward the south, where it seldom exceeds more than 2 feet in thickness. Nearly always it carries a thin, bony top, and usually a thin parting. In Indiana county the Lower Kittanning lies 50 to 100 feet above the Homewood sandstone and exhibits an average thickness of about 2 feet 6 inches of coal, generally split by a thin shale band.

The coal is accessible over most of Clarion county, with the exception of three townships in the northern portion. In the northern half of the county it averages 2 feet 8 inches in thickness, and in the central portion from 3 feet 3 inches to 4 feet 6 inches. Generally it carries one or two very thin partings. In Center county on the eastern edge of

the main bituminous coal field the Lower Kittanning coal, although slightly inferior in quality to the Upper Kittanning coal, has, since the partial exhaustion of the latter, been very extensively developed, particularly in the Snowshoe basin. In this district the seam furnishes a large output, a portion of which, after careful cleaning is coked.

In Clearfield county the Lower Kittanning coal varies from 3 feet to 7 feet in thickness, having an average of 4 feet. In the southern part of the county the seam is in fine condition, at many points furnishing 4 feet 9 inches of commercial coal, sandwiched with two thin partings. In Cambria county this bed is locally known as the Miller seam or Sonman coal, and is widely known as a high grade smokeless coal, being low in both sulphur and ash. In this part of the state it has reached an enormous development. Along the eastern border of the Cambria region the Lower Kittanning horizon is well proved and has an established reputation, especially for steam and smithing coal. Locally it also yields in some areas an excellent coke. The developments in the basin of the South Fork of the Conemaugh River, in southern Cambria county, has given the Miller coal its supremacy as the chief coal of Cambria county.

A seam of coal, known as the "B Rider," is being operated on the Bens Creek Branch, at Cassandra, and is quite a separate and distinct seam from the "B" seam which lies about twelve feet above it. The same condition is noted at other points in the vicinity of Cassandra and in all likelihood the Rider coal will be operated at such places. In eastern Cambria and in Clearfield county the "B" seam and the "B Rider" seem to join, with a distinct parting of a foot or more between the two benches of the united seam.

In Somerset county, the Lower Kittanning is, next to the Pittsburgh coal, the most important coal-bearing horizon. In the northern part of the county, where it is particularly valuable, it is a double bed with a thick upper mining bench of pure, lustrous, columnar coal, 3 feet to 5 feet 2 inches in thickness. This coal shows a peculiar increase in sulphur in going westward, so that in the second basin it occasionally yields 11½ per cent of sulphur and 8 to 10 per cent of ash. In the region northeast of Jefferson county the "Dagus" or "Daguscahonda" coal, the supposed representative of the Lower Kittanning bed, is a very valuable coal, it being the chief source of coal in Elk county.

GENERAL ANALYSIS

	Somerset	Cambria	Beaver
Moisture	3.00	3.00	2.30
Volatile Matter	16.30	18.00	38.50
Fixed Carbon	72.30	72.00	53.60
Ash	8.40	7.00	5.60
Sulphur	2.00	1.30	2.00
B. t. u.	13,900	14,200	....

Bloss Seam. (Mined in Tioga county.)

In the outlying residual basins to the northwest of the main coal field, the celebrated "Bloss" coal has generally been considered as identical with the Lower Kittanning bed. This coal, so well known to blacksmiths and engineers of the Northeastern states and lower Canada, is derived chiefly from a dissected basin about 20 miles long and 3 miles wide

in eastern Tioga county. Not all so-called Blossburg coal is "Blossburg" in the old sense, as that grade of smithing coal has about disappeared, though a few operations still remain. The coal now largely mined in this basin is more similar to Clearfield in character. The analysis here given is of the original "Bloss" coal.

GENERAL ANALYSIS

Moisture	2.25
Volatile Matter	20.20
Fixed Carbon	71.15
Ash	6.40
Sulphur	0.55

Clarion Seam. (Known also as the A Prime seam; believed that this horizon is represented by the Fulton seam in the Broad-Top field; by the Pardoe coal of northwestern Butler and eastern Mercer counties; by the Clermont coal of Elk, Forest, Cameron and McKean counties; by the Scrubgrass coal of western Clarion, Venango and northern Butler counties.) (Mined in the Shawmut district.)

The Clarion seam lies normally from 10 to 70 feet below the Ferriferous limestone and about 35 feet above the Brookville coal. It resembles the latter in that it is in general best and thickest toward the outer or shoreward border of its exposure zone, the more central sections being, with some exceptions, thinner and even obscure. In its mode of occurrence, with relation to that of the Brookville coal, the Clarion illustrates a condition commonly prevailing in the coal groups of the Allegheny formation, i. e., the failure of two approximate coals to be of workable thickness in the same locality. Thus the Clarion coal is rarely of workable thickness in a section containing a workable thickness of coal at the Brookville horizon also.

The Clarion coal is typically exposed and locally mined about Clarion, in Clarion county, and in a section showing about 4 feet of impure and somewhat sulphurous coal. Over the greater part of the southern half of the county it is thin and worthless; toward the western boundary it improves, and in the northwestern corner of Armstrong county it is the chief source of fuel about Parker, where a thickness of 3 feet 6 inches, with a 1-inch parting, is disclosed. In Jefferson county this coal is usually very thin, often but a few inches in thickness, and very impure where it is thicker. In Indiana county, also, the bed is thin and unimportant, though fairly persistent.

In northwestern Butler county and in eastern Mercer the Clarion coal, or its supposed representative, the Pardoe coal, is mostly of workable thickness, and constitutes the main coal of the Allegheny formation in that district. On the whole, chiefly on account of the rather high percentage of sulphur, the Clarion coal in this part of the state is not generally good, though its easy accessibility and geographic advantage have led to its somewhat extensive exploitation. The fuel is principally used in locomotives. In the counties northeast of Jefferson county the Clarion group contains only one coal-bearing horizon, that of the Clermont coal, which on account of its relation to the Ferriferous limestone, has been correlated with the Clarion coal. It takes its name from Clermont, in McKean county, and is the most important coal of the Cler-

mont basin in this county. The seam here is sulphurous and contains a thin parting.

The Scrubgrass coal of western Clarion, Venango and northern Butler counties has been correlated by the State geologists with the upper bench of the Clarion coal and is now often designated as the Upper Clarion coal.

The Clarion seam in general is suited only to domestic and railroad use.

GENERAL ANALYSIS		
	Armstrong	Indiana
Moisture	1.00	2.00
Volatile Matter	42.60	27.90
Fixed Carbon	50.40	64.10
Ash	6.00	6.00
Sulphur	1.70	3.60

Brookville Seam. (Known also as the A seam; believed that this horizon is represented by the Cushman or Seymour seam in Tioga county; may be the same as the Pardoe in Mercer and Butler counties, and the Clermont in Elk, Forest and McKean counties.) (Mined in the Blossburg and Reynoldsville districts.)

The Brookville coal, the lowest coal of the Allegheny formation, lies almost immediately above the Homewood sandstone, the interval being from

3 to 15 feet. It extends in workable thickness over the greater part of Jefferson county and has been mined for local use at a large number of points, especially about Brookville. Here it is found in its best condition.

In general this seam, where it is of workable thickness, carries a large amount of sulphur in the form of pyrites, and is inclined to be dirty, which unfits it for other than domestic use. Thicknesses ranging from 4 to 8 feet are frequently met with, though commonly too impure and sulphurous for marketing. The coal is found in its greatest purity where the seam is thin. On the whole it would appear that the Brookville coal is of workable thickness locally over a large part of the marginal belt of the coal fields, and that to some extent it has been worked commercially on account of its nearness to markets, although it is nearly always too impure to compete with the superior coals lying not far distant within the field.

GENERAL ANALYSIS		
	Jefferson	Clarion
Moisture	1.40	2.30
Volatile Matter	39.50	21.10
Fixed Carbon	49.90	68.60
Ash	9.20	8.00
Sulphur	1.25	1.80
B. t. u.		13,800

THE BROAD-TOP COAL FIELD*

The Broad-Top coal field is about 50 square miles in extent and lies in the south-central portion of the State, in Bedford, Fulton and Huntingdon counties. It is about 30 miles east of the Allegheny Front and is totally isolated from all other coal fields. The rocks of the Broad-Top field are folded into a series of anticlines and synclines running in a northeast and southwest direction parallel to the larger ranges and valleys of this section of Pennsylvania. Not infrequently in the underground workings structures known as "rolls" are encountered. These are sudden folds in the measures running diagonally across the basins and are the result of longitudinal pressures. As a result of this folding the coal is much broken up in places and much fine coal is gotten in mining. All of the coal in this field is sold as run-of-mine. There is little difference in the fuel value of the three seams, namely, the Fulton, Barnett, and Kelly.

Kelly Seam. (Mined in the Broad-Top district.)

The Kelly seam lies at an average height of 90 feet above the Barnett bed and is believed to be at the same horizon as the Upper Freeport seam lying to the west. It is more limited in area than either the Fulton or the Barnett coals, due to lying higher in the series and because it has been more eroded than the lower beds. It has been heavily drawn upon in mining, but its persistent nature indicates that it will yet furnish a large amount of recoverable coal. It varies from three to four feet in thickness, has a black shale or shaly sandstone roof and a variable under-clay ranging from zero to three feet in thickness. Coal from the Kelly seam is tender and soft and is easily broken into fine pieces. Like the other coals from this field, it is semibituminous in rank and is much in demand in eastern markets as a boiler fuel. It also produces a coking coal.

GENERAL ANALYSIS	
Moisture	1.10
Volatile Matter	17.60
Fixed Carbon	69.10
Ash	12.30
Sulphur	2.30
B. t. u.	13,500

Barnett Seam. (Mined in the Broad-Top district.)

The Barnett seam, lying at an average height of 50 feet above the Fulton seam, appears to be representative of the Lower Kittanning seam in Bedford and Huntingdon counties. This coal is persistent though irregular, and is especially valuable on account of the relative proximity of the Broad-Top field to eastern markets. The Barnett bed will, in all probability, supply the largest amount of recoverable coal in the future mining in this field. It is a semibituminous coal used largely for domestic and steam purposes. For the latter purpose it is especially well regarded. Although this coal can be coked it ranks somewhat below the Kelly and Fulton seams for this purpose. It varies in thickness from 1 foot 9 inches to 5 feet, with an average of about 3 feet 6 inches. It usually carries from four to six inches of bone coal at the top and frequently is divided into different benches by thin bone or shale partings.

GENERAL ANALYSIS	
Moisture	2.10
Volatile Matter	17.20
Fixed Carbon	72.25
Ash	8.45
Sulphur	1.90
B. t. u.	14,300

*Extracts from Report No. 10, Pennsylvania Geologic Survey.

Fulton Seam. (Mined in the Broad-Top district.)

The Fulton seam lies at the top of the Pottsville formation and is believed to correlate with the Clarion seam. It has been extensively mined in the East Broad-Top basin. The bed varies from three to five feet in thickness and usually contains at least one parting of bituminous sandy shale, referred to as "rock parting" by the miners. The Fulton bed is, so far as known, persistent within its entire outcrop, but the fact that it contains an admixture of shale in the form of partings will

make the mining of this bed a difficult matter at places. This bed furnishes a high grade of semi-bituminous coal, going largely to eastern cities for domestic and steam purposes.

GENERAL ANALYSIS

Moisture	1.20
Volatile Matter	18.30
Fixed Carbon	71.80
Ash	8.70
Sulphur	1.45
B. t. u.	14,200

POTTSVILLE SERIES

Mercer Group. (Contains the Upper and Lower Mercer seams; Upper, Middle and Lower Alton in McKean county; Mt. Savage seam in Bedford and Huntingdon counties; Gaines in Potter county; believed that in this group is also the Bloss in Tioga county, B seam in Lycoming and Bradford counties, Bear Creek seam in Blossburg basin, and the A coal of the Bernice basin.) (Mined in the Blossburg and Broadtop districts.)

The second horizon of commercially valuable coal in the Pottsville formation is embraced by the Mercer group, lying between the Conoquenessing and Homewood sandstones. This group has a thickness varying from 15 to 60 feet, and consists of a highly valuable series of about 52 feet of dark shales, including fire clays and two coals, the lower Mercer and the upper Mercer, each locally overlain by a limestone, with the occasional addition of an iron ore. Along the northern margin of the field the limestones disappear to the eastward and three or four irregular coals with local developments of

refractory fire clays appear in the dark shales. In the eastern counties of the field these are replaced by gray shales, thin sand rocks, and most important refractory clays, including the celebrated Mt. Savage fire clay.

The coals which are seldom of any economic value are generally patchy, irregular, or lenticular; hence it is impracticable to attempt to identify the coal of a single horizon in distant parts of the basin. The coal beds usually contain much dirt or sulphur, though at many localities they offer an excellent fuel, of great purity and utility. The two seams are valuable in parts of Beaver, Lawrence, Mercer and Crawford counties.

GENERAL ANALYSIS

	Sullivan Co.	Tioga Co.
Moisture	4.00	1.80
Volatile Matter	10.50	19.70
Fixed Carbon	73.80	68.70
Ash	11.70	9.80
Sulphur . . . . .	.60	.65
B. t. u.	13,400	.....

PREPARATION OF COAL

In a state producing such a large quantity of coal it is expected that the preparation of the product will be at some places quite simple, and at others quite elaborate. At many of the smaller and newer operations the coal is transferred from the mine wagon direct to the railroad car through a chute without screening, and enters the market as run-of-mine. At the more pretentious works bar screens are installed, by means of which the coal may be graded into slack, nut, nut and slack, $3\frac{1}{4}$ -inch lump, $1\frac{1}{4}$ -inch lump, and sizes above this,

depending upon the screen. At mines where the entire product is coked, the coal is dumped without screening or picking into large bins, from which it is drawn into larries and taken to the ovens.

The best examples of careful preparation will naturally be found at those mines which cater to domestic trade and to the manufacture of illuminating gas. Here will be found all that is latest and best in the preparation of clean and well sized coal, including shaker screens, picking tables, loading booms, etc.

For additional information on the uses and analyses of Pennsylvania coals, see the descriptive advertisements on mines following the Supplementary Analyses.

Analyses of Penna. Bituminous Seams by Counties & Localities

(ALL ANALYSES MADE ON MINE SAMPLES "AS RECEIVED")

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined R. T. U.	Carbon	Oxygen	Carbon	Hydrogen	Nitrogen	Ratio
*Barnett.	Bedford, 3½ mi. s. e. of Hopewell.	Glendale No. 2.	1.25	17.81	74.28	6.66	1.43	14.458	82.79	3.41	8.22	1.17		
*Barnett.	Bedford, 3 mi. s. e. of Hopewell.	Chevington No. 3.	1.68	16.65	75.82	5.85	1.51	14.508	83.48	3.40	9.02	4.55		
†Barnett.	Bedford, Six Mile Run.		.57	18.01	78.08	2.45	.89	14.100				4.34		
†Barnett.	Bedford, near Riddlesburg.	Rock-Bar.	0.686	19.029	63.741	15.056	1.488	13.200				3.35		
†Barnett.	Bedford, near Kearney.	Kearney.	1.300	18.161	69.166	9.011	2.362	14.110				3.81		
†Barnett.	Bedford, near Coaldale.	Duval Slope.	3.053	17.324	69.953	7.436	2.234	14.220				4.01		
†Barnett.	Bedford, near Broad Top Twp.	Wishart.	2.774	16.538	60.196	18.929	1.563	12.340				3.65		
†Barnett.	Bedford, near Brookston.	Ocean No. 4.	1.880	17.701	70.569	8.880	0.880	14.175				3.99		
†Barnett.	Bedford, near Melrose.	Miller (No. 2).	2.350	19.296	69.592	7.441	1.381	14.417				3.60		
†Barnett.	Fulton, near Jacobs.	Jacobs No. 2.	2.012	18.617	71.827	6.408	1.136	14.690				3.86		
†Barnett.	Bedford, near Melrose.	Benedict No. 1.	2.631	17.487	61.713	14.666	4.103	13.117				3.53		
†Barnett.	Bedford, near North Point.	Bartie No. 2.	1.660	16.954	74.745	5.241	1.400	14.730				4.41		
†Barnett.	Bedford, near North Point.	Bacon No. 2.	1.000	17.507	73.391	6.152	1.860	14.700				4.19		
†Barnett.	Bedford, near Coaldale.	Illinois.	1.354	16.336	66.458	13.406	2.446	13.477				4.07		
†Barnett.	Bedford, near Crookstown.	Ocean No. 2.	0.925	17.754	66.344	11.572	3.405	13.669				3.74		
†Barnett.	Bedford.	Kimbers Run.	0.623	22.211	65.055	9.500	2.611	14.110				2.93		
†Berlin.	Somerset, Pine Hill Run.	Fritz.	1.63	22.76	67.47	7.34	.80					2.96		
†Brookville.	Armstrong, Slabtown.	Woodcock.	0.74	35.71	51.05	11.56	.57					1.43		
†Brookville.	Blair, Woodcock Mine.	Barclay.	1.26	26.29	66.13	5.75	.57					2.52		
†Brookville.	Bradford, Fall Creek.	Wickes.	.850	16.625	67.292	14.735	4.98					4.05		
*Brookville.	Cambria, South Fork.	Sligo.	2.35	14.30	71.40	11.95	3.30	13.288	75.16	4.24	4.64	5.00		
*Brookville.	Clarion, Sligo.	Goss.	2.35	37.47	49.01	11.17	4.04	13.118				1.31		
*Brookville.	Clarion, Blue Ball.	Mountain Branch.	1.9	22.0	66.3	9.8	1.95	13.760	78.05	4.40	5.50	3.01		
*Brookville.	Clearfield, 2 mi. s. of Houtzdale.	Shimola.	2.34	22.81	63.87	11.04	3.59	13.360	75.20	4.63	4.80	2.80		
*Brookville.	Clearfield, near Karthans.	Sylvania No. 1.	2.82	20.21	63.87	13.10	3.04	12.989	72.98	4.95	4.04	3.16		
*Brookville.	Clearfield, Madera.	Meldren.	2.4	20.5	70.8	6.3	1.66	14.330	80.93	4.87	7.24	3.45		
†Brookville.	Indiana, Bells Mills.	Meldren.	.560	27.880	61.920	6.030	3.610					2.22		
†Brookville.	Jefferson, Brookville.	Fleege.	1.35	39.62	48.53	9.26	1.24					1.25		
*Brookville.	Somerset, Cairnbrook.	Morris.	2.94	20.92	65.85	10.29	1.39	13.329	76.78	5.99	4.72	3.14		
†Clarion.	Butler, West Winfield.	Meldren.	1.01	42.65	48.66	6.04	1.64					1.14		
†Clarion.	Indiana, Bells Mills.	Pine Creek.	0.56	36.19	50.83	10.78	3.35					2.22		
†Freeport, Lower.	Armstrong, Pine Creek Furnace.	Shantz.	1.82	34.18	58.30	4.71	.99					1.71		
†Freeport, Lower.	Butler, Ziegler's Mill.	Peerless No. 2.	2.290	33.580	55.772	7.200	1.158					1.66		
*Freeport, Lower.	Cambria, Van Ormer.	Pardee No. 27.	2.31	24.40	62.47	10.82	2.34	13.468	76.11	4.66	4.92	2.56		
*Freeport, Lower.	Cambria, St. Boniface.	Victor No. 6.	3.14	26.01	64.40	6.45	1.37	14.159	79.55	6.25	6.26	2.48		
*Freeport, Lower.	Cambria, St. Benedict.	Victor No. 12.	2.19	23.84	65.36	8.61	1.84	13.876	78.47	4.89	5.77	2.74		
*Freeport, Lower.	Cambria, 1 mi. s. of Hastings.	Pennsylvania No. 11.	2.80	21.22	67.03	8.95	1.82	13.763	77.80	5.28	5.47	3.11		
*Freeport, Lower.	Cambria, 1 mi. s. of Hastings.	No. 20.	2.73	23.61	66.18	7.48	1.84	14.035	78.80	5.69	5.98	2.80		
*Freeport, Lower.	Cambria, Hastings.	Delta.	2.89	23.67	66.34	7.10	1.37	14.107	79.49	5.72	6.20	2.80		
*Freeport, Lower.	Cambria, Barnesboro.	Lancashire No. 12.	4.25	21.79	66.09	7.87	1.59	13.513	75.92	8.62	4.60	3.03		
*Freeport, Lower.	Cambria, near Beaverdale.	Victor No. 15.	2.87	21.44	69.23	6.46	1.52	14.177	80.53	5.30	6.85	3.23		
*Freeport, Lower.	Cambria, Emeigh.	Center, Gillingtown.	3.11	21.92	67.53	7.41	0.78	13.709	77.76	6.70	5.46	3.59		
*Freeport, Lower.	Clarion, 3 mi. n. e. New Bethlehem.	Fairmount No. 12.	3.45	23.71	61.60	11.24	2.66	13.059	73.51	6.47	4.15	3.08		
*Freeport, Lower.			3.30	33.79	56.83	6.08	2.73					1.68		

*Bull-tins Bureau of Mines.

†United States Geological Survey Reports.

‡State Geological Survey Reports.

(Continued on Next Page)

CALC. CONTINUED

ANALYSES OF PENNA. BITUMINOUS SEAMS BY COUNTIES AND LOCALITIES—Continued

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Ind. num. d. B. T. P.	Carbon	RATIOS	
										0.8% u.	Carbon org. + A. sh.
*Freeport, Lower.....	Cambria, Moxhom.....	.....	4.73	13.78	72.27	9.22	1.09	14,510	82.79	5.49	5.24
*Freeport, Lower.....	Clearfield, Moshannon.....	.....	2.9	20.5	72.0	4.6	0.77	14,000	78.46	7.17	3.51
*Freeport, Lower.....	Clearfield, Grampion.....	.....	4.1	23.0	66.8	6.1	1.91	13,390	80.95	5.16	2.90
*Freeport, Lower.....	Clearfield, Gassam No. 1.....	.....	1.9	23.0	68.9	6.2	1.37	13,734	76.99	5.71	3.00
*Freeport, Lower.....	Clearfield, Du Bois.....	.....	1.97	31.10	58.28	8.65	2.01	14,081	79.66	5.71	1.87
*Freeport, Lower.....	Clearfield, Carnwarth.....	.....	3.13	24.47	65.62	6.78	1.46	13,788	76.99	4.30	2.68
*Freeport, Lower.....	Clearfield, Berwindale.....	.....	2.85	24.65	63.44	9.06	3.46	13,788	76.99	5.76	2.57
*Freeport, Lower.....	Clearfield, Berwindale.....	.....	7.00	25.470	54.67	15.49	3.67	13,152	76.99	5.76	2.15
*Freeport, Lower.....	Clearfield, Berwindale.....	.....	3.37	23.96	65.94	6.73	0.66	13,152	76.99	5.76	2.75
*Freeport, Lower.....	Indiana, 2 mi. n. e. Glen Campbell.....	.....	1.01	28.50	55.38	14.41	7.0	13,732	76.91	6.95	1.94
*Freeport, Lower.....	Indiana, Jacksonville.....	.....	2.44	28.44	60.68	8.41	1.32	13,151	72.73	7.57	2.13
*Freeport, Lower.....	Jefferson, Sykesville.....	.....	1.86	34.63	53.23	10.28	2.91	13,151	72.73	7.57	1.57
*Freeport, Lower.....	Jefferson, Brockwayville.....	.....	3.56	27.19	65.18	4.07	.82	14,465	.....	.....	2.40
*Freeport, Lower.....	Jefferson, Punxsutawney.....	.....	2.53	27.82	63.95	5.70	1.19	14,200	81.72	3.71	2.30
*Freeport, Lower.....	Jefferson, Punxsutawney.....	.....	.92	17.24	73.84	8.00	.71	14,353	82.90	5.04	4.28
*Freeport, Lower.....	Somerset, Listie.....	.....	2.89	18.73	73.19	5.19	.63	12,816	70.25	8.11	3.91
*Freeport, Lower.....	Somerset, Somerset.....	.....	2.65	33.02	51.17	13.16	2.16	13,408	77.01	3.40	1.55
*Freeport, Lower.....	Allegheny, Creighton.....	.....	2.08	39.52	54.69	2.46	1.25	13,408	77.01	3.40	1.38
*Freeport, Lower.....	Beaver, Hookstown.....	.....	1.58	16.32	69.98	12.12	1.94	13,408	77.01	3.40	4.29
*Freeport, Lower.....	Bedford, Hopewell.....	.....	.96	26.40	65.59	4.78	2.27	13,408	77.01	3.40	2.48
*Freeport, Lower.....	Blair, Bennington.....	.....	2.110	37.570	51.248	7.178	1.894	13,408	77.01	3.40	1.36
*Freeport, Lower.....	Butler, Centre Twp.....	.....	2.95	36.76	52.77	7.52	2.98	13,516	74.68	8.00	1.44
*Freeport, Lower.....	Butler, Butler.....	.....	3.78	34.13	52.56	9.53	3.59	13,016	71.67	8.86	1.54
*Freeport, Lower.....	Butler, 1 mi. s. e. of Butler.....	.....	4.91	32.14	54.71	8.24	1.20	13,018	73.36	10.66	1.70
*Freeport, Lower.....	Butler, 1 mi. s. w. of Chicago.....	.....	3.34	17.69	70.71	8.26	1.72	13,846	79.16	4.90	4.00
*Freeport, Lower.....	Cambria, near Beaverdale.....	.....	2.56	21.78	67.69	7.97	2.02	14,049	78.67	5.03	3.11
*Freeport, Lower.....	Cambria, Barnesboro.....	.....	2.98	22.85	65.78	8.39	1.63	13,907	77.87	5.77	2.90
*Freeport, Lower.....	Cambria, 2 mi. e. of Barnesboro.....	.....	1.45	23.40	67.92	7.23	.83	14,281	81.06	4.75	2.61
*Freeport, Lower.....	Cambria, 1 mi. e. of Bens Creek.....	.....	3.49	24.06	62.55	9.85	2.14	14,058	79.95	4.97	4.50
*Freeport, Lower.....	Cambria, 1 mi. s. w. of Bens Creek.....	.....	3.34	24.06	62.55	9.85	1.80	13,469	76.48	4.34	3.70
*Freeport, Lower.....	Cambria, Fallen Timber.....	.....	2.82	15.61	70.32	11.25	2.18	13,964	79.33	4.32	2.55
*Freeport, Lower.....	Cambria, Johnstown.....	.....	2.73	19.03	70.48	8.21	.81	13,860	78.21	6.19	1.86
*Freeport, Lower.....	Cambria, 1 1/2 mi. s. e. of Portage.....	.....	2.73	24.98	63.64	8.65	1.10	13,628	79.68	5.65	2.55
*Freeport, Lower.....	Clarion, Fairmount.....	.....	3.27	30.72	57.14	6.58	2.47	13,628	79.68	5.65	3.12
*Freeport, Lower.....	Clearfield, La Jose.....	.....	2.83	21.78	67.80	7.50	.91	14,188	.....	.....	2.27
*Freeport, Lower.....	Clearfield, Brisbin.....	.....	.87	27.25	61.75	8.08	2.03	13,874	.....	.....	2.20
*Freeport, Lower.....	Payette, Stewart.....	.....	2.74	27.55	60.68	9.03	1.63	13,874	.....	.....	2.27
*Freeport, Lower.....	Indiana, 2 mi. from Glen Campbell.....	.....	4.26	26.55	60.35	8.84	1.86	13,424	79.80	7.16	2.86
*Freeport, Lower.....	Indiana, Rossiter.....	.....	3.62	23.55	67.38	5.45	1.30	14,200	76.71	7.30	2.24
*Freeport, Lower.....	Indiana, Clymer.....	.....	3.08	27.32	61.16	8.44	1.29	13,772	76.71	7.30	2.45
*Freeport, Lower.....	Indiana, Glen Campbell.....	.....	1.00	26.07	63.79	9.14	2.69	13,945	78.12	4.26	2.45
*Freeport, Lower.....	Indiana, Homer City.....	.....	4.35	27.76	55.99	11.90	1.51	12,964	71.62	8.54	2.02
*Freeport, Lower.....	Indiana, White.....	.....	3.10	32.27	54.96	9.67	1.69	13,217	73.71	8.34	1.70
*Freeport, Lower.....	Jefferson, Brockwayville.....	.....	.950	17.940	71.15	9.13	.83	13,217	73.71	8.34	3.96
*Freeport, Lower.....	Lycoming, Ralston.....	.....	1.44	18.56	68.44	11.56	1.88	13,604	77.31	3.22	3.69
*Freeport, Lower.....	Somerset, Berlin.....	.....	3.21	17.08	64.60	15.11	1.47	12,893	72.65	5.08	3.78
*Freeport, Lower.....	Somerset, Zimmerman.....	.....	2.05	21.11	65.02	11.82	2.44	13,433	76.40	3.47	3.08
*Freeport, Lower.....	Somerset, Somerset.....	.....	3.07	18.97	67.08	10.88	1.52	13,415	76.38	5.33	3.54
*Freeport, Lower.....	Somerset, Edie.....	.....	2.61	21.42	64.38	11.59	1.94	13,365	75.81	4.78	3.01
*Freeport, Lower.....	Westmoreland, Ligonier.....	.....	1.060	33.96	54.39	9.54	1.06	13,104	72.08	7.87	1.60
*Freeport, Lower.....	Westmoreland, Salma Station.....	.....	2.71	35.72	50.87	10.70	3.11	13,104	72.08	7.87	1.42
*Freeport, Lower.....	Westmoreland, Lucerne.....	.....	2.71	35.72	50.87	10.70	3.11	13,104	72.08	7.87	1.42

(Continued on Next Page)

*Geological Survey Reports

†United States Geological Survey Reports

‡Geological Bureau of Mines

§State Geological Survey Reports

ANALYSES OF PENNA. BITUMINOUS SEAMS BY COUNTIES AND LOCALITIES—Continued

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carbon	Oxygen	Calorific Carbon	F. C.	V. M.
*Freeport, Upper.....	Westmoreland, Loyalhanna	Snodgrass.....	.89	34.10	56.09	4.99	3.93	13,980	.....	.....	.....	1.64	
†Fulton.....	Bedford, near Coaldale.....	Duval Slope.....	1.052	18.960	69.289	9.835	0.856	13,980	.....	.....	.....	3.65	
†Fulton.....	Bedford, near North Point.....	Ladysmith No. 5.....	1.012	17.600	64.975	14.937	1.476	12,950	.....	.....	.....	3.69	
†Fulton.....	Bedford, near Melrose.....	Hollyhook.....	1.216	18.492	69.001	9.918	1.373	14,108	.....	.....	.....	3.73	
†Fulton.....	Bedford, near Crookstown.....	Ocean No. 6.....	0.753	20.584	67.691	9.478	1.494	14,147	.....	.....	.....	3.29	
†Fulton.....	Fulton, near Jacobs.....	Jacobs No. 1.....	1.000	18.414	69.632	9.811	1.143	14,153	.....	.....	.....	3.78	
†Fulton.....	Bedford, near Melrose.....	Miller No. 1.....	2.652	19.061	68.537	8.625	1.125	14,236	.....	.....	.....	3.60	
†Fulton.....	Bedford, near Crookstown.....	Carbon No. 4.....	1.125	18.302	70.444	7.623	2.506	14,383	.....	.....	.....	3.85	
†Fulton.....	Fulton, near Cooks.....	Wray's Hill.....	1.412	19.836	68.484	8.427	1.841	14,319	.....	.....	.....	3.45	
†Fulton.....	Huntingdon, Jacobs.....	Jacobs.....	1.65	17.48	72.26	8.61	1.55	14,076	80.64	3.24	6.81	4.13	
†Kelly.....	Bedford, Sandy Run	.....	.58	16.01	76.72	4.96	1.23	.....	.....	.....	.....	4.79	
†Kelly.....	Bedford, near Kearney.....	Kearney Slope.....	1.134	16.807	67.863	12.981	1.215	13,485	.....	.....	.....	4.03	
†Kelly.....	Bedford, near Stone Row.....	Cambria No. 2.....	1.205	17.121	64.891	13.406	3.377	13,220	.....	.....	.....	3.79	
†Kelly.....	Bedford, near Coaldale.....	Duval Slope.....	0.995	19.623	65.034	12.336	2.012	13,570	.....	.....	.....	3.31	
†Kelly.....	Bedford, near Coaldale.....	Illinois No. 4.....	1.295	17.175	67.268	12.930	1.332	13,535	.....	.....	.....	3.92	
†Kelly.....	Bedford, near Finleyville.....	Finleyville (Plane).....	1.027	16.746	66.582	13.025	2.620	14,402	.....	.....	.....	3.97	
†Kelly.....	Bedford, near North Point.....	Highland No. 4.....	1.245	17.783	63.186	12.660	4.126	13,431	.....	.....	.....	3.55	
†Kelly.....	Bedford, near Langdendale.....	Langdendale Shaft.....	0.750	17.587	65.619	13.012	3.032	13,403	.....	.....	.....	3.73	
†Kelly.....	Bedford.....	Kimbers Run.....	0.811	20.096	53.982	19.262	5.849	12,279	.....	.....	.....	2.69	
†Kelly.....	Bedford.....	Wisdom Run Prospect.....	6.790	17.887	67.527	7.075	0.721	14,140	.....	.....	.....	3.77	
†Kittanning, Lower.....	Armstrong, Kittanning	.....	0.95	40.90	51.65	5.14	1.36	.....	.....	.....	.....	1.26	
†Kittanning, Lower.....	Beaver, Beaver Falls.....	Hulmes.....	2.400	38.110	54.619	4.080	.791	.....	.....	.....	.....	1.43	
†Kittanning, Lower.....	Beaver, New Brighton.....	Mendenhall.....	2.270	38.870	50.173	6.365	2.322	.....	.....	.....	.....	1.29	
†Kittanning, Lower.....	Blair, Bennington.....	Dennison-Porter.....	.91	26.34	64.37	6.59	1.79	.....	.....	.....	.....	2.44	
*Kittanning, Lower.....	Cambria, Nanty Glo.....	Cardiff.....	1.85	20.14	72.00	6.51	1.84	14,561	.....	.....	.....	3.57	
*Kittanning, Lower.....	Cambria, Franklin.....	Franklin Slope No. 2.....	2.70	15.64	74.03	7.63	1.93	.....	.....	.....	.....	4.73	
*Kittanning, Lower.....	Cambria, Expedit.....	Nonpareil No. 1.....	3.45	18.82	71.18	6.55	2.01	.....	.....	.....	.....	3.78	
*Kittanning, Lower.....	Cambria, Beaverdale.....	Pennsylvania No. 15.....	3.44	16.18	73.46	6.92	1.83	.....	.....	.....	.....	4.54	
*Kittanning, Lower.....	Cambria, Bakerton.....	Sterling No. 1.....	2.9	17.0	73.4	6.74	1.69	14,114	80.61	4.80	6.88	4.54	
*Kittanning, Lower.....	Cambria, 1 1/4 mi. e. of Barnesboro.....	Cymbria.....	.82	22.86	69.15	7.17	2.02	14,310	80.12	5.61	6.49	4.32	
*Kittanning, Lower.....	Cambria, 1 mi. e. of Bens Creek.....	Bens Creek No. 1.....	1.83	16.82	75.34	6.01	.84	14,443	81.56	3.36	7.75	4.32	
*Kittanning, Lower.....	Cambria, Carroltown Road.....	Logan No. 5.....	.93	23.10	69.29	6.68	1.30	14,485	83.43	3.88	8.44	4.48	
*Kittanning, Lower.....	Cambria, Colver.....	Colver.....	2.00	21.17	70.90	5.93	1.23	14,512	81.64	4.31	7.43	3.00	
*Kittanning, Lower.....	Cambria, Dunlo.....	Henriette.....	2.65	18.08	74.61	6.41	.62	14,560	83.80	5.05	8.66	4.13	
*Kittanning, Lower.....	Cambria, near El Mora.....	Peerless No. 1.....	3.47	20.73	69.39	6.41	1.55	14,173	80.02	5.78	6.56	3.35	
*Kittanning, Lower.....	Cambria, Ehrenfeld.....	Ehrenfeld No. 3.....	3.51	16.32	73.04	6.63	0.94	14,279	80.70	5.91	6.44	4.34	
*Kittanning, Lower.....	Cambria, 2 1/2 mi. n. e. of Hastings.....	Miller Run.....	.81	23.92	66.15	9.12	1.36	14,040	79.15	4.44	5.84	2.77	
*Kittanning, Lower.....	Cambria, Johnstown.....	Greenhill.....	2.03	14.47	75.31	8.19	2.26	14,081	79.97	4.18	6.46	5.20	
*Kittanning, Lower.....	Cambria, Llaufair.....	Scalp Level No. 2.....	2.71	19.38	72.97	4.94	.69	14,587	83.83	4.52	8.86	3.77	
*Kittanning, Lower.....	Cambria, Lloydell.....	Cambria.....	4.46	15.44	71.63	8.47	1.49	13,682	77.43	4.53	5.16	4.64	
*Kittanning, Lower.....	Cambria, Nanty Glo.....	Lincoln No. 1.....	3.31	20.47	70.03	6.19	1.76	14,305	80.66	5.32	7.01	3.42	
*Kittanning, Lower.....	Cambria, Nanty Glo.....	Springfield No. 1.....	2.54	19.85	71.22	6.39	2.12	14,315	81.17	4.29	7.60	3.59	
*Kittanning, Lower.....	Cambria, Portage.....	Miller No. 1.....	3.52	17.32	73.27	5.89	1.06	14,278	82.06	4.98	7.55	4.23	
*Kittanning, Lower.....	Cambria, Portage.....	Sonman No. 2.....	1.43	16.92	75.22	6.43	1.08	14,557	83.40	3.29	8.58	4.45	
*Kittanning, Lower.....	Cambria, Patton.....	Brown.....	3.88	22.52	67.08	6.52	0.66	14,117	79.41	6.98	5.88	2.98	
*Kittanning, Lower.....	Cambria, St. Benedict.....	Victor No. 10.....	2.94	19.52	70.87	6.67	1.76	14,143	79.78	5.49	6.56	3.63	
*Kittanning, Lower.....	Cambria, South Fork.....	Stineman No. 2.....	2.4	15.0	77.10	5.54	1.31	14,500	82.96	4.78	8.04	5.14	
*Kittanning, Lower.....	Cambria, Twin Rocks.....	Big Bend No. 1.....	1.29	20.56	72.15	6.00	1.74	14,920	82.96	3.22	9.00	3.51	
*Kittanning, Lower.....	Cambria, Twin Rocks.....	Commercial No. 3.....	.82	20.42	72.11	6.65	2.35	14,549	81.89	3.39	8.16	3.53	
*Kittanning, Lower.....	Cambria, Vintondale.....	Vinton No. 1.....	.91	19.89	72.05	7.15	2.36	14,644	81.06	3.38	7.70	3.62	
*Kittanning, Lower.....	Cambria, Vintondale.....	Vinton No. 6.....	3.63	18.63	71.20	6.54	1.98	14,119	80.59	4.76	7.13	3.82	

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(Continued on Next Page)

COAL CATALOG

ANALYSES OF PENNA. BITUMINOUS SEAMS BY COUNTIES AND LOCALITIES—Continued

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carbon	Oxygen	RATIOS	
											Carbon	F. C.
											oxy. + ash	V. M.
* Kittanning, Lower.	Cambria, Windber.	Eureka No. 37.	3.30	12.50	77.90	6.33	1.04	14,340	81.65	5.25	7.05	6.23
* Kittanning, Lower.	Cameron, Mount Hope	.....	.99	34.40	60.19	3.56	.86	.....	.....	.....	.....	1.75
* Kittanning, Lower.	Cameron, 3½ mi. s. w. of Phillipsburg.	Acme No. 2.	3.37	19.85	69.25	7.53	2.39	13,946	78.90	6.17	6.26	3.49
* Kittanning, Lower.	Center, Osceola Mills.	Electric.	3.24	20.65	68.34	7.77	2.08	13,907	77.85	6.16	5.59	3.31
* Kittanning, Lower.	Center, Osceola Mills.	No. 10.	3.28	21.46	69.57	6.59	1.99	14,274	80.58	4.63	7.18	3.26
* Kittanning, Lower.	Center, 1½ mi. n. e. of Clarence.	Poormaniste.	3.38	22.83	61.39	12.40	.88	13,039	74.44	6.14	4.06	2.69
* Kittanning, Lower.	Clarion, Fairmount	No. 1.	2.73	34.77	52.20	10.30	3.66	.....	.....	.....	.....	1.50
* Kittanning, Lower.	Clarion, Rinersburg	Acme.	4.09	34.79	55.32	5.80	2.39	.....	.....	.....	.....	1.59
* Kittanning, Lower.	Clearfield, Smoke Run.	Viola.	3.73	20.29	68.41	7.57	1.33	13,970	78.92	6.10	5.77	3.37
* Kittanning, Lower.	Clearfield, Boardman.	Potts Run No. 3.	2.95	21.29	66.92	8.84	1.35	13,901	78.51	5.37	5.52	3.14
* Kittanning, Lower.	Clearfield, Smoke Run.	Eureka No. 22.	3.20	21.00	69.30	6.50	.69	14,060	79.90	6.76	6.03	3.30
* Kittanning, Lower.	Clearfield, Phillipsburg.	Guion.	.90	21.59	68.49	9.02	1.99	14,060	79.49	3.62	6.29	3.17
* Kittanning, Lower.	Clearfield, Morrisdale.	Morrisdale No. 3.	3.30	20.13	69.57	7.00	1.91	14,152	79.93	5.14	6.58	3.46
* Kittanning, Lower.	Clearfield, Morrisdale.	Morrisdale No. 1.	3.61	20.86	67.07	8.46	3.38	13,822	77.06	4.90	5.77	3.22
* Kittanning, Lower.	Clearfield, Madera.	Morgan Run.	.80	21.36	68.48	9.36	1.38	14,022	80.07	3.61	6.17	3.21
* Kittanning, Lower.	Clearfield, Karthans.	Horseshoe.	2.45	22.41	66.39	8.75	3.15	13,790	78.05	3.98	6.13	2.96
* Kittanning, Lower.	Elk, Byrnedale.	Byrnedale No. 31.	2.69	32.41	58.58	6.32	2.52	14,017	78.10	6.39	6.14	1.81
* Kittanning, Lower.	Elk, Byrnedale.	Dagus.	2.92	34.66	52.76	9.66	3.92	13,284	72.67	7.15	4.32	1.52
* Kittanning, Lower.	Huntingdon, Jacobs.	Barnett.	2.09	18.20	73.46	6.25	.81	14,414	.....	.....	.....	4.03
* Kittanning, Lower.	Huntingdon, Robertsdale.	Robertsdale.	2.14	15.47	75.96	6.43	1.05	14,470	82.83	3.98	7.96	4.91
* Kittanning, Lower.	Huntingdon, Woodvale.	Woodvale.	2.18	14.07	77.62	6.13	1.14	14,553	83.33	3.64	8.53	5.52
* Kittanning, Lower.	Indiana, Scot Glen.	Brush Valley.	3.55	20.94	67.59	7.92	2.90	13,939	78.16	4.76	6.16	3.23
* Kittanning, Lower.	Indiana, Wehrum	Lackawana No. 4.	2.57	18.09	69.01	10.33	3.97	13,712	75.89	4.22	5.22	3.81
* Kittanning, Lower.	Indiana, Clymer	Lackawana No. 4.	3.13	17.61	69.45	9.81	3.77	13,795	76.41	4.25	5.44	3.94
* Kittanning, Lower.	Indiana, Clymer	Rodkey.	2.06	24.46	66.09	7.39	2.19	14,170	79.39	4.76	6.62	2.70
* Kittanning, Lower.	Indiana, Clymer	Empire M.	1.30	26.70	64.40	7.60	2.03	13,315	80.35	3.64	7.15	2.41
* Kittanning, Lower.	Jefferson, Brockwayville.	West Clarion.	1.93	34.49	53.18	10.40	3.38	13,293	74.08	5.60	4.63	1.54
* Kittanning, Lower.	Lawrence, Slippery Rock Twp.	Miller.	1.930	42.45	49.82	3.970	1.83	.....	.....	.....	.....	1.17
* Kittanning, Lower.	Somerset, Cairnbrook.	Loyal Hanna No. 6.	3.39	17.15	73.01	6.45	.83	14,103	81.53	5.01	7.11	4.26
* Kittanning, Lower.	Somerset, Holsope.	Lenove.	1.99	16.58	73.28	8.15	2.46	14,110	80.24	3.50	6.89	4.42
* Kittanning, Lower.	Somerset, Kimmelon.	Kimmelon.	3.09	17.29	68.29	11.33	2.04	13,424	75.40	5.79	4.40	3.95
* Kittanning, Lower.	Somerset, MacDonaldton.	Pen Mar No. 3.	1.03	16.03	72.57	10.37	2.22	13,790	79.17	2.71	6.05	4.53
* Kittanning, Lower.	Somerset, Windber.	Lochrie Arrow.	3.38	18.07	71.75	6.80	1.36	14,114	80.87	4.90	6.90	3.97
* Kittanning, Lower.	Somerset, Windber.	Eureka No. 31.	1.10	15.80	75.69	7.41	1.49	14,499	81.98	3.56	7.38	4.79
* Kittanning, Lower.	Somerset, Windber.	Eureka No. 30.	3.1	15.0	74.8	7.07	1.85	14,100	80.78	4.40	7.01	4.99
* Kittanning, Lower.	Somerset, Windber.	Somerset & Cambria.	1.78	15.19	73.25	9.78	4.50	13,702	77.10	3.05	6.01	4.82
* Kittanning, Lower.	Westmoreland, 1½ mi. e. of Seward.	Seward.	4.00	15.89	69.57	10.54	2.85	13,347	75.41	5.29	4.76	4.38
* Kittanning, Lower.	Butler, Worth Twp.	Studebaker.	2.270	40.990	46.794	8.075	1.871	.....	.....	.....	.....	1.14
* Kittanning, Middle.	Cambria, 1¼ mi. n. e. of Figart.	Fricks No. 2.	1.11	25.68	64.99	8.22	1.18	14,072	79.71	4.90	6.08	2.53
* Kittanning, Middle.	Clearfield, Graham.	Harkley.	6.20	19.50	65.80	8.50	3.19	13,350	75.09	7.18	4.79	3.37
* Kittanning, Middle.	Clearfield, Graham.	Guion.	2.7	20.0	67.1	10.2	2.0	13,610	76.92	4.81	5.12	3.35
* Kittanning, Middle.	Clearfield, Morrisdale.	Morrisdale No. 1.	3.86	19.79	67.54	8.81	1.08	13,617	77.44	6.53	5.05	3.41
* Kittanning, Upper.	Armstrong, Putneyville	Redbank.	.64	32.66	52.31	13.35	1.04	.....	.....	.....	.....	1.60
* Kittanning, Upper.	Beaver, Cannelton	Mansfield.	1.780	40.760	49.391	4.690	3.379	.....	.....	.....	.....	1.21
* Kittanning, Upper.	Beaver, Georgetown	Diehl.	1.770	38.620	56.333	7.17	.....	.....	.....	.....	.....	1.46
* Kittanning, Upper.	Butler, Ziegler's Mills	Fiedler.	1.390	41.27	48.03	5.72	3.06	.....	.....	.....	.....	1.16
* Kittanning, Upper.	Butler, 1 mi. e. of Butler.	Thompson.	4.38	34.37	54.24	7.01	2.00	13,976	74.47	9.85	4.42	1.52
* Kittanning, Upper.	Butler, 2 mi. n. of Butler.	Zenith No. 1.	3.73	35.84	56.07	4.36	.89	13,858	77.31	10.43	5.23	1.56
* Kittanning, Upper.	Cambria, Moxhom	Valley No. 1.	2.93	13.47	74.06	9.54	1.88	.....	.....	.....	.....	5.50
* Kittanning, Upper.	Cambria, Johnstown	Franklin No. 1.	2.0	14.0	73.6	10.4	2.05	13,800	.....	.....	.....	5.26
* Kittanning, Upper.	Cambria, Franklin	Dale.	1.67	18.52	69.14	10.67	3.46	.....	.....	.....	.....	3.73
* Kittanning, Upper.	Cambria, Dale	2.60	14.10	72.05	11.25	2.79	5.11

(Continued on Next Page)

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ANALYSES OF PENNA. BITUMINOUS SEAMS BY COUNTIES AND LOCALITIES—Continued

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carbon	Oxygen	Ratios	
											Carbon	F. C.
											Oxy. + Ash	V. M.
*Kittanning, Upper.....	Cambria, 1½ mi. from Johnstown.....	Sunnyside.....	3.74	14.46	71.73	10.07	2.36	13,435	77.10	4.85	5.17	4.96
*Kittanning, Upper.....	Cambria, 2 mi. s. of Johnstown.....	Smokeless No. 1.....	2.15	16.22	62.17	9.50	2.13	13,765	79.21	3.44	6.12	4.45
*Kittanning, Upper.....	Cambria, Patton.....	Moshannon No. 33.....	2.71	23.17	65.77	8.35	1.72	13,820	78.37	5.43	5.69	2.84
*Kittanning, Upper.....	Cambria, Portage.....	Forge Slope No. 1.....	.94	18.41	71.73	8.92	1.86	14,081	80.10	3.53	6.43	3.90
*Kittanning, Upper.....	Cambria, Windber.....	Eureka No. 37-C.....	3.30	12.50	76.70	7.58	1.97	14,060	79.69	5.05	6.31	6.14
*Kittanning, Upper.....	Clarion, 3½ mi. n. e. Rimersburg.....	Mohney.....	5.89	30.16	48.66	14.99	1.60	.....	.....	.....	.....	1.60
*Kittanning, Upper.....	Clarion, New Bethlehem.....	Shenke.....	4.09	30.24	57.37	8.30	1.01	.....	.....	.....	.....	1.90
*Kittanning, Upper.....	Clearfield, Woodland.....	Plane.....	3.2	23.5	65.8	7.5	3.77	13,940	77.68	4.92	6.25	2.80
*Kittanning, Upper.....	Huntingdon, Robertsdale.....	Robertsdale.....	.450	16.210	70.60	8.57	4.170	.....	.....	.....	.....	4.35
*Kittanning, Upper.....	Indiana, Glen Campbell.....	Glenwood No. 9.....	3.46	23.09	67.17	6.28	1.03	14,054	.....	.....	.....	2.91
*Kittanning, Upper.....	Jefferson, Reynoldsville.....	Diamond.....	1.550	34.500	57.39	5.45	1.12	.....	.....	.....	.....	1.66
*Kittanning, Upper.....	Lawrence, Shenango Twp.....	McConnell.....	1.950	40.800	53.53	2.460	1.20	.....	.....	.....	.....	1.31
*Kittanning, Upper.....	Lawrence, Wampum.....	Lee & Patterson.....	2.170	39.610	55.59	1.840	.79	.....	.....	.....	.....	1.40
*Kittanning, Upper.....	Somerset, Acosta.....	Belmont No. 1.....	1.2	15.65	74.18	8.97	1.39	.....	.....	.....	.....	4.74
*Kittanning, Upper.....	Somerset, Berth.....	Wills No. 2.....	3.24	19.90	66.56	10.30	1.67	.....	.....	.....	.....	3.23
*Kittanning, Upper.....	Somerset, Boswell.....	Orenda.....	3.77	16.26	71.06	8.91	.78	.....	.....	.....	.....	4.68
*Kittanning, Upper.....	Somerset, Holsopple.....	Oneida.....	2.03	17.28	69.31	11.38	3.00	.....	.....	.....	.....	5.48
*Kittanning, Upper.....	Somerset, Jerome.....	Jerome No. 2.....	1.44	15.21	73.38	9.97	.90	.....	.....	.....	.....	3.41
*Kittanning, Upper.....	Somerset, Windber.....	Eureka No. 39.....	3.3	13.0	75.4	8.34	1.50	.....	.....	.....	.....	4.82
*Kittanning, Upper.....	Somerset, Ralphton.....	Ralphton No. 3.....	1.23	15.49	74.77	8.51	.71	.....	.....	.....	.....	5.80
*Kittanning, Upper.....	Somerset, Jenner.....	Jenner No. 2.....	3.99	15.67	74.06	6.28	.67	.....	.....	.....	.....	4.73
*Kittanning, Upper.....	Sullivan, Bernice.....	Connell.....	3.38	8.47	76.65	11.50	.63	.....	.....	.....	.....	4.79
*Mercer Group.....	Sullivan, Bernice.....	.....	5.815	15.085	62.329	16.297	.474	.....	.....	.....	.....	4.13
*Mercer Group.....	Sullivan, Lopez.....	Northern.....	3.16	8.59	78.08	10.17	.67	.....	.....	.....	.....	5.10
*Mercer Group.....	Sullivan, Bernice.....	O'Boyle & Fay.....	3.66	9.17	74.08	13.09	1.57	.....	.....	.....	.....	5.20
*Mercer Group.....	Tioga, Fall Brook.....	Fall Brook.....	.790	20.97	65.47	12.106	.73	.....	.....	.....	.....	4.13
*Mercer Group.....	Tioga, Morris Run.....	Morris Run.....	1.12	18.57	72.10	7.63	0.58	.....	.....	.....	.....	3.12
*Mercer Group.....	Tioga, Morris Run.....	.....	1.66	21.51	67.60	9.23	1.73	.....	.....	.....	.....	3.88
*Philson.....	Somerset, Ursina.....	P. & B. C. Co.....	.920	22.950	66.999	6.035	3.096	.....	.....	.....	.....	3.14
*Phipps.....	Bedford, near Defiance.....	Phipps.....	1.554	19.473	73.111	4.942	0.920	.....	.....	.....	.....	2.92
*Pittsburgh.....	Allegheny, Bruceton.....	Experimental.....	2.80	34.41	53.95	8.81	.87	.....	.....	.....	.....	3.75
*Pittsburgh.....	Allegheny, Bruceton.....	Bertha.....	3.67	34.03	56.84	5.46	1.37	.....	.....	.....	.....	4.14
*Pittsburgh.....	Allegheny, Bruceton.....	Experimental.....	3.06	35.65	53.72	7.57	1.95	.....	.....	.....	.....	1.57
*Pittsburgh.....	Allegheny, Elizabeth.....	Experimental.....	2.73	36.03	54.98	6.26	1.39	.....	.....	.....	.....	4.56
*Pittsburgh.....	Allegheny, Oak Station.....	Oak.....	3.48	35.15	55.45	5.92	1.18	.....	.....	.....	.....	1.51
*Pittsburgh.....	Allegheny, Scott Haven.....	Ocean No. 2.....	2.62	33.51	58.69	5.18	0.80	.....	.....	.....	.....	1.53
*Pittsburgh.....	Fayette, Uniontown.....	Beal.....	1.020	31.840	61.84	4.560	.734	.....	.....	.....	.....	1.69
*Pittsburgh.....	Fayette, Connellsville.....	Leisenring No. 1.....	5.13	27.87	58.29	8.71	.86	.....	.....	.....	.....	1.94
*Pittsburgh.....	Fayette, East Millsboro.....	Husted.....	3.24	31.78	52.46	12.52	1.94	.....	.....	.....	.....	3.73
*Pittsburgh.....	Greene, Greensboro.....	Vernon.....	.850	38.580	54.19	5.10	1.290	.....	.....	.....	.....	3.46
*Pittsburgh.....	Greene, Millsboro.....	Vernon.....	1.020	38.490	45.90	11.690	2.91	.....	.....	.....	.....	1.40
*Pittsburgh.....	Indiana, West Lebanon.....	George.....	1.680	34.98	57.000	5.680	.67	.....	.....	.....	.....	1.19
*Pittsburgh.....	Indiana, Clarksburg.....	Ashbaugh.....	1.110	37.56	53.64	6.260	1.44	.....	.....	.....	.....	1.63
*Pittsburgh.....	Somerset, Salisbury.....	Beachy.....	1.680	21.010	69.02	7.530	.76	.....	.....	.....	.....	3.29
*Pittsburgh.....	Somerset, Meyersdale.....	Elk Lick No. 1.....	2.87	19.28	69.75	8.10	0.86	.....	.....	.....	.....	3.57
*Pittsburgh, Little.....	Somerset, Pinehill.....	Consolidation No. 112.....	2.58	21.53	67.97	7.92	1.66	.....	.....	.....	.....	3.16
*Pittsburgh.....	Washington, Meadowslands.....	McLain.....	1.90	36.20	53.70	8.20	1.52	.....	.....	.....	.....	1.48
*Pittsburgh.....	Washington, Ellsworth.....	Ellsworth No. 1.....	1.22	36.28	56.24	6.26	0.84	.....	.....	.....	.....	1.55
*Pittsburgh.....	Washington, Acheson.....	Acheson.....	1.96	30.55	58.24	9.25	2.19	.....	.....	.....	.....	1.91
*Pittsburgh.....	Washington, Avella.....	Penobscott.....	4.31	37.00	52.85	5.84	1.90	.....	.....	.....	.....	4.33
*Pittsburgh.....	Washington, Baird.....	Schoenberger.....	3.94	33.55	56.81	5.70	1.04	.....	.....	.....	.....	1.43
												1.69

COAL CATALOG

*Bull-tins Bureau of Mines.

†United States Geological Survey Reports.

‡State Geological Survey Reports.

BERTHA COAL COMPANY

General Office

Chamber of Commerce Bldg., PITTSBURGH, PA.

Miners of

Pittsburgh Seam Steam and Domestic Coal

Bertha and Jean Mines

The Bertha Coal Company was organized in 1915 and in the same year began the development of a 1,400-acre tract of Pittsburgh seam coal at Burgettstown, Washington County, Pennsylvania. With a coal ranging in thickness from 62 to 68 inches, plus the help of modern equipment, the output increased rapidly and now has reached the total of 2,000 tons daily.

The Jean mine is a comparatively new enterprise. It is located at Dinsmore, Washington county, Pennsylvania, and, like the Bertha mine, is working in the Pittsburgh bed. The seam here is 60 inches in thickness, and development work has been so rapid that a daily capacity of 2,000 tons has already been attained.

Both mines are located on the P. C. C. & St. L. (Panhandle) Railroad, with favorable freight rates both East and West of Pittsburgh.

Steam and Domestic Coal

Coal from the Bertha and Jean mines is a high-grade high-volatile fuel, and is widely known for its excellence for steam and domestic purposes. It is much used and gives general satisfaction as a locomotive fuel. Coal from this section of Western Pennsylvania is shipped in large quantities to Canada and is in high favor for steam purposes. Because of its hard texture and its ability to withstand weather and rough usage it is a popular coal with the retail coal dealer. Its heat value is over 14,000 British thermal units and its moisture and ash contents low.

Preparation

Both tipples are equipped to produce a variety of sizes, as Run-of-Mine, Slack, Nut, $3\frac{1}{4}$ -inch Lump, $1\frac{1}{4}$ -inch Lump and Specially Prepared Lump. Shaker screens and loading booms are a part of the tipple outlay, and special preparation is given in the loading of all coal.

Management

The Bertha Coal Company is one of the organizations under the management of the John H.

Jones Interests. The personnel responsible for its operation and quality of output are men whose entire life's interests have been centered in the production and sale of coal. Business entrusted to this company is regarded as a trust and every effort is made to guarantee satisfactory dealings.



A Lump of Bertha Coal

The Bertha Coal Company is exclusive sales agents for the Consumers Fuel Company with mines located in Pennsylvania and West Virginia, the Consolidated Fuel Company with mines located in Ohio, West Virginia and Kentucky, and the Virginville Coal Company with mines located in Pennsylvania.

W. H. BRADFORD & COMPANY, Inc.

Commercial Trust Bldg., PHILADELPHIA, PA.

Miners and Shippers

"Victoria Smokeless" and "Victoria Quemahoning" Coals

Victoria Coals

"Victoria Smokeless" and "Victoria Quemahoning" coals are mined by the Victor Coal Mining Company at Hollsopple, Somerset County, Pennsylvania. Both are low-volatile smokeless coals, but for trade reasons are differently designated.

"Victoria Smokeless"

This coal is produced at Mine No. 3, operating in the "B" or Lower Kittanning seam. This seam, next to the Pittsburgh, is the most important coal bearing measure in the Quemahoning field. The coal from No. 3 mine is a high-grade low ash, high carbon steam coal, and like most of the good steaming coals is somewhat soft and friable. It is, however, of slightly harder texture than most semi-bituminous coals and is a prime favorite for steam and stoker purposes.

"Victoria Quemahoning"

Haws No. 1 mine, operating in the C Prime or Upper Kittanning seam, is the originating point for coal sold under the trade name of "Victoria Quemahoning." This seam, which here shows 42 inches of clean coal, is in high repute as a first-class steam coal. This coal mines in large blocky lumps, as will be noted from the illustration herewith. It is especially adapted for use in the manufacture of terra cotta and tile and wherever a low sulphur uniform fuel is necessary.

Modern Equipment

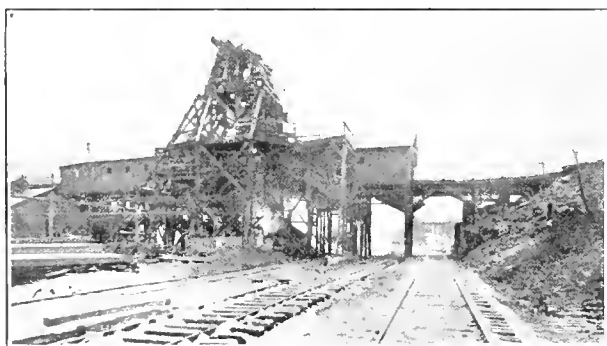
At both mines of the Victor Coal Mining Company will be found the best equipment tending to high quality and capacity production. Electricity is employed throughout from the working face to the tipple. Living conditions are good, and in addition to churches and schools, there are plenty of diversions, such as picture theatres, pool and billiard parlors and assembly halls.

Officials

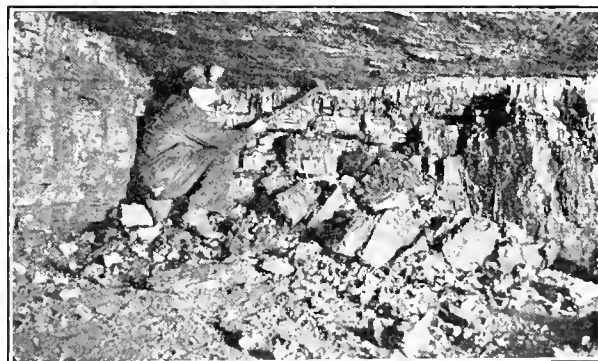
The officials of the Victor Coal Mining Company are all officials of W. H. Bradford & Company, the sales agency which handles the entire output from the mines mentioned.

Other Coals Handled and Branch Offices

W. H. Bradford & Company, Inc., in addition to the Somerset county mines, have operations in Cambria, Clarion and Indiana counties, Pennsylvania, and also in West Virginia. Branch offices are maintained at 17 East 42nd St., New York; McGill Building, Montreal, Canada; Lexington Building, Baltimore, Md.; and Snyder Building, Somerset, Pa.



Tipple of the Victor Coal Mining Company.



Face of Seam Showing "Victor Quemahoning" Coal as it is Shot Down.

WILLIAM H. ELLERY, President

ROBERT R. SCHOTE, Secretary & Treasurer

THE COALDALE MINING COMPANY

OF NEW YORK

350 Broadway, NEW YORK, N. Y.

COALDALE COAL

HIGH GRADE BITUMINOUS

Originating on N. Y. C. R. R. and P. R. R.

Quality

For over 30 years "COALDALE" has been known as and acknowledged by its users to be a strictly high grade Bituminous coal which has successfully met the requirements of discriminating consumers.

The Semibituminous coals of Central Pennsylvania (particularly from Clearfield and Cambria counties) are noted for "Quality." Clearfield coals have been favorably regarded for several generations, and particularly the Moshannon Vein (taking its name from Moshannon Creek). The "D" or Moshannon Seam of coal is noted for its low ash and low sulphur content. Hence it is adapted not only to the average steam user, but also where stokers are used, and likewise its low sulphur commends it to the blacksmith for smithing purposes. In recent years the demand for "Clearfield" has resulted in the opening up in this field of practically every known vein from the "A" to the "E." Some of these veins are distinctly inferior, and that efficiency which characterizes the "D" does not include all the other veins referred to. We are in a position to furnish "D" or Moshannon Seam of coal, as well as the "B" Vein, which next to the "D" is preferable as an efficient fuel.

Service

We have always maintained that painstaking service and square dealing with our clients constituted the best business asset. That has been our policy for many years; as a result we are justified in saying that "COALDALE SERVICE" is comparable with any and all our competitors.

"COALDALE"

Indicates not only the quality standard of COALDALE mines, but is in its practical effect a warranty, symbolizing the quality standard of all coals handled by the Company, a standard gained in over 30 years' experience in the merchandising of Bituminous coal, plus a "policy" that concedes that permanent success can only be built upon the foundation of business "well done."

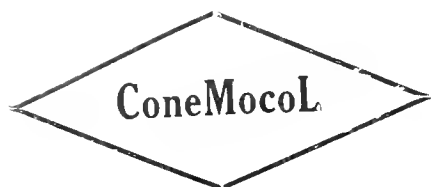
A COAL that properly meets consumers' requirements.

A SERVICE that satisfies exacting buyers.

And a PRICE in keeping with good market practice.

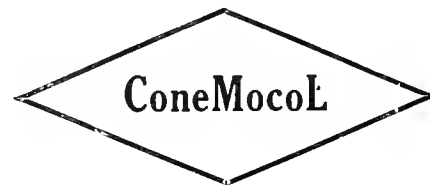
Such is "COALDALE."

CONEMAUGH COAL & MINING CO.



403 McCance Building

PITTSBURGH, PA.



Miners and Shippers of

High Grade Steam and Domestic Coals

The Conemaugh Coal & Mining Company operate four mines, known as Nos. 1, 2, 3 and 4 in Kiskiminetas Township, Armstrong county, Pa.

All four openings are in the Upper Freeport seam, which on this property averages 50 inches of exceptionally fine coal.

Tests made of this coal by the Pittsburgh Testing Laboratory gave the following analysis:

Moisture	2.50
Volatile Matter	32.93
Fixed Carbon	58.41
Ash	6.16
	<hr/>
	100.00
Sulphur	1.16
B. t. u.	13,933
Fusion Point of Ash.....	2,354 Deg. F.

These mines are now being developed for increased capacity and beginning with the early months of 1922 will have reached the point in output where large orders can be taken care of.

The coal from Conemaugh mines has an established reputation as a high grade steam coal, and is used extensively by railroads as a locomotive fuel. Although it is a rapid burning coal, its volatile content is not so high as to make it wasteful, with the result that more of its heat value is effective than is the case with many coals used for steam purposes having a much higher percentage of volatile matter.

Shipments made on run-of-mine, slack, 13 $\frac{1}{4}$ " and 4" lump. All shipments take Clearfield rates to all points North and East. Shipping point, Apollo, Penna.

COSGROVE & COMPANY

Producers and Shippers of

"Thermal" Smokeless Coal From Central Pennsylvania
"Goldenrod"—The Genuine Smithing Coal

General Offices
JOHNSTOWN, PA.

Eastern Sales Offices
149 Broadway, NEW YORK

Swank Bldg., JOHNSTOWN, PA.
 Pennsylvania Bldg., PHILADELPHIA, PA.

Sales Offices Also Located at

Old Colony Bldg., CHICAGO, ILL.
 Central National Bank Bldg., ST. LOUIS, MO.

Location of Mines

The Cosgrove Pennsylvania Mines, known as Thermal Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10, are located on the Pennsylvania and Baltimore & Ohio systems in Cambria and Somerset counties. Shipping points are Johnstown, Homer City, Barnesboro, Portage, Foustwell, Boswell and Somerset. The B, C Prime and E Seams are operated. Modern equipment is installed at all mines and a special system of cleaning and preparation individual with the Cosgrove organization is practiced.

Personnel of Company

Cosgrove & Company is a partnership which owns or controls, operates and sells the output of the above-named ten THERMAL mines, which are



operated under the well known original mining company names of Thermal Smokeless Coal Co., Lenox Coal Co., Harco Coal Co., Moxham Coal Co., Ideal Coal Co., Grazier Coal Mining Co., and Purity Coal Co., in Pennsylvania, and Marion & Pittsburgh Coal Co., Ernest Coal Co., and Sandford Coal Co., in Illinois. The members of the firm are: John C. Cosgrove, A. K. Cosgrove, Harry J. Meehan and Enoch Carver, Jr. Mr. Meehan is in charge of production at all mines, and Mr. Carver is general sales manager.

The eastern sales offices of the company are located at 149 Broadway, New York City, under the management of P. J. Wilson. The Philadelphia office is in charge of Roy H. McGahey.

Thermal Smokeless Coal

Thermal smokeless low volatile coal is representative of the best Pennsylvania steam coals, with the exception of Thermal No. 8 coal, which

besides being a fair steam producing coal is essentially a coal adapted to metal heating and brick and tile kiln work. A representative analysis is as follows:*

Moisture .....	.60
Volatile Matter	16.38
Fixed Carbon	75.99
Ash	7.03
	<hr/> 100.00

Sulphur	1.36
B. t. u. per pound.....	14,500
Fusing Point of Ash, average.	2,604

*Analysis taken from average submitted all sources in 1921.

Goldenrod Smith Coal

The pride of the Cosgrove production is Goldenrod, the genuine smithing coal. Produced at Homer City, Pa., on the Pennsylvania railroad system, it is specially mined, only part of the vein being used, and then is given rigid preparation to further adapt it to forge uses. A paper which is about to be published by a large eastern college which has made extensive inquiry and research into the qualities of nine of the leading commercial smith coals for forge work, states that Golden rod was the most efficient and the most economical. It is used in the shops of the large railroad systems, the Pullman Company, and other particular users. Its territory extends from the Atlantic to the Pacific oceans and into Canada. The official analysis given by the above-mentioned paper is as follows:

Moisture .....	.87
Volatile Matter	25.81
Fixed Carbon	67.24
Ash	6.08
	<hr/> 100.00

Sulphur .....	.62
Sulphur Volatilization	32.7
B. t. u. per pound.....	14,648
Fusing Point of Ash.....	2,950

Capacity of Mines

The Cosgrove THERMAL mines have an annual potential capacity of something over 1,250,000 tons per year. All but two of these mines are non-union, and consequently are free from much of the forced idleness and unduly high costs which prevail in the strong union fields. The mining and safety equipment at all mines is of the best.

EASTERN FUEL COMPANY

Main Office

Frick Building, PITTSBURGH, PA.

Branch Office

302 Broadway, NEW YORK, N. Y.

Branch Office

Elder-Fishbone Bldg., ALTOONA, PA.

Miners and Shippers of

**Pennsylvania, Ohio, Maryland and West Virginia Steam,
Gas, By-Product and Coking Coals**

CONNELLSVILLE COKE

Furnace, Foundry, Smelting

The Eastern Fuel Company are shippers of coal from the following mines:

Newton	Hillside	Delmar No. 1	Helen
Eleanor	Jackson Nos. 1 and 2	Delmar No. 2	Robert
Commercial No. 6	Barton	Delmar No. 3	Hilltop
Schoenberger	Davis	Delmar No. 4	Hughes
Dominion	Barry	Ruth	Clauson

Present annual capacity is 3,750,000 tons. Developed annual capacity 4,500,000.

Genuine Georges Creek Big Vein

Mined from the original seam, the coal that for 100 years has been one of the high grade standard steam and smithing coals. Our coal is from one of the few remaining mines still operating in the Big Vein. The thickness of the seam reaches 14 feet in places. It is low in volatile and high in heat value. Its fusion point of ash is close to 3,000 degrees, which stands as a guarantee against troubles from clinking.

	ANALYSES Big Vein Seam*	Tyson Seam Average Analysis
Moisture	0.49	1.25
Volatile Matter	16.95	17.08
Fixed Carbon	77.41	74.66
Ash	5.15	7.01
	100.00	100.00
Sulphur	0.78	1.65
B. t. u.	14,879	14,200
Fusion point of ash....	2948°	2690°

*Analysis by Pittsburgh Testing Laboratory.

Pennsylvania Gas and By-Product Coals

Coal from Eleanor mine is a splendid low sulphur, low ash gas coal; Schoenberger coal unsurpassed for the manufacture of illuminating gas; Commercial No. 6 is an excellent steam coal from the Redstone seam.

Analyses

We give the following as representative analyses of the above mentioned coals:

	ANALYSES Eleanor	Schoen- berger*	Commercial No. 6
Moisture Dry Basis		1.70	1.00
Volatile Matter..	33.90	35.27	34.50
Fixed Carbon....	59.13	58.13	55.72
Ash	6.97	4.90	8.78
	100.00	100.00	100.00
Sulphur .....	.866	.98	1.58
B. t. u.	14,480	13,900	13,511
Phosphorus .....	.010	.....	.122

*See also Bureau of Mines analysis on page 716.

If you want clean, carefully prepared coal, with the assurance that a reliable and financially responsible organization stands back of its every sale, protecting your interest from the "face of the coal" to your power plant, you will be interested in our proposition insuring you against fuel difficulties.

Newton

Pittsburgh Seam

Shipping point: Fisher Station, O.

Penna. Lines (P. C. C. & St. L. Ry.)

Dominion and Hillside

Lower Kittanning Seam

Shipping point: Cowanshannock, Pa.

P. R. R. (Allegheny Valley Division)

Barton

Pittsburgh Seam

Shipping point: Barton, Md.

Cumberland & Pennsylvania R. R.

Commercial No. 6

Redstone Seam

Shipping point: Wyano, Pa.

P. R. R.

Jackson No. 1

Pittsburgh Seam

Shipping point: Lonaconing, Md.

Cumberland & Pennsylvania R. R.

Jackson No. 2

Tyson Seam

Shipping point: Lonaconing, Md.

Cumberland & Pennsylvania R. R.

Eleanor

Pittsburgh Seam

Shipping point: Wyano, Pa.

P. R. R.

Schoenberger

Pittsburgh Seam

Shipping point: Band Sta., Pa.

P. R. R.

SHIPMENTS BY THE CAR OR TRAINLOAD

See also Page 994

FANCY HILL COAL COMPANY

CHEAT HAVEN, PA.

Miners and Shippers of "Fancy Hill" Pittsburgh Seam Coal

The Eagle mine, operated by the Fancy Hill Coal Company, has had a continuous existence of twenty-eight years.

It is located at Cheat Haven, Fayette County, Pennsylvania, on the Baltimore & Ohio Railroad, with openings in the Pittsburgh seam, having in this vicinity a thickness ranging from 72 to 108 inches.

"Fancy Hill" coal is mined from a tract of 500 acres of fine Pittsburgh coal. All workings are machine cut, and the coal is carefully shot and carefully loaded.

The tippie is provided with a double screening arrangement, which gives more than ordinary assurance that the coal leaving our side tracks is thoroughly screened and sized. A picking table guarantees that any stray pieces of slate, clay or sulphur balls which may have been loaded in the mine are excluded before reaching the railroad cars.

In addition to run-of-mine, nut and slack, and slack, we can also furnish the larger sizes, as $3\frac{1}{4}$ ", $1\frac{1}{4}$ ", $2\frac{1}{4}$ " and 4"-lump.

"Fancy Hill" coal is widely known for its fine steaming qualities. It is of firm texture and stands transportation well, hence also is in successful use as a domestic coal. For locomotive fuel, cement burning, pulverizing and brick and tile burning it is unsurpassed. Its analysis is as follows:*

Moisture	1.14
Volatile Matter	34.79
Fixed Carbon	55.25
Ash	8.82
Sulphur	2.04
B. t. u.	13,970
Fusion point of ash.....	2,570° F.

During the more than quarter of a century in which the Eagle mine has been in operation there has never been a strike. This is a labor record to be proud of and should be given due consideration by all buyers who wish to tie up with a company that can offer a reasonable guarantee of uninterrupted shipments.

*Car sample taken at mine by representative of Tidewater Coal Exchange, Inc. and analyzed by Pittsburgh Testing Laboratory.

EMPIRE COAL MINING COMPANY

GENERAL OFFICE

418 Stephen Girard Bldg., Philadelphia, Pa.

Miners and Shippers of

EMPIRE

High Grade Pennsylvania Bituminous Coals

OPERATING OFFICE
Clearfield, Pa.

SALES OFFICES
NEW YORK, N. Y.
ALBANY, N. Y. BOSTON, MASS.

The Field

The Empire Coal Mining Company operates eight mines in Central Pennsylvania.

Three at or near Barnesboro, Cambria County, Pa., one of which is located on the famous Moshannon or "D" Seam, one on the Upper Freeport, and one on Upper Kittanning or C Prime Seam.

Three mines near Clymer, Indiana County, Pa., two of which are on the Lower Kittanning or "B" Seam, and one of which is mined from the Moshannon or "D" Seam.

One mine at Starford, Indiana County, Pa., on the Lower Kittanning or "B" Seam.

One mine at Idamar, Indiana County, Pa., on the Moshannon or "D" Seam.

Railroad Facilities

Shipments from seven mines of this Company are made over the New York Central Railroad, whose facilities for car supply are unequaled in Central Pennsylvania. Shipments from one mine are made over the Pennsylvania Railroad. All points in the Eastern part of the United States are reached by shipments on one or the other of these roads.

Freight Rates

All shipments from the mines of this Company take the Clearfield Freight Rate to New York State, New England and Eastern Points.

Preparation

All coal produced by the Empire Coal Mining Company is subject to critical preparation and is carefully inspected before it is shipped. At its largest mine, Empire A, mechanical picking tables are in operation, over which all coal is separated by screens, and all particles of dirt are removed. An average analysis of this coal is as follows: (Analysis supplied by C. W. Clafin & Company, Boston.)

Moisture .....	.90
Volatile Matter	23.33
Fixed Carbon	68.65
Ash	7.12
	<hr/>
	100.00
Sulphur	1.25
B. T. U. (As Rec'd)	14383
" (Dry Basis)	14526

The installation of similar equipment at the other mines is under consideration.



Picking Table at Empire A Mine

Characteristics of Coal

The coals originating in Cambria County are a low-volatile, low-sulphur, high-grade steam coal having a B. T. U. content of about 14300. Those originating on the "B" Seam in Indiana County are slightly higher volatile, with sulphur about 1.75 and a B. T. U. content as high as 14600.

Analysis

Analysis of "B" or Miller Vein Seam Coal from the Empire Coal Mining Company's mines at Clymer, Indiana County, Pa. (Analysis made by Reading Iron Company.)

Moisture .....	.71
Volatile Matter	27.24
Fixed Carbon	65.75
Ash	6.30
	<hr/>
	100.00
Sulphur	1.72
B. T. U.	14350
Fusing Point of Ash	2450 F.

The Cambria County coals are admirably adapted to Manufacturing Plants, etc., which carry a constant steam pressure, where a constantly hot fuel is required.

The Indiana County fuels are especially adapted to Power Plants, and Plants where sudden variations in loads are encountered, and are quick firing high heat value coals.

Empire coals are used extensively and successfully where stokers are installed.

The coals of this Company are classified in Pools 10 and 4, which are the best classification of Commercial Coals originating on the New York Central Railroad.

Empire "G" Mine

Takes Pennsylvania R. R. shipments; located in Barnesboro region.

This is a low-volatile coal with medium ash content which has a high-fusing point. Sulphur less than one per cent.

British thermal units run about 14,300.

Recommended for use where a hot fire is needed continuously or for smithing purposes.

Analysis*

Moisture .....	.60
Volatile Matter	22.77
Fixed Carbon	69.85
Ash	6.78
	<hr/>
	100.00
Sulphur .....	.924
B. T. U.	11130
Fusing Point of Ash	above 2858

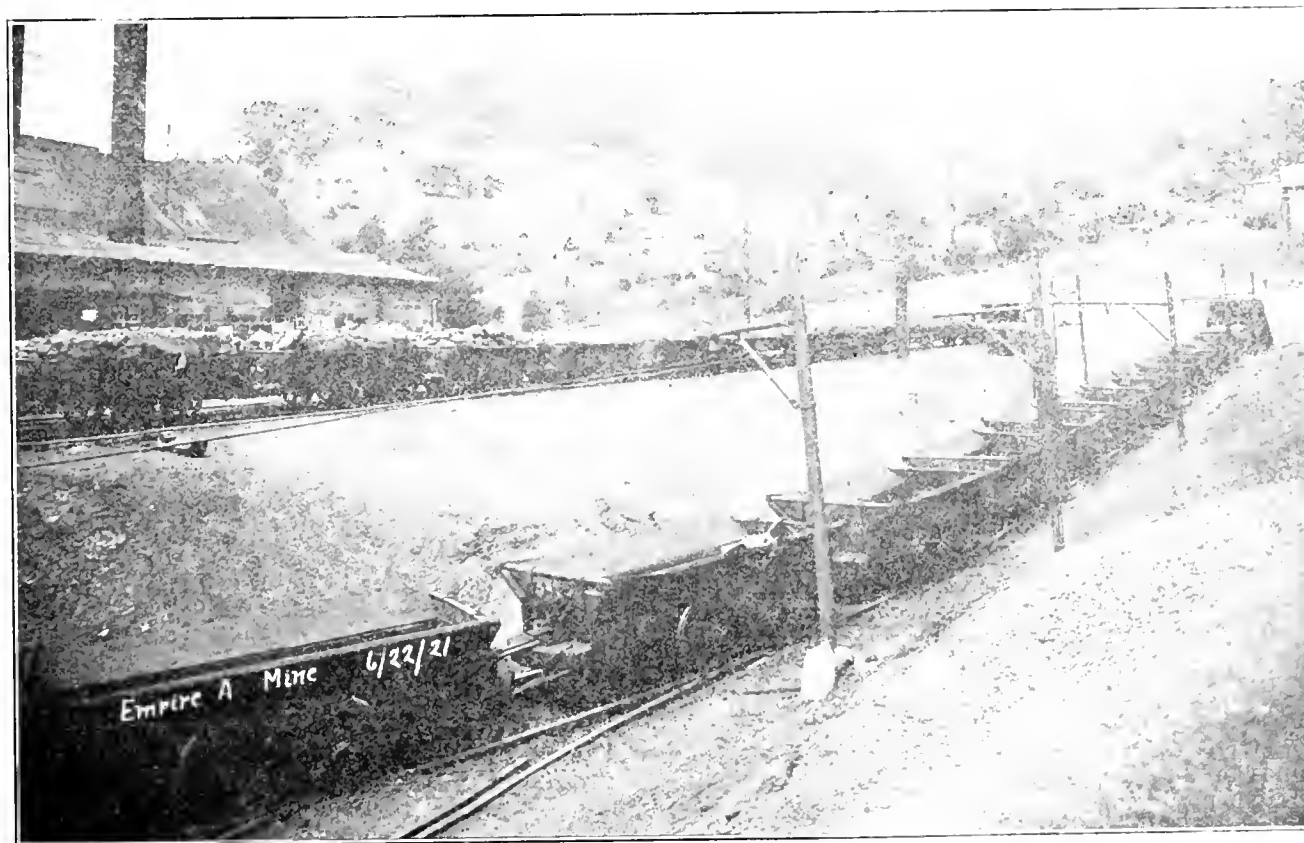
*Analysis by Booth, Garrett & Blair.

Sales Facilities

Through our Branch Sales Offices, this Company can offer every facility for all rail shipments or for tidewater shipments in Philadelphia, Baltimore and New York harbors, and for large shipments on the Eastern Coast.

The Personnel of the Empire Coal Mining Co. are

William A. Webb, President.
G. Webb Shillingford, Secretary and Treasurer.
E. J. Hauber, Asst. Secretary and Treasurer.



Mine Openings at Empire A Mine

HILLMAN COAL & COKE COMPANY

First National Bank Building

PITTSBURGH, PA.

— BRANCH OFFICES —

Whitehall Building, New York
Prudential Building, Buffalo

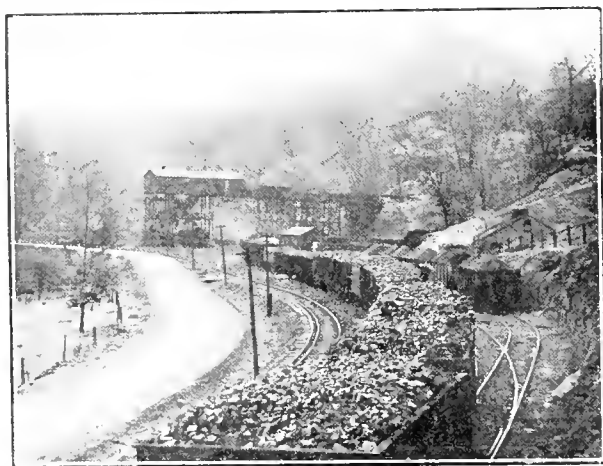
Maryland Trust Building, Baltimore
Pennsylvania Building, Philadelphia

Miners and Shippers of

Pittsburgh Steam Coals

MINES OPERATED by the Hillman Coal and Coke Company consist of twenty-four (24) in Western Pennsylvania and one (1) in Northern West Virginia. Twenty-two of these are in the Pittsburgh, Connellsville, Mon. River, Yough and Irwin Districts, and two are in the Quemahoning District of Somerset County, Pa. All but one have rail connections, and eight (8) have river tipples also.

CAPACITY of annual output from these mines will approximate 7,000,000 tons of coal. Company has more than 1,100 bee-hive ovens, and 798 rectangular coke ovens, with output capacity for coke of 1,500,000 tons additional to coal product.



Patterson Mine, P. & L. E. R. R. (N. Y. C.)
High Class By-Product and Gas Coal.
Capacity 300,000 Tons Annually.

USE OF HILLMAN COALS covers a wide range. Hillman mines are so located as to provide a satisfactory grade of coal for practically every known requirement.

BY-PRODUCT COALS, of High Volatile Content, for desirable use in by-product ovens, were shipped from eight (8) of our mines, during last three normal years at the rate of 200,000 tons per month, to various by-product coke oven plants.

FOR GAS MANUFACTURING, twelve of our mines produce coals used in the manufacture of illuminating gas. These coals are rich in Hydro-Carbons, and of hard physical structure, making ideal gas coals.

SMOKELESS COAL is produced from the two large, Jerome No. 1 and No. 2 mines in Somerset County, Pa. This Low Volatile Coal has only 17% of Volatile content, is low in Sulphur and of high heat values.



Jerome Mines, No. 1 and No. 2, B. & O. R. R.
Low Volatile Smokeless Coal.
Capacity 1,500,000 Tons Annually.

This excellent coal is widely and favorably known, by the trade name of "Quemahoning Smokeless," and is always in strong demand, for high grade steam use, especially where anti-smoke ordinances prevail.

It is the ideal coal for steamship bunker, meeting the severe requirements of the Government, and is listed in U. S. Navy Acceptable List, as Pool No. 71. Having no liability of spontaneous combustion, it can be exported to any part of the world, without danger from this source.

HILLMAN COKES are made in over 1,100 bee-hive ovens and 798 rectangular ovens, having an annual output capacity of approximately 1,500,000 tons.

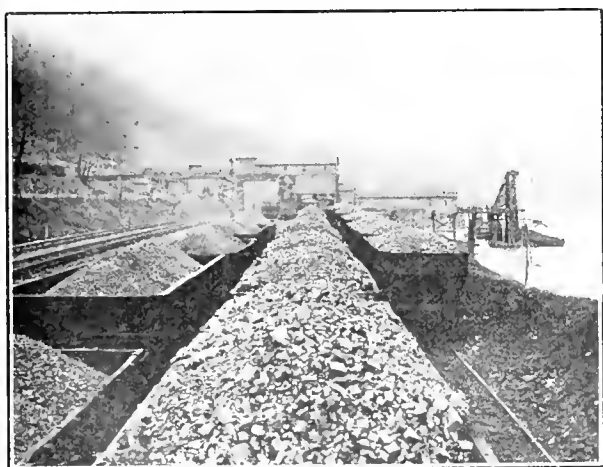
HILLMAN BLAST FURNACE COKE, with its low ash, low sulphur content, and strong physical structure, has established, and broken records in Blast Furnaces, for low fuel consumption, combined with large output of high grade iron production.

LOW PHOSPHOROUS COKE, is essential to produce Low Phos Pig Iron. At several plants of Hillman Company, there is produced blast furnace coke of specially low phosphorous content, ranging from a mere trace to .010, with a general average of .008. This coke is in special demand for this critical use.



Griffin No. 1, Fayette County, Pa.
High Grade, Low Phosphorous Coke.
Griffin No. 1 and No. 2, 2,325,000 Tons Coke Annually.

HILLMAN FOUNDRY COKE, is hand drawn from bee-hive ovens, 72 hour burned, carefully selected, and cleanly loaded, of strong physical structure, and suitable size. Is guaranteed not to exceed 12% in ash and not over 1% in sulphur. It gives low fuel consumption in the cupola, with large melt of hot metal.



Ella Mine, Rail and River Shipments.
Sized Coal, By-Product, Gas and Steam.
Capacity 300,000 Tons Annually.

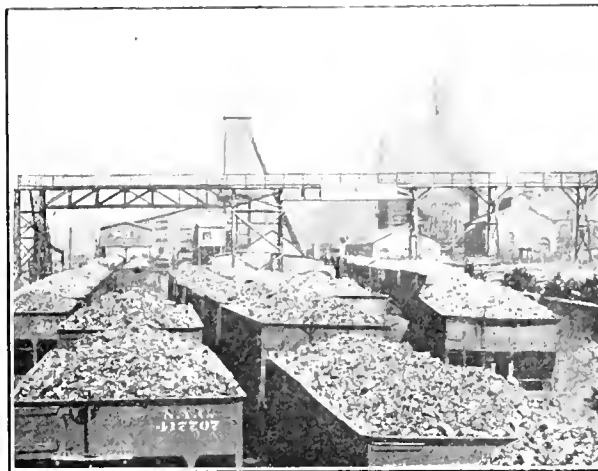
CRUSHED COKE is made at the crushing plant of Hillman Company, from bee-hive coke, crushed to domestic sizings, making an ideal substitute for anthracite coal, being clean and smokeless.

Very desirable for domestic use, either alone or in mixture with other fuels, in grates, base burners, furnaces, stoves, etc.

Also for various manufacturing uses, as brass and aluminum foundries, varnish and paint works, chemical plants, making filters, etc. Sizes furnished are Egg, Large Stove, Small Stove, Chestnut ("nut"), Pea and Dust.

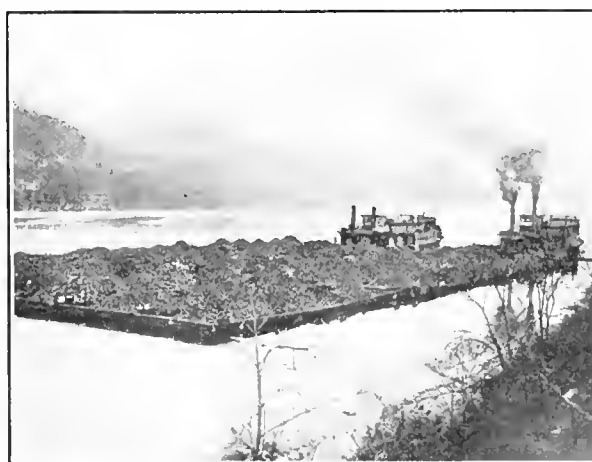
SMEALTER COKE is large, hard, strong and well burned, suitable for use in Copper and Lead Smelters. Hillman Company has shipped many thousands of tons of this product, in pre-war time to Mexico and West Coast of South America in vessels, and by rail to Western U. S. and Canada.

SHIPPING FACILITIES of exceptional character are afforded by the fact that Hillman plants are directly connected, by their own plant sidings, with the rails of the Pennsylvania, New York Central, Monongahela, and Baltimore & Ohio Railroads, and rail shipments can be made, to any part of the U. S., Mexico or Canada.



Isabella Mine, Fayette County, Pa.
Capacity 500,000 Tons Coal Annually.
Coal and Coke Shipments by Rail and River

FOR EXPORT, any Hillman product can be promptly shipped to seaboard piers, for vessel cargo to any part of the world. The Company's large output makes possible the quick assemblage and prompt movement of any size vessel cargo. Hillman Company has shipped thousands of tons of coal and coke for vessel loadings to Europe, Mexico, and South America.



Hillman Transportation Company,
Steamers Hillman and Hecla,
With 10,000 Tons Low Sulphur Coal

THE HILLMAN TRANSPORTATION COMPANY owns and operates six (6) large Steamboats, and over one hundred (100) coal carrying barges of large capacity, and can by its own facilities promptly move large tonnages to consumers located on the Allegheny, Monongahela or Ohio Rivers.

FORT PITT COAL & COKE CO.

1015 Farmers Bank Building, PITTSBURGH, PA.

Shippers of

High Grade Steam, Gas and Domestic Coals Foundry and Furnace Coke

The Fort Pitt Coal & Coke Company is the exclusive Sales Agent for the McClane Mining Company and the Clinton Block Coal Company, two operating companies in Western Pennsylvania, whose mines are briefly described below.

McClane Mining Company

This company operates two mines, Rich Hill No. 1, being located at Meadowlands, Washington County, and Maud mine located at Treveskyn, Allegheny County, Pa. All mines are working in the Pittsburgh seam, which on the properties has an average thickness of 5 to 6 feet. Coal from the Pittsburgh seam is so favorably known as to require no description here, while the RICH HILL GAS COAL and MAUD COAL are well known throughout the trade for their high steaming qualities and value as domestic, by-product and gas coals.

The Chartiers Division of the Pennsylvania Lines West serves these mines, affording a direct route for all shipments east and west.

Clinton Block Coal Company

The mines of this company are located at Imperial, Allegheny County, Pa., on the Montour Railroad, which connects with the Pittsburgh & Lake Erie Railroad and Pennsylvania Lines West, permitting direct shipments to all markets.

The coal mined is from the Pittsburgh seam and is known to the trade as CLINTON BLOCK.

Mines are electrically equipped and with the aid of shaker screens, picking tables and loading booms we are able to ship a clean grade of coal, free from impurities and with a minimum of breakage.



View of Tipple, Clinton Block Coal Company.

Both mines are equipped with shaker screens and picking tables, enabling shipment of coal free from slate, bone and other impurities, and in sizes including Run of Mine, Nut, Lump and Slack.

The capacity of the mines is 750,000 tons per year.

Analysis*

The following is an analysis of Pittsburgh coal from the company's mines:

Moisture	1.47
Volatile Matter	36.73
Fixed Carbon	55.26
Ash	6.54
	100.00
Sulphur	1.24
B.t.u. per pound	14,081

*Analysis made by Brier Hill Steel Company, Youngstown, Ohio.

Analysis*

Attention is directed to the following analysis of coal from the company's mines:

Moisture	1.90
Volatile Matter	39.16
Fixed Carbon	52.48
Ash	6.46
	100.00
Sulphur	1.45
B.t.u. (dry basis)	14,158

*Analysis made by Gulick-Henderson Company, Inc., Pittsburgh, Pa.

With a capacity of 300,000 tons per annum, these mines are able to give prompt attention to all orders of coal in $\frac{3}{4}$ " Lump, $1\frac{1}{4}$ " Lump, Slack, Nut and Run of Mine, and 3" Lump when required.

IMPERIAL COAL CORPORATION

Whitehall Bldg.
NEW YORK, N. Y.

Widener Bldg.
PHILADELPHIA, PA.

Johnstown Trust Bldg.
JOHNSTOWN, PA.

120 Milk St., BOSTON, MASS.



ALBANY, N. Y.

BITUMINOUS COALS

OPERATIONS

The Imperial Coal Corporation operates the following bituminous coal mines:

Shade Creek Mines No. 1 and No. 3, located at Miller Run, Somerset county, Pa., with openings in the "B" or Lower Kittanning seam. Coal from these mines is in Pool No. 1.

Cambria Smokeless Mine No. 1, located at Coalport, Clearfield county, Pa., with opening in the "B" or Miller seam. Coal from this mine is in Pool No. 9.

Diamond Smokeless Mines No. 1, No. 2 and No. 3 are located at Boltz, Indiana county, Pa., with openings in the "B" or Miller seam. Coal from these mines is in Pool No. 10.

Smokeless Mines No. 1 and No. 3 are located in Clearfield county, Pa., with openings in the "B" or Miller seam. Coal from these mines is in Pool No. 10.

PRODUCTION

The annual production from this group of mines exceeds 1,000,000 tons of clean coal.

Every ton of our production is especially adapted for bunker, export, smithing, steam and domestic uses.

They are all low volatile coals, having a widely established reputation for dependable performance.

Along with the superior quality of our coals, we give our customers an unexcelled service.



Modern Method of Preparation at Imperial Mines

Keystone Coal and Coke Company

INLAND COAL COMPANY

LATROBE-CONNELLVILLE COAL & COKE CO.

ACME GAS COAL COMPANY

MOUNTAIN COAL COMPANY

ARGYLE COAL COMPANY

General Offices

GREENSBURG, PA.

SALES DEPARTMENT

F. B. MILLER, Manager of Sales, Huff Bldg., Greensburg, Penna.

HARRISBURG, PENNA.

Kunkel Building

H. Geisel, Jr., Sales Agent

PHILADELPHIA, PENNA.

Widener Building

M. T. Dean, Sales Agent

NEW HAVEN, CONN.

Colonial Building

G. F. Hollacher, Sales Agent

BALTIMORE, MD.

Continental Building

J. A. Dinning, Sales Agent

PITTSBURGH, PENNA.

Park Building

E. M. Gross, Sales Agent

CLEVELAND, OHIO

Kirby Building

E. A. Upstill, Sales Agent

Producers and Shippers of

High and Low Volatile Bituminous Coals and Manufacturers of Coke

The above collation of mining companies is the result of the direct energies of Colonel George F. Huff and General Richard Coulter, who laid the foundation for these respective companies by opening mines in the Greensburg District early in the 70's. New operations were started subsequently in the Westmoreland Gas Coal Field, in the Latrobe District and in the low volatile coals of Cambria, Indiana and Clearfield counties, and later, in the Kittanning seam in Clarion county.

The coke manufactured is made from washed coal and the resultant product is the highest grade of standard coke. The washing process insures a constant uniformity in chemical content and structure. The coke is put on the market as Foundry and Furnace grades.

Chemical Laboratory

A chemical laboratory is maintained for the benefit of all mines. This department is complete in every respect and is equipped to handle not only the analytical work on coals and coke, but much research work is being done at all times. Analy-

ses of gases, by-products, water and lubricants are also made.

The laboratory is in charge of a competent chemist and corps of assistants, who regularly make analyses of the products of all mines and plants.

Attention is called to the following pages for the separate analyses of the coals offered by these companies.

In addition to the analysis feature of this department, special attention is given to the study of power plants, steaming systems, stokers, methods of firing, and fuel best adapted for each particular case and with assurance of results.

Forging, Smelting, Puddling and Annealing have been given much consideration by this department and we are prepared to furnish coals and cokes especially selected for these purposes.

Our research covering the many types of gas producers and retorts has been such that we know positively the quantity and quality of gas, by-products, etc., that may be expected where our gas coals are used.

Care in Preparation

Electrical head lamps are used exclusively at all mines, the result being that the coal receives the best possible preparation at the face, by reason of the extra amount of light. Slate pickers are stationed at the tippie, where the coal has further and final preparation.

Shipments

All shipments of coal and coke are made over the lines of the Pennsylvania Railroad, affording a direct route to all markets, east and west.

Employe Activities—First Aid Teams

At all of the mines of the Companies First Aid Teams have been organized and much rivalry is displayed in bringing these teams to a high degree of efficiency. Commencing in 1911, annual contests have been held, in which all teams compete, the four teams earning the highest percentages being eligible to compete for the Efficiency Cup contributed by the late Colonel Lloyd B. Huff. In addition to the cup, money prizes and buttons are awarded to deserving teams, so that there is sufficient incentive to inspire all teams to strive for a high degree of efficiency.

In connection with the First Aid Teams, the company has a complete rescue apparatus, with the main station at Greensburg, Pa., and sub-stations at all mines.

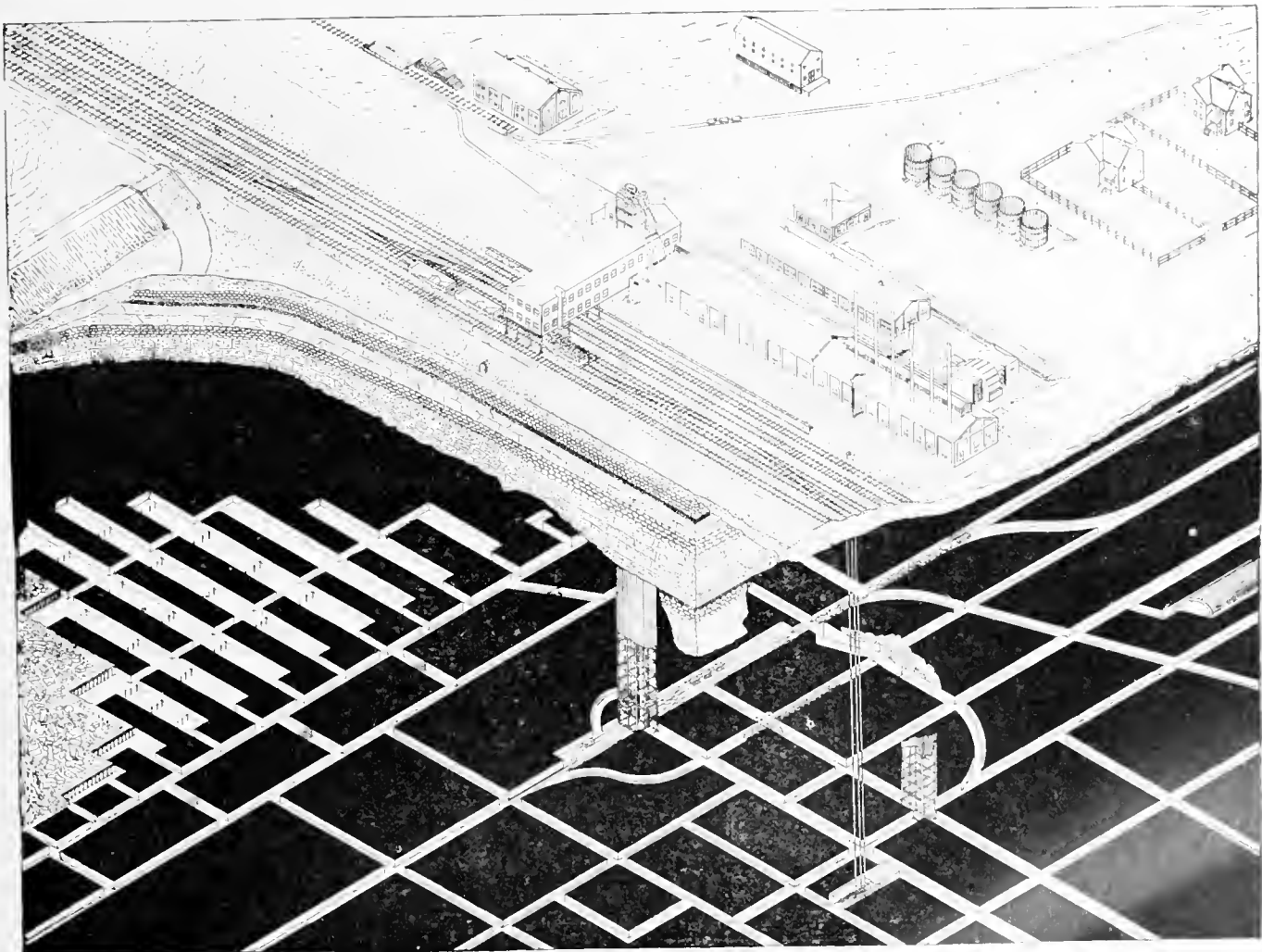
Employe Activities—Keystone Mining Institute

This organization has been in existence since 1908, the membership consisting of superintendents, mine foremen, fire-bosses and miners. Meetings are held monthly, the object of such being a study of subjects pertaining to safety, new developments in the industry, new machinery, and all subjects tending to improve the efficient and economic conditions of mining.

Community Work

Graduate nurses are stationed at all mining towns whose duties are to look after the welfare of the miners and their families. These nurses are also in charge of dispensaries, at which the miners may secure such medicines as they require.

Playgrounds have been established at the various mines, equipped with a variety of devices for the amusement of the miners' children.



Isometric view of one of the mines of the Collation, showing underground workings, columns, etc.; also buildings above ground, including residence of Mine Foremen, Fire and Boiler Feed Water Storage Tanks, Store Buildings, Repair and Blacksmith Shops, Supply House, Engine House, Lamp House, Locomotive House and Tippie.

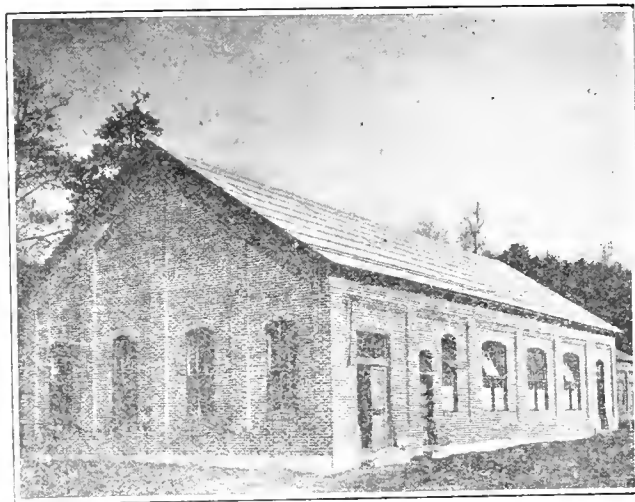
KEYSTONE COAL & COKE COMPANY

The Company was formed 19 years ago by the merging of the following companies:

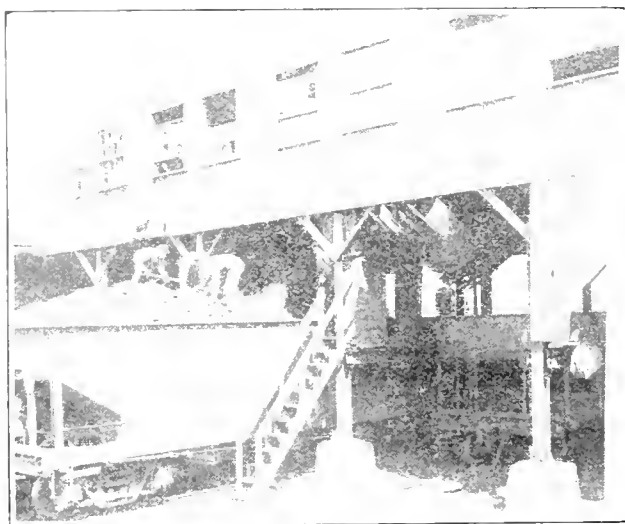
Sewickley Gas Coal Company
 Arona Gas Coal Company
 Madison Gas Coal Company
 Claridge Gas Coal Company
 Greensburg Coal Company
 Hempfield Coal Company
 Carbon Coal Company
 Salem Coal Company
 Huron Coal Company

Bath Houses

Bath houses are maintained at the principal mines of the company and are equipped with the latest devices for the comfort of its men.



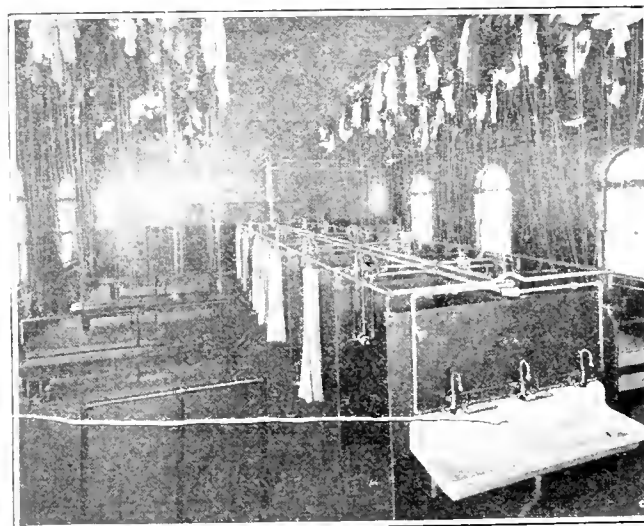
Bath House and Laundry



Trimming a Car of Run of Mine at Tipple

Its founders were some of the best known pioneers of the industry in the Greensburg and Westmoreland gas coal regions. The company has continued in the forefront of every movement designed for the advancement of the coal and coke industry in those sections.

The Keystone Coal & Coke Company presents a management whose policy has been one of aggressive perseverance toward the betterment of mining conditions and the quality of its product.



Interior View of Bath House

The battery of showers is shown in the view, with individual hangers for the miners' street clothes. This innovation in caring for the comfort of employees was only recently adopted, but in a very short time every miner availed himself of these modern conveniences.



View of Crows Nest Mine, Showing Tipple, Fan Power House, and Locomotive Shed

Coal Mined

The coal mined at the various mines of the Keystone Coal & Coke Company is from the Pittsburgh Seam, the Westmoreland Field producing Gas Coal and the Greensburg Field Steam Coal.

Mines Operated

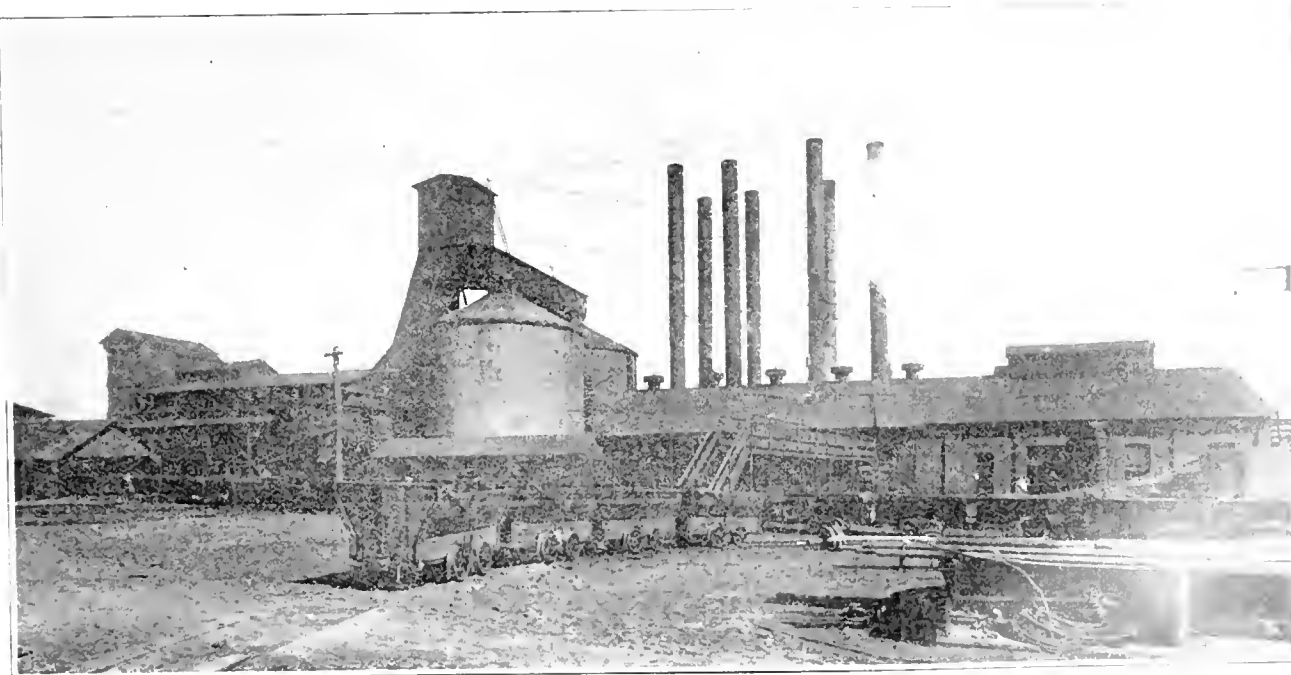
The following tabulation gives briefly the extent of our operations at each mine:

Arona Mine Annual Production, 102,000 tons. Sizes Produced, Screened, Run of Mine, Slack.	Greensburg No. 2 Annual Production, 100,000 tons. Sizes Produced, Screened, Run of Mine, Slack.	Crows Nest Annual Production, 900,000 tons. Sizes Produced, Screened, Run of Mine, Slack.
Keystone Shaft Annual Production, 650,000 tons. Sizes Produced, Screened, Run of Mine, Slack.	Greensburg No. 3 Annual Production, 60,000 tons. Sizes Produced, Run of Mine.	Hempfield No. 1 Annual Production, 350,000 tons. Sizes Produced, Run of Mine.
Claridge Annual Production, 60,000 tons. Sizes Produced, Screened, Run of Mine, Slack.	Greensburg No. 4 Annual Production, 150,000 tons. Sizes Produced, Run of Mine.	Salem Annual Production, 100,000 tons. Sizes Produced, Screened, Run of Mine, Slack.
Greensburg No. 1 Annual Production, 55,000 tons. Sizes Produced, Run of Mine.	Greensburg No. 5 Annual Production, 60,000 tons. Sizes Produced, Run of Mine.	Marion Annual Production, 210,000 tons. Sizes Produced, Screened, Run of Mine, Slack.

Analyses

Attention is directed to the following analyses of these coals made by the company's chemist, all analyses being made from dry samples:

GAS 3/4" SCREENED		GREENSBURG 1 1/4" SCREENED	
Volatile Matter	35.02	Volatile Matter	32.71
Fixed Carbon	60.34	Fixed Carbon	59.91
Ash	4.61	Ash	5.38
	100.00		100.00
Sulphur .....	.91	Sulphur .....	.95
B. t. u.	11,516	B. t. u.	11,448
GAS RUN OF MINE		GREENSBURG RUN OF MINE	
Volatile Matter	34.12	Volatile Matter	31.72
Fixed Carbon	59.65	Fixed Carbon	61.53
Ash	5.93	Ash	6.75
	100.00		100.00
Sulphur .....	.99	Sulphur	1.06
B. t. u.	11,308	B. t. u.	11,278
GAS SLACK		GREENSBURG 1 1/4" SLACK	
Volatile Matter	33.63	Volatile Matter	29.64
Fixed Carbon	58.59	Fixed Carbon	60.29
Ash	7.78	Ash	9.07
	100.00		100.00
Sulphur	1.25	Sulphur	1.26
B. t. u.	11,071	B. t. u.	10,982
FURNACE AND FOUNDRY COKE ANALYSIS			
Ash	11.65		
Sulphur .....	.91		
Phosphorus .....	.012		



Power House, Washery and Tipple at Salem Mine

Adaptability of Our Coals

The following tabulation gives the uses for which we recommend our various coals:

MINES	RECOMMENDED FOR
Afton..... Key-tonic Shatt..... Claridge.....	Gas producers, annealing, ceramics, lime burning, high pressure steaming, etc.
Greensburg No. 1..... Greensburg No. 2..... Greensburg No. 3..... Greensburg No. 4..... Greensburg No. 5..... Hempfield No. 1..... Crow's Nest..... Salem..... Huron.....	By-product, puddling, heating furnaces, ceramics, steaming, etc.

Washed Coal..... Smithing, by-product.

Laundries

At several of the mines laundries have been established for the use of the miners, whose families have availed themselves of this feature.



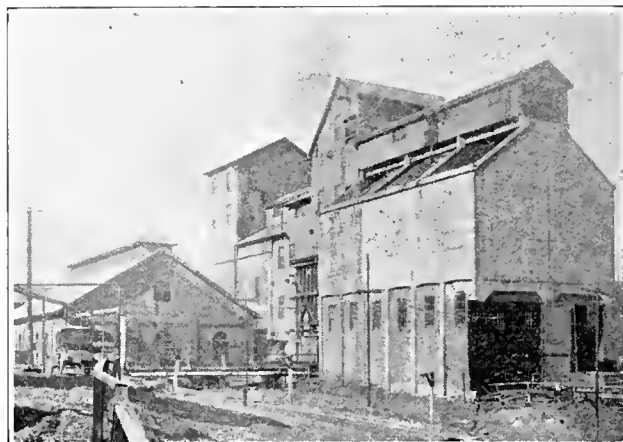
Interior of Laundry

These laundries are equipped with washing machines, electrically driven, and the miner may not only leave his dirty clothes at the laundry, but may have his family wash done there at a nominal cost. Laundry bags are distributed to the families, along with a number of clothes pins, all bearing the same number, so that no confusion results in the sorting of the washed clothes.

Coal Washeries

Coal washing plants are operated at Huron and Salem mines. The equipment consists of what is known as the "Intermittent Plunging Jig" washer.

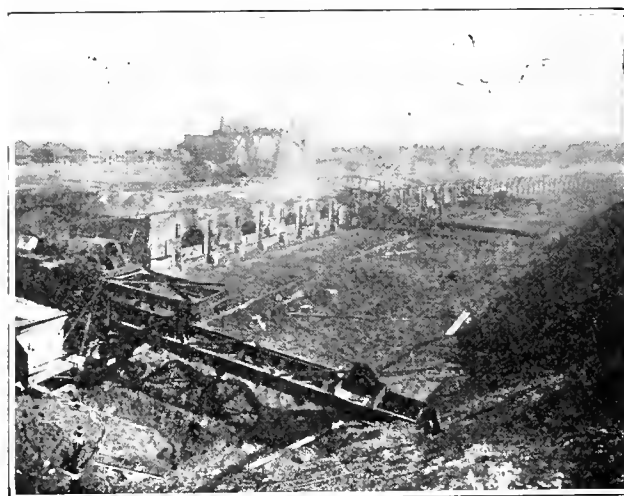
Our washed coal is carefully prepared and washed, making it especially adapted for forging and welding.



View of Washery

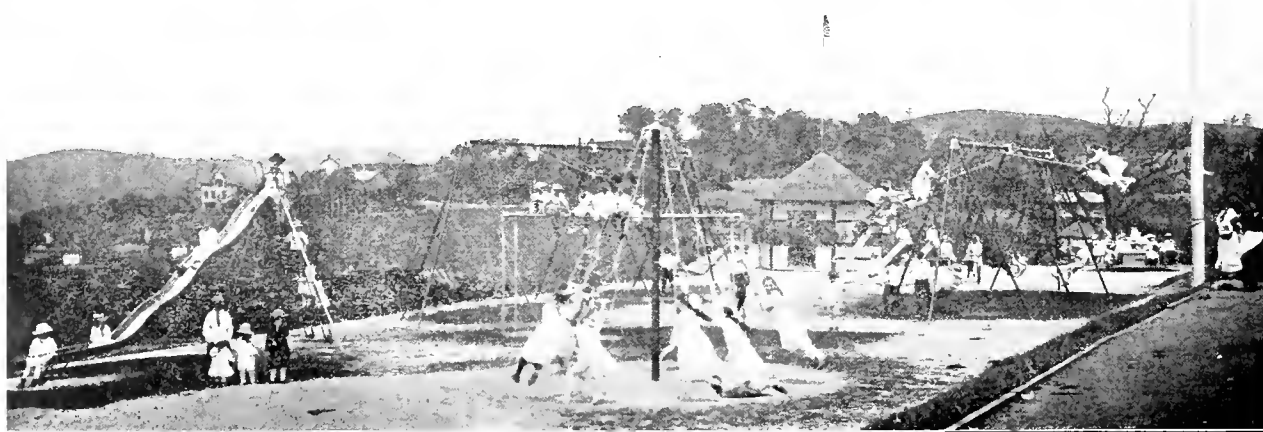
Coke Production

At the Salem Mine are 300 bee-hive coke ovens, and at the Huron Mine are 100 Rectangular Belgian ovens, giving us a total coke production of 20,000 tons per month, or 240,000 per annum.



Belgian Coke Ovens at Huron Plant

The highest grades of Foundry and Furnace coke is produced from washed coal, same being prepared in up-to-date washeries, and daily laboratory tests are made not only of the resultant washed coal produced, but of the coke.



View of Playground

INLAND COAL COMPANY

The Inland Coal Company directly operates five mines, four of them being in Cambria County. One mine is a large locomotive engine coaling station. The other three produce the highest grade of by-product coal. The mine in Westmoreland County produces a high-grade steam coal.

These coals are the highest grade for by-product ovens and steam purposes, and, on account of their low volatile content are used in large eastern cities where city ordinances require the burning of a smokeless fuel.

Production of Mines

By referring to the tabulation below the extent of the operations of this company will be observed.

Cardiff Mine

Miller Seam, 40-44" thick.
Annual Production, 128,000 tons.
Sizes Produced, Run of Mine.

Carney Mine

Lower Freeport Seam, 42" thick.
Annual Production, 62,000 tons.
Sizes Produced, Run of Mine.

Greenwich No. 2 Mine

Lower Freeport Seam, 43-45" thick.
Annual Production, 90,000 tons.
Sizes Produced, Run of Mine.

Greenwich No. 3 Mine

Lower Freeport Seam, 43-45" thick.
Annual Production, 125,000 tons.
Sizes Produced, Run of Mine.

Tunnel No. 1 Mine

Lemon Seam, 46-50" thick.
Annual Production, 150,000 tons.
Sizes Produced, Run of Mine.

Analyses

Coal from the mines of the Inland Coal Company gives the following analyses, all samples having been dried before analysis.

CARDIFF MINE

Volatile Matter	22.15
Fixed Carbon	72.28
Ash	5.57
	<hr/>
	100.00
Sulphur	1.10
B. T. U.	14,901

GREENWICH No. 2 MINE

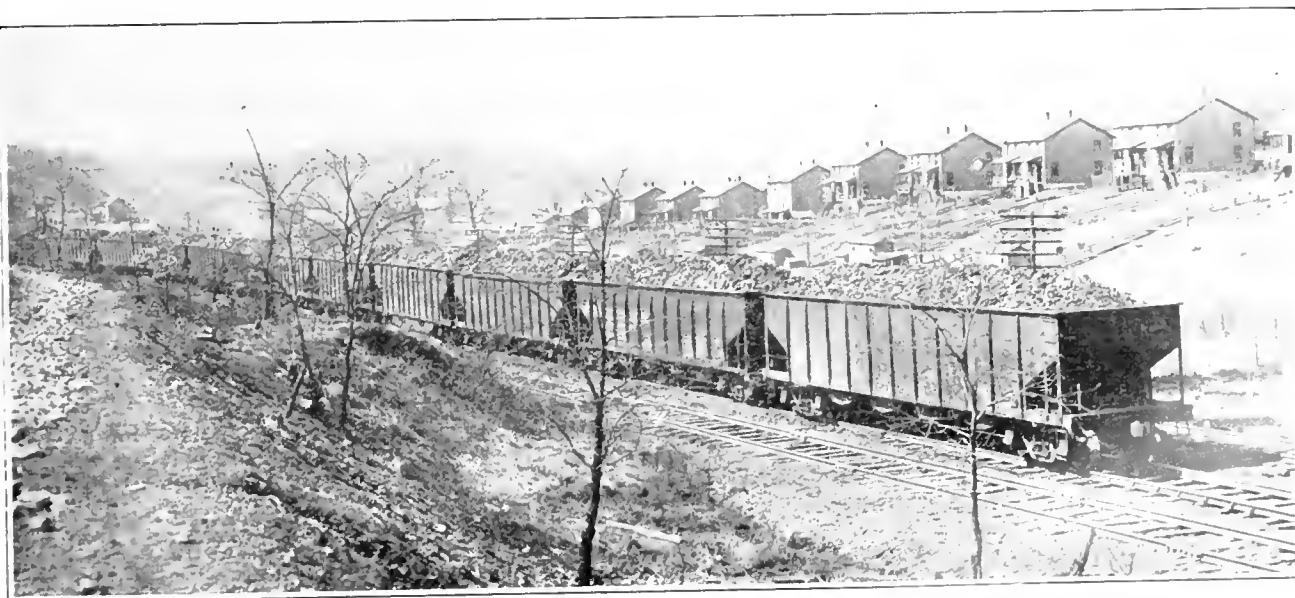
Volatile Matter	27.38
Fixed Carbon	68.24
Ash	4.38
	<hr/>
	100.00
Sulphur .....	.71
B. T. U.	14,866

GREENWICH No. 3 MINE

Volatile Matter	26.02
Fixed Carbon	68.68
Ash	5.30
	<hr/>
	100.00
Sulphur .....	.76
B. T. U.	14,418

TUNNEL No. 1 MINE

Volatile Matter	26.73
Fixed Carbon	69.73
Ash	3.54
	<hr/>
	100.00
Sulphur .....	.80
B. T. U.	14,711



A Shipment of Coal Ready for the Market

LATROBE-CONNELLVILLE COAL & COKE CO

The Latrobe-Connellsville Coal & Coke Co. operates three mines, which have a daily capacity of 2,000 tons of coal.

The mines operated are as follows:

Connellsville Mine

Pittsburgh Seam, 84" thick.
Annual Production, 225,000 tons.
Sizes Produced, Run of Mine.

Derry No. 1 Mine

Pittsburgh Seam, 84" thick.
Annual Production, 325,000 tons.
Sizes Produced, Run of Mine.

Superior No. 2 Mine

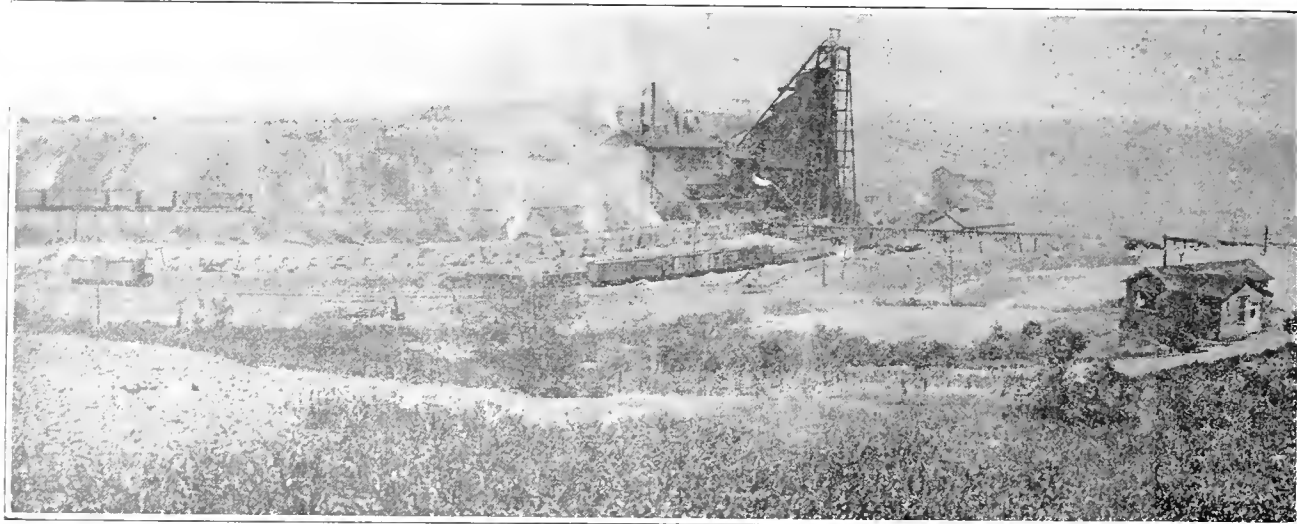
Pittsburgh Seam, 84" thick.
Annual Production, 110,000 tons.
Sizes Produced, Run of Mine.

General Analysis

Moisture	Dried
Volatile Matter	30.04
Fixed Carbon	62.53
Ash	7.43
	<hr/> 100.00
Sulphur	1.27
B. t. u.	14,298

Coke Production

At the Derry No. 1 Mine are 293 bee-hive coke ovens, and at the Connellsville Mine 208 bee-hive ovens, with a daily capacity of 1,000 tons, all producing a very fine grade of coke suitable for foundry and furnace purposes.



General View of Derry No. 1 Plant, Showing Bee-Hive Coke Ovens and Shaft House.

ACME GAS COAL COMPANY

The Acme Gas Coal Company operates three mines in Clarion County, the following tabulation giving the details:

Acme Mine

Lower Kittanning Seam, 38-62" thick.
Annual Production, 285,000 tons.
Sizes Produced, Lump, Nut and Slack.

Penn Mine

Lower Kittanning Seam, 36-54" thick.
Annual Production, 25,000 tons.
Sizes Produced, Run of Mine.

Shannon Mine

Lower Kittanning Seam.
Annual Production, 150,000 net tons.
Sizes Produced, Run of Mine.

Analysis

The following is an analysis of the coal from the Acme Mine, sample being dried before analysis:

Volatile Matter	36.00
Fixed Carbon	60.69
Ash	3.31
	<hr/> 100.00
Sulphur	1.30
B. T. U.	14,211

MOUNTAIN COAL COMPANY

The Yellow Run Shaft of the Mountain Coal Company is located in Cambria County, Pennsylvania. The coal mined is from the Miller, or B Seam, which bears an excellent reputation for its general steaming qualities. The annual production of Yellow Run Shaft is 175,000 net tons.

Coal from this operation is especially suitable for by-product ovens, smithing, bunkers, and domestic purposes.

Analysis

The following is an analysis of coal from the Yellow Run Shaft of the Mountain Coal Company, made by the U. S. Navy at Norfolk, Va., on February 25th, 1919.

Moisture	Dried
Volatile Matter	17.9
Fixed Carbon	76.5
Ash	5.6
	<hr/>
	100.0
Sulphur .....	.78
B. t. u.	14,855

ARGYLE COAL COMPANY

The Argyle Coal Company operates two mines in Cambria County, Pennsylvania.

Argyle No. 1 Mine

Miller Seam, 44" thick.
Annual Production, 91,000 tons.
Sizes Produced, Run of Mine.

Argyle No. 2 Mine

Miller Seam, 44" thick.
Annual Production, 230,000 tons.
Sizes Produced, Run of Mine.

Coal Produced and Usages

The coal produced at the mines of this company is an excellent steam coal and in addition ranks

high for by-product use, smithing and domestic use. It stands transportation well and is used for bunker purposes.

Analyses

The following are analyses of coal from the Argyle Mines. Samples dried before analysis.

ARGYLE No. 1		ARGYLE NO. 2	
Moisture	Dried	Moisture .....	.87
Volatile Matter	18.45	Volatile Matter	18.29
Fixed Carbon	76.65	Fixed Carbon	75.68
Ash	4.90	Ash	5.16
	<hr/>		<hr/>
	100.00		100.00
Sulphur .....	.92	Sulphur	1.05
B. t. u.	14,891	B. t. u.	14,741



General Living Conditions

The management of the foregoing companies has also made every effort to provide the most modern housing conditions for its employees. The construction of the dwellings is of the latest type. They are equipped with bath, electric light, and the communities are attractively arranged with every care for sanitation.

School buildings and churches have also been provided, while playgrounds and amusements halls are located in or near the towns. A typical playground is shown on another page.

KELLY BROTHERS COAL COMPANY

SNOW SHOE, PA.

Miners of

Snow Shoe "B" Seam (Lower Kittanning) Coal

The Snow Shoe mining district, in which the Kelly Brothers Coal Company mines are situated, is one of the oldest in the state. The land embraced in the region was surveyed by one of the early deputy surveyor-generals at the beginning of a winter season. It appears that the party was overtaken by a snowstorm and were obliged to make snow shoes on which to work their way down from the mountain to the settlement in the valley. From this circumstance their work became known as the "Snow-shoe Survey," and the name later descended to the township and to the mines.

The Snow Shoe coal field, covering an area of about twelve miles in length by five miles in breadth, is situated in the western part of Center county, north-west of Bellefonte. It is connected to the latter town by a railroad 26 miles in length which joins the Pennsylvania Railroad at Milesburg. The ascent from Milesburg to the top of the Allegheny Mountains, a total of 1,000 feet, is accomplished with switchbacks 16 miles long. This field also has an outlet to markets through the New York Central lines.

It follows that a coal field as difficult to tap as the Snow Shoe must contain coal of very high quality. The B seam, which is the one mined at our various operations, is an excellent semi-bituminous coal, and is widely known for its good steaming qualities. It has a high heat value, and being low in volatile, is a smokeless coal which meets city ordinances against smoky fuels. It is also well adapted for smithing purposes.

Kelly Brothers Coal Company operate five mines, all of them well equipped for producing clean coal in large quantities. We cater to the trade that insists on having a high-grade steam fuel. Power plants using stokers will find our coal well fitted to their needs. Shipments over the Pennsylvania and New York Central lines.

Kelly Brothers Snow Shoe Coal

LINCOLN GAS COAL COMPANY

Farmers Bank Building

P. O. Box 53

PITTSBURGH, PA.

"Lincoln" Pittsburgh Seam Coal

Lincoln Mines Nos. 1 and 2 are situated at Lincoln Hill, Washington County, Pennsylvania, about one and three-quarter miles west of Washington.

Work on two shafts, one 452 feet and the other 469 feet in depth, was started in 1917 to tap a 2,200-acre tract of Pittsburgh coal six feet thick.

As will be noted on the illustration below, Lincoln Hill is located in one of the finest sections of Western Pennsylvania. The lay-out of the town is in keeping with the natural beauty of its surroundings. The miners' houses are commodious and of pleasing design. Sanitary conditions are excellent, ample grounds are provided for each tenant to have gardens, a first-class commissary is at hand, and social diversions are offered the workmen and their families.

Both shafts are concrete lined and all equipment, both inside and outside, is of the most modern design. Four hundred Edison electric lamps are in use for illumination by the miners and day men. All tippie apparatus has been installed in such manner as to insure the benefits of gravity with a minimum of labor. In addition to run-of-mine, separation into the larger sizes as 1¼"-lump and ¾"-lump is provided for, and also loading booms to guard against excessive breakage in loading.

The coal mined is of a high-grade and is giving continuous satisfaction for steam, domestic, locomotive, producer gas, pulverized and foundry purposes. Its analysis is as follows:*

Moisture	2.23
Volatile Matter	33.80
Fixed Carbon	57.76
Ash	6.21
Sulphur	1.59
B. t. u.	13,953

Shipments are made on both the B. & O. and the P. C. C. & St. L. railroads. Storage is provided at our tippie for 85 empty and a like number of loaded cars. This in addition to a daily capacity of 2,000 tons, and headed toward 5,000 tons, insures prompt delivery of your orders.



Panoramic View of Lincoln Hill and Outside Works

*Pittsburgh Testing Laboratory.

MORRIS RUN COAL MINING CO

General Offices: WILKES-BARRE, PA.

Miners and Shippers

BLOSS SMITHING

Distributors

MORRIS RUN COAL COMPANY, Inc.

300 Madison Ave., NEW YORK CITY

141 Milk St., BOSTON, MASS.

Agents for

WILKES-BARRE, LEHIGH AND LACKAWANNA ANTHRACITE

Location Morris Run Coal

The holdings of the company are located in Morris Run, Tioga County, Pennsylvania, on the lines of the New York Central and Erie railroads. Lowest freight rates to the Canadian Gateways, New England and New York State.

Sizes Shipped

Mine Run, Lump, Egg, Fine, Egg and Fine reassembled for stoker use, Smithing.

Specialty

Genuine Bloss Smithing, mined since 1835. The coal that has made the Blossburg District known from Maine to California. WE OWN PRACTICALLY ALL THAT REMAINS OF THIS GRADE OF COAL.

Preparation

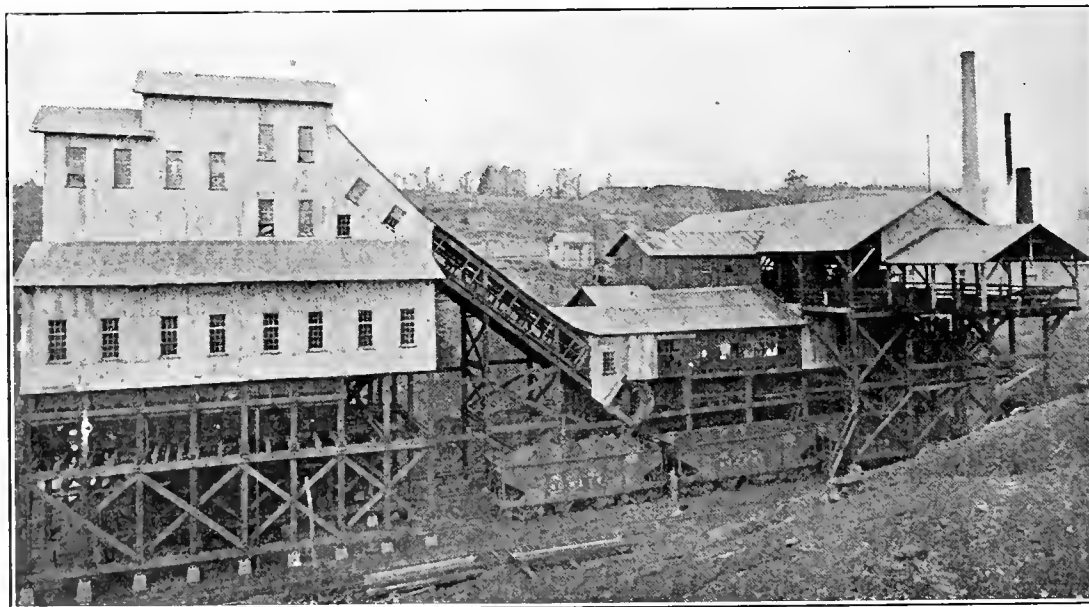
Washed and dry methods. Crushers, shaker screens, picking tables, and jigs.

Labor

Highest wage scale in State of Pennsylvania. Living conditions good. A large percentage of the workers born and raised in Morris Run, Pa.

Advantages

Morris Run is 250 miles nearer to the Eastern markets than mines of competing districts, which insures quick delivery, efficient service, and a minimum delay during congested periods.



Tipple and Washery Morris Run Coal Mining Co., Morris Run, Pa.

PEABODY COAL COMPANY

CHICAGO, ILL.

BRANCHES

CINCINNATI, OHIO
PINEVILLE, KENTUCKY
ST. LOUIS, MISSOURI
KANSAS CITY, MISSOURI

MINNEAPOLIS, MINNESOTA
SPRINGFIELD, ILLINOIS
PEORIA, ILLINOIS

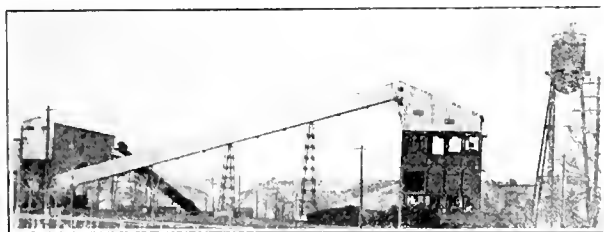
OMAHA, NEBRASKA
DEADWOOD, SOUTH DAKOTA
SHERIDAN, WYOMING
SPOKANE, WASHINGTON

Coal Mine Management

For General Summary of Peabody Management Service See Page 219.

SALES AGENT

We undertake distribution of mine outputs, not only for properties we manage but also mines operated by the owners.



Mine No. 42 at Aeme, Sheridan County, Wyoming. One of a group of six large mines whose production is sold by Peabody Coal Company for the Sheridan-Wyoming Coal Co., Inc.

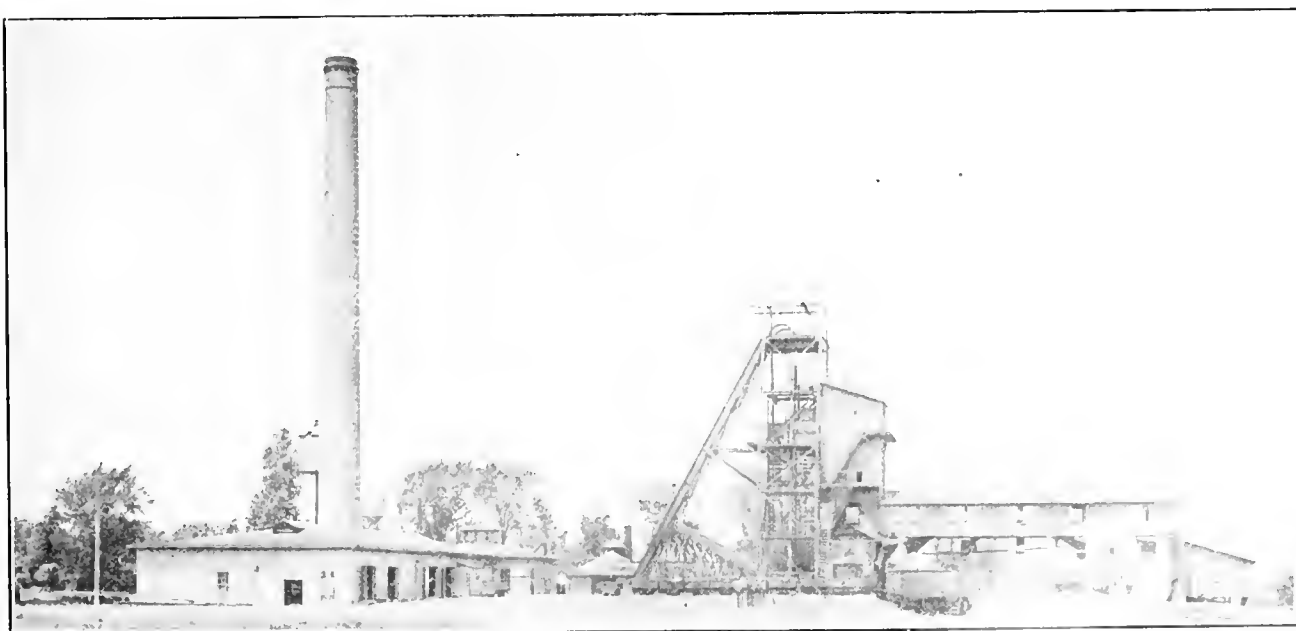
With a large, well directed sales force and an extensive branch office organization distributing millions of tons annually; with an intimate knowledge of markets developed by thirty-eight years of

selling activity; in daily contact with large and small buyers throughout the country and with an enormous following among the trade built up by years of faithful service, we are in position to market mine outputs advantageously.



Mine No. 57, Another of the Springfield Group

We are at the present time handling the sale of the entire production of thirty mines in addition to that of our own operations and part of the output of many others.



Mine No. 51 at Andrew, Sangamon County, Illinois. One of a group of seven mines in the Central Illinois field, the output of which is distributed by Peabody Coal Company for the Springfield District Coal Mining Company.

PEERLESS COAL COMPANY

Commercial Trust Building
PHILADELPHIA

Shippers of
PEERAGE COALS
Bituminous Anthracite Coke

PEERAGE STANDARD

Moisture	1.00
Volatile Matter	13.69
Fixed Carbon	79.68
Ash	5.63
	<hr/> 100.00
Sulphur .....	.94
B. t. u. (As Received)	14,900
B. t. u. (Dry Basis)	15,030



Pennsylvania Coal & Coke Corporation

Miners and Shippers of

BITUMINOUS COAL

For Steam, Smithing, Coking and Domestic Purposes

Annual Output 3,500,000 Tons

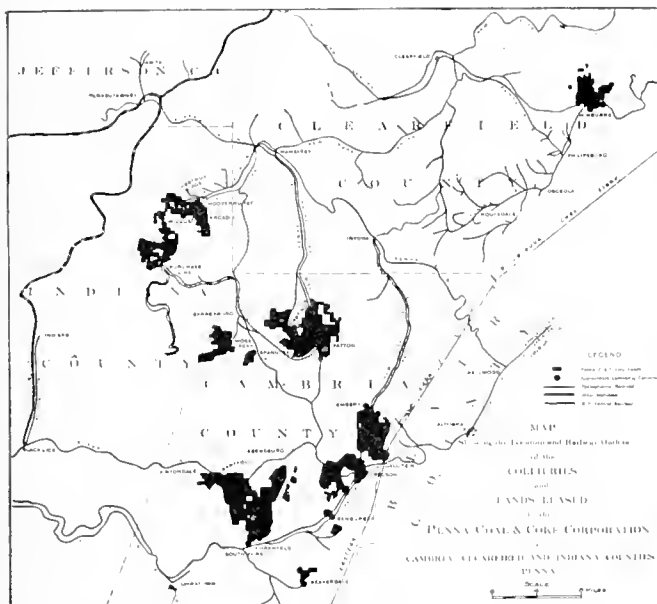


General Sales Office
No. 17 Battery Place
New York, N. Y.

Mine Office
Cresson, Pa.

Location

The properties controlled by the Pennsylvania Coal & Coke Corporation are located in Central Pennsylvania, in four adjoining counties, on the New York Central, Pennsylvania and Cambria & Indiana railroads.



Twenty-six of the mines are in Cambria county, six in Indiana county, three in Clearfield county, and one in Blair county.

This wide distribution covers workings in four basins: Johnstown, Wilmore, Barnesboro (West-over) and Mechanicsburg.



Types of Company Houses.

Trade Names

"Webster" is one of the trade names which has been used for years by the Corporation and its predecessors.

"Webster" is a high carbon, low ash coal; its heating value is high, as is also the fusion point of the ash.



Office Building, Cresson, Pa.

"Pardee" Coal

A large proportion of the output of the Corporation is sold under the trade name of "Pardee."

This coal has a wide reputation among steamship owners for bunker purposes.

Coal Mined

Coal is mined from four seams: Upper Freeport, Lower Freeport, Upper Kittanning and Lower Kittanning; therefore, the Corporation is in position to furnish coal for all the varying conditions found in steam plants.

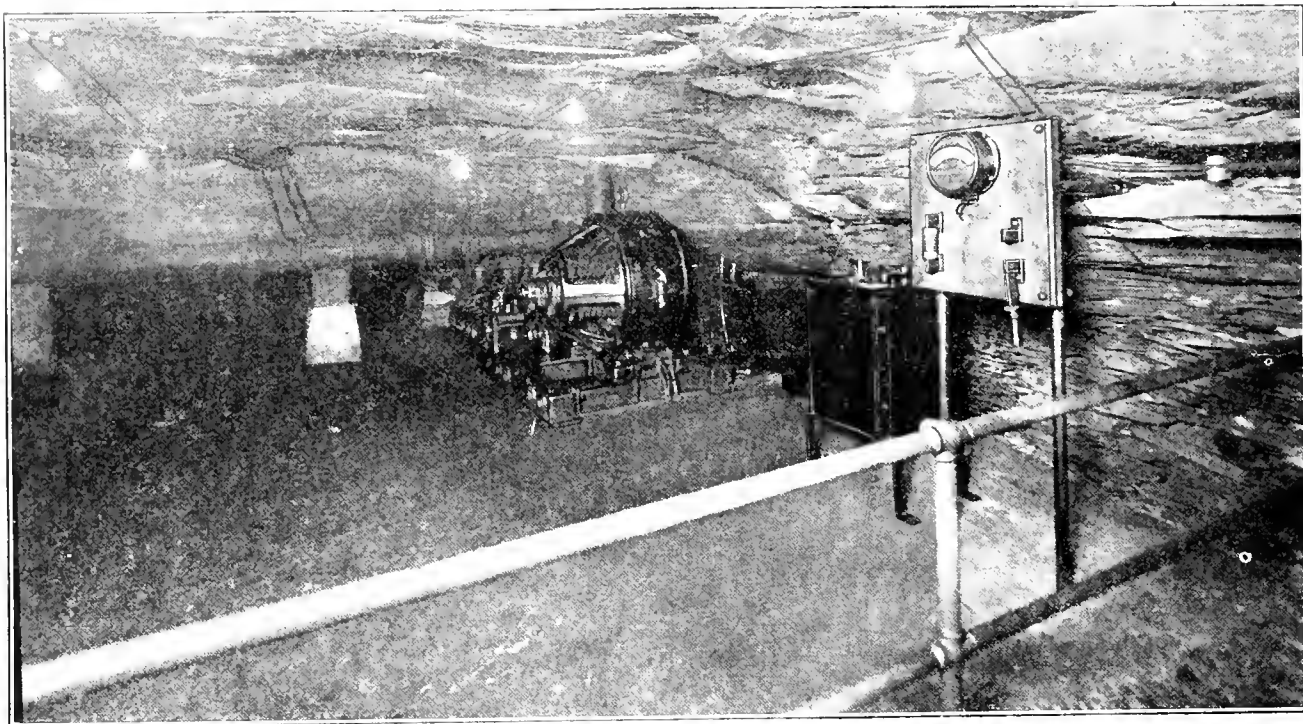
Usages of Coal Mined

In addition to their superiority for general steam raising purposes, some of the coals mined by the Corporation are particularly well adapted for by-product purposes, brick burning, copper smelting and pottery work.

The excellence of "PARDEE" and "WEBSTER" coals has served to place them in the forefront, and

Smithing Coal

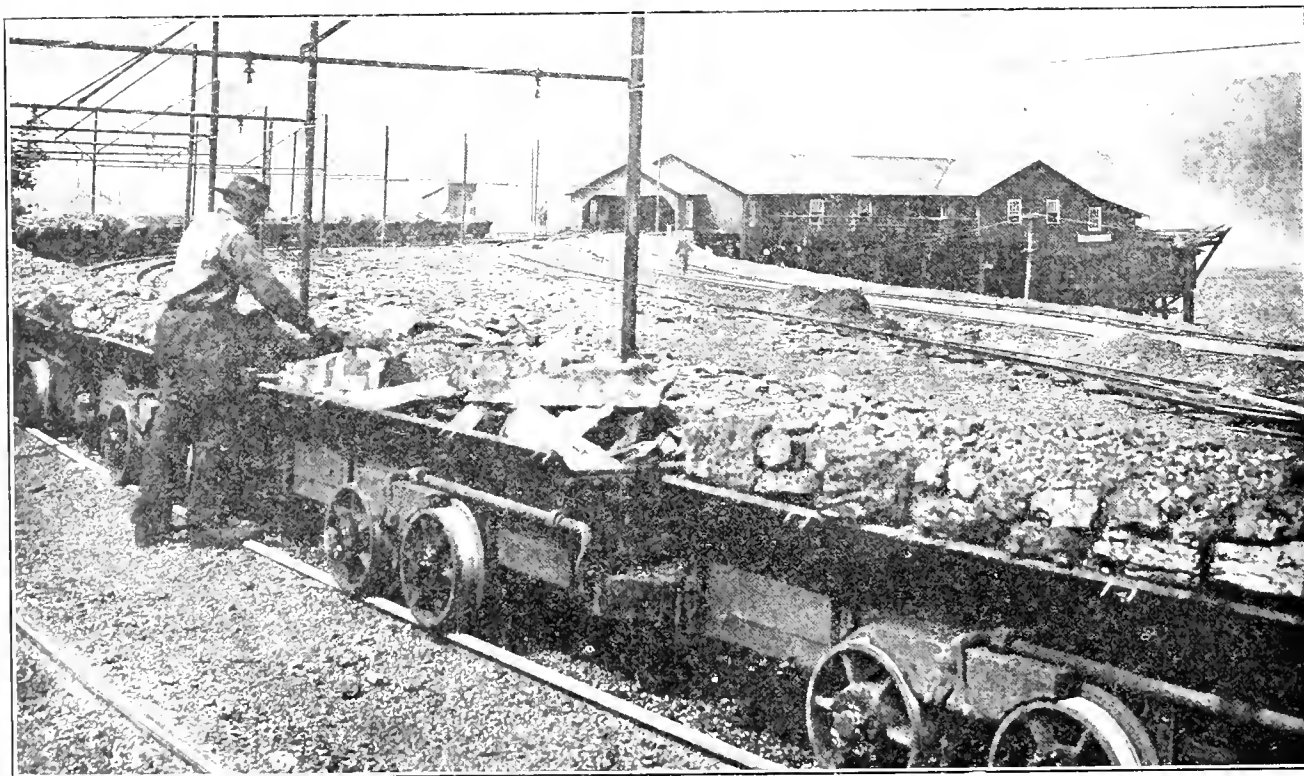
At one of the operations of the Corporation is produced an ideal blacksmith's fuel. This coal possesses all the characteristics which make it highly desirable for use in the forge. Repeated analyses indicate a maximum Sulphur content of 0.85 per cent.



Underground Pumping Station, Colliery 28.

the other coals produced by the Corporation find a ready market among consumers whose plants are equipped for burning fuel of a slightly higher volatile content.

This coal is marketed throughout the United States and Canada under the name "Webster Selected Smithing Coal."



Main Trolley Line, Looking Toward Tipple, Colliery 21-22.

Preparation of Coal

The Pennsylvania Coal & Coke Corporation caters to a critical consuming trade. Every effort is made to maintain a high standard of preparation and service, the management realizing that these are vital factors in securing and retaining valuable customers. Preparation is held to be of prime importance, in view of the increase in the cost of coal during the past few years and the higher railroad freight rates. At several of the mines picking tables have been installed and others will be added from time to time as conditions may permit. Where

the mine car to the railroad car. At one of the operations at Patton, the Corporation has erected a washery, which is giving such satisfactory results that similar installations at other collieries are contemplated.

Export and Bunker Trade

In addition to its mining operations, the Corporation controls, through stock ownership, the Port Liberty Pier at Jersey City, N. J., on the Central Railroad of New Jersey, with a capacity of over a million tons per year.



Type of Picking Table in Use

picking tables are installed, it is possible to load slack, nut or lump coal in addition to run of mine. In other words, the coal as it is dumped from the mine cars is separated into the three sizes mentioned, and after the nut and lump have been picked, they may be loaded separately or combined with the slack and loaded into railroad cars as run of mine. This results in a larger percentage of bone and slate being removed than it is possible to eliminate under the regular method of cleaning in the mine and on the tippie as the coal passes from

It also reships coal over the piers at Elizabethport, Port Reading, Pier 18, Jersey City, N. J., and South Amboy, New York Harbor, and over the Port Richmond and Greenwich piers at Philadelphia, and Canton Piers at Baltimore.

The tidewater and bunker business is handled by a special department, and, consequently, receives the particular attention which it requires.

More than one-third of the output of the Corporation moves to its destination by way of the tidewater reshipping piers previously mentioned.

EUROPEAN AGENTS

The European Agent of the Pennsylvania Coal & Coke Corporation is Hull, Blyth & Co., Ltd., No. 1 Lloyd's Avenue, London, England, an old established firm with coaling stations throughout the world.

The Corporation represents this firm in New York, and thereby is able to arrange in the United States for the coaling of ships at foreign ports.

PENNSYLVANIA COLLIERIES

INCORPORATED

PHILADELPHIA

Perry Building
Spruce 1623

NEW YORK

500 Fifth Avenue
Vanderbilt 4878

JOHNSTOWN, PA.

First National Bank Bldg.
Phone 25

MINE OPERATORS

Quemahoning
SMOKELESS

Indiana County
MEDIUM VOLATILE

Lilly
SMITHING

Pennsylvania Collieries, Inc., owns and operates six mines in the Central Pennsylvania field. Its mines, under the direct supervision of an operating Vice-President, are electrically operated and equipped with the most modern facilities, insuring efficient and economical mining of coal. It has built its own towns where good living conditions are at a minimum cost to its employees. During the past year extensive improvements have been made in its properties which have increased total daily capacity to 2,500 tons. The following properties are owned and operated by this Corporation:

Pretoria Smokeless

Two mines located at Holsopple, Pa., on the B. & O. R. R. in the Quemahoning District of Somerset County.

No. 1 Mine is "C" Prime Coal.

No. 2 Mine is Miller or "B" Seam Coal, slightly higher in volatile matter than No. 1.

Both coals are ideal for all classes of steam work, pottery, terra cotta, glass making, and any other uses where a low volatile, low sulphur coal is required. Particularly adapted for bunkering.

Coals take low freight East.

Meco Medium Volatile

Two mines located at Meco, Indiana County, on the P. R. R.

No. 1 Mine is Miller or "B" Seam Coal, free burning and long flame. Suitable for steam use and brick making.

No. 2 Mine is Upper Freeport or "E" Seam Coal, higher in volatile matter than No. 1. Adapted for steam, brick making, and by-product coke, also for gas producers.

Both coals work well on either underfeed or overfeed stokers.

Coals take low freight rate East. To western points rate is only ten cents above minimum.

Anvil Smithing

Two mines located at Benscreek and Lilly, Pa., the famous Lilly District of Cambria County on the P. R. R., taking low freight rate East. A specially prepared, carefully selected product from the heart of Pennsylvania's smithing coal district; the cream of a naturally pure coal.

"The dirt is removed at the mines, instead of at the forge."

ANALYSES

	Pretoria No. 1	Pretoria No. 2	Meco No. 1	Meco No. 2	Anvil
Moisture .....	.....	.37	.....	.48	.45
Volatile Matter	17.16	18.10	30.21	30.30	19.69
Fixed Carbon	75.58	73.69	60.29	62.14	71.97
Ash	7.26	7.84	9.50	7.08	7.89
	100.00	100.00	100.00	100.00	100.00
Sulphur .....	.60	1.24	2.16	1.64	1.42
B. t. u.	14,688	14,670	13,678	14,614	14,655

W. A. MARSHALL & COMPANY

Sales Agents for

MAPLE RIDGE COAL COMPANY

Miners of

MAPLE RIDGE "C PRIME" and BETHEL "MILLER VEIN"

Productive Capacity About 600 Tons Per Day

Maple Ridge Coal

The Maple Ridge coal is of a strong, lumpy nature characteristic of the "C PRIME" coal of Somerset county. Used largely as a steam coal and to some extent throughout the West as a domestic fuel.

The Bethel Coal

The BETHEL coal in structure is of the characteristic nature of the Miller Vein in the South Fork and Scalp Level districts, to which it is contiguous. It is soft by nature and does not run lumpy. Used exclusively as a smokeless steam coal and by reason of its low volatile and ash and high heat units is termed a fancy grade of fuel for that purpose.

Both seams are absolutely clean, being free from any sign of slate or bone partings. The preparation is perfect at all times in both coals.

Shipping Facilities and Rates

Mined on the Baltimore & Ohio Railroad, they reach all points on that road, its connections in the East on the Meyersdale or low rate.

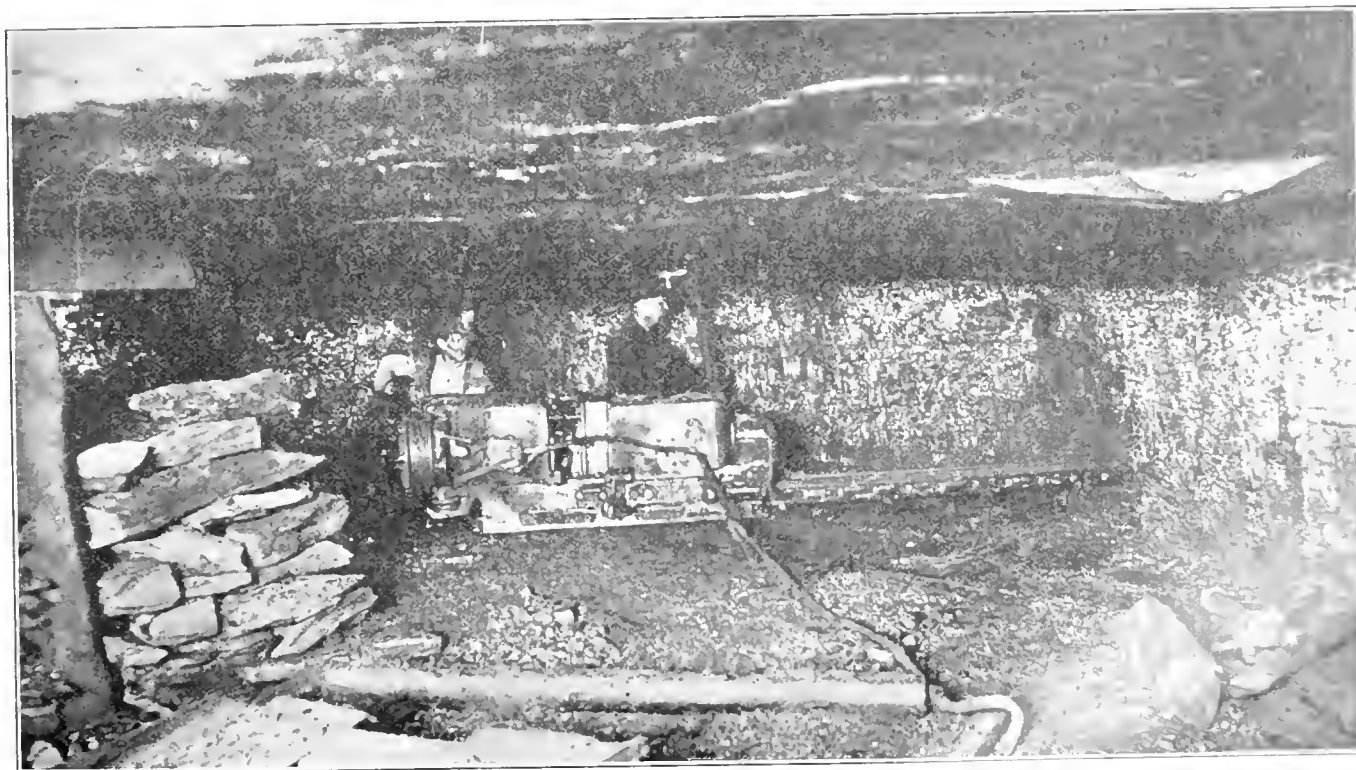
On Western shipments they reach all points on the Baltimore & Ohio and its connections on the Meyersdale or Somerset rate. Mines provided with modern equipment of every necessary description.

Housing facilities ample, mostly new and of high class construction, cottage form and uniformly painted white with dark trimmings.

Average Analyses

MAPLE RIDGE	
Moisture	1.00
Volatile Matter	16.00
Fixed Carbon	74.00
Ash	9.00
Sulphur	1.75
B. T. U.	14,250

BETHEL	
Moisture	1.00
Volatile Matter	16.00
Fixed Carbon	76.25
Ash	6.75
Sulphur	1.85
B. T. U.	14,750



Shortwall Undercutting Machine at Maple Ridge

PIONEER COAL & COKE COMPANY

H. W. Oliver Building
PITTSBURGH, PA.

Branches

NEW YORK, N. Y.—National City Building
UNIONTOWN, PA.—Union Trust Building
FAIRMONT, W. VA.—Fairmont Trust Building

Representing

CONSOLIDATED COKE COMPANY
WHYEL COAL & COKE INTERESTS
BEAL COAL COMPANY
UNITED STATES FUEL COMPANY
NATIONAL TRANSPORTATION COMPANY
SUPERIOR CONNELLSVILLE COAL CO.

Connellsville Furnace, Foundry, Crushed Coke and Pittsburgh Coals

SHIPMENTS VIA RAIL AND RIVER

Plants Operated and Capacity

Pioneer Coal & Coke Company controls the operation of eight coal mines and coke plants, all of which are located in the "Connellsville Coke Region", Fayette County, Pennsylvania. Our output represents approximately 125 cars of coal and coke daily via both rail and river.

Quality of Coke

Our Coke is all produced from Connellsville Coking Vein Coal, commonly known as the Pittsburgh seam, which coal is thoroughly washed to insure a coke of high fixed carbon content, low ash and sulphur, and of a particularly hard, flinty structure.

Quality of Coal

The Coal from our various plants is classified into Connellsville By-Product Coking Coal, Pittsburgh Gas Coal and High Grade Steam and Domestic Coal, and will pass the most exacting tests for these various requirements.

Sales Facilities

Our various offices located at Pittsburgh, Pa.; New York City, N. Y.; Uniontown, Pa., and Fairmont, W. Va., place us in direct communication with the trade at all times and enable us to expedite the handling of shipments.

Service

Our trade for Coal and Coke is protected for regular shipments and deliveries on account of our large daily tonnage for disposition. The question of service should be taken into consideration when buying your supply of Coal and Coke. The selection of a SHIPPER that will furnish your supply WHEN and AS you want it, from the same operation, assuring you the same uniformly well prepared product at all times, is a paramount factor.

Equipment and Preparation

Our plants are the most modernly and up-to-date equipped in the Connellsville Region for the mining, preparation and loading of Coal, and manufacture of Coke, and our large established trade bespeaks for the service and product that we are able to offer.

Rail Transportation

Our operations are served by the Pennsylvania Railroad, Pittsburgh & Lake Erie Railroad and Baltimore & Ohio Railroad, affording a direct shipping route to all destinations on the regular Connellsville rate of freight.

River Transportation

Our affiliated interest, the National Transportation Company, owns and operates three modern type steamboats and a large fleet of barges for the serving of trade on the Monongahela, Allegheny, Ohio and Mississippi Rivers and their tributaries.

We make river deliveries to trade located on these rivers of large daily tonnages of coal and coke, and do a commercial towing business, particularly of steel products, assuring such trade regular deliveries regardless of car shortages, railroad strikes, etc.

Export Shipments

This company has always made a special feature of tidewater business, embracing both coal and coke shipments, and has yardage facilities at its different operations to assemble entire trainloads thereby enabling solid trainload movement to tidewater piers, which eliminates steamer delays and demurrage possibilities.

Personnel

All the officers of this company are men of wide experience in the coal and coke business, having devoted practically their entire lives in this particular line, which affords our trade the assurance of competency and reliability.

GEORGE WHYEL, President

CHAS. F. COLBERT, Jr.
Vice-President

F. E. WEDDELL, Secretary

JOHN HUSBAND, Treasurer

F. E. FITZGERALD
Coal Sales Manager



MINES LOCATED ON WEST SIDE BELT RAILROAD, AFFORDING DIRECT CONNECTIONS WITH ALL
RAILROADS IN THE PITTSBURGH DISTRICT

A black and white photograph of a large industrial facility, likely a steel mill or foundry. In the foreground, there are several large, rectangular pits or basins, some of which appear to be filled with molten material or slag. To the left, a tall, complex structure of pipes and machinery is visible. In the center, a large, arched structure, possibly a bridge or a part of the mill's infrastructure, spans across the scene. The background shows a hilly landscape with some trees and a small building on the right. The overall scene depicts a busy industrial environment.

B. NICOLL & COMPANY, Incorporated, 149 BROADWAY, NEW YORK CITY
PHILADELPHIA BALTIMORE PITTSBURGH

Shipping Piers: Baltimore, Philadelphia and New York.
Lake Loading Ports: Ashtahula, Cleveland, Conneaut, Lorain and Huron

J. W. PLETCHER

403 McCance Building
PITTSBURGH, PA.

Miners and Shippers of
Steam and Domestic Coals

Donley Mine

The Donley Mine is located at Oak Hill, Armstrong County, Pa., on the Pennsylvania Railroad.

Two seams are worked—the Upper and Lower Freeport—which on this property have an average thickness of 48 inches.

The daily capacity of the Donley Mine is 300 tons of run-of-mine coal.

Analysis of this coal by the Pittsburgh Testing Laboratory shows the following:

Moisture	1.80
Volatile Matter	35.02
Fixed Carbon	57.54
Ash	5.64
	<hr/>
	100.00
Sulphur	1.67
B. t. u.	14,570

Coal from the Donley Mine rates high as a steam producer. The thermal value is high and the moisture and ash low. A dollar invested in Donley coal, therefore, brings a maximum of heat producing components to the fire box, and a minimum of waste.

Cowanshannock Mine

This operation at Cowanshannock, Armstrong county, Pa., is on the Pennsylvania Railroad and works the Lower Kittanning seam having an average thickness of 48 inches.

It has a daily capacity of 300 tons.

Shaker screens are a part of the tippie equipment which enables shipments of lump coal as well as run-of-mine.

The following analysis of this coal was made by the Pittsburgh Testing Laboratory.

Moisture	0.90
Volatile Matter	39.02
Fixed Carbon	51.35
Ash	8.73
	<hr/>
	100.00
Sulphur	2.26
B. t. u.	13,645

Coal from Cowanshannock Mine is a clean steam and domestic fuel and is used extensively by railroads and by retailers. It is high in volatile matter and gives a quick and lively heat. It will pay you to investigate this coal.

Reilly-Callaghan Coal & Coke Company
W. J. Reilly Coal & Coke Company
W. J. Reilly Sales Company
Nicholson Coal Company

General Offices
UNIONTOWN, PENNSYLVANIA

Miners, Shippers and Selling Agents
COAL AND COKE

REILLY-CALLAGHAN COAL & COKE CO.

General Office, Uniontown, Pa.

Sapper, Nellie and Callaghan Mines, property of the above company, are situated at High House, Pa., on the S. & M. Branch of the Baltimore & Ohio Railroad Company. This location affords us the privilege of shipment either over the Baltimore & Ohio Railroad or the Pennsylvania Railroad, the same rate of freight being applicable on either road. These mines operate in the Sewickley Seam and all three combined have an average daily output of approximately 1200 tons. They are classified by the Tidewater Coal Exchange in Pool 44. In the preparation of this coal special care is exercised and the greater percentage of it is of the lumpy variety.

The Reilly Mine of the above company is located at Confluence, Pa., on the Baltimore & Ohio Railroad and is classified by the Tidewater Coal Exchange in Pool 18. This mine operates in the Freeport Seam and, as in all of our operations, particular attention is given to the preparation of this coal. The daily output of this mine is about 300 tons.

W. J. REILLY COAL & COKE CO.

General Office, Uniontown, Pa.

Margaret Mine of the above company, is located near Brownfield, Pa., on the P.R.R., and is operating in the Pittsburgh Seam. This coal is of the High Volatile By-Product grade and it is therefore understood, without stating, the many uses to which same may be adapted.

The Winona Mine of this company is situated at Coffman, W. Va., on the B. & O. Railroad and is operating the Kittanning Seam, the average height of same being about 5' 2". It is classified by the Tidewater Coal Exchange in Pool 44 and has an average daily output of about 500 tons of good, clean and well prepared coal. This coal runs about 75% in lump and is immune from all impurities.

The Billie Mine of this company is located at Newcomer, Pa., on the P.R.R. and operates the Sewickley Seam. Due to the fact that this operation is now in the process of development, the average daily output will aggregate only about 200 tons. However, in the very near future, we expect to double and in all probability treble the present output. This coal is well prepared and undergoes rigid inspection before being put on the cars. As a good Sewickley Coal it cannot be excelled.

The Baxter Ridge Mine, the property of the above company, is located at Smithfield, Pa., on the B. & O. Railroad and is a very good grade of Pittsburgh Seam Coal. The average daily output of this mine is about 250 tons of well prepared coal.

W. J. REILLY SALES COMPANY

General Office, Uniontown, Pa.

This company, engaged in the purchase and sale of coal and coke, although only operating for the past several years, has established for itself a name beyond reproach, as a result of the honest, fair and just business methods which they unswervingly adhere to in all business transactions.

NICHOLSON COAL COMPANY

General Office, Uniontown, Pa.

Patrick No. 1 and Patrick No. 2 Mines of the above company are located at Ifield, Pa., near Ma-sontown; on the Monongahela R. R. These mines are operating the Sewickley Seam and are classified by the Tidewater Coal Exchange in Pool 44. They have an average daily output of 1000 tons of clean, well prepared coal. This coal is the very best grade Sewickley and the care given to its preparation makes it one of the best of its kind in the Connells-ville Region. Coal from both of the above mines can be shipped either via B. & O. or P.R.R., which fact has no bearing on the freight rate, as concerns additional charges, the same rate applying to each road.

FRANK W. ALDERMAN, President

H. B. ALDERMAN, Sec. & Treas.

R. H. DAVISON, Gen. Sales Agent

SENECA COAL MINING COMPANY

General Office

708-712 Fidelity Building, Buffalo, N. Y.

Mine Owners and Shippers of

BITUMINOUS COAL



Seneca Mines No. 1 and No. 2 are located at Chambersville, Indiana county, Pennsylvania, on the Buffalo, Rochester & Pittsburgh Railway between the towns of Punxsutawney and Indiana.

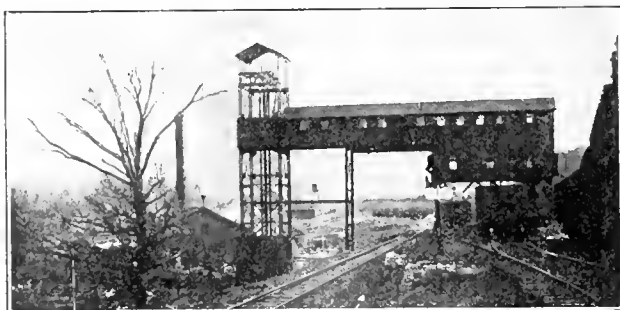
The town of Chambersville was built and is owned by the Seneca Coal Mining Company. It is a modern mining town of about 600 persons.

The Upper Freeport seam is worked in both mines and is a high volatile, low sulphur coal of very excellent quality. No. 1 mine was opened nearly twenty years ago by this company, which was incorporated in 1904. The mine is noted for its well laid out workings, and boasts of one of the lowest compensation insurance rates in Pennsylvania. This mine is self-draining. It uses compressed air for mining and electric haulage. It has a capacity of 15,000 to 20,000 per month.

No. 2 mine is directly across Crooked Creek and, although only recently taken over by this company, is already shipping over 5,000 tons monthly. The haulage in this mine is also electric and the mining is done by electric machines. The company contemplates installing one or two more machines in this mine shortly and expect to triple the output within a year.

The company owns and controls over 700 acres.

Both mines use the modern tippie, shown in the photograph, which is equipped with bar screens,

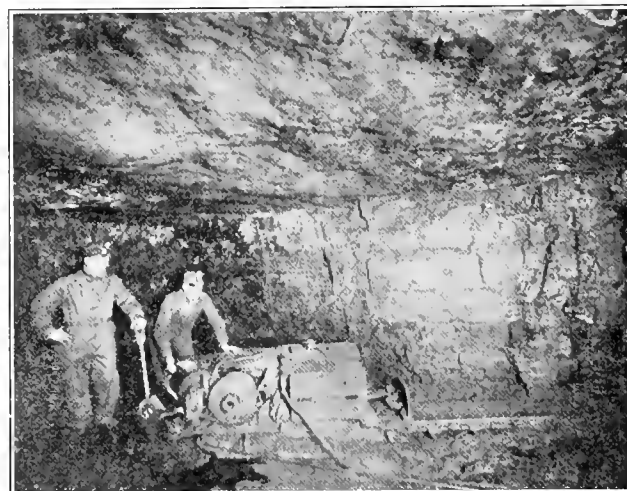


Modern Steel Tippie Serving Both Mines

enabling it to produce Mine Run, Lump and Nut (1" screened), Select Lump (2" screened), and Nut

and Slack. This operation is the only independent one on the B. R. & P. Railway preparing their coal in this manner.

The coal has met great favor for steaming purposes and is used extensively by railroads. The Nut and Slack size is especially adapted for use in



Cutting Coal in Seneca No. 2 With Electric Mining Machine

automatic stokers, some large eastern consumers having used this coal exclusively for a number of years.

This coal carries the minimum or Reynoldsville freight rate to Buffalo and Canada and the minimum or Clearfield rate to eastern points, including the tidewater points of New York and Philadelphia. It is classified in Pool 14.

Because of this company's conservative selling policies they are always in a position to make prompt shipments when desired. The company also conducts a jobbing department specializing in coal of a similar quality to their own.

All business is conducted through its general offices, Nos. 708-712 Fidelity Bldg., Buffalo, N. Y.

SUPERIOR COAL COMPANY

General Office

1536 Commercial Trust Building
PHILADELPHIA, PENNSYLVANIA

Miners and Shippers of

Superior High Grade Bituminous Coal

The Superior Coal Company

Own and operate three (3) mines located at Lochvale, Indiana County, Pennsylvania, almost in the heart of the great Central Pennsylvania Bituminous Coal Field.

Quality of Coal

The coal produced at these mines is from the "B" or Miller seam and is considered one of the best coals produced in the Clearfield District, being an excellent steam coal and classified in Pool 10 by the United States Fuel Administration.

The demand for this coal by Public Utility and Transportation Companies is constantly growing, and it is used extensively for smithing, domestic use, bunkering vessels and for export.

This coal is exceptionally low in Sulphur and high in heat value, and may be stored in large quantity with assurance that there will be no danger from spontaneous combustion.

Capacity of Mines

The daily capacity of these operations is approximately 2,000 tons, which insures prompt and regular shipments to all patrons over a period of years, but more particularly during the war period, when abnormal conditions prevailed, each and every consumer depending on a prompt and regular supply of coal, which was amply provided for.

The business of every customer, whether large or small, is rendered the best service at our command, which is a vital factor to the consumer, particularly so during periods of car shortage and stress or at other times when abnormal conditions prevail. The consumer is relieved of worry and uneasiness concerning shipments and deliveries of coal when orders are placed with us.

Preparation

Particular care is given to the preparation of coal as it is produced from these operations, in order that each and every car of coal shipped is uniform in quality and absolutely free from bone, slate and other impurities.

Freight Rates

All shipments originate on the lines of the Pennsylvania Railroad Company and take the Clearfield rate of freight to South Amboy, New Jersey; Greenwich Piers, Philadelphia; Canton Piers, Baltimore; New York State; New Jersey; New England, and other eastern shipping points.

Analysis

A representative analysis of this coal is shown as follows, viz.:*

Moisture	0.98
Volatile Comb. Matter	26.99
Fixed Carbon	63.51
Ash	8.52
	<hr/>
	100.00

Sulphur	0.92
B. t. u. (As Received)	14,054
B. t. u. (Dry Basis)	14,193
Fusing Point of Ash	2804° F.

*Above analysis made by Smith, Rudy & Co., 411 Walnut street, Philadelphia, Pa.

Equipment

Superior Mines Nos. 1, 2 and 3 are drift mines and have been developed under most modern mining methods. The electric equipment consists of electric cutting machines, electric loading machines, large motor generator sets, trolley locomotives, storage battery locomotives, portable pumps, portable drills and other modern, up-to-date equipment in every particular, which insures steady production with constant shipments to each and every customer.

VERNER COAL & COKE COMPANY

Henry W. Oliver Building
PITTSBURGH, PA.

Location

The holdings of the Verner Coal & Coke Company lie in Washington County, Pa., in the Cross Creek Basin of the Pan Handle district. The tract contained 1,234 acres originally and it is estimated that approximately 700 acres of coal remain unmined.

This mine is located at Bulger, Pa., on the Pan Handle division of the P. C. C. & St. L. Ry. of the Pennsylvania System, affording a direct route to eastern markets through Pittsburgh, and to southern, western and lake markets through Cincinnati, St Louis and Cleveland.

Coal Mined

The coal mined on this property is from the Pittsburgh Seam of the Monongahela Series, having an average thickness of 60 inches and is probably the best known coal in America. In addition to being an excellent coal for steam and locomotive fuel, it is highly regarded for cement burning, by-product and bee-hive coking, illuminating and producer gas, domestic, melting and powdered uses.

Capacity of Mine

The daily capacity of this mine is 1500 tons. Estimated yearly output of 450,000 tons. Based upon 80% recovery there are approximately 5,000,000 short tons of coal in reserve from the Pittsburgh Seam exclusive of the Rooster coal, which is approximately 3½ feet thick over the entire area, which is estimated will yield 2,000,000 short tons based upon 50% recovery.

Grades Produced

The mine is equipped with shaker screens and picking tables, which enable us to produce Run of Mine, Nut, 1¼-Inch Lump, ¾-Inch Lump and 3-Inch Lump coal.

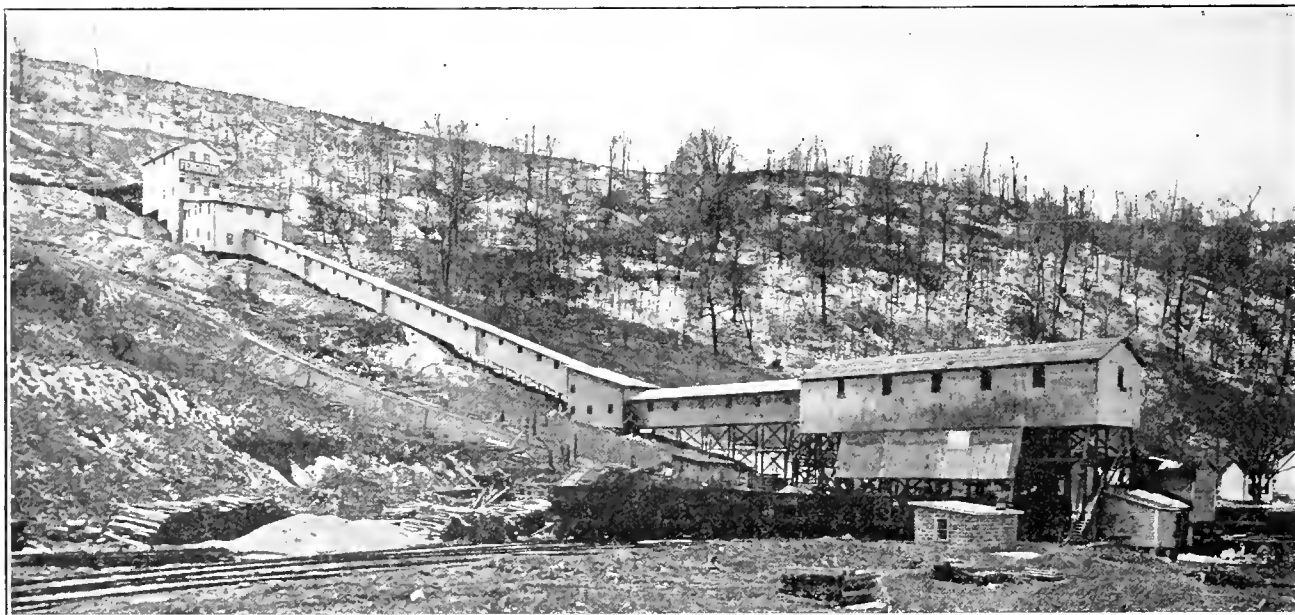
Affiliated Companies

Affiliated with the Verner Coal & Coke Company is the Salkeld Coal Company, an operating company of West Virginia, owning 3300 acres of Pittsburgh Coal having an average thickness of 58 inches. This property is located in Brooke County and the mine at Cliftonville, and is known as Salkeld Mine No. 2, or Ferguson Mine.

Salkeld Mine No. 1 having an acreage of 1700 acres of Freeport Coal with an average thickness of 84 inches. This property is in Barbour County and the mine at Clements.

This company is served by the Pittsburgh & West Virginia Railroad at its Ferguson Mine, which railroad connects with the Pennsylvania, and the Pittsburgh & Lake Erie Railroad, and the Wheeling & Lake Erie Railroad, and the West Side Belt Railroad and Bessemer and Lake Erie, thus securing a minimum freight rate to the lakes and other points.

Salkeld Mine No. 1 is served by the Baltimore & Ohio Railroad, which takes the Fairmont rate and affords us a very low rate to Tidewater. This coal is a semi-smokeless coal and is a very high grade coal for gas and steam purposes.



Salkeld Coal Company, Mine No. 2, Cliftonville, W. Va.

General Analysis

The following is an analysis of the coal mined and indicates a fuel of high steam value, particularly well adapted as a quick firing railroad fuel:

Analysis of Coal of Verner Mine, Made by Gulick-Henderson & Co.

Moisture	1.82
Volatile Matter	38.16
Fixed Carbon	53.54
Ash	6.48
Total	100.00
Sulphur	1.71
B. T. U.	14,040
Fusion Point of Ash.....	2714° F

The Ferguson Mine has over 34,000,000 short tons of coal unmined and the Salkeld Mine No. 1 has over 20,000,000 tons of coal unmined.

Preparation and Sizes Shipped

The Ferguson Mine is equipped with picking tables and crusher and every care is given to producing a clean coal, as in addition to the care exercised in the mine to remove impurities, the picking tables afford an opportunity of removing the bone and slate which have passed through undetected from the mine.

Sizes shipped at Ferguson Mine are Run of Mine, Slack, Lump and Block.

Salkeld Mine No. 1 is also equipped to furnish screened coal.

WESTMORELAND COAL COMPANY

PRINCIPAL OFFICE
224 South Third Street
Philadelphia, Pa.

SHIPPING PORTS
Philadelphia, Pa., Baltimore, Md.
South Amboy, N. J.

Miners and Shippers of
"WESTMORELAND"
GAS COAL



For Use in
ILLUMINATING GAS RETORTS
GAS PRODUCERS
HIGH PRESSURE STEAMING
KILN FIRING
RAILROAD LOCOMOTIVES

Mines on the Pennsylvania Railroad in Westmoreland County, Penna.

Location of Mines

Our operating headquarters are at Irwin, Pa., 21 miles east of Pittsburgh, on the main line of the Pennsylvania Railroad in Westmoreland County, Pa. We operate the well known "Pittsburgh" Seam, in the district within a radius of ten miles from Irwin, known as the "Irwin Gas Coal Basin."



"Westmoreland" Gas Coal

The coal in this basin has certain marked characteristics; geologically it is uniform in occurrence, and the seam has a thickness throughout of about six feet; physically, the coal is hard and blocky; chemically, it is free from impurities and rich in hydrocarbons.

Preparation

Throughout all our mining operations the greatest care is taken that all impurities, tending to increase the ash or sulphur content, be excluded

from the coal as loaded on the railroad cars. No expense is spared, either inside or outside the mine to insure the loading of a clean, pure fuel.

To assist our operating department, we maintain a force of skilled chemists, and a fully equipped laboratory. Our chemists take samples regularly, both inside the mine, and outside as the coal is loaded into the railroad car. Frequent reports of the results of these analyses assure our management that each individual mine is keeping up to our high standard of preparation.

Production

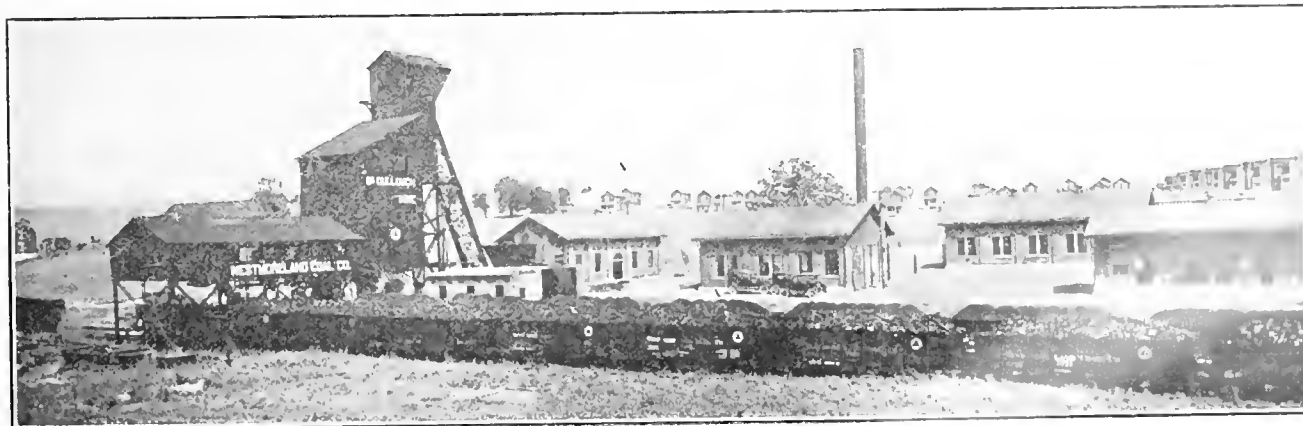
The capacity of our mines is 5,000,000 tons annually. This coal is shipped in three sizes: Run of Mine, $\frac{3}{4}$ " Screened, and Slack.

Our Run of Mine Coal is used extensively for railroad locomotives, especially in passenger train service. In fact, it excels wherever rapid steaming is required.

A large share of the $\frac{3}{4}$ " Screened Gas Coal goes to Illuminating Gas Plants throughout the Eastern United States. Our Gas Coal has been the standard for use in gas-making since our mines were opened in 1854. It is also largely used in Gas Producers in the steel and glass industries.

Our Slack Coal is especially adapted for use in stoker fired steaming plants where a large output at certain periods in the day demands that the boilers be worked with heavy overloads. Its rate of combustion when forced, and freedom from clinkering permits this overloading without heavy expense for boiler repairs.

In fact, for any use where a high volatile fuel of purity and high calorific value is demanded, the Westmoreland Coal Company's "Westmoreland" Gas Coal has no equal.



McCullough Mine

WATKINS COAL COMPANY

Sales Office
366 Madison Avenue
New York



Mine Office
Barnesboro, Pa.

STANDARDIZED

UNIFORM QUALITY

RELIABLE SERVICE

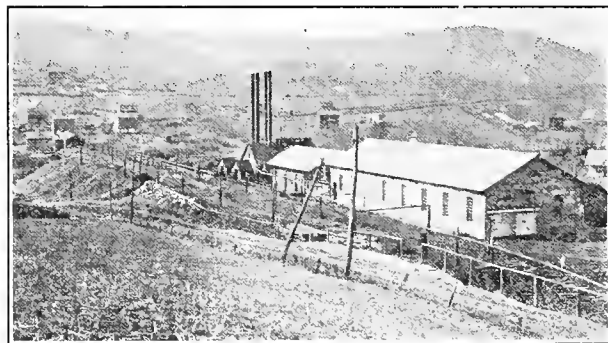
Location of Mines and Seams Worked

The Watkins Mines are located on the Pennsylvania Railroad in the Barnesboro Basin, Cambria County, Pa. WATKINS No. 1 near Barnesboro operates the "D" (Lower Freeport) and "E" (Upper Freeport) Seams. WATKINS No. 3 near Bakerton operates the "B" (Lower Kittanning) Seam.

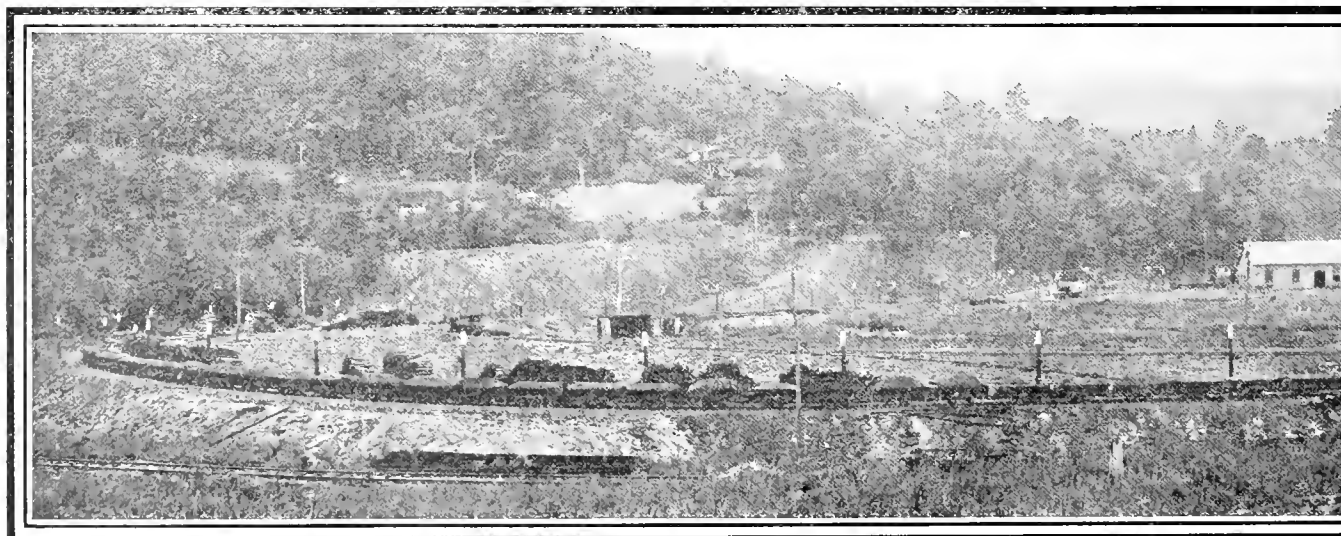
The coal produced is a high-grade run of mine steam coal, which will stand up under the heaviest forcing and do satisfactory work on any type of stoker.

Constant and most careful attention is given to the preparation.

Shipments take the Clearfield, or lowest, freight rate to eastern points.



Buildings and Tipple Watkins No. 1 Mine



Watkins No. 3 Mine



View of Watkins Village

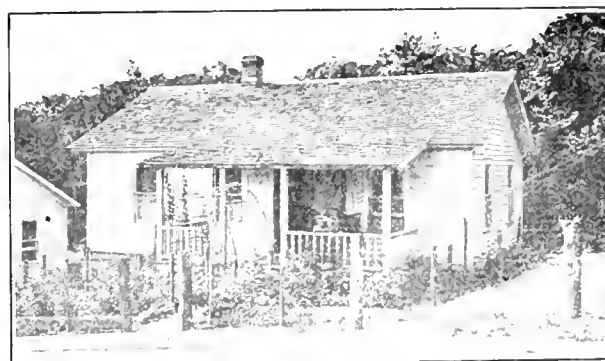
Analyses*

Analyses furnished us recently by customers are as follows:

	Watkins No. 1 "D" and "E" Seams	Watkins No. 2 "B" Seam
Volatile Matter	24.30	20.53
Fixed Carbon	68.80	71.97
Ash	6.90	7.50
	<hr/>	<hr/>
	100.00	100.00
Sulphur	1.22	1.96
B.t.u.	14,480	14,538

*Analyses made on dry samples.

The samples from which these analyses were made were taken by customers from shipments made them.



Cottage Watkins Village



Watkins No. 3 Mine

List of Mines By Seams, Including Name of Company, General Office Address
County, Railroad and Shipping Point

PENNSYLVANIA---BITUMINOUS

BARNETT SEAM

Mined in Broad Top district. Semibituminous. Suitable for Smithing, Locomotive Fuel, Export, Bunker, Producer Gas, Domestic and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Black, A. J., Coal Co.	Broad Top City, Pa.	Black No. 4	Huntingdon	H. & E. T. M.	Dudley, Pa.
Black, A. J., Coal Co.	Broad Top City, Pa.	Black No. 5	Huntingdon	H. & E. T. M.	Dudley, Pa.
Black, A. J., Coal Co.	Broad Top City, Pa.	Fisher No. 2	Huntingdon	H. & E. T. M.	Dudley, Pa.
Broad Top Coal & Mineral Co.	Huntingdon, Pa.	Jacobs	Huntingdon	E. Broad Top, J. & S.	Jacobs, Pa.
Bunker Hill Coal Co.	Huntingdon, Pa.	Bunker Hill	Bedford	H. & E. T. M.	Bommell, Pa.
Carbon Coal & Coke Co.	85 Devonshire St., Boston, Mass.	Cambria No. 3	Bedford	H. & E. T. M.	Hopewell, Pa.
Carbon Coal & Coke Co.	85 Devonshire St., Boston, Mass.	Ocean No. 5	Huntingdon	H. & E. T. M.	Dudley, Pa.
Carbon Coal & Coke Co.	85 Devonshire St., Boston, Mass.	Carbon No. 5	Huntingdon	H. & E. T. M.	Dudley, Pa.
Eichelberg, E. & Co.	Saxton, Pa.	Bacon No. 1	Bedford	P. R. R.	Rommell Sta., Pa.
Eichelberg, E. & Co.	Saxton, Pa.	Bacon No. 2	Bedford	P. R. R.	Rommell Sta., Pa.
Jonathan Coal Mining Co.	102 Franklin Bank Bldg., Philadelphia, Pa.	Jonathan	Huntingdon	H. & E. T. M.	Dudley, Pa.
Kay Coal Mining Co.	Everett, Pa.	Octoraro No. 1	Bedford	H. & E. T.	Riddlesburg, Pa.
Kay Coal Mining Co.	Everett, Pa.	Octoraro No. 2	Bedford	H. & E. T.	Riddlesburg, Pa.
Kay Coal Mining Co.	Everett, Pa.	Rock Bar	Bedford	H. & E. T.	Riddlesburg, Pa.
Kenrock Coal Co.	Philadelphia, Pa.	Kenrock	Huntingdon	H. & E. T. M.	Dudley, Pa.
Langdon Coal Co.	Huntingdon, Pa.	Cambria No. 1	Bedford	H. & E. T. M.	Hopewell, Pa.
Langdon Coal Co.	Huntingdon, Pa.	Glendale No. 1	Bedford	H. & E. T. M.	Hopewell, Pa.
Langdon Coal Co.	Huntingdon, Pa.	Glendale No. 4	Bedford	H. & E. T. M.	Rommell, Pa.
McIntyre, James M. & Co.	Six Mile Run, Pa.	Shrove Run No. 2	Bedford	H. & E. T.	Rommell, Pa.
Miller, J. H.	Lewistown, Pa.	Zeller	Huntingdon	E. B. & P.	Cobs, Pa.
Rockhill Coal & Iron Co.	Philadelphia, Pa.	No. 8	Huntingdon	E. B. & C. Co.	Robertdale, Pa.
Shanil Coal Co.	Saxton, Pa.	Shanil	Bedford	H. & E. T. M.	Riddlesburg, Pa.
Shannon Company	Dudley, Pa.	Martha Drift	Huntingdon	H. & E. T. M.	Dudley, Pa.
Thropp, Joseph E.	Everett, Pa.	Barnett No. 3	Bedford	H. & E. T.	Kearney & Hopewell, Pa.
Thropp, Joseph E.	Everett, Pa.	Melrose No. 1	Huntingdon	H. & E. T.	Melrose & Dudley, Pa.
Thropp, Joseph E.	Everett, Pa.	Melrose No. 2	Huntingdon	H. & E. T.	Kearney & Hopewell, Pa.

BERLIN SEAM

Mined in Somerset county. Semibituminous rank. Suitable for Producer Gas, Smithing, Locomotive Fuel, Bunker, Domestic and Export uses. Known as Smokeless Coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Consolidation Coal Co., The	New York, N. Y.	Consolidation No. 113	Somerset	B. & O.	Consolidation No. 113, Pa.
Ginder Coal Co., Inc.	Berlin, Pa.	Gladys	Somerset	B. & O.	Berlin, Pa.
Hillside Coal Co.	Garrett, Pa.	Thodore	Somerset	B. & O.	Garrett, Pa.
Pine Hill Fuel Co.	Meyersdale, Pa.	Gambert No. 2	Somerset	B. & O.	Pine Hill, Pa.
Quality Smokeless Coal Co.	Meyersdale, Pa.	Quality No. 2	Somerset	B. & O.	Pine Hill, Pa.
Ram, J. O.	Berlin, Pa.	Ram No. 1	Somerset	B. & O.	Berlin, Pa.
Ram, J. O.	Berlin, Pa.	Ram No. 2	Somerset	B. & O.	Berlin, Pa.
Rensberg Coal Co.	Garrett, Pa.	Garrett	Somerset	B. & O.	Garrett, Pa.

BLOSS SEAM

Mined in Tioga county. Semibituminous. Suitable for Smithing, Steam, Locomotive Fuel, Export, Bunker, Producer Gas and Domestic Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Bloss Vein Coal Co., Inc.	Geneva, N. Y.	Bloss Vein	Tioga	N. Y. C. & Erie	Blossburg, Pa.
Blossburg Coal Co.	Scranton, Pa.	No. 1	Tioga	Erie	Arnot, Pa.
Blossburg Coal Co.	Scranton, Pa.	No. 2	Tioga	Erie	Arnot, Pa.
Blossburg Coal Co.	Scranton, Pa.	No. 5	Tioga	Erie	Arnot, Pa.
Blossburg Coal Co.	Scranton, Pa.	Maple Hill	Tioga	Erie	Arnot, Pa.
Burgess England Coal Co.	Wellsboro, Pa.	Lundquist	Tioga	N. Y. C. & Erie	Morris, Pa.
Fail Brook Coal Co.	Corning, N. Y.	'Anna S'	Tioga	N. Y. C. & H. R.	Antrim, Pa.
Flower Run Coal Co.	Blossburg, Pa.	Flower Run	Tioga	Erie	Blossburg, Pa.
Morris Run Coal Mining Co.	Wilkes-Barre, Pa.	Lake Jones	Tioga	N. Y. C. & H. R.	Morris Run, Pa.
Morris Run Coal Mining Co.	Wilkes-Barre, Pa.	Morris Run	Tioga	N. Y. C. & Erie	Morris Run, Pa.
Novak Coal Co.	Blossburg, Pa.	Jenkins	Tioga	N. Y. C. & H. R.	Blossburg, Pa.
O'Donnell Brothers	Morris Run, Pa.	East 1	Tioga	N. Y. C. & H. R.	Morris Run, Pa.
O'Donnell Brothers	Morris Run, Pa.	East 2	Tioga	N. Y. C. & H. R.	Morris Run, Pa.
O'Donnell Brothers	Morris Run, Pa.	East 3	Tioga	N. Y. C. & H. R.	Morris Run, Pa.
O'Donnell Brothers	Morris Run, Pa.	East No. 4	Tioga	N. Y. C. & H. R.	Morris Run, Pa.

BROOKVILLE SEAM (Known also as the **A SEAM**; believed that this horizon is represented by the **COOK** or **FULTON SEAM** in Huntingdon and Bedford counties; the **CUSHMAN** or **SEYMOUR SEAM** in Tioga county; the **PARDOE** in Mercer and Butler counties; and the **CLERMONT** in Elk, Forest and McKean counties)

Mined in the Snow Shoe, Clearfield, Reynoldsville, Allegheny River and Broad Top districts. Bituminous rank in western counties; Semibituminous in eastern. Suitable for Producer Gas, Locomotive Fuel, Domestic and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Allegheny River Mining Co.	Kittanning, Pa.	Conifer	Jefferson	P. & S. R. R.	Conifer, Pa.
Annapolis Coal Co.	Smithport, Pa.	Erle No. 1	Butler	R. & L. E.	Annapolis, Pa.
Argentine Coal Co.	Pittsburgh, Pa.	Maple Furnace	Butler	R. & L. E.	Phillipsburg, Pa.
Atterton Barnes Co.	Phillipsburg, Pa.	Belfast	Centre	N. Y. C.	Phillipsburg, Pa.
Atlantic Coal Co.	Marysville, Pa.	Atlanta No. 2	Somerset	B. & O.	Academy on 2 Siding Pa.
Axellina Coal Co.	Montdale, Pa.	No. 1	Clearfield	P. R. R.	Houtzdale, Pa.
Blair Bros. Coal Co.	Tyone, Pa.	Orient No. 3	Centre	Penna.	Sandy Ridge, Pa.
Blue Run Coal Co.	Clarion, Pa.	Blue Run No. 1	Clearfield	N. Y. C.	Glen Hop, Pa.
Boston Mining Co.	Groveville, Pa.	Boston	Butler	R. & L. E.	Argentine, Pa.
Bruin Coal Co.	Cratton, Pa.	Bruin	Butler	R. & O.	Bruin, Pa.
Butts Canal Coal Co.	Cleveland, O.	Bessemer	Butler	R. & L. E.	Annapolis, Pa.
Cann Coal Co.	Stoneboro, Pa.	Carver	Mercer	N. Y. C.	Summerville, Pa.
Carrier Brothers & Co.	Summerville, Pa.	Wysc.	Jefferson	L. E. F. & C.	Summerville, Pa.
Caswin Coal Mining Co.	Philadelphia, Pa.	Caswin No. 1	Clearfield	Penna.	Oscola Mills, Pa.
Cedar Hill Coal Mining Company	Harrison Bldg., Philadelphia, Pa.	Mt. Branch	Clearfield	Penna.	Oscola Mills, Pa.
Clarence Coal Co.	Clarence, Pa.	Clarence No. 1	Centre	Penna.	Snow Shoe, Pa.
Consolidation Coal Co. (The)	New York, N. Y.	Consolidation 108	Somerset	B. & O.	Consolidation 114, Pa.
Consolidation Coal Co. (The)	New York, N. Y.	Consolidation 111	Somerset	B. & O.	Consolidation No. 114, Pa.
Dunne Coal & Coke Co.	Pittsburgh, Pa.	N. Iron's Bridge	Butler	R. & L. E.	Nelson's Bridge, Pa.
Erle Coal Mining Co.	Butler, Pa.	Keystone No. 1 & 2	Butler	R. & L. E.	Hilliards, Pa.
Erle Coal Mining Co.	Butler, Pa.	Keystone No. 3	Butler	R. & L. E.	Annapolis, Pa.
Erle Coal Mining Co.	Butler, Pa.	Keystone No. 4	Butler	R. & L. E.	Annapolis, Pa.
Eureka Coal Co.	Di Bois, Pa.	Benzinger	Elk	Penna.	St. Marys, Pa.
Filer & Jenkins	Mercer, Pa.	Pardee No. 1	Mercer	R. & L. E.	Pardee, Pa.
Graham, John C.	Butler, Pa.	Graham	Clarion	Penna.	Sigo, Pa.
Horn, J. Edward & Co.	Phillipsburg, Pa.	Thorn S. 9	Centre	N. Y. C. & H. R.	Phillipsburg, Pa.
Klamath Coal Co.	Lock Haven, Pa.	Cummings No. 1	Clarion	L. E. F. & C.	Holden, Pa.
Krommewetter Coal Co.	St. Marys, Pa.	Krommewetter	Elk	Penna.	St. Marys, Pa.
McCullough Coal Co.	Brookwayville, Pa.	No. 1	Elk	P. S. & N.	Averyville, Pa.
McCullough Coal Co.	Brookwayville, Pa.	McCullough No. 2	Jefferson	N. Y. C.	Brookville, Pa.
McCurdy, J. H. & Son	Jackson Center, Pa.	McCurdy	Mercer	Penna.	Jackson Center, Pa.
McDonald, C. A.	Di Bois, Pa.	McDonald	Clarion	R. & O.	Arthurs, Pa.
Meadow Coal Co.	Knoxdale, Pa.	Meadow No. 1	Jefferson	P. & S.	Knoxdale, Pa.
Mercer Gas Coal Co.	Pittsburgh, Pa.	Oakes	Mercer	Penna.	Le Shung, Pa.
Mercer Iron & Coal Co.	Stoneboro, Pa.	Stoneboro No. 3	Mercer	N. Y. C.	Stoneboro, Pa.
Mercer Iron & Coal Co.	Stoneboro, Pa.	Stoneboro No. 7	Mercer	N. Y. C.	Stoneboro, Pa.
Mercer Iron & Coal Co.	Stoneboro, Pa.	Stoneboro No. 11	Mercer	Penna.	Jackson Center, Pa.
Montgomery Coal Co.	Leeshburg, Pa.	Monterey	Clarion	Penna.	W. Monterey, Pa.
Murdock, J. M. & Bro.	Johnstown, Pa.	Milford	Somerset	R. & O.	Murdock, Pa.
North East Coal Mining Co.	Pittsburgh, Pa.	North East	Butler	R. & L. E.	Argentine, Pa.
Panther Run Coal Co.	Ridgway, Pa.	Panther Run	Jefferson	Penna.	Shirwood, Pa.
Pawnee Coal Company	Brookville, Pa.	Pawnee	J. H. R.	P. & S.	Norman, Pa.
Penlee Coal Corp.	Johnstown, Pa.	Ponder No. 4	Centre	Penna. N. Y. C.	Phillipsburg, Pa.
Pennsy Coal Company	Franklin, Pa.	Dayton No. 10	J. H. R.	L. E. F. & C., Penna.	Carri r, Pa.
Pennsy Gas Coal Co.	Pittsburgh, Pa.	Pennsy	Mercer	Penna.	Leeshburg, Pa.
Powell Coal Co., Inc.	Powell, Pa.	Powell	Bradford	S. & N. Y.	Powell, Pa.
Ramsey & Scott	Reynoldsville, Pa.	Black Prince	J. H. R.	Penna.	Fuller, Pa.
Savage Fire Brick Co.	Marysville, Pa.	Glade City	Somerset	R. & O.	Marysville, Pa.
Scotiae Mining Co.	Williamsport, Pa.	Scotiae	Clinton	Penna.	Lock Haven, Pa.
Seotch Hills Coal Co.	601 Citizens Bank Bldg., Pittsburgh, Pa.	Diamond No. 3	Mercer	R. & L. E.	Grove City, Pa.
Sharon Coal & Limestone Company	Mercer, Pa.	No. 2	Lawrence	P. R. R.	Drake, Pa.
Sharon Coal & Limestone Company	Mercer, Pa.	No. 5	Mercer	Penna.	Drake, Pa.
Smooth Hill Coal Co.	Phillipsburg, Pa.	Smooth Hill	Centre	N. Y. C.	Phillipsburg, Pa.
Smythier Coal Co.	Munson, Pa.	Cutdale No. 12	Centre	N. Y. C.	Munson, Pa.
Spring Valley Coal Co.	Pittsburgh, Pa.	Spring Valley	Butler	R. & L. E.	Hilliards, Pa.
Standard Coal Co.	Butler, Pa.	Hamilton No. 3	Butler	R. & L. E.	Argentine, Pa.
Standard Coal Co.	Butler, Pa.	Roxie	Butler	R. & L. E.	Argentine, Pa.
Strattonville Coal Mining Co.	Clarion, Pa.	Strattonville	Clarion	L. E. F. C.	Strattonville, Pa.
Straub, G. B.	St. Marys, Pa.	Star	Elk	P. S. & N.	St. Marys, Pa.
Verdon Coal Co.	Oscola Mills, Pa.	Verdon	Clearfield	Penna.	Oscola Mills, Pa.
Victoria Coal Co.	311 Oliver Bldg., Pittsburgh, Pa.	Victoria No. 2	Butler	R. & L. E.	Butler, Pa.
Weld, Louis M.	Marysville, Pa.	Weld	Somerset	R. & O.	Weld, Pa.
West Branch Coal Co.	St. Marys, Pa.	Benzinger	Elk	Penna.	St. Marys, Pa.
Zenith Coal Co.	Pittsburgh, Pa.	Zenith No. 1	Butler	R. & L. E.	Butler, Pa.
Zenith Coal Co.	Pittsburgh, Pa.	Zenith No. 2	Butler	R. & L. E.	Butler, Pa.

CLARION SEAM (Known also as the **A PRIME SEAM**; believed that this horizon is represented by the **PARDOE COAL** of Butler and Mercer counties; by the **CLERMONT COAL** of Elk, Forest, Cameron and McKean counties; by the **SCRUBGRASS COAL** of Clarion, Venango and Butler counties)

Mined in the Low Grade and Shawmut districts. Bituminous rank. Suitable for Producer Gas, Locomotive Fuel, Domestic and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Anthracite Oil, Gas & Coal Co.	Philadelphia, Pa.	Jover	Jefferson	N. & C.	Baylor, Pa.
Carroll-Gat-smann Coal Co.	Lucinda, Pa.	Carroll	Clarion	R. & O.	Lucinda, Pa.
Collum, A. T.	Arthurs, Pa.	McDonald	Clarion	R. & O.	Lucinda, Pa.
Cowanshanock Mining Co.	Bradford, Pa.	Tadger	Clarion	L. E. F. & C.	Strattonville, Pa.
Dornon Coal Co.	Conestogville, Pa.	Stewarton	Fayette	R. & O.	Stewarton, Pa.
Edwena Coal Mining Co.	Baltimore, Md.	Emma	Somerset	R. & O.	Rockwood, Pa.
Fred-H Mining Co.	West Monterey, Pa.	Eagle	Clarion	Penna.	Coper Hillville
Griebel, Jos. J. & Sons	Snyderburg, Pa.	Mottmiller	Clarion	R. & O.	Lucinda, Pa.
Hill Fuel Co., The	Silgo, Pa.	Miller	Clarion	Penna.	Silgo, Pa.
James, W. J. Coal Co.	Emblenton, Pa.	Emblenton	Clarion	Penna.	Emblenton, Pa.
Lucinda Coal Co.	Warren, Pa.	Baines-Frampton	Clarion	R. & O.	Lucinda, Pa.
Oak Valley Coal Co.	Brookville, Pa.	Oak Valley	Jefferson	N. Y. C. Penna.	Oak Valley, Pa.
O'Neill, H. & Co.	Lucinda, Pa.	O'Neill	Clarion	R. & O.	Lucinda, Pa.
Osterried Coal Co.	Lucinda, Pa.	Osterried	Clarion	R. & O.	Lucinda, Pa.
Pine Run Coal Co.	New Bethlehem, Pa.	No. 2	Clarion	Penna.	Pine Run Landing
Riverside Coal Co.	New Castle, Pa.	Piney Creek	Clarion	N. Y. C.	Andison, Pa.
Schill, J. A. & Co.	Uniontown, Pa.	Bailey	Fayette	R. & O.	Ohioville, Pa.
Welsh Run Coal Co.	Lucinda, Pa.	Sandy Ridge	Clarion	R. & O.	Schill's, Pa.
Tidal Valley Coal Co.	Brookville, Pa.	Welsh Run	Jefferson	N. Y. C.	Summerville, Pa.
Windfield Coal Co.	Tidal, Pa.	Riverside	Armstrong	P. R. R.	Rimberton, Pa.
	2915 Oliver Bldg., Pittsburgh, Pa.	Wen Windfield	Butler	R. & L. E.	Wen Windfield, Pa.

FREEPORT, LOWER SEAM (Known also the D SEAM; MOSHANNON COAL in Clearfield and Center Counties; LIMESTONE COAL in southern Cambria county; SCHANTZ COAL in Butler County)

Mined in the Snowshoe, Clearfield, Reynoldsville, Low Grade Division, Shawmut, Cambria, Two Lick, Indiana, Allegheny River, Johnstown and Southfork-Windber districts. Bituminous rank in western counties; Semibituminous in eastern counties. Suitable by localities for Bunker, Cement Burning, By-product Coking, Bee-hive Coking, Domestic, Export, Illuminating Gas, Locomotive Fuel, Melting, Powdered Coal, Producer Gas, Smithing and Steam uses. Coals from low-volatile regions known as Smokeless.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Alberts Coal Co.	Houtzdale, Pa.	No. 1	Clearfield	Penna.	Houtzdale, Pa.
Alexander Coal Co.	Madera, Pa.	Alexander	Clearfield	Penna.	Madera, Pa.
Allegheny River Mining Co.	Kittanning, Pa.	Cadogan	Armstrong	Pgh. & Shawmut	Cadogan, Pa.
Anita Coal Mining Co.	Punxsutawney, Pa.	No. 1	Jefferson	Penna.	Anita, Pa.
Anita Coal Mining Co.	Punxsutawney, Pa.	Anita No. 2	Jefferson	Penna.	Horatio, Pa.
Atlantic Coal Mining Co.	Phillipsburg, Pa.	Atlantic	Clearfield	P. R. R., P. & S.	West Moshannon, Pa.
Barnes & Tucker Co.	Philadelphia, Pa.	Porter No. 1	Cambria	Penna.	Barnesboro, Pa.
Barnes & Tucker Co.	Philadelphia, Pa.	Lancashire No. 3	Cambria	Penna.	Barnesboro, Pa.
Barnes & Tucker Co.	Philadelphia, Pa.	Lancashire No. 7	Cambria	Penna.	Barnesboro, Pa.
Barnes & Tucker Co.	Philadelphia, Pa.	Lancashire No. 12	Cambria	Penna.	Barnesboro, Pa.
Barnes, Harry & Co.	Phillipsburg, Pa.	Tio Top	Center	N. Y. C.	Munson, Pa.
Barrett Coal Co.	Clearfield, Pa.	Barrett	Clearfield	Penna.	Clearfield, Pa.
Beachly Coal Co.	Johnstown, Pa.	Beachly No. 1	Cambria	Penna.	Portage, Pa.
Beachly Coal Co.	Johnstown, Pa.	Beachly No. 6	Cambria	Penna.	Portage, Pa.
Beachly Coal Co.	Johnstown, Pa.	Beachly No. 7	Cambria	Penna.	Portage, Pa.
Beachly Coal Co.	Johnstown, Pa.	Beachly No. 7	Cambria	Penna.	Portage, Pa.
Beagle & McCauley Coal Co.	Brookwayville, Pa.	Beagle & McCauley	Jefferson	Penna.	Brookwayville, Pa.
Beaver Coal Co.	Indiana, Pa.	Beaver No. 1	Cambria	P. R. R.	Barnesboro, Pa.
Beaver Run Coal Co.	Philadelphia, Pa.	Viking	Cambria	Penna.	Lloydell, Pa.
Becaria Coal Co.	Indiana, Pa.	Standard No. 1	Clearfield	Penna.	McGee's Mills, Pa.
Belfast Coal Co.	Punxsutawney, Pa.	Belfast	Clearfield	Penna.	Grampian, Pa.
Bellmore Coal Co.	Phillipsburg, Pa.	Bellmore No. 2	Clearfield	N. Y. C.	Burnside, Pa.
Benedictine Coal Co.	Spangler, Pa.	Emily Eliza No. 1	Cambria	Penna.	Spangler, Pa.
Bunington Coal Co.	Altoona, Pa.	Sugar Run No. 1	Cambria	Penna.	Gallitzin, Pa.
Bunington Coal Co.	Altoona, Pa.	Sugar Run No. 2	Cambria	Penna.	Gallitzin, Pa.
Bethel Coal Mining Co.	Elensburg, Pa.	Bethel	Cambria	C. & I.	Two Rocks, Pa.
Bethlehem Mines Corp.	Bethlehem, Pa.	Penn-Mary No. 1	Indiana	Penna.	Heilwood, Pa.
Bethlehem Mines Corp.	Bethlehem, Pa.	Penn-Mary No. 2	Indiana	Penna.	Heilwood, Pa.
Bethlehem Mines Corp.	Bethlehem, Pa.	Penn-Mary No. 3	Indiana	Penna.	Heilwood, Pa.
Bethlehem Mines Corp.	Bethlehem, Pa.	Penn-Mary No. 7	Indiana	Penna.	Heilwood, Pa.
Bethlehem Mines Corp.	Bethlehem, Pa.	Penn-Mary No. 8	Indiana	Penna.	Heilwood, Pa.
Bethlehem Mines Corp.	Bethlehem, Pa.	Penn-Mary No. 9	Indiana	C. & I.	Heilwood, Pa.
Bethlehem Mines Corp.	Bethlehem, Pa.	Penn-Mary No. 11	Indiana	C. & I.	Heilwood, Pa.
Bethlehem Mines Corp.	Bethlehem, Pa.	Penn-Mary No. 12	Indiana	C. & I.	Heilwood, Pa.
Bethlehem Mines Corp.	Bethlehem, Pa.	Benshoff No. 2	Cambria	Penna.	Johnstown, Pa.
Benshoff Coal Co.	139 Wilson St., Johnstown, Pa.	Benshoff No. 2	Clearfield	Penna.	Ramey, Pa.
Bermoshan Coal Company	Fulton, N. Y.	Bermoshan No. 1	Clearfield	Penna.	Ramey, Pa.
Bermoshan Coal Company	Fulton, N. Y.	Bermoshan No. 2	Clearfield	Penna.	Ramey, Pa.
Berwindle Coal Co.	Clearfield, Pa.	No. 1	Clearfield	Penna.	Berwindle, Pa.
Big Run Coal Co.	Big Run, Pa.	Big Run	Jefferson	B. R. & P.	Big Run, Pa.
Binder Bros. Coal Co.	Hastings, Pa.	Binder Bros. No. 1	Cambria	C. & C., Penna.	Hastings, Pa.
Binder Bros. Coal Co.	Hastings, Pa.	Binder Bros. No. 2	Cambria	Penna.	Hastings, Pa.
Binder Coal Mining Co.	Barnesboro, Pa.	Binder No. 2	Cambria	Penna.	Carrolltown Roads, Pa.
Bloom, Kelly D.	Curtisville, Pa.	Bloom	Clearfield	B. R. & P.	Curwensville, Pa.
Blue Run Coal Co.	Clarence, Pa.	Blue Run No. 1	Clearfield	N. Y. C.	Glen Hope, Pa.
Boucher-Cortright Coal Co.	E. averseide, Pa.	Viking	Cambria	Penna.	Lloydell, Pa.
Britton Coal Co.	Brookwayville, Pa.	Britton	Jefferson	P. & S.	Brookwayville, Pa.
Brothers Valley Coal Co.	20 West St., New York, N. Y.	Penn-Mar No. 5	Somerset	B. & O.	Macdonaldton, Pa.
Brown, W. E., Inc.	Ligonier, Pa.	Fern	Westmoreland	L. V.	Darlington, Pa.
Buffalo & Susquehanna Coal & Coke Co.	DuBois, Pa.	DuBois No. 1	Clearfield	B. & S.	DuBois, Pa.
Buffalo & Susquehanna Coal & Coke Co.	DuBois, Pa.	DuBois No. 2	Clearfield	B. & S.	DuBois, Pa.
Bulah Shaft Coal Co.	Ramey, Pa.	Bulah Shaft No. 1	Clearfield	Penna., P. & S., N. Y. C.	Ramey, Pa.
Burns Brothers	Houtzdale, Pa.	Penn No. 3	Clearfield	Penna.	Grampian, Pa.
Butterworth Brothers	Phillipsburg, Pa.	Keystone No. 1	Clearfield	Penna.	Phillipsburg, Pa.
Butterworth Brothers	Phillipsburg, Pa.	Keystone No. 2	Clearfield	Penna.	Phillipsburg, Pa.
Butterworth Brothers	Phillipsburg, Pa.	Keystone No. 3	Clearfield	Penna.	Phillipsburg, Pa.
Butterworth Brothers	Phillipsburg, Pa.	Keystone No. 4	Clearfield	Penna.	Phillipsburg, Pa.
Campbell Bidge Coal Co.	Altoona Trust Bldg., Altoona, Pa.	Jefferson No. 1	Clearfield	Penna.	Phillipsburg, Pa.
Carnwath Coal Co.	Winburne, Pa.	Carnwath No. 3	Clearfield	N. Y. C.	Carnwath, Pa.
Carnwath Coal Co.	Winburne, Pa.	Carnwath No. 2	Clearfield	N. Y. C.	Carnwath, Pa.
Carriek Coal Co.	Winburne, Pa.	No. 3	Jefferson	B. R. & P.	R. D., Punxsutawney, Pa.
Carrolltown Coal Co.	B. D., Punxsutawney, Pa.	Victor No. 1	Cambria	N. Y. C.	St. Benedict, Pa.
Carrolltown Coal Co.	St. Benedict, Pa.	Victor No. 2	Cambria	N. Y. C.	St. Benedict, Pa.
Carrolltown Coal Co.	St. Benedict, Pa.	Victor No. 3	Cambria	N. Y. C.	St. Benedict, Pa.
Carrolltown Coal Co.	St. Benedict, Pa.	Victor No. 6	Cambria	N. Y. C.	St. Benedict, Pa.
Carrolltown Coal Co.	St. Benedict, Pa.	Victor No. 12	Cambria	N. Y. C.	St. Benedict, Pa.
Cascade Coal & Coke Co.	Buffalo, N. Y.	Skewisville	Jefferson	B. & S.	Sykes, Pa.
Cassidy Coal Co.	Curwensville, Pa.	Cassidy	Clearfield	B. R. & P.	Hyde, Pa.
Charley-Frank Coal Co.	Clymer, Pa.	Charley-Frank No. 1	Indiana	C. T. & D.	Clymer, Pa.
Cherry Tree Coal Co.	St. Benedict, Pa.	Victor No. 15	Cambria	N. Y. C.	Emsigh, Pa.
Cherry Tree Coal Co.	St. Benedict, Pa.	Victor No. 17	Cambria	N. Y. C.	Emsigh, Pa.
Clark, H. E.	Glen Campbell, Pa.	Indiana	Indiana	Penna., N. Y. C.	Glen Campbell, Pa.
Clearfield Bituminous Coal Corp.	Indiana, Pa.	Barr	Indiana	N. Y. C. & H. R.	Dixonville, Pa.
Clearfield Bituminous Coal Corp.	Indiana, Pa.	Sample Run	Indiana	N. Y. C. & H. R.	Clymer, Pa.
Clearfield Bituminous Coal Corp.	Indiana, Pa.	West Branch	Cambria	N. Y. C.	Barnesboro, Pa.
Clearfield Colliery Co.	Clearfield, Pa.	Caldwell	Clearfield	N. Y. C. & H. R.	Rowles Sta., Pa.
Coal Run Mining Company	Indiana, Pa.	Coal Run No. 1	Indiana	B. R. & P.	Coal Run Sw., McIntyre, Pa.
Conquest Coal Mining Co.	Phillipsburg, Pa.	Conquest No. 1-C	Clearfield	Penna., N. Y. C.	Phillipsburg, Pa.
Consolidated Coal & Coke Co.	Butler, Pa.	Consolidated No. 2	Butler	B. R. & P.	Fenelton, Pa.
Consolidated Coal & Coke Co.	Butler, Pa.	Consolidated No. 4	Butler	B. R. & P.	Fenelton, Pa.
Crescent Refractories Co.	Curwensville, Pa.	Rowles No. 1	Clearfield	N. Y. C.	Curwensville, Pa.
Crescent Refractories Co.	Curwensville, Pa.	No. 4	Clearfield	B. R. & P.	Curwensville, Pa.
Cumberland Smokeless Coal Co.	Cumberland, Md.	Owl Hill	Somerset	W. Md.	Confluence, Pa.
Cushake Coal Mining Co.	Burnside, Pa.	Cushake	Clearfield	Penna.	Burnside, Pa.
Cymbria Coal Co.	Philadelphia, Pa.	Cymbria No. 1	Cambria	Penna.	Barnesboro, Pa.
Cymbria Coal Co.	Philadelphia, Pa.	Cymbria No. 2	Cambria	Penna.	Barnesboro, Pa.
Dahlin Bros. Coal Co.	Houtzdale, Pa.	Stanley	Clearfield	Penna.	Houtzdale, Pa.
Denro Coal Mining Co., Inc.	Phillipsburg, Pa.	Alden No. 2	Clearfield	N. Y. C.	Curwensville, Pa.
Denro Coal Mining Co., Inc.	Phillipsburg, Pa.	Alden No. 3	Clearfield	N. Y. C.	Curwensville, Pa.
Derby Branch Coal Co.	Phillipsburg, Pa.	Colorado No. 1	Clearfield	Penna.	Phillipsburg, Pa.
Deringer Bros.	Spangler, Pa.	Woodland Col. No. 2	Cambria	N. Y. C.	Garman, Pa.
Deringer Coal Mining Co.	Spangler, Pa.	Woodland No. 4	Cambria	N. Y. C.	Spangler, Pa.
Dill Coal Co.	Barnesboro, Pa.	"Chapman"	Cambria	Penna.	Barnesboro, Pa.
Dixonville Coal Co.	Johnstown, Pa.	Randolph No. 2	Indiana	N. Y. C.	Dixonville, Pa.
Dun-an-Spangler Coal Co.	205 Finance Bldg., Philadelphia, Pa.	Delta No. 1	Cambria	Penna.	Barnesboro, Pa.
Dun-an-Spangler Coal Co.	205 Finance Bldg., Philadelphia, Pa.	Delta No. 2	Cambria	Penna.	Barnesboro, Pa.

(Continued on Next Page)

FREEPORT, LOWER SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Dunham Spangler Coal Co.	305 Finance Bldg., Philadelphia, Pa.	Blubbaker No. 13	Cambria	Penn.	Spangler, Pa.
Dunham, Fred J.	Philadelphia, Pa.	Sheridan No. 1	Center	P. & S.	Philadelphia, Pa.
Dunham, Fred J.	Philadelphia, Pa.	Sheridan No. 2	Center	P. & S.	Philadelphia, Pa.
Dunsmore, R. P.	Philadelphia, Pa.	Chia No. 2	Clearfield	N. Y. C.	Philadelphia, Pa.
Ealy, E. T.	Barnesboro, Pa.	Lady No. 1	Cambria	Penn.	Barnesboro, Pa.
Electric Coal Co.	Glen Campbell, Pa.	Electric No. 7	Indiana	N. Y. C.	Glen Campbell, Pa.
Electric Coal Co.	Glen Campbell, Pa.	Electric No. 8	Indiana	N. Y. C.	Glen Campbell, Pa.
Ellery Coal Mining Co.	Grandman, Pa.	Coalade No. 15	Clearfield	N. Y. C.	Grandman, Pa.
Ellery-Schaefer Mining Co.	New York, N. Y.	Coalade No. 16	Clearfield	Penn.	Grandman, Pa.
Ellsworth Dunham Coal Co.	St. Benedict, Pa.	Victor No. 11	Indiana	N. Y. C.	Archde, Pa.
Ellsworth Dunham Coal Co.	St. Benedict, Pa.	Victor No. 14	Indiana	N. Y. C.	Archde, Pa.
Emma Coal Mining Co.	Nanty Glo, Pa.	Emma	Cambria	C. & L.	Nanty Glo, Pa.
Empire Coal Mining Co.	Philadelphia, Pa.	Empire A	Cambria	N. Y. C.	Barnesboro, Pa.
Empire Coal Mining Co.	Philadelphia, Pa.	Empire D	Indiana	N. Y. C.	Clymer, Pa.
Empire Coal Mining Co.	Philadelphia, Pa.	Empire G	Cambria	N. Y. C.	Garman, Pa.
Empire Coal Mining Co.	Philadelphia, Pa.	Empire L	Indiana	N. Y. C.	Idamar, Pa.
Equitable Coal Co.	Pittsburgh, Pa.	Harwick	Indiana	Penn., B. & E.	Cheswick, Pa.
Estep Bros. Coal Mining Co.	Boston, Mass.	Millbar No. 1	Clearfield	N. Y. C.	Hixonsville, Pa.
Eureka Coal Co.	Du Bois, Pa.	Falls Creek	Clearfield	Penn.	Falls Creek, Pa.
Excelsior Coal Co., Inc.	Kittanning, Pa.	Kelly	Armstrong	Penn.	Kelly, Pa.
Falcon No. 3 Mining Corp.	Glen Campbell, Pa.	Falcon No. 3	Clearfield	Penn.	Smoke Run, Pa.
Falk Coal Co.	Houtzdale, Pa.	Prospect No. 2	Clearfield	Penn.	Houtzdale, Pa.
Fenilton Coal Trust	Du Bois, Pa.	Fenilton	Butler	Penn.	Fenilton, Pa.
Fernhill Coal Co.	Johnstown, Pa.	No. 1	Cambria	Penn.	Johnstown, Pa.
Fort Hill Coal Co.	Johnstown, Pa.	Fort Hill	Somerset	Penn.	Fort Hill, Pa.
Frostburg Coal Co.	Punxsutawney, Pa.	Walton No. 6	Jefferson	Penn.	Punxsutawney, Pa.
Gaskill Coal Co.	Punxsutawney, Pa.	No. 2	Jefferson	Penn.	Big Run, Pa.
Gasley Coal Co.	Houtzdale, Pa.	Gasley No. 2	Clearfield	Penn., P. & S. (N. Y. C.)	Brishin, Pa.
Georges Creek-Parker Coal Co., The	Baltimore, Md.	Ritter No. 1	Somerset	Penn.	Coleman, Pa.
Georges Creek-Parker Coal Co., The	Baltimore, Md.	Ritter No. 2	Somerset	Penn.	Johnstown, Pa.
Glen Dale Coal Co.	Johnstown, Pa.	Glen Dale	Cambria	Penn.	Ivona, Pa.
Glen Hope Coal Mining Co.	Glen Hope, Pa.	Glen Hope No. 1	Clearfield	N. Y. C. & H. R.	Bucoside, Pa.
Glenwood Coal Co.	Philadelphia, Pa.	Glenwood No. 10	Clearfield	Penn.	Glen Campbell, Pa.
Glenwood Coal Co.	Philadelphia, Pa.	Glenwood No. 14	Clearfield	Penn.	R. H. Landig, Pa.
Good Clay & Coal Co.	Patton, Pa.	Good A-22	Clearfield	N. Y. C.	New Millport, Pa.
Good Clay & Coal Co.	Patton, Pa.	Good No. 23	Clearfield	Penn.	Ramey, Pa.
Good Clay & Coal Co.	Patton, Pa.	Good No. 24	Clearfield	Penn.	Surayor, Pa.
Goshen Coal Co.	Clearfield, Pa.	Goshen No. 2	Clearfield	N. Y. C.	Surayor, Pa.
Goshen Coal Co.	Clearfield, Pa.	Goshen No. 3	Clearfield	N. Y. C.	Brishin, Pa.
Gould, W. A. & Bro.	Brishin, Pa.	Midvale No. 1	Clearfield	P. R. R.	Brishin, Pa.
Gould, W. A. & Bro.	Brishin, Pa.	Midvale No. 3	Clearfield	P. R. R.	Brishin, Pa.
Gould, W. A. & Bro.	Brishin, Pa.	Midvale No. 4	Clearfield	Penn.	Tarentum, Pa.
Haas Coal Co.	Natrona, Pa.	Haas	Allegheny	Penn.	Grampton, Pa.
Halden-Kelley Coal Co.	Clearfield, Pa.	Lower Moshannon	Clearfield	Penn.	Clearfield, Pa.
Haney Coal Co.	Clearfield, Pa.	Ham No. 1	Clearfield	N. Y. C.	Philadelphia, Pa.
Harris, Wm. Coal Co.	Philadelphia, Pa.	Land No. 1	Cambria	Penn.	Kimport, Pa.
Hastings Coal & Coke Co.	Cherry Tree, Pa.	Kimport No. 2	Cambria	Penn.	Kimport, Pa.
Hastings Coal & Coke Co.	Cherry Tree, Pa.	Kimport No. 2	Elk	Penn.	Kersey, Pa.
Haw Coal Co.	St. Marys, Pa.	Haw	Clearfield	Penn.	Philadelphia, Pa.
Hawkins Coal Co.	Philadelphia, Pa.	Hawkins No. 1	Clearfield	Penn.	Rockwood, Pa.
Hays Coal Co.	Rockwood, Pa.	Hays	Somerset	Penn.	Conifer, Pa.
Helena Coal Co.	Ryanoldsville, Pa.	Helena No. 1	Jefferson	P. & S.	Conifer, Pa.
Helena Coal Co.	Ryanoldsville, Pa.	Helena No. 2	Jefferson	P. & S.	Conifer, Pa.
Henrietta Coal Co.	Houtzdale, Pa.	Henrietta No. 5	Clearfield	Penn.	Houtzdale, Pa.
Herd, Herd & Son	Connellsville, Pa.	Herd	Fayette	Penn.	Power, Pa.
Hillcrest Smokeless Coal Co.	Hooversville, Pa.	Hillcrest	Somerset	Penn.	Stoyestown, Pa.
Hines Coal Co.	Philadelphia, Pa.	Hines No. 7	Indiana	N. Y. C.	Starford, Pa.
Hopkins Coal Co.	Lock Haven, Pa.	Hopkins No. 2	Clearfield	Penn.	Du Bois, Pa.
Hudson Coal Company	Punxsutawney, Pa.	Hudson	Jefferson	Penn.	Winslow, Pa.
Inland Coal Co.	Greensburg, Pa.	Greenwich No. 2	Cambria	Penn.	Garman, Pa.
Inland Coal Co.	Greensburg, Pa.	Greenwich No. 3	Cambria	Penn.	Garman, Pa.
Jacobs, T. J.	Somerset, Pa.	Jacobs	Fayette	Penn.	Somerset, Pa.
Jasabill Coal Mining Co.	Johnstown, Pa.	Flint No. 1	Cambria	Penn.	Flint, Pa.
Jefferson & Clearfield Coal & Iron Co.	Indiana, Pa.	McIntire	Indiana	Penn.	McIntire, Pa.
Jefferson Coal Co.	South Bethlehem, Pa.	Jefferson	Jefferson	Penn.	Coal Glen, Pa.
Jefferson Fuel Co.	Brookwayville, Pa.	Perry No. 1	Jefferson	Penn.	Valley, Pa.
Jones Coal Co.	Indiana, Pa.	Yellow Creek	Indiana	Penn.	Indiana, Pa.
Keys, W. A. Coal Co.	Brookwayville, Pa.	Logue	Jefferson	Penn.	Brookwayville, Pa.
Laing, John E. Coal Co.	Du Bois, Pa.	Laing	Clearfield	Penn.	Laing, Pa.
Lakeside Coal Co.	Seranton, Pa.	Lakeside	Clearfield	Penn.	Braxendale, Pa.
Lane Coal Co.	Philadelphia, Pa.	Lane Colliery No. 5	Clearfield	N. Y. C.	Munson, Pa.
Leland Coal Mining Co.	12 Broadway, New York, N. Y.	Leland No. 9	Clearfield	Penn.	Smoke Run, Pa.
Leland Coal Mining Co.	12 Broadway, New York, N. Y.	Leland No. 10	Clearfield	Penn.	Smoke Run, Pa.
Liberty Coal Mining Co.	Madra, Pa.	Eighteen	Clearfield	Penn.	Madera, Pa.
Liberty Coal Mining Co.	Madra, Pa.	Gammas No. 1	Clearfield	Penn.	Heverly, Pa.
Liberty Coal Mining Co.	Madra, Pa.	Gammas No. 2	Clearfield	Penn.	Heverly, Pa.
Liberty Coal Mining Co.	Madra, Pa.	Gammas No. 3	Clearfield	Penn.	Heverly, Pa.
Liberty Coal Mining Co.	Madra, Pa.	King	Clearfield	Penn.	Madera, Pa.
Liberty Smokeless Coal Co.	Johnstown, Pa.	Liberty No. 1	Cambria	Penn., B. & O.	Johnstown, Pa.
Light Coal Mining Co.	Punxsutawney, Pa.	Light No. 1	Jefferson & Ind.	Penn.	Valley, Pa.
Lingood Mining Co.	Patton, Pa.	Lindsey No. 1	Jefferson	Penn.	Lindsey, Pa.
Lingood Coal Co.	Brishin, Pa.	Sunset No. 1	Cambria	N. Y. C.	St. Benedict, Pa.
Lobb, Walter & Brothers	Brishin, Pa.	Lobb No. 1	Clearfield	Penn.	Brishin, Pa.
Lobb, Walter & Brothers	Brishin, Pa.	Lobb No. 2	Clearfield	Penn.	Brishin, Pa.
Lobb, Walter & Brothers	Brishin, Pa.	Lobb No. 3	Clearfield	Penn.	Brishin, Pa.
Logan Coal Company	502 Harrison Bldg., Philadelphia, Pa.	Logan No. 6	Cambria	Penn.	Lloyd, Pa.
Lost Run Coal Mining Co.	Munson, Pa.	Logan No. 8	Cambria	Penn.	Lloyd, Pa.
Low Coal Co.	Youngwood, Pa.	Lost Run No. 1	Clearfield	Penn.	Madira Hill, Pa.
McAllen Coal Co.	Garrett, Pa.	Low	Westmoreland	Penn.	Youngwood, Pa.
McDonald, C. A.	Du Bois, Pa.	Garvey	Somerset	Penn.	Garrett, Pa.
McDonald, C. A.	Du Bois, Pa.	Pochebster	Clearfield	Penn.	Falls Creek, Pa.
McPetridge Bros. Coal Co.	Du Bois, Pa.	New Rochester	Clearfield	Penn.	Falls Creek, Pa.
McKnight Coal Co.	Creighton, Pa.	McPetridge	Allegheny	Penn.	Creighton, Pa.
McKnight Coal Co.	Brookwayville, Pa.	McKnight No. 1	Jefferson	Penn.	Brookwayville, Pa.
McKnight Coal Co.	Brookwayville, Pa.	McKnight No. 2	Jefferson	Penn.	Brookwayville, Pa.
Mackelvon Coal Mining Co.	Cassola Mills, Pa.	Center No. 1	Clearfield	Penn.	Brookwayville, Pa.
Maderia Hill Smithing Coal Co.	Philadelphia, Pa.	Maderia Slope No. 1	Somerset	Penn.	Brookwayville, Pa.
Mahoney, C. C.	Uniontown, Pa.	Mahoney	Fayette	Penn.	Brookwayville, Pa.
Maryland Coal & Coke Co., Inc.	Philadelphia, Pa.	Shoff	Clearfield	Penn.	Brookwayville, Pa.
Millar Coal Co.	Boston, Mass.	Miller No. 1	Indiana	N. Y. C.	Brookwayville, Pa.
Miller, Clark S.	Normalville, Pa.	Miller	Fayette	Penn.	Brookwayville, Pa.
Mills, Chas. W.	1210 Land Title Bldg., Philadelphia, Pa.	Climax No. 3	Indiana	Penn.	Brookwayville, Pa.
Moore Bros. Coal Co.	Madera, Pa.	Moore No. 1	Susquehanna	N. Y. C.	Brookwayville, Pa.
Moshannon Creek Coal Mining Co.	Philadelphia, Pa.	Moshannon Creek	Centre	Penn.	Brookwayville, Pa.
Moshannon-Smithing Coal Co.	Clearfield, Pa.	Glenmar No. 1	Clearfield	Penn.	Brookwayville, Pa.
Mount Hope Coal & Coke Co.	Emporium, Pa.	Mount Hope No. 1	Cambria	Penn.	Brookwayville, Pa.
Nyers Coal Co.	Houtzdale, Pa.	Vulcan No. 3	Clearfield	Penn.	Brookwayville, Pa.
Noerr F. B.	Punxsutawney, Pa.	Noerr	Jefferson	Penn.	Brookwayville, Pa.

(Continued on Next Page)

FREEPORT, LOWER SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Northwestern Mining & Exchange Co.	Scranton, Pa.	Dagus.	Elk.	Erie.	Toby Mines, Pa.
Northwestern Mining & Exchange Co.	Scranton, Pa.	Kyle No. 3.	Elk.	Erie.	Toby Mines, Pa.
Northwestern Mining & Exchange Co.	Scranton, Pa.	Eureka No. 3.	Elk.	Erie.	Toby Mines, Pa.
Northwestern Mining & Exchange Co.	Scranton, Pa.	Toby No. 3.	Elk.	Erie.	Toby Mines, Pa.
Northwestern Mining & Exchange Co.	Scranton, Pa.	Clarion No. 4.	Jefferson.	Erie.	Crenshaw, Pa.
Northwestern Mining & Exchange Co.	Scranton, Pa.	Eriton.	Clearfield.	Erie.	Eriton, Pa.
Northwestern Mining & Exchange Co.	Scranton, Pa.	Granville.	Jefferson.	Erie.	Brockwayville, Pa.
Nugent Coal Co.	Morrisdale, Pa.	Nugent No. 1.	Clearfield.	Penna.	McCartney, Pa.
Oak Ridge Coal & Coke Co., Inc.	Hastings, Pa.	Oak Ridge No. 1.	Cambria.	P. R. R.	Hastings, Pa.
Oak Ridge Coal & Coke Co., Inc.	Hastings, Pa.	Oak Ridge No. 7.	Cambria.	Penna.	Hastings, Pa.
O'Donnell, C. V., Sr.	Midland, Va.	No. 2.	Clearfield.	P. & S.	Philipsburg, Pa.
Onondaga Coal Mining Co.	Buffalo, N. Y.	Onondaga.	Jefferson.	B. & S.	Punkstutawney, Pa.
Pansy Coal Co.	Punkstutawney, Pa.	Pansy.	Indiana.	B. R. & P.	Valier, Pa.
Peale, Peacock & Kerr, Inc.	St. Benedict, Pa.	Glen Richey No. 1.	Clearfield.	N. Y. C. & H. R.	Mitchell's Station, Pa.
Peale, Peacock & Kerr, Inc.	St. Benedict, Pa.	Glen Richey No. 3.	Clearfield.	N. Y. C. & H. R.	Mitchell's Station, Pa.
Peale, Peacock & Kerr, Inc.	St. Benedict, Pa.	Glen Richey No. 4.	Clearfield.	N. Y. C. & H. R.	Mitchell's Station, Pa.
Peale, Peacock & Kerr, Inc.	St. Benedict, Pa.	Glen Richey No. 5.	Clearfield.	N. Y. C. & H. R.	Mitchell's Station, Pa.
Peale, Peacock & Kerr, Inc.	St. Benedict, Pa.	Glen Richey No. 6.	Clearfield.	N. Y. C. & H. R.	Mitchell's Station, Pa.
Peale, Peacock & Kerr, Inc.	St. Benedict, Pa.	Glen Richey No. 18.	Clearfield.	N. Y. C. & H. R.	Mitchell's Station, Pa.
Peale, Peacock & Kerr, Inc.	St. Benedict, Pa.	Glen Richey No. 19.	Clearfield.	N. Y. C. & H. R.	Mitchell's Station, Pa.
Peale, Peacock & Kerr, Inc.	St. Benedict, Pa.	Glen Richey No. 20.	Clearfield.	N. Y. C. & H. R.	Mitchell's Station, Pa.
Penlee Coal Corp.	Johnstown, Pa.	Penlee No. 2.	Clearfield.	Penna.	Clearfield, Pa.
Pennsylvania Coal & Coke Corp.	910 Whitehall Bldg., New York, N. Y.	Penna. No. 11.	Cambria.	Penna.	Hastings, Pa.
Pennsylvania Coal & Coke Corp.	910 Whitehall Bldg., New York, N. Y.	Penna. No. 13.	Cambria.	Penna.	Hastings, Pa.
Pennsylvania Coal & Coke Corp.	910 Whitehall Bldg., New York, N. Y.	Moss Creek No. 21.	Cambria.	Penna.	Spangler, Pa.
Pennsylvania Coal & Coke Corp.	910 Whitehall Bldg., New York, N. Y.	Penna. No. 22.	Cambria.	N. Y. C. & H. R.	Spangler, Pa.
Pennsylvania Coal & Coke Corp.	910 Whitehall Bldg., New York, N. Y.	Penna. No. 35.	Cambria.	Penna.	Patton, Pa.
Pennsylvania Coal & Coke Corp.	910 Whitehall Bldg., New York, N. Y.	Penna. No. 50.	Cambria.	Penna.	Patton, Pa.
Pennsylvania Smithing Coal Co.	New York, N. Y.	Adams.	Somerset.	B. & O.	Freeden, Pa.
Perry, P. V., Coal Co.	Scottsdale, Pa.	Westmoreland Fair.	Westmoreland.	Penna.	Youngwood, Pa.
Pine Ridge Coal Co.	1501 Finance Bldg., Philadelphia, Pa.	Ames No. 1.	Clearfield.	Penna.	La Jose, Pa.
Pine Ridge Coal Co.	1501 Finance Bldg., Philadelphia, Pa.	Ames No. 2.	Clearfield.	Penna.	La Jose, Pa.
Pine Ridge Coal Co.	1501 Finance Bldg., Philadelphia, Pa.	Ames No. 3.	Clearfield.	Penna.	La Jose, Pa.
Pine Ridge Coal Co.	1501 Finance Bldg., Philadelphia, Pa.	Ames No. 4.	Clearfield.	Penna.	La Jose, Pa.
Piper, M. K., Coal Co.	Lilly, Pa.	Piper No. 1.	Westmoreland.	B. & O.	Jones Mills, Pa.
Postlewaite, P. H.	Valier, Pa.	Postlewaite.	Jefferson.	B. R. & P.	Valier, Pa.
Progress Coal Co.	Ramsey, Pa.	Progress No. 1.	Clearfield.	P. & S.	Ramsey, Pa.
Pyramid Coal Mining Co.	Curwensville, Pa.	Pyramid No. 1.	Clearfield.	N. Y. C. & H. R.	Curwensville, Pa.
Ramsey Coal Co.	St. Marys, Pa.	Ramsey.	Jefferson.	P. & S.	Ramsaytown, Pa.
Reade Coal Co.	Fallen Timber, Pa.	Rade No. 1.	Cambria.	Penna.	Flinton, Pa.
Regal Coal Mining Co.	Clearfield, Pa.	Elcanor No. 2.	Clearfield.	Penna.	Ramsey, Pa.
Renee Coal Co.	Kittanning, Pa.	Benson.	Armstrong.	Penna.	Kelly, Pa.
Rich Hill Coal Co.	Philadelphia, Pa.	Rich Hill No. 1.	Cambria.	Penna.	Hastings, Pa.
Rich Hill Coal Co.	Philadelphia, Pa.	Rich Hill No. 20.	Cambria.	Penna.	Hastings, Pa.
Roberta Coal Co.	Johnstown, Pa.	Roberta.	Clearfield.	Penna.	La Jose, Pa.
Rochester & Pittsburgh Coal & Iron Co.	Indiana, Pa.	Adrian.	Jefferson.	B. R. & P.	Delancey, Pa.
Rochester & Pittsburgh Coal & Iron Co.	Indiana, Pa.	Fluorence.	Jefferson.	B. R. & P.	Delancey, Pa.
Rochester & Pittsburgh Coal & Iron Co.	Indiana, Pa.	Eleonora.	Jefferson.	B. R. & P.	Eleonora, Pa.
Rochester & Pittsburgh Coal & Iron Co.	Indiana, Pa.	Helvetia.	Jefferson.	B. R. & P.	Stanley, Pa.
Rochester & Pittsburgh Coal & Iron Co.	Indiana, Pa.	Walston.	Jefferson.	B. R. & P.	Walston, Pa.
Rockwood Coal Co.	Rockwood, Pa.	Rockwood No. 1.	Somerset.	B. & O. W. M.	Rockwood, Pa.
Rockwood Coal Co.	Rockwood, Pa.	Rockwood No. 2.	Somerset.	B. & O. W. M.	Rockwood, Pa.
Rocky Ledge Coal Co.	Philipsburg, Pa.	Rocky Ledge No. 1.	Clearfield.	Penna.	Philipsburg, Pa.
Rocky Ledge Coal Co.	Philipsburg, Pa.	Rocky Ledge No. 2.	Clearfield.	Penna.	Philipsburg, Pa.
Ross Run Coal Co.	Punkstutawney, Pa.	No. 1.	Jefferson.	P. R. R.	Punkstutawney, Pa.
Ross Run Coal Co.	Punkstutawney, Pa.	No. 2.	Jefferson.	P. R. R.	Punkstutawney, Pa.
Russell Coal Mining Co.	St. Benedict, Pa.	Bloom Victor No. 24.	Indiana.	Penna.	Clymer, Pa.
Russell Coal Mining Co.	St. Benedict, Pa.	Bloom Victor No. 25.	Indiana.	Penna.	Clymer, Pa.
Russell Coal Mining Co.	St. Benedict, Pa.	Bloom Victor No. 27.	Indiana.	Penna.	Clymer, Pa.
Salem Coal & Coke Corp.	DuBois, Pa.	Salem No. 1.	Clearfield.	B. R. & P.	Dixonville, Pa.
Sandberg Coal Co.	Barneshoro, Pa.	Sandberg No. 1.	Cambria.	Penna.	Lutherburg, Pa.
Sandy Valley Coal Co.	Reynoldsville, Pa.	Peterson.	Clearfield.	B. R. & P.	Barneshoro, Pa.
Seanoor Coal Mining Co.	Johnstown, Pa.	Heckler No. 1.	Somerset.	Penna.	Falls Creek, Pa.
Seanoor Coal Mining Co.	Johnstown, Pa.	Heckler No. 2.	Somerset.	Penna.	Seanoor, Pa.
Seman, Jno.	Morann, Pa.	Woodward No. 2.	Clearfield.	Penna.	Houtzdale, Pa.
Service Coal Mining Co.	Ramey, Pa.	Vigo.	Jefferson.	Penna.	Fordham, Pa.
Shawmut Mining Co.	St. Marys, Pa.	Ramsay.	Jefferson.	P. & S.	Ramsaytown, Pa.
Shepherd Coal Mining Co.	Conemaugh, Pa.	Shepherd No. 1.	Cambria.	B. & O. Penna.	Johnstown, Pa.
Shepherd Coal Mining Co.	Conemaugh, Pa.	Shepherd No. 3.	Cambria.	B. & O. Penna.	Johnstown, Pa.
Sheridan Coal Co.	Johnstown, Pa.	Sheridan.	Cambria.	Penna.	Johnstown, Pa.
Sheridan Coal Co.	Philipsburg, Pa.	Sheridan No. 1.	Clearfield.	N. Y. C.	Philipsburg, Pa.
Smith & Hohnka.	Morrisdale, Pa.	Morrisdale No. 9.	Clearfield.	N. Y. C.	Morrisdale, Pa.
Smith & Hohnka.	Morrisdale, Pa.	Morrisdale No. 10.	Clearfield.	N. Y. C.	Morrisdale, Pa.
Smith, I. S., Coal Company.	Reynoldsville, Pa.	Smith.	Jefferson.	B. R. & P.	Reynoldsville, Pa.
Somerville Coal Co.	Uniontown, Pa.	Somerville.	Somerset.	B. & O.	Somerfield, Pa.
Sonman Run Coal Co.	Philadelphia, Pa.	Sonman No. 1.	Cambria.	Penna.	Portage, Pa.
South Fork Colliery Co.	South Fork, Pa.	South Fork No. 1.	Cambria.	Penna.	South Fork, Pa.
Standard Mosbanon Coal Co.	Clearfield, Pa.	Standard No. 4.	Clearfield.	P. R. R.	Ramey, Pa.
Straitwell Coal Co.	Punkstutawney, Pa.	Straitwell.	Jefferson.	Penna.	Arifa, Pa.
Strayer Bros.	Coalport, Pa.	Strayer No. 1.	Cambria.	Penna.	Flinton, Pa.
Sun Coal Co., The.	Stonboro, Pa.	Sun No. 1.	All-gheny.	B. & L. E.	Cunningham, Pa.
Susquehanna Fuel Co.	Glen Campbell, Pa.	No. 9.	Indiana.	Penna.	Glen Campbell, Pa.
Sutter Coal Co.	Punkstutawney, Pa.	Valier No. 1.	Jefferson.	B. R. & P.	Valier, Pa.
Sutter Coal Co.	Punkstutawney, Pa.	Valier No. 2.	Jefferson.	B. R. & P.	Valier, Pa.
Toby Coal Mining Co.	Brockwayville, Pa.	Groves No. 1.	Jefferson.	B. R. & P.	Bellwood, Pa.
Toby Coal Mining Co.	Brockwayville, Pa.	Groves No. 2.	Jefferson.	B. R. & P.	Bellwood, Pa.
Trojan Coal Mining Co.	Clearfield, Pa.	Trojan No. 2.	Indiana.	N. Y. C.	Gipsy, Pa.
Tyson, Will H.	Big Run, Pa.	Big Run.	Jefferson.	B. R. & P.	Elg Run, Pa.
Union Mining Co.	Du Bois, Pa.	Union.	Clearfield.	B. R. & P.	Rockton, Pa.
Vega Coal Mining Co.	Houtzdale, Pa.	Vega No. 1.	Jefferson.	Penna.	Valier, Pa.
Victory Collieries Co.	Coalport, Pa.	No. 1.	Clearfield.	Penna.	Irvona, Pa.
Victory Coal Co.	St. Marys, Pa.	Victory No. 1.	Elk.	P. S. & N.	Brady Camp, Pa.
Victory Coal Co.	St. Marys, Pa.	Victory No. 2.	Elk.	P. S. & N.	Brady Camp, Pa.
Watkins Coal Co.	New York, N. Y.	Watkins No. 1.	Cambria.	P. R. R.	Barneshoro, Pa.
Watkins Coal Co.	New York, N. Y.	Watkins No. 2.	Cambria.	P. R. R.	Barneshoro, Pa.
Wendell Coal Mining Co.	Altoona, Pa.	Chesterfield No. 1.	Clearfield.	Penna.	Smoke Run, Pa.
White-Dugan Coal Co.	Philipsburg, Pa.	Columbia No. 2.	Clearfield.	P. & S.	Ossola Mills, Pa.
Widdowson Coal Mining Co.	Altoona, Pa.	Widdowson No. 1.	Indiana.	C. T. & D.	Dixonville, Pa.
Wiley Coal Co.	Conwensville, Pa.	Wiley.	Clearfield.	Penna.	Hyde, Pa.
Williams & Binder Coal Co.	H. Wood, Pa.	Williams & Binder.	Indiana.	Cambria & Indiana.	Grismore, Pa.
Williams Run Coal Co.	Punkstutawney, Pa.	Williams.	Jefferson.	B. R. & P.	Punkstutawney, Pa.
Windsor Fuel Co.	Windsor, Pa.	Windsor Fuel No. 1.	Cambria.	Penna.	Windsor, Pa.
Windsor & Williams.	Punkstutawney, Pa.	Williams.	Jefferson.	B. R. & P.	Punkstutawney, Pa.
Wood & Boucher Coal Co.	Barneshoro, Pa.	Wood & Boucher No. 2.	Cambria.	N. Y. C.	Barneshoro, Pa.
Wood & Boucher Coal Co.	Barneshoro, Pa.	Wood & Boucher No. 3.	Cambria.	N. Y. C.	Barneshoro, Pa.
Woodland Coal Mining Co.	Patton, Pa.	Howard No. 1.	Clearfield.	Penna.	Mahaffey, Pa.
Woodland Coal & Coke Co.	Spangler, Pa.	Woodland Colliery No. 1.	Cambria.	P. R. R.	Spangler, Pa.
Yorkshire Coal Co.	New York, N. Y.	No. 2.	Clearfield.	Penna.	Bavian Junction, Pa.
Ziegler Coal Co.	Houtzdale, Pa.	Robt Vernon No. 2.	Clearfield.	Penna.	Houtzdale, Pa.

FREEPORT, THICK SEAM

Mined in Allegheny, Butler and Westmoreland counties. Suitable for Bunker, Cement Burning, By-product Coking, Beehive Coking, Domestic, Export, Illuminating Gas, Locomotive Fuel, Melting, Powdered Coal, Producer Gas, Smithing and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Allegheny-Pittsburgh Coal Co.	Pittsburgh, Pa.	No. 1	Allegheny	Penna.	Logans Ferry, Pa.
Consumers Mining Co.	Wheeling, W. Va.	Harmare	Allegheny	Penna.	Harmarville, Pa.
Cooper Coal Co.	Grove City, Pa.	Cooper	Butler	P. & L. E.	Argentine, Pa.
Cruet Coal Co.	Pittsburgh, Pa.	Cornell	Allegheny	Penna.	Glassmere, Pa.
Diamond Coal & Coke Co.	Pittsburgh, Pa.	Oakmont	Allegheny	Penna.	R. F. D. 2, Parnassus, Pa.
Ford Collieries Co.	Detroit, Mich.	Benjamin	Allegheny	R. & L. E.	Carlisle, Pa.
Ford Collieries Co.	Detroit, Mich.	Berry	Allegheny	R. & L. E.	Carlisle, Pa.
Ford Collieries Co.	Detroit, Mich.	Francis	Allegheny	R. & L. E.	Carlisle, Pa.
Harbison Mining & Mfg. Co.	Pittsburgh, Pa.	Stella	Armstrong	Penna.	Harbison, Pa.
Mount, S. J. & Co.	Smith Mills, Pa.	S. 106	Butler	R. & L. E.	Annandale, Pa.
Newfield By-Product Coal Co.	Cleveland, O.	New Field	Allegheny	P. R. R.	Pleasantdale, Pa.
Palmer Coal Co.	Queen Junction, Pa.	Palmer	Butler	W. Allegheny	Queen Junction, Pa.
Pittsburgh Plate Glass Co. (Coal Dept.)	Pittsburgh, Pa.	Creighton	Allegheny	P. R. R. E.	Creighton, Pa.
Republic Iron & Steel Co.	Youngstown, O.	Bessemer No. 1	Allegheny	R. & L. E.	Fushton, Pa.
Republic Iron & Steel Co.	Youngstown, O.	Bessemer No. 2	Allegheny	R. & L. E.	Roseton, Pa.
Ridge Coal Co.	Greensburg, Pa.	Frances	Westmoreland	P. R. R.	Ladrobe, Pa.
Ruth Coal Co.	Tarantum, Pa.	Sign	Butler	R. & O.	Karns City, Pa.
Sherwin, Samuel	Karns City, Pa.	Kincaid	Butler	Western Allegheny	Karns City, Pa.
Sherwin, Samuel	Karns City, Pa.	Enterprise	Butler	R. & O.	Karns City, Pa.
Superior Fuel Co.	Russellton, Pa.	Superior No. 1	Allegheny	R. & L. E.	Gilberton, Pa.
Superior Fuel Co.	Russellton, Pa.	Superior No. 2	Allegheny	R. & L. E.	Russellton, Pa.
Union Collieries Co.	Pittsburgh, Pa.	Renton No. 3	Allegheny	R. & L. E.	Renton, Pa.
Valley Camp Coal Co.	Cleveland, O.	Kilnoch	Westmoreland	Penna.	Parnassus, Pa.
Valley Camp Coal Company (The)	Cleveland, O.	Valley Camp No. 1	Westmoreland	Penna.	Valley Camp, Pa.

FREEPORT, UPPER SEAM (Known also as the E SEAM; LEMON and COKEYARD SEAM in Cambria County, believed to be represented by the KELLY SEAM in Bedford county, the SAWMILL in the Potomac basin, FOUR-FOOT and FIVE-FOOT SEAMS in Beaver County)

Bituminous in western counties; Semibituminous in eastern counties. Suitable by localities for Bunker, Cement Burning, By-product Coking, Bee-hive Coking, Domestic, Export, Locomotive Fuel, Melting, Powdered Coal, Producer Gas, Smithing and Steam uses. Coals from low-volatile region known as Smokeless.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Ake, Everett C.	Glen Campbell, Pa.	Melona No. 4	Indiana	Penna.	Glen Campbell, Pa.
Aladdin Coal & Coke Co.	Leechburg, Pa.	Aladdin	Armstrong	West Penn.	Aladdin, Pa.
Allegheny Coal & Coke Co.	Brackenridge, Pa.	Avenue	Allegheny	West Penn.	Brackenridge, Pa.
Allegheny River Mining Co.	Kittanning, Pa.	Cadogan	Armstrong	Pittsburgh & Shawmut	Cadogan, Pa.
Allegheny River Mining Co.	Kittanning, Pa.	S. mine	Armstrong	P. & S.	Seminole, Pa.
Allen Coal Mining Co.	Kittanning, Pa.	Allen No. 3	Somerset	R. & O.	Gaewell, Pa.
Altoona Coal & Coke Co.	Boswell, Pa.	Delaney No. 7	Cambria	Penna.	Gallitzin, Pa.
American Manganese Mfg. Co.	F. N. Bank Bldg., Altoona, Pa.	Furnace No. 1	Fayette	Penna.	Dunbar, Pa.
American Manganese Mfg. Co.	Philadelphia, Pa.	Furnace No. 2	Fayette	Penna.	Dunbar, Pa.
American Sheet & Tin Plate Co.	Frick Bldg., Pittsburgh, Pa.	Kirkpatrick	Armstrong	P. R. R.	Lechburg, Pa.
Anita Coal Mining Co.	Punkstutawney, Pa.	Anita No. 6	Jefferson	P. R. R.	Punkstutawney, Pa.
Anita Coal Mining Co.	Punkstutawney, Pa.	Anita No. 7	Jefferson	P. R. R.	Horatio, Pa.
Apollo Coal Mining Company	Salina, Pa.	Norlocast	Westmoreland	Penna.	Salina, Pa.
Armstrong County Coal Co.	718 Farm & Bank Bldg., Pittsburgh, Pa.	Armstrong	Armstrong	P. R. R.	Leechburg, Pa.
Arthur Coal Co.	Punkstutawney, Pa.	Arthur Colliery	Jefferson	Penna.	Hillman Station, Pa.
Atlantic Coal Mining Co.	Phillipsburg, Pa.	Atlantic	Clearfield	P. R. R., P. & S.	West Moshannon, Pa.
B. & L. Coal Co.	Youngwood, Pa.	B. & L.	Westmoreland	Penna.	Hunkers, Pa.
Bagdad Coal & Coke Co.	Leechburg, Pa.	Bagdad	Armstrong	Penna.	Lechburg, Pa.
Bald Hill Coal Company	Victor No. 41	Victor No. 41	Clearfield	N. Y. C.	Bald Hill, Pa.
Barnes & Tucker Co.	St. Benedict, Pa.	Leamshire No. 10	Cambria	Penna.	Barnesboro, Pa.
Barnes Quemahoning Coal Co.	Listie, Pa.	Stauffer No. 1	Somerset	R. & O.	Listie, Pa.
Barnes Quemahoning Coal Co.	Listie, Pa.	Stauffer No. 3	Somerset	R. & O.	Listie, Pa.
Barnes Quemahoning Coal Co.	Listie, Pa.	Boswell Br. No. 1	Somerset	R. & O.	Listie, Pa.
Beachly Coal Co.	Listie, Pa.	Beachly No. 7	Cambria	Penna.	Portage, Pa.
Beachly Coal Co.	Johnstown, Pa.	Beachly No. 3	Cambria	Penna.	Portage, Pa.
Beachly Coal Co.	Johnstown, Pa.	Beachly No. 4	Cambria	Penna.	Portage, Pa.
Beacon Coal Co.	Johnstown, Pa.	Perless No. 1	Cambria	P. R. R.	Van Ormer, Pa.
Beacon Coal Co.	Fallen Timber, Pa.	Perless No. 2	Cambria	P. R. R.	Van Ormer, Pa.
Beaver Run Coal Co.	916 Penn Bldg., Philadelphia, Pa.	Beaver	Cambria	P. R. R.	Clayton, Pa.
Beck & Boale Coal Co.	Vandergrift, Pa.	Beck	Armstrong	Penna.	Vandergrift, Pa.
Bell Run Coal Co.	Clearfield, Pa.	Bell Run No. 1	Clearfield	Penna.	Glenora, Pa.
Belmont Smokeless Coal Co.	Acosta, Pa.	Belmont No. 5	Somerset	R. & O.	Boswell, Pa.
Ben Franklin Coal Co.	Freeport, Pa.	Brachura	Westmoreland	Penna.	Brachura, Pa.
Ben Franklin Coal Co.	Freeport, Pa.	M. Galf	Westmoreland	Penna.	Brachura, Pa.
Bennington Coal Co.	Altoona, Pa.	Sugar Run No. 1	Cambria	Penna.	Gallitzin, Pa.
Bennington Coal Co.	Altoona, Pa.	Sugar Run No. 2	Cambria	Penna.	Gallitzin, Pa.
Berkey Bros. Coal Co.	Somerset, Pa.	Berkey	Somerset	R. & O.	Somerset, Pa.
Bessener Coal Co.	Loudside, Pa.	Bessener	Clearfield	Penna.	Brishin, Pa.
Binder Bros. Coal Co.	Hastings, Pa.	Binder Bros. No. 1	Cambria	C. & C., Penna.	East es, Pa.
Binder Bros. Coal Co.	Hastings, Pa.	Binder Bros. No. 2	Cambria	Penna.	Hastings, Pa.
Black Top Coal Co.	Washington, D. C.	Black Top	Somerset	W. Md.	Rockwood, Pa.
Bowersville Coal Company	Punkstutawney, Pa.	Bowersville Colliery	Jefferson	P. R. R.	Punkstutawney, Pa.
Bowser, Watson	Kittanning, Pa.	Watson Bowser	Armstrong	P. R. & P.	Cowan, Pa.
Boyd, Geo. E. Coal Co.	Tarantum, Pa.	Elizabeth	Westmoreland	Penna.	Tarantum, Pa.
Brown Bros. & Tyler	Hastings, Pa.	High Spot No. 3	Cambria	Penna.	Hastings, Pa.
Brown Bros. & Tyler	Hastings, Pa.	High Spot No. 4	Cambria	Penna.	Hastings, Pa.
Brush Creek Coal Mining Co.	Indiana, Pa.	Coy	Indiana	B. R. & P.	Waterman, Pa.
Brush Creek Coal Mining Co.	Indiana, Pa.	Lancashire	Indiana	B. R. & P.	Lancashire, Pa.
Buffalo & Susquehanna Coal & Coke Co.	Dufkols, Pa.	Sagamore	Armstrong	B. & S.	Somerset, Pa.
Bull Creek Coal Co., Inc.	Tarantum, Pa.	Golding	Allegheny	P. R. R.	Tarantum, Pa.
Butter Junction Coal Co.	Leechburg, Pa.	Bull r Junction	Allegheny	Penna.	Leechburg, Pa.
Calorite Coal Co.	814 Penna. Bldg., Philadelphia, Pa.	Calorite	Cambria	P. R. R.	Calorite, Pa.
Campbell Coal Co.	Connellsville, Pa.	Campbell No. 2	Fayette	I. C. V., B. & O.	Campbell, Pa.
Campbell Ridge Coal Co.	Altoona Trust Bldg., Altoona, Pa.	J. H. ferson No. 1	Clearfield	Penna.	Campbell, Pa.
Cannelton Clay & Coal Co.	New Galilee, Pa.	Cannelton	B. & W.	P. L. & W.	Cannelton, Pa.
Century Coal Co.	1033 Century Bldg., Pittsburgh, Pa.	Century No. 2	Armstrong	Penna.	Lechburg, Pa.
Century Coal Mining Co.	Hastings, Pa.	Peterman No. 1	Indiana	B. R. & P.	Chambersville, Pa.
Clark, H. E.	Glen Campbell, Pa.	Indiana	Indiana	P. R. R., N. Y. C.	Glen Campbell, Pa.
Clearfield Bituminous Coal Corp.	Indiana, Pa.	Commodore No. 1	Indiana	N. Y. C.	Commodore, Pa.
Clearfield Bituminous Coal Corp.	Indiana, Pa.	Commodore No. 2	Indiana	N. Y. C.	Commodore, Pa.
Clearfield Bituminous Coal Corp.	Indiana, Pa.	Bositer No. 1	Indiana	N. Y. C. & H. R.	Rositer, Pa.
Clearfield Bituminous Coal Corp.	Indiana, Pa.	Bositer No. 3	Indiana	N. Y. C. & H. R.	Rositer, Pa.

(Continued on Next Page)

FREEPORT, UPPER SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Clearfield Bituminous Coal Corp.	Indiana, Pa.	Rossiter No. 4.	Indiana	N. Y. C. & H. R.	Rossiter, Pa.
Clearfield Bituminous Coal Corp.	Indiana, Pa.	Rossiter No. 5.	Indiana	N. Y. C. & H. R.	Rossiter, Pa.
Cline, H. A. Coal Co.	Bolivar, Pa.	No. 1.	Westmoreland	Penna.	Bolivar, Pa.
Coal Run Mining Co.	Indiana, Pa.	Coal Run.	Indiana	B. R. & P.	McIntyre, Pa.
Cochran Coal Co.	Williamsport, Pa.	Cochran.	Westmoreland	Penna.	Salina, Pa.
Conemaugh Coal Mining Co.	Pittsburgh, Pa.	Conemaugh No. 1.	Armstrong	Penna.	Apollo, Pa.
Conemaugh Coal Mining Co.	Pittsburgh, Pa.	Conemaugh No. 2.	Armstrong	Penna.	Apollo, Pa.
Conemaugh Coal Mining Co.	Pittsburgh, Pa.	Conemaugh No. 3.	Armstrong	Penna.	Apollo, Pa.
Conemaugh Coal Mining Co.	Pittsburgh, Pa.	Conemaugh No. 4.	Armstrong	Penna.	Apollo, Pa.
Conemaugh Coal Mining Co.	Pittsburgh, Pa.	Conemaugh No. 5.	Armstrong	Penna.	Apollo, Pa.
Confluence Coal Co.	Confluence, Pa.	ough-nour.	Somerset	B. & O.	Confluence, Pa.
Conquest Coal Mining Co.	Philipsburg, Pa.	Imperial No. 1.	Clearfield	Penna.	Philipsburg, Pa.
Consolidated Coal & Coke Co.	Butler, Pa.	Consolidated.	Indiana	R. & S.	Plumville, Pa.
Consolidation Coal Co.	New York, N. Y.	Consolidation No. 123.	Somerset	W. Md.	Gray, Pa.
Consolidation Coal Co.	New York, N. Y.	Consolidation No. 124.	Somerset	W. Md.	Gray, Pa.
Consolidation Coal Co.	New York, N. Y.	Consolidation No. 126.	Somerset	W. Md.	Gray, Pa.
Consolidation Coal Co.	New York, N. Y.	Consolidation No. 127.	Somerset	W. Md.	Gray, Pa.
Corrado Coal Co.	Connellsville, Pa.	Corrado No. 1.	Fayette	P. & L. E.	Sand Rock, Pa.
Cortez Coal Co.	Punxsutawney, Pa.	Cortez.	Jefferson	P. R. R.	Anita, Pa.
Cowanshannock Coal & Coke Co.	Punxsutawney, Pa.	Yatesboro.	Armstrong	Rural Valley.	Yatesboro, Pa.
Crock Coal Co.	Greensburg, Pa.	Betty.	Butler	B. & O.	Chicora, Pa.
Cunningham Coal Co.	Chicora, Pa.	Chicora.	Butler	B. & O.	Chicora, Pa.
Cymbria Coal Co.	Philadelph. Pa.	Cymbria No. 1.	Cambria	Penna.	Barnesboro, Pa.
Cymbria Coal Co.	Philadelph. Pa.	Cymbria No. 2.	Cambria	Penna.	Barnesboro, Pa.
Dalliba Coal Co.	287 College Ave., Oakmont, Pa.	Dalliba.	Allegheny	P. R. R.	Oakmont, Pa.
Datesman Coal Co.	Confluence, Pa.	Datesman.	Somerset	U. & N. F.	Ursina, Pa.
Deer Hill Coal Co.	424 Lincoln St., Johnstown, Pa.	Deer Hill.	Cambria	Penna.	Coalport, Pa.
Derby Branch Coal Co.	Philipsburg, Pa.	Colorado No. 1.	Clearfield	Penna.	Philipsburg, Pa.
Dexcar Coal Mining Co.	12 Broadway, New York, N. Y.	Claire.	Cambria	Penna.	Ashtville, Pa.
Dickey, S. E. Coal Co.	Johnstown, Pa.	Dickey No. 1.	Somerset	E. & O.	Kings Station, Pa.
Dickey, S. E. Coal Co.	Johnstown, Pa.	Dickey No. 2.	Somerset	B. & O.	Kings Station, Pa.
Doherty Coal Co.	Latrobe, Pa.	Doherty No. 1.	Westmoreland	Penn.	Derry, Pa.
Dock Hollow Coal Co.	New Kensington, Pa.	Dock Hollow.	Armstrong	Pittsburgh & Shawmut.	Freeport, Pa.
Dor-Mar Coal Co.	806 Fine Arts Bldg., Rochester, N. Y.	Dor-Mar No. 1.	Indiana	B. R. & P.	Savan, Pa.
Dunbam, Fred J.	Philipsburg, Pa.	Shriden No. 1.	Center	P. & S.	Philipsburg, Pa.
Dunbam, Fred J.	Philipsburg, Pa.	Shriden No. 2.	Center	P. & S.	Philipsburg, Pa.
Dunsmore, R. P.	Philipsburg, Pa.	Cuba No. 2.	Clearfield	N. Y. C.	Timblin & Ringgold, Pa.
Eagle Valley Coal Co.	Timblin, Pa.	Eagle Valley.	Jefferson	P. & S.	Frugality, Pa.
Eastern Bituminous Coal Mining Bonds.	Altoona, Pa.	Dean No. 8.	Cambria	Penna.	Frugality, Pa.
Eastern Bituminous Coal Mining Bonds.	Altoona, Pa.	Dean No. 10.	Cambria	Penna.	Frugality, Pa.
Elder Mining Co.	Timblin, Pa.	Elder.	Armstrong	Penna.	Timblin, Pa.
Elder Run Coal Co.	Leechburg, Pa.	Elder Run.	Armstrong	Penna.	Leechburg, Pa.
Electric Coal Co.	Glen Campbell, Pa.	Electric No. 7.	Indiana	N. Y. C.	Glen Campbell, Pa.
Electric Coal Co.	Glen Campbell, Pa.	Electric No. 8.	Indiana	Penna.	Glen Campbell, Pa.
Elk Run Coal Mining Co.	Punxsutawney, Pa.	Shaller.	Jefferson	N. Y. C.	Florence, Pa.
Empire Coal Mining Co.	Philadelph. Pa.	Empire E.	Cambria	N. Y. C.	Barnesboro, Pa.
Equitable Coke Company.	Pittsburgh, Pa.	Harwick.	Allegheny	Penna.	Cheswick, Pa.
Fallen Timber Coal Company.	Philadelph. Pa.	Fallen Timber.	Cambria	Penna.	Fallen Timber, Pa.
Fenelon Coal Trust.	121 Park Ave., DuBois, Pa.	Fenelon.	Butler	B. R. & P.	Fenelon, Pa.
Fleener Coal Co.	South Fork, Pa.	Fleener No. 1.	Cambria	Penna.	South Fork, Pa.
Ford City Coal & Lime Co.	Ford City, Pa.	Garrets Run.	Armstrong	Penna.	Ford City, Pa.
Frauenheim-Logansport Coal Corp.	Pittsburgh, Pa.	Bethel.	Armstrong	Penna.	Kelly, Pa.
Frauenheim-Logansport Coal Corp.	Pittsburgh, Pa.	Antoinette.	Somerset	W. Md.	Grey, Pa.
Freeport & Mahoning Coal Co.	Freeport, Pa.	Ruth.	Westmoreland	P. & S.	Pittsfield, Pa.
Garfield Smokeless Coal Co.	Latrobe, Pa.	No. 1.	Indiana	P. R. R.	Bolivar, Pa.
Garfield Smokeless Coal Co.	Latrobe, Pa.	No. 2.	Indiana	Penna.	Bolivar, Pa.
Garfield Smokeless Coal Co.	Latrobe, Pa.	No. 3.	Indiana	Penna.	Bolivar, Pa.
Garrets Run Coal Co.	Kittanning, Pa.	Tor.	Armstrong	Penna.	Kittanning, Pa.
Gearhart Coal Co.	Philipsburg, Pa.	Gearhart.	Clearfield	N. Y. C.	Philipsburg, Pa.
Gilbert Coal Co.	Timblin, Pa.	No. 1.	Jefferson	P. & S.	Timblin, Pa.
Gilpin Coal Co.	Leechburg, Pa.	Gilpin.	Armstrong	P. E. R.	Leechburg, Pa.
Gladys Coal Mining Co.	Leechburg, Pa.	Gladys.	Armstrong	Penna.	Leechburg, Pa.
Glasgow Fuel Co., Inc.	Glasgow, Pa.	Glasgow No. 1.	Cambria	Penna.	Glasgow, Pa.
Glen White Coal & Lumber Co.	Baltimore, Md.	Glen White No. 2.	Blair	P. R. R.	Kittanning Point, Pa.
Goshen Coal Co.	Clearfield, Pa.	Goshen No. 1.	Clearfield	N. Y. C. & H. R.	Surveyor, Pa.
Graceton Coal & Coke Co.	New York, N. Y.	Graceton No. 2.	Indiana	Penna.	Graceton, Pa.
Graceton Coal & Coke Co.	New York, N. Y.	Graceton No. 3.	Indiana	Penna.	Graceton, Pa.
Guernsey Coal Company.	Houtzdale, Pa.	Henrietta No. 2.	Clearfield	Penna.	Houtzdale, Pa.
Gwin, J. Sons.	Mountaineale, Pa.	Mountaineale No. 1.	Cambria	Penna.	Figart, Pa.
Gypsy Coal Co.	Commercial Tr. Bldg., Philadelphia, Pa.	Indian No. 6.	Indiana	N. Y. C.	Glen Campbell, Pa.
Haddon Coal Co.	Leechburg, Pa.	Haddon.	Armstrong	Penna.	Leechburg, Pa.
Hadden Kelley Coal Co.	Clearfield, Pa.	Lower Moshannon.	Clearfield	Penna.	Grampian, Pa.
Hennan Coal Co.	Johnstown, Pa.	Hannan.	Cambria	B. & O.	Johnstown, Pa.
Harrison-Walker Refractories Co.	Pittsburgh, Pa.	Croft.	Clearfield	N. Y. C.	Surveyor, Pa.
Harris, Wm. Coal Co.	Philipsburg, Pa.	Land No. 1.	Clearfield	N. Y. C.	Philipsburg, Pa.
Hill Bros. Coal Company.	Morrisdale, Pa.	Ashman No. 4.	Clearfield	N. Y. C.	Morrisdale, Pa.
Hillworth Coal Co.	Mooreville, Pa.	Hillcrest.	Somerset	B. & O.	Stoyestown, Pa.
Holland Coal Co.	Altoona, Pa.	Belmont No. 3.	Somerset	B. & O.	Acosta, Pa.
Homer City Coal Co.	Johnstown, Pa.	Hughes No. 5.	Cambria	Penna.	Flinton, Pa.
Hughes, H. M.	Osceola Mills, Pa.	Homer.	Indiana	P. R. R.	Homer City, Pa.
Hurd Coal Co.	Union Rank Bldg., Pittsburgh, Pa.	Reading No. 3.	Clearfield	Penna.	Osceola Mills, Pa.
Ideal Coal Company.	Greensburg, Pa.	Gonder.	Somerset	B. & O.	Boswell, Pa.
Inland Coal Company.	Johnstown, Pa.	Thermal No. 6.	Cambria	Penna. B. & O.	Johnstown, Pa.
Inland Collieries Co.	Chicago, Ill.	Tunnel No. 1.	Cambria	P. R. R.	Gallitzin, Pa.
Jacobs, T. J.	Somerfield, Pa.	Indianola.	Allegheny	B. & L. E.	Indianola, Pa.
Jefferson & Clearfield Coal & Iron Co.	Indiana, Pa.	Jacobs.	Fayette	C. & O.	Somerfield, Pa.
Jefferson & Clearfield Coal & Iron Co.	Indiana, Pa.	Aultman No. 3.	Indiana	R. R. & P.	Aultman, Pa.
Jefferson & Clearfield Coal & Iron Co.	Indiana, Pa.	Aultman No. 4.	Indiana	B. B. & P.	Aultman, Pa.
Jefferson & Clearfield Coal & Iron Co.	Indiana, Pa.	Aultman No. 5.	Indiana	B. B. & P.	Aultman, Pa.
Jefferson & Clearfield Coal & Iron Co.	Indiana, Pa.	Aultman No. 6.	Indiana	B. B. & P.	Aultman, Pa.
Jefferson & Clearfield Coal & Iron Co.	Indiana, Pa.	Cummings.	Indiana	B. B. & P.	Creekside, Pa.
Jefferson & Clearfield Coal & Iron Co.	Indiana, Pa.	Ernest.	Indiana	B. B. & P.	Ernest, Pa.
Jefferson & Clearfield Coal & Iron Co.	Indiana, Pa.	Fulton.	Indiana	B. B. & P.	Creekside, Pa.
Jefferson & Clearfield Coal & Iron Co.	Indiana, Pa.	McIntire.	Indiana	B. R. & P.	McIntyre, Pa.
Jenkins, Scott Coal Co.	Blossburg, Pa.	Scott Jenkins.	Tioga	N. Y. C. Erie.	Blossburg, Pa.
Jones Fuel Co.	Roswell, Pa.	Ferrell No. 1.	Somerset	B. & O.	Boswell, Pa.
Jones Coal Co.	Indiana, Pa.	Yellow Creek.	Indiana	Penna.	Indiana, Pa.
Kelly Station Mining Co.	Kittanning, Pa.	Kelly Station.	Armstrong	Penna.	Kelly, Pa.
Kepple Coal Mining Co.	Leechburg, Pa.	Kepple.	Armstrong	Penna.	Leechburg, Pa.
Kerr Coal Company.	Freeport, Pa.	Kerr No. 2.	Butler	Penna.	Freeport, Pa.
Keystone Coal Company.	York, Pa.	Mooween.	Indiana	Penna.	White, Pa.
Kir Fire Brick Company.	Pittsburgh, Pa.	Salina.	Westmoreland	Penna.	Salina, Pa.
Kiskiminetas Valley Coal Co.	New Bethlehem, Pa.	No. 1.	Westmoreland	Penna.	Apollo, Pa.
Kiskiminetas Coal Co.	Blairsville, Pa.	Boaring Run.	Westmoreland	Penna.	Truxell, Pa.
Kiskiminetas Coal Co.	Blairsville, Pa.	Tunnelton.	Indiana	P. R. R.	Tunnelton, Pa.
Kittanning Iron & Steel Co.	Kittanning, Pa.	Cowanshannock No. 1.	Armstrong	Penna.	Cowanshannock, Pa.
Kittanning Steam Coal Co.	Kittanning, Pa.	Buffington No. 1.	Armstrong	Penna.	Kittanning, Pa.
Kittanning Steam Coal Co.	Kittanning, Pa.	Buffington No. 2.	Armstrong	Penna.	Kittanning, Pa.
Klee Coal Co.	Pittsburgh, Pa.	Fay No. 1.	Butler	B. & O.	Evans City, Pa.

(Continued on Next Page)

FREEPORT, UPPER SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Kurtz & Rinn	Punxsutawney, Pa.	Kurtz & Rinn	Jefferson	B. R. & P.	Punxsutawney, Pa.
Lanark Coal Mining Co.	Phillipsburg, Pa.	Lanark	Centre	Penna.	Osceola Mills, Pa.
Lantz & Clark Coal Co.	Hastings, Pa.	Lantz No. 1	Cambria	Penna.	Hastings, Pa.
Latrobe Hygrade Coal Co.	Latrobe, Pa.	Pearl	Westmoreland	Penna.	Derry, Pa.
Leechburg Coal & Coke Co.	Leechburg, Pa.	Leechburg	Westmoreland	Penna.	Leechburg, Pa.
Lenox Coal Company	Johnstown, Pa.	Lenox No. 1	Cambria	Penna.	Barnesboro, Pa.
Lobb, Walter & Brothers	Brisbin, Pa.	Lobb No. 1	Clearfield	Penna.	Brisbin, Pa.
Lobb, Walter & Brothers	Brisbin, Pa.	Lobb No. 2	Clearfield	Penna.	Brisbin, Pa.
Lobb, Walter & Brothers	Brisbin, Pa.	Lobb No. 3	Clearfield	Penna.	Brisbin, Pa.
Loeust Colliery Co.	Philladelphia, Pa.	Loeust	Indiana	B. R. & P.	Loeust, Pa.
Logan Coal Company	502 Harrison Bldg., Philadelphia, Pa.	Logan No. 7	Cambria	Penna.	Dunio, Pa.
Long, Calh.	Phillipsburg, Pa.	Buttle No. 4	Clearfield	N. Y. C.	Phillipsburg, Pa.
Loyal Hanna Coal & Coke Co.	Land Title Bldg., Philadelphia, Pa.	Loyal Hanna No. 4	Cambria	Penna.	Lloydell, Pa.
Lumstead Mining Co.	Echo, Pa.	Echo	Armstrong	R. R. & P.	Echo, Pa.
McCombs Coal Co.	Indiana, Pa.	McCombs No. 2	Indiana	B. & S.	Rinn, Pa.
McConnel Coal Co.	DuBois, Pa.	Sugar Hill	Jefferson	P. & S.	Westville, Pa.
McConnel Coal Co.	DuBois, Pa.	Beechton	Jefferson	P. S. & N.	Coal Glen, Pa.
McFetridge Bros. Coal Co.	Crichton, Pa.	McFetridge	Allegheny	Penna.	Crichton, Pa.
McGregor Coal Co.	Temblin, Pa.	McGregor No. 1	Armstrong	P. & S.	Timblin, Pa.
Mackelvon Coal Mining Co.	Osceola Mills, Pa.	Center No. 1	Clearfield	P. R. R.	Osceola Mills, Pa.
Madelra-Hill Coal Mining Co.	North American Bldg., Philadelphia, Pa.	Spangler No. 3	Cambria	Penna.	Barnesboro, Pa.
Maher Coal & Coke Co.	Leechburg, Pa.	No. 4 Maher	Armstrong	P. R. R.	Leechburg, Pa.
Mahoning River Coal Co., Inc.	New Bethlehem, Pa.	Thayerton	Armstrong	P. & S.	New Bethlehem, Pa.
Majestic Coal Mining Co.	Leechburg, Pa.	Majestic No. 1	Armstrong	Penna.	Johnetta, Pa.
Manufacturers Coal Co.	Bellefonte, Pa.	Aldine No. 2	Indiana	Penna.	Indiana, Pa.
Marion Center Coal Mining Co.	Philadelphia, Pa.	Marion Center	Indiana	B. R. & P.	Marion Center, Pa.
Markle & Minch	New Bethlehem, Pa.	Rarnhart No. 113	Butler	B. & L. E.	Jamiltonville, Pa.
Mill Site Colliery Co., Inc.	R. F. D. No. 5, New Bethlehem, Pa.	Columbia	Armstrong	P. & S.	Colwell, Pa.
Mill Coal Co.	63 Park Row, New York, N. Y.	Stewart No. 4	Jefferson	P. & S.	Timblin, Pa.
Millrich Coal Co.	Rockester Mills, Pa.	Savan No. 2	Indiana	B. R. & P.	Savan, Pa.
Mills, Chas. W.	1210 Land Title Bldg., Philadelphia, Pa.	Climax No. 2	Indiana	Penna.	New Florence, Pa.
Mirns, Geo., Jr.	DuBois, Pa.	Clear Run	Clearfield	Penna.	DuBois, Pa.
Moudy, F. R.	Portage, Pa.	Myra No. 1	Cambria	Penna.	Portage, Pa.
Mountz, S. J. & Co.	Smith Mills, Pa.	Viola No. 2	Clearfield	Penna.	Smoke Run, Pa.
Mull, R. H.	Phillipsburg, Pa.	Imperial No. 1	Clearfield	Penna.	Phillipsburg, Pa.
Myers Coal Co.	Mosgrove, Pa.	Meyers	Armstrong	P. S.	W. Mosgrove, Pa.
Myvan Coal Co. (The)	Rox 672, Pittsburgh, Pa.	Laverne	Indiana	P. R. R.	Homer City, Pa.
Newell, C. P.	Mill Run, Pa.	Mill Run	Fayette	I. C. V.	Mill Run, Pa.
North Pittsburgh Realty Co.	Harmony, Pa.	Harmony Junction	Butler	B. & O.	Harmony, Pa.
Oakhill Coal Co.	104 Fayette Trust Bldg., Uniontown, Pa.	Oakhill	Armstrong	Penna.	Jeannetta, Pa.
Ohio River Coal Co.	Pittsburgh, Pa.	Ohio River	Beaver	Penna.	Industry, Pa.
Packsaddle Coal Mining Co.	Portage, Pa.	Packsaddle No. 1	Westmoreland	Penna.	Blairsville Intersect., Pa.
Paint Coal Company	Arthurs, Pa.	Star	Clarion	B. & O.	Arthurs, Pa.
Pantall Coal Co.	Punxsutawney, Pa.	Pantall	Clearfield	N. Y. C. Penna.	Punxsutawney, Pa.
Paragon Coal Mining Co., Inc.	Osceola Mills, Pa.	Paragon No. 2	Clearfield	Penna.	Osceola Mills, Pa.
Park Coal Co.	Leechburg, Pa.	Park	Armstrong	P. R. R.	Leechburg, Pa.
Parkhill Coal Co.	Dawson, Pa.	Ruth	Fayette	B. & O.	Dawson, Pa.
Paulton Coal Mining Co.	Leechburg, Pa.	Paulton	Westmoreland	P. R. R.	Apollo, Pa.
Pearce, Geo. & Son	Puritan, Pa.	Excelsior No. 1	Cambria	P. R. R.	Portage, Pa.
Peon Carbon Coal Co.	Greensburg, Pa.	Kemmerer	Westmoreland	Penna.	Youngwood, Pa.
Pennie-Bryner Coal Co.	Connellsville, Pa.	Penbury	Fayette	B. & O.	Indian Creek, Pa.
Pennsylvania Coal & Coke Co.	New York, N. Y.	Penna No. 28-E	Cambria	N. Y. C. Penna.	Fulton, Pa.
Pennsylvania Coal & Coke Corp.	New York, N. Y.	Penna No. 7	Cambria	P. R. R.	Amshry, Pa.
Pennsylvania Coal & Coke Corp.	New York, N. Y.	Penna No. 40	Indiana	N. Y. C.	Arcadia, Pa.
Pennsylvania Coal & Coke Corp.	New York, N. Y.	Penna No. 41	Indiana	N. Y. C.	Arcadia, Pa.
Pennsylvania Coal & Coke Corp.	New York, N. Y.	Penna No. 42	Indiana	N. Y. C.	Arcadia, Pa.
Pennsylvania Coal & Coke Corp.	New York, N. Y.	Penna No. 43	Indiana	N. Y. C.	Arcadia, Pa.
Pennsylvania Coal & Coke Corp.	New York, N. Y.	Penna No. 44	Indiana	N. Y. C.	Arcadia, Pa.
Pennsylvania Coal & Coke Corp.	New York, N. Y.	Penna No. 2	Blair	P. R. R.	Bennington, Pa.
Pennsylvania Coal & Coke Corp.	New York, N. Y.	Penna No. 9	Cambria	P. R. R.	Cresson, Pa.
Pennsylvania Coal & Coke Corp.	New York, N. Y.	Penna No. 8	Cambria	P. R. R.	Ehrenfeld, Pa.
Pennsylvania Coal & Coke Corp.	New York, N. Y.	Penna No. 10	Cambria	P. R. R.	Gallitzin, Pa.
Pennsylvania Coal & Coke Corp.	New York, N. Y.	Penna No. 11-E	Cambria	Penna.	Hastings, Pa.
Pennsylvania Coal & Coke Corp.	New York, N. Y.	Cassandra No. 1	Cambria	Penna.	Cassandra, Pa.
Pennsylvania Collieries, Inc.	500 Fifth Ave., New York, N. Y.	Lilly	Cambria	Penna.	Lilly, Pa.
Pennsylvania Collieries, Inc.	500 Fifth Ave., New York, N. Y.	Meco No. 2	Indiana	Penna.	Homer City, Pa.
Pennsylvania Collieries, Inc.	500 Fifth Ave., New York, N. Y.	Natrona No. 1	Allegheny	Penna.	Natrona, Pa.
Pennsylvania Salt Mfg. Co.	Widner Bldg., Philadelphia, Pa.	Pergrin	Cambria	C. & I.	Nanty Glo, Pa.
Pergrin Coal Co.	Phillipsburg, Pa.	Pine Run	Westmoreland	Penna.	Pine Run Siding, Pa.
Pine Run Coal & Coke Co.	Leechburg, Pa.	Lewis	Westmoreland	Penna.	Vandergrift, Pa.
Pine Run Co.	New Bethlehem, Pa.	No. 5	Armstrong	Penna.	Hawthorn, Pa.
Pine Run Coal Co.	New Bethlehem, Pa.	No. 10	Armstrong	Penna.	New Bethlehem, Pa.
Pine Run Coal Co.	Pittsburgh, Pa.	Dennley No. 1	Armstrong	Penna.	Johnetta, Pa.
Pletcher, J. W.	Beaverdale, Pa.	Portage No. 2	Cambria	Penna.	Portage, Pa.
Portage Smokeless Coal Co.	Beaverdale, Pa.	Portage No. 3	Cambria	Penna.	Portage, Pa.
Portage Smokeless Coal Co.	Greensburg, Pa.	Potter	Indiana	Penna.	Coral, Pa.
Potter Coal & Coke Company	Weber Bldg., Punxsutawney, Pa.	Pratt	Indiana	Penna.	Hillman, Pa.
Pratt Coal Co.	702 Oliver Bldg., Pittsburgh, Pa.	Ruff	Westmoreland	Penna.	Youngwood, Pa.
Premier Fuel Co.	Ramey, Pa.	Progress No. 1	Clearfield	P. & S.	Ramey, Pa.
Progress Coal Co.	Kelly Station, Pa.	Provident	Armstrong	Penna.	Kelly Station, Pa.
Provident Coal & Mining Co.	Buffalo, N. Y.	Frances	Indiana	B. R. & P.	Frances, Pa.
Punxsutawney Coal Mining Co.	Buffalo, N. Y.	Frances No. 2	Indiana	B. R. & P.	Frances, Pa.
Punxsutawney Coal Mining Co.	Buffalo, N. Y.	Frances No. 3	Indiana	B. R. & P.	Frances, Pa.
Punxsutawney Coal Mining Co.	Buffalo, N. Y.	Purity	Somerset	B. & O.	Somerset, Pa.
Purity Coal Co.	Somerset, Pa.	Ankeny	Allegheny	B. & O. W. M.	Grey, Pa.
Quemahoning Coal Co.	Somerset, Pa.	Rockwood	Somerset	W. Md.	South Rockwood, Pa.
Quemahoning Coal Co.	Somerset, Pa.	Husband	Somerset	B. & O.	Husband, Pa.
Quemahoning Coal Co.	Somerset, Pa.	McCartney No. 3	Clearfield	Penna.	McCartney, Pa.
Quinn-Simler Coal Co.	Johnstown, Pa.	Raridan	Armstrong	Penna.	Glen and Kelly, Pa.
Raridan & East Brady Coal Co.	Pittsburgh, Pa.	R. Id.	Armstrong	P. & S.	Caldwell, Pa.
Reid Coal Co.	Rockville, Pa.	Reilly	Somerset	B. & O.	Confluence, Pa.
Reilly-Callaghan Coal & Coke Co., Inc.	Philadelphia, Pa.	Ridge Hill No. 1	Cambria	Penna.	Hastings, Pa.
Rich Hill Coal Company	Bolivar, Pa.	Ridgeview	Westmoreland	Penna.	Bolivar, Pa.
Ridgeview Coal Co.	Punxsutawney, Pa.	Adrian No. 5	Jefferson	B. R. & P.	Punxsutawney, Pa.
Rinn, S. A. Coal Co.	Punxsutawney, Pa.	Jeanau No. 1	Indiana	Penna.	Jeanau, Pa.
Ritter & Winslow, Inc.	South Fork, Pa.	Riverside No. 1	Cambria	P. R. R.	South Fork, Pa.
Riverside Coal Mining Co.	Indiana, Pa.	Cowan	Jefferson	R. R. & P.	Cowan, Pa.
Rochester & Pittsburgh Coal & Iron Co.	Indiana, Pa.	Luzerne	Indiana	R. R. & P.	Luzerne, Pa.
Rochester & Pittsburgh Coal & Iron Co.	Phillipsburg, Pa.	Rocky Lodge No. 1	Clearfield	Penna.	Rocky Lodge, Pa.
Rocky Lodge Coal Co.	Phillipsburg, Pa.	Rocky Lodge No. 2	Clearfield	Penna.	Rocky Lodge, Pa.
Rocky Lodge Coal Co.	Indiana, Pa.	Pershing	Fayette	I. C. V.	Pershing, Pa.
Salt Lick Coal Co.	Leechburg, Pa.	Foster No. 4	Westmoreland	Penna.	Foster, Pa.
Saltburg Colliery Co.	Leechburg, Pa.	Foster No. 5	Westmoreland	Penna.	Foster, Pa.
Saltburg Colliery Co.	Brookville, Pa.	Sandy Hollow No. 1	Armstrong	P. & S.	Sandy Hollow, Pa.
Sandy Hollow Coal Co.	Brookville, Pa.	Sander No. 1	Somerset	B. & O.	Sander, Pa.
Sanner Coal Co.	Indiana, Pa.	Savan No. 1	Indiana	B. R. & P.	Savan, Pa.
Savan Colliery Company	708-712 Fidelity Bldg., Buffalo, N. Y.	Seneca No. 1	Indiana	B. R. & P.	Chambersville, Pa.
Seneca Coal Mining Co.	708-712 Fidelity Bldg., Buffalo, N. Y.	Seneca No. 2	Indiana	B. R. & P.	Chambersville, Pa.
Seneca Coal Mining Co.	Phillipsburg, Pa.	Sheridan No. 1	Clearfield	N. Y. C.	Phillipsburg, Pa.
Sheridan Coal Co.	Phillipsburg, Pa.				

(Continued on Next Page)

FREEPORT, UPPER SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Shoemaker Coal Mining Co.	1507 Real Estate Trust Bldg., Philadelphia, Pa.	Willmore No. 3.	Cambria.	Penna.	Lilly, Pa.
Smith, Eliza J. & Brothers.	Cherry Tree, Pa.	Peterman.	Indiana.	B. & P.	Chambersville, Pa.
Smokeless Coal Company.	Johnstown, Pa.	Smokeless No. 2.	Cambria.	B. & O.	Johnstown, Pa.
Smokeless Quakemaking Coal Co.	Somerset, Pa.	Alex No. 1.	Somerset.	B. & O.	Boswell, Pa.
Solomon Jos., Fire Brick Co.	Connellsville, Pa.	Indiana No. 2.	Indiana.	Penna.	Bolivar, Pa.
Somerfield Mining Co.	Pittsburgh, Pa.	Thomasdale.	Fayette.	Penna.	Somerfield, Pa.
Sonman Shaft Coal Co.	Minersville, Pa.	Sonman Slope.	Cambria.	Penna.	Portage, Pa.
South Fork Coal Mining Co.	421 Chestnut St., Philadelphia, Pa.	South Fork No. 2.	Cambria.	P. R. R.	South Fork, Pa.
Stader Coal Co.	Connellsville, Pa.	Stader No. 1.	Fayette.	Indian Creek Valley.	Indian Creek, Pa.
Stauffer Kittanning Coal Co.	Scottdale, Pa.	No. 1.	Armstrong.	H. V. Penna.	Kelly Station, Pa.
Stilla Coal Co.	Pittsburgh, Pa.	Stella.	Armstrong.	Penna.	Templeton, Pa.
Sterrett Coal Co.	Westville, Pa.	Sterrett.	Jefferson.	B. & P.	Brockwayville, Pa.
Stickel Coal Co.	Vandergrift, Pa.	Stickel.	Westmoreland.	Penna.	Vandergrift, Pa.
Strangford Coal Company.	Blairsville, Pa.	Strangford.	Indiana.	P. R. R.	Strangford, Pa.
Strayer Bros.	Coalport, Pa.	Strayer No. 2.	Cambria.	Penna.	Flinton, Pa.
Summit Coal Mining Co.	Punxsutawney, Pa.	Summit No. 1.	Armstrong.	P. R. R.	Dayton, Pa.
Summit Coal Mining Co.	Punxsutawney, Pa.	Summit No. 3.	Armstrong.	P. R. R.	Dayton, Pa.
Summit Coal Mining Co.	Punxsutawney, Pa.	Summit No. 4.	Armstrong.	P. R. R.	Dayton, Pa.
Sutter-Binn Coal Co.	Indiana, Pa.	Sutter-Binn.	Indiana.	B. & S.	Plumville, Pa.
Taylor & McCoy Coal & Coke Co.	Baltimore, Md.	Gallitzin.	Cambria.	P. R. R.	Gallitzin, Pa.
Taylor Run Coal Co.	Union Arcade, Pittsburgh, Pa.	Taylor Run.	Armstrong.	P. R. R.	Kelly Station, Pa.
Telford Coal Co.	Johnstown, Pa.	Telford No. 1.	Cambria.	Penna.	Johnstown, Pa.
Timblin Coal Co.	Timblin, Pa.	Timblin.	Jefferson.	P. & S.	Timblin, Pa.
Toby Coal Mining Co.	Brockwayville, Pa.	Groves No. 1.	Jefferson.	B. & P.	Belwood, Pa.
Toby Coal Mining Co.	Brockwayville, Pa.	Groves No. 2.	Jefferson.	B. & P.	Belwood, Pa.
Trout Run Coal Mining Co.	St. Benedict, Pa.	Trout Run No. 5.	Cambria.	Penna.	Portage, Pa.
Trucks Coal Mining Co.	Leechburg, Pa.	Trucks No. 2.	Armstrong.	Penna.	Leechburg, Pa.
Trucks Coal Mining Co.	Leechburg, Pa.	Trucks No. 3.	Armstrong.	Penna.	Arolo, Pa.
Union Fuel Co.	Jennette, Pa.	Hunker No. 1.	Westmoreland.	Penna.	Hunker & New Station, Pa.
Ursina Fuel Co.	Somerset, Pa.	Hill.	Somerset.	U. & N. F.	Ursina, Pa.
Valley Coal Company.	Leechburg, Pa.	Valley.	Westmoreland.	Penna.	Leechburg, Pa.
Vogele Coal Co.	Butler, Pa.	Vogele.	Butler.	P. R. R.	Butler, Pa.
Wallwork Mining Co.	Summersville, Pa.	Mosgrove.	Armstrong.	Penna.	Mosgrove, Pa.
Watkins Coal Co.	New York, N. Y.	Watkins No. 1.	Cambria.	P. R. R.	Barnesboro, Pa.
Watkins Coal Co.	New York, N. Y.	Watkins No. 2.	Cambria.	P. R. R.	Barnesboro, Pa.
Watson Coal Company.	Saltsburg, Pa.	Watson No. 1.	Indiana.	P. R. R.	White, Pa.
Watson Coal Company.	Saltsburg, Pa.	Watson No. 2.	Indiana.	P. R. R.	White, Pa.
West Leechburg Steel Co.	Pittsburgh, Pa.	West Leechburg.	Armstrong.	Penna.	Leechburg, Pa.
West Penn Mining Co.	Leechburg, Pa.	West Penn.	Westmoreland.	P. R. R.	Leechburg, Pa.
West Tarentum Fuel Co.	Freeport, Pa.	Peterson.	Allegheny.	Penna.	Tarentum, Pa.
Whitelaw Coal & Coke Co.	Pittsburgh, Pa.	Whitelaw.	Butler.	B. & L. E.	Ivywood, Pa.
Wilson-Beggle Coal Co.	1301 Keenan Bldg., Pittsburgh, Pa.	Wilson-Beggle.	Beaver.	P. F. W. & C., P. L. & W.	Cannetown, Pa.
Wilmer-Bird Coal Co.	Latrobe, Pa.	Bird.	Westmoreland.	Ligonier Valley.	Kingston, Pa.
Wingrove Coal Co.	Morgantown, W. Va.	Echart.	Fayette.	I. C. V.	Mill Run, Pa.
Winslow & Williams.	Punxsutawney, Pa.	Winslow.	Jefferson.	Penna.	Winslow, Pa.
Wood & Boucher Coal Co.	Barnesboro, Pa.	Wood & Boucher No. 2.	Cambria.	N. Y. C.	Barnesboro, Pa.
Wood & Boucher Coal Co.	Barnesboro, Pa.	Wood & Boucher No. 3.	Cambria.	N. Y. C.	Barnesboro, Pa.
Youghiogheny Coal & Coke Co.	Dawson, Pa.	Florence.	Fayette.	B. & O., P. & L. E.	Dawson, Pa.
Youngwood Coal & Coke Co.	Greensburg, Pa.	Faxtown.	Westmoreland.	Penna.	Youngwood, Pa.

FULTON SEAM

Mined in Broad Top district. Semibituminous. Suitable for Smithing, Locomotive Fuel, Export, Bunker, Producer, Gas, Domestic and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Baylor Coal Mining Co.	Huntingdon, Pa.	Fulton No. 1.	Bedford.	H. & B. T. M.	Dudley, Pa.
Black, A. J., Coal Co., The.	Broad Top City, Pa.	Black No. 3.	Huntingdon.	H. & B. T. M.	Dudley, Pa.
Black, A. J., Coal Co., The.	Broad Top City, Pa.	Black No. 7.	Huntingdon.	H. & B. T. M.	Dudley, Pa.
Black, A. J., Coal Co., The.	Broad Top City, Pa.	Black No. 8.	Huntingdon.	H. & B. T. M.	Dudley, Pa.
Broad Top Coal & Mineral Co.	Huntingdon, Pa.	Jacobs.	Huntingdon.	E. B. T.	Jacobs, Pa.
Carbon Coal & Coke Co., The.	85 Devonshire St., Boston, Mass.	Ocean No. 5.	Huntingdon.	H. & B. T.	Dudley, Pa.
Carbon Coal & Coke Co., The.	85 Devonshire St., Boston, Mass.	Ocean No. 4.	Huntingdon.	H. & B. T.	Dudley, Pa.
Carbon Coal & Coke Co.	85 Devonshire St., Boston, Mass.	Carbon No. 5.	Huntingdon.	H. & B. T. M.	Dudley, Pa.
Kenrock Coal Co.	Philadelphia, Pa.	Kenrock.	Huntingdon.	H. & B. T. M.	Dudley, Pa.
Middlethian Coal Co.	Dudley, Pa.	Middlethian.	Huntingdon.	H. & B. T.	Dudley, Pa.
Reed Colliery Co.	Dudley, Pa.	Benedict No. 1.	Huntingdon.	H. & B. T.	Dudley, Pa.
Rockhill Coal & Iron Co.	Philadelphia, Pa.	No. 1.	Huntingdon.	E. B. T. & C.	Robertsdale, Pa.
Rockhill Coal & Iron Co.	Philadelphia, Pa.	No. 5.	Huntingdon.	E. B. T. & C.	Robertsdale, Pa.
Rockhill Coal & Iron Co.	Philadelphia, Pa.	No. 6.	Huntingdon.	E. B. T. & C.	Robertsdale, Pa.
Rockhill Coal & Iron Co.	Philadelphia, Pa.	No. 7.	Huntingdon.	E. B. T. & C.	Robertsdale, Pa.
Rockhill Coal & Iron Co.	Philadelphia, Pa.	No. 9.	Huntingdon.	E. B. T. & C.	Robertsdale, Pa.
Shannon Company.	Dudley, Pa.	Martha Slope.	Huntingdon.	H. & B. T. M.	Dudley, Pa.
Thropp, Joseph E.	Everett, Pa.	Gordon & Fulton.	Huntingdon.	H. & B. T.	Melrose & Dudley, Pa.
Thropp, Joseph E.	Everett, Pa.	Miller.	Huntingdon.	H. & B. T.	Melrose & Dudley, Pa.
Vernon Collieries Co.	Huntingdon, Pa.	Vernon No. 1.	Huntingdon.	E. B. T. & C.	Rocky Ridge, Pa.
Vernon Collieries Co.	Huntingdon, Pa.	Vernon No. 2.	Huntingdon.	E. B. T. & C.	Rocky Ridge, Pa.

KELLY SEAM

Mined in Broad Top district. Semibituminous. Suitable for Smithing, Locomotive Fuel, Export, Bunker, Producer Gas, Domestic and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Bunker Hill Coal Co.	Huntingdon, Pa.	Bunker Hill.	Bedford.	H. & B. T.	Rommell, Pa.
Carbon Coal & Coke Co.	85 Devonshire St., Boston, Mass.	Cambria No. 3.	Bedford.	H. & B. T. M.	Hopewell, Pa.
Huntingdon Coal Co.	Huntingdon, Pa.	Delaware No. 2.	Bedford.	Penna.	Six Mile Run, Pa.
Kay Coal Mining Co.	Everett, Pa.	Hickory Hill.	Bedford.	H. & B. T.	Coalmont, Pa.
Kay Coal Mining Co.	Everett, Pa.	Octoraro No. 1.	Bedford.	H. & B. T.	Riddlesburg, Pa.
Kay Coal Mining Co.	Everett, Pa.	Octoraro No. 2.	Bedford.	H. & B. T.	Riddlesburg, Pa.
Langdon Coal Co.	Huntingdon, Pa.	Cambria No. 2.	Bedford.	H. & B. T. M.	Hopewell, Pa.
Langdon Coal Co.	Huntingdon, Pa.	Glendale No. 4.	Bedford.	H. & B. T. M.	Rommell, Pa.
Langdon Coal Co.	Huntingdon, Pa.	Chevington No. 3.	Bedford.	H. & B. T. M.	Hopewell, Pa.
Langdon Coal Co.	Huntingdon, Pa.	Chevington No. 4.	Bedford.	H. & B. T. M.	Hopewell, Pa.
Lenore Coal Co.	York, Pa.	Lenore No. 1.	Bedford.	H. & B. T.	Riddlesburg, Pa.
Lenore Coal Co.	York, Pa.	Lenore No. 2.	Bedford.	H. & B. T.	Riddlesburg, Pa.
McIntyre, James M. & Co.	Six Mile Run, Pa.	Shreeve Run No. 1.	Bedford.	H. & B. T.	Rommell, Pa.
McIntyre, James M. & Co.	Six Mile Run, Pa.	Shreeve Run No. 6.	Bedford.	H. & B. T.	Rommell, Pa.
McIntyre, James M. & Co.	Six Mile Run, Pa.	Shreeve Run No. 7.	Bedford.	H. & B. T.	Rommell, Pa.
Schipper Brothers Coal Mining Co.	Six Mile Run, Pa.	Langdon.	Bedford.	H. & B. T.	Riddellburg, Pa.
Schipper Brothers Coal Mining Co.	Six Mile Run, Pa.	Illinois.	Bedford.	H. & B. T.	Riddellburg, Pa.
Schipper Brothers Coal Mining Co.	Six Mile Run, Pa.	Smokeless.	Bedford.	H. & B. T.	Riddellburg, Pa.
Thropp, Joseph E.	Everett, Pa.	Kelly Plane.	Bedford.	H. & B. T.	Kearney & Hopewell, Pa.

KITTANNING, LOWER SEAM (Known also as the B SEAM; MILLER or SONMAN and BLACKLICK in Cambria County; DAGUS or DAGUSCAHONDA in Elk County; BLOSS in Tioga County; BARNET in Bedford and Huntingdon Counties)

Mined in Blossburg, Snowshoe, Clearfield, Reynoldsville, Low Grade Division, Shawmut, Cambria, Two Lick, Indiana, Allegheny River, Johnstown, Southfork-Windber, Quehannong and Broadtop districts. Bituminous rank in western counties; Semibituminous in eastern counties.

Suitable by localities for Bunker, Cement Burning, By-product Coking,

Bee-hive Coking, Domestic, Export, Illuminating Gas, Locomotive

Fuel, Melting, Powdered Coal, Producer Gas, Smithing and

Steam uses. Coals from low-volatile regions

known as Smokeless.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
A. G. & S. Mining Co.	Kittanning, Pa.	Brilliant	Armstrong	A. V. Penna.	Kittanning, Pa.
Abel Coal Co.	DuBois, Pa.	Wild Cat	Clearfield	P. R. R.	DuBois, Pa.
Acme Gas Coal Company	Greensburg, Pa.	Acme	Clarion	Penna.	Kimersburg, Pa.
Acme Gas Coal Company	Greensburg, Pa.	Penn.	Clarion	Penna.	Kimersburg, Pa.
Allegheny River Mining Company	Kittanning, Pa.	Chadegan	Armstrong	Pgh. & Shawmut	Chadegan, Pa.
Allegheny River Mining Company	Kittanning, Pa.	Chickasaw	Armstrong	P. & S.	Chickasaw, Pa.
Allegheny River Mining Company	Kittanning, Pa.	Purnace Run	Armstrong	P. & S.	Furnace Run, Pa.
Alton Coal Co.	McGees Mills, Pa.	Alton No. 1	Indiana	Penna.	Sidney, Pa.
Amestown Coal Mining Co.	Phillipsburg, Pa.	Amestown No. 1	Clearfield	N. Y. C.	Whitmar, Pa.
Argyle Coal Co.	Greensburg, Pa.	No. 1	Cambria	Penna.	South Fork, Pa.
Argyle Coal Co.	Greensburg, Pa.	No. 2	Cambria	Penna.	South Fork, Pa.
Armstrong Coal Mining Co.	Blairsville, Pa.	Amford	Indiana	P. R. R.	Dilltown, Pa.
Armstrong Coal Mining Co.	Kittanning, Pa.	Armstrong	Armstrong	Penna.	Hasthor, Pa.
Arrow Coal Mining Company	Oliver Bldg., Pittsburgh, Pa.	Arrow No. 1	Somerset	Penna.	Arrow, Pa.
Arrow Coal Mining Company	Oliver Bldg., Pittsburgh, Pa.	Arrow No. 5	Somerset	Penna.	Rockingham, Pa.
Ashman Coal Co.	Philadelphia, Pa.	Glen	Clearfield	N. Y. C. & R. R.	Mission, Pa.
Atlantic Coal Co.	Meyersdale, Pa.	Atlantic No. 2	Somerset	R. & O.	Atlantic No. 2 Sdg., Pa.
B. & B. Coal Co., Inc.	New Millport, Pa.	R. & B.	Clearfield	N. Y. C. & H.	New Millport, Pa.
Baker-Whiteley Coal Co.	Keyser Bldg., Baltimore, Md.	Elma No. 1	Somerset	R. & O.	Howersville, Pa.
Baker-Whiteley Coal Co.	Keyser Bldg., Baltimore, Md.	Elma No. 2	Somerset	R. & O.	Howersville, Pa.
Bakerton Coal Co.	Indiana, Pa.	Bakerton No. 1	Cambria	P. R. R.	Carrolltown Rd. Sta., Pa.
Bald Hill Coal Company	St. Benedict, Pa.	Victor No. 44	Clarion	N. Y. C.	Bald Hill, Pa.
Baldwin Coal & Coke Co.	Punxsutawney, Pa.	No. 1	Clarion	L. E. F. & C.	Shawers, Pa.
Banks Coal Company	Punxsutawney, Pa.	Burton No. 1	Indiana	Penna.	Sidney, Pa.
Banks Coal Company	Punxsutawney, Pa.	Burton No. 2	Indiana	Penna.	Sidney, Pa.
Banner Coal Mining Co.	617 Munsy Bldg., Baltimore, Md.	Peerless No. 4	Centre	P. R. R.	Oseola Mills, Pa.
Barnes Coal Co.	Philadelphia, Pa.	Lancashire No. 11	Cambria	Penna.	Bakerton, Pa.
Baxter Coal Co.	Kittanning, Pa.	Baxter	Armstrong	Penna.	Kittanning, Pa.
Bear Rock Coal Company	Lilly, Pa.	Bear Rock Col. No. 1	Cambria	Penna.	Lilly, Pa.
Bear Rock Coal Company	Lilly, Pa.	Bear Rock Col. No. 3	Cambria	Penna.	Lilly, Pa.
Bear Run Coal Mining Co.	Oseola Mills, Pa.	Bear Run No. 1	Centre	Penna.	Houtzdale, Pa.
Beattie Mining Co.	Fairmount City, Pa.	No. 2	Clarion	Penna.	New Bethlehem, Pa.
Bell Hill Coal & Coke Co.	35 Central Trust Bldg., Altoona, Pa.	Bond No. 5	Cambria	P. R. R.	Figart, Pa.
Bells Hill Coal Co.	Blairsville, Pa.	Bells Hill	Indiana	S. R. & P. P. R. R.	Jos. mine, Pa.
Ben Adhem Coal Company	Brookville, Pa.	Ben Adhem	Clarion	Penna.	Stige, Pa.
Bennetts Branch Coal Co.	Clarion, Pa.	No. 2	Elk	P. R. R.	Dents Run, Pa.
Bennetts Branch Coal Co.	Clarion, Pa.	No. 3	Elk	P. R. R.	Dents Run, Pa.
Berlin Coal Co.	Johnstown, Pa.	Salvo	Somerset	B. & O.	Pen Mar No. 2 Siding, Pa.
Berwind-White Coal Co.	Commercial Trust Bldg., Philadelphia, Pa.	Eureka No. 28	Clearfield	P. R. R.	Houtzdale, Pa.
Berwind-White Coal Co.	Commercial Trust Bldg., Philadelphia, Pa.	Eureka No. 29	Clearfield	P. R. R.	Houtzdale, Pa.
Berwind-White Coal Co.	Commercial Trust Bldg., Philadelphia, Pa.	Eureka No. 30	Somerset	P. R. R.	Windber, Pa.
Berwind-White Coal Co.	Commercial Trust Bldg., Philadelphia, Pa.	Eureka No. 31	Somerset	P. R. R.	Windber, Pa.
Berwind-White Coal Co.	Commercial Trust Bldg., Philadelphia, Pa.	Eureka No. 35	Somerset	P. R. R.	Windber, Pa.
Berwind-White Coal Co.	Commercial Trust Bldg., Philadelphia, Pa.	Eureka No. 36	Somerset	P. R. R.	Windber, Pa.
Berwind-White Coal Co.	Commercial Trust Bldg., Philadelphia, Pa.	Eureka No. 37	Cambria	P. R. R.	Windber, Pa.
Berwind-White Coal Co.	Commercial Trust Bldg., Philadelphia, Pa.	Eureka No. 39	Somerset	P. R. R.	Windber, Pa.
Berwind-White Coal Co.	Commercial Trust Bldg., Philadelphia, Pa.	Eureka No. 40	Cambria	P. R. R.	Windber, Pa.
Berwind-White Coal Co.	Commercial Trust Bldg., Philadelphia, Pa.	Eureka No. 42	Cambria	P. R. R.	Windber, Pa.
Berwind-White Coal Co.	Commercial Trust Bldg., Philadelphia, Pa.	Eureka No. 43	Cambria	P. R. R.	Windber, Pa.
Betty Coal & Fire Clay Co.	Brisban, Pa.	Burley No. 1	Clearfield	Penna.	Brisban, Pa.
Betz Coal Mining Co.	Philadelphia, Pa.	Betz No. 2	Clarion	Penna.	Acron, Pa.
Big Bend Coal Mining Co.	1410 R. E. Trust Bldg., Philadelphia, Pa.	Somerset No. 1	Cambria	P. R. R.	Toledo Rocks, Pa.
Bigelow Run Coal Co.	Phillipsburg, Pa.	Bigelow Run No. 1	Centre	Penna.	Phillipsburg, Pa.
Binder Coal Mining Co.	Carrolltown, Pa.	Binder No. 1	Cambria	Penna.	Carrolltown Road, Pa.
Black Oak Coal Co.	Oseola Mills, Pa.	Oleum	Clearfield	P. & S. Penna.	Oseola Mills, Pa.
Blair, Fred, Jr.	Blairburg, Pa.	Blair No. 2	Cambria	Penna.	Figart, Pa.
Blue Run Coal Co.	Clarance, Pa.	Blue Run No. 1	Clearfield	N. Y. C.	Clinton Hope, Pa.
Boardman Coal Mining Co.	Clearfield, Pa.	Boardman No. 4	Clearfield	N. Y. C.	Boardman, Pa.
Bostaph Coal Co.	1310 First Nat'l Bank Bldg., Pittsburgh, Pa.	Bozaph	Clarion	R. & O.	Bozaph, Pa.
Boston Collieries Corp.	Clearfield, Pa.	Manoet No. 1	Clearfield	Penna.	Houtzdale, Pa.
Bradley Mine Coal Co.	Altoona, Pa.	Bradley	Blair	Penna.	Callitzin, Pa.
Bradys Bend Coal Co.	East Brady, Pa.	Bradys Bend	Armstrong	W. Allegheny	East Brady, Pa.
Brothers Valley Coal Co.	90 West Street, New York, N. Y.	Pen Mar No. 2	Somerset	R. & O.	Macdonaldton, Pa.
Brothers Valley Coal Co.	90 West Street, New York, N. Y.	Pen Mar No. 3	Somerset	R. & O.	Macdonaldton, Pa.
Brothers Valley Coal Co.	90 West Street, New York, N. Y.	Pen Mar No. 4	Somerset	R. & O.	Macdonaldton, Pa.
Brush Creek Coal Mining Co.	Indiana, Pa.	Waterman	Indiana	B. B. & P.	Waterman, Pa.
Brush Creek Coal Mining Co.	Indiana, Pa.	Snyder No. 1	Indiana	B. B. & P.	Waterman, Pa.
Brush Creek Coal Mining Co.	Indiana, Pa.	Snyder No. 2	Indiana	B. B. & P.	Waterman, Pa.
Brush Creek Coal Mining Co.	Indiana, Pa.	Snyder No. 3	Indiana	B. B. & P.	Waterman, Pa.
Brush Creek Coal Mining Co.	Indiana, Pa.	Marie Valley	Somerset	R. & O.	Berlin, Pa.
Buffalo Creek Coal Mining Co.	Berlin, Pa.	Calder No. 1	Indiana	Penna., B. R. & P.	Dias, Pa.
Caldwell Smokeless Coal Co.	Johnstown, Pa.	Caldwell No. 2	Indiana	Penna., B. R. & P.	Heshon, Pa.
Cambria Fuel Co.	Johnstown, Pa.	Cambria No. 2	Somerset	R. & O.	Johnstown, Pa.
Cambria Steel Co.	Widener Bldg., Philadelphia, Pa.	Franklin No. 2	Cambria	Penna., B. & O.	Johnstown, Pa.
Cambria Steel Co.	Widener Bldg., Philadelphia, Pa.	Franklin No. 4	Cambria	Penna., B. & O.	Johnstown, Pa.
Camrons Bottom Smokeless Coal Co.	Hellwood, Pa.	Camrons Bottom	Indiana	N. Y. C.	Hellwood, Pa.
Campbell Coal Co.	Connellsville, Pa.	Campbell No. 1	Fayette	R. & O.	Connellsville, Pa.
Campbell Coal Co.	Connellsville, Pa.	Campbell No. 2	Fayette	I. C. V.	Connellsville, Pa.
Cascade Coal & Coke Co.	Buffalo, N. Y.	Tyler	Clearfield	B. & S.	Tyler, Pa.
Caswin Coal Mining Co.	Philadelphia, Pa.	West r.	Clearfield	Penna.	Oseola Mills, Pa.
Cedar Hill Coal Mining Company	Harrison Bldg., Philadelphia, Pa.	Mt. Branch	Clearfield	Penna.	Oseola Mills, Pa.
Charleston Coal Co.	Kittanning, Pa.	Charleston	Armstrong	P. & S.	McWilliams, Pa.
Chas. Bros. Coal Co.	Clearfield, Pa.	Faunes No. 1	Clearfield	N. Y. C. & H. R.	Faunes, Pa.
Cherry Run Fuel Company	Rimburg, Pa.	Vogel	Clarion	Penna.	Huy Station, Pa.
Cherry Run Mining Co.	Somerset, Pa.	Cherry Run	Clarion	Penna.	Huy, Pa.
Chestnut Ridge Coal Mining Co.	Ellisport Square, Buffalo, N. Y.	Ch stunt Ridge	Clarion	Penna.	Rimburg, Pa.
Childs, M. Mines	Laquin, Pa.	Barclay	Bradford	S. & N. Y.	Powell, Pa.
Church Hill Mining Co.	Lechburg, Pa.	Church Hill	Clarion	Penna.	Monteoy, Pa.
Citizens Coal Co.	Johnstown, Pa.	Gautier	Cambria	P. R. R.	Johnstown, Pa.
Citizens Coal Co.	Johnstown, Pa.	Green Hill	Cambria	B. & O.	Johnstown, Pa.
Clarence Coal Co.	Clarance, Pa.	Clarance No. 1	Centre	Penna.	Snow Sho., Pa.
Clarence Coal Co.	Clarance, Pa.	Clarance No. 10	Centre	Penna.	Snow Sho., Pa.
Clarion Coal Mining Company	Commercial Trust Bldg., Philadelphia, Pa.	Clarion	Clarion	Penna.	Huy, Pa.

(Continued on Next Page)

KITTANNING, LOWER SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Acme Coal Mining Co.	Clarion, Pa.	No. 1.	Clarion	L. E. F. & C.	Clarion, Pa.
Adams Bituminous Coal Corp.	Indiana, Pa.	Cooper.	Clearfield	N. Y. C. & H. R.	Peale, Pa.
Adams Bituminous Coal Corp.	Indiana, Pa.	Pleasant Hill.	Clearfield	N. Y. C. & H. R.	Peale, Pa.
Adams Bituminous Coal Corp.	Northumberland, Pa.	Moore Creek.	Clearfield	B. R. & P.	Clearfield, Pa.
Adams Bituminous Coal Corp.	Altoona, Pa.	Coal Run Jet. No. 1.	Clearfield	Penna.	Oseola Mills, Pa.
Adams Bituminous Coal Corp.	Commercial Trust Bldg., Philadelphia, Pa.	Commercial No. 3.	Cambria	P. R. R.	Twin Rocks, Pa.
Adams Bituminous Coal Corp.	Commercial Trust Bldg., Philadelphia, Pa.	Commercial No. 4.	Cambria	P. R. R.	Twin Rocks, Pa.
Adams Bituminous Coal Corp.	Commercial Trust Bldg., Philadelphia, Pa.	Commercial No. 5.	Cambria	Penna.	Twin Rocks, Pa.
Adams Bituminous Coal Corp.	Commercial Trust Bldg., Philadelphia, Pa.	Commercial No. 15.	Cambria	Penna.	Twin Rocks, Pa.
Adams Bituminous Coal Corp.	Johnstown, Pa.	Park Hill.	Cambria	P. R. R.	Conemaugh, Pa.
Adams Bituminous Coal Corp.	Now York, N. Y.	Conestoga.	Clearfield	Penna.	Irvona, Pa.
Adams Bituminous Coal Corp.	Butler, Pa.	Consolidated No. 3.	Armstrong	B. R. & P.	Nichola, Pa.
Adams Bituminous Coal Corp.	Butler, Pa.	Consolidated No. 5.	Butler	B. R. & P.	Kendleton, Pa.
Adams Bituminous Coal Corp.	319 White Bldg., Buffalo, N. Y.	Turkey Run.	Clarion	Penna.	Sligo, Pa.
Adams Bituminous Coal Corp.	Bradford, Pa.	Cowanshannock No. 1.	Armstrong	Penna.	Kittanning, Pa.
Adams Bituminous Coal Corp.	Woodlawn, Pa.	Coxes Creek No. 3.	Somerset	R. & O.	Rockwood, Pa.
Adams Bituminous Coal Corp.	Brisbin, Pa.	Sarah No. 1.	Clearfield	P. & S.	Brisbin, Pa.
Adams Bituminous Coal Corp.	Brisbin, Pa.	Sarah No. 2.	Clearfield	P. & S.	Brisbin, Pa.
Adams Bituminous Coal Corp.	Curwensville, Pa.	No. 3.	Clearfield	N. Y. C.	Curwensville, Pa.
Adams Bituminous Coal Corp.	Craigsville, Pa.	Crescent.	Armstrong	B. R. & P.	Craigsville, Pa.
Adams Bituminous Coal Corp.	Morrisdale, Pa.	Conard.	Clearfield	N. Y. C. & H. R.	Morrisdale, Pa.
Adams Bituminous Coal Corp.	Expedit, Pa.	Sugar Camp.	Cambria	Penna.	Twin Rocks, Pa.
Adams Bituminous Coal Corp.	Hooversville, Pa.	Custer No. 1.	Somerset	B. & O.	Hooversville, Pa.
Adams Bituminous Coal Corp.	Philadelphia, Pa.	Cymbria No. 3.	Cambria	Penna.	Barnesboro, Pa.
Adams Bituminous Coal Corp.	Clearfield, Pa.	Penn No. 8.	Clearfield	P. & S.	Oseola Mills, Pa.
Adams Bituminous Coal Corp.	Clearfield, Pa.	Penn No. 9.	Clearfield	P. & S.	Oseola Mills, Pa.
Adams Bituminous Coal Corp.	Spangler, Pa.	Woodland No. 5 "B".	Indiana	N. Y. C.	Diamondville, Pa.
Adams Bituminous Coal Corp.	Dilltown, Pa.	Dilltown No. 1.	Indiana	P. R. R.	Dilltown, Pa.
Adams Bituminous Coal Corp.	DuBois, Pa.	Luthersburg.	Clearfield	B. B. & P.	Luthersburg, Pa.
Adams Bituminous Coal Corp.	Dugan, James F., & Co.	Beacon No. 1.	Clearfield	P. & S. Penna.	Oseola Mills, Pa.
Adams Bituminous Coal Corp.	Dushan Coal Mining Co.	Old Shan No. 1.	Clearfield	Penna.	Oseola Mills, Pa.
Adams Bituminous Coal Corp.	Eagle Coal Company.	Clenora.	Clarion	Penna.	Sarah Furnace, Pa.
Adams Bituminous Coal Corp.	East Fayette Coal Co.	Torrence.	Fayette	W. Md.	Ohio Pyle, Pa.
Adams Bituminous Coal Corp.	Ebensburg Coal Co.	Elmsburg No. 1.	Cambria	P. R. R.	Coiver, Pa.
Adams Bituminous Coal Corp.	Egolf Coal Mining Company.	Kath-rine No. 1.	Somerset	Penna.	Cairbrook, Pa.
Adams Bituminous Coal Corp.	Elk Coal Co.	Elk.	Elk	P. S. & N.	Elbon, Pa.
Adams Bituminous Coal Corp.	Elery-Schote Mining Co.	Coal Dale No. 16.	Clearfield	Penna.	Oseola Mills, Pa.
Adams Bituminous Coal Corp.	Filiott Coal Co.	Elcott.	Indiana	Penna.	Bolivar, Pa.
Adams Bituminous Coal Corp.	Empire Coal Mining Co.	Empire "M".	Indiana	N. Y. C.	Clymer, Pa.
Adams Bituminous Coal Corp.	Empire Coal Mining Co.	Empire "R".	Indiana	N. Y. C.	Clymer, Pa.
Adams Bituminous Coal Corp.	Empire Coal Mining Co.	Empire "P".	Indiana	N. Y. C.	Starford, Pa.
Adams Bituminous Coal Corp.	Estep Bros. Coal Mining Co.	Pleasant Valley No. 1.	Indiana	N. Y. C.	Starford, Pa.
Adams Bituminous Coal Corp.	Eureka Coal Co.	Strattonville.	Clarion	L. E. F. & C.	Strattonville, Pa.
Adams Bituminous Coal Corp.	Eyre Fuel Co.	Eyre.	Fayette	B. & O.	Ohio Pyle, Pa.
Adams Bituminous Coal Corp.	Federal Coal Mining Co., Ltd.	Federal.	Clarion	L. E. F. & C.	Clarion & Sligo, Pa.
Adams Bituminous Coal Corp.	Ferrier Run Coal Co.	Ferrier No. 1.	Indiana	Penna.	Indiana, Pa.
Adams Bituminous Coal Corp.	Figart Run Coal Company.	Fricks.	Cambria	Penna.	Figart, Pa.
Adams Bituminous Coal Corp.	Flora Coal Co.	Flora No. 3.	Somerset	B. & O.	Hooversville, Pa.
Adams Bituminous Coal Corp.	Fox Coal Co.	Fox No. 1.	Butler	W. A.	Portersville, Pa.
Adams Bituminous Coal Corp.	Freeport Fuel Co.	West Penna.	Armstrong	Penna.	Apollo, Pa.
Adams Bituminous Coal Corp.	Fordham Mining Co.	Fordham.	Jefferson	Penna.	Valley or Fordham, Pa.
Adams Bituminous Coal Corp.	Forge Coal Mining Co.	Forge No. 1.	Cambria	Penna.	Portage, Pa.
Adams Bituminous Coal Corp.	Forge Coal Mining Co.	Forge No. 2.	Cambria	Penna.	Portage, Pa.
Adams Bituminous Coal Corp.	Fort Hill Coal Co.	Fort Hill.	Somerset	B. & O. W. M.	Fort Hill, Pa.
Adams Bituminous Coal Corp.	Garfield Smokeless Coal Co.	Garfield No. 1.	Westmoreland	P. R. R.	Bolivar, Pa.
Adams Bituminous Coal Corp.	Garfield Smokeless Coal Co.	No. 2.	Indiana	Penna.	Bolivar, Pa.
Adams Bituminous Coal Corp.	Garfield Smokeless Coal Co.	No. 3.	Indiana	Penna.	Bolivar, Pa.
Adams Bituminous Coal Corp.	Garman, E. A.	Garman No. 3.	Cambria	Altoona Northern.	Dysart, Pa.
Adams Bituminous Coal Corp.	Ghem Coal Co.	Ghem.	Centre	P. R. R.	Oseola Mills, Pa.
Adams Bituminous Coal Corp.	Glen Brook Mining Co.	Glen Brook No. 1.	Clearfield	P. & S.	Brisbin, Pa.
Adams Bituminous Coal Corp.	Glen Brook Mining Co.	Glen Brook No. 2.	Clearfield	Penna.	Irvona, Pa.
Adams Bituminous Coal Corp.	Glen Bichey Coal Mining Co.	Manhattan.	Clearfield	N. Y. C.	Mitchell, Pa.
Adams Bituminous Coal Corp.	Glenbrook Coal Co.	Glenbrook No. 3.	Indiana	N. Y. C.	Starford, Pa.
Adams Bituminous Coal Corp.	Goshen Coal Co.	Goshen No. 4.	Clearfield	N. Y. C.	Surveyor, Pa.
Adams Bituminous Coal Corp.	Goshen Coal Co.	Goshen No. 5.	Clearfield	N. Y. C.	Surveyor, Pa.
Adams Bituminous Coal Corp.	Goshen Coal Co.	Goshen No. 6.	Clearfield	N. Y. C.	Surveyor, Pa.
Adams Bituminous Coal Corp.	Gould, W. A. & Bro.	Loraine.	Clearfield	P. R. R.	Brisbin, Pa.
Adams Bituminous Coal Corp.	Gould, W. A. & Bro.	Black Diamond.	Centre	P. R. R.	Oseola Mills, Pa.
Adams Bituminous Coal Corp.	Grampion Coal Mining Co.	Penn No. 4.	Centre	P. R. R.	Oseola Mills, Pa.
Adams Bituminous Coal Corp.	Grampion Coal Mining Co.	Penn No. 5.	Clearfield	P. R. R.	Oseola Mills, Pa.
Adams Bituminous Coal Corp.	Grampion Coal Mining Co.	Decatur No. 11.	Clearfield	N. Y. C. & H. R.	Grass Flat, Pa.
Adams Bituminous Coal Corp.	Grass Flat Coal Co.	No. 1.	Somerset	B. & O.	Fonstwell, Pa.
Adams Bituminous Coal Corp.	Grazier Coal Mining Co.	No. 1.	Clearfield	P. R. R.	Madra, Pa.
Adams Bituminous Coal Corp.	Greenwood Coal Mining Co.	Greenwood.	Armstrong	B. R. & P.	Worthington, Pa.
Adams Bituminous Coal Corp.	Guaranty Coal Co.	Graff.	Clearfield	Penna.	Phillipsburg, Pa.
Adams Bituminous Coal Corp.	Guion Coal Co.	Guion.	Cambria	Penna.	Lilly, Pa.
Adams Bituminous Coal Corp.	Hahman & Richards.	Bens Creek.	Clearfield	Penna.	Houtzdale, Pa.
Adams Bituminous Coal Corp.	Hale Coal Co.	Hale No. 1.	Clearfield	Penna.	Houtzdale, Pa.
Adams Bituminous Coal Corp.	Hale Coal Co.	Elizabeth No. 1.	Clearfield	Penna.	Houtzdale, Pa.
Adams Bituminous Coal Corp.	Hale Coal Co.	Elizabeth No. 2.	Clarion	Penna.	Rimersburg, Pa.
Adams Bituminous Coal Corp.	Hamler Coal Co.	Hamler No. 1.	Clearfield	N. Y. C.	Woodland, Pa.
Adams Bituminous Coal Corp.	Harrison-Walker Refractories Co.	Plane.	Centre	Penna.	Sandy Ridge, Pa.
Adams Bituminous Coal Corp.	Harrison-Walker Refractories Co.	Reitor.	Clarion	L. E. F. & C.	Strattonville, Pa.
Adams Bituminous Coal Corp.	Harriger Coal Co.	Valter.	Clearfield	Penna.	Blue Ball, Pa.
Adams Bituminous Coal Corp.	Harris Bros. Coal Mining Co.	No. 4.	Clearfield	Penna.	Blue Ball, Pa.
Adams Bituminous Coal Corp.	Harris Bros. Coal Mining Co.	Red Jacket.	Cambria	P. R. R.	Lilly, Pa.
Adams Bituminous Coal Corp.	Harris, Jas., & Sons.	Harris No. 2.	Indiana	Penna.	Starford, Pa.
Adams Bituminous Coal Corp.	Harve-Mack Coal Co.	Harve-Mack No. 1.	Indiana	N. Y. C.	Starford, Pa.
Adams Bituminous Coal Corp.	Harve-Mack Coal Co.	Harve-Mack No. 2.	Indiana	L. E. F. & C.	Clarion, Pa.
Adams Bituminous Coal Corp.	Harvey Coal Corp.	Harvey.	Clarion	P. S. & N.	Kersey, Pa.
Adams Bituminous Coal Corp.	Haw Coal Co.	Elk.	Centre	N. Y. C.	Gorton, Pa.
Adams Bituminous Coal Corp.	Hendon, Isaac F. & Son.	Pioneer No. 3.	Clarion	L. E. F. & C.	Waterson, Pa.
Adams Bituminous Coal Corp.	Hefron-Eisworth Coal Co.	Karns.	Clearfield	Penna.	Coalport, Pa.
Adams Bituminous Coal Corp.	Hegarty's, S. Sons.	Oakland No. 1.	Clearfield	Penna.	Coalport, Pa.
Adams Bituminous Coal Corp.	Hegarty's, S. Sons.	Oakland No. 2.	Clearfield	Penna.	Coalport, Pa.
Adams Bituminous Coal Corp.	Hegarty's, S. Sons.	Oakland No. 3.	Clearfield	Penna.	Coalport, Pa.
Adams Bituminous Coal Corp.	Henrietta Coal Mining Co.	Oakland No. 2.	Cambria	P. R. R.	Dunlo, Pa.
Adams Bituminous Coal Corp.	Henry Coal Co.	Henrietta No. 1.	Armstrong	P. & S.	Kittanning, Pa.
Adams Bituminous Coal Corp.	Hestrick Coal Co.	Hestrick No. 1.	Clearfield	N. Y. C.	Bald Hill, Pa.
Adams Bituminous Coal Corp.	Hestrick Coal Co.	Hestrick No. 2.	Clearfield	N. Y. C.	Bald Hill, Pa.
Adams Bituminous Coal Corp.	Highland View Coal Co.	Hughland View.	Armstrong	P. & S. N.	Kittanning, Pa.
Adams Bituminous Coal Corp.	Hill End Coal Co., The.	Miller.	Clarion	Penna.	Sligo, Pa.
Adams Bituminous Coal Corp.	Hillsboro Coal Co.	Hillsboro.	Cambria	Penna.	Hillsboro, Pa.
Adams Bituminous Coal Corp.	Hillside Mining Co.	Gukkside.	Armstrong	Penna.	Kittanning, Pa.
Adams Bituminous Coal Corp.	Hindle Coal Co.	Hindl No. 1.	Centre	Penna. N. Y. C. P. & S.	Phillipsburg, Pa.
Adams Bituminous Coal Corp.	Hocking Coal Co.	Hocking.	Somerset	B. & O.	Hocking, Pa.
Adams Bituminous Coal Corp.	Holden Coal Co.	Holden.	Clarion	L. E. F. & C.	Iolden, Pa.
Adams Bituminous Coal Corp.	Holler Coal Co.	Marjorie No. 1.	Centre	Penna. N. Y. C. P. & S.	Phillipsburg, Pa.
Adams Bituminous Coal Corp.	Hopkins Coal Co.	Sandvick.	Clearfield	Penna. B. R. & P.	Falls Creek, Pa.

(Continued on Next Page)

KITANNING, LOWER SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Hornier Quemahoning Coal Co.	Boswell, Pa.	Hornier No. 1.	Somerset	B. & O.	Boswell, Pa.
Hughes, C. A. & Co.	Altoona, Pa.	Hughes No. 2.	Cambria	Penna.	Portage, Pa.
Hughes, W. H. & Co.	Altoona, Pa.	Hughes No. 1.	Cambria	Penna.	Lilly, Pa.
Hughes, W. H. & Co.	Altoona, Pa.	Hughes No. 3.	Cambria	Penna.	Portage, Pa.
Huskin Coal Mining Co.	Windber, Pa.	Huskin No. 1.	Somerset	Penna.	Huskin, Pa.
Huskin Coal Mining Co.	Windber, Pa.	Huskin No. 3.	Somerset	Penna.	Carrbrook, Pa.
Imperial Coal Corporation.	705 Johnstown Trust Bldg., Johnstown, Pa.	Cambria No. 1.	Cambria	Penna.	Coalport, Pa.
Imperial Coal Corporation.	705 Johnstown Trust Bldg., Johnstown, Pa.	Diamond No. 1.	Indiana	Penna.	Swart, Pa.
Imperial Coal Corporation.	705 Johnstown Trust Bldg., Johnstown, Pa.	Diamond No. 2.	Indiana	Penna.	Swart, Pa.
Imperial Coal Corporation.	705 Johnstown Trust Bldg., Johnstown, Pa.	Shade Creek.	Somerset	Penna.	Swart, Pa.
Indian Creek Coal & Coke Co.	Somerset, Pa.	Sparks.	Fayette	B. & O.	Miller Run, Pa.
Indiana Coal Co.	Greensburg, Pa.	Cardiff.	Cambria	Penna.	Indian Head, Pa.
Iryona Coal & Coke Co.	Coalport, Pa.	Iryona No. 5.	Cambria	Penna.	Tom Run, Pa.
Iryona Coal & Coke Co.	Coalport, Pa.	Iryona No. 10.	Cambria	Penna.	Coalport, Pa.
Ivy Ridge Coal Mining Co.	Somerset, Pa.	Ivy Ridge.	Cambria	B. & O.	Coalport, Pa.
Jackson Coal Mining Co.	Expedi, Pa.	Jackson No. 1.	Cambria	Penna.	Rockwood, Pa.
Jackson Harrigan Coal Co.	St. Marys, Pa.	Paulay.	Cambria	P. S. & N.	Twin Rocks, Pa.
Jackson Harrigan Coal Co.	St. Marys, Pa.	Weedville.	Cambria	P. S. & N.	Byde, Pa.
Jaffa Coal Mining Co.	Brisban, Pa.	Harcene.	Cambria	P. S. & N.	Woodville, Pa.
James, W. J. Coal Co.	Franklin, Pa.	East Brady.	Clarion	P. R. R.	Brim, Pa.
James, W. J. Coal Co.	Franklin, Pa.	Franklin.	Clarion	Penna.	Philipston, Pa.
James, W. J. Coal Co.	Franklin, Pa.	Van Buren.	Clarion	Penna.	Philipston, Pa.
Juniata Coal Co.	Philadelphla, Pa.	Fernwood No. 1.	Armstrong	Penna., P. & S.	Redbank, Pa.
Juniata Coal Co.	Johnstown, Pa.	Rebecca No. 1.	Cambria	Penna.	Riney & Fernwood, Pa.
Juniata Coal Co.	Pittsburgh, Pa.	John Sta.	Armstrong	Penna.	Fenton, Pa.
Johnstown Smokeless Coal Co.	Johnstown, Pa.	Shalt.	Cambria	Penna.	John Sta., Pa.
Johnstown Smokeless Coal Co.	Johnstown, Pa.	No. 7.	Cambria	Penna.	Johnstown, Pa.
Josephson Coal Co.	St. Marys, Pa.	Elroy No. 1.	Elk	P. S. & N.	K. & Y. Pa.
Josephson Coal Co.	St. Marys, Pa.	Montgomery No. 2.	Armstrong	P. R. & P.	Montgomeryville, Pa.
Joyce, M. V.	New Bethlehem, Pa.	For.	Armstrong	Penna.	New Bethlehem, Pa.
Juniata Coal Co.	Alexandria, Pa.	Juniata No. 2.	Cambria	Penna.	Casandra, Pa.
Juniata Coal Co.	Alexandria, Pa.	Juniata No. 3.	Cambria	Penna.	Casandra, Pa.
Kato Coal Co.	Curwensville, Pa.	Kato.	Centre	N. Y. C. & H.	Kato, Pa.
Kelly Brothers Coal Co.	Snow Shoe, Pa.	Cherry Run No. 3.	Centre	Penna.	Snow Shoe, Pa.
Kelly Brothers Coal Co.	Snow Shoe, Pa.	Cherry Run No. 4.	Centre	Penna.	Snow Shoe, Pa.
Kelly Brothers Coal Co.	Snow Shoe, Pa.	Cherry Run No. 6.	Centre	Penna.	Snow Shoe, Pa.
Kelly Brothers Coal Co.	Snow Shoe, Pa.	Olanta.	Centre	N. Y. C. & H.	Olanta, Pa.
Kelly Brothers Coal Co.	Snow Shoe, Pa.	Valentine No. 2.	Centre	Penna.	Snow Shoe, Pa.
Kettle Creek Coal Mining Co.	Williamstown, Pa.	Kettle Creek.	Clinton	P. R. R.	Cooks Run, Pa.
Keystone Mining Co.	East Brady, Pa.	Sarah Furnace No. 1.	Clarion	P. R. R.	Sarah Furnace, Pa.
Keystone Mining Co.	East Brady, Pa.	Sterling No. 2.	Clarion	P. R. R.	Laxsonham, Pa.
Kiskimintas Coal Co.	Blairsville, Pa.	Brush Valley.	Indiana	Penna.	Scott Glen, Pa.
Kittanning Iron & Steel Co.	Kittanning, Pa.	Cowanshammock No. 2.	Armstrong	Penna.	Cowanshammock, Pa.
Kittanning Iron & Steel Co.	Kittanning, Pa.	Rayburn.	Armstrong	Penna.	Cowanshammock, Pa.
Kittanning Mining Co.	Poston, Mass.	Peach Hill.	Armstrong	Penna.	Rumerton, Pa.
Kittanning Steam Coal Co.	Kittanning, Pa.	Bohington No. 1.	Armstrong	Penna.	Kittanning, Pa.
Kittanning Steam Coal Co.	Kittanning, Pa.	Tullington No. 2.	Armstrong	Penna.	Kittanning, Pa.
Knickelbocker Smokeless Coal Co.	Johnstown, Pa.	Knickelbocker No. 2.	Somerset	B. & O.	Howesville, Pa.
Knickelbocker Smokeless Coal Co.	Johnstown, Pa.	Knickelbocker No. 3.	Somerset	R. & O.	Howesville, Pa.
Kreger Brothers.	Listie, Pa.	Kreger Bros.	Somerset	United.	Humbert, Pa.
Lackawanna Coal & Coke Co.	Lackawanna, N. Y.	No. 3.	Indiana	Penna., B. R. & P.	Wetrum, Pa.
Lackawanna Coal & Coke Co.	Lackawanna, N. Y.	No. 4.	Indiana	Penna., B. R. & P.	Wetrum, Pa.
Lane Coal Co.	Phillipsburg, Pa.	Leader.	Cambria	N. Y. C. & H.	Murphy, Pa.
Lansberry, A. H.	Woodland, Pa.	Lansberry No. 2.	Cambria	N. Y. C. & H.	Woodland, Pa.
Lasher Mining Co.	Templeton, Pa.	Lasher.	Armstrong	P. & S.	Dickey, Pa.
Laurel Run Coal Co.	Clearfield, Pa.	Laurel Run No. 1.	Clearfield	N. Y. C. & H.	Dumpling, Pa.
Lawsonham Coal Co.	St. Marys, Pa.	Lawsonham.	Clarion	Penna.	Lawsonham, Pa.
Lee, Thomas J.	Phillipsburg, Pa.	Ch. Sher.	Centre	N. Y. C. & H.	Black Run, Pa.
Leet Coal Co.	Highland Bldg., Pittsburgh, Pa.	Leet.	Armstrong	P. & S.	Frederick, Pa.
Lehigh Valley Coal Co.	Wilkes-Barre, Pa.	No. 22.	Centre	Penna.	Snowshoe, Pa.
Lehigh Valley Coal Co.	Wilkes-Barre, Pa.	No. 25.	Centre	Penna.	Snowshoe, Pa.
Lehigh Valley Coal Co.	Wilkes-Barre, Pa.	No. 26.	Centre	Penna.	Snowshoe, Pa.
Lehman & Estep Coal Co.	Windber, Pa.	Lehman & Estep.	Somerset	Penna.	Windber, Pa.
Lena Coal Co.	Winbure, Pa.	Lena No. 1.	Clearfield	Penna.	Smok Run, Pa.
Liberty Coal Co.	Berlin, Pa.	No. 1.	Somerset	B. & O.	Berlin, Pa.
Liberty Coal Co.	Berlin, Pa.	Liberty No. 2.	Somerset	B. & O.	Berlin, Pa.
Liberty Coal Mining Co.	Madra, Pa.	Buch.	Clearfield	Penna.	Madra, Pa.
Liberty Coal Mining Co.	Madra, Pa.	Corona.	Clearfield	Penna.	Madra, Pa.
Liberty Coal Mining Co.	Madra, Pa.	Davis.	Clearfield	Penna.	Madra, Pa.
Liberty Coal Mining Co.	Madra, Pa.	Shoff.	Clearfield	N. Y. C. & H.	Madra, Pa.
Liberty Coal Mining Co.	Madra, Pa.	Morgan Run.	Clearfield	Penna.	Madra, Pa.
Liberty Coal Mining Co.	Madra, Pa.	Seyanna.	Clearfield	Penna.	Madra, Pa.
Lilly Coal Co.	Altoona, Pa.	Lilly No. 2.	Cambria	P. R. B.	Lilly, Pa.
Lincoln Coal Co.	N. W. York, N. Y.	Lincoln.	Cambria	P. R. B.	Nanty Glo, Pa.
Little Beaver Coal Co.	Commercial Trust Bldg., Philadelphia, Pa.	Little Beaver No. 1.	Clearfield	P. & S.	Phillipsburg, Pa.
Lloydell Fuel Co.	Lloydell, Pa.	Lloydell No. 1.	Cambria	Penna.	Lloydell, Pa.
Loash Coal Co.	Indiana, Pa.	J. H. Loash.	Pittsburgh & Shawmut	Penna.	Knoxdale, Pa.
Lochrie-Price Coal Co.	Windber, Pa.	Lorrie Pries No. 1.	Somerset	B. & O.	Frostville, Pa.
Logan Coal Co.	502 Harrison Bldg., Philadelphia, Pa.	Logan No. 1.	Cambria	Penna.	Dunto, Pa.
Logan Coal Co.	502 Harrison Bldg., Philadelphia, Pa.	Logan No. 2.	Cambria	Penna.	Lloyd II, Pa.
Logan Coal Co.	502 Harrison Bldg., Philadelphia, Pa.	Logan No. 4.	Cambria	Penna.	Lloyd II, Pa.
Lorain Co., The.	Johnstown, Pa.	Ingleside.	Cambria	B. & O.	Johnstown, Pa.
Lower Kittanning Mining Co.	Kittanning, Pa.	Lower Kittanning.	Armstrong	P. & S.	Kittanning, Pa.
Loyal Hanna Coal & Coke Co.	Philadelphla, Pa.	Loyal Hanna No. 1.	Cambria	Penna.	Lloyd II, Pa.
Loyal Hanna Coal & Coke Co.	Philadelphla, Pa.	Loyal Hanna No. 6.	Somerset	Penna.	Carrbrook, Pa.
Lucas Coal Co.	Snow Shoe, Pa.	Cherry Run No. 7.	Centre	N. Y. C.	Snow Shoe, Pa.
Lydick Coal Co.	Indiana, Pa.	Lydick.	Indiana	P. R. R.	Indiana, Pa.
McGregor Coal Co.	Timblin, Pa.	McGregor No. 2.	Armstrong	P. & S.	Timblin, Pa.
McKenzie, Alex. & Sons.	Houtzdale, Pa.	McKenzie No. 1.	Clearfield	Penna., P. & S.	Houtzdale, Pa.
McLaughlin Coal Co.	Ridgway, Pa.	McLaughlin.	Elk	P. S. & N.	Woodville, Pa.
McNeese-Besse Coal Co., The.	Kittanning, Pa.	McNeese-Besse.	Armstrong	Penna.	Kittanning, Pa.
Madera Hill Coal Mining Co.	North American Bldg., Philadelphia, Pa.	Spangler No. 4.	Cambria	Penna.	Barnesboro, Pa.
Manufacturers Coal Co.	Belleville, Pa.	Adams No. 2.	Indiana	Penna.	Indiana, Pa.
Maple Ridge Coal Co.	New York, N. Y.	Bethel.	Somerset	B. & O.	Holtsville, Pa.
Maple Run Coal Co.	Altoona, Pa.	Maple Run.	Clearfield	N. Y. C. & H. R. R.	Bordman, Pa.
Margaret Coal Mining Co.	Blairsville, Pa.	Margaret.	Indiana	B. R. & P. Penna.	Hudson, Pa.
Maryland Coal & Coke Co., Inc.	Philadelphla, Pa.	Shoff.	Clearfield	P. & S.	Ossoda, Pa.
Maryland Coal & Coke Co., Inc.	Philadelphla, Pa.	Imperial No. 2.	Clearfield	Penna.	Hudson, Pa.
Maryland Coal Co. of Pennsylvania.	Philadelphla, Pa.	Maryland.	Cambria	Penna.	St. Marys, Pa.
Meadow Brook Coal Co.	Philadelphla, Pa.	Meadow Brook No. 1.	Clearfield	Penna.	Philadelphla, Pa.
Meadow Brook Coal Co.	Philadelphla, Pa.	Meadow Brook No. 2.	Clearfield	Penna.	Philadelphla, Pa.
Melcroft Coal Co.	800 Union Avenue, Pittsburgh, Pa.	Melcroft No. 1.	Fayette	I. C. V. B. & O.	Melcroft, Pa.
Melcroft Coal Co.	800 Union Avenue, Pittsburgh, Pa.	Melcroft No. 2.	Fayette	I. C. V. B. & O.	Melcroft, Pa.
Melrose Coal & Mining Co.	Uniontown, Pa.	No. 1.	Armstrong	Penna.	Uniontown, Pa.
Mercer Iron & Coal Co.	Stonchboro, Pa.	Sutton No. 9.	Clarion	N. Y. C. & H.	Stonchboro, Pa.
Miller Coal Co.	Philadelphla, Pa.	Miller No. 1.	Cambria	P. R. R.	Hasting, Pa.
Miller Run Coal Mining Co.	Patton, Pa.	Miller Run No. 1.	Cambria	Penna.	Hasting, Pa.
Mineo Coal Co.	Parkers Landing, Pa.	Mineo.	Armstrong	B. & O.	Parkers Landing, Pa.
Mineral Point Coal Co.	Johnstown, Pa.	Smolss No. 3.	Cambria	Penna.	Mineral Point, Pa.

(Continued on Next Page)

KITTANNING, LOWER SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Mohawk Coal Mining Co., Inc.	Kittanning, Pa.	Mohawk	Armstrong	P. & S.	Furnace Run, Pa.
Moravian Coal Mining Co.	Clarence, Pa.	Moravian No. 1	Clearfield	N. Y. C. & H.	Winburne, Pa.
Moravian Coal Mining Co.	Clarence, Pa.	Moravian No. 2	Clearfield	N. Y. C.	Winburne, Pa.
Moravian Coal Mining Co.	Clarence, Pa.	Moravian No. 3	Clearfield	N. Y. C.	Winburne, Pa.
Morrisdale Coal Co.	Philadelphia, Pa.	Morrisdale No. 8	Centre	Penna.	Gilliantown, Pa.
Morrisdale Coal Co.	Philadelphia, Pa.	Morrisdale No. 1	Clearfield	N. Y. C. & H.	Morrisdale, Pa.
Morrisdale Coal Co.	Philadelphia, Pa.	Morrisdale No. 5	Clearfield	N. Y. C. & H.	Morrisdale, Pa.
Moshannon Coal Mining Co.	Osceola Mills, Pa.	Moshannon No. 10	Clearfield	P. R. R.	Osceola Mills, Pa.
Moshannon Coal Mining Co.	Osceola Mills, Pa.	Moshannon No. 11	Centre	P. R. R.	Phillipsburg, Pa.
Moshannon Coal Mining Co.	Osceola Mills, Pa.	Moshannon No. 12	Clearfield	P. R. R.	Osceola Mills, Pa.
Moshannon Collieries Co.	Seneca Falls, N. Y.	Wallace No. 2	Clearfield	N. Y. C. & H.	Mitchell, Pa.
Moss Creek Coal Co.	Barnesboro, Pa.	Yoss Creek	Cambria	Penna.	Barnesboro, Pa.
Mountain Coal Co.	Greensburg, Pa.	Yellow Run	Cambria	Penna.	Dunlop, Pa.
Mountain Spring Coal Co., Inc.	Newport, Pa.	Mountain Spring	Clearfield	P. R. R.	Houtzdale, Pa.
Moutz, S. J. & Co.	Smith Mills, Pa.	Viola No. 1	Clearfield	Penna.	Smith Mills, Pa.
Nant-Y-Glo Coal Mining Co.	727 Land Title Bldg., Philadelphia, Pa.	Nant-Y-Glo No. 1	Cambria	Penna.	Nanty Glo, Pa.
Nant-Y-Glo Coal Mining Co.	727 Land Title Bldg., Philadelphia, Pa.	Nant-Y-Glo No. 2	Cambria	Penna.	Bakerton, Pa.
Nant-Y-Glo Coal Mining Co.	727 Land Title Bldg., Philadelphia, Pa.	Nant-Y-Glo No. 3	Cambria	Camb. & Ind.	Nanty Glo, Pa.
Navy Smokeless Coal Co.	Ebensburg, Pa.	Navy Colliery No. 1	Cambria	Penna.	Marrolltown Roads, Pa.
Neco Coal Mining Co.	Johnstown, Pa.	Mohawk	Fayette	Indian Cr. Valley	Neco, Pa.
Nineveh Coal Co.	Greensburg, Pa.	Valley No. 2	Westmoreland	Penna.	Seward, Pa.
O'Dwyer Beachley Coal Co.	Bethel, Pa.	D. B. No. 1	Somerset	B. & O.	Berlin, Pa.
Old Colony Coal Mining Co.	Altoona, Pa.	Federal No. 1	Somerset	B. & O.	Hooversville, Pa.
Old Colony Coal Mining Co.	Altoona, Pa.	Federal No. 2	Somerset	B. & O.	Hooversville, Pa.
Oliver Coal Mining Co.	Osceola Mills, Pa.	Coal Run No. 2	Clearfield	Indian Creek Valley	Oscola Mills, Pa.
Oneida Coal Mining Co.	Philadelphia, Pa.	Oneida No. 1	Fayette	Indian Creek Valley	Indian Head, Pa.
Page, James A. & Son	Mineral Point, Pa.	Page	Cambria	Penna.	Mineral Point, Pa.
Paragon Coal Mining Co.	Osceola Mills, Pa.	Paragon No. 3	Clearfield	Penna.	Oscola Mills, Pa.
Paramount Coal Mining Co.	Johnstown, Pa.	Paramount No. 1	Clearfield	N. Y. C. & H. R.	Winburne, Pa.
Peale, Peacock & Kerr, Inc.	St. Benedict, Pa.	No. 1	Clearfield	N. Y. C. & H. B.	Phillipsburg, Pa.
Peale, Peacock & Kerr, Inc.	St. Benedict, Pa.	No. 6	Clearfield	N. Y. C. & H. R.	Winburne, Pa.
Peale, Peacock & Kerr, Inc.	St. Benedict, Pa.	No. 7	Clearfield	N. Y. C. & H. R.	Phillipsburg, Pa.
Peale, Peacock & Kerr, Inc.	St. Benedict, Pa.	No. 8	Clearfield	N. Y. C. & H. R.	Phillipsburg, Pa.
Peale, Peacock & Kerr, Inc.	St. Benedict, Pa.	No. 9	Clearfield	N. Y. C. & H. R.	Winburne, Pa.
Penna. Clarion Coal Co.	716 Prudential Bldg., Buffalo, N. Y.	Rlack Cat.	Clarion	Penna.	New Bethlehem, Pa.
Pendler Coal Corp.	Johnstown, Pa.	Pendler No. 3	Somerset	B. & O.	Rockwood, Pa.
Pendler Coal Corp.	Johnstown, Pa.	Pendler No. 4	Centre	Penna.	Phillipsburg, Pa.
Pendler Coal Corp.	Johnstown, Pa.	Pendler No. 5	Indiana	Penna.	Seward, Pa.
Pennfield Coal & Coke Co.	Pennfield, Pa.	Pennfield No. 1	Clearfield	P. R. R.	Pennfield, Pa.
Pennfield Coal & Coke Co.	Pennfield, Pa.	Coalville No. 2	Elk	P. R. R.	Woodville, Pa.
Penner Coal Mining Co.	Baltimore, Md.	Tenker	Cambria	Penna.	Portage, Pa.
Penn Central Coal & Coke Co.	West Monticoy, Pa.	Penn Central	Clarion	Penna.	Upper Hill Village, Pa.
Pennsy Coal Company	Franklin, Pa.	Carrier No. 5	Jefferson	L. E. F. & C.	Carrier, Pa.
Pennsy Coal Company	Franklin, Pa.	Alsace No. 12	Clarion	L. E. F. & C.	Sligo, Pa.
Pennsy Coal Company	Franklin, Pa.	Hilltop No. 6	Jefferson	L. E. F. & C.	Carrier, Pa.
Pennsy Coal Company	Franklin, Pa.	Red No. 7	Jefferson	L. E. F. & C.	Carrier, Pa.
Pennsylvania Coal & Coke Corporation	New York, N. Y.	Penna. No. 1	Cambria	P. R. R.	Cassandra, Pa.
Pennsylvania Coal & Coke Corporation	New York, N. Y.	Penna. No. 3	Cambria	P. R. R.	Ehrenfeld, Pa.
Pennsylvania Coal & Coke Corporation	New York, N. Y.	Penna. No. 14	Cambria	Camb. & Ind.	Nanty Glo, Pa.
Pennsylvania Coal & Coke Corporation	New York, N. Y.	Penna. No. 15	Cambria	P. R. R.	Beaverdale, Pa.
Pennsylvania Coal & Coke Corporation	New York, N. Y.	Winburne No. 46	Clearfield	N. Y. C. & H.	Winburne, Pa.
Pennsylvania Coal & Coke Corporation	New York, N. Y.	Penna. No. 47	Clearfield	N. Y. C. & H.	Winburne, Pa.
Pennsylvania Coal & Coke Corporation	New York, N. Y.	Penna. No. 27	Cambria	Penna., N. Y. C.	Tatton, Pa.
Pennsylvania Coal & Coke Corporation	New York, N. Y.	Penna. No. 31	Cambria	Penna., N. Y. C.	Patton, Pa.
Pennsylvania Coal & Coke Corporation	New York, N. Y.	Penna. No. 55	Indiana	N. Y. C.	Alverda, Pa.
Pennsylvania Coal & Coke Corporation	New York, N. Y.	Pictoria No. 2	Somerset	B. & O.	Hollisopple, Pa.
Pennsylvania Collieries, Inc.	500 Fifth Ave., New York, N. Y.	Pratum No. 1	Somerset	B. & O.	Hollisopple, Pa.
Pennsylvania Collieries, Inc.	500 Fifth Ave., New York, N. Y.	Phoenix No. 1	Clearfield	P. R. R.	Madera, Pa.
Phoenix Coal Co.	Madera, Pa.	White Oak	Clearfield	Penna.	Madera, Pa.
Phoenix Coal Co.	Kittanning, Pa.	Dorothy	Armstrong	B. R. & P.	Kittanning, Pa.
Pine Furnace Fuel Co.	New Bethlehem, Pa.	No. 4	Armstrong	Penna.	Hawthorn, Pa.
Pine Run Coal Co.	New Bethlehem, Pa.	No. 11	Clarion	Penna.	New Bethlehem, Pa.
Pine Run Coal Co.	Hastings, Pa.	Pine Valley No. 1	Cambria	Penna., Hastings & C.	Hastings, Pa.
Pine Valley Coal Co.	Johnstown, Pa.	Monrville No. 1	Cambria	Penna.	Johnstown, Pa.
Piney Run Mining Co.	Comm-relied Trust Bldg., Philadelphia, Pa.	Souman No. 2	Cambria	P. R. R.	Lilly, Pa.
Pipr, W. H. & Co.	Kittanning, Pa.	Philliston	Clarion	Penna.	East Brady, Pa.
Pittsburgh & Clarion Coal Co.	Pittsburgh, Pa.	Domidion	Armstrong	Penna.	Johnetta, Pa.
Pletcher, J. W.	Windber, Pa.	Pot Ridge	Somerset	Penna.	Romnell, Pa.
Pot Ridge Coal Co.	Clearfield, Pa.	Mt. Carmel	Clearfield	N. Y. C. & H.	Karthaas, Pa.
Potter, Bigger & Potter, Inc.	Clearfield, Pa.	Potts Run No. 1	Clearfield	N. Y. C. & H. R.	Boardman, Pa.
Potts Run Coal Co.	Clearfield, Pa.	Potts Run No. 2	Clearfield	N. Y. C. & H. R.	Boardman, Pa.
Potts Run Coal Co.	Clearfield, Pa.	Potts Run No. 3	Clearfield	N. Y. C. & H. R.	Boardman, Pa.
Potts Run Coal Co.	Clearfield, Pa.	Powell	Bradford	S. & N. Y.	Powell, Pa.
Powell Coal Co., Inc.	Prisella, Pa.	Prisella	Cambria	P. R. R.	South Fork, Pa.
Prisella Coal Mining Co.	Somerset, Pa.	Purity No. 2	Somerset	B. & O.	Boswell, Pa.
Purity Coal Co.	East Brady, Pa.	Queenstown	Armstrong	W. A.	East Brady, Pa.
Queenstown Coal Co.	Somerset, Pa.	Kootz	Somerset	B. & O.	Stonestown, Pa.
Quehoning Coal Co.	Ralston, Pa.	Reidburn	Lycoming	P. R. R.	Ralston, Pa.
Ralston Coal Co.	Ralston, Pa.	Ramsey No. 1	Clearfield	P. & S.	Ram y, Pa.
Ramsey Coal Co.	Ramsey, Pa.	Rattlesnake	Clarion	Penna.	Brockwayville, Pa.
Rattlesnake Coal Co.	Brockwayville, Pa.	Monorch	Clarion	Penna.	Rd Bank, Pa.
Rd Bank Coal Company	Vandegrift Bldg., Pittsburgh, Pa.	Red Top No. 1	Cambria	P. R. R.	Hastings, Pa.
Rd Top Coal Co.	Hastings, Pa.	Red Top No. 2	Cambria	Penna.	Hastings, Pa.
Rd Top Coal Co.	Hastings, Pa.	Valentine No. 1	Centre	N. Y. C., Penna.	Snow Shoe, Pa.
Redding, Lawrence	Clarence, Pa.	Rilly No. 1	Cambria	C. & C., P. R. R.	Spangler, Pa.
Rilly, Jos. H. Coal Co.	305 Finance Bldg., Philadelphia, Pa.	Ritz No. 1	Somerset	Penna.	Cairnbrook, Pa.
Ritz Coal Co.	Windber, Pa.	Ritz No. 2	Somerset	Penna.	Cairnbrook, Pa.
Ritz Coal Co.	Windber, Pa.	No. 3	Somerset	Penna.	Cairnbrook, Pa.
Ritz Coal Co.	Windber, Pa.	No. 4	Somerset	Penna.	Windber, Pa.
Ritz Coal Co.	Windber, Pa.	No. 6	Somerset	Penna.	Windber, Pa.
Ritz Coal Co.	Windber, Pa.	Betty	Clarion	Penna.	Rumerton, Pa.
Ritz Coal Co.	Kittanning, Pa.	Kim rion	Armstrong	Penna.	Rimersburg, Pa.
Rimberton Coal Co.	Leeburg, Pa.	Riggold	Jefferson	P. & S.	Timblin, Pa.
Ringgold Coal Co.	Timblin, Pa.	Riley	Fayette	B. & O.	Obioggie, Pa.
Riverside Coal Co.	Oriontown, Pa.	Alden No. 1	Clearfield	Penna.	Phillipsburg, Pa.
Rod n Coal Mining Co., Inc.	Phillipsburg, Pa.	Alden No. 3	Clearfield	Penna.	Phillipsburg, Pa.
Roden Coal Mining Co., Inc.	Phillipsburg, Pa.	Little Squaw	Fayette	I. C. V.	Indian Head, Pa.
Romney Coal Mining Co.	Pittsburgh, Pa.	Boss	Clarion	L. E. F. & C.	Waterson, Pa.
Ross Mining Co.	Clarion, Pa.	Lulu No. 2	Centre	Penna., N. Y. C., P. & S.	Phillipsburg, Pa.
Roland, H. H.	Phillipsburg, Pa.	Ogle No. 7	Clearfield	N. Y. C.	Munson, Pa.
Royal Coal Co.	Pittsburgh, Pa.	Bassett No. 2	Blair	P. R. R.	Altoona, Pa.
Russell Coal Mining Co.	Mineral Point, Pa.	Rloom Victor No. 29	Indiana	Penna.	Thyer, Pa.
Sacramento Coal Co.	St. Benedict, Pa.	Big Chief	Fayette	I. C. V.	Indian Head, Pa.
Sailor Coal Co.	1445 Oliver Bldg., Pittsburgh, Pa.	Glottely	Fayette	B. & O., W. M.	Obioggie, Pa.
Scalp Level Coal Co.	Windber, Pa.	Scalp Level No. 2	Cambria	Penna.	Dunlop, Pa.
Schultz Coal Co.	Riosburg, Pa.	Schultz	Tioga	Erie	Riosburg, Pa.
Scott, H. B.	Phillipsburg, Pa.	Colorado No. 5	Clearfield	N. Y. C. & H.	Munson Station, Pa.
Sease, S. S.	Mineral Point, Pa.	Sosa No. 5	Cambria	Penna.	South Fork, Pa.

(Continued on Next Page)

KITTANNING, LOWER SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Shade Coal Mining Corp.	Johnstown, Pa.	Hagevo No. 1	Somerset	Penna.	Windhor Pa.
Shade Coal Mining Corp.	Johnstown, Pa.	Hagevo No. 2	Somerset	Penna.	Windhor Pa.
Shade Coal Mining Corp.	Johnstown, Pa.	Hagevo No. 1	Somerset	Penna.	Windhor Pa.
Shawmut Mining Co.	St. Mary's, Pa.	No. 5 Edison	Elk	P. S. & N.	Lithon, Pa.
Shawmut Mining Co.	St. Mary's, Pa.	Shawmut No. 8	Elk	P. S. & N.	Shawmut, Pa.
Shawmut Mining Co.	St. Mary's, Pa.	No. 10 Shawmut	Elk	P. S. & N.	Shawmut, Pa.
Shawmut Mining Co.	St. Mary's, Pa.	No. 11 Byrnedale	Elk	P. S. & N.	Byrnedale, Pa.
Shawmut Mining Co.	St. Mary's, Pa.	No. 11	Elk	P. S. & N.	Lithon, Pa.
Shawmut Mining Co.	St. Mary's, Pa.	No. 12 Brown's Run	Elk	P. S. & N.	Byrnedale, Pa.
Shawmut Mining Co.	St. Mary's, Pa.	Proctor	Elk	P. S. & N.	Lithon, Pa.
Sherwin Coal Mining Co.	Karns City, Pa.	Kaylor	Armstrong	W. A.	Kaylor, Pa.
Sherwin Coal Mining Co.	Karns City, Pa.	Shaw Hill	Armstrong	W. A.	Kaylor, Pa.
Shoemaker Coal Mining Co.	1507 Real Estate Trust Bldg., Philadelphia, Pa.	Miller Slope	Cambria	Penna.	Portage, Pa.
Sidney Coal Mining Co.	Philadelphia, Pa.	E. M. Long	Indiana	Penna.	Lithon, Pa.
Sloan Coal Co.	Clarion, Pa.	Sloan	Clarion	L. E. F. & C.	Lithon, Pa.
Smith Coal Co.	Indiana, Pa.	J. and No. 3	Indiana	Penna., B. & P.	Josephine, Pa.
Smith, Edward, Coal Co.	Tyler, Pa.	Ed Smith	Elk	P. S. & N.	Tyler, Pa.
Snyder, M. A. & Sons	Marickton, Pa.	Snyder	Somerset	W. A.	Lithon, Pa.
Solsson, Jos., Fire Brick Co.	Cornellville, Pa.	Indiana No. 2	Indiana	P. R. R.	Lithon, Pa.
Solsson, Jos., Fire Brick Co.	Cornellville, Pa.	No. 3	Indiana	Penna.	Lithon, Pa.
Somerset Coal Mining Co.	Somerset, Pa.	Welfare	Somerset	B. & O.	Lithon, Pa.
Somerset Creek Fuel Co.	Hooversville, Pa.	Somerset Creek No. 1	Somerset	B. & O.	Hooversville, Pa.
Somerset Mining Co.	Johnstown, Pa.	Knickelbocker No. 1	Somerset	B. & O.	Lithon, Pa.
Sonman Shaft Coal Co.	Unionville, Pa.	Sonman	Cambria	Penna.	Portage, Pa.
Springfield Coal Mining Co.	St. Benedict, Pa.	No. 1	Cambria	Penna.	Nanty Glo, Pa.
Springfield Coal Mining Co.	St. Benedict, Pa.	No. 2	Cambria	Penna.	Nanty Glo, Pa.
Springfield Coal Mining Co.	St. Benedict, Pa.	No. 3	Cambria	Penna.	Nanty Glo, Pa.
Sproat, R. L.	Windhor, Pa.	Sproat No. 1	Somerset	Penna.	Windhor, Pa.
Sproat, R. L.	Windhor, Pa.	Sproat No. 2	Somerset	Penna.	Windhor, Pa.
Sproat, R. L.	Windhor, Pa.	Sproat No. 3	Somerset	Penna.	Windhor, Pa.
Sproat, R. L.	Windhor, Pa.	Sproat No. 4	Somerset	Penna.	Windhor, Pa.
Sproat, R. L.	Windhor, Pa.	Sproat No. 5	Somerset	Penna.	Windhor, Pa.
Standard Coal Co.	Altoona, Pa.	Standard No. 1	Cambria	P. R. R.	Lithon, Pa.
Standard-Qumahoning Coal Co.	Boswell, Pa.	No. 2	Somerset	B. & O.	Lithon, Pa.
Standard Smokeless Coal Co.	Indiana, Pa.	Standard	Indiana	Penna.	Lithon, Pa.
Stanley Coal Co.	Cornellville, Pa.	Stanley	Clearfield	P. & S., Penna.	Lithon, Pa.
Stanley Coal Mining Co.	Brisban, Pa.	Stanley No. 3	Clearfield	Penna.	Lithon, Pa.
Sterling Coal Co.	121 Chestnut St., Philadelphia, Pa.	Sterling No. 1	Cambria	P. R. R.	Lithon, Pa.
Sterling Coal Co.	121 Chestnut St., Philadelphia, Pa.	Sterling No. 3	Cambria	P. R. R.	Lithon, Pa.
Sterling Coal Co.	121 Chestnut St., Philadelphia, Pa.	Sterling No. 5	Cambria	P. R. R.	Lithon, Pa.
Sterling Coal Co.	121 Chestnut St., Philadelphia, Pa.	Sterling No. 6	Cambria	P. R. R.	Lithon, Pa.
Sterling Coal Mining Co.	Woodland, Pa.	Sterling No. 1	Clearfield	Penna.	Lithon, Pa.
Sterling Moshamon Coal Co.	Houtzdale, Pa.	Sterling No. 2	Clearfield	P. & S., Penna.	Houtzdale, Pa.
Stevens Coal Co.	246 Third Ave., Pittsburgh, Pa.	Stevens No. 1	Clarion	Penna.	Lithon, Pa.
Stevens Coal Co.	246 Third Ave., Pittsburgh, Pa.	Stevens No. 2	Clarion	Penna.	Lithon, Pa.
Stevens Coal Co.	246 Third Ave., Pittsburgh, Pa.	Stevens No. 3	Clarion	Penna.	Lithon, Pa.
Stineman Coal Mining Co.	121 Chestnut St., Philadelphia, Pa.	Stineman No. 1	Cambria	P. R. R.	Lithon, Pa.
Stineman Coal & Coke Co.	121 Chestnut St., Philadelphia, Pa.	Stineman No. 2	Cambria	P. R. R.	Lithon, Pa.
Stineman Coal & Coke Co.	121 Chestnut St., Philadelphia, Pa.	Stineman No. 4	Cambria	P. R. R.	Lithon, Pa.
Stott Harley Coal Co.	Philipsburg, Pa.	Harley No. 2	Centre	Penna., N. Y. C. & P. & S.	Philipsburg, Pa.
Stott, Jam. S. F. & Co.	Philipsburg, Pa.	R. J. Jack No. 1	Centre	N. Y. C. & H. R.	Hawk Run, Pa.
Stott, Jam. S. F. & Co.	Philipsburg, Pa.	Rich Hill	Centre	N. Y. C. & H. R.	Hawk Run, Pa.
Sugar Creek Coal Co.	Pittsburgh, Pa.	Do. spike	Armstrong	Penna.	Lithon, Pa.
Sugar Run Coal Mining Co.	Altoona, Pa.	Bygart No. 2	Cambria	L. E. F. & C.	Lithon, Pa.
Sommerville Coal Co.	Brookville, Pa.	No. 1	Clarion	Penna.	Lithon, Pa.
Sunshine Coal Mining Co.	South Fork, Pa.	Stineman No. 8	Cambria	P. R. R.	Lithon, Pa.
Superior Coal Co.	Glen Campbell, Pa.	Superior No. 1	Indiana	Penna.	Lithon, Pa.
Tartown Coal Co.	Brookwayville, Pa.	Tartown	Armstrong	Penna.	Lithon, Pa.
Thatcher Manufacturing Co.	Emira, N. Y.	Thatcher	Clarion	L. E. F. & C.	Portage, Pa.
Thermal Smokeless Coal Co.	Johnstown, Pa.	Thermal No. 1	Cambria	Penna.	Portage, Pa.
Thermal Smokeless Coal Co.	Johnstown, Pa.	Thermal No. 2	Cambria	Penna.	Portage, Pa.
Tid Coal Mining Co.	Indiana, Pa.	Tid	Indiana	P. R. & P.	Lithon, Pa.
Toby Coal Mining Co.	Brookwayville, Pa.	Five Points	Elk	P. S. & N.	Lithon, Pa.
Trojan Coal Mining Co.	Clearfield, Pa.	Trojan No. 3	Indiana	N. Y. C.	Gipsy, Pa.
Trout Run Coal Co.	Madra, Pa.	Trout	Centre	Penna.	Lithon, Pa.
Trucks Coal Mining Co.	Leeburg, Pa.	Trucks No. 1	Armstrong	Penna.	Lithon, Pa.
Turley Coal Mining Co.	Philadelphia, Pa.	Water No. 3	Clearfield	Penna.	Lithon, Pa.
Valley Smokeless Coal Co.	Bethlehem, Pa.	Valley No. 3	Cambria	Penna., B. & O.	Lithon, Pa.
Valley Smokeless Coal Co.	Bethlehem, Pa.	Valley Smokeless No. 4	Cambria	B. & O.	Lithon, Pa.
Victor Coal Mining Company	Coalport, Pa.	Haws No. 3	Somerset	Penna.	Lithon, Pa.
Victor Hill Coal Co.	Coalport, Pa.	Victor Hill No. 1	Clearfield	Penna.	Lithon, Pa.
Victoria Coal Mining Co.	11 Broadway, New York, N. Y.	Victory No. 1	Elk	N. Y. C. & H. R.	Lithon, Pa.
Victory Coal Co.	St. Mary's, Pa.	Victory No. 2	Elk	P. S. & N.	Lithon, Pa.
Victory Coal Co.	St. Mary's, Pa.	Victory No. 3	Elk	P. S. & N.	Lithon, Pa.
Victory Coal Mining Co.	Ellicott Square, Buffalo, N. Y.	Victory No. 4	Clarion	L. E. F. & C.	Lithon, Pa.
Vinton Colliery Co.	50 E. 42d St., New York, N. Y.	Vinton No. 1	Cambria	Penna.	Lithon, Pa.
Vinton Colliery Co.	50 E. 19d St., New York, N. Y.	Vinton No. 6	Cambria	Penna.	Lithon, Pa.
Vinton Colliery Co.	50 E. 42d St., New York, N. Y.	Vinton No. 16	Indiana	Penna., B. & P.	Lithon, Pa.
Vogel Coal Co.	Bakerstown, Pa.	Vogel	Cambria	Penna.	Lithon, Pa.
Watkins Coal Mining Co.	New York, N. Y.	Watkins No. 3	Cambria	Penna.	Lithon, Pa.
Weber Coal Co.	Howard, Pa.	Weber	Clearfield	N. Y. C.	Lithon, Pa.
Weld, Louis M.	Marysville, Pa.	Weld	Somerset	B. & O.	Lithon, Pa.
West Kittanning Mining Co.	Kittanning, Pa.	West Kittanning	Armstrong	I. & S.	Kittanning, Pa.
Wheeler Mining Co.	Mogrove, Pa.	Wheeler	Armstrong	Pittsburgh & Shawmut	Mogrove, Pa.
Whitson Coal Mining Co.	Wilmington, Pa.	Whitson	Clarion	P. R. R.	Lithon, Pa.
Wilbur Coal Mining Co.	Johnstown, Pa.	Knickelbocker No. 4	Somerset	B. & O.	Lithon, Pa.
Wilbur Coal Mining Co.	Johnstown, Pa.	Knickelbocker No. 5	Somerset	B. & O.	Lithon, Pa.
Wilbur Coal Mining Co.	Johnstown, Pa.	Knickelbocker No. 6	Somerset	B. & O.	Lithon, Pa.
Willard Coal Co.	Philipsburg, Pa.	Willard No. 1	Clearfield	P. & S.	Lithon, Pa.
Williams Coal Co.	Gorrie, Pa.	Williams	Clarion	L. E. F. & C.	Lithon, Pa.
Williams, T. J.	Brookville, Pa.	Williams	Elk	Erie	Lithon, Pa.
Wilmore Basin Coal Co.	Altoona, Pa.	Wilmore Basin No. 1	Blair	Penna.	Lithon, Pa.
Woodland Cannel Coal Co.	Woodland, Pa.	Cannel Crest	Clearfield	N. Y. C. & H.	Lithon, Pa.
Worth Mining Co.	Kaylor, Pa.	Worth	Butler	W. A.	Portage, Pa.
Yorkshire Coal Co.	New York, N. Y.	Yorkshire No. 1	Clearfield	Penna.	Lithon, Pa.

KITTANNING, MIDDLE SEAM (Known also as C SEAM)

Mined in Lawrence, Butler, Jefferson, Indiana, Clearfield and Somerset counties. Bituminous rank in western counties; Semibituminous in eastern counties. Suitable for Producer Gas, Locomotive Fuel, Steam and Domestic uses. Known as Smokeless Coal in low-volatile regions.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Allen Coal Co.	Nanty Glo, Pa.	Allen No. 1	Cambria	Penna.	Nanty Glo, Pa.
Arrow Coal Mining Co.	Officer Bldg., Pittsburgh, Pa.	Arrow No. 6	Somerset	Penna.	Rockingham, Pa.
Barrett Coal Co.	Clearfield, Pa.	Barrett	Clearfield	Penna.	Clearfield, Pa.
Beattie Mining Co.	Farmington City, Pa.	No. 5	Clearfield	Penna.	N. & B. Bethlehem, Pa.
Beaver Coal & Coke Co.	Wamonom, Pa.	Raver No. 6	Clarion	Penna.	Wamonom, Pa.

(Continued on Next Page)

COAL CATALOG

KITTANNING, MIDDLE SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Beaver Coal & Coke Co.	Wampum, Pa.	Beaver No. 7	Lawrence	Penna.	Wampum, Pa.
Beltmore Mining Co.	Osceola Mills, Pa.	Coal Run No. 1	Clearfield	Penna.	Osceola Mills, Pa.
Bland, Fred, Jr.	Blandburg, Pa.	Bland's No. 1	Cambria	Penna.	Figart, Pa.
Branch Camp Coal Co.	Brockwayville, Pa.	Branch Camp	Elk	P. S. & N.	Figart, Pa.
Brogarsan Coal Mining Co.	Osceola Mills, Pa.	Brogarsan No. 1	Clearfield	C. P. & S.	Osceola Mills, Pa.
Brogarsan Coal Mining Co.	Osceola Mills, Pa.	Brogarsan No. 2	Clearfield	C. P. & S.	Osceola Mills, Pa.
Cambria Fuel Co.	Beaverdale, Pa.	Cambria No. 1	Somerset	B. & O.	Johnstown, Pa.
Cambria Fuel Co.	Beaverdale, Pa.	Cambria No. 2	Somerset	B. & O.	Johnstown, Pa.
Cassidy Coal Co.	Circleville, Pa.	Cassidy's	Somerset	B. & O.	Hosopple, Pa.
Colonial Iron Co.	Riddlesburg, Pa.	Judith No. 1	Bedford	H. & B. T.	Kidderburg, Pa.
Commercial Collieries Co.	Philadelphia, Pa.	Alf. R. Run	Clearfield	N. Y. C.	Norrisdale, Pa.
Cumberland Smokeless Coal Co.	Cumberland, Md.	Owl Hill	Somerset	W. Md.	Confluence, Pa.
Dahlin Bros. Coal Co.	Houtzdale, Pa.	Damless	Clearfield	Penna.	Houtzdale, Pa.
Dickey, S. E., Coal Co.	Johnstown, Pa.	Dickey No. 1	Somerset	B. & O.	Kings Station, Pa.
Dickey, S. E., Coal Co.	Johnstown, Pa.	Dickey No. 2	Somerset	B. & O.	Kings Station, Pa.
Eastern Bituminous Coal Mining Bonds	Altoona, Pa.	Dean No. 10	Cambria	Penna.	Figart, Pa.
Figart Run Coal Co.	Blandburg, Pa.	Fricks	Cambria	Penna.	Portage, Pa.
Forge Coal Mining Co.	1000 Liberty Bldg., Philadelphia, Pa.	Forge No. 1	Cambria	Penna.	Portage, Pa.
Forge Coal Mining Co.	1000 Liberty Bldg., Philadelphia, Pa.	Forge No. 2	Cambria	Penna.	Portage, Pa.
Fort Hill Coal Co.	Johnstown, Pa.	Fort Hill	Somerset	R. & O. W. M.	Fort Hill, Pa.
Gracemont Coal Co.	Pittsburgh, Pa.	Gracemont	Butler	B. & L. E.	Claytonia, Pa.
Grazier Coal Mining Co.	Johnstown, Pa.	No. 2	Somerset	B. & O.	Foustwell, Pa.
Great Bend Coal Co.	Johnstown, Pa.	Great Bend No. 1	Cambria	Penna.	Montandale, Pa.
Green Valley Coal Co.	Brookwayville, Pa.	Great Valley No. 1	Jefferson	P. & S.	Knoxdale, Pa.
Jasahill Coal Mining Co.	Johnstown, Pa.	Knickhocker No. 7	Somerset	B. & O.	Hosopple, Pa.
Jupiter Coal Co.	Prospect, Pa.	Jupiter	Butler	Western Allegheny	Isle, Pa.
Kay Coal Mining Co.	Everett, Pa.	Mt. Equity	Bedford	H. & B. T.	Biddlesburg, Pa.
Knoxdale Coal & Coke Co.	Brookville, Pa.	No. 1	Jefferson	P. & S.	Knoxdale, Pa.
Knoxdale Coal & Coke Co.	Brookville, Pa.	No. 2	Jefferson	P. & S.	Knoxdale, Pa.
Knoxdale Coal & Coke Co.	Brookville, Pa.	No. 5	Jefferson	P. & S.	Knoxdale, Pa.
Lexie Mining Co.	Prudential Bldg., Buffalo, N. Y.	Lexie No. 1	Butler	W. A.	Isle, Pa.
Lexie Mining Co.	Prudential Bldg., Buffalo, N. Y.	Lexie No. 2	Butler	W. A.	Isle, Pa.
Liberty Coal Mining Co.	Madera, Pa.	Vivian	Clearfield	P. & N. W.	Heavly, Pa.
Loosh Coal Co.	Indiana, Pa.	Loosh No. 1	Jefferson	Pittsburgh & Shawmut	Knoxdale, Pa.
Lobb, Walter & Brothers	Brisbin, Pa.	Lobb No. 1	Clearfield	Penna.	Brisbin, Pa.
Lobb, Walter & Brothers	Brisbin, Pa.	Lobb No. 2	Clearfield	Penna.	Brisbin, Pa.
Lobb, Walter & Brothers	Brisbin, Pa.	Lobb No. 3	Clearfield	Penna.	Brisbin, Pa.
Logan Coal Co.	Philadelphia, Pa.	Logan No. 6	Cambria	Penna.	Lloydell, Pa.
McFetridge, G. H. Coal Co.	Butler, Pa.	Hallston	Butler	B. & L. E.	Claytonia, Pa.
MacGregor Coal Co.	R. D. No. 1, Somerset, Pa.	MacGregor No. 1	Somerset	B. & O.	MacGregor, Pa.
MacGregor Coal Co.	R. D. No. 1, Somerset, Pa.	MacGregor No. 2	Somerset	B. & O.	MacGregor, Pa.
Maryland Coal & Coke Co., Inc.	Philadelphia, Pa.	Imperial No. 4	Clearfield	Pgh. & Susquehanna	Osceola Mills, Pa.
Maryland Coal & Coke Co., Inc.	Philadelphia, Pa.	Imperial No. 2	Clearfield	Penna.	Houtzdale, Pa.
Meadow Brook Coal Co.	Philadelphia, Pa.	Meadowbrook No. 1	Clearfield	Penna.	Phillipsburg, Pa.
Meadow Brook Coal Co.	Philadelphia, Pa.	Meadowbrook No. 2	Clearfield	Penna.	Phillipsburg, Pa.
Moose Creek Coal Co.	Clearfield, Pa.	Moose Creek	Clearfield	B. B. & P.	Clearfield, Pa.
Moose Run Coal Co.	St. Marys, Pa.	Moose Run	Clearfield	Penna.	Penfield, Pa.
Moxham Coal Co.	Johnstown, Pa.	Thermal No. 4	Cambria	P. R. R.	Johnstown, Pa.
New Castle Coal Co.	Houtzdale, Pa.	New Castle No. 1	Clearfield	P. & S. N. Y. C.	Brisbin, Pa.
Northern Cambria Coal Co.	Patton, Pa.	Noll	Cambria	P. R. R.	Figart, Pa.
Paragon Coal Mining Co., Inc.	Osceola Mills, Pa.	Paragon No. 1	Clearfield	Penna.	Osceola Mills, Pa.
Patton Clay Manufacturing Co.	Patton, Pa.	Patton Shaft	Cambria	N. Y. C. & H. R. R.	Patton, Pa.
Pearce, George & Sons	Johnstown, Pa.	Excelsior No. 1	Cambria	Penna.	Portage, Pa.
Pena Smokeless Coal Co.	Union Bank Bldg., Pittsburgh, Pa.	Hyasota	Somerset	B. & O.	Figart, Pa.
Pennsylvania Smithing Coal Co.	New York, N. Y.	Adams	Somerset	B. & O.	Freedens, Pa.
Powell Coal Co., Inc.	Powell, Pa.	Powell	Bradford	S. & N. Y.	Powell, Pa.
Progress Coal Co.	Ram, Pa.	Progress No. 1	Clearfield	P. & S.	Ram, Pa.
Reading Iron Co.	Reading, Pa.	Reading No. 3	Somerset	B. & O.	Stoxtown, Pa.
Reitz Coal Co.	Windber, Pa.	No. 5	Somerset	Penna.	Windber, Pa.
Ridgway Coal Co.	Ridgway, Pa.	Kyler	Elk	Elk	Brockport, Pa.
Riverside Coal Mining Co.	South Fork, Pa.	Riverside No. 1	Cambria	P. R. R.	South Fork, Pa.
Roden Coal Mining Co., Inc.	Phillipsburg, Pa.	Alden No. 4	Clearfield	Penna.	Phillipsburg, Pa.
Romeburg Coal Company	Garrett, Pa.	Buffalo	Somerset	B. & O.	Garrett, Pa.
Seaton Coal Mining Co.	Johnstown, Pa.	Hickler No. 1	Somerset	Penna.	Seaton, Pa.
Seaton Coal Mining Co.	Johnstown, Pa.	Hickler No. 2	Somerset	Penna.	Seaton, Pa.
Sesee, S. S.	Mineral Point, Pa.	Sesee No. 5	Cambria	Penna.	South Fork, Pa.
Smith & Hobbs	Morrisdale, Pa.	Phoenix No. 1	Clearfield	N. Y. C.	Morrisdale, Pa.
Susquehanna Fuel Co.	Glen Campbell, Pa.	No. 8	Indiana	Penna.	Glen Campbell, Pa.
Thompson-Lea Coal Mining Co.	La Jose, Pa.	Elton Colliery No. 1	Clearfield	Penna.	La Jose, Pa.
Tyone Fuel & Supply Co.	Tyone, Pa.	Miller No. 1	Cambria	Penna.	Mountandale, Pa.
Vander Coal Co.	New Florence, Pa.	No. 1	Westmoreland	Penna.	New Florence, Pa.
White-Dugan Coal Co.	Phillipsburg, Pa.	Columbia No. 2	Clearfield	B. & S.	Osceola Mills, Pa.
Witten Coal Co.	Tyler, Pa.	Witten	Elk	P. S. & N.	Tyler, Pa.

KITTANNING, UPPER SEAM (Known also as the **C PRIME SEAM**; **DARLINGTON** and **NORTH WASHINGTON CANNEL** in Beaver County; **WOODLAND CANNEL** in Clearfield County; **BIG BED** in Center County; **CEMENT** in Southern Cambria County; **CEMENT** or **ROCK VEIN** in Somerset County; **NO. 4** and **CREEK VEIN** in Butler County)

Mined in the Snowshoe, Clearfield, Low Grade Division, Cambria, Two Lick, Indiana, Allegheny River, Johnstown, Southfork-Windber and Quemahoning districts. Bituminous rank in western counties; Semibituminous in eastern counties. Suitable by localities for Bunker, Cement Burning, By-product Coking, Bee-hive Coking, Domestic, Export, Illuminating Gas, Locomotive Fuel, Melting, Powdered Coal, Producer Gas, Smithing and Steam uses. Coals from low-volatile regions known as Smokeless.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Alexander Coal Co.	Listonburg, Pa.	Nemaacolin	Somerset	B. & O.	Liston & Confluence, Pa.
Ambrose-Shaffer Collieries Corp.	Cumberland, Md.	Ambros No. 1	Somerset	B. & O.	Listonburg, Pa.
Ambrose-Somerset Collieries Corp.	Cumberland, Md.	Ambros-Somerset No. 1	Somerset	B. & O.	Listonburg, Pa.
Atlantic Coal Co.	Myersdale, Pa.	Atlantic No. 1	Somerset	B. & O.	Boswell, Pa.
Atlas Smokeless Coal Co.	Conemaugh, Pa.	Atlas	Somerset	B. & O.	Rowena, Pa.
Beaver Cannel Coal Co.	East Liverpool, O.	Beaver Cannel	Beaver	P. L. & W.	Cannifton, Pa.
Bee Hive Coal Mining Co.	Houtzdale, Pa.	Bee Hive	Clearfield	Penna.	Houtzdale, Pa.
Belmont Smokeless Coal Co.	Acosta, Pa.	Belmont No. 4	Somerset	B. & O.	Boswell, Pa.
Berger-Aiken Coal Co.	Pittsburgh, Pa.	Markleton	Somerset	W. M.	Markleton, Pa.
Berresford, Ike & Co.	Enon Valley, Pa.	Berresford	Beaver	P. L. & W.	Cannifton, Pa.
Bird Coal Co.	718 Harrison Bldg., Philadelphia, Pa.	Bird No. 1	Cambria	B. & O.	Krings, Pa.
Blair Coal Company	Indiana, Pa.	Krogar No. 1	Westmoreland	Indian Creek Valley	Jones Mills, Pa.
Bland, Fred, Jr.	Blandburg, Pa.	Bland No. 2	Cambria	Penna.	Figart, Pa.
Bland, L. B.	Bellwood, Pa.	Bland No. 3	Blair	P. N. W.	Lloydsville, Pa.
Brown Bros. & Tyler	Hastings, Pa.	High Spot No. 1	Cambria	Penna.	Hastings, Pa.

(Continued on Next Page)

COAL CATALOG

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Brum Coal Co.	Crafton, Pa.	Brum	B & O	Brum, Pa.	
Bucktail Coal Co.	Du Bois, Pa.	Bucktail	P & S & N	Woodville, Pa.	
Burger Smokeless Coal Co.	Cumberland, Md.	Burger Smokeless	B & O	Smith-Id, Pa.	
Butler Coal Mining Co.	Butler, Pa.	Butler	B & R & P	Butler, Pa.	
Caldwell Smokeless Coal Co.	Johnstown, Pa.	Caldwell No. 1	Penn.	Philipsburg, Pa.	
Cambria Steel Co.	Widener Bldg., Philadelphia, Pa.	Franklin No. 1	P & R, R. & O.	John town, Pa.	
Cambria Steel Co.	Widener Bldg., Philadelphia, Pa.	Franklin No. 2	P & R, R. & O.	John town, Pa.	
Cambria Steel Co.	Widener Bldg., Philadelphia, Pa.	Rolling Mill	P & R, R. & O.	John town, Pa.	
Cannel Bituminous Mining Co.	Cannelton, Pa.	Saw Bee No. 1	P & L & W	Cannelton, Pa.	
Casselman River Smokeless Coal Co.	Cay town, Md.	No. 1	W. Md.	Marion ton, Pa.	
Citizen Coal Co.	Johnstown, Pa.	Dale	Penn.	John town, Pa.	
Conquest Coal Mining Co.	Phillipsburg, Pa.	Con. No. 1	Penn.	Phillipsburg, Pa.	
Consolidation Coal Co.	New York, N. Y.	Consolidation No. 118	B & O	Consolidation No. 118, Pa.	
Consolidation Coal Co.	New York, N. Y.	Consolidation No. 119	B & O	Consolidation No. 119, Pa.	
Consolidation Coal Co.	New York, N. Y.	Consolidation No. 120	B & O	Consolidation No. 120, Pa.	
Consolidation Coal Co.	New York, N. Y.	Consolidation No. 121	B & O	Consolidation No. 121, Pa.	
Consolidation Coal Co.	New York, N. Y.	Consolidation No. 125	W. Md.	Consolidation No. 125, Pa.	
Costa Coal Co.	Cumtelsville, Pa.	Lucey	P & L. E.	Sand Rock, Pa.	
Curry, Thomas F.	Exp dit, Pa.	Auspaich	B & O	Auspaich, Pa.	
Cushake Coal Mining Co.	Furnside, Pa.	Cushake	Penn.	Burnside, Pa.	
Davis Coal & Coke Co.	Baltimore, Md.	Orenda No. 2	B & O	Bow II, Pa.	
East Branch Coal Co.	DuBois, Pa.	East Branch	P & S	East Branch, Pa.	
East Windber Coal Co.	Windber, Pa.	East Windber	Penn.	Windber, Pa.	
Eastern Bituminous Coal Mining Bonds	Altoona, Pa.	Dean No. 8	Penn.	Frugality, Pa.	
Enterprise Coal Company	Garratt, Pa.	Enterprise	B & O	Garratt, Pa.	
Enterprise Coal Company	Garratt, Pa.	Pontigh	B & O	Garratt, Pa.	
Euclid Coal Co.	Pittsburgh, Pa.	Shawin	B & L. E.	Euclid, Pa.	
Fair Oak Coal Co.	Confines, Pa.	Fair Oak	B & O	Confines, Pa.	
Filer, F. P. & Co.	Mercer, Pa.	Kildoo No. 1	B. L. E.	Euclid, Pa.	
Filer, F. P. & Co.	Mercer, Pa.	Kildoo No. 2	Butler	Wet run Allegheny	
Forks Coal Co.	Altoona, Pa.	Hughes No. 12	Cambria	South Fork, Pa.	
Georges Creek Coal Co.	Cumberland, Md.	Miller	Somerset	Eastonburg, Pa.	
Georges Creek Parker Coal Co. (The)	Baltimore, Md.	Ritter No. 1	Somerset	Coleman, Pa.	
Georges Creek Parker Coal Co. (The)	Baltimore, Md.	Ritter No. 2	Somerset	Coleman, Pa.	
Glider Coal Co., Inc.	Berlin, Pa.	Glider	Somerset	Coleman, Pa.	
Gregory Coal Mining Co.	Smith Fork, Pa.	Rockville No. 1	Cambria	South Fork, Pa.	
Hastings Fuel Co.	Hastings, Pa.	Hastings No. 1	Cambria	Hastings, Pa.	
Highland Coal Co.	Somerset, Pa.	Highland	B & O	Somerset, Pa.	
Hillman Coal & Coke Co.	Pittsburgh, Pa.	Jerome No. 1	Somerset	Jerome & Holsopple, Pa.	
Hillman Coal & Coke Co.	Pittsburgh, Pa.	Jerome No. 2	Somerset	Jerome & Holsopple, Pa.	
Hillworth Coal Co.	Acosta, Pa.	Belmont No. 1	Somerset	Acosta, Pa.	
Hillworth Coal Co.	Acosta, Pa.	Belmont No. 2	Somerset	Acosta, Pa.	
Howard Coal Co.	Indian Creek, Pa.	Kimm 1	Fayette	Daytown, Pa.	
Huber Street Coal Co.	Johnstown, Pa.	Huber Street No. 1	Cambria	Johnstown, Pa.	
Huber Street Coal Co.	Johnstown, Pa.	Huber Street No. 2	Cambria	Johnstown, Pa.	
Hughes, W. H., & Co.	Hastings, Pa.	Hughes No. 1	Cambria	Hastings, Pa.	
Hygrade Coal Co.	Altoona, Pa.	Hygrade No. 1	Cambria	Portage, Pa.	
Ideal Coal Mining Co.	Kanfer, Pa.	Hygrade No. 2	Somerset	Stoytown, Pa.	
Innes Coal Mining Co.	Johnstown, Pa.	Thermal No. 5	Cambria	Johnstown, Pa.	
Jackson-Harrison Coal Co.	Windt, Pa.	Innes No. 1	Somerset	Cairbrook, Pa.	
Jamisonville Coal Co.	St. Marys, Pa.	Cumco	Elk	Cumco, Pa.	
Jefferson Ridge Coal Co.	Farmers National Bank Bldg., Leechburg, Pa.	Jamisonville	Butler	Queen Junction, Pa.	
Kennedy Coal Mining Co.	Altoona, Pa.	Jefferson	Clearfield	Phillipsburg, Pa.	
Kennedy Coal Mining Co.	South Fork, Pa.	Kennedy No. 1	Somerset	Confines, Pa.	
Kennedy Coal Mining Co.	Cumtelsville, Pa.	Kid	Somerset	Confines, Pa.	
Leahy Coal Company	Lilly, Pa.	Leahy No. 1	Cambria	Lilly, Pa.	
Leahy Coal Mining Co.	Pittsburgh, Pa.	Liberty	Butler	Queen Jet, Pa.	
Little Coal Co.	Somerset, Pa.	Junior	Somerset	Listie, Pa.	
Little Coal Co.	Somerset, Pa.	Louis	Somerset	Listie, Pa.	
Loyal Hanna Coal & Coke Co.	Somerset, Pa.	Loyal Hanna No. 7	Somerset	Cairbrook, Pa.	
McEwen Run Coal Co.	2136 Land Title Bldg., Philadelphia, Pa.	McEwen Run	J. F. rson	Lane's Landing, Pa.	
Maple Ridge Coal Co.	Ridgway, Pa.	Maple Ridge	Somerset	Holsopple, Pa.	
Marine Smokeless Coal Co.	No. 1 Broadway, New York, N. Y.	Marine	Somerset	Casselman, Pa.	
Markleton Coal Co.	Somerset, Pa.	Marine	Somerset	Markleton, Pa.	
Martin's Branch Coal Mining Co.	Markleton, Pa.	Forge	Cambria	Portage, Pa.	
Meyersdale Smokeless Coal Co.	Portage, Pa.	Branch No. 1	Somerset	Casselman, Pa.	
Mineral Point Coal Co.	Meyersdale, Pa.	DH	Cambria	Mineral Point, Pa.	
Mitener Coal Co.	Johnstown, Pa.	Smokeless No. 4	Butler	Claytona, Pa.	
Mountain Smokeless Coal Co.	Eric, Pa.	Grant	B & O	Cass Iman, Pa.	
Newton, E. P., & Co.	Cass Iman, Pa.	Mountain Smokeless	Somerset	Stanton, Pa.	
Oak Ridge Coal &					

KITTANNING, UPPER SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Smokeless Coal Company	Johnstown, Pa.	Smokeless No. 1	Cambria	B. & O.	Johnstown, Pa.
South Fork Bituminous Coal Co.	South Fork, Pa.	Bituminous No. 1	Cambria	Penna.	South Fork, Pa.
State Mining Co.	Conemaugh, Pa.	No. 1	Somerset	B. & O.	Confluence, Pa.
Somers & Cambria Smokeless Cl. Mg. Co.	Pittsburgh, Pa.	Big Six	Somerset	B. & O.	Listie, Pa.
Sonnan Shaft Coal Co.	Minersville, Pa.	Sonnan Shaft	Cambria	Penna.	Portage, Pa.
Stin, George P.	Garrett, Pa.	"Stein"	Somerset	B. & O.	Garrett, Pa.
Stineman, H. C.	South Fork, Pa.	Stineman No. 5	Cambria	Penna.	South Fork, Pa.
Thomas Mills Coal Mining Co., The	Johnstown, Pa.	Thomas Mills	Cambria	Penna.	Patton, Pa.
Triple Vein Smokeless Coal Co.	Somerset, Pa.	Triple Vein	Somerset	B. & O.	Garrett, Pa.
Tri-State Collieries Co.	Baltimore, Md.	Garrett Slope	Somerset	B. & O.	Garrett, Pa.
United Refractories Co.	Dunbar, Pa.	Patton	Fayette	B. & O.	Ferguson, Pa.
United Smokeless Coal Co.	Humbert, Pa.	Baldwin	Somerset	Ursina & North Fork	Ursina, Pa.
Urey Ridge Coal Co.	100 Liberty Bldg., Phila., Pa.	Urey No. 1	Indiana	Penna.	Glen Campbell, Pa.
Urey Ridge Coal Co.	100 Liberty Bldg., Phila., Pa.	Urey No. 3	Indiana	Penna.	Glen Campbell, Pa.
Urey Ridge Coal Co.	100 Liberty Bldg., Phila., Pa.	Urey No. 5	Indiana	Penna.	Glen Campbell, Pa.
Urey Ridge Coal Co.	100 Liberty Bldg., Phila., Pa.	Urey No. 6	Indiana	Penna.	Glen Campbell, Pa.
Valley Smokeless Coal Co.	Bethlehem, Pa.	Valley No. 1	Cambria	Penna., B. & O.	Johnstown, Pa.
Victor Coal Mining Company	Somerset, Pa.	Haws No. 1	Somerset	B. & O.	Holsopple, Pa.
Wabillon Coal Co.	Indiana, Pa.	Brewster No. 2	Butler	B. R. & P., B. & O.	Evans City, Pa.
Wallwork Coal Co.	Summitville, Pa.	Pancost	Jefferson	Penna.	Falls Creek, Pa.
Warwick Coal Co.	Indian Creek, Pa.	Warwick	Fayette	U. C. V.	Indian Creek, Pa.
Warder Coal Co.	New Florence, Pa.	Ward No. 2	Westmoreland	Penna.	New Florence, Pa.
West Carroll Coal Mining Co.	Ebensburg, Pa.	West Carroll No. 2	Cambria	N. Y. C.	Carrolltown, Pa.
Woolridge Coal Co.	Woodland, Pa.	Woolridge No. 2	Clearfield	N. Y. C. & H.	Woodland, Pa.

PITTSBURGH SEAM

Mined in the Meyersdale, Latrobe, Greensburg, Youghiogheny, Connellsville and Pittsburgh districts. Bituminous rank in western counties; Semibituminous in eastern counties. Suitable by localities for Bunkering, Cement Burning, By-Product Coking, Bee-hive Coking, Domestic, Illuminating Gas, Locomotive Fuel, Melting, Powdered Coal, Producer Gas, Smithing and Steam purposes. Coal from low-volatile regions known as Smokeless Coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Arme Coal & Coke Co.	Park Bldg., Pittsburgh, Pa.	Wilson	Washington	P. R. R.	Ellsworth, Pa.
Aerial Coal Co.	Hays, Pa.	Fishwick	Allegheny	Penna., P. & L. E.	Hays, Pa.
Alberta Coal Co.	Smithton, Pa.	Alberta	Westmoreland	B. & O., P. & L. E.	Smithton, Pa.
Allison Valley Coal Co.	Washington, Pa.	Ross	Washington	Penna.	Meadow Lands, Pa.
American Coal, Oil & Gas Co.	Uniontown, Pa.	Flint Rock	Fayette	B. & O., Penna.	Uniontown, Pa.
American Coke Corp.	Pittsburgh, Pa.	American No. 1	Fayette	Penna.	Braznell, Pa.
American Coke Corp.	Pittsburgh, Pa.	American No. 2	Fayette	M. R. R.	Masontown, Pa.
American Coke Corp.	Pittsburgh, Pa.	Orient	Fayette	M. R. R.	Orient, Pa.
American Manganese Mfg. Co.	Philadelphia, Pa.	Hill Farm	Fayette	Penna.	Dunbar, Pa.
American Sewer Pipe Co.	Akron, O.	Brighton Clay	Traver	Penna.	New Brighton, Pa.
Anderson-Rees Coal Producers	Venetia, Pa.	Anderson	Washington	B. & O.	Anderson, Pa.
Atlantic Big Vein Coal Co.	Meyersdale, Pa.	Keystone No. 1	Somerset	B. & O.	West Salisbury, Pa.
Atlantic Big Vein Coal Co.	Meyersdale, Pa.	Keystone No. 3	Somerset	B. & O.	West Salisbury, Pa.
Atlantic Coal Co.	Uniontown, Pa.	Willie Poole No. 34	Monon	Fayette	New Geneva, Pa.
Atlantic Crushed Coke Co.	Greensburg, Pa.	Atlantic No. 2	Westmoreland	Penna.	N. W. Derry, Pa.
Atlantic Crushed Coke Co.	Greensburg, Pa.	Atlantic No. 3	Westmoreland	Penna.	New Derry, Pa.
Atlas Coal Company	Leetonia, Ohio	Lafayette	Fayette	Penna., R. R.	Waltersburg, Pa.
Avella Coal Co.	Greensburg, Pa.	Penobscot	Washington	Pgh. & W. Va.	Penowa, Pa.
Avonmore Coal & Coke Co.	Leechburg, Pa.	Avonmore	Armstrong	Penna.	Edri, Pa.
Baker Coal Co.	Masontown, Pa.	Emery	Fayette	B. & O.	Masontown, Pa.
Barnett Coal Co.	Latrobe, Pa.	Barnett No. 1	Westmoreland	Penna.	Derry, Pa.
Barnett Coal Co.	Latrobe, Pa.	Barnett No. 2	Westmoreland	P. C. & R.	Millwood, Pa.
Basin Coal Co.	Faytte City, Pa.	Basin	Fayette	P. & L. E.	Faytte City, Pa.
Beal Coal Co.	Uniontown, Pa.	Beal	Fayette	Penna.	Beal Siding, Rvere, Pa.
Beatty Gas Coal Co.	North Bessemer, Pa.	Beatty	Washington	Union, Penna.	North Bessemer, Pa.
Belboise Coal Co.	Belboise, Pa.	Belboise	Fayette	Penna.	Belboise Sta., Pa.
Bell Coal & Coke Co.	Connellsville, Pa.	Josephine	Fayette	B. & O.	Smith Id, Pa.
Berkley Coal Co.	Meyersdale, Pa.	Berkley	Somerset	B. & O.	Meyersdale, Pa.
Bertha Coal Co.	Chamber of Commerce Bldg., Pittsburgh, Pa.	Bertha	Washington	P. C. C. & St. L.	Dinsmore, Pa.
Bertha Coal Co.	Pittsburgh, Pa.	Jean	Allegheny	P. C. C. & St. L.	Dinsmore, Pa.
Bess-Etta Coal Co.	573 Union Arcade, Pittsburgh, Pa.	Bess Etta	Allegheny	P. C. C. & St. L. R. E.	Walkers Mill, Pa.
Wigley Coal Co.	Greensburg, Pa.	Bingley	Westmoreland	B. & O.	Gulley, Pa.
Blanchard Coal Co.	126 Fulton Bldg., Pittsburgh, Pa.	Blanchard No. 1	Westmoreland	P. R. R.	Wyano, Pa.
Blue Ridge Coal Co.	Fairchance, Pa.	Blue Ridge	Fayette	B. & O., Penna.	Fairchance, Pa.
Bortz, C. E.	Uniontown, Pa.	Ross No. 1	Fayette	Monon	Masontown, Pa.
Bortz, C. E.	Uniontown, Pa.	Ross No. 2	Fayette	Monon	Masontown, Pa.
Bourne Fuller Coke Co.	Uniontown, Pa. & Cleveland, O.	Sebright	Fayette	Monon	Low Phos, Pa.
Bowers Coal Co.	Point Marion, Pa.	Bowers No. 2	Fayette	B. & O.	Point Marion, Pa.
Bowman Bros. Co.	McKeesport, Pa.	Hiland	Allegheny	P. & L. E.	McKeesport, Pa.
Bradenville Coal & Coke Co.	Blairsville, Pa.	Bradenville	Westmoreland	P. R. R.	Bradenville, Pa.
Brier Hill Coke Company	Brier Hill, Pa.	Brier	Fayette	Monongahela	Brier Hill, Pa.
Brown, L. A.	Fayette City, Pa.	Brown No. 1	Fayette	Penna., Lake Erie	Fayette City, Pa.
Brownfield Coal & Coke Co.	Uniontown, Pa.	Mvers	Fayette	P. R. R.	Tarr, Pa.
Bruceon Fuel Co.	Broughton, Pa.	Porter	Allegheny	B. & O.	Broughton, Pa.
Brush Run Coal Co.	R. F. D. No. 1, Mt. Pleasant, Pa.	Brush Run	Westmoreland	B. & O.	R. F. D. No. 1, Mt. Pleasant, Pa.
Buckeye Coal Co.	Youngstown, Pa.	N. Macdon No. 1	Greene	Penna., Monon	Huron, Pa.
Bulger Block Coal Co.	6366 Frankstown Ave., Pittsburgh, Pa.	Bulger	Washington	P. C. C. & St. L.	Bulger, Pa.
Burgittstown Coal Co.	Pittsburgh, Pa.	Patterson	Washington	P. C. C. & St. L.	Burgittstown, Pa.
Burns Coal & Coke Co.	Alverton, Pa.	Bears	Westmoreland	Penna.	Alverton, Pa.
Burley Gas Coal Co.	Irwin, Pa.	Burley	Westmoreland	Penna.	Irwin, Pa.
Byrne Coal & Coke Co.	Scottdale, Pa.	Virgie No. 1	Westmoreland	P. R. R.	Yukon, Pa.
Byrne Coal & Coke Co.	Scottdale, Pa.	Virgie No. 2	Westmoreland	Penna.	Madison, Pa.
Byrne Coal & Coke Co.	Scottdale, Pa.	Virgie No. 3	Westmoreland	Penna.	Yukon, Pa.
Camberdith Coal Co.	Export, Pa.	McAlister No. 1	Westmoreland	Penna.	Export, Pa.
Cambria Steel Co.	Widener Bldg., Philadelphia, Pa.	Slickville	Westmoreland	Penna.	Slickville, Pa.
Canonsburg Gas Coal Co.	Pittsburgh, Pa.	Davis	Washington	Penna.	Canonsburg, Pa.
Carnegie Coal Company	Oliver Bldg., Pittsburgh, Pa.	Armide	Washington	P. C. C. & St. L.	Racoon, Pa.
Carnegie Coal Company	Oliver Bldg., Pittsburgh, Pa.	Atlas	Washington	P. C. C. & St. L.	Atlasburg, Pa.
Carnegie Coal Co.	Oliver Bldg., Pittsburgh, Pa.	Cedar Grove	Washington	P. C. C. & St. L.	Studa, Pa.
Carnegie Coal Company	Oliver Bldg., Pittsburgh, Pa.	Louise	Washington	P. C. C. & St. L.	Racoon, Pa.
Carnegie Coal Company	Oliver Bldg., Pittsburgh, Pa.	McDonald	Washington	P. C. C. & St. L.	Primros, Pa.
Carnegie Coal Company	Oliver Bldg., Pittsburgh, Pa.	Primrose	Washington	P. C. C. & St. L.	Primros, Pa.
Carnegie Coal Company	Oliver Bldg., Pittsburgh, Pa.	Oakdale	Allegheny	P. C. C. & St. L.	Noblistown, Pa.
Carter Coal Co.	Monessen, Pa.	No. 1	Westmoreland	P. & L. E.	Monessen, Pa.
Casby, John F. Co.	Pittsburgh, Pa.	Casby No. 7	Washington	Penna.	Racoon, Pa.
Central Fuel Company	Connellsville, Pa.	Lawyer	Fayette	Penna.	Pennsville, Pa.
Central Yough Coal Co.	Pittsburgh, Pa.	Central Yough No. 1	Westmoreland	B. & O.	Shaner, Pa.

(Continued on Next Page)

SHIPPING POINT

COAL CATALOG

PITTSBURGH SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Davidson	Fayette	Penna., B. & O.	Davidson, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Dearth	Fayette	P. R. R.	Low Phos, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Dilworth	Greene	Penna.	Rices Landing, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Dorothy	Westmoreland	P. R. R.	Dorothy Coke Works, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Edenborn	Fayette	P. R. R.	Edenborn, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Filbert	Fayette	Penna.	Fairbanks, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Footdale	Fayette	Penna.	Footdale, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Gates	Fayette	P. B. R.	Gates, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Hecla No. 1	Westmoreland	P. R. R.	Hecla, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Hecla No. 3	Westmoreland	P. R. R.	Hecla, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Hecla No. 2	Westmoreland	P. R. R.	Hecla, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Junata	Fayette	B. & O.	Trauger, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Kyle	Fayette	P. R. R.	Junata, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Lambert	Fayette	P. R. R.	Fairchance, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Leckrone	Fayette	P. R. R., Monon. B. & O.	Lamberton, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Leisenring No. 1	Fayette	P. R. R., B. & O.	Leisenring, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Leisenring No. 2	Fayette	P. R. R.	Bute, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Leisenring No. 3	Fayette	P. R. R.	Monarch, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Leith	Fayette	P. R. R., B. & O.	Leith, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Lemont No. 1	Fayette	P. R. R., B. & O.	Lemont Ovens & Darent, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Lemont No. 2	Fayette	P. R. R., B. & O.	Lemont Ovens & Darent, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Mammoth	Westmoreland	P. R. R.	Mammoth, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Marguerite	Westmoreland	Penna.	Marguerite, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Maxwell	Fayette	Penna.	Maxwell, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Mutual	Westmoreland	Penna.	Mutual, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Olipbant	Fayette	P. R. R.	Olipbant Furnace, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Palmer	Fayette	Penna.	Antram, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Phillips	Fayette	P. R. R.	Vance Mill Jet., Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Redstone	Fayette	B. & O.	Brownfield, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Ralph	Fayette	P. R. R.	Ralph, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Ronco	Fayette	Penna.	Ronco, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Shoaf	Somerset	B. & O., P. R. R.	Shoaf, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	South West No. 1	Westmoreland	P. R. R.	Morwood Coke Works, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	South West No. 2	Westmoreland	P. B. R.	Alice Mines, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	South West No. 3	Westmoreland	P. R. R.	Tarr, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Standard	Westmoreland	B. & O.	Standard, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Trotter	Fayette	P. R. R., B. & O.	Trotter, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	United	Westmoreland	P. R. R.	United, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Wynn	Fayette	Penna.	Wynn Works, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	York Run	Fayette	P. R. R.	York Run, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Youngstown	Fayette	P. R. R., B. & O.	Stambaugh, Pa.
Frick, H. C. Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Gallatin No. 1	Allegheny	P. & L. E.	Gallatin, Pa.
Gallatin Coal Co.	Gallatin, Pa.	Park Hill	Fayette	P. R. R., P. V. & C.	Waltersburg, Pa.
Genuine Conn-Hsville Coke Co.	Waltersburg, Pa.	Leon	Fayette	P. V. C.	Smock, Pa.
Gilliland Coke Co.	Brownsville, Pa.	Gillmore	Fayette	B. & O.	Sant'y, Pa.
Gilmore Coke Ovens	Uniontown, Pa.	Glass Run	Allegheny	Penna.	Hays, Pa.
Glass Run Coal Co.	Hays, Pa.	Graff	Indiana	P. R. R.	Blacklick, Pa.
Graff Coal Company	Blairsville, Pa.	Jeannette	Greene	Monongahela	West Point Marion, Pa.
Greene County Coal & Coke Co.	Point Marion, Pa.	Hawthorn	Westmoreland	P. R. R.	Greensburg, Pa.
Greensburg Coal Co.	Greensburg, Pa.	Francis	Washington	P. C. C. & St. L.	Burgittstown, Pa.
Greensburg-Connellsville Coal & Coke Co.	First National Bank Bldg., Pittsburgh, Pa.	Old Colony No. 1	Westmoreland	Penna.	North Ligonier, Pa.
Greensburg-Connellsville Coal & Coke Co.	First National Bank Bldg., Pittsburgh, Pa.	Bailey	Westmoreland	Penna.	Latrobe, Pa.
Greensburg Eastern Coal Co.	Latrobe, Pa.	Hall	Allegheny	Penna.	Turtle Creek, Pa.
Hall Coal Co.	East Pittsburgh, Pa.	Hammill No. 2	Allegheny	Montour	Scotts, Pa.
Hammill, B. S. Inc.	11 Crafton Ave., Crafton, Pa.	Niewanger	Westmoreland	Penna.	Luxor, Pa.
Hampfield Coal Co.	Greensburg, Pa.	Bradford	Washington	P. V. & C.	California, Pa.
Hanlin Coal Co.	California, Pa.	Dawson	Washington	P. V. & C.	California, Pa.
Hanlin Coal Co.	California, Pa.	Palton	Washington	P. V. & C.	California, Pa.
Hanover Coal Co.	Pittsburgh, Pa.	Hanover	Washington	P. C. C. & St. L.	Hanlin, Pa.
Happy Hollow Fuel Co.	Versailles, Pa.	Ella May No. 2	Allegheny	P. & L. E.	Versailles, Pa.
Harah Coal & Coke Co.	Uniontown, Pa.	Harah	Fayette	B. & O.	Out Crop, Pa.
Harding Coal Co.	Elk Lick, Pa.	Margaret	Somerset	B.	Boynton, Pa.
Harmon Creek Coal Co.	729 Oliver Bldg., Pittsburgh, Pa.	Florence	Washington	P. C. C. & St. L.	Burgittstown, Pa.
Harmon Creek Coal Co.	729 Oliver Bldg., Pittsburgh, Pa.	Fulton	Washington	P. C. C. & St. L.	Burgittstown, Pa.
Harmon Creek Coal Co.	729 Oliver Bldg., Pittsburgh, Pa.	Wilson	Washington	P. C. C. & St. L.	Burgittstown, Pa.
Harper, Thos. Coal Co.	Turtle Creek, Pa.	Harper No. 1	Allegheny	Penna.	Turtle Creek, Pa.
Harper, Thos. Coal Co.	Turtle Creek, Pa.	Phini Creek	Allegheny	Penna.	Unity Station, Pa.
Hayden Coal Co.	Uniontown, Pa.	Hayden No. 1	Fayette	Penna.	Uniontown, Pa.
Hayden Coal Co.	Uniontown, Pa.	Hayden No. 2	Fayette	Penna.	Uniontown, Pa.
Hayden Coal Co.	Uniontown, Pa.	No. 3	Fayette	Penna.	Uniontown, Pa.
Hayes Gas Coal Co.	Connellsville, Pa.	Smith	Allegheny	B. & O.	Hays, Pa.
Hecla Coal & Coke Co.	Pittsburgh, Pa.	Crystal	Fayette	B. & O.	Cheat Haven, Pa.
Hecla Coal & Coke Co.	Pittsburgh, Pa.	Griffin No. 1	Fayette	Penna.	Idled, Pa.
Hecla Coal & Coke Co.	Pittsburgh, Pa.	Griffin No. 2	Fayette	Penna.	Idled, Pa.
Hecla Coal & Coke Co.	Pittsburgh, Pa.	Isabella	Fayette	Penna.	Isabella, Pa.
Henderson Coal Co.	Pittsburgh, Pa.	Kennedy	Westmoreland	P. & L. E.	Webster, Pa.
Henderson Coal Co.	Pittsburgh, Pa.	No. 1	Washington	Montour	Finleyville, Pa.
Henderson Coal Co.	Pittsburgh, Pa.	No. 2	Washington	B. & O.	Finleyville, Pa.
Hertzog Coal Co.	Gans, Pa.	Hertzog	Fayette	Baltimore & Ohio	Gans, Pa.
Highland Fuel Co.	Uniontown, Pa.	Stahler	Fayette	Penna.	Waltersburg, Pa.
Hillman Coal & Coke Co.	Pittsburgh, Pa.	Edna No. 1	Westmoreland	B. & O.	Edna & Irwin, Pa.
Hillman Coal & Coke Co.	Pittsburgh, Pa.	Edna No. 2	Westmoreland	B. & O.	Edna & Irwin, Pa.
Hillman Coal & Coke Co.	Pittsburgh, Pa.	Ella	Allegheny	P. & L. E.	Milesville & Webster, Pa.
Hillman Coal & Coke Co.	Pittsburgh, Pa.	Naomi	Fayette	P. & L. E.	Fayette City, Pa.
Hillman Coal & Coke Co.	Pittsburgh, Pa.	Patterson	Allegheny	P. & L. E.	Wyllie & Elizabeth, Pa.
Hillman Gas Coal Co.	Pittsburgh, Pa.	Gibson	Washington	Penna.	Weaver, Pa.
Hilltop Coal & Coke Co.	Uniontown, Pa.	Hill Top No. 1	Fayette	B. & O., P. R. R.	Uniontown, Pa.
Hill Top Coal & Coke Co., Inc.	Uniontown, Pa.	Hill Top No. 2	Fayette	Penna.	Uniontown, Pa.
Hofrichter, J. F.	Bridgeville, Pa.	Hofrichter	Allegheny	Penna.	Bridgeville, Pa.
Hornel Coal Co.	Hickman, Pa.	Frederick No. 2	Allegheny	P. C. & Y.	Hickman, Pa.
Hornor Coal Co.	Millsboro, Pa.	Hornor	Washington	Penna.	Millsboro, Pa.
Hostetter Connellsville Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Hostetter	Westmoreland	P. R. R.	Hostetter, Pa.
Hostetter Connellsville Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Whitney	Westmoreland	P. R. R.	Whitney, Pa.
Hostetter Connellsville Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	Arnold	Washington	P. C. & St. L.	Henston, Pa.
Houston Coal Co.	Houston, Pa.	Louise No. 1	Westmoreland	Penna.	Slickville, Pa.
Howe Gas Coal Co.	Greensburg, Pa.	Penit	Allegheny	P. & L. E.	Lock No. 2, Pa.
Howell Coal Co.	Jackson Bldg., Pittsburgh, Pa.	Howell	Westmoreland	Penna.	Hermine, Pa.
Humphreys Coal & Coke Co.	Greensburg, Pa.	Humphreys	Westmoreland	Penna.	Trauger, Pa.
Humphreys, E. A. Coal & Coke Co.	Scottdale, Pa.	Chester No. 2	Westmoreland	Penna.	Bradenville, Pa.
Husted-Semans Coal & Coke Co.	Uniontown, Pa.	Husted	Fayette	P. R. R.	East Millsboro, Pa.
Irwin Gas Coal Co.	Greensburg, Pa.	Irwin Gas No. 2	Westmoreland	Penna.	Export, Pa.
Irwin Gas Coal Co.	Greensburg, Pa.	Irwin Gas No. 3	Westmoreland	Penna.	Elrico, Pa.
Irwin Gas Coal Co.	Greensburg, Pa.	Irwin No. 4	Westmoreland	Penna.	Slickville, Pa.
Irwin Gas Coal Co.	Greensburg, Pa.	Irwin No. 5	Westmoreland	Penna.	Elrico, Pa.
Irwin Valley Gas Coal Co.	Connellsville, Pa.	Schultz & Colinear	Westmoreland	Penna.	Irwin, Pa.
Jamison Coal & Coke Co.	Greensburg, Pa.	No. 1	Westmoreland	P. R. R.	Luxor, Pa.
Jamison Coal & Coke Co.	Greensburg, Pa.	No. 2	Westmoreland	P. R. R.	Hannastown, Pa.
Jamison Coal & Coke Co.	Greensburg, Pa.	No. 3	Westmoreland	P. R. R.	Forbes Road, Pa.

(Continued on Next Page)

PITTSBURGH SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Jamison Coal & Coke Co.	Greensburg, Pa.	No. 1	Westmorland	P. R. R.	Cab Trer, Pa.
Jamison Coal & Coke Co.	Greensburg, Pa.	No. 6	Westmorland	P. R. R.	Fish's Road, Pa.
Jamison Coal & Coke Co.	Greensburg, Pa.	Jamison No. 20	Westmorland	Penna.	Latta, Pa.
Jamison Coal & Coke Co.	Greensburg, Pa.	Jamison No. 21	Fayette	Lake Erie	Fulton Station, Pa.
Jamison Coal & Coke Co.	Greensburg, Pa.	Jamison No. 22	Fayette	Lake Erie	Fulton Station, Pa.
Jean Coal Co.	Crafton, Pa.	Jean	Allegheny	Montour	Imperial, Pa.
Jefferson Gas Coal Co.	Pittsburgh, Pa.	Jefferson No. 1	Washington	B. & O.	Pennock, Pa.
Jennings Coal & Coke Co.	Ontario, Pa.	Jennings	Fayette	B. & O.	Chat Haven, Pa.
Jintown Coal Co.	Connellsville, Pa.	Connellsville	Westmorland	Penna.	Connellsville, Pa.
Kendall, J. L.	Pittsburgh, Pa.	Hillside	Westmorland	Penna.	Machon, Pa.
Keystone Coal & Coke Co.	Huff Bldg., Greensburg, Pa.	Aronia	Westmorland	P. R. R.	Arden Station, Pa.
Keystone Coal & Coke Co.	Huff Bldg., Greensburg, Pa.	Claridge	Westmorland	Penna.	Claridge, Pa.
Keystone Coal & Coke Co.	Huff Bldg., Greensburg, Pa.	Crows Nest	Westmorland	Penna.	Greensburg, Pa.
Keystone Coal & Coke Co.	Huff Bldg., Greensburg, Pa.	K y zone	Westmorland	P. R. R.	Madison Station, Pa.
Keystone Coal & Coke Co.	Huff Bldg., Greensburg, Pa.	Greensburg No. 1	Westmorland	P. R. R.	Greensburg, Pa.
Keystone Coal & Coke Co.	Huff Bldg., Greensburg, Pa.	Greensburg No. 2	Westmorland	P. R. R.	Greensburg, Pa.
Keystone Coal & Coke Co.	Huff Bldg., Greensburg, Pa.	Greensburg No. 3	Westmorland	P. R. R.	Greensburg, Pa.
Keystone Coal & Coke Co.	Huff Bldg., Greensburg, Pa.	Greensburg No. 4	Westmorland	Penna.	Hunkers, Pa.
Keystone Coal & Coke Co.	Huff Bldg., Greensburg, Pa.	Hempfield No. 1	Westmorland	Penna.	Greensburg, Pa.
Keystone Coal & Coke Co.	Huff Bldg., Greensburg, Pa.	Haron	Westmorland	P. R. R.	Allsworth, Pa.
Keystone Coal & Coke Co.	Huff Bldg., Greensburg, Pa.	Sai m.	Westmorland	Penna.	Allsworth Station, Pa.
Keystone Lime & Coal Co.	Elk Lick, Pa.	Peck	Somers	B. & O.	West Salisbury, Pa.
Kite, Wm. J.	Bona Vista, Pa.	No. 1	Allegheny	P. & L. E.	Bona Vista, Pa.
Labille Coke Co.	Wheeling, W. Va.	Labille	Fayette	Monongahela	W. B. D., Pa.
Lacey Coal Co.	Pittsburgh, Pa.	Virginia	Washington	Penna.	Millboro, Pa.
Lake Shore Gas Coal Co.	Bona Vista, Pa.	Bravo	Allegheny	P. & L. E.	Truro Station, Pa.
Land Coal Company	Blairsville, Pa.	Briek Yard	Indiana	Penna.	Blairsville, Pa.
Langeloth Coal Co.	Pittsburgh, Pa.	Langeloth	Washington	P. C. C. & St. L.	Borg Union, Pa.
Larimer Gas Coal Co.	Larimer, Pa.	Larimer No. 1	Westmorland	Penna.	Larimer, Pa.
Latrobe Connellsville Coal & Coke Co.	Greensburg, Pa.	Dunn-Isle	Westmorland	P. R. R.	Brad nible, Pa.
Latrobe Connellsville Coal & Coke Co.	Greensburg, Pa.	Derry No. 1	Westmorland	P. R. R.	Brad nible, Pa.
Latrobe Connellsville Coal & Coke Co.	Greensburg, Pa.	Superior No. 2	Westmorland	P. R. R.	Brad nible, Pa.
Latrobe-Crasson Coal Mining Co.	Latrobe, Pa.	Island	Westmorland	P. R. R.	Latron, Pa.
Laurel Coke Co.	Union Trust Co. Bldg., Uniontown, Pa.	Laurel	Fayette	B. & O.	Chat Haven, Pa.
Lawrence Coal Co.	Uniontown, Pa.	Elizabeth	Fayette	Penna.	Newcomer, Pa.
Lilly Coal & Coke Co.	Charlton, Pa.	Lilley	Fayette	P. R. R.	West Brownsville, Pa.
Lincoln Gas Coal Co.	1920 Farmers Bank Bldg., Pittsburgh, Pa.	Lincoln No. 1	Washington	P. C. C. & St. L.	Washington, Pa.
Lincoln Coal & Coke Co.	Scottsdale, Pa.	Lincoln	Fayette	Penna.	Wait sberg, Pa.
Lindley Coal Co.	101 Farmers Bank Bldg., Pittsburgh, Pa.	Lindley	Washington	P. C. C. & St. L.	Tonaton, Pa.
Linsboro Coal Co.	Carnegie, Pa.	Jannette	Allegheny	Penna. & W. Va.	Bridgeville, Pa.
Loest Hill Coal Co.	Point Marion, Pa.	Loest	Fayette	B. & O.	Point Marion, Pa.
Lottis Coal Co.	Crafton, Pa.	Lottie	Allegheny	P. C. & Y.	Crafton, Pa.
Lowber Gas Coal Co.	Pittsburgh, Pa.	Lowber	Fayette	P. & L. E.	Fayette City, Pa.
Lowber Gas Coal Co.	Pittsburgh, Pa.	Ruth	Westmorland	Penna.	Graztown, Pa.
Lowther Coal Company	Clarksburg, Pa.	Lowther	Indiana	B. & O.	Iscin, Pa.
Luzerne Coal & Coke Co.	Oliver Bldg., Pittsburgh, Pa.	Luzerne	Fayette	Monongahela	Lackawanna, Pa.
Lyons Coal Co.	Uniontown, Pa.	Lyons	Fayette	B. & O.	Gals, Pa.
McAllister & Gray Coal Co.	Irwin, Pa.	Star	Westmorland	Penna.	Irwin, Pa.
McAnulty Coal Co.	Pittsburgh, Pa.	McAnulty No. 1	Allegheny	Penna.	Braddock, Pa.
McAnulty Coal Co.	Pittsburgh, Pa.	McAnulty No. 2	Butler	Penna.	Fremport, Pa.
McClane Mining Co.	Washington, Pa.	Maud	Allegheny	P. C. C. & St. L.	Esco, Pa.
McClane Mining Co.	Washington, Pa.	Rich Hill No. 1	Washington	P. C. C. & St. L.	Meadowdale, Pa.
McClane Mining Co.	Washington, Pa.	Rich Hill No. 2	Washington	P. C. C. & St. L.	Meadowdale, Pa.
McClellandtown Coal & Coke Co.	McClellandtown, Pa.	McClellandtown	Fayette	Penna.	Al smore, Pa.
McCombs Coal Co.	Indiana, Pa.	McCombs No. 1	Allegheny	B. & O.	McCombs Siding, Pa.
McConnell & Berg	Wilkinsburg, Pa.	McConnell & Berg	Allegheny	P. C. C. & St. L.	Univarsal, Pa.
McDonald Coal Co.	1211 Park Bldg., Pittsburgh, Pa.	Willow Grove	Allegheny	Penna.	stogoo, Pa.
McHugh, H., Coal Co.	Romerdale, Pa.	Cherry	Allegheny	Penna.	Walkers Mill, Pa.
McKeeley Coal Co.	Leetonia, Ohio	Geneva	Fayette	Monongahela	Martin, Pa.
McLean, R. J., Coal Co.	Oakdale, Pa.	Berna	Allegheny	P. H. P. C. & St. L.	Oakdale, Pa.
McShane Coal Co.	Pittsburgh, Pa.	No. 1 or Crafton	Allegheny	Penna.	Crafton, Pa.
McShane Coal Co.	Pittsburgh, Pa.	No. 2 or Tople	Allegheny	Penna.	Crafton, Pa.
Maber & Graff	Blairsville, Pa.	River	Westmorland	Penna.	Blairsville, Pa.
Mahoning Coal & Coke Co.	Connellsville, Pa.	Perches	Westmorland	Penna.	Ayrton, Pa.
Maple Glen Coal Works	Pittsburgh, Pa.	Driftwood	Washington	Penna.	Maple Glen, Pa.
Maple Glen Coal Works	Pittsburgh, Pa.	Maple Glen	Greene	Monongahela	Maple Glen, Pa.
Maple-Sterling Coal Works	Hunkard, Pa.	Dunkard No. 2	Allegheny	Penna.	Imperial, Pa.
Maroon Coal Co.	Fayette City, Pa.	Marshall	Allegheny	Montour	Imperial, Pa.
Margaret Coal Co.	Bridgeville, Pa.	Margaret	Allegheny	Monongahela	Imperial, Pa.
Marietta-Connellsville Coke Co.	Connellsville, Pa.	Clare No. 2	Washington	Ligonier Valley	Ligonier, Pa.
Martin, J. S.	Morgantown, W. Va.	Martin	Fayette	Penna.	Fairchance, Pa.
Maston Coal Co.	Pittsburgh, Pa.	Pandy	Washington	P. C. C. & St. L.	Houston, Pa.
Maust Coal Co.	Elk Lick, Pa.	Chapman No. 3	B. & O.	Penna.	Elk Lick, Pa.
Maust Coal Co.	Elk Lick, Pa.	Chapman No. 4	Somerset	Penna.	Elk Lick, Pa.
Mayer, C. P., Brick Co.	Bridgeville, Pa.	No. 1	Allegheny	Penna.	Bridgeville, Pa.
Mayer, C. P., Brick Co.	Bridgeville, Pa.	No. 2	Allegheny	P. C. & Y.	Preston, Pa.
Meadow Lands Coal Co.	1506 First Natl. Bank Bldg., Pittsburgh, Pa.	Meadow Lands No. 2	Washington	Penna. & W. Va.	Arden, Pa.
Meadow Lands Coal Co.	1506 First Natl. Bank Bldg., Pittsburgh, Pa.	Meadow Lands No. 3	Washington	Pgh. & W. Va.	Avila, Pa.
Meyersdale Fuel Co.	Somerset, Pa.	Fuel No. 1	Somerset	B. & O.	West Salisbury, Pa.
Meyersdale Fuel Co.	Somerset, Pa.	Fuel No. 2	Somerset	B. & O.	West Salisbury, Pa.
Meyersdale Fuel Co.	Somerset, Pa.	Fuel No. 3	Somerset	B. & O.	West Salisbury, Pa.
Midway Coal Co.	Bridgeville, Pa.	Midway	Washington	P. C. C. & St. L.	Midway, Pa.
Millboro Coal & Coke Co.	Bellevue, Pa.	Millboro	Washington	Penna.	Millboro, Pa.
Moffitt-Sterling Gas Coal Co.	Charlton, Pa.	Moffitt Sterling	Greene	Monongahela	Dilliner, Pa.
Monessen Coal & Coke Co.	700 Union Arcade, Pittsburgh, Pa.	Monessen	Westmorland	P. & L. E.	Monessen, Pa.
Montour & Lake Erie Coal Co.	102 Vanadium Bldg., Pittsburgh, Pa.	Beggs	Allegheny	Monongahela	Beggs, Pa.
Moore Coal Co.	South Brownsville, Pa.	Moore	Fayette	Penna.	East Millboro, Pa.
Morgan Coal & Coke Co.	Uniontown, Pa.	Corush	Fayette	B. & O.	Freintown, Pa.
Morris-Connellsville Fuel Co.	Connellsville, Pa.	Deacherry	Westmorland	P. R. R.	Smith H. Pa.
Mt. Pleasant By-Products Coal Co.	Greensburg, Pa.	St. Vincent	Westmorland	P. R. R.	Boatty Sta., Pa.
Mt. Pleasant Coke Co.	Greensburg, Pa.	Batty	Westmorland	P. R. R.	Batty, Pa.
Mt. Pleasant-Connellsville Coke Co.	Greensburg, Pa.	Mt. Pleasant	Allegheny	P. C. C. & St. L.	Hecla, Pa.
National Mining Co.	Pittsburgh, Pa.	National No. 1	Washington	P. C. C. & St. L.	Sygan, Pa.
National Mining Co.	Pittsburgh, Pa.	National No. 2	Washington	P. C. C. & St. L.	Trweskyn, Pa.
National Mining Co.	Pittsburgh, Pa.	No. 1	Washington	Penna. Monon.	Courtney, Pa.
National Mining Co.	Pittsburgh, Pa.	No. 2	Westmorland	P. & L. E.	Bellevue, Pa.
Need, C. M.	1119 Oliver Bldg., Pittsburgh, Pa.	Johnston	Fayette	P. & L. E.	Duckers, Pa.
Nellie Coal & Coke Co.	Connellsville, Pa.	Nellie	Westmorland	Penna.	Andree, Pa.
New Alexandria Coke Co.	Greensburg, Pa.	New Alexandria No. 1	Westmorland	Penna.	Andree, Pa.
New Alexandria Coke Co.	Greensburg, Pa.	New Alexandria No. 2	Westmorland	Penna.	Andree, Pa.
New Alexandria Coke Co.	Greensburg, Pa.	New Alexandria No. 3	Westmorland	Penna.	Andree, Pa.
New Alexandria Coke Co.	Greensburg, Pa.	New Alexandria No. 4	Westmorland	Penna.	Andree, Pa.
New Alexandria Coke Co.	Greensburg, Pa.	New Alexandria No. 5	Westmorland	Penna.	Andree, Pa.
New Geneva Fuel Co.	New Geneva, Pa.	Powell	Fayette	Monongahela	New Geneva, Pa.
Niverton Coal Co.	Meyersdale, Pa.	Wilson	Somerset	B. & O.	Niverton, Pa.
Oak Hill Coal Mining Co.	Washington, Pa.	Knox	Washington	Penna.	Avila, Pa.
Oakville Coal & Coke Co.	Greensburg, Pa.	Ann	Westmorland	Penna.	Avila, Pa.
Ocean Coal Co.	Commercial Trust Bldg., Philadelphia, Pa.	Ocean No. 1	Westmorland	P. R. R.	Hermine, Pa.
Ocean Coal Co.	Commercial Trust Bldg., Philadelphia, Pa.	Ocean No. 2	Westmorland	P. R. R.	Hermine, Pa.
Old Connellsville Coke Co.	Uniontown, Pa.	Old Connellsville	Fayette	B. & O.	Uniontown, Pa.

(Continued on Next Page)

PITTSBURGH SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
O. & S. Steel Co.	Pittsburgh, Pa.	Oliver No. 1	Fayette	P. R. R. B. & O. P. & L. E.	R. d. stone Jet & Oliver No. 3, Pa.
O. & S. Steel Co.	Pittsburgh, Pa.	Oliver No. 2	Fayette	P. R. R. B. & O. P. & L. E.	R. d. stone Jet & Oliver No. 3, Pa.
O. & S. Steel Co.	Pittsburgh, Pa.	Oliver No. 3	Fayette	P. R. R. B. & O. P. & L. E.	R. d. stone Jet & Oliver No. 3, Pa.
O. & S. Steel Co.	Bridgeville, Pa.	Roseville	Allegheny	P. C. & Y.	Woodville, Pa.
O. & S. Steel Co.	Pittsburgh, Pa.	Ontario	Washington	P. C. & Y.	Ellsworth, Pa.
O. & S. Steel Co.	Scottsdale, Pa.	Onondaga	Fayette	P. C. & Y.	Scottsdale, Pa.
O. & S. Steel Co.	Crafton, Pa.	Thornburg	Allegheny	P. C. & Y.	Crafton, Pa.
O. & S. Steel Co.	Monongahela, Pa.	Home	Washington	P. C. & Y.	Monongahela, Pa.
O. & S. Steel Co.	Connellsville, Pa.	Dick	Fayette	P. C. & Y.	Pawson, Pa.
O. & S. Steel Co.	Uniontown, Pa.	Old Home	Fayette	P. R. R. B. & O. P. & L. E.	Uniontown, Pa.
O. & S. Steel Co.	Uniontown, Pa.	Port ss.	Fayette	P. R. R. B. & O. P. & L. E.	Uniontown, Pa.
O. & S. Steel Co.	Uniontown, Pa.	Francis	Indiana	P. R. R. B. & O. P. & L. E.	Uniontown, Pa.
O. & S. Steel Co.	810 Magee Bldg., Third Ave., Pittsburgh, Pa.	Margaret	Fayette	M. & Mon. River	W. St. Point Marion, Pa.
O. & S. Steel Co.	Point Marion, Pa.	Detweiler & Pennsville	Fayette	P. R. R. B. & O. P. & L. E.	Connellsville, Pa.
O. & S. Steel Co.	Connellsville, Pa.	Dale	Allegheny	P. R. R. B. & O. P. & L. E.	Connellsville, Pa.
O. & S. Steel Co.	McKeesport, Pa.	Piney Fork	Allegheny	P. R. R. B. & O. P. & L. E.	McKeesport, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Phyllis	Fayette	P. C. & Y.	Phyllis, Pa.
O. & S. Steel Co.	Connellsville, Pa.	Mathew	Allegheny	P. C. & Y.	Mathew, Pa.
O. & S. Steel Co.	Cleveland, O.	Pierce	Allegheny	P. C. & Y.	Wylie, Pa.
O. & S. Steel Co.	Versailles, O.	St. John No. 1	Allegheny	Montour	St. John, Pa.
O. & S. Steel Co.	1709 Ridge Ave., Coraopolis, Pa.	Gambert No. 1	Somerset	P. C. & Y.	Pine Hill, Pa.
O. & S. Steel Co.	McKeesport, Pa.	Wallace	Allegheny	P. C. & Y.	Pittsburgh, Pa.
O. & S. Steel Co.	Irwin, Pa.	Allison	Washington	P. C. & Y.	Irwin, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Apollo	Fayette	P. C. & Y.	Apollo, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Arnold No. 2	Fayette	P. C. & Y.	Arnold, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Banning No. 1	Westmoreland	P. C. & Y.	Banning, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Banning No. 2	Fayette	P. C. & Y.	Banning, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Banning No. 3	Westmoreland	P. C. & Y.	Banning, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Black Diamond	Washington	P. C. & Y.	Black Diamond, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Bridgeville	Allegheny	P. C. & Y.	Bridgeville, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Catsburg	Washington	P. C. & Y.	Catsburg, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Champion	Allegheny	P. C. & Y.	Champion, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Cincinnati	Washington	P. C. & Y.	Cincinnati, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Coal Bluff	Washington	P. C. & Y.	Coal Bluff, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Crescent	Washington	P. C. & Y.	Crescent, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Delmont	Westmoreland	P. C. & Y.	Delmont, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Dickson	Allegheny	Montour	Dickson, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Eclipse	Washington	P. C. & Y.	Eclipse, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Equitable	Westmoreland	P. C. & Y.	Equitable, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Ess No. 3	Allegheny	P. C. & Y.	Ess, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Enclid	Westmoreland	P. C. & Y.	Enclid, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Eureka	Westmoreland	P. C. & Y.	Eureka, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Fair Haven	Allegheny	P. C. & Y.	Fair Haven, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Fayette City	Fayette	P. C. & Y.	Fayette City, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Forrest Hill	Allegheny	P. C. & Y.	Forrest Hill, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Gallatin	Allegheny	P. C. & Y.	Gallatin, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Harrison	Allegheny	P. C. & Y.	Harrison, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Laurel Hill No. 5	Allegheny	P. C. & Y.	Laurel Hill, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Loveland	Allegheny	P. C. & Y.	Loveland, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Lyons	Westmoreland	P. C. & Y.	Lyons, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Manown	Allegheny	P. C. & Y.	Manown, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Mansfield	Allegheny	P. C. & Y.	Mansfield, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Margum	Allegheny	Montour	Margum, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Midland No. 1	Washington	P. C. & Y.	Midland, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Midland No. 3	Washington	P. C. & Y.	Midland, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Mongah	Washington	P. C. & Y.	Mongah, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Montour No. 1	Washington	Montour	Montour, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Montour No. 2	Washington	Montour	Montour, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Montour No. 4	Washington	Montour	Montour, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Montour No. 8	Allegheny	Montour	Montour, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Montour No. 9	Washington	Montour	Montour, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Montour No. 10	Allegheny	Montour	Montour, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Moore Run	Allegheny	Montour	Moore Run, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Ocean No. 2	Allegheny	P. C. & Y.	Ocean, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Ocean No. 5	Allegheny	P. C. & Y.	Ocean, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Partridge	Allegheny	Montour	Partridge, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Shamrock	Westmoreland	P. C. & Y.	Shamrock, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Somers No. 2	Westmoreland	P. C. & Y.	Somers, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Somers No. 4	Westmoreland	P. C. & Y.	Somers, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Sunnyside	Allegheny	P. C. & Y.	Sunnyside, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Tremont	Fayette	P. C. & Y.	Tremont, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Walton No. 2	Allegheny	P. C. & Y.	Walton, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Waverly	Westmoreland	P. C. & Y.	Waverly, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	West Newton	Westmoreland	P. C. & Y.	West Newton, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Yough No. 2	Allegheny	P. C. & Y.	Yough, Pa.
O. & S. Steel Co.	Oliver Bldg., Pittsburgh, Pa.	Yough Slope	Westmoreland	P. C. & Y.	Yough, Pa.
O. & S. Steel Co.	Leader News Bldg., Cleveland, O.	No. 1	Washington	P. C. & Y.	Leader News, Pa.
O. & S. Steel Co.	Leader News Bldg., Cleveland, O.	No. 2	Washington	P. C. & Y.	Leader News, Pa.
O. & S. Steel Co.	Leader News Bldg., Cleveland, O.	No. 3	Washington	P. C. & Y.	Leader News, Pa.
O. & S. Steel Co.	Erie, Pa.	Summer No. 2	Fayette	P. C. & Y.	Summer, Pa.
O. & S. Steel Co.	Erie, Pa.	Erie No. 1	Washington	P. C. & Y.	Erie, Pa.
O. & S. Steel Co.	Indiana, Pa.	Iselin No. 1	Indiana	P. C. & Y.	Iselin, Pa.
O. & S. Steel Co.	Indiana, Pa.	Iselin No. 2	Indiana	P. C. & Y.	Iselin, Pa.
O. & S. Steel Co.	Indiana, Pa.	Iselin No. 4	Indiana	P. C. & Y.	Iselin, Pa.
O. & S. Steel Co.	Indiana, Pa.	Iselin No. 6	Indiana	P. C. & Y.	Iselin, Pa.
O. & S. Steel Co.	Indiana, Pa.	Iselin No. 3	Indiana	P. C. & Y.	Iselin, Pa.
O. & S. Steel Co.	Indiana, Pa.	Iselin No. 5	Indiana	P. C. & Y.	Iselin, Pa.
O. & S. Steel Co.	Vandergrift Bldg., Pittsburgh, Pa.	Russell	Washington	P. C. & Y.	Russell, Pa.
O. & S. Steel Co.	Union Arcade, Pittsburgh, Pa.	Alicia No. 1	Fayette	Monon.	Alicia, Pa.
O. & S. Steel Co.	Union Arcade, Pittsburgh, Pa.	Alicia No. 2	Fayette	B. & O. Penna.	Alicia, Pa.
O. & S. Steel Co.	Greensburg, Pa.	No. 1	Washington	Pittsburgh & W. Va.	Greensburg, Pa.
O. & S. Steel Co.	Pittsburgh, Pa.	English	Allegheny	Penna.	English, Pa.
O. & S. Steel Co.	Wabash Bldg., Pittsburgh, Pa.	No. 2	Allegheny	West Side Belt	Wabash, Pa.
O. & S. Steel Co.	Wabash Bldg., Pittsburgh, Pa.	No. 3	Allegheny	West Side Belt	Wabash, Pa.
O. & S. Steel Co.	Wabash Bldg., Pittsburgh, Pa.	No. 4	Allegheny	West Side Belt	Wabash, Pa.
O. & S. Steel Co.	Wabash Bldg., Pittsburgh, Pa.	No. 6	Allegheny	West Side Belt	Wabash, Pa.
O. & S. Steel Co.	Wabash Bldg., Pittsburgh, Pa.	No. 7	Allegheny	West Side Belt	Wabash, Pa.
O. & S. Steel Co.	Pittsburgh, Pa.	No. 8	Allegheny	Montour	Wabash, Pa.
O. & S. Steel Co.	46 East Main St., Uniontown, Pa.	Point Marion	Fayette	B. & O.	Point Marion, Pa.
O. & S. Steel Co.	Poland Coal Company	Poland No. 1	Fayette	Penna.	Poland, Pa.
O. & S. Steel Co.	Pittsburgh, Pa.	Poland No. 2	Fayette	Penna.	Poland, Pa.
O. & S. Steel Co.	Southwest, Pa.	Pollins No. 1	Westmoreland	Penna.	Bradenville, Pa.
O. & S. Steel Co.	Southwest, Pa.	Pollins No. 2	Westmoreland	Penna.	Pollins, Pa.
O. & S. Steel Co.	First National Bank Bldg., Pittsburgh, Pa.	Masten	Washington	B. & O.	Clarksburg, Pa.
O. & S. Steel Co.	Greensburg, Pa.	Prospect	Westmoreland	Penna.	Greensburg, Pa.
O. & S. Steel Co.	Greensburg, Pa.	Avella No. 1	Washington	P. & W. V.	Avella, Pa.
O. & S. Steel Co.	New Kensington, Pa.	Puckety	Allegheny	Penna.	New Kensington, Pa.
O. & S. Steel Co.	Uniontown, Pa.	Union No. 2	Fayette	P. R. R. B. & O.	Uniontown, Pa.
O. & S. Steel Co.	Uniontown, Pa.	Puritan No. 3	Fayette	Penna.	Leckrone, Pa.

(Continued on Next Page)

PITTSBURGH SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Puritan Coke Co.	Uniontown, Pa.	Puritan No. 1	Fayette	Penn.	Lackawanna, Pa.
Puritan Coke Co.	Uniontown, Pa.	Puritan No. 5	Fayette	Penn.	Lackawanna, Pa.
Quality Coal Co.	Meyersdale, Pa.	Quality No. 1	Somerset	R & O	Monaca, Pa.
Quality Coal Co.	Meyersdale, Pa.	Quality No. 2	Somerset	R & O	Pine Hill, Pa.
Rainey, W. J.	New York, N. Y.	Allison	Fayette	Monongahela	Brownsville, Pa.
Rainey, W. J.	52 Vanderbilt Ave., New York, N. Y.	Elm Grove	Fayette	R & O	Vanderbilt, Pa.
Rainey, W. J.	52 Vanderbilt Ave., New York, N. Y.	Fort Hill	Fayette	P & L E	Uniontown, Pa.
Rainey, W. J.	52 Vanderbilt Ave., New York, N. Y.	Mount Bradbrook	Fayette	P & O, P & R	Allegheny, Pa.
Rainey, W. J.	52 Vanderbilt Ave., New York, N. Y.	Paul	Fayette	P & L E, R & O	Uniontown, Pa.
Rainey, W. J.	52 Vanderbilt Ave., New York, N. Y.	Rocky	Fayette	P & R	Uniontown, Pa.
Rainey, W. J.	52 Vanderbilt Ave., New York, N. Y.	Royal	Fayette	P & R	Harrisburg, Pa.
Rainey, W. J.	52 Vanderbilt Ave., New York, N. Y.	Stewart	Westmoreland	Penna.	Uniontown, Pa.
Rainey, W. J.	New York, N. Y.	Runs No. 2	Westmoreland	Ligonier Valley	Uniontown, Pa.
Rainey Coal Co., Inc.	Ligonier, Pa.	Thompson No. 1	Fayette	Monon	Uniontown, Pa.
Reckstone Coal & Coke Co.	Pittsburgh, Pa.	Margaret	Fayette	R & O	Uniontown, Pa.
Relby-Cullaghan Coal & Coke Co., Inc.	Uniontown, Pa.	Baxter Ridge	Fayette	R & O	Uniontown, Pa.
Relby, W. J. Coal & Coke Co.	Uniontown, Pa.	Dino	Washington	Penna.	Uniontown, Pa.
Reliance Coal Company	514 Erie Bldg., Pittsburgh, Pa.	Rauick	Westmoreland	Ligonier Valley	Uniontown, Pa.
Republic Coal Co.	Ligonier, Pa.	Redden	Fayette	R & O	Uniontown, Pa.
Republic Coal & Coke Co.	Connellsville, Pa.	Wood No. 3	Fayette	R & O	Uniontown, Pa.
Republic Iron & Steel Co.	Youngstown, O.	Reynold	Fayette	P & R	Uniontown, Pa.
Republic Iron & Steel Co.	Youngstown, O.	Martin	Fayette	P & R	Uniontown, Pa.
Republic Iron & Steel Co.	Youngstown, O.	R. public	Fayette	P & R	Uniontown, Pa.
Republic Iron & Steel Co.	Youngstown, O.	Rich Hill	Fayette	R & O	Uniontown, Pa.
Rich Hill Coal Co.	Uniontown, Pa.	Robinson	Fayette	R & O	Uniontown, Pa.
Robinson Coal Co.	701 Second Natl. Bk. Bldg., Connellsville, Pa.	Rowe	Somerset	Cumberland & Penna.	Uniontown, Pa.
Rowe, C. J. & Bros.	Meyersdale, Pa.	Willis No. 1	Somerset	R & O	Uniontown, Pa.
Rowe, C. J. & Bros.	Meyersdale, Pa.	Sacolet	Fayette	R & O	Uniontown, Pa.
Sackett, H. R. Coal & Coke Co.	Smithfield Id., Pa.	Foster	Indiana	P & R	Uniontown, Pa.
Saltburg Coal Mining Co.	Leechburg, Pa.	Simpson	Washington	Penna.	Uniontown, Pa.
Sanspan Coal Co.	Dunora, Pa.	Saxman No. 2	Westmoreland	W. M.	Uniontown, Pa.
Saxman Coal & Coke Co.	Laporte, Pa.	Hornet	Somerset	P & C & St. L.	Uniontown, Pa.
Seibel Coal Co.	Somers T. Pa.	Scott	Allegheny	M. K. P. & A. I. E.	Uniontown, Pa.
Scott Coal Co.	Madville, Pa.	Sedar	Fayette	P & L E	Uniontown, Pa.
Solar Coal Co.	Hazleton, Pa.	Ligomer Diamond No. 1	Westmoreland	Ligonier Valley	Uniontown, Pa.
Seger Bros.	Ligonier, Pa.	Ligomer Diamond No. 2	Westmoreland	Ligonier Valley	Uniontown, Pa.
Seger Bros.	Ligonier, Pa.	St. Clair	Westmoreland	Ligonier Valley	Uniontown, Pa.
Seger Bros.	Ligonier, Pa.	S. g. r. Bros. No. 1	Westmoreland	Penna.	Uniontown, Pa.
Seger Bros.	Ligonier, Pa.	Vogel	Westmoreland	Ligonier Valley	Uniontown, Pa.
Seger Bros.	Ligonier, Pa.	Rose	Greene	Monongahela	Uniontown, Pa.
Sesenth Coal & Coke Co.	Mason town, Pa.	No. 1	Washington	P & R	Uniontown, Pa.
Shearn, James G. & Son	Canonsburg, Pa.	Lyle	Westmoreland	Penna.	Uniontown, Pa.
Shenango Furnace Co. The	Pittsburgh, Pa.	Wilpen	Westmoreland	Ligonier Valley	Uniontown, Pa.
Shenango Furnace Company (The)	Pittsburgh, Pa.	Dandy	Washington	Penna.	Uniontown, Pa.
Shergle Coal Co.	Canonsburg, Pa.	Morie	Washington	P & C & St. L.	Uniontown, Pa.
Sidin, W. H., Coal Company	Diamond Bank Bldg., Pittsburgh, Pa.	Elizabeth	Westmoreland	P & R	Uniontown, Pa.
Skelly, W. B., Coal Co.	Export, Pa.	Mc. Hone	Fayette	Penna.	Uniontown, Pa.
Snowden Coal Company	Pittsburgh, Pa.	Mich. B.	Fayette	P & L E	Uniontown, Pa.
Spears, S. M., Coal Co.	R. de Vernon, Pa.	Blackstone	Fayette	P & C & St. L.	Uniontown, Pa.
South Fayette Coal Co.	Pittsburgh, Pa.	Melrose	Allegheny	P & C & St. L.	Uniontown, Pa.
South Fayette Coal Co.	Pittsburgh, Pa.	Pr. sto.	Washington	R & O	Uniontown, Pa.
South Wilkesboro Coal Co.	Wilmsiding, Pa.	No. 1	Allegheny	P & R	Uniontown, Pa.
Southern Connellsville Coal Co.	Connellsville, Pa.	Marton	Fayette	P & R	Uniontown, Pa.
Springer Coal Co.	Pittsburgh, Pa.	Spinger	Washington	Penna.	Uniontown, Pa.
State Line Coal Co.	Chat Haven, Pa.	Studz No. 1	Fayette	Penna.	Uniontown, Pa.
Statler, E. & Sons	Elk Lick, Pa.	Stall	Somerset	W. M.	Uniontown, Pa.
Sterling Coal Co.	Connellsville, Pa.	Strang	Fayette	R & O	Uniontown, Pa.
Stern Coal & Coke Co.	Uniontown, Pa.	Ball	Fayette	Penna. Monon	Uniontown, Pa.
Stern Coal & Coke Co.	Uniontown, Pa.	Snyder	Fayette	Penna. Monon	Uniontown, Pa.
Stevenson Coal Co.	Point Marion, Pa.	Stevenson	Fayette	M. R.	Uniontown, Pa.
Summit Connellsville Coal & Coke Co.	Conn. Hsille, Pa.	Franklin	Fayette	Penna. P & L E	Uniontown, Pa.
Superior Connellsville Coal Co.	Uniontown, Pa.	Sharpnack	Fayette	Monongahela	Uniontown, Pa.
Superior Mining Co.	Pittsburgh, Pa.	Superior	Washington	P & C & St. L.	Uniontown, Pa.
Sutersville Coal Co.	Connellsville, Pa.	Corrado	Westmoreland	R & O	Uniontown, Pa.
Thompson Connellsville Coal Co.	Pittsburgh, Pa.	Thompson No. 2	Fayette	Penna.	Uniontown, Pa.
Thornbottom Coal Co.	Connellsville, Pa.	Work	Fayette	Penna. R. A. O. W. M.	Uniontown, Pa.
Tommako, Edward	Adamsburg, Pa.	Little Gem	Westmoreland	R & O	Uniontown, Pa.</

(Continued on Next Page)

PITTSBURGH SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
West Point By Product Coal Co.	Pittsburgh, Pa.	Marion	Westmoreland	Penna.	Udell, Pa.
West Point Marion Coal Works	Milliner, Pa.	Walnut Hill	Greene	Monongahela	West Point Marion, Pa.
Westmoreland Coal Co.	224 S. Third St., Philadelphia, Pa.	Adams	Westmoreland	Penna.	Irwin, Pa.
Westmoreland Coal Co.	224 S. Third St., Philadelphia, Pa.	Biddle	Westmoreland	Penna.	Irwin, Pa.
Westmoreland Coal Co.	224 S. Third St., Philadelphia, Pa.	Critchley	Westmoreland	P. R. R.	Killbuck, Pa.
Westmoreland Coal Co.	224 S. Third St., Philadelphia, Pa.	Demark	Westmoreland	Penna.	Claridge, Pa.
Westmoreland Coal Co.	224 S. Third St., Philadelphia, Pa.	Export No. 1	Westmoreland	P. R. R.	Export, Pa.
Westmoreland Coal Co.	224 S. Third St., Philadelphia, Pa.	Export No. 2	Westmoreland	P. R. R.	Export, Pa.
Westmoreland Coal Co.	224 S. Third St., Philadelphia, Pa.	McCullough	Westmoreland	Penna.	Claridge, Pa.
Westmoreland Coal Co.	224 S. Third St., Philadelphia, Pa.	Magee	Westmoreland	P. R. R.	Yukon, Pa.
Westmoreland Coal Co.	224 S. Third St., Philadelphia, Pa.	Marchand	Westmoreland	Penna.	Lowber, Pa.
Westmoreland Coal Co.	224 S. Third St., Philadelphia, Pa.	Penn.	Westmoreland	Penna.	Penn, Pa.
Westmoreland Coal Co.	224 S. Third St., Philadelphia, Pa.	Southside	Westmoreland	P. R. R.	Irwin, Pa.
Westmoreland-Conn Hsville Coal & Coke Co.	5114 Frick Bldg., Pittsburgh, Pa.	Fort Palmer No. 1	Westmoreland	Ligonier Valley	Ligonier, Pa.
Westmoreland-Fayette Coal & Coke Co.	Greensburg, Pa.	Ada	Fayette	B. & O.	Cheat Haven, Pa.
Westmoreland-Fayette Coal & Coke Co.	Greensburg, Pa.	Ruth	Westmoreland	Penna.	Batty, Pa.
White Valley Coal Company	Export, Pa.	White Valley	Westmoreland	Penna.	Export, Pa.
Whyel Coke Co.	Uniontown, Pa.	Ellen No. 2	Westmoreland	P. R. R.	Whitney, Pa.
Whyel Coke Co.	Uniontown, Pa.	Klondyke	Westmoreland	Penna.	Yukon, Pa.
Whyel Coke Co.	Uniontown, Pa.	Oakridge	Westmoreland	Penna.	Yukon, Pa.
Whyel Coke Co.	Uniontown, Pa.	Thomas	Fayette	Penna., B. & O.	Smiley, Pa.
Whyel Coke Co.	Uniontown, Pa.	Yukon	Westmoreland	Penna.	Yukon, Pa.
Whyel Coal & Coke Co.	Uniontown, Pa.	Anica	Fayette	P. & L. E., Monon.	Whitsett, Pa.
Wilkey Coal & Coke Co.	Uniontown, Pa.	Prospect	Fayette	P. & L. E.	Whitsett, Pa.
Wilkinsburg Domestic Coal Co.	P. O. Box 88, Wilkinsburg, Pa.	Hampton	Allegheny	Penna.	Wilkinsburg, Pa.
Wilson Brothers Coal Co.	Fairchance, Pa.	Hill	Fayette	B. & O.	Cheat Haven, Pa.
Winland-Gilmore Coal & Coke Co.	Uniontown, Pa.	Winmore	Westmoreland	B. & O.	Smithton, Pa.
Winnett, A. M.	Belle Vernon, Pa.	Winnett	Fayette	P. & L. E.	Belle Vernon, Pa.
Winstead Coal Co.	Uniontown, Pa.	Winstad	Fayette	B. & O.	Point Marion, Pa.
Wishart Coal Co.	Dunbar, Pa.	Wishart	Fayette	B. & O., Penna.	Fairchance, Pa.
Wood Run Gas Coal Co.	Newell, Pa.	Wood Run Gas	Washington	Penna.	Roscoe, Pa.
Woods Coal Co.	Brownsville, Pa.	Woods	Fayette	P. & L. E.	East Roscoe, Pa.
Youngbuehney & Ohio Coal Co., The	Cleveland, O.	Whirlpool	Washington	P. V. & C.	Monessen, Pa.
Youngbuehney & Ohio Coal Co., The	Cleveland, O.	Enterprise	Washington	P. C. C. & St. L.	Meadow Lands, Pa.
Youngbuehney & Ohio Coal Co., The	Cleveland, O.	Manifold No. 1	Washington	P. C. C. & St. L.	Meadow Lands, Pa.
Youngbuehney & Ohio Coal Co., The	Cleveland, O.	Manifold No. 2	Washington	P. C. C. & St. L.	Meadow Lands, Pa.
Youngbuehney & Ohio Coal Co., The	Cleveland, O.	Osborne No. 1	Westmoreland	P. R. R.	Wyano, Pa.
Youngbuehney & Ohio Coal Co., The	Cleveland, O.	Osborne No. 2	Westmoreland	P. R. R.	Wyano, Pa.

REDSTONE SEAM

Mined in Allegheny, Somerset, Westmoreland and Fayette counties. Bituminous rank. Suitable for Steam, Railway, Domestic and Producer Gas purposes.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Atlantic Big Vein Coal Co.	Meyersdale, Pa.	Keystone No. 2	Somerset	B. & O.	West Salisbury, Pa.
Atlantic Big Vein Coal Co.	Meyersdale, Pa.	Keystone No. 4	Somerset	B. & O.	West Salisbury, Pa.
Bowman Coal Co.	Boynton, Pa.	Hamilton	Somerset	B. & O.	West Salisbury, Pa.
Bowman, C. K., & Co.	Boynton, Pa.	Chapman No. 2	Somerset	B. & O.	West Salisbury, Pa.
Commercial Coal Co.	West Newton, Pa.	Commercial No. 6	Westmoreland	Penna.	Wyano, Pa.
Consolidation Coal Co., The	New York, N. Y.	Consolidation No. 105	Somerset	B. & O.	Consolidation No. 105, Pa.
Consolidation Coal Co., The	New York, N. Y.	Consolidation No. 106	Somerset	B. & O.	Consolidation No. 106, Pa.
Consolidation Coal Co., The	New York, N. Y.	No. 107	Somerset	B. & O.	West Salisbury, Pa.
Grassy Run Coal Co.	Elk Lick, Pa.	Grassy Run No. 1	Somerset	B. & O.	West Salisbury, Pa.
Grassy Run Coal Co.	Elk Lick, Pa.	Grassy Run No. 2	Somerset	B. & O.	West Salisbury, Pa.
Grassy Run Coal Co.	Elk Lick, Pa.	Grassy Run No. 3	Somerset	B. & O.	West Salisbury, Pa.
Grassy Run Coal Co.	Elk Lick, Pa.	Grassy Run No. 4	Somerset	B. & O.	West Salisbury, Pa.
Harding Coal Co.	Elk Lick, Pa.	Margaret	Somerset	B. & O.	Boynton, Pa.
Hart-Markl Coal Mining Co.	Connellsville, Pa.	Markl	Westmoreland	P. & L. E.	West Newton, Pa.
Hoosier Keystone Coal Co.	Fort Wayne, Ind.	Hoosier Keystone	Westmoreland	P. & L. E.	West Newton, Pa.
Jeanette Coal Co.	Jeanette, Pa.	Bertha	Westmoreland	Penna.	Wyano, Pa.
Mt. Pleasant Fuel Co.	Mt. Pleasant, Pa.	Mt. Pleasant	Westmoreland	B. & O.	Mt. Pleasant, Pa.
Rowe, C. J., & Brothers	Meyersdale, Pa.	Mystic	Somerset	B. & O.	Meyersdale, Pa.
Scott Haven Coal Co.	Wickburg, Pa.	Syring Run	Allegheny	P. & L. E.	Scott Haven, Pa.
Tub Mill Coal Co.	West Salisbury, Pa.	Tub Mill	Fayette	B. & O.	West Salisbury, Pa.
Wick Haven Fuel Co.	Wick Haven, Pa.	Wick Haven	Fayette	B. & O.	Benning, Pa.

SEWICKLEY SEAM (Known also as the MAPLETOWN SEAM)

Mined in Allegheny, Somerset, Fayette and Greene counties. Bituminous rank. Suitable for Steam, Railway, Domestic and Producer Gas purposes.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Amend Coal Co.	Greensburg, Pa.	Amend No. 1	Fayette	Penna.	Newcomer, Pa.
Amend Coal Co.	Greensburg, Pa.	Amend No. 2	Fayette	Penna.	Newcomer, Pa.
Amend Coal Co.	Greensburg, Pa.	Playford No. 1	Fayette	Penna.	Udell, Pa.
Amend Coal Co.	Greensburg, Pa.	Playford No. 2	Fayette	Penna.	Udell, Pa.
Bertz, C. E.	Uniontown, Pa.	Ross No. 1	Fayette	Monongahela	Masonstown, Pa.
Bertz, C. E.	Uniontown, Pa.	Ross No. 2	Fayette	Monongahela	Masonstown, Pa.
Brownfield Coal & Coke Co.	Uniontown, Pa.	Marie	Fayette	B. & O.	Uniontown, Pa.
Brownfield Coal & Coke Co.	Uniontown, Pa.	Martha	Fayette	P. R. R.	Uniontown, Pa.
Buttermore Coal Co.	Box 64, Uniontown, Pa.	Brinker	Fayette	B. & O.	Evans, Pa.
Campbell & Sons Coal Co.	Connellsville, Pa.	Ida	Fayette	Penna.	Edenborn, Pa.
Chester Hill Coal Co.	Binghamton, N. Y.	Alice No. 1	Fayette	B. & O.	Shoaf, Pa.
Columbia Coal & Coke Co.	Pittsburgh, Pa.	Percy	Fayette	B. & O.	Mount Braddock, Pa.
Consolidated Coke Company	2126 Oliver Bldg., Pittsburgh, Pa.	Donald No. 5	Fayette	Penna.	Grays Landing, Pa.
Cumberland Fuel Co.	Uniontown, Pa.	Cumberland	Greene	Penna.	Adah, Pa.
Devarman Coal Co.	626 Fayette Title & Trust Bldg., Uniontown, Pa.	Devarman	Fayette	Penna.	Uniontown, Pa.
Eureka Coal & Coke Co.	Uniontown, Pa.	Adams	Fayette	Penna., Monon.	Uniontown, Pa.
Evans Coal & Coke Co.	Uniontown, Pa.	Evans No. 3	Fayette	B. & O.	Uniontown, Pa.
Faith Coal Company	Uniontown, Pa.	Faith	Fayette	Penna.	Darwin, Pa.
Fredericktown Coal & Coke Co.	Fredericktown, Pa.	Shady Run	Fayette	Monon.	Martin, Pa.
Gaddis Coal Co.	Uniontown, Pa.	Gaddis	Fayette	Penna.	Uniontown, Pa.
George's Coal Co.	Connellsville, Pa.	Love and Nora	Fayette	B. & O.	High House-Fairchance, Pa.

SEWICKLEY SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Hays, R. S., Coal Co.	Masontown, Pa.	Hays	Fayette	Penna.	Newcomer, Pa.
Hope Coal Co.	Uniontown, Pa.	Hope	Fayette	B. & O., Penna.	Smith's 3d, Pa.
Howe Coal Company	Jackson Bldg., Pittsburgh, Pa.	Howe	Allegheny	P. & L. E.	Look No. 3, Pa.
Liberty Coal & Coke Co.	Uniontown, Pa.	Liberty	Fayette	P. & R. E.	Newcomer, Pa.
McIntyre Coal Co.	Uniontown, Pa.	McIntyre	Fayette	Penna.	Uniontown, Pa.
Maple-Stirling Coal Works	Dunkard, Pa.	Dunkard No. 1	Greene	Monon.	W. T. Point Marion, Pa.
Martin, J. S.	Morgantown, W. Va.	Martin	Fayette	Penna.	Fairbank, Pa.
Meadow Brook Fuel Co.	R. D. No. 5, Uniontown, Pa.	Meadow Brook	Fayette	Penna.	R. D. No. 5, Uniontown, Pa.
Mill-Conn Coal Co.	Connellsville, Pa.	Mill-Conn	Westmoreland	Penna.	Scottsdale, Pa.
Mutual Coal & Coke Co.	Uniontown, Pa.	Shaw	Fayette	B. & O.	Collier, Pa.
Oliphant Coal & Coke Company	Uniontown, Pa.	J. Frey	Fayette	Penna.	Uniontown, Pa.
Proxins Coal Co.	Uniontown, Pa.	Proxins	Fayette	Monongahela	Gray's Landing, Pa.
Rilly, W. J., Coal & Coke Co.	41 N. Main St., Washington, Pa.	Billie	Fayette	Penna.	Newcomer, Pa.
Rilly Callaghan Coal & Coke Co., Inc.	Uniontown, Pa.	Callaghan	Fayette	B. & O.	Newcomer, Pa.
Rilly Callaghan Coal & Coke Co., Inc.	Uniontown, Pa.	S. Hill	Fayette	B. & O.	Newcomer, Pa.
Rosevale Coal Co.	Morgantown, W. Va.	Sapp	Greene	Monongahela	Poland, Pa.
Shadyside Coal & Coke Co.	Masontown, Pa.	Posedale No. 2	Fayette	B. & O.	Collier, Pa.
Smiley Coal Co.	Uniontown, Pa.	Shady Side	Fayette	P. & R. E.	Fairbank, Pa.
Sterling & Graham Coal Co.	Masontown, Pa.	Smiley	Fayette	Mon., Penna., N. Y. C.	Maestown, Pa.
Stevenson Coal Co.	Uniontown, Pa.	Stella	Fayette	Monongahela	New Geneva, Pa.
United States Fuel Co.	Pittsburgh, Pa.	Stevenson	Fayette	Monongahela	Gray's Landing, Pa.
Winona Coal Co.	Masontown, Pa.	Donald No. 6	Fayette	Monon, Penna., N. Y. C.	Maestown, Pa.
Zebby Coal Co.	Alverton, Pa.	Winona	Fayette	B. & O.	Fairbank, Pa.
		Zebby	Fayette		

WAYNESBURG SEAM

Mined in Fayette, Greene, Washington and Westmoreland counties. Bituminous rank. Suitable for Steam, Railway, Domestic and Producer Gas purposes.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Andrews Run Coal Co.	New Kensington, Pa.	Rainbow	Westmoreland	Penna.	Herrin, Pa.
Arnish rg Coal Co.	Brownsville, Pa.	Arnish rg	Fayette	Monon.	East Millboro, Pa.
Boyd Coal Co.	McClintown, Pa.	Boyd	Fayette	Adah, Pa.	Adah, Pa.
Brown Ferry Coal Co.	Adah, Pa.	Brown	Fayette	Monon.	Adah, Pa.
Cokebury Coal Co.	41 N. Main St., Washington, Pa.	Mitchell	Washington	P. C. C. & St. L.	Ellsworth, Pa.
East Riverside Coal Co.	Brownsville, Pa.	Jacobs	Fayette	Monon.	East Millboro, Pa.
Edwards Coal Co.	Greensburg, Pa.	Edwards No. 4	Westmoreland	Penna.	Herrin, Pa.
Fair Haven Coal Co.	Pittsburgh, Pa.	Herrin	Westmoreland	Penna.	Herrin, Pa.
Fiat Coal Co.	McClintown, Pa.	Fiat	Fayette	Monon.	Adah, Pa.
Fredericktown Cross Creek Coal Co.	Fredericktown, Pa.	Fredericktown Cross Creek	Washington	P. C. C. & St. L.	Birgettstown, Pa.
Hartly Coal Co.	Smock, Pa.	Hartly No. 1	Fayette	Monongahela	Gat's, Pa.
Matyas-Kraus Coal Co.	McClintown, Pa.	Crescent	Fayette	Monon.	Leckrone, Pa.
P & Y Coal Co.	Masontown, Pa.	Christopher	Fayette	Monon.	Antrim, Pa.
Sixth Pool Coal Co.	Brownsville, Pa.	Sixth Pool	Fayette	Monon.	Adah, Pa.

MISCELLANEOUS SEAMS

Bituminous and Semibituminous. Suitable for Smithing, Locomotive Fuel, Export, Producer Gas, Domestic and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Beaver Clay Mfg. Co.	New Galilee, Pa.	Beaver Clay	Beaver	P. F. W. & C.	New Galilee, Pa.
Boron-Wesoky Coal Co.	Winburne, Pa.	Boron-Wesoky	Clarion	B. & O.	St. Petersburg, Pa.
Boston Coal Co.	Connellsville, Pa.	Docker	Allegheny	P. & L. E.	Greene, Pa.
Bowers, Chas., Coal Co.	Curwensville, Pa.	Bowers No. 1	Clearfield	N. Y. C.	Lumbert, Pa.
Broughton Coal Co.	Broughton, Pa.	Glenn	Allegheny	B. & O., P. & W. Va.	Broughton, Pa.
Brown Coal Co.	Blairsville, Pa.	Brown	Indiana	B. & R. & P.	Chickburg, Pa.
Carbon Center Coal Co.	North Bessemer, Pa.	Carbon	Allegheny	B. & L. E.	North Bessemer, Pa.
Carothers, C. E., Coal Co.	Elizabeth, Pa.	B. H. Bridge	Allegheny	P. & L. E.	Full Bridge, Pa.
Catherine Coal Co.	Scottsdale, Pa.	Gail	Westmoreland	Penna.	New Stanton, Pa.
Coal Hill Mining Co.	OnBois, Pa.	Coal Hill	Clearfield	B. R. & P.	Luthersburg, Pa.
County Coal Co.	Carnegie, Pa.	Lo	Allegheny	P. C. & Y.	Louise, Pa.
Cribbs, Hyatt M.	Verona, Pa.	Delmas	Allegheny	Penna.	Verona, Pa.
Cribbs, Hyatt M.	Verona, Pa.	Roadside	Allegheny	Penna.	Verona, Pa.
Curry Coal Co.	Elizabeth, Pa.	Curry	Allegheny	P. & L. E.	Emola, Pa.
Dora Coal Co.	OnBois, Pa.	Dora	Jefferson	P. & N.	Dora, Pa.
Eureka Coal Co.	OnBois, Pa.	Caledonia	Elk	B. & S.	Caledonia, Pa.
Eyre Collieries Co.	Philadelphia, Pa.	Engle No. 1	Clearfield	Penna.	Clearfield, Pa.
Fairview Coal Co.	Greensburg, Pa.	Fairview	Westmoreland	Penna.	Madison Sta., Pa.
Farmington Coal & Mining Co.	Kane, Pa.	Farmington	Clarion	B. & O.	Tylerburg, Pa.
Four States Coal & Coke Co.	Greensburg, Pa.	Eloise	Westmoreland	Penna.	Bradford Jet, Pa.
Fulton Coal & Coke Co.	Youngwood, Pa.	Fulton	Westmoreland	Penna.	Waltz, Pa.
Hartley-Spackman Coal Co.	Phillipsburg, Pa.	Jones No. 1	Centre	Penna.	Phillipsburg, Pa.
Haberberger Mine	St. Mary's, Pa.	Haberberger	Elk	Penna.	St. Marys, Pa.
Hess Coal Co.	Punxsutawney, Pa.	Hess No. 1	Indiana	B. R. & P.	Savan, Pa.
Hilda Coal Co.	Pittsburgh, Pa.	Hilda	Westmoreland	Penna.	Blackburn, Pa.
Home Co., The	Altoona, Pa.	Shay No. 1	Cambria	Penna.	Ashville, Pa.
Jo Ann Coal Co.	Pittsburgh, Pa.	Pine Goose	Allegheny	Penna.	Upper Hillville, Pa.
Ligeitt Spring & Axle Co.	Monongahela, Pa.	Ligeitt	Allegheny	B. & O., B. R. & P., Penna.	Allegheny, Pa.
Lily Kutz Barrow Co.	Scullton, Pa.	Alma	Somerset	C. & N. P.	Lumbert, Pa.
Mable Coal Works	Dunkard, Pa.	Mable	Greene	Monongahela	Forand, Pa.
Nicholson Coal Co.	Uniontown, Pa.	Patrick No. 1	Fayette	Monongahela	Masontown, Pa.
Pine Hill Coal Co.	Punxsutawney, Pa.	Pine Hill No. 1	Indiana	Penna.	Hilma, Pa.
S. B. & B. Coal Co.	Uniontown, Pa.	McManus	Monon	Penna.	Maestown, Pa.
Salem Gas Coal Co.	Greensburg, Pa.	Leuffer	Westmoreland	Penna.	Delmon, Pa.
Stoner Coal Co.	Berlin, Pa.	Stoner No. 2	Somerset	B. & O.	Berlin, Pa.
Swanks, H. & Son	Johnstown, Pa.	Woodvale	Cambria	B. & O., Penna.	Johnstown, Pa.
Thorne Coal Mining Co.	N. W. York, N. Y.	Clear Creek No. 1	Cambria	Penna.	Thorne, Pa.
Venus Coal Co., The	Stoneboro, Pa.	Venus	Merer	N. Y. C.	Stoneboro, Pa.
Walters, Alva M.	Upper Middletown, Pa.	Walters	Fayette	Penna.	Waltersburg, Pa.
Wilson Coal & Coke Co.	Brookville, Pa.	Eliss	Clarion	P. & L. E.	Eliss, Pa.
Wright, C. D., Coal Co.	West Newton, Pa.	Duncan	Allegheny	P. & L. E.	Duncan, Pa.

PENNSYLVANIA BITUMINOUS

Alphabetical Directory of Coal Mines, Giving Complete Detailed
Information Covering Each Mine

For List of Abbreviations See Page 13.

A. G. & S. MINING CO.

General Office, Kittanning, Pa.
PR—J. L. Apple, Kittanning, Pa.
TR—A. S. Gruskin, Kittanning, Pa.
GM—J. L. Apple, Kittanning, Pa.
GS—W. J. Stewart, Kittanning, Pa.
PA—A. S. Gruskin, Kittanning, Pa.
EM—F. C. Stewart, Kittanning, Pa.
SA—J. L. Apple, Kittanning, Pa.

Brilliant Mine; Drift; Lower Kittanning
Seam, 38-48 in. thick.
PO—Kittanning, Pa.; SP—Same; CTY—
Armstrong; RR—Allegheny Valley, P.
R. R.
S of H—1 storage battery loco. Track gage
36 in. shortwall machs.
PP—Power purchased, 550 volts D. C.,
1 pump.
EMP—52. Last years tonnage 49,824.
SIZES SHIPT—Run of Mine.

ABEL COAL COMPANY

General Office, DuBois, Pa.
PR—J. H. Pentz, DuBois, Pa.
TR—C. C. Hoover, " "
PA—C. C. Hoover, " "
Wild Cat Mine; Drift; "B" or Lower
Kittanning Seam, 36 in. thick.
PO—DuBois, Pa.; SP—Same; CTY—
Clearfield; RR—P. R. R., B. & S.
Branch.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine.

ACME COAL & COKE COMPANY

General Office, Park Bldg., Pittsburgh, Pa.
PR—H. A. Kuhse, Ellsworth, Pa.
TR—S. A. Davis, " "
GM—H. K. Knopf, " "
GS—H. K. Knopf, " "
EM—H. K. Knopf, " "
PA—G. L. Hutchinson, " "
Wilson Mine; Shaft and Slope; Pitts-
burgh Seam, 76 in. thick.
PO—Ellsworth, Pa.; SP—Same; CTY—
Washington; RR—P. R. R., Monon-
gahela Div.
MS—Silas Hall, Ellsworth, Pa.
S of H—Mules.
S of M—3 elec. and 2 comp. air machs.
PP—2 return tubular boilers, total 350
H. P., 2 gen. units, 220 volts D. C.
Purchase power.
Daily output, to be 1,800 tons.
SIZES SHIPT—Run of Mine, Slack, Nut.

ACME GAS COAL COMPANY

General Office, Greensburg, Pa.
PR—Julian R. Huff, Greensburg, Pa.
TR—A. N. Pershing, " "
Sec.—Geo. H. Francis, " "
PA—R. P. Kilgore, " "
GS—L. B. Lewis, Rimersburg, Pa.
Additional Information on Page 736

Acme Mine; Drift; Lower Kittanning
Seam, 38 to 62 in. thick.
PO—Rimersburg, Pa.; SP—Same; CTY—
Clarion; RR—Penna., Silgo R.
SM—W. F. Beckner, Rimersburg, Pa.
S of H—Mules and 3 elec. locos. Track
gage 36 in.
S of M—17 shortwall machs.
PP—4 return tubular boilers, total 600
H. P., 2 gen. units, 250 volts D.
C., 2400 volts A. C., 3 phase, 60
cycles, 3 pumps.
EMP—247. Last years tonnage 265,100.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Gravity Screens.

Penn Mine; Drift; Lower Kittanning
Seam, 36 to 54 in. thick.
PO—Rimersburg, Pa.; SP—Same; CTY—
Clarion; RR—Penna., Silgo R.
S of H—Mules and 1 elec. loco. Track
gage 36 in.
S of M—1 elec. mach.
PP—1 return tubular boiler, total 150
H. P., 1 gen. unit, 250 volts D. C.,
1 pump.
SIZES SHIPT—Run of Mine.
Note—This mine not operating.
Shannon Mine; Drift; Lower Kittanning
Seam, 38 to 58 in. thick.
PO—Rimersburg, Pa. SP—Shannon Sta.,
Pa.
Note—This mine not operating

AERIAL COAL COMPANY

General Office, Hays, Pa.
PR—Hugh Fishwick, Hays, Pa.
VP—Robert Deane, Pittsburgh, Pa.
TR—F. R. Lowes, Pittsburgh, Pa.

Fishwick Mine; Slope; Pittsburgh Seam,
60 inches thick.
PO—Hays, Pa.; SP—Same; CTY—Alle-
gheny; RR—Penna., P. & L. E.
S of H—Mules. Track gage 41 inches.
S of M—Hand.
EMP—19.
PREP. EQUIPT—Bar Screens.

AKE, EVERETT C.

General Office, Glen Campbell, Pa.
OWNER—E. C. Ake, Glen Campbell, Pa.
EM—Arthur Wilson, Johnstown, Pa.
SCD—Judge & Co. Buyer, Chas. Judge,
Glen Campbell, Pa.

Melena No. 4 Mine; Drift; E Seam;
42 inches thick.
PO—Glen Campbell, Pa.; SP—Same;
CTY—Indiana; RR—Penna.
MS—Robt. D. Vins, Glen Campbell, Pa.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—Power purchased, 220 volts.
EMP—25. Daily tonnage 200.
SIZES SHIPT—Run of Mine.

ALADDIN COAL & COKE CO.

General Office, Leechburg, Pa.
PR—P. C. Madefra, Philadelphia, Pa.
TR—L. C. Madefra, " "
VP—L. W. Hicks, Leechburg, Pa.
GM—L. W. Hicks, Leechburg, Pa.
GS—E. A. Watters, Leechburg, Pa.
PA—D. L. Maher, Leechburg, Pa.
EM—S. E. Moguet, Leechburg, Pa.
EE—G. H. Ritchie, Leechburg, Pa.

Aladdin Mine, Drift, Upper Freeport
Seam, 40 to 48 in. thick.
PO—Schenley, Pa. SP—Aladdin. CTY—
Armstrong; RR—Penna.
MS—Frank Bryant, Leechburg, Pa.
S of H—Electric trolley locos. Track
gage 39 inches.
S of M—Electric chainbreast machs.
PP—Power purchased, M. G. sets, 250
volts D. C., 2 pumps.
EMP—60. Last fiscal year output,
23,784 tons.
SIZES SHIPT—Run of Mine.

ALBERTA COAL COMPANY

General Office, Smithton, Pa.
PR—J. H. Sager, Smithton, Pa.
TR—Nicholas Snyder, Smithton, Pa.
GS—J. L. Sager, Smithton, Pa.
CE—D. R. Walkinshaw, Greensburg, Pa.
Alberta Mine; Drift and Stripping; Pitts-
burgh Seam; 84 in. thick.
PO—Smithton, Pa.; SP—Same; CTY—
Westmoreland; RR—B. & O., P. &
L. E.
MS—J. L. Sager, Smithton, Pa.
S of H—3 horse. Track gage 42 in.
S of M—Pick mining.
PP—2 water tube boilers, total 90 H. P.,
and 1 engine.
EMP—31. Daily tonnage 250.
SIZES SHIPT—Run of Mine.

ALBERTS COAL CO.

PR—Albert Brown, Houtzdale, Pa.
VP—Gay Sankay, Houtzdale, Pa.
GS—Albert Pearson, Houtzdale, Pa.
PA—A. Brown, Houtzdale, Pa.
No. 1 Mine; Drift; D. Seam, 66 in.
thick.
PO—Houtzdale, Pa.; SP—Same; CTY—
Clearfield; RR—P. R. R.
S of H—Mules. Track gage 36 in.
S of M—Hand.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by the Pear-
son Coal Mining Co.

ALEXANDER COAL COMPANY

General Office, Listonburg, Pa.
PR—John A. Sandor, Listonburg, Pa.
TR—R. E. Sandor, Listonburg, Pa.
GS—John A. Sandor, Listonburg, Pa.
PA—John A. Sandor, Listonburg, Pa.

Nemacolin Mine; Drift; Prime C Seam,
46 in. thick.
PO—Listonburg, Pa.; Frit. Same; Exp.
Confuence, Pa.; CTY—Somerset;
RR—B. & O.
S of H—Mules, rope and steam locos.
S of M—Hand.
PP—1 fire tube boiler.
EMP—35.
SIZES SHIPT—Run of Mine.
Old information.

ALEXANDER COAL COMPANY

General Office, Madera, Pa.
PR—C. R. Alexander, Washington, D. C.

TR—H. R. Swoope, Madera, Pa.
GM—H. R. Swoope, Madera, Pa.
GS—John Steenson, Madera, Pa.
PA—A. W. Stoker, Madera, Pa.
EM—Donald Waidlick, Madera, Pa.
EE—P. J. Stevenson, Madera, Pa.
SCD—Liberty Trading Co., Buyer, G. B.
Curry, Madera, Pa.
SA—Shoemaker Coal Mining Co., Madera,
Pa.

Alexander Mine; Drift; D or Moshannon
Seam, 72 in. thick.
PO—Madera, Pa.; SP—Same; CTY—
Clearfield; RR—P. R. R.
S of H—Mules and rope.
S of M—Hand.
SIZES SHIPT—Run of Mine.

ALLEGHENY COAL & COKE CO.

General Office, Brackenridge, Pa.
PR—L. W. Hicks, Leechburg, Pa.
GM—E. R. Perkins, Brackenridge, Pa.
GS—Norman Adams, Natrona, Pa.
PA—Norman Adams, " "
EM—S. E. Moguet, Leechburg, Pa.

Avenue Mine Drift; Upper Freeport Seam,
40 in. thick.
PO—Brackenridge, Pa.; SP—Same; CTY—
Allegheny; RR—West Penn.
S of H—6 elec. locos. Track gage 39 in.
S of M—Mining machines, room and
pillar.
PP—500 volts D. C., 5 pumps. Purchase
power.
EMP—60. Last years tonnage 153,780.
SIZES SHIPT—Run of Mine.

ALLEGHENY-PITTSBURGH COAL CO.

General Office, West Penn Bldg., Pittsburgh,
Pa.
PR—A. M. Lynn, Pittsburgh, Pa.
VP—J. S. Jenks, Pittsburgh, Pa.
TR—C. C. McBride, Pittsburgh, Pa.
GM—J. S. Jenks, Pittsburgh, Pa.
GS—R. C. Berrower, Pittsburgh, Pa.
PA—W. E. Higgins, Pittsburgh, Pa.
CE—John Rayburn, House Bldg., Pitts-
burgh, Pa.
EM—G. G. Bell, Pittsburgh, Pa.

No. 1 Mine; Shaft; Twin Freeport Seam.
PO—Not established; SP—Logans Ferry,
Pa.; CTY—Allegheny; RR—P. R. R.
S of H—Electric locos.
S of M—Electric machs.
PP—Purchase power.

ALLEGHENY RIVER MINING CO.

General Office, Kittanning, Pa.
PR—Dwight C. Morgan, Kittanning, Pa.
TR—L. G. Bonstein, Kittanning, Pa.
GS—Arnold Hurst, Kittanning, Pa.
PA—D. C. Morgan, Jr., Kittanning, Pa.
EM—Fred Norman, Kittanning, Pa.
SCD—Allegheny River Supply Co.,
Cadogan, Pa., and Shawmut Com-
mercial Co., St. Marys, Pa. Buyer,
L. H. Garbarino, Cadogan, Pa.
SA—Kittanning & Shawmut Coal Co.,
Kittanning, Pa.

Hunts Run Mine Abandoned.

Confier Mine; Drift; A-Brookville Seam,
48 in. thick.
PO—Confier, Pa.; SP—Same; CTY—
Jefferson; RR—Pittsburgh & Shaw-
mut.
MS—John Woodall, Confier, Pa.
SM—John Keetley, Confier, Pa.
S of H—9 trolley pole type locos. Track
gage 36 in.
S of M—20 comp. air punchers and 8
shortwall machs.
PP—10 fire tube boilers, 1500 H.
P., 1 500 Kva, 2300 volts A. C.,
1 200 K. W., 250 volts D. C.,
gen. units, 26 pumps.
EMP—260. Daily tonnage 1,000.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
PREP. EQUIPT—Gravity Screens.

Seminole Mine; Drift; E-Upper Freeport
Seam, 48 in. thick.
PO—Seminole, Pa.; SP—Same; CTY—
Armstrong; RR—Pittsburgh & Shaw-
mut.
MS—Arthur White, Seminole, Pa.
SM—Frank Robinson, St. Marys, Pa.
S of H—7 trolley pole type locos. Track
gage 42 in.
S of M—7 chain breast type and 19
shortwall machs.
PP—6 fire tube boilers, 900 H. P., 1
250 Kva., 2300 volts A. C., 2
200 K. W., 250 volts D. C., gen
units, 12 pumps.

Daily tonnage 1,300.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
PREP. EQUIPT—Gravity and Shaker
Screens.

Chickasaw Mine; Drift; B-Lower Kittan-
ning Seam, 48 in. thick.
PO—Chickasaw, Pa.; SP—Same; CTY—
Armstrong; RR—Pittsburgh & Shaw-
mut.

MS—Wm. P. Jones, Chickasaw, Pa.
SM—Samuel Pryor, Chickasaw, Pa.
S of H—14 trolley pole type locos. Track
gage 44 in.
S of M—11 chain breast type and 18
shortwall machs.
PP—6 fire tube boilers, 900 H. P., 1
460 Kva., 2400 volt A. C., 1 200
K. W., 250 volts D. C., gen. units,
19 pumps.
EMP—250. Daily tonnage 1,000.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
PREP. EQUIPT—Gravity and Shaker
Screens.

Furnace Run Mine; Drift; B-Lower Kit-
tanning Seam, 42 in. thick.
PO—Furnace Run, Pa.; SP—Same; CTY—
Armstrong; RR—Pittsburgh &
Shawmut.
MS—John W. Crooks, Furnace Run, Pa.
S of H—10 trolley pole type locos. Track
gage 42 in.
S of M—4 chain breast type and 10
shortwall machs.
PP—6 fire tube boilers, 900 H. P., 2
625 Kva., 2400 volts A. C., gen.
units, 250 volts D. C., 27 pumps.
EMP—250. Daily tonnage 1,000.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
PREP. EQUIPT—Gravity and Shaker
Screens.

Cadogan Mine; Drift; B, D and E Seam,
36-72 in. thick.
PO—Cadogan, Pa.; SP—Same, CTY—
Armstrong; RR—Pittsburgh & Shaw-
mut.
MS—Samuel Woodall, Cadogan, Pa.
S of H—12 trolley pole type locos. Track
gage 42 in.
S of M—9 chain breast type and 26
shortwall machs.
PP—3 water tube boilers, total 1,410
H. P., 2—375 K. V. A., 1—700
K. V. A. and 1—200 K. W.,
250 volts D. C., 23 pumps.
EMP—500. Daily tonnage 2,000.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
PREP. EQUIPT—Shaker Screens, Pickling
Tables, Loading Booms.

ALLEN COAL CO.

General Office, Nanty-Glo, Pa.
PR—John Carlson, Nanty Glo, Pa.
VP—John Carlson, Nanty Glo, Pa.
TR—John Carlson, Nanty Glo, Pa.
GM—John Carlson, Nanty Glo, Pa.
GS—John Carlson, Nanty Glo, Pa.
PA—John Carlson, Nanty Glo, Pa.
EM—E. D. Bradley, Nanty Glo, Pa.

Allen No. 1 Mine; Drift; C. Seam, 36
in. thick.
PO—Nanty Glo, Pa.; SP—Same; CTY—
Cambria; RR—Cambria & Ind.
MS—Chas. Enquist, Nanty Glo, Pa.
S of H—Mules Track gage 36 in.
S of M—Hand.
EMP—20. Last years tonnage 6,000.
SIZES SHIPT—Run of Mine.

ALLEN COAL MINING COMPANY

General Office, Boswell, Pa.
PR—F. D. Allen, Boswell, Pa.
TR—F. L. Ferrell, " "
GM—F. D. Allen, " "
GS—F. D. Allen, Boswell, Pa.
PA—F. D. Allen, Boswell, Pa.
CE—G. C. Winslow, Somerset, Pa.
SCD—Ferrell & Co. Buyer, F. D. Allen,
Boswell, Pa.
Sales Agent, F. D. Allen, Boswell, Pa.

Allen No. 3 Mine; Drift; E Seam, 48
in. thick.
PO—Boswell, Pa. SP—Same. CTY—
Somerset. PA. RR—B. & O., Quemo-
honing R.
SM—F. L. Ferrell, Boswell, Pa.
S of H—Rope and Mules. Track gauge,
42 in.
S of M—Hand.
EMP—20.
SIZES SHIPT—Run of Mine.

ALLISON VALLEY COAL COMPANY

General Office, Washington, Pa.
PR—Geo. C. Patch, Washington, Pa.
VP—R. G. Lutton, Washington, Pa.
TR—Geo. S. Chaney, Washington, Pa.
GM—R. G. Lutton, Washington, Pa.
GS—Geo. C. Patch, Washington, Pa.

Rose Mine; Drift; Pittsburgh Vein Seam, 60 in. thick.
PO—Washington, Pa.; SP—Meadow Lands, Pa.; CTY—Washington; RR—Penna.
MS—Robert Davidson, Washington, Pa.
S of H—Mules. Track gage 36 in.
S of M—Hand.
Daily tonnage 100.
SIZES SHIPT—Run of Mine.

ALTON COAL CO.

General Office, McGees Mills, Pa.
Alton No. 3 Mine.
PO—Sidney, Pa.; CTY—Indiana; RR—Penna.
No report.

ALTOONA COAL & COKE COMPANY

General Office, First National Bank Bldg., Altoona, Pa.
PR—Thos. K. Maher, Altoona, Pa.
TR—John Lloyd, Jr., Altoona, Pa.
GS—Thos. L. Jones, Altoona, Pa.
PA—Thos. L. Jones, Altoona, Pa.
CE—Jos. S. Silyman & Co., Altoona, Pa.
EE—Jas. Holmberg, Coupon, Pa.
SCO—Horseshoe Supply Co., Buyer, W. D. Canan, Coupon, Pa.

Delany No. 7 Mine; Slope; E or Lemon Seam; 48 inches thick.
PO—Coupon, Pa.; SP—Gallitzin, Pa.; CTY—Cambria; RR—Penna.
S of H—Mules, rope, 3 trolley pole type and 1 gasoline locos. Track gage 36 inches.
S of M—6 shortwall machs.
PP—Power purchased. Transformer 6,600 to 220 volts A. C. M. G. sets, 250 volts D. C.
EMP—175. Daily tonnage 550.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.

ALVERTON COAL & COKE CO.

General Office, Alverton, Pa.
No report.

AMALGAMATED COAL CO. THE

General Office, 101 Bowman Bldg., Pittsburgh, Pa.
PR—F. N. Boyle, 401 Bowman Bldg., Pittsburgh, Pa.
VP—Alfred W. Heeren, c/o Heeren Bros. Co., Pittsburgh, Pa.
TR—J. T. Finnin, 356 Union Arcade, Pittsburgh, Pa.
Note—Property under development.

AMBROSE-SHAFFER COLLIERIES CORP.

General Office, Cumberland, Md.
PR—N. C. Shaffer, Cumberland, Md.
VP—W. E. Ambrose, Cumberland, Md.
TR—E. Ambrose, Poughkeepsie, N. Y.
GM—W. E. Ambrose, Cumberland, Md.
GS—H. E. Smith, Listonburg, Pa.
PA—W. E. Ambrose, Cumberland, Md.
CE—Fluck & Moore, Somerset, Pa.
EM—Fluck & Moore, Somerset, Pa.
SA—Jno. Wills, Jr., Pennsy Bldg., Philadelphia, Pa.

Ambrose No. 1 Mine; Drift; C Prime Seam, 59 inches thick.
PO—Listonburg, Pa.; SP—Same; CTY—Somerset; RR—B. & O.
S of H—Mules. Track gage 40 inches.
S of M—Hand.
EMP—65. Last years tonnage 14,960.
SIZES SHIPT—Run of Mine.
Note—Formerly operated by the Ambrose-Somerset Collieries Corp.

AMBROSE-SOMERSET COLLIERIES CORP.

General Office, Law Bldg., Cumberland, Md.
PR—H. C. Shaffer, Cumberland, Md.
VP—W. E. Ambrose, Cumberland, Md.
TR—E. Ambrose, Atlantic City, N. J.
GM—W. E. Ambrose, Cumberland, Md.
GS—A. Lenhart, Listonburg, Pa.
PA—W. E. Ambrose, Cumberland, Md.
EM—J. W. Hyde, Confluence, Pa.
SA—John Wills, Inc., Philadelphia, Pa.

Ambrose-Somerset No. 1 Mine; Drift; "C" Prime Seam; 49 inches thick.
PO—Listonburg, Pa.; SP—Same; CTY—Somerset; RR—B. & O.
S of H—Mules. Track gage 40 in.
S of M—Hand.
EMP—48. Last years tonnage 10,700.
SIZES SHIPT—Run of Mine.
Note—Formerly operated by McMillan Coal Co.

AMEND COAL COMPANY

General Office, Irwin Gas Coal Co. Bldg., Greensburg, Pa.
PR—R. H. Jamison, Greensburg, Pa.
TR—A. Turney McConnell, Greensburg, Pa.
GM—T. P. Latta, Greensburg, Pa.
GS—C. L. Clark, Greensburg, Pa.
PA—A. Turney McConnell, Greensburg, Pa.

CE—C. E. Cowan, Greensburg, Pa.
EM—R. A. Ramsey, Greensburg, Pa.
EE—Jus. P. Barry, Greensburg, Pa.

Amend No. 1 Mine; Slope; Sewickley Seam; 66 inches thick.
PO—R. F. D. No. 3, Uniontown, Pa.; SP—Newcomer, Pa.; CTY—Fayette; RR—P. R. R.
MS—W. I. Klingensmith, Newcomer, Pa.
S of H—Rope. Track gage 42 inches.
S of M—Hand.
PP—Power purchased, 230 volts A. C., 1 return tubular boiler; 2 pumps.
EMP—17. Last years tonnage 28,691.
SIZES SHIPT—Run of Mine. Slack.

Amend Nos. 2 and 3 Mines; Drifts; Sewickley Seam; 66 inches thick.
PO—R. F. D. No. 3, Uniontown, Pa.; SP—Newcomer, Pa.; CTY—Fayette; RR—P. R. R.
MS—W. I. Klingensmith, Newcomer, Pa.
S of H—Mules and trolley pole type loco.
S of H—3 shortwall, 1 chainbreast machines.
PP—Power purchased, 250 volts D. C.
EMP—91. Last years tonnage 93,275.
SIZES SHIPT—Run of Mine. Slack.
PREP. EQUIPT—Picking Tables.

Playford Nos. 1 and 2 Mines; Drift and Slope; Sewickley Seam; 66 inches thick.
PO—Holl, Pa.; CTY—Fayette; RR—P. R. R. Raily Branch.
MS—W. I. Klingensmith, Newcomer, Pa.
S of H—Mules and rope.
S of M—Hand.
PP—Power purchased, 250 volts D. C., 3 pumps.
EMP—80. Last years tonnage 10,361.
SIZES SHIPT—Run of Mine.

AMERICAN COAL OIL & GAS CO.

General Office, Uniontown, Pa.
Flint Rock Mine.
PO—Uniontown, Pa.; CTY—Fayette; RR—B. & O. and Penna.
No report.

AMERICAN COKE CORPORATION

General Office, Oliver Bldg., Pittsburgh, Pa.
PR—F. E. Peabody, Pittsburgh, Pa.
VP—R. E. Peabody, Pittsburgh, Pa.
VP—W. Russell Carr, Pittsburgh, Pa.
SEY—C. M. Rhoads, Pittsburgh, Pa.
GENERAL SALES MGR—T. J. Atkinson, Pittsburgh, Pa.
GS—G. R. Hardy, Brazzell, Pa.
PA—C. M. Rhoads, Pittsburgh, Pa.
CE—H. L. Burchinal, Uniontown, Pa.
EM—H. L. Burchinal, Uniontown, Pa.
SCO—Columbia Supply Co., Orient, Pa. and Standard Supply Co., Martia and Linn, Pa.
SA—Reilly-Peabody Fuel Company, Oliver Bldg., Pittsburgh, Pa.

American No. 1 Mine; Slope; Pittsburgh Seam, 96 in. thick.
PO—Brazzell, Pa.; SP—Same; CTY—Fayette; RR—Penna.
MS—Ed. Boyle, Brazzell, Pa.
S of H—Mules and 2 trolley pole type locos. Track gage 44 in.
S of M—3 shortwall machs.
PP—Power purchased. Transformer 2,200 to 250-275 volts A. C. M. G. sets, 250 volts D. C., 7 pumps.
EMP—140. Coke Ovens, 142 Bee Hive.
SIZES SHIPT—Run of Mine. Lump.
PREP. EQUIPT—Gravity Screens.

American No. 2 Mine; Drift; Pittsburgh and Sewickley Seams, 96-60 in. thick.
PO—Martin, Pa.; SP—Masontown, Pa.; CTY—Fayette; RR—M. R. R.
MS—R. F. Hensel, Martin, Pa.
S of H—Mules and 2 trolley pole type and 1 storage battery locos. Track gage 44 in.
S of M—4 shortwall machs.
PP—3 100 H. P. water tube boilers, 250 volts D. C., 5 pumps.
EMP—180. Coke Ovens, 240 Bee Hive.
SIZES SHIPT—Run of Mine. Lump.
PREP. EQUIPT—Gravity Screens.

Orient Mine; Shaft; Pittsburgh Seam, 96 in. thick.
PO—Orient, Pa.; SP—Same; CTY—Fayette; RR—M. R. R.
MS—J. J. Knox, Orient, Pa.
S of H—Mules and 8 comp. air locos. Track gage 44 in.
S of M—13 comp. air punchers and 2 chain breast type machs.
PP—Power purchased. Transformer 2,200 to 250-275 volts A. C. M. G. sets, 250 volts D. C., 6-300 H. P. water tube boilers, 18 pumps.
EMP—400. Coke Ovens, 480 Bee Hive.
SIZES SHIPT—Run of Mine. Lump.
PREP. EQUIPT—Gravity Screens.
Note—This mine formerly operated by Orient Coke Co.

AMERICAN MANGANESE MFG. CO.

General Office, Philadelphia, Pa.
PR—E. E. Marshall, Philadelphia, Pa.
VP—Radclyff Romeyn, Philadelphia, Pa.

TR—W. H. Locke, Duluth, Minn.
GM—J. L. Seaman, Dunbar, Pa.
GS—Clark White, Dunbar, Pa.
PA—E. Palmer, Dunbar, Pa.
EM—G. W. Henschaw, Edinboro, Pa.
MM—Wm. White, Dunbar, Pa.
SA—L. G. Kuchert, Oliver Bldg., Pittsburgh, Pa.

Hill Farm Mine; Slope; Pittsburgh Seam; 108 in. thick.
PO—Dunbar, Pa.; SP—Same; CTY—Fayette; RR—P. R. R.
MS—John W. Greaves, Sr., Dunbar, Pa.
S of H—Mules and rope. Track gage 42 in.
S of M—Hand.
PP—1 fire tube boiler, total 80 H. P., 1 pump.
EMP—6. Last fiscal year output, 1,884 tons.
SIZES SHIPT—Run of Mine.

Furnace No. 1 Mine; Slope; E Seam; 42 in. thick.
PO—Dunbar, Pa.; SP—Same; CTY—Fayette; RR—P. R. R.
MS—John W. Greaves, Sr., Dunbar, Pa.
S of H—Mules. Track gage 42 in.
S of M—10 comp. air machs.
PP—2 water tube and 6 fire tube boilers, total 1,080 H. P., 3 air compressors, 12 pumps.
EMP—65. Last fiscal year output, 20,410 tons.
SIZES SHIPT—Run of Mine.

Fee No. 2 Mine; Drift; E Seam; 42 in. thick.
PO—Dunbar, Pa.; SP—Same; CTY—Fayette; RR—P. R. R.
MS—John W. Greaves, Dunbar, Pa.
S of H—Mules and 1 elec. loco. Track gage 42 in.
S of M—2 shortwall machs.
PP—240 volts A. C.
EMP—95. Last fiscal year output, 28,820 tons. 110 Smelt Solvay By-Product Ovens.
SIZES SHIPT—Run of Mine.
old information.

AMERICAN SEWER PIPE COMPANY.

General Office, Akron, O.
PR—Geo. R. Hill, Akron, O.
TR—A. S. McCombs, " "
GM—A. S. McCombs, " "
GS—R. H. Russell, " "
PA—W. K. Hill, Akron, O.
EM—H. E. Watson, Akron, O.
EK—D. T. Bowlers, Akron, O.

Brighton Clay Mine; Drift; Pittsburgh Clay No. 3 Seam, 20 to 24 in. thick.
PO—New Brighton, Pa.; SP—Same; CTY—Beaver; RR—Penna.
MS—Mason Chilcote, New Brighton, Pa.
S of H—Mules. Track gage, 32 in.
S of M—Hand.
PP—1 return tubular boiler, 1 pump.
EMP—10. Last years tonnage 498.
old information.

AMERICAN SHEET & TIN PLATE CO.

General Office, Frick Building, Pittsburgh, Pa.
GM—A. H. Beale, Vandergrift, Pa.
PA—M. S. Dennis, Pittsburgh, Pa.
EM—G. C. Kimball, " "

Kirkpatrick Mine; Drift; Up. Freeport Seam.
PO—Lechburg, Pa.; SP—Same; CTY—Armstrong; RR—P. R. R.
MS—S. T. Shoff, Lechburg, Pa.
S of H—Mules.
S of M—Hand.
EMP—40. Last fiscal year output

Scottsda Mine
PO—Scottsdale, Pa.; CTY—Fayette
EMP—22. Last fiscal year output
State report.
(Old Information)

AMSTOWN COAL MINING COMPANY

General Office, Philipsburg, Pa.
PR—A. J. Peterson, Grassflat, Pa.
TR—W. D. Hoover, Philipsburg, Pa.
GM—A. J. Peterson, Grassflat, Pa.
PA—W. D. Hoover, Philipsburg, Pa.

Amstown No. 1 Mine; Drift; R Seam, 46 in. thick.
PO—Winburne, Pa.; SP—Same; CTY—Clearfield; RR—N. Y. C.
S of H—Mules. Track gage 30 inches.
S of M—Hand.
EMP—25. Daily output, 150 tons.
SIZES SHIPT—Run of Mine.

ANDERSON-REES COAL PRODUCERS.

General Office, Venetia, Pa.
TR—David Rees, Venetia, Pa.

Anderson Mine; Drift; Pittsburgh Seam, 66 in. thick.
PO—Venetia, Pa.; SP—Anderson, Pa.; CTY—Washington; RR—B. & O.
MS—Wm. Rauer, Venetia, Pa.
S of H—Mules. Track gage 42 in.
S of M—Hand.
EMP—20. Daily tonnage 150.
SIZES SHIPT—Run of Mine.

ANDREWS RUN COAL CO.

General Office, New Kensington, Pa.
PR—W. W. Shultz, New Kensington, Pa.
VP—B. H. Thompson, New Kensington, Pa.
TR—W. K. Cooper, New Kensington, Pa.
GM—W. W. Shultz, New Kensington, Pa.
GS—Hugh Ferguson, New Kensington, Pa.
PA—W. W. Shultz, New Kensington, Pa.

Rainbow Mine; Drift; Waynesburg Seam, 56 in. thick.
PO—R. F. D. Irwin, Pa.; SP—Hormline, Pa.; CTY—Westmoreland; RR—P. R. R.
S of H—Mules. Track gage 42 in.
S of M—Shortwall machs.
PP—Power purchased.
EMP—29. Last years tonnage 15,000.
SIZES SHIPT—Run of Mine.

ANITA COAL MINING COMPANY.

General Office, Punxsutawney, Pa.
VP—J. B. Williamson, Punxsutawney, Pa.
TR—W. S. Blaisdell, Punxsutawney, Pa.
GM—W. S. Blaisdell, Punxsutawney, Pa.
GS—C. J. Weber, Punxsutawney, Pa.
PA—Jas. A. Knarr, Punxsutawney, Pa.
CE—E. W. Robinson, Punxsutawney, Pa.
EM—Harry Kanarr, Punxsutawney, Pa.
SCO—Anita Supply Co., Buyer, C. H. Ford, Punxsutawney, Pa.
Sales Agent, W. S. Blaisdell, Punxsutawney, Pa.

No. 1 Mine; Drift; Lower Freeport Seam, 72 in. thick.
PO—Punxsutawney, Pa. SP—Anita. CTY—Jefferson. RR—P. R. R. & P.
MS—N. S. White, Punxsutawney, Pa.
SM—J. A. Duran, Punxsutawney, Pa.
S of H—Mules. Track gage 42 in.
S of M—Hand.
EMP—30. Last fiscal year output, 17,220 tons.
SIZES SHIPT—Run of Mine.

No. 7 Mine; Drift; Freeport Seam, 48 in. thick.
PO—Punxsutawney, Pa.; SP—Horatio, Pa.; CTY—Jefferson; RR—B. R. & P.
MS—N. S. White, Punxsutawney, Pa.
SM—J. A. Duran, Punxsutawney, Pa.
S of H—Mules and trolley pole type locos. Track gage, 42 in.
S of M—Shortwall machs.
EMP—35. Last fiscal year output, 21,090 tons.
SIZES SHIPT—Run of Mine.

No. 6 Mine; Slope; Freeport Seam, 72 in. thick.
PO—Punxsutawney, Pa. SP—Same. CTY—Jefferson. RR—B. R. & P.
MS—N. S. White, Punxsutawney, Pa.
SM—J. A. Duran, Punxsutawney, Pa.
S of H—Mules and rope. Track gage, 42 in.
S of M—Hand.
PP—3 water tube boilers, 150 H. P.
EMP—25. Last fiscal year output, 15,350 tons.
SIZES SHIPT—Run of Mine.

Anita No. 2 Mine; Slope; Lower Freeport Seam, 72 in. thick.
PO—Punxsutawney, Pa.; SP—Horatio, Pa.; CTY—Jefferson; RR—P. R. & P.
MS—N. S. White, Punxsutawney, Pa.
SM—J. A. Duran, Punxsutawney, Pa.
S of H—Mules, rope and trolley pole type locos. Track gage, 42 in.
S of M—Electric punchers and shortwall machs.
PP—4 150 H. P. fire tube boilers, 2 150 K. W. gen. units, 500 volts D. C., 6 pumps.
EMP—40. Last fiscal year output, 22,960 tons.
SIZES SHIPT—Run of Mine.

ANNANDALE COAL COMPANY

General Office, Smethport, Pa.
PR—F. L. Holmes, Smethport, Pa.
VP—W. H. Gallup, Smethport, Pa.
TR—J. O. Waite, Erie, Pa.
GM—F. L. Holmes, Smethport, Pa.
GS—D. H. Farren, Smethport, Pa.
PA—F. L. Holmes, Smethport, Pa.
EM—W. J. Koerner, Grove City, Pa.
EE—Wm. Farren, Buyers, Pa.
SA—J. O. Waite, Erie, Pa.

Erie No. 1 Mine Drift A or Brook Vein Seam 42 in. thick.
PO—Buyers, Pa.; SP—Annandale, Pa.; CTY—Butler; RR—B. & O. & L. E.
S of H—Trolley pole type locos. Track gage, 42 in.
S of M—4 elec. machs.
PP—2 water tube boilers, total 60 H. P. 2-150 K. W. gen. units, 3-200 volts D. C., 3 pumps.
EMP—70. Daily tonnage 300.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

ANTHRACITE OIL, GAS & COAL COMPANY

General Office, 316 Parkway Bldg., Philadelphia, Pa.
PR—C. Scott Ferguson, Philadelphia, Pa.
VP—H. L. Montgomery, 400 City Hall, Philadelphia, Pa.

(Continued on Next Page)

Anthracite Oil, Gas & Coal Company—Cont.

TR—C. E. Jones, Shamokin, Pa.
GM—C. Scott Ferguson, Philadelphia, Pa.
GS—H. J. Cassady, Baxter, Pa.
PA—C. Scott Ferguson, Philadelphia, Pa.
EM—H. J. Cassady, Baxter, Pa.

Clover Mine; Drift; Clarion Seam, 44 inches thick.
PO—Baxter, Pa.; SP—Same; CTY—Jefferson; RR—N. Y. C.

S of H—Mules. Track gage 36 inches.

S of M—Hand.

PP—M. G. sets, 100 K. W., 250 volts D. C.

EMP—35.

SIZES SHIPT—Run of Mine.

Note—Formerly operated by the Clover Coal & Coke Co.

APOLLO COAL MINING COMPANY.

PR—P. C. Maderia, Philadelphia, Pa.
VP—L. W. Hicks, Leechburg, Pa.
TR—L. C. Maderia, Philadelphia, Pa.
GM—L. W. Hicks, Leechburg, Pa.
GS—E. A. Watters, Leechburg, Pa.
PA—D. L. Mahr, Leechburg, Pa.
EM—S. E. Mognet, Leechburg, Pa.
EE—Jes. Matlick, Salina, Pa.

Northwest Mine; Drift; Upper Freeport and Kittanning Seam, 44 in. thick.

PO—Salina, Pa.; SP—Same; CTY—Westmoreland; RR—Penna., Conemaugh Div.

MS—Thomas Adams, Avonmore, Pa.

S of H—2 elec. trolley pole type locos.

Track gage 42 in.

S of M—Elec. chain machs.

PP—Power purchased, M. G. set, 6 pumps.

EMP—77. Last fiscal year output, 52,000 tons.

SIZES SHIPT—Run of Mine.

ARENSBERG COAL COMPANY.

General Office, Brownsville, Pa.
PR—Max G. Mann, Brownsville, Pa.
TR—A. Toth, Brownsville, Pa.
GM—Max G. Mann, Brownsville, Pa.
PA—A. Toth, Brownsville, Pa.

Arensberg Mine; Drift; Waynesburg Seam, 60 in. thick.

PO—Brownsville, Pa. SP—East Millsboro, Pa. CTY—Fayette. RR—Monon.

S of H—Mules.

S of M—Hand.

EMP—9. Daily tonnage 40.

SIZES SHIPT—Run of Mine.

ARGENTINE COAL CO.

General Office, 365 Union Arcade Bldg., Pittsburgh, Pa.

PR—Thos. Leehrie, Windber, Pa.

VP—Fred Stover, Butler, Pa.

TR—Frederick Stover, Butler, Pa.

GM—Frederick Stover, Butler, Pa.

GS—Fred Stover, Butler, Pa.

PA—Fred Stover, Butler, Pa.

EM—W. P. Vance, Butler, Pa.

EE—Wm. Clifford, Argentine, Pa.

SA—Chas. S. Bygate, Union Arcade Bldg., Pittsburgh, Pa.

Maple Furnace Mine; Slope; Brookville Seam, 48 in. thick.

PO—Argentine, Pa.; SP—Same; CTY—Butler; RR—R. & L. E., Argentine Branch.

MS—A. M. Klink, Argentine, Pa.

S of H—Mules, rope and locos, 6 elec. locos. Track gage 36 in.

S of M—6 shortwall machs.

PP—2 200 K. W. gen. units, 250 volts D. C., 8 pumps.

EMP—100. Last years tonnage 100,000.

SIZES SHIPT—Run of Mine. Slack Lump.

PREP. EQUIPT—Gravity Screens.

ARGYLE COAL COMPANY

General Office, Huff Bldg., Greensburg, Pa.

PR—Julian B. Huff, Greensburg, Pa.

TR—A. N. Pershing, Greensburg, Pa.

GM—H. F. Bovard, Huff Bldg., Greensburg, Pa.

GS—M. J. Bracken, Johnstown, Pa.

PA—R. P. Kilgore, Greensburg, Pa.

EE—A. Macdonald, Greensburg, Pa.

SCO—Forks Co-operative Association, Buyer, F. J. Bailly, South Fork, Pa.

SA—F. B. Miller, Huff Bldg., Greensburg, Pa.

Additional Information on Page 737

Argyle No. 1 Mine; Drift; "B" or Miller Seam, 44 in. thick.

PO—South Fork, Pa. SP—Same. CTY—Cambria. RR—Penna.

MS—J. A. Dunsmore, South Fork, Pa.

S of H—Mules and rope. Track gage, 36 in.

S of M—Hand.

PP—1 return tubular boilers, total 60 H. P.

EMP—38. Last years tonnage 37,380.

Argyle No. 2 Mine; Drift; "B" or Miller Seam, 44 in. thick.

PO—South Fork, Pa. SP—Same. CTY—Cambria. RR—Penna.

MS—J. A. Dunsmore, South Fork, Pa.

S of H—Mules and rope. Track gage, 36 in.

S of M—Hand.

PP—6 return tubular boilers, total 450 H. P., 1 air comp., 5 pumps.

EMP—78. Last years tonnage 82,129.

ARMERFORD COAL MINING CO.

General Office, Blairsville, Pa.

PR—D. E. Thompson, Blairsville, Pa.

TR—C. F. Armstrong, Leechburg, Pa.

GM—D. E. Thompson, Blairsville, Pa.

GS—J. E. Stewart, Pittsburgh, Pa.

PA—N. A. Barnhart, Pittsburgh, Pa.

EM—M. G. Gibson, Crafton, Pa.

SCO—Armerford Supply Co., Buyer, John B. Hughes, Billtown, Pa.

SA—Bertha Coal Co., Pittsburgh, Pa.

Armerford Mine; Slope; Miller Seam, 48 to 52 in. thick.

PO—Billtown, Pa.; SP—Same; CTY—Indiana; RR—E. R. & P. and P. R. R.

MS—John B. Hughes, Billtown, Pa.

S of H—Storage battery and rope haulage. Track gage, 36 in.

S of M—3 shortwall machs.

PP—Power purchased, 3 pumps.

EMP—65. Last years tonnage 88,000.

SIZES SHIPT—Run of Mine, Slack Lump.

ARMSTRONG COAL COMPANY

General Office, Kittanning, Pa.

PR—H. M. Silman, Kittanning, Pa.

VP—L. V. Barach, 605 Frick Bldg., Pittsburgh, Pa.

TR—H. T. Silman, Kittanning, Pa.

GM—H. T. Silman, Kittanning, Pa.

GS—James McAler, Kittanning, Pa.

PA—H. T. Silman, Kittanning, Pa.

CE—Jacob Landy, 673 Elton Ave., New York, N. Y.

EM—Henry Williams, Oak Ridge, Pa.

EE—Jacob Landy, 673 Elton Ave., New York, N. Y.

SA—H. T. Silman, Kittanning, Pa.

Armstrong Mine; Drift; Lower Kittanning B Seam; 42 in. thick.

PO—Oak Ridge, Pa.; SP—Hawthorn, Pa.; CTY—Armstrong; RR—P. R. R.

S of H—Mules, elec. locos. Track gage 30 inches.

S of M—Shortwall machs.

PP—Purchased power, M. G. sets, 200 to 250 volts, generates 100 K. W. to 250 volts D. C.

EMP—60. Daily tonnage 400.

SIZES SHIPT—Run of Mine, Lump.

PREP. EQUIPT—Bar Screens.

ARMSTRONG COUNTY COAL CO.

General Office, 718 Farmers Bank Bldg., Pittsburgh, Pa.

PR—P. C. Maderia, Philadelphia, Pa.

TR—L. C. Maderia, Philadelphia, Pa.

GM—L. W. Hicks, Leechburg, Pa.

GS—E. A. Watters, Leechburg, Pa.

PA—D. L. Mahr, Leechburg, Pa.

EM—S. E. Mognet, Leechburg, Pa.

EE—G. H. Ritchie, Leechburg, Pa.

Armstrong Mine; Drift; Upper Freeport Seam, 40 to 60 in. thick.

PO—Leechburg, Pa.; SP—Same; CTY—Armstrong; RR—P. R. R., Conemaugh Div.

S of H—3 elec. trolley locos. Track gage 42 in.

S of M—6 elec. chain machs.

PP—Power purchased, M. G. sets, 250 volts D. C., 5 pumps.

EMP—200. Last fiscal year output 101,781 tons.

SIZES SHIPT—Run of Mine.

ARROW COAL MINING CO.

General Office, 1444 Oliver Bldg., Pittsburgh, Pa.

PR—S. A. Gilmore, Pittsburgh, Pa.

VP—W. C. Huber, Philadelphia, Pa.

TR—E. L. Morris, Pittsburgh, Pa.

GM—E. L. Morris, Pittsburgh, Pa.

GS—Geo. Crossland, Arrow, Pa.

PA—J. I. Boyd, Pittsburgh, Pa.

FM—S. E. Dickey & Co., Johnstown, Pa.

EE—C. W. Shanaberger, Arrow, Pa.

SCO—Arrow Supply Company, Buyer, Geo. Ganow, Reitz, Pa.

SA—W. C. Huber & Co., Stock Exchange Bldg., Philadelphia, Pa.

Arrow No. 1 Mine; Drift; "B" Seam, 48 in. thick.

PO—Arrow, Pa.; SP—Fr. Arrow, Pa.; Ex., Windber, Pa.; CTY—Somerset, RR—South Fork Br., Penna.

SM—L. F. Wagner, Arrow, Pa.

S of H—3 trolley pole type and 1 steam locos. Track gage 42 in.

S of M—3 shortwall machs.

PP—Power purchased, 1—150 K. W. M. G. Set, 250 volts D. C., 4 pumps.

EMP—70. Daily tonnage 450.

SIZES SHIPT—Run of Mine.

Arrow No. 5 Mine; Drift; "B" Seam, 52 in. thick.

PO—Reitz, Pa.; SP—Rockingham, Pa.; CTY—Somerset, Pa.; RR—P. R. R., South Fork Br.

S of H—1 trolley pole type and 2 storage battery locos. Track gage 42 in.

S of M—5 shortwall and 1 overhead cutter mach.

PP—Power purchased, transformer 22000

-440 volts A. C., 2-150 K. W.

M. G. Sets, 250 volts D. C., 9 pumps.

EMP—125. Daily tonnage 1,000.

SIZES SHIPT—Run of Mine.

Arrow No. 6 Mine; Drift; "C" Prime Seam, 44 in. thick.

PO—Reitz, Pa.; SP—Rockingham, Pa.; CTY—Somerset; RR—P. R. R., South Fork Br.

S of H—2 trolley pole type locos. Track gage 42 in.

S of M—2 shortwall machs.

PP—Power furnished by No. 5 Mine. 1 pump.

EMP—60. Daily tonnage 400.

SIZES SHIPT—Run of Mine.

ARTHUR COAL COMPANY

General Office, Punxsutawney, Pa.

PR—H. G. Bowers, Punxsutawney, Pa.

VP—W. A. Bowers, Punxsutawney, Pa.

TR—I. R. Bowers, Punxsutawney, Pa.

GM—H. G. Bowers, Punxsutawney, Pa.

GS—James Pratt, Punxsutawney, Pa.

PA—H. G. Bowers, Punxsutawney, Pa.

EM—H. M. Kanarr, Punxsutawney, Pa.

SA—Burtner Coal Co., 1004 Finance Bldg., Philadelphia, Pa.

Arthur Mine; Drift; Upper Freeport Seam, 36 inches thick.

PO—Punxsutawney, Pa.; SP—Hillman, Pa.; CTY—Jefferson; RR—P. R. R.

S of H—Mules. Track gage 36 inches.

S of M—Hand.

EMP—20. Last years tonnage 10,317.

SIZES SHIPT—Run of Mine.

ASHMAN COAL CO.

General Office, North American Bldg., Philadelphia, Pa.

PR—P. C. Maderia, Philadelphia, Pa.

VP—R. C. Hill, New York, N. Y.

TR—John Gilbert, Philadelphia, Pa.

GM—J. Wm. Wetter, Philadelphia, Pa.

GS—J. Wm. Wetter, Philadelphia, Pa.

PA—Jas. H. Hogg, Philadelphia, Pa.

EM—T. F. Morgan, Philadelphia, Pa.

EE—W. J. Mildon, Philadelphia, Pa.

Sales agency, Maderia, Hill & Co. Philadelphia, Pa.

Ghem Mine, Drift, "B" Seam, 36 to 42 in. thick.

PO—Munson, Pa. SP—Same. CTY—Clearfield. RR—N. Y. C. & H. R.

MS—P. J. Cullen, Munson, Pa.

S of H—Mules and 3 trolley pole type locos. Track gage 34 in.

S of M—Hand.

PP—Power purchased, 2200 volts A. C., 1-100 K. W. M. G. Sets, 250 volts D. C., 9 pumps.

EMP—104. Last years tonnage 100,000.

SIZES SHIPT—Run of Mine.

ATHERTON BARNES CO.

General Office, Phillipsburg, Pa.

PR—Atherton Barnes, Phillipsburg, Pa.

GM—Joseph Barnes, Phillipsburg, Pa.

Belfast Mine; Drift; A Seam, 54 in. thick.

PO—Phillipsburg, Pa.; SP—Same; CTY—Centre; RR—N. Y. C.

MS—Jos. Barnes, Phillipsburg, Pa.

S of H—Mules.

S of M—Hand.

PP—Power purchased

Last years tonnage 50,005.

ATLANTIC BIG VEIN COAL CO.

General Office, Meyersdale, Pa.

PR—F. B. Black, Meyersdale, Pa.

VP—J. M. Black, Meyersdale, Pa.

TR—J. J. Hoblitzell, Jr., Meyersdale, Pa.

GS—J. J. Hoblitzell, Jr., Meyersdale, Pa.

PA—J. J. Hoblitzell, Jr., Meyersdale, Pa.

EM—J. J. Hoblitzell, Jr., Meyersdale, Pa.

SA—J. M. Black, Meyersdale, Pa.

Keystone No. 1 Mine; Drift; Seam, 96 in. thick.

PO—Meyersdale, Pa.; SP—West Salisbury, Pa.; CTY—Somerset; RR—B. & O.

MS—D. R. Spence, Meyersdale, Pa.

S of H—Mules and motor. Track gage 36 in.

S of M—Hand.

PP—2 fire tube boilers, 250 H. P., 1 75 K. W. gen. unit, D. C., 1 pump.

EMP—70. Last years tonnage 39,042.

SIZES SHIPT—Run of Mine.

Keystone No. 2 Mine; Drift; Redstone Seam, 54 in. thick.

PO—Meyersdale, Pa.; SP—West Salisbury, Pa.; CTY—Somerset; RR—B. & O.

MS—D. R. Spence, Meyersdale, Pa.

S of H—Mules and motor. Track gage 36 in.

S of M—Hand.

PP—2 fire tube boilers, 250 H. P., 1 75 K. W. gen. unit, D. C.

EMP—110. Last years tonnage 66,207.

SIZES SHIPT—Run of Mine.

Atlantic Crushed Coke Company—Cont.

PP—3 150 H. P. fire tube boilers, 2 200 H. P. water tube boilers, gen. units, 2300 volts A. C., motor 2.4 sets, 250 volts D. C., 13 pumps.
EMP—150. Daily output, 800 tons.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Gravity Screens.

Atlantic No. 3 Mine; Shaft; Pittsburgh Seam, 78 in. thick.
PO—New Derry, Pa. SP—Same. CTY—Westmoreland RR—Penna., Brandywine Br.
MS—Randall Kelley, New Derry, Pa.
S of H—Mules, 1 trolley pole type loco.
S of M—Hand.
PP—2 150 H. P. fire tube boilers, 1 gen. unit, 150 K. W., 250 volts D. C., 4 pumps.
EMP—55. Daily output, 300 tons.
SIZES SHIPT—Run of Mine, Slack.
PREP. EQUIPT—Gravity Screens.

ATLAS COKE COMPANY.

General Office, Leetonia, Ohio.
PR—John McKeefrey, Leetonia, O.
TR—N. J. McKeefrey, " "
GM—W. D. McKeefrey, " "
SA—McKeefrey & Co., Leetonia, O.
Lafayette Mine, Slope, Pittsburgh Seam, 90 in. thick.
PO—Helen, Pa. SP—Waltersburg, Pa. CTY—Fayette, R. P. R. R.
MS—Jas. Henderson, Uniontown, Pa.
S of H—Mules and rope. Track gage, 42 in.
S of M—Hand.
PP—8 return tubular boilers, total 640 H. P., 2 gen. units 240 volts D. C., 2 air comp. 6 pumps.
EMP—136. Last fiscal year output, 114,991 tons. Coke ovens, 270 Bee Hive.

ATLAS SMOKELESS COAL CO.

General Office, Conemaugh, Pa.
PR—A. G. Wilson, Mineral Point, Pa.
TR—Ira F. Link, Conemaugh, Pa.
GM—Ira F. Link, Conemaugh, Pa.
EM—O. P. Thomas, Johnstown, Pa.
Atlas Mine; Drift; C Prime Seam, 36 inches thick.
PO—Rowena, Pa.; SP—Rowena, Pa.; CTY—Somerset; RR—B. & O., S. & C Branch.
MS—Ira F. Link, Conemaugh, Pa.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
SIZES SHIPT—Run of Mine.

AVELLA COAL COMPANY.

General Office, Greensburg, Pa.
PR—K. H. Jamison, Greensburg, Pa.
VP—W. F. Overly, Greensburg, Pa.
TR—Wm. R. Turney, Greensburg, Pa.
GM—Wm. R. Turney, Greensburg, Pa.
PA—Robert Robson, Greensburg, Pa.
EM—Wm. R. Turney, Greensburg, Pa.
SCO—Avella Supply Co., Buyer, Jno. F. Schack, Avella, Pa., R. F. D. No. 2.
SA—Operators Fuel Agency, Greensburg, Pa.
Penobscot Mine; Drift; Pittsburgh Seam, 60 in. thick.
PO—Avella, Pa.; R. D. No. 2; SP—Penna., Pa.; CTY—Washington; RR—Pittsburgh & West Virginia.
MS—Eli Robr, Avella, Pa., R. D. No. 2.
S of H—Mules and trolley pole type locos. Track gage, 42 in.
S of M—5 chain breast type and 4 short-wall machines.
PP—Purchase power. Two 150 K. W. Rotary Converters, 275 volts D. C., 5 pumps.
EMP—170. Daily tonnage 1,000.
SIZES SHIPT—Run of Mine, Slack, Not Egg, Lump, Block.
PREP. EQUIPT—Gravity Screens.

AVONMORE COAL & COKE CO.

General Office, Leechburg, Pa.
PR—Frank T. Patterson, Philadelphia, Pa.
VP—L. W. Hicks, Leechburg, Pa.
TR—Winthrop Sargent, Philadelphia, Pa.
GM—L. W. Hicks, Leechburg, Pa.
GS—E. A. Walters, Leechburg, Pa.
PA—D. L. Maher, Leechburg, Pa.
EM—S. E. Magnet, Leechburg, Pa.
EE—Huber Smith, Edri, Pa.

Avonmore Mine; Drift; Pittsburgh Seam, 60 in. thick.
PO—Edri, Pa.; SP—Same; CTY—Armstrong; RR—Penna.
MS—Thos. Adams, Edri, Pa.
S of H—Rope and mules. Track gage 36 inches.
S of M—Electric chain mach.
PP—Steam and electricity.
EMP—150. Last fiscal year output, 128,890 tons.
SIZES SHIPT—Run of Mine.

AXELINA COAL COMPANY.

PR—Harry Boulton, Clearfield, Pa.
TR—John Benson, Houtzdale, Pa.
GM—John Benson, Houtzdale, Pa.

GS—Edw. Boulton, Houtzdale, Pa.
PA—John Benson, Houtzdale, Pa.

Axellina Mine; Drift; A Seam, 60 in. thick.
PO—Houtzdale, Pa. SP—Same. CTY—Clearfield. RR—P. R. R., Tyrone Div.
S of H—Mules.
S of M—Hand.
EMP—25. Last years tonnage 8,910.

B. & B. COAL CO., INC.

General Office, New Millport, Pa.
PR—L. S. Boyce, New Millport, Pa.
TR—John Boyce, New Millport, Pa.
GM—L. S. Boyce, New Millport, Pa.
GS—L. S. Boyce, New Millport, Pa.
PA—L. S. Boyce, New Millport, Pa.

R. & B. Mine; Drift; B Seam; 34 inches thick.
PO—New Millport, Pa.; SP—Same; CTY—Clearfield; RR—N. Y. C. & H.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—25. Last years tonnage 18,000.
SIZES SHIPT—Run of Mine.

B. & L. COAL COMPANY

General Office, Youngwood, Pa.
OWNERS—J. S. Best, Youngwood, Pa.; J. C. Lowe, Youngwood, Pa.

B. & L. Mine; Drift; Freeport Seam, 52 inches thick.
PO—Hunkers, Pa.; SP—Same; CTY—Westmoreland; RR—Penna.
MS—J. S. Best, Youngwood, Pa.
S of H—Mules and rope.
S of M—Hand.
PP—Power purchased.
EMP—35.
SIZES SHIPT—Run of Mine.
Note—Formerly operated by J. M. Williams Coal Company.

BAGDAD COAL & COKE CO.

TR—L. W. Hicks, Leechburg, Pa.
GM—L. W. Hicks, Leechburg, Pa.
GS—E. A. Walters, Leechburg, Pa.
PA—D. L. Maher, Leechburg, Pa.
EM—S. E. Magnet, Leechburg, Pa.
EE—G. H. Ritchie, Leechburg, Pa.
Bagdad Mine; Drift; Upper Freeport Seam, 42 in. thick.
PO—Leechburg, Pa.; SP—Same. CTY—Armstrong RR—P. R. R.
MS—Frank Bryant, Leechburg, Pa.
S of H—Mules and trolley pole type loco. Track gage, 59 in.
S of M—Hand and chain breast type machs.
PP—Power purchased. 2 pumps.
EMP—40. Last fiscal year output, 32,000 tons.
SIZES SHIPT—Run of Mine.

BAKER COAL CO.

General Office, Mastontown, Pa.
PR—Samuel Baker, Mastontown, Pa.
VP—C. H. Baker, Mastontown, Pa.
TR—C. H. Baker, Mastontown, Pa.
GM—C. H. Baker, Mastontown, Pa.
GS—C. H. Baker, Mastontown, Pa.
PA—C. H. Baker, Mastontown, Pa.
SA—Sinek Fuel Co., Uniontown, Pa.

Emery Mine; Drift; Pittsburgh Seam, 96 in. thick.
PO—Mastontown, Pa.; SP—Same; CTY—Fayette; RR—B. & O.
S of H—Mules and 1 steam loco. Track gage 42 in.
S of M—Hand.
EMP—20. Last years tonnage 20,000.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by the Emery-Lee Coal Company.

BAKER-WHITELEY COAL CO.

General Office, Keyser Bldg., Baltimore, Md.
PR—James S. Whiteley, Baltimore, Md.
VP—Chas. H. Brown, Baltimore, Md.
TR—Geo. A. Smith, Baltimore, Md.
GM—Charles H. Brown, Baltimore, Md.
GS—John B. Hughes, Hooversville, Pa.
PA—John B. Hughes, Hooversville, Pa.
MM—R. P. Crissey, " "
EE—Anthony Kuschinski, " "
SCO—Calvert Supply Co.; Buyer, George P. Lauer, Hooversville, Pa.

Elma Nos. 1 and 2; Drift; "B" Seam 42 to 58 in. thick.
PO—Hooversville, Pa.; SP—Same; CTY—Somerset; RR—B. & O., S. M. Div.

MS—John Nichols, Hooversville, Pa.
S of H—5 Elec. loco., track gage 36 in.
S of M—4 Elec. mach. and hand.
PP—4 Return tubular boilers total 600 H. P., 2 gen. units 500 volts D. C., 2 pumps.
EMP—130. Last fiscal year output, 103,992 tons.
SIZES SHIPT—Run of Mine.

BAKERTON COAL CO.

General Office, Indiana, Pa.
PR—Samuel T. Brown, Indiana, Pa.
TR—F. C. McClure, Indiana, Pa.

GM—Samuel T. Brown, Indiana, Pa.
PA—W. R. Rees, Indiana, Pa.
CE—Chas. E. Schlicher, Spangler, Pa.
SA—Samuel T. Brown, Indiana, Pa.

Bakerton No. 1 Mine; Drift; "B" Miller Seam, 48 in. thick.
PO—Indiana, Pa.; SP—Carrolltown Road, Pa.; CTY—Cambria, RR—P. R. R.
MS—John Kelly, Carrolltown, Pa.
S of H—Mules and rope. Track gage, 36 in.
S of M—2 shortwall machines.
PP—Power purchased, transformer 2200 220 volts A. C., 1 pump.
EMP—40. Last years tonnage 30,000.
SIZES SHIPT—Run of Mine.

BALD HILL COAL COMPANY.

General Office, St. Benedict, Pa.
PR—Johndruid Peale, St. Benedict, Pa.
TR—John Peale, St. Benedict, Pa.
GM—Richard Peale, St. Benedict, Pa.
GS—Merritt Dalton, St. Benedict, Pa.
PA—Geo. Metzger, St. Benedict, Pa.
EM—R. J. Protzler, St. Benedict, Pa.
EE—E. K. Davis, St. Benedict, Pa.
SCO—Central Trading Corp., Buyer, F. R. Booth, St. Benedict, Pa.
Sales Agent, G. E. Metzger, St. Benedict, Pa.

Victor No. 41 Mine; Drift; E Seam, 48 in. thick.
PO—Leontes Mills, Pa. SP—Bald Hill, Pa. CTY—Clearfield. RR—N. Y. C.
MS—David Davidson, Leontes Mills, Pa.
SM—Edward Leiby, Leontes Mills, Pa.
S of H—4 trolley pole type locos. Track gage, 36 in.
S of M—Elec. panaber and shortwall machs.
PP—Gen. units, 200 K. W., 250 volts D. C., 12 pump. Purchase power.
EMP—140.
SIZES SHIPT—Run of Mne.
PREP. EQUIPT—Bar Screens.

Victor No. 44 Mine; B Seam, 42 in. thick.
SP—Bald Hill, Pa. CTY—Clearfield. RR—N. Y. C.
S of H—1 comp. aid loco. Track gage, 36 in.
S of M—2 comp. aid machs.
PP—1 air comp., gen. units, 200 K. W., 250 volts A. C., 1 pump. Purchase power.
EMP—10.
PREP. EQUIPT—Bar Screens.

BALDAUF COAL AND COKE CO.

General Office, Punxsutawney, Pa.
PR—J. H. Fink, Punxsutawney, Pa.
GM—J. H. Fink, " "
GS—L. B. Wathen, Punxsutawney, Pa.
Drift Mine; Lower Kittanning Seam, 36 to 42 in. thick.
PO—Showers, Pa. SP—Same. CTY—Clarion. RR—L. E. F. & Co., Franklin Div.
S of H—Mules. Track gage 30 in.
S of M—Hand.
EMP—15.
SIZES SHIPT—Run of Mine.

BANKS COAL COMPANY

General Office, Punxsutawney, Pa.
PR—W. A. Bowers, Punxsutawney, Pa.
VP—W. A. Bowers, Punxsutawney, Pa.
TR—George W. Fink, Punxsutawney, Pa.
Secy.—A. F. McCall, " "
GM—H. G. Bowers, Punxsutawney, Pa.
GS—W. A. Bowers, " "
PA—H. G. Bowers, " "
EM—H. M. Kanarr, Punxsutawney, Pa.
EE—Ray Ansell, Punxsutawney, Pa.
MM—Joseph Sample, " "
SCO—Sidney Supply Co. Buyer, J. H. Fink, Punxsutawney, Pa.
SA—Burtner Coal Co., 1004 Finance Bldg., Philadelphia, Pa.

Burtner Nos. 1 and 2 Mines; Drifts, "B" Seam, 46 to 52 in. thick.
PO—Sidney, Pa.; SP—Same; CTY—Indiana; RR—Penna.
MS—James Pratt, Punxsutawney, Pa.
S of H—3 locos. Track gage 36 inches.
S of M—4 elec. mach.
PP—2 Erie return tubular boilers, total 250 H. P., 500 volts D. C., 1 pump.
EMP—(No. 1)—145. Last years tonnage, 73,159. EMP—(No. 2)—110. Last years tonnage 72,919.
SIZES SHIPT—Run of Mine, Slack, Not Lump.

BANNER COAL MINING CO.

General Office, 617 Munsey Bldg., Baltimore, Md.
PR—C. Francis Brown, Baltimore, Md.
VP—Leon Walker, Wilmington, Del.
TR—Chas. H. Brown, Baltimore, Md.
GM—J. R. Maxwell, Osceola Mills, Pa.
GS—C. B. Maxwell, Osceola Mills, Pa.
PA—J. R. Maxwell, Osceola Mills, Pa.
SCO—Maxwell Trading Company; Buyer, J. R. Maxwell, Osceola Mills, Pa.

Peerless No. 4 Mine; Drift; Lower Kittanning Seam, 54 in. thick.
PO—Osceola Mills, Pa. SP—Same; CTY—Centre; RR—Pennsylvania.
S of H—1 trolley pole type loco. Track gage, 36 in.

S of M—Hand.
PP—Power purchased, transformer 2200-220 volts A. C., 1 150 K. W., motor gen. units, 250 volts D. C., 4 pumps.
EMP—15.
SIZES SHIPT—Run of Mine.

BANNING-CONNELLSVILLE COKE CO.

Operations exhausted.

BARNES COAL COMPANY.

General Office, 718 Harrison Bldg., Philadelphia, Pa.
PR—John Barnes, Philadelphia, Pa.
TR—Harry E. Bird, Philadelphia, Pa.
GS—Richard T. Todhunter, Barnesboro, Pa.
PA—H. H. Hamilton, Barnesboro, Pa.
EM—Chas. E. Schlicher, Spangler, Pa.
EE—Orin Hains, Barnesboro, Pa.
SCO—Barnes & Tucker Store Company, Buyer, C. T. Grist, Barnesboro, Pa.
SA—W. G. Earnshaw, Philadelphia, Pa.
Lancashire No. 11 Mine; Slope; "B" Seam.
PO—Barnesboro, Pa.; SP—Bakerton, Pa.; CTY—Cambria; RR—P. R. R.
S of H—Trolley pole type locos. Track gage 42 in.
S of M—1 longwall machs.
PP—Power purchased.

BARNES & TUCKER CO.

General Office, 718 Harrison Bldg., Philadelphia, Pa.
PR—John Barnes, Philadelphia, Pa.
TR—Harry E. Bird, Philadelphia, Pa.
GS—Richard T. Todhunter, Barnesboro, Pa.
PA—H. H. Hamilton, Barnesboro, Pa.
EM—Chas. E. Schlicher, Spangler, Pa.
EE—Orin Hains, John Gilt, Barnesboro, Pa.
SCO—Barnes & Tucker Store Co. Buyer, C. T. Grist, Barnesboro, Pa.
SA—W. G. Earnshaw, Philadelphia, Pa.

Porter No. 1, Lancashire Nos. 3, 7, 12 Mines; Drift; Lower Freeport D. Seam.
PO—Barnesboro, Pa.; SP—Same; CTY—Cambria; RR—P. R. R.
S of H—Trolley pole type loco. Track gage 42 in.
S of M—Hand.
PP—Power purchased.
Last years tonnage 125,600.

Lancashire No. 10 Mine; Drift; Upper Freeport E. Seam.
PO—Barnesboro, Pa.; SP—Same; CTY—Cambria; RR—P. R. R.
S of H—Trolley pole type loco. Track gage 42 in.
S of M—Hand.
PP—Power purchased.
Last years tonnage 40,000.

Lancashire No. 15 Mine; Drift; C Prime Seam.
PO—Barnesboro, Pa.; SP—Same; CTY—Cambria; RR—P. R. R.
S of H—Trolley pole type loco. Track gage 42 in.
S of M—Hand.
PP—Power purchased.

BARNES, HARRY, & COMPANY.

PR—Harry Barnes, Phillipsburg, Pa.
TR—Harry Barnes, Phillipsburg, Pa.
GS—Harry Barnes, Phillipsburg, Pa.
CE—Geo. Ayers, Phillipsburg, Pa.

Tin Top Mine; Drift; D Seam, 54 in. thick.
PO—Phillipsburg, Pa. SP—Munson, Pa. CTY—Center; RR—N. Y. C., Munson Branch.
MS—Geo. Locke, Phillipsburg, Pa.
S of H—Mules.
S of M—Hand.
Daily output, 100 tons.
SIZES SHIPT—Run of Mine.
(Old Information)

BARNES ZUEMAHONG COAL CO.

PR—A. McE. Barnes, Jr., 2 Rector St., New York, N. Y.
GM—W. A. Coleman, Lisle, Pa.
GS—T. A. Lang, Lisle, Pa.
PA—T. A. Lang, Lisle, Pa.
CE—W. V. Whitman, Scottsdale, Pa.
EM—C. K. Weigle, Lisle, Pa.
EE—Samuel Raingh, Lisle, Pa.
SCO—Wells Creek Supply Co. Buyer, C. J. Larman, Lisle, Pa.

Stauffer No. 1 Mine; Drift; E or Upper Freeport Seam, 42 inches thick.
PO—Lisle, Pa.; SP—Same; CTY—Somerset; RR—B. & O.
S of H—Electric loco. Track gage 40 in.
S of M—1 comp. air panaber and 1 shortwall machs.
PP—Power purchased, transformer 22-000 to 2,200 volts A. C., M. G. Sots, 1 200 K. W. and 250 volts D. C., 11 pumps.
EMP—120. Daily tonnage 500.
SIZES SHIPT—Run of Mine.

Stauffer No. 3 Mine; Drift; D or Lower Freeport Seam, 48 inches thick.
PO—Lisle, Pa.; SP—Same; CTY—Somerset; RR—B. & O.

(Continued on Next Page)

Barnes Quemahoning Coal Co.—Cont.

S of H—Trolley pole type locos. and mules. Track gage 40 in.

S of M—Hand.

PP—Power purchased. Transformer 22,000 to 2200 volts A. C., 1—100 K. W. gen. unit, 250 volts D. C., 2 pumps.

EMP—46. Daily tonnage 150.

SIZES SHIPT—Run of Mine.

NOTE—Nos. 1 and 3 Mines formerly operated by Stauffer-Quemahoning Coal Co.

Boswell Br. No. 1 Mine; Drift; E or Upper Freeport Seam, 40 in. thick.

PO—Listie, Pa.; SP—Same; CTY—Somerset; RR—E. & O.

S of H—Trolley pole type locos. Track gage 40 in.

S of M—1 chain breast type and 1 shortwall machs.

PP—Power purchased. Transformer 22,000 to 2,200 volts A. C., 1—75 K. W. gen. unit, 250 volts D. C., 1 pump.

EMP—20. Daily tonnage 50.

SIZES SHIPT—Run of Mine.

NOTE—Formerly operated by Boswell Branch Coal Co.

BARNETT COAL COMPANY

General Office, Latrobe, Pa.

OWNERS—F. M. Groff, Blairsville, Pa.; J. E. Barnett, Latrobe, Pa.; A. J. Barnett, Latrobe, Pa.

GM—A. J. Barnett, Latrobe, Pa.

GS—M. R. Sassi, Latrobe, Pa.

PA—A. J. Barnett, Latrobe, Pa.

CE—Albert Smith, Blairsville, Pa.

EE—Frank Morphet, R. F. D. No. 3, Blairsville, Pa.

SCO—Kisk Supply Company, Buyer, Wm. Fletcher, Blairsville, Pa.

Barnett No. 1 Mine; Shaft; Pittsburgh Seam, 72 in. thick.

PO—Blairsville, Pa.; SP—Derry, Pa.; CTY—Westmoreland; RR—E. & O. R. R.

SM—W. M. Gray, Latrobe, Pa.

S of H—2 trolley pole type locos. Track gage 36 in.

S of M—3 shortwall machs.

PP—Power purchased. Transformer 6600 to 2200 volts, M. G. Sets, 250 volts D. C., 3 pumps.

EMP—150. Daily tonnage 600.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Gravity Screens.

Barnett No. 2 Mine; Drift; Pittsburgh Seam, 72 in. thick.

PO—Milwood, Pa.; SP—Same; CTY—Westmoreland; RR—P. C. & R.

MS—L. C. Thomas, Milwood, Pa.

S of H—Mules. Track gage 36 in.

S of M—Hand.

EMP—50. Last years tonnage 50,000.

SIZES SHIPT—Run of Mine.

BARRETT COAL COMPANY

General Office, Clearfield, Pa.

GM—M. E. Troxell, Clearfield, Pa.

Barrett Mine; Drift; D and C Seams, 46 in. thick.

PO—Clearfield, Pa.; SP—Same; CTY—Clearfield; RR—Penna.

S of H—Mules.

S of M—Hand.

SIZES SHIPT—Run of Mine.

BASIN COAL COMPANY

General Office, Fayette City, Pa.

PR—F. O. Dewar, Fayette City, Pa.

VP—Guy W. Brown, Fayette City, Pa.

TR—Guy W. Brown, Fayette City, Pa.

GM—Alexander Bonay, Fayette City, Pa.

GS—Edw. Brakewell, Fayette City, Pa.

PA—Alexander Bonay, Fayette City, Pa.

SA—Alexander Bonay, Fayette City, Pa.

Basin Mine; Drift; Pittsburgh Vein Seam; 95 inches thick.

PO—Fayette City, Pa.; SP—Same; CTY—Fayette; RR—P. & L. E.

S of H—Mules and electric loco. Track gage 44 inches.

S of M—Shortwall mach.

PP—Power purchased.

EMP—30.

SIZES SHIPT—Run of Mine.

NOTE—Operations practically exhausted.

BAXTER COAL COMPANY

General Office, Kittanning, Pa.

PR—John A. Fox, Kittanning, Pa.

VP—L. E. Stitt, Kittanning, Pa.

TR—H. E. Moesta, Kittanning, Pa.

GM—Henry E. Moesta, Kittanning, Pa.

GS—Henry E. Moesta, Kittanning, Pa.

PA—H. E. Moesta, Kittanning, Pa.

EM—Frank Stewart, Kittanning, Pa.

Baxter Mine; Drift; Lower Kittanning Seam, 44 inches thick.

PO—Kittanning, Pa.; SP—Same; CTY—Armstrong; RR—Penna.

MS—L. D. Stitt, Kittanning, Pa.

S of H—Mules and locos. Track gage 30 inches.

S of M—Shortwall machs.

PP—Power purchased, 2 pumps.

EMP—39. Daily output, 125 tons.

SIZES SHIPT—Run of Mine.

BAYLOR COAL MINING COMPANY

General Office, Huntingdon, Pa.

PR—E. P. Baylor, Hampton, N. J.

TR—E. P. Baylor, Hampton, N. J.

SECY—Warren W. Jones, Huntingdon, Pa.

GM—E. G. Jones, Huntingdon, Pa.

GS—E. G. Jones, Huntingdon, Pa.

PA—E. P. Baylor, Hampton, N. J.

EM—C. E. Benson, Huntingdon, Pa.

SA—E. P. Baylor, Hampton, N. J.

Fulton No. 1 Mine; Drift; Fulton Seam; 72 inches thick.

PO—Huntingdon, Pa.; SP—Dudley, Pa.; CTY—Bedford; RR—H. & B. T. M.

S of H—Mules, rope. Track gage 36 inches.

S of M—Hand.

PP—1 fire tube boiler 35 H. P.

EMP—25. Daily tonnage 100.

SIZES SHIPT—Run of Mine.

Formerly operated by Coalmont Coal Co.

BEACHLY COAL COMPANY

General Office, Johnstown, Pa.

PR—Andrew B. Crichton, Johnstown, Pa.

TR—H. A. Crichton, Johnstown, Pa.

GM—H. A. Crichton, Johnstown, Pa.

GS—John Auld, Portage, Pa.

PA—H. A. Crichton, Johnstown, Pa.

EM—A. B. Crichton, Johnstown, Pa.

SCO—Portage Mercantile Co., Buyer, John J. Shaw, Johnstown, Pa.

SA—Johnstown Coal & Coke Co., Johnstown, Pa.

Beachly No. 1 Mine; Slope; Moshannon or "D" Seam; 42 inches thick.

PO—Portage, Pa.; SP—Same; CTY—Cambria; RR—P. R. R.

S of H—Mules, rope, elec. hoists, 1 storage battery loco. Track gage 36 inches.

S of M—Hand.

S of M—2 shortwall machs.

PP—Purchase power. 1 fire tube boiler, 100 H. P., gen. units, 440 volts A. C., 1 pump.

EMP—90. Last years tonnage 74,060.

SIZES SHIPT—Run of Mine.

Beachly No. 3 Mine; Drift; "E" Seam; 48 inches thick.

PO—Portage, Pa.; SP—Same; CTY—Cambria; RR—P. R. R.

S of H—Mules. Track gage 36 inches.

S of M—Hand.

PP—Power purchased. 440 volts A. C.

EMP—12. Last years tonnage 77,464.

SIZES SHIPT—Run of Mine.

Beachly No. 4 Mine; Drift; Upper Freeport or "E" Seam; 48 inches thick.

PO—Portage, Pa.; SP—Same; CTY—Cambria; RR—P. R. R.

S of H—Mules. Track gage 36 inches.

S of M—Hand.

PP—Power purchased. 220 volts A. C.

EMP—12. Last years tonnage 18,999.

SIZES SHIPT—Run of Mine.

Beachly No. 6 Mine; Slope; Moshannon or "D" Seam; 42 inches thick.

PO—Portage, Pa.; SP—Same; CTY—Cambria; RR—P. R. R.

S of H—Mules and rope. Track gage 36 inches.

S of M—2 shortwall machs.

PP—Power purchased. 440 volts A. C.

EMP—50. Last years tonnage 28,550.

SIZES SHIPT—Run of Mine.

Beachly No. 7 Mine; Drift; D and E Seams, 42 to 48 in. thick.

PO—Portage, Pa.; SP—Same; CTY—Cambria; RR—P. R. R.

S of H—Mules, rope, one 10-ton elec loco. Track gage 36 in.

S of M—Hand.

PP—Power purchased, D. C.

EMP—10. Last years tonnage 1,938.

SIZES SHIPT—Run of Mine.

BEACON COAL COMPANY.

General Office, Fallen Timber, Pa.

PR—C. H. Worster, Boston, Mass.

TR—H. F. Vickery, Boston, Mass.

GM—B. A. McDonnell, Fallen Timber, Pa.

GS—B. A. McDonnell, Fallen Timber, Pa.

PA—B. A. McDonnell, Fallen Timber, Pa.

EM—E. H. Cable, Fallen Timber, Pa.

EE—Jas. Hartley, Fallen Timber, Pa.

Peerless No. 1 Mine; Drift "E" Seam, 34 in. thick.

PO—Fallen Timber, Pa. SP—Van Ormer, Pa. CTY—Cambria. RR—P. R. R.

MS—A. W. Britten, Fallen Timber, Pa.

S of H—Mules and 1 trolley pole type elec. loco. Track gage, 36 in.

EMP—140. Last fiscal year output, 75,000 tons.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT.—Bar Screens.

Peerless No. 2 Mine; Drift; "D" Seam, 34 in. thick.

PO—Fallen Timber, Pa. SP—Van Ormer, Pa. CTY—Cambria. RR—P. R. R.

MS—A. W. Britten, Fallen Timber, Pa.

S of H—4 trolley pole type electric loco. Track gage, 36 in.

S of M—5 shortwall machs.

PP—1 return tubular boiler, total 500 H. P., 1 200 K. W. gen. unit, 230

volts D. C., 2 pumps.

EMP—135. Last fiscal year output, 82,000 tons.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT.—Bar Screens.

BEACON HILL COAL CO

General Office, 1510 First Natl Bank Bldg., Uniontown, Pa.

PR—T. S. Inorley, Uniontown, Pa.

VP—John C. Shaw, Uniontown, Pa.

TR—G. Carl Auford, Uniontown, Pa.

GM—John C. Shaw, Uniontown, Pa.

PA—John C. Shaw, Uniontown, Pa.

Riverside Mine; Drift; Brookville Seam, 5 ft. thick.

PP—Purchase power. Transformer 250 volts A. C. G. Sets, Rotary Converters, 250 volts D. C.

Last years tonnage 50,000.

SIZES SHIPT—Run of Mine.

BEADLE & McCaULEY COAL CO.

TR—C. R. McCauley, Brockwayville, Pa.

GM—C. R. McCauley, Brockwayville, Pa.

GS—C. R. McCauley, Brockwayville, Pa.

PA—R. W. Raddle, Brockwayville, Pa.

EM—Reese Hafner, Kittanning, Pa.

SCO—Beadle & Co., Buyer, R. W. Beadle, Brockwayville, Pa.

Beadle & McCauley Mine; Drift; Freeport Seam, 38-40 inches thick.

PO—Brockwayville, Pa.; SP—Same; CTY—Jefferson; RR—Penna.

MS—Alex Stewart, Brockwayville, Pa.

SM—R. W. Warr n, Brockwayville, Pa.

S of H—Elec. loco. Track gage 36 in.

S of M—Shortwall machs.

PP—2 fire tube boilers, 125 H. P., 250 K. W. gen. units, 1 pump.

EMP—25. Daily tonnage 800.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens, Pickling Tables.

BEAL COAL COMPANY

General Office, 501 Union Trust Bldg., Uniontown, Pa.

PR—George Whyel, Uniontown, Pa.

TR—George Whyel, Uniontown, Pa.

GM—George Whyel, Uniontown, Pa.

GS—L. S. Holland, Uniontown, Pa.

SA—Pioneer Coal & Coke Co., Uniontown, Pa.

Beal Mine; Drift; Pittsburgh Seam, 108 inches thick.

PO—Rivers, Pa.; SP—Beal Siding, Beaver, Pa.; CTY—Fayette; RR—P. R. R. Monon. Div.

S of H—Mules.

S of M—Hand.

PP—Power purchased, 550 volts D. C.

EMP—30. Last years tonnage 40,179.

SIZES SHIPT—Run of Mine.

BEAR ROCK COAL COMPANY.

General Office, Lilly, Pa.

OWNER—John Leabey, Lilly, Pa.

GM—H. M. Leabey, Lilly, Pa.

CE—J. S. Silliman & Co., Altoona, Pa.

SCO—M. M. Leabey, Buyer, M. A. Leabey, Lilly, Pa.

Bear Rock Colly No. 1; Drift and Slope, "B" Seam, 48 in. thick.

PO—Lilly, Pa.; SP—Same; CTY—Cambria; RR—Penna.

MS—Edw. W. Leabey, Lilly, Pa.

S of H—Mules, rope and 1 steam loco. Track gage, 36 in.

S of M—Hand.

PP—2 50 H. P. water tube boilers, 1 steam pump.

EMP—42. Last years tonnage 13,663.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.

Bear Rock Colly No. 3; Drift; "B" Seam, 52 in. thick.

PO—Lilly, Pa.; SP—Same; CTY—Cambria; RR—Penna.

MS—J. A. Leabey, Lilly, Pa.

S of H—Mules and rope. Track gage, 36 in.

S of M—Hand.

EMP—23. Last years tonnage 16,607.

SIZES SHIPT—Run of Mine.

BEAR RUN COAL MINING COMPANY

General Office, Fulton Bldg., Osceola Mills, Pa.

PR—C. S. Harkins, Osceola Mills, Pa.

VP—H. G. Danner, Osceola Mills, Pa.

TR—H. A. McCordell, Os

BEAVER COAL & COKE CO.
PR—G. L. Patterson, New Castle, Pa.
TR—K. C. Patterson, " "
GS—C. M. Harvey, Wampum, Pa.
PA—C. M. Harvey, " "
CE—G. R. Zahnizer, New Castle, Pa.
Sales Agents, R. A. Wood Coal Co.,
Cleveland, O.

Beaver Mine No. 6 and 7; Drift; Kittingham Middle Seam, 36 to 42 in. thick.
PO—Wampum, Pa.; SP—Same; CTY—Lawrence; RR—P. R. R., E. & H. Div.
S of H—Mules and 2 elec. locos. Track gauge 37 in.
S of M—Hand, 6 elec. machs.
PP—2 return tubular boilers, total 250 H. P., gen. units, 250 volts D. C., 3 pumps.
EMP—150. Last fiscal year output, 50,000 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.
(Old Information)

BEAVER RUN COAL COMPANY.
General Office, Pennsylvania Bldg., Philadelphia, Pa.
PR—N. D. Cortright, Mauch Chunk, Pa.
VP—H. K. Cortright, Philadelphia, Pa.
TR—W. A. Cortright, Beverly, N. J.
GM—Ivan A. Boucher, Beaverdale, Pa.
GS—A. E. Shannon, Beaverdale, Pa.
PA—Ivan A. Boucher, Beaverdale, Pa.
CE—G. M. Stoker, Johnstown, Pa.
EE—Mike Lamark, Beaverdale, Pa.
SCO—Beaver Stone Co., Buyer, H. L. Hiteman, Beaverdale, Pa.
SA—Cortright Coal Co., Philadelphia, Pa.

Beaver Mine; Drift and Slope; E Seam, 48 in. thick.
PO—Beaverdale, Pa.; SP—Lloydell, Pa.; CTY—Cambria; RR—Penna.
MS—Ivan A. Boucher, Beaverdale, Pa.
S of H—Mules, rope and trolley pole type locos. Track gauge, 36 in.
S of M—1 shortwall mach.
PP—Power purchased transformer 2200-250 volts, M. G. sets, gen. units, 1—150 K. W., 2 water tube boilers, 400 H. P., 4 pumps.
EMP—250. Daily output, 1,000 tons.

Viking Mine; Drift; D Seam, 48 in. thick.
PO—Beaverdale, Pa.; SP—Lloydell, Pa.; CTY—Cambria; RR—Penna.
MS—Ivan A. Boucher, Beaverdale, Pa.
SM—H. W. Black, Beaverdale, Pa.
S of H—Mules and trolley pole type locos. Track gauge, 36 in.
S of M—Shortwall machs.
PP—Power purchased transformer 2200-250 volts, M. G. sets, 250 volts D. C., 1 pump.
EMP—125. Last fiscal year output, 225,000 tons.
SIZES SHIPT—Run of Mine, Slack, Pea.

BECCARIA COAL & COKE CO.
In hands of receiver; plant equipment sold and property not in operation.

BECCARIA COAL COMPANY.
General Office, Indiana, Pa.
PR—J. E. Parnell, Indiana, Pa.
TR—Ruth Watt, Indiana, Pa.
GM—J. E. Parnell, Indiana, Pa.
PA—J. E. Parnell, Indiana, Pa.
EM—Thos. Feiler, Indiana, Pa.
Standard No. 1 Mine; Drift; D Seam, 42 in. thick.
PO—McGees Mills, Pa. SP—Same; CTY—Clearfield; RR—Penna. & N. Br.
MS—Jas. Napier, McGees Mills, Pa.
S of H—Mules. Track gauge 36 inches
S of M—Hand.
EMP—12. Last years tonnage 4,000
SIZES SHIPT—Run of Mine.

BECK & BOALE COAL CO.
General Office, Vandergrift, Pa.
OWNERS—W. R. Beck and J. A. Beale, Vandergrift, Pa.
GM—W. R. Beck, Vandergrift, Pa.
Becks Mine; Drift; Upper Freeport Seam, 44 inches thick.
PO—Vandergrift, Pa.; SP—Same; CTY—Armstrong; RR—P. R. R., Conemaugh Div.
S of H—Mules. Track gauge 36 inches.
S of M—Shortwall machs.
PP—Power purchased transformer 2300-220 volts A. C.
EMP—16. Last years tonnage 19,800
SIZES SHIPT—Run of Mine.

BEE HIVE COAL MINING CO.
General Office, Houtzdale, Pa.
PR—J. E. Madigan, Houtzdale, Pa.
TR—E. G. Madigan, Houtzdale, Pa.
GM—W. L. Gaffney, Houtzdale, Pa.
EM—Harry Shillingford, Osceola Mills, Pa.
Bee Hive No. 1 Mine; Drift; C Prime Seam, 36 in. thick.
PO—Houtzdale, Pa.; SP—Same; CTY—Clearfield; RR—P. R. R.

S of H—Mules. Track gauge 30 in.
S of M—Hand.
Daily tonnage 150.
SIZES SHIPT—Run of Mine.
BELBOSSE COAL CO.
General Office, Smock, Pa.
Belbasse Mine
PO—Belbasse, Pa.; SP—Same; CTY—Fayette; RR—Penna.
No report

BELFAST COAL COMPANY.
General Office, Punxsutawney, Pa.
PR—G. E. Hagstrom, Punxsutawney, Pa.
TR—G. E. Hagstrom, " "
GM—J. W. Larson, " "
PA—J. W. Larson, Gramplan, Pa.
SA—G. E. Hagstrom, Punxsutawney, Pa.
Belfast Mine; Drift; Moshannon Seam, 48 inches thick.
PO—Gramplan, Pa.; SP—Same; CTY—Clearfield; RR—Penna.; Gramplan Br.
MS—J. W. Larson, Gramplan, Pa.
S of H—Mules. Track gauge 30 inches.
S of M—Hand.
PP—2 pumps.
Last years tonnage 9,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

BELL COAL & COKE COMPANY.
General Office, Colonial National Bank Bldg., Connellsville, Pa.
PR—G. Corrado, Connellsville, Pa.
VP—T. R. Francis, Connellsville, Pa.
TR—J. L. Williams, Connellsville, Pa.
GM—G. Corrado, Connellsville, Pa.
GS—H. R. Cunningham, Connellsville, Pa.
PA—P. R. Yoder, Connellsville, Pa.
CE—W. B. Barnhart, Connellsville, Pa.
EE—H. R. Cunningham, Connellsville, Pa.
SA—G. Corrado Coal & Coke Ints., J. J. Ash, Sales Mgr., Connellsville, Pa.
Josephine Mine; Drift; Pittsburgh Bituminous Seam, 96 in. thick.
PO—Smithfield, Pa.; SP—Same; CTY—Fayette; RR—B. & O.
S of H—Mules. Track gauge, 42 in.
S of M—Hand.
EMP—19. Daily output, 250 tons.
SIZES SHIPT—Run of Mine.

BELL RUN COAL COMPANY.
General Office, Clearfield, Pa.
PR—Guy B. Clark, Curwensville, Pa.
VP—Hugh Mallon, Curwensville, Pa.
TR—J. A. Kupka, Curwensville, Pa.
GM—Walter Welch, Clearfield, Pa.
CE—H. McMoran, Philipsburg, Pa.
PA—Walter Welch, Clearfield, Pa.
Bell Run No. 1 Mine; Drift; E Seam, 34 in. thick.
PO—Gramplan, Pa.; SP—Same; CTY—Clearfield; RR—Penna.
MS—P. H. Johnston, Gramplan, Pa.
S of H—Mules and rope. Track gauge, 36 in.
S of M—Hand.
EMP—10. Daily tonnage 50.
SIZES SHIPT—Run of Mine.

BELLE VERNON COKE CO.
Mine worked out.

BELLFIELD COAL & COKE CO.
General Office, 35 Central Trust Bldg., Altoona, Pa.
PR—E. E. Davis, Johnstown, Pa.
TR—F. P. McFarland, Altoona, Pa.
GM—F. P. McFarland, " "
GS—F. P. McFarland, " "
PA—F. P. McFarland, " "
EM—Jos. S. Silliman & Co., " "
Sales Agent, F. P. McFarland, Altoona, Pa.

Bend No. 5 Mine, Slope, Miller Seam, 4 ft. 2 in. to 3 ft. 10 in. thick.
PO—Blandburg, Pa.; SP—Figtart, Pa.; CTY—Cambria; RR—P. R. R., Stroud Branch.
MS—A. L. South, Blandburg, Pa.
S of H—Mules; track gauge 3 ft.
S of M—Hand.
EMP—5. Daily tonnage 125
SIZES SHIPT—Run of Mine.

CELLMORF COAL CO.
General Office, Philipsburg, Pa.
PR—E. E. Kantz, Burnside, Pa.
TR—S. H. Wigton, Philipsburg, Pa.
GM—E. E. Kantz, Burnside, Pa.
GS—E. E. Kantz, " "
PA—S. H. Wigton, Philipsburg, Pa.
Bellmore No. 2 Mine, Drift, "D" Seam, 2 ft. 4 in. to 4 ft. 8 in. thick.
PO—Burnside, Pa.; SP—Same; CTY—Clearfield; RR—N. Y. C.
S of H—Mules; track gauge 3 ft.
S of M—Hand.
EMP—12. Last years tonnage 5843
SIZES SHIPT—Run of Mine.

BELLS MILL COAL CO.
PR—J. W. Campbell, Phila., Pa.
TR—W. H. Smith, Blairsville, Pa.
TR—Wilber P. Craft, Blairsville, Pa.
GM—F. M. Craft, " "
GS—Ernest Fletcher, Saltsburg, Pa.
PA—W. G. Fletcher, Blairsville, Pa.
CE—Albert Smith, Saltsburg, Pa.
Sales Agent, Knickerbocker Fuel Co., New York, N. Y.

Bells Mill; Drift; "R" or L. Kittanning Seam, 3 ft. 8 in. thick.
PO—Blairsville, Pa.; SP—Josephine Pa. CTY—Indiana RR B. & P., P. R. R. Clearfield & Cresson Div.
MS—A. L. Kline, Josephine, Pa.
S of H—2 6 ton and 1 10 ton elec. locos. Track gauge 42 inches.
S of M—4 shortwall machs.
PP—Power purchased, M. G. set, 3 pumps.
EMP—92. Last fiscal year output, 51,771 tons.

BELMONT SMOKELESS COAL COMPANY.
General Office, Acosta, Pa.
PR—E. J. Stern, New York, N. Y.
TR—Thos. A. Courtney, Acosta, Pa.
GM—Thos. A. Courtney, Acosta, Pa.
GS—Thos. A. Courtney, Acosta, Pa.
PA—Thos. A. Courtney, Acosta, Pa.
CE—S. E. Diekey, Johnstown, Pa.
FE—Thos. Owens, Acosta, Pa.
SCO—Daily Supply Co. Buyer, Elmer M. Dailey, Acosta, Pa.
SA—A. W. Hillbrand Co., No. 1 Broadway, New York, N. Y.

Belmont No. 4 Mine; Drift; C Prime Seam, 48 inches thick.
PO—Acosta, Pa.; SP—Boswell, Pa.; CTY—Somerset; RR—B. & O.
S of H—Electric loco. Track gauge 42 inches.
S of M—Hand.
PP—Power purchased Transformer 23,000 to 2,200 volts, 250 volts D. C.
EMP—38. Last fiscal year output, 33,500 tons.
SIZES SHIPT—Run of Mine.

Belmont No. 5 Mine; Drift; Upper Freeport Seam, 52 in. thick.
PO—Acosta, Pa.; SP—Boswell, Pa.; CTY—Somerset; RR—B. & O.
S of H—Mules and elec. loco. Track gauge 42 in.
S of M—Hand.
PP—250 volts D. C., 1 pump.
EMP—20. Daily tonnage 100.
SIZES SHIPT—Run of Mine.

BEN ADHEM COAL COMPANY.
General Office, Brookville, Pa.
PR—T. J. Williams, Brookville, Pa.
TR—T. J. Williams, Brookville, Pa.
GM—T. J. Williams, Brookville, Pa.
GS—John Mur, Sligo, Pa.
PA—T. J. Williams, Brookville, Pa.
EM—Fred Sayer, Brookville, Pa.
SA—C. Campbell, Philadelphia, Pa.

Ben Adhem Mine; Drift; Lower Kittanning Seam, 32 to 42 inches thick.
PO—Sligo, Pa.; SP—Same; CTY—Clarion; RR—Penna. Sligo Branch.
MS—John Mur, Sligo, Pa.
S of H—Mules and incline plane. Track gauge 42 inches.
S of M—1 shortwall mach.
PP—1—100 H. P. tubular boiler, 1—75 H. P. engine, 60 K. W. gen unit 1 pump.
SIZES SHIPT—Run of Mine.

BEN FRANKLIN COAL CO.
General Office, Freeport, Pa.
PR—A. L. Iseman, Freeport, Pa.
TR—A. L. Iseman, Freeport, Pa.
GM—A. L. Iseman, Freeport, Pa.
GS—C. E. Hild, Freeport, Pa.
PA—A. L. Iseman, Freeport, Pa.
CE—D. E. Taylor, Freeport, Pa.
SA—A. L. Iseman, Freeport, Pa.

Braburn Mine; Drift; Upper Freeport Seam, 48-60 in. thick.
PO—Braburn, Pa.; SP—Same; CTY—Westmoreland; RR—Conemaugh Div. P. R. R.
MS—J. E. Wilson, Braburn, Pa.
S of H—3 electric motors. Track gauge, 42 in.
S of M—6 shortwall machs.
PP—Power purchased Transformer 2200 volts A. C., 150 M. G. S. 4, 250 volts D. C.
EMP—87. Daily tonnage 600
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Pickling Tables.

Metcalf Mine; Drift; Upper Freeport Seam, 42-54 in. thick.
PO—Freeport, Pa.; SP—Metcalf, Pa.; CTY—Westmoreland; RR—Penna.
MS—A. Bowers, Freeport, Pa.
S of H—Trolley pole type and 1 electric locos. Track gauge, 42 in.
S of M—4 shortwall machs.
PP—Power purchased Transformer 2200 volts A. C., 250 volts D. C.
EMP—50. Daily tonnage 600
SIZES SHIPT—Run of Mine, Slack, Old information.

BENEDICTINE COAL COMPANY.
General Office, Spangler, Pa.
PR—T. Orlando Helffrich, Spangler, Pa.
VP—George Metzger, Spangler, Pa.
TR—James McLean, Spangler, Pa.
GM—George Metzger, Spangler, Pa.
SA—Watkins Coal Co., Barnesboro, Pa.

Emily Eliza No. 1 Mine; Drift; Moshannon Seam; 43 inches thick.
PO—Spangler, Pa.; SP—Same; CTY—Cambria; RR—Penna.
MS—Walter Lantz, Spangler, Pa.
S of H—Mules. Track gauge 38 inches.
S of M—Hand.
EMP—27. Last years tonnage 24,000
SIZES SHIPT—Run of Mine.

BENNETTS BRANCH COAL COMPANY.
General Office, Clearfield, Pa.
PR—W. H. Miller, R. F. D., Benicette, Pa.
TR—A. L. Moore, Clearfield, Pa.
GM—H. F. Bigler, Jr., Clearfield, Pa.
GS—W. H. Miller, R. F. D., Benicette, Pa.
GS—B. T. Owens, Dents Run, Pa.
PA—H. F. Bigler, Jr., Clearfield, Pa.
EM—B. T. Owens, Dents Run, Pa.
SCO—Willmore Supply Company, Buyer, B. T. Owens, Dents Run, Pa.

Bennetts Branch No. 2 and No. 3 Mines; Drift; Lower Kittanning Seam 36 in. thick.
PO—Dents Run, Pa.; SP—Same; CTY—Lick; RR—P. R. R.
S of H—Mules. Track gauge, 38 in.
S of M—Hand.
PP—6 pumps.
EMP—50. Daily tonnage 300.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.

BENNINGTON COAL COMPANY.
General Office, Altoona, Pa.
PR—E. L. Study, Altoona, Pa.
TR—B. F. MacCartney, Altoona, Pa.
GM—B. F. MacCartney, Altoona, Pa.
GM—M. C. Kelly, Altoona, Pa.
PA—M. C. Kelly, Altoona, Pa.
EM—Fetterman Eng. Co., Johnstown, Pa.

Sugar Run No. 1 and 2 Mine; Drift; D and E Seam, 40 and 48 in. thick.
PO—Gallitzin, Pa.; SP—Same; CTY—Cambria; RR—Penna.
S of H—Mules and 1 elec. loco. Track gauge 36 in.
S of M—Hand and Machine.
EMP—70.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

BENSHOFF COAL CO.
General Office, 139 Wilson St., Johnstown, Pa.
GS—D. F. Benshoff, 139 Wilson St., Johnstown, Pa.
EM—S. E. Diekey & Co., Johnstown, Pa.

Benshoff No. 1 Mine; Drift; "D" Seam, 30 in. thick.
PO—Johnstown, Pa.; SP—Same; CTY—Cambria; RR—Penna.
S of H—Mules. Track gauge, 30 in.
S of M—Hand.
PP—Purchase power for fan. Transformer 120 volts A. C.
EMP—11. Last years tonnage 6,150
SIZES SHIPT—Run of Mine.

BENZINGER COAL COMPANY.
Now West Branch Coal Company.

BERGER-AIKEN COAL COMPANY.
General Office, 1921 Oliver Bldg., Pittsburgh, Pa.
PR—W. L. Berger, Pittsburgh, Pa.
TR—Geo. Z. Hosack, Pittsburgh, Pa.
GS—H. F. B. Swank, Pittsburgh, Pa.
PA—W. L. Berger, Pittsburgh, Pa.

Markleton Mine; Drift; C Prime Seam, 38 in. thick.
PO—Markleton, Pa. SP—Same; CTY—Somerset; RR—W. M.
MS—J. H. Seurfield, Markleton, Pa.
S of H—Mules. Track gauge, 42 in.
S of M—Hand.
PP—Water tube boiler, total 60 H. P.
EMP—50. Daily tonnage 200.
SIZES SHIPT—Run of Mine.

BERKEY BROS. COAL CO.
General Office, Somerset, Pa.
TR—L. C. Berkey, Somerset, Pa.
GM—L. C. Berkey, Somerset, Pa.
GS—S. M. Berkey, Somerset, Pa.
PA—L. C. Berkey, Somerset, Pa.
EM—Geo. Kimm, Somerset, Pa.
SA—L. C. Berkey, Somerset, Pa.

Berkey Mine; Drift; E Seam, 42 in. thick.
PO—Somerset, Pa.; SP—Same; CTY—Somerset; RR—B. & O.
MS—L. C. Berkey, Somerset, Pa.
S of H—Mules. Track gauge, 42 in.
S of M—Hand.
EMP—40. Last years tonnage 20,000
SIZES SHIPT—Run of Mine.
Old information

BERKLEY COAL CO.

General Office, Meyersdale, Pa.
Berkley Mine.
PO—Meyersdale, Pa.; CTY—Somerset;
RR—B. & O.
No report.

BERLIN COAL COMPANY

General Office, Johnstown, Pa.
PR—F. B. Cook, Johnstown, Pa.
VP—J. P. Williams, Johnstown, Pa.
TR—J. M. Griffith, Johnstown, Pa.
GM—H. C. Cook, Johnstown, Pa.
GS—H. C. Cook, Johnstown, Pa.
PA—L. B. Williams, Johnstown, Pa.
Salco Mine; Drift; B Seam, 56 in. thick.
PO—Berlin, Pa. SP—Pen Mar No. 2 Siding, Pa. CTY—Somerset. RR—B. & O., Berlin Br.
S of H—Mules.
S of M—Hand.
(Old Information)

BERMOSHAN COAL COMPANY, INC.

General Office, Fulton, N. Y.
PR—H. L. Paddock, Fulton, N. Y.
VP—F. G. Weeks, Fulton, N. Y.
TR—F. G. Ash, Fulton, N. Y.
GS—Chas. Beirlair, Ramey, Pa.
Bermoshan Nos. 1 and 2 Mines; Drift; Moshannon Seam; 32-54 in. thick.
PO—Ramey, Pa.; SP—Same; CTY—Clearfield; RR—Penna., N. Y. C.
S of H—Mules and 1 motor. Track gage 36 in.
S of M—Hand.
PP—2 pumps.
EMP—80. Daily tonnage 300.
SIZES SHIPT—Run of Mine.

BERNARD MINING COMPANY.

General Office, Osceola Mills, Pa.
PR—Bernard McCane, Osceola Mills, Pa.
TR—J. M. Kenna, Osceola Mills, Pa.
Coal Run No. 1 Mine; Drift; "C" Seam, 32 in. thick.
PO—Osceola Mills, Pa.; SP—Same; CTY—Clearfield; RR—P. R. R.
S of H—Mules. Track gage 30 in.
S of M—Hand.
EMP—12. Last years tonnage 5,680.

BERRESFORD, IKE & COMPANY.

General Office, R. D. No. 3, Box 31, Enon Valley, Pa.
PR—Ike Berresford, Enon Valley, Pa.
Berresford Mine; Drift; No. 6 Seam, 44 in. thick.
PO—Cannelton, Pa.; SP—Same; CTY—Beaver; RR—P. L. & W.
S of H—Mules. Track gage, 32 in.
S of M—Hand.
SIZES SHIPT—Run of Mine.

BERTHA COAL COMPANY.

General Office, 1203 Chamber of Commerce Bldg., Pittsburgh, Pa.
PR—John H. Jones, Pittsburgh, Pa.
VP—Frank A. Gould, Pittsburgh, Pa.
TR—D. C. Eaton, Pittsburgh, Pa.
GM—J. E. Stewart, Pittsburgh, Pa.
GS—H. H. Kallaway, Pittsburgh, Pa.
PA—N. A. Barnhart, Pittsburgh, Pa.
CE—M. H. Gibson, Pittsburgh, Pa.
SCO—Four States Supply Company, Buyer, J. Lloyd Grimon, Pittsburgh, Pa.
SA—Address the Company, Pittsburgh, Pa.
Additional Information on Page 717
Bertha Mine; Drift; Pittsburgh Seam, 8 Seam, 62 to 68 in. thick.
PO—Burgettstown, Pa.; SP—Dinsmore, Pa.; CTY—Washington; RR—P. C. C. & St. L.
MS—F. C. Hunt, Burgettstown, Pa.
SM—J. V. Scott, Burgettstown, Pa.
S of H—Mules and 3 trolley pole type locos. Track gage, 42 in.
S of M—4 chain breast type and 8 short-wall machs.
PP—Power purchased, transformer 6600-2200 volts A. C., 2 M. G. sets, 250 volts D. C., 3 pumps.
EMP—192. Last years tonnage 284,081.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump, Block.
PREP. EQUIPT—Shaker Screens and Loading Booms.

Jean Mine; Drift; Pittsburgh Seam, 60 in. thick.
PO—Burgettstown, Pa.; SP—Dinsmore, Pa.; CTY—Washington; RR—P. C. C. & St. L.
SM—J. V. Scott, Burgettstown, Pa.
S of H—1 trolley pole type and 4 storage battery locos. Track gage 42 in.
S of M—5 shortwall machs.
PP—Power purchased. Transformer 6600-2200 volts A. C., 1 M. G. Set, 250 volts D. C., 4 pumps.
EMP—128. Last years tonnage 139,836.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump, Block.
PREP. EQUIPT—Shaker Screens, Loading Booms.

BERWINDALE COAL CO.

General Office, Clearfield, Pa.
Berwindale No. 1 Mine.
PO—Berwindale, Pa.; CTY—Clearfield; RR—Penna.
No report.

BERWIND WHITE COAL MINING CO.

General Office, Commercial Trust Bldg., Philadelphia, Pa.
PR—E. J. Berwind, No. 1 Broadway, New York, N. Y.
TR—H. C. Middleton, Philadelphia, Pa.
GM—Thos. Fisher, Philadelphia, Pa.
ASST. GM—E. J. Newbaker, Philadelphia, Pa.
Mine Mgr.—Harris Booker, Windber, Pa.
PA—W. W. Whitely, Philadelphia, Pa.
CE—C. W. Parkhurst, Philadelphia, Pa.
EFF. ENG.—C. E. Watts, Windber, Pa.
SUPT. ELEC. DEPT.—C. A. Moore, Windber, Pa.
MM—(Outside) Chas. Weir, Windber, Pa.
MM—(Underground) Jas. Browning, Windber, Pa.
F. MACH. SHOPS—H. G. Lehman, Windber, Pa.
MGR. MINE SUPPLY—J. M. Miller, Windber, Pa.
CHIEF CLERK—Butler Freeman, Windber, Pa.
SUPT. MNG. ENG. DEPT.—D. P. Browning, Windber, Pa.
SUPT. CONSTRUCTION—West Lehman, Windber, Pa.
SCO—Sureka Stores Co. Buyer and Manager, G. A. Smith, Windber, Pa.

Eureka Nos. 30, 31, 39, 42, 35, 36, 37 and 40 Mines; Drifts and Shafts; Miller Seam.
PO—Windber, Pa.; SP—Same; CTY—Somerset and Cambria; RR—Penna.
MS—(30, 31, 39, 42) Geo. Wilkes, Windber, Pa.
MS—(35, 36) Adolf Cook, Windber, Pa.
MS—(37, 40) Mr. Teasdale, Windber, Pa.
S of H—84 haulage motors, 45 gathering motors.
S of M—Chain, longwall and breast machines; room bolsters.
PP—Central Station, 6—823 H. P. boilers, underfeed stokers, coal crushing conveying and storage bins, 2—5000 K. W. 6600 volts, 3 phase 25 cycles; turbine; condensers; spray pond cooling system; turbine-driven feed pumps; 260 mines pumps, sub stations equipped with 400 K. W. rotary converters, 550 volts D. C.

Eureka Mines Nos. 28 and 29; Shafts; "B" or Miller Seam; 48 in. thick.
PO—Houtzdale, Pa.; SP—Same; CTY—Clearfield; RR—P. R. R., Tyrone Div.
MS—W. R. Cameron, Houtzdale, Pa.
S of H—Elec., loco; track gage 36 in.
S of M—Elec. mach.
PP—Gen. units, 500 volts D. C.

BESS-ETTA COAL COMPANY.

General Office, 573 Union Arcade, Pittsburgh, Pa.
PR—M. M. Griest.
TR—W. H. Pratt.
GM—M. M. Griest.
PA—M. M. Griest, 573 Union Arcade, Pittsburgh, Pa.
Bess-Etta Mine; Drift; Pittsburgh Vein; 66 in. thick.
PO—Walkers Mill, Pa. (PO not yet established); SP—Same; CTY—Allegheny; RR—P. C. C. & St. L.
MS—Arch Robertson, Renegade, Pa.
S of H—Mules. Track gage, 42 in.
S of M—2 shortwall machs.
PP—Power purchased.
EMP—75. Last fiscal year output, 70,000 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

BESSEMER COAL COMPANY

General Office, Houtzdale, Pa.
GM—John B. McGrath, Houtzdale, Pa.
GS—James King, Brishin, Pa.
Bessemer Mine; Drift; "E" Seam, 36 in. thick.
PO—Houtzdale, Pa.; SP—Brishin, Pa.; CTY—Clearfield; RR—Penna.
S of H—Mules. Track gage 30 in.
S of M—Hand.
EMP—50. Daily tonnage 150.
SIZES SHIPT—Run of Mine.

BETHLE COAL MINING COMPANY

General Office, Ebensburg, Pa.
PR—W. C. Shiffer, Ebensburg, Pa.
VP—H. G. Difenderfer, Beaverdale, Pa.
TR—J. B. Shiffer, Ebensburg, Pa.
GS—J. B. Shiffer, Ebensburg, Pa.
EM—H. F. Dorr, Ebensburg, Pa.
Bethel Mine; Drift; D or Lower Freeport Seam; 42 in. thick.
PO—Expedit, Pa.; SP—Twin Rocks, Pa.; CTY—Cambria; RR—C. & I.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—Purchase power. 1 fire tube boiler.
75 H. P.
SIZES SHIPT—Run of Mine.

BETHLEHEM MINES CORPORATION

General Office, Bethlehem, Pa.
PR—C. A. Buck, Bethlehem, Pa.
TR—E. B. Hill, Bethlehem, Pa.
MGR OF COAL MINES—K. R. Jones, Hellwood, Pa.
PA—W. M. Tobias, Bethlehem, Pa.
CE—W. S. Bourlier, Bethlehem, Pa.
EM—K. M. Quickel, Hellwood, Pa.
EE—B. C. Ford, Hellwood, Pa.
SCO—Service Stores Corp., Buyer, J. R. Duncan, Hellwood, Pa.
SA—E. S. Knisely, Bethlehem, Pa.
Penn-Mary No. 1 Mine; Drift; D or Lower Freeport Seam, 40-44 in. thick.
PO—Hellwood, Pa.; SP—Same; CTY—Indiana; RR—Penna.
MS—B. E. Abrams, Hellwood, Pa.
S of H—3 trolley pole type locos. Track gage, 42 in.
S of M—3 shortwall machs. and 6 electric punchers.
PP—6 300 H. P. water tube boilers, 5 gen. units, 250 volts D. C., 7 pumps.
EMP—103. Last fiscal year output, 121,904 tons.
SIZES SHIPT—Run of Mine.

Penn-Mary No. 2 Mine; Drift; D or Lower Freeport Seam, 40-44 in. thick.
PO—Hellwood, Pa.; SP—Same; CTY—Indiana; RR—Penna.
MS—R. E. Abrams, Hellwood, Pa.
S of H—5 trolley pole type locos. Track gage, 42 in.
S of M—2 electric punchers and 5 short-wall machs.
PP—1 150 H. P. water tube boiler, 3 300 K. W. gen. units, 250 volts D. C., 5 pumps.
EMP—124. Last fiscal year output, 142,242 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens, Picking Tables.

Penn-Mary No. 3 Mine; Slope; D or Lower Freeport Seam, 40-44 in. thick.
PO—Hellwood, Pa.; SP—Same; CTY—Indiana; RR—Penna.
MS—R. E. Abrams, Hellwood, Pa.
S of H—3 trolley pole type locos. Track gage, 42 in.
S of M—2 shortwall machs.
PP—250 volts D. C., 4 pumps. Power from central station.
EMP—58. Last fiscal year output, 51,114 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens, Picking Tables.

Penn-Mary No. 7 Mine; Drift; D or Lower Freeport Seam, 40-44 in. thick.
PO—Hellwood, Pa.; SP—Same; CTY—Indiana; RR—Penna.
MS—R. E. Abrams, Hellwood, Pa.
S of H—3 trolley pole type locos. Track gage, 36 in.
S of M—6 electric punchers and 7 short-wall machs.
PP—1 300 K. W. gen. unit, 250 volts D. C., 8 pumps.
EMP—145. Last fiscal year output, 153,813 tons.
SIZES SHIPT—Run of Mine.

Penn-Mary No. 8 Mine; Drift; D or Lower Freeport Seam, 40-44 in. thick.
PO—Hellwood, Pa.; SP—Same; CTY—Indiana; RR—Penna.
MS—R. E. Abrams, Hellwood, Pa.
S of H—3 trolley pole type locos. Track gage, 42 in.
S of M—3 shortwall machs.
PP—250 volts D. C. Power from central station.
EMP—72. Last fiscal year output, 36,338 tons.
SIZES SHIPT—Run of Mine.

Penn-Mary No. 9 Mine; Drift; D or Lower Freeport Seam, 40-44 in. thick.
PO—Hellwood, Pa.; SP—Same; CTY—Indiana; RR—Cambria & Indiana.
MS—R. E. Abrams, Hellwood, Pa.
S of H—4 trolley pole type locos. Track gage 36 in.
S of M—4 shortwall machs.
PP—Power purchased. Transformer 6,600 to 2,200 volts A. C., 2—100 K. W. M. G. sets, 250 volts D. C., 10 pumps.
EMP—75. Last years tonnage 80,911.
SIZES SHIPT—Run of Mine.

Penn-Mary Nos. 11 and 12 Mines; Drift and Slope; D or Lower Freeport Seams, 40-44 in. thick.
PO—Hellwood, Pa.; SP—Same; CTY—Indiana; RR—Cambria & Indiana.
MS—R. E. Abrams, Hellwood, Pa.
S of H—2 trolley pole type locos. Track gage, 42 in.

S of M—6 shortwall machs.
PP—Power purchased, transformer 22,000-2200 volts A. C., 2 450 K. W. rotary converters, 250 volts D. C., 10 pumps.
EMP—126. Last fiscal year output, 74,863 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens, Picking Tables.

BETTY COAL & FIRE CLAY COMPANY

General Office, Brishin, Pa.
PR—E. C. Poorman, Brishin, Pa.
VP—W. H. Goued, Brishin, Pa.
TR—T. V. Goued, Brishin, Pa.
PA—T. V. Goued, Brishin, Pa.
Burley No. 1 Mine; Drift; B Seam, 48 inches thick.
PO—Brishin, Pa.; SP—Same; CTY—Clearfield; RR—Penna.
MS—Russell Kiphont, Brishin, Pa.
S of H—Mules.
S of M—Hand.
EMP—10. Last years tonnage 3,000.
SIZES SHIPT—Run of Mine.

BETZ COAL MINING CO.

General Office, Penn Bldg., Philadelphia, Pa.
PR—John F. Betz, 3rd, Philadelphia, Pa.
TR—Roberts Lowrie.
Betz No. 2 Mine, Drift, "B" Seam, 4 to 5 ft. thick.
PO—Madera, Pa.; SP—Same; CTY—Clearfield; RR—Penna.
S of H—Mules and elec. loco.
S of M—8 comp. air punchers.
PP—2 Return tubular boilers, total 200 H. P., 1 gen. unit, 1 comp.
EMP—75. Last years tonnage 67,000.
SIZES SHIPT—Run of Mine.

BIG BEND COAL MINING CO.

General Office, 1410 R. E. Trust Bldg., Philadelphia, Pa.
PR—Theron L. Crane, Philadelphia, Pa.
TR—Wm. S. Wiling.
GM—Jos. W. Harrison, Expedt, Pa.
GS—Jos. W. Harrison.
PA—Jos. W. Harrison.
EE—John Cohern, Expedt, Pa.
Sales Agents Pilling & Craoe, Phila. Pa.
Nonpareil No. 1 Mine, Drift, Lower Kittanning Seam, 3.08 to 3.10 ft. thick.
PO—Expedt, Pa.; SP—Twin Rocks, Pa.; CTY—Cambria; RR—P. R. R., Black Lick Br., Crescen Div.
S of H—Trolley pole type locos.
S of M—10 electric and 3 chain breast type machs.
PP—Power purchased, transformer 2200-250 volts M. G. sets, 250 volts D. C., 9 pumps.
EMP—150. Last fiscal year output, 100,000 tons.
SIZES SHIPT—Run of Mine.
Old information.

BIGELOW RUN COAL COMPANY

General Office, Philipsburg, Pa.
TR—Chas. H. Wilson, Philipsburg, Pa.
GM—Chas. H. Wilson, Philipsburg, Pa.
GS—Chas. H. Wilson, Philipsburg, Pa.
PA—Chas. H. Wilson, Philipsburg, Pa.
SA—Chas. H. Wilson, Philipsburg, Pa.
Bigelow Run No. 1 Mine; Drift; B Seam, 44 inches thick.
PO—Philipsburg, Pa.; SP—Same; CTY—Center; RR—Penna.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—Power purchased. Transformer 2,200 to 220 volts A. C.
EMP—35. Last years tonnage 13,000.
SIZES SHIPT—Run of Mine.

BIGLEY COAL COMPANY

General Office, Dravosburg, Pa.
TR—G. C. Bigley, Dravosburg, Pa.
EM—G. C. Bigley, Dravosburg, Pa.
SA—G. C. Bigley, Dravosburg, Pa.
Bigley Mine; Drift; Pittsburgh Seam, 78 in. thick.
PO—Dravosburg, Pa.; SP—Frt., Guffey, Pa., Exp., Scott Haven, Pa.; CTY—Westmoreland; RR—B. & O.
MS—T. M. Skillen, Dravosburg, Pa.
S of H—Mules, gasoline and steam locos. Track gage 40 in.
S of M—Hand.
EMP—15. Daily tonnage 100.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.
Old information.

BIG RUN COAL CO.

General Office, Big Run, Pa.
Big Run Mine.
PO—Big Run, Pa.; CTY—Jefferson; RR—B. R. & P.
No report.

BINDER BROS. COAL COMPANY

General Office, Hastings, Pa.
PR—H. G. Kirk, Hastings, Pa.
VP—E. M. Binder, Hastings, Pa.
TR—L. L. Binder, Hastings, Pa.
GM—H. G. Kirk, Hastings, Pa.
GS—L. L. Binder, Hastings, Pa.
PA—L. L. Binder, Hastings, Pa.
CE—L. J. Pfeister, Spangler, Pa.
EM—Albert Sward, Hastings, Pa.

Binder Bros. Nos. 1 and 2 Mines; Drift; "B" and "E" Seams, 52 and 42 in. thick.
PO—Hastings, Pa.; SP—Same; CTY—Cambria; RR—Penna.
MS—Albert Sward, Hastings, Pa.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—Power purchased. Transformer, 2,300 volts A. C.
EMP—70. Daily tonnage 200.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Loading Booms.

BINDER COAL MINING COMPANY.

PR—E. M. Binder, Barnesboro, Pa.
TR—C. C. Adams, Carrolltown, Pa.
GM—James F. Green, Carrolltown, Pa.
PA—James F. Green, Carrolltown, Pa.
CE—Isadore Pfeister, Spangler, Pa.
EM—Scott Green, Elmora, Pa.
Sales Agency, Spring Coal Co., 50 Congress St., Boston, Mass.

Binder No. 1 Mine; Drift; B Seam, 42 in. thick.
PO—Carrolltown, Pa. SP—Carrolltown Road, Pa. CTY—Cambria. RR—Penna.
MS—James F. Green, Carrolltown, Pa.
S of H—Storage battery loco. Track gage, 36 in.
S of M—Hand.
PP—Gen. units, 220 volts. A. C. Purchase power.
EMP—55. Last fiscal year output, 40,000 tons.
SIZES SHIPT—Run of Mine.

Binder No. 2 Mine; Drift; D Seam, 54 in. thick.
PO—Carrolltown, Pa. SP—Carrolltown Road, Pa. CTY—Cambria. RR—Penna.
MS—James F. Green, Carrolltown, Pa.
S of H—1 electric motor.
S of M—Hand.
Last fiscal year output, 40,000 tons.
SIZES SHIPT—Run of Mine.
(Old information)

BIRD COAL CO.

General Office, 718 Harrison Bldg., Philadelphia, Pa.

Bird No. 1 Mine; Slope; C. Prime Seam, 60-66 in. thick.
PO—Kings, Pa.; SP—Same; CTY—Cambria; RR—B. & O.
S of H—Mules and elec. loco. Track gage 42 in.
S of M—Hand.
PP—B-turn tubular boilers, gen. units, 250 volts D. C.
SIZES SHIPT—Run of Mine.
No report

BLACK, A. J. COAL COMPANY, THE.

General Office, Broad Top City, Pa.
PR—N. W. Black, Broad Top City, Pa.
TR—N. W. Black, Broad Top City, Pa.
GM—N. W. Black, Broad Top City, Pa.
PA—G. D. Black, Broad Top City, Pa.
CE—Frank Dinker, Broad Top, Pa.
EM—Robuster, Philipsburg, Pa.
SCO—Address the Company. Buyer, T. H. Black, Broad Top, Pa.
SA—Maderia Hill & Co., North American Bldg., Philadelphia, Pa.

Black No. 3 Mine; Drift; Fulton Seam, 60 in. thick.
PO—Broad Top, Pa.; SP—Dudley, Pa.; CTY—Huntingdon; RR—H. B. T. M.
S of H—Mules and gasoline locos. Track gage, 36 in.
S of M—Hand.
PP—Power purchased, 1-100 K. W. gen. units, 250 volts D. C., 4 pumps.
EMP—90. Last years tonnage 6,500.
SIZES SHIPT—Run of Mine.

Black No. 4 Mine; Drift; Barnett Seam, 32 in. thick.
PO—Broad Top, Pa.; SP—Dudley, Pa.; CTY—Huntingdon; RR—H. B. T. M.
S of H—Mules. Track gage 36 in.
S of M—Hand.
EMP—8. Last years tonnage 4,000.
SIZES SHIPT—Run of Mine.

Black No. 5 Mine; Drift; Barnett Seam, 38 in. thick.
PO—Broad Top, Pa.; SP—Dudley, Pa.; CTY—Huntingdon; RR—H. and B. T. M.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
PP—100 K. W. gen. units, 250 volts D. C.
EMP—7. Last years tonnage 3,500.
SIZES SHIPT—Run of Mine.

Black Nos. 7 and 8 Mines; Drift; Fulton Seam, 66 in. thick.
PO—Broad Top, Pa.; SP—Dudley, Pa.; CTY—Huntingdon; RR—H. B. T. M.
S of H—Mules.
EMP—32. Last years tonnage 12,000.
SIZES SHIPT—Run of Mine.

Fisher No. 2 Mine; Drift; Barnett Seam, 30 in. thick.
PO—Broad Top, Pa.; SP—Dudley, Pa.; CTY—Huntingdon; RR—H. and B. T. M.
S of H—Mules.
S of M—Hand.
PP—1 pump.
EMP—6. Last years tonnage 1,800.
SIZES SHIPT—Run of Mine.

BLACK OAK COAL CO.

General Office, Osceola Mills, Pa.
Olympia Mine
PO—Osceola Mills, Pa.; CTY—Clearfield; RR—P. & S. and Penna.
No report.

BLACK TOP COAL COMPANY

General Office, 231 Woodward Bldg., Washington, D. C.
Managing Partner, C. Seiden, Jr., Washington, D. C.
GM—C. Seiden, Jr., Washington, D. C.
GS—Walter Heugard, Rockwood, Pa.
EM—Geo. Wheeling, Rockwood, Pa.
SA—Hall Bros. & Co., Baltimore, Md.

Black Top Mine; Drift; E Seam, 36 inches thick.
PO—Rockwood, Pa.; SP—Same; CTY—Somerset; RR—W. Md.
S of H—Mules. Track gage 42 in.
S of M—Hand.
PP—Power purchased. M. G. Sets, 2 pumps.
EMP—30. Last years tonnage 29,897.
SIZES SHIPT—Run of Mine.
Note—Formerly operated by the Pure Coal Co.

BLAIR BROS. COAL CO.

General Office, Tyrone, Pa.
PR—C. F. Blair, Tyrone, Pa.
VP—L. B. Blair, Tyrone, Pa.
TR—H. C. Blair, Tyrone, Pa.
GM—H. C. Blair, Tyrone, Pa.
GS—L. B. Blair, Tyrone, Pa.
PA—H. C. Blair, Tyrone, Pa.
EM—P. Womelsdorf, Philipsburg, Pa.

Orient No. 3 Mine; Drift; Clarion "A" Seam, 48 inches thick.
PO—Powellton, Pa.; SP—Sandy Ridge, Pa.; CTY—Centre; RR—Penna.
MS—S. D. Hainley, Osceola Mills, Pa.
S of H—Mules and gravity. Track gage 36 in.
S of M—Hand.
EMP—25. Last fiscal year output, 40,000 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Marcus Screens.

BLAIR COAL CO.

General Office, Indiana, Pa.
PR—David Blair, Indiana, Pa.
TR—J. S. Blair, Indiana, Pa.
GM—David Blair, Indiana, Pa.
GS—H. G. Smith, Kregar, Pa.
PA—J. S. Blair, Indiana, Pa.
EM—W. H. Matthews, Ligonier, Pa.
SA—David Blair, Indiana, Pa.

Kregar Mine; Drift; Miller Seam, 42 in. thick.
PO—Kregar, Pa.; SP—Jones Mills, Pa.; CTY—Westmoreland; RR—I. C. V. to B. & O.
S of H—Mules. Track gage, 42 in.
S of M—Hand.
PP—1 80 H. P. fire tube boiler.
EMP—20.
SIZES SHIPT—Run of Mine.

BLAIR-CAMBRIA COAL CO.

Out of business.

BLANCHARD COAL COMPANY

General Office, 426 Fulton Bldg., Pittsburgh, Pa.
PR—R. P. McClellan, Irwin, Pa.
VP—H. E. Cole, Pittsburgh, Pa.
TR—F. H. Robinson, Pittsburgh, Pa.
GM—Wm. G. Blanchard, Pittsburgh, Pa.
PA—J. W. Reges, 426 Fulton Bldg., Pittsburgh, Pa.
EM—Wm. G. Blanchard, Pittsburgh, Pa.
SA—Blanchard Coal Co., Pittsburgh, Pa.

Blanchard No. 1 Mine; Stripping; Pittsburgh Seam, 90 in. thick.
PO—Wyano, Pa.; SP—Same; CTY—Westmoreland; RR—P. R. R.
MS—P. W. Rainier, Wyano, Pa.
S of H—Steam locos. Track gage 36 in.
S of M—Stripping.
PP—Power purchased. Transformer 6,600 to 440 volts A. C.
EMP—40. Last years tonnage 104,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
PREP. EQUIPT—Bar Screens, Picking Tables.

BLAND, ERED, JR.

General Office, Blandburg, Pa.
PR—Fred Bland, Jr., Blandburg, Pa.
GM—Fred Bland, Jr., Blandburg, Pa.
PA—Fred Bland, Jr., Blandburg, Pa.

Bland Nos. 1 and 2 Mines; C Prime and B Seams, 21 1/2 in. thick.
PO—Blandburg, Pa.; SP—Fagart, CTY—Cambria; RR—Penna.; Bellwood, Division.
MS—Fred Bland, Jr., Blandburg, Pa.
S of H—Mules.
S of M—Hand.
EMP—31. Last years tonnage 20,000.
SIZES SHIPT—Run of Mine.

BLAND, L. B.

General Office, Bellwood, Pa.
OPERATOR—L. B. Bland, Bellwood, Pa.
GM—L. B. Bland.

Bland Colliery No. 3; Drift; C Prime Seam; 30 in. thick.
PO—Bellwood, Pa.; SP—Lloydsville, Pa.; CTY—Blair; RR—P. N. W.
S of H—Mules. Track gage 36 in.
S of M—Hand.
EMP—25. Last fiscal year output, 15,174 tons.
SIZES SHIPT—Run of Mine.

BLOOM, KELLY O.

General Office, Curwensville, Pa.
OPERATOR—Kelly O. Bloom, Curwensville, Pa.
GS—K. W. Bloom, Curwensville, Pa.
PA—K. W. Bloom, Curwensville, Pa.
EM—A. K. Bloom, Curwensville, Pa.

Bloom Mine; Drift; Meshannon Seam, 10-42 in. thick.
PO—Curwensville, Pa.; SP—Same; CTY—Clearfield; RR—B. & P.
S of H—Mules and gasoline loco. Track gage 30 in.
S of M—Hand.
PP—1 pump.
EMP—20. Daily tonnage 60.
SIZES SHIPT—Run of Mine.

BLOSSBURG COAL CO.

General Office, Scranton, Pa.
PR—W. A. May, Scranton, Pa.
TR—F. W. Wright, Scranton, Pa.
GS—E. W. Robertson, Dubois, Pa.
PA—W. R. Collins, New York, N. Y.
EM—J. H. Nagle, Dubois, Pa.

Nos. 1, 2, 5, & Maple Hill Mine; Drift; Blossburg Seam, 2 1/2 to 5 ft. thick.
PO—Arnot, Pa.; SP—Same; CTY—Tioga; RR—Erie, Tioga Div.
MS—R. E. Logan, Arnot, Pa.
S of H—2 elec., 3 steam locos., and mules; track gage 26 and 36 in.
S of M—Hand.
PP—5 R turn tubular boilers, total 550 H. P., 1 gen. unit, 250 volts D. C.
EMP—512. Last years tonnage 188,975.

BLOSS VEIN COAL COMPANY, INC.

General Office, Geneva, N. Y.
PR—W. B. Haefner, Auburn, N. Y.
VP—E. H. Palmer, Geneva, N. Y.
TR—H. L. Coleman, Geneva, N. Y.
GM—H. L. Coleman, Geneva, N. Y.
GS—D. B. Coleman, Blossburg, Pa.

Bloss Vein Mine Drift; Seam, 46 in. thick.
PO—Blossburg, Pa.; SP—Same; CTY—Tioga; RR—N. Y. C. and Erie.
MS—John Brooks, Blossburg, Pa.
S of H—Mules, gasoline locos. Track gage 30 in.
S of M—Hand and machine.
PP—Power purchased, transformer 2200-220 volts A. C.
Last years tonnage 600.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Bar Screens, Picking Tables, Loading Booms.

BLUE RIDGE COAL COMPANY.

TR—W. S. Nixon, Uniontown, Pa.
GM—R. D. Nixon, Fairbance, Pa.
EM—N. S. McClay, Uniontown, Pa.

Blue Ridge Mine; Shaft; Connellsville Seam; 96 in. thick.
PO—Fairbance, Pa.; SP—Same; CTY—Payette; RR—B. & O. and P. R. E.
S of H—1 steam loco.
PP—22 H. P. boiler.
Daily output, 100 tons.
SIZES SHIPT—Run of Mine.
(Old information.)

BLUE RUN COAL COMPANY.

General Office, Clarence, Pa.
PR—O. J. Harm, Snow Shoe, Pa.
TR—David Chambers, Clarence, Pa.
GM—Jas. F. Uzzell, Clarence, Pa.
PA—J. F. Uzzell, Clarence, Pa.

Blue Run No. 1 Mine; Drift; D, R & A Seams, 54 in. thick.
PO—Glen Hope, Pa.; SP—Same; CTY—Clearfield; RR—N. Y. C.
MS—Jas. F. Uzzell, Clarence, Pa.
S of H—Mules and 1 steam loco. Track gage, 36 in.

S of M—Hand.

PP—Power purchased.
EMP—58. Daily tonnage 130.
SIZES SHIPT—Run of Mine.

BOARDMAN COAL MINING COMPANY

General Office, Clearfield, Pa.
PR—A. L. Dickerman, New York, N. Y.
TR—Frederick B. Kerr, Clearfield, Pa.
GM—Frederick B. Kerr, Clearfield, Pa.
GS—A. M. Dunsmore, Boardman, Pa.
PA—Paul Stanifer, Clearfield, Pa.
EM—G. A. Weber, Boardman, Pa.
SCO—Boardman Supply Co. Buyer, John Boag, Jr., Boardman, Pa.

Boardman No. 1 Mine; Drift; "R" Seam; 18 inches thick.
PO—Boardman, Pa.; SP—Same; CTY—Clearfield; RR—N. Y. C.
S of H—Trolley pole type loco. Track gage 36 in.
S of M—Hand, shortwall mach.
PP—Power purchased.
EMP—65. Last fiscal year output, 67,198 tons.
SIZES SHIPT—Run of Mine.

BOGGS COAL & MINING CO.

Out of business.

BORON-WESOSKY COAL CO.

General Office, Winnimere, Pa.

Boron-Wesosky Mine.
PO—St. Petersburg, Pa.; CTY—Clarion; RR—B. & O.
No report.

BORTZ, C. E.

General Office, Uniontown, Pa.
OWNER—C. E. Bortz, Uniontown, Pa.
CE—Fayette Engineering Co., Uniontown, Pa.
SA—R. D. Shields, Uniontown, Pa.

Boss Nos. 1 and 2 Mines; Drift and Slope; Pittsburgh and Swickley Seams, 40 to 148 in. thick.
PO—Masontown, Pa.; SP—Same; CTY—Fayette; RR—Monongahela.
MS—C. E. Bortz, Uniontown, Pa.
S of H—Storage battery locos. Track gage 42 in.
S of M—2 shortwall machs.
PP—Power purchased, Transformer 2300 to 440 volts A. C.
EMP—20. Last fiscal year output, 16,244 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.

BOSTAPH COAL COMPANY

General Office, 1310 First Natl. Bank Bldg., Pittsburgh, Pa.
PR—Adam W. Tritsch, Pittsburgh, Pa.
VP—Joe Mulligan, St. Petersburg, Pa.
TR—J. C. Armstrong, Pittsburgh, Pa.
SCY—J. G. Armstrong, Pittsburgh, Pa.
GS—Adam W. Tritsch, Pittsburgh, Pa.
GM—Joe Mulligan, St. Petersburg, Pa.
PA—J. G. Armstrong, Pittsburgh, Pa.
EM—P. P. Graham, Grove City, Pa.
EE—J. Mulligan, St. Petersburg, Pa.
SA—Fairview Mining Company, Pittsburgh, Pa.

Bostaph Mine; Drift; Lower Kittanning Seam, 54 in. thick.
PO—St. Petersburg, Pa.; SP—Foxburg, Pa.; CTY—Clarion; RR—B. & O.
S of H—Mules and elec. locos. Track gage 36 inches.
S of M—1 shortwall mach.
PP—1-150 H. P. water tube boilers, 1-100 K. W. gen. unit, 220 volts D. C., 5 pumps.
EMP—40. Daily tonnage 150.
SIZES SHIPT—Run of Mine.

BOSTON COAL CO.

General Office, Connellsville, Pa.
PR—W. P. Docker, Connellsville, Pa.
TR—A. C. Stickle, Connellsville, Pa.
GM—A. C. Stickle, Connellsville, Pa.
GS—G. Brook Ross, Connellsville, Pa.
PA—C. M. Stone, Connellsville, Pa.
SA—International Fuel & Iron Corp., Pittsburgh, Pa.

Hecker Mine; Drift; Youghiogheny Gas Seam, 84 in. thick.
PO—Connellsville, Pa.; SP—Greencastle, Pa.; CTY—Allegheny; RR—P. & L. F.
MS—E. S. B. Harper, Connellsville, Pa.
S of H—Mules. Track gage 42 in.
S of M—Hand.
EMP—18. Daily tonnage 100.
SIZES SHIPT—Run of Mine.

BOSTON COLLIERIES CORPORATION.

General Office, Clearfield, Pa.
PR—J. A. Ram, New Bethlehem, Pa.
VP—B. L. Wallace, Clearfield, Pa.
TR—M. Duront, Boston, Mass.
GM—B. L. Wallace, Clearfield, Pa.
GS—B. L. Wallace, Clearfield, Pa.
PA—B. L. Wallace, Clearfield, Pa.
EM—R. R. Hodgson, New Bethlehem, Pa.
EE—Emil Potz, Houtzdale, Pa.
SCQ—Alex Slavsky, Madera, Pa.
SA—The Bader Coal Co., 141 Milk St., Boston, Mass.

(Continued on Next Page)

Brothers Valley Coal Company—Cont.

Pen-Mar No. 5 Mine; Drift; Miller or "D" Seam, 52 in. thick.
PO—Macdonaldton, Pa. SP—Same. **CTY**—Somerset RR—B. & O.
MS—J. E. Lowry, Macdonaldton, Pa.
S of H—Elev. locos. Track gauge, 42 in.
S of M—3 shortwall machs.
PP—Purchase power. Transformers 22000-22000 volts A. C. 3 at 5 sets.
EMP—30. Last years tonnage 82,693.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

BROUGHTON COAL CO.

General Office, Broughton, Pa.
 Glenn Mine
PO—Broughton, Pa.; **CTY**—Allegheny; RR—B. & O. and P. & W. Va.
 No report.

BROWN, L. A.

GM—L. A. Brown, Fayette City, Pa.
 Brown No. 1 Mine; Drift; Pittsburgh Seam, 108 inches thick.
PO—Fayette City, Pa.; SP—Same; **CTY**—Fayette; RR—Penna., Lake Erie.
MS—L. A. Brown, Fayette City, Pa.
S of H—Mules and rope. Track gauge 42 inches.
S of M—Shortwall machs.
PP—Power purchased, transformer 6600 to 220 volts A. C., 2 pumps.
EMP—32. Last years tonnage 20,000.
SIZES SHIPT—Run of Mine.

BROWN, W. E., INC.

General Office, Ligonier, Pa.
OWNERS—Seger Bros., Ligonier, Pa.
OPERATOR—W. E. Brown, P.O. Box No. 35, Ligonier, Pa.
SA—Edwin Howard Fuel Co., Ligonier, Pa.
 Fern Mine; Drift; Lower Freeport Seam.
PO—Ligonier, Pa.; SP—Darlington, Pa.; **CTY**—Westmoreland; RR—Ligonier Valley.
S of H—Mules. Track gauge 44 in.
S of M—Hand.
 Note—Formerly operated by the Fern Coal Co.

BROWN, W. HARRY

Now Pittsburgh Steel Co.
BROWN BROS. & TYLER
 General Office, Hastings, Pa.
PR—Wm. G. Tyler, Hastings, Pa.
TR—Orin J. Brown, Hastings, Pa.
GS—Orin J. Brown, Hastings, Pa.
PA—C. E. Brown, Hastings, Pa.
EM—I. Pfeister, Hastings, Pa.
SA—Jas. Pierpont & Sons Co., Philadelphia, Pa. and Clark Coal Co., Hastings, Pa.
 High Spot, Nos. 1, 3 and 4 Mines; Drift; Seams No. 1 C Prime, 54 inches thick; No. 3 E, 50 inches thick, and No. 4 E, 52 inches thick.
PO—Hastings, Pa.; SP—Same; **CTY**—Cambria; RR—Penna.
S of H—Mules. Track gauge 36 inches.
S of M—Hand.
EMP—58. Last years tonnage 17,778.
SIZES SHIPT—Run of Mine.
 Note—Formerly operated by the Cheston Coal Co.

BROWN COAL CO.
 General Office, Blairsville, Pa.
 Brown Mine.
PO—Clarkburg, Pa.; **CTY**—Indiana; RR—B. R. & P.
 No report.

BROWNS PEPPY COAL COMPANY
 General Office, Adah, Pa.
OWNERS—Lewis A. Brown, Adah, Pa.; Edw. K. Flat, Adah, Pa.; H. N. Boyd, McClellandtown, Pa.
GM—Lewis A. Brown, Adah, Pa.
GS—Lewis A. Brown, Adah, Pa.
 Brown Mine; Drift; Waynesburg Seam; 72 in. thick.
PO—Adah, Pa.; SP—Same; **CTY**—Fayette; RR—Monon.
S of H—Mules. Track gauge 42 inches.
S of M—Hand and elec. drill.
PP—Power purchased. Transformer 2,200 to 220 volts A. C.
EMP—25. Daily tonnage 150.
SIZES SHIPT—Run of Mine.

BROWNFIELD COAL & COKE COMPANY
 General Office, Uniontown, Pa.
PR—P. F. Smith, Uniontown, Pa.
TR—Mark E. Brownfield, Uniontown, Pa.
GM—William Beal, " "
GS—William Beal, " "
PA—William Beal, " "
EM—Homer L. Ruchinat Uniontown, Pa.
EE—Emmett Beal, " "
 Marie Mine; Drift; Sewickley Seam; 60 in. thick.
PO—Uniontown, Pa.; SP—Same; **CTY**—Fayette; RR—B. & O.

MS—Geo. Weightman, Uniontown, Pa.
S of H—Mules and 1 elec. loco. Track gauge 44 in.
S of M—2 elec. machs.
PP—3 water tube boilers, total 300 H. P., 500 volts D. C., 6 pumps.
EMP—75. Last fiscal year output, 35,000 tons.
SIZES SHIPT—Run of Mine.

Martha Mine; Slope; Sewickley Seam; 60 in. thick.
PO—Uniontown, Pa.; SP—Same; **CTY**—Fayette; RR—P. R. R.
MS—Geo. Weightman, Uniontown, Pa.
S of H—Mules, rope and 1 elec. loco. Track gauge 44 in.
S of M—2 elec. machs.
PP—Purchase power, 2 pumps.
EMP—60. Last fiscal year output, 37,000 tons.
SIZES SHIPT—Run of Mine.

Meyers Mine; Drift; Pittsburgh Seam, 96 in. thick.
PO—Uniontown, Pa.; SP—Tarr, Pa. **CTY**—Fayette; RR—P. R. R.
MS—Geo. Weightman, Uniontown, Pa.
MS—William Beal, Uniontown, Pa.
S of H—Mules, rope and 1 elec. loco. Track gauge 44 in.
S of M—Hand.
PP—5 pumps. Purchase power.
EMP—110. Last fiscal year output, 63,000 tons.
SIZES SHIPT—Run of Mine.

BROWNING COKE CO

Operations exhausted.

BRUCEFON FUEL COMPANY

General Office, Broughton, Pa.
PR—Mrs. Bertha E. Porter, Broughton, Pa.
GM—James Porter, Broughton, Pa.
EM—Robert A. Schneider, Mt. Oliver, Pittsburgh, Pa.
 Porter Mine; Drift; Pittsburgh Seam; 66 in. thick.
PO—Broughton, Pa.; **CTY**—Allegheny.
S of H—7 mules. Track gauge 14 inches.
S of M—Hand.
EMP—60. Last fiscal year output, 42,000 tons.
SIZES SHIPT—Run of Mine.

BRUN COAL COMPANY

General Office, Crafton, Pa.
PR—Geo. Oster, Oliver Bldg., Pittsburgh, Pa.
VP—J. T. M. Stonerud, Oliver Bldg., Pittsburgh, Pa.
TR—C. C. McGregor, Crafton, Pa.
GM—C. C. McGregor, Crafton, Pa.
PA—C. C. McGregor, Crafton, Pa.
EE—Flood Shively, Bruin, Pa.
SA—C. C. McGregor, Bruin, Pa.
 Bruin Mine; Drift; Kittanning and Brookville Seams, 72 inches thick.
PO—Bruin, Pa.; SP—Same; **CTY**—Butte; RR—B. & O.
MS—P. J. McQuade, Bruin, Pa.
S of H—Mules, main and tail rope and 1 trolley pole type loco. Track gauge 42 inches.
S of M—4 longwall machs.
PP—2 100 K. W. gen. units, 250 volts D. C., 3 pumps.
EMP—106. Last years tonnage 65,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Picking Tables.

BRUSH RUN COAL COMPANY.
 General Office, Mt. Pleasant, Pa.
PR—J. S. Hittman, Mt. Pleasant, Pa.
TR—J. D. Hittman, " "
GM—John D. Hittman, Mt. Pleasant, Pa.
 Brush Run Mine, Slope, Pgh. Seam, 7 1/2 ft. thick.
PO—R. F. D. No. 1, Mt. Pleasant, Pa. SP—Same. **CTY**—Westmoreland. RR—B. & O.
S of H—Mules; track gauge 36 in.
S of M—Hand.
PP—1 Return tubular boiler, 100 H.P.
EMP—40. Last years tonnage 2,000.
 Coke ovens, 30 Bee Hive.

BRUSH CREEK COAL MINING CO.
 General Office, Indiana, Pa.
PR—I. W. Robinson, Indiana, Pa.
VP—F. M. Fritchman, Indiana, Pa.
TR—F. H. Beck, Indiana, Pa.
GM—F. M. Fritchman, Indiana, Pa.
GS—F. R. Vinton, Indiana, Pa.
PA—H. C. Smith, Indiana, Pa.
EM—Geo. Reig, Indiana, Pa.
EE—I. A. Housholder, Indiana, Pa.
SCO—Traders Supply Co., Watorman, Pa.
SA—Royce J. F. Campbell, Indiana, Pa.
 Sales Agent, Rochester & Pittsburgh Coal & Iron Co., Rochester, N. Y.
 Coy Mine; Drift; Upper Freeport Seam, 72 in. thick.
PO—Watorman, Pa.; SP—Same; **CTY**—Indiana; RR—B. R. & P.
MS—Thos. Jeffrey, Homer City, Pa.
SM—F. H. Campbell, Watorman, Pa.
S of H—4 trolley pole type locos.
S of M—6 shortwall machs.
PP—Power purchased, 550 volts D. C.
EMP—140. Daily tonnage 650.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

Waterman Mine; Slope; Miller Seam; 46 in. thick.
PO—Watorman, Pa. SP—Same. **CTY**—Indiana. RR—B. R. & P.
MS—S. W. Wilden, Watorman, Pa.
SM—F. H. Campbell, Indiana, Pa.
S of H—7 trolley pole type and 1 storage battery locos. Track gauge 42 in.
S of M—7 shortwall machs.
PP—550 volts D. C., 12 pumps.
EMP—184. Daily tonnage 950.

SIZES SHIPT—Run of Mine, Black, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

Indushoru Mine; Drift; Upper Freeport Seam; 72 in. thick.
PO—Lucasburg, Pa.; SP—Same; **CTY**—Indiana; RR—B. R. & P.
MS—James Simpson, Lucasburg, Pa.
SM—F. H. Campbell, Indiana, Pa.
S of H—5 trolley pole type and 1 storage battery locos. Track gauge 42 in.
S of M—8 shortwall machs.
PP—Power purchased, 550 volts D. C.
EMP—178. Daily tonnage 1,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

Snyder No. 1 Mine; Drift; Miller Seam; 44 in. thick.
PO—Watorman, Pa.; SP—Same; **CTY**—Indiana; RR—B. R. & P.
MS—Thos. Jeffrey, Homer City, Pa.
SM—F. H. Campbell, Indiana, Pa.
S of H—3 trolley pole type locos. Track gauge 42 in.
S of M—Hand.
PP—Power purchased, 550 volts D. C.
Daily tonnage 300.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

Snyder No. 2 Mine; Drift; Miller Seam, 44 in. thick.
PO—Watorman, Pa.; SP—Same; **CTY**—Indiana; RR—B. R. & P.
MS—Thos. Jeffrey, Homer City, Pa.
S of H—3 trolley pole type locos. Track gauge 42 in.
S of M—Hand.
PP—Power purchased, 550 volts D. C.
Daily tonnage 325.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

Snyder No. 3 Mine; Drift; Miller Seam; 44 in. thick.
PO—Watorman, Pa.; SP—Same; **CTY**—Indiana; RR—B. R. & P.
MS—Thos. Jeffrey, Homer City, Pa.
SM—F. H. Campbell, Watorman, Pa.
S of H—3 trolley pole type locos. Track gauge 42 in.
S of M—Hand.
PP—Power purchased.
Daily tonnage 425.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

BRUSH RUN COAL COMPANY.

General Office, Mt. Pleasant, Pa.
PR—J. S. Hittman, Mt. Pleasant, Pa.
TR—J. D. Hittman, " "
GM—John D. Hittman, Mt. Pleasant, Pa.
 Brush Run Mine, Slope, Pgh. Seam, 7 1/2 ft. thick.
PO—R. F. D. No. 1, Mt. Pleasant, Pa. SP—Same. **CTY**—Westmoreland. RR—B. & O.
S of H—Mules; track gauge 36 in.
S of M—Hand.
PP—1 Return tubular boiler, 100 H.P.
EMP—40. Last years tonnage 2,000.
 Coke ovens, 30 Bee Hive.

BUCKEYE COAL COMPANY.

General Office, Staumbaugh Bldg. Youngstown, O.
PR—J. A. Campbell, Youngstown, O.
VP—C. S. Robinson, Youngstown, O.
TR—Richard Garlick, Youngstown, O.
MGR—C. M. Lingle, Nemaacolin, Pa.
GS—W. H. Gates, Nemaacolin, Pa.
PA—E. G. Murray, Youngstown, O.
EM—A. W. Hesse, Nemaacolin, Pa.
SCO—Nemaacolin Supply Company, Ruyter, H. O. Marquis, Nemaacolin, Pa.
SA—W. B. Prescott, Oliver Bldg., Pittsburgh, Pa.

Nemaacolin No. 1 Mine; Slope and Shaft; Pittsburgh Seam; 96 in. thick.
PO—Nemaacolin, Pa.; SP—Same or Huron, Pa.; **CTY**—Greene; RR—Penna. & Monon.
S of H—8 storage battery and 2 trolley pole locos. Track gauge 44 in.
S of M—10 shortwall machs.
PP—Power purchased. Transformer 22000 2200 volts A. C. 3 water tube boilers, 250 H. P. each, 1—300 K. W. M. G. Set, 1—200 K. W. gen. unit, 250 volts D. C., 9 pumps.
EMP—720. Last years tonnage 253,796.
SIZES SHIPT—Run of Mine.

BUCKTAIL COAL COMPANY

General Office, 8 North Church St., DuBois, Pa.
PR—G. W. Wilgus, DuBois, Pa.
VP—L. W. Wilgus, Buffalo, N. Y.
TR—H. S. Wilgus, DuBois, Pa.
GM—H. S. Wilgus, DuBois, Pa.
PA—H. S. Wilgus, DuBois, Pa.
SA—H. S. Wilgus, DuBois, Pa.

Bucktail Mine; Drift; Upper Kittanning Seam; 36 to 40 inches thick.
PO—Weedville, Pa.; SP—Same; **CTY**—Erie; RR—P. S. & N.
MS—J. J. Clark, Weedville, Pa.
S of H—Mules, Track gauge 36 inches.
S of M—Hand, comp. air punchers.
PP—Power purchased, 250 volts D. C.
EMP—50. Last years tonnage 21,155.
SIZES SHIPT—Run of Mine.

BUFFALO & SUSQUEHANNA COAL & COKE COMPANY

PR—J. R. Caskey, DuBois, Pa.
VP—Herbert Dean, New York, N. Y.
TR—F. E. Hall, Buffalo, N. Y.
GM—J. R. Caskey, DuBois, Pa.
GS—James Harvey, DuBois, Pa.
PA—J. R. Caskey, DuBois, Pa.
EM—C. D. Oshkove, DuBois, Pa.
SCO—Key tone Store Co., Ruyter, A. R. McHenry, Sagamore, Pa.
 Gen. Sales Agent, J. W. Trautman, 1538 Marine National Bank Bldg., Buffalo, N. Y.

DuBois No. 1 Mine; Shaft; Lower Freeport Seam, 60 in. thick.
PO—DuBois, Pa. SP—Same. **CTY**—Clearfield, RR—B. & S.
MS—Wm. Chalk, DuBois, Pa.
S of H—Mules, 2 elec. locos. Track gauge 42 in.
S of M—21 comp. air punchers.
PP—2 water tube boilers, 1500 H. P., 2 gen. units, 500 volts D. C., 12 pumps.
EMP—200. Daily output, 1,200 tons.
SIZES SHIPT—Run of Mine.

DuBois No. 2 Mine; Shaft; Lower Freeport Seam, 60 in. thick.
PO—DuBois, Pa. SP—Same. **CTY**—Clearfield, RR—B. & S.
MS—H. McCutcheon, DuBois, Pa.
SM—T. Vosburg, DuBois, Pa.
S of H—Mules, elec. loco. Track gauge, 42 in.
S of M—30 comp. air puncher machs.
PP—2 water tube boilers, 2500 H. P., 2 gen. units, 500 volts D. C., 33 pumps.
EMP—450. Last fiscal year output 1,800 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

Sagamore Mine; Drift; Upper Freeport Seam, 60 in. thick.
PO—Sagamore, Pa.; SP—Same; **CTY**—Armstrong; RR—B. & S.
MS—H. A. Moulder, Sagamore, Pa.
S of H—Mules, elec. loco. Track gauge, 42 in.
S of M—25 shortwall machs. 70 comp. air puncher machs.
PP—12 water tube boilers, total 4340 H. P., 4 air compressors, 3 gen. units, 550 volts D. C., 13 pumps.
EMP—1,000. Daily output, 1,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

BUFFALO CREEK COAL MINING CO

General Office, Berlin, Pa.
PR—Robert L. Groff, Berlin, Pa.
VP—W. S. Whits, 1214 Penna. Bldg., Philadelphia, Pa.
TR—Wm. O'Dwyer, Berlin, Pa.
GM—Wm. O'Dwyer, Berlin, Pa.
GS—H. F. Hartman, Berlin, Pa.
PA—Wm. O'Dwyer, Berlin, Pa.
EM—Frank Fluck, Somerset, Pa.

Marie Valley Mine; Drift; Somerset Smokeless Seam, 60 in. thick.
PO—Berlin, Pa.; SP—Same; **CTY**—Somerset; RR—B. & O.
S of H—Mules. Track gauge 40 in.
S of M—Hand. Room and pillar.
EMP—35. Last years tonnage 15,000.
SIZES SHIPT—Run of Mine.

BULAH SHAFT COAL COMPANY

General Office, Ramey, Pa.
PR—John H. Minds, Philadelphia, Pa.
TR—V. R. Minds, Ramey, Pa.
GM—Jas. H. Minds, Ramey, Pa.
GS—ames H. Minds, Ramey, Pa.
PA—Jas. H. Minds, Ramey, Pa.
EM—Womelsdorf, Dinkle & Custer, Philadelphia, Pa.
EE—Geo. Lundberg, Ramey, Pa.
SCO—Jas. H. Minds, Ruyter, C. B. Jones Ramey, Pa.
 Sales Agency, Bulah Coal Mining Co., 120 Broadway, N. Y.

Bulah Shaft No. 1 Mine; Shaft; "D" Seam; 60 in. thick.
PO—Ramey, Pa. SP—Same. **CTY**—Clearfield, RR—Penna., P. & S. and N. Y. C.
MS—David A. Ramey, Pa.
S of H—Mules and 7 trolley pole type locos. Track gauge, 36 in.
S of M—4 shortwall and 2 arewall machs.
PP—200 K. W., 1—150 K. W., 1—100 K. W. M. G. Sets, 250 volts D. C., 7 pumps.
EMP—188.
SIZES SHIPT—Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

BULGER BLOCK COAL CO.

Gen. Office, 6366 Frankstown Ave.,
Pittsburgh, Pa.
PR—D. J. Kennedy, Pittsburg, Pa.
TR—S. C. Orr, " "
CM—D. J. Kennedy, " "
GS—Leon Raudour, McDonald, Pa.
PA—D. J. Kennedy, Pittsburgh, Pa.
EM—Andrews & Southard, Pittsburgh, Pa.
EE—Wm. Daudet, Midway, Pa.

Bulger Mine, Shaft, Pittsburgh Seam,
5½ ft. thick.
PO—Bulger, Pa.; SP—Same; CTY—
Washington; RR—P. C. C. & St. L.
S of H—Mules and 3 trolley pole type
locos. Track gage, 42 in.
S of M—12 chain breast type and 3
shortwall machs.
PP—Power purchased, transformer 6600-
440 volts A. C., M. G. sets, 200
K. W., 250 volts D. C., 14 pumps.
EMP—195. Daily output, 1,000.
SIZES SHIPT—Run of Mine, Slack
Nut, Lump.

BULL CREEK COAL COMPANY, INC.

General Office, 400 Lock St., Tarentum,
Pa.
PR—P. C. Walters, Tarentum, Pa.
VP—J. W. Loynd, Tarentum, Pa.
TR—O. C. Camp, Jr., Tarentum, Pa.
GM—O. C. Camp, Jr., Tarentum, Pa.
TE—R. E. Walters, Tarentum, Pa.

Goldinger Mine; Drift; Upper Freeport
Seam, 42 in. thick.
PO—Tarentum, Pa.; SP—Same; CTY—
Allegheny.
MS—John Thompson, Tarentum, Pa.
S of H—Mules and rope. Track gage 39
inches.
S of M—Shortwall machs.
PP—150 K. W. Gen. unit, 250 volts
D. C.
EMP—18. Daily tonnage 100.
SIZES SHIPT—Run of Mine, Lump.

BUNKER HILL COAL COMPANY.

General Office, Huntingdon, Pa.
PR—John R. Wald, Huntingdon, Pa.
VP—John D. Dorris, Huntingdon, Pa.
TR—John R. Wald, Huntingdon, Pa.
GM—A. J. Himes, Six Mile Run, Pa.
SCO—Six Mile Run Supply Co., Buyer,
A. J. Himes, Six Mile Run, Pa.
SA—Elmer Fleck, Saxton, Pa.

Bunker Hill Mine; Drift; Barnett and
Kelly Seams; 36 and 48 in. thick.
PO—Six Mile Run, Pa.; SP—Rommell;
CTY—Bedford; RR—H. & B. T. M.
S of H—Mules. Track gage 38 in.
S of M—Hand.
PP—81 pumps.
EMP—24. Daily tonnage 100.
SIZES SHIPT—Run of Mine.
old information.

BURGER SMOKELESS COAL CO.

General Office, Cumberland, Md.
PR—W. Burger, Cumberland, Md.
VP—John L. Somerville, Cumberland, Md.
TR—Wm S. Burger, Cumberland, Md.
GM—John L. Somerville, Cumberland,
Md.
GS—John L. Somerville, Cumberland, Md.
PA—John L. Somerville, Cumberland, Md.
TE—John L. Somerville, Cumberland, Md.
SCO—Somerville Supply Co., Buyer, John
L. Somerville, Cumberland, Md.

Burger Smokeless Mine; Drift; "C" Prime
Seam, 72 in. thick.
PO—Somersfield, Pa.; SP—Same; CTY—
Somerset; RR—B. & O.
S of H—Rope. Track gage 40 in.
S of M—Hand.
PP—2 pumps.
EMP—20. Daily tonnage 100.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Table.
NOTE—Formerly operated by the Yough
Coal Company.

BURGESS ENGLAND COAL CO.

General Office, Wellshoro, Pa., R.D. 1
PR—C. E. Bennett, Wellshoro, Pa.
GS—L. M. Erickson, R.D. 1, Wellshoro,
Pa.
SA—C. E. Bennett, Wellshoro, Pa.

Lundquist Mine; Drift; Bloss Seam, 40
inches thick.
PO—Wellshoro, Pa., R.D. 1; SP—Morris;
PA; CTY—Tioga; RR—N. Y. C.
and Erie.
MS—E. F. Erickson, Wellshoro, Pa., R.
D. 1.
S of H—Mules. Track gage 29 inches.
S of M—Hand.
EMP—15. Last years tonnage 10,200.
SIZES SHIPT—Run of Mine.

BURGETTSTOWN COAL COMPANY

General Office, 1519 Oliver Bldg., Pitts-
burgh, Pa.
PR—John A. Bell, Pittsburgh, Pa.
VP—John A. Bell, Jr., Pittsburgh, Pa.
TR—John A. Bell, Jr., Pittsburgh, Pa.
GM—J. K. Robb, Pittsburgh, Pa.
GS—S. W. Smith, Burgettstown, Pa.
PA—M. W. McGaffey, Pittsburgh, Pa.
CE—Geo. Osler, Pittsburgh, Pa.
EM—Sidney Ritchie, Burgettstown, Pa.
SA—M. W. McGaffey, Pittsburgh, Pa.

Patterson Mine; Drift; Pittsburgh Seam
54 inches thick.
FO—Burgittstown, Pa.; SP—Same; CTY—
Washington; RR—P. C. C. & St. L.
Atlas Branch.
S of H—10 elec. locos. Track gage 42
inches.
S of M—10 shortwall elec. machs.
PP—Power purchased, 3—200 K. W. M.
G. Sets, 250 volts D. C., 7 pumps.
EMP—200. Last years tonnage 175,000.
SIZES SHIPT—Run of Mine, Slack, Lump.

BURNS BROTHERS

General Office, Houtzdale, Pa.
TR—W. M. Burns, Houtzdale, Pa.
GM—W. M. Burns, Houtzdale, Pa.
GS—H. P. Burns, Grampian, Pa.
SCO—Grampian Supply Co., Buyer, J.
W. Scurman, Grampian, Pa.
SA—W. M. Burns, Houtzdale, Pa.

Penn No. 3 Mine; Drift; "D" Seam, 48
in. thick.
FO—Grampian, Pa.; SP—Same; CTY—
Clearfield; RR—Penna.
MS—G. Shelgren, Grampian, Pa.
S of H—3 storage battery locos. Track
gage 36 in.
S of M—Hand and cutting mach.
PP—Power purchased. Transformer 220
volts A. C., 2 pumps.
EMP—92. Last years tonnage 62,000.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by M. Burns.
old information.

BURNS, M.

New Burns Brothers.

BUTLER COAL MINING COMPANY

General Office, Butler, Pa.
PR—P. G. Hollman, Butler, Pa.
VP—Theo. Schenck, Butler, Pa.
TR—J. C. Say, 145 Oak St., Butler, Pa.
GM—J. C. Say, 145 Oak St., Butler, Pa.
GS—J. C. Say, 145 Oak St., Butler, Pa.
PA—Thos. Watson, Butler, Pa.

Say Mine; Slope; Upper Kittanning
Seam, 32 inches thick.
PO—Butler, Pa.; SP—Same; CTY—But-
ler; RR—B. & P.
MS—Jas. Fair, Butler, Pa.
S of H—Mules. Track gage, 32 in.
S of M—2 shortwall machs.
PP—Power purchased, Transformer 66-
000 to 240 volts A. C., M. G. set,
75 K. W., 240 volts D. C., 3
pumps.
EMP—28. Daily output, 115 tons.
SIZES SHIPT—Run of Mine.

BUTLER JUNCTION COAL COMPANY.

General Office, Leechburg, Pa.
PR—Cooper Wood, Detroit, Mich.
TR—L. W. Hicks, Leechburg, Pa.
GM—L. W. Hicks, Leechburg, Pa.
GS—E. A. Watters, Leechburg, Pa.
PA—D. L. Maher, Leechburg, Pa.
EM—S. E. Mognet, Leechburg, Pa.
EE—G. H. Ritchie, Leechburg, Pa.

Butler Junction Mine; Drift; Upper Free-
port Seam, 42 in. thick.
PO—Freeport, Pa.; SP—Same; CTY—
Allegheny; RR—Penna.
S of H—Trolley pole type locos. Track
gage, 42 in.
S of M—4 chain breast type machs.
PP—Power purchased, 3 pumps.
EMP—65. Daily output, 250 tons.
SIZES SHIPT—Run of Mine.

BUTTERMORE COAL COMPANY

General Office, Box 64, Uniontown, Pa.
PR—P. C. McClain, Uniontown, Pa.
TR—L. M. Keck, Uniontown, Pa.
GM—P. C. McClain, Uniontown, Pa.
GS—P. C. McClain, Uniontown, Pa.
PA—P. C. McClain, Uniontown, Pa.

Brinker Mine; Slope; Sewickley Seam, 60
in. thick.
PO—R. F. D. 2, Uniontown, Pa.; SP—
Evans, Pa.; CTY—Fayette; RR—B.
& O. Stewart Iron Co. Br.
S of H—Mules.
S of M—Hand.
PP—Purchase power.
SIZES SHIPT—Run of Mine.
(old information)

BUTTERWORTH BROTHERS

General Office, R. D., Phillipsburg, Pa.
PR—W. M. Butterworth, Phillipsburg, Pa.
VP—John F. Butterworth, Phillipsburg,
Pa.
GM—Alex Butterworth, Phillipsburg, Pa.
CE—George Ayers, Phillipsburg, Pa.

Keystone Nos. 1, 2, 3 and 4 Mines;
Drift; "D" Seam, 34 in. thick.
PO—Phillipsburg, Pa.; SP—Same; CTY—
Clearfield; RR—Penna.
MS—Alex Butterworth, Phillipsburg, Pa.
S of H—Mules. Track gage 36 in.
S of M—Hand.
EMP—18. Last years tonnage 11,000.
SIZES SHIPT—Run of Mine.
NOTE—Successors to Ed. Butterworth &
Sons.

BUTTERWORTH, ED., & SONS.
Now Butterworth Bros.

BUTTS CANNEL COAL COMPANY

General Office, Electric Bldg., Cleve-
land, O.
PR—I. C. Goff, Cleveland, O.
TR—B. R. Taylor, Cleveland, O.
GM—J. L. Deegan, Cleveland, O.
GS—J. J. Shuttleworth, Deegan, Pa.
EE—Samuel Ryder, Deegan, Pa.

Bessemer Mine; Drift; Brookville Seam,
48-52 in. thick.
PO—Deegan, Pa.; SP—Anandale, Pa.;
CTY—Butler; RR—B. & L. E.
S of H—Mules and electric loco. Track
gage 38 in.
S of M—Hand and shortwall mach.
PP—2 tubular boilers, total 230 H. P.,
150 K. W. gen. unit, 250 volts
D. C., 4 pumps.
EMP—77. Daily tonnage 400.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Circular Picking Table.

BYARS COAL & COKE COMPANY

General Office, Alverton, Pa.
PR—J. W. Byars, Alverton, Pa.
TR—J. W. Byars, Alverton, Pa.
PA—J. W. Byars, Alverton, Pa.
CE—Ben Gibson, Alverton, Pa.
SCO—Mrs. W. A. Byars Store, Buyer,
J. A. Byars, Alverton, Pa.

Byars Mine; Drift; Pittsburgh Seam, 88
inches thick.
PO—Alverton, Pa.; SP—Same; CTY—
Westmoreland; RR—Penna.
MS—ohn Christner, Alverton, Pa.
S of H—Mules and rope. Track gage
42 inches.
S of M—Hand.
EMP—77. Daily tonnage 200.
SIZES SHIPT—Run of Mine.

BYERLY GAS COAL COMPANY.

PR—J. Elmer Byerly, Irwin, Pa.
TR—Louis S. Malone, Irwin, Pa.
CM—Louis S. Malone, Irwin, Pa.
PA—Louis S. Malone, Irwin, Pa.
CE—Wm. Evans, Irwin, Pa.

Byerly Mine; Drift; Pittsburgh Seam, 72
in. thick.
PO—Irwin, Pa.; SP—Same; CTY—West-
moreland; RR—P. R. R., Yough. Br.
MS—J. Elmer Byerly, Irwin, Pa.
S of H—Mules.
S of M—Hand.
PP—Power purchased, 1 pump.
EMP—38. Last years tonnage 33,579.
SIZES SHIPT—Run of Mine.

BYRNE COAL & COKE CO.

General Office, Scottsdale, Pa.
PR—F. W. Byrne, Scottsdale, Pa.
GM—F. W. Byrne, Scottsdale, Pa.
GS—E. A. Byrne, Scottsdale, Pa.
TR—John R. Byrne, Scottsdale, Pa.
PA—M. J. Petonic, Scottsdale, Pa.
EM—H. L. Burchinal, Uniontown, Pa.
EE—Michael Haller, Yukon, Pa.
SA—Byrne Fuel Company, Pittsburgh, Pa.

Virgle No. 1 Mine; Drift; Pittsburgh
Seam, 96 in. thick.
PO—Yukon, Pa.; SP—Same. CTY—West-
moreland. RR—Penna.
MS—P. J. Callahan, Yukon, Pa.
S of H—Mules and trolley pole type locos.
Track gage, 42 in.
S of M—3 shortwall machs.
PP—Power purchased, transformer 2200
to 250 volts A. C., motor gen. sets,
250 volts D. C.
EMP—120. Coke Owens, 42 Bee Hive.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

Virgle No. 2 Mine; Drift; Pittsburgh
Seam, 96 in. thick.
PO—Yukon. SP—Madison. CTY—West-
moreland. RR—Penna.
MS—T. A. Callahan, Yukon, Pa.
S of H—Mules and trolley pole type locos.
Track gage, 42 in.
S of M—2 shortwall machs.
PP—Power purchased, transformer 2200
to 250 volts A. C., motor gen. sets,
250 volts D. C.
EMP—20.
SIZES SHIPT—Run of Mine.

Virgle No. 3 Mine; Drift; Pittsburgh
Seam, 72 in. thick.
PO—Yukon, Pa.; SP—Same; CTY—West-
moreland; RR—P. R. R.
MS—P. J. Callahan, Yukon, Pa.
S of H—Mules and trolley pole type locos.
Track gage 42 in.
S of M—3 shortwall mach.
PP—Power purchased, Transformer 2200-
250 volts A. C., M. G. Sets, 250
volts D. C.
EMP—115. Last years tonnage 145,000.
Coke Oven 42 Bee Hive
SIZES SHIPT—Run of Mine.

CALDWELL SMOKELESS COAL CO.

General Office, Kurtz Bldg., Johnstonown,
Pa.
PR—N. W. Campbell, Johnstonown, Pa.
TR—C. H. Peacock, Real Estate Trust
Bldg., Philadelphia, Pa.
GM—N. W. Campbell, Johnstonown, Pa.
GS—E. A. Campbell, Johnstonown, Pa.
PA—N. W. Campbell, Johnstonown, Pa.

CE—Horner & Jones Eng. Co., Indiana,
Penna.

EM—Charles E. Schlicker, Spangler, Pa.
SCO—Address the company, Buyer, N.
W. Campbell, Johnstonown, Pa.
SA—Campbell, Peacock, Kinzer, Inc.,
Widener Bldg., Philadelphia, Pa.

Caldwell No. 1 Mine; Drift; B or Miller
Seam, 44 to 48 in. thick.
PO—Dilltown, Pa. SP—Dias, Pa. CTY—
Indiana. RR—Penna. & B. R. & P.
SM—Alford Fredrick Fick, Dilltown, Pa.
S of H—Mules. Track gage 36 in.
S of M—2 shortwall machs.
PP—1 water shore boiler, 150 H. P.,
gen. units, 250 volts D. C., 4
pumps.
EMP—21. Last fiscal year output,
19,250 tons.
SIZES SHIPT—Run of Mine.

Caldwell No. 2 Mine; Drift; B or Miller
Seam, 44 to 48 in. thick.
PO—Heshbon, Pa. SP—Same. CTY—In-
diana. RR—Penna. & B. R. & P.
SM—Alford Fredrick Fick, Dilltown, Pa.
S of H—Mules. Track gage 36 in.
S of M—2 shortwall machs.
PP—Power purchased, transformer 2200
to 250 volts A. C., M. G. set, 250
volts D. C., 1 pump.
EMP—19. Last fiscal year output,
15,395 tons.
SIZES SHIPT—Run of Mine.

Caldwell No. 4 Mine; Drift; C Prime
Seam, 36 in. thick.
PO—Phillipsburg, Pa.; SP—Same; CTY—
Clearfield; RR—Penna.
MS—John Collins, Phillipsburg, Pa.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—2 pumps.
EMP—13. Last fiscal year output,
9,605 tons.
SIZES SHIPT—Run of Mine.

CALORIE COAL CO.

General Office, 814 Pennsylvania Bldg.,
Philadelphia, Pa.
PR—W. H. Swayne, Philadelphia, Pa.
TR—H. Hahman, Altoona, Pa.
GM—H. Hahman, Altoona, Pa.
GS—H. Hahman, Altoona, Pa.
PA—H. Hahman, Altoona, Pa.

Calorie Mine; Drift; E Seam, 30 in.
thick.
PO—Clinton, Pa.; SP—Same; CTY—
Cambria; RR—Penna.
S of H—Mules and 1 gasoline loco. Track
gage, 36 in.
S of M—Hand.
PP—1 pump.
EMP—6.
SIZES SHIPT—Run of Mine.

CAMBERDIF COAL CO.

General Office, Export, Pa.
McAlister No. 1 Mine.
PO—Export, Pa.; CTY—Westmoreland;
RR—Penna.
No report.

CAMBRIA FUEL COMPANY

General Office, Beaverdale, Pa.
PR—Irran A. Boucher, Beaverdale, Pa.
VP—C. C. Dovey, Johnstonown, Pa.
TR—John E. Evans, Ebsenburg, Pa.
GM—Irran A. Boucher, Beaverdale, Pa.
GS—Frank Nicholson, Johnstonown, Pa.
PA—Frank Nicholson, Johnstonown, Pa.
EM—Gardner Stoker, Johnstonown, Pa.
SCO—Cambria Store Co., Buyer, Boyd
McHaffey, Johnstonown, Pa.

Cambria Nos. 1 and 2 Mines; Drift;
and R Seams; 63 in. thick.
PO—Hillsopole, Pa.; SP—Johnstown,
Pa.; CTY—Somerset; RR—B. & O.
S of H—Mules and hoists.
S of M—35 shortwall machs.
PP—Power purchased, 250 volts D. C.,
100 K. W. gen. unit, 2 pumps.
EMP—49. Daily tonnage 400.
SIZES SHIPT—Run of Mine.

CAMBRIA STEEL CO.

General Office, Widener Bldg., Phila-
delphia, Pa.
PR—A. A. Corey, Jr., Philadelphia, Pa.
TR—D. B. Gehly, Philadelphia, Pa.
GS—J. C. H. Lubken, Johnstonown, Pa.
EM—R. H. Stevens, Philadelphia, Pa.
EE—C. S. Prondfoot, Johnstonown, Pa.
MM—Daniel Harris, Johnstonown, Pa.
SA—no. C. Neale, Mgr., Widener Bldg.,
Philadelphia, Pa.

Rolling Mill Mine; Drift; Upper Kittan-
olog Seam, 3½ to 4 ft. thick.
PO—Johnstown, Pa. SP—Same. CTY—
Cambria. RR—P. R. R. and B.
& O.
MS—Frank Horton, Johnstonown, Pa.
S of H—Mules, rope, 8 comp. air and
5 storage battery locos. Track gauge,
36 in.
S of M—5½ comp. air machs.
PP—8 water tube boilers, total 2200
H. P. gen. units, 6 air compressors,
52 pumps.
EMP—450. Last years tonnage 523,420
(Continued on Next Page)

Cambria Steel Co.—Cont.

Franklin No. 1 Mine; Drift; Upper Kittanning Seam, 3 to 4 ft. thick.
PO—Johnstown, Pa.; SP—Same; CTY—Cambria, RR—P. R. R. and R. & O.

MS—Frank Horton, Johnstown, Pa.
S of H—Mules, rope and 6 storage battery locos. Track gage, 45 in.
S of M—7 shortwall machs.
PP—6 pumps. Power from Steel Works Central Plant.
EMP—250. Last years tonnage 356,816.

Franklin No. 2 Mine; Drift; Lower Kittanning Seam, 36 to 48 in. thick.
PO—Johnstown, Pa.; SP—Same; CTY—Cambria

MS—Frank Horton, Johnstown, Pa.
S of H—8 storage battery locos. Track gage, 45 in.
S of M—9 shortwall machs.
PP—6 pumps. Receive power from Steel Works Central Plant.
EMP—267. Last years tonnage 481,945.

Franklin No. 3 Mine; Drift; Upper Kittanning Seam, 36 to 42 in. thick.
PO—Johnstown, Pa.; SP—Same; CTY—Cambria

MS—Frank Horton, Johnstown, Pa.
S of H—2 storage battery locos. Track gage, 45 in.
S of M—3 shortwall machs.
PP—Receive power from Steel Works Central plant.
EMP—82. Last years tonnage 117,972.

Franklin No. 4 Mine; Drift; Lower Kittanning Seam, 42 to 54 in. thick.
PO—Johnstown, Pa.; SP—Same; CTY—Cambria

MS—Frank Horton, Johnstown, Pa.
S of H—3 storage battery locos. Track gage, 45 in.
S of M—5 shortwall machs.
PP—1 pump. Receive power from Steel Works Central Plant.
EMP—95. Last years tonnage 258,401.
Slackville Mines; Drift; Pittsburgh Seam, 84 in. thick.
PO—Slackville, Pa.; SP—Same; CTY—Westmoreland; RR—Penna.
MS—L. O. Millinger, Slackville, Pa.
S of H—9 storage battery locos. Track gage, 45 in.
S of M—3 shortwall machs.
PP—Purchase power, 2 pumps.
EMP—325. Last years tonnage 551,887.
NOTE—Mine coal for own use only.

CAMDEN COAL COMPANY

General Office, Duquesne, Pa.
TR—W. E. Ried, Duquesne, Pa.
SA—Pennsylvania Fuel Corp., Park Bldg., Pittsburgh, Pa.
Camden Mine; Pittsburgh Seam.
Daily tonnage 360.
SIZES SHIPT—Slack, Nut.
PREP. EQUIPT—Gravity Screens.

CAMERONS BOTTOM SMOKELESS COAL CO

General Office, Hillwood, Pa.
PR—B. R. Williams, Hillwood, Pa.
VP—J. F. Wilson, Hillwood, Pa.
TR—B. R. Williams, Hillwood, Pa.
GM—B. R. Williams, Hillwood, Pa.
GS—B. R. Williams, Hillwood, Pa.
PA—B. R. Williams, Hillwood, Pa.
EM—Homer & Jones, Indiana, Pa.

Cameron No. 1 Mine; Drift; B Seam, 36 in. thick.
PO—Hillwood, Pa.; SP—Same; CTY—Indiana; RR—N. Y. C.

S of H—Electric loco. Track gage 36 inches.
S of M—Hand.
PP—Power purchased.
EMP—30. Daily tonnage 90.
SIZES SHIPT—Run of Mine.

CAMPBELL & SONS COAL COMPANY.

General Office, Connellsville, Pa.
PR—Geo. W. Campbell, Connellsville, Pa.
GM—Geo. W. Campbell, Connellsville, Pa.
GS—Ben H. Campbell, Connellsville, Pa.

Ida Mine; Drift; Waynesburg Seam, 72 to 84 inches thick.
PO—Edenboro, Pa.; SP—Same; CTY—Fayette; RR—P. R. R. Monon Branch.

S of H—Mules. Track gage 44 in.
S of M—Hand.
EMP—15. Daily output, 100 tons.
SIZES SHIPT—Run of Mine.

CAMPBELL COAL COMPANY

General Office, Connellsville, Pa.
PR—Geo. W. Campbell, Connellsville, Pa.
TR—C. H. Brooks, Normalville, Pa.
SECT—S. T. Steel, Normalville, Pa.
GM—Geo. W. Campbell, Connellsville, Pa.
GS—S. T. Steel, Normalville, Pa.
SA—Geo. W. Campbell, Connellsville, Pa.

Campbell Nos. 1 and 2 Mines; Drift; Freeport and B Seams, 60 in. thick.
PO—Normalville, Pa.; SP—Connellsville, Pa.; CTY—Fayette; RR—Indian Creek Valley, B. & O.

S of H—Mules and steam locos. Track gage 42 in.
S of M—Hand.
EMP—30. Daily tonnage 200.
SIZES SHIPT—Run of Mine.

CAMPBELL RIDGE COAL CO.

General Office, Altoona Trust Bldg., Altoona, Pa.

PR—P. M. Copelin, Phillipsburg, Pa.
VP—W. F. Beck, Altoona, Pa.
TR—W. Frank Beck, Altoona, Pa.
GM—L. H. Copelin, Phillipsburg, Pa.
GS—L. H. Copelin, Phillipsburg, Pa.
EM—Geo. Ayers, Phillipsburg, Pa.
SA—W. F. Beck, Altoona, Pa.

Jefferson Mine; Drift; E. & D. Seams, 42 to 60 in. thick.
PO—Phillipsburg, Pa.; SP—Same; CTY—Clearfield; RR—Penna.

S of H—Mules. Track gage 30 in.
S of M—Hand.
EMP—36. Last years tonnage 9,571.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

CANN COAL CO

PR—Robt. P. Cann, Stoneboro, Pa.
VP—J. G. Cann, Stoneboro, Pa.
GM—Robt. P. Cann, Stoneboro, Pa.
GS—Robt. P. Cann, Stoneboro, Pa.
PA—Robt. P. Cann, Stoneboro, Pa.

Carver Mine, Shaft, Brookville, Bed A Seam, 4½ ft. thick.
PO—Stoneboro, Pa.; SP—Same; CTY—Mercer; RR—N. Y. C.

S of H—Mules, rope and 1 elec. loco. Track gage 36 in.
S of M—Hand, and 1 elec. machine.
PP—3 Return tubular boilers, total 450 H. P. 1 gen units 250 volts D. C., 3 pumps.
SIZES SHIPT—Run of Mine.

CANNEL BITUMINOUS MINING COMPANY.

General Office, Cannelton, Pa.
PR—W. J. Houston, Stoneboro, Pa.
VP—L. J. Cann, Stoneboro, Pa.
TR—P. J. Brinkworth, Buffalo, N. Y.
GM—G. F. Martinez, Stoneboro, Pa.
GS—G. F. Martinez, Stoneboro, Pa.
PA—W. J. Houston, Stoneboro, Pa.
EM—L. J. Cann, Stoneboro, Pa.
SC—Address the Company Buyer, W. J. Houston, Stoneboro, Pa.
SA—Paragon Coal & Coke Co., Inc., Buffalo, N. Y.

See Bee No. 1 Mine; Drift; Seam, 60 in. thick.
PO—Cannelton, Pa.; SP—Same; CTY—Beaver; RR—Pgh. & West'n.
S of H—Mules, storage battery and combination locos.
S of M—2 elec. punchers.
PP—Power purchased, 2 pumps.
SIZES SHIPT—Run of Mine, Slack, Lump.
NOTE—Formerly operated by Wistar Coal Corp.

CANNELTON CLAY & COAL COMPANY.

General Office, New Galilee, Pa.
PR—H. R. Beagle, New Galilee, Pa.
VP—G. G. Starr, Beaver Falls, Pa.
TR—C. R. Shannon, New Galilee, Pa.
GS—J. C. Ault, New Galilee, Pa.

Cannelton Mine; Drift and Stripping; Nos. 6 and 7 Seams; 34 to 48 in. thick.
PO—Cannelton, Pa.; SP—Same; CTY—Beaver; RR—P. L. & W.

S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine, Slack, Lump.

CANDONSPURG GAS COAL CO

General Office, 804 First National Bank Bldg., Pittsburgh, Pa.
PR—R. A. Davis, Pittsburgh, Pa.
VP—J. H. Hillman, Jr., Pittsburgh, Pa.
TR—H. A. Davis, Pittsburgh, Pa.
GM—H. A. Davis, Pittsburgh, Pa.
GS—W. F. Pilkington, Pittsburgh, Pa.
PA—J. R. Jones, Pittsburgh, Pa.
CE—Raton & Elliott, Pittsburgh, Pa.
EM—J. L. Mountain, Pittsburgh, Pa.
SC—Candonsburg Mercantile Co., Buyer, R. G. Williams, Candonsburg, Pa.

Davis Mine; Shaft; Pittsburgh Seam, 66 in. thick.
PO—Candonsburg, Pa.; SP—Same; CTY—Washington; RR—P. C. C. & St. L.

MS—Ed. Sneider, Candonsburg, Pa.
S of H—Mules and 1 trolley pole type locos. Track gage 44 in.
S of M—2 chain breast type and 4 shortwall machs.

PP—Power purchased. Transformer 6,600 to 220 440 volts A. C., M. G. 11, 220 volts D. C., 5 pumps.
EMP—128. Last years tonnage 141,185.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

CARBON CENTER COAL COMPANY

General Office, North Bessemer, Pa.
PR—E. J. Dugan, North Bessemer, Pa.
TR—R. R. Reynolds, Greensburg, Pa.
GM—E. J. Dugan, North Bessemer, Pa.
PA—E. J. Dugan, North Bessemer, Pa.
SA—E. J. Dugan, North Bessemer, Pa.

Carbon Mine.
PO—North Bessemer, Pa.; SP—Same; CTY—Allegheny; RR—B. & O., E. & Penna.
MS—Thomas Wendell, North Bessemer, Pa.

S of H—Mules. Track gage 41 in.
SIZES SHIPT—Run of Mine.

CARBON COAL & COKE CO (THE).

General Office, 85 Devonshire St., Boston, Mass.

PR—Arthur E. Doe, Boston, Mass.
VP—Leonard F. Leighton, Boston, Mass.
TR—J. Milton Payne, Pawtucket, R. I.
GM—W. W. E. Shannon, Dudley, Pa.
GS—W. W. E. Shannon, Dudley, Pa.
PA—W. W. E. Shannon, Dudley, Pa.
CE—Wondoloff & Dunkle, Phillipsburg, Pa.

SCO—Broad Top Supply Co., Buyer, W. W. E. Shannon, Dudley, Pa.

Cambria No. 3 Mine; Shaft; Kelly & Barrett Seams, 60 in. thick.
PO—Langsdale, Pa.; SP—H. Powell, Pa.; CTY—Bedford; RR—H. & B. T. M.

SM—A. E. Gates, Pawtucket, Pa.
S of H—Mules and 1 trolley pole type loco. Track gage, 38 in.
S of M—Hand.

PP—4 fire tube boilers, 2 pumps.
EMP—65. Last fiscal year output, 59,834 tons.
SIZES SHIPT—Run of Mine.

Carbon No. 4 Mine now being operated by the Shannon Co.

Carbon No. 5 Mine; Drift; Fulton and Barnett Seams.
PO—Dudley, Pa.; SP—Same; CTY—Huntingdon; RR—H. & B. T. M.

S of H—Mules. Track gage 38 inches.
S of M—Hand.

EMP—11.
Ocean No. 4 Mine; Drift; Fulton Seam, 32-36 in. thick.

PO—Dudley, Pa.; SP—Same; CTY—Huntingdon; RR—H. & B. T. M.
SM—L. N. Horton, Dudley, Pa.

S of H—Mules. Track gage, 38 in.
S of M—Hand.

EMP—4. Last fiscal year output, 1,256 tons.
SIZES SHIPT—Run of Mine.

Ocean No. 5 Mine; Drift; Barnett & Fulton Seams, 32 in. thick.

PO—Dudley, Pa.; SP—Same; CTY—Huntingdon; RR—H. & B. T. M.
SM—L. N. Horton, Dudley, Pa.

S of H—Mules. Track gage, 38 in.
S of M—Hand.

EMP—42. Last fiscal year output, 64,500 tons.
SIZES SHIPT—Run of Mine.

CARNEGIE COAL COMPANY.

General Office, Oliver Bldg., Pittsburgh, Pa.
PR—John A. Bell, Pittsburgh, Pa.
VP—J. H. Sanford, Pittsburgh, Pa.
TR—J. T. M. Stonerod, " "

GM—J. H. Sanford, " "
GS—G. F. Osler, " "
PA—R. B. Haverstick, Oakdale, Pa.
EE—W. J. Hallie, McDonald, Pa.

LINE INSPECTOR—Jos. Linden, Primrose, Pa.

SCO—Carnegie Supply Co., Pittsburgh, Pa., Buyer, H. E. Harrell, Oakdale, Pa.

Oakdale Mine; Drift; Pittsburgh Seam, 58 to 62 in. thick.

PO—Oakdale, Pa.; SP—Nobletown, Pa.; CTY—Allegheny; RR—P. C. C. & St. L.

MS—A. H. Shafer, Oakdale, Pa.
S of H—Mules and 6 trolley pole type locos. Track gage 42 in.

S of M—10 chain breast type and 4 shortwall machs.
PP—Power purchased. Transformer 23,000 to 2200 to 550 volts A. C., 1—200 K W M. G. Set, 550 volts D. C., 2 water tube boilers, total 500 H. P., 8 pumps.

EMP—200. Last years tonnage 144,723.
SIZES SHIPT—Run of Mine, Slack, Nut.

PREP. EQUIPT—Shaker Screens, Picking Tables.

Primrose Mine; Drift; Pittsburgh Seam, 58 to 60 in. thick.

PO—Primrose, Pa.; SP—Same; CTY—Washington; RR—P. C. C. & St. L.
MS—John Barton, Primrose, Pa.
SM—John Vanderschiff, Primrose, Pa.

S of H—11 trolley pole type locos. Track gage 42 in.

S of M—9 chain breast and 7 shortwall machs.

PP—Power purchased. Transformer 23,000 to 2,200 volts A. C., 2—200 K W M. G. sets, 550 volts D. C., 9 pumps.
EMP—160. Last years tonnage 193,517.
SIZES SHIPT—Run of Mine, Slack, Nut.

PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

Louise Mine; Drift; Pittsburgh Seam

54 to 60 in. thick.
PO—Joffre, Pa.; SP—Raccoon, Pa.; CTY—Washington; RR—P. C. C. & St. L.

MS—John Malone, Joffre, Pa.
S of H—6 trolley pole type locos. Track gage 42 in.

S of M—8 shortwall machs.
PP—Purchased power, transformer 6600 to 2200 volts A. C., motor gen. sets, 550 volts D. C., 4 pumps.
EMP—156. Last years tonnage 141,056.
SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Shaker Screens, Loading Booms, Picking Tables.

McDonald Mine; Drift; Pittsburgh Seam, 59 to 70 in. thick.

PO—McDonald, R. F. D., Pa.; SP—Primrose, Pa.; CTY—Washington, RR—P. C. C. & St. L.

MS—Albert Bayne, R. F. D., McDonald, Pa.

SM—John Vanderschiff, R. F. D., McDonald, Pa.

S of H—11 trolley pole type locos. Track gage 42 in.

S of M—1 chain breast type and 12 shortwall machs.

PP—Purchased power, transformer 23,000 to 2200 volts A. C., motor gen. sets, 550 volts D. C., 4 pumps.
EMP—323. Last years tonnage 306,049.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Pa.

PREP. EQUIPT—Shaker Screens, Picking Tables.

Atlas Mine; Shaft; Pittsburgh Seam, 60 to 70 in. thick.

PO—Atlasburg, Pa.; SP—F. O. Atlasburg, Pa.; Exp. Bargettsburg, Pa.; CTY—Washington; RR—P. C. C. & St. L.

MS—R. F. McMillan, Atlasburg, Pa.
SM—C. A. Kocher, Atlasburg, Pa.
S of H—12 trolley pole type locos. Track gage, 44 in.

S of M—5 chain breast type and 11 shortwall machs.

PP—6 water tube boilers, total 1800 H. P., 3 gen. units, 2 200 K W., 1 400 K W., 275 volts D. C., 7 pumps.

EMP—290. Last years tonnage 173,097.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

Armide Mine; Drift; Pittsburgh Seam, 54 to 60 in. thick.

PO—Joffre, Pa.; SP—Raccoon, Pa.; CTY—Washington; RR—P. C. C. & St. L.

MS—Martin Rosca, Joffre, Pa.

S of H—9 trolley pole type locos. Track gage, 42 in.

S of M—7 chain breast type and 6 shortwall machs.

PP—Purchase power, transformers 6600 to 2200 volts A. C., motor gen. sets, 1 150, 1 100 K W., 550 volts D. C., 6 pumps.

EMP—203. Last years tonnage 147,401.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

Note—Formerly operated by J. H. Sanford Coal Co.

Cedar Grove Mine; Slope; Pittsburgh Seam; 54 to 66 in. thick.

PO—Studa, Pa.; SP—Same; CTY—Washington; RR—P. C. C. & St. L.

MS—G. L. Luxbacher, Studa, Pa.
SM—J. R. Gillespie, Studa, Pa.

S of H—10 elec. trolley pole type locos. Track gage 42 in.

S of M—12 elec. shortwall machs.

PP—Power purchased, transformer 23,000 to 2200 volts A. C., 2—200 K W. M. G. Sets 275 volts D. C. 10 pumps.

EMP—229. Last years tonnage 241,045.
SIZES SHIPT—Run of Mine, Slack, Lump, Block.

CARNWATH COAL CO

General Office, Fuchsburne, Pa.
PR—M. C. Fuchsburne, Chambersburg, Pa.
VP—C. L. Amos, Syracuse, N. Y.

TR—Rold H. Somerville, Wilburne, Pa.
GM—Rold H. Somerville, " "

GS—James Gray, Carnwath, Pa.
PA—James Gray, " "

EM—E. W. Hess, Clearfield, Pa.
EE—Prod Patterson, N. Y. Millport, Pa.

SCO—Carnwath Supply Co., Buyer, J. M. Fuchsburne, Carnwath, Pa.
SA—C. L. Amos Coal Co., Syracuse, N. Y.

Carnwath Nos. 2 and 3 Mines; Drift; D Seam 11 to 14 in. thick.
PO—Carnwath, Pa.; SP—Same; CTY—Clearfield; RR—P. C. C. & Potts.

S of H—11 trolley pole type locos. Track gage 36 in.

S of M—2 chain breast and 2 shortwall machs.
PP—Power purchased. Transformer 23,000 to 2,200 volts A. C., 2—200 K W. M. G. sets, 550 volts D. C., 9 pumps.
EMP—72. Last fiscal year output, 15,543 tons.
SIZES SHIPT—Run of Mine.
NOTE—Developing Mine No. 4.

CAROTHERS, C. E., COAL CO.

General Office, R. D. No. 1, Elizabeth, Pa.

Bell Bridge Mine
PO—Bell Bridge, Pa.; CTY—Allegheny;
RR—P. & L. E.
No report

CARRICK COAL COMPANY.

General Office, Punxsutawney, Pa.
PE—David Carrick, R. D.,
Punxsutawney, Pa.

TE—F. C. Lang, Punxsutawney, Pa.
GS—David Carrick, Punxsutawney, Pa.
PA—David Carrick, Punxsutawney, Pa.

No. 3 Mine; Drift; Lower Freeport Seam,
66 in. thick.
PO—R. D., Punxsutawney, Pa. SP—
Same. CTY—Jefferson. RR—B. R. &
P., Adrian Div.
S of H—Mules. Track gauge, 42 in.
S of M—Hand.
EMP—40. Daily tonnage 200.
SIZES SHIPT—Run of Mine.

CARRIER BROTHERS & COMPANY

General Office, Summerville, Pa.
PR—W. H. Carrier, Summerville, Pa.
VT—I. A. Carrier, Summerville, Pa.
TR—Frank A. Glenn, Summerville, Pa.
GM—James Wyse, Summerville, Pa.

Wyse Mine; Drift; Brookville Seam, 48-
60 inches thick.
PO—Summerville, Pa.; SP—Same; CTY—
Jefferson; RR—L. E. F. & C.
MS—James Wyse, Summerville, Pa.
S of H—Mules, rope.
S of M—Comp. air punchers.
EMP—30. Daily tonnage 70.
SIZES SHIPT—Run of Mine.

CARROLL-GATESMAN COAL CO.

PR—E. J. Carroll, Lucinda, Pa.
VP—E. J. Carroll, Lucinda, Pa.
TR—E. J. Carroll, Lucinda, Pa.
GM—E. J. Carroll, Lucinda, Pa.
GS—E. J. Carroll, Lucinda, Pa.
PA—E. J. Carroll, Lucinda, Pa.
SA—Frontier Mining Co., St. Marys, Pa.

Carroll Mine; Shaft; Clarion or 4 foot
Seam, 48 to 52 in. thick.
PO—Lucinda, Pa.; SP—Same. CTY—
Clarion. RR—B. & O.
S of H—Mules. Track gauge, 36 in.
S of M—Hand.
EMP—14. Last years tonnage 7,577.
SIZES SHIPT—Run of Mine.

CARROLLTOWN COAL CO.

General Office, St. Benedict, Pa.
PR—Rembrandt Peale, St. Benedict, Pa.
TR—Ale S. Murphy, St. Benedict, Pa.
GM—Richard Peale, St. Benedict, Pa.
GS—Merritt Hutton, St. Benedict, Pa.
PA—G. E. M. Tignor,
St. Benedict, Pa.
EE—R. J. Pratzillar, St. Benedict, Pa.
S of M—Benedictine Stores 2 and 3, Buyer,
F. R. Booth, St. Benedict, Pa.

Victor Nos. 1, 2, 3, 6 and 12 Mines,
Drifts and Slopes; Lower Freeport
Seams.
PO—St. Benedict, Pa. SP—Same. CTY—
Cambria. RR—N. Y. C.
MS—A. J. Dukes, St. Benedict, Pa.
S of H—9 elec. locos., mules and
rope.
S of M—20 elec. and 18 comp. air
machines and hand.
PP—Purchase power.
EMP—515. Last fiscal year out-
put 473,324 tons.
SIZES SHIPT—Run of Mine.

CARTER COAL COMPANY

General Office, 477 Donner Ave.,
Monessen, Pa.
GM—F. Chas. Carter, Monessen, Pa.
EM—A. L. McKiever, Monessen, Pa.
SA—F. Chas. Carter, Monessen, Pa.

No. 1 Mine; Drift; Pittsburgh Seam, 73
in. thick.
PO—Monessen, Pa.; SP—Same; CTY—
Westmoreland; RR—P. & L. E.
MS—Andrew C. Boyd, Monessen, Pa.
S of H—Horses. Track gauge 46 inches.
S of M—Chain breast and shortwall
machs.
PP—Purchase power.
EMP—30. Last years tonnage 55,000.
SIZES SHIPT—Run of Mine.
Note—Formerly operated by the Iron
City Coal Co.

CASCADE COAL AND COKE CO.

General Office, Buffalo, N. Y.
PR—Hugh Kennedy, Buffalo, N. Y.
VP—Wm. A. Rogers, Buffalo, N. Y.
TR—H. M. Van Horn, " "
GM—Hugh Kennedy, " "
PA—H. M. Van Horn, " "
GS—C. C. Gadd, " "
CE—The W. G. Wilkins Co., Pittsburgh,
Pa.

Sykesville Mine; Shaft; Lower Freeport
Seam; 48 to 60 in. thick.
PO—Sykesville, Pa.; SP—Sykes, Pa.;
CTY—Jefferson; RR—B. & S.

MS—John W. Foster, Sykesville, Pa.
S of H—14 elec. locos. Track gauge 42 in.
S of M—24 comp. air punchers and 2
shortwall machs.

PP—6 water tube boilers, total 1812
H. P., 2 375 Kva., 1 500 K. W.,
3 200 K. W., gen. sets, trans-
former 2200 volts A. C., gen. units,
250 volts D. C.

EMP—475. Last fiscal year output,
321,410 tons. Coke Ovens, 200 Bee
Hive and 200 Rectangular.
PREP. EQUIPT—Crushing.
Mine coal for own use.

Tyler Mine; Drift; Kittanning "R" Seam,
36 to 42 in. thick.
PO—Tyler, Pa.; SP—Same; CTY—Clear-
field; RR—B. & S.

MS—Geo. J. Raummer, Tyler, Pa.
S of H—10 trolley pole type locos. Track
gauge, 36 in.

S of M—9 shortwall machs.
PP—6 water tube boilers, total 1260 H.
P., 3 200 K. W., 1 300 K. W.,
1 781 Kva, gen. units, 2200 volts
A. C., transformer, M. G. set, 250
volts D. C.

EMP—450. Last fiscal year output,
226,735 tons. Coke Ovens, 400 Bee
Hive.
PREP. EQUIPT—Washery.
Mine coal for own use.

CASEY, JOHN F. COMPANY

General Office, Union Arcade, Pittsburgh,
Pa.
OWNER—John F. Casey, Pittsburgh, Pa.
GM—C. E. Lott, Pittsburgh, Pa.
GS—J. V. Walsh, Joffre, Pa.
PA—J. L. Cleary, Pittsburgh, Pa.

Casey No. 7 Mine; Stripping.
PO—Joffre, Pa.; SP—Bacon, Pa.;
CTY—Washington; RR—Penna. Paco-
handle Div.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine.

CASH COAL COMPANY.

Now operated by the Powell Coal Co

CASSELLMAN RIVER SMOKELESS COAL COMPANY.

General Office, Cavetown, Md.
PR—W. G. Barnheisel, Hagerstown, Md.
VP—J. G. Bower, Cavetown, Md.
TR—F. E. Busley, Cavetown, Md.
GS—B. J. Sefton, Markleton, Pa.
CE—G. C. Winslow, Somerset, Md.
SA—W. G. Barnheisel, Hagerstown, Md.

Casselman No. 1 Mine; Drift; C. Prime
Seam, 58 in. thick.
PO—Markleton, Pa.; SP—Same; CTY—
Somerset; RR—W. M.
S of H—Mules. Track gauge, 36 in.
S of M—Hand.
PP—4 pumps.
EMP—20. Daily tonnage 150.
SIZES SHIPT—Run of Mine.

CASSIDY COAL CO.

General Office, Curwensville, Pa.
PR—H. J. Thompson, Curwensville, Pa.
TR—C. O. Norris, Curwensville, Pa.
GM—C. O. Norris, Curwensville, Pa.
GS—C. O. Norris, Curwensville, Pa.
PA—C. O. Norris, Curwensville, Pa.
CE—Ralph Hess, Curwensville, Pa.
SA—H. J. Thompson, Curwensville, Pa.

Cassidy Mine; Drift; Moshannon Seam;
42 in. thick.
PO—Curwensville, Pa.; SP—Hyde, Pa.;
CTY—Clearfield; RR—B. R. & P.
S of H—Mules and elec. loco.
S of M—Hand.
PP—Purchase power.
EMP—38. Last fiscal year output, 33-
364 tons.
SIZES SHIPT—Run of Mine.

CASSLER, R. H. COAL CO.

General Office, Holsopple, Pa.
Cassler's Mine; Slope; "C" Seam, 36
inches thick.
PO—Holsopple, Pa.; SP—Same; CTY—
Somerset; RR—B. & O.
S of H—Mules. Track gauge 36 inches.
S of M—Hand.
SIZES SHIPT—Run of Mine.

CASWIN COAL MINING CO.

General Office, Philadelphia, Pa.
PR—F. D. Casanave, Jr., Philadelphia,
Pa.
VP—C. W. Bickford, Osceola Mills, Pa.
TR—J. H. Casanave, Philadelphia, Pa.
GM—C. W. Bickford, Osceola Mills, Pa.
GS—S. H. Eastment, Philadelphia, Pa.
PA—F. D. Casanave, Jr., Philadelphia,
Pa.
EE—Geo. Minns, Osceola Mills, Pa.

Caswin No. 1 Mine; Drift; "A" Seam,
60 in. thick.
PO—Osceola Mills, Pa. SP—Same. CTY—
Clearfield; RR—Penna.
MS—Thos. Dawson, Osceola Mills, Pa.
S of H—Mules.
S of M—Hand.
EMP—25. Last years tonnage 25,141
SIZES SHIPT—Run of Mine.

Wester Mine; Drift; "B" Seam; 42 in.
thick.
PO—Osceola Mills, Pa.; SP—Same; CTY—
Clearfield; RR—Penna.
MS—Thos. Dawson, Osceola Mills, Pa.
S of H—1 elec. storage battery loco.
S of M—Hand.
PP—Power purchased, 440 volts A. C.,
2 pumps.

EMP—43. Last years tonnage 28,757
SIZES SHIPT—Run of Mine.

CATHERINE COAL COMPANY

General Office, Box 66, Scottsdale, Pa.
PR—Jas. P. Strickler, Scottsdale, Pa.
VP—C. A. Miller, Scottsdale, Pa.
TR—Jas. P. Strickler, Scottsdale, Pa.
PA—C. A. Miller, Scottsdale, Pa.

Gail Mine; Drift.
PO—New Stanton, Pa.; SP—Same; CTY—
Westmoreland; RR—Penna.

S of H—Gasoline locos.
S of M—Hand.
EMP—63. Last years tonnage 40,000
SIZES SHIPT—Run of Mine.

CEBAR HILL COAL MINING COMPANY.

General Office, Philadelphia, Pa.
PR—F. D. Casanave, Jr., Philadelphia,
Pa.
VP—C. W. Bickford, Osceola Mills, Pa.
TR—J. H. Casanave, Philadelphia, Pa.
GS—H. Eastment, Philadelphia, Pa.
PA—C. W. Bickford, Osceola Mills, Pa.

Mt. Branch Mine; Drift; "A" and "B"
Seams, 54 in. thick.
PO—Osceola Mills, Pa.; SP—Same; CTY—
Clearfield; RR—Penna.
MS—Frank Christoff, Huntzdale, Pa.
S of H—Mules and elec. loco. Track gauge
36 in.
S of M—Hand and mach.
EMP—67. Last years tonnage 54,085.
SIZES SHIPT—Run of Mine.

CENTRAL FUEL COMPANY.

General Office, Connellsville, Pa.
PR—G. M. Tipton, Connellsville, Pa.
TR—F. M. Richey, Connellsville, Pa.
SECY—F. M. Richey, Connellsville, Pa.
GM—F. M. Richey, Connellsville, Pa.
PA—F. M. Richey, Connellsville, Pa.

Lawyer Mine; Drift; Pittsburgh Seam,
108 in. thick.
PO—Peensville, Pa.; SP—Same; CTY—
Fayette; RR—Penna.
MS—Grant Miller, Peensville, Pa.
S of H—Mules. Track gauge 44 in.
S of M—Hand.
EMP—25. Last years tonnage 20,000.
SIZES SHIPT—Run of Mine.

CENTRAL YOUGH COAL COMPANY

General Office, 404 Union Arcade Bldg.,
Pittsburgh, Pa.
PR—W. R. Calverley, Pittsburgh, Pa.
TR—W. A. Luce, Pittsburgh, Pa.
GM—J. W. A. Luce, Pittsburgh, Pa.
PA—H. V. Wyld, Pittsburgh, Pa.
CE—George A. Baton, Pittsburgh, Pa.
SA—Addison L. Luce, Pittsburgh, Pa.

Central Yough No. 1 Mine; Drift; Pitts-
burgh Seam, 72 in. thick.
PO—Yohogany, Pa.; SP—Shaner, Pa.;
CTY—Westmoreland; RR—B. & O.
S of H—Mules and 1 trolley pole type
loco. Track gauge 42 in.
S of M—2 shortwall machs.
PP—Power purchased, transformer 22-
000 to 2200 volts A. C., M. G.
set, 100 K. W., 550 volts D. C.,
8 pumps.
EMP—45. Last years tonnage 25,894.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Gravity Screens.

CENTURY COAL COMPANY

General Office, 1053 Century Bldg., Pitts-
burgh, Pa.
PR—G. R. Shipley, Pittsburgh, Pa.
VP—O. M. Bernuth, New York, N. Y.
VP—G. A. Lembeck, New York, N. Y.
TR—La Salle Girls, Pittsburgh, Pa.
PA—J. S. Stockdale, Pittsburgh, Pa.
EM—D. E. Taylor, Freeport, Pa.

Century No. 2 Mine; Drift; Upper Free-
port Seam; 42 inches thick.
PO—Freeport, Pa.; SP—Same; CTY—
Armstrong; RR—P. R. R. and P. &
S.
MS—D. J. McHugh, Freeport, Pa.
S of H—1 trolley and 1 storage battery
locos. Track gauge 42 inches.
S of M—4 shortwall machs.
PP—Power purchased, 1-200 K. W. M.
G. Set, 250 volts D. C., 1 fire
tube boiler, 150 H. P., 2 pumps.
EMP—40. Daily tonnage 350.
SIZES SHIPT—Run of Mine, Slack
PREP. EQUIPT—Shaker Screens Picking
Tables.

CENTURY COKE COMPANY.

General Office, Brownsville, Pa.
PR—C. E. Lenhart, Uniontown, Pa.
VP—J. H. Hillman, Jr., Pittsburgh, Pa.
TR—G. S. Harrah, Uniontown, Pa.

PA—D. C. Sheets, Brownsville, Pa.
EM—Fayette Engineering Co., Union-
town, Pa.

SCO—Century Supply Co., Buyer, L. A.
Lenhart, Brownsville, Pa.
SA—Producers Coke Co., Uniontown, Pa.

Century Mine; Drift; Pittsburgh Seam,
78 in. thick.
PO—Brownsville, Pa.; SP—Same; CTY—
Fayette; RR—Monongahela.

S of H—Mules and 2 trolley pole type
locos. Track gauge, 44 in.
S of M—1 chain breast type and 2 short-
wall machs.
PP—Purchase power, 500 volts D. C., 6
pumps.
EMP—203. Last fiscal year output,
164,793 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Shaker Screens.

CHAMPION CONNELLSVILLE COKE CO.

General Office, Brownsville, Pa.
PR—Martin F. Richard, Brownsville, Pa.
VP—Chas. S. Hemstead, Brownsville, Pa.
TR—John E. Hess, Brownsville, Pa.
GM—John E. Hess, Brownsville, Pa.
GS—A. B. Nedrow, Brownsville, Pa.
PA—A. B. Nedrow, Brownsville, Pa.
CE—Fayette Engineering Co., Browns-
ville, Pa.
SA—John E. Hess, Uniontown, Pa.

Champion Mine; Drift; Pittsburgh Seam,
96 in. thick.
PO—Brownsville, Pa.; SP—Same; CTY—
Fayette; RR—M. R. Y.
S of H—Mules and storage battery loco.
Track gauge 44 in.
S of M—Hand.
PP—Power purchased, 550 volts D. C.,
4 pumps.
EMP—47. Last fiscal year output, 25-
497 tons. Coke ovens, 40 Bee Hive.
SIZES SHIPT—Run of Mine.

CHAMPION GAS COAL BLDG.

General Office, Land Title Bldg., Phila-
delphia, Pa.
PR—M. D. Kelly, Philadelphia, Pa.
SECY—W. M. Whitney, Philadelphia, Pa.
TR—Jno. P. Kelly, Philadelphia, Pa.
GM—Jno. P. Kelly, Philadelphia, Pa.
GS—L. D. Morgan, Millsboro, Pa.
PA—W. M. Whitney, Philadelphia, Pa.
SA—Whitney Coal Mining Co., Land
Title Bldg., Philadelphia, Pa.

Champion Mine; Slope; Pittsburgh Seam;
72 inches thick.
PO—Millsboro, Pa.; SP—Same; CTY—
Washington; RR—Penna.
S of H—Mules and 2 trolley pole type
locos. Track gauge 44 inches.
S of M—1 chain breast and 3 shortwall
machs.
PP—Power purchased, Transformer 6,600
to 2,400 volts A. C., M. G. set,
250 volts D. C., 5 pumps.
EMP—135. Daily output, 600 tons.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Gravity Screens.

CHAPMAN COAL CO.

Out of Business.

CHARLES COAL CO.

Out of Business.

CHARLESTON COAL COMPANY

General Office, Kittanning, Pa.
TR—D. L. Shaffer, Kittanning, Pa.
GM—J. B. Fisher, Kittanning, Pa.
GS—J. B. Fisher, Kittanning, Pa.
PA—J. B. Fisher, Kittanning, Pa.
SA—P. & S. Coal Co., Kittanning, Pa.
Charleston Mine; Drift; Lower Kittanning
Seam, 36 inches thick.
PO—New Bethlehem, Pa., R. D. 4; SP—
McWilliams, Pa.; CTY—Armstrong;
RR—P. & S.
S of H—Mules and electric loco. Track
gauge 36 inches.
S of M—Shortwall machines and electric
punchers.
PP—1 fire tube boiler, 350 H. P., gen.
units 150 K. W., 250 volts D. C.
EMP—38. Last years tonnage 15,000
SIZES SHIPT—Run of Mine.

CHARLEY-FRANK COAL COMPANY

PR—Chas. E. Faust, Clymer, Pa.
TR—James St. Clair, Clymer, Pa.
GM—Charles E. Faust, Clymer, Pa.
GS—James St. Clair, Clymer, Pa.
PA—Charles E. Faust, Clymer, Pa.
CE—James St. Clair, Clymer, Pa.
SA—Chas. E. Faust, Clymer, Pa.

Charley-Frank No. 1 Mine; Drift; "D"
or Moshannon Seam, 48 in. thick.
PO—Clymer, Pa.; SP—Same; CTY—In-
diana; RR—Cherry Tree & Dixon-
ville, Buck Run Branch.
S of H—1 gasoline loco. Track gauge
36 in.
S of M—Hand.
EMP—30. Daily tonnage 150
SIZES SHIPT—Run of Mine.

Clearfield Bituminous Coal Corp.—Cont.

Pleasant Hill Mine, Drift; "B" L. Kittanning Seam, 39 in. thick.
PO—Gasslat, Pa.; SP—Peale, Pa.; CTY—Clearfield; RR—N. Y. C. & H. R., Grassflat Branch.
MS—Andrew Frohlich, Grassflat, Pa. S of H—3 trolley pole type locos. Track gage 36 in.
S of M—4 shortwall machs.
PP—Power purchased, transformer 24,000 to 2300 volts A. C., rotary converters, 250 volts D. C., 17 pumps.
EMP—122. Last years tonnage 120,441. **SIZES SHIPT**—Run of Mine.
West Branch Mine; Drift; D Seam, 46 in. thick.
PO—Barnesboro, Pa. SP—Same. **CTY**—Cambria, RR—N. Y. C.
MS—Timothy McCarthy, Barnesboro, Pa. S of H—5 trolley pole type elec. locos. Track gage, 36 in.
S of M—2 elec. punchers and 4 shortwall machs.
PP—Power purchased, transformer 23,000 to 2300 volts A. C., rotary converters, 250 volts D. C., 8 pumps.
EMP—137. Last years tonnage 130,666. **SIZES SHIPT**—Run of Mine.
Sample Run Mine, Slope; "D" L. Freeport Seam, 46 in. thick.
PO—Clymer, Pa.; SP—Same; **CTY**—Indiana; RR—N. Y. C. & H. R., Cherrytree & Dixonville Branch.
MS—Jacob Frantz, Clymer, Pa.
S of H—8 trolley pole type locos. Track gage 36 in.
S of M—7 shortwall machs.
PP—4 water tube boilers, total 2000 H. P., M. G. sets, 2 1000 K. W. gen. units, 550 volts A. C., 14 pumps.
EMP—189. Last years tonnage 154,901. **SIZES SHIPT**—Run of Mine.
Hart Mine; Slope; "D" L. Freeport Seam, 42 in. thick.
PO—Dixonville, Pa.; SP—Same; **CTY**—Indiana; RR—N. Y. C. & H. R., Cherrytree & Dixonville Branch.
MS—James Laing, Dixonville, Pa.
S of H—4 trolley pole type locos. Track gage, 36 in.
S of M—5 shortwall machs.
PP—Power purchased, transformer 23,000 to 2200 volts A. C., rotary converters, 550 volts D. C., 6 pumps.
EMP—57. Last years tonnage 57,386. **SIZES SHIPT**—Run of Mine.
Rositer Nos. 1, 3, 4 and 5 Mines; Drifts and Slopes; "E" Upper Freeport Seam, 48 inches thick.
PO—Russiter, Pa.; SP—Same; **CTY**—Indiana; RR—N. Y. C. & H. R., Rositer Branch.
MS—Henry Frantz, Rositer, Pa.
S of H—18 trolley pole type locos. Track gage 36 in.
S of M—21 shortwall machs.
PP—3 water tube boilers, 1200 H. P., gen. units 2—650 K. W., 250 volts A. C., 32 pumps.
EMP—567. Last years tonnage 432,864. **SIZES SHIPT**—Run of Mine.
Commodore Nos. 1 and 2 Mines; Drift; "E" Upper Freeport Seam, 48 inches thick.
PO—Commodore, Pa.; SP—Same; **CTY**—Indiana; RR—N. Y. C. & H. R., Commodore Branch.
MS—D. C. Lefebvre, Commodore, Pa.
S of H—2 trolley pole type locos.
S of M—3 shortwall machs.
PP—Power purchased, transformer 23,000 to 2,200 volts A. C., rotary converters, 550 volts D. C., 5 pumps.
EMP—111. Last years tonnage 44,564. **SIZES SHIPT**—Run of Mine.
CLEARFIELD COLLIERY CO.
 General Office, Clearfield, Pa.
PR—J. M. Fiesch, Rochester, N. Y.
VP—J. M. Fitzgerald, Rochester, N. Y.
TR—A. W. Bigler, Clearfield, Pa.
GM—A. W. Bigler, Clearfield, Pa.
GS—A. W. Bigler, " "
PA—A. W. Bigler, " "
CE—Ralph H. Curwensville, Pa.
Caldwell Mine, Drift, "D" Seam 3 1-2 ft. thick.
PO—Curwensville, Pa.; SP—Bowles Sta.; **CTY**—Clearfield; RR—N. Y. C. & H. R.
MS—W. H. Hephart, Curwensville, Pa.
S of H—Trolley pole type locos. Track gage 36 in.
S of M—3 shortwall machs.
PP—Power purchased, transformers 2300 volts A. C., M. G. Set, 250 volts D. C.
EMP—85. Last years tonnage 81,000. **SIZES SHIPT**—Run of Mine.
CLEVER CAS COAL COMPANY
 General Office, Box 758, Connellsville, Pa.
PR—A. C. Stuckel, Connellsville, Pa.

VP—E. J. Norton, Connellsville, Pa.
TR—E. R. Floto, Connellsville, Pa.
GM—A. C. Stuckel, Connellsville, Pa.
GS—G. Brooks Ross, Frick Bldg., Pittsburgh, Pa.
PA—C. M. Stone, Connellsville, Pa.
SA—International Fuel & Iron Corp., Pittsburgh, Pa.
Staub Mine; Drift; Pittsburgh Seam, 66 inches thick.
PO—Moon Run, Pa.; SP—Clever, Pa.; **CTY**—Allegheny; RR—P. & L. E., Moon Run Branch.
MS—Jas. A. Welling, Moon Run, Pa.
S of H—Mules and main and tail rope. Track gage 42 inches.
S of M—4 comp. air punchers.
PP—1 fire tube boiler, 35 H. P., 3 pumps.
EMP—50.
SIZES SHIPT—Run of Mine, Slack.
CLINE, H. A. COAL CO.
 General Office, Bolivar, Pa.
TR—Mrs. H. A. Cline, Bolivar, Pa.
GM—Mrs. H. A. Cline, Bolivar, Pa.
PA—Mrs. H. A. Cline, Bolivar, Pa.
SCO—Cline Store, Buyer, Mrs. H. A. Cline, Bolivar, Pa.
No. 1 Mine; Drift; Freeport Seam, 108 inches thick.
PO—Bolivar, Pa.; SP—Same; **CTY**—Westmoreland; RR—Penna.
S of H—Mules. Track gage 32 inches.
S of M—Hand.
EMP—15. Daily output, about 40 or 50 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.
Old information.
CLINTON BLOCK COAL COMPANY
 General Office, 1015 Farmers Bank Bldg., Pittsburgh, Pa.
PR—M. W. McClane, Washington, Pa.
TR—R. L. McCarrell, Washington, Pa.
GM—R. H. Canon, Pittsburgh, Pa.
GS—W. B. Bannister, Imperial, Pa.
PA—R. H. Canon, 1015 Farmers Bank Bldg., Pittsburgh, Pa.
EM—W. B. Bannister, Imperial, Pa.
EE—T. B. Phillips, 1015 Farmers Bank Bldg., Pittsburgh, Pa.
SA—Fort Pitt Coal & Coke Co., 1015 Farmers Bank Bldg., Pittsburgh, Pa.
Additional information on Page 728
Clinton No. 1 Mine; Drift; Pittsburgh Seam, 66 in. thick.
PO—Imperial, Pa.; SP—Same; **CTY**—Allegheny; RR—Montour.
S of H—Mules and 1 trolley pole type loco. Track gage 40 in.
S of M—3 chain breast type machs.
PP—Power purchased, Transformer 22,000 to 2,200 volts A. C., M. G. sets, 250 volts D. C., 1 pump.
EMP—25. Last years tonnage 2,129.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.
Clinton No. 2 Mine; Stripping; Pittsburgh Seam, 66 in. thick.
PO—Imperial, Pa.; SP—Same; **CTY**—Allegheny; RR—Montour.
S of H—1 steam loco. Track gage 36 in.
S of M—Steam shovel.
PP—Power purchased, Transformer 2,200 to 220 volts A. C., 3 pumps.
EMP—60. Last years tonnage 29,316.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Crushed.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.
CLIPPER COAL COMPANY
 General Office, Speers, Pa.
PR—Van. L. Speers, Speers, Pa.
TR—Ray F. Speers, Speers, Pa.
PA—Van. L. Speers, Speers, Pa.
SA—Van. L. Speers, Speers, Pa.
Lock Four Mine; Drift; Pittsburgh Seam, 77 inches thick.
PO—Speers, Pa.; SP—Lock Four, Pa.; **CTY**—Washington; RR—P. R. R.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
PP—Power purchased.
Old information.
CLYDE COAL CO.
 Gen. Office, 1120 Bessemer Building, Pittsburgh, Pa.
PR—James Neale, Pittsburgh, Pa.
TR—J. Stuart Brown, Pittsburgh, Pa.
GM—Jas. G. Gegan, Pittsburgh, Pa.
GS—John Shaw, Fredericktown, Pa.
PA—James G. Gegan, Pittsburgh, Pa.
EM—Baton & Elliott, Pittsburgh, Pa.
EE—Wm. Toward, Fredericktown, Pa.
SCO—Clyde Supply Co.; Buyer, I. A. Griffith, Fredericktown, Pa.
SA—Wm. J. McAllister, Pittsburgh, Pa.
Clyde Mine Drift Pittsburgh River Seam 72 to 96 in. thick.
PO—Fredericktown, Pa.; SP—Same; **CTY**—Washington; RR—P. R. R., Monongahela Div. and P. M. & S.
S of H—Horses and trolley pole type locos. Track gage, 44 in.
S of M—3 chain breast and 5 shortwall machs.

PP—Power purchased, transformers 6600-440 volts A. C., 1—300 K. W., 2—125 K. W., M. G. Sets, 250 volts D. C., 10 pumps.
EMP—325. Last years tonnage 404,714. **SIZES SHIPT**—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.
COAL & CLAY COMPANY
 General Office, Northumberland, Pa.
PR—Charles Steele, Northumberland, Pa.
VP—Harry Steele, Northumberland, Pa.
TR—Charles Steele, Northumberland, Pa.
GM—Charles Steele, Northumberland, Pa.
GS—E. C. Zimmerman, Clearfield, Pa.
PA—Harvey Steele, Northumberland, Pa.
Moose Creek Mine; Drift; B. Kittanning Seam, 48 inches thick.
PO—Clearfield, Pa.; SP—Same; **CTY**—Clearfield; RR—B. R. & P.
S of H—Mules.
S of M—Hand.
EMP—15. Daily tonnage 75. **SIZES SHIPT**—Run of Mine.
COAL HILL MINING CO.
 General Office, DuBois, Pa.
Coal Hill Mine.
PO—Lutgersburg, Pa.; **CTY**—Clearfield; RR—B. R. & P.
No report.
COAL JUNCTION COAL MINING COMPANY
 General Office, Altoona Trust Bldg., Altoona, Pa.
PR—A. Bathgate, Sr., Coalport, Pa.
VP—B. D. Waddell, Philippi, W. Va.
TR—H. M. Fair, Altoona, Pa.
GM—Thos. Bathgate, Osceola Mills, Pa.
GS—Thos. Bathgate, Osceola Mills, Pa.
SA—H. M. Fair, Altoona, Pa.
Coal Run Junction No. 1 Mine; Slope; Lower Kittanning Seam, 51 in. thick.
PO—Osceola Mills, Pa.; SP—Same; **CTY**—Clearfield; RR—Penna.
S of H—Mules and rope.
S of M—Hand and shortwall mach.
PP—Power purchased, transformer 2,200-440-220 volts A. C., 3 pumps.
EMP—30. Last years tonnage 11,000. **SIZES SHIPT**—Run of Mine.
COAL RUN MINING COMPANY.
 General Office, Indiana, Pa.
PR—L. W. Robinson, Rochester, N. Y.
TR—J. A. O'Connor, Indiana, Pa.
GM—L. W. Robinson, Jr., Indiana, Pa.
GS—Thomas D. Thomas, Indiana, Pa.
PA—H. C. Smith, Indiana, Pa.
CE—L. W. Householder, Indiana, Pa.
EM—W. L. Dock, Indiana, Pa.
EE—L. W. Householder, Indiana, Pa.
SCO—Jacksonville Supply Co., Keest, Pa.
Buyer, J. F. Campbell, Indiana, Pa.
SA—J. M. Nelson, Rochester, N. Y.
Coal Run Mine; Drift; Upper and Lower Freeport Seam, 46-68 in. thick.
PO—McIntyre, Pa. SP—Coal Run Switch, McIntyre, Pa.; **CTY**—Indiana. RR—B. R. & P.
MS—Geo. Ditch McIntyre, Pa.
S of H—12 elec. locos. Track gage 42 inches.
S of M—17 shortwall machs.
PP—Purchase power, transformer 6600 to 360 volts A. C., rotary converters, 550 volts D. C., 13 pumps.
EMP—300. Last fiscal year output, 474,037 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens, Picking Tables.
COALMONT COAL CO.
 Now Baylor Coal Mining Co.
COALMONT-MOSHANNON COAL CO.
 Out of Business.
COCHRAN BROS.
TR—R. D. Henry, Dawson, Pa.
GM—R. D. Henry, Dawson, Pa.
CE—Thos. Zimmerman, " "
MM—S. E. Hon, " "
Sales Agent, W. N. Stone, 705 House Bldg., Pittsburgh, Pa.
Spring Grove Mine, Drift, Connellsville Seam, 9 ft. thick.
PO—Dawson, Pa.; SP—Same; **CTY**—Fayette; RR—B. & O., Heckman Run Branch.
MS—William Haas, Dawson, Pa.
S of H—Mules; track gage 42 in.
S of M—Hand.
EMP—60. Last fiscal year output, 46,860 tons. 61 Bee Hive ovens.
SIZES SHIPT—Run of Mine.
(Old Information)
COCHRAN COAL COMPANY.
 General Office, 34 West 4th St., Williamsport, Pa.
PR—G. D. Tinsman, Williamsport, Pa.
VP—J. W. Cochran, Williamsport, Pa.
TR—B. T. S. Steele, Williamsport, Pa.
GM—W. H. Miller, Saltsburg, Pa.
GS—W. H. H. Miller, Saltsburg, Pa.
PA—W. H. H. Miller, Saltsburg, Pa.

CE—W. H. Miller, Saltsburg, Pa.
EE—James W. Woodmense, Salina, Pa.
SCO—Bitumen Supply Co. Buyer, O. J. Cochran, Salina, Pa.
Cochran Mine; Drift; Slope; Upper Freeport Seam, 52 in. thick.
PO—Salina, Pa.; SP—Same; **CTY**—Westmoreland; RR—Penna.
S of H—5 trolley pole type locos. Track gauge, 42 in.
S of M—13 shortwall machs.
PP—Power purchased, transformer 2200-250 volts A. C., M. G. sets, 250-275 volts D. C., 1 150 K. W. gen. unit, 13 pumps.
EMP—210. Last tonnage 950. **SIZES SHIPT**—Run of Mine.
COCHRANE COAL COMPANY.
 General Office, Monongahela, Pa.
TR—D. M. Swickard, Monongahela, Pa.
GM—A. P. Cochran, Monongahela, Pa.
GS—D. M. Swickard, Monongahela, Pa.
EM—A. L. McViker, Monongahela, Pa.
Cochrane Mine; Slope; Pittsburgh Seam, 58 in. thick.
PO—Monongahela, Pa.; SP—Same; **CTY**—Washington; RR—Penna.
S of H—Mules and rope. Track gage 43 in.
S of M—1 mach.
PP—Power purchased, 500 volts D. C., 1 18 H. P. fire tube boiler, 1 pump.
EMP—22. Last years tonnage 24,000. **SIZES SHIPT**—Run of Mine.
COKEBURG COAL COMPANY
 General Office, 41 N. Main St., Washington, Pa.
PR—H. H. Landay, Washington, Pa.
VP—Charles Landay, Washington, Pa.
TR—F. L. Florian, Washington, Pa.
GM—H. H. Landay, Washington, Pa.
GS—H. H. Landay, Washington, Pa.
PA—F. L. Florian, Washington, Pa.
CE—J. A. Saxe, Ellsworth, Pa.
Mitchell Mine; Drift; Waynesburg Seam; 48 in. thick.
PO—Cokeburg, Pa.; SP—Ellsworth, Pa.; **CTY**—Washington; RR—P. C. C. & St. L.
MS—A. M. Ramsy, Cokeburg, Pa.
S of H—Mules. Track gage 42 inches.
S of M—Shortwall machs.
SIZES SHIPT—Run of Mine.
COLLUM, A. T.
 General Office, Arthurs, Pa.
PR—A. T. Collum, Arthurs, Pa.
TR—A. T. Collum, Arthurs, Pa.
GM—A. T. Collum, Arthurs, Pa.
GS—A. T. Collum, Arthurs, Pa.
PA—A. T. Collum, Arthurs, Pa.
EM—Harry Kissell, Clarion, Pa.
McDonald Mine; Shaft; Clarion Seam, 44 in. thick.
PR—Arthurs, Pa.; SP—Lucinda, Pa.; **CTY**—Clarion; RR—B. & O.
S of H—Mules. Track gage 30 inches.
S of M—Hand.
PP—1 30 H. P. fire tube boiler.
EMP—20. Daily output, 75 tons. **SIZES SHIPT**—Run of Mine.
COLONIAL IRON COMPANY.
 General Office, Riddlesburg, Pa.
PR—C. M. Smith, 149 Broadway, New York, N. Y.
VP—John M. Reynolds, Bedford, Pa.
TR—C. M. Smith, 149 Broadway, New York, N. Y.
GS—E. P. Ross, Riddlesburg, Pa.
PA—M. L. Washburn, 149 Broadway, New York, N. Y.
CE—Frank C. Roberts & Co., Philadelphia, Pa.
SA—Henry H. Adams & Co., 149 Broadway, New York, N. Y.
Judith No. 1 Mine; Slope; "C" Seam, 45 to 72 in. thick.
PO—Riddlesburg, Pa.; SP—Same; **CTY**—Bedford; RR—H. & B. T., Six Mile Run Br.
MS—James C. Allan, Riddlesburg, Pa.
S of H—Mules, rope, 1 steam, 1 elec. loco. Track gage 38 in.
S of M—Hand.
PP—3 return tubular boilers, total 240 H. P. Purchase power, 220 volts A. C., 2 air comps. and 2 pumps.
EMP—254. Last fiscal year output 155,000 tons coke ovens, 216 Bee Hive.
COLUMBIA COAL & COKE COMPANY
 General Office, 438 Diamond St., Pittsburgh, Pa.
OWNER—Jacob Steinberg, Pittsburgh, Pa.
Percy Mine; Slope; Sewlekley & Pittsburgh Seams, 60 to 84 in. thick.
PO—Lemont, Pa.; SP—Mount Braddock, Pa.; **CTY**—Fayette; RR—B. & O., F. M. & P. Branch.
S of H—Mules, rope and electric locos.
S of M—1 electric puncher and 2 shortwall machs.
PP—Purchase power, 250 volts A. C. Daily output, 100 tons.
SIZES SHIPT—Run of Mine.
Old information.

COMMERCIAL COAL COMPANY

General Office, West Newton, Pa.
 GS—W. H. Watt, West Newton, Pa.
 PA—W. H. Watt, West Newton, Pa.
 EM—D. R. Walkinshaw, Greensburg, Pa.
 SA—G. H. Snowden company, Pittsburgh, Pa.

Commercial No. 6 Mine; Drift; Reardon Seam, 54 in. thick.
 PO—Wyano, Pa.; SP—Same; CTY—Westmoreland; RR—Pennsylvania, Yukon Branch.
 S of H—Mules, 1 storage battery loco. Track gage 42 in.
 S of M—3 shortwall machs.
 PP—Power purchased, transformer 22000-250 volts A. C., gen. units, 250 volts D. C.
 EMP—60. Last years tonnage 20,000.
 SIZES SHIPT—Run of Mine.

COMMERCIAL COAL MINING CO.

General Office, Commercial Trust Bldg., Philadelphia, Pa.
 PR—Chas. V. Bergh, Philadelphia, Pa.
 VP—Geo. H. McAbee, Philadelphia, Pa.
 TR—A. G. Lanners, Philadelphia, Pa.
 GS—Victor E. Bergh, Expedite, Pa.
 EM—B. K. Nelson, Expedite, Pa.
 EF—Jas. Wilson, Expedite, Pa.
 SC0—Big Bend Supply Co., Expedite, Pa.; Buyer, H. R. Greest, Ebensburg, Pa.

Commercial Nos. 3 and 4 Mines; Slopes; Lower Kittanning Seam, 42-46 in. thick.
 PO—Expedite, Pa.; SP—Tain Rocks, Pa.; CTY—Cambria; RR—Penna.
 S of H—Mules and trolley pole type locos.
 S of M—Shortwall machs.
 PP—Power purchased, 220 volts D. C. EMP—160. Last fiscal year output, 164,728 tons.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Picking Tables.

Commercial Nos. 5 and 15 Mines; Slopes; Lower Kittanning Seam, 42-46 in. thick.
 PO—Expedite, Pa.; SP—Tain Rocks, Pa.; CTY—Cambria; RR—Penna.
 S of H—Trolley pole type locos.
 S of M—Hand.
 PP—Power purchased, 500 volts D. C. EMP—130. Last fiscal year output, 134,145 tons.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Picking Tables.

COMMERCIAL COLLIERIES COMPANY

General Office, Philadelphia, Pa.
 TR—Thos. R. Pierpoint, Philadelphia, Pa.
 GM—Jas. Pierpoint, Philadelphia, Pa.
 PA—Thos. R. Pierpoint, Philadelphia, Pa.
 EM—H. M. Kanar, Philadelphia, Pa.
 SA—James Pierpoint & Sons, Philadelphia, Pa.

Alder Run Mine; Drift; C Seam, 42 inches thick.
 PO—Morrisdale, Pa.; SP—Same; CTY—Clearfield; RR—N. Y. C.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 EMP—40.

CONCORD COAL & CLAY CO.

Grove City, Pa.
 GM—R. R. Smith, Grove City, Pa.
 No report.

CONEMAUGH COAL COMPANY

General Office, Blairsville, Pa.
 PR—T. L. Eyre, West Chester, Pa.
 TR—Wilbur P. Graff, Blairsville, Pa.
 GM—Frank M. Graft, Blairsville, Pa.
 GS—Ernest Fletcher, Saltburg, Pa.
 PA—Frank M. Graft, Saltburg, Pa.
 CE—Albert Smith, Saltburg, Pa.
 EE—H. A. Scott, Saltburg, Pa.

MM—Chancy Shipley, Saltburg, Pa.
 SC0—Kiskimuntus Supply Co. (Saltburg Store), Buyer, Wm. G. Fletcher, Blairsville, Pa.
 Sales Agent, Knickerbocker Fuel Co., New York, N. Y.

Conemaugh Mine; Drift; Pgh. Seam, 5 1/4 ft to 7 1/4 ft thick.
 PO—Blairsville, Pa.; SP—Conemaugh, Pa.; CTY—Indiana; RR—Penna.
 SM—W. H. Lydie, Saltburg, Pa.
 S of H—1 Elec. loco and mules, track gage 42 in.
 S of M—Hand.
 PP—2 Return tubular boilers total 230 H. P., 1 100 K. W. gen. unit 250 volts D. C., 3 pumps.
 EMP—106. Daily output, 250 tons.

CONEMAUGH COAL MINING CO.

General Office, Perth Bldg., Johnstown, Pa.
 PR—J. H. Cooney, Conemaugh, Pa.
 TR—H. C. Cook, Johnstown, Pa.
 GM—H. C. Cook, Johnstown, Pa.
 GS—H. C. Cook, Johnstown, Pa.
 PA—E. Lerow Cook, Johnstown, Pa.
 CE—L. G. Hastings, Johnstown, Pa.
 EM—L. G. Hastings, Johnstown, Pa.

Pack Hill Mine, Drift and Slope; Miller at U Seam; 48 in. thick.
 PO—Johnstown, Pa. SP—Conemaugh, Pa.; CTY—Cambria. RR—P. R. R., Main Line.
 S of H—Mules, 3 storage batteries. Track gage, 36 in.
 S of M—2 shortwall machs.
 PP—220 volts A. C., 5 pumps.
 EMP—350. Daily tonnage 600.
 SIZES SHIPT—Run of Mine.

CONEMAUGH COAL MINING CO.

General Office, McCance Block Bldg., Pittsburgh, Pa.
 PR—J. W. Fletcher, Pittsburgh, Pa.
 VP—George Fletcher, Kittanning, Pa.
 TR—A. H. Goodman, Pittsburgh, Pa.
 GM—J. W. Fletcher, Pittsburgh, Pa.
 PA—E. Brown, Pittsburgh, Pa.
 SA—J. W. Fletcher, Pittsburgh, Pa.
 Additional information on Page 720

Conemaugh Nos. 1, 2, 3, 4, 5 Mines; Drift; Upper Freeport Seam, 56 in. thick.
 PO—Apollo, Pa.; SP—Same; CTY—Armstrong; RR—P. R. R. (Conemaugh Division).
 MS—T. P. Kraemer, Apollo, Pa.
 PP—2 gen. units, 150 K. W.
 NOTE—Mines under development.

CONEMAUGH SMOKELESS COAL CO.

Now a part of the Penelec Coal Corporation.

CONESTOGA COAL COMPANY

General Office, 522 5th Ave., New York, N. Y.
 PR—A. B. Harris, New York, N. Y.
 VP—Jas. R. Wilson, Philadelphia, Pa.
 TR—C. C. Harris, New York, N. Y.
 GS—Jos. A. Black, Irvona, Pa.
 PA—A. B. Harris, New York.
 SA—Geo. D. Harris Company, 522 5th Ave., New York, N. Y.

Conestoga No. 1 Mine; Drift; B Seam.
 PO—Irvona, Pa.; SP—Same; CTY—Clearfield; RR—Penna.

S of H—Mules.
 S of M—Hand.
 PP—1 pump.
 EMP—50. Last years tonnage 9,931.
 SIZES SHIPT—Run of Mine.

CONFLUENCE COAL COMPANY

General Office, Confluence, Pa.
 PR—Andrew Coughenour, Confluence, Pa.
 VP—Floyd Coughenour, Confluence, Pa.
 TR—T. K. Thrasher, Confluence, Pa.
 GM—Andrew Coughenour, Confluence, Pa.
 GS—Andrew Coughenour, Confluence, Pa.
 PA—T. K. Thrasher, Confluence, Pa.
 EM—C. A. Younkin, Confluence, Pa.
 SA—T. K. Thrasher, Confluence, Pa.

Coughenour Mine; Drift; E Seam, 36 in. thick.
 PO—Confluence, Pa.; SP—Same; CTY—Somerset; RR—E. & O.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 EMP—25. Last years tonnage 5,000.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Picking Tables.

CONNELLVILLE BY-PRODUCT COAL CO

General Office, Cheat Haven, Pa.
 Lock View Mine.
 PO—Point Marion, Pa.; CTY—Fayette; RR—E. & O. and Monon.
 No report.

CONNELLVILLE CENTRAL COKE CO.

General Office, Pittsburgh, Pa.
 PR—Herbert Du Puy, Pittsburgh, Pa.
 VP—Charles M. Du Puy, Pittsburgh, Pa.
 TR—E. W. Reed, Pittsburgh, Pa.
 GM—John C. Neff, Pittsburgh, Pa.
 Asst. GM—John B. Campbell, Pittsburgh, Pa.
 GS—J. T. Harshman, Pittsburgh, Pa.
 EM—Fayette Engineering Co., Unifontown, Pa.
 S O—Klondyke Supply Co., Buyer, F. E. Harrington, R. F. D. No. 1, New Salem, Pa.

Herbert Mine; Shaft; Pittsburgh Seam, 108 in. thick.
 PO—R. F. D., New Salem, Pa.; SP—Low Phos., Pa.; CTY—Fayette; RR—Monongahela.
 S of H—2 gasoline locos. Track gage 44 in.
 S of M—10 comp. air machs.
 PP—8 return tubular boilers, total 1200 H. P., 2 gen. units, 250 volts D. C., 2 air compressors and 3 pumps.
 EMP—350. Daily tonnage 1,200. Coke ovens, 210 horizontal; 250 bee hive.

CONNELLVILLE COKE CO.

General Office, Connellville, Pa.
 PR—J. Fred Kurtz, Connellville, Pa.
 VP—R. S. Matthews, Connellville, Pa.
 TR—W. D. McGinnis, Connellville, Pa.
 GM—J. Fred Kurtz, Connellville, Pa.
 GS—J. J. Brown, Scottdale, Pa.
 PA—J. Fred Kurtz, Connellville, Pa.
 EM—S. M. Faust, Connellville, Pa.
 Sales Agency, Federal Fuel Co., Connellville, Pa.

Dexter Mine; Drift; Connellville Coking Seam, 72 in. thick.
 PO—Scottdale, Pa.; SP—West Overton, Pa.; CTY—Fayette. RR—B. & O.

S of H—Mules.
 S of M—Hand.
 SIZES SHIPT—Run of Mine.

CONNELLVILLE COKE & FUEL CO.

General Office, Connellville, Pa.
 PR—R. Marletta, Connellville, Pa.
 VP—W. F. Solsson, Connellville, Pa.
 TR—W. H. Solsson, Connellville, Pa.
 GM—R. Marletta, Connellville, Pa.
 GS—R. H. Hewitt, Ligonier, Pa.
 PA—W. H. Solsson, Connellville, Pa.
 EM—Jos. Honsler, Connellville, Pa.
 SA—J. H. Hillman & Sons Co., Pittsburgh, Pa.

Hazelburg Mine; Drift; Pittsburgh Seam 84 to 96 in. thick.
 PO—Ligonier, Pa.; SP—Same; CTY—Westmoreland, RR—P. R. R., L. V.
 S of H—Mules. Track gage, 44 in.
 S of M—Hand.
 PP—2 water tube boilers, 125 H. P., 1 pump.
 EMP—150. Last fiscal year output, 80,000 tons. Coke ovens, 80 Bee Hives.
 SIZES SHIPT—Run of Mine.

CONQUEST COAL MINING CO.

General Office, Philipsburg, Pa.
 PR—N. H. Mull, Philipsburg, Pa.
 TR—R. H. Mull, Philipsburg, Pa.
 GM—R. H. Mull, Philipsburg, Pa.
 GS—R. H. Mull, Philipsburg, Pa.
 PA—R. H. Mull, Philipsburg, Pa.
 EM—Geo. Ayers, Philipsburg, Pa.

Conquest No. 1 Mine; Drift; Upper Freeport Seam, 34 in. thick.
 PO—Philipsburg, Pa.; SP—Same; CTY—Clearfield; RR—Penna., N. Y. C.
 MS—Wm. Borge, Philipsburg, Pa.
 S of H—Mules and 1 trolley pole type loco. Track gage, 36 in.
 S of M—Hand.
 PP—Power purchased, transformer 22,000-2200 volts A. C., M. G. sets, 250-275 volts D. C.
 EMP—30.
 SIZES SHIPT—Run of Mine.

Conquest No. 1 "C" Mine; Drift; Upper Kittanning Seam, 30 in. thick.
 PO—Philipsburg, Pa.; SP—Same; CTY—Clearfield; RR—Penna., N. Y. C.
 MS—Wm. Borge, Philipsburg, Pa.
 S of H—Mules and 2 trolley pole type locos. Track gage, 36 in.
 S of M—2 chain breast type machs.
 PP—Power purchased, transformer 22,000-2200 volts A. C., M. G. sets, 250-275 volts D. C.
 EMP—35.
 SIZES SHIPT—Run of Mine.
 Imperial No. 1 Mine; Drift; Upper Freeport Seam, 42-48 in. thick.
 PO—Philipsburg, Pa.; SP—Same; CTY—Clearfield; RR—Penna.
 S of H—Mules. Track gage, 33 1/2 in.
 S of M—Hand.
 SIZES SHIPT—Run of Mine.

CONSOLIDATED COAL & COKE CO

General Office, Butler, Pa.
 PR—B. D. Phillips, Butler, Pa.
 VP—C. C. Ferguson, Butler, Pa.
 TR—A. M. Christley, Butler, Pa.
 GM—C. C. Ferguson, Butler, Pa.
 GS—C. C. Ferguson, Butler, Pa.
 PA—C. C. Ferguson, Butler, Pa.
 EM—Herbert & Henderson, Kittanning, Pa.
 EE—James Roush, Plumville, Pa.
 SC0—Plumville Supply Co.; Buyer, H. F. Brant, Plumville, Pa.
 SA—J. W. Tronice, 1538 Marine Trust Bldg., Buffalo, N. Y.

Consolidated No. 1 Mine; Slope; Upper Freeport Seam, 56 inches thick.
 PO—Plumville, Pa.; SP—Same; CTY—Indiana; RR—Buffalo & Susquehanna.
 MS—H. J. Kennard, Plumville, Pa.
 S of H—3 trolley pole type locos. Track gage 42 in.
 S of M—3 shortwall machs.
 PP—3-165 H. P. gas engines, 2-100 K. W. M. G. Sets, 250 volts D. C., 3 pumps.
 EMP—150. Last years tonnage 80,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

Consolidated No. 2 Mine; Drift; Lower Freeport Seam, 52 in. thick.
 PO—Fenelon, Pa.; SP—Same; CTY—Butler; RR—E. & P.
 MS—T. J. Butler, Fenelon, Pa.
 SM—J. W. Fisher, Worthington, Pa.
 S of H—1 trolley pole type and 1 gasoline loco. Track gage 42 in.
 S of M—3 shortwall machs.
 PP—2-165 H. P. gas engines, 2-100 K. W. gen. units, 250 volts D. C., 2 pumps.
 EMP—150. Last years tonnage 100,000.
 SIZES SHIPT—Run of Mine.

Consolidated No. 3 Mine; Drift; Lower Kittanning Seam, 46 in. thick.
 PO—R. F. D., Worthington, Pa.; SP—Nichols, Pa.; CTY—Armstrong; RR—E. & P.

MS—T. P. Butler, Fenelon, Pa.
 SM—J. W. Fisher, Worthington, Pa.
 S of H—Mules, 1 trolley pole type and 1 gasoline loco. Track gage 42 in.
 S of M—3 shortwall machs.
 PP—1-165 H. P. gas engine 1-100 K. W. gen. unit, 250 volts D. C., 1 pump.
 EMP—100. Last years tonnage 50,000.
 SIZES SHIPT—Run of Mine.
 NOTE—This mine formerly operated by the Inbrie Coal Mining Co.

Consolidated No. 4 Mine; Drift; Lower Freeport Seam, 54 in. thick.
 PO—Fenelon, Pa.; SP—Same; CTY—Butler; RR—E. & P.
 MS—T. P. Butler, Fenelon, Pa.
 SM—J. W. Fisher, Worthington, Pa.
 S of H—1 trolley pole type loco. Track gage 42 in.
 S of M—1 shortwall mach.
 PP—1-165 H. P. gas engine, gen. units, 1-100 K. W., 250 volts D. C., 1 pump.
 EMP—50. Daily tonnage 300.
 SIZES SHIPT—Run of Mine.

Consolidated No. 5 Mine; Drift; Lower Kittanning Seam, 38 in. thick.
 PO—Fenelon, Pa.; SP—Same; CTY—Butler; RR—E. & P.
 MS—T. P. Butler, Fenelon, Pa.
 SM—J. W. Fisher, Worthington, Pa.
 S of H—Mules and 1 trolley pole type loco. Track gage 42 in.
 S of M—1 shortwall mach.
 PP—1-165 H. P. gas engine, gen. units, 1-100 K. W., 250 volts D. C., 1 pump.
 EMP—50. Daily tonnage 250.
 SIZES SHIPT—Run of Mine.

CONSOLIDATED COKE COMPANY.

General Office, 2126 Oliver Bldg., Pittsburgh, Pa.
 PR—George Whyte, Pittsburgh, Pa.
 VP—Bas. F. Colbert, Jr., Pittsburgh, Pa.
 TR—John Husband, Pittsburgh, Pa.
 GM—Chas. F. Colbert, Jr., Pittsburgh, Pa.
 GS—P. J. Walsh, Unifontown, Pa.
 PA—C. G. Garland, Unifontown, Pa.
 EM—Chas. Hennessey, Grays Landing, Pa.
 EE—Amos Helmick, Grays Landing, Pa.
 SC0—Societley Supply Co., Buyer, John York, Unifontown, Pa.
 SA—Pioneer Coal & Coke Co., Pittsburgh, Pa.

Donald Nos. 1 and 2 Mines; Drift; Pittsburgh Seam, 90 to 102 in. thick. Operate Washery.
 PO—Grays Landing, Pa.; SP—Same; CTY—Fayette; RR—Penna., Monongahela Div.
 MS—Wm. Fisher, Grays Landing, Pa.
 SM—Wm. Reitz, Grays Landing, Pa.
 S of H—Mules and 3 trolley pole type locos. Track gage 42 in.
 S of M—2 shortwall machs.
 PP—8 water tube boilers, total 1175 H. P., 2 gen. units, 250 volts D. C., 1 air comp., 5 pumps.
 EMP—200. Daily tonnage 1,500. Coke ovens, 402 Bee Hives.
 SIZES SHIPT—Run of Mine, Crushed.

Donald No. 3 Mine; Slope; Pittsburgh Seam, 90 to 102 in. thick.
 PO—Grays Landing, Pa.; SP—Same; CTY—Fayette; RR—Penna., Monongahela Div.
 MS—Wm. Fisher, Grays Landing, Pa.
 SM—Wm. Reitz, Grays Landing, Pa.
 S of H—Mules, 1 trolley pole type loco S of M—2 shortwall machs.
 PP—3 water tube boilers, total 450 H. P., gen. units, 250 volts D. C., 1 pump.
 EMP—120. Daily tonnage 1,000. Coke ovens, 160 Bee Hives.
 SIZES SHIPT—Run of Mine, Crushed.

Mt. Sterling Mine; Shaft; Pittsburgh Seam, 66 to 102 in. thick.
 PO—Mt. Sterling, Pa.; SP—Masonstown, Pa.; CTY—Fayette; RR—Penna., Monongahela Div.

MS—Wm. Fisher, Grays Landing, Pa.
 SM—M. T. Christie, Mt. Sterling, Pa.
 S of H—Mules and 1 trolley pole type locos. Track gage 44 in.
 S of M—6 shortwall machs.
 PP—8 water tube boilers, total 1600 H. P., 2 gen. units, 250 volts D. C., 3 air comp. and 13 pumps.
 EMP—300. Daily tonnage 1,500. Coke ovens, 310 Bee Hives.
 SIZES SHIPT—Run of Mine, Crushed.
 PREP. EQUIPT—Washery.

Donald No. 5 Mine; Drift; Pittsburgh Seam, 60 to 72 in. thick.
 PO—Grays Landing, Pa.; SP—Same; CTY—Fayette; RR—Penna., Monongahela Div.
 MS—Wm. Fisher, Grays Landing, Pa.
 SM—Wm. Reitz, Grays Landing, Pa.
 S of H—Mules and 1 trolley pole type loco. Track gage 44 in.
 S of M—3 shortwall machs.
 PP—Power purchased, 250 volts D. C. EMP—100. Daily tonnage 500.
 SIZES SHIPT—Run of Mine.

CONSOLIDATION COAL COMPANY

General Office, Monongahela Bldg., 67 Wall St., New York, N. Y.
 100 Mines in Maryland, West Virginia, Pennsylvania and Kentucky.
 PR—W. Watson, New York, N. Y.
 ASST. to PR—Brooks Fleming, Jr., Fairmount, W. Va.
 VP—S. D. Cannon, New York, N. Y.
 VP—Arthur H. Hays, Continental Bldg., Baltimore, Md.
 VP (operating)—F. R. Lyon, Fairmount, W. Va.
 VP (Transportation)—W. L. Andrews, Continental Bldg., Baltimore, Md.
 VP—(Eastern Sales)—F. W. Wilshire, New York, N. Y.
 VP (Western Sales)—E. M. Mancourt, Dime Bank Bldg., Detroit, Mich.
 GEN. AUDITOR—A. K. Bowie, New York, N. Y.
 ASST. GEN. AUDITOR—H. H. Soderly, New York, N. Y.
 TR—S. L. Watson, Fairmont, W. Va.
 ASST. TR—T. K. Stuart, Baltimore, Md.
 ASST. TR—Walton Miller, Fairmont, W. Va.
 ASST. TR—D. P. Carey, New York, N. Y.

SECTY—T. K. Stuart, Baltimore, Md.
 ASST. SECTY & ASST. TR—H. H. Warfield, New York, N. Y.
 REAL ESTATE AGENT—C. H. Bradfield, New York, N. Y.
 GM—Wm. H. Kramer, Somerset, Pa.
 ASST. GM—A. W. Louthier, Somerset, Pa.
 PA (General)—A. T. Watson, Fairmont, W. Va.
 PA (Asst. General)—F. C. Davis, Fairmont, W. Va.
 CE—Frank Haas, Fairmont, W. Va.
 ASST. CE—J. C. Gaskill, Fairmont, W. Va.
 SUPT. P. & M. DEPT. (All Divisions)—K. L. Kingsland, Fairmont, W. Va.
 ENGR. OF TESTS—R. E. Rightmire, Fairmont, W. Va.
 ASST. ENGR. OF TESTS—W. D. Barrington, Fairmont, W. Va.
 LIVE STOCK BUYER—Frank Amos, Fairmont, W. Va.
 DIRECTOR (Employment Relationship Department)—C. L. Green, Fairmont, W. Va.
 DIRECTOR OF SAFETY—J. W. Reed, Fairmont, W. Va.
 COAL INSPECTOR, GENERAL—C. F. Lee, Fairmont, W. Va.

PENNSYLVANIA DIVISION

SUPT. P. & M. Dept.—A. F. Finnerman, Jenner, Pa.
 PA—W. P. Stettin, Somerset, Pa.
 EM—L. M. Carter, Somerset, Pa.
 SCO—John M. Co. General Store Mgr., R. F. Mason, Meyersdale, Pa.

Consolidation No. 104 Mine; Drift; Pittsburgh Seam, 72 in. thick.
 PO—Myersdale, Pa. SP—Consolidation No. 104, Pa. CTY—Somerset. RR—B. & O. Salisbury Br.
 MS—G. B. Fluck, Meyersdale, Pa.
 SM—E. J. Dickey, Meyersdale, Pa.
 S of H—Mules and elec. locos. Track gauge, 42 in.
 S of M—Hand.
 PP—3 return tubular boilers, total 450 H. P., 3 gen. units, 500 volts D. C., 3 pumps. Power from central plant.
 EMP—129. Last years tonnage 14,145.
 SIZES SHIPT—Run of Mine.

Consolidation No. 105 Mine; Drift; Pittsburgh and Redstone Seams, 56 to 72 in. thick.
 PO—Myersdale, Pa. SP—Consolidation No. 105, Pa. CTY—Somerset. RR—B. & O. Salisbury Br.
 MS—G. B. Fluck, Meyersdale, Pa.
 SM—E. J. Dickey, Meyersdale, Pa.
 S of H—Mules, 2 elec. locos. Track gauge, 42 in.
 S of M—Hand.
 PP—1 pump. Power from central plant.
 EMP—129. Last years tonnage 117,332.
 SIZES SHIPT—Run of Mine.

Consolidation No. 106 Mine; Drift; Redstone Seam, 56 in. thick.
 PO—Myersdale, Pa. SP—Consolidation No. 106, Pa. CTY—Somerset. RR—B. & O. Salisbury Br.
 MS—G. B. Fluck, Meyersdale, Pa.
 SM—E. J. Dickey, Meyersdale, Pa.
 S of H—Mules, 2 elec. locos. Track gauge, 42 in.
 S of M—Hand.
 PP—Power from central plant.
 EMP—116. Last years tonnage 97,829.
 SIZES SHIPT—Run of Mine.

No. 107 Mine; Drift; Pittsburgh and Redstone Seams, 72 and 56 inches thick.
 PO—Myersdale, Pa.; SP—West Salisbury, Pa.; CTY—Somerset; RR—B. & O. Salisbury Br.
 MS—G. B. Fluck, Meyersdale, Pa.
 SM—E. J. Dickey, Meyersdale, Pa.
 S of H—Mules and 1 elec. loco. Track gauge 42 in.

PP—1 pump. Receive power from central power station.
 EMP—59. Last years tonnage 39,064.
 SIZES SHIPT—Run of Mine.

Consolidation No. 108 Mine; Drift; "A" Seam, 46 in. thick.
 PO—R. D. 1 Rockwood, Pa.; SP—Consolidation No. 114, Pa.; CTY—Somerset; RR—B. & O.
 MS—J. P. Colby, R. D. No. 3, Berlin, Pa.
 SM—R. D. Meyers, R. D. 1 Rockwood, Pa.
 S of H—Mules, 1 elec. loco. Track gauge, 42 in.
 S of M—1 elec. mach.
 PP—1 gen. unit, 250 volt D. C., 2 pumps. Power from central plant.
 EMP—19. Last years tonnage 11,905.
 SIZES SHIPT—Run of Mine.

Consolidation No. 112 Mine; Drift; Platt Seam, 3 1/2 to 5 ft. thick.
 PO—R. D. 3 Berlin, Pa.; SP—Consolidation No. 112, Pa.; CTY—Somerset; RR—B. & O. Berlin Br.
 MS—J. J. Colby, R. D. No. 3, Berlin, Pa.
 S of H—2 elec. locos. and mules. Track gauge 42 in.
 S of M—Hand.
 PP—3 return tubular boilers total 425 H. P., 1 gen. unit, 250 volts D. C., 2 pumps.
 EMP—59. Last years tonnage 37,057.
 SIZES SHIPT—Run of Mine.

Consolidation No. 113 Mine; Drift; Berlin Seam, 48 in. thick.
 PO—R. D. 3, Berlin, Pa.; SP—Consolidation No. 113, Pa.; CTY—Somerset; RR—B. & O. Berlin Br.
 MS—J. J. Colby, R. D. No. 3, Berlin, Pa.
 S of H—4 elec. locos. Track gauge 42 in.
 S of M—3 elec. machs.
 PP—Power from central station, 2 pumps.
 EMP—79. Last years tonnage 84,437.
 SIZES SHIPT—Run of Mine.

Consolidation No. 114 Mine; Drift; A Seam, 56 inches thick.
 PO—R. D. 1, Rockwood, Pa.; SP—Consolidation No. 114, Pa.; CTY—Somerset; RR—B. & O.
 MS—J. J. Colby, R. D. No. 3, Berlin, Pa.
 SM—E. E. Meyers, R. D. 1, Rockwood, Pa.
 S of H—Mules, 1 elec. loco. Track gauge, 42 in.
 S of M—Hand.
 PP—2 return tubular boilers, total 300 H. P., 1 gen. unit, 250 volts D. C., 3 pumps. Power from central plant.
 EMP—52. Last years tonnage 39,820.
 SIZES SHIPT—Run of Mine.

Consolidation No. 118 Mine; Drift; "C" Prime Seam, 48 in. thick.
 PO—Jenner, Pa. SP—Consolidation No. 118, Pa. CTY—Somerset. RR—B. & O. Roswell Br.
 MS—J. P. Sommer, Jenner, Pa.
 SM—W. R. Mendenhall, Jenner, Pa.
 S of H—11 elec. locos. Track gauge, 42 in.
 S of M—6 elec. machs.
 PP—3 return tubular boilers, total 2700 H. P., 7 gen. units, 2300 volts A. C., 3 phase, 60 cycle, 3 pumps. Power from central plant.
 EMP—158. Last years tonnage 142,621.
 SIZES SHIPT—Run of Mine.

Consolidation 119 Mine; Slope; "C" Prime Seam, 52 in. thick.
 PO—Jenner, Pa. SP—Consolidation No. 119, Pa. CTY—Somerset. RR—B. & O. Roswell Br.
 MS—J. P. Sommer, Jenner, Pa.
 SM—W. R. Mendenhall, Jenner, Pa.
 S of H—Rope, 9 elec. locos. Track gauge, 42 in.
 S of M—6 elec. machs.
 PP—3 pumps. Power from central plant.
 EMP—158. Last years tonnage 197,268.
 SIZES SHIPT—Run of Mine.

Consolidation Nos. 120 and 121 Mines; Drifts; C. Prime Seam, 46 in. thick.
 PO—Acosta, Pa. SP—Consolidation 120 and 121, Pa. CTY—Somerset. RR—B. & O. Roswell Br.
 MS—M. M. D. Acosta, Pa.
 SM—Theodore Reese, Acosta, Pa.
 S of H—11 elec. locos. Track gauge 42 in.
 S of M—14 elec. machs.
 PP—3 return tubular boilers, total 300 H. P., 1 pump. Central power plant for 118, 119, 120, 121, 124, 125, 126, 127 Mines.
 EMP—258. Last years tonnage 160,242.
 SIZES SHIPT—Run of Mine.

Consolidation Nos. 123 and 124 Mines; Shaft; "E" Seam, 42 to 54 in. thick.
 PO—Gray, Pa.; SP—Same; CTY—Somerset; RR—W. M.
 MS—R. M. Crawford, Gray, Pa.
 SM—James Nixon, Gray, Pa.

S of H—8 elec. locos. Track gauge 42 inches.
 S of M—10 elec. machs.
 PP—1 return tubular boiler, 80 H. P.
 EMP—256. Last years tonnage 90,611.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT.—Picking Tables.

Consolidation No. 125 Mine; Slope; "C" Prime Seam, 54 to 60 in. thick.
 PO—Bell, Pa.; SP—Consolidation No. 125, Pa.; CTY—Somerset; RR—W. M.
 MS—Guy Schrock, Bell, Pa.
 SM—J. T. Friend, Bell, Pa.
 S of H—Rope and elec. loco. Track gauge, 42 in.
 S of M—3 elec. Machs.
 PP—2 pumps. Receive power from central power plant.
 EMP—113. Last years tonnage 90,611.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT.—Picking Tables.

Consolidation No. 126 Mine; Drift; E Seam, 54 to 60 inches thick.
 PO—Bell, Pa.; SP—Consolidation No. 126, Pa.; CTY—Somerset; RR—W. M.
 MS—Guy Schrock, Bell, Pa.
 SM—J. T. Friend, Bell, Pa.
 S of H—Mules and 4 elec. locos. Track gauge 42 inches.
 S of M—5 elec. machs.
 PP—4 pumps. Receive power from central power plant.
 EMP—89. Last years tonnage 73,390.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT.—Picking Tables.

Consolidation No. 127 Mine; Drift; "E" Seam, 54 to 60 in. thick.
 PO—Bell, Pa.; SP—Consolidation No. 127, Pa.; CTY—Somerset; RR—W. M.
 MS—Guy Schrock, Bell, Pa.
 SM—J. T. Friend, Bell, Pa.
 S of H—Mules and 3 elec. locos. Track gauge 42 inches.
 S of M—Hand and 3 elec. mach.
 PP—3 pumps. Receive power from central power plant.
 EMP—47. Last years tonnage 48,350.
 SIZES SHIPT—Run of Mine.

CONSUMERS COLLIERIES CORPORATION

General Office, 319 White Bldg., Buffalo, N. Y.
 PR—J. E. Tibbitts, Buffalo, N. Y.
 VP—J. E. Tibbitts, 319 White Bldg., Buffalo, N. Y.
 TR—William A. Stetson, Battavia, N. Y.
 GM—R. B. Stewart, Sligo, Pa.
 GS—R. B. Stewart, Sligo, Pa.
 PA—R. B. Stewart, Sligo, Pa.
 EM—R. B. Stewart, Sligo, Pa.

Turkey Run Mine; Drift; Lower Kittanning Seam, 42 in. thick.
 PO—Sligo, Pa.; SP—Same; CTY—Clarion; RR—Penna.
 S of H—1 elec. loco. Track gauge 36 in.
 S of M—1 shortwall mach.
 PP—1—100 K. W. M. G. Set, 250 volts D. C., 3 pumps.
 EMP—60. Last years tonnage 30,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT.—Gravity Screens.

CONSUMERS FUEL COMPANY

General Office, Chamber of Commerce Bldg., Pittsburgh, Pa.
 One mine in Pennsylvania, three in West Virginia.
 PR—E. F. Miller, Broomfield, W. Va.
 VP—J. E. Soward, Pittsburgh, Pa.
 TR—C. S. Patterson, Pittsburgh, Pa.
 SECY—D. R. Tomb, Pittsburgh, Pa.
 GM—J. E. Stewart, Pittsburgh, Pa.
 GS—H. H. Kallaway, Pittsburgh, Pa.
 PA—N. A. Barnhart, Pittsburgh, Pa.
 CE—M. D. Gibson, Pittsburgh, Pa.
 CHAIRMAN OF THE BOARD—W. L. Stewart, Pittsburgh, Pa.

SCO—Four States Supply Co., Buyer, J. Lloyd Grimm, Pittsburgh, Pa.
 SA—Bertha Coal Co. Pittsburgh, Pa.
 Gould Mine; Drift; Pittsburgh Seam, 63 in. thick.
 PO—Finleyville, Pa.; SP—Same; CTY—Washington; RR—P. V. & C., Peters Creek Branch.
 MS—Thomas Howard, Finleyville, Pa.
 SM—W. R. Murrell, Finleyville, Pa.
 S of H—8 mules and 1 electric loco. Track gauge, 42 in.
 S of M—4 electric mining machs.
 PP—2 return tubular boilers, 150 H. P., gen. units, 275 volts and 250 volts D. C., 7 pumps.
 EMP—175. Last years tonnage 108,883.
 SIZES SHIPT—Run of Mine, Slack Nut, Pa., Lump, Egg, Block.

CONSUMERS MINING COMPANY

General Office, Wheeling, W. Va.
 PR—D. A. Burt, Wheeling, W. Va.
 VP—H. B. Westfall, Wheeling, W. Va.
 TR—H. B. Westwick, Wheeling, W. Va.
 GM—G. B. LeVan, Steubenville, O.
 GS—R. W. McCandless, Steubenville, O.
 PA—R. M. Rice, Wheeling, W. Va.
 CE—H. H. Roberts, Steubenville, O.

EM—J. C. Gibson, Steubenville, O.
 EE—Jas. Farrington, Steubenville, O.
 SCO—Luzerne Mercantile Co., Harmarville, Pa.
 SA—Wheeling Steel Products Co., Wheeling, W. Va.

Harmar Mine; Slope and Shaft; Freeport Seam; 88 inches thick.
 PO—Harmarville, Pa.; SP—Same; CTY—Allegheny; RR—Penna.
 MS—H. C. Dougherty, Harmarville, Pa.
 S of H—Mules and 2 elec. combination locos. Track gauge 44 in.
 S of M—Chain breast and shortwall machs.
 PP—Power purchased. Transformer 22,000 to 2,200-220 volts A. C., M. G. sets, 250 volts D. C.
 EMP—90. Last years tonnage 98,484.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT.—Picking Tables.

COOPER COAL CO.

General Office, Grove City, Pa.
 PR—W. C. Quinn, Brockwayville, Pa.
 VP—H. B. Cooper, Road City, Pa.
 TR—S. M. Cooper, Road City, Pa.
 SA—Pennsylvania Fuel Corp., Park Bldg., Pittsburgh, Pa.
 Cooper Mine; Double Freeport Seam.
 PO—Argentine, Pa.; SP—Same; CTY—Butler; RR—R. & L. E.
 SIZES SHIPT—Slack, Nut.

COPELIN-BURGE & CO.

Now part of Conquest Coal Mining Co.
 CORRETT COAL COMPANY.
 Property now operated by Gilbert Coal Co.

CORNING-BLOSSBERG COAL CORP.

Now operated by the Nowak Coal Co.

CORRADO COAL COMPANY

General Office, Colonial National Bank Bldg., Connellsville, Pa.
 PR—G. F. Corrado, Connellsville, Pa.
 VP—G. F. Corrado, Connellsville, Pa.
 TR—A. Basione, Connellsville, Pa.
 GM—G. F. Corrado, Connellsville, Pa.
 GS—H. R. Cunningham, Connellsville, Pa.
 PA—F. R. Yoder, Connellsville, Pa.
 CE—W. R. Barnhart, Connellsville, Pa.
 EK—H. R. Cunningham, Connellsville, Pa.
 SA—G. Corrado Coal & Coke Ints., J. J. Ash, Sales Mgr., Connellsville, Pa.

Corrado No. 1 Mine; Slope; Freeport Seam, 8 in. thick.
 PO—Connellsville, Pa.; SP—Sand Rock, Pa.; CTY—Fayette; RR—P. & L. E.
 MS—C. R. Weihe, Connellsville, Pa.
 SM—A. Palladino, Connellsville, Pa.
 S of H—Mules. Track gauge, 42 in.
 S of M—Hand.
 PP—Power purchased, 1 pump.
 EMP—60. Daily output, 250 tons.
 SIZES SHIPT—Run of Mine.

CORRADO-SCHENCK COAL COMPANY

General Office, Colonial National Bank Bldg., Connellsville, Pa.
 PR—G. F. Corrado, Connellsville, Pa.
 VP—T. B. Donnelly, Connellsville, Pa.
 GM—G. F. Corrado, Connellsville, Pa.
 GS—H. R. Cunningham, Connellsville, Pa.
 PA—F. R. Yoder, Connellsville, Pa.
 CE—W. R. Barnhart, Connellsville, Pa.
 EK—H. R. Cunningham, Connellsville, Pa.
 SA—G. Corrado Coal & Coke Ints., J. J. Ash, Sales Mgr., Connellsville, Pa.

Eagle Mine; Slope; Pittsburgh Seam, 108 in. thick.
 PO—Broad Ford, Pa.; SP—Same; CTY—Fayette; RR—P. & L. E.
 MS—H. J. Crowley, Broad Ford, Pa.
 S of H—Mules. Track gauge, 39 in.
 S of M—Hand.
 PP—1 pump.
 EMP—15. Daily output, 50 tons.
 SIZES SHIPT—Run of Mine.

CORTEZ COAL CO.

General Office, Punxsutawney, Pa.
 PR—R. H. Hampson, Punxsutawney, Pa.
 TR—E. G. Roddig, Punxsutawney, Pa.
 GM—R. Hampson, Punxsutawney, Pa.
 GS—John R. Hampson, Anita, Pa.
 SA—Williams, Damill & Co., Philadelphia, Pa.

Cortez No. 2 Mine; Drift; Upper Freeport Seam; 42 in. thick.
 PO—Anita, Pa.; SP—Same; CTY—Jefferson; RR—P. R. R.
 S of H—Mules. Track gauge, 42 in.
 S of M—2 shortwall machs.
 PP—3 fire tube boilers, 260 H. P., 1—150 K. W. gen. unit, 250 volts D. C., 1 pump.
 EMP—40. Last years tonnage 13,500.
 SIZES SHIPT—Run of Mine.
 Old information.

COSTA COAL COMPANY

General Office, 610 2nd National Bank Bldg. Connellsville, Pa.
 PR—Clive S. Campbell, Connellsville, Pa.
 VP—Lindsay McFarland, Connellsville, Pa.
 TR—W. C. McClelland, Connellsville, Pa.
 GM—W. C. McClelland, Connellsville, Pa.

(Continued on Next Page)

Costa Coal Company—Cont.

GS—W. C. McElhann, Connellsville, Pa.
PA—Clyde S. Campbell, Connellsville, Pa.
SA—Federal Fuel Co., Connellsville, Pa.
Lucy Mine; Drift; Prime C Seam, 46 in. thick.
PO—Sand Rock, Pa.; SP—Same; CTY—Fayette; RR—P. & E.
S of H—Mules Track gage 42 in.
S of M—Hand.
EMP—35 daily tonnage 100.
SIZES SHIPT—Run of Mine.

COUNTRY CLUB COAL CO.

General Office, 504 First Natl. Bank Bldg., Pittsburgh, Pa.
PR—H. A. Davis, Pittsburgh, Pa.
VP—J. H. Hillman, Jr., " "
TR—H. A. Davis, " "
GM—H. A. Davis, Pittsburgh, Pa.
CS—W. P. Pilkington, Pittsburgh, Pa.
PA—J. R. Jones, Pittsburgh, Pa.
EM—J. L. Mountain, Pittsburgh, Pa.

Lutton Mine; Slope; Pittsburgh Vein, 60 to 72 in. thick.
PO—Washington, R. D., Pa.; SP—Meadowlands, Pa.; CTY—Washington; RR—P. C. & S. L.
MS—R. W. Davis, Washington, Pa.
S of H—Mules. Track gage, 42 in.
S of M—4 shortwall machs.
PP—Power purchased, Transformer 6600-2200 M. G. sets, 250 volts D. C., 5 pumps.
EMP—97. Last years tonnage 118,969.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

COUNTY COAL COMPANY

General Office, Carnegie, Pa.
TR—L. F. Sossong, Carnegie, Pa.
GM—W. F. Sossong, Carnegie, Pa.
GS—L. F. Sossong, Carnegie, Pa.

Leo Mine.
PO—Loupurex, Pa.; SP—Same; CTY—Allegheny; RR—P. C. & Y.
MS—J. Platts, Loupux, Pa.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine.
Old Information.

COWANSHANNOCK COAL & COKE CO.

General Office, Punxsutawney, Pa.
PR—L. W. Robinson, Punxsutawney, Pa.
VP—B. M. Clark, Punxsutawney, Pa.
TR—Wm. G. Miller, Yatesboro, Pa.
CM—James Craig, Punxsutawney, Pa.
CS—James Craig, Punxsutawney, Pa.
PA—H. C. Smith, Indiana, Pa.
CE—E. H. Jenks, Indiana, Pa.
EM—Jas. S. Scott, Punxsutawney, Pa.
MM—J. E. Dickey, Punxsutawney, Pa.
EE—B. J. Clark, Punxsutawney, Pa.
SCD—Valley Supply Co., Buyer, Wm. G. Miller, Yatesboro, Pa.
SA—Rochester & Pittsburgh Coal & Iron Co., Rochester, N. Y.

Yatesboro Mine. Slope, Upper Freeport Seam, 4 ft. thick.
PO—Yatesboro, Pa.; SP—Same; CTY—Armstrong; RR—Burling Valley.
S of H—31 elec loco. and rope.
S of M—33 elec mach.
PP—Water tube boilers, total 2000 H. P. gen. units, 500 volts D. C., 60 cycles, 158 pumps.
EMP—975. Last fiscal year output, 1,110,000 tons.
SIZES SHIPT—Run of Mine, Slack.
Pea, Not Lump.
PREP. EQUIPT—Bar Screens, Picking Tables.

COWANSHANNOCK MINING COMPANY

General Office, Bradford, Pa.
PR—C. E. Foster, Bradford, Pa.
TR—E. H. Perkins, Wayland, N. Y.
GM—C. E. Foster, Bradford, Pa.
GS—G. W. Foster, Jr., Kittanning, Pa.
PA—G. W. Foster, Jr., Kittanning, Pa.
EM—Bernard Peters, Kittanning, Pa.
SA—Valley Coal Company, Brockwayville, Pa.

CowanShannock No. 1 Mine; Drift; Lower Kittanning Seam; 36 in. thick.
PO—Kittanning, Pa.; SP—Same; CTY—Armstrong; RR—Penna.
MS—Grant Lamson, Kittanning, Pa.
S of H—Mules and elec. locos. Track gage 30 in.
S of M—Electric punchers and continuous cutter mach.
PP—Generate power, 1 75 K. W., 250 volts D. C., 2 pumps.
EMP—50. Daily tonnage 150.
SIZES SHIPT—Run of Mine.

Badger Mine; Slope; Upper Clarion Seam; 36 in. thick.
PO—Strattonville, Pa.; SP—Same; CTY—Clarion; RR—Lake Erie, Franklin & Clarion.
MS—J. B. Enterline, Strattonville, Pa.
S of H—Mules, elec locos. Track gage 30 inches.
S of M—Electric punchers and continuous cutter machs.

PP—2 water tube boilers, 150 H. P. gen. units, 110 K. W., 250 volts D. C., 4 pumps.
EMP—20.
SIZES SHIPT—Run of Mine.

COXES CREEK COAL COMPANY

General Office, Woodlawn, Pa.
PR—J. S. Barragh, Rochester, Pa.
VP—J. A. C. Ruffner, Jr., Woodlawn, Pa.
TR—A. C. Osburn, Woodlawn, Pa.
GM—J. A. C. Ruffner, Jr., Woodlawn, Pa.

Coxes Creek No. 3 Mine; Drift; "B" Seam; 32 inches thick.
PO—Rockwood, Pa.; SP—Shamrock Sliding Rockwood, Pa.; CTY—Somerset; RR—B. & O.
MS—E. C. Wells, Rockwood, Pa.
S of H—Mules. Track gage 36 inches.
S of M—1 shortwall mach.
PP—Power purchased.
EMP—18.
SIZES SHIPT—Run of Mine.

CRAIG-GOULD COAL CO.

General Office, Brinslin, Pa.
PR—W. A. Gould, Brinslin, Pa.
VP—Frank Craig, Brinslin, Pa.
TR—Thos. V. Gould, Brinslin, Pa.
GM—Michael Craig, Brinslin, Pa.
CS—Michael Craig, Brinslin, Pa.
PA—Thomas V. Gould, Brinslin, Pa.
EM—Michael Craig, Brinslin, Pa.
EE—Ernest Merritt, Brinslin, Pa.
MM—Fred Merritt, Brinslin, Pa.
SCD—W. A. Gould & Bro.; Buyer, Thos. V. Gould, Brinslin, Pa.

Sarah No. 1 and 2 Mine; Slope; "B" Seam, 54 in. thick.
PO—Brinslin, Pa.; SP—Same; CTY—Clearfield; RR—P. & S.
MS—Thos. Gardner, Brinslin, Pa.
SM—K. L. Houson, Brinslin, Pa.
S of H—Mules, 1 storage battery loco. and 1 combination type loco.
S of M—Hand and machs.
PP—Power purchased, 440 and 220 volts D. C.
EMP—100.

CRAWFORD COAL & COKE COMPANY

General Office, Connellsville, Pa.
PR—J. K. Davidson, Connellsville, Pa.
VP—J. I. Adams, Connellsville, Pa.
TR—G. Corrado, Connellsville, Pa.
GM—G. Corrado, Connellsville, Pa.
GS—H. B. Cunningham, Connellsville, Pa.
PA—P. R. Yoder, Connellsville, Pa.
CE—W. B. Barnhart, Connellsville, Pa.
SA—Corrado Coal & Coke Co., Connellsville, Pa.

Crawford Mine; Stripping; Pittsburgh Seam, 96 in. thick.
MS—S. D. Adams, Connellsville, Pa.
S of H—1 steam loco.
S of M—2 shovels.
EMP—15.
SIZES SHIPT—Run of Mine.

CRAWFORD, D. J. COAL COMPANY

General Office, 512 Ann St., Homestead, Pa.
PR—Wm. A. Kessler, Homestead, Pa.
TR—D. J. Crawford, Homestead, Pa.
GM—D. J. Crawford, Homestead, Pa.
PA—D. J. Crawford, Homestead, Pa.
EM—Smith & Vanhorn, Homestead, Pa.
SA—D. J. Crawford, Homestead, Pa.

Crawford Mine; Drift; Pittsburgh Seam, 54 in. thick.
PO—Homestead, Pa.; SP—Same; CTY—Allegheny; RR—Penna.; P. & L. E.
MS—John Bradford, Terrace P.O., Homestead, Pa.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine, Slack, Lump.

CREIGHTON COAL COMPANY

General Office, Crafton, Pa.
PR—James A. Hunter, 16 Obey Ave., Crafton, Pa.
TR—H. R. Park 1112 Wolfendale St., N. S., Pittsburgh, Pa.
GS—Albert M. Stauder, Park View Ave., Crafton, Pa.

Creighton No. 2 Mine; Drift; Pittsburgh No. 8 Seam, 65 in. thick.
PO—Crafton, Pa.; SP—Same; CTY—Allegheny; RR—Penna.; Panhandle Div.
S of H—Mules.
S of M—Hand.
Daily tonnage 50.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Bar Screens, Double Roll Crusher.

CRESCENT REFRACTORIES CO.

General Office, Curwensville, Pa.
PR—Jam. S. R. Graham, Williamsport, Pa.
VP—J. M. McKinley, Curwensville, Pa.
TR—Harold Brown, Williamsport, Pa.
GM—J. M. McKinley, Curwensville, Pa.
GS—A. F. Maureo, Curwensville, Pa.
PA—H. H. Hopwood, Curwensville, Pa.
CE—E. W. Hess, Clearfield, Pa.

EM—R. F. Hess, Curwensville, Pa.
KE—V. S. Wall, Curwensville, Pa.
SALES MGR—M. C. Lumbach, Curwensville, Pa.

No. 4 Mine; Drifts; Conglomerate Seam, 84 inches thick.
PO—Curwensville, Pa.; SP—Same; CTY—Clearfield.
MS—O. F. Smith, Curwensville, Pa.
S of H—Mules, 3 steam engines. Track S of M—Hand.
gage 36 inches.
PP—2 pumps.
EMP—70. Daily output, 350 tons.

No. 3 Mine; Drifts; Kittanning Seam, 81 inches thick.
PO—Curwensville, Pa.; SP—Same; CTY—Clearfield.
MS—O. F. Smith, Curwensville, Pa.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
PP—Power purchased, Transformer 2200 volts A. C., M. G. set, 220 volts D. C., 2 pumps.
EMP—40. Daily output, 225 tons.

Rowles No. 1 Mine; Drift; Lower Freeport Seam, 42 inches thick.
PO—Curwensville, Pa.; SP—Same; CTY—Clearfield; RR—N. Y. C.
MS—Samuel Williams, Curwensville, Pa.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
PP—Power purchased, Transformer 2200 volts A. C., M. G. set, 220 volts D. C., 1 pump.
EMP—30. Daily output, 120 tons.
SIZES SHIPT—Run of Mine.
Note—Mine for own use only.

CRIBBS, HYATT M.

General Office, 753 Front St., Verona, Pa.
OPERATOR—Hyatt M. Cribbs, Verona, Pa.

Roadside, Delmas Mine; Drift; Seam 72 inches thick.
PO—Verona, Pa.; SP—Same; CTY—Allegheny; RR—Penna.
S of H—Mules.
EMP—32. Last years tonnage 22,669.
SIZES SHIPT—Run of Mine.

CROCK COAL COMPANY

General Office, Greensburg, Pa.
PR—David E. Crock, Greensburg, Pa.
TR—R. A. Brandon, Greensburg, Pa.
GM—W. W. Helman, Greensburg, Pa.
GS—Jno. G. White, Greensburg, Pa.
PA—R. A. Brandon, Greensburg, Pa.
CE—W. W. Helman, Greensburg, Pa.
SA—R. A. Brandon, Greensburg, Pa.

Betty Mine; Drift; Freeport Seam, 42 inches thick.
PO—Chlcora, Pa.; SP—Same; CTY—Butler; RR—B. & O.
S of H—Mules.
EMP—25. Daily tonnage 200.

CROZIER RUN COAL CO.

General Office, 11 West Church St., Uniontown, Pa.
PR—J. F. Brownfield, Uniontown, Pa.
VP—J. P. Brownfield, Uniontown, Pa.
TR—T. I. Scott, Uniontown, Pa.
GM—T. I. Scott, Uniontown, Pa.
CS—T. I. Scott, Uniontown, Pa.
PA—T. I. Scott, Uniontown, Pa.
SA—T. I. Scott, 11 West Church St., Uniontown, Pa.

Crozier Mine; Drift; Pittsburgh Seam, 108 in. thick.
PO—Uniontown, Pa.; SP—Smithfield, Pa.; CTY—Fayette; RR—B. & O.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
EMP—12. Last years tonnage 15,000.
SIZES SHIPT—Run of Mine.

CRUCIBLE FUEL COMPANY

General Office, 1947 Oliver Bldg., Pittsburgh, Pa.
PR—John A. Mathews, Pittsburgh, Pa.
VP—F. B. Hufnagle, Pittsburgh, Pa.
TR—Geo. E. Shaw, Pittsburgh, Pa.
PA—H. E. Zaring, Pittsburgh, Pa.
SCD—Cumberland Supply Co., Buyer, W. D. Thompson, Crucible, Pa.

Crucible Mine; Shaft; Pittsburgh Seam; 90 inches thick.
PO—Crucible, Pa.; SP—Same; CTY—Greene; RR—P. R. R. Monon. Div.
MS—Robt. Holliday, Crucible, Pa.
S of H—6 gasoline locos. Track gage 44 inches.
S of M—18 elec machs.
PP—6 water tube boilers total 1,500 H. P., 3 gen. units, 250 volts D. C., 1 air compressor, 21 pumps.
EMP—700. Last fiscal year output, 500,000 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens, Picking Tables.

Cornell Mine; Slope; Freeport Seam; 72 inches thick.
PO—Glassmere, Pa.; SP—Same; CTY—Allegheny; RR—P. R. R.
MS—Ben Holliday, Glassmere, Pa.

S of H—Mules and rope, 6 elec locos. Track gage 44 inches.
S of M—1 chain breast type and 6 long-wall machs.
PP—Power purchased, 550 volts D. C. 1 water tube boilers total 600 H. P., 11 pumps.
EMP—210. Last fiscal year output, 213,862 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

CRUM BROS. COAL MINING COMPANY.

General Office, East Brady, Pa.
PR—V. E. Crum, Sinnamoning, Pa.
VP—V. E. Crum, Sinnamoning, Pa.
TR—M. V. Crum, Sinnamoning, Pa.
GM—V. E. Crum, Sinnamoning, Pa.
GS—J. C. Crum, Craigville, Pa.
PA—R. M. Kleber, East Brady, Pa.
CE—G. C. Cleaver, Punxsutawney, Pa.
EM—J. C. Crum, Craigville, Pa.
SCD—Address the Company, Buyer, R. M. Kleber, East Brady, Pa.
SA—R. M. Kleber, East Brady, Pa.

Crescent Mine; Drift; Kittanning Seam, 48 in. thick.
PO—Craigville, Pa.; SP—Same; CTY—Armstrong; RR—P. R. & P.
S of H—Mules. Track gage 36 in.
S of M—Hand.
EMP—23.
SIZES SHIPT—Run of Mine, Egg.

CUMBERLAND COAL COMPANY.

Now Cumberland Fuel Company

General Office, 104 E. T. T. Bldg., Uniontown, Pa.
PR—Earl S. Arford, Uniontown, Pa.
VP—L. A. Philippi, Uniontown, Pa.
TR & TRUSTEE—G. Carl Arford, Uniontown, Pa.
GS—L. A. Philippi, Uniontown, Pa.
PA—G. Carl Arford, Uniontown, Pa.
EM—L. A. Philippi, Uniontown, Pa.
SA—Arden Fuel Co., Uniontown, Pa.

Cumberland Mine; Drift; Sowickley Seam, 72 in. thick.
PO—Uniontown, Pa.; SP—Adah, Pa.; CTY—Greene; RR—P. R. R.
MS—W. S. Nicholson, Carmichaels, Pa.
S of H—Mules. Track gage 44 in.
S of M—Hand.
PP—1 pump.
Daily tonnage 200.
SIZES SHIPT—Run of Mine.

CUMBERLAND SMOKELESS COAL CO.

General Office, 74 Liberty Trust Bldg., Cumberland, Md.
PR—L. Lee Lichtenstein, Cumberland, Md.
VP—A. M. Lichtenstein, Cumberland, Md.
TR—D. P. Mullen, Cumberland, Md.
GM—J. E. Somerville, Cumberland, Md.
GS—J. E. Somerville, Cumberland, Md.
PA—D. P. Mullen, Cumberland, Md.
EM—J. E. Somerville, Cumberland, Md.

Old Hill Mine Drift; C & D Seam, 40 in. thick.
PO—Harnedsville, Pa.; SP—Confience, Pa.; CTY—Somerset; RR—W. Md.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
EMP—20.
SIZES SHIPT—Run of Mine.

CUNARD COAL CO

General Office, Morrisdale, Pa.
PR—E. H. Wigton, Philadelphia, Pa.
VP—C. B. Maxwell, Morrisdale, Pa.
TR—C. B. Maxwell, Morrisdale, Pa.
GM—C. B. Maxwell, Morrisdale, Pa.
GS—R. F. Aldstadt, Morrisdale, Pa.
PA—C. B. Maxwell, Morrisdale, Pa.
EM—L. B. Smith, Morrisdale, Pa.
EE—Alex. Campbell, Morrisdale, Pa.
SCD—Morrisdale Supply Co., Buyer, C. F. Penepacker, Morrisdale, Pa.
SA—Morrisdale Coal Co., Philadelphia, Pa.

Cunard Mine; Slope; B Seam, 54 in. thick.
PO—Morrisdale, Pa.; SP—Same; CTY—Clearfield; RR—N. Y. C.
S of H—Mules and 8 trolley pole type locos. Track gage 37 inches.
S of M—4 elec. punchers, 12 shortwall machs.
PP—Purchase power, Transformer 2200-500 volts A. C., 2 200 K. W. M. G. sets, 250 volts D. C.
EMP—300. Last years tonnage 18,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens, Picking Tables.

CUNNINGHAM COAL CO

General Office, Chlcora, Pa.
VP—J. H. Fox, Chlcora, Pa.
TR—G. H. Fox, Chlcora, Pa.
GM—G. H. Fox, Chlcora, Pa.
GS—G. H. Fox, Chlcora, Pa.
PA—G. H. Fox, Chlcora, Pa.
Subs Agent, Geo. H. Fox, Chlcora, Pa.

(Continued on Next Page)

Cunningham Coal Co.—Cont.

Chloro Mine: Drift; Upper Freeport Seam, 44 to 60 in. thick.
PO—Chloro, Pa.; SP—Same; CTY—Butler; RR—B. & O., P. & W. Br.
S of H—3 elec. locos. Track gauge, 80 in.
S of M—2 chain breast type and 1 short-wall machs.
PP—1 fire tube boiler, 150 H. P., 1 gen. unit, 175 K. W., 250 volts D. C., 20 pumps.
EMP—75. Last fiscal year output, 49,870 tons.
SIZES SHIPT—Run of Mine.
Old information.

CURRY COAL CO.

General Office, Elizabeth, Pa.
Curry Mine.
PO—Bunola, Pa.; CTY—Allegheny; RR—P. & L. E.
No report.

CURRY COAL MINING COMPANY

General Office, Expedit, Pa.
PA—M. A. Curry, Expedit, Pa.
TR—T. F. Curry, Expedit, Pa.
GM—T. F. Curry, Expedit, Pa.
GS—Fred J. McFadden, Expedit, Pa.
PA—Fred J. McFadden, Expedit, Pa.
CE—J. L. Elder, Ebenburg, Pa.
Sugar Camp No. 1 Mine; Drift; B Seam, 42 inches thick.
PO—Expedit, Pa.; SP—Twins Rocks, Pa.; CTY—Cambria; RR—P. R. R.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
Last fiscal year output, 4,650 tons.
SIZES SHIPT—Run of Mine.

Expedit No. 1 Mine; Drift; B Seam, 42 inches thick.
PO—Expedit, Pa.; SP—Twins Rocks, Pa.; CTY—Cambria; RR—P. R. R.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—15. Last fiscal year output, 1,043 tons.
SIZES SHIPT—Run of Mine.

CURRY, THOMAS F.

General Office, Expedit, Pa.
PROPRIETOR—Thomas T. Curry, Expedit, Pa.
GM—Fred McFadden, Expedit, Pa.
GS—John J. Curry, Harnedsville, Pa.
PA—Fred J. McFadden, Expedit, Pa.
CE—Gardiner M. Stoker, Johnstown, Pa.
SA—Curry Coal Mng. Co., Expedit, Pa.
Anspach Mine; Drift; C Prime Seam; 48 inches thick.
PO—Harnedsville, Pa.; SP—Anspach, Pa.; CTY—Somerset; RR—B. & O.
PP—2 water tube boilers, total 300 H. P., gen. units, 250 volts D. C.
S of H—Mules, 1 elec. hoist and 2 motors. Track gage 42 in.
S of M—Hand and 1 shortwall mach.
EMP—60. Daily tonnage 300.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.

CUSHAKE COAL MINING COMPANY

General Office, Burnside, Pa.
PR—Wm. C. Browne, Burnside, Pa.
VP—M. C. Frowell, Burnside, Pa.
TR—P. P. Browne, Burnside, Pa.
GM—W. C. Browne, Burnside, Pa.
GS—W. C. Browne, Burnside, Pa.
PA—W. C. Browne, Burnside, Pa.
EM—W. C. Browne, Burnside, Pa.
Cushake Mine; Drift; C Prime and D Seams; 72 and 44 in. thick.
PO—Burnside, Pa.; SP—Same; CTY—Clearfield; RR—Penna.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—Purchase power, Transformer 2,200 to 220 volts.
EMP—45. Last years tonnage 30,000.
SIZES SHIPT—Run of Mine.

CUSTER COAL CO.

General Office, Hooversville, Pa.
PR—John E. Custer, Hooversville, Pa.
TR—John E. Custer, Hooversville, Pa.
GM—John E. Custer, Hooversville, Pa.
GS—John E. Custer, Hooversville, Pa.
PA—John E. Custer, Hooversville, Pa.
CE—George Kimmel, Colman, Pa.
EM—John L. Snyder, Hooversville, Pa.
SA—John E. Custer, Hooversville, Pa.
Custer No. 1 Mine; Slope; B Seam, 44 in. thick.
PO—Hooversville, Pa.; SP—Same; CTY—Somerset; RR—B. & O.
S of H—Mules and electric hoists. Track gage 36 in.
S of M—Hand.
PP—Power purchased, 440 volts A. C., 1 pump.
EMP—48. Last fiscal year output, 39,000 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Hand Raking

CYMBRIA COAL CO.

General Office, 1000 Liberty Bldg., Philadelphia, Pa.
PR—David E. Williams, Philadelphia, Pa.

VP—J. W. Campbell, Philadelphia, Pa.
TR—G. Brinton Roberts, Philadelphia, Pa.
GM—A. M. Riddell, Altoona, Pa.
GS—A. M. Riddell, Altoona, Pa.
PA—D. Evans Williams, Jr., Liberty Bldg., Philadelphia, Pa.
CE—A. H. Crichton, Johnstown, Pa.
EM—Chas. E. Schlicker, Spangler, Pa.
EE—Jas. Cunningham, Portage, Pa.
SCO—Excelsior Store Co.; Buyer, W. P. Grist, Cymbria Mines, Pa.
SA—David E. Williams & Co., Philadelphia, Pa.

Cymbria Nos. 1 and 2 Mines; Drifts; E and D Seams, 40-60 in. thick.
PO—Cymbria Mines, Pa.; SP—Barnesboro, Pa.; RR—Cambria; RR—P. R. R.
MS—Harry Goodall, Cymbria Mines, Pa.
S of H—5 trolley pole type locos. Track gage 36 in.
S of M—2 shortwall machs.
PP—Power purchased, transformer 2300-250 volts A. C., motor gen. sets, 3 pumps.
EMP—130. Last fiscal year output, 174,640 tons.
SIZES SHIPT—Run of Mine.

Cymbria No. 3 Mine; Shaft; B Seam, 40 in. thick.
PO—Cymbria Mines, Pa.; SP—Barnesboro, Pa.; RR—Cambria; RR—P. R. R.
MS—Harry Goodall, Cymbria Mines, Pa.
S of H—Trolley pole type loco. Track gage 36 in.
S of M—Hand.
PP—Power purchased, transformer 2300-250 volts A. C., M. G. set, 3 pumps.
SIZES SHIPT—Run of Mine.
Note—This mine not in operation.

DAHLIN BROS. COAL CO.

General Office, Houtzdale, Pa.
GM—Geo. T. Dahlin, Houtzdale, Pa.
GS—A. V. Dahlin, Houtzdale, Pa.
PA—Geo. T. Dahlin, Houtzdale, Pa.
CE—L. S. Groppers, W. Moshannon, Pa.
EM—Jos. Zeigler, Osceola Mills, Pa.
EE—F. Dahlin, Houtzdale, Pa.

Stanley and Dauntless Mines; Stripping Slope and Drift; C and D Seams, 48 in. thick.
PO—Houtzdale, Pa.; SP—Same; CTY—Clearfield; RR—P. R. R.
SM—Geo. T. Dahlin, Houtzdale, Pa.
S of H—Steam, electric and gasoline locos. Track gage 36 in.
S of M—Hand.
PP—Power purchased, transformer 2200-220 volts A. C., M. G. sets, 250 volts D. C., 3 pumps.
EMP—60.
SIZES SHIPT—Run of Mine.
Old information.

DALLIBA COAL CO.

General Office, 287 College Ave., Oakmont, Pa.
PR—R. D. Grey, Blairsville, Pa.
TR—E. H. Beale, Oakmont, Pa.
GM—E. H. Beale, Oakmont, Pa.
GS—E. H. Beale, Oakmont, Pa.
PA—E. H. Beale, Oakmont, Pa.
CE—D. E. Taylor, Freeport, Pa.

Dalliba Mine, Drift, Up. Freeport Seam, 5 ft 3 in. thick.
PO—Oakmont, Pa.; SP—Same; CTY—Allegheny; RR—Penna.
S of H—2 Elec. loco. and mules; track gage 40 in.
S of M—6 shortwall machs.
PP—Power purchased, Transformer, 6600 to 220 volts A. C., M. G. set, 250 volts D. C.
EMP—120. Last fiscal year output 90,000 tons.

DATESMAN COAL COMPANY

General Office, Confluence, Pa.
PR—H. M. Datesman, Confluence, Pa.
VP—A. K. Datesman, Confluence, Pa.
TR—H. M. Datesman, Confluence, Pa.
GM—H. M. Datesman, Confluence, Pa.
GS—H. M. Datesman, Confluence, Pa.
PA—H. M. Datesman, Confluence, Pa.
CE—Fluck & Moore, Somerset, Pa.
SA—John Willis, Inc., Philadelphia, Pa.

Datesman Mine; Drift; "E" Seam, 54 in. thick.
PO—Confluence, Pa.; SP—Ursina, Pa.; CTY—Somerset; RR—U. & N. F.
MS—D. E. McLane, Confluence, Pa.
S of H—2 mules. Track gage 26 in.
S of M—Hand.
EMP—20. Daily tonnage 75.
SIZES SHIPT—Run of Mine.

DAVIDSON-CONNELLSVILLE COAL & COKE CO.

General Office, Connelville, Pa.
PR—Charles Davidson, Connelville, Pa.
VP—Louis R. Davidson, Connelville, Pa.
TR—George Davidson
EM—W. J. Davidson, Connelville, Pa.

SCO—Address the Company, Buyer, R. N. McCahon, Point Marion, Pa.
SA—W. J. Davidson, Connelville, Pa.

Frederick No. 1 Mine; Drift; Pittsburgh Seam, 84 in. thick.
PO—Point Marion, Pa.; SP—Same; CTY—Fayette; RR—B. & O. (Fairmont Br.)
MS—James A. Shearin, Point Marion, Pa.
S of H—Mules and gasoline loco. Track gage 44 in.
S of M—3 shortwall machs.
PP—Power purchased, 6 transformers, 1—290 K. W., M. G. Set, 440 volts D. C., 3 phase 60 cycles, 2 pumps.
EMP—80. Last years tonnage 48,000.
SIZES SHIPT—Run of Mine.

DAVIS COAL & COKE COMPANY

General Office, Baltimore, Md.
PR—A. W. Calloway, Baltimore, Md.
VP—A. B. Stewart, Baltimore, Md.
VP—R. P. Maloney, Cumberland, Md.
TR—W. E. Kennedy, Baltimore, Md.
General Counsel—A. B. Stewart, Baltimore, Md.
GM—R. P. Maloney, Cumberland, Md.
GS—George Roberts, Thomas, W. Va.
PA—K. L. Grebenstein, Cumberland, Md.
CE—R. W. Robinson, Cumberland, Md.
EM—S. B. Jeffries, Thomas, W. Va.
EE—P. W. Traynor, Thomas, W. Va.
SCO—Buxton & Landreth Co. Buyer, W. S. Davenport, Thomas, W. Va.
SA—C. C. Knoebelch, Baltimore, Md.

Orenda No. 2 Mine; C or Prime Seam.
PO—Boswell, Pa.; SP—Same; CTY—Somerset; RR—B. & O.
MS—W. H. Hodgess, Boswell, Pa.
SM—Lewis Helmick, Boswell, Pa.
S of H—Rope and 15 trolley pole type locos. Track gage 42 in.
S of M—Hand.
PP—Power purchased, transformer 22000-250 volts A. C., M. G. Sets, 275 volts D. C., 8 water tube boilers, 2,364 H. P.
EMP—323. Last years tonnage 221,126.
SIZES SHIPT—Run of Mine.
Note—Formerly operated by Orenda Smokeless Coal Co.

DECATUR COAL MINING COMPANY

General Office, Clearfield, Pa.
TR—A. K. Wright, Clearfield, Pa.
GM—A. K. Wright, Clearfield, Pa.
Penn Nos. 8 and 9 Mines; "B" Seam, 48 in. thick.
PO—Osceola Mills, Pa.; SP—Same; CTY—Clearfield; RR—Pittsburgh & Susquehanna.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
SIZES SHIPT—Run of Mine.

DEER HILL COAL COMPANY

General Office, 424 Lincoln St., Johnstown, Pa.
PR—W. W. Hoffman, Johnstown, Pa.
VP—L. H. Mayer, Johnstown, Pa.
TR—I. M. Chaplin, Johnstown, Pa.
GM—W. W. Hoffman, Johnstown, Pa.
GS—John McGowan, Cresson, Pa.
EM—L. H. Owens, Johnstown, Pa.
Deer Hill Mine; Slope; E Seam, 54 inches thick.
PO—Fallen Timber, Pa.; SP—Coalport, Pa.; CTY—Cambria; RR—P. R. R.
S of H—Mules and elec. loco. Track gage 36 inches.
S of M—Hand.
PP—Power purchased, Transformer 23,000 to 250 volts A. C., M. G. Sets, 250 volts D. C.
SIZES SHIPT—Run of Mine.

DELMONT GAS COAL CO.

General Office, Park Bldg., Pittsburgh, Pa.
PR—E. M. Gross, Pittsburgh, Pa.
TR—Jas. H. Gallagher, " "
GM—E. M. Gross, " "
PA—A. F. Syroth, " "
GS—M. R. Morris, Delmont, Pa.
CE—Robt. Morris, Windber, Pa.
EM—Gibson Thomas, Latrobe, Pa.
SA—Arthur F. Syroth, 508 Park Bldg., Pittsburgh, Pa.

Delmont No. 2 Mine; Drift; Pittsburgh Seam, 72-78 inches thick.
PO—Delmont, Pa.; SP—Same; CTY—Westmoreland; RR—Penna.
MS—John Sneddon, Delmont, Pa.
S of H—Mules and main and tail rope. Track gage 40 inches.
S of M—Hand.
PP—Power purchased, transformer 2200 to 250 volts A. C.
EMP—150. Last fiscal year output, 132,949 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.

Delmont Colliery No. 4 Mine; Drift; Pittsburgh Seam, 76 in. thick.
PO—Delmont, Pa.; SP—Trees Mills, Pa.; CTY—Westmoreland; RR—Penna.
MS—Archev Sneddon, Delmont, Pa.

S of H—Mules and rope. Track gauge, 40 in.
S of M—Hand.
PP—Power purchased, Transformer 2200 to 250 volts A. C.
EMP—160. Last fiscal year output, 135,713 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.

DENRO COAL MINING COMPANY, INC.

General Office, Phillipsburg, Pa.
PR—W. S. Alden, 125 East 46th St., New York, N. Y.
VP—J. C. Haddock, Grand Central Palace, New York, N. Y.
TR—E. Hunt Hughes, Phillipsburg, Pa.
GM—E. Hunt Hughes, Phillipsburg, Pa.
GS—E. Hunt Hughes, Phillipsburg, Pa.
PA—E. Hunt Hughes, Phillipsburg, Pa.
CE—E. Hunt Hughes, Phillipsburg, Pa.
EM—G. A. Weber, Curwensville, Pa.
SA—Alden Coal Mining Co., 125 East 46th St., New York, N. Y.

Alden No. 2 Mine; Drift; D Seam; 42 in. thick.
PO—Curwensville, Pa.; SP—Same; CTY—Clearfield; RR—N. Y. C.
MS—J. W. Grey, Curwensville, Pa.
S of H—Mules, main and tail rope. Track gage 42 inches.
S of M—Water tube boiler, 50 H. P. Daily tonnage 150.
Alden No. 3 Mine; Drift; Moshannon D Seam; 36 inches thick.
PO—Curwensville, Pa.; CTY—Clearfield; RR—N. Y. C.
S of H—Rope. Track gage 36 in.
S of M—Hand.
PP—1 fire tube boiler, 50 H. P.
EMP—50. Daily output, 200 tons.
SIZES SHIPT—Run of Mine.

DERBY BRANCH COAL COMPANY.

General Office, Phillipsburg, Pa.
PR—Enoch Hartshorn, Phillipsburg, Pa.
TR—H. E. Scott, " "
GM—Simeon Hartshorn, " "
GS—Simeon Hartshorn, " "
PA—H. B. Scott, Phillipsburg, Pa.
Sales Agent—H. B. Scott, Phillipsburg, Pa.

Colorado No. 1 Mine; Drift; E., D. and Moshannon Seams, 44, 43 and 72 in. thick.
PO—Phillipsburg, Pa.; SP—Same; CTY—Clearfield; RR—N. Y. C.; P. R. R.
S of H—Mules. Track gage 35 in.
S of M—Hand.
SIZES SHIPT—Run of Mine.

DERINGER BROS.

General Office, Spangler, Pa.
GM—W. Deringer, Spangler, Pa.
GS—Chas. E. Jones, Spangler, Pa.
PA—W. Deringer, Spangler, Pa.
EM—Chas. E. Schlicker, Spangler, Pa.
Woodland Colliery No. 2, Drift, Lower Freeport Seam, 48 in. thick.
PO—Spangler, Pa.; SP—Garman, Pa.; CTY—Cambria; RR—N. Y. C., Moss Creek Branch.
MS—John Sharp, Spangler, Pa.
S of H—Mules; track gage 36 in.
S of M—Hand.
PP—3 gasoline pumps.
EMP—50. Daily output, 200 tons.
SIZES SHIPT—Run of Mine.

DERINGER COAL MINING COMPANY.

General Office, Spangler, Pa.
GM—W. Deringer, Spangler, Pa.
GS—Chas. E. Jones, Spangler, Pa.
PA—W. Deringer, Spangler, Pa.
EM—Chas. E. Schlicker, Spangler, Pa.

Woodland No. 4 Mine; Drift; Lower Freeport Seam, 48 in. thick.
PO—Spangler, Pa.; SP—Same; CTY—Cambria; RR—N. Y. C.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—1 gasoline pump.
EMP—30. Daily output, 100 tons.
SIZES SHIPT—Run of Mine.

DERINGER FUEL COMPANY.

General Office, Spangler, Pa.
GM—W. Deringer, Spangler, Pa.
GS—Chas. E. Jones, Spangler, Pa.
PA—W. Deringer, Spangler, Pa.
CE—B. W. Deringer, Spangler, Pa.

Woodland 5 "B" Mine; Slope; Lower Kittanning Seam, 48 in. thick.
PO—Spangler, Pa.; SP—Diamondville, Pa.; CTY—Indiana; RR—N. Y. C.
MS—Jas. W. Deringer, Spangler, Pa.
S of H—Elec. locos. Track gage 36 in.
S of M—Shortwall mach
PP—Power purchased, 220 to 440 volts, 4 pumps.
EMP—50. Daily tonnage 150.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by the Deringer Mining Company.

DERINGER MINING COMPANY

Now Deringer Fuel Co.

DEXCAR COAL MINING COMPANY
General Office, 12 Broadway, New York, N. Y.
PR—Geo. M. Dexter, New York, N. Y.
VP—Wm. H. Carpenter, New York, N. Y.
TR—Wm. H. Carpenter, New York, N. Y.
GM—Geo. M. Dexter, New York, N. Y.
GS—E. E. Pratt, Altoona, Pa.
PA—F. E. Pratt, Altoona, Pa.
EM—F. E. Pratt, Altoona, Pa.
SCO—Ashville Supply Co., Buyer, Fred C. Neal, Ashville, Pa.
SA—Dexter & Carpenter, New York, N. Y.

Clare Mine; Slope; E Seam; 42 inches thick.
PO—Ashville, Pa.; SP—Same; CTY—Cambria; RR—P. R. R.
S of H—Rope, Track gage 36 in.
S of M—Shortwall machs.
PP—Power purchased.
EMP—90. Last fiscal year output, 60,000 tons.
SIZES SHIPT—Run of Mine.
Note—Mine formerly operated by Dexter & Carpenter, Inc.

DEYARMAN COAL COMPANY
General Office, 626 Fayette Title & Trust Bldg., Uniontown, Pa.
PR—S. E. Hibbs, Uniontown, Pa.
VP—Frederick Bieker, Uniontown, Pa.
TR—Wm. C. Black, Uniontown, Pa.
GM—G. W. Hibbs, Uniontown, Pa.
GS—G. W. Hibbs, Uniontown, Pa.

Deyarman Mine; Drift; S-wickley Seam, 60 in. thick.
PO—Uniontown, Pa.; SP—Same; CTY—Fayette; RR—P. R. R.
MS—J. J. Sorotinsky, Uniontown, Pa.
S of H—Elec. and storage battery locos. Track gage 42 in.
S of M—3 shortwall machs.
PP—Power purchased, transformer, M G Sets, 3 pumps.
EMP—50. Daily tonnage 400.
SIZES SHIPT—Run of Mine.

DIAMOND COAL & COKE COMPANY
General Office, First National Bank Bldg., Pittsburgh, Pa.
PR—T. W. Guthrie, Pittsburgh, Pa.
1ST VP—A. R. Sheets, Pittsburgh, Pa.
2ND VP—A. R. Budd, Pittsburgh, Pa.
SECY—A. H. Stolznbach, Pittsburgh, Pa.
TR—A. H. Stolznbach, Pittsburgh, Pa.
GM—A. R. Budd, Pittsburgh, Pa.
GS—E. A. Simon, Pittsburgh, Pa.
PA—W. W. Gillette, Pittsburgh, Pa.
CE—J. D. Martin, Pittsburgh, Pa.
EM—E. A. Simon, Pittsburgh, Pa.
SCO—Diamond Store Company, Courtney, Pa.; Elizabeth Store Co., Elizabeth, Pa.; West Brownsville Store Co., West Brownsville, Pa.; Buyer, S. A. Barnum, West Brownsville, Pa.
SA—Sales Mgr., C. M. Budd, and Gen. Sales Mgr., F. E. Lockhart, Pittsburgh, Pa.

Huston Run Mine; Slope, Pittsburgh Seam, 64 in. thick.
PO—Courtney, Pa.; SP—Same; CTY—Washington; RR—P. V. & C. (Penna.).
MS—Geo. Barnell, Courtney, Pa.
SM—J. H. Jackman, Courtney, Pa.
S of H—1 trolley pole type locos. Track gage 44 in.
S of M—3 chain breast type machs.
PP—Power purchased, transformer 6600 to 440 volts, motor gen. sets, 250 volts D. C., 7 pumps.
EMP—86. Last fiscal year output, 133,509 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

Pike Mine; Drift; Pittsburgh Seam, 96 in. thick.
PO—Brownsville, Pa.; SP—Same; CTY—Fayette; RR—Monongahela, P. & L. E., P. V. & C.
MS—E. M. Ryan, Brownsville, Pa.
S of H—Mules, rope, 4 trolley pole type and 2 comb. locos. Track gage, 45 inches.
S of M—1 chain breast type and 6 shortwall machs.
PP—Power purchased, transformer 2200 to 240 volts, motor gen. sets, 250 volts D. C., 3 100 H. P. fire tube boilers, 6 pumps.
EMP—290. Last fiscal year output, 291,184 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

Diamond Mine; Slope; Pittsburgh Seam, 84 in. thick.
PO—West Brownsville, Pa.; SP—Same; CTY—Washington; RR—P. R. R.
MS—S. V. Hartman, West Brownsville, Pa.
S of H—Mules and 3 comp. air locos. Track gage, 44 in.
S of M—3 chain breast type and 1 shortwall machs.
PP—Power purchased, transformer 6600 to 2200 volts, motor gen. sets, 250 volts D. C., 7 pumps.

EMP—225. Last fiscal year output, 290,844 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

Oakmont Mine; Shaft; Dual Freeport Seam, 90 in. thick.
PO—Parnassus, R. F. D. No. 2, Pa.
SP—Same; CTY—Allegheny; RR—P. R. R. & A. V. Div.
MS—Robert McFarlane Springdale, Pa.
S of H—2 combination electric locos. Track gage, 44 in.
S of M—3 shortwall machs.
PP—Power purchased, transformer 22,000 to 220 volts, motor gen. sets, 250 volts D. C., 4 pumps.
EMP—110. Last fiscal year output, 42,602 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

Blaine Mine; Drift; Pittsburgh Seam, 72 in. thick.
PO—Lock No. 3, Pa.; SP—Elizabeth, Pa.; CTY—Allegheny; RR—P. & L.
MS—Thos. R. Jenkins, Lock No. 3, Pa.
S of H—5 trolley pole type electric locos. Track gage, 44 in.
S of M—6 chain breast type and 3 shortwall machs.
PP—Power purchased, transformer 6600 to 440 volts, motor gen. sets, 250 volts D. C., 10 pumps.
EMP—268. Last fiscal year output, 513,881 tons.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

DIAMOND SMOKELESS COAL CO.
Now a part of Imperial Coal Corporation.

DICKERSON RUN COAL COMPANY
Out of Business.

DICKEY, S. E. COAL COMPANY
General Office, 809 Johnston Trust Bldg., Johnstown, Pa.
PR—S. E. Dickey, Johnstown, Pa.
VP—Robert Horie, Johnstown, Pa.
TR—M. F. Riddle, 809 Johnston Trust Bldg., Johnstown, Pa.
GM—S. E. Dickey, Johnstown, Pa.
GS—S. E. Dickey, Johnstown, Pa.
PA—S. E. Dickey, Johnstown, Pa.
EM—S. E. Dickey & Co., Johnstown, Pa.
SA—S. E. Dickey, Johnstown, Pa.

Dickey Nos. 1 and 2 Mines; Drift; C and E Seams; 36 to 54 inches thick.
PO—Johnstown, Pa.; SP—Kings Station, Pa.; CTY—Somerset; RR—B. & O., S. & C. Branch.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—10. Last fiscal year output, 5,200 tons.
SIZES SHIPT—Run of Mine.

DILL COAL COMPANY
General Office, Barnesboro, Pa.
OWNERS—W. F. Dill, Barnesboro, Pa.; Richard T. Todhunter, Barnesboro, Pa.

"Chapman" Mine; Drift; "D" or Lower Freeport Seam, 58 inches thick.
PO—Barnesboro, Pa.; SP—Same; CTY—Cambria; RR—P. R. R.
MS—R. T. Todhunter, Barnesboro, Pa.
S of H—Mules.
S of M—Hand.
PP—Power purchased.
EMP—20. Daily tonnage 100.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by the Chapman Coal Co.

DILLTOWN SMOKELESS COAL CO.
General Office, Dilltown, Pa.
PR—Dr. T. R. Williams, Cynwyd, Pa.
VP—S. S. Henderson, Brookville, Pa.
TR—S. S. Henderson, Brookville, Pa.
GM—E. E. Hewitt, Dilltown, Pa.
GS—E. E. Hewitt, " "
PA—E. E. Hewitt, " "
CE—C. M. Means, Pittsburgh, Pa.
EM—Homer & Jones, Indiana, Pa.
EE—Boyd Tomb, Dilltown, Pa.
SCO—Pocahontas Co., Buyer, Jay S. Shields, Dilltown, Pa.

Dilltown No. 1 Mine; Drift; "B" Seam, 44 to 52 in. thick.
PO—Dilltown, Pa.; SP—Same; CTY—Indiana; RR—P. R. R. & B. R. A. P., Cresson and Blacklick Br.
S of H—2 6-ton and 1 10-ton elec. locos. Track gage 42 in.
S of M—6 shortwall machs.
PP—1 200 K. W. and 1—100 K. W. gen. units, 250 volts D. C.
EMP—220. Last years tonnage 205,978.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Picking Table, Shaker Screens.

DIXONVILLE COAL CO.
General Office, 406-408 Swank Bldg., Johnstown, Pa.
PR—W. J. Kuntz, Johnstown, Pa.

TR—Gen. T. Robinson, " "
GS—Hugh McMillen, Dixonville, Pa.
CE—S. E. Dickey & Co., Johnstown, Pa.
Sales Agencies, Dixonville Coal Co., Johnstown, Pa.; Operator Coal Mining Co., Johnstown, Pa.

Randolph No. 2 Mine; Drift, "D" Seam, 3 to 4 ft. thick.
PO—Dixonville, Pa.; SP—Same; CTY—Indiana; RR—N. Y. C.
S of H—1 6-ton elec. loco. Track gage 36 in.
S of M—Shortwall mach.
PP—Power purchased from Penn. Public, M. G. set, 100 K. W., 2 pumps.
EMP—38. Last years tonnage 30,000.
SIZES SHIPT—Run of Mine.

DOBBY COAL CO.
General Office, Latrobe, Pa.
Dobby No. 1 Mine.
PO—Derry, Pa.; CTY—Westmoreland; RR—Penna.
No report.

DOCK HOLLOW COAL CO.
General Office, New Kensington, Pa.
PR—E. Craig, Oakmont, Pa.
TR—H. S. Arthur, McKeesport, Pa.
GM—J. E. Walker, New Kensington, Pa.
GS—J. E. Walker, New Kensington, Pa.
PA—J. E. Walker, New Kensington, Pa.
EM—W. O. Aye, Kittanning, Pa.
SA—Pittsburgh & Shawmut Coal Co., Kittanning, Pa.

Dock Hollow Mine; Drift; Upper Freeport Seam, 44 inches thick.
PO—New Kensington, Pa.; SP—Freeport, Pa.; CTY—Armstrong; RR—Shawmut.
S of H—Mules.
S of M—3 shortwall machs.
PP—Power purchased, 1—200 K. W. M. G. Set, 250 volts D. C., 2 pumps.
EMP—70. Last fiscal year output, 50,000 tons.
SIZES SHIPT—Run of mine.

DONALD COAL & COKE CO.
General Office, 702 2nd Natl. Bank Bldg., Connellsville, Pa.
PR—W. P. Stillwagon, Connellsville, Pa.
TR—R. D. Klinedinst, Connellsville, Pa.
GS—P. S. Emmons, Connellsville, Pa.
PA—R. D. Klinedinst, Connellsville, Pa.
SA—Rice Fuel Co., Connellsville, Pa.

Stillwagon Mine; Drift; Pittsburgh Seam, 108 inches thick.
PO—Cheat Haven, Pa.; SP—Same; CTY—Fayette; RR—B. & O.
S of H—Elec. loco. Track gage 42 in.
S of M—Hand.
PP—Power purchased.
SIZES SHIPT—Run of Mine.

DONOHUE COKE CO.
General Office, Greensburg, Pa.
PR—J. P. Donohue, Greensburg, Pa.
VP—C. E. Heller, Greensburg, Pa.
TR—Edw. E. Donohue, Greensburg, Pa.
GM—C. E. Heller, Greensburg, Pa.
GS—J. R. Nessler, Greensburg, Pa.
PA—L. Frank Klingensmith, Greensburg, Pa.
EM—Robt. Gill, Greensburg, Pa.
EE—James Kiley, Greensburg, Pa.
SCO—John P. Donohue & Co., Ltd. Buyer, Clyde Parks, Greensburg, Pa.
SA—Rogers, Brown & Co., Farmers Bank Bldg., Pittsburgh, Pa. and Crocker Bros., New York, N. Y.

Donohue Mine; Drift; Pittsburgh Seam, 84 in. thick.
PO—Greensburg, Pa. SP—Same. CTY—Westmoreland; RR—P. R. R., New Alexandria Br.
S of H—3 Elec. loco., track gage 44 in. S of M—Hand.
PP—4 boilers, total 660 H. P., 3 100 K. W., gen. units, 250 volts D. C., 1 compressor, 7 pumps.
EMP—150. Last years tonnage 121,000.
PREP. EQUIPT—Gravity Screens, Washeries.

DOBA COAL COMPANY
General Office, DuBois, Pa.
PR—A. O. Stockdale, DuBois, Pa.
VP—I. E. Boyer, DuBois, Pa.
TR—B. R. McCreight, DuBois, Pa.
GS—James Harvey, DuBois, Pa.
PA—Geo. A. Stockdale, DuBois, Pa.
SA—Geo. A. Stockdale, DuBois, Pa.

Dora Mine; Drift; 36 inches thick.
PO—Dora, Pa.; SP—Same; CTY—Jefferson; RR—P. & S.
MS—V. T. Stockdale, Dora, Pa.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
EMP—28. Daily output, 100 tons.
SIZES SHIPT—Run of Mine.

DOR-MAR COAL COMPANY
General Office, 806 Fine Arts Bldg., Rochester, N. Y.
PR—Robert K. Forth, Rochester, N. Y.
VP—Thos. S. Leach, Indiana, Pa.
TR—James Bryant, Rochester, N. Y.
PA—Robert K. Forth, Rochester, N. Y.
CE—Mr. Paler, Indiana, Pa.

Dor-Mar No. 1 Mine; Drift; Upper Freeport Seam; 42 to 51 inches thick.
PO—Rochester Mills, Pa.; SP—Savon, Pa.; CTY—Indiana; RR—B. & P.
S of H—Mules, main and tail rope. Track gage 30 inches.
S of M—Hand.
PP—1 water tube boiler, 150 H. P., 2 pumps.
EMP—25. Daily output, 300 tons.
SIZES SHIPT—Run of Mine.
Old information.

DORNON COAL COMPANY
General Office, Connellsville, Pa.
PR—John M. Dornon, Connellsville, Pa.
TR—S. J. Dornon, New Alexandria, Pa.
GM—John M. Dornon, Connellsville, Pa.

Stewartown Mine; Drift; Lower Kittanning Seam, 48 in. thick.
PO—Connellsville, Pa.; SP—Stewartown, Pa.; CTY—Fayette; RR—B. & O.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
EMP—18.
SIZES SHIPT—Run of Mine.

DOUBOIS MINING COMPANY
General Office, DuBois, Pa.
PR—W. H. Cannon, DuBois, Pa.
TR—Frank I. Schwen, DuBois, Pa.
GM—Frank Schwen, DuBois, Pa.
GS—Frank Schwen, DuBois, Pa.
PA—Frank Schwen, DuBois, Pa.
LE—E. W. Hess, DuBois, Pa.
SA—Frank Schwen, DuBois, Pa.

Luthersburg Mine; Drift; Kittanning Seam, 36 in. thick.
PO—DuBois, Pa.; SP—Luthersburg, Pa.; CTY—Clearfield; RR—B. & P.
MS—V. H. Beck, Luthersburg, Pa.
S of H—Mules. Track gage 36 in.
S of M—Hand.
EMP—50. Daily tonnage 150.
SIZES SHIPT—Run of Mine.

DOUGAN, JAMES F. & CO.
General Office, Osceola Mills, Pa.
PR—Jas. F. Dugan, Osceola Mills, Pa.
GM—A. A. Dugan, Osceola Mills, Pa.
Bacon No. 1 Mine; Drift; B. Seam, 50 to 54 in. thick.
PO—Osceola Mills, Pa.; SP—Same; CTY—Clearfield; RR—Penna.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine.

DUNCAN-SPANGLER COAL COMPANY.
General Office, 305 Finance Bldg., Philadelphia, Pa.
PR—Jos. H. Reilly, Philadelphia, Pa.
VP—John E. Reilly, Philadelphia, Pa.
TR—W. B. Reilly, Philadelphia, Pa.
GM—Jos. H. Reilly, Philadelphia, Pa.
GS—John E. Reilly, Spangler, Pa.
PA—John E. Reilly, " "
CE—C. E. Schlicher, Spangler, Pa.
SCO—C. B. Jones & Co., Buyer, C. R. Jones, Spangler, Pa.
SA—Duncan Spangler Coal Co., 305 Finance Bldg., Philadelphia, Pa.

Delta No. 1 Mine; Drift; "D" Seam, 50 to 54 in. thick.
PO—Spangler, Pa.; SP—Barnesboro, Pa.; CTY—Cambria; RR—Penna., C. & C. Br.
MS—Alex. McCormick, Barnesboro, Pa.
S of H—Mules and rope. Track gage, 36 in.
S of M—Hand.
PP—2 fire tube boilers, 160 H. P., 3 pumps.
EMP—30.
SIZES SHIPT—Run of Mine.

Delta No. 2 Mine; Drift; "D" Seam, 54 in. thick.
PO—Spangler, Pa. SP—Barnesboro, Pa. CTY—Cambria. RR—Penna., C. & C. Br.
MS—M. A. Ward, Spangler, Pa.
S of H—Electric. Track gage, 36 in.
S of M—5 shortwall machs.
PP—Power purchased, M. G. set, 200 K. W., 350 volts D. C., 3 pumps.
EMP—130.
SIZES SHIPT—Run of Mine.

Blubaker No. 13 Mine; Drift; "D" Seam, 42 to 44 in. thick.
PO—Spangler, Pa.; SP—Same; CTY—Cambria; RR—Penna., C. & C. Br.
MS—Thomas Evans, Spangler, Pa.
S of H—2 electric locos. Track gage 36 in.
S of M—Hand and machs.
PP—3 fire tube boilers, 100 1 200 K. W. gen. units, 250 volts D. C., 2 pumps.
EMP—30.
SIZES SHIPT—Run of Mine.

DUNHAM, FRED J.
General Office, Greensburg, Pa.
PR—J. P. Donohue, Greensburg, Pa.
VP—C. E. Heller, Greensburg, Pa.
TR—Edw. E. Donohue, Greensburg, Pa.
GM—C. E. Heller, Greensburg, Pa.
GS—J. R. Nessler, Greensburg, Pa.
PA—L. Frank Klingensmith, Greensburg, Pa.
EM—Robt. Gill, Greensburg, Pa.
EE—James Kiley, Greensburg, Pa.
SCO—John P. Donohue & Co., Ltd. Buyer, Clyde Parks, Greensburg, Pa.
SA—Rogers, Brown & Co., Farmers Bank Bldg., Pittsburgh, Pa. and Crocker Bros., New York, N. Y.

(Continued on Next Page)

Dunham, Fred J.—Cont.

Sherriden Nos. 1 and 2 Mines; Drift; "D" and "E" Seams; 42 and 48 inches thick.
 PO—Phillipsburg, Pa.; SP—Same; CTY—Center; RR—P. & S.
 S of H—Mules. Track gage 30 inches.
 S of M—Hand.
 EMP—20. Daily output, 70 tons.
 SIZES SHIPT—Run of Mine.

DUNN, J. H.

General Office, Uniontown, Pa.
 PR—J. H. Dunn, Uniontown, Pa.
 GS—W. J. Ghrist, Vanderhill, Pa.
 SA—J. H. Dunn, Uniontown, Pa.

Liberty Mine; Drift; Pittsburgh Seam; 72 inches thick.
 PO—Vanderhill, Pa.; SP—Dickerson Bun. Pa.; CTY—Fayette; RR—P. & L. E.
 S of H—Mules. Track gage 42 inches.
 S of M—Hand.
 EMP—35. Daily output, 150 tons.
 SIZES SHIPT—Run of Mine.
 Old information.

DUNNE COAL & COKE CO.

General Office, 618 Citizens Bank Bldg., Pittsburgh, Pa.
 PR—R. O. Dunne, Pittsburgh, Pa.
 VP—John F. Ely, Jeannette, Pa.
 TR—E. C. Young, Wilkensburg, Pa.
 GM—E. C. Young, Pittsburgh, Pa.
 PA—E. C. Young, Pittsburgh, Pa.
 EM—W. J. Koerner, Grove City, Pa.
 S of M—Nelson Bridge Supply Company, Buyer, E. C. Young, Pittsburgh, Pa.
 SA—Operators' Coal & Coke Co., Citizens Bank Bldg., Pittsburgh, Pa.

Nelson Bridge Mine; Drift; Brookville Seam, 36 in. thick.
 PO—Branchton, Pa.; SP—Frt. Nelsons Bridge, Pa.; Exp. Branchton, Pa.; CTY—Butler; RR—B. & L. E.
 MS—E. C. Young, Pittsburgh, Pa.
 S of H—Mules. Track gage 37 in.
 S of M—2 shortwall machs.
 PP—Generates power, 220 volts D. C., 6 pumps.
 EMP—48. Last years tonnage 10,000.
 SIZES SHIPT—Run of Mine, Slack, Nut Lump.
 PREP. EQUIPT—Gravity Screens

DUQUESNE COAL & COKE CO.

General Office, 244-248 Oliver Bldg., Pittsburgh, Pa.
 PR—George H. Theiss, Pittsburgh, Pa.
 VP—A. G. Leonard, Avella, Pa.
 TR—G. O. H. Theiss, Avella, Pa.
 GM—A. G. Leonard, Avella, Pa.
 GS—A. G. Leonard, Avella, Pa.
 PA—A. G. Leonard, Avella, Pa.
 CE—C. F. Southard, Pittsburgh, Pa.
 EM—Southard & Theiss Co., Pittsburgh, Pa.
 SCO—Anchor Stores Company, Buyer, A. G. Leonard, Avella, Pa.
 SA—C. F. Southard, Pittsburgh, Pa.

Aurora Mine; Drift; Pittsburgh Seam, 56 in. thick.
 PO—Avella, Pa.; SP—Same; CTY—Washington; RR—Pittsburgh & W. Va.
 S of H—9 elev. locos. Track gage 44 inches.
 S of M—6 shortwall and 14 chain breast machs.
 PP—4 fire tube boilers, 150 H. P., 1 250 K. W. and 1 200 K. W. gen. units, 250 volts D. C., 7 pumps.
 EMP—270. Daily tonnage 2,000.
 SIZES SHIPT—Run of Mine, Slack, Nut Lump, Block.
 PREP. EQUIPT—Gravity Screens.

DUSHAN COAL MINING CO.

General Office, Osceola Mills, Pa.
 PR—J. J. Shannon, Osceola Mills, Pa.
 TR—James F. Dugan, " "
 GM—A. A. Dugan, " "
 GS—John J. Dugan, " "
 PA—J. F. Dugan, " "
 CE—H. S. Shillingford, " "
 Sales Agents—Whitney & Kemmer, Philadelphia, Pa., Carbon Coal and Coke Co., Boston, Mass.

DuShan No. 1 Mine; Drift; B Seam; PO—Osceola Mills, Pa.; SP—Same; CTY—Clearfield; RR—Penna., Trout Run branch.
 S of H—Mules.
 S of H—Mules and electric locos.
 S of M—Hand and chain breast machs.
 PP—Purchase power, Transformer 2200-250 volts A. C.
 EMP—55. Last fiscal year output 53,876 tons.
 SIZES SHIPT—Run of Mine.

DUNSMORE, R. P.

General Office, Phillipsburg, Pa.
 SA—Whitney Coal Mining Co., Philadelphia, Pa.

Cuba No. 2 Mine; Drift; "D" and "E" Seams; 48 inches thick.
 PO—Phillipsburg, Pa.; SP—Same; CTY—Clearfield; RR—N. Y. C.
 S of H—Mules. Track gage 30 inches.
 S of M—Hand.

EMP—25. Daily output, 100 tons.
 SIZES SHIPT—Run of Mine.
 Old information.

EAGLE COAL COMPANY

General Office, Buffalo, N. Y.
 PR—R. E. Cornelius, Youngstown, O.
 VP—W. D. Ward, Buffalo, N. Y.
 TR—J. R. Williamson, Buffalo, N. Y.
 GM—W. E. Hart, Parkers Landing, Pa.
 GS—W. E. Hart, Parkers Landing, Pa.
 PA—W. E. Hart, Parkers Landing, Pa.
 EM—F. T. Graham, Grove City, Pa.
 SCO—Catfish Supply Co., Buyer, F. Piazza, Catfish, Pa.
 SA—H. K. Wick & Co., Inc., Buffalo, N. Y.

Eagle Mine.
 Now operated by the Fredell Mining Co

Glenora Mine; Drift; Lower Kittanning Seam, 42 inches thick.
 PO—Catfish, Pa.; SP—Sarah Furnace, Pa.; CTY—Clarion; RR—P. R. R.
 S of H—Mules and 2 trolley pole type locos. Track gage 29 in.
 S of M—4 shortwall machs.
 PP—1—120 H. P. fire tube boiler, gen. units, 1—125 K. W. and 1—150 K. W., 250 volts D. C., 5 pumps.
 EMP—90. Daily tonnage 400.
 SIZES SHIPT—Run of Mine, Slack, Lump
 PREP. EQUIPT—Gravity Screens.

EAGLE VALLEY COAL COMPANY.

PR—Edward C. Ring, Rochester, N. Y.
 GM—E. C. Ring, " "
 PA—E. C. Ring, " "
 EM—M. Davidson, Timblin, Pa.

Eagle Valley Mine; Drift; Freeport Seam, 48 in. thick.
 PO—Timblin, Pa.; SP—Same and Ringgold, Pa.; CTY—Jefferson; RR—Pgh. & Shawmut, Eagle Valley Br.
 MS—J. C. Mayes, Timblin, Pa.
 S of H—Mules and 1 trolley pole type locos.
 S of M—1 electric puncher and 2 shortwall machs.
 PP—2 water tube boilers, total 300 H. P., 2 gen. units, 250 volts D. C., 30 pumps.
 SIZES SHIPT—Run of Mine.
 Old information.

EALY, E. T.

General Office, Barnesboro, Pa.
 Ealy No. 1 Mine; Drift; D Seam, 52 inches thick.
 PO—Barnesboro, Pa.; SP—Same; CTY—Cambria; RR—Penna.
 S of H—Mules and rope. Track gage 36 inches.
 S of M—Hand.
 EMP—J. Daily tonnage 50.
 SIZES SHIPT—Run of Mine.

EAST BRANCH COAL CO.

General Office, DuBois, Pa.
 PR—J. C. Levinson, DuBois, Pa.
 VP—Dr. Geo. H. Humphreys, Brockwayville, Pa.
 TR—Fred Tamler, DuBois, Pa.
 GM—F. Tamler, DuBois, Pa.
 GS—M. Johnson, DuBois, Pa.
 PA—Fred Tamler, DuBois, Pa.
 SA—W. A. Couse, DuBois, Pa.

East Branch Mine; Drift; Upper Kittanning Seam, 42 in. thick.
 PO—Cool Springs, Pa.; SP—East Branch, Pa.; CTY—Jefferson; RR—P. S. R. R.
 MS—A. Kalgren, DuBois, Pa.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 EMP—25. Daily tonnage 100.
 SIZES SHIPT—Run of Mine.

EAST CONNELLSVILLE COKE CO.

General Office, Conneltsville, Pa.
 PR—W. F. Snisson, Conneltsville, Pa.
 TR—W. F. Snisson, " "
 GM—R. E. Soisson, Conneltsville, Pa.
 GS—R. E. Soisson, Conneltsville, Pa.
 EM—Homer Burchinal, Uniontown, Pa.

Hilton Mine; Drift; 72 to 108 in. thick
 PO—Newcomer, Pa.; SP—Same; CTY—Fayette; RR—Penna., M. R. R. Br.
 S of H—Horses.
 S of M—Hand.
 EMP—40. Coke ovens, 52 Bee Hive.
 SIZES SHIPT—Run of Mine.
 Old information.

EAST FAYETTE COAL CO.

General Office, 1st Natl. Bank Bldg., Scottsdale, Pa.
 PR—Jno. F. Torrence, Conneltsville, Pa.
 VP—Albert Keister, " "
 TR—M. L. Hasness, " "
 GM—E. L. Stoner, Scottsdale, Pa.
 GS—M. H. Hochstetler, Obiopolle, Pa.
 PA—E. L. Stoner

Torrence Mine; Drift; "B" Seam; 42 in. thick.
 PO—Obiopolle, Pa.; SP—Same; CTY—Fayette; RR—W. M.
 S of H—1 trolley pole type loco. Track gage 42 inches.

S of M—2 shortwall machs.
 PP—2 fire tube boilers, 100 H. P., 1 125 K. W., gen. unit, 250 volts D. C., 1 pump.
 EMP—40. Daily tonnage 200.
 SIZES SHIPT—Run of Mine.

EAST PITTSBURGH GAS COAL COMPANY

PR—William H. Tompson, Frick Bldg., Pittsburgh, Pa.
 TR—William H. Tompson, Frick Bldg., Pittsburgh, Pa.
 GM—C. W. Christopher, 1204 Franklin Ave., Wilkensburg, Pa.
 GS—C. W. Christopher, 1204 Franklin Ave., Wilkensburg, Pa.
 PA—C. W. Christopher, 1204 Franklin Ave., Wilkensburg, Pa.

Oak Hill Mine; Drift; Pittsburgh Seam, 82 in. thick.
 PO—East Pittsburgh, Pa.; SP—Same; CTY—Allegheny; RR—P. R. R., Monongahela Div.
 Daily output, 100 tons.
 SIZES SHIPT—Run of Mine.
 (Old Information)

EAST RIVERSIDE COAL COMPANY

General Office, 303 Second National Bank Bldg., Brownsville, Pa.
 PR—A. L. Dewey, Brownsville, Pa.
 VP—M. Donovan, South Brownsville, Pa.
 TR—J. H. Price, Brownsville, Pa.
 GM—J. H. Price, Brownsville, Pa.
 GS—J. H. Price, Brownsville, Pa.
 PA—J. H. Price, Brownsville, Pa.
 EM—Brownsville Engineer'g Co., Brownsville, Pa.
 SA—Price-Dewey Fuel Company, Brownsville, Pa.

Jarobs Mine; Drift; Waynesburg Seam; 60 inches thick.
 PO—E. Millsboro, Pa.; SP—Same; CTY—Fayette; RR—Monongahela.
 S of H—Mules.
 S of M—Hand.
 PP—1 pump.
 EMP—19. Last years tonnage 17,084.
 SIZES SHIPT—Run of Mine.

EAST WINDSOR COAL COMPANY.

General Office, 111 Cambria Ave., Windber, Pa.
 PR—John Hindman, Windber, Pa.
 VP—Thomas Hindman, Windber, Pa.
 TR—Joseph T. McCormick, Windber, Pa.
 GM—Thomas Hindman, Windber, Pa.
 GS—Matt H. Hindman, Windber, Pa.
 PA—Thomas Hindman, Windber, Pa.
 CE—Wesley McCleary, Windber, Pa.
 SA—Thomas Hindman, Windber, Pa.

East Windsor Mine; Drift; "C" Prime Seam, 48 in. thick.
 PO—Windber, Pa.; SP—Same; CTY—Somerset; RR—P. R. R., South Fork Branch.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 PP—Steam boilers, 25 H. P.
 EMP—40. Last years tonnage 40,000.
 SIZES SHIPT—Run of Mine.
 Old information.

EASTERN BITUMINOUS COAL MINING BONDS.

General Office, Altoona, Pa.
 TR—W. W. Alexander, 1233 Land Title Bldg., Philadelphia, Pa.
 GM—F. P. McFarland, Altoona, Pa.
 GS—H. L. Binnix, Frugality, Pa.
 PA—H. L. Binnix, " "
 EM—J. S. Silliman & Co., Altoona, Pa.
 SCO—Frugality Merchandise Co., Frugality, Pa.
 SA—F. P. McFarland, Altoona, Pa.

Dean Nos. 8 and 10; Slope and Drift; "B" and "C" Prime, 36 to 72 in. thick.

PO—Frugality, Pa.; SP—Same; CTY—Cambria; RR—Penna., C. & I. Div.
 S of H—5 elev. locos. and mules. Track gage 36 in.
 S of M—1 shortwall mach
 PP—3—150 H. P. fire tube boilers, 1—150 K. W. M. G. Set, 440 volts A. C., 250 volts D. C., 2 pumps.
 EMP—260. Daily tonnage 750. Coke ovens 99 Bee Hive.
 SIZES SHIPT—Run of Mine.

Dean No. 9 not operated.

EASTERN COKE COMPANY

General Office, Pittsburgh, Pa.
 PR—I. H. Hillman, Jr., Pittsburgh, Pa.
 ASST. TO PRES—W. L. Affelder, Pittsburgh, Pa.
 VP—A. E. Sheets, Pittsburgh, Pa.
 TR—R. W. Flenniken, Pittsburgh, Pa.
 GS—Frank R. Dunbar, Pittsburgh, Pa.
 ASST. GS—M. D. Cooper, Brownsville, Pa.

PA—W. D. Gillett, Pittsburgh, Pa.
 EM—J. D. Martin, Pittsburgh, Pa.
 EE—J. A. Malady, Pittsburgh, Pa.
 SCO—Hillman Supply Co., Buyer & Pres., M. P. Sullivan, Pittsburgh, Pa.
 SA—Hillman Coal & Coke Co., Pittsburgh, Pa.

Tower Hill No. 1 Mine; Shaft; Connellsville Seam, 96 in. thick.
 PO—Republic, Pa.; SP—Same; CTY—Fayette; RR—Monongahela.
 MS—F. A. Coffroth, Republic, Pa.
 SM—H. G. Miller, Republic, Pa.
 S of H—Mules, comp. air locos. Track gage 44 in.

S of M—6 comp. air punchers, 4 shortwall machs.
 PP—4 water tube boilers, 1700 H. P., 1—100 K. W., 1—200 K. W., M. G. Sets, 250 volts D. C., 5 pumps.
 EMP—265. Last years tonnage 263,033. Coke ovens, 112 Bee Hive, 208 Rectangular.
 SIZES SHIPT—Run of Mine.
 Note—Formerly operated by Tower Hill Connellsville Coke Co.

EBENSBURG COAL CO.

General Office, Philadelphia, Pa.
 PR—J. P. Macklin, Philadelphia, Pa.
 TR—G. Dawson Coleman, Philadelphia, Pa.
 CS—S. T. Oldham, Colver, Pa.
 PA—J. J. Mahteson, Philadelphia, Pa.
 CE—C. E. Sharpless, Ebensburg, Pa.
 EE—H. C. Radach, Colver, Pa.
 MM—R. B. Fleming, Colver, Pa.
 SCO—Colver Store Co., Buyer, W. H. Troxell, Colver, Pa.
 Sales Agents, J. H. Weaver & Co., 61 Broadway, New York.

Ebensburg No. 1 Mine, Drift, "B" Seam 38 to 48 in. thick.
 PO—Colver, Pa.; SP—Same; CTY—Cambria; RR—P. R. R.
 S of H—16 trolley pole type locos. Track gage 36 in.
 S of M—42 elev. punchers and 20 shortwall machs.
 PP—6 water tube boilers, total 1800 H. P., transformer 2300-250 volts A. C., Rotary converters, 250 volts D. C., 41 pumps.
 EMP—625. Last fiscal year output, 600,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

ECLIPSE GAS COAL CO.

General Office, 1405 Oliver Bldg., Pittsburgh, Pa.
 PR—A. O. Blackburn, Pittsburgh, Pa.
 VP—Geo. H. Theiss, Pittsburgh, Pa.
 TR—D. B. Blackburn, Pittsburgh, Pa.
 GM—D. B. Blackburn, Pittsburgh, Pa.
 GS—Grover C. McClure, Venetia, Pa.
 PA—D. B. Blackburn, Pittsburgh, Pa.
 EM—B. L. Smith, Pittsburgh, Pa.
 EE—G. J. Snow, Venetia, Pa.

Eclipse Mine; Shaft; Pittsburgh Seam, 66 in. thick.
 PO—Thomas, Pa.; SP—Same; CTY—Washington. RR—B. & O.
 S of H—Storage battery loco. Track gage 44 inches.
 S of M—5 shortwall machs.
 PP—Purchase power, transformer 23,000 to 2200 volts, rotary converter to 250 D. C., 3 pumps.
 EMP—150. Last fiscal year output, 150,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

EDWARDS COAL COMPANY

General Office, Greensburg, Pa.
 PR—A. E. Troutman, Greensburg, Pa.
 TR—Paul S. Bair, Greensburg, Pa.
 GS—Luther F. Edwards, Greensburg, Pa.
 EM—S. F. Hammer, Greensburg, Pa.
 SA—Operators' Fuel Agency, Greensburg, Pa.

Edwards No. 2 Mine; Slope; Pittsburgh Seam, 72 inches thick.
 PO—Export, Pa.; SP—Same; CTY—Westmoreland; RR—Penna.
 MS—Jos. J. Morgan, Export, Pa.
 S of H—Mules and 1 gasoline loco. Track gage 40 inches.
 S of M—Hand.
 EMP—18. Last fiscal year output, about 15,000 tons.
 SIZES SHIPT—Run of Mine.

Edwards No. 3 Mine; Drift; Pittsburgh Seam, 72 inches thick.
 PO—Stickville, Pa.; SP—Same; CTY—Westmoreland; RR—Penna.
 MS—A. L. Whitehead, Stickville, Pa.
 S of H—Mules. Track gage 40 inches.
 S of M—Hand.
 EMP—28. Last fiscal year output, 21,295 tons.
 SIZES SHIPT—Run of Mine.

Edwards No. 4 Mine; Drift; Waynesburg Seam, 72 in. thick.
 PO—Hermine, Pa.; SP—Same; CTY—Westmoreland; RR—P. R. R.
 MS—Chas. E. McWilliams, Irwin, Pa.
 S of H—Mules and gasoline loco.
 S of M—Hand.
 EMP—40. Last years tonnage 9,023.
 SIZES SHIPT—Run of Mine.
 NOTE—This mine formerly operated by W. F. & S. E. Tilbrook, Hermine, Pa.

EOWENA COAL MINING COMPANY.

General Office, Hanover and Fayette Sts., Baltimore, Md.
PR—J. W. Eddelen, Baltimore, Md.
VP—J. Harry West, Baltimore, Md.
TR—J. Harry West, Baltimore, Md.
GM—J. W. Eddelen, Baltimore, Md.
PA—J. W. Eddelen, Baltimore, Md.
SA—Enterprise Fuel Co., Baltimore, Md.

Emma Mine; Drift; "A" Seam, 50 in. thick.
PO—Rockwood, Pa.; SP—Same; CTY—Somerset; RR—B. & O. (Wilson Creek Br.)
MS—H. J. Williams, Rockwood, Pa.
S of H—Mules and 2 trolley pole type locos. Track gage, 42 in.
S of M—Hand.
PP—Power purchased, transformer 22,000 to 275 volts A. C., M. G. set, 250 volts D. C., 4 pumps.
EMP—15. Last years tonnage 14,594.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Hand Clearing.

EDWINA COAL COMPANY

GM—L. M. Crowthers, Fredericktown, Pa.
Edwina Mine; Drift; Pittsburgh Seam, 72 in. thick.
PO—Fredericktown, Pa.; SP—Frt., Fredericktown, Pa.; Exp., Millsboro, Pa.; CTY—Washington; RR—Penna. (Monon. Div.)
MS—B. Bortangetti, Fredericktown, Pa.
S of H—Hoops and mules. Track gage 44 in.
S of M—2 chain breast type machs.
PP—West Penn Power, M. G. Set, 250 volts A. C., 2 pumps.
EMP—30. Daily tonnage 250.
SIZES SHIPT—Run of Mine.

EGOLF COAL MINING COMPANY.

General Office, Windber, Pa.
PR—M. E. McNeal, Windber, Pa.
TR—Thomas McNeal, Windber, Pa.
GM—M. E. McNeal, Windber, Pa.
PA—A. C. Hyde, Windber, Pa.
EM—Dickey & Co., Johnstown, Pa.
Additional Information on Page 980

Katherine Mine; Drift; "B" Seam, 54 in. thick.
PO—Cairnbrook, Pa.; SP—Same. CTY—Somerset; RR—Penna., Cairnbrook Branch.
MS—David Lehman, Cairnbrook, Pa.
S of H—2 steam and 1 gas locos. Track gage, 42 in.
S of M—Hand.
Last fiscal year output, 100,000 tons.
SIZES SHIPT—Run of Mine.

EICHELBERGER, E. & CO.

General Office, Saxton, Pa.
GM—J. A. Eichelberger, Saxton, Pa.
GS—J. A. Eichelberger, Saxton, Pa.
CE—Wm. E. Dinkler, Phillipsburg, Pa.
SA—J. A. Eichelberger, Saxton, Pa.

Bacon Nos. 1 and 2 Mines, Drifts, Barton Seam, 26 in. thick.
PO—Six Mile Run, Pa.; SP—Exp. Rd. disburg, Pa.; Frt. Romell Station, Pa.; CTY—Bedford; RR—Penna.
S of H—Mules and gasoline loco. Track gage, 38 in.
S of M—Hand.
EMP—120. Last years tonnage 83,955.
SIZES SHIPT—Run of Mine.
Old information.

EIDEMILLER COAL COMPANY

General Office, New Alexandria, Pa.
PR—Philip Eidemiller, New Alexandria, Pa.
TR—Adam Eidemiller, New Alexandria, Pa.
GM—Adam Eidemiller, New Alexandria, Pa.
GS—Adam Eidemiller, New Alexandria, Pa.
PA—Adam Eidemiller, New Alexandria, Pa.
EM—D. R. Walkershaw, Greensburg, Pa.
SA—Adam Eidemiller, New Alexandria, Pa.

Eidemiller Mine; Drift; Pittsburgh Seam, 81 inches thick.
PO—New Alexandria, Pa.; SP—Same; CTY—Westmoreland; RR—Penna.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
PP—Steam shovel, 1 pump.
EMP—20. Last years tonnage 25,000.
SIZES SHIPT—Run of Mine.

EISAMAN COAL CO.

General Office, Greensburg, Pa.
Retty Mine.
PO—Madison, Pa.; CTY—Westmoreland, RR—Penna.
No report.

ELDER MINING COMPANY

General Office, Timblin, Pa.
OWNER—Harry R. Campbell, Timblin, Pa.
CE—Herbert & Henderson, Kittanning, Pa.

Elder Mine; Drift; Upper Freeport Seam, 50 inches thick.
PO—Timblin, Pa.; SP—Same; CTY—Armstrong; RR—P. & S.
MS—Harry R. Campbell, Timblin, Pa.
S of H—Mules and main and tail rope. Track gage 36 inches.
S of M—Hand.
PP—1 fire tube boiler, 60 H. P.
EMP—25. Daily tonnage 150.
SIZES SHIPT—Run of Mine.

ELDER RUN COAL COMPANY

General Office, Leechburg, Pa.
VP—E. A. Watters, Leechburg, Pa.
GM—E. A. Watters, Leechburg, Pa.
GS—E. A. Watters, Leechburg, Pa.
PA—D. L. Maher, Leechburg, Pa.
EM—S. L. Moguet, Leechburg, Pa.
EE—G. H. Ritchie, Leechburg, Pa.

Elder Run Mine; Drift; Upper Freeport Seam, 36-40 in. thick.
PO—Leechburg, Pa.; SP—Same; CTY—Armstrong; RR—Penna., Schenley Br. Con. Div.
MS—Frank Bryant, Leechburg, Pa.
S of H—Mules and elec. trolley loco. Track gage 39 in.
S of M—Elec. chain machs.
PP—Power purchased, 250 volts motor gen. set.
SIZES SHIPT—Run of Mine.

ELEANOR COAL COMPANY

General Office, West Newton, Pa.
TR—R. W. Gilmore, Uniontown, Pa.
GM—R. W. Gilmore, Uniontown, Pa.
GS—W. H. Watt, West Newton, Pa.
PA—W. H. Watt, West Newton, Pa.
EM—D. R. Walkershaw, Greensburg, Pa.
SA—G. H. Snowden, Pittsburgh, Pa.

Eleanor Mine; Drift; Pittsburgh Seam, 84 in. thick.
PO—Wyano, Pa.; SP—Yukon, Pa.; CTY—Westmoreland; RR—Penna., Yukon Branch.
S of H—Mules. Track gage, 42 in.
S of M—Hand.
EMP—24. Last fiscal year output, 20,000 tons.
SIZES SHIPT—Run of Mine.

ELECTRIC COAL COMPANY

General Office, Glen Campbell, Pa.
PR—J. C. Van Every, Glen Campbell, Pa.
TR—M. R. Clark, Glen Campbell, Pa.
GM—H. E. Clark, Glen Campbell, Pa.
GS—R. D. Wilmoth, Glen Campbell, Pa.
PA—R. D. Wilmoth, Glen Campbell, Pa.
SA—Clark Bros. Coal Mining Co., Glen Campbell, Pa.

Electric Nos. 7 and 8 Mines; Drift and Slope; "E" and "D" Seams; 48 to 60 inches thick.
PO—Glen Campbell, Pa.; SP—Same, CTY—Indiana; RR—N. Y. C.
S of H—Rope. Track gage 36 inches.
S of M—Hand.
EMP—25. Last fiscal year output, 19,882 tons.
Old information.

ELK COAL COMPANY

General Office, St. Marys, Pa.
PR—Frank Oberkirch, St. Marys, Pa.
TR—B. T. Dorr, St. Marys, Pa.
GS—P. J. Fleming, St. Marys, Pa.
PA—Bernard E. Willard, St. Marys, Pa.
EM—Bernard E. Willard, St. Marys, Pa.

Elk Mine; Drift; Lower Kittanning Seam, 100 in. thick.
PO—Libon, Pa.; SP—Same; CTY—Elk; RR—P. & S.
S of H—Mules. Track gage 20 inches.
S of M—Will install shortwall mach.
PP—1 150 H. P. fire tube boiler, 100 K. W. gen. unit, 250 volts D. C.
Daily tonnage 200.
SIZES SHIPT—Run of Mine.

ELK RUN COAL MINING COMPANY

General Office, Punxsutawney, Pa.
PR—W. N. Trussell, Punxsutawney, Pa.
TR—E. H. Winslow, Punxsutawney, Pa.
GS—E. H. Winslow, Punxsutawney, Pa.
GM—W. N. Trussell, Punxsutawney, Pa.
PA—E. H. Winslow, Punxsutawney, Pa.
SA—Ritter & Winslow, Punxsutawney, Pa.

Shaller Mine; Drift; Upper Freeport Seam; 36 inches thick.
PO—Florence, Pa.; SP—Same; CTY—Jefferson; RR—Penna.
S of H—Rope. Track gage 42 inches.
S of M—Shortwall mach.
PP—1 water tube boiler, 75 H. P., gen. unit, 250 volts D. C.
EMP—30. Last years tonnage 20,000.
SIZES SHIPT—Run of Mine.

ELLERY COAL MINING COMPANY

General Office, Grampian, Pa.
PR—W. H. Ellery, 350 Broadway, New York, N. Y.
TR—R. R. Schote, 350 Broadway, New York, N. Y.
Additional Information on Page 720

Coaldale No. 15 Mine; Drift; D Seam, 36 inches thick.
PO—Grampian, Pa.; SP—Same; CTY—Clearfield; RR—N. Y. C.
MS—Thos. Ferguson, Grampian, Pa.

S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—35. Daily tonnage 175.
SIZES SHIPT—Run of Mine.

ELLERY-SCHOTE MINING COMPANY

General Office, 350 Broadway, New York, N. Y.
PR—W. H. Ellery, New York, N. Y.
TR—R. R. Schote, New York, N. Y.
GS—Thos. Ferguson, Clearfield, Pa.
PA—Thos. Ferguson, Clearfield, Pa.
SA—Coaldale Mining Co. of N. Y., 350 Broadway, New York, N. Y.
Additional Information on Page 720

Coaldale No. 16 Mine; Drift; "B" and "C" Seams; 41 inches thick.
PO—Oscoda Mills, Pa.; SP—Same; CTY—Clearfield; RR—Penna.
MS—Thos. Ferguson, Oscoda Mills, Pa.
S of H—Mules.
S of M—Hand.
EMP—30. Last years tonnage 10,000.
SIZES SHIPT—Run of Mine.

ELLIOTT COAL COMPANY

General Office, Robinson, Pa.
PR—J. L. Rugh, Robinson, Pa.
VP—W. M. Robinson, Robinson, Pa.
TR—E. E. Robinson, Robinson, Pa.
GS—J. L. Rugh, Robinson, Pa.
PA—E. E. Robinson, Robinson, Pa.
EM—J. L. Rugh, Robinson, Pa.
SC—The Robinson Company, Buyer, G. D. Sutton, Robinson, Pa.

Elliott Mine; Drift; Miller Seam, 40 inches thick.
PO—Robinson, Pa.; SP—Bollivar, Pa.; CTY—Indiana; RR—Penna.
S of H—Mules and rope. Track gage 42 inches.
S of M—Hand.
EMP—23. Daily tonnage 100.
SIZES SHIPT—Run of Mine.

ELLSWORTH COLLIERIES CO.

General Office, Lackawanna, N. Y.
PR—George F. Downs, Lackawanna, N. Y.
VP—Moses Taylor, 5 Nassau St., New York, N. Y.
GS—J. A. Cameron, Ellsworth, Pa.
ASST. Supt.—Albert Roth, Ellsworth, Pa.
TR—J. P. Higginson, Lackawanna, N. Y.
PA—F. H. Burnett, Ellsworth, Pa.
EM—W. H. Beck, Ellsworth, Pa.
CE—W. A. James, Lackawanna, N. Y.
EE—T. E. Tynes, Ellsworth, Pa.
SC—Western Supply Co., Buyer, E. M. Orr, Ellsworth, Pa.

No. 1 Mine. Shaft, Pittsburgh Seam, 5 ft. 10 in. thick. Operate wash-ers.

PO—Ellsworth, Pa. SP—Same. CTY—Washington; RR—P. B. R., Monon. Div.
S of H—24 trolley pole type locos. Track gage 42 in.
S of M—16 chain breast type and 7 shortwall machs.
PP—6 water tube boilers, total 2100 H. P., gen. units 3,500 K. W., 1—750 K. W., 250 volts D. C., 19 pumps.
EMP—582. Last fiscal year output, 566,082 tons. Coke ovens, 205 Bee Hive.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

No. 2 Mine, Shaft, Pgh. or River Seam, 5 ft. 10 in. thick.
PO—Ellsworth, Pa. SP—Same. CTY—Washington, RR—P. B. R., Monongahela Div.
S of H—21 trolley pole type locos. Track gage 42 in.
S of M—17 chain breast type and 5 shortwall machs.
PP—11 return tubular boilers, total 1375 H. P., 2 gen. units, 1—750 hp., 1—250 K. W. belted, 250 volts D. C., 16 pumps.
EMP—552. Last fiscal year output, 628,062 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

Nos. 3 and 4 Mines, Shaft, Pgh. or River Seam, 5 ft. 10 in. thick. Operate washers.
PO—Cokeburg, Pa.; SP—Same; CTY—Washington, RR—P. B. R., Monongahela Div.
S of H—24 trolley pole type locos. Track gage 42 in.
S of M—16 chain breast type and 5 shortwall machs.
PP—8 fire tube boilers, 1600 H. P., 5 water tube boilers, 2000 H. P., 1—400 K. W., 1—100 K. W., 250 volts D. C., 19 pumps.
EMP—633. Last fiscal year output, 647,491 tons. Coke Ovens, 285 Bee Hive.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

ELLSWORTH-DUNHAM COAL CO

General Office, St. Benedict, Pa.
PR—Richard Peale, St. Benedict, Pa.
TR—John Peale, St. Benedict, Pa.
GS—Merritt Hutton, St. Benedict, Pa.
PA—G. E. Metzger, St. Benedict, Pa.

CE—Merritt Hutton, St. Benedict, Pa.
EM—R. J. Protzeller, St. Benedict, Pa.
EE—E. K. Davis, St. Benedict, Pa.
SC—Central Trading Corp., Buyer, A. C. Hoover, St. Benedict, Pa.

Victor Nos. 11 and 14, Drift and Slope, Lower Freeport Seam, 31 to 42 in. thick.
PO—Arcadia, Pa. SP—Same, CTY—Indiana, RR—N. Y. C.
MS—William Murray, Arcadia, Pa.
SM—V. A. Kuper, Arcadia, Pa.
S of H—1 elec. loco. and rope. Track gage 42 in.
S of M—7 elec. machs.
PP—250 volts D. C., 2 amp. Per base power.
EMP—150. Last fiscal year output 180,000 tons.
SIZES SHIPT—Run of Mine.

ELMO COAL COMPANY.

General Office, New Post Office, Brownsville, Pa.
RECEIVERS—A. A. Scott, Brownsville, Pa.; Levi C. Waggoner, Brownsville, Pa.

GM—A. A. Scott, Brownsville, Pa.
GS—A. A. Scott, Brownsville, Pa.
PA—A. A. Scott, Brownsville, Pa.
EM—Brownsville Engineering Co., Snowden, Pa.
SA—The G. H. Snowden Co., Oliver Bldg., Pittsburgh, Pa.

Elmo Mine; Drift; Waynesburg Seam 60 to 72 in. thick.
PO—H. H. No. 1, East Millsboro, Pa.; SP—Ardenburg, Pa.; CTY—Fayette; RR—Monon.
MS—Alvin R. Gates, Brownsville, Pa.
S of H—Mules and gasoline locos. Track gage, 42 in.
S of M—Hand.
EMP—40. Daily output, 100 to 150 tons.
SIZES SHIPT—Run of Mine.

EMERY, J. W. COAL & LUMBER CO

Now Lexie Mining Co.

EMERY-LEE COKE COMPANY

Now Baker Coal Co.

EMMA COAL MINING COMPANY

General Office, Nanty Glo, Pa.
PR—R. V. Brown, 2732 Grand Central Terminal, New York.
TR—H. M. Vandervoort, New York, N. Y.
GM—R. V. Brown, 2732 Grand Central Terminal, New York.
GS—H. M. McFarney, Nanty Glo, Pa.
PA—J. A. Price, Box 725 Johnstown, Pa.
CE—W. R. Calkins, Box 725 Johnstown, Pa.
EM—J. A. Price, Box 725 Johnstown, Pa.
EE—Chas. L. Worley, Johnstown, Pa.
SA—Robert Y. Brown, New York, N. Y.
Additional Information on Page 980

Luma No. 1 Mine; Drift; D or Lower Freeport Seam, 40 in. thick.
PO—Exp. dist., Pa.; SP—Nanty Glo, Pa.; CTY—Cambria; RR—C. & D.
S of H—1 trolley pole type loco. Track gage 36 in.
S of M—2 shortwall machs.
PP—Power purchased. Transformer 2200-250 volts A. C., 1 pump.
EMP—77. Last years tonnage 37,652.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

EMPIRE COAL MINING CO

General Office, 418 Stephen Girard Bldg., Philadelphia, Pa.
PR—Wm. A. Webb, Philadelphia, Pa.
TR—G. Webb, Shillingford, Clearfield, Pa.
GM—G. Webb, Shillingford, Clearfield, Pa.
GS—G. Webb Shillingford, Clearfield, Pa.
PA—L. Banks Smith, " "
EM—R. W. Austin, " "
SA—Empire Coal Mining Co., 418 Stephen Girard Bldg., Philadelphia, Pa.
Additional Information on Pages 724, 725

Empire A Mine; Drift; Lower Freeport Seam, 56 in. thick.
PO—Barnesboro, Pa.; SP—Same, CTY—Cambria, RR—N. Y. C.
MS—Wm. R. Leadbetter, Barnesboro, Pa.
S of H—Mules and 6 elec. locos. Track gage 36 inches.
S of M—Hand and 20 comp. locos, 1 elec. shortwall mach.
PP—Power purchased, 250 volts A. C., M. G. Srs, 250 volts D. C., 7 pumps.
EMP—130. Last years tonnage 25,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—P. & S.

Empire M Mine; Drift, Lower Kittanning Seam, 43 in. thick.
PO—Cambria, Pa.; SP—Same, CTY—Cambria, RR—N. Y. C., C. & D. Br.
MS—Wm. R. Leadbetter, Clymer, Pa.
S of H—Mules and 2 elec. loco. Track gage 36 in.
S of M—19 comp. or purchrs.

(Continued on Next Page)

Empire Coal Mining Co.—Cont.

PP—5 fire tube boilers 700 H. P. gen. units 277 K. W., 250 volts D. C., 1 pump.

EMP—47. Last fiscal year output, 26,107 tons.

SIZES SHIPT—Run of Mine.

Empire R Mine; Drift; Lower Kittanning Seam, 40 in. thick.

PO—Starford, Pa.; SP—Same; CTY—Indiana; RR—N. Y. C., C. T. & D. Br.

MS—Amiel Clemenson, Clymer, Pa. S of H—Mules and 2 elec. locos. Track gauge 36 in.

S of M—Hand.

PP—1 gen. unit, 250 volts D. C., 2 pumps. Purchase power.

EMP—41. Last fiscal year output, 45,600 tons.

SIZES SHIPT—Run of Mine.

Empire P Mine; Drift; Lower Kittanning Seam, 36 to 48 in. thick.

PO—Starford, Pa.; SP—Same; CTY—Indiana; RR—N. Y. C., C. T. & D. Br.

MS—Amiel Clemenson, Clymer, Pa.

S of H—Mules and rope. Track gauge 36 in.

S of M—Hand.

PP—Power purchased, transformers 2200—110 volts A. C., 2 fire tube boilers, 100 H. P., 2 pumps.

EMP—23. Last fiscal year output, 30,038 tons.

SIZES SHIPT—Run of Mine.

Empire E Mine; Drift; Upper Freeport Seam, 42 inches thick.

PO—Barnesboro, Pa. SP—Same. CTY—Cambria. RR—N. Y. C.

MS—W. R. Ledbetter, Barnesboro, Pa.

S of H—1 elec. loco. Track gauge 36 in.

S of M—1 elec. shortwall mach. and hand.

PP—Power obtained from plant at Empire "A" Mine, 250 volts.

EMP—20. Daily output, 100 tons.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Picking Tables.

Empire D Mine; Drift; Lower Freeport Seam, 38 in. thick.

PO—Clymer, Pa. SP—Same. CTY—Indiana. RR—N. Y. C.

MS—Amiel Clemenson, Clymer, Pa.

S of H—2 elec. locos., gravity plane.

S of M—Hand.

PP—Power obtained from Empire "M" plant, 250 volts.

EMP—25. Daily output, 100 tons.

Empire "G" Mine; Drift; Lower Freeport Seam, 50 inches thick.

PO—R. F. D. Barnesboro, Pa.; SP—Ex., Same; Fr., Garman, Pa., Prepaid; CTY—Cambria; RR—Penna.

MS—Wm. R. Ledbetter, Barnesboro, Pa.

S of H—2 mules.

S of M—Hand.

Daily output, 100 tons.

Empire "I" Mine; Drift; D Seam, 48 inches thick.

PO—Idamar, Pa.; SP—Same; CTY—Indiana; RR—N. Y. C.

MS—Amiel Clemenson, Clymer, Pa.

S of H—5 trolley pole type locos. Track gauge 36 inches.

S of M—4 shortwall machs.

PP—2 return tubular boilers, 1 gen. unit, 4 pumps.

Daily output, 100 tons.

ENGLE BROTHERS COAL CO.

General Office, Elk Lick, Pa.

PR—I. J. Engle, Elk Lick, Pa.

VP—Geo. G. Engle, Elk Lick, Pa.

TR—I. J. Engle, Elk Lick, Pa.

GM—I. J. Engle, Elk Lick, Pa.

GS—I. J. Engle, Elk Lick, Pa.

PA—I. J. Engle, Elk Lick, Pa.

CE—C. U. Engle, Elk Lick, Pa.

Engle No. 1 Mine; Drift; Bed D Seam, 42 inches thick.

PO—Elk Lick, Pa.; SP—Meyersdale, Pa.

CTY—Somerset; RR—E. & O.

S of H—Mules. Track gauge 30 inches.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Picking Tables.

ENTERPRISE COAL COMPANY.

General Office, Garrett, Pa.

PR—C. A. Merrill, Garrett, Pa.

VP—W. J. B. Merrill, Garrett, Pa.

TR—F. Merrill, Miller, Garrett, Pa.

GM—C. A. Merrill, Garrett, Pa.

GS—W. J. B. Merrill, Garrett, Pa.

PA—C. A. Merrill, Garrett, Pa.

FM—J. E. Dikes & Co., Garrett, Pa.

EE—H. J. Rittner, Meyersdale, Pa.

SCG—Enterprise Supply Co., Garrett, Pa.

Buyer, C. A. Merrill.

SA—W. A. Merrill Sons & Co., Inc., Philadelphia, Pa.

Pondfich Mine; Drift; "C" Prime Seam, 44 to 54 in. thick.

PO—Garrett, Pa.; SP—Same; CTY—Somerset; RR—E. & O., Berlio Br.

MS—H. J. Rittner, Garrett, Pa.

S of H—Trolley pole type locos. Track gauge 40 in.

S of M—Hand.

PP—Power purchased. Transformer 2300—220 volts, 1—150 K. W. gen. unit, M. G. sets 250 volts D. C., 1 pump.

EMP—69. Last fiscal year output, 18,989 tons.

SIZES SHIPT—Run of Mine.

Enterprise Mine; Drift; "C" Prime Seam, 43 in. thick.

PO—Garrett, Pa. SP—Same. CTY—Somerset. RR—E. & O.

S of H—Mules. Track gauge 36 inches.

S of M—Hand.

PP—Power purchased. Transformer 2300—220 volts A. C.

EMP—20. Last fiscal year output, 20,149 tons.

SIZES SHIPT—Run of Mine.

EQUITABLE COAL CO.

General Office, 435 Sixth Ave., Pittsburgh, Pa.

PR—A. W. Thompson, Pittsburgh, Pa.

VP—W. E. Carson, Pittsburgh, Pa.

TR—C. J. Braun, Jr., Pittsburgh, Pa.

GM—C. W. Gibbs, Pittsburgh, Pa.

GS—H. E. Sweet, Harwick, Pa.

PA—C. W. Lepper, Pittsburgh, Pa.

EM—John M. Rayburn, Pittsburgh, Pa.

SA—C. W. Gibbs, 435 Sixth Ave., Pittsburgh, Pa.

Harwick Mine; Shaft; Upper & Lower Freeport Seam; 82 in. thick.

PO—Harwick, Pa.; SP—Cheswick, Pa., and River Valley, Pa. CTY—Allegheny. RR—Penna. & B. & L. E.

S of H—5 trolley pole type locos. and 1 storage battery gathering loco.

Track gauge 42 in.

S of M—9 breast machs. and 9 shortwall machs.

PP—Power purchased. Gen. units, 250 volts D. C., 8 water tube boilers 800 H. P., 16 pumps.

EMP—360. Last years tonnage 380,718.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Gravity and Revolving Screens, Picking Tables.

ERIE COAL MINING COMPANY.

General Office, Butler, Pa.

PR—Edw. Sopitt, Butler, Pa.

VP—C. F. Mosford, Jr., Pittsburgh, Pa.

TR—Geo. C. Stewart, Butler, Pa.

GM—Edw. Sopitt, Butler, Pa.

GS—J. W. McDonald, Ferris, Pa.

PA—F. G. West, Butler, Pa.

EM—R. K. Sopitt, Butler, Pa.

EE—A. Taylor, Ferris, Pa.

SCG—Ferris Supply Co.; Buyer, R. 8 Blair, Ferris, Pa.

SA—Penn-York Coal & Coke Co., Pittsburgh, Pa.

Keystone No. 1 Mine; Drift; Brookville Seam, 41 in. thick.

PO—Ferris, Pa.; SP—Hilliards, Pa.; CTY—Butler; RR—B. & L. E.

S of H—Mules and 2 trolley pole type locos. Track gauge 37 inches.

S of M—3 shortwall machs.

PP—3 water tube boilers, 300 H. P., 250 volts D. C., 1 250 K. W. gen. unit, 4 pumps.

EMP—150. Daily output, 750 tons.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.

Keystone No. 2 Mine; Drift; Brookville Seam, 44 in. thick.

PO—Ferris, Pa.; SP—Hilliards, Pa.; CTY—Butler; RR—B. & L. E.

S of H—Mules and 1 trolley pole type loco. Track gauge, 36 in.

S of M—2 shortwall machs.

PP—Power from No. 1 plant, 250 volts D. C., 1 pump.

EMP—50. Daily output, 350 tons.

SIZES SHIPT—Run of Mine, Slack, Lump.

PBEP. EQUIPT—Gravity Screens.

Keystone Nos. 3 & 4 Mines; Slope & Drift; Brookville Seam, 48 to 60 inches thick.

PO—Ferris, Pa.; SP—Annandale, Pa.; CTY—Butler; RR—B. & L. E.

S of H—Mules, 1 storage battery and 3 combination locos. Track gauge 36 inches.

S of M—2 shortwall Machs.

PP—Gas engine set, 1—100 K. W. gen. unit, 250 volts D. C., 2 pumps.

EMP—175. Daily output, 1,000 tons.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Shaker Screens, Picking Tables.

ESTEP BROS COAL MINING CO.

General Office, 35 Congress St., Boston, Mass.

PR—G. E. Warren, Boston, Mass.

VP—H. C. Estep, Indiana, Pa.

TR—G. W. Anderson, Boston, Mass.

GM—S. T. Brown, Indiana, Pa.

GS—Thos. Hogarth, Indiana, Pa.

PA—R. R. Ries, Indiana, Pa.

EM—Harner-Jones, Indiana, Pa.

SCG—Estep Trading Co.; Buyer, R. L. Estep, Starford, Pa.

SA—Geo. E. Warren, Boston, Mass.

Pleasant Valley No. 1 Mine; Drift; B or Miller Seam, 44 in. thick.

PO—Starford, Pa.; SP—Same; CTY—Indiana; RR—N. Y. C.

S of H—Mules and trolley pole type locos. Track gauge, 36 in.

S of M—5 shortwall machs.

PP—Power purchased. Transformer 2300—240 volts A. C. M. G. Sets, 250 volts D. C., 6 pumps.

EMP—65. Daily output, 150 tons.

SIZES SHIPT—Run of Mine.

Milbar No. 1 Mine; Drift; D Seam, 46 in. thick.

PO—Starford, Pa.; SP—Dixonville, Pa.; CTY—Indiana; RR—N. Y. C.

S of H—Mules. Track gauge, 36 in.

S of M—Hand.

PP—Power purchased, transformer 2300—240 volts, 220 volts D. C., 1 pump.

EMP—45. Daily output, 100 tons.

SIZES SHIPT—Run of Mine.

ETNA-CONNELLSVILLE COKE CO.

General Office, Connelville, Pa.

PR—Jos. R. Eckard, Connelville, Pa.

TR—Jos. B. Millard, Connelville, Pa.

PA—George W. Campbell, Connelville, Pa.

EM—S. M. Foust, Connelville, Pa.

Garwood Mine; Shaft and Slope; Pittsburgh Seam, 96-108 in. thick.

PO—Brownsville, Pa.; SP—Simpson, Pa.; CTY—Fayette; RR—Penna., Monon.

Branch.

MS—Isaac Schubert, R. D., Brownsville, Pa.

SM—Chas. Stickle, R. F. D. No. 1, Brownsville, Pa.

S of H—Mules and gasoline locos. Track gauge, 42 in.

S of M—6 comp. air machs. and hand.

PP—3 return tubular boilers, total 350 H. P., 1 compressor, 2 pumps.

EMP—100. Coke ovens, 122 Bee Hive.

SIZES SHIPT—Run of Mine.

EUCLID COAL COMPANY.

General Office, 2212 Oliver Bldg., Pittsburgh, Pa.

TR—R. M. Cook, Pittsburgh, Pa.

GM—R. M. Cook, Pittsburgh, Pa.

GS—Ralph Stewart, R. D. 8, Euclid, Pa.

Sherwin Mine; Slope; Upper Kittanning Seam, 36 in. thick.

PO—R. D. 2, Euclid, Pa.; SP—Same; CTY—Butler; RR—B. & L. E.

S of H—Trolley pole type loco. Track gauge 36 in.

S of M—2 shortwall machs.

PP—1 fire tube boiler, 150 H. P., 1—80 K. W. gen. unit, 250 volts D. C., 4 pumps.

EMP—40.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Gravity Screens.

Old information.

EUREKA COAL COMPANY.

General Office, DuBois, Pa.

PR—W. Harrigan, DuBois, Pa.

GM—L. J. DeVilder, Strattonville, Pa.

GS—C. E. Walter, Strattonville, Pa.

PA—L. J. DeVilder, Strattonville, Pa.

SA—W. A. Conse, DuBois, Pa.

Strattonville Mine; Slope; Lower Kittanning Seam, 42 in. thick.

PO—Strattonville, Pa.; SP—Same; CTY—Clarion; RR—L. E. F. & C.

MS—A. C. Chapman, Strattonville, Pa.

S of H—Mules and rope. Track gauge 30 inches.

S of M—Hand.

PP—1 85 H. P. fire tube boiler, 3 pumps.

EMP—20. Daily tonnage 100.

SIZES SHIPT—Run of Mine.

Falls Creek Mine; Drift; Seam, 32 in. thick.

PO—DuBois, Pa.; SP—Falls Creek, Pa.; CTY—Clearfield; RR—P. R. R.

MS—J. J. Keenan, DuBois, Pa.

S of H—Mules. Track gauge 30 in.

PP—1 pump.

EMP—18. Daily tonnage 50.

SIZES SHIPT—Run of Mine.

Caledonia Mine; Drift; Seam, 36 in. thick.

PO—Caledonia, Pa.; SP—Same; CTY—Elk; RR—R. & S.

MS—H. E. Fox, Caledonia, Pa.

S of H—Mules. Track gauge 30 in.

PP—1 pump.

EMP—20. Daily tonnage 50.

SIZES SHIPT—Run of Mine.

Benzinger Mine; Drift; Seam, 30 in. thick.

PO—St. Marys, Pa.; SP—Same; CTY—Elk; RR—P. R. R.

MS—F. E. Rusan, St. Marys, Pa.

S of H—Mules. Track gauge 30 in.

PP—1 pump.

EMP—20. Daily tonnage 100.

Export Coal Company—Cont.

Spring Hill Mine; Drift; Pittsburgh Seam; 72 inches thick.
PO—Trafford, Pa.; SP—Same; CTY—Westmoreland; RR—Penna.
MS—Wm. Myers, Trafford, Pa.
S of H—Mules and trolley pole type loco. Track gage 42 in.
S of M—4 elec. machs.
PP—Power purchased, 3 motor generator sets, 250 volts D. C., 1 pump.
VPP—50. Last years tonnage 60,000.
SIZES SHIPT—Run of Mine, Lump, Block.

EXPORT MINING COMPANY

General Office, Export, Pa.
PR—H. D. Duffenderfer, Export, Pa.
VP—C. Ward Eicher, Greensburg, Pa.
TR—M. H. Smithgall, Export, Pa.
GM—E. E. Kunkle, Export, Pa.
GS—E. E. Kunkle, Export, Pa.
EM—R. G. Gill, Greensburg, Pa.
PA—H. D. Duffenderfer, Export, Pa.
CE—R. G. Gill, Greensburg, Pa.
SA—West Penn Fuel Co., Pittsburgh, Pa.

Carrie Mine; Drift; Pittsburgh Seam, 72 in. thick.
PO—Export, Pa.; SP—Same; CTY—Westmoreland; RR—Penna., Turtle Creek Branch.
S of M—Hand.
PP—1 return tubular boiler, total 60 H. P., 1 gen. unit.
EMP—60. Daily output, 250 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens. (old information)

EYRE COLLIERIES CO.

General Office, Commercial Trust Bldg., Philadelphia, Pa.

Eagle No. 1 Mine.
PO—Clearfield, Pa.; SP—Same; CTY—Penna.
No report.

EYRE FUEL COMPANY

General Office, 300 Madison Ave., New York, N. Y.
CO-PARTNERS—T. J. Eyre, West Chester, Pa.; W. D. Eyre, 300 Madison Ave., New York, N. Y.
GS—James Simpson, Ohio, Pa.

Eyre Fuel Mine; Drift; B Seam, 12 in. thick.
PO—Ohio, Pa.; SP—Same; CTY—Fayette; RR—B. & O.
S of H—Mules.
S of M—Hand.
EMP—35. Daily tonnage 150.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by Brockman & Simpson.

FAIR HAVEN COAL COMPANY

General Office, 467 Union Arcade, Pittsburgh, Pa.
PR—Fred W. Scott, Pittsburgh, Pa.
VP—C. J. McBride, Pittsburgh, Pa.
TR—S. H. Hunter, Pittsburgh, Pa.
GS—Al. Downs, Box 161, McKees Rocks, Pa.
PA—S. H. Hunter, Pittsburgh, Pa.
CE—Douglas & McKnight, Columbia Bank Bldg., Pittsburgh, Pa.
EM—T. J. McGovern, Mt. Oliver Station, Pittsburgh, Pa.
SA—S. H. Hunter, Pittsburgh, Pa.

Fair Haven Mine; Drift; Pittsburgh Seam, 64 in. thick.
PO—Mt. Oliver Br., Pittsburgh, Pa.; SP—Fair Haven, Pa.; CTY—Allegheny; RR—West Side Belt.
MS—A. D. Nicholls, 2529 Home Ave., Fair Haven, Pa., Mt. Oliver Station, Pittsburgh, Pa.
S of H—Mules. Track gage 42 in.
S of M—Hand.
PP—1 pump.
EMP—40. Last years tonnage 74,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

McKees Rocks Mine; Drift; Pittsburgh Seam, 64 in. thick.
PO—McKees Rocks, Pa.; SP—Same; CTY—Allegheny; RR—P. C. & Y.
S of H—Mules. Track gage 42 in.
S of M—Hand.
PP—1 50 H. P. ore tube boiler, 1 pump.
EMP—110. Last years tonnage 95,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

Beck Mine; Drift; Pittsburgh Seam, 64 in. thick.
PO—McKees Rocks, Pa.; SP—Same; CTY—Allegheny; RR—P. C. & Y.
S of H—Mules. Track gage 42 in.
S of M—Hand.
PP—1 pump.
EMP—15. Last years tonnage 15,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

Hermine Mine; Drift; Waynesburg Seam, 55 in. thick.
PO—Hermine, Pa.; SP—Same; CTY—Westmoreland; RR—Penna.
MS—Paul Nicholls, Hermine, Pa.
S of H—Mules and trolley pole type loco. Track gage 42 in.
S of M—3 shortwall and 3 chain breast machs.
PP—Power purchased, 250 volts D. C. EMP—60. Last years tonnage 7,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.
NOTE—This mine formerly operated by Hermine Coal Co.

FAIR OAK COAL COMPANY

PR—Ross R. Scott, Somerset, Pa.
VP—H. L. Sillers, Confluence, Pa.
TR—Chas. R. McMillan, Confluence, Pa.
GM—Chas. R. McMillan, Confluence, Pa.
GS—Chas. R. McMillan, Confluence, Pa.
PA—Chas. R. McMillan, Confluence, Pa.
CE—Fleck & Moore, Somerset, Pa.

Fair Oak Mine; Drift; C Prime Seam, 43 inches thick.
PO—Confluence, Pa.; SP—Same; CTY—Somerset; RR—B. & O.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
PP—Purchase power.
EMP—13.
SIZES SHIPT—Run of Mine.

FAIRCHANCE COAL & COKE COMPANY

General Office, Uniontown, Pa.
OWNER—Geo. H. Bortz, Uniontown, Pa.
TR—Chas. E. Bortz, Uniontown, Pa.
GM—Chas. E. Bortz, Uniontown, Pa.
GS—Chas. E. Bortz, Uniontown, Pa.
PA—Chas. E. Bortz, Uniontown, Pa.
CE—Fayette Engineering Co., Uniontown, Pa.
SA—W. A. Stone & Co., Uniontown, Pa.

"Daugherty" Mine; Drift.
PO—Fairchance, Pa.; SP—Same; CTY—Fayette; RR—B. & O.
S of H—Mules.
S of M—Hand.
PP—3 pumps.
EMP—20. Last fiscal year output, 10,218 tons.
SIZES SHIPT—Run of Mine.

Jimtown No. 4, 5 and 6 Mines; Drift; Pittsburgh Seam, 84 to 88 in. thick.
PO—Jimtown, Pa.; SP—Dawson, Pa.; CTY—Fayette; RR—B. & O.
S of H—Mules, steam locos. Track gage 42 in.
S of M—Hand.
SIZES SHIPT—Run of Mine.
Rice Mine; Drift; Pittsburgh Seam, 82 in. thick.
PO—Smithfield, Pa.; SP—Same CTY—Fayette; RR—B. & O.
S of H—Mules. Track gage 42 in.
S of M—Hand.
PP—1 pump.
EMP—12. Daily tonnage 60.
SIZES SHIPT—Run of Mine.

FAIRFIELD COAL & COKE CO.

Out of Business

FAIRVIEW COAL COMPANY

General Office, Greensburg, Pa., R. F. D. No. 2.
PR—C. A. Ruff, New Stanton, a.
VP—J. F. Earhart, Greensburg, Pa.
TR—W. Irwin Hunter, Greensburg, Pa.
GM—S. C. Ruff, Greensburg, Pa., R. F. D. No. 2.
GS—S. C. Ruff, Greensburg, Pa., R. F. D. No. 2.
PA—S. C. Ruff, Greensburg, Pa., R. F. D. No. 2.
EM—D. Walkinshaw, Greensburg, Pa.
SA—S. C. Ruff, Greensburg, Pa., R. F. D. No. 2.

Fairview Mine; Drift; Penn Gas Seam, 96 inches thick.
PO—Greensburg, Pa.; SP—Madison Station, Pa.; CTY—Westmoreland; RR—Penna.
S of H—Mules, steam locos. Track gage 36 inches.
S of M—Hand.
PP—Purchase power.
EMP—40. Last years tonnage 7,000.
SIZES SHIPT—Run of Mine.

FAITH COAL COMPANY

General Office, Uniontown, Pa.
PR—G. M. Hochheimer, Uniontown, Pa.
TR—G. M. Hochheimer, Uniontown, Pa.
GM—P. J. McIntyre, Uniontown, Pa.
PA—G. M. Hochheimer, Uniontown, Pa.
SA—Hochheimer & Co., Uniontown, Pa.

Faith Mine; Slope; S-wickley Seam; 60 to 78 in. thick.
PO—Lemont Furnace, Pa.; SP—Darent, Pa.; CTY—Fayette; RR—Penna., South-west Branch.
S of H—Rope. Track gage 12 in.
S of M—3 shortwall machs.
PP—Power purchased, 440 volts A. C., 2 return tubular boilers, total 200 H. P.
EMP—100.
SIZES SHIPT—Run of Mine.

FALCON NO. 3 MINING CORPORATION

General Office, Glen Campbell, Pa.
PR—J. O. Clark, Glen Campbell, Pa.
Contractor—C. E. Fletcher, Glen Campbell, Pa.
GS—J. H. Miller, Glen Campbell, Pa.
PA—J. H. Miller, Glen Campbell, Pa.
SA—Clark Brothers Coal Mining Co., 1536 Commercial Trust Bldg., Philadelphia, Pa.

Falcon No. 3 Mine; Drift; D Seam, 20 inches thick.
PO—Beccaria, Pa.; SP—Smoke Run, Pa.; CTY—Clearfield; RR—Penna.
MS—Thos. Stoker, Beccaria, Pa.
S of H—Mules and electric power. Track gage 36 inches.
S of M—Hand.
PP—Purchase power. Transformer 2,200 to 220 volts A. C.
SIZES SHIPT—Run of Mine.

FALK COAL COMPANY

General Office, Houtzdale, Pa.
PR—P. C. Falk, Houtzdale, Pa.
TR—A. C. Falk, Houtzdale, Pa.

Prospect No. 2 Mine; Drift; Moshannon Seam, 66 inches thick.
PO—Houtzdale, Pa.; SP—Same; CTY—Clearfield; RR—Penna.
S of H—Mules.
EMP—20.

FALL BROOK COAL CO.

General Office, Corning, N. Y.
PR—John Magee, Corning, N. Y.
VP—John H. Lang, Corning, N. Y.
TR—John H. Lang, Corning, N. Y.
GM—W. J. Howell, Antrim, Pa.
GS—William Howell, Corning, N. Y.
PA—W. J. Howell, Antrim, Pa.
SCO—Antrim Store, Buyer, W. W. Forrest, Antrim, Pa.

Anna S. Mine; Drift; Bloss Seam, 36-48 in. thick.
PO—Antrim, Pa.; SP—Same, CTY—Tugay; RR—N. Y. C. & H. R. R.
MS—Ernest Coupe, Antrim, Pa.
S of H—Mules and rope. Track gage, 29 in.
S of M—Hand; 18 Comp. air machines.
PP—5 Return tubular boilers, total 500 H. P., 3 compressors and 3 pumps.
EMP—244. Last years tonnage 128,012.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screen.

FALLEN TIMBER COAL CO.

General Office 804 Land Title Bldg., Philadelphia, Pa.
PR—L. C. Emmons, Philadelphia, Pa.
VP—J. A. Emmons, Philadelphia, Pa.
TR—J. G. Emmons, Philadelphia, Pa.
GS—C. E. McCarthy, Philadelphia, Pa.
PA—G. C. McIntyre, 804 Land Title Bldg., Philadelphia, Pa.
CE—A. R. Llewellyn, Bayard, W. Va.
SCO—Culpepper Supply Co., Buyer, B. E. Hahn, Fallen Timber, Pa.
SA—T. K. Jenkins, 804 Land Title Bldg., Philadelphia, Pa.

Fallen Timber Mine; Drift; Upper Freeport Seam, 42 in. thick.
PO—Fallen Timber, Pa. SP—Same, CTY—Cambria; RR—Penna.
MS—James Rathgave, Fallen Timber, Pa.
S of H—2 elec. locos. Track gage 36 in.
S of M—3 shortwall machs.
PP—250 volts D. C., 2 pumps.
EMP—90. Last years tonnage 85,000.
SIZES SHIPT—Run of Mine.

FALLS CREEK COAL CO.

Now Hopkins Coal Co.

FANCY HILL COAL WORKS.

General Office, Cheat Haven, Pa.
PR—Geo. P. Howell, Pittsburgh, Pa.
TR—John B. Moore, Point Marion, Pa.
GM—John B. Moore, " "
GS—John B. Moore, " "
PA—R. W. Ames, Cheat Haven, Pa.
EM—James Cuddege, Uniontown, Pa.
ED—Clarence A. Hixon, Point Marion, Pa.
SCO—Eagle Supply Co., Buyer, Ray Blosser, Cheat Haven, Pa.
Additional information on Page 723
Eagle Mine; Drift; Pittsburgh Seam, 72 to 108 in. thick.
PO—Cheat Haven, Pa. SP—Same; CTY—Fayette; RR—B. & O., F. M. & P. B.
MS—Matthew Latta, Cheat Haven, Pa.
S of H—3 gasoline locos. Track gage 42 in.
S of M—4 shortwall machs.
PP—Power purchased, Transformer 6600-220 volts A. C., 8 pumps.
EMP—100. Last years tonnage 126,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens Block Tables.

FARMINGTON COAL & MINING COMPANY

General Office, Kane, Pa.
OWNER—W. F. Willis, Leeper, Pa.
GM—W. F. Willis, Leeper, Pa.

GS—W. F. Willis, Leeper, Pa.
PA—W. F. Willis, Leeper, Pa.

Farmington Mine; Drift and Slope, 46-42 inches thick.
PO—Leeper, Pa.; SP—Tylersburg, Pa.; CTY—Clarion; RR—B. & O.
MS—L. P. Polan, Tylersburg, Pa.
S of H—Mules. Track gage 32 inches.
S of M—Hand.
EMP—12. Daily output, 30 tons.
SIZES SHIPT—Run of Mine.

FAY COAL COMPANY (THE).

Now Kloe Coal Company

FAYETTE COAL CORPORATION

General Office, 503 First National Bank Bldg., Pittsburgh, Pa.
PR—W. R. Calverley, Pittsburgh, Pa.
VP—W. A. Luce, Pittsburgh, Pa.
TR—W. A. Luce, Pittsburgh, Pa.
ASST. TR—J. W. A. Luce, Pittsburgh, Pa.
GM—J. G. Calverley, Noblesstown, Pa.
GS—J. G. Calverley, Noblesstown, Pa.
PA—H. W. Wyld, Pittsburgh, Pa.
EM—John M. Rayburn, Pittsburgh, Pa.
FE—J. G. Calverley, Noblesstown, Pa.
SCO—Noblesstown Supply Co. Buyer, Desaire Thomas, Noblesstown, Pa.
SA—Addison L. Luce, Pittsburgh, Pa.

Chalfant Mine; Drift; Pittsburgh Seam; 60 inches thick.
PO—Noblesstown, Pa.; SP—Same; CTY—Allegheny; RR—P. C. & St. L.
MS—James Roy, Noblesstown, Pa.
S of H—Mules and electric loco. Track gage 42 inches.
S of M—Shortwall mach.
PP—Power purchased, G. E. motor (A. C.), 300 K. V. A., G. E. Gen. unit (D. C.).
EMP—275. Last years tonnage 158,020.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Bar Screens.

FAYETTE COKE CO.

General Office, New Salem, Pa.
PR—G. P. Fitzgerald, New Salem, Pa.
TR—C. E. Lenhart, " "
GM—C. E. Lenhart, " "
GS—Geo. H. Reynolds, New Salem, Pa.
PA—Geo. H. Reynolds, New Salem, Pa.
SCO—Shamrock Supply Co. Buyer, Bert McBurney, New Salem, Pa.
EM—Fayette Engineering Co., Uniontown, Pa.
Sales Agents, Producers Coke Co., Uniontown, Pa.

Shamrock Mine, Slope, Pittsburgh Seam, 8 to 11 ft thick.
PO—New Salem, Pa.; SP—Same, CTY—Fayette; RR—M. R. R.
S of H—Rope, horses and 3 elec. locos. Track gage 40 in.
S of M—Hand.
PP—Power purchased, 3 gen. units, 650 volts D. C., 5 return tubular boilers 480 H. P., 5 pumps.
EMP—245.
240 Bee Hive coke ovens.
SIZES SHIPT—Run of Mine.

FEDERAL COAL MINING CO., INC.

General Office, Clarion, Pa.
PR—D. J. Leebetter, Wellsboro, Pa.
VP—J. L. Binder, Hastings, Pa.
TR—M. M. Stevens, Clarion, Pa.
GM—M. M. Stevens, Clarion, Pa.
GS—M. M. Stevens, Clarion, Pa.
PA—M. M. Stevens, Clarion, Pa.
EM—Charles A. Imel, Clarion, Pa.
SA—M. M. Stevens, Clarion, Pa.

Federal Mine; Drift; B-Kittanning Seam; 36 in. thick.
PO—Clarion, Pa.; SP—Clarion and Sligo, Pa.; CTY—Clarion; RR—L. E. F. & C.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—35. Last years tonnage 15,406.
SIZES SHIPT—Run of Mine.

FEDERAL-CONNELLSVILLE COAL & COKE COMPANY.

General Office, Connellsville, Pa.
PR—T. B. Donnelly, Connellsville, Pa.
VP—John P. Kophart, Philadelphia, Pa.
TR—G. Corrado, Connellsville, Pa.
GM—G. Corrado, Connellsville, Pa.
GS—G. Corrado, Connellsville, Pa.
PA—E. R. Yoder, Connellsville, Pa.
CE—W. R. Barnhart, Connellsville, Pa.
SCO—Corrado Supply Co., Connellsville, Pa.

Ida Mine; Drift; B Seam, 96 in. thick.
PO—Connellsville, Pa.; SP—Cheat Haven, Pa.; CTY—Fayette, RR—B. & O., P. C. & Y.
MS—J. B. Shearer, Connellsville, Pa.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
PP—Power purchased, 220 volts A. C. Daily output, 500 tons.
SIZES SHIPT—Run of Mine.

FEDERAL GAS COAL COMPANY

RECEIVER—J. M. McDuff, Pittsburgh, Pa.

Federal Mine, Stripping; Pittsburgh Gas Coal Secho, 84-110 in. thick.
PO—Salsburg, Pa.; SP—Isidore, Pa.; CTY—Indiana, RR—B. & P.
S of H—Mules and 100 Track gage 36 in.

S of M—Hand.
PP—4 125 H. P. water tube boilers, 4 pumps.
Last years tonnage 60,000.
SIZES SHIPT—Run of Mine, Slack, Lump, Crushed.
PREP. EQUIPT—Picking Tables, Screens, Crusher.

FENELTON COAL TRUST

General Office, 121 Park Ave., DuBois, Pa.

TR—J. E. Fry, DuBois, Pa.
GM—J. E. Fry, DuBois, Pa.
PA—J. E. Fry, DuBois, Pa.
CE—J. H. Weir, Pittsburgh, Pa.
EM—J. H. Weir, Sylesville, Pa.
SA—J. E. Fry, DuBois, Pa.

Fenelton Mine; Drift; Upper Freeport Seam, 48 in. thick. Lower Freeport Seam, 49 in. thick.
PO—Fenelton, Pa.; SP—Same; CTY—Butler; RR—B. & P.
MS—Samuel Bruce, Fenelton, Pa.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—2 hand pumps. 1 steam pump.
EMP—20 Daily tonnage 100.
SIZES SHIPT—Run of Mine.

FERNHILL COAL COMPANY

General Office, 505 Main St., Johnstown, Pa.

PR—Peter Panagotacos, Johnstown, Pa.
TR—Geo. Panagotacos, Johnstown, Pa.
GM—E. C. Armstrong, Johnstown, Pa.
PA—E. C. Armstrong, Johnstown, Pa.
EM—Owen & Plummer, Johnstown, Pa.

No. 1 Mine; Drift D Seam, 34 inches thick.
PO—Johnstown, Pa.; SP—Same; CTY—Cambria; RR—P. R. R.
MS—Geo. M. Furniss, Johnstown, Pa.
S of H—Mules and storage battery locos. Track gage 36 inches.
S of M—Shortwall machs.
PP—Power purchased. Transformer 2200-220 volts A. C., M. C. Sets.
EMP—14. Last years tonnage 26,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.

FERRIER RUN COAL COMPANY.

General Office, 413 Trust Bldg., Ebensburg, Pa.

PR—W. C. Smith, Exedit, Pa.
VP—F. W. Foedesch, Philadelphia, Pa.
TR—H. B. Griest, Ebensburg, Pa.
GS—B. Frank Smith, Indiana, Pa.
PA—B. Frank Smith, Indiana, Pa.
CE—Andrew Crichton, Johnstown, Pa.
SCO—Ferrier Supply Co.; Buyer, H. R. George, Indiana, Pa.
Sales Agency, F. W. Foedesch & Co., Philadelphia, Pa.

Ferrier No. 1 Mine; Drift; B Seam, 45 to 55 in. thick.
PO—Indiana, Pa.; SP—Same; CTY—Indiana, RR—Penna., Yellow Creek Branch.
S of H—Mules.
S of M—Hand.
Daily output, 400 tons.
SIZES SHIPT—Run of Mine.
Old information.

FIAT COAL COMPANY.

General Office, McLellanstown, Pa.
SA—Southern Fuel Company, Monongahela Bldg., Morgantown, W. Va.

Fiat Mine; Drift; Waynesburg Seam, 60 inches thick.
PO—McLellanstown, Pa.; SP—Adah, Pa.; CTY—Fayette; RR—Monon.
S of H—Steam loco.
S of M—Hand.
Daily tonnage 200.
SIZES SHIPT—Run of Mine.

FIFTH POOL COAL & COKE COMPANY

General Office, Denbo, Pa.

PR—Louis Collins, Charleroi, Pa.
VP—D. Gottheld, Charleroi, Pa.
TR—J. W. Manon, Charleroi, Pa.
GM—Sherman C. Shull, Denbo, Pa.
PA—Sherman C. Shull, Denbo, Pa.
EM—H. L. Lowring, California, Pa.

Dawson Mine; Shaft; Pittsburgh or River Seam, 86 inches thick.
PO—Denbo, Pa.; SP—Same; CTY—Washington; RR—Penna.
MS—Sherman C. Shull, Denbo, Pa.
S of H—Mules and electric loco. Track gage 42 inches.
S of M—Shortwall machs.

PP—Power purchased, M. G. Sets, 440 volts A. C., 250 volts D. C.
EMP—60. Last years tonnage 70,000.
SIZES SHIPT—Run of Mine.

FIGART RUN COAL COMPANY.

GM—R. L. Bower, Blandburg, Pa.
PA—R. L. Bower, Blandburg, Pa.
GS—W. C. McCartney, M. Dale, Pa.
SA—R. L. Bower, Blandburg, Pa.

Ficks Mine; Drift; B and C Seams; 60-36 in. thick.
PO—Blandburg, Pa.; SP—Figart, Pa.; CTY—Cambria; RR—Penna., Stroud Rr.
SM—R. L. Bower, Blandburg, Pa.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—2 pumps.
EMP—30. Daily tonnage 100.
SIZES SHIPT—Run of Mine.

FILER & JENKINS.

General Office, Mercer, Pa.
TR—Enoch W. Filer, Mercer, Pa.
GS—William Jenkins, Mercer, Pa.

Pardoe No. 1 Mine; Drift; Brookville Seam, 56 in. thick.
PO—Pardoe, Pa.; SP—Same—CTY—Mercer; RR—B. & L. E.
S of H—Mules and 1 steam loco. Track gage 30 in.
S of M—Hand.
PP—1 oil engine.
EMP—35. Last fiscal year output, 20,000 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

FILER, F. P. & COMPANY.

General Office, Mercer, Pa.
PR—F. P. Filer, Mercer, Pa.
TR—E. W. Filer, Mercer, Pa.
GS—H. H. Filer, Grove City, Pa.
PA—E. W. Filer, Mercer, Pa.

Kildoe No. 1 Mine; Slope; Kittanning Seam, 36 in. thick.
PO—Euclid, Pa.; SP—Same; CTY—Butler; RR—B. & L. E.
MS—Peter De Armore, Euclid, Pa.
S of H—1 trolley pole type loco. Track gage 37 in.
S of M—2 shortwall machs.
PP—1 fire tube boiler, 100 H. P., 150 K. W. gen. unit, 250 volts D. C., 7 pumps.
EMP—50. Daily output, 150 tons.
SIZES SHIPT—Run of Mine.

Kildoe No. 2 Mine; Drift; Kittanning Seam, 36 in. thick.
PO—Mayne, Pa.; SP—Same; CTY—Butler; RR—Western Allegheny.
MS—William McKay, Jr., Euclid, Pa.
S of H—Mules. Track gage, 37 in.
S of M—Hand.
EMP—40. Daily output, 100 tons.

FINLEYVILLE GAS COAL COMPANY

General Office, Colonial National Bank Bldg., Connellsville, Pa.

PR—G. Corrado, Connellsville, Pa.
VP—W. N. Leche, Connellsville, Pa.
TR—P. H. Beighly, Connellsville, Pa.
GM—G. Corrado, Connellsville, Pa.
GS—Homer Cunningham, Connellsville, Pa.
PA—F. R. Yoder, Connellsville, Pa.
CE—W. R. Barnhart, Connellsville, Pa.
EE—H. R. Cunningham, Connellsville, Pa.
SA—G. Corrado Coal & Coke Ints., J. J. Ash, Sales Manager, Connellsville, Pa.

Elm Mine; Slope; Pittsburgh Seam, 72 in. thick.
PO—Venetia, Pa.; SP—Anderson Station; PA; CTY—Washington; RR—B. & O.
MS—E. Mathias, Finleyville, Pa.
S of H—Mules and rope. Track gage, 42 in.
S of M—Hand.
PP—1 fire tube boiler, 40 H. P., 1 pump.
EMP—12. Daily output, 50 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.
Note—Formerly operated by Oakes Bros.

FLENNER COAL COMPANY

General Office, South Fork, Pa.
PR—G. E. Fleener, South Fork, Pa.
TR—Howard Miller, South Fork, Pa.
PA—G. E. Fleener, South Fork, Pa.
EM—Fetterman Engineering Co., South Fork, Pa.

SA—G. E. Fleener, South Fork, Pa.
Fleener No. 1 Mine; Drift; E or Upper Freeport Seam; 35 in. thick.
PO—South Fork, Pa.; SP—Same; CTY—Cambria; RR—Penna.
S of H—Electric loco. Track gage 36 inches.
S of M—Shortwall mach.
EMP—75. Daily tonnage 250.
SIZES SHIPT—Run of Mine.

FLINTON COAL COMPANY

Now part of Jasahill Coal Co.

FLORA COAL CO.

General Office, Somerset, Pa.

Flora No. 3 Mine.
PO—Hoversville, Pa.; CTY—Somerset; RR—B. & O.
No report.

FLORENCE COAL & COKE COMPANY

General Office, 700 Bowman Bldg., Pittsburgh, Pa.

PR—H. T. McFarland, Uniontown, Pa.
Sney—E. J. Fedigan, Pittsburgh, Pa.
TR—Thos. R. Heyward, Jr., Pittsburgh, Pa.
GM—H. T. McFarland, Uniontown, Pa.
SA—Thomas R. Heyward Co., Pittsburgh, Pa.

Browning Mine; Drift; Pittsburgh Seam; 90 to 108 inches thick.
PO—Uniontown, Pa.; R. F. D. No. 1; SP—Vance Mill Junction, Pa.; CTY—Fayette; RR—Penna., Redstone Branch.
S of H—Mules.
S of M—Hand.
EMP—12.
SIZES SHIPT—Run of Mine.
Old information.

FLOWER RUN COAL COMPANY

General Office, Blossburg, Pa.

PR—H. H. Roberts, Blossburg, Pa.
GM—H. H. Roberts, Blossburg, Pa.
GS—Evan Williams, Blossburg, Pa.
PA—H. H. Roberts, Blossburg, Pa.
EM—E. R. Greene, Blossburg, Pa.
SCO—Address the company. Buyer, H. H. Roberts, Blossburg, Pa.

Flower Run Mine; Drift; Blossburg Seam, 36 inches thick.
PO—Blossburg, Pa.; SP—Same; CTY—Tioga; RR—Erie.
S of H—Mules. Track gage 28 inches.
S of M—Hand.
PP—Power purchased, 110 volts D. C.
EMP—35. Last years tonnage 28,000.
SIZES SHIPT—Run of Mine.

FOHL, W. E., COAL CO.

Now J. W. Fletcher.

FORD CITY COAL & LIME CO.

General Office, Ford City, Pa.

PR—D. A. Goldman, Ford City, Pa.
TR—B. Baldauf, Ford City, Pa.
GM—D. A. Goldman, Ford City, Pa.
GS—D. A. Goldman, Ford City, Pa.
PA—D. A. Goldman, Ford City, Pa.
CE—Herbert & Henderson, Kittanning Pa.
EE—Dave Brown, Kittanning, Pa., R. D. No. 1.

Garretts Run Mine; Drift; Upper Freeport Seam, 42-48 inches thick.
PO—Garretts Run, Pa.; SP—Ford City, Pa.; CTY—Armstrong; RR—P. R. R., A. V. Div.
MS—John Otten, Garretts Run, Pa.
S of H—Mules, elec. and storage battery locos. Track gage 36 inches.
S of M—Chain breast type and shortwall machs.
PP—Power purchased, 1-100 H. P. fire tube boiler.
EMP—48. Last years tonnage 30,000.
SIZES SHIPT—Run of Mine.

FORD COLLIERIES COMPANY.

General Office, Detroit, Mich.

PR—J. R. Ford, Detroit, Mich.
VP—J. A. Curtis, Detroit, Mich.
TR—E. L. Ford, Detroit, Mich.
GM—A. R. Pollock, Curtisville, Pa.
GS—A. R. Pollock, Curtisville, Pa.
PA—J. H. Byers, Curtisville, Pa.
CE—John M. Rayburn, Pittsburgh, Pa.
EM—G. G. Long, Curtisville, Pa.
SCO—Highland Stores Co., Inc. Buyer, W. F. Leister, Curtisville, Pa.
SA—K. B. Brundage, Detroit, Mich.

Benjamin Mine; Shaft; Twin Freeport Seam, 78 in. thick.
PO—Curtisville, Pa.; SP—Same; CTY—Allegheny; RR—B. & L. E.
MS—Wm. Drennen, Curtisville, Pa.
S of H—13 trolley pole type locos. Track gage, 42 in.
PP—6 return tubular boilers, 1200 H. P., gen. units, 2-200 K. W., 250 volts D. C., 30 pumps.
EMP—380. Last years tonnage 433,402.
SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Lump.
PREP. EQUIPT—Bar Screens.

Francis Mine; Shaft; Twin Freeport Seam, 78 in. thick.
PO—Curtisville, Pa.; SP—Same; CTY—Allegheny; RR—B. & L. E.
MS—Wm. Flemmer, Curtisville, Pa.
S of H—13 trolley pole type locos. Track gage, 42 in.
S of M—Shortwall machs.
PP—6 return tubular boilers, 1200 H. P., gen. units, 200 K. W., 250 volts D. C., 23 pumps.
EMP—395. Last years tonnage 398,953.

SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Lump.
PREP. EQUIPT—Bar Screens.

Berry Mine; Shaft; Twin Freeport Seam, 78 in. thick.
PO—Bairdford, Pa.; SP—Same; CTY—Allegheny; RR—B. & L. E.
MS—Thos. Brennen, Bairdford, Pa.
S of H—10 trolley pole type locos. Track gage, 42 in.
S of M—8 shortwall machs.
PP—6 return tubular boilers, 1200 H. P., 3-200 K. W. gen. units, 250 volts D. C., 20 pumps.
EMP—427. Last years tonnage 490,332.
SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Lump.
PREP. EQUIPT—Bar Screens, Loading Rooms.

FORDHAM MINING COMPANY

OWNER—Frederic W. Fisher, Punxsutawney, Pa.

Fordham Mine; Drift; Lower Kittanning Seam, 60 in. thick.
PO—Punxsutawney, Pa.; SP—Valier or Fordham, Pa.; CTY—Jefferson; RR—Penna.
MS—F. W. Fisher, Punxsutawney, Pa.
S of H—Mules and 1 steam loco. Track gage 42 in.
S of M—7 comp. air punchers.
PP—4 175 H. P. fire tube boilers.
EMP—45. Last years tonnage 22,000.
SIZES SHIPT—Run of Mine.

FORGE COAL MINING COMPANY.

General Office, 1000 Liberty Bldg., Philadelphia, Pa.

PR—David E. Williams, Philadelphia, Pa.
VP—C. B. Roberts, Philadelphia, Pa.
TR—William A. Smith, Philadelphia, Pa.
GM—A. M. Biddell, Altoona, Pa.
GS—A. M. Biddell, Altoona, Pa.
PA—Davide E. Williams, Jr., Philadelphia, Pa.
CE—Andrew B. Crichton, Johnstown, Pa.
SCO—Excelsior Store Co. Buyer, Wm. P. Griest, Barnesboro, Pa.
Sales Agency—David E. Williams & Co., Philadelphia, Pa.

Forge Nos. 1 and 2 Mines; Shaft and Slope "B" and "C" Seams, 34 to 42 in. thick.
PO—Portage, Pa.; SP—Same; CTY—Cambria; RR—Penna., Martins Br.
MS—Robert Quigley, Portage, Pa.
S of H—Mules, rope and 4 elec. locos. Track gage 36 in.
S of M—15 elec. machs.
PP—4 return tubular boilers, total 500 H. P., 2 air comp., 1 gen. unit, 250 volts D. C., 440 volts A. C., 3 pumps.
EMP—155. Last fiscal year output, 152,515 tons.
SIZES SHIPT—Run of Mine.

FORKS COAL COMPANY.

General Office, Altoona, Pa.

PARTNERS—W. H. Hughes, Altoona, Pa.; R. H. Moore, Portage, Pa.
EM—Raymond Campbell, Portage, Pa.

Hughes No. 12 Mine; Drift; C. Prime Seam, 40 in. thick.
PO—South Fork, Pa.; SP—Same; CTY—Cambria; RR—P. R. R.
MS—J. P. Bradley, South Fork, Pa.
S of H—Elec. hoists, 2 locos. Track gage 32 in.

S of M—2 chain breast type machs.
PP—Power purchased, 1-150 K. W. gen. unit, 250 volts D. C., 1 pump.
EMP—77. Last years tonnage 41,467.
NOTE—Successors to the Fork Coal Mining Company.

FORKS COAL MINING COMPANY

Now Forks Coal Co.

FORT HILL COAL COMPANY

General Office, 751 Franklin St., Johnstown, Pa.

PR—Carl G. Heinz, 618 Robb Ave., Johnstown, Pa.
VP—O. T. Thomas, Johnstown, Pa.
TR—Adam Traubold, Johnstown, Pa.
GM—Carl G. Heinz, Johnstown, Pa.
GS—Carl G. Heinz, Johnstown, Pa.
EM—O. T. Thomas, Johnstown, Pa.
SCO—Address the Company. Buyer, John Gogel, Johnstown, Pa.
SA—J. J. Martin, Johnstown, Pa.

Fort Hill Mine; Drift; Slope; D, C and B Seams.
PO—Fort Hill, Pa.; SP—Same; CTY—Somerset; RR—B. & O., W. M.
S of H—Electric locos.
S of M—Hand.
EMP—100. Daily tonnage 2,500.
SIZES SHIPT—Run of Mine, Lump.

FOUR STATES COAL & COKE CO.

General Office, Greensburg, Pa.

Eloise Mine.
PO—Bradford Jct., Pa.; CTY—Westmoreland; RR—Penna.
No report.

FOX COAL COMPANY.

General Office 1904 Oliver Bldg., Pittsburgh, Pa.
 PR—Chas. A. Rampus, Washington, Pa.
 VP—H. H. Wolfe, Pittsburgh, Pa.
 TR—R. J. Arthur, Pittsburgh, Pa.
 GM—R. J. Arthur, Pittsburgh, Pa.
 GS—J. H. Naylor, Portersville, Pa.
 PA—H. H. Wolfe, Pittsburgh, Pa.
 EM—F. P. Graham, Grove City, Pa.
 EE—J. H. Yerkey, Portersville, Pa.
 SCO—Branna Supply Co., Buyer, J. A. Allen, Portersville, Pa.
 SA—H. H. Wolfe, 1305 First National Bank Bldg., Pittsburgh, Pa.

Fox No. 1 Mine; Drift; Lower Kittanning Seam, 36 to 40 in. thick.
 PO—Portersville, Pa.; SP—Same; CTY—Butler; RR—W. A.
 S of H—Mules. Track gage 36 in.
 S of M—2 shortwall mchs.
 PP—1—150 H. P. tubular boiler, 2 generators, 250 volts D. C., 2 pumps.
 EMP—35. Last years tonnage 23,000.
 SIZES SHIPT—Run of Mine, Slack, Lump, Block.
 PREP. EQUIPT—Gravity Screens, Picking Tables.

FRANKLIN COKE CO.

General Office 300 Front St., Brownsville, Pa.
 PR—Isaac Taylor, Uniontown, Pa.
 VP—Edward H. Rebok, Waltersburg, Pa.
 TR—Isaac Taylor, Uniontown, Pa.
 GM—Alvie L. Gilleland, Brownsville, Pa.
 GS—Chas. Wilson, Smock, Pa.
 PA—Alvie L. Gilleland, Brownsville, Pa.
 EM—South Penna. Eng. Co., Uniontown, Pa.
 SCO—Star Supply Co., Buyer, C. J. Jordan, Smock, Pa.
 SA—Pioneer Coal & Coke Co., Oliver Bldg., Pittsburgh, Pa.

Leon Mine; Drift; Connellsville Pittsburgh Seam, 8 ft. thick.
 PO—Brownsville, Pa.; SP—Smock, Pa.; CTY—Fayette; RR—P. V. & C.
 MS—J. E. Hughes, Uniontown, Pa.
 S of H—Mules and 2 steam locos. Track gage 40 in.
 S of M—Hand
 PP—1—50 H. P. fire tube boiler, 2 pumps.
 EMP—30. Daily tonnage 60.
 SIZES SHIPT—Pea, Nut, Egg, Lump, Block.

FRAUENHEIM, E. J. COAL CO

Now Fraunheim-Logansport Coal Corp.

FRAUENHEIM-LOGANSPORT COAL CORP.

General Office, 1203 Keenan Bldg., Pittsburgh, Pa.
 VP—C. A. Fagan, Pittsburgh, Pa.
 TR—J. A. Kuhlman, Fraunheim, Pa.
 GS—J. A. Kuhlman, Fraunheim, Pa.
 PA—M. R. Lynch, Pittsburgh, Pa.
 CE—John M. Rayburn, Pittsburgh, Pa.
 SCO—Antoinette Supply Co., Buyer, F. A. Schmidt, Fraunheim, Pa.

Antoinette Mine; Drift; E Seam, 48 in. thick.
 PO—Fraunheim, Pa.; SP—Frt., Grey, Pa.; Exp., Somerset, Pa.; CTY—Somerset; RR—W. M.
 S of H—Elec. loco. Track gage 42 in.
 S of M—Shortwall mach.
 PP—Power purchased, 250 volts D. C.
 EMP—105. Last years tonnage 10,000.
 SIZES SHIPT—Run of Mine.
 NOTE—Formerly operated by the E. J. Fraunheim Coal Co.

Bethel Mine; Drift; Upper Freeport Seam, 42 in. thick.
 PO—Logansport, Pa.; SP—Kelly, Pa.; CTY—Armstrong; RR—P. R. R., (B. & A. Division).
 MGR—Ed. Klingensmith, Logansport, Pa.
 S of H—1 electric and 2 storage battery locos. Track gage 36 in.
 S of M—5 shortwall mchs.
 PP—1—150 K. W. M. G. Set, 250 volts D. C., 2 pumps.
 EMP—105. Daily tonnage 475.
 SIZES SHIPT—Run of Mine, Slack, Lump
 PREP. EQUIPT—Stationary Screens.
 NOTE—Formerly operated by the Logansport Coal Co.

FREDELL MINING COMPANY

General Office, R. D. 1, West Monterey, Pa.
 SCO—Fredell Supply Co., Buyer, O. L. Foringer, West Monterey, Pa.
 PA—O. L. Foringer, West Monterey, Pa.
 SA—O. L. Foringer, West Monterey, Pa.

Eagle Mine; Drift; Clarion Seam, 36 inches thick.
 PO—R. D. 1, W. Monterey, Pa.; SP—Upper Hillville, Pa.; CTY—Clarion; RR—P. R. R.
 MS—O. L. Foringer, West Monterey, Pa.
 S of H—Mules and comp. air loco. Track gage 31 inches.
 S of M—5 comp. air punchers.
 PP—1—150 H. P. water tube boiler, 3 pumps.

EMP—50. Daily tonnage 100.
 SIZES SHIPT—Run of Mine.
 NOTE—Formerly operated by the Eagle Coal Co.

FREDERICKTOWN COAL & COKE CO.

General Office, Fredericktown, Pa.
 PR—Joe A. Hawkins, Fredericktown, Pa.
 VP—W. W. Hawkins, " "
 GM—J. A. Bayndell, " "
 GS—Chas. Butler, Fredericktown, Pa.
 PA—J. A. Bayndell, Fredericktown, Pa.
 EM—Brownsville Engineering Co., Brownsville, Pa.
 EE—John Bannerman, Fredericktown, Pa.
 Sales Agency, Moreland Coke Co., Pittsburgh, Pa.

Fredericktown Mine; Drift; Pittsburgh Seam, 72 to 96 in. thick.
 PO—Fredericktown, Pa.; SP—Same; CTY—Washington; RR—P. R. R., P. M. & S. Branch.
 S of H—Mules and rope. Track gage, 43 in.
 S of M—4 elec. mchs.
 PP—Gen. unit 250 volts D. C. Power purchased. 2 pumps.
 EMP—92. Last years tonnage 264,896.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

Sandy Run Mine; Drift; Sewickley Seam, 60 in. thick.
 PO—Marlin, Pa.; SP—Same; CTY—Greene.
 S of H—Mules and elec. locos. Track gage 42 in.
 S of M—4 shortwall mchs.
 PP—Power purchased, M. G. Set, 250 volts D. C., 4 pumps.
 EMP—95. Daily tonnage 1,000.
 SIZES SHIPT—Run of Mine.

FREDERICKTOWN CROSS CREEK COAL CO.

General Office, Fredericktown, Pa.
 PR—Joseph Crockett, Fredericktown, Pa.
 VP—H. Lovring, California, Pa.
 TR—Joseph Carroll, Beallsville, Pa.
 GM—J. W. Carroll, Fredericktown, Pa.
 GS—J. W. Carroll, Fredericktown, Pa.
 PA—J. W. Carroll, Fredericktown, Pa.
 EM—H. Lovring, California, Pa.

Fredericktown Cross Creek Mine; Drift and Slope; Pittsburgh and Waynesburg Seams, 72-60 in. thick.
 PO—Burgettstown, Pa.; SP—Same; CTY—Washington; RR—P. C. & St. L.
 S of H—Rope and elec. loco. Track gage 48 in.
 S of M—Shortwall mchs.
 PP—Power purchased, M. G. Set, 250 volts D. C.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.

FREEPORT FUEL COMPANY

General Office, Freeport, Pa.
 PR—W. E. Iseman, Tarentum, Pa.
 TR—W. A. Iseman, Freeport, Pa.
 GM—W. E. Iseman, Tarentum, Pa.
 GS—J. H. Harley, Apollo, Pa.
 PA—J. J. Mardorf, Freeport, Pa.
 EM—D. E. Taylor, Freeport, Pa.
 EE—John Ferguson, Apollo, Pa.
 SA—Herman Haupt, 811 Harrison Bldg., Philadelphia, Pa.

West Penna. Mine; Drift; Kittanning Seam; 40 inches thick.
 PO—Apollo, Pa.; SP—Same; CTY—Armstrong; RR—Penna.
 S of H—5 trolley pole type locos. Track gage 36 in.
 S of M—5 longwall mchs.
 PP—Power purchased. Transformer 2,200 to 250 volts A. C., 1 M. G. set, 250 volts D. C., 4 pumps.
 EMP—60.

SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Picking Table.
 Note—Successors to West Penn Coal Mining Co.

FREEPORT & MAHONING COAL CO

General Office, Freeport, Pa.
 PR—W. E. Iseman, Tarentum, Pa.
 TR—W. A. Iseman, Freeport, Pa.
 GM—W. E. Iseman, Tarentum, Pa.
 GS—J. H. Harley, Apollo, Pa.
 PA—J. J. Mardorf, Freeport, Pa.
 EM—D. E. Taylor, Freeport, Pa.
 EE—John Ferguson, Apollo, Pa.

Ruth Mine; Drift; Upper Freeport Seam; 36-60 inches thick.
 PO—New Bethlehem, Pa.; R. D. No. 6; SP—Putneyville, Pa.; CTY—Clarion; RR—Pgh., Shawmut & North Main Line.
 S of H—Mules, cone and comp. air locos. Track gage 42 inches.
 S of M—5 comp. air mchs.
 PP—1 water tube and 2 return tubular boilers, total 375 H. P., 2 compressors, 4 pumps.
 EMP—34.
 SIZES SHIPT—Run of Mine.
 NOTE—Successors to Mahoning Coal Co.

FRICK, H. C. COKE CO

General Office, Carnegie Bldg., Pittsburgh, Pa.
 PR—W. H. C. Frick, Pittsburgh, Pa.
 TR—Philip Keller.

SIXTY Wm. Gates, Pittsburgh, Pa.
 ASSIST. SEY. C. L. Albright, Pittsburgh, Pa.
 PA—T. S. Duncan, Pittsburgh, Pa.
 MOTOR—P. P. Parker, Pittsburgh, Pa.
 ASSIST. MOTOR—W. J. White, Pittsburgh, Pa.
 GS—Clay F. Lynch, Scottsdale, Pa.
 GS—Asst. W. C. Hand, Scottsdale, Pa.
 GS—Asst. W. D. Glasgow, Scottsdale, Pa.
 CE—T. W. Dawson, Scottsdale, Pa.
 ME—G. E. Huttie, Scottsdale, Pa.
 Const Eng.—E. C. Auld, Scottsdale, Pa.
 EE—G. E. Gramm, Scottsdale, Pa.
 SCO—Union Supply Co., Buyer, W. F. Walton, Frick Bldg., Pittsburgh, Pa.
 General Supt. of Stores, C. L. Steiner, Uniontown, Pa.

Abdelade Mine, Shaft.
 PO—Adelade, Pa.; SP—Same; CTY—Fayette; RR—P. & L. E.
 MS—Benton Boyd, Adelade, Pa.
 SM—Miss Margaret Brown, Adelade, Pa.
 S of H—Mules and tall rope. Track gage, 44 in.
 S of M—Hand and 2 compressed air mchs.
 PP—6 return tubular boilers, total 525 H. P.
 EMP—228. Coke ovens, 260 Bee Hive.

Alvorton Nos. 1, 2 and 3 Mines, Slopes and Drift.
 PO—Alvorton, Pa.; SP—Same; CTY—Westmoreland; RR—P. R. R., Shenerville Branch.
 MS—Jas. Lynch, Scottsdale, Pa.
 S of H—Mules. Track gage, 42 in.
 S of M—Hand
 PP—4 cylindrical and 1 return tubular boilers, total 240 H. P.
 EMP—60. Coke ovens, 300 Bee Hive.

Baggaley Mine, Slope, Pgh. Seam, 7 to 7½ ft. thick.
 PO—Baggaley, Pa.; SP—Same; CTY—Westmoreland; RR—P. R. R., Unity Branch.
 MS—J. H. Pettigrew, Baggaley, Pa.
 SM—C. R. Sniffley, Baggaley, Pa.
 S of H—2 comp. air locos. Track gage 44 in.
 S of M—3 comp. air mchs.
 PP—12 return tubular boilers, total 1050 H. P., gen. units, 550 volts D. C., 2 comps., 2 pumps.
 EMP—374. Coke ovens, 360 Bee Hive.

Bitter Mine; Drift; Pittsburgh Seam, 88 to 96 in. thick.
 PO—Bitter, Pa.; SP—Same; CTY—Fayette; RR—Penna. Monon. Div.
 MS—E. F. Hess, R. F. D. No. 1, Dunbar, Pa.
 SM—Jas. W. Emory, R. D. No. 1, Dunbar, Pa.
 S of H—5 elec. locos. Track gage 42 in.
 S of M—Hand and 3 electric mchs.
 PP—2 return tubular boilers, total 300 H. P., gen. units, 1200 K. W., 550 volts D. C., 2 pumps.
 EMP—309. Coke ovens, 300 Bee Hive.

Bridgeport Mine, Shaft.
 PO—Brownsville, Pa.; SP—Same; CTY—Fayette; RR—P. R. R., Monon. Div., P. & L. E.
 MS—T. W. English, Brownsville, Pa.
 SM—H. S. Whit, Brownsville, Pa.
 S of H—1 elec. loco. Track gage 48 in.
 S of M—12 elec. mchs.
 PP—Water tube boilers, 1,000 H. P., 2—200 K. W., gen. units, 550 volts D. C., 9 electric pumps.
 EMP—241. Coke ovens, 100 Bee Hive.

Brinkerton Mine; Shaft; Pittsburgh Seam, PO—Greensburg, Pa.; R. F. D. No. 7; SP—Brinkerton, Pa.; CTY—Westmoreland; RR—P. R. R.
 MS—J. H. Bitt, R. F. D. No. 7, Greensburg, Pa.
 SM—E. C. Kensinger, R. F. D. No. 7, Greensburg, Pa.
 S of H—Mules and rope.
 S of M—Hand and 4 comp. air mchs.
 PP—5 return tubular boilers, 360 H. P., 2 comps.
 EMP—203. Coke ovens, 240 Bee Hive.

Buffington Mine, Shaft, Pgh. Seam, 90 to 112 in. thick.
 PO—New Salem, Pa.; SP—Same; CTY—Fayette; RR—P. R. R., Monon. Div.
 MS—Jas. Hoot, New Salem, Pa.
 SM—J. C. Keek, " "
 S of H—1 comp. air loco and rope. Track gage 44 in.
 S of M—Comp. air mchs.
 PP—8 return tubular boilers, total 1150 H. P., gen. units, 2100 K. W., 500 volts D. C., 1 comp., 2 pumps.
 EMP—473. Coke ovens, 426 Bee Hive.

Calumet Mine; Shaft Pittsburgh Seam, 79 to 88 in. thick.
 PO—Calumet, Pa.; SP—Same; CTY—Westmoreland; RR—P. R. R., Monon. Div.
 MS—Robert Ramsey, Calumet, Pa.
 SM—D. H. Stoner, Calumet, Pa.
 S of H—3 comp. air locos. Track gage 40 in.

S of M—Hand and 6 comp. air mchs.
 PP—8 return tubular boilers, total 600 H. P., 3 air comp., 6 pumps.
 EMP—258. Coke ovens, 260 Bee Hive.

Central Mine; Slope; Pittsburgh Seam, 79 to 88 in. thick.
 PO—Tarr, Pa.; SP—Same; CTY—Westmoreland; RR—P. R. R.
 MS—R. L. Kirk, Tarr, Pa.
 SM—M. L. Hays, Tarr, Pa.
 S of H—Mules and tall rope. Track gage, 42 in.
 S of M—Hand and 3 comp. air mchs.
 PP—Return tubular boilers, 810 H. P., 2 compressors.
 EMP—240. Coke ovens, 301 Bee Hive.

Chambers Mine; Drift Pittsburgh Seam, 80 to 90 in. thick.
 PO—Latrobe, Pa.; R. F. D. No. 3; SP—Marguerite, Pa.; CTY—Westmoreland; RR—Penna.
 MS—J. F. McCrackin, R. D. No. 3, Latrobe, Pa.
 S of H—Mules. Track gage, 42 in.
 S of M—Hand.
 PP—2 Return tubular boilers total 140 H. P. and 1 pump.
 EMP—74.

Collier Mine; Shaft, Pgh. Seam, 7 to 7½ ft.
 PO—Uniontown, Pa.; R. F. D. No. 3; SP—Collier, Pa.; CTY—Fayette; RR—P. R. R., B. & O., S. & M Br.
 MS—N. A. Michelson, Uniontown, Pa.
 SM—Samuel Dane R. D. No. 3, Uniontown, Pa.
 S of H—8 elec. locos. Track gage 42 in.
 S of M—6 electric mchs.
 PP—3 water tube boilers, total 750 H. P., gen. units, 550 volts D. C., 1 air comp., 2 pumps.
 EMP—388. Coke ovens, 400 Bee Hive.

Colonial No. 1 Mine; Slope; Pgh. Seam, 7 to 7½ ft. thick.
 PO—Smock, Pa.; SP—Same; CTY—Fayette; RR—P. R. R., Monon. Div.
 MS—R. H. Barry, Smock, Pa.
 SM—L. W. Hartley, Smock, Pa.
 S of H—2 electric locos. and rope. Track gage, 42 in.
 S of M—15 elec. mchs.
 PP—4 return tubular boilers, total 1100 H. P., 1 air comp., gen. units, 550 volts D. C., 12 pumps.
 EMP—388. Coke ovens, 500 Bee Hive.

Colonial No. 3 Mine; Shaft; Pgh. Seam, 7 to 7½ ft. thick.
 PO—Grindstone, Pa.; R. F. D. No. 23, SP—Rowes Run, Pa.; CTY—Fayette; RR—P. R. R., Monon. Div.
 MS—G. W. Pantall, Grindstone, Pa.
 SM—Floyd H. Lilly, Grindstone, Pa.
 S of H—2 elec. locos. Track gage 42 in.
 S of M—3 elec. mchs.
 PP—3 water tube boilers, total 1500 H. P., 2 comps., and 2 pumps, gen. units, 550 volts D. C., Power from central station.
 EMP—170. Coke ovens, 156 Bee Hive.

Colonial No. 4 Mine; Shaft; Pgh. Seam, 7 to 7½ ft. thick.
 PO—Grindstone, Pa.; SP—Same; CTY—Fayette; RR—P. R. R., Monon. Div.
 MS—G. W. Pantall, Grindstone, Pa.
 SM—H. W. Lyons, Grindstone, Pa.
 S of H—13 electric locos and rope. Track gage, 42 in.
 S of M—13 electric mchs.
 PP—5 return tubular boilers, total 650 H. P., gen. units, 550 volts D. C., power from Colonial No. 3, 3 pumps.
 EMP—277. Coke ovens, 300 Bee Hive.

Continental No. 1 Mine; Shaft; Pittsburgh Seam, 84 to 90 in. thick.
 PO—Uniontown, Pa.; SP—Continental Works No. 1, Pa.; CTY—Fayette; RR—P. R. R., B. & O.
 MS—W. C. Mullan, Uniontown, Pa.
 SM—M. J. Rodgers, Uniontown, Pa.
 S of H—5 elec. locos. Track gage 42 in.
 S of M—5 electric mchs.
 PP—9 return tubular boilers, total 140 H. P., 1 compressor, 2 150 K. W., 250 volts, gen. units, 3 pumps.
 EMP—356. Coke ovens, 400 Bee Hive.

Continental No. 2 Mine; Shaft; Pgh. Seam, 92 to 108 in. thick.
 PO—Uniontown, Pa.; R. F. D. No. 3, SP—Walnut Hill, Pa.; CTY—Fayette; RR—P. R. R., B. & O.
 MS—G. H. Hodges, R. F. D. No. 3, Uniontown, Pa.
 SM—J. H. Fennell, " "
 S of H—9 electric locos.
 S of M—5 electric mchs.
 PP—7 return tubular boilers, total 500 H. P., 1 compressor, 2 150 K. W., 250 volts, gen. units, 3 pumps.
 EMP—326. Coke ovens, 326 Bee Hive.

Continental No. 3 Mine; Shaft; Pittsburgh Seam, 84 to 92 in. thick.
 PO—Uniontown, Pa.; SP—Same; CTY—Fayette; RR—P. R. R., B. & O.
 MS—J. L. Fowdell, Newcenter, Pa.
 SM—A. A. Rankin, Newcenter, Pa.

(Continued on Next Page)

Frick, H. C. Coke Co.—Cont.

S of H—6 electric locos. and rope. Track gauge, 42 in.
S of M—7 elec. machs.
PP—5 Return tubular boilers, total 400 H. P., gen. units, 550 volts D. C. Purchase power.
EMP—306. Coke ovens, 300 Bee Hive.

Crossland Mine; Shaft; Pittsburgh Seam, 94 to 100 in. thick.
PO—Crossland Mine, Pa.; SP—Same; CTY—Fayette; RR—Penna., B. & O.

MS—O. L. Walters, Uniontown, Pa.
PP—2 Return tubular boilers, total 300 H. P., gen. units, 550 volts D. C. Purchase power.

EMP—146. Coke ovens, 146 Bee Hive.

Davidson Mine; Shaft; Pittsburgh Seam, 84 to 112 in. thick.
PO—Connellsville, Pa.; SP—Davidson, Pa.; CTY—Fayette; RR—P. R. R., B. & O.

MS—H. G. Brown, Connellsville, Pa.
SM—A. W. Bowman, Connellsville, Pa.

S of H—Mules, rope. Track gauge, 40 in.

S of M—Hand and comp. air machs.
PP—7 Return tubular boilers, total 900 H. P., 1 air comp., 8 pumps.

EMP—332. Coke ovens, 333 Bee Hive.

Heath Mine; Shaft; Pgh. Seam, 7 to 10 ft. thick.
PO—Uniontown, Pa.; R. F. D. No. 4; SP—Low Phos. Pa.; RR—P. R. R., Monon. Div.

MS—J. M. Shields, R. F. D. No. 4, Uniontown, Pa.

SM—C. L. Bronson, R. R. No. 4, Uniontown, Pa.

S of H—6 electric locos. Track gauge, 42 in.

PP—2 water tube boilers, total 500 H. P., 2 200 K. W. gen. units, 550 volts D. C., 4 pumps.

S of M—5 elec. machs.
EMP—177. Coke ovens, 250 Bee Hive.

Dilworth Mine; Shaft; Pittsburgh Seam, 84 to 96 in. thick.
PO—Rices Landing, Pa.; SP—Same; CTY—Greene; RR—Penna., Monon. Div.

MS—S. V. Alwine, Rices Landing, Pa.
SM—Guy C. Douglas, Rices Landing, Pa.

S of H—Mules and 2 elec. locos. Track gauge 44 in.

S of M—Hand and 2 electric machs.
PP—4 Return tubular boilers, total 600 H. P., 2 150 K. W. gen. units, 250 volts D. C.

Dorothy Mine; Shaft; Pgh. Seam, 7 to 7½ ft. thick.
PO—Latrobe, Pa.; SP—Dorothy Coke Works, Pa.; CTY—Westmoreland; RR—P. R. R.

MS—A. F. Downing, Latrobe, Pa.
SM—Joseph Bigely, Latrobe, Pa.

S of H—Mules, rope, 5 elec. locos.

S of M—5 comp. air machs.

PP—6 Return tubular boilers, total 1050 H. P., gen. units, 440 volts A. C., 3 phase, 60 cycles, and 4

EMP—149. Coke ovens, 230 Bee Hive.

Edenborn Mine; Shaft; Pgh. Seam, 79 to 87 in. thick.
PO—Edenborn, Pa.; SP—Same; CTY—Fayette; RR—P. R. R., Monon.

MS—S. W. Brown, Edenborn, Pa.
SM—J. W. Christopher, Edenborn, Pa.

S of H—2 elec. locos.

S of M—14 elec. machs.

PP—12 Return tubular boilers, total 1850 H. P., 1 comp. and 1 pump. Purchase power.

EMP—425. Coke ovens, 500 Bee Hive.

Filbert Mine; Shaft; Pittsburgh Seam, 84 to 88 in. thick.
PO—Fairbanks, Pa.; SP—Same; CTY—Fayette; RR—Penna., Monon. Div.

MS—J. J. Malloy, Fairbanks, Pa.
SM—E. J. Hardesty, Fairbanks, Pa.

S of H—Mules and 3 electric locos. Track gauge, 42 in.

S of M—Hand and 9 elec. machs.

PP—6 water tube boilers, total 1800 H. P., gen. units, 550 volts D. C., 2 comp., 2 pumps.

EMP—430.

Footdale Mine; Shaft and Slope, Pgh. Seam, 7 to 9 ft. thick.
PO—New Salem, Pa.; SP—Footdale, Pa.; CTY—Fayette; RR—Penna., Monon. Div.

MS—Wm. W. Merwin, New Salem, Pa.
SM—G. L. Mills, New Salem, Pa.

S of H—11 elec. locos. Track gauge 42 in.

S of M—14 electric machs.

PP—5 Return tubular boilers, total 750 H. P., 3 175 K. W., gen. units, 250 volts, 1 comp., 3 pumps.

EMP—360. Coke ovens, 400 Bee Hive.

Gates Mine; Shaft; Pgh. Seam, 88 to 108 in. thick.
PO—Adah, Pa.; SP—Gates, Pa.; CTY—Fayette; RR—P. R. R., Monon. Div.

MS—S. W. Brown, Edenborn, Pa.

SM—H. L. Lewellen, Edenborn, Pa.
S of H—8 electric locos. Track gauge, 44 in.

S of M—12 elec. machs.

PP—12 Return tubular boilers, total 1870 H. P., 5 comp. and 3 pumps. Purchase power.

EMP—318.

Hecla Nos. 1 and 3 Mines; Shaft; Pittsburgh Seam, 84 to 96 in. thick.
PO—Westport, Pa.; SP—Hecla, Pa.; CTY—Westmoreland; RR—P. R. R.

MS—A. H. Pollins, South West, Pa.
SM—Andrew Rebanek, Southwest, Pa.

S of H—Mules and rope.

S of M—Hand and comp. air machs.

PP—14 Return tubular boilers, total 1820 H. P., 4 comp., 7 pumps.

EMP—601. Coke ovens, 572 Bee Hive.

Hecla No. 2 Mine; Shaft; Pittsburgh Seam, 84 to 96 in. thick.
PO—Trauger, Pa.; SP—Same; CTY—Westmoreland; RR—P. R. R.

MS—William Quinn, Trauger, Pa.
SM—F. D. Johnstone, Trauger, Pa.

S of H—Mules, rope. Track gauge, 48 in.

S of M—Hand and comp. air machs.

PP—8 Return tubular boilers, total 1100 H. P., 2 comp. and 4 pumps.

EMP—208. Coke ovens, 320 Bee Hive.

Juniata Mine; Shaft; Pittsburgh Seam, 84 to 100 in. thick.
PO—Dunbar, Pa.; R. F. D. No. 32; SP—Juniata, Pa.; CTY—Fayette; RR—B. & O., and O. & B. Short Line Branch.

MS—R. V. Rex, R. R. 32, Dunbar, Pa.
SM—Frank A. Perkey, R. F. D. No. 32, Dunbar, Pa.

S of H—Mules, rope, - elec. loco. Track gauge 44 in.

S of M—4 electric machs.

PP—6 Return tubular boilers, total 650 H. P., gen. units, 550 volts D. C., 4 pumps.

EMP—230. Coke ovens, 250 Bee Hive.

Kyle Mine; Shaft; Pgh. Seam, 6 to 9 ft. thick.
PO—Fairchance, Pa.; SP—Same; CTY—Fayette; RR—P. R. R.

MS—R. S. Skemp, Fairchance, Pa.
SM—H. G. Hugh, Fairchance, Pa.

S of H—7 elec. locos. Track gauge 40 in.

S of M—5 electric machs.

PP—Gen. units 550 volts D. C., 4 pumps.

EMP—292. Coke ovens, 306 Bee Hive.

Lambert Mine; Shaft; Pgh. Seam, 88 to 198 in. thick.
PO—Lamberton, Pa. SP—Same; CTY—Fayette; RR—P. R. R., Monon. Div.

MS—C. J. Maher, Lambert, Pa.
SM—F. B. Loucks, Lambert, Pa.

S of H—3 comp. air locos. Track gauge, 44 in.

S of M—Comp. air machs.

PP—6 Return tubular boilers, total 1600 H. P., 3 comp., 2 pumps.

EMP—439. Coke ovens, 462 Bee Hive.

Leckrone Mines; Shaft and Slope; Pgh. Seam, 84 to 90 in. thick.
PO—Leckrone, Pa.; SP—Same; CTY—Fayette; RR—P. R. R., Monon., B. & O.

MS—W. J. Culleton, Leckrone, Pa.
SM—A. B. Gault, Leckrone, Pa.

S of H—14 elec. locos. Track gauge 42 in.

S of M—15 elec. machs.

PP—Power purchased.

EMP—443. Coke ovens, 516 Bee Hive.

Leisenring No. 1 Mine; Shaft; Pittsburgh Seam, 84 to 92 in. thick.
PO—Leisenring, Pa.; SP—Same; CTY—Fayette; RR—P. R. R., B. & O.

MS—H. E. Mason, Leisenring, Pa.
SM—C. B. Culver, Leisenring, Pa.

S of H—4 comp. air locos. Track gauge, 35 in.

S of M—Hand.

PP—12 Return tubular boilers, total 1400 H. P., 4 comp. and 3 pumps.

EMP—445. Coke ovens, 499 Bee Hive.

Leisenring No. 2 Mine; Shaft; Pittsburgh Seam, 86 to 100 in. thick.
PO—West Leisenring, Pa.; SP—Bute, Pa.; CTY—Fayette; RR—P. R. R.

MS—R. K. Warnock, West Leisenring, Pa.

SM—E. J. Kensing, West Leisenring, Pa.

S of H—Mules and rope. Track gauge, 35 in.

S of M—Hand and comp. air machs.

PP—3 cylindrical and 4 return tubular boilers, total 1100 H. P., 1 200 K. W., gen. units, 506 volts D. C., 2 comp., 2 pumps.

EMP—441. Coke ovens, 502 Bee Hive.

Leisenring No. 3 Mine; Shaft; Pittsburgh Seam, 88 to 92 in. thick.
PO—Dunbar, Pa.; R. F. D. No. 32; SP—Monarch, Pa.; CTY—Fayette; RR—P. R. R.

MS—C. L. Lutton, Dunbar, Pa.; R. F. D. No. 32.

SM—J. O. Soxman, R. F. D. No. 1, Dunbar, Pa.

S of H—4 comp. air locos. Track gauge 35 in.

PP—6 water tube and 2 return tubular boilers, total 1650 H. P., 5 comp., 2 pumps.

EMP—395. Coke ovens, 502 Bee Hive.

Leith Mine; Shaft; Pgh. Seam, 84-92 inches thick.
PO—Uniontown, Pa.; SP—Leith, Pa.; CTY—Fayette; RR—P. R. R., B. & O.

MS—P. J. Locke, Uniontown, Pa.
SM—W. E. Crossland, Uniontown, Pa.

S of H—Mules and rope. Track gauge, 44 in.

S of M—3 elec. machs.

PP—11 Return tubular boilers, total 1300 H. P., 440 volts A. C., 2 comp. and 6 pumps. Purchase power.

EMP—260. Coke ovens, 304 Bee Hive.

Lemont Nos. 1 and 2 Mines; Slopes; Pittsburgh Seam, 84 to 88 in. thick.
PO—Lemont Furnace, Pa.; SP—Lemont ovens and Darent, Pa.; CTY—Fayette; RR—B. & O., P. R. R.

MS—T. L. Doorley, Lemont Furnace, Pa.
SM—O. M. Wallace, Lemont, Pa.

S of H—2 electric locos. Track gauge, 40 in.

S of M—Comp. air mach and hand.

PP—24 Return tubular boilers, total 2300 H. P., 3 comp., purchase power, 10 pumps.

EMP—504. Coke ovens, 577 Bee Hive.

Mammoth Mine; Shaft; Pittsburgh Seam, 84 to 90 in. thick.
PO—Mammoth, Pa.; SP—Same; CTY—Westmoreland; RR—P. R. R.

MS—Jos. Mallia, Mammoth, Pa.
SM—C. E. Overly, Mammoth, Pa.

S of H—4 elec. locos. Track gauge, 40 in.

S of M—5 electric machs. and hand.

PP—10 Return tubular boilers, total 1900 H. P., gen. units, 1200 K. W., 550 volts D. C., 1 comp., 5 pumps.

EMP—430. Coke ovens, 509 Bee Hive.

Marguerite Mine; Shaft; Pgh. Seam, 84 to 102 in. thick.
PO—Latrobe, Pa.; R. F. D. No. 3; SP—Marguerite, Pa.; CTY—Westmoreland; RR—Penna.

MS—J. F. McCrackin, Latrobe, Pa.
SM—W. S. Oldland, R. F. D. No. 3, Latrobe, Pa.

S of H—4 elec. locos. Track gauge, 40 in.

S of M—6 elec. machs.

PP—8 Return tubular boilers, total 1000 H. P., 2 220 K. W. gen. units, 550 volts D. C., 1 comp., 3 pumps.

EMP—310. Coke ovens, 400 Bee Hive.

Maxwell Mine; Shaft; Pittsburgh Seam, 84 to 96 in. thick.
PO—La Belle, Pa.; SP—Maxwell; CTY—Fayette; RR—Penna., Monon. Div.

MS—G. A. Millward, LaBelle, Pa.
SM—Jesse Hess, LaBelle, Pa.

S of H—Mules and 1 elec. loco. Track gauge 48 in.

S of M—6 elec. machs.

PP—Gen. units, 550 volts D. C. Purchase power.

EMP—441.

Mutual Mine; Shaft; Pittsburgh Seam, 84 to 88 in. thick.
PO—R. R. No. 6, Greensburg, Pa.; SP—Mutual, Pa.; CTY—Westmoreland; RR—Penna.

MS—Robert Ramsay, Calumet, Pa.
SM—Ed Newcomer, R. R. No. 6, Greensburg, Pa.

S of H—Mules and rope. Track gauge, 40 in.

S of M—Hand and comp. air machs.

PP—4 Return tubular boilers, total 280 H. P., 2 compressors.

EMP—135. Coke ovens, 195 Bee Hive.

Oliphant Mine; Shaft; Pittsburgh Seam, 84 to 90 in. thick.
PO—Oliphant Furnace, Pa.; SP—Same; CTY—Fayette; RR—P. R. R.

MS—J. F. McGinnis, Oliphant Furnace, Pa.
SM—Homer Crossland, Oliphant Furnace, Pa.

S of H—6 elec. locos.

S of M—8 elec. machs.

PP—4 Return tubular boilers, total 600 H. P., gen. units, 550 volts D. C., 1 comp. and 2 pumps. Purchase power.

EMP—242. Coke ovens, 256 Bee Hive.

Palmer Mine; Shaft; Pittsburgh Seam, 84 to 96 in. thick.
PO—Adah, Pa.; SP—Antram, Pa.; CTY—Fayette; RR—Penna., Monon. Div.

MS—C. J. Maher, R. F. D. No. 1, Adah, Pa.

SM—L. A. Alton, Adah, Pa.

S of H—4 electric locos. Track gauge, 42 in.

S of M—6 elec. machs.

PP—5 water tube boilers, total 1500 H. P., gen. units, 550 volts D. C., 2 pumps. Purchase power.

EMP—98.

Phillips Mine; Shaft; Pgh. Seam, 8 to 9 ft. thick.
PO—Uniontown, Pa.; R. F. D. No. 1; SP—Vance Mill Jet, Pa.; CTY—Fayette; RR—P. R. R., Monon. Div.

MS—M. A. Burriss, Uniontown, Pa.
SM—James W. Emery, Uniontown, Pa.

S of H—Mules and 4 comp. air locos.

S of M—14 comp. air machs.

PP—4 Return tubular boilers, total 1200 H. P., 2 100 K. W., gen. units, 500 volts D. C., 3 comp., 2 pumps.

EMP—356. Coke ovens, 400 Bee Hive.

Ralph Mine; Shaft; Pittsburgh Seam, 84 to 90 in. thick.
PO—Republic, Pa.; SP—Ralph, Pa.; CTY—Fayette; RR—P. R. R., Monongahela Div.

MS—Wm. Robinson, Republic, Pa.
SM—H. B. Newhouse, Republic, Pa.

S of H—Mules and elec. locos. Track gauge 42 in.

S of M—Hand and comp. air machs.

PP—4 water tube, 4 return tubular boilers, total 1800 H. P., 3 pumps.

EMP—15.

Redstone Mine; Shaft and Slope. Pittsburgh Seam, 84 to 90 in. thick.
PO—Brownfield, Pa.; SP—Same; CTY—Fayette; RR—B. & O.

MS—Herbert Boyd, Brownfield, Pa.
SM—L. C. Patterson, Brownfield, Pa.

S of H—3 comp. air locos. Track gauge, 40 in.

PP—8 water tube boilers, total 2400 H. P., 1 comp. and 4 pumps.

EMP—414. Coke ovens, 443 Bee Hive.

Ronco Mine; Shaft; Pgh. Seam, 7½ to 8 ft. thick.
PO—Ronco, Pa.; SP—Same; CTY—Fayette; RR—P. R. R., Monon. Div.

MS—W. J. Culleton, Ronco, Pa.
SM—A. S. Meehling, Ronco, Pa.

S of H—13 elec. locos. Track gauge 44 in.

S of M—15 elec. machs.

PP—7 Return tubular boilers, total 120 H. P., 2 200 K. W., gen. units, 550 volts D. C., 1 comp., 3 pumps.

EMP—368. Coke ovens, 350 Bee Hive.

Shoaf Mine; Shaft; Pgh. Seam, 90 to 114 in. thick.
PO—Smithfield, Pa.; R. F. D. No. 2; SP—Shoaf, Pa.; CTY—B. & O., S. & M. Br., P. R. R.

MS—Frank Emory, Smithfield, Pa.
SM—C. P. Hugh, Fairchance, Pa.

S of H—8 elec. locos. Track gauge 42 in.

S of M—14 elec. machs.

PP—Gen. units, 550 volts D. C., Purchase power.

EMP—498. Coke ovens, 448 Bee Hive.

South West No. 1 Mine; Shaft; Pittsburgh Seam, 84 to 92 in. thick.
PO—Mt. Pleasant, Pa.; SP—Westmoreland; RR—P. R. R.

MS—J. A. Cowan, Mt. Pleasant, Pa.
SM—John Brindinger, Mt. Pleasant, Pa.

S of H—Mules and rope. Track gauge, 44 in.

S of M—Hand.

PP—17 Return tubular boilers, total 2050 H. P., 2 comp. and 8 pumps. Purchase power. 550 volts D. C.

EMP—397. Coke ovens, 425 Bee Hive.

South West No. 2 Mine; Shaft; Pittsburgh Seam, 80 to 88 in. thick.
PO—Mt. Pleasant, Pa.; SP—Allice Mines, Pa.; CTY—Westmoreland; RR—P. R. R.

MS—J. A. Cowan, Mt. Pleasant, Pa.
SM—W. B. Hahn, Tarr, Pa.

S of H—Mules and rope. Track gauge, 42 inches.

Frick, H. C. Coke Co.—Cont.

Trotter Mine; Shaft; Pittsburgh Seam, 84 to 92 in. thick.
PO—Connellsville, Pa.; SP—Trotter, Pa.; CTY—P. R. R., E. & O.
MS—Reuben Boyd, Connellsville, Pa.
SM—Wm. Wislart, Connellsville, Pa.
 S of H—Mules and rope. Track gauge, 34 in.
 S of M—Hand and comp. air mch.
PP—7 Return tubular boilers, total 1400 H. P., gen. units, 550 volts D. C., 3 comp. and 5 pumps. Purchase power.
EMP—494. Coke ovens, 464 Bee Hive.
 United Mine; Shaft; Pittsburgh Seam, 88 to 91 in. thick.
PO—Connellsville, Pa.; SP—Same; CTY—Westmoreland; RR—P. R. R.
MS—Robert Ramsay, Connellsville, Pa.
SM—W. M. Baker, United, Pa.
 S of H—2 comp. air locos. Track gauge 40 in.
PP—1 cylindrical and 8 return tubular boilers, total 750 H. P., 3 comp. 5 pumps.
EMP—331. Coke ovens, 350 Bee Hive.
 White mine abandoned.
 Wynn Mine; Shaft; Pittsburgh Seam 86 to 90 in. thick.
PO—Fairchance, Pa.; SP—Wynn Works, Pa.; CTY—Fayette; RR—Penna.
MS—G. M. Matthews, Fairchance, Pa.
SM—Carl P. Pugh, Fairchance, Pa.
 S of H—7 elec. locos. Track gauge 40 in.
PP—3 elec. mch.
PP—Gen. units, 550 volts D. C., 7 pumps, purchase power.
EMP—239. Coke ovens, 500 Bee Hive.
 York Run Mine; Drift and Slope; Pgh. Seam, 6 to 7½ ft. thick.
PO—Uniontown, Pa., R. F. D. No. 3.
SP—York Run, Pa.; CTY—P. R. R.
MS—Frank Emery, R. F. D. No. 3, Uniontown, Pa.
SM—D. H. Hugh, R. F. D. No. 5, Uniontown, Pa.
 S of H—15 elec. locos. Track gauge 42 in.
 S of M—9 elec. mch.
PP—6 return tubular boilers, total 1800 H. P., 400 K. W., gen. units, 2200 volts A. C., 500 volts D. C., 3 phase, 25 cycles, 2 comp., central station, 9 pumps.
EMP—448. Coke ovens, 500 Bee Hive.
 Youngstown Mine; Slope; Pittsburgh Seam, 88 to 96 in. thick.
PO—Lemont Furnace, Pa. SP—Stam-baugh, Pa.; CTY—Fayette; RR—P. R. R., E. & O.
MS—W. R. Beerbower, Lemont Furnace, Pa.
SM—Ferdinand Fichtner, Lemont Furnace, Pa.
 S of H—Mules and rope. Track gauge, 36 in.
 S of M—Comp. air mach and hand.
PP—8 Return tubular boilers, total 910 H. P., 550 volts D. C., gen. units, 2 comp., 6 pumps.
EMP—185. Coke ovens, 215 Bee Hive.
FROSTBURG COAL COMPANY.
 General Office, Punxsutawney, Pa.
PR—S. A. Rinn, Punxsutawney, Pa.
TR—E. H. Winslow, Punxsutawney, Pa.
GM—S. A. Rinn, Punxsutawney, Pa.
GS—W. N. Trussell, Punxsutawney, Pa.
PA—W. N. Trussell, Punxsutawney, Pa.
EM—Maurice Coulter, Punxsutawney, Pa.
 Walston No. 6 Mine; Drift; Freeport Seam, 52 in. thick.
PO—Walston, Pa.; SP—Punxsutawney, Pa.; CTY—Jefferson; RR—E. & O.
MS—Thos. Lungenfelter, Punxsutawney, Pa.
 S of H—3 trolley pole type locos. Track gauge, 42 in.
 S of M—1 shortwall mach.
PP—2 water tube boilers, total 300 H. P., gen. units, 500 volts D. C., 3 pumps.
EMP—15. Last fiscal year output, 99,135 tons.
SIZES SHIPT—Run of Mine, Slack Lamp.
F. S. & M. COAL COMPANY
 General Office, 911 Walnut St., Versailles, Pa.
PR—J. E. Stentz, Uniontown, Pa.
TR—Geo. A. Farmer, Versailles, Pa.
GM—Geo. A. Farmer, Versailles, Pa.
GS—Geo. A. Farmer, Versailles, Pa.
PA—Geo. A. Farmer, Versailles, Pa.
SA—Geo. A. Farmer, Versailles, Pa.
 Ella May Nos. 1 and 2 Mines; Drifts; Pittsburgh Seam, 66 inches thick.
PO—Versailles, Pa.; SP—Same; CTY—Allegheny; RR—P. & L. E.
 S of H—Mules. Track gauge 42 inches.
 S of M—Hand and chain breast mch.
PP—Power purchased, 440 volts A. C.
SIZES SHIPT—Run of Mine.

FUEL COAL CO.

Located to Premier Fuel Co.

FULTON COAL & COKE CO.

General Office, Youngwood, Pa.

Fulton Mine.

PO—Waltz, Pa.; CTY—Westmoreland; RR—Penna.
 No report.

GAUDIS COAL COMPANY

General Office, Room 121, Second National Bank Bldg., Uniontown, Pa.
PR—Albert Gaddis, Uniontown, Pa.
VP—S. W. Jones, Uniontown, Pa.
TR—W. C. Black, Uniontown, Pa.
GM—R. V. Nicolay, Uniontown, Pa.
GS—R. V. Nicolay, Uniontown, Pa.
PA—R. V. Nicolay, Uniontown, Pa.
EM—South Penn Engineering Co., Uniontown, Pa.
SA—Gaddis Coal & Iron Co., Uniontown, Pa.

Gaddis Mine; Slope; Sewickley Seam, 67 inches thick.
PO—Uniontown, Pa.; SP—Same; CTY—Fayette; RR—Penna.
MS—Wm. Stevenson, Uniontown, Pa.
 S of H—Tape and electric loco. Track gauge 42 inches.
 S of M—Hand and shortwall mch.
PP—Power purchased, Transformer 6,000 to 220 volts A. C.
EMP—30. Last years tonnage 2,058.
SIZES SHIPT—Run of Mine.

GALLATIN COAL CO.

General Office, Gallatin, Pa.

Gallatin No. 1 Mine.
PO—Gallatin, Pa.; CTY—Allegheny; RR—P. & L. E.
 No report.

GARFIELD SMOKELESS COAL COMPANY

General Office, Latrobe, Pa.
PR—F. B. McFeely, Latrobe, Pa.
TR—Jos. C. Head.
GS—F. X. Bradley, Latrobe, Pa.
PA—F. X. Bradley, Latrobe, Pa.
EM—Gibson & Thomas, Latrobe, Pa.
EE—Tom Kelly, Latrobe, Pa.
SA—Wentz Company, and A. J. Carley, Philadelphia, Pa.

Nos. 1, 2 and 3 Mines; Drift; E and B Seams; 48-72 in. thick.
PO—Robinson, Pa.; SP—Bollivar, Pa.; CTY—Indiana; RR—P. R. R.
MS—H. J. Bowser, Robinson, Pa.
 S of H—3 5-ton locos. Track gauge 42 in.
 S of M—5 shortwall mch.
PP—Power purchased, 2 M. G. Sets, 200 K. W., 3 pumps.
EMP—225. Daily tonnage 700.
SIZES SHIPT—Run of Mine.

GARMAN, F. A.

GS—F. A. Garman, Dysart, Pa.
EM—Jas. Carpenter, Altoona, Pa.
SA—F. A. Garman, Dysart, Pa.

Garman No. 3 Mine; Drift; "B" or Miller Seam, 54 in. thick.
PO—Dysart, Pa.; SP—Same; CTY—Cambria; RR—A. N.
 S of H—Mules and rope. Track gauge 36 inches.
 S of M—2 comp. air mch.
PP—1 water tube boiler, total 150 H. P., 1 air comp. and 2 pumps.
EMP—30. Last years tonnage 6,885.
SIZES SHIPT—Run of Mine.

GARRETT SMOKELESS COAL CO.

Now South Side Coal Company.

GARRETT'S RUN COAL CO.

General Office, Kittanning, Pa.
PR—E. J. Bellinger, Sherman, N. Y.
VP—Frank G. Bie, Rochester, N. Y.
TR—Duncan McCall, Kittanning, Pa.
GM—Duncan McCall, Kittanning, Pa.
GS—Duncan McCall, Kittanning, Pa.
PA—Duncan McCall, Kittanning, Pa.
EM—Bernard Peters, Kittanning, Pa.

Toy Mine; Drift; Upper Freeport Seam, 44 inches thick.
PO—Kittanning, Pa.; SP—Same; CTY—Armstrong; RR—P. R. R.
MS—J. C. Mayes, Kittanning, Pa.
 S of H—Elec. loco. Track gauge 36 in.
 S of M—Shortwall mach.
PP—Power purchased, Transformer 2200 to 250 volts A. C., M. G. Set, 100 K. W., 250 volts D. C.
EMP—30. Daily tonnage 150.
SIZES SHIPT—Run of Mine.

GASKILL COAL COMPANY

General Office, Punxsutawney, Pa.
PR—C. W. Varner, Big Run, Pa.
TR—R. B. Kendig, Indiana, Pa.
GM—C. W. Varner, Big Run, Pa.
PA—C. W. Varner, Big Run, Pa.
EM—H. M. Knarr, Punxsutawney, Pa.
 No. 2 Mine; Drift; Seam 42 inches thick.
PO—Big Run, Pa.; SP—Same; CTY—Jefferson; RR—B. R. & P.
MS—John C. Yoke, Big Run, Pa.

S of H—Mules; Track gauge 30 inches.
 S of M—Hand.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Shaker Screens.

CASLEY COAL COMPANY

General Office, Houtzdale, Pa.
PR—Harry Remiten, Clearfield, Pa.
TR—L. W. Byer, Houtzdale, Pa.
GM—L. W. Byer, Houtzdale, Pa.
PA—L. W. Byer, Houtzdale, Pa.

Gasley No. 2 Mine; Drift; "B" Mohan-noun Seam, 60 inches thick.
PO—Houtzdale, Pa.; SP—Brishin, Pa.; CTY—Clearfield; RR—Penna. & P. & S. (N. Y. C.)
MS—J. A. McEliland, Houtzdale, Pa.
 S of H—Elec. loco. Track gauge 36 in.
 S of M—1 shortwall mach.
PP—Power purchased.
EMP—70. Last years tonnage 47,500.
SIZES SHIPT—Run of Mine.

GEARHART COAL COMPANY

General Office, Philipsburg, Pa.
PR—Jas. Adams, Philipsburg, Pa.
GM—R. P. Dunsmore, Philipsburg, Pa.

Gearhart Mine; Drift; "E" Seam; 42 inches thick.
PO—Philipsburg, Pa.; SP—Same; CTY—Clearfield; RR—N. Y. C.
 S of H—Mules. Track gauge 34 inches.
 S of M—Hand.
EMP—25.
SIZES SHIPT—Run of Mine.
 Old information.

GENUINE CONNELLSVILLE COKE CO.

General Office, Waltersburg, Pa.
PR—C. S. Hempstead, New Salem, Pa.
VP—M. F. Pickard, Conneltsville, Pa.
TR—John E. Hess, Uniontown, Pa.
GM—M. F. Pickard, Conneltsville, Pa.
GS—A. B. Pickard, Waltersburg, Pa.
PA—A. B. Pickard, Waltersburg, Pa.
CE—Fayette Eng. Co., Uniontown, Pa.
SC—Address the Company; Buyer, A. B. Pickard, Waltersburg, Pa.
SA—A. B. Pickard, Waltersburg, Pa.
 Park Hill Mine; Drift; Pittsburgh Seam, 8 to 10 ft. thick.
PO—Waltersburg, Pa.; SP—Same; CTY—Fayette. RR—P. R. R. & P. V. & C.

MS—H. P. Lloyd, Waltersburg, Pa.
 S of H—Horses. Track gauge, 44 in.
 S of M—Hand.
PP—1 fire tube boiler, 50 H. P.
EMP—60. Daily output, 150 tons.
 Coke ovens, 58 Bee Hives.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Loading Booms.

GEORGES COAL COMPANY

General Office, Second Nat'l Bank Bldg., Conneltsville, Pa.
PR—Logan Rush, Conneltsville, Pa.
TR—Logan Rush, Conneltsville, Pa.
GS—C. G. Graybill, Conneltsville, Pa.
PA—C. G. Graybill, Conneltsville, Pa.
SA—Irwin Valley Coal & Coke Co., Philadelphia, Pa.

Love & Nora Mines; Drift; Sewickley Seam, 60 inches thick.
PO—Fairchance, Pa.; SP—Same; CTY—Fayette; RR—B. & O.
MS—Martin Madden, Fairchance, Pa.
 S of H—Mules and rope. Track gauge 42 inches.
 S of M—Hand.
EMP—50. Last years tonnage 70,057.
SIZES SHIPT—Run of Mine.

GEORGES CREEK COAL COMPANY.

General Office, Cumberland, Md.
PR—H. E. Weber, Cumberland, Md.
TR—R. L. Stallings, " " "
SECY—C. C. Hetzel, " " "
GM—W. F. Oale, Cumberland, Md.

Miller Mine, Slope, C. Prime Seam.
PO—Leeburg, Pa. SP—Same. CTY—Somerset.
 S of H—Electric loco.
 S of M—1 shortwall mach.
PP—2 boilers, total 225 H. P.
 (Old Information)

GEORGES CREEK-PARKER COAL CO. THE

General Office, 430 Equitable Bldg., Baltimore, Md.
PR—C. D. Heller, Baltimore, Md.
VP—Dr. J. C. Cohey, Frostburg, Md.
TR—Harry O. Norris, Baltimore, Md.
AD—J. Stewart, Cumberland, Md.
GM—John M. Lambert, Coleman, Pa.
GS—David Baird, Coleman, Pa.
EM—Geo. Kimmell, Coleman, Pa.
EE—W. A. S. Comerille, Cumberland, Md.

Ritter Nos. 1 and 2 Mines; "C" Prime and D Seams, 48-50 in. thick.
PO—Coleman, Pa.; SP—Same; CTY—Somerset; RR—B. & O.
 S of H—Mules and trolley pole type loco. Track gauge 42 in.
 S of M—Hand.
PP—1 pump.
EMP—1000. Daily tonnage 300.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Loading Rooms

GHEM COAL CO

General Office, Orevola Mills, Pa.
PR—G. M. H. Good, Orevola Mills, Pa.
TR—Chas. R. Houtz, Orevola Mills, Pa.
 Ghem Mine, Drift Mine, "B" Seam 5 ft. 6 in. to 5 ft. thick.
PO—Orevola Mills, Pa.; SP—Same; CTY—Centre; RR—Penna.
 S of H—Mules. Track gauge 36 in.
 S of M—Hand.
PP—Power purchased, Transformer 220 volts A. C., 2 pumps.
EMP—13. Last years tonnage 31,358.
SIZES SHIPT—Run of Mine.

GILBERT COAL COMPANY

General Office, Timblin, Pa.
PR—J. G. Jackson, 30 Pine St., New York, N. Y.
VP—Wm. Barr, Brockville, Pa.
TR—L. E. Wolfe, 63 Park Row, New York, N. Y.
GM—L. E. Wolfe, 63 Park Row, New York, N. Y.
GS—Wm. G. Gilbert, Timblin, Pa.
PA—Wm. G. Gilbert, Timblin, Pa.
CE—P. F. Lofus, 63 Park Row, New York, N. Y.
SA—L. E. Wolfe, 63 Park Row, New York, N. Y.

No. 1 Mine; Drift; Upper Freeport Seam, 48 in. thick.
PO—Timblin, Pa.; SP—Same; CTY—Jefferson; RR—Pgh. & Shammut.
 S of H—Trolley pole type locos. Track gauge 36 in.
 S of M—6 shortwall mch.
PP—3 water tube boilers, 375 H. P., 2 gen. units, 250 volts A. C. and D. C., 8 pumps.
EMP—150. Last years tonnage 150,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Block.
PREP. EQUIPT—Shaker Screens.
 Note—Successors to Corbett Coal Co.

GILLILAND COKE COMPANY

General Office, Brownsville, Pa.
TR—Isaac Taylor, Uniontown, Pa.
GM—Alvin L. Gilliland, Brownsville, Pa.
GS—Alvin L. Gilliland, Brownsville, Pa.
SC—Star Supply Co., Buyer, C. J. Jordan, Smock, Pa.
SA—Standard Fuel Co., Uniontown, Pa.

Leon Mine; Drift; Conneltsville Seam, 96 inches thick.
PO—Brownsville, Pa.; SP—Smock, Pa.; CTY—Fayette; RR—P. V. C.
MS—Jno. Hughes, Brownsville, Pa.
 S of H—Mules and 1 steam loco. Track gauge 40 inches.
 S of M—Hand.
PP—1 25 H. P. and 1 40 H. P. fire tube boilers.
EMP—30. Coke ovens, 30 Bee Hive.
SIZES SHIPT—Run of Mine.

GILMORE COKE OVENS.

General Office, Uniontown, Pa.
TR—S. A. Gilmore, 1444 Oliver Bldg., Pittsburgh, Pa.
GM—G. R. Gilmore, Uniontown, Pa.
SC—Swaney & Gilmore, Buyer, G. B. Gilmore, Uniontown, Pa.

Gilmore Mine; Drift; Conneltsville Seam, 7 ft. thick.
PO—Smiley, Pa.; SP—Smiley, Pa.; CTY—Fayette. RR—B. & O.
 S of H—1 Elec. loco, track gauge 42 in.
 S of M—Hand.
EMP—250. Coke ovens, 161 Bee Hive

GILPIN COAL CO.

General Office, Leeburg, Pa.
VP—L. W. Hicks, Leeburg, Pa.
TR—Winthrop Sargent, Philadelphia, Pa.
GM—L. W. Hicks, Leeburg, Pa.
GS—E. A. Walters, Leeburg, Pa.
PA—D. L. Maher, Leeburg, Pa.
EM—S. E. Mognet, Leeburg, Pa.
EE—G. H. Ritchie, Leeburg, Pa.

Gilpin Mine; Drift; Upper Freeport Seam, 42 in. thick.
PO—Leeburg, Pa.; SP—Same; CTY—Armstrong; RR—Penna.
MS—Frank Bryant, Leeburg, Pa.
 S of H—Mules. Track gauge 42 inches.
PP—Power purchased, M. G. sets, 250 volts D. C., 2 pumps.
EMP—60. Last years tonnage 17,319.
SIZES SHIPT—Run of Mine.

GINDER COAL CO., INC.

General Office, Berlin, Pa.
PR—G. W. K. Berlin, Berlin, Pa.
VP—C. W. K. Berlin, Berlin, Pa.
TR—Z. T. Berlin, Berlin, Pa.
SECY—P. A. Shaker, Berlin, Pa.

Ginder Mine; Drift; D and C. Prime Seam, 48 inches thick.
PO—Berlin, Pa.; SP—Same; CTY—Somerset; RR—B. & O.
 S of H—Mules.
 S of M—Hand.
SIZES SHIPT—Run of Mine.

GLADYS COAL MINING COMPANY.

General Office, Leeburg, Pa.
PR—H. M. Wilson, Leeburg, Pa.
VP—Geo. B. Lutz, Leeburg, Pa.
TR—J. D. Lutz, Leeburg, Pa.
GM—J. D. Lutz, Leeburg, Pa.
GS—C. S. Lutz, Leeburg, Pa.
PA—J. D. Lutz, Leeburg, Pa.
SA—Blum-Weldon & Co., Pittsburgh, Pa.

Gladys Mine; Drift; Freeport Seam, 42 in. thick.
PO—Leeburg, Pa.; SP—Same; CTY—Armstrong; RR—Penna., Conemaugh Div.
S of H—Mules. 1 trolley pole type loco. Track gage 36 inches.
S of M—5 shortwall machs.
PP—Power purchased. Transformer 6600-2200 volts A. C., 1-150 K. W. M. G. Set, 250 volts D. C., 2 pumps.
EMP—80. Last years tonnage 60,000.
SIZES SHIPT—Run of Mine.

GLASGOW FUEL COMPANY, INC.

General Office, Glasgow, Pa.
PR—H. L. Cannon, Glasgow, Pa.
TR—J. W. Leech, Ebensburg, Pa.
GM—H. L. Cannon, Glasgow, Pa.
GS—Geo. Lamb, Glasgow, Pa.
PA—H. L. Cannon, Glasgow, Pa.
CE—John L. Elder, Jr., Ebensburg, Pa.
Glasgow No. 1 Mine; Drift; 'E' Seam, 36 in. thick.
PO—Glasgow, Pa.; SP—Same; CTY—Cambria; RR—P. R. R.
S of H—Mules and rope, elec. loco. Track gage 36 inches.
S of M—Hand.
PP—Power purchased.
SIZES SHIPT—Run of Mine, Lump.

GLASS RUN COAL CO.

General Office, Hays, Pa.
PR—Homer Jones, Hays, Pa.
TR—O. P. Guthrie, Hays, Pa.
GM—O. P. Guthrie, Hays, Pa.
GS—O. P. Guthrie, Hays, Pa.
PA—Homer Jones, Hays, Pa.
SA—F. M. Howard, Room 705, Oliver Bldg., Pittsburgh, Pa.

Glass Run Mine; Drift; Pittsburgh Seam, 66 in. thick.
PO—Hays, Pa.; SP—Same; CTY—Allegheny; RR—Mon. Div. P. R. R.
S of H—Mules. Track gage, 42 in.
S of M—Hand.
EMP—15. Daily output, 50 tons.
SIZES SHIPT—Run of Mine, Lump.
D. C. information.

GLEN BROOK COLLIERIES COMPANY

General Office, Land Title Bldg., Philadelphia, Pa.
PR—L. A. Hickley, Philadelphia, Pa.
VP—F. M. Ramsey, Jr., Philadelphia, Pa.
TR—Clayton E. Platt, Philadelphia, Pa.
GM—Jas. Gray, Carnwath, Pa.
SA—Glen Brook Coal Co. Land Title Bldg., Philadelphia, Pa.

Glen Brook No. 2 Mine; Drift; B Seam, 48 in. thick.
PO—Irving, Pa.; SP—Same; CTY—Clearfield; RR—Penna., Cresson Br.
S of H—Mules.
S of M—Hand.
PP—1 fire tube boiler, total 50 H. P.
EMP—30. Last fiscal year output, 15,433 tons.
SIZES SHIPT—Run of Mine.

GLEN BROOK MINING COMPANY

General Office, 1104 Land Title Bldg., Philadelphia, Pa.
PR—L. A. Hickley, Philadelphia, Pa.
TR—F. M. Ramsey, Jr., Philadelphia, Pa.
GM—F. M. Ramsey, Jr., Philadelphia, Pa.
GS—Jas. Gray, Carnwath, Pa.
SA—Glen Brook Coal Co. Land Title Bldg., Philadelphia, Pa.

Glen Brook No. 1 Mine; Drift; B Seam, 54 inches thick.
PO—Houtzdale, Pa.; SP—Reishin, Pa.; CTY—Clearfield; RR—P & S
S of H—Mules and rope, electric hoist. Track gage 36 in.
S of M—Hand.
PP—Power purchased. Transformer 2,200 to 220 volts, 3 pumps.
EMP—50. Last years tonnage 35,000
SIZES SHIPT—Run of Mine.

GLEN DALE COAL COMPANY

General Office, Bedford St., Johnstown, Pa.
OPERATOR—Bristol Hardy, Johnstown, Pa.
Glen Dale Mine; Drift; D Seam, 34 in. thick.
PO—Johnstown, Pa.; SP—Same; CTY—Cambria; RR—Penna., B & O.
S of H—Mules. Track gage 36 in.
S of M—Hand.
EMP—5. Daily tonnage 35.
SIZES SHIPT—Run of Mine.
Note—Successors to James Morgan.

GLEN HOPE COAL MINING CO.

General Office, Glen Hope, Pa.
PR—Joseph Campbell, Glen Hope, Pa.
TR—Edward Hopfer, Glen Hope, Pa.
GM—P. F. Campbell, Portage, Pa.
PA—Edward Hopfer, Glen Hope, Pa.
SA—Portage Coal Co., Portage, Pa.

Glen Hope No. 1 Mine; Drift; Moshannon Seam, 32 in. thick.
PO—Glen Hope, Pa.; SP—Irving, Pa.; CTY—Clearfield; RR—N. Y. C.
MS—Joseph Campbell, Portage, Pa.
S of H—Mules. Track gage 36 in.
S of M—2 shortwall machs.
PP—Power purchased.
EMP—20. Last years tonnage 15,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

GLEN RICHEY COAL MINING CO.

General Office, 716 Land Title Bldg., Philadelphia, Pa.
PR—Justice Cox, Jr., Philadelphia, Pa.
VP—H. Troner, Philadelphia, Pa.
TR—G. Woodruff, Philadelphia, Pa.
GM—H. Troner, Philadelphia, Pa.
GS—Alton Nelson, Philadelphia, Pa.
PA—H. Troner, Philadelphia, Pa.
SA—Justice Cox, Jr., & Co., Philadelphia, Pa.

Manhattan Mine; Drift; B Seam, 42 inches thick.
PO—Oshanter, Pa.; SP—Mitchell, Pa.; CTY—Clearfield; RR—N. Y. C.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—25.
SIZES SHIPT—Run of Mine.
D. C. information.

GLEN WHITE COAL & LUMBER CO.

General Office, 210 Union Trust Bldg., Baltimore, Md.
PR—Frank J. Taylor, Baltimore, Md.
TR—John C. Wolf, Baltimore, Md.
GM—Frank J. Taylor, Baltimore, Md.
GS—F. D. McNellis, Gallitzin, Pa.
PA—F. D. McNellis, Gallitzin, Pa.
CE—Jus. S. Silyman & Co., Altoona, Pa.
SA—Address the company. Buyer, Gust Helsing, Glen White, Pa.

Glen White No. 2 Mine; Drift; E or Lemon Seam, 50 inches thick.
PO—Glen White, Pa.; SP—Kittanning Point, Pa.; CTY—Blair; RR—Pa.
MS—A. G. McGary, Gallitzin, Pa.
S of H—Mules, rope and gasoline locos. Track gage 36 inches.
S of M—8 comp. air machs.
PP—4 fire tube boilers, 330 H. P., 1 pump.
EMP—124. Last fiscal year output, 64,747 tons. Coke Ovens, 90 Beehive.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Gravity Screens.

GLENSIDE COAL COMPANY

General Office, Indiana, Pa.
PR—Samuel T. Brown, Indiana, Pa.
TR—F. C. McClure, Indiana, Pa.
GM—Samuel T. Brown, Indiana, Pa.
GS—Thomas Hogarth, Indiana, Pa.
PA—W. R. R. Indiana, Pa.
EM—Chas. F. Schlicker, Spangler, Pa.
SA—Geo. F. Warren Corp., Boston, Mass.

Glenside No. 3 Mine; Slope; B Seam, 44 in. thick.
PO—Starford, Pa.; SP—Same; CTY—Indiana; RR—N. Y. C.
S of H—Main and tail rope 3 trolley pole type locos. Track gage 36 in.
S of M—4 shortwall machs.
PP—Power purchased, transformer 2200-12200 volts A. C., M. G. Sets, 250 volts D. C., 2-150 K. W. gen. units, 7 pumps.
EMP—125. Last years tonnage 60,000.
SIZES SHIPT—Run of Mine.

GLENWOOD COAL COMPANY

General Office, 1000 Liberty Bldg., Philadelphia, Pa.
PR—David E. Williams, Philadelphia, Pa.
VP—G. Brinton Roberts, Philadelphia, Pa.
TR—Wm. A. Smith, Philadelphia, Pa.
GM—A. M. Riddell, Altoona, Pa.
GS—A. M. Riddell, Altoona, Pa.
PA—H. Evans Williams, Jr., Philadelphia, Pa.
CE—Chas. F. Schlicker, Spangler, Pa.
SA—Sales Agency—David E. Williams & Co., Philadelphia, Pa.

Glenwood No. 10 Mine; Drift; D Seam, 40 in. thick.
PO—Barnside, Pa.; SP—Same; CTY—Clearfield; RR—N. Y. C. and H. R.
MS—J. A. Downing, Glen Campbell, Pa.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—Power purchased, 220 volts A. C., 4 pumps.
EMP—15. Daily tonnage 50.
SIZES SHIPT—Run of Mine.

Glenwood No. 14 Mine; D Seam, 40 in. thick.
PO—Glen Campbell, Pa.; SP—Same; CTY—Indiana; RR—Penna.

MS—John A. Downing, Glen Campbell, Pa.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—220 volts A. C., 4 pumps.
EMP—15. Daily tonnage 50.

GOOD CLAY & COAL CO.

General Office, Patton, Pa.
PR—Geo. S. Good, Patton, Pa.
VP—Geo. E. Metzgar, St. Benedict, Pa.
TR—Geo. E. Prindible, Patton, Pa.
GM—Geo. E. Prindible, Patton, Pa.
GS—Geo. E. Prindible, Patton, Pa.
PA—Geo. E. Prindible, Patton, Pa.
EM—E. W. Hess, Clearfield, Pa.

Good A-22 Mine; Drift; 'D' or Moshannon Seam, 38 in. thick.
PO—Bells Landing, Pa.; SP—Same; CTY—Clearfield; RR—N. Y. C.
MS—B. R. Spackman, Bells Landing, Pa.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
EMP—38. Daily output, 80 tons.
SIZES SHIPT—Run of Mine.

Good 23 Mine; Drift; 'D' or Moshannon Seam, 36 in. thick.
PO—New Millport, Pa.; SP—Same; CTY—Clearfield; RR—N. Y. C.
MS—Wilson McClure, New Millport, Pa.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
EMP—40. Daily output, 100 tons.
SIZES SHIPT—Run of Mine.

Good No. 24 Mine; Drift; D. or Moshannon Seam, 42 in. thick.
PO—Ginter, Pa.; SP—Ramsey, Pa.; CTY—Clearfield; RR—P. & S. and N. Y. C.
MS—Wm. Stanley, Ginter, Pa.
S of H—Mules. Track gage 36 in.
PP—1 pump.
EMP—30.
SIZES SHIPT—Run of Mine.

GOODYEAR, E. J.

New Lena Coal Co.

GOSHEN COAL CO.

General Office, Clearfield, Pa.
PR—H. B. Powell, Clearfield, Pa.
VP—H. B. Hartwick, Clearfield, Pa.
TR—Alfred Graham, Clearfield, Pa.
PA—R. M. Hane, Clearfield, Pa.
CE—E. W. Hess, Clearfield, Pa.
SA—Surveyor Supply Co.; Buyer, K. A. Miller, Surveyor, Pa.

Goshen Nos. 1, 2, 3, 4, 5 and 6 Mines; Drift; E. D. & B Seams, 42 in. thick.
PO—Surveyor, Pa.; SP—Same; CTY—Clearfield; RR—N. Y. C.
MS—Thomas Langford, Surveyor, Pa.
S of H—Trolley pole type locos. Track gage, 36 in.
S of M—Shortwall machs.
PP—Power purchased. Transformer 2200-2200 volts A. C., M. G. Sets, 250 volts D. C., 6 pumps.
EMP—100. Last years tonnage 50,000.
SIZES SHIPT—Run of Mine.

GOULD, W. A. & BRO.

General Office, Brishin, Pa.
PR—W. H. Gould, Brishin, Pa.
VP—Thos. V. Gould, Brishin, Pa.
TR—Thos. V. Gould, Brishin, Pa.
GM—Thos. V. Gould, Brishin, Pa.
GS—Jno. Gould, Brishin, Pa.
PA—Thos. V. Gould, Brishin, Pa.
SA—Address the company. Buyer, K. L. Housen, Brishin, Pa.

Midvale Nos. 1, 3 and 4 Loraine & Black Diamond Mines; Drifts and Slopes; Moshannon and B Seams.
PO—Brishin, Pa.; SP—Same; CTY—Clearfield; RR—P. R. R.
S of H—Mules and rope. Track gage 36 in.
S of M—Hand.
PP—Boiler, 125 H. P.
EMP—150.
SIZES SHIPT—Run of Mine.

GRACEMONT COAL COMPANY

General Office, Keenan Bldg., Pittsburgh, Pa.
PR—E. J. Fraenkel, Jr., Pittsburgh, Pa.
VP—G. W. Colson, Kittanning, Pa.
GM—G. W. Colson, Kittanning, Pa.
PA—M. R. Lynch, Pittsburgh, Pa.
EM—A. A. Layne, Kittanning, Pa.
SA—Frank Homan, Keenan Bldg., Pittsburgh, Pa.

Gracemont Mine; Drift; Middle Kittanning Seam, 42 in. thick.
PO—Claytonia, Pa.; SP—Same; CTY—Butler; RR—P. & L. E.
MS—Geo. Reeder, Claytonia, Pa.
S of H—Gasoline loco. Track gage 36 in.
S of M—4 comp. air punchers.
PP—2 water tube boilers, 250 H. P., 2 pumps.
EMP—50. Daily tonnage 260.
SIZES SHIPT—Run of Mine.
Note—Successors to Stage, G. G. Estate.
D. C. information.

GRACETON COAL & COKE COMPANY

General Office, 50 East 42d St., New York, N. Y.
PR—C. M. Schwerin, New York, N. Y.
TR—F. W. Cameron, New York, N. Y.
GM—C. M. Schwerin, New York, N. Y.
GS—M. F. Brandon, Graceton, Pa.
PA—Geo. W. Blewitt, Vintondale, Pa.
EM—W. H. Robertson, Graceton, Pa.
SA—Graceton Supply Co. Buyer, W. H. Clements, Vintondale, Pa.
SA—Graceton Coal & Coke Co., New York, N. Y.

Graceton No. 2 Mine; Drift; Upper Freeport Seam, 72 inches thick.
PO—Graceton, Pa.; SP—Same; CTY—Indiana; RR—Penna., Indiana Br.
S of H—Mules, rope and electric locos. Track gage 42 inches.
S of M—Hand. comp. air and electric punchers, overcutter machs.
PP—Power purchased. Transformer 2,200 volts A. C., M. G. set, 250 volts D. C.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Washeries.

Graceton No. 3 Mine; Slope; Upper Freeport Seam, 72 inches thick.
PO—Graceton, Pa.; SP—Same; CTY—Indiana; RR—Penna.
S of H—Mules and electric locos. Track gage 42 inches.
S of M—Hand, compressed air and elec. punchers, overcutter machs.
PP—Power purchased. Transformer 2,200 volts A. C., M. G. sets, 250 volts D. C., 8 fire tube boilers, 1,850 H. P.
EMP—260. Daily tonnage 800.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Washeries.
Note—Formerly operated by the Graceton Coke Company.

GRACETON COKE CO.

Now being operated by the Graceton Coal & Coke Company.

GRAFF COAL COMPANY.

General Office, Blairsville, Pa.
PR—E. M. Gratt, Blairsville, Pa.
TR—E. M. Gratt, Blairsville, Pa.
GM—E. M. Gratt, Blairsville, Pa.
PA—E. M. Gratt, Blairsville, Pa.
CE—Albert Smith, Saltsburg, Pa.
SA—Sales Agent, Knickerbocker Fuel Co., New York, N. Y.

Graff Mine; Drift; Pittsburgh Seam; 5 ft. 9 in. to 7 1/2 ft. thick.
PO—Blacklick, Pa.; SP—Same; CTY—Indiana. RR—P. R. R., Conemaugh Div., Indiana Branch.
MS—Ernest Fletcher, Saltsburg, Pa.
S of H—Mules, 2 elec. locos. Track gage 42 in.
S of M—Hand.
PP—1 return tubular boiler, total 1507 H. P., 1 gen. unit, 100 K. W., 250 volts D. C.
EMP—75. Last fiscal year output 21,400 tons.
SIZES SHIPT—Run of Mine.

GRAHAM, JOHN C.

General Office, Rutler, Pa.
OWNER—John C. Graham, Butler, Pa.
PA—A. M. Klink, Sligo, Pa.

Graham Mine; Drift; Brookville Seam, 60 in. thick.
PO—Sligo, Pa.; SP—Same. CTY—Clarion. RR—P. R. R.
MS—C. T. Mortimer, Sligo, Pa.
S of H—Mules. Track gage 36 in.
S of M—6 comp. air machs. 1 elec. puncher.
PP—1 150 H. P. fire tube boiler, 1 air compressor, gen. units, 250 volts D. C., 1 pump.
EMP—80. Last years tonnage 20,000.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Gravity Screens.

GRAMPIAN COAL MINING CO.

General Office, Clearfield, Pa.
Penn. No. 4 Mine; 'B' Seam, 42 in. thick.
PO—Osceola Mills, Pa.; SP—Same, CTY—Centre; RR—Penna.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
SIZES SHIPT—Run of Mine.

Penn. No. 5 Mine; 'B' Seam, 60 in. thick.
PO—Osceola Mills, Pa.; SP—Same, CTY—Centre; RR—Penna.
S of H—Trolley pole type locos.
S of M—3 shortwall machs.
PP—Power purchased.
SIZES SHIPT—Run of Mine.

Decatur No. 11 Mine; 'B' Seam, 48 in. thick.
PO—Osceola Mills, Pa.; SP—Same, CTY—Clearfield; RR—Penna. & S. R. R.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
SIZES SHIPT—Run of Mine.

GRASS FLAT COAL COMPANY.

General Office, St. Benedict, Pa.
PR—Richard Peale, St. Benedict, Pa.
TR—John Peale, St. Benedict, Pa.
GS—Merritt Hutton, St. Benedict, Pa.
PA—G. E. Metzger, St. Benedict, Pa.
EM—E. J. Protzeller, St. Benedict, Pa.
EK—E. K. Davis, St. Benedict, Pa.
SCD—Central Trading Corp., Buyer, F. R. Booth, St. Benedict, Pa.

Drift Mine.

PO—Grass Flat, Pa.; SP—Same; CTY—Clearfield; RR—N. Y. C. & H.

S of H—Mules and rope.
S of M—Hand.

GRASSY RUN COAL CO.

General Office, Elk Lick, Pa.
PR—J. Howard Meager, Elk Lick, Pa.
TR—J. Howard Meager, Elk Lick, Pa.
GM—J. Howard Meager, Elk Lick, Pa.
GS—J. Howard Meager, Elk Lick, Pa.
PA—J. Howard Meager, Elk Lick, Pa.
EM—Rome Bros., Meyersdale, Pa.
SCD—Howard Meager & Co., Buyer, Geo. James, Elk Lick, Pa.
SA—Whitney & Kimmner, 113 Liberty St., New York, N. Y.

Grassy Run No. 1 Mine; Drift; Redstone Seam, 48 inches thick.

PO—Elk Lick, Pa.; SP—W. Salisbury, Pa.; CTY—Somerset; RR—B. & O.

MS—Ben Shroyer, Elk Lick, Pa.
S of H—Mules. Track gage 12 inches.

S of M—Hand.
EMP—20. Last years tonnage 25,000.

Grassy Run No. 2 Mine; Drift; Redstone Seam, 48 inches thick.

PO—Elk Lick, Pa.; SP—W. Salisbury, Pa.; CTY—Somerset; RR—B. & O.

MS—Archle Cochran, Elk Lick, Pa.
S of H—Mules, storage battery locos. Track gage 12 inches.

S of M—Hand.
PP—Power purchased. Transformer 2200 to 110 volts A. C.

EMP—30. Last years tonnage 20,000.

Grassy Run No. 4 Mine; Drift; Redstone Seam, 54 inches thick.

PO—Elk Lick, Pa.; SP—West Salisbury, Pa.; CTY—Somerset; RR—B. & O.

MS—M. Thomas, Elk Lick, Pa.
S of H—Mules and storage battery locos. Track gage 12 inches.

S of M—Hand.
PP—Power purchased. Transformer 2200 to 110 volts A. C.

EMP—40. Last years tonnage 23,000.

GRAZIER COAL MINING COMPANY.

General Office, Johnstown, Pa.
PR—A. W. Hillebrand, New York, N. Y.
VP—W. F. Ainsworth, New York, N. Y.
TR—E. C. Hudson, Johnstown, Pa.
GM—H. J. Meehan, Johnstown, Pa.
GS—A. Collins, Johnstown, Pa.
PA—S. G. Symons, Johnstown, Pa.
EM—F. T. Fitzharris, Johnstown, Pa.
SCD—Grazier Supply Co., Johnstown, Pa.
SA—Grazier Coal & Coke Co., Johnstown, Pa.; A. W. Hillebrand & Co., New York, N. Y.

Additional Information on Page 721

Grazier No. 1 Mine; Drift; "B" Seam 44 in. thick.

PO—Holsapple, R. D., Pa.; SP—Foustwell, Pa.; CTY—Somerset; RR—B. & O.

MS—Geo. D. Cosgrove, Holsapple, R. D., Pa.

SM—Geo. D. Cosgrove, Seaton, Pa.
S of H—1 trolley pole type loco. Track gage, 36 in.

S of M—2 electric punchers and 2 short wall machs.

PP—Power purchased, central power plant, 2 100 K. W. gen. units, transformer 22,000 to 2300 volts A. C., M. G. sets, 250 volts D. C., 3 pumps.

Last fiscal year output, 45,000 tons.

SIZES SHIPT—Run of Mine.

Grazier No. 2 Mine; Drift; C-Prime Seam, 42 in. thick.

PO—Holsapple, R. D., Pa.; SP—Foustwell, Pa.; CTY—Somerset; RR—B. & O.

MS—Geo. D. Cosgrove, Holsapple, R. D., Pa.

S of H—1 trolley pole type loco. Track gage, 36 in.

S of M—2 comp. air punchers.

PP—One plant for both mines, 3 pumps.

Last fiscal year output, 55,000 tons.

SIZES SHIPT—Run of Mine.

GREAT BEND COAL CO.

General Office, Ebensburg, Pa.
Great Bend No. 1 Mine.
PO—Mountandale, Pa.; CTY—Cambria; RR—Penna.
No report.

GREEN COUNTY COAL & COKE COMPANY.

General Office, Point Marlon, Pa.
PR—Jules J. Quertinmont, Point Marlon, Pa.
TR—Geo. A. Carlier, Point Marlon, Pa.
GM—Geo. A. Carlier, Point Marlon, Pa.

GS—Geo. A. Carlier, Point Marlon, Pa.
PA—Geo. A. Carlier, Point Marlon, Pa.
CE—Payette Eng. Co., Unlontown, Pa.

Jeanette Mine; Drift; Pittsburgh Seam, 72 in. thick.

PO—Point Marlon, Pa. SP—West Point Marlon, Pa.; CTY—Greene; RR—Monongahela.

S of H—Mules. Track gage 42 in.

S of M—1 shortwall mach.

PP—Power purchased. Transformer 6600 to 220 volts A. C., 3 pumps.

EMP—10. Daily tonnage 300.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT.—Bar Screens.

GREEN VALLEY COAL COMPANY.

General Office, Brockwayville, Pa.
PR—F. B. Henderson, Brockwayville, Pa.
TR—B. E. Taylor, Brockwayville, Pa.
GM—B. E. Taylor, Brockwayville, Pa.
GS—Jas. S. McCloskey, Pottsville, Pa.
PA—Joel Tompkins, Brockwayville, Pa.
CE—B. E. Taylor, Brockwayville, Pa.
EM—Horne & Jones, Indiana, Pa.
SA—Joel Tompkins, Brockwayville, Pa.

Green Valley No. 1 Mine; Drift; Middle Kittanning Seam, 40 inches thick.

PO—Knoxdale, Pa.; SP—Same; CTY—Jefferson; RR—Pittsburgh & Sham-

mut.

MS—Wm Mathews, Knoxdale, Pa.
S of H—Mules. Track gage 36 inches.

S of M—Hand.
EMP—35. Daily tonnage 150.

SIZES SHIPT—Run of Mine.

GREENSBURG COAL CO.

General Office, Greensburg, Pa.
PR—W. A. Coulter, Greensburg, Pa.
TR—H. W. Coulter, Greensburg, Pa.
GS—Jos. D. Wentling, " "
PA—Stanley E. Cook, " "
EM—F. E. Maddocks, " "
SALES AGENTS—Greensburg Coal & Coke Co., 114 Commercial Trust Bldg., Philadelphia, Pa.

Hawthorn Mine, Shaft, Pittsburgh Seam 7 ft. thick.

PO—Greensburg, Pa.; SP—Same. CTY—Westmoreland; RR—P. R. R.

S of H—13 Trolley pole type locos. Track gage 40 in.

S of M—6 chain breast type and 6 shortwall machs.

PP—Power purchased, transformer 2200 to 440 volts A. C., M. G. sets, 2—200 K. W. Gen. Units, 250 volts D. C., 6 pumps.

EMP—275. Last fiscal year output, 450,769 tons.

SIZES SHIPT—Run of Mine, Slack, Lump

PREP. EQUIPT—Gravity Screens.

GREENSBURG-CONNELLSVILLE COAL AND COKE COMPANY.

General Office, First National Bank Bldg., Pittsburgh, Pa.
PP—Geo. S. Eaton, Pittsburgh, Pa.
VP—L. C. Sands, Pittsburgh, Pa.
TR—George Phelps Rose, Pittsburgh, Pa.
PA—James R. McColligan, " "
CE—Eaton & Elliott, " "
SCD—Ligonier Valley Supply Co., Buyer, J. R. McColligan, Pittsburgh, Pa.

Old Colony Nos. 1 Mine; Drift; Pittsburgh Seam, 72 to 96 in. thick.

PO—Ligonier, Pa.; SP—North Ligonier, Pa.; CTY—Westmoreland; RR—Ligonier Valley.

MS—R. B. McDowell, Ligonier, Pa.

SM—L. C. Gross, Ligonier, Pa.
S of H—Mules. Track gage, 42 in.

S of M—Hand.

PP—Purchase power, 110 volts A. C., 5 pumps.

EMP—150. Last years tonnage 114,208.

SIZES SHIPT—Run of Mine, Slack Nut, Lump.

Francis Mine; Slope; Pittsburgh Seam, 60 to 84 in. thick.

PO—Burgittstown, Pa.; SP—Same; CTY—Washington; RR—P. C. C. & St. L.

MS—O. A. Wakefield, Burgittstown, Pa.

SM—B. H. Williams, Burgittstown, Pa.

S of H—Mules and 5 trolley pole type elec. locos. Track gage, 48 in.

S of M—13 chain breast type and 8 shortwall machs.

PP—Purchase power, 275 volts A. C., 10 pumps.

EMP—400. Last years tonnage 152,464.

SIZES SHIPT—Run of Mine, Slack, Nut Lump.

PREP. EQUIPT—Shaker Screens, Pickling Tables, Loading Booms.

GREENSBURG EASTERN COAL CO.

General Office, Latrobe, Pa.
PR—H. E. Marker, Greensburg, Pa.
TR—D. P. Hudson, Greensburg, Pa.
GM—D. L. Newell, Greensburg, Pa.
GS—R. C. Holter, Greensburg, Pa.
EM—E. R. Goshorn, Latrobe, Pa.
SA—John W. Patton, Greensburg, Pa.

Duiley Mine; Slope; Pittsburgh Seam, 90 inches thick.

PO—Latrobe, Pa.; SP—Same; CTY—Westmoreland; RR—Penna.

MS—E. R. Goshorn, 119 Depot St., Latrobe, Pa.

S of H—Mules. Track gage 42 inches.

S of M—Pick mining.

PP—Power purchased. Transformer 6600 to 110 volts A. C., M. G. sets, 5 pumps.

EMP—80. Last years tonnage 55,000.

SIZES SHIPT—Run of Mine.

GREENWOOD COAL MINING COMPANY.

General Office, Clearfield, Pa.
GM—H. F. Bigler, Jr., Clearfield, Pa.
GS—H. F. Bigler, Jr., Clearfield, Pa.
PA—H. F. Bigler, Jr., Clearfield, Pa.

Greenwood Mine; Drift; R Seam, 28 to 42 in. thick.

PO—Madeta, Pa.; SP—Same; CTY—Clearfield; RR—P. R. R.

MS—H. J. Klondan, Houtzdale, Pa.

S of H—Mules and rope. Track gage 36 inches.

S of M—Hand.

PP—7 pumps.

EMP—45. Last years tonnage 26,000.

SIZES SHIPT—Run of Mine.

GREGORY COAL MINING COMPANY.

General Office, South Fork, Pa.
PR—E. C. Van Seyoe, South Fork, Pa.
TR—Norman W. Hoffman, South Fork, Pa.
GM—E. C. Van Seyoe, South Fork, Pa.
GS—E. C. Van Seyoe, South Fork, Pa.
SA—E. C. Van Seyoe, South Fork, Pa.

Rockville No. 1 Mine; Drift; C Prime Seam, 40 in. thick.

PO—South Fork, Pa. SP—Same. CTY—Cambria. RR—P. R. R.

S of H—Mules. Track gage 35 in.

S of M—Hand.

EMP—28. Last years tonnage 19,000.

SIZES SHIPT—Run of Mine.

GRIEBEL BROS.

Now Jos. J. Griebel & Son

GRIEBEL, JOS. J. & SONS.

General Office, Snyderburg, Pa.
GS—Jos. J. Griebel, Snyderburg, Pa.

Moltmiller Mine; Drift; Seam, 44 in. thick.

PO—Snyderburg, Pa.; SP—Lancaster, Pa.; CTY—Clarion; RR—B. & O.

S of H—Mules. Track gage 30 in.

S of M—Hand.

EMP—11. Last years tonnage 6,000.

SIZES SHIPT—Run of Mine.

GUARANTY COAL COMPANY.

General Office, Worthington, Pa.
PR—W. T. Marsh, Scalp Level, Pa.
VP—W. T. Morley, Johnstown, Pa.
TR—W. J. Murphy, Windler, Pa.
GM—R. T. Marsh, Scalp Level, Pa.
GS—R. T. Marsh, Scalp Level, Pa.
PA—R. T. Marsh, Scalp Level, Pa.
EM—Bernard Peter, Kittanning, Pa.
SA—Stewart Harmer, Rochester, N. Y.

Graff Mine; Drift; Freeport Seam, 42 to 54 in. thick.

PO—Worthington, Pa.; SP—Craigsville, Pa.; CTY—Armstrong; RR—B. R. & P.

S of H—Mules and 1 main and tail rope. Track gage 42 in.

S of M—2 chain breast machs.

PP—Power purchased, 1—70 K. W. gen. unit, 250 volts D. C., 1—100 H. P. gas engine, 1 pump.

EMP—30. Last years tonnage 2,100.

SIZES SHIPT—Run of Mine.

GUERNSEY COAL COMPANY.

General Office, Houtzdale, Pa.
PR—G. W. Anderson, 35 Congress St., Boston, Mass.
TR—G. W. Anderson, 35 Congress St., Boston, Mass.
GM—Asa Spencer, Houtzdale, Pa.

Henrietta No. 2 Mine; Drift; "E" Cap Seam, 32 inches thick.

PO—Houtzdale, Pa.; SP—Same; CTY—Clearfield; RR—Penna.

MS—B. W. Roundside, Houtzdale, Pa.

S of H—Mules.

S of M—Hand.

EMP—48. Last years tonnage 25,275.

GULON COAL COMPANY.

General Office, Philipsburg, Pa.
PR—J. Swires, Philipsburg, Pa.
TR—Eva Swires, Philipsburg, Pa.
GM—Joe Swires, Philipsburg, Pa.

Gulon Mine; Drift; B Seam; 34 inches thick.

PO—Philipsburg, Pa.; SP—Same; CTY—Clearfield; RR—P. R. R.

MS—Joe Swires, Philipsburg, Pa.

S of H—Electric mach.

S of M—Electric mach.

EMP—46. Last fiscal year output, 23,931 tons.

Old information.

GWIN, J. SONS.

General Office, Mountandale, Pa.
PR—T. V. Gwin, Mountandale, Pa.
GM—E. M. Gwin, Mountandale, Pa.
GS—T. V. Gwin, Mountandale, Pa.
SA—American Coal Co., Altoona, Pa.

Mountandale No. 1 Mine; Drift; B Seam, 30 inches thick.

PO—Mountandale, Pa.; SP—Fagart, Pa.; CTY—Cambria; RR—Penna.

S of H—Mules. Track gage 36 in.

S of M—Hand.

EMP—18. Last years tonnage 5,018.

SIZES SHIPT—Run of Mine.

GYPSY COAL CO.

General Office, 533 Commercial Trust Bldg., Philadelphia, Pa.
PR—Warren L. Irish, Philadelphia, Pa.
TR—G. R. Irish, Philadelphia, Pa.
GM—Ned Irish, Philadelphia, Pa.
EM—Wmelsdorf, Dunick & Custer, Philadelphia, Pa.

SA—W. L. Irish & Co., Inc., 533 Commercial Trust Bldg., Philadelphia, Pa.

Indiana No. 6 Mine; Drift; E Seam, 50 in. thick.

PO—Glen Campbell, Pa.; SP—Same; CTY—Indiana; RR—New York Central.

MS—J. H. Miller, Glen Campbell, Pa.

S of H—Mules and 2 gasoline locos.

Track gage, 36 in.

S of M—Hand.

PP—2 pumps.

EMP—65. Daily output, 225 tons.

SIZES SHIPT—Run of Mine.

HAAS COAL COMPANY.

General Office, Natrona, Pa.
PR—L. W. Hicks, Leechburg, Pa.
TR—Norman Adams, Natrona, Pa.
GS—Norman Adams, Natrona, Pa.
PA—Norman Adams, Natrona, Pa.
EM—E. A. Waters, Leechburg, Pa.

Haas Mine; Drift; Upper Freeport Seam, 44 in. thick.

PO—Natrona, R. D. No. 2, Pa.; SP—Same; CTY—Allegheny; RR—P. R. R.

S of H—Mules. Track gage 29 inches.

S of M—Room and pillar and 1 mining mach.

PP—Power purchased, 500 volts A. C.

EMP—20. Last years tonnage 24,000.

SIZES SHIPT—Run of Mine.

HABERBERGER MINE.

General Office, St. Marys, Pa.
SA—Frontier Mining Co.; Harrigan Coal Co., St. Marys, Pa.

Haberberger Mine; Drift; Bituminous Seam, 48 inches thick.

PO—St. Marys, Pa.; SP—Same; CTY—Elk; RR—Penna.

MS—Clarence Haberberger, St. Marys, Pa.

S of H—Mules.

S of M—Hand.

EMP—20. Daily tonnage 75.

SIZES SHIPT—Run of Mine.

HADDON COAL CO.

General Office, Leechburg, Pa.
GM—L. W. Hicks, Leechburg, Pa.
GS—E. A. Waters, Leechburg, Pa.
PA—L. L. Miller, Leechburg, Pa.
EM—S. E. Moguet, Leechburg, Pa.
EE—G. H. Ritchie, Leechburg, Pa.

Haddon Mine; Drift; Upper Freeport Seam, 42 in. thick.

PO—Leechburg, Pa.; SP—Same; CTY—Armstrong; RR—P. R. R.

MS—Frank Bryant, Leechburg, Pa.

S of H—Elec. trolley locos. Track gage 39 inches.

S of M—Elec. chain machs.

PP—Power purchased, M. G. sets, 250 volts D. C., 2 pumps.

EMP—35. Last fiscal year output, 12,000 tons.

SIZES SHIPT—Run of Mine.

HALE COAL COMPANY.

General Office, N. E. American Bldg., Philadelphia, Pa.
 PR—P. C. Mahan, Philadelphia, Pa.
 VP—R. C. Hall, New York, N. Y.
 TR—John Gilbert, Philadelphia, Pa.
 GM—J. Wm. Weller, Philadelphia, Pa.
 GS—J. Wm. Weller, Philadelphia, Pa.
 PA—Jas. H. Hagg, Philadelphia, Pa.
 EM—T. F. Morgan, Philadelphia, Pa.
 EE—W. J. Aldon, Philadelphia, Pa.
 Sales Agents—Maderia Hill & Co., North American Bldg., Philadelphia, Pa.

Hale No. 1 Mine; Drift; "B" or Miller Seam, 55 in. thick.
 PO—Houtzdale, Pa.; SP—Same; CTY—Clearfield; RR—Penna.
 MS—L. F. Heller, Houtzdale, Pa.
 S of H—Mules and 2 trolley pole type locos. Track gage, 37 in.
 S of M—2 shortwall machs.
 PP—Power purchased, transformer 22,000-2200/220 volts, M. G. sets, 250 volts D. C., 4 pumps.
 EMP—90. Last years tonnage 65,000.
 SIZES SHIPT—Run of Mine.

Elizabeth No. 1 Mine; Drift; "B" Seam, 54 in. thick.
 PO—Houtzdale, Pa. SP—Same. CTY—Clearfield RR—Penna., M. & C. Br.
 MS—L. F. Heller, Philadelphia, Pa.
 S of H—Mules, rope and 2 trolley pole type locos. Track gage 36 in.
 S of M—Hand.
 PP—Power purchased, transformer 2200 to 440 volts A. C., 2 fire tube boilers, 306 H. P., 4 pumps.
 EMP—63. Last years tonnage 30,000.
 SIZES SHIPT—Run of Mine.

Elizabeth No. 2 Mine; Drift; "B" Seam, 42 in. thick.
 PO—Houtzdale, Pa. SP—Same. CTY—Clearfield RR—Penna., M. & C. Br.
 MS—L. F. Heller, Houtzdale, Pa.
 S of H—Mules and rope. Track gage, 36 in.
 S of M—Hand.
 PP—Power purchased, transformer 2200 to 440 volts A. C., 1 fire tube boiler, 120 H. P., 5 pumps.
 EMP—54. Last years tonnage 30,000.
 SIZES SHIPT—Run of Mine.

HALL COAL COMPANY

General Office, East Pittsburgh, Pa.
 PR—J. O. Hall, East Pittsburgh, Pa.
 TR—J. O. Hall, " "
 GM—J. O. Hall, " "
 PA—J. O. Hall, " "
 MM—James Sadder, Turtle Creek, Pa.
 EM—Harrop, Hopkins & Taylor, Pittsburgh, Pa.

Hall Mine; Drift; Pittsburgh Seam, 60 to 96 in. thick.
 PO—Turtle Creek, R. F. D., Pa.; SP—Same; CTY—Allegheny; RR—Union.
 S of H—Mules. Track gage 44 in.
 S of M—Hand.
 PP—1 pump.
 EMP—39. Last fiscal year output 40,556 tons.
 SIZES SHIPT—Run of Mine. Lump.
 (Old information)

HAMLER COAL COMPANY

General Office, Clarion, Pa.
 PR—C. W. Amsler, Clarion, Pa.
 VP—H. M. Amsler, Clarion, Pa.
 TR—Samuel Wilson, Clarion, Pa.
 GM—H. M. Amsler, Huey, Pa.
 GS—H. M. Amsler, Huey, Pa.
 PA—S. J. Sloan, Clarion, Pa.
 EM—Chas. Emill, Clarion, Pa.
 EE—Clyde McCalmont, Romsburg, Pa.
 SA—Cherry Trading Co., Clarion, Pa.

Hamler No. 1 Mine; Slope; Lower Kittanning Seam, 42 inches thick.
 PO—Huey, Pa.; SP—Rimersburg, Pa.; CTY—Clarion; RR—Penna.
 MS—C. H. Oaks, East Brady, Pa.
 S of H—1 8-ton, 1 6-ton, 1 4-ton locos. Track gage 36 in.
 S of M—4 shortwall machs.
 PP—4 fire tube boilers, 410 H. P., 1—200 K. W. and 1—100 K. W. gen. units, 250 volts H. C., 6 pumps.
 EMP—122. Daily tonnage 400.
 SIZES SHIPT—Run of Mine.

HAMMILL, B. S.

General Office, 11 Crafton Ave., Crafton, Pa.
 OWNER—B. S. Hammill, Pittsburgh, Pa.
 GS—R. D. Maize, Crafton, Pa.
 PA—B. S. Hammill, Pittsburgh, Pa.
 EM—Geo. Rowman, Imperial, Pa.
 EE—Sam. Pritchard, R. F. D. No. 1, Oakdale, Pa.
 SA—B. S. Hammill, 11 Crafton Ave., Crafton Sta., Pittsburgh, Pa.

Hammill No. 2 Mine; Drift; Pittsburgh No. 8 Seam, 68 in. thick.
 PO—R. F. D. No. 1, Oakdale, Pa.; SP—Scotts, Pa.; CTY—Allegheny; RR—Montour.
 S of H—Mules and 1 trolley pole type locos. Track gage, 42 in.
 S of M—3 chain breast type and 1 short-wall machs.

PP—Gas engine, 250 H. P., generator, 100 K. W., 275 volts D. C., 3 pumps.
 EMP—75. Last fiscal year output, 120,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

HAMFIELD COAL COMPANY

General Office, Irwin Gas Coal Co. Bldg., Greensburg, Pa.
 VP—J. R. Brunot, Greensburg, Pa.
 TR—J. R. Eisman, Greensburg, Pa.
 GM—T. P. Latta, Greensburg, Pa.
 GS—C. L. Clark, Greensburg, Pa.
 PA—A. T. McConnell, Greensburg, Pa.
 CE—C. E. Cowan, Greensburg, Pa.
 EM—R. A. Ramsay, Greensburg, Pa.
 EE—J. P. Berry, Greensburg, Pa.
 SA—Operators' Fuel Agency, Greensburg, Pa.

Niewanger Mine; Drift; Pittsburgh Seam, 72 in. thick.
 PO—Luxor, Pa.; SP—Same; CTY—Westmoreland; RR—Penna.
 MS—L. D. Niewanger, Luxor, Pa.
 S of H—Mules. Track gage 44 inches.
 S of M—Hand.
 EMP—50. Last years tonnage 35,776.
 SIZES SHIPT—Run of Mine.

HANEY COAL COMPANY

General Office, Clearfield, Pa.
 PR—R. M. Haney, Clearfield, Pa.
 VP—F. W. Kennedy, Philadelphia, Pa.
 TR—B. F. D. Struse, Philadelphia, Pa.
 Haney No. 1 Mine; Drift; "D" Seam, 36 inches thick.
 PO—Clearfield, Pa.; SP—Same; CTY—Clearfield; RR—P. R. R.
 S of H—Mules.
 S of M—Hand.
 Last years tonnage 1500.
 SIZES SHIPT—Run of Mine.

HANLIN COAL COMPANY.

General Office, California, Pa.
 PR—Robt. L. James, 5046 Jenkins Arcade Bldg., Pittsburgh, Pa.
 VP—John Brandon, Pittsburgh, Pa.
 TR—Miss. C. S. Campbell, Pittsburgh, Pa.
 GS—Roy Dick, California, Pa.
 EM—J. W. Miller, California, Pa.
 EE—G. W. Hammond, California, Pa.

Bradford, Dawson and Patton Mines; 2 Drifts, 1 slope; Pittsburgh Seam, 80 in. thick.
 PO—California, Pa.; SP—Same; CTY—Washington; RR—P. V. & C.
 S of H—Mules, rope. Track gage 36 in.
 S of M—2 shortwall machs.
 PP—60 H. P. fire tube boiler, 25 H. P. water tube boiler, transformer, 220 volts A. C.
 EMP—150.
 NOTE—Successors to Bradford Gas Coal Co.

HANNAN COAL COMPANY

General Office, 531 Locust St., Johnstown, Pa.
 PR—C. E. Hannan, Johnstown, Pa.
 TR—H. J. Daschbach, Pittsburgh, Pa.
 GM—R. G. Hannan, Johnstown, Pa.
 GS—H. G. Hannan, Johnstown, Pa.
 PA—R. G. Hannan, Johnstown, Pa.
 EM—Owen & Plummer, Inc., Johnstown, Pa.
 SA—R. G. Hannan, Johnstown, Pa.

Hannan Mine; Drift; E Seam, 42 in. thick.
 PO—Johnstown, Pa.; SP—Same; CTY—Cambria; RR—P. & O.
 S of H—Mules. Track gage 36 in.
 S of M—2 shortwall machs.
 PP—Power purchased, 220 volts A. C., 2 pumps.
 EMP—22. Last years tonnage 26,000.
 SIZES SHIPT—Run of Mine.

HANOVER COAL CO.

General Office, 1107 Bessemer Bldg., Pittsburgh, Pa.
 PR—W. J. Sprow, Sandusky, O.
 VP—A. C. Beetham, Reliance, O.
 TR—C. M. Wyrick, Reliance, O.
 GS—W. C. Kenney, Hanlin Station, Pa.
 PA—E. B. Graham, 1107 Bessemer Bldg., Pittsburgh, Pa.
 CE—Orion Koller, Wheeling, W. Va.
 EE—L. Crawford, Hanlin Station, Pa.
 SA—Lake Erie Coal Co., Pittsburgh, Pa.

Hanlin Mine; Stripping; Pittsburgh Seam, 52 in. thick.
 PO—Hanlin Station, Pa.; SP—Same; CTY—Washington; RR—Panhandle.
 MINE MGR—Geo. D. Rowland, 1107 Bessemer Bldg., Pittsburgh, Pa.
 MS—W. C. Kenney, Hanlin Station, Pa.
 S of H—Steam loco. Track gage 36 in.
 S of M—Elec. shovels.
 PP—Power purchased, Transformer 440 volts A. C., 2 pumps.
 EMP—35. Last years tonnage 65,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens, Picking Tables.

HAPPY HOLLOW FUEL COMPANY

General Office, 911 Walnut St., Versailles, Pa.
 TR—Geo. A. Farmer, Versailles, Pa.
 GM—Geo. A. Farmer, Versailles, Pa.
 GS—Albert C. Farmer, Versailles, Pa.
 PA—Geo. A. Farmer, Versailles, Pa.
 CE—Thos. E. Herron, Irwin, Pa.

Elia May No. 2 Mine; Slope; Pittsburgh Seam, 66 inches thick.
 PO—Versailles, Pa.; SP—Same; CTY—Allegheny; RR—P. & L. E.
 S of H—Mules and electric locos. Track gage 42 inches.
 S of M—Chain breast machs.
 PP—Purchase power. 440 volts A. C. Daily tonnage 100.
 SIZES SHIPT—Run of Mine.

HARAH COAL & COKE COMPANY

General Office, Uniontown, Pa.
 PR—G. S. Harah, Uniontown, Pa.
 VP—W. W. Farball, Uniontown, Pa.
 TR—E. D. Brown, Uniontown, Pa.
 GM—H. R. Sackett, Smithfield, Pa.
 GS—H. R. Sackett, Smithfield, Pa.
 PA—H. R. Sackett, Smithfield, Pa.
 CE—Homer L. Burchinal, Uniontown, Pa.
 EM—Edw. Burchinal, Gans, Pa.
 SCO—Baer & Sproul, Outcrop, Pa.

Harah Mine; Drift; Pittsburgh Seam, 72 inches thick.
 PO—Outcrop, Pa.; SP—Same; CTY—Fayette; RR—B. & O.
 S of H—Mule, trolley pole type. Track gage 44 inches.
 S of M—3 shortwall machs.
 PP—2 fire tube boilers, 200 H. P., 1 gen. unit, 500 volts D. C., 5 pumps.
 EMP—60. Daily output, 500 tons.
 SIZES SHIPT—Run of Mine.
 Old information.

HARBISON MINING AND MFG. CO.

General Office, Pittsburgh, Pa.
 PR—John M. Greck, Pittsburgh, Pa.
 TR—M. Wylie, " "
 PA—John M. Greck, " "
 MM—F. Sabatlnna, Harbison, Pa.

SteHla Mine; Drift; Freeport Seam, 36 to 48 inches thick.
 PO—Freeport, Pa.; SP—Harbison, Pa.; CTY—Armstrong; RR—Penna., Butler Br.
 S of H—Mules and gravity. Track gauge 42 in.
 S of M—Hand.
 PP—3 boilers, total 400 H. P., 2 gen. units, 5 pumps.
 EMP—50. Last fiscal year output, 12,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump, Block.
 PREP. EQUIPT—Screens.
 Old information.

HARBISON-WALKER REFRACTORIES CO.

General Office, Pittsburgh, Pa.
 PR—J. E. Lewis, Pittsburgh, Pa.
 VP—N. McQuillen, Pittsburgh, Pa.
 TR—Wm. Walker, Pittsburgh, Pa.
 GM—J. E. Lewis, Pittsburgh, Pa.
 GS—H. B. Campbell, Portsmouth, O.
 PA—C. T. Stewart, Pittsburgh, Pa.
 CE—L. C. Morganroth, Pittsburgh, Pa.
 EM—W. E. Pick, Portsmouth, O.
 EE—W. C. Harth, Pittsburgh, Pa.
 SCO—Vulcan Trading Co. Buyer, W. J. Usher, Clearfield, Pa.

Plane Mine; Drift; B Seam, 36 inches thick.
 PO—Woodland, Pa.; SP—Same; CTY—Clearfield; RR—Penna. and N.Y.C.
 MS—J. W. Baker, Woodland, Pa.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 PP—Power purchased. Transformer 220 volts A. C.
 EMP—30. Last years tonnage 20,000.
 SIZES SHIPT—Run of Mine.

Croft Mine; Drift; E Seam, 41 inches thick.
 PO—Surveyor, Pa.; SP—Same; CTY—Clearfield; RR—N.Y.C.
 MS—W. A. Aughenbough, Surveyor, Pa.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 PP—Power purchased, Transformer 23,000 to 220 volts A. C., 3 pumps.
 EMP—70. Last years tonnage 35,000.
 SIZES SHIPT—Run of Mine.

Retort Mine; Drift; B Seam, 53 inches thick.
 PO—Sandy Ridge, Pa.; SP—Same; CTY—Centre; RR—Penna.
 MS—Chas. Heath, Sandy Ridge, Pa.
 S of H—Mules and elec. and steam locos. Track gage 36 inches.
 S of M—1 chain breast type and long-wall mach.
 PP—Power purchased, Transformer 23,000 to 230 volts A. C., 4 pumps.
 EMP—65. Last years tonnage 35,000.
 SIZES SHIPT—Run of Mine.

HARDING COAL COMPANY

General Office, Elk Lick, Pa.
 PR—James Harding, Elk Lick, Pa.
 TR—John Harding, Elk Lick, Pa.

GM—James Harding, Elk Lick, Pa.
 GS—John Harding, Elk Lick, Pa.
 CE—John Harding, Elk Lick, Pa.
 EM—J. J. Hobbittzell, Meyersdale, Pa.

Margaret Mine; Drift; Pittsburgh and Red Stone Seams, 54 inches thick.
 PO—Elk Lick, Pa.; SP—Ex., Meyersdale, Pa.; P.R., Boynton, Pa.; CTY—Somerset; RR—B. & O.
 S of H—Mules. Track gage 42 inches.
 S of M—Hand.
 EMP—20. Last years tonnage 21,500.
 SIZES SHIPT—Run of Mine.

HARDING, T. C.

Now Wilmore Basin Coal Co.

HARMON CREEK COAL CO.

General Office, 729 Oliver Bldg., Pittsburgh, Pa.
 PR—Geo. H. Flinn, 729 Oliver Bldg., Pittsburgh, Pa.
 VP—John A. Bell, 729 Oliver Bldg., Pittsburgh, Pa.
 TR—John A. Bell, Jr., 729 Oliver Bldg., Pittsburgh, Pa.
 GM—E. H. Dinkle, 729 Oliver Bldg., Pittsburgh, Pa.
 GS—P. J. Doyle, 729 Oliver Bldg., Pittsburgh, Pa.
 PA—W. J. Turnbull, 729 Oliver Bldg., Pittsburgh, Pa.
 EM—M. W. Horgan, Burgettstown, Pa.
 SCO—Harmon Supply Co.; Buyer, H. W. Rhody, Burgettstown, Pa.

Fulton Mine; Drift; Pittsburgh Seam, 54 in. thick.
 PO—Burgettstown, Pa.; SP—Same; CTY—Washington; RR—P. C. C. & St. L.
 MS—Samuel McKay, Burgettstown, Pa.
 S of H—6 trolley pole type and 1 steam loco. Track gage, 42 in.
 S of M—3 shortwall machs.
 PP—Power purchased, 2 pumps.
 EMP—150. Daily output, 750 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

Florence Mine; Stripping, Pittsburgh Seam, 54 in. thick.
 PO—Burgettstown, Pa.; SP—Same; CTY—Washington; RR—P. C. C. & St. L.
 MS—Frank Huttenpiller, Burgettstown, Pa.
 S of H—4 steam locos. Track gage, 42 inches.
 S of M—Hand.
 PP—9 fire tube boilers, 3 pumps.
 EMP—200. Daily output, 1,200 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens, Picking Tables.

Wilson Mine; Stripping, Pittsburgh Seam, 54 in. thick.
 PO—Burgettstown, Pa.; SP—Same; CTY—Washington; RR—P. C. C. & St. L.
 MS—Frank Huttenpiller, Burgettstown, Pa.
 S of H—1 steam loco. Track gage, 56½ in.
 S of M—Hand.
 PP—4 fire tube boilers.
 EMP—100. Daily output, 400 tons.
 SIZES SHIPT—Run of Mine.

HARPER, THOS. COAL CO.

General Office, Turtle Creek, Pa.
 TR—Thos. R. Harper, Turtle Creek, Pa.
 GM—Thomas Harper, Turtle Creek, Pa.
 GS—Thos. R. Harper, Turtle Creek, Pa.
 PA—Thos. R. Harper, Turtle Creek, Pa.
 EM—Harrop-Hopkins, Pittsburgh, Pa.
 EE—Turtle Creek Electric Co., Turtle Creek, Pa.
 SA—Eaton Rhodes & Co., Pittsburgh, Pa.

Harper No. 1 Mine; Drift; Pittsburgh Seam, 66 in. thick.
 PO—Turtle Creek, Pa.; SP—Same; CTY—Allegheny.
 S of H—Mules and 1 steam loco. Track gage, 44 in.
 S of M—1 chain breast type and 1 shortwall machs.
 PP—M. G. set, 250 volts D. C., 1 175 K. W. gen. unit, 250 volts D. C.
 EMP—63. Daily output, 200 tons.
 SIZES SHIPT—Run of Mine.

Plum Creek Mine; Drift; Pittsburgh Seam, 54 in. thick.
 PO—Turtle Creek, Pa.; SP—Unity Station, Pa.; CTY—Allegheny; RR—P. R. R.
 S of H—Mules and 1 trolley pole type loco. Track gage, 44 in.
 S of M—1 shortwall mach.
 PP—Power purchased, 2300 volts A. C. M. G. Set, 200 K. W., 500 volts D. C.
 EMP—35. Daily output, 150 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Screens.

HARRIGER COAL COMPANY
General Office, DuBois, Pa.
OPERATING: Wm. Harriger, DuBois, Pa.
SA—W. A. Conne, DuBois, Pa.

Walter Mine; Slope; Kittanning Seam, 42 inches thick.
PO—Stratonsville, Pa.; SP—Same; CTY—Clarion; RR—L. E. & F.
S of H—Mules, rope and steam locus
S of M—Hand.
PP—2 water tube boilers.
EMP—20.
SIZES SHIPT—Run of Mine.

HARRIS ORDS. COAL MINING CO.
General Office, 522 5th Ave., New York, N. Y.
PR—C. C. Harris, West Decatur, Pa.
TR—A. B. Harris, West Decatur, Pa.
GM—A. B. Harris, West Decatur, Pa.
PA—A. B. Harris, West Decatur, Pa.
SA—George D. Harris & Co., New York, N. Y.

Red Jacket and No. 4 Mines; Drift; Miller Seam, 48 in. thick.
PO—West Decatur, Pa.; SP—Blue Ball, Pa.; CTY—Clearfield, RR—Penna., Tyrone & Clearfield Br.
MS—S. N. Hewlett, Philadelphia, Pa.
S of H—Mules.
S of M—Hand.
PP—3 pumps.
Daily tonnage 100.
SIZES SHIPT—Run of Mine.
Note—Formerly operated by Ajax-Hocking Coal Co.

HARRIS, JAS. & SONS.
General Office, Lilly, Pa.
PR—James Harris, Lilly, Pa.
GM—Wm. Harris, Lilly, Pa.
GS—George Harris, Lilly, Pa.

Harris No. 2 Mine; Drift; Miller, Bard, Bridger Seams, 42 in. thick.
PO—Lilly, Pa.; SP—Same; CTY—Cambria; RR—P. B. R.
S of H—Mules and rope, Track gage 36 in.
S of M—Hand.
PP—1 60 H. P. water tube boiler.
EMP—10. Last years tonnage 10,000.
SIZES SHIPT—Run of Mine.

HARRIS, WM. COAL CO.
General Office, Philipsburg, Pa.
PR—Wm. E. Harris, Philipsburg, Pa.
TR—Wm. Harris, Jr., Philipsburg, Pa.
GS—Wm. E. Harris, Philipsburg, Pa.

Lane No. 1 Mine; Drift; D and E Seams; 36-56 in. thick.
PO—Philipsburg, Pa.; SP—Same; CTY—Clearfield; RR—N. Y. C.
S of H—Mules. Track gage 36 in.
S of M—Hand.
EMP—18. Last years tonnage 15,000.
SIZES SHIPT—Run of Mine.

HART-MARKLE COAL MINING COMPANY
General Office, 137 N. 6th St., Connellsville, Pa.
PR—J. W. Overholt, Mt. Pleasant, Pa.
VP—O. D. Zuck, Mt. Pleasant, Pa.
TR—Geo. A. Markle, Connellsville, Pa.
GM—J. W. Overholt, Mt. Pleasant, Pa.
GS—Geo. A. Markle, Connellsville, Pa.
PA—Geo. A. Markle, Connellsville, Pa.
SA—Geo. A. Markle, Connellsville, Pa.

Markle Mine; Drift; Redstone Seam, 48 in. thick.
PO—West Newton, Pa.; SP—Same; CTY—Westmoreland; RR—P. & L. E.
MS—D. A. Truap, West Newton, Pa.
S of H—Mules. Track gage 36 in.
S of M—2 elec. machs.
PP—Power purchased, 440 volts A. C.
EMP—25 to 30. Daily tonnage 200.
SIZES SHIPT—Run of Mine.

HARTLEY COAL COMPANY.
General Office, Smock, Pa.
PR—Thomas Hartley, Adah, Pa.
TR—Lawrence Hartley, Smock, Pa.
GM—T. W. English, Brownsville, Pa.
GS—T. W. English, Brownsville, Pa.
PA—Lawrence Hartley, Smock, Pa.
CE—T. W. English, Brownsville, Pa.
SA—Arden Fuel Co., Uniontown, Pa.

Hartley No. 1 Mine; Drift; Waynesburg Seam; 60 in. thick.
PO—Adah, Pa.; SP—Gates, Pa.; CTY—Fayette; RR—Monongahela.
MS—Chas. Burns, New Salem, Pa.
S of H—Mules.
S of M—Hand.
EMP—25. Last years tonnage 35,000.
SIZES SHIPT—Run of Mine.

HARTLEY-SPACKMAN COAL COMPANY
General Office, Philipsburg, Pa.
PR—H. T. Jones, Philipsburg, Pa.
TR—J. P. Spackman, Grasslats, Pa.
GM—Robt. Hartley, Philipsburg, Pa.
EM—Geo. Ayres, Philipsburg, Pa.
SA—Spring Coal Co., Boston, Mass.

Jones No. 1 Mine; Drift; Seam 44 inches thick.
PO—Philipsburg, Pa.; SP—Same; CTY—Centre; RR—Penna.

S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—15. Daily output, 50 tons.
SIZES SHIPT—Run of Mine.
Old Information

HARVE-MACK COAL COMPANY
General Office, Clymer, Pa.
PR—H. H. Hetrick, Clymer, Pa.
TR—O. C. Hoffman, Clymer, Pa.
GM—H. H. Hetrick, Clymer, Pa.
GS—H. H. Hetrick, Clymer, Pa.
PA—H. H. Hetrick, Clymer, Pa.
EM—Thomas Peater, Indiana, Pa.
Additional Information on Page 980

Harve Mack Nos 1 and 2 Mines; Drift; Miller or R Seam, 41 in. thick.
PO—Starford, Pa.; SP—Same; CTY—Indiana; RR—P. B. R. and N. Y. C.
MS—Henry Edwards, Starford, Pa.
S of H—2 storage battery and 2 trolley pole type locus. Track gage 36 in.
S of M—2 chain breast machs.
PP—Power purchased, transformers 2200 volts A. C., 2—100 K. W. M. G. Sets, 250 volts D. C. 5 pumps.
EMP—110. Last years tonnage 47,000.
SIZES SHIPT—Run of Mine.

HARVEY COAL CORPORATION.
General Office, Clarion, Pa.
PR—J. W. F. Wilkinson, Clarion, Pa.
VP—John Ballentine, Clarion, Pa.
TR—J. M. Harvey, Clarion, Pa.
GM—J. M. Harvey, Clarion, Pa.
GS—J. M. Harvey, Clarion, Pa.
EM—C. E. Imel, Clarion, Pa.
SA—Phero Supply Co., Buyer, Wm. Phero, Clarion, Pa.
SA—Clarion Bituminous Coal Co., Clarion, Pa.

Harvey Mine; Drift; Lower Kittanning Seam, 36 in. thick.
PO—Clarion, Pa.; SP—Same; CTY—Clarion; RR—L. E. & F. & C.
MS—Wm. Madill, Clarion, Pa.
S of H—1 5-ton storage battery loco. and mules, Track gage 36 in.
S of M—Hand.
PP—1 pump.
EMP—46. Last years tonnage 30,000.
SIZES SHIPT—Run of Mine.

HASTINGS COAL AND COKE CO.
General Office, Cherry Tree, Pa.
PR—Wm. H. Donner, Buffalo, N. Y.
VP—Floyd Smith, Buffalo, N. Y.
ASST TR—Pearce F. Boyer, Buffalo, N. Y.
GM—Ralph A. Butler, Cherry Tree, Pa.
GS—Ralph A. Butler, Cherry Tree, Pa.
PA—Ralph A. Butler, Cherry Tree, Pa.
SA—Kinport Supply Co., Buyer, Stanley Polskey, Kinport, Pa.

Kinport Nos 1 and 2 Mines; Slope and Drift; Lower Freeport Seam, 42 in. thick.
PO—Cherry Tree, Pa.; SP—Kinport, Pa.; CTY—Cambria; RR—P. B. R.
S of M—4 shortwall machs.
S of H—3 trolley pole type locus. Track gage 36 inches.
PP—Power purchased, transformer 6600-2200 volts A. C., 2—150 K. W. M. G. Sets, 275 volt D. C. 6 pump.
EMP—88. Last years tonnage 54,000.
SIZES SHIPT—Run of Mine.

HASTINGS FUEL COMPANY
General Office, Hastings, Pa.
PR—H. K. Cortright, Philadelphia, Pa.
VP—J. E. Evans, Ebensburg, Pa.
TR—A. A. Boucher, Beaverdale, Pa.
GM—E. M. Cortright, Hastings, Pa.
GS—E. M. Cortright, Hastings, Pa.
PA—A. A. Boucher, Beaverdale, Pa.
EM—E. M. Cortright, Beaverdale, Pa.
SA—Cortright Coal Co., Philadelphia, Pa.

Hastings No. 1 Mine; Drift; C Prime Seam, 52 in. thick.
PO—Hastings, Pa.; SP—Same; CTY—Cambria; RR—Penna.
S of H—Electric locus. Track gage 42 in.
S of M—Shortwall machs.
PP—Power purchased, Transformer 2,300 to 250 volts A. C., M. G. sets, 250 volts D. C.
EMP—30.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables

HAW COAL COMPANY
General Office, St. Marys, Pa.
PR—A. C. Haw, Kersy, Pa.
TR—W. G. Haw, Kersy, Pa.
GM—A. C. Haw, Kersy, Pa.
GS—A. C. Haw, Kersy, Pa.
PA—A. C. Haw, Kersy, Pa.
SA—Haw Coal Co., Kersy and St. Marys, Pa.

Haw Mine; Drift and Stripping; Lower Freeport and Kittanning Seams, 45 inches thick.
PO—Kersy, Pa.; SP—Same; CTY—Elk; RR—P. B. & N.
S of H—Mules. Track gage 30 in.
S of M—Hand.
PP—1 pump.
EMP—25. Last years tonnage 30,000.
SIZES SHIPT—Run of Mine.

HAWKINS COAL COMPANY
General Office, Philipsburg, Pa.
PR—J. E. Hawkins, Philipsburg, Pa.
GM—J. M. Hawkins, Philipsburg, Pa.
GS—J. M. Hawkins, Philipsburg, Pa.

Hawkins No. 1 Mine; Drift; D Seam; 36 inches thick.
PO—Philipsburg, Pa.; SP—Same; CTY—Clearfield; RR—Penna.
S of H—Mules. Track gage 30 inches.
S of M—Hand.
SIZES SHIPT—Run of Mine.

HAY, F. W. COAL COMPANY
New Hocking Coal Company.

HAYS, R. B. COAL COMPANY
General Office, Masontown, Pa.
OWNER—R. B. Hays, Masontown, Pa.
PR—R. B. Hays, Masontown, Pa.
EM—Donahill & Gans, Uniontown, Pa.

Hays Mine; Slope; Sewickley Seam; 60 in. thick.
PO—Newcomer, Pa.; SP—Frt. Newcomer, Pa.; Exp. Uniontown, Pa.; CTY—Fayette; RR—P. B. R.
MS—W. T. McGee, Uniontown, Pa.
S of H—Mules, rope and electric. Track gage 12 inches.
S of M—Hand and shortwall machs.
PP—Power purchased Transformer 2,200-220 volts A. C., 3 pumps.
EMP—10. Last years tonnage 50,000.
SIZES SHIPT—Run of Mine.

HAYDEN COAL COMPANY
General Office, Uniontown, Pa.
PR—D. A. Hayden, Uniontown, Pa.
TR—D. A. Hayden, Uniontown, Pa.
GM—D. A. Hayden, Uniontown, Pa.
GS—D. A. Hayden, Uniontown, Pa.
PA—D. A. Hayden, Uniontown, Pa.
EM—L. B. Woodhill, Smithfield, Pa.
SA—Union Supply Co., No. 45, Buyer, Frank Rankin, Newcomer, Pa.
SA—D. A. Hayden, Uniontown, Pa.

Hayden Nos. 1, 2 & 3 Mines; Drift, Slope & Stripping; Pittsburgh Seam, 85 inches thick.
PO—Newcomer, Pa.; SP—Uniontown, Pa.; CTY—Fayette; RR—Penna.
S of H—Mules. gasoline loco. Track gage 42 inches.
S of M—Hand.
PP—2 pumps.
EMP—20. Last fiscal year output, 5,000 tons.
SIZES SHIPT—Run of Mine.

HAYES GAS COAL COMPANY
General Office, Connellsville, Pa.
PR—A. C. Stickle, Connellsville, Pa.
TR—A. C. Stickle, Connellsville, Pa.
GM—G. Brooks Ross, Connellsville, Pa.
GS—G. Brooks Ross, Connellsville, Pa.
PA—M. A. McKevitt, Connellsville, Pa.
SA—International Fuel & Iron Corp., Pittsburgh, Pa.

Smith Mine; Drift; Pittsburgh Seam; 72 inches thick.
PO—Hayes, Pa.; SP—Same; CTY—Allegheny; RR—Wheeling Div., B. & O.
MS—David Smith, Hayes, Pa.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
SIZES SHIPT—Run of Mine.

HAYS COAL COMPANY
General Office, 949 Main St., Rockwood, Pa.
PR—G. J. Hay, Rockwood, Pa.
TR—F. W. Hay, Rockwood, Pa.
GS—F. W. Hay, Rockwood, Pa.
PA—F. W. Hay, Rockwood, Pa.
SA—McCarthy, Gilmore & Co., Pittsburgh, Pa.

Hays Mine; Drift; Lower Freeport Seam, 54 inches thick.
PO—Rockwood, Pa.; SP—Same; CTY—Somerset; RR—B. & O.
MS—Geo. Pritts, Rockwood, Pa.
S of H—Mules and gasoline locus. Track gage 42 inches.
S of M—Hand.
PP—Power purchased.
EMP—24. Daily tonnage 150.

HAZELWOOD COAL CO.
Out of business.

HEATON, ISAAC F. & SON.
General Office, Moshannon, Pa.
PR—Isaac F. Heaton, Moshannon, Pa.
TR—Walter F. Heaton, Moshannon, Pa.
GM—Isaac F. Heaton, Moshannon, Pa.
GS—Walter F. Heaton, Moshannon, Pa.
PA—Walter F. Heaton, Moshannon, Pa.
SA—Walter Heaton, Moshannon, Pa.

Pioneer No. 3 Mine; Drift; "B" Seam, 36 to 54 in. thick.
PO—Moshannon, Pa.; SP—Gorton, Pa.; CTY—Center; RR—N. Y. C.
S of H—Mules, rope, trolley pole type locus. Track gage 36 in.
S of M—2 elec. mining machs.
PP—Power purchased, 250 volts D. C.
SIZES SHIPT—Run of Mine.

HECLA COAL & COKE COMPANY.
General Office, Pittsburgh, Pa.
PR—J. H. Hillman, Jr., Pittsburgh, Pa.
ASST. to PR—W. L. Affolder, Pittsburgh, Pa.

VP—A. R. Sheets, Pittsburgh, Pa.
TR—H. W. Flecken, Pittsburgh, Pa.
GS—Frank R. Dunbar, First National Bank Bldg., Pittsburgh, Pa.
ASST GS—M. D. Cooper, Brownsville, Pa.
SA—W. W. Gillett, Pittsburgh, Pa.
EM—J. D. Martin, Pittsburgh, Pa.
SAO—Hillman Supply Co., Buyer, M. P. Sullivan, Pittsburgh, Pa.
SA—Hillman Coal & Coke Co., Pittsburgh, Pa.

Griffin No. 1 Mine; Drift; Connellsville Seam, 102 in. thick.
PO—Masontown, Pa.; SP—Ideld, Pa.; Exp. Masontown, Pa.; CTY—Fayette; RR—Monongahela.
MS—D. R. DePriest, Masontown, Pa.
SM—C. L. Sangston, Masontown, Pa.
S of M—3 shortwall machs.
S of H—Mules and 4 trolley pole type locus. Track gage, 36 in.
PP—Power purchased, 250 volts D. C. 2 fire tube boilers, 275 H. P., 4 pumps.
EMP—235. Last years tonnage 148,857 (coal), 82,868 tons (Coke), Coke ovens, 200 Rectangular.
SIZES SHIPT—Run of Mine.

Griffin No. 2 Mine; Slope; Pittsburgh Seam, 84-96 in. thick.
PO—Masontown, Pa.; SP—Ideld, Pa.; CTY—Fayette; RR—Monongahela.
MS—D. R. DePriest, Masontown, Pa.
SM—C. L. Sangston, Masontown, Pa.
S of H Mules and 3 trolley pole type locus. Track gage, 36 in.
S of M—10 shortwall machs.
PP—Power purchased, transformer 6600-2200 volts A. C., 1 M. G. Set, 250 volts D. C., 2—200 K. W. engine gen. units, 250 volts D. C., 2 fire tube boilers, total 800 H. P., 9 pumps.
EMP—198. Last years tonnage 151,067 (Coal), 81,403 (Coke), Coke ovens 196 Bee Hive.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

Isabella Mine; Shaft; Connellsville Seam, 102 in. thick.
PO—Hilleoke, Pa.; SP—Isabella, Pa.; CTY—Fayette; RR—Monongahela.
MS—F. W. Howarth, Hilleoke, Pa.
SM—R. C. Martin, Hilleoke, Pa.
S of H—Mules and 4 trolley pole type locus. Track gage, 44 in.
S of M—16 shortwall machs., total 1700 H. P., 2—200 K. W. engine gen. units, 550 volts D. C., 16 pumps.
EMP—383. Last years tonnage 414,675 (Coal) 153,730 (Coke), Coke ovens 124 Bee Hive, 136 Rectangular.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

Humphreys Mine sold to Humphreys Coal & Coke Company.

Crystal Mine; Drift; Lower Connellsville Seam, 72 in. thick.
PO—Gans, Pa.; SP—Cheat Haven, Pa.; CTY—Fayette; RR—B. & O.
MS—W. E. Winebrenner, Gans, Pa.
SM—J. S. McNulty, Gans, Pa.
S of H—Mules and 1 trolley pole type loco. Track gage, 44 in.
S of M—3 shortwall machs.
PP—Power purchased, transformer 6600-2300-440 volts A. C. 1—150 K. W. M. G. Set, 250 volts D. C., 1 elec. hoist, 75 H. P., 7 pumps.
EMP—123. Last years tonnage 94,701 (Coal), 56,893 (Coke), Coke ovens 118 Bee Hive.

H. E. F. COAL COMPANY
Out of Business.

HEFREN-EISWERTH COAL COMPANY
General Office, Warren, Pa.
GM—J. F. Elsworth, Lucinda, Pa.
GS—J. F. Elsworth, Lucinda, Pa.
SA—C. A. Hefren, Warren, Pa.

Karns Mine; Drift; Lower Kittanning Seam, 42 in. thick.
PO—Waterson, Pa.; SP—Same; CTY—Clarion; RR—L. E. F. & C.
S of H—Mules.
S of M—Hand.
EMP—10. Last years tonnage 5,000 tons.
SIZES SHIPT—Run of Mine.

HEGARTY'S, S. SONS.
GM—W. W. Hegarty, Coalport, Pa.
GS—W. W. Hegarty, Coalport, Pa.
MM—W. W. Hegarty, Coalport, Pa.
PA—W. W. Hegarty, Coalport, Pa.
CE—W. W. Hegarty, Coalport, Pa.
ED—Plum Swagers, Coalport, Pa.
SAO—Address the Company, Buyer, W. W. Hegarty, Coalport, Pa.

(Continued on Next Page)

Hegarty's, S. Sons—Cont.

Oakland No. 1 Mine; Drift; "B" Seam, 58 in. thick.
PO—Coalport, Pa.; SP—Same; CTY—Clearfield; RR—Penna.
S of H—Mules. Track gauge 36 in.
S of M—Hand.
EMP—15. Last years tonnage 8,350.
SIZES SHIPT—Run of Mine.

Oakland No. 2 Mine; Drift; "B" Seam, 58 in. thick.
PO—Coalport, Pa.; SP—Same; CTY—Clearfield; RR—Penna.
S of H—1 gasoline loco. Track gauge 36 in.
S of M—Hand.
PP—1 return tubular boiler, total 40 H. P., 3 pumps.
EMP—36. Last years tonnage 24,144.
SIZES SHIPT—Run of Mine.

Oakland No. 3 Mine; Drift; "B" Seam.
PO—Coalport, Pa.; SP—Same; CTY—Clearfield; RR—Penna.
S of H—Rope. Track gauge 36 in.
S of M—Hand.
PP—2 return tubular boilers, 3 elec. pumps. Purchase power.
EMP—46. Last years tonnage 34,770.
SIZES SHIPT—Run of Mine.

Oakland No. 4 Mine; Drift; "C" Prime Seam, 40 in. thick.
S of H—1 gasoline loco. Track gauge 36 in.
S of M—Hand.
EMP—6. Last years tonnage 2,132.
SIZES SHIPT—Run of Mine.

HELENA COAL COMPANY.

General Office, Reynoldsville, Pa.
PR—G. O. Sharp, Brookville, Pa.
VP—J. R. Bailey, Big Run, Pa.
TR—W. H. Bell, Reynoldsville, Pa.
GM—G. O. Sharp, Brookville, Pa.
GS—G. O. Sharp, Brookville, Pa.
PA—G. O. Sharp, Brookville, Pa.
EM—Mr. Kenarr, Punxsutawney, Pa.
SA—W. H. Bell, Reynoldsville, Pa.

Helena Nos. 1 and 2 Mines; Drift; Lower Freeport Seam, 72 in. thick.
PO—R. F. D. No. 3, Brookville, Pa.; SP—Conifer, Pa.; CTY—Jefferson; RR—P. & S.
S of H—Mules and steam locos. Track gauge 36 in.
S of M—Hand.
PP—Power purchased.
EMP—30. Daily tonnage 200.
SIZES SHIPT—Run of Mine.

HENDERSON COAL CO.

General Office 1708-1711 Commonwealth Bldg., Pittsburgh, Pa.
PR—W. M. Henderson, Pittsburgh, Pa.
TR—W. M. Henderson, " "
GM—W. M. Henderson, " "
GS—Arthur McCune, Canonsburg, Pa.
PA—E. E. Elbert, Pittsburgh, Pa.
EM—H. M. Day, Canonsburg, Pa.
SCO—Henderson Supply Co., Buyer, J. C. Bortz, Hendersonville, Pa.
SA—W. M. Henderson, Pittsburgh, Pa.

Irons mine abandoned

Kennedy Mine, Drift, Pittsburgh Seam, 5 ft. 6 in. thick.
PO—Webster, Pa.; SP—Same; CTY—Westmoreland; RR—P. & L. E.
S of H—4 Elec. loco.; track gauge 42 in.
S of M—4 elec. mach. and pick mining.
PP—Purchase power.
EMP—75. Last years tonnage 24,149.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Bar Screens.
Umpire mine abandoned.

No. 1 Mine; Shaft; Pittsburgh Seam, 66 in. thick.
PO—Henderville, Pa.; SP—Same; CTY—Washington; RR—Montour.
S of H—3 elec. locos. Track gauge 42 in.
S of M—13 elec. machs.
PP—Power purchased.
EMP—250. Last years tonnage 300,294.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Pickling Tables, Loading Booms.

No. 2 Mine
PO—Finleyville, Pa.; CTY—Washington, RR—B. & O.
S of M—3 elec. cutting machs.
PP—Power purchased.
EMP—100. Daily tonnage 500.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.

HENRIETTA COAL COMPANY

General Office, Houtzdale, Pa.
PR—Harry Boulton, Houtzdale, Pa.
TR—Asa Spencer, Houtzdale, Pa.
GM—Asa Spencer, Houtzdale, Pa.
GS—John C. Wilson, Houtzdale, Pa.
PA—Asa Spencer, Houtzdale, Pa.

Henrietta No. 5 Mine; Slope; Moshannon Seam, 48 inches thick.
PO—Houtzdale, Pa.; SP—Same; CTY—Clearfield; RR—Penna.
S of H—Rope.
S of M—Hand.
PP—2 fire tube boilers, 100 H. P.
EMP—81. Last years tonnage 41,507.
SIZES SHIPT—Run of Mine.

HENRIETTA COAL MINING COMPANY

General Office, New York, N. Y.
PR—Geo. B. Byrd, 1208 International Commerce Bldg., New York, N. Y.
TR—Gardner Cassat, 1419 Penna. Bldg., Philadelphia, Pa.
GM—J. G. Leamer, Dunlo, Pa.
PA—J. G. Leamer, " "
EE—H. A. Roser, " "
CE—J. S. Sillyman & Co., Altoona, Pa.
Sales Manager—George R. Byrd, New York, N. Y.

Henrietta No. 2 Mine; Shaft; "B" or Miller Seam, 44 in. thick.
PO—Dunlo, Pa.; SP—Same; CTY—Cambria; RR—P. R. R., South Fork Branch.
MS—J. G. Leamer, Dunlo, Pa.
S of H—Mules, rope and 2 elec. loco., track gauge 36 in.
S of M—Hand.
PP—8 return tubular boilers, total 1200 H. P., 2 gen. units, 550 volts D. C., 3 pumps.
EMP—190. Daily tonnage 600.
SIZES SHIPT—Run of Mine.

HENRY COAL COMPANY.

General Office, Kittanning, Pa.
EM—Herbert & Henderson, Kittanning, Pa.

Henry Mine; Drift; Lower Kittanning Seam, 42 in. thick.
PO—Kittanning, Pa.; SP—Same; CTY—Armstrong; RR—P. & S.
MS—H. J. Thomas Arch St., Kittanning, Pa.
S of H—Storage battery locos. Track gauge 32 in.
S of M—Shortwall machs.
PP—Power purchased, 440 volts A. C., 3 pumps.
SIZES SHIPT—Run of Mine.

HERD & SON

General Office, Connelville, Pa.
PR—Washington Herd, Connelville, Pa.
TR—W. E. Herd, Connelville, Pa.
GM—Gordon Herd, Connelville, Pa.
PA—W. E. Herd, Connelville, Pa.
SA—W. E. Herd, Connelville, Pa.

Herd Mine; Drift; Lower Freeport Seam; 50 inches thick.
PO—Connellsville, Pa.; SP—Power, Pa.; CTY—Fayette; RR—B. & O.
MS—O. G. Herd, Connellsville, Pa.
S of H—Mules and rope, gasoline and steam loco. Track gauge 32 inches.
S of M—Shortwall mach.
PP—Power purchased. Fire tube and water tube boilers.
SIZES SHIPT—Run of Mine, Slack, Lump.
Old Information.

HERMINIE COAL CO.

Now part of Fair Haven Coal Co.

HERTZOG COAL COMPANY

General Office, Gans, Pa.
PA—J. A. Hertzog, Cheat Haven, Pa.
TR—F. L. Ruble, Gans, Pa.
GM—F. L. Ruble, Gans, Pa.
GS—F. L. Ruble, Gans, Pa.
PA—F. L. Ruble, Gans, Pa.
SA—F. L. Ruble, Gans, Pa.
SCO—Atchison Supply Co., Gans, Pa.

Hertzog Mine; Drift; Pittsburgh Seam; 60 inches thick.
PO—Gans, Pa.; SP—Same; CTY—Fayette; RR—R. & O.
SM—Frank Brotzman, Cheat Haven, Pa.
S of H—Mules. Track gauge 42 inches.
S of M—Hand.
EMP—18. Last years tonnage 30,000.

HESS COAL CO.

General Office, Punxsutawney, Pa.

Hess No. 1 Mine.
PO—Savan, Pa.; RR—B. R. & P.
No report.

HETRICK COAL COMPANY

General Office, Hastings, Pa.
OWNER—Chas. Hetrick, Hastings, Pa.
EM—E. W. Hess, Clearfield, Pa.

Hetrick Nos. 1 and 2 Mines; Drift; "B" Seam; 38 in. thick.
PO—Leontes Mills, Pa.; SP—Eald Hill, Pa.; CTY—Clearfield; RR—N. Y. C.
MS—W. E. Hetrick, Leontes Mills, Pa.
S of H—Mules and electric loco. Track gauge 36 inches.
S of M—Electric and chain breast machs.
PP—Power purchased. Transformer 2,200 to 250 volts D. C.
EMP—55. Last years tonnage 20,000.
SIZES SHIPT—Run of Mine.

HEVERLY COAL COMPANY

Now part of Liberty Coal Mining Co.

HIGHLAND COAL COMPANY

General Office, Somerset, Pa.
PR—C. F. Roy, Somerset, Pa.
TR—C. F. Roy, Somerset, Pa.
GM—R. D. Roy, Somerset, Pa.
PA—R. D. Roy, Somerset, Pa.
SA—MacGregor Coal Co., Somerset, Pa.

Highland Mine; Drift; C Prime Seam; 48 to 60 inches thick.
PO—Somerset, Pa.; SP—Same; CTY—Somerset; RR—B. & O.
MS—Geo. H. Watson, Somerset, Pa.
S of H—Mules. Track gauge 42 inches.
S of M—Hand.
PP—Power purchased. Transformer 2,200 to 220 volts A. C.
EMP—100. Daily output, 500 tons.
SIZES SHIPT—Run of Mine.
Note—Successors to Scull Coal Co.

HIGHLAND FUEL CO.

General Office, Uniontown, Pa.

Stabler Mine.
PO—Waltersburg, Pa.; CTY—Fayette; RR—Penna.
No report.

HIGHLAND VIEW COAL CO.

General Office, Kittanning, Pa.
PR—John R. Herbert, Kittanning, Pa.
VP—J. N. Henderson, Kittanning, Pa.
TR—O. N. Wilson, Kittanning, Pa.
GM—J. N. Henderson, Kittanning, Pa.
PA—John R. Herbert, Kittanning, Pa.
EM—Herbert & Henderson, Kittanning, Pa.

Highland View Mine; Drift; Lower Kittanning Seam, 42 inches thick.
PO—Kittanning, Pa.; SP—Same; CTY—Armstrong; RR—P. & S.
MS—J. N. Henderson, Kittanning, Pa.
S of H—Mules and electric loco. Track gauge 30 inches.
S of M—Chain breast and shortwall machs.
PP—Power purchased, 100 K. W. M. G. sets, 250 volts D. C.
EMP—38. Last years tonnage 26,000.
SIZES SHIPT—Run of Mine.

HILLOA COAL COMPANY

General Office, 517 Union Arcade, Pittsburgh, Pa.
OWNER—J. J. McAlister, Pittsburgh, Pa.

Hilda Mine; Drift; Seam, 72 inches thick.
PO—Trafford, Pa.; SP—Blackburn, Pa.; CTY—Westmoreland; RR—Penna.
MS—P. J. Joyce, Trafford, Pa.
S of H—Mules.
S of M—Hand.
SIZE SHIPT—Run of Mine.

HILL BROS COAL COMPANY.

General Office, Morrisdale, Pa.
TR—W. D. Hill, Morrisdale, Pa.
GM—W. D. Hill, " "
GS—W. D. Hill, " "
SA—W. D. Hill, Morrisdale, Pa.

Asbman No. 4 Mine; Drift; "E" Vein, 30 in. thick.
PO—Morrisdale, Pa.; SP—Same; CTY—Clearfield; RR—N. Y. C. Hawk Run Branch.
MS—Geo. M. Hill, Morrisdale, Pa.
S of H—Mules.
S of M—Hand.
EMP—75. Daily output, 100 tons.
SIZES SHIPT—Run of Mine.

HILLCREST SMOKELESS COAL CO.

General Office, Hooversville, Pa.
PR—L. A. Meyers, Hooversville, Pa.
VP—T. H. Tipton, Hooversville, Pa.
TR—M. L. Markel, Hooversville, Pa.
GM—T. H. Tipton, Hooversville, Pa.
GS—J. H. Tipton, Hooversville, Pa.
PA—J. H. Tipton, Hooversville, Pa.
SA—M. L. Markel, Hooversville, Pa.

Hillcrest Mine; Drift; E. & D. Seams, 50-59 in. thick.
PO—Stoyestown, Pa.; SP—Same; CTY—Somerset; RR—B. & O.
S of H—Mules. Track gauge 36 in.
S of M—Hand.
EMP—16. Last years tonnage 2800.
SIZES SHIPT—Run of Mine.

HILL FUEL COMPANY, THE

General Office, Sligo, Pa.
TR—M. S. Barron, Sligo, Pa.
GM—W. I. Barnhart, Sligo, Pa.

Miller Mine; Drift; Claron and Lower Kittanning Seams, 43 inches thick.
PO—Sligo, Pa.; SP—Same; CTY—Clarion; RR—Penna.
MS—W. C. Barnhart, Sligo, Pa.
S of H—Mules. Track gauge 36 inches.
S of M—Comp. air punchers.
PP—2 fire tube boilers, 120 H. P.
EMP—45. Last years tonnage 30,000.
SIZES SHIPT—Run of Mine.

HILL TOP COAL & COKE CO., INC.

General Office, 23 W. Main St., Uniontown, Pa.
PR—A. M. Springer, R. D. No. 2, Uniontown, Pa.
TR—J. D. Springer, 23 West Main St., Uniontown, Pa.
GM—A. M. Springer, Uniontown, Pa.

GS—J. D. Springer, Uniontown, Pa.
PA—J. D. Springer, Uniontown, Pa.

Hill Top 1 & 2 Mines; Drift; Pittsburgh Seam, 108 in. thick.
PO—Uniontown, Pa.; SP—Same; CTY—Fayette; RR—Penna., B. & O.
MS—Geo. Huston, Uniontown, Pa.
S of H—Rope and mules.
S of M—Hand.
EMP—30. Daily output, 400 tons.
SIZES SHIPT—Run of Mine, Slack.

HILLMAN COAL & COKE CO.

General Office, Pittsburgh, Pa.
PR—T. W. Guthrie, Pittsburgh, Pa.
ASST. to PR—W. L. Affeder, Pittsburgh, Pa.
VP—Thos. Watson, Pittsburgh, Pa.
VP—A. B. Sheets, Pittsburgh, Pa.
TR—Ernest Hillman, Pittsburgh, Pa.
GS—Frank B. Dumbor, First National Bank Bldg., Pittsburgh, Pa.
Asst. GS—M. D. Cooper, Brownsville, Pa.
DS—C. M. Snyder, West Newton, Pa.
PA—W. W. Gillett, Pittsburgh, Pa.
EM—J. D. Martin, Pittsburgh, Pa.
EE—J. A. Malady, Pittsburgh, Pa.
SCO—Hillman Supply Company, Buyer, M. P. Sullivan, Pittsburgh, Pa.

Additional Information on Pages 726, 727

Ella Mine; Drift; Pittsburgh Seam, 72 in. thick.
PO—Sunyside, Pa.; SP—Allegheny and Webster, Pa.; CTY—Allegheny and Westmoreland; RR—P. & L. E.
MS—David Dunn, Sunyside, Pa.
SM—John Holmcek, Sunyside, Pa.
S of H—Rope and 3 trolley pole type locos. Track gauge, 44 in.
S of M—15 chain breast type and shortwall machs.
PP—Power purchased, transformer 23, 000-2200 volts, M. G. sets, 250 volts D. C., 13 pumps.
EMP—265. Last years tonnage 253,849.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

Patterson Mine; Drift; Pittsburgh Seam, 60 in. thick.
PO—Elizabeth, Pa.; SP—Wylle and Elizabeth, Pa.; CTY—Allegheny; RR—P. & L. E.
MS—Thos. Mark, Elizabeth, Pa.
S of H—Mules, rope and 4 trolley pole type locos. Track gauge 44 in.
S of M—13 chain breast type and 7 shortwall machs.
PP—Power purchased, transformer 23, 000-2200 volts, M. G. sets, 250 volts, 12 pumps.
EMP—249. Last years tonnage 198,626.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

Naomi Mine; Slope; Pittsburgh Seam, 84 in. thick.
PO—Bellevue, Pa.; SP—Fayette City, Pa.; CTY—Fayette and Westmoreland; RR—P. & L. E.
MS—Thomas Branch, Bellevue, Pa.
SM—J. H. Bittner, Bellevue, Pa.
S of H—Mules, rope and 9 trolley pole type locos. Track gauge, 44 in.
S of M—13 chain breast type machs.
PP—Power purchased, transformer 2, 000-440 volts, M. G. sets, 500 volts D. C., 9 pumps.
EMP—256. Last years tonnage 279,912.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

Edna No. 1 Mine; Slope; Pittsburgh Seam, 72 in. thick.
PO—Adamsburg, Pa.; SP—Edna and Irwin, Pa.; CTY—Westmoreland; RR—B. & O.
MS—Edw. H. Miller, Adamsburg, Pa.
SM—A. C. Leuz, Adamsburg, Pa.
S of H—Mules, rope and 3 trolley pole type locos. Track gauge, 42 in.
S of M—11 chain breast type machs.
PP—Power purchased, transformer 440 volts, gen. units, 175 K. W., 500 volts D. C., 4 fire tube boilers, 600 H. P., 12 pumps.
EMP—176. Last years tonnage 153,827.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

Edna No. 2 Mine; Shaft; Pittsburgh Seam, 72 in. thick.
PO—Wendel, Pa.; SP—Wendel and Irwin, Pa.; CTY—Westmoreland; RR—B. & O.
MS—Edw. H. Miller, Wendel, Pa.
SM—Wm. B. Clark, Wendel, Pa.
S of H—Mules and 5 trolley pole type locos. Track gauge, 42 in.
S of M—14 chain breast type machs.
PP—Power purchased. Transformer 440 volts A. C., gen. units, 1—300 K. W., 1—250 K. W., 500 volts D. C., 8 fire tube boilers total 1200 H. P., 13 pumps.
EMP—223. Last years tonnage 169,783.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

(Continued on Next Page)

Hillman Coal & Coke Co.—Cont.

Jerome Nos. 1 and 2 Mines; Shafts: Upper Kittanning Seam, 60 in. thick.
PO—Jerome, Pa.; SP—Jerome and Hollsopple, Pa.; CTY—Somerset; RR—B. & O.
MS—J. C. Trevorrow, Jerome, Pa.
SM—August Eld, Jerome, Pa.
S of H—Mules and 21 trolley pole type locos. Track gage 42 in.
S of M—27 chain breast type machs.
PP—12 line tube boilers, 1800 H. P., 5 gen. units, 1000 K. W., 250 volts D. C., 18 pumps.
EMP—567. Last years tonnage 619,680.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens, Picking Tables.

HILLMAN GAS COAL COMPANY

General Office, Pittsburgh, Pa.
PR—T. W. Guthrie, Pittsburgh, Pa.
ASST TO PR—W. L. Affolter, Pittsburgh, Pa.
VP—A. E. Sheets, Pittsburgh, Pa.
TR—R. W. Plenkun, Pittsburgh, Pa.
GS—Frank B. Dunbar, Pittsburgh, Pa.
ASST GS—M. D. Cooper, Brownsville, Pa.
PA—W. W. Gillett, Pittsburgh, Pa.
EM—J. D. Martin, Pittsburgh, Pa.
EE—J. A. Malady, Pittsburgh, Pa.
SCO—Hillman Supply Company, Buyer, M. P. Sullivan, Pittsburgh, Pa.
SA—Hillman Coal & Coke Co., Pittsburgh, Pa.

Gibson Mine; Slope, Shaft; Pittsburgh Seam, 72 in. thick.
PO—Bentleyville, Pa.; SP—Frt., Weaver, Pa., Exp., Bentleyville, Pa.; CTY—Washington; RR—Penna.
MS—A. A. Galloway, Bentleyville, Pa.
S of H—Mules, trolley pole type locos. Track gage 44 in.
S of M—Shortwall and breast machs.
PP—Transformer, 23000 to 2300-440-110 volts A. C., M. G. Set, 150 K. W., 250 volts D. C., 1—150 H. P. elec. bolst, 3 pumps.

HILLSBORO COAL COMPANY.

General Office, 300-301 Lincoln Bldg., Johnstown, Pa.
PR—Carl C. Hetzel, Cumberland, Md.
VP—Wm. F. Coale, Cumberland, Md.
TE—Carl C. Hetzel, Cumberland, Md.
GM—F. F. Osborn, 645 Franklin St., Johnstown, Pa.
GS—Frank F. Osborn, Johnstown, Pa.
PA—F. F. Osborn, Johnstown, Pa.
EM—F. F. Osborn, Johnstown, Pa.
SA—F. F. Osborn, Johnstown, Pa.

Hillsboro Mine; Drift; B or Miller Seam 48 to 54 in. thick.
PO—Johnstown, Pa.; SP—Hillsboro, Pa.; CTY—Cambria; RR—P. E. R. R. Windber Br.
S of H—Mules. Track gage, 28 in.
S of M—Hand.
Last fiscal year output, 8,000 tons.
SIZES SHIPT—Run of Mine.
Note—Mine idle.
Old information.

HILLSDALE COAL & COKE CO.

out of business.
HILLSIDE COAL CO.
General Office, Garrett, Pa.
Theodore Mine
PO—Garrett, Pa.; CTY—Somerset; RR—B. & O.
No report.

HILLSIDE MINING COMPANY

General Office, Bradford, Pa.
PR—C. E. Foster, Bradford, Pa.
VP—D. E. Foster, Bradford, Pa.
TR—F. M. Nash, Bradford, Pa.
GM—C. E. Foster, Bradford, Pa.
GS—G. W. Foster, Jr., Kittanning, Pa.

Gnksude Mine; Drift; Lower Kittanning Seam, 40-50 inches thick.
PO—Kittanning, Pa.; SP—Same; CTY—Armstrong RR—Penna.
S of H—Mules and elec. storage battery locos. Track gage 30 inches.
S of M—Hand.
PP—Power purchased.
EMP—60. Daily tonnage 200.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.

HILLWORTH COAL COMPANY

General Office, Acosta, Pa.
PR—A. W. Hillbrand, New York City.
TR—W. F. Amworth, New York City.
GM—Thos. A. Courtney, Acosta, Pa.
GS—Thos. A. Courtney, Acosta, Pa.
PA—Thos. A. Courtney, Acosta, Pa.
EM—S. E. Dickey, Johnstown, Pa.
EE—Thos. Downie, Acosta, Pa.
SCO—Daily Supply Co., Buyer, E. M. Daily, Acosta, Pa.
Sales Agency—A. W. Hillbrand & Co., No. 1 Broadway, New York City.

Belmont No. 1 Mine; Drift; "C" Prime Seam, 42 in. thick.
PO—Acosta, Pa.; SP—Same; CTY—Somerset; RR—B. & O.

S of H—Mules. Track gage 42 in.
S of M—Hand.
EMP—20. Last fiscal year output, 1200 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.

Belmont No. 2 Mine; Drift; "C" Prime Seam, 44 in. thick.
PO—Acosta, Pa.; SP—Same; CTY—Somerset; RR—B. & O.
S of H—1 trolley pole type elec. loco. Track gage 42 in.
S of M—Hand.
PP—Purchase power, transformer 23,000 to 2200, M. G. sets, 250 volts D. C., 1 pumps.
EMP—15. Last fiscal year output, 12,500 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.

Belmont No. 3 Mine; Drift; "E" or Freeport Seam, 52 in. thick.
PO—Acosta, Pa.; SP—Same; CTY—Somerset; RR—B. & O.
S of H—1 trolley pole type elec. loco. Track gage 42 in.
S of M—Hand.
PP—Purchase power, transformer 23,000 to 2200 volts, M. G. sets, 250 volts D. C., 3 pumps.
EMP—10. Last fiscal year output, 41,200 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.

HINDLE COAL CO.

General Office, Philipsburg, Pa.
Hindle No. 1 Mine
PO—Philipsburg, Pa.; CTY—Center; RR—Penna., N. Y. C. and P. & S.
No report.

HINES COAL CO.

General Office, Land Title Bldg., Philadelphia, Pa.
PR—J. H. Weaver, Philadelphia, Pa.
GM—C. E. Sharpless, Ephensburg, Pa.
GS—C. E. Sharpless, Ephensburg, Pa.
PA—J. J. Matheson, Philadelphia, Pa.
CE—C. S. Sharpless, Ephensburg, Pa.
EM—R. Whitman, Colver, Pa.
SA—J. H. Weaver, Land Title Bldg., Philadelphia, Pa.

Hines No. 7 Mine; Drift; D Seam, 40 in. thick.
PO—Starford, Pa.; SP—Same; CTY—Indiana; RR—N. Y. C.
MS—J. J. McGonigal, Starford, Pa.
S of H—Mules. Track gage 36 in.
S of M—Hand.
EMP—48. Last years tonnage 52,000.
SIZES SHIPT—Run of Mine.

HOCKING COAL COMPANY

General Office, Meyersdale, Pa.
PR—W. G. Hocking, Meyersdale, Pa.
VP—Frank H. Hocking, Meyersdale, Pa.
TR—W. G. Hocking, Meyersdale, Pa.
GM—J. Allen Hocking, Meyersdale, Pa.
GS—W. T. Hocking, Meyersdale, Pa.
PA—Frank H. Hocking, Meyersdale, Pa.
EM—Fleck & Moore, Somerset, Pa.

Hocking Mine; Drift; B Seam; 60 inches thick.
PO—Rockwood, Pa.; SP—Hocking, Pa.; CTY—Somerset; RR—B. & O., S. & C. Branch.
S of H—Mules.
S of M—Hand and shortwall machs.
PP—Power purchased, 1 100 H. P. water tube boiler, M. G. sets, 250 volts D. C.
EMP—75. Daily output, 250 tons.
SIZES SHIPT—Run of Mine.
Note—Successors to F. W. Hay Coal Co.

HOFRICHTER, J. F.

General Office, R.F.D. No 1, Bridgeville, Pa.

Hofrichter Mine; Slope; Pittsburgh Seam, 62 inches thick.
PO—R.F.D. No 1, Bridgeville, Pa.; SP—Same; CTY—Allegheny; RR—Penna.
S of H—Mules and rope. Track gage 42 inches.
S of M—Shortwall mach.
EMP—8. Last years tonnage 12,047.
SIZES SHIPT—Run of Mine, Slack, Lump.

HOLDEN COAL COMPANY.

General Office, Clarion, Pa.
PR—J. W. F. Wilkinson, Clarion, Pa.
VP—Robert Harvey, Eleasora, Pa.
TR—J. M. Harvey, Clarion, Pa.
GM—J. M. Harvey, Clarion, Pa.
GS—J. M. Harvey, Clarion, Pa.
PA—J. M. Harvey, Clarion, Pa.
EM—C. E. Imel, Clarion, Pa.
SCO—Miles & Davis, Buyer, G. H. Miles, Corsica, Pa.
SA—Clarion Bituminous Coal Co., Clarion, Pa.

Holden Mine; Drift; Lower Kittanning Seam, 36 in. thick.
PO—Corsica, Pa.; SP—Holden, Pa.; CTY—Clarion; RR—L. E. F. & C.
MS—S. R. Madill, Summerville, Pa.

S of H—Mules and rope. Track gage 42 in.
S of M—Hand.
EMP—1 20 H. P. 110 volts A. C., 1 pump.
SIZES SHIPT—Run of Mine.

HOLLAND COAL COMPANY.

General Office, Altoona, Pa.
PR—C. A. Hughes, Altoona, Pa.
TR—L. C. Broome, Altoona, Pa.
VP—C. A. Hughes, Altoona, Pa.
GS—C. R. Hughes, Altoona, Pa.
PA—C. R. Hughes, Altoona, Pa.
EM—R. H. Moore, Portage, Pa.
SA—W. H. Hughes & Co., Altoona, Pa.

Hughes No. 5 Mine; Drift; "E" Seam, 28 in. thick.
PO—Flinton, Pa.; SP—Same; CTY—Cambria; RR—Penna., Buyer Dam Br.
MS—James Fletcher, Flinton, Pa.
S of H—Mules. Track gage 36 in.
S of M—4 elec. machs.
PP—Power purchased, transformer 6000-2300 volts, M. G. sets, 250 volts D. C., 1 pump.
EMP—10. Last years tonnage 11,595.
SIZES SHIPT—Run of Mine.

HOLLER COAL CO.

General Office, Philipsburg, Pa.
Marjorie No. 1 Mine.
PO—Philipsburg, Pa.; CTY—Center; RR—Penna., N. Y. C. and P. & S.
No report.

HOME COAL COMPANY

Now P. V. K. Coal Company.
HOME COMPANY, THE
General Office, Altoona, Pa.
Shaver No. 1 Mine.
PO—Ashville, Pa.; CTY—Cambria; RR—Penna.
No report.

HOMER CITY COAL CO.

General Office, Johnstown, Pa.
PR—John C. Cosgrove, Johnstown, Pa.
VP—A. K. Cosgrove, Johnstown, Pa.
TR—Frank Finstwalt, Cherry Tree, Pa.
GM—H. J. Moehan, Johnstown, Pa.
GS—Ardell Collins, Johnstown, Pa.
PA—S. G. Symons, Johnstown, Pa.
EM—F. T. Fitzharris, Johnstown, Pa.
Sales Agency—Cosgrove & Co., Philadelphia, Pa., Johnstown, Pa., and Chicago, Ill.

Homer Mine; Drift; "E" Upper Freeport Seam, 72 in. thick.
PO—Homer City, Pa.; SP—Same; CTY—Indiana; RR—P. E. R. R., Indiana Branch.
MS—Lafayette Tuck, Homer City, Pa.
S of H—Mules and rope. Track gage, 42 in.
S of M—Hand.
PP—Power purchased, transformer 20,000 to 2300 volts A. C.
EMP—75. Last fiscal year output, 110,000 tons.
SIZES SHIPT—Run of Mine.

THE HOOSIER COAL COMPANY, INC.

Now Hoosier Keystone Coal Co.

HOOSIER KEYSTONE COAL COMPANY.

General Office, 1418 Wells Bldg. Fort Wayne, Ind.
PR—W. B. Strubig, Fort Wayne, Ind.
TR—G. B. Sunby, Fort Wayne, Ind.
GM—W. B. Strubig, Fort Wayne, Ind.
CE—C. A. Shaw, West Newton, Pa.

Hoosier Keystone Mine; Drift; Redstone Seam 48 in. thick.
PO—West Newton, Pa.; SP—Same; CTY—Westmoreland; RR—P. & L. E.
MS—C. A. Shaw, West Newton, Pa.
S of H—Mules. Track gage 36 in.
S of M—Hand.
EMP—35. Daily tonnage 35.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.
Note—Formerly operated by the Hoosier Coal Company.

HOPE COKE CO.

General Office, Uniontown, Pa.
PR—A. M. Husted, Uniontown, Pa.
VP—W. R. Husted, Uniontown, Pa.
TR—J. E. Husted, Uniontown, Pa.
GM—W. R. Husted, Uniontown, Pa.
GS—J. E. Husted, Uniontown, Pa.
PA—A. M. Husted, Uniontown, Pa.
CE—Homer L. Birchard, Uniontown, Pa.
Sales Agent, J. E. Husted, Uniontown, Pa.

Hope Mine; Drift; Sewickley Seam, 60 to 66 in. thick.
PO—Sewickley, Pa.; SP—Same; CTY—Fayette; RR—B. & O.
MS—W. B. Husted, Uniontown, Pa.
S of H—Rope. Track gage, 42 in.
S of M—Hand.
PP—1 fire tube boiler, 60 H. P., 3 pumps.
EMP—40. Coke ovens 28 Rec Hiv.
SIZES SHIPT—Run of Mine.

HOPKINS COAL COMPANY

General Office, Lock Haven, Pa.
PR—T. A. Shaffer, Jr., Lock Haven, Pa.
VP—Wm. P. Hopkins, Lock Haven, Pa.
TR—L. B. Kleber, Lock Haven, Pa.
GM—T. A. Shaffer, Jr., Lock Haven, Pa.
GS—J. R. Axelton, DuBois, Pa.
PA—T. A. Shaffer, Jr., Lock Haven, Pa.
EM—L. W. Hess, DuBois, Pa.
EE—J. R. Axelton, DuBois, Pa.
SA—Hopkins Coal Co., Lock Haven, Pa.

Hopkins No. 2 Mine; Slope; Lower Freeport Seam, 60 in. thick.
PO—DuBois, Pa.; SP—Same; CTY—Clearfield; RR—Penna.
MS—Alex. Penman, DuBois, Pa.
S of H—3 elec. locos. Track gage 42 in.
S of M—1 chain breast type mach.
PP—Power purchased, 1 pump.
EMP—430. Last years tonnage 112,657.
SIZES SHIPT—Run of Mine, Slack, Lump.

Sandylick Mine; Drift; Lower Kittanning Seam, 42 in. thick.
PO—DuBois, Pa.; SP—Falls Creek, Pa.; CTY—Clearfield; RR—P. E. R. R. and B. R. & P. Ry.
MS—Alex. Penman, DuBois, Pa.
S of H—3 elec. locos. Track gage 42 in.
S of M—1 chain breast type machs.
PP—Power purchased, 4 pumps.
EMP—130. Last years tonnage 112,657.
SIZES SHIPT—Run of Mine, Slack, Lump.
Note—Formerly operated by the Hopkins Coal Mining Co.

HOPKINS COAL MINING COMPANY.

Now Hopkins Coal Co.

HORMEL COAL COMPANY

General Office, Hickman, Pa.
PR—P. F. Hormel, Hickman, Pa.
VP—P. A. Hormel, Hickman, Pa.
TR—L. P. Hormel, Hickman, Pa.
GS—P. F. Hormel, Hickman, Pa.
PA—L. P. Hormel, Hickman, Pa.
EE—J. F. Holly, Federal, Pa.
SCO—Hormel Supply Co., Buyer, P. A. Hormel, Hickman, Pa.

Federal No. 2 Mine; Drift; Pittsburgh Seam, 58 inches thick.
PO—Hickman, Pa.; SP—Same; CTY—Allegheny; RR—P. C. & Y.
S of H—Mules and elec. loco. Track gage 39 inches.
S of M—Hand. and chain breast type machine.
PP—Power purchased. Transformer 2200 to 220 volts A. C., M. G. Sets, 250 volts D. C.
EMP—25. Last years tonnage 27,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

HORN, J. EDWARD & CO

General Office, Philipsburg, Pa.
PR—Edward Horn, Philipsburg, Pa.
TR—B. M. Tappery, Philipsburg, Pa.
GS—Tom. L. Horn, Philipsburg, Pa.
PA—Tom. L. Horn, Philipsburg, Pa.
EM—Tom. L. Horn, Philipsburg, Pa.

Horn No. 9 (Ophir No. 9 and Bloom S. 9) Mines; Drift; Brookville A Seam, 36 in. thick.
PO—Philipsburg, Pa.; SP—Same; CTY—Center; RR—N. Y. C. & H. R.
MS—O. S. Woerner, Philipsburg, Pa.
S of H—Mules, trolley pole type and storage battery locos. Track gage, 36 in.
S of M—3 shortwall machs.
PP—Power purchased, rotary converter, 100 K. W., 250 volts D. C., 5 pumps.
EMP—150. Last years tonnage 14,508.
SIZES SHIPT—Run of Mine.

HORNER COAL COMPANY

General Office, Millisboro, Pa.
PR—Le Moyne Ward, Fredricktown, Pa.
VP—S. A. Morton, Millisboro, Pa.
TR—F. W. Horner, Millisboro, Pa.

Horner Mine; Slope; Pittsburgh Seam, 84 inches thick.
PO—Millisboro, Pa.; SP—Same; CTY—Washington; RR—P. E. R. R.
S of H—Elec. loco. Track gage 42 in.
S of M—Shortwall mach.
PP—Power purchased. Transformer 440 volts A. C.
SIZES SHIPT—Run of Mine.

HORNER QUEMAHONING COAL CO.

General Office, Roswell, Pa.
PR—P. P. Gundesberger, Roswell, Pa.
VP—E. L. Horner, Roswell, Pa.
TR—J. F. Horner, Roswell, Pa.
GM—J. F. Horner, Roswell, Pa.
GS—J. F. Horner, Roswell, Pa.
PA—J. F. Horner, Roswell, Pa.
SA—E. L. Horner, Roswell, Pa.

Horner No. 1 Mine; Drift; B Seam; 34 in. thick.
PO—Roswell, Pa.; SP—Same; CTY—Somerset; RR—B. & O., Roswell Br.
S of H—Mules. Track gage, 42 in.
S of M—Hand.
EMP—10. Daily output, 40 to 50 tons.
SIZES SHIPT—Run of Mine.

HOSTETTER CONNELLSVILLE COKE CO.
(H. C. FRICK COKE CO.)

General Office, Carnegie Bldg., Pittsburgh, Pa.
 PR—W. H. Clingerman, Pittsburgh, Pa.
 TR—Philip Keller, Pittsburgh, Pa.
 ASST. SECY.—L. Albright, Pittsburgh, Pa.
 PA—T. S. Duncan, " "
 Auditor—C. P. Parker, " "
 CS—Clay F. Lynch, Scottsdale, Pa.
 ASST. GS—W. H. Glasgow, Scottsdale, Pa.
 ASST. GS—W. C. Hood, Scottsdale, Pa.
 CE—T. W. Dawson, " "
 EE—G. E. Gramm, Scottsdale, Pa.
 ME—G. E. Huttie, Scottsdale, Pa.
 SCO—Union Supply Co. Buyer, F. W. Walton, Frick Bldg., Pittsburgh, Pa.
 Gen. Supt. of Stores, C. L. Steiner, Uniontown, Pa.

Hostetter Mine, Slope, Pgh. Seam, 7 to 7½ ft. thick.

PO—Hostetter, Pa.; SP—Same. CTY—Westmoreland; RR—P. R. R., Unity Branch.

MS—B. B. Boyd, Hostetter, Pa.
 SM—Allan P. Musick, " "
 S of H—Mules and rope. Track gauge, 44 in.

S of M—7 Comp. air machines.
 PP—10 boilers total 1980 H. P.

EMP—297. Coke ovens, 355 Beehive.

Whitney Mine, Slope, Pgh. Seam, 7 to 7½ ft. thick.

PO—Whitney, Pa.; SP—Same. CTY—Westmoreland; RR—P. R. R., Unity Branch.

MS—J. T. Pisula, Whitney, Pa.
 SM—W. H. Holman, Whitney, Pa.
 S of H—Mules and rope. Track gauge, 44 in.

S of M—7 Comp. air machines.
 PP—8 boilers, total 1980 H. P.

EMP—275. Coke ovens, 352 Beehive.

HOUSTON COAL COMPANY

General Office, Houston, Pa.
 PR—S. C. Reynolds, Houston, Pa.
 VP—S. C. Reynolds, Houston, Pa.
 TR—John Hodgson, Houston, Pa.
 GM—M. D. Pearce, Houston, Pa.
 GS—M. D. Pearce, Houston, Pa.
 PA—M. D. Pearce, Houston, Pa.

Arnold Mine; Drift; Pittsburgh Seam, 56 inches thick.

PO—Houston, Pa.; SP—Same; CTY—Washington; RR—P. C. C. & St. L.
 S of H—Mules. Track gauge 30 inches.

S of M—Hand.

EMP—25. Daily tonnage 75.

SIZES SHIPT—Run of Mine. Slack Lump.

PREP. EQUIPT—Bar Screens.

HOWARD COAL COMPANY

General Office, Indian Creek, Pa.

PR—H. I. Fisher, Indian Creek, Pa.
 GM—Howard I. Fisher, Indian Creek, Pa.
 CE—J. E. Hoenshell, Connelville, Pa.

Kimmel Mine; Drift; Lower Kittanning Seam, 44 in. thick.

MS—Boyd Trimble, Indian Head, Pa.
 PO—Indian Creek, Pa.; SP—Davistown, Pa.; CTY—Fayette; RR—I. C. V.

S of H—1 S-ton loco and 2 5 H. P. room-boilers. Track gauge 36 in.

S of M—2 shortwall machs.

PP—Power purchased, 250 volts D. C.

EMP—65. Daily tonnage 225.

SIZES SHIPT—Run of Mine.

HOWARD GAS COAL COMPANY

General Office, Main and Second Sts., Greensburg, Pa.

PR—Howard C. Patton, Greensburg, Pa.
 VP—Elmer S. Keay, 90 West St., New York, N. Y.

TR—Howard C. Patton, Greensburg, Pa.
 GM—Howard C. Patton, Greensburg, Pa.
 GS—Howard C. Patton, Greensburg, Pa.

PA—Howard C. Patton, Greensburg, Pa.
 CE—W. R. Richards, Greensburg, Pa.

SCO—Howard Supply Co. Buyer, R. J. Springer, Slickville, Pa.

Louise No. 1 Mine; Drift; Pittsburgh Seam, 84 inches thick.

PO—Slickville, Pa.; SP—Same; CTY—Westmoreland; RR—Penna.

MS—Albert V. Eisman, Louise, Pa.

S of H—2 Storage battery and 2 trolley pole type locos. Track gauge 40 in.

S of M—5 shortwall and chain machs.

PP—Power purchased, 1—150 K. W. M. G. sets, 500 volts D. C., 4 pumps.

EMP—150. Last fiscal year output, 78,272 tons.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Gravity Screens.

HOWE COAL CO.

General Office, Jackson Bldg., Pittsburgh, Pa.

PR—J. F. McNaull, Jackson Bldg., Pittsburgh, Pa.

TR—R. S. Dougall, Jackson Bldg., Pittsburgh, Pa.

GM—R. S. Dougall, Jackson Bldg., Pittsburgh, Pa.

Howe Mine; Drift; Sewickley Seam, 46 in. thick.

PO—Lock No. 3, Pa.; SP—Same; CTY—Allegheny; RR—L. & E.

MS—John Sutton, Lock No. 3, Pa.

S of H—Mules. Track gauge 42 in.

S of M—1 shortwall mach.

PP—Power purchased, Transformer 1,100 to 220 volts A. C.

EMP—20. Last years tonnage 20,000.

SIZES SHIPT—Run of Mine. Slack Lump.

PREP. EQUIPT—Gravity Screens.

Rippel Mine; Drift; Pittsburgh Seam; 66 in. thick.

PO—Lock No. 3, Pa.; SP—Same; CTY—Allegheny; RR—P. & L. E.

MS—John Sutton, Lock No. 3, Pa.

S of H—Mules. Track gauge 42 in.

S of M—Hand.

EMP—6. Daily tonnage 50.

SIZES SHIPT—Run of Mine.

HOWELL COAL CO.

General Office, Greensburg, Pa.

Howell Mine.

PO—Hermine, Pa.; CTY—Westmoreland; RR—Penna.

No report.

HUBER STREET COAL COMPANY

General Office, 781 Railroad St., Johnstown, Pa.

PR—William Hetzlein, Johnstown, Pa.

VP—John C. Blimmel, Johnstown, Pa.

TR—John V. Horn, Johnstown, Pa.

GM—John V. Horn, Johnstown, Pa.

GS—John V. Horn, Johnstown, Pa.

PA—John V. Horn, Johnstown, Pa.

Huber Street No. 1 Mine; Drift; C Prime Seam, 46 in. thick.

PO—Johnstown, Pa.; SP—Same; CTY—Cambria; RR—B. & O., Penna.

S of H—Mules. Track gauge 36 in.

S of M—Chain breast type machs.

EMP—35.

SIZES SHIPT—Run of Mine.

Huber Street No. 2 Mine; Drift; C Prime Seam, 46 in. thick.

PO—Johnstown, Pa.; SP—Same; CTY—Cambria; RR—B. & O., Penna.

S of H—Mules. Track gauge 36 in.

S of M—Chain breast type machs.

EMP—35.

SIZES SHIPT—Run of Mine.

Note—Formerly operated by the Widman Coal Co.

HUDSON COAL COMPANY

General Office, Punxsutawney, Pa.

PR—E. B. Good, Punxsutawney, Pa.

VP—J. C. Driscoll, " "

GM—J. C. Driscoll, " "

GS—J. C. Driscoll, " "

PA—J. C. Driscoll, " "

SCO—J. R. Eberhart & Co., Ltd., Punxsutawney, Pa.

Sales Agency, Burton Coal Co., Punxsutawney and Philadelphia, Pa.

Hudson Mine; Drift; Lower Freeport Seam, 48 in. thick.

PO—Winslow, Pa.; SP—Same; CTY—Jefferson; RR—Penna. Bullwood Br.

S of H—Mules. Track gauge 36 in.

PP—1 pump.

EMP—40. Last years tonnage 15,672.

SIZES SHIPT—Run of Mine.

HUETHER COAL COMPANY

General Office, Hastings, Pa.

PR—B. A. Lantzy, Hastings, Pa.

VP—H. J. Huether, Hastings, Pa.

TR—A. B. Clark, Hastings, Pa.

GM—H. J. Huether, Hastings, Pa.

GS—H. J. Huether, Hastings, Pa.

PA—A. B. Clark, Hastings, Pa.

SCO—Address the Company, Buyer, Buntch Bros., Hastings, Pa.

SA—Clark Coal Company, Hastings, Pa.

Huether No. 1 Mine; Slope; "C" Prime Seam, 78 in. thick.

PO—Hastings, Pa.; SP—Same; CTY—Cambria; RR—Penna.

S of H—Mules and elec. locos. Track gauge 36 in.

S of M—Hand.

PP—220 volts D. C., 2 pumps.

EMP—20. Daily tonnage 85.

SIZES SHIPT—Run of Mine.

HUGHES, C. A., & CO.

General Office, Altoona, Pa.

Operator—C. A. Hughes, Altoona, Pa.

TR—E. C. Roomer, Altoona, Pa.

GM—W. H. Hughes, Altoona, Pa.

GS—W. H. Hughes, Altoona, Pa.

PA—W. H. Hughes, Altoona, Pa.

EM—R. H. Moore, Portage, Pa.

Hughes No. 2 Mine; Slope; "B" or Miller Seam, 46 in. thick.

PO—Cassandra, Pa. SP—Portage, Pa. CTY—Cambria; RR—Penna. Bens Creek Br.

MS—Geo. J. Hassenpflug, Lilly, Pa.

S of H—Mule, rope, trolley pole type locos. Track gauge 36 inches.

S of M—Hand.

PP—Power purchased, Transformer 6600 to 440 volts A. C. M. G. set, 250 volts D. C., 15 pumps.

EMP—289. Last years tonnage 201,952.

SIZES SHIPT—Run of Mine.

HUGHES, H. M.

General Office, Osceola Mills, Pa.

Reading No. 3 Mine; Drift; "E" Seam, 36 inches thick.

PO—Osceola Mills, Pa.; SP—Same; CTY—Clearfield; RR—P.R.R.

MF—C. Hughes, Osceola Mills, Pa.

S of H—Mules. Track gauge 30 inches.

S of M—Hand.

EMP—16. Last years tonnage 10,673.

SIZES SHIPT—Run of Mine.

HUGHES, W. H., & COMPANY.

General Office, Altoona, Pa.

TR—E. C. Roomer, Altoona, Pa.

GM—W. H. Hughes, Altoona, Pa.

GS—W. H. Hughes, Altoona, Pa.

PA—W. H. Hughes, Altoona, Pa.

EM—R. H. Moore, Portage, Pa.

Hughes No. 1 Mine; Drift; B Seam, 39 in. thick.

PO—Lilly, Pa. SP—Same. CTY—Cambria; RR—Penna.

MS—Wm. Throwers, Lilly, Pa.

S of H—Mules, trolley pole type locos. Track gauge 36 inches.

S of M—Hand.

PP—Power purchased, 250 volts D. C.

EMP—62. Last years tonnage 58,168.

SIZES SHIPT—Run of Mine.

Hughes No. 3 Mine; Drift; B and C Prime Seams, 44 inches thick.

PO—Portage, Pa. SP—Same. CTY—Cambria; RR—Penna.

MS—J. H. Kuhns, B. F. D. Portage, Pa.

S of H—Mules, rope. Track gauge 30 and 36 inches.

S of M—Hand.

PP—3 water tube boilers, 150 H. P.

EMP—64. Last years tonnage 36,761.

SIZES SHIPT—Run of Mine.

HUMPHREYS COAL & COKE CO.

General Office, Greensburg, Pa.

PR—A. A. Landon, Buffalo, N. Y.

VP—W. A. Van Arsdale, Buffalo, N. Y.

TR—W. H. Hill, Chicago, Ill.

SECY—W. D. Freyburger, Chicago, Ill.

GM—A. B. Kelly, Greensburg, Pa.

PA—A. B. Kelly, Greensburg, Pa.

CE—A. B. Kelly, Greensburg, Pa.

SCO—Ideal Supply Co. Buyer, A. B. Kelly, Greensburg, Pa.

Humphreys Mine; Slope; Connelville Seam, 84 in. thick.

PO—Greensburg, Pa.; SP—Trauger, Pa.; CTY—Westmoreland; RR—P. R. R.

SM—T. O. Anderson, Greensburg, Pa.

S of H—Rope and trolley pole type locos. Track gauge 44 in.

S of M—Shortwall machs.

PP—Water tube boilers, 300 H. P., 1—125 K. W. and 1—200 K. W. motor generator sets, 8 pumps.

EMP—185. Last years tonnage 105,000.

Coke oven, 145 Beehive.

Note—Formerly operated by Hecla Coal & Coke Co.

HUMPHRIES, E. A. COAL & COKE CO.

General Office, Scottsdale, Pa.

PR—C. W. McKee, Greensburg, Pa.

VP—L. T. Gilbert, Scottsdale, Pa.

TR—Roy K. Loucks, Scottsdale, Pa.

GS—C. Deal, Derry, Pa., R. D. No. 1.

PA—C. Deal, Derry, Pa., R. D. No. 1.

KM—S. M. Faust, Connelville, Pa.

SCO—E. A. Humphries Supply Co.; Buyer, Mrs. C. Deal, Derry, Pa.

SA—Roy K. Loucks, Scottsdale, Pa.

Chester No. 2 Mine; Drift; Pittsburgh Seam, 84 in. thick.

PO—Derry, Pa., R. D. No. 1; SP—Bradenville, Pa.; CTY—Westmoreland; RR—Penna.

S of H—Mules and rope. Track gauge 42 in.

S of M—Hand.

PP—2 fire tube boilers, 250 H. P., 1 pump.

EMP—48. Last fiscal year output, 78,988 tons.

SIZES SHIPT—Run of Mine.

HUNTINGDON COAL CO.

General Office, Huntingdon, Pa.

Delaware No. 2 Mine.

PO—Six Mile Run, Pa.; CTY—Bedford; RR—Penna.

No report.

HURD COAL CO.

General Office, Union Bank Bldg., Pittsburgh, Pa.

PR—Thurston Wright, Pittsburgh, Pa.

VP—E. P. Payne, Pittsburgh, Pa.

TR—John Gibson, Jr., Pittsburgh, Pa.

GM—John Gibson, Jr., Pittsburgh, Pa.

GS—R. P. Baldwin, Jerome, Pa.

PA—Geo. W. Smith, Pittsburgh, Pa.

CE—S. E. Diekey & Co., Johnstown, Pa.

EE—Thos. Haulton, Johnstown, Pa.

SA—The Wright-Gibson Co., 68 William St., New York, N. Y.

Gouder Mine; Slope; E Seam, 48 in. thick.

PO—Goswell, Pa.; SP—Same; CTY—Somerset; RR—E. & O.

MS—John Walker, Goswell, Pa.

S of H—Rope. Track gauge, 48 in.

S of M—Hand.

PP—Power purchased, transformer, 2200-440 volts A. C., 1 pump.

EMP—22. Daily output, 60 tons.

Ideal Coal Co.—Cont.

MS—James McMan, Johnstown, Pa.
S of H—3 trolley pole type locos. Track gauge, 36 in.
S of M—1 shortwall machs.
PP—Power purchased, transformer 4000-2200 volts A. C., M. G. sets, 250 volts D. C.
EMP—64. Last fiscal year output, 100,583 tons.
SIZES SHIPT—Run of Mine.
Thermal No. 6 Mine; Drift; Upper Freeport Seam, 40 to 46 inches thick.
PO—Johnstown, Pa.; SP—Same; CTY—Cambria; RR—Penna., B. & O., Johnstown and Stony Creek Rr.
MS—James McMan, Johnstown, Pa.
S of H—Mules, 1 trolley pole type and 1 storage battery loco. Track gauge, 36 in.
S of M—2 shortwall machs.
PP—Power purchased, transformer 4000-2200 volts A. C., M. G. sets, 250 volts D. C., 1 pump.
EMP—12. Last fiscal year output, 41,852 tons.
SIZES SHIPT—Run of Mine.

IMBERIE COAL MINING COMPANY
Now a part of the Consolidated Coal & Coke Company.

IMPERIAL COAL CORPORATION
General Office, 705 Johnstown Trust Bldg., Johnstown, Pa.

PR—Chas. A. Owen, Johnstown, Pa.
VP—Jas. P. Thomas, Johnstown, Pa.
TR—P. E. Thomas, Johnstown, Pa.
GM—Chas. A. Owen, Johnstown, Pa.
GS—Jas. M. Cook, Johnstown, Pa.
PA—Jas. M. Cook, Johnstown, Pa.
EM—W. H. Hinks, Johnstown, Pa.
EE—Irvin Wilhelm, Johnstown, Pa.
SC—Charles Supply Co., Buyer, Edward Horn Boltz, Pa.; Miller Run Supply Co., Buyer, Jas. T. Mugridge, Miller Run, Pa.
SA—Imperial Coal Corporation, Johnstown, Pa.; Philadelphia, Pa.; New York, N. Y.; Boston, Mass.; and Norfolk, Va.

Additional Information on Page 729

Cambria Mine No. 1; Drift; Miller or B Seam, 42 to 54 inches thick.
PO—Coalport, Pa.; SP—Same; CTY—Clearfield; RR—Penna., Bellwood Div.
MS—John M. Coleman, Coalport, Pa.
S of H—11 trolley pole type locos. Track gauge 42 in.
S of M—9 shortwall machs.
PP—Power purchased. Transformers, 22,000 to 2,200 volts A. C., rotary converters, 275 volts D. C., 24 pumps.
EMP—101. Last years tonnage 144,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.
Diamond Mine No. 1; Drift; B or Miller Seam, 42 to 46 inches thick.
PO—Boltz, Pa.; SP—Seward, Pa.; CTY—Indiana; RR—Penna., Conemaugh Div.
MS—R. R. Lindsay, Boltz, Pa.
S of H—6 trolley pole type locos. Track gauge 36 inches.
S of M—8 shortwall machs.
PP—Power purchased. Transformer, 22,000 to 2,200 volts A. C., rotary converters, 275 volts D. C., 4 pumps.
EMP—132. Last years tonnage 93,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.
Note—Formerly operated by The Diamond Smokeless Coal Co.

Diamond Mine No. 2; Slope; B Seam, 42 to 48 inches thick.
PO—Boltz, Pa.; SP—Seward, Pa.; CTY—Indiana; RR—Penna., Conemaugh Division.
MS—R. R. Lindsay, Boltz, Pa.
S of H—1 trolley pole type loco. Track gauge 36 inches.
S of M—2 shortwall machs.
PP—Power purchased.
EMP—20. New opening.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.
Shade Creek Mine; Drift; "B" Coal Seam; 42 to 48 inches thick.
PO—Miller Run, Pa.; SP—Same; CTY—Somerset; RR—Penna., Calnbrook Branch.
MS—D. C. Boag, Miller Run, Pa.
S of H—5 trolley pole type locos. Track gauge 36 inches.
S of M—6 shortwall machs.
PP—Power purchased. Transformer, 22,000 to 2,200 volts A. C., 275 volts D. C. in mine, 8 pumps.
EMP—116. Last years tonnage 106,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.
Note—Formerly operated by the Shade Creek Coal Co.

INDIAN CREEK COAL & COKE COMPANY

General Office, Somerset, Pa.
PR—D. B. Zimmerman, Somerset, Pa.
GM—H. M. Young, Indian Head, Pa.
GS—H. M. Young, Indian Head, Pa.
PA—H. M. Young, Indian Head, Pa.
SC—Sparks Supply Co.; Buyer, I. L. Sparks, Indian Head, Pa.

Sparks Mine; Drift; Creek "B" Seam, 46 in. thick.
PO—Indian Head, Pa.; SP—Same; CTY—Payette; RR—B. & O., I. C. V. Rr.
S of H—3 elec. locos.
S of M—2 shortwall machs.
PP—1 water tube boiler, 2 pumps.
SIZES SHIPT—Run of Mine.
Old information.

INES COAL MINING CO.

General Office, Windber, Pa.
PR—W. T. Geddes, Windber, Pa.
VP—W. E. Kerr, Windber, Pa.
TR—M. E. McNeal, Windber, Pa.
PA—C. A. Hyde, Windber, Pa.
SA—C. A. Hyde, Windber, Pa.

Ines No. 1 Mine; Drift; "C" Prime Seam, 42 inches thick.
PO—Cairnbrook, Pa.; SP—Same; CTY—Somerset; RR—P. R. R.
MS—D. A. Lehman, Cairnbrook, Pa.
S of H—Elec. loco. Track gauge 36 in.
S of M—Hand, elec. puncher and shortwall mach.
PP—Power purchased. Transformer 13,200 to 550 volts A. C., M. G. sets, 550 volts D. C.
SIZES SHIPT—Run of Mine.

INLAND COAL COMPANY

General Office, Greensburg, Pa.
PR—Julian R. Huff, Greensburg, Pa.
TR—A. N. Pershing.
SECY—Geo. H. Francis, Greensburg, Pa.
GS—M. J. Bracken, 606 First National Bank Bldg., Johnstown, Pa.
PA—K. P. Kilgore, Johnstown, Pa.
CE—A. MacDonald, Greensburg, Pa.
Additional Information on Page 735

Tunnel No. 1 Mine; Drift E or Lemox Seam, 46 to 50 inches thick.
PO—Gallitzin, Pa.; SP—Same; CTY—Cambria.
SM—J. Clyde Weston, Gallitzin, Pa.
S of H—Mules, 2 elec. locos., rope and steam. Track gauge 36 inches.
S of M—Hand and 2 elec. machs.
PP—4 return tubular boilers, total 550 H. P., 2 gen. units, 250 volts D. C.
EMP—150. Last years tonnage 125,060.
SIZES SHIPT—Run of Mine.
Greenswich No. 2 Mine; Drift; D or Lower Freeport Seam, 43 to 45 in. thick.
PO—Saxman, Pa.; SP—Garman, Pa.; CTY—Cambria; RR—Penna., Cherry Tree & Dixonville Rr.
MS—E. C. Northover, Saxman, Pa.
SM—G. G. Glatfely, Saxman, Pa.
S of H—2 elec. locos. Track gauge 36 inches.
S of M—Hand and 1 elec. mach.
PP—6 return tubular boilers, total 750 H. P., 2 gen. units, 250 volts D. C., 1 air compressor, 2 pumps.
EMP—46. Last years tonnage 26,135.
SIZES SHIPT—Run of Mine.

Greenswich No. 3 Mine; Slope; D or Lower Freeport Seam, 43 to 45 in. thick.
PO—Saxman, Pa.; SP—Garman, Pa.; CTY—Cambria; RR—Penna., Cherry Tree & Dixonville Rr.
MS—E. C. Northover, Saxman, Pa.
SM—G. G. Glatfely, Saxman, Pa.
S of H—Rope and 3 elec. locos. Track gauge 36 in.
S of M—8 elec. and 3 comp. air machs.
PP—6 return tubular boilers, total 725 H. P., 2 gen. units, 250 volts D. C., 2 pumps.
EMP—81. Last years tonnage 53,343.
SIZES SHIPT—Run of Mine.

NOTE: Greenswich Nos. 5 & 8 Mines sold to Samuel Brown, Indiana, Pa.

Cardiff Mine; Drift; B or Miller Seam, 40 to 14 in. thick.
PO—Nettleton, Pa.; SP—Twin Rock, Pa.; CTY—Cambria; RR—Penna., Black Lick Branch.
MS—James Walker, Nettleton, Pa.
MS—Ira C. Pennell, Nettleton, Pa.
S of H—5 elec. loco. Track gauge 36 in.
S of M—Hand and 12 elec. machs.
PP—Power purchased, 2 gen. units, 250 volts D. C., 3 return tubular boilers, total 350 H. P., 7 pumps.
EMP—107. Last years tonnage 68,543.
SIZES SHIPT—Run of Mine.

INLAND COLLIERIES COMPANY.

General Office, Chicago, Ill.
PR—P. D. Block, First National Bank Bldg., Chicago, Ill.
VP—D. P. Thompson, Chicago, Ill.
TR—E. J. Rook, Chicago, Ill.
GS—T. G. Fear, Harmarville, Pa.
PA—J. A. Stafford, Indiana Harbor, Ind.
EM—Milton Campbell, Indianola, Pa.
SC—Deer Creek Merc. Co. Buyer, J. B. Luyten, Indianola, Pa.

Indianola Mine, Shaft; Thick Vein Freeport Seam, 88 in. thick.
PO—Indianola, Pa.; SP—Same; CTY—Allegheny; RR—B. & I. E.
MS—Milton Campbell, Indianola, Pa.
S of H—Trolley pole type and storage battery locos. Track gauge, 42 in.
S of M—Shortwall machs.
PP—Power purchased, transformer 22,000-2200 110 volts A. C., M. G. sets, 250 volts D. C., 2 line tube boilers, 250 H. P., 11 pumps.
EMP—150. Last years tonnage 363,500.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens, Picking Tables.

IRVONA COAL & COKE CO

General Office, Coalport, Pa.
PR—W. L. Daggett, Bellefonte, Pa.
TR—Thos. F. Kelly, Coalport, Pa.
GM—John A. Kelly, Coalport, Pa.
GS—John A. Kelly, Coalport, Pa.
PA—Thos. F. Kelly, Coalport, Pa.
CE—Womelsdorf, Dunkle & Custer, Phillipsburg, Pa.
SC—Main City Supply Co., Coalport, Pa. Buyer, Miss Agnes Rathgate, Coalport, Pa.
SA—Emma Coal Mining Co., Philadelphia, Pa.

Irvona No. 5 Mine; Drift; B or Miller Seam, 18-60 in. thick.
PO—Coalport, Pa.; SP—Same; CTY—Clearfield; RR—Penna.
S of H—Trolley pole type locos. Track gauge, 36 in.
S of M—Shortwall machs.
PP—Power purchased, 250 volts D. C., 7 pumps.
EMP—115. Last years tonnage 110,330.
SIZES SHIPT—Run of Mine.

Irvona No. 10 Mine; Slope; B or Miller Seam, 48-60 in. thick.
PO—Coalport, Pa.; SP—Same; CTY—Clearfield; RR—Penna.
S of H—Trolley pole type locos. Track gauge, 36 in.
S of M—Hand.
PP—Power purchased, M. G. sets, 250 volts D. C., 9 pumps.
EMP—108. Last fiscal year output, 82,571 tons.

IRWIN GAS COAL CO.

General Office, Greensburg, Pa.
PR—R. H. Jamison, Greensburg, Pa.
VP—J. B. Brunet, Greensburg, Pa.
TR—J. R. Eisaman, Greensburg, Pa.
GM—T. P. Latta, Greensburg, Pa.
GS—C. L. Clark, Greensburg, Pa.
PA—A. T. McConnell, Greensburg, Pa.
CE—C. E. Cowan, Greensburg, Pa.
EM—R. A. Ramsey, Greensburg, Pa.
EE—J. P. Barry, Greensburg, Pa.
SC—Irwin Supply Co., Buyer, C. H. Latta, Greensburg, Pa.
SA—Paul Johnson, Greensburg, Pa.

Irwin No. 2 Mine; Drift and Stripping; Pittsburgh Seam, 90 to 96 in. thick.
PO—Export, Pa. SP—Same. CTY—Westmoreland. RR—Turtle Creek R. P. R. R.
MS—A. J. Sandles, Export, Pa.
SM—J. W. Hayes, Export, Pa.
S of H—Mules, 2 trolley pole type, 1 storage battery and 1 gasoline loco. Track gauge 44 in.
S of M—4 shortwall machs.
PP—Power purchased. Transformer 2,300 to 220 volts A. C., rotary converters, 250 volts D. C., 5 pumps.
EMP—138. Last years tonnage 123,570.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens, Picking Tables.

Irwin Gas No. 3 Mine; Drift; Pittsburgh Seam, 96 inches thick.
PO—Slickville, Pa. SP—Elrico, Pa. CTY—Westmoreland. RR—P. R. R.
MS—Geo. W. Williams, Slickville, Pa.
SM—John Brown, Slickville, Pa.
S of H—Mules, 1 trolley pole type loco. Track gauge 42 in.
S of M—3 shortwall machs.
PP—Power purchased. Transformer 2,300 to 220 volts A. C., M. G. sets, 250 volts D. C., 2 pumps.
EMP—88. Last years tonnage 116,439.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

Irwin No. 4 Mine; Drift; Pittsburgh Seam, 96 in. thick.
PO—Slickville, Pa.; SP—Elrico, Pa.; CTY—Westmoreland; RR—Penna., Turtle Creek Branch.
MS—Geo. W. Williams, Slickville, Pa.
SM—John Brown, Slickville, Pa.
S of H—Mules and 1 trolley pole type loco. Track gauge 42 in.
S of M—3 shortwall machs.
PP—Power purchased from No. 3 Mine, 2 pumps.
EMP—33. Last years tonnage 60,119.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

Irwin No. 5 Mine; Drift; Pittsburgh Seam, 96 in. thick.
PO—Slickville, Pa.; SP—Elrico, Pa.; CTY—Westmoreland; RR—Penna.
S of H—Mules. Track gauge 42 in.
S of M—Hand.
EMP—22. Last years tonnage 34,235.
SIZES SHIPT—Run of Mine.

IRWIN VALLEY GAS COAL MINING CO.

General Office, 703 Second Nat'l Bank Bldg., Connellsville, Pa.
PR—W. L. Rice, Connellsville, Pa.
TR—R. D. Kinnead, Connellsville, Pa.
GM—P. S. Linnon, Connellsville, Pa.
GS—P. S. Linnon, Connellsville, Pa.
PA—R. D. Kinnead, Connellsville, Pa.
SA—Rice Fuel Co., Connellsville, Pa.

Schade & Collinear Mine; Drift; Irwin Gas Seam, 96 inches thick.
PO—Irwin, Pa.; SP—Same; CTY—Westmoreland; RR—Penna.
S of H—Mules. Track gauge 42 inches.
S of M—Hand.
EMP—75. Last fiscal year output, 45,000 tons.
SIZES SHIPT—Run of Mine.

ISLAND RUN COAL COMPANY.
Operation Abandoned.

IVY RIDGE COAL MINING COMPANY.

General Office, Somerset, Pa.
PR—L. G. McTrom, Somerset, Pa.
VP—J. E. Schmittle, Rockwood, Pa.
TR—W. B. Conway, Somerset, Pa.
GM—L. G. McTrom, Somerset, Pa.
GS—M. M. Traux, Somerset, Pa.
PA—W. B. Conway, Somerset, Pa.
CE—S. E. Dickey Co., Johnstown, Pa.
EM—Fluke & Moore, Somerset, Pa.
MM—Coolter Sarke, Rockwood, Pa.
Sales Agency, W. H. Bradford & Co., Inc., New York and Philadelphia, Pa.

Ivy Ridge Mine; Drift; B or Miller Seam, 30 in. thick.
PO—Rockwood, Pa. SP—Same. CTY—Somerset. RR—B. & O.
MS—J. E. Schmittle, Rockwood, Pa.
S of H—Trolley pole type locos. Track gauge 42 in.
S of M—2 shortwall machs.
PP—2 return tubular boilers, total 300 H. P., 2 gen. units, 250 volts D. C., 4 pumps.
EMP—50. Last fiscal year output, 22,442 tons.
SIZES SHIPT—Run of Mine.

JACKSON COAL MINING COMPANY

General Office, Exposit, Pa.
PR—Robert Y. Brown, Grand Central Terminal, New York, N. Y.
TR—H. M. Vandervoort, Grand Central Terminal, New York, N. Y.
GM—Robert Y. Brown, New York, N. Y.
GS—H. M. McAlary, Elensburg, Pa.
CE—J. L. Elder, Elensburg, Pa.
SA—Robert Y. Brown, New York, N. Y.
Additional Information on Page 980

Jackson No. 1 Mine; Drift; B Seam; 42 inches thick.
PO—Exposit, Pa.; SP—Twin Rocks, Pa.; CTY—Cambria; RR—Penna.
S of H—Mules and rope; gasoline loco. Track gauge 36 inches.
S of M—Hand.
PP—Power purchased, 220 volts A. C.
EMP—124. Last years tonnage 50,507.
SIZES SHIPT—Run of Mine.

JACKSON-HARRIGAN COAL CO.

General Office, St. Marys, Pa.
Owners—J. E. Jackson, St. Marys, Pa.; Jos. J. Harrigan, St. Marys, Pa.
GS—Duk Anderson, Kersey, Pa.
PA—Thos. J. Harrigan, St. Marys, Pa.

Cuneo Mine; Drift; Upper Kittanning Seam, 38 in. thick.
PO—Kersey, Pa.; SP—Cuneo, Pa.; CTY—Elk; RR—P. S. & N.
S of H—Mules. Track gauge, 30 in.
S of M—5 comp. air punchers.
PP—1 140 H. P. water tube boiler, 1 gen. units A. C.
EMP—25. Last fiscal year output, 22,000 tons.
SIZES SHIPT—Run of Mine.

Weedville Mine; Drift; Lower Kittanning Seam, 38 in. thick.
PO—Weedville, Pa.; SP—Same. CTY—Elk; RR—P. S. & N.
MS—J. E. Mitchell, Weedville, Pa.
S of H—Mules. Track gauge, 30 in.
EMP—23. Last fiscal year output, 12,000 tons.
SIZES SHIPT—Run of Mine.

Paddy Mine; Drift; Lower Kittanning Seam, 38 in. thick.
SP—H. P.; RR—P. S. & N.
S of H—Electric loco. Track gauge 30 in.
S of M—2 elec. machs.
PP—150 H. P. return tubular boiler, 3 pumps.
EMP—50. Daily tonnage 200.
SIZES SHIPT—Run of Mine.

Jefferson & Clearfield Coal & Iron Co.—Cont.

Aultman Nos. 3, 4 and 0 Mines; Drift; Upper Freeport Seam, 60 in. thick.
PO—Aultman, Pa. SP—Same. **CTY**—Indiana, RR—B. & P.
MS—Hebert Dey, Aultman, Pa. S of H—10 trolley pole type loco. Track gauge, 42 in.
S of M—14 shortwall machs.
PP—Gen. units, 550 volts D. C., 15 pumps. Power from central plant.
EMP—240. Last fiscal year output, 421,254.14 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

Aultman No. 5 Mine; Drift; Upper Freeport Seam, 48 inches thick.
PO—Aultman, Pa. SP—Same. **CTY**—Indiana, RR—B. & P.
MS—James Cummings, Aultman, Pa. S of H—3 trolley pole type loco. Track gauge, 42 in.
S of M—4 shortwall machs.
PP—Gen. units, 550 volts D. C., 3 pumps. Power from central plant.
EMP—101. Last fiscal year output, 87,735.01 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

JEFFERSON COAL COMPANY.

General Office, South Bethlehem, Pa.
PR—W. A. Wilbur, So. Bethlehem, Pa.
TR—B. E. Wilbur, " "
GM—Austin Blakeslee, DuBois, Pa.
GS—F. B. Blakeslee, DuBois, Pa.
PA—F. B. Blakeslee, DuBois, Pa.
SCO—Abbott & Blakeslee Company, Buyer F. B. Blakeslee, Coal Glen, Pa.

Jefferson Mine; Drift; Lower Freeport Seam, 48 to 56 in. thick.
PO—Coal Glen, Pa.; SP—Same; **CTY**—Jefferson, RR—B. & P.
S of H—2 elec. locos. Track gauge 36 in. S of M—4 elec. machs.
PP—Power purchased, 1—150 K. W. M. G. Set, 250 volts D. C., 3 pumps.
EMP—85. Last years tonnage 81,630.
SIZES SHIPT—Run of Mine.

JEFFERSON FUEL CO.

General Office, Brockwayville, Pa.
TR—Joe Tompkins, Brockwayville, Pa.
GM—J. S. McClosky, Punxsutawney, Pa.
PA—Joe Tompkins, Brockwayville, Pa.
SA—Joe Tompkins, Brockwayville, Pa.

Perry No. 1 Mine; Slope; Lower Freeport Seam, 56 in. thick.
PO—Valter, Pa. SP—Same. **CTY**—Jefferson, RR—B. & P.
MS—W. E. Plouman, Valtier, Pa. S of H—Mules, 1 trolley pole type loco. Track gauge 42 in.
S of M—2 shortwall machs.
PP—2 return tubular boilers, total 250 H. P., 1 gen. unit, 250 volts D. C., 4 pumps.
EMP—50. Daily tonnage, 300.
SIZES SHIPT—Run of Mine.

JEFFERSON GAS COAL COMPANY

General Office, Farmers Bank Bldg., Pittsburgh, Pa.
PR—L. F. Crawford, Farmers Bank Bldg., Pittsburgh, Pa.
TR—J. P. Cameron, Farmers Bank Bldg., Pittsburgh, Pa.
GM—W. A. McBride, Houston, Pa.
GS—W. A. McBride, Houston, Pa.
PA—W. A. McBride, Houston, Pa.
SA—Jefferson Gas Coal Co., Farmers Bank Bldg., Pittsburgh, Pa.

Jefferson No. 1 Mine; Drift; Pittsburgh Seam, 63 in. thick.
PO—Avella, Pa.; R. D. No. 2; SP—Penown, Pa.; or Avella, Pa.; **CTY**—Washington; RR—P. & W. V.
S of H—Mules. Track gauge 42 in.
S of M—Electric mach.
PP—1—200 K. W. gen. unit, 500 volts D. C.
SIZES SHIPT—Run of Mine Slack, Nut, Lump, Block.

JEFFERSON RIDGE COAL COMPANY.

General Office, Altoona Trust Bldg., Altoona, Pa.
PR—P. M. Copelin, Phillipsburg, Pa.
VP—W. F. Beck, Altoona, Pa.
TR—W. F. Beck, Altoona, Pa.
GM—L. H. Copelin, Phillipsburg, Pa.
GS—L. H. Copelin, Phillipsburg, Pa.
EM—Geo. Ayers, Phillipsburg, Pa.
SA—W. F. Beck, Altoona, Pa.

Jefferson Mine; Slope C or Prime Seam, 42 to 60 in. thick.
PO—Phillipsburg, Pa.; SP—Same; **CTY**—Clearfield; RR—P. R. R.
S of H—Mules. Track gauge 30 in.
S of M—Hand.
PP—Last years tonnage 16,032.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens

JENKINS, SCOTT, COAL CO.

General Office, Blossburg, Pa.
GM—Scott Jenkins, Blossburg, Pa.
GS—Scott Jenkins, Blossburg, Pa.
PA—Scott Jenkins, Blossburg, Pa.
Scott Jenkins Mine; Drift; E Seam.
PO—Blossburg, Pa. SP—Same. **CTY**—Tioga, RR—N. Y. C. & Erie.
S of H—Mules. Track gauge 20½ in.
S of M—Hand.
EMP—10.
PREP. EQUIPT—Loading Rooms.

JENNERS FUEL COMPANY

General Office, Roswell, Pa.
PR—F. D. Allen, Roswell, Pa.
TR—F. D. Allen, " "
GM—F. D. Allen, " "
GS—Geo. Hartshorne, Roswell, Pa.
PA—F. D. Allen, Roswell, Pa.
SCO—Ferrell & Co.; Buyer, F. L. Ferrell, Roswell, Pa.
SA—F. D. Allen, Roswell, Pa.

Ferrell No. 1 Mine; Drift; "E" Seam, 48 in. thick.
PO—Roswell, Pa.; SP—Same; **CTY**—Somerset; RR—B. & O., Roswell Br.
S of H—Mules and rope. Track gauge, 42 in.
S of M—Hand.
PP—1 water tube boiler, 40 H. P.
EMP—20. Last fiscal year output, 12,500 tons.
SIZES SHIPT—Run of Mine.

JENNINGS COAL & COKE COMPANY.

General Office, Outcrop, Pa.
PR—J. N. McGill, Outcrop, Pa.
VP—J. H. Davis, Outcrop, Pa.
TR—J. N. McGill, Outcrop, Pa.
GM—J. N. McGill, Outcrop, Pa.
GS—J. N. McGill, Outcrop, Pa.
PA—J. N. McGill, Outcrop, Pa.
EM—Harry B. Gans, Uniontown, Pa.
SA—J. N. McGill, Outcrop, Pa.

Jennings Mine; Drift; Pittsburgh Seam, 72 in. thick.
PO—Outcrop, Pa.; SP—Cheat Haven, Pa.; **CTY**—Fayette; RR—B. & O.
S of H—Mules. Track gauge, 42 in.
S of M—Hand.
PP—4 pumps.
EMP—10. Last fiscal year output, 17,000 tons.
SIZES SHIPT—Run of Mine.

JIM RUN COAL CO.

New Brockman & Simpson.

JIMTOWN COAL COMPANY

General Office, Colonial National Bank Bldg., Connellsville, Pa.
PR—G. Corrado, Connellsville, Pa.
VP—A. C. Stickle, Connellsville, Pa.
TR—Paul B. Dick, Connellsville, Pa.
GM—G. Corrado, Connellsville, Pa.
GS—H. B. Cunningham, Connellsville, Pa.
PA—F. R. Yoder, Connellsville, Pa.
EE—W. B. Barnhart, Connellsville, Pa.
CE—H. B. Cunningham, Connellsville, Pa.
SA—G. Corrado Coal & Coke Ints., Sales Manager J. J. Ash, Connellsville, Pa.

Cox Mine; Slope; Pittsburgh Seam, 108 inches thick.
PO—Dawson, Pa. SP—Same. **CTY**—Fayette, RR—B. & O.
MS—J. D. Cullen, Dawson, Pa.
S of H—Mules and steam locos. Track gauge 42 inches.
S of M—Hand.
PP—1 pump.
Coke Ovens—12 Bee Hive.
SIZES SHIPT—Run of Mine.

JO ANN COAL COMPANY

General Office, 1109 House Bldg., Pittsburgh, Pa.
PR—Mr. Schannon, Pittsburgh, Pa.
TR—R. W. Henley, Pittsburgh, Pa.
GS—E. W. Greene, Pittsburgh, Pa.

Blue Gense Mine; Drift; Seam, 3 feet thick.
PO—West Monterey, Pa.; SP—Upper Hillville, Pa.; **CTY**—Clarion; RR—(Allegheny Div.) P. R. R.
MS—John Welsh, West Monterey, Pa.
S of H—Mules and elec. motors. Track gauge, 36 inches.
S of M—Shortwall machs.
PP—1—100 H. P., 1—150 H. P. ore tube boilers, gen. units, 100 K. W. 250 volts D. C.
EMP—20. Daily tonnage 75.
SIZES SHIPT—Run of Mine.

JOHNETTA BRICK AND COAL CO.

General Office, 1203 Chamber of Commerce Bldg., Pittsburgh, Pa.
PR—J. E. Stewart, Johnetta, Pa.
GM—J. E. Stewart, " "
VP—Geo. K. Roby, Pittsburgh, Pa.
TR—D. C. Eaton, Pittsburgh, Pa.
PA—N. A. Barnhart, Pittsburgh, Pa.
EM—M. D. Gibson, Pittsburgh, Pa.
SA—Bertha Coal Co., Johnetta, Pa.
SCO—Four States Supply Co., Johnetta, Pa. Buyer, W. C. Sharpe, Irwin, Pa.

Johnetta Mine; Shaft; Lower Kittanning Seam, 36 to 42 in. thick.
PO—Johnetta, Pa.; SP—Same; **CTY**—Armstrong, RR—Penna., Allegheny Div.
MS—R. L. Barnaby, Johnetta, Pa.
SM—R. D. Thompson, Johnetta, Pa.
S of H—3 trolley pole type locos. Track gauge, 42 in.
S of M—1 chain breast type and 4 shortwall machs.
PP—Power purchased, transformer 2200 to 440 volts A. C., M. G. S. L. 275 volts D. C., 4 pumps.
EMP—100. Last fiscal year output, 64,689 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

JOHNSTOWN SMOKELESS COAL CO.

Office Address, Farmers Trust & Mtg. Co. Bldg., Main St., Johnstown, Pa.
PR—Jas. P. Thomas, Johnstown, Pa.
TR—Campbell Patch, Johnstown, Pa.
GM—H. L. Tredennick, Johnstown, Pa.
GS—A. T. Williams, Johnstown, Pa.
PA—R. L. Sanford, Johnstown, Pa.
SA—John Tredennick, Boston, Mass.

Shaft Mine; Shaft; B or Miller Seam, 42 in. thick.
PO—Johnstown, Pa. SP—Same. **CTY**—Cambria, RR—Penna.
S of H—Mules.
S of M—Hand.
Last year tonnage 47,440.
SIZES SHIPT—Run of Mine.

No. 7 Mine; Slope; B or Miller Seam, 42 in. thick.
PO—Johnstown, Pa. SP—Same. **CTY**—Cambria, RR—Penna.
S of H—Electric.
S of M—5 shortwall machs.
Last years tonnage 52,561.
SIZES SHIPT—Run of Mine.

JONATHAN COAL MINING COMPANY

General Office, 102 Franklin Bank Bldg., Philadelphia, Pa.
PR—Jon. P. Edwards, Philadelphia, Pa.
VP—S. L. G. Southerland, Philadelphia, Pa.
TR—Wm. R. Eagle, Philadelphia, Pa.
GM—Jon. P. Edwards, Philadelphia, Pa.
Jonathan Mine; Drift; Barnett Seam; 48 inches thick.
PO—Dudley, Pa.; **CTY**—Huntingdon; RR—Huntingdon & Broad Top Mtn.
MS—W. H. Reed, Dudley, Pa.
S of H—Rope. Steam loco.
S of M—Hand.
PP—1 water tube boiler, 60 H. P.
Daily output, 75 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.
Note—Mine operated under lease by W. H. Reed, Dudley, Pa.
old information.

JONES COAL COMPANY.

PR—M. E. Jones, 612 S. Seventh St., Indiana, Pa.
GS—M. E. Jones, 612 S. Seventh St., Indiana, Pa.
EM—Thos. Peador, Indiana, Pa.

Yellow Creek Mine; Drift; D and E Seams, 84 in. thick.
PO—Indiana, Pa. SP—Same. **CTY**—Indiana, RR—Penna., Snyder Br.
MS—H. T. Jones, Indiana, Pa.
S of H—1 elec. loco. Track gauge, 36 in.
S of M—1 elec. mach.
PP—550 volts D. C. Purchase power.
Last fiscal year output, 8,250 tons.
SIZES SHIPT—Run of Mine.
(old information)

JOSEPHSON COAL COMPANY

General Office, St. Mary's, Pa.
PR—Gust Josephson, St. Mary's, Pa.
VP—H. C. Johnson, Reading, Pa.
TR—F. A. Hauber, St. Mary's, Pa.
GM—Gust Josephson, Kersy, Pa.
GS—Gust Josephson, Kersy, Pa.
CE—P. J. Hauber, St. Mary's, Pa.
EM—R. M. Shaffer, Ridgeway, Pa.
EE—Gust Josephson, Kersy, Pa.
SCO—Gust Josephson Store, Buyer, Gust Josephson, Kersy, Pa.
SA—Frontier Mining Co., St. Marys, Pa.

Eckley No. 1 Mine; Drift; Lower Kittanning Seam; 42 inches thick.
PO—Kersy, Pa.; SP—Same; **CTY**—Elk; RR—P. S. & N.
S of H—Mules and rope. Track gauge 30 inches.
S of M—Hand, comp. air and shortwall machs.
PP—3 water tube boilers, 150 H. P.
EMP—60. Last fiscal year output, 30,000 tons.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Screens.

Montgomery No. 2 Mine; Drift; Lower Kittanning Seam; 42 inches thick.
PO—Adrian, Pa.; SP—Montgomeryville, Pa.; **CTY**—Armstrong; RR—B. & P.

MS—Joseph Woods, Adrian, Pa.
S of H—Mules and rope. Track gauge 30 inches.
S of M—Hand, comp. air and shortwall machs.
PP—Water tube boiler.
EMP—60. Last fiscal year output, 30,000 tons.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Screens.

JOYCE, M. V.

General Office, New Bethlehem, Pa.
PR—M. V. Joyce, New Bethlehem, Pa.
CE—R. R. Hodson, New Bethlehem, Pa.
EM—R. R. Hodson, New Bethlehem, Pa.

Fern Mine; Drift; Lower Kittanning Seam, 40 inches thick.
PO—New Bethlehem, Pa.; SP—Same; **CTY**—Armstrong; RR—Penna.
MS—Wm. Joyce, New Bethlehem, Pa.
S of H—Mules. Track gauge 30 inches.
S of M—Hand.
PP—Power purchased.
EMP—15. Daily tonnage 100.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.

JUNEAU COAL MINING COMPANY.

Now Ritter & Winslow, Inc.

JUNIATA COAL CO.

General Office, Alexandria, Pa.
PR—John Phillips, Alexandria, Pa.
TR—John Phillips, " "
GM—John Phillips, " "
CS—A. P. Hite, " "
PA—Geo. Henderson, Alexandria, Pa.
CE—J. C. Silliman, Altoona, Pa.

Juniata No. 2 Mine; Slope; B Rider Seam, 36 in. thick.
PO—Lilly, Pa. SP—Cassandra, Pa. **CTY**—Cambria, RR—Penna., Bens Cr. Br.
S of H—Rope. Track gauge, 30 in.
S of M—Hand.
EMP—30. Last fiscal year output, 14,395 tons.

Juniata Mine No. 3, Slope and Drift, Rider Seam, 46 in. thick.
PO—Lilly, Pa.; SP—Cassandra; **CTY**—Cambria, RR—Penna., Bens Creek branch.
MS—James Forsythe, Lilly, Pa.
S of H—Mules. Track gauge, 36 in.
S of M—Hand.
PP—Purchase power.
EMP—48. Last fiscal year output, 40,000 tons.
old information.

JUPITER COAL COMPANY.

PR—C. H. Quast, East Brady, Pa.
TR—C. H. Quast, East Brady, Pa.
PA—William Haston, Prospect, Pa.

Jupiter Mine; Slope; Middle Kittanning Seam, 36 in. thick.
PO—Prospect, Pa. SP—Isle, Pa. **CTY**—Butler, RR—Western Allegheny.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mae.
old information.

KATO COAL CO.

General Office, Curwensville, Pa.
PR—Wm. Wingert, Luthersburg, Pa.
VP—A. Z. Wolf, Curwensville, Pa.
TR—L. B. Norris, Curwensville, Pa.
GM—Michael Kelly, Curwensville, Pa.
GS—M. Kelly, Curwensville, Pa.
PA—Michael Kelly, Curwensville, Pa.
CE—E. W. Hess, Clearfield, Pa.
EM—Hess Engineering Co., Clearfield, Pa.
EE—Chas. E. Diehl, Curwensville, Pa.
SCO—Address the Company, Buyer, W. J. Jones, Kato, Pa.
SA—M. J. Kelly, Curwensville, Pa.

Kato Mine No. 5; Drift; "B" Seam, 42 to 54 in. thick.
PO—Kato, Pa. SP—Samel. Prepaid. **CTY**—Center, RR—N. Y. C., Beech Cr. Div.
MS—Chas. E. Diehl, Curwensville, Pa.
S of H—Mules and trolley pole type locos. Track gauge, 36 in.
S of M—2 shortwall machs.
PP—Power purchased, transformer 2200—250 volts D. C., 2 pumps.
EMP—50. Last fiscal year output, 45,000 tons.
SIZES SHIPT—Run of Mine.
old information.

KAY COAL MINING COMPANY

General Office, " " " "
PR—R. H. Kay, " "
TR—H. P. Kay, " "
GM—R. H. Kay, " "
GS—R. H. Kay, " "
PA—R. H. Kay, " "
EM—R. H. Kay, " "
SA—R. H. Kay, " "
SC—R. H. Kay, " "
SE—R. H. Kay, " "
SO—R. H. Kay, " "
SI—R. H. Kay, " "
SM—R. H. Kay, " "
SN—R. H. Kay, " "
SP—R. H. Kay, " "
SR—R. H. Kay, " "
SS—R. H. Kay, " "
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SV—R. H. Kay, " "
SW—R. H. Kay, " "
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SY—R. H. Kay, " "
SZ—R. H. Kay, " "
TA—R. H. Kay, " "
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ZW—R. H. Kay, " "
ZX—R. H. Kay, " "
ZY—R. H. Kay, " "
ZZ—R. H. Kay, " "

(Continued on Next Page)

Kay Coal Mining Company—Cont.

Octoraro Nos. 1 and 2 Mines; Slope; "B" and "A" Seams, 32-48 in. thick.
 PO—Riddelsburg, Pa.; SP—Same; CTY—Bedford; RR—H. & B. T.
 S of H—Mules and main rope. Track gauge 36 in.
 S of M—Shortwall machs.
 PP—1 fire tube boiler, 120 H. P., gen. unit, 50 K. W., 230 volts D. C., 2 pumps.
 EMP—30. Last years tonnage 14,000.
 SIZES SHIPT—Run of Mine.
 Mt. Equity Mine; Drift; C Seam, 48 in. thick.
 PO—Riddelsburg, Pa.; SP—Same; CTY—Bedford; RR—H. & B. T.
 S of H—Mules. Track gauge 38 in.
 S of M—Hand.
 PP—Power purchased, 230 volts D. C.
 EMP—75. Daily tonnage 125.
 SIZES SHIPT—Run of Mine.
 Hickory Hill Mine; Slope; C Kelly Seam, 48 in. thick.
 PO—Riddelsburg, Pa.; SP—Coalmoor, Pa.; CTY—Bedford; RR—H. & B. T.
 S of H—Mules and main and tall rope. Track gauge 42 in.
 S of M—Hand.
 PP—1 fire tube boiler, 150 H. P., 40 K. W. gen. unit, 230 volts D. C., 2 pumps.
 EMP—80. Daily tonnage 250.
 SIZES SHIPT—Run of Mine.
 Note—Successors to Octoraro Coal Co.
 Rock Bar Mine; Slope; Barnett Seam, 36 in. thick.
 PO—Riddelsburg, Pa.; SP—Same; CTY—Bedford; RR—H. & B. T.
 S of H—Mules and rope. Track gauge 36 in.
 S of M—Hand.
 PP—Power purchased, 230 volts D. C., 1 pump.
 EMP—25. Last years tonnage 18,000.
 SIZES SHIPT—Run of Mine.

KELLY BROTHERS COAL COMPANY.

General Office, Snow Shoe, Pa.
 PR—H. P. Kelly, Snow Shoe, Pa.
 TR—M. D. Kelly, " "
 GM—M. D. Kelly, " "
 GS—Logan M. Kelly, " "
 PA—John P. Kelly, " "
 EM—W. G. Knapper, Snow Shoe, Pa.
 EE—John C. Noll Snow Shoe, Pa.
 SCO—Kelley Bros. Supply Co. Buyer, Thomas F. Kelly, Snow Shoe, Pa.
 Additional Information on Page 738
 Cherry Run No. 3 Mine; Drift and Slope; "B" Seam, 42 to 66 in. thick.
 PO—Snow Shoe, Pa.; SP—Same; CTY—Centre; RR—Penna., Snow Shoe Br.
 MS—J. J. Morgan, Snow Shoe, Pa.
 S of H—3 elec. 2 steam and 1 gasoline loco. Track gauge 36 in.
 S of M—4 elec. machs.
 PP—6 pumps. Purchase power.
 EMP—180. Last years tonnage 168,000.
 Cherry Run No. 6 Mine; Drift; "B" Seam, 48 to 66 in. thick.
 PO—Snow Shoe, Pa.; SP—Same; CTY—Centre; RR—Penna.
 MS—Edward Hayes, Snow Shoe, Pa.
 S of H—Mules. Track gauge 36 in.
 PP—1 pump. Purchase power.
 EMP—40. Last fiscal year output 23,000 tons.
 Cherry Run No. 4 Mine; Drift; "B" Seam, 42 to 60 in. thick.
 PO—Snow Shoe, Pa.; SP—Same; CTY—Centre; RR—Penna., Big Sandy Div.
 MS—Joseph Wade, Snow Shoe, Pa.
 S of H—1 elec. loco. Track gauge 36 in.
 S of M—1 elec. mach.
 PP—2 pumps. Purchase power.
 EMP—63. Last fiscal year output 62,000 tons.
 Valentine No. 2 Mine; Drift "B" Seam, 60 in. thick.
 PO—Snow Shoe, Pa.; SP—Same; CTY—Centre; RR—Penna.
 MS—Chas. H. Watson, Snow Shoe, Pa.
 S of H—Mules. Track gauge 36 in.
 EMP—34. Last fiscal year output 18,000 tons.
 Olanta Mine; Drift; "B" Seam, 86 to 54 in. thick.
 PO—Olanta, Pa.; SP—Same; CTY—Clearfield; RR—N. Y. C., Beech Creek Div.
 MS—W. R. Hall, Olanta, Pa.
 S of H—1 elec. loco. Track gauge 36 in.
 S of M—2 elec. machs.
 PP—2 pumps.
 EMP—29. Last fiscal year output 37,000 tons.

KELLY STATION MINING COMPANY

General Office, Kittanning, Pa.
 PR—E. R. Perkins, Tarentum, Pa.
 VP—Dr. T. L. Aye, Brackebridge, Pa.
 TR—Otto Cunningham, Brackebridge, Pa.
 GM—W. G. Aye, Kittanning, Pa.
 GS—W. G. Aye, Kittanning, Pa.
 EM—W. G. Aye, Kittanning, Pa.
 SA—Fairview Mining Company and Shawmut Coal Company, Kittanning, Pa.

Kelly Station Mine; Drift; Upper Freeport Seam, 41 to 48 in. thick.
 PO—Kelly Station, Pa.; SP—Kelly, Pa.; CTY—Armstrong; RR—Penna., Allegheny Div.
 S of H—Mules. Track gauge 42 inches.
 S of M—Chain breast type machs.
 PP—Power purchased, transformer 2200-500 volts A. C.
 EMP—20. Daily tonnage 50.
 SIZES SHIPT—Run of Mine.

KENDALL, J. L.
 General Office, Oliver Bldg., Pittsburgh, Pa.
 PR—J. L. Kendall, Oliver Bldg., Pittsburgh, Pa.
 GM—J. L. Kendall, Oliver Bldg., Pittsburgh, Pa.
 Hillside Mine; Drift; Pittsburgh Seam, 84 in. thick.
 PO—Arona, Pa.; SP—Madison, Pa.; CTY—Westmoreland; RR—P. R. R.
 S of H—Mules and 1 gasoline loco. Track gauge 42 in.
 S of M—Hand.
 PP—Power purchased, transformer 2200 to 220 volts A. C., 3 pumps.
 EMP—46. Last years tonnage 39,137.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.
 NOTE—Successor to the Westmoreland Gas Coal Company.

KENNERLY COAL MINING COMPANY

General Office, South Fork, Pa.
 PR—D. Parson, Johnstown, Pa.
 VP—M. E. McCrossin, South Fork, Pa.
 TR—Wm. Fox, South Fork, Pa.
 GS—M. E. McCrossin, South Fork, Pa.
 PA—G. Boisinger, South Fork, Pa.
 Keenerly No. 1 Mine; Slope; C. Prime Seam, 42 to 48 in. thick.
 PO—Confluence, Pa.; SP—Same; CTY—Somerset; RR—B. & O.
 MS—Harry Early Confluence, Pa.
 S of H—Rope and steam loco. Track gauge 42 inches.
 S of M—Hand.
 PP—1—50 H. P. fire tube boiler.
 EMP—50. Last years tonnage 15,000.
 SIZES SHIPT—Run of Mine.

KENROCK COAL COMPANY

General Office, 330 Land Title Bldg., Philadelphia, Pa.
 PR—J. B. Bird, Wilmington, Del.
 VP—J. E. Gegenheimer, Philadelphia, Pa.
 TR—S. D. Ross, Philadelphia, Pa.
 GS—Leonard S. Sweet, Saton, Pa.
 PA—Leonard S. Sweet, Saton, Pa.
 EM—Womelsdorf-Dunkle & Custer, Philadelphia, Pa.
 Kenrock Mine; Drift; Fulton & Barcott Seams, 60-48 in. thick.
 PO—Saxon, Pa.; SP—Budley, Pa.; CTY—Huntingdon; RR—H. & B. T. M.
 S of H—5 mules. Track gauge 38 in.
 S of M—Hand.
 EMP—61. Last years tonnage 26,000.
 SIZES SHIPT—Run of Mine.

KEPPLE COAL MINING COMPANY.

General Office, Leechburg, Pa.
 PR—P. C. Maher, Farmers Bank Bldg., Pittsburgh, Pa.
 TR—R. C. Maher, Leechburg, Pa.
 GM—R. C. Maher, Leechburg, Pa.
 GS—R. C. Maher, Leechburg, Pa.
 PA—R. C. Maher, Leechburg, Pa.
 EM—E. A. Walters, Leechburg, Pa.
 Kepple Mine; Drift; Upper Freeport Seam, 42 in. thick.
 PO—Leechburg, Pa.; SP—Same; CTY—Armstrong; RR—P. R. R.
 S of H—6-ton loco. Track gauge 42 in.
 S of M—3 shortwall machs.
 PP—Power purchased, transformer 6600 to 440 volts A. C.
 EMP—40. Daily tonnage 220.
 SIZES SHIPT—Run of Mine.

KERR COAL CO.

General Office, Freeport, Pa.
 PR—Isaac Guckenheimer, Pittsburgh, Pa.
 VP—R. P. O'Brien, Freeport, Pa.
 TR—A. L. Strouse, Freeport, Pa.
 GS—R. A. Stein, Kittanning, Pa.
 PA—A. L. Strouse, Freeport, Pa.
 EM—D. E. Taylor, Freeport, Pa.
 EE—R. H. Kerner, Freeport, Pa.
 SA—R. A. Stein, Kittanning, Pa.
 Kerr No. 2 Mine; Drift; Upper Freeport Seam, 42 in. thick.
 PO—Freeport, Pa.; SP—Same; CTY—Butler; RR—Penna.
 S of H—Trolley pole type and 2 electric locos.
 S of M—7 shortwall machs.
 PP—2—300 H. P. fire tube boilers, gen. units, 275 volts D. C., 1—250 K. W. motor generator set, 4 pumps.
 EMP—110. Last fiscal year output, 90,000 tons.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Shaker Screens.

KETTLE CREEK COAL MINING CO.

General Office, 34 West 4th St., Williamsport, Pa.
 PR—G. D. Tinsman, Williamsport, Pa.
 VP—R. T. S. Steele, Williamsport, Pa.
 TR—Jos. W. Cochran, Williamsport, Pa.
 GM—W. H. H. Miller, Saltsburg, Pa.
 GS—Harry G. From, Bitumen, Pa.
 PA—Harry G. From, Bitumen, Pa.
 SCO—Bitumen Supply Co. Buyer, Wm. Schatz, Bitumen, Pa.
 Kettle Creek Mine; Drift; R Seam, 60-70 inches thick.
 PO—Bitumen, Pa.; SP—Cooks Run, Pa.; CTY—Clinton; RR—P. R. R., Erie Div.
 S of H—12 elec. locos. Track gauge 36 in.
 S of M—7 shortwall machs.
 PP—2 150 K. W. belted generators, 550 volts D. C., 3—150 H. P. boilers, 18 pumps.
 EMP—370. Daily tonnage 1,000 gross.
 SIZES SHIPT—Run of Mine.

KEYS, W. A. COAL CO.

General Office, Brockwayville, Pa.
 OWNER—W. A. Keys, Brockwayville, Pa.
 Logue Mine; Drift; Freeport Seam, 30 in. thick.
 PO—Brockwayville, Pa.; SP—Same; CTY—Jefferson; RR—Erie.
 MS—F. Baskirk, Brockwayville, Pa.
 S of H—Mules. Track gauge 30 in.
 S of M—Hand.
 EMP—60. Last years tonnage 35,000.
 SIZES SHIPT—Run of Mine.

KEYSTONE COAL & COKE CO.

General Office, Huff Bldg., Greensburg, Pa.
 PR—J. B. Huff, Greensburg, Pa.
 VP—Richard Coulter, Greensburg, Pa.
 TR—A. N. Persbrog, Greensburg, Pa.
 SEGUY—Geo. H. Francis, Greensburg, Pa.
 GS—H. F. Kovard, Greensburg, Pa.
 PA—R. P. Kilgore, Greensburg, Pa.
 EM—A. Macdonald, Greensburg, Pa.
 MM—James Wilson, Darragh, Pa.
 Sales Agents, F. B. Miller, Greensburg, Pa.

Additional Information on Pages 730-737

Arona Mine; Slope; Pittsburg Seam; 76 to 85 in. thick.
 PO—Darragh, Pa.; SP—Madison Station; CTY—Westmoreland; RR—Penna., Hempfield Br.
 MS—A. W. White, Darragh, Pa.
 S of H—Mules and 2 elec. locos. Track gauge, 40 in.
 S of M—Hand.
 PP—2 return tubular boilers, total 250 H. P., 4 gen. units.
 EMP—55. Last fiscal year output, 59,587 tons.
 SIZES SHIPT—Run of Mine.
 Claridge Mine; Drift; Pittsburg Seam, 76 to 85 in. thick.
 PO—Claridge, Pa.; SP—Same; CTY—Westmoreland; RR—P. R. R., Manor Br.
 MS—G. M. Brinker, Claridge, Pa.
 S of H—Rope and mules; track gauge 40 in.
 S of M—Hand.
 PP—4 return tubular boilers, 500 H. P., 6 gen. units, 3 pumps.
 EMP—76. Last fiscal year output, 87,177 tons.
 SIZES SHIPT—Run of Mine.
 Crows Nest Mine; Drift; Pittsburg Seam; 72 to 108 in. thick.
 PO—Greensburg, Pa.; SP—Same; CTY—Westmoreland; RR—Penna.
 MS—W. E. Henderson, Greensburg, Pa.
 SM—Wm. M. Huff, Greensburg, Pa.
 S of H—Rope, mules. Track gauge, 40 in.
 S of M—Hand. 10 elec. machs.
 PP—1 return tubular boiler, total 50 H. P., 1 gen. unit, 8 pumps. Purchase power.
 EMP—332. Last fiscal year output, 546,084 tons.
 SIZES SHIPT—Run of Mine, Slack, Crushed.

Keystone Mine; Shaft; Pittsburg Seam, 76 to 85 in. thick.
 PO—Darragh, Pa.; SP—Madison Station, Pa.; CTY—Westmoreland; RR—P. R. R., Hempfield Br.
 MS—A. W. White, Darragh, Pa.
 S of H—5 elec. locos., mules and rope. Track gauge, 40 in.
 S of M—Hand and 9 elec. machs.
 PP—6 return tubular boilers, total 900 H. P., 2 200 K. W. M. G. Sets, 4 pumps. Purchase power.
 EMP—336. Last fiscal year output, 391,179 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 Greensburg No. 1 Mine; Slope; Pittsburg Seam, 72 to 96 in. thick.
 PO—Greensburg, Pa.; SP—Same; CTY—Westmoreland; RR—P. R. R., South-west Br.
 S of H—2 Elec. loco., rope and mules; track gauge 40 in.
 S of M—2 elec. mach.

PP—3 return tubular boilers, 325 H. P., 1 gen. unit, 2 pumps. Purchase power.
 EMP—70. Last fiscal year output, 76,877 tons.
 SIZES SHIPT—Run of Mine.

Greensburg No. 2 Mine; Slope; Pittsburg Seam, 72 to 96 in. thick.
 PO—Greensburg, Pa.; SP—Same; CTY—Westmoreland; RR—P. R. R., South-west Br.
 MS—H. H. Noll, Greensburg, Pa.
 S of H—4 elec. locos. Track gauge, 40 in.
 S of M—Hand and 5 elec. machs.
 PP—Power purchased.
 EMP—237. Last fiscal year output, 315,015 tons.
 SIZES SHIPT—Run of Mine.

Greensburg No. 3 Mine; Slope; Pittsburg Seam, 80 to 85 in. thick.
 PO—Greensburg, Pa.; SP—Same; CTY—Westmoreland; RR—P. B. R., Baderhaugh Br.
 MS—Henry Welty, Greensburg, Pa.
 S of H—Mules. Track gauge 40 in.
 S of M—Hand.
 PP—1 return tubular boiler, total 100 H. P., 3 gen. unit, and 1 pump.
 EMP—56. Last fiscal year output, 57,789 tons.
 SIZES SHIPT—Run of Mine.

Greensburg No. 4 Mine; Slope; Freeport Seam, 54 to 60 in. thick.
 PO—Greensburg, Pa.; SP—Hooker, CTY—Westmoreland; RR—Penna., South-west Br.
 MS—R. W. Sterrett, Hunker, Pa.
 S of H—Mules and elec. locos. Track gauge, 40 in.
 S of M—Hand, shortwall mining mach.
 PP—1 pump. Purchase power.
 EMP—53. Last fiscal year output, 70,430 tons.
 SIZES SHIPT—Run of Mine.

Hempfield No. 1 Mine; Drift; Pittsburg Seam; 80 to 85 in. thick.
 PO—Greensburg, Pa.; SP—Same; CTY—Westmoreland; RR—Penna.
 MS—W. E. Henderson, Greensburg, Pa.
 SM—Wm. Huff, Greensburg, Pa.
 S of H—Rope, mules and 2 elec. locos. Track gauge, 40 in.
 S of M—Hand and 4 elec. machs.
 PP—4 return tubular boilers, 400 H. P., 11 pumps. Purchase power.
 EMP—157. Last fiscal year output, 238,534 tons.
 SIZES SHIPT—Run of Mine, Slack.

Huron Mine; Drift; Pittsburg Seam, 72 to 108 in. thick. Operate Washery.
 PO—New Alexandria, Pa.; SP—Allsworth, Sta. Pa.; CTY—Westmoreland; RR—P. R. R., New Alexandria Br.
 MS—Wm. Goodfellow, New Alexandria, Pa.

S of H—Mules, rope and 2 electric loco. Track gauge 40 in.
 S of M—Hand and 1 elec. mach.
 PP—2 return tubular boilers, total 500 H. P., 6 gen. units, 1 air comp., 1 pump.
 EMP—93. Last fiscal year output, 198,508 tons. Coke ovens, 100 rectangular.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

Madison Mine worked out.

Salem Mine; Slope; Pittsburg Seam, 72 to 108 in. thick. Operate Washery.
 PO—New Alexandria, Pa.; SP—Allsworth, Station; CTY—Westmoreland; RR—Penna., New Alexandria Br.
 MS—Wm. Goodfellow, New Alexandria, Pa.
 S of H—3 elec. locos. Track gauge 40 in.
 S of M—3 elec. machs.
 PP—8 return tubular boilers, total 2400 H. P., 16 gen. units, 6 air comp., 7 pumps.
 EMP—190. Last fiscal year output, 381,779 tons.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.

KEYSTONE COAL COMPANY.

General Office, York, Pa.
 PR—J. E. Baker, York, Pa.
 TR—V. M. Frey, " "
 GM—J. E. Baker, " "
 GS—V. M. Frey, York, Pa.
 PA—George R. Sheoberger, York, Pa.
 CE—V. M. Frey, York, Pa.
 Mooween Mine; Drift; Upper Freeport Seam, 42 to 48 in. thick.
 PO—Mooween, Pa.; SP—White, Pa.; CTY—Indiana; RR—Penna., Conemaugh Div.
 MS—Edward Bytheway, Mooween, Pa.
 S of H—Elec. locos.
 S of M—2 elec. machs.
 PP—Boilers, 450 H. P., 2 gen. units, 250 volts D. C., 1 pump.
 EMP—162. Last fiscal year output 140,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Picking Table.

KEYSTONE LIME & COAL CO.

General Office, Elk Lick, Pa.
PR—Sam Herschberger, Grantsville, Md.
TR—C. E. Bird, Myersdale, Pa.
GM—C. M. Bird, Myersdale, Pa.
GS—C. M. Bird, Myersdale, Pa.
PA—C. M. Bird, Myersdale, Pa.
SA—C. M. Bird, Myersdale, Pa.

Peek Mine; Drift; Pittsburgh Seam, 96 inches thick.
PO—Elk Lick, Pa.; SP—West Salisbury, Pa.; CTY—Somerset; RR—B. & O.
MS—Chas. Deist, Elk Lick, Pa.
S of H—Mules; Track gage 42 inches.
S of M—Hand.
EMP—16. Last fiscal year output, 8,000 tons.
SIZES SHIPT—Run of Mine.

KEYSTONE MINING CO.

General Office, East Brady, Pa.
PR—H. H. Fruchan, Scranton, Pa.
TR—J. G. Endersin, New York, N. Y.
GM—W. W. Inglis, Scranton, Pa.
GS—D. Robertson, East Brady, Pa.
PA—C. W. Deings, East Brady, Pa.
EE—H. M. Warren, Scranton, Pa.
SCO—James Angilina, Catfish, Pa.

Sarah Furnace No. 1 Mine; Drift; Lower Kittanning Seam, 42 in. thick.
PO—East Brady, Pa.; SP—Frt. Sarah Furnace; Exp. East Brady, Pa.
CTY—Clarion; RR—P. R. R.
MS—C. H. Henry, East Brady, Pa.
S of H—12 mules and 2 trolley pole type locos. Track gage 36 in.
S of M—10 shortwall machs.
PP—2 fire tube boilers, 2-190 H. P. gas engines, 1-60 K. W., 1-30 K. W. gen. unit, 250 volts D. C. 2-140 K. W. generators, 10 pumps.
EMP—203. Daily tonnage 650.
SIZES SHIPT—Run of Mine.

Sterling No. 3 Mine; Drift; Lower Kittanning Seam, 42 in. thick.
PO—East Brady, Pa.; SP—Lawshannon, Pa.; CTY—Clarion; RR—Penna.
MS—Chas. C. Henry, East Brady, Pa.
S of H—10 mules, 1 trolley pole type loco. Track gage 32 inches.
S of M—5 shortwall machs.
PP—1-140 K. W. gen. unit, 250 volts D. C. 3 pumps.
EMP—150. Daily tonnage 500.
SIZES SHIPT—Run of Mine.

KIER FIRE BRICK COMPANY.

General Office, 2243 Oliver Bldg., Pittsburgh, Pa.
PR—S. M. Kier, Pittsburgh, Pa.
TR—P. S. Kier, Pittsburgh, Pa.
GM—H. W. Whitesell, Salina, Pa.
PA—S. M. Kier, Pittsburgh, Pa.

Salina Mine; Drift; Upper Freeport Seam, 36 to 60 in. thick.
PO—Salina, Pa.; SP—Same; CTY—Westmoreland; RR—Penna., Conemaugh Division.
MS—William Larimer, Salina, Pa.
S of H—Mules. Track gage 30 in.
S of M—1 chain elec. mach.
PP—Power purchased, 220 volts D. C.
Note—Consume output in Brick plant.

KISKIMINETAS COAL CO.

General Office, Blairsville, Pa.
PR—T. L. Tyne, West Chester, Pa.
TR—W. P. Graft, Blairsville, Pa.
GM—P. M. Graft, Blairsville, Pa.
GS—Ernest Fletcher, Saltsburg, Pa.
PA—Chancy Shipley, Blairsville, Pa.
PA—F. M. Graft, Blairsville, Pa.
CE—Albert Smith, Saltsburg, Pa.
EE—H. A. Scott, Saltsburg, Pa.
SCO—Kiskiminetas Supply Co., Buyer, Wm. G. Fletcher, Blairsville, Pa.
Sales Agent, Knickerbocker Fuel Co., New York, N. Y.

Tunnelton Mine; Drift; "E" Seam, 3 ft. thick.
PO—Tunnelton, Pa.; SP—Same; CTY—Indiana; RR—P. R. R., Conemaugh Div.
SM—H. F. Winger, Tunnelton, Pa.
S of H—2 elec. locos. Track gage 36 in.
S of M—7 Elec. mach.
PP—2 return tubular boilers, total 300 H. P., 1-100, 1-150 K. W., 250 volts D. C., 3 pumps.
EMP—123. Last years tonnage 61,680.

Brush Valley Mine; Drift; "B" Seam, 46 in. thick.
PO—Armagh, Pa.; SP—Scott Glen, Pa.; CTY—Indiana. RR—P. R. R., Clearfield & Cresson Div.
SM—M. J. Giddin, Armagh, Pa.
S of H—2 elec. locos. Track gage 42 in.
S of M—Hand and machs.
PP—2 return tubular boilers, 200 H. P., 2 gen. units, 150 K. W., 250 volts D. C., 6 pumps.
EMP—140. Last years tonnage 117,601.

Roaring Run Mine; Drift; "E" or Upper Freeport Seam, 36-60 in. thick.
PO—Apollo, Pa.; SP—Troxell, Pa.; CTY—Westmoreland; RR—Penna., Conemaugh Div.

S of H—1 electric loco. Track gage, 42 in.
S of M—9 electric machs.
PP—2 return tubular boilers, total 300 H. P., 1 gen. unit, 250 volts D. C.
EMP—210. Last years tonnage 201,750.

KISKIMINETAS VALLEY COAL COMPANY

General Office, New Bethlehem, Pa.
PR—H. F. Brennan, Pittsburgh, Pa.
TR—W. P. Todd, New Bethlehem, Pa.
GM—W. H. Patterson, Apollo, Pa.
GS—Harry Patterson, Apollo, Pa.
PA—Herbert & Henderson, Kittanning, Pa.
EE—Hayes Welch, Apollo, Pa.

Kiskiminetas Valley No. 1 Mine; Slope; Upper Freeport Seam 46 in. thick.
PO—Apollo, Pa.; SP—Same; CTY—Westmoreland; RR—P. R. R.
S of H—Mules, 1 elec. loco. Track gage 42 inches.
S of M—3 chain electric and 7 elec. machs.
PP—Power purchased, 1-150 K. W. generator set, 250 volts D. C., 1 pump.
EMP—75. Last years tonnage 50,000.
SIZES SHIPT—Run of Mine.

KITE, WM. J.

General Office, Buena Vista, Pa.
OWNERS—Wm. J. Kite, Buena Vista, Pa.
EM—Wm. Jenkins, Pittsburgh, Pa.
SA—Wm. J. Kite, Buena Vista, Pa.
No. 1 Mine; Drift; Pittsburgh Seam; 66 in. thick.
PO—Buena Vista, Pa.; SP—Same; CTY—Allegheny; RR—P. & L. E.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
EMP—10. Last years tonnage 9,000.
SIZES SHIPT—Run of Mine.

KITTANNING IRON & STEEL COMPANY

PR—Frank C. Neale, Pittsburgh, Pa.
TR—D. R. Wilson, Kittanning, Pa.
GM—Harry Hufnir, Kittanning, Pa.
PA—Wylie V. Thompson, Kittanning, Pa.
EM—Thomas Williams, Kittanning, Pa.

Cowanshannock No. 1 Mine; Drift; Inclined Plane; Upper Freeport Seam, 38 in. thick.
PO—Kittanning, Pa.; SP—Cowanshannock, Pa.; CTY—Armstrong; RR—P. R. R.
MS—Thos. Williams, Cowanshannock, Pa.
S of H—Mules and elec. locos. Track gage 36 in.
S of M—5 chain breast type machs.
PP—Gen. units, 275 volts, D. C., 4 pumps.
EMP—250. Daily output, 100 tons.
SIZES SHIPT—Run of Mine, Slack.

Cowanshannock No. 2 Mine; Drift; Lower Kittanning Seam, 42 in. thick.
PO—Kittanning, Pa.; SP—Cowanshannock, Pa.; CTY—Armstrong; RR—P. R. R.
MS—Thos. Williams, Cowanshannock, Pa.
S of H—Mules and electric locos.
S of M—2 chain breast type machs.
PP—3 gen. units, 275 volts D. C., 4 pumps.
Daily output, 400 tons.
SIZES SHIPT—Run of Mine, Slack.

Rayburn Mine; Drift; Lower Kittanning and Upper Freeport Seams, 42 in. thick.
PO—Cowanshannock, Pa.; SP—Same; CTY—Armstrong; RR—P. R. R.
MS—Wm. Patterson, Cowanshannock, Pa.
S of H—Mules and 2 locos.
S of M—5 cutting machs.
PP—3 gen. units, 275 volts D. C., 4 pumps.
EMP—150. Daily tonnage 400.
SIZES SHIPT—Run of Mine; Slack
PREP. EQUIPT—Screens.

KITTANNING MINING COMPANY

General Office, Boston, Mass.
PR—E. L. Farber, Boston, Mass.
TR—S. P. Burton, Jr., Boston, Mass.
VP—E. L. Farber, Boston, Mass.
GS—P. G. Marshall, Rimer, Pa.
PA—F. S. Marshall, Rimer, Pa.
EM—W. G. Aye, Kittanning, Pa.
SA—S. P. Burton & Co., Boston, Mass.

Peach Hill Mine; Drift; Lower Kittanning Seam, 40 inches thick.
PO—Rimer, Pa.; SP—Rimer, Pa.; CTY—Armstrong; RR—Penna.
S of H—Mules, comp. air and steam locos. Track gage 40 inches.
S of M—2 elec. machs.
PP—1 return tubular boiler, 1 generator.
EMP—50. Last fiscal year output, 40,000 tons.
SIZES SHIPT—Run of Mine.

KITTANNING STEAM COAL COMPANY

General Office, Kittanning, Pa.
PR—Orr Huntington, Kittanning, Pa.
TR—Anthony Smith, Kittanning, Pa.
GS—C. F. Smith, Kittanning, Pa.
PA—C. F. Smith, Kittanning, Pa.

Bullington No. 1 and 2 Mine; Drift; Lower Kittanning and Upper Freeport Seams; 42 in. thick.
PO—Kittanning, Pa.; SP—Same; CTY—Armstrong; RR—Penna.
S of H—Electric loco. Track gage 30 inches.
S of M—Shortwall machs.
PP—Purchase power, Transformer 2,200 to 250 volts.
EMP—50. Daily tonnage 150.
SIZES SHIPT—Run of Mine.

KLAMATH COAL COMPANY

General Office, Lock Haven, Pa.
PR—J. A. Shaffer, Jr., Lock Haven, Pa.
VP—Wm. P. Hopkins, Spokane, Wash.
TR—L. R. Klepper, Lock Haven, Pa.
GM—J. A. Shaffer, Jr., Lock Haven, Pa.
GS—J. R. Axelson, DuBois, Pa.
PA—J. A. Shaffer, Jr., Lock Haven, Pa.
EM—Chas. A. Inel, Clarion, Pa.
EE—J. R. Axelson, DuBois, Pa.
SCO—Clarion Valley Trading Co., Buyer, J. R. Axelson, DuBois, Pa.

Cumming No. 1 Mine; Drift; Brookville Seam, 60 in. thick.
PO—Summerville, Pa.; SP—Holden, Pa.; CTY—Clarion; RR—L. E. F. & C.
MS—A. G. Eckland, Summerville, Pa.
SM—Chas. J. Miller, Summerville, Pa.
S of H—1 elec. loco. Track gage 36 in.
S of M—2 chain breast machs.
PP—3 return tubular boilers, total 250 H. P., 2 M. G. Sets, 75 and 150 K. W., 500 volts D. C., 1 pump.
EMP—85. Last years tonnage 31,632.
SIZES SHIPT—Run of Mine.

KLEE COAL COMPANY

General Office, 406 Empire Bldg., Pittsburgh, Pa.
PR—R. R. Pennar, Pittsburgh, Pa.
VP—T. A. Turk, Pittsburgh, Pa.
TR—H. B. Day, Pittsburgh, Pa.
GM—R. B. Loos, 901 1st Natl. Bank Bldg., Pittsburgh, Pa.
GS—W. H. Evans, Evans City, Pa.
EM—E. A. Evans, Pittsburgh, Pa.
SA—R. B. Loos, 901 1st Natl Bk Bg., Pittsburgh, Pa.

Fay No. 1 Mine; Shaft; Freeport Seam; 44 inches thick.
PO—Evans City, Pa.; SP—Same; CTY—Butler; RR—B. & O.
S of H—Mules. Track gage 42 inches.
S of M—2 shortwall machs.
PP—Power purchased. Gen. unit 100 K. W., 250 volts D. C.
EMP—30.
SIZES SHIPT—Run of Mine, Slack, Lump
NOTE—Formerly operated by Fay Coal Co.

KNICKERBOCKER SMOKELESS COAL CO.

General Office, Knickerbocker Bldg., Johnstown, Pa.
PR—T. Ford Lewis, Johnstown, Pa.
VP—James A. Hill, New York, N. Y.
TR—P. M. Graft, Blairsville, Pa.
GM—Telford Lewis, Johnstown, Pa.
GS—Richard A. Suppes, Johnstown, Pa.
PA—Norman Lewis, Johnstown, Pa.
EM—C. T. Oaks, Johnstown, Pa.
SCO—Hooversville Supply Co., Buyer, Edw. Lauer, Hooversville, Pa.
SA—Knickerbocker Fuel Co., 1 Broadway, New York, N. Y.

Knickerbocker No. 2 Mine; Drift; "E" Seam, 42 in. thick.
PO—Hooversville, Pa.; SP—Same; CTY—Somerset; RR—B. & O.
MS—S. B. Halvorsen, Hooversville, Pa.
S of H—Trolley pole type locos. Track gage, 42 in.
S of M—3 shortwall machs.
PP—Power purchased, M. G. sets, 250 volts D. C.
EMP—100. Last years tonnage 74,722.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.

Knickerbocker No. 3 Mine; Drift; "B" Seam, 48 in. thick.
PO—Hooversville, Pa.; SP—Same; CTY—Somerset; RR—B. & O.
MS—S. B. Halvorsen, Hooversville, Pa.
S of H—Trolley pole type locos. Track gage, 36 in.
S of M—Hand.
PP—Power purchased, M. G. sets, 250 volts D. C.
EMP—50. Last years tonnage 45,803.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.

KNOWLES & SHELBY.

Phillipsburg, Pa.
Pershing Mine; Drift; R & D Seams, 52 to 60 in. thick.
No report.

KNOWDALE COAL & COKE COMPANY

General Office, Brookville, Pa.
PR—Dr. J. G. Stiner, Brookville, Pa.
VP—J. J. Campbell, Brookville, Pa.
TR—J. B. Henderson, Brookville, Pa.
GM—J. J. Campbell, Brookville, Pa.
GS—J. J. Campbell, Brookville, Pa.
PA—J. J. Campbell, Brookville, Pa.
CE—Herbert & Henderson, Kittanning, Pa.

Nos. 1, 2 and 5 Mine; Drift; Mules; Kittanning Seam, 52 inches thick.
PO—Knockdale, Pa.; SP—Same; CTY—Jefferson; RR—Pgh. & Shawmut
S of H—Mules. Track gage, 36 in.
S of M—Hand.
EMP—40.
SIZES SHIPT—Run of Mine, Slack.

KREGER BROTHERS

General Office, Little, Pa.
PR—D. L. Kregar, Little, Pa.
GM—S. Kregar, Little, Pa.
GS—C. S. Kregar, Little, Pa.
CE—G. O. Kimm, Little, Pa.
SCO—Addrs. the company, Buyer, D. E. Kregar, Little, Pa.

Kregers Mine; Drift; Red B. Seam, 46 inches thick.
PO—Humbert, Pa.; SP—Same; CTY—Somerset; RR—United.
S of H—Mules. Track gage 26 inches.
S of M—Hand.
EMP—10. Last years tonnage 5,000.
SIZES SHIPT—Run of Mine.

KRONENWETTER COAL COMPANY

General Office, St. Marys, Pa.
PR—E. J. McLaughlin, St. Marys, Pa.
TR—Louis Kronenwetter, St. Marys, Pa.
GM—Louis Kronenwetter, St. Marys, Pa.
PA—E. J. McLaughlin, St. Marys, Pa.
EM—A. H. Shafer, Ridgway, Pa.

Kronenwetter Mine; Drift; Brookville Seam, 45 in. thick.
PO—St. Marys, Pa.; SP—Same; CTY—Elk; RR—P. R. R.
MS—Louis Kronenwetter, St. Marys, Pa.
S of H—Mules and endless rope. Track gage 30 in.
S of M—Hand.
EMP—32. Daily tonnage 100.
SIZES SHIPT—Run of Mine.
Note—Successors to Lamore Mining Co.

KURTZ & RINN

General Office, Punxsutawney, Pa.
PR—S. A. Rinn, Punxsutawney, Pa.
TR—E. H. Winslow, Punxsutawney, Pa.
GM—S. A. Rinn, Punxsutawney, Pa.
GS—W. N. Trussell, Punxsutawney, Pa.
PA—W. N. Trussell, Punxsutawney, Pa.

Kurtz & Rinn Mine; Drift; Freeport Seam, 66 to 78 in. thick.
PO—Walston, Pa.; SP—Same; CTY—Penna.; RR—B. & O.
MS—Wm. Lewis, Punxsutawney, Pa.
S of H—Mules and rope. Track gage 42 in.
S of M—Hand.
PP—1 water tube boiler, total 80 H. P., 1 pump.
Last years tonnage 43,693.
SIZES SHIPT—Run of Mine.

KURTZ COAL CO.

Saltsburg, Pa.
No report.

LA BELLE COKE CO.

General Office, Wheeling, W. Va.
PR—D. A. Burt, Wheeling, W. Va.
VP—H. D. Westfall, Wheeling, W. Va.
TR—H. B. Boswick, Wheeling, W. Va.
GM—G. B. LeVan, Steubenville, O.
GS—R. W. McLaughlin, Steubenville, O.
PA—R. M. Rice, Wheeling, W. Va.
CE—H. H. Roberts, Steubenville, O.
EM—J. C. Gibson, Steubenville, O.
EE—Jas. Farrington, Steubenville, O.
SCO—Luzerne Merc. Co., Wheeling, W. Va.
SA—Wheeling Steel Products Co., Wheeling, W. Va.

La Belle Mine; Drift; Pittsburgh Seam; 84 in. thick.
PO—La Belle, Pa.; SP—Same; CTY—Fayette.
MS—Alex. Peterson, La Belle, Pa.
SM—Frank Hamore, La Belle, Pa.
S of H—Trolley pole type locos.
S of M—Hand.
PP—Power generated, 2 250 K. W., gen. units, 275 volts D. C.
EMP—150. Last years tonnage 172,480.

LACEY COAL COMPANY

General Office, 1713 First Natl. Bank Bldg., Pittsburgh, Pa.
PR—R. C. Maston, Pittsburgh, Pa.
TR—E. C. Hibbets, Pittsburgh, Pa.
GM—H. A. Turner, Pittsburgh, Pa.
GS—H. A. Turner, Pittsburgh, Pa.
PA—H. H. Elsmann, Pittsburgh, Pa.
CE—John M. Rice, Pittsburgh, Pa.
SA—Producers Fuel Co., Pittsburgh, Pa.

Virginia Mine; Drift; S. B. 72 inches thick.
PO—Mules; Pa.; SP—Same; CTY—Westmoreland; RR—Penna.
S of H—Mules.
S of M—Shortwall machs.
EMP—70. Daily output, 400 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

LACKAWANNA COAL & COKE CO.

General Office, Lackawanna, N. Y.
 PR—George P. Buons, Lackawanna, N. Y.
 VP—Moses Taylor, 5 Nassau St., New York, N. Y.
 TR—J. P. Higginson, Lackawanna, N.Y.
 GS—George Lindsay, Wehrum, Pa.
 PA—F. H. Burnett, Wehrum, Pa.
 CE—W. A. James, Lackawanna, N. Y.
 EE—T. E. Tynes, Lackawanna, N. Y.
 EM—W. P. Francis, Wehrum, Pa.
 SCU—Wehrum Supply Co. Buyer, E. M. Orr, Ellsworth, Pa.

Nos. 3 and 4 Mines; Shaft; Miller "B" Seam, 46 in. thick.
 PO—Wehrum, Pa. SP—Same. CTY—Indiana; RR—Peoria, and B. & P.
 S of H—11 trolley pole type locos. Track gage 36 in.
 S of M—16 electric punchers.
 PP—7 water tube boilers, 1857 H. P., 2—300 K. W. 1—5000 K. W. turbine gen. units, 250 volts D. C. A. C.
 EMP—381. Last years tonnage 380,949.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Breakers and Crushers

LAING, JOHN E. COAL COMPANY.

General Office, Second Floor National Bldg., DuBois, Pa.
 PR—John E. Laing, DuBois, Pa.
 TR—Miss Mary Laing, DuBois, Pa.
 GM—John E. Laing, DuBois, Pa.
 GS—James E. Laing, DuBois, Pa.

Laing Mine; Drift; Lower Freeport Seam, 48 in. thick.
 PO—DuBois, Pa.; SP—Laing, Pa.; CTY—Clearfield; RR—B. & S.
 S of H—Mules.
 S of M—Hand.
 EMP—50. Last years tonnage 12,000.
 SIZES SHIPT—Run of Mine.

LAKE SHORE GAS COAL CO.

General Office, Buena Vista, Pa.
 OPERATOR—F. R. Wisser, Buena Vista, Pa.

Dravo Mine; Drift; Pittsburgh Seam; 72 in. thick.
 PO—Buena Vista, Pa.; SP—Dravo Station, Pa.; CTY—Allegheny; RR—P. & L. E. R.
 S of H—Trolley pole type and combination locos. Track gage 44 in.
 S of M—1 chain breast type and 1 short-wall machs.
 PP—Power purchased, Transformer 6,600 to 2,200 volts A. C., M. G. sets, 220 volts A. C., 500 volts D. C., 1 pump.
 EMP—24. Daily tonnage 200.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.
 Old information.

LAKE TRADE COAL MINING CO.

Now operated by the North East Coal Mining Co.

LAKESIDE COAL CO.

General Office, Union Bank Bldg., Scranton, Pa.
 PR—E. E. Jermyon, Scranton, Pa.
 VP—W. S. Robertson, Scranton, Pa.
 TR—Edward S. Judge, Scranton, Pa.
 GM—L. L. Schoemaker, Scranton, Pa.
 GS—J. McGilvray, B. Windale, Pa.
 CE—John P. Corcoran, Old Forge, Pa.
 SA—M. L. White, Scranton, Pa.

Lakeside Mine.
 PO—Berwindale, Pa.; SP—Same; CTY—Clearfield; RR—Penna.
 S of H—Mules.
 S of M—Hand.
 PP—Power purchased.
 EMP—20. Last years tonnage 50,000.
 SIZES SHIPT—Run of Mine, Slack.
 PREP. EQUIPT—Bar Screens.

LAMORE MINING CO.

Now Kronenwetter Coal Co.

LANARK COAL MINING COMPANY

General Office, Phillipsburg, Pa.
 PR—Isaac Finberg, Phillipsburg, Pa.
 GM—Isaac Finberg, Phillipsburg, Pa.

Lanark Mine; Drift; E Seam, 42 in. thick.
 PO—Phillipsburg, Pa.; SP—Osceola Mills, Pa.; CTY—Centre; RR—Penna.
 S of H—Mules. Track gage 36 in.
 S of M—Hand.
 Daily tonnage 100.
 SIZES SHIPT—Run of Mine.
 Old information.

LAND COAL COMPANY

General Office, Blairsville, Pa.
 TR—W. P. Graff, Blairsville, Pa.
 GM—F. M. Graff, Blairsville, Pa.
 GS—Ernest Fletcher, Saltburg, Pa.
 PA—Wm. G. Fletcher, Blairsville, Pa.
 EM—Albert Smith, Saltburg, Pa.

Brick Yard Mine; Drift; Pittsburgh Seam; 72 inches thick.
 PO—Blairsville, Pa.; SP—Same; CTY—Indiana; RR—Peoria.

S of H—Mules. Track gage 42 inches.
 S of M—Hand.
 EMP—25. Daily output, 200 tons.
 SIZES SHIPT—Run of Mine.
 NOTE—Not operating October 1, 1921

LANE COAL COMPANY.

General Office, Phillipsburg, Pa.
 PR—J. T. Todd, Phillipsburg, Pa.
 TR—H. W. Todd, Phillipsburg, Pa.
 GM—H. W. Todd, Phillipsburg, Pa.
 PA—H. W. Todd, Phillipsburg, Pa.
 GS—Daniel Milson, Allport, Pa.
 EM—H. McD. Lorain, Phillipsburg, Pa.

Lane No. 5 Mine; Drift; D Seam, 54 in. thick.
 PO—Allport, Pa. SP—Munson, Pa. CTY—Clearfield. RR—N. Y. C.
 S of H—Mules. Track gage, 34 in.
 S of M—Hand.
 PP—1 water tube boiler, 100 H. P., 2 pumps.
 EMP—26. Last years tonnage 17,000.
 SIZES SHIPT—Run of Mine.

Leader Slope Mine; Slope; B Seam, 39 in. thick.
 PO—Allport, Pa.; SP—Munson, Pa.; CTY—Clearfield; RR—N. Y. C.
 S of H—Mules and steam loco. Track gage 36 in.
 S of M—Hand.
 PP—1 water tube boiler, 50 H. P.
 EMP—32. Last years tonnage 26,000.
 SIZES SHIPT—Run of Mine.
 Old information.

LANGDON COAL COMPANY

General Office, 403 Penn St., Huntingdon, Pa.
 PR—John Langdon, Huntingdon, Pa.
 TR—John Langdon, Huntingdon, Pa.
 GM—Chester J. Langdon, Huntingdon, Pa.
 PA—Chester J. Langdon, Huntingdon, Pa.
 EM—Chester J. Langdon, Huntingdon, Pa.
 SCU—Glendale, Pa. Buyers, W. H. Barnett, Hopewell, Pa., and Lloyd Altstadt, Six Mile Run, Pa.

Glendale No. 4 Mine; Slope; Kelly & Barnett Seams, 32 to 48 in. thick.
 PO—Six Mile Run, Pa. SP—Rommell, Pa. CTY—Bedford. RR—H. & B. T.
 MS—G. B. Iselt, Six Mile Run, Pa.
 S of H—Mules and rope. Track gage, 38 in.
 S of M—Hand.
 PP—3 fire tube boilers, 305 H. P., 1—100 K. W. gen. unit, 250 volts D. C., 4 pumps.
 EMP—49. Last years tonnage 28,728.
 SIZES SHIPT—Run of Mine.

Cambria No. 1 Mine; Drift; Barnett Seam, 30 to 36 inches thick.
 PO—Hopewell, Pa. SP—Same. CTY—Bedford. RR—H. & B. T.
 MS—James Evans, Hopewell, Pa.
 S of H—Mules. Track gage, 38 in.
 S of M—Hand.
 PP—1 gasoline pump.
 EMP—19. Last years tonnage 9,223.
 SIZES SHIPT—Run of Mine.

Cambria No. 2 Mine; Slope; Kelly Seam, 43 in. thick.
 PO—Hopewell, Pa. SP—Same. CTY—Bedford. RR—H. & B. T.
 MS—John Himes, Hopewell, Pa.
 S of H—Mules and rope. Track gage, 38 in.
 S of M—Hand.
 PP—2 fire tube boilers, 140 H. P., 1—22½ K. W. gen. unit, 250 volts D. C., 2 pumps.
 EMP—92. Last years tonnage 54,663.
 SIZES SHIPT—Run of Mine.

Glendale No. 1 Mine; Drift; Barnett Seam, 32 in. thick.
 PO—Hopewell, Pa. SP—Same. CTY—Bedford. RR—H. & B. T.
 MS—James Evans, Hopewell, Pa.
 S of H—Mules. Track gage, 38 in.
 S of M—Hand.
 EMP—9. Last years tonnage 3,469.
 SIZES SHIPT—Run of Mine.

Chevington No. 3 Mine; Drift; Kelly Seam, 42 to 48 inches thick.
 PO—Hopewell, Pa.; SP—Same; CTY—Bedford; RR—H. & B. T. M.
 MS—James Evans, Hopewell, Pa.
 S of H—Mules. Track gage 38 inches.
 S of M—Hand.
 EMP—4. Last years tonnage 1,655.
 SIZES SHIPT—Run of Mine.

Chevington No. 4 Mine; Drift; Kelly Seam, 42 to 48 inches thick.
 PO—Hopewell, Pa. SP—Same. CTY—Bedford. RR—H. & B. T.
 MS—James Evans, Hopewell, Pa.
 S of H—Mules. Track gage, 38 in.
 S of M—Hand.
 EMP—12. Last years tonnage 3,924.
 SIZES SHIPT—Run of Mine.

LANGLOTH COAL COMPANY.

General Office, 512 Oliver Bldg., Pittsburgh, Pa.
 PR—J. B. Beatty, 61 Broadway, New York, N. Y.
 TR—R. N. Zimmer, 512 Oliver Bldg., Pittsburgh, Pa.

GM—Geo. T. Kirkbride, 512 Oliver Bldg., Pittsburgh, Pa.
 GS—R. E. Buckoam, Slovan, Pa.
 MM—Wm. Jamison, Midway, Pa.
 PA—A. H. Kunkel, 514 Oliver Bldg., Pittsburgh, Pa.
 CE—Raton & Elliott, 1st National Bank Bldg., Pittsburgh, Pa.
 EE—W. W. Gregory, Langeloth, Pa.
 Sales Agent, Geo. T. Kirkbride, 512 Oliver Bldg., Pittsburgh, Pa.

Langeloth Mine; Shaft and Slope; Pittsburgh Seam; 58 in. thick.
 PO—Slovan, Pa.; SP—Burgettstown, Pa.; CTY—Washington; RR—P. C. C. & St. L.
 SM—E. J. Regrutto, Langeloth, Pa.
 S of H—6 6-ton elec. and 2 10-ton elec. locos. Track gage 36 in.
 S of M—15 shortwall machs.
 PP—Power purchased, 250 volts A. C., 34 pumps.
 EMP—30. Last years tonnage 252,000.
 SIZES SHIPT—Run of Moe, Slack, Nut, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

LANSBERRY, A. H.

General Office, Woodland, Pa.
 Lansberry No. 2 Mine.
 PO—Woodland, Pa.; CTY—Clearfield; RR—N. Y. C. and Penna.
 No report.

LANTZY & CLARK COAL COMPANY

General Office, Hastings, Pa.
 PR—B. A. Lantzy, Hastings, Pa.
 TR—Andrew Lantzy, Ebensburg, Pa.
 GM—B. A. Lantzy, Hastings, Pa.
 PA—B. A. Clark, Hastings, Pa.
 EM—J. J. Pfeister, Hastings, Pa.
 SCU—Mountain Mercantile Co., Hastings, Pa.
 Lantzy No. 1 Mine; Drift; "E" Seam 39 in. thick.
 PO—Hastings, Pa.; SP—Same; CTY—Cambria; RR—Penna.
 MS—James Spence, Hastings, Pa.
 SM—Paul Stitts, Hastings, Pa.
 S of H—Mules and storage battery loco. Track gage 36 in.
 S of M—1 mining mach.
 PP—Power purchased, 220 volts.
 EMP—40. Last years tonnage 26,000.
 SIZES SHIPT—Run of Mine.

LARIMER GAS COAL COMPANY.

PR—J. C. McLarran, Larimer, Pa.
 TR—Samuel Miller, Larimer, Pa.
 GM—O. E. Seidler, Larimer, Pa.
 GS—O. E. Seidler, Larimer, Pa.
 PA—O. E. Seidler, Larimer, Pa.
 EM—D. W. Walkenshaw, Larimer, Pa.

Larimer No. 4 Mine; Drift; Pittsburgh Seam, 84 in. thick.
 PO—Larimer, Pa. SP—Same. CTY—Westmoreland. RR—Penna., Main Line.
 S of H—Mules.
 S of M—Hand.
 PP—500 volts D. C. Purchase power. Daily output, 150 tons.
 SIZES SHIPT—Run of Mine.
 (Old information.)

LASHER MINING COMPANY

General Office, Templeton, Pa.
 PR—M. B. Lasher, Templeton, Pa.
 GM—M. B. Lasher, Templeton, Pa.
 GS—M. B. Lasher, Templeton, Pa.
 PA—V. & S. Coal Company, Templeton, Pa.

Lasher Mine; Drift; Lower Kittanning Seam, 48 inches thick.
 PO—Templeton, Pa.; SP—Dickey, Pa.; CTY—Armstrong; RR—P. & S.
 MF—P. M. Hooks, Adrian, Pa.
 S of H—Mules. Track gage 30 inches.
 S of M—Hand.
 EMP—22. Daily tonnage 60.
 SIZES SHIPT—Run of Mine.

LATROBE COAL CO.

Operation Abandoned.

LATROBE-CONNELLSVILLE COAL & COKE COMPANY.

General Office, Greensburg, Pa.
 PR—J. E. Hoff, Greensburg, Pa.
 VP—A. N. Pershing, Greensburg, Pa.
 TR—A. N. Pershing, Greensburg, Pa.
 SCY—George H. Francis, Greensburg, Pa.
 MGR OF OPERATIONS—H. F. Bovard, Greensburg, Pa.
 PA—R. P. Kigore, Greensburg, Pa.
 CE—Alex Macdonald, Greensburg, Pa.
 EM—R. M. Goehring, Greensburg, Pa.
 EE—R. F. Demil, Greensburg, Pa.
 SCU—Superior Store Co. Buyer, Wm. M. Duff, Greensburg, Pa.
 SA—P. B. Miller, Greensburg, Pa.
 Additional Information on Page 736

Derry No. 1 Mine; Shaft; Pittsburgh Seam, 84 in. thick.
 PO—Bradenville, Pa.; SP—Same; CTY—Westmoreland; RR—P. R. R.
 MS—William Gray, Bradenville, Pa.
 S of H—3 trolley pole type elec. locos. Track gage, 40 in.
 S of M—Hand.

PP—6 return tubular boilers, total 600 H. P., 1 geo. unit, 500 volts D. C., 6 pumps. Purchase power.
 EMP—225. Last fiscal year output, 220,349 tons. Coke ovens, 293 Breehive.

SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Screens.

Connellsville Mine; Slope; Pittsburgh Seam, 84 in. thick.
 PO—Superior, Pa.; SP—Bradenville, Pa.; CTY—Westmoreland; RR—P. R. R.
 MS—William Gray, Bradenville, Pa.
 S of H—Rope and 2 trolley pole type elec. locos. Track gage, 40 in.
 S of M—Hand.
 PP—5 return tubular boilers, total 500 H. P., 1 air comp., 1 geo. unit, 500 volts D. C. Purchase power.
 EMP—150. Last fiscal year output, 184,443 tons. Coke ovens, 208 Breehive.

SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Screens.

Millwood Mine Abandoned.

Superior No. 2 Mine; Drift; Pittsburgh Seam, 84 in. thick.
 PO—Superior, Pa.; SP—Bradenville, Pa.; CTY—Westmoreland; RR—P. R. R.
 MS—William Gray, Bradenville, Pa.
 S of H—1 trolley pole type elec. loco. Track gage, 40 in.
 S of M—Hand.
 PP—1 gen. unit, 500 volts D. C. Power from Connellsville mine.
 EMP—75. Last fiscal year output, 60,576 tons.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Screens.

LATROBE-CRESSON COAL MINING CO.

General Office, Latrobe, Pa.
 PR—James Quinn, Latrobe, Pa.
 VP—C. A. Johnson, Latrobe, Pa.
 TR—M. J. Hines, Latrobe, Pa.
 GM—James Quinn, Latrobe, Pa.
 GS—James Quinn, Latrobe, Pa.
 PA—C. A. Johnson, Latrobe, Pa.
 EM—Gibson-Thomas Engr. Co., Latrobe, Pa.

Island Mine; Shaft; Fgh. Seam, 84 to 108 in. thick.
 PO—Latrobe, Pa.; SP—Same; CTY—Westmoreland; RR—P. R. R.
 S of H—Mules. Track gage, 40 in.
 S of M—Hand.
 PP—3 pumps.
 EMP—18. Last years tonnage 12,000.
 SIZES SHIPT—Run of Mine.
 Old information.

LATROBE HYGRADE COAL CO.

General Office, Latrobe, Pa.
 Pearl Mine.
 PO—Derry, Pa.; CTY—Westmoreland; RR—Penna.
 No report.

LAUREL COAL MINING COMPANY.

General Office, Connellsville, Pa.
 PR—John P. Kephart, Connellsville, Pa.
 VP—H. M. Kephart, Connellsville, Pa.
 TR—G. Corrado, Connellsville, Pa.
 GM—G. Corrado, Connellsville, Pa.
 GS—H. B. Cunningham, Connellsville, Pa.
 PA—F. R. Yoder, Connellsville, Pa.
 CE—W. B. Barnhart, Connellsville, Pa.
 EE—H. B. Cunningham, Connellsville, Pa.
 SA—G. Corrado Coal & Coke Ints., Sales Mgr., J. J. Ash, Connellsville, Pa.

Reid Mine; Drift; C. Prime Seam.
 PO—Connellsville, Pa.; SP—Same; CTY—Somerset; RR—W. M.
 S of H—Mules.
 S of M—Hand.
 SIZES SHIPT—Run of Mine.

LAUREL COKE CO.

General Office, Union Trust Co. Bldg., Uniontown, Pa.
 PR—W. A. Stone, Uniontown, Pa.
 VP—S. A. Kendall, Meyersdale, Pa.
 AUDITOR—Robert W. Solisson, Uniontown, Pa.

TR—G. H. Rortz, Uniontown, Pa.
 GM—W. A. Stone, Uniontown, Pa.
 GS—J. F. Dawson, Uniontown, Pa.
 PA—Geo. H. Rortz, Uniontown, Pa.
 CE—Fayette Engineering Co., Uniontown, Pa.

SA—W. A. Stone & Co., Uniontown, Pa.
 Laurel Mine; Drift; Pittsburgh Seam; 72 inches thick.
 PO—Uniontown, Pa.; SP—Cheat Haven, Pa.; CTY—Fayette; RR—E. & O.
 S of H—Mules. Track gage 44 inches.
 S of M—Hand.
 EMP—30. Daily tonnage 300.
 SIZES SHIPT—Run of Mine.

LAUREL RUN COAL COMPANY

General Office, Clearfield, Pa.
 VP—R. K. Shodroff, Clearfield, Pa.
 TR—J. C. Staver, Clearfield, Pa.
 PA—J. C. Staver, Clearfield, Pa.
 SCU—Address the Company, Buyer, Geo. O. Davis, Clearfield, Pa.

(Continued on Next Page)

Liberty Coal Mining Co.—Cont.
Corona Mine, Drift; "B" Seam, 36 to 40 in. thick.

PO—Madra, Pa.; SP—Same; CTY—Clearfield; RR—Penna., Moshannon and Madra Br.

MS—J. L. Lockett, Madra, Pa.

S of H—Mules.

S of M—Hand.

PP—1 pump.

EMP—36. Last fiscal year output, 27,050 tons.

SIZES SHIPT—Run of Mine.

Cammos No. 1 Mine; Drift; "D" or Moshannon Seam, 29 to 50 in. thick.

PO—Urberville, Pa.; R. F. D. No. 1.

SP—Heverly, Pa.; CTY—Clearfield.

RR—Penna., Bellwood Br.

MS—A. T. Marshall, Urberville, Pa.

S of H—1 storage battery loco. Track gage, 36 in.

PP—Purchase power, transformer 2300 to 140 volts A. C., 220 volts A. C. in mine, 1 pump.

EMP—46. Daily output, 150 tons.

SIZES SHIPT—Run of Mine.

Cammos No. 2 Mine; Drift; "D" or Moshannon Seam, 31 to 52 in. thick.

PO—Urberville, R. F. D. No. 1, Pa.

SP—Heverly, Pa.; CTY—Clearfield.

RR—Penna., Bellwood Br.

MS—A. T. Marshall, Urberville, Pa.

S of H—Mules. Track gage, 36 in.

PP—Purchase power, transformer 2300 to 220 volts A. C., M. G. set, 220 volts D. C., 1 pump.

EMP—30. Daily output, 150 tons.

SIZES SHIPT—Run of Mine.

Cammos No. 3 Mine; Drift; "D" or Moshannon Seam, 29 to 52 in. thick.

PO—R. F. D. No. 1, Urberville, Pa.

SP—Heverly, Pa.; CTY—Clearfield.

RR—Penna., Bellwood Br.

MS—Lloyd Williams, Coalport, Pa.

S of H—Mules. Track gage, 36 in.

S of M—Hand.

EMP—20. Daily output, 40 tons.

SIZES SHIPT—Run of Mine.

Note—Cammos Nos. 1, 2 and 3 Mines formerly operated by Heverly Coal Company.

LIBERTY COAL MINING CO.

General Office, 601 Citizens Bank Bldg., Pittsburgh, Pa.

PR—W. C. Frost, Pittsburgh, Pa.

VP—R. O. Dunne, Pittsburgh, Pa.

TR—E. C. Young, Pittsburgh, Pa.

SECY—Chas. Stromoski, Pittsburgh, Pa.

GM—John T. Shauley, Butler, Pa.

GS—John T. Shauley, Pittsburgh, Pa.

PA—R. O. Dunne, Pittsburgh, Pa.

SA—T. O. Dunne, Pittsburgh, Pa.

Liberty Mine; Drift; Kittanning Seam, 44 in. thick.

PO—Queo Jct., Pa.; SP—Same; CTY—Butler; RR—B. & L. E.

S of H—Mules. Track gage 36 inches.

S of M—Shortwall machs.

PP—2-150 H. P. water tube boilers, gen. units, 250 volts D. C.

EMP—50. Daily tonnage 300.

SIZES SHIPT—Run of Mine, Nut.

PREP. EQUIPT—Crusher.

LIBERTY SMOKELESS COAL COMPANY

General Office, Johnstown, Pa.

PR—E. S. Bowden, Johnstown, Pa.

TR—E. S. Bowden, Johnstown, Pa.

GM—E. S. Bowden, Johnstown, Pa.

GS—E. S. Bowden, Johnstown, Pa.

PA—E. S. Bowden, Johnstown, Pa.

CE—E. S. Bowden, Johnstown, Pa.

EM—A. M. Wilson, Johnstown, Pa.

SA—Miller-Stineman Coal Co., Johnstown, Pa.

Liberty No. 1 Mine; Drift; D Seam, 36 in. thick.

PO—Johnstown, Pa.; SP—Same; CTY—Cambria; RR—Penna., B. & O.

MS—Grant Wise, Johnstown, Pa.

S of H—Mules. Track gage 36 in.

S of M—Hand.

EMP—18. Last years tonnage 12,000.

SIZES SHIPT—Run of Mine, Lump.

LIGGETT SPRING & AXLE CO.

General Office, Monongahela, Pa.

Liggett Mine.

PO—Allegheny, Pa.; CTY—Allegheny; RR—B. & O., B. R. & P., Penna., No report.

LIGHT COAL MINING COMPANY

General Office, Punxsutawney, Pa.

PR—A. L. Light, Punxsutawney, Pa.

TR—A. K. Yost, Punxsutawney, Pa.

GM—A. L. Light, Punxsutawney, Pa.

GS—W. H. Maloney, Punxsutawney, Pa.

CE—W. R. Cameron, Philadelphia, Pa.

EM—H. M. Kanarr, Punxsutawney, Pa.

EE—Fred Hall, Punxsutawney, Pa.

Light No. 1 Mine; Shaft; Lower Freeport Seam, 60 inches thick.

PO—Valter, Pa.; SP—Same; CTY—Jefferson and Indiana; RR—B. R. & P.

S of H—Elec. loco. Track gage 42 in.

S of M—Shortwall mach.

PP—2 150 H. P. Ore tube boilers. Transformer 500 volts, M. G. Set, 300 K. W., 500 volts D. C.

EMP—250.

SIZES SHIPT—Run of Mine.

LILLEY COAL & COKE CO.

General Office, Charleroi, Pa.

PR—Thomas Elliott, South Brownsville, Pa.

VP—Jane Elliott, West Brownsville, Pa.

IR—John H. Moffitt, Charleroi, Pa.

GM—Thos. Elliott, So. Brownsville, Pa.

GS—Thomas Elliott, South Brownsville, Pa.

PA—S. U. Ross, Charleroi, Pa.

EM—Alex. McKicker, Monongahela, Pa.

EE—Samuel Moyer, California, Pa.

SCO—Playford Valley Supply Co., Buyer, Fred Wilkins, California, Pa.

SA—Hillman Coal & Coke Co., Pittsburgh, Pa.

Lilley Mine; Slope; Pittsburgh Seam, 96 in. thick.

PO—So. Brownsville, Pa.; SP—West Brownsville, Pa.; CTY—Fayette.

BR—P. B. R., Monongahela Div.

MS—John North, West Brownsville, Pa.

SM—John Lynn, West Brownsville, Pa.

S of H—8 elec. locos Track gage 44 in.

S of M—11 shortwall breast machs.

PP—3 water tube boilers, total 1000 H. P., gen. units, 250 volts D. C., 15 pumps.

EMP—390.

SIZES SHIPT—Run of Mine, Slack, Nut.

PREP. EQUIPT—Screens.

LILLY COAL CO.

General Office, Altoona, Pa.

OPERATOR—C. A. Hughes, Altoona, Pa.

TR—E. C. Broomer, Altoona, Pa.

GM—W. H. Hughes, Altoona, Pa.

GS—R. H. Moore, Portage, Pa.

PA—W. H. Hughes, Altoona, Pa.

Lilly No. 2 Mine; Slope; "B" Seam, 38 inches thick.

PO—Lilly, Pa.; SP—Same; CTY—Cambria. RR—P. R. R., Lilly Br.

MS—Jas. S. Campbell, Lilly, Pa.

S of H—Mules, rope and 2 trolley pole type locos. Track gage, 36 in.

S of M—Hand.

PP—4 fire tube boilers, total 800 H. P., 1-150 K. W. and 1-200 K. W., gen. units, 250 volts D. C., 3 pumps.

EMP—25. Last years tonnage 61,085.

SIZES SHIPT—Run of Mine.

LILY KUTZ BARRON CO.

General Office, Scutcheon, Pa.

Alma Mine

PO—Humbert, Pa.; CTY—Somerset; RR—Penna. & North Fork.

No report.

LINCOLN COAL CO.

General Office, 25 Beaver St., New York, N. Y.

PR—L. H. Rowe, 165 Broadway, N. Y.

TR—W. A. Marshall, New York, N. Y.

GM—W. A. Marshall, New York, N. Y.

GS—J. E. Burns, Nanty-Glo, Pa.

PA—J. E. Burns, Nanty-Glo, Pa.

SCO—Cambria Supply Co., Nanty-Glo, Pa.

SA—W. A. Marshall & Co., New York, N. Y.

Lincoln No. 1 Mine; Drift; Lower Kittanning Seam, 42 in. thick.

PO—Nanty-Glo, Pa.; SP—Same; CTY—Cambria; RR—P. R. R., C. & I.

SM—J. E. Burns, Nanty-Glo, Pa.

S of H—5 elec. locos Track gage 36 in.

S of M—Hand and 4 shortwall elec. machs.

PP—2 return tubular boilers, total 300 H. P., 2 gen. units, 250 K. W., also Automatic Sub-Station containing M. G. Set, 200 K. W., 250 volts D. C., 4 pumps.

EMP—200. Last years tonnage 162,000.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Screens, Picking Tables.

LINCOLN COAL & COKE CO.

General Office, Scottdale, Pa.

PR—B. F. Keister, Scottdale, Pa.

VP—A. C. Overholt, Scottdale, Pa.

TR—F. O. Keister, " "

GM—E. L. Stoner, " "

GS—E. L. Stoner, " "

PA—E. L. Stoner, " "

EM—Baton & Elliott, Pittsburgh, Pa.

SCO—F. O. Keister, C. O. Buyer, J. W. Davis, Waltersburg, Pa.

Lincoln Mine, Slope, Pgh. Seam 9 ft. thick.

PO—Waltersburg, Pa.; SP—Same; CTY—Fayette; RR—Penna.

MS—R. R. Leichter, Waltersburg, Pa.

S of H—Mules, rope, 2 comp. air and 2 steam locos. Track gage, 44 in.

S of M—5 comp. air punchers.

PP—3 water tube boilers, 1200 H. P., 7 pumps.

EMP—380. Daily output, 1,300 tons.

Coke ovens—400 Bee Hive.

SIZES SHIPT—Lump.

PREP. EQUIPT—Gravity Screens.

LINCOLN GAS COAL CO.

General Office, 1920 Farmers Bank Bldg., Pittsburgh, Pa.

PR—T. W. Friend, Pittsburgh, Pa.

VP—J. H. Hillman, Jr., Pittsburgh, Pa.

TR—W. A. Chamberlain, Pittsburgh, Pa.

GM—J. G. Hoffstot, Pittsburgh, Pa.

GS—Geo. Wilson, Washington, Pa.

PA—J. G. Hoffstot, Pittsburgh, Pa.

CE—Baton & Elliott, Pittsburgh, Pa.

EM—H. R. Dygert, Pittsburgh, Pa.

EE—Mr. Bushmeyer, Pittsburgh, Pa.

SCO—Lincoln Hill Supply Co., Buyer, J. G. Hoffstot, Pittsburgh, Pa.

Additional Information on Page 739

Lincoln No. 1 Mine; Shaft; Pittsburgh Seam, 70 in. thick.

PO—Box 296, Washington, Pa.; SP—Same; CTY—Washington; RR—P. C. C. & St. L., B. & O.

SM—W. E. Hepler, Washington, Pa.

S of H—Mules and trolley pole type locos. Track gage, 44 in.

S of M—2 chain breast type and 10 shortwall machs.

PP—Power purchased, transformer 6600-2200 volts A. C., 250 volts D. C., 100 K. W., volts A. C.

EMP—200. Daily output, 1,000 tons.

SIZES SHIPT—Run of Mine, Slack, Nut.

PREP. EQUIPT—Gravity Screens.

Lincoln No. 2 Mine not operating.

LINCOLN HIGHWAY COAL COMPANY.

Out of Business.

LINDSEY COAL COMPANY.

General Office, 401 Farmers Bank Bldg., Pittsburgh, Pa.

PR—L. F. Crawford, Farmers Bank Bldg., Pittsburgh, Pa.

TR—Wm. McK. Reed, Pittsburgh, Pa.

GM—W. A. McBride, Houston, Pa.

GS—W. A. McBride, Houston, Pa.

PA—H. E. Hahler, Pittsburgh, Pa.

EM—E. H. Day, Houston, Pa.

EE—H. P. Walker, Houston, Pa.

SA—J. Person Gas Coal Company, Pittsburgh, Pa.

Lindsey Mine; Slope; Pittsburgh Seam, 60 in. thick.

PO—Houston, Pa.; SP—Same; CTY—Washington; RR—P. R. R.

S of H—Mules and 2 trolley pole type locos. Track gage 42 in.

S of M—7 chain breast type and 4 shortwall machs.

PP—Power purchased, transformer 22000-2200 volts A. C., 2 M. G. Sets, 500 volts D. C.

EMP—180. Daily tonnage 900.

SIZES SHIPT—Run of Mine, Slack, Nut.

PREP. EQUIPT—Gravity Screens.

LINDSAY COAL MINING COMPANY.

Out of business.

LINDSEY MINING COMPANY

General Office, Punxsutawney, Pa.

PR—T. R. Brooks, Scranton, Pa.

VP—L. H. Coaklin, Scranton, Pa.

TR—J. H. Conklin, Scranton, Pa.

GM—Geo. A. Mau, Punxsutawney, Pa.

GS—John Noverla, Punxsutawney, Pa.

EM—Harry Kanarr, Punxsutawney, Pa.

EE—Geo. A. Mau, Punxsutawney, Pa.

PA—Geo. A. Mau, Punxsutawney, Pa.

Lindsey No. 1 Mine; Slope; Lower Freeport Seam, 38 in. thick.

PO—Punxsutawney, Pa.; SP—Lindsey.

PA; CTY—Jefferson; RR—Penna., Bellwood Branch.

S of H—Mules, rope, track gage 36 in. thick.

S of M—Hand.

PP—Power purchased, transformers 2300 to 220 volts A. C., 3 pumps.

EMP—10. Last years tonnage 5,000.

SIZES SHIPT—Run of Mine.

Note—Formerly operated by West End Coal Company.

LINGLE COAL COMPANY.

Now operated by the Willard Coal Co.

LOCHRIE-PRICE COAL CO.

General Office, Windber, Pa.
PR—John Lochrie, Windber, Pa.
TR—D. T. Price, Windber, Pa.
GM—D. T. Price, Windber, Pa.
PA—D. T. Price, Windber, Pa.

Lochrie-Price No. 1 Mine; Drift, B Seam, 42 in. thick.
PO—Eleanor, Pa.; SP—Fonville, Pa.; CTY—Somerset; RR—B. & O.
MS—Arthur Wilek, Windber, Pa.
S of H—Elec. loco. Track gage 42 in. S of M—Shortwall machs.
PP—Power purchased. Transformer 2200 to 220 volts A. C. M. G. Set, 500 volts D. C.
EMP—50. Daily tonnage 200.
SIZES SHIPT—Run of Mine.

LOCUST COLLIERY COMPANY.

General Office, Philadelphia, Pa.
PR—Jas. Pierpoint, Philadelphia, Pa.
TR—Thos. R. Pierpoint, Rochester Mills, Pa.
GM—R. W. Pierpoint, Rochester Mills, Pa.
PA—Jas. Pierpoint, Rochester Mills, Pa.
EM—H. M. Kanarr, Rochester Mills, Pa.
SCD—Locust Supply Co., Buyer, H. G. Weaver, Rochester Mills, Pa.
SA—Jas. Pierpoint & Sons Co., Philadelphia, Pa.

Locust Mine; Drift; Upper Freeport Seam, 48 in. thick.
PO—Rochester Mills, Pa.; SP—Locust, Pa.; CTY—Indiana; RR—B. & O.
MS—C. P. Ginter, Rochester Mills, Pa.
S of H—Trolley pole type loco. Track gage, 36 in.
S of M—2 shortwall machs.
PP—2 250 H. P. fire tube boilers, 1 150 K. W., gen. units, 230 volts D. C., 1 pump.
EMP—75. Last fiscal year output, 36,000 tons.
SIZES SHIPT—Run of Mine.

LOCUST HILL COAL CO.

General Office, Point Marion, Pa.
PR—Asa M. Sterling, Point Marion, Pa.
VP—J. Blair Easter, Point Marion, Pa.
TR—E. E. Bardsley, Point Marion, Pa.
SECY—John B. Moore, Point Marion, Pa.
PA—J. Blair Easter, Point Marion, Pa.
EM—C. W. F. Free, Point Marion, Pa.
EE—C. A. Nixon, Point Marion, Pa.
SA—J. Blair Easter, Point Marion, Pa.

Locust Hill Mine; Drift; Pittsburgh Seam, 84 inches thick.
PO—Point Marion, Pa.; SP—Same; CTY—Fayette; RR—B. & O.
MS—J. Callahan, Point Marion, Pa.
S of H—Mules and storage battery loco. Track gage 36 in.
S of M—2 longwall machs.
PP—Power purchased. Transformer 6,000-440 volts A. C. M. G. sets, 6 pumps.
EMP—150. Daily tonnage 750.
SIZES SHIPT—Run of Mine, Slack Lump.
PREP. EQUIPT—Pickling Tables.

LOGAN COAL COMPANY.

General Office, 502 Harrison Bldg., Philadelphia, Pa.
PR—Wm. J. Faux, Philadelphia, Pa.
TR—O. S. Wiley, Philadelphia, Pa.
SECY—Theo. V. Jahnke, Philadelphia, Pa.
GS—Arthur Appleyard, Beversdale, Pa.
PA—C. E. Baver, Philadelphia, Pa.
EM—A. B. Crichton, Johnstown, Pa.
EE—H. A. Rife, Beversdale, Pa.
SCD—Logan Valley Store Company, Buyer, G. E. Sponseller, Beversdale, Pa.

Logan No. 1 Mine; Slope; B Seam, 36 in. thick.
PO—Dunlo, Pa.; SP—Same; CTY—Cambria; RR—Penna., South Fork Br.
MS—Terrance Brennan, Dunlo, Pa.
S of H—Mules, trolley pole type loco. Track gage 36 in.
S of M—Hand.
PP—M. G. set, 250 volts D. C. Transformer 2,300 volts A. C.
EMP—94. Last years tonnage 40,790.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.

Logan No. 2 Mine; Drift; "B" Seam, 36 in. thick.
PO—Beversdale, Pa.; SP—Lloydell, Pa.; CTY—Cambria; RR—Penna., South Fork Br.
MS—P. Hart, Beversdale, Pa.
S of H—1 trolley pole type loco. Track gage, 36 in.
S of M—Hand.
PP—6 fire tube boilers, total 1,100 H. P., 2—150 and 1—200 K. W., generators, 250 volts D. C., 7 pumps.
EMP—180. Last years tonnage 147,532.
SIZES SHIPT—Run of Mine.

Logan No. 4 Mine; Slope; "B" Seam, 36 in. thick.
PO—Beversdale, Pa.; SP—Lloydell, Pa.; CTY—Cambria; RR—Penna., South Fork Br.

MS—Robt. Patterson, Beversdale, Pa.
S of H—Mules, trolley pole type loco. Track gage, 36 in.
S of M—Hand.
PP—Gen. unit, 250 volts D. C., 7 pumps.
EMP—144. Last years tonnage 131,345.
SIZES SHIPT—Run of Mine, Slack Lump.

PREP. EQUIPT—Gravity Screens.

Logan No. 5 Mine
Now operated by the Navy Smokeless Coal Company.

Logan No. 6 Mine; Drift; D and C Seams, 53-40 in. thick.
PO—Beversdale, Pa.; SP—Lloydell, Pa.; CTY—Cambria; RR—Penna., South Fork Br.

MS—Robt. M. Kiney, Beversdale, Pa.
S of H—Trolley pole type loco. Track gage, 36 in.
S of M—7 shortwall machs.
PP—M. G. sets, 250 volts D. C., 2 pumps.
EMP—162. Last years tonnage 162,129.
SIZES SHIPT—Run of Mine.

Logan No. 7 Mine; Slope; "E" Seam, 30 in. thick.
PO—Dunlo, Pa.; SP—Same; CTY—Cambria; RR—Penna., South Fork Br.
MS—Jas. Appleyard, Dunlo, Pa.
SM—H. R. Red, Dunlo, Pa.
S of H—Mules, trolley pole type loco. Track gage, 36 in.
S of M—3 shortwall machs.
PP—M. G. sets, 250 volts D. C. Transformer 2,300 volts A. C., 1 pump.
Last years tonnage 68,647.
SIZES SHIPT—Run of Mine.

Logan No. 8 Mine; Drift; "D" Seam, 38 in. thick.
PO—Rutherford, Pa.; SP—Lloydell, Pa.; CTY—Cambria; RR—Penna.
MS—Roland Kay, Rutherford, Pa.
SM—C. Watchman, Rutherford, Pa.
S of H—Trolley pole type loco. Track gage, 36 in.
S of M—6 shortwall machs.
PP—4 fire tube boilers, total 600 H. P. Transformer 2,300 volts A. C., 1—200 K. W. and 1—400 K. W. M. G. sets, 250 volts D. C., 2 pumps.
EMP—160. Last years tonnage 124,576.
SIZES SHIPT—Run of Mine.

Logan No. 9 Mine not operating.

LOGANSPOUT COAL COMPANY.

Now a part of the Frauentheim-Logansport Coal Corp.

LONG, CALEB

General Office, Phillipsburg, Pa.
OWNER—Caleb Long, Phillipsburg, Pa.
SA—John E. Dale Coal Co., Altoona, Pa.

Battle No. 4 Mine; Drift; 5 Seam; 42 inches thick.
PO—Phillipsburg, Pa.; SP—Same; CTY—Clearfield; RR—N. Y. C.
MS—Caleb Long, Phillipsburg, Pa.
S of H—Mules. Track gage 34 inches.
S of M—Hand.
EMP—10. Daily tonnage 30.
SIZES SHIPT—Run of Mine.
Old information.

LORAIN COMPANY (THE).

General Office, Johnstown, Pa.
PR—Carroll Burton, Johnstown, Pa.
TR—P. M. Boyd, Johnstown, Pa.
GS—Carroll Burton, Johnstown, Pa.
PA—C. F. Brandler, Johnstown, Pa.
CE—C. A. McIntyre, Pittsburgh, Pa.
EE—Geo. H. McFeaters, Johnstown, Pa.
EE—W. M. Brown, Johnstown, Pa.

Ingleide Mine; Drift; B or Miller Seam, 42 in. thick.
PO—Johnstown, Pa.; SP—Same; CTY—Cambria; RR—B. & O., Somerset & Cambria Branch.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
PP—Power purchased, 220 volts A. C.
EMP—20. Last fiscal year output, 32,779 tons.
SIZES SHIPT—Run of Mine.

LOST RUN COAL MINING COMPANY

General Office, Munson, Pa.
PR—Jacob Smutzinger, Munson, Pa.
TR—John H. M., Mahaffey, Pa.
GM—S. P. Kuntz, Mahaffey, Pa.
GS—Jacob Smutzinger, Munson, Pa.
EM—Thos. F. Morgan, Mahaffey, Pa.
SA—Jalden Kelley Coal Co., Clearfield, Pa.

Lost Run Mine No. 1; Drift; D Seam, 10 inches thick.
PO—Mahaffey, Pa.; SP—Fet. Madera, Pa.; Exp., Mahaffey, Pa.; CTY—Clearfield; RR—Penna.
S of H—Mules. Track gage 30 inches.
S of M—Hand.
EMP—45. Daily tonnage 150.
SIZES SHIPT—Run of Mine.

LOTTIE COAL COMPANY

General Office, Crafton, Pa.
TR—J. A. McGregor, Crafton, Pa.
GM—F. J. McGregor, Crafton, Pa.
GS—F. J. McGregor, Crafton, Pa.
PA—J. A. McGregor, Crafton, Pa.
EM—F. J. McGregor, Crafton, Pa.

Lottie Mine; Drift; Pittsburgh Seam, 60 inches thick.
PO—Crafton, Pa.; SP—Same; CTY—Allegheny; RR—P. C. & Y.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
EMP—30. Daily tonnage 125.
SIZES SHIPT—Run of Mine, Slack Lump.
PREP. EQUIPT—Bar Screens.

LOWBER GAS COAL COMPANY

General Office, 1013 House Bldg., Pittsburgh, Pa.
PR—Julian Kennedy, Pittsburgh, Pa.
VP—R. C. Crawford, Pittsburgh, Pa.
TR—J. Miller, Pittsburgh, Pa.
GM—R. C. Crawford, Pittsburgh, Pa.
GS—R. C. Crawford, Pittsburgh, Pa.
PA—R. C. Crawford, Pittsburgh, Pa.
CE—C. K. Knopf, Pittsburgh, Pa.
EM—M. C. Milholland, Pittsburgh, Pa.

Fayette Mine; Slope; Pittsburgh Seam, 72 in. thick.
PO—Fayette City, Pa.; SP—Same; CTY—Fayette; RR—P. & L. E.
MS—Wm. Bird, Lowber, Pa.
S of H—Mules, endless rope, 1 trolley pole type, 2 storage battery, 2 gasoline and 2 steam locos. Track gage, 42 in.
S of M—6 chain hoist type and 4 shortwall machs.
PP—Power purchased. Transformer 6,600 to 2,200 volts A. C., M. G. set, 250 volts D. C., 2 fire tube boilers, total 300 H. P., 7 pumps.
EMP—300. Last years tonnage 360,000.
SIZES SHIPT—Run of Mine, Slack Lump.
PREP. EQUIPT—Shaker Screens.

Lowber Mine; Drift; Pittsburgh Seam; 72 in. thick.
PO—Lowber, Pa.; SP—Grafton, Pa.; CTY—Westmoreland; RR—Penna.
MS—A. R. Aultman, Lowber, Pa.
S of H—Mules and plane, 2 storage battery locos. Track gage 42 in.
S of M—6 shortwall machs.
PP—3 fire tube boilers, 250 H. P., gen. unit, 250 volts D. C., 12 pumps.
EMP—200. Daily tonnage 1,200.
SIZES SHIPT—Run of Mine, Slack Lump.
PREP. EQUIPT—Gravity Screens.

LOWE COAL COMPANY.

General Office, Youngwood, Pa.
PR—Richard Bowen, Youngwood, Pa.
VP—E. P. Newton, Pardus, Pa.
TR—T. F. Nolan, Greensburg, Pa.
GM—T. F. Nolan, Greensburg, Pa.
GS—T. F. Nolan, Greensburg, Pa.
PA—T. F. Nolan, Greensburg, Pa.
SA—Newton & Mayer, Pardus, Pa.

Lowe Mine; Slope; Lower Freeport Seam, 60 in. thick.
PO—Youngwood, Pa.; SP—Same; CTY—Westmoreland; RR—Penna.
S of H—Mules and rope. Track gage, 42 in.
S of M—2 shortwall machs.
PP—2 water tube boilers, 200 H. P., 2 pumps.
EMP—50. Last fiscal year output, 50,000 tons.
Old information.

LOWER KITTANNING MINING CO.

General Office, Kittanning, Pa.
TR—L. G. Bonstein, Kittanning, Pa.
GM—J. E. Carpenter, Kittanning, Pa.

Lower Kittanning Mine; Drift; Lower Kittanning Seam, 42 inches thick.
PO—Kittanning, Pa.; SP—Same; CTY—Armstrong; RR—P. & S.
MS—James McAler, Kittanning, Pa.
S of H—Storage battery loco. Track gage 30 inches.
S of M—Shortwall machs.
SIZES SHIPT—Run of Mine.

LOWTHER COAL COMPANY, INC.

General Office, Clarksburg, Pa.
PR—B. B. McCreight, DuBois, Pa.
VP—M. A. Lowther, Indiana, Pa.
TR—W. C. Lowther, Clarksburg, Pa.
GM—W. C. Lowther, Clarksburg, Pa.
PA—W. C. Lowther, Clarksburg, Pa.
EM—Thomas Peahler, Indiana, Pa.

Ruth Mine; Drift; Pittsburgh Seam; 72 inches thick.
PO—Clarksburg, Pa.; SP—Iselin, Pa.; CTY—Indiana; RR—B. & O. & P.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—20. Last years tonnage 25,000.
SIZES SHIPT—Run of Mine.

LOYAL HANNA COAL & COKE CO

General Office, 2135 Land Title Bldg. Philadelphia, Pa.
PR—C. C. Watt, Philadelphia, Pa.
VP—Raymond Patealro, Philadelphia, Pa.
TR—L. V. Biggs, Philadelphia, Pa.
GM—C. M. Watt, Philadelphia, Pa.
PA—E. G. Frame, Philadelphia, Pa.

Loyal Hanna No. 3 Mine; Lower Kittanning Seam, 44 in. thick.
PO—Omahlinda, Pa.; SP—Lloydell, Pa.; CTY—Cambria; RR—Penna.
MS—J. Patterson, Omahlinda, Pa.
S of H—Mules, and trolley pole type locos. Track gage, 36 in.
S of M—Hand.
PP—Power purchased.
SIZES SHIPT—Run of Mine.

Loyal Hanna No. 4 Mine; Drift; Upper Freeport Seam.
PO—Omahlinda, Pa.; SP—Lloydell, Pa.; CTY—Cambria; RR—Penna.
MS—J. Patterson, Omahlinda, Pa.
S of H—Mules.
S of M—Chain breast type machs.
PP—Power purchased.
Note—Under development.

Loyal Hanna No. 6 Mine; Drift; Lower Kittanning Seam, 50 in. thick.
PO—Cairbrook, Pa.; SP—Same; CTY—Somerset; RR—Penna.
MS—J. Patterson, Omahlinda, Pa.
ASST MS—Arch Miller, Cairbrook, Pa.
S of H—Trolley pole type loco. Track gage 42 in.
S of M—Electric punchers and overhead cutters.
PP—Power purchased.
SIZES SHIPT—Run of Mine.

Loyal Hanna No. 7 Mine; Drift; Upper Kittanning Seam.
PO—Cairbrook, Pa.; SP—Same; CTY—Somerset; RR—Penna.
MS—J. Patterson, Omahlinda, Pa.
ASST MS—Arch Miller, Cairbrook, Pa.
S of H—Mules, trolley pole type locos. Track gage 42 inches.
S of M—Chain breast type machs.
PP—Power purchased.

LUCAS COAL CO

General Office, Snow Shoe, Pa.
Cherry Run No. 7 Mine.
PO—Snow Shoe, Pa.; CTY—Center, RR—N. Y. C.
No report.

LUCESCO COAL CO

General Office, Greensburg, Pa.
PR—J. Howard Patton, Greensburg, Pa.
NOTE—Not operating but still have coal holdings.

LUCINDA COAL COMPANY

General Office, Warren, Pa.
PR—Peter Hefren, Hulton, Pa.
VP—J. F. Eiswerth, Clarion, Pa.
TR—C. A. Hefren, Warren, Pa.
GS—J. F. Eiswerth, Lucinda, Pa.
PA—J. F. Eiswerth, Lucinda, Pa.

Frankton Mine; Shaft; Clarion Seam, 48 in. thick.
PO—Lucinda, Pa.; SP—Same; CTY—Clarion; RR—B. & O.
S of H—Mules. Track gage, 33 in.
S of M—Hand.
EMP—20. Last years tonnage 14,000.
SIZES SHIPT—Run of Mine.

Baines Mine; Shaft; Clarion Seam, 48 in. thick.
PO—Lucinda, Pa.; SP—Same; CTY—Clarion; RR—B. & O.
S of H—Mules. Track gage, 30 in.
S of M—2 comp. air punchers.
PP—1 80 H. P. fire tube boiler.
EMP—20. Last years tonnage 15,000.
SIZES SHIPT—Run of Mine.

LUMSTED MINING COMPANY

General Office, Echo, Pa.
PR—Geo. Wm. Olmstead, Buffalo, N. Y.
VP—Chas. M. Harrington, Buffalo, N. Y.
TR—Geo. Lum, Echo, Pa.
CM—Geo. Lum, Echo, Pa.
GS—J. R. Yates, Echo, Pa.
SCD—Echo Supply Company, Buyer, J. H. Houser, Echo, Pa.

Echo Mine; Drift; Upper Freeport Seam; 52 inches thick.
PO—Echo, Pa.; SP—Same; CTY—Armstrong; RR—B. & O. & P.
S of H—Mules.
S of M—Hand.
EMP—100. Last years tonnage 100,000.
SIZES SHIPT—Run of Mine.

LUZERNE COAL & COKE CO

General Office, Clarksburg, Pa.
PR—J. H. ... , Pittsburgh, Pa.
ASST ... , Altoona, Pa.
VP—A. ... , Pittsburgh, Pa.
TR—Frank B. Dunbar, Pittsburgh, Pa.
GS—M. H. ... , Brownsville, Pa.
(Continued on Next Page)

Luzerne Coal & Coke Co.—Cont.

PA—W. W. Gillett, Pittsburgh, Pa.
EM—J. D. Martin, Pittsburgh, Pa.
EE—J. A. Malady, Pittsburgh, Pa.
SA—Hillman Coal & Coke Co., Pittsburgh, Pa.

Luzerne Mine; Slope; Pittsburgh Seam, 84 in. thick.
PO—La Belle, Pa.; SP—East Millshoro, Pa.; CTY—Fayette; RR—Monon.
MS—R. L. Kurtz, LaBelle, Pa.
S of H—Mules and rope. Track gauge, 42 in.
S of M—2 shortwall machs.
PP—Power purchased, 440 volts A. C., 1—25 H. P. elec. hoist, 3 pumps.
EMP—42. Last years tonnage 40,585.
Coke Ovens, 34 Bee Hive.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

LYCOMING FOUNDRY FACING CO., INC.
Out of Business.**LYDICK COAL CO**

General Office, Indiana, Pa.
PR—Jas. R. Phelan, Punxsutawney, Pa.
TR—Wm. M. Seiple, Indiana, Pa.
GM—F. L. Neff, Indiana, Pa.
GS—F. L. Neff, Indiana, Pa.
PA—F. L. Neff, Indiana, Pa.
EM—Thos. Pealer, Indiana, Pa.

Lydick Mine; Drift; B Seam; 36 to 48 in. thick.
PO—Indiana, Pa.; SP—Same; CTY—Indiana, RR—P. R. R.
MS—Robt. Baird, Indiana, Pa.
S of M—Hand.
S of H—Mules. Track gauge 36 in.
EMP—9. Last years tonnage 10,000.
SIZES SHIPT—Run of Mine.

LYONS COAL COMPANY

General Office, Box 732, Uniontown, Pa.
PR—W. H. Wilkey, Uniontown, Pa.
TR—W. J. Sturgis, Uniontown, Pa.
SA—Continental Fuel Co., Uniontown, Pa.

Lyons Mine; Slope; Pittsburgh Seam; 72 in. thick.
PO—Gans, Pa.; SP—Same; CTY—Fayette; RR—B. & O.
MS—S. Rosenik, Gans, Pa.
S of H—Mules and gasoline locos. Track gauge 42 inches.
S of M—Hand.
EMP—25. Daily tonnage 150.
SIZES SHIPT—Run of Mine.

MALISTER & GRAY COAL CO.

General Office, Irwin, Pa.
PR—J. J. Malister, Irwin, Pa.
TR—Clayton D. Woodcock, Trafford, Pa.
GM—J. J. Malister, Irwin, Pa.
GS—J. J. Malister, Irwin, Pa.
PA—J. J. Malister, Irwin, Pa.
EM—Harry K. Ward, Irwin, Pa.
EE—Clayton D. Woodcock, Trafford, Pa.
SA—Sales Agency, Export Coal Co., Pittsburgh, Pa.

Star Mine; Drift; Pittsburgh Seam, 78 in. thick.
PO—Export, Pa.; SP—Same; CTY—Westmoreland; RR—Penna., Turtle Creek Valley Br.
MS—Nick Broiler, Hahntown Rd., Irwin, Pa.
S of H—Mules. Track gauge 36 in.
S of M—Hand.
PP—Power purchased. Transformers, 1—100 K. W. gen. unit, 440 volts D. C., 4 pumps.
EMP—40.
SIZES SHIPT—Run of Mine.
Old information.

MALLEN COAL COMPANY

General Office, Garrett, Pa.
PR—J. S. McIntyre, Garrett, Pa.
VP—J. C. Allen, Garrett, Pa.
TR—J. S. McIntyre, Garrett, Pa.
GS—H. J. Grew, Garrett, Pa.
EM—James L. Crawford, Garrett, Pa.
EE—M. D. Crawford, Garrett, Pa.

Garey Mine; Drift; "D" Seam; 36 in. thick.
PO—Garrett, Pa.; SP—Same; CTY—Somerset; RR—B. & O.
MS—J. C. Mallen, Garrett, Pa.
S of H—Mules. Track gauge 36 in.
S of M—Machine.
PP—Power purchased, 250 volts.
EMP—4.
SIZES SHIPT—Run of Mine.

MCANULTY COAL COMPANY

General Office, Room 421-423 Park Bldg., Pittsburgh, Pa.
PR—R. M. McAnulty, Pittsburgh, Pa.
TR—Avon R. McAnulty, Pittsburgh, Pa.

McAnulty No. 2 Mine; Drift; Upper Freeport Seam, 44 inches thick.
PO—Freeport, Pa.; SP—Same; CTY—Butler; RR—Penna.
S of H—Mules. Track gauge 42 inches.
S of M—Shortwall machs.
PP—Power purchased. Transformer 6600 to 220-440 volts A. C., rotary converters, 220 volts D. C.
SIZES SHIPT—Run of Mine.

McAnulty No. 1 Mine; Drift; Pittsburgh Seam, 72 in. thick.
PO—Pittsburgh, Pa.; SP—Bradlock, Pa.; CTY—Allegheny; RR—P. R. R.
S of H—Mules. Track gauge 44 in.
PP—2 pumps.
SIZES SHIPT—Run of Mine, Slack.

MCAFREY COAL & COKE CO.
Out of Business.**McFETRIDGE BROS. COAL CO.**

General Office, Creighton, Pa.
PR—Wm. McFetridge, Creighton, Pa.
VP—W. F. McFetridge, Creighton, Pa.
TR—G. E. McFetridge, " "
GM—G. E. McFetridge, " "
GS—R. B. McFetridge, " "
PA—W. F. McFetridge, Creighton, Pa.
CE—John M. Bayburn, Pittsburgh, Pa.
EE—Arthur Hutchinson, Tarentum, Pa.
SA—Geo. E. McFetridge, Creighton, Pa.

McFetridge Mine, Drift, Lower and Upper Freeport Seam, 24 to 84 in. thick.
PO—Creighton, Pa.; SP—Same; CTY—Allegheny; RR—P. R. R.
S of H—Mules, 4 trolley pole type locos. Track gauge 44 in.
S of M—1 chain breast type, 3 shortwall and 3 longwall machs.
PP—3 water tube boilers, 50 H. P. 550 volts D. C., 12 pumps.
EMP—200.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

MCCARTNEY COAL CO.
Out of business.**MCCLANE MINING COMPANY.**

General Office, Washington, Pa.
PR—M. W. McClane, Washington, Pa.
VP—J. A. McClane, Washington, Pa.
TR—Robt. L. McCarrell, Washington, Pa.
GM—M. W. McClane, Washington, Pa.
GS—E. McClane, Washington, Pa.
PA—Arthur Cary, Washington, Pa.
EM—W. H. McClane, Washington, Pa.
EE—August Slagter, Washington, Pa.
SCO—Vulcan Supply Co., Buyer, F. D. McFarland, Cuddy, Pa.
Sales Agency, Fort Pitt Coal & Coke Co., Pittsburgh, Pa.

Additional Information on Page 728

Rich Hill Nos. 1 and 2 Mines; Slopes.
PO—Meadowland, Pa.; SP—Same; CTY—Washington. RR—P. C. C. & St. L.
S of H—Mules, 4 trolley pole type, 2 storage battery and 2 combination locos. Track gauge, 44 in.
S of M—15 chain breast type and 11 shortwall machs.
PP—Purchase power, transformer 11,000 to 220 volts A. C., M. G. sets, 250 volts D. C., 14 pumps.
EMP—400. Last fiscal year output, 341,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Bar and Shaker Screens, Picking Tables, Loading Booms.
Note—Formerly operated by United Coal Corp.

Mildred Mine worked out.
Maud Mine; Drift; Pittsburgh Seam, 62 in. thick.
PO—Cuddy, Pa.; SP—Trevesky, Pa.; CTY—Allegheny. RR—P. C. C. & St. L.
MS—Alex McLean, Bridgeville, Pa.
S of H—Mules and 2 trolley pole type elec. locos. Track gauge, 40 in.
S of M—11 chain breast type and 6 shortwall machs.
PP—Purchase power, transformer 23,000 to 250 volts A. C., M. G. sets, 250 volts D. C., 4 pumps.
EMP—200. Last fiscal year output, 246,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

MCCLELLANDTOWN COAL & COKE CO.

General Office, McClellandtown, Pa.
PR—J. H. Sangston, McClellandtown, Pa.
TR—J. H. Sangston, McClellandtown, Pa.
GM—J. H. Sangston, McClellandtown, Pa.
PA—J. H. Sangston, McClellandtown, Pa.
McClellandtown Mine; Pittsburgh Seam, 108 in. thick.
PO—McClellandtown, Pa.; SP—Messmore, Pa.; CTY—Fayette; RR—P. R. R.
MS—J. H. Sangston, McClellandtown, Pa.
S of H—Mules and steam loco. Track gauge, 42 in.
S of M—Hand.
EMP—30. Daily tonnage 100.
SIZES SHIPT—Run of Mine.
Old information.

MCCONNELL & BERG.

General Office, R. D. No. 1, Wilkensburg, Pa.
PR—Philip Berg, Wilkensburg, Pa.
TR—R. R. McConnell, Wilkensburg, Pa.
GM—R. R. McConnell, Wilkensburg, Pa.
GS—R. R. McConnell, Wilkensburg, Pa.

PA—R. R. McConnell, Wilkensburg, Pa.
SA—R. R. McConnell, Wilkensburg, Pa.

McConnell & Berg Mine; Drift; Pittsburgh Seam, 65 in. thick.
PO—Wilkensburg, Pa.; SP—Universal, Pa.; CTY—Allegheny; RR—B. & L. E.

S of H—Mules. Track gauge 44 in.
S of M—Hand.
EMP—20. Daily tonnage 100.
SIZES SHIPT—Run of Mine.

MCCOMBS COAL COMPANY.

General Office, Saving & Trust Bldg., Indiana, Pa.
PR—D. F. Rinn, Indiana, Pa.
TR—J. Cloyd Rinn, Indiana, Pa.
GM—J. Cloyd Rinn, Indiana, Pa.
PA—J. Cloyd Rinn, Indiana, Pa.

McCombs No. 1 Mine; Pittsburgh Seam, 72 in. thick.
PO—Reed, Pa.; SP—McCombs Siding, CTY—Indiana. RR—B. R. & P.
MS—James Irvin, Reed, Pa.
S of H—Mules. Track gauge, 42 in.
S of M—Hand.
EMP—30. Last fiscal year output, 40,723 tons.
SIZES SHIPT—Run of Mine.

McCombs No. 2 Mine; Drift; Upper Freeport Seam, 54 in. thick.
PO—Boosmoyn, Pa. SP—Rinn, Pa. CTY—Indiana. RR—B. R. & S.
MS—Robt. Johnston, Rossmoyn, Pa.
S of H—Mules. Track gauge, 42 in.
S of M—3 compressed air machs.
PP—Total 150 H. P., 1 air compressor, 4 pumps.
EMP—28. Last fiscal year output, 10,609 tons.
SIZES SHIPT—Run of Mine.

MCCONALD COAL CO.

General Office, Du Bois, Pa.
PR—Frank G. St. Clair, Du Bois, Pa.
GM—Frank G. St. Clair, " "
ASST. TR—C. C. Hammond, Du Bois, Pa.
PA—Frank G. St. Clair, " "
GS—F. G. St. Clair, Du Bois, Pa.
EM—H. S. Kanarr, Punxsutawney, Pa.
EE—Lloyd Bently, Coal Glen, Pa.
SA—C. C. Hammond, Du Bois, Pa.

Sugar Hill Mine; Drift; Up. Freeport Seam, 4½ to 5 ft. thick.
PO—Westville, Pa.; SP—Same; CTY—Jefferson; RR—P. & S.
MS—J. H. Kerry, Westville, Pa.
S of H—Mules and 54 H. P. gasoline engine. Track gauge 42 inches.
S of M—4 Elec. machs.
PP—2 Return tubular boilers total 90 H. P., 2 gas engines, gen. units 500 volts D. C., 2 pumps.
EMP—23. Last fiscal year output, 20,000 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.

Beechton Mine; Drift; Up. Freeport Seam, 4½ to 5 ft. thick.
PO—Westville, Pa.; SP—Ex., Lanes Mills, Pa.; FR., Coal Glen, Pa.; CTY—Jefferson; RR—P. & S.
MS—John H. Kerry, Westville, Pa.
S of H—Mules. Track gauge 42 inches.
S of M—Hand.
PP—1 pump.
EMP—26. Last fiscal year output, 25,000 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

MCCULLOUGH COAL COMPANY

General Office, Brockwayville, Pa.
OWNER—H. B. McCullough, Brockwayville, Pa.

McCullough No. 1 Mine; Drift; A Seam, 48 inches thick.
PO—St. Marys, Pa.; SP—Averyville, Pa.; CTY—Elk; RR—P. S. & N.
S of H—Mules. Track gauge 36 inches.
S of M—Hand.
EMP—25. Daily output, 100 tons.
SIZES SHIPT—Run of Mine.

McCullough No. 2 Mine; Drift; Brookville Seam, 52 inches thick.
PO—Brookville, Pa.; SP—Same; CTY—Jefferson; RR—N. Y. C.
S of H—Mules and main and tail rope. Track gauge 36 inches.
S of M—Hand.
PP—1 pump.
EMP—20. Daily output, 75 tons.
Old information.

MCCURDY, J. H., & SON.

General Office, Jackson Center, Pa.
PR—J. H. McCurdy, Jackson Center, Pa.
TR—W. R. McCurdy, Jackson Center, Pa.
GM—J. W. McCurdy, Jackson Center, Pa.
GS—J. W. McCurdy, Jackson Center, Pa.
PA—J. W. McCurdy, Jackson Center, Pa.
SA—J. W. McCurdy, Jackson Center, Pa.

McCurdy Mine; Slope; Brookville Seam, 53 in. thick.
PO—Jackson Center, Pa. SP—Same. CTY—Jefferson; RR—Penna.
S of H—Mules and comp. air loco. Track gauge 32 inches.
S of M—Hand and 5 comp. air and 1 elec. chain breast mach.

PP—3 fire tube boilers, total 320 H. P., 1—110 K. W. gen. unit, 250 volts D. C., 4 pumps.
EMP—34. Last years tonnage 19,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens, Picking Tables.

MCDONALD, C. A.

General Office, DuBois, Pa.
GS—Thomas Harrigan, DuBois, Pa.
PA—C. A. McDonald, DuBois, Pa.
SA—C. A. McDonald, DuBois, Pa.

McDonald Mine; Shaft; Brookville Seam, 48 in. thick.
PO—Arthur, Pa.; SP—Same; CTY—Clarion; RR—B. & O.
MS—E. A. Callom, Arthurs, Pa.
S of H—Mules. Track gauge 42 in.
S of M—Hand.
PP—2 water tube boilers, 60 H. P., 2 pumps.
EMP—15. Last years tonnage 8,000.
SIZES SHIPT—Run of Mine.

Rochester Mine; Drift; Freeport Seam, 96 inches thick.
PO—Falls Creek, Pa.; SP—Same; CTY—Clearfield; RR—Penna.
MS—Thomas Harrigan, Falls Creek, Pa.
S of H—Mules. Track gauge 36 inches.
S of M—Hand.
Daily output, 50 tons.
SIZES SHIPT—Run of Mine.

New Rochester Mine; Drift; Freeport Seam.
PO—Falls Creek, Pa.; SP—Same; CTY—Clearfield; RR—Penna.
MS—At. Smith, Falls Creek, Pa.
S of M—Hand.
Daily output, 100 tons.
SIZES SHIPT—Run of Mine.

MCDONALD COAL COMPANY

General Office, Park Bldg., Pittsburgh, Pa.
PR—Robt. Young, 142 Fifth St., McDonald, Pa.
TR—W. S. Lockhart, McDonald, Pa.
GM—R. Young, McDonald, Pa.
GS—Andrew Young, McDonald, Pa.
PA—Andrew Young, McDonald, Pa.
EE—Robt. Browning, Sturgeon, Pa.
SA—J. J. Green, McDonald, Pa.

Willow Grove Mine; Drift; Pitts Vein Seam, 54 inches thick.
PO—McDonald, Pa.; SP—Sturgeon, Pa.; CTY—Allegheny; RR—Penna.
S of H—Mules. Track gauge 44 inches.
S of M—4 chainbreast type machs.
PP—Power purchased, Transformer, 500 volts A. C., 5 pumps.
EMP—100. Last fiscal year output, 70,000 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
PREP. EQUIPT—Gravity Screens.

MCWEEN RUN COAL COMPANY.

General Office, Ridgway, Pa.
PR—E. E. Clawson, Ridgway, Pa.
VP—Samuel Murphy, Ridgway, Pa.
TR—W. A. Deegan, Ridgway, Pa.
GM—Geo. R. Adam, Lane's Mills, Pa.
GS—Geo. R. Adam, Lane's Mills, Pa.
PA—Geo. R. Adam, Lane's Mills, Pa.
EE—E. W. Hess, DuBois, Pa.
SA—W. A. Deegan, Ridgway, Pa.

McEwen Mine; Drift; Lower Kittanning Seam, 34 in. thick.
PO—Lane's Landing, Pa.; SP—Same; CTY—Jefferson; RR—P. R. R.
S of H—Mules. Track gauge 30 in.
S of M—Hand.
EMP—45. Last years tonnage 29,000.
SIZES SHIPT—Run of Mine.

McFETRIDGE, G. H., COAL CO.

General Office, 306 Butler Co. Natl. Bank Bldg., Butler, Pa.
PR—T. C. Leedom, Butler, Pa.
TR—P. W. Leedom, Oil City, Pa.
GM—A. L. Pritner, Butler, Pa.
GS—J. W. Donaldson, Keister, Pa.
PA—A. L. Pritner, Butler, Pa.
SCO—McFetridge Supply Co., Buyer, A. L. Pritner, Butler, Pa.

Hallston Mine; Drift; Middle Kittanning Seam, 36 to 51 in. thick.
PO—Keister, Pa. SP—Claytona, Pa. CTY—Butler. RR—B. & L. E.
S of H—Storage Battery locos. Track gauge 36 in.
S of M—Shortwall machs.
PP—1—100 H. P. and 1—200 H. P. boilers, 1—75 K. W. gen. unit, 250 volts D. C., 2 pumps.
EMP—80. Daily tonnage 270.
SIZES SHIPT—Run of Mine, Slack, Lump.

MCGREGOR COAL COMPANY

PR—Perry L. Winger, Punxsutawney, Pa.
VP—J. C. Long, Punxsutawney, Pa.
TR—Wm. T. McGregor, Timblin, Pa.
GM—Wm. T. McGregor, Timblin, Pa.
GS—Wm. T. McGregor, Timblin, Pa.
PA—Wm. T. McGregor, Timblin, Pa.
EM—W. H. Arthurs, Brookville, Pa.
SA—W. T. McGregor, Timblin, Pa.

(Continued on Next Page)

McGregor Coal Company—Cont.

McGregor No. 1 Mine; Drift; Upper Freeport Seam, 18 in. thick.
PO—Timblin, Pa.; SP—Same; CTY—Armstrong; RR—Pittsburgh & Shawmut.
S of H—Mules, 2 steam locos. Track gage 36 in.
S of M—Hand.
PP—1 125 H P fire tube boiler.
EMP—35. Daily tonnage 50.
SIZES SHIPT—Run of Mine.

McGregor No. 2 Mine; Drift; Kittanning Seam, 36-38 in. thick.
PO—Timblin, Pa.; SP—Same; CTY—Armstrong; RR—P. & S.
NOTE—Now mine; not operating now.

McHUGH, H. COAL CO.

General Office, Rennerdale, Pa.
PR—H. McHugh, Rennerdale, Pa.
GM—H. McHugh, " "
PA—H. McHugh, " "
CE—John McKay, " "
EM—Robt. Provost, " "
EE—S. West, " "
MM—John Ritter, Rennerdale, Pa.
Sales Agent—Pittsburgh Coal Co., Oliver Bldg., Pittsburgh, Pa.

Cherry Mine; Drift and Shaft; Pittsburgh Seam, 60 inches thick.
PO—Rennerdale, Pa.; SP—Walkers Mill, Pa.; CTY—Allegheny; RR—Penna., Panhandle.
MS—Hugh McHugh, Rennerdale, Pa.
S of H—Mules and 1 elec. loco. Track gage 40 in.
S of M—Elec. puncher, chain breast type and shortwall machs.
PP—1 fire tube and 1 water tube boiler, total 220 H. P., gen. unit, 125-250 volts A. C., 3 pumps.
EMP—44. Last fiscal year output, 52,600 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.

McINTYRE COAL COMPANY.

General Office, Masonic Bldg. Uniontown, Pa.
PR—J. J. McIntyre, Uniontown, Pa.
TR—Lee Stern, Uniontown, Pa.
GM—J. J. McIntyre, Uniontown, Pa.
GS—J. J. McIntyre, Uniontown, Pa.
PA—J. J. McIntyre, Uniontown, Pa.

McIntyre Mine; Drift; Sewickley Seam, 60 in. thick.
PO—Uniontown, Pa.; SP—Same; CTY—Fayette; RR—P. & R.
MS—Lewis Williams, Uniontown, Pa.
S of H—Mules and rope.
S of M—Hand.
PP—Power purchased.
SIZES SHIPT—Run of Mine.

McINTYRE, JAMES M. & CO.

General Office, Six Mile Run, Pa.
PR—James M. McIntyre, " "
TR—John M. McIntyre, " "
GM—W. B. McIntyre, " "
GS—W. B. McIntyre, Six Mile Run, Pa.
PA—John M. McIntyre, Six Mile Run, Pa.
EM—Richard Colelesser, Six Mile Run, Pa.
S.O. Penn Trading Co., Boyer, R. G. McIntyre, Six Mile Run, Pa.
Sales Agency—Commercial Coal Mining Co., 801 Commercial Trust Bldg., Philadelphia, Pa.

Shreeve Run No. 1 Mine; Drift; Kelley Seam, 48 to 54 in. thick.
PO—Six Mile Run, Pa.; SP—Bommell; EX—Riddelsburg, Pa.; CTY—Bedford; RR—H. & B. T.
MS—Jas. McIntyre, Jr., Six Mile Run, Pa.
S of H—Mules and rope. Track gage 40 in.
S of M—Hand.
PP—3 water tube boilers, 250 H. P., 3 pumps.
EMP—155. Last fiscal year output, 110,942 tons.
SIZES SHIPT—Run of Mine.

Shreeve Run No. 2 Mine; Drift; Barnett Seam, 30 to 42 in. thick.
PO—Six Mile Run, Pa.; SP—Bommell, Pa.; EX—Riddelsburg, Pa.; CTY—Bedford; RR—H. & B. T.
S of H—Mules, rope. Track gage 40 in.
S of M—Hand.
PP—1 water tube boiler, total 40 H. P.
EMP—44. Last fiscal year output, 20,074 tons.
SIZES SHIPT—Run of Mine.

Shreeve Run No. 6 Mine; Drift; Kelly & Fulton Seams, 44 inches thick.
PO—Six Mile Run, Pa.; SP—Bommell, Pa.; EX—Riddelsburg, Pa.; CTY—Bedford; RR—H. & B. T.
MS—Jas. McIntyre, Jr., Six Mile Run, Pa.
S of H—Mules. Track gage 38 inches.
S of M—Hand.
EMP—27. Last fiscal year output, 11,898 tons.
SIZES SHIPT—Run of Mine.

Shreeve Run No. 7 Mine; Drift; Kelley Seam, 48 to 72 in. thick.
PO—Six Mile Run, Pa.; SP—Bommell, Pa.; EX—Riddelsburg, Pa.; CTY—Bedford; RR—H. & B. T.
MS—Jas. McIntyre, Jr., Six Mile Run, Pa.
S of H—Mules. Track gage 38 inches.
S of M—Hand.
EMP—22. Last fiscal year output, 15,873 tons.
SIZES SHIPT—Run of Mine.

McKEEFREY COAL COMPANY

General Office, Leetonia, Ohio.
PR—John McKeefrey, Leetonia, Ohio.
VP—W. D. McKeefrey, Leetonia, Ohio.
TR—N. J. McKeefrey, Leetonia, Ohio.
GM—W. D. McKeefrey, Leetonia, Ohio.
GS—James Henderson, Uniontown, Pa.
SA—McKeefrey & Co., Leetonia, Ohio

Geneva Mine; Drift; Pittsburgh Seam, 84 inches thick.
PO—Martin, Pa. SP—Fr., Martin, Ex., Masontown, Pa. CTY—Fayette.
RR—Monongahela.
S of H—Mules, trolley pole type locos.
S of M—3 shortwall machines.
PP—1 water tube boiler, 600 H. P.
EMP—175. Last years tonnage 147,851.
Coke Ovens, 202 Bee Hive.
SIZES SHIPT—Run of Mine.

McKENZIE, ALEX. & SONS.

General Office, Houtzdale, Pa.
McKenzie No. 1 Mine.
PO—Houtzdale, Pa.; CTY—Clearfield; RR—Penna. and P. & S.
No report.

McKNIGHT COAL COMPANY.

PR—T. M. Kurtz, Painsantown, Pa.
VP—F. R. Henderson, Brookville, Pa.
TR—B. E. Taylor, Brookwayville, Pa.
GM—B. E. Taylor, Brookwayville, Pa.
GS—Jas. S. McLesky, Painsantown, Pa.
PA—B. E. Taylor, Brookwayville, Pa.

McKnight Nos. 1 and 2 Mines; Drift; Lower Freeport Seam, 50 in. thick.
PO—Brookwayville, Pa.; SP—Same; CTY—Jefferson; RR—No. 1 Mine, P. & S.; No. 2 Mine, B. & P.
S of H—1 elec. loco. Track gage 36 in.
S of M—Hand.
EMP—50. Last years tonnage 32,503.
SIZES SHIPT—Run of Mine, Slack.

McLAUGHLIN COAL COMPANY

General Office, Ridgway, Pa.
TR—Wm. Simons, Ridgway, Pa.
GM—R. G. Dowie, Kersey, Pa.
PA—R. G. Dowie, Kersey, Pa.
SA—R. G. Dowie, Kersey, Pa.

McLaughlin Mine; Drift; Lower Kittanning Seam; 36 in. thick.
PO—Weedville, Pa.; SP—Same; CTY—Elk; RR—P. & S. & N.
MS—R. G. Dowie, Kersey, Pa.
S of H—Mules. Track gage 36 in.
S of M—Hand.
EMP—20. Daily tonnage 100.
SIZES SHIPT—Run of Mine.

McLEAN, R. J. COAL CO.

General Office, Oakdale, Pa.
PR—Alex. McLean, Bridgeville, Pa.
TR—R. J. McLean, Oakdale, Pa.
GS—R. J. McLean, Oakdale, Pa.
PA—Alex. McLean, Bridgeville, Pa.
SA—Penn Empire Coal Inc., 406 Empire Bldg., Pittsburgh, Pa.

Berna Mine; Drift; Pittsburgh Bit Seam, 62 inches thick.
PO—Oakdale, Pa.; SP—Same; CTY—Allegheny; RR—P. & R. & C. & St. L. P. & R. R. System.
S of H—Mules. Track gage 40 inches.
S of M—Hand.
Daily tonnage 500.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.
NOTE—Mine under development.

McMILLAN COAL CO.

Now Amrose-Somerset Collieries Corp.

McNees-Reese Coal Co., THE
General Office, Kittanning, Pa.
PR—Geo. W. Reese, Kittanning, Pa.
VP—C. R. McNees, Kittanning, Pa.
TB—G. W. McNees, Kittanning, Pa.
GM—G. W. McNees, Kittanning, Pa.
GS—C. B. McNees, Kittanning, Pa.
PA—C. B. McNees, Kittanning, Pa.
CE—Herbert & Henderson, Kittanning, Pa.

McNees-Reese Mine; Drift; Lower Kittanning Seam, 42 inches thick.
PO—Kittanning, Pa.; SP—Same; CTY—Armstrong; RR—Penna.
S of H—Rope. Track gage 36 inches.
S of M—Shortwall machs.
PP—Power purchased. Transformer 2,200 to 250 volts A. C., M. G. sets, 250 volts D. C.
EMP—40. Last years tonnage 28,155.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

McSHANE COAL COMPANY

General Office, Crafton Sta., Pittsburgh, Pa.
PR—Phelan McShane, Leetonia, Ohio.
VP—J. F. McShane, Crafton Sta., Pittsburgh, Pa.
TR—W. H. Tepe, West Elizabeth, Pa.
GM—Frank L. McShane, Crafton Sta., Pittsburgh, Pa.
GS—Frank L. McShane, Crafton Sta., Pittsburgh, Pa.

No. 1 or Crafton and No. 2 or Tepe Mines; Drift, Pittsburgh Seam, 72 inches thick.
PO—Crafton Sta., Pgh., Pa.; SP—Crafton, Pa.; CTY—Allegheny; RR—Penna.
MS—W. A. Tepe, West Elizabeth, Pa.
S of H—Mules. Track gage 41 inches.
S of M—Hand.
EMP—45. Last years tonnage 15,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

MABEL COAL WORKS.

General Office, Dunkard, Pa.
Mable Mine.
PO—Dunkard, Pa.; CTY—Greene; RR—Monongahela.
No report.

MacGREGOR COAL CO.

General Office, Somerset, Pa.
PR—C. F. Roy, Somerset, Pa.
TR—C. F. Roy, Somerset, Pa.
GM—R. D. Roy, Somerset, Pa.
PA—R. D. Roy, Somerset, Pa.
SCO—Russ Pyle, R. F. D. No. 1, Somerset, Pa.

MacGregor Nos. 1 and 2 Mines; Drifts; Middle Kittanning Seam, 36-40 in. thick.
PO—R. D. No. 1, Somerset, Pa. SP—MacGregor, CTY—Somerset, RR—B. & O.
S of H—Mules and storage battery loco. Track gage 36 in.
S of M—Hand.
EMP—100. Last years tonnage 45,396.
SIZES SHIPT—Run of Mine.

MACKEYLON COAL MINING COMPANY.

PR—W. Frank Vaughn, Osceola Mills, Pa.
TR—R. E. MacCartney, Osceola Mills, Pa.
GM—John G. Kelly, Osceola Mills, Pa.
GS—Edw. Kelly, Osceola Mills, Pa.
PA—John G. Kelly, Osceola Mills, Pa.

Center No. 1 Mine; Drift; E. and D. Seams, 40 to 60 in. thick.
PO—Osceola Mills, Pa. SP—Same. CTY—Clearfield. RR—P. & R.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
SIZES SHIPT—Run of Mine.
(Old Information)

MADEIRA-HILL COAL MINING CO

General Office, North American Bldg. Philadelphia, Pa.
PR—P. C. Madeira, North American Bldg., Philadelphia, Pa.
VP—R. C. Hill, New York, N. Y.
VP—L. C. Madeira, Philadelphia, Pa.
TR—John Gilbert, Philadelphia, Pa.
GM—J. Wm. Wetter, Philadelphia, Pa.
GS—J. Wm. Wetter, Philadelphia, Pa.
PA—Jas. H. Hinge, Philadelphia, Pa.
EE—W. J. Milden, Philadelphia, Pa.
SCO—Natalie Store Co., Royer, H. E. Apple, R. F. D. No. 1, Mahaffey, Pa.

Sales Agency, Madeira-Hill & Co., North American Bldg., Philadelphia, Pa.
Spangler No. 2 Mine abandoned.
Spangler No. 3 Mine; Drift; "E" Seam, 38 in. thick.
PO—Barneshoro, Pa. SP—Same, CTY—Cambria. RR—Penna., Walnut Run Branch.
MS—Hugh Green, Barneshoro, Pa.
S of H—6 trolley pole type locos. Track gage 36 in.
S of M—Hand.
PP—Power purchased, transformer 2200 to 440 volts A. C., M. G. set, 250 volts D. C.
EMP—108. Last years tonnage 105,000.
SIZES SHIPT—Run of Mine.

Spangler No. 4 Mine; Shaft; "R" Seam, 36 in. thick.
PO—Barneshoro, Pa. SP—Same, CTY—Cambria. RR—Penna., Walnut Run Branch.
MS—Hugh Green, Barneshoro, Pa.
S of H—7 trolley pole type locos. Track gage 36 in.
S of M—6 shortwall machs.
PP—Power purchased. Transformer 6600-2200-440 volts A. C., M. G. sets, 250 volts D. C., 15 pumps.
EMP—110. Last years tonnage 75,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.
Clever Run No. 2 Mine abandoned.

MADEIRA HILL SMITHING COAL COMPANY

General Office, North American Bldg. Philadelphia, Pa.
PR—P. C. Madeira, Philadelphia, Pa.

VP—R. C. Hill, New York, N. Y.
TR—John Gilbert, Philadelphia, Pa.
GM—J. Wm. Wetter, Philadelphia, Pa.
GS—J. Wm. Wetter, Philadelphia, Pa.
PA—James H. Hinge, Philadelphia, Pa.
EM—T. F. Morgan, Philadelphia, Pa.
EE—W. J. Milden, Philadelphia, Pa.
SA—Maderia, Hill & Company, Philadelphia, Pa.

Maderia Slope No. 1 Mine; Slope; "D" Lower Freeport Seam, 36 in. thick.
PO—Franklin, Pa. SP—Same; CTY—Somerset. RR—B. & O.
MS—Thomas, Hindman, Fraden, Pa.
S of H—Mules and elec. locos.
PP—Power purchased. Transformer 2200 volts A. C., 150 K. W. M. G. set.
EMP—30.

MAHER COAL & COKE CO

General Office, Leeburg, Pa.
TR—Thos. Maher, Leeburg, Pa.
GM—R. Campbell Maher, Leeburg, Pa.
GS—R. Campbell Maher, " "
PA—R. Campbell Maher, " "
EM—E. A. Walters, " "

No. 4 Maher Mine. Drift, Upper Freeport Seam, 46 in. thick.
PO—Leeburg, Pa. SP—Same. CTY—Armstrong; RR—P. R. R., Schenley Br.
S of H—4 elec. locos. Track gage 42 in.
S of M—8 elec. machs.
PP—1 gen. unit, 250 volts D. C., 2 pumps. Purchase power.
EMP—125. Last years tonnage 110,854.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.

MAHER & CRAFF

General Office, Blairsville, Pa.
TR—Thomas Maher, 917 Farmers Bank Bldg., Pittsburgh, Pa.
ASST. TR—Paul C. Maher, 917 Farmers Bank Bldg., Pittsburgh, Pa.
EM—Albert Smith, Blairsville, Pa.

River Mine; Drift; Pittsburgh-Connelville Seam, 72 inches thick.
PO—Blairsville, Pa.; SP—Same; CTY—Westmoreland; RR—P. & R.
MS—R. M. Wilson, Blairsville, Pa.
S of H—4 trolley pole type locos. Track gage 39 in.
S of M—2 shortwall machs.
PP—Power purchased, M. G. set, 250 volts D. C., 2 pumps.
EMP—55. Daily tonnage 400.
SIZES SHIPT—Run of Mine.

MAHONEY, G. C.

General Office, 100 W. Fayette St., Uniontown, Pa.
PR—G. C. Mahoney, Uniontown, Pa.
TR—G. C. Mahoney, Uniontown, Pa.
GM—John Lacy, Uniontown, Pa.
SA—G. C. Mahoney, Uniontown, Pa.

Mahoney Mine; Drift; Lower Freeport Seam, 48 inches thick.
PO—Uniontown, Pa.; SP—Same; CTY—Fayette; RR—Penna.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
PP—Power purchased. Transformer 2200-110 volts A. C.
Daily tonnage 50.
SIZES SHIPT—Run of Mine.

MAHONING COAL CO

Now Prospect and Mahoning Coal Co.

MAHONING COAL AND COKE CO
General Office, 304 Title & Trust Bldg., Connelville, Pa.
PR—J. M. Grey, Connelville, Pa.
TR—K. K. Kramer, " "
GM—K. K. Kramer, " "
GS—W. C. Elston, Turt Station, Pa.
PA—K. K. Kramer, Connelville, Pa.
SA—Kramer Coal Co., Connelville, Pa.

Poorless Mine; Drift; 132 in. thick.
PO—Alverton, Pa.; SP—Same; CTY—Westmoreland; RR—Penna., Donally Br.
S of H—Mules, gasoline loco. Track gage 42 in.
S of M—Hand.
EMP—50. Coke Ovens, 32 Bee Hive.
SIZES SHIPT—Run of Mine.

MAHONING RIVER COAL COMPANY, INC.

Out of business.

MAJESTIC COAL MINING CO.

General Office, Leeburg, Pa.
GM—L. S. Roberts, Leeburg, Pa.
GS—L. S. Roberts, " "
SA—Clark Bros. Coal Co., Leeburg, Pa.

Majestic No. 1 Mine; Drift; Upper Freeport Seam, 36 in. thick.
PO—Leeburg, Pa.; SP—Johnetta, Pa.; RR—Armstrong; RR—Penna., B. & O. Div.
S of H—Mules.
S of M—Elec. machs.
EMP—50. Daily output, 300 tons.
SIZES SHIPT—Run of Mine.
Old Information

Matys-Krause Coal Company—Cont.

S of H—Mules, Track gage 42 in.
S of M—Hand.
PP—Power purchased.
EMP—20. Last years tonnage 16,100.
SIZES SHIPT—Run of Mine.

MAUST COAL CO.

General Office, Elk Lick, Pa.

Chapman Nos. 3 and 4 Mine; Drifts; Pittsburgh Seam, 96 inches thick
PO—Elk Lick, Pa.; SP—Same; CTY—Somerset; RR—B & O.
No report.

MAYER, C. P. BRICK COMPANY

General Office, Bridgeville, Pa.
PR—C. P. Mayer, Bridgeville, Pa.
TR—E. C. Mayer.
SECY—J. H. Lutz, Bridgeville, Pa.
GM—C. P. Mayer, Bridgeville, Pa.
CE—C. P. Mayer, Bridgeville, Pa.
FM—Thouless & McKnight, Bridgeville, Pa.

No. 1 Mine; Drift; Pittsburgh Seam, 72 to 96 in. thick.
PO—Bridgeville, Pa.; SP—Same; CTY—Allegheny; RR—Penna. Charters Br. and P. & W. V.
MS—E. C. Mayer, Bridgeville, Pa.
S of H—Mules and elec. hoists.
S of M—Picks and machs.
SP—Elec. power.
SIZES SHIPT—Run of Mine, Lump.

No. 2 Mine; Drift; Pittsburgh Seam, 72-96 in. thick.
PO—Bridgeville, Pa.; SP—Presto, Pa. CTY—Allegheny; RR—P. C. & Y.
MS—C. M. Mayer, Bridgeville, Pa.
S of H—Mules and elec. hoists.
S of M—Hand and machs.
SP—Elec. power.
SIZES SHIPT—Run of Mine, Lump.

MEADOW BROOK COAL CO.

General Office, Philipsburg, Pa.
GM—Albert M. Abdallah, Philipsburg, Pa.
GM—Frank Chille, Philipsburg, Pa.
GM—Thos. Murphy, Philipsburg, Pa.
PA—Albert M. Abdallah, Philipsburg, Pa.
SCO—Address the Company, c/o Albert M. Abdallah, Philipsburg, Pa.
SA—Albert M. Abdallah, Philipsburg, Pa.

Meadowbrook Grey Nos. 1 and 2 Mines; Drift; B. & C. Seams, 36-48 in. thick.
PO—Philipsburg, Pa.; SP—Same; CTY—Clearfield; RR—P. R. R.
S of H—Mules, Track gage 30 in.
S of M—Hand.
SIZES SHIPT—Run of Mine.

MEADOW BROOK FUEL CO.

General Office, Uniontown, Pa.
PR—Thomas M. Whyel, Uniontown, Pa.
TR—Francis Whyel, Uniontown, Pa.
SECY—Francis Whyel, Uniontown, Pa.
GM—Thomas M. Whyel, Uniontown, Pa.
GS—J. A. Abraham, Uniontown, Pa.
PA—Thomas M. Whyel, Uniontown, Pa.
EE—Mike Haller, Uniontown, Pa.

Meadow Brook Mine; Slope; Sewickley Seam, 60 in. thick.
PO—R. D. No. 5, Uniontown, Pa.; SP—Same; CTY—Fayette; RR—Penna.
MS—Harry Sigafos, Uniontown, Pa.
S of H—Mules and 2 electric locos.
S of M—3 shortwall machs.
PP—Power purchased, 3 phase, 220 volts A. C., 5 pumps.
EMP—50. Last years tonnage 42,000.
SIZES SHIPT—Run of Mine.

MEADOW COAL COMPANY

General Office, Knoxdale, Pa.
PR—Ray M. Wolfe, Knoxdale, Pa.
VP—James R. Eschbaugh, Knoxdale, Pa.
TR—John E. Cummings, Knoxdale, Pa.

Meadow No. 1 Mine; Drift; Brookville Seam, 60 inches thick.
PO—Knoxdale, Pa.; SP—Same; CTY—Jefferson; RR—P. & S.
MS—Robert S. Cummings, Knoxdale, Pa.
S of H—Mules. Track gage 36 inches.
S of M—Comp. air machs.
PP—Purchase power, 250 volts.
EMP—25. Last years tonnage 17,000.
SIZES SHIPT—Run of Mine.

MEADOW LANDS COAL COMPANY.

General Office, 1506 First National Bank Bldg., Pittsburgh, Pa.
PR—E. E. Taplin, Cleveland, O.
VP—A. P. King, Cleveland, O.
TR—C. P. Taplin, Cleveland, O.
SECY—W. J. Semple, Cleveland, O.
GM—A. P. King, Cleveland, O.
PA—R. Dawson, Cleveland, O.
CE—J. P. Creedius, Cleveland, O.
EM—T. R. Richards, Avella, Pa.
SA—Th. Cleveland & Western Coal Co., Cleveland, O.

Meadow Lands No. 2 Mine; Shaft; Pittsburgh Seam, 56-68 in. thick.
PO—Arden, Pa.; SP—Same; CTY—Washington; RR—P. R. R. and P. & W. Va.
MS—J. P. Collins, Arden, Pa.

S of H—Mules and 8 elec. locos. Track gage 44 in.
S of M—16 elec. machs.
PP—Power purchased 1-300 K. W., 1-250 K. W., M. G. Sets, 550 volts D. C., 12 pumps.
EMP—250. Last years tonnage 100,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT.—Bar Screens.

Meadow Lands, No. 3 Mine; Shaft; Pittsburgh Seam, 58-64 in. thick.
PO—Avella, Pa.; SP—Same; CTY—Washington; RR—P. & W. Va.
MS—Geo. T. Atkins, Avella, Pa.
S of H—Mules and 5 elec. locos. Track gage 44 in.
S of M—24 elec. machs.
PP—6-150 H. P. boilers 1-300 K. W., 1-150 K. W. and 1-100 K. W. M. G. Sets, 550 volts D. C.
EMP—175. Last years tonnage 650,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT.—Bar Screens.

MEARS COAL CO.

Out of business.

MELCROFT COAL CO.

General Office, 800 Union Arcade, Pittsburgh, Pa.
PR—H. B. Rust, Pittsburgh, Pa.
VP—W. F. Rust, Pittsburgh, Pa.
TR—S. T. Brown, Pittsburgh, Pa.
GS—Fred Lowlands, Melcroft, Pa.
PA—J. N. Forker, Pittsburgh, Pa.
EM—J. P. Williams, Jr., Pittsburgh, Pa.
SCO—Chestnut Ridge Supply Co., Bayler, L. Quinn, Coxton, Ky.

Melcroft No. 1 Mine; Drift; B Seam, 38 in. thick.
PO—Melcroft, Pa.; SP—Same; CTY—Fayette; RR—1 C. V. B. & O.
S of H—2 trolley pole type locos. Track gage, 42 in.
S of M—6 shortwall machs.
PP—2-150 H. P. water tube boilers, 1-350 K. W., gen. unit, 250 volts A. C., 6 pumps.
EMP—150. Last years tonnage 55,500.
SIZES SHIPT—Run of Mine.

Melcroft No. 2 Mine; Drift; B Seam, 38 in. thick.
PO—Melcroft, Pa.; SP—Same; CTY—Fayette; RR—1 C. V. B. & O.
S of H—2 trolley pole type locos. Track gage, 42 in.
S of M—6 shortwall machs.
PP—Power from No. 1 plant.
EMP—150. Last years tonnage 55,500.
SIZES SHIPT—Run of Mine.

MELROSE COAL & MINING COMPANY

General Office, Uniontown, Pa.
OPERATOR—J. B. Topham, Uniontown, Pa.
PR—J. E. Topham, Uniontown, Pa.
TR—J. E. Topham, Uniontown, Pa.
GM—J. B. Topham, Uniontown, Pa.
GS—J. F. Kridler, Kittanning, Pa.

Melrose Mine; Drift; Lower Kittanning Seam, 42 in. thick.
PO—Cowanstown, Pa.; SP—Same—CTY—Armstrong; RR—Penna.
S of H—Mules and 1 haulage engine. Track gage 30 in.
S of M—4 electric chain breast type machs.
PP—Power purchased from West Penn Power Co., 550 volts D. C., 2 pumps.
EMP—45. Last years tonnage 50,000.
SIZES SHIPT—Run of Mine, Slack, Lump.

MERCER GAS COAL CO.

General Office, 352 Frick Bldg., Pittsburgh, Pa.
PR—P. Wilbert, Sr., Pittsburgh, Pa.
VP—J. W. Ely, Mercer, Pa.
TR—H. L. Wymard, Pittsburgh, Pa.
GM—J. W. Ely, Mercer, Pa.
GS—M. P. Crawford, Volant, Pa.
PA—J. Wallace, Volant, Pa.
EM—H. V. McClymonds, Volant, Pa.
EE—Ray Brocklehurst, Volant, Pa.

Oakes Mine; Shaft; Brookville Seam, 48 inches thick.
PO—Volant, Pa.; SP—Leesburg, Pa.; CTY—Mercer Lawrence; RR—Penna.
S of H—Mules and rope. Track gage 36 inches.
S of M—Hand and shortwall machs.
PP—3 fire tube boilers, total 225 H. P. Gen. unit, 250 volts D. C.
EMP—50.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT.—Bar Screens.

MERCER IRON & COAL CO

General Office, Stoneboro, Pa.
PR—E. P. Watson, Corey, Colo.
VP—W. A. McMaster, Jamestown, Pa.
TR—John P. Cann, Stoneboro, Pa.
GM—John P. Cann, Stoneboro, Pa.
GS—John Thomas, Stoneboro, Pa.
PA—Robert P. Cann, Stoneboro, Pa.
EE—Wm. Parker, Stoneboro, Pa.
SCO—Mercer Iron & Coal Co., Bayler, Robert P. Cann, Stoneboro, Pa.

Stoneboro No. 3 Mine; Slope; Brookville A Seam, 54 in. thick.
PO—Stoneboro, Pa.; SP—Same; CTY—Mercer; RR—N. Y. C.
MS—Thos. Harrison, Stoneboro, Pa.
SM—Thos. Harrison, Stoneboro, Pa.
S of H—Mules, rope. Track gage 42 in.
S of M—2 shortwall machs.
PP—Power from No. 7 mine, transformers 2200-220 volts, rotary converters, 250 volts D. C., 1-100 H. P. fire tube boiler, 4 pumps.
EMP—75. Last fiscal year output, 48,534 tons.
SIZES SHIPT—Run of Mine.

Stoneboro No. 7 Mine; Shaft; Brookville A Seam, 48 to 72 in. thick.
PO—Stoneboro, Pa.; SP—Same; CTY—Mercer; RR—N. Y. C., Franklin Br.
S of H—Mules and 7 trolley pole type locos. Track gage, 36 in.
S of M—5 shortwall machs.
PP—3 water tube, 5 return tubular boilers, total 1100 H. P., 3-2200 A. C., 2-250 D. C., gen. units, transformers 2200 to 220 volts A. C., rotary converters, 250 volts D. C., 1 compressor, 10 pumps.
EMP—350. Last fiscal year output 170,000 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT.—Picking Table.

No. 9 Sutton Mine; Shaft; Kittanning Seam, 48 to 72 in. thick.
PO—Kingsville; SP—Sutton; CTY—Clarion; RR—N. Y. C.
MS—A. J. Reese, Summerville, Pa.
S of H—Mules, Track gage, 36 in.
S of M—2 shortwall machs.
PP—2 return tubular boilers, total 250 H. P., 2-250 volts D. C., gen. units, 2 pumps.
EMP—45. Last fiscal year output, 29,460 tons.
SIZES SHIPT—Run of Mine.

Bestwick No. 11 Mine; Shaft; Brookville A Seam, 48 in. thick.
PO—Stoneboro, Pa.; SP—Jackson Center, Pa.; CTY—Mercer; RR—Penna. Lines West.
MS—M. J. Smith, Stoneboro, Pa.
S of H—Mules, Track gage, 32 in.
S of M—Hand.
PP—2-100 H. P. fire tube boilers, 1 pump.
EMP—50. Last fiscal year output, 13,100 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.

MEYERS COAL CO.

General Office, Houtzdale, Pa.
Vulcan No. 1 Mine.
PO—Rigler, Pa.; CTY—Clearfield; RR—Penna. and N. Y. C.
No report.

MEYERSDALE FUEL CO.

General Office, Somerset, Pa.
PR—B. E. Keris, Somerset, Pa.
VP—Edgar Statter, Hroversville, Pa.
TR—H. C. Siehl, Somerset, Pa.
GM—E. N. Irvin, Somerset, Pa.
GS—H. C. Siehl, Somerset, Pa.
PA—E. N. Irvin, Somerset, Pa.
CE—J. J. Hobbitzell, Meyersdale, Pa.

Fuel Nos. 1, 2 and 3 Mines; Drifts, Pgh. Seam; 60 to 84 in. thick.
PO—Meyersdale, Pa.; SP—West Salisbury, Pa.; CTY—Somerset; RR—B. & O., Salisbury Br.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
EMP—95. Last fiscal year output, 105,486 tons.
SIZES SHIPT—Run of Mine.

MEYERSDALE MINING CO.

Out of business.

MEYERSDALE SMOKELESS COAL CO.

General Office, Meyersdale, Pa.
PR—Robert Williams, Meyersdale, Pa.
VP—Fred E. Rowe, Meyersdale, Pa.
TR—W. H. Dill, Meyersdale, Pa.
GM—W. H. Dill, Meyersdale, Pa.
GS—W. H. Dill, Meyersdale, Pa.
PA—W. H. Dill, Meyersdale, Pa.
EM—L. H. Rowe, Meyersdale, Pa.
EE—James Walker, Meyersdale, Pa.
Dill Mine; Drift; C Prime Seam, 38 to 48 in. thick.
PO—Casselman, Pa.; SP—Same; CTY—Somerset; RR—B. & O., Pittsburgh Div.
MS—Jos. Walker, Meyersdale, Pa.
S of H—Mules and rope. Track gage 42 in.
S of M—Hand.
PP—1-80 H. P. loco. type boiler 2 pumps.
EMP—32. Daily tonnage 200.
SIZES SHIPT—Run of Mine.

MIDLOTHIAN COAL COMPANY

General Office, Dudley, Pa.
PR—W. W. Reed, Dudley, Pa.
GM—W. W. Reed, Dudley, Pa.
GS—W. H. Reed, Dudley, Pa.

PA—W. H. Reed, Dudley, Pa.
SCO—C. D. Reed, Boyer, W. W. Reed, Dudley, Pa.
SA—W. H. Reed, Dudley, Pa.

Midlothian Mine; Slope; Fulton Seam, 48 inches thick.
PO—Dudley, Pa.; SP—Same; CTY—Huntingdon; RR—H. & B. T.
MS—John Allen, Dudley, Pa.
S of H—Mules. Track gage 38 inches.
S of M—Hand.
PP—1-100 H. P., 2 pumps.
EMP—10. Last fiscal year output, 40,000 tons.
Old information.

MIDWAY COAL COMPANY

General Office, Broad Hill, Pa.
PR—S. P. McGuffey, Broad Hill, Pa.
VP—C. C. McGuffey, Broad Hill, Pa.
TR—P. R. Olfert, Bridgeville, Pa.
GM—S. P. McGuffey, Bridgeville, Pa.
GS—S. P. McGuffey, Bridgeville, Pa.
PA—P. R. Olfert, Bridgeville, Pa.
EM—Andrews & Southard, Pittsburgh, Pa.
EE—John Dawson, Midway, Pa.

Midway No. 1 Mine; Drift; Pittsburgh Seam, 66 inches thick.
PO—Midway, Pa.; SP—Same; CTY—CTY—Washington; RR—P. C. C. & P. S.
MS—Frank Ruschel, Midway, Pa.
S of H—Mules and elec. loco. Track gage 42 inches.
S of M—Hand, chain breast type and shortwall machs.
PP—Power purchased, Transformer 6600 to 2300 volts A. C., M. G. Set, 250 volts D. C.
EMP—110. Last years tonnage 100,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
PREP. EQUIPT.—Bar Screens, Loading Booms.
Old information.

MILBAR COAL CO

General Office, Boston, Mass.
PR—T. A. Estep, Ebensburg, Pa.
VP—H. C. Estep, Ebensburg, Pa.
TR—G. W. Anderson, Boston, Mass.
GM—Geo. M. Estep, Ebensburg, Pa.
GS—H. C. Estep, Indiana, Pa.
PA—F. A. & H. C. Estep, Ebensburg, Pa.
EM—Horner & Jones, Indiana, Pa.
EE—Forest Wolfe, Starford, Pa.
SCO—Estep Trading Co.; Boyer, R. L. Estep, Starford, Pa.
SA—Geo. E. Warren Co., 35 Congress St., Boston, Mass.

Miller No. 1 Mine; Drift; D Seam, 46 in. thick.
PO—Starford, Pa.; SP—Dixonville, Pa.; CTY—Indiana; RR—N. Y. C.
S of H—Mules. Track gage, 42 in.
S of M—Hand.
PP—Power purchased, transformer 2300-220 volts A. C., 220 volts D. C., 1 pump.
EMP—50. Last years tonnage 35,415.
SIZES SHIPT—Run of Mine.

MILE SITE COLLIERY COMPANY, INC.

PR—Jas. P. Sullivan, New Bethlehem, Pa.
VP—SECY—J. Craig Gillespie, Pittston, Pa.
TR—B. E. Sullivan, New Bethlehem, Pa.
GM—Jas. P. Sullivan, New Bethlehem, Pa.
PA—Jas. P. Sullivan, New Bethlehem, Pa.

Columbia Mine; Drift; Freeport Seam, 40 in. thick.
PO—New Bethlehem, R. F. D. No. 5, Pa.; SP—Colwell, Pa.; CTY—Armstrong; RR—Pittsburgh & Shawmut.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine.
Old information.

MILL COAL COMPANY.

General Office, 63 Park Row, New York City.
PR—James Otterson, New York City, N. Y.
VP—Lynn E. Wolfe, New York, N. Y.
TR—Lynn E. Wolfe, New York, N. Y.
GM—W. G. Gilbert, Timblin, Pa.
GS—A. J. Case, Timblin, Pa.
PA—W. G. Gilbert, Timblin, Pa.
EE—Carl Olson, Timblin, Pa.
SA—Lynn E. Wolfe.

Stewart No. 4 Mine; Drift; Freeport Seam, 40 in. thick.
PO—Timblin, Pa.; SP—Same; CTY—Pittsburgh & Shawmut.
S of H—Mules and rope. Track gage 42 in.
S of M—Hand and shortwall machs.
PP—3 return tubular boilers, total 300 H. P., 2-150 K. W., gen. units, 250 volts D. C., 3 pumps.
EMP—110. Last years tonnage 85,500.
SIZES SHIPT—Run of Mine, Slack.
Note—Formerly Timblin No. 4 Mine operated by Stewart Coal Co.

MILL-CONN COAL CO.

General Office, Connellsville, Pa.
PR—L. K. Miller, Connellsville, Pa.
VP—E. F. Dooly, Scottsdale, Pa.
TR—A. P. Dooly, Scottsdale, Pa.
GM—A. P. Dooly, Scottsdale, Pa.

Brinker Run Mine; Drift; Sewickley Seam, 50 in. thick.
PO—Scottsdale, Pa.; SP—Same; CTY—Westmoreland; RR—P. R. R.
S of H—Mules.
S of M—Hand.
EMP—25. Daily tonnage 200.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by the Brinker Run Coal Company.

MILLER, CLARK S.

Miller Mine; Slope; Lower Freeport Seam, 48 to 54 in. thick.
PO—Normalville, Pa.; SP—Miller Crossing, Pa.; CTY—Fayette; RR—B. & O., I. C. W. Br.
MS—Clark S. Miller, R. F. D. No. 1, Normalville, Pa.
S of H—Rope and steam. Track gauge 36 in.
S of M—Hand.
PP—1 boiler, total 40 H. P., 1 pump. Output 1,000 tons per month.
SIZES SHIPT—Run of Mine.
Old information.

MILLER COAL CO.

General Office, Philadelphia, Pa.
PR—C. H. Brown, Baltimore, Md.
TR—H. E. Burt, Philadelphia, Pa.
GM—H. E. Burt, Philadelphia, Pa.
GS—C. E. Maxwell, Morrisdale, Pa.
PA—J. W. Buckwalter, Portage, Pa.
EM—L. R. Smith, Morrisdale, Pa.
SA—Miller Coal Co., Philadelphia, Pa.

Miller No. 1 Mine; Shaft; B Seam, 42 in. thick.
PO—Portage, Pa.; SP—Same. CTY—Cambria. RR—P. R. R.
MS—J. W. Buckwalter, Portage, Pa.
S of H—Mules, rope and 4 trolley pole type locos. Track gauge, 42 in.
S of M—Hand.
PP—Power purchased, transformer 23,000 to 2,300 volts A. C., G. S., 225 K. W., gen. units, 500 volts D. C., 4 fire tube boilers, 800 H. P.
EMP—200. Last years tonnage 92,953.
SIZES SHIPT—Run of Mine.

MILLER, J. H.

General Office, Lewistown, Pa.
PR—J. H. Miller, Lewistown, Pa.
VP—Geo. E. Miller, Joller, Pa.
GM—Geo. E. Miller, Joller, Pa.
GS—Geo. E. Miller, Joller, Pa.
PA—Geo. E. Miller, Joller, Pa.
EM—R. A. Zentmyer, Tyrone, Pa.
SCO—Joller Store, Buyer, G. Miller, Joller, Pa.

Joller Mine; Drift; Seam, 36 in. thick.
PO—Joller, Pa.; SP—Coles, Pa.; CTY—Huntington; RR—E. B. T.
S of H—Mules. Track gauge, 44 in.
S of M—Hand.
PP—2 pumps.
EMP—81.
SIZES SHIPT—Run of Mine.

MILLER RUN COAL MINING CO.

General Office, Patton, Pa.
PR—L. W. Maurer, Patton, Pa.
VP—A. Rhody, Patton, Pa.
TR—F. R. Maurer, Patton, Pa.
GM—L. W. Maurer, Patton, Pa.
GS—F. R. Maurer, Patton, Pa.
PA—F. R. Maurer, Patton, Pa.
CE—F. R. Maurer, Patton, Pa.
SA—Maurer Coal Mining Co., Patton, Pa.

Miller Run No. 1 Mine; Drift; B or Miller Vein, 52 in. thick.
PO—Hastings, Pa.; SP—Same; CTY—Cambria; RR—P. R. R.
S of H—Mules.
S of M—Hand.
EMP—60. Last years tonnage 50,000.
SIZES SHIPT—Run of Mine.

MILLRICH COAL COMPANY

General Office, Rochester Mills, Pa.
GM—F. W. Fuller, Rochester Mills, Pa.
Savan No. 2 Mine; Drift; Upper Freeport Seam, 42 in. thick.
PO—Rochester Mills, Pa.; SP—Savan, Pa.; CTY—Indiana; RR—B. & O. & P.
S of H—Mules, gasoline and steam locos. Track gauge 36 in.
S of M—Hand.
EMP—25. Daily tonnage 60.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Gravity Screens.
Old information.

MILLS, CHAS. W.

General Office, 1210 Land Title Bldg., Philadelphia, Pa.
GS—H. Horl, Lockport Station, Pa.
PA—Chas. W. Mills, Philadelphia, Pa.
SCO—Climax Supply Co.; Buyer, Thos. Clawson, Lockport, Pa.

SA—Chas. W. Mills, 1210 Land Title Bldg., Philadelphia, Pa.

Climax Nos. 2 & 3 Mines; Drift; "E" and "D" Seams.
PO—Lockport Station, Pa.; SP—New Florence, Pa.; CTY—Indiana; RR—P. R. R.
S of H—Mules and 1 trolley pole type loco. Track gauge, 42 in.
S of M—2 shortwall machs.
PP—Power purchased, transformer 22,000 to 2,200 volts, M. G. sets, 250 volts D. C.
EMP—73. Last fiscal year output, 90,000 tons.
SIZES SHIPT—Run of Mine.

MILLSBORO COAL AND COKE CO.

General Office, Bellevernon, Pa.
PR—G. W. Miller, Fayette City, Pa.
VP—W. L. Quinn, Fayette City, Pa.
TR—Robt. Williams, " "
GM—G. W. Miller, " "
GS—G. W. Miller, Fayette City, Pa.
PA—T. A. McCune, Millsboro, Pa.
Sales Agent, G. W. Miller, Fayette City, Penna.

Millsboro Mine; Slope; Pittsburgh Seam, 82 in. thick.
PO—Millsboro, Pa.; SP—Same; CTY—Washington. RR—P. R. R.
MS—T. A. McCune, Millsboro, Pa.
S of H—Mules and combination locos. Track gauge, 44 in.
S of M—1 shortwall and 1 longwall machs.
PP—Power purchased, 2 pumps.
EMP—46. Last years tonnage 30,927.
SIZES SHIPT—Run of Mine.
Old information.

MINEO COAL COMPANY

General Office, Parkers Landing, Pa.
PR—Chas. Mines, Parkers Landing, Pa.
VP—Carl Mines, Parkers Landing, Pa.
TR—Richard Mines, Parkers Landing, Pa.
GM—Chas. Mines, Parkers Landing, Pa.
GS—Russell Mines, Parkers Landing, Pa.

Mines Mine; Drift; Lower Kittanning Seam, 38-40 in. thick.
PO—Parkers Landing, Pa.; SP—Same; CTY—Armstrong; RR—B. & O., Penna. Connection.
S of H—Mules and gasoline loco.
S of M—Hand.
PP—1 pump.
Daily tonnage 200.
SIZES SHIPT—Run of Mine.

MINERAL POINT COAL COMPANY.

General Office, 606 First National Bank Bldg., Johnstown, Pa.
PR—M. J. Bracken, Johnstown, Pa.
TR—F. B. Bracken, 934 Land Title Bldg., Philadelphia, Pa.
GM—M. J. Bracken, Johnstown, Pa.
GS—M. J. Bracken, Johnstown, Pa.
PA—M. J. Bracken, Johnstown, Pa.
EM—S. E. Dickey, Johnstown, Pa.
SCO—Address the Company, Buyer, John Stockly, Mineral Point, Pa.

Smokeless No. 3 Mine; Drift, "B" or Miller Seam, 48 in. thick.
PO—Mineral Point, Pa.; SP—Same. CTY—Cambria. RR—P. R. R.
S of H—Mules and rope. Track gauge, 36 in.
S of M—Hand.
PP—Purchase power.
EMP—37. Last years tonnage 24,946.
SIZES SHIPT—Run of Mine.

Smokeless No. 4 Mine; Drift; "C" Prime or Cement Seam, 42 in. thick.
PO—Mineral Point, Pa.; SP—Same. CTY—Cambria. RR—P. R. R.
S of H—Mules and gravity plane. Track gauge, 36 in.
S of M—Hand.
PP—Purchase power.
EMP—12. Last years tonnage 8,513.
SIZES SHIPT—Run of Mine.

MINNS, GEO. JR.,

OWNER—George Minns, Jr., DuBois, Pa.
GM—Earl E. Minns, DuBois, Pa.
GS—Earl Minns, DuBois, Pa.
SA—I. A. Shaffer, St. Lock Haven, Pa.

Minns Clear Run Mine; Drift; Lower Freeport Seam; 36 in. thick.
PO—DuBois, Pa.; SP—Same; CTY—Clearfield; RR—P. R. R.
S of H—Mules and 1 storage battery loco. Track gauge 36 in.
S of M—1 chain breast type mach.
PP—500 volts A. C. Purchase power.
EMP—25. Last years tonnage 19,000.
SIZES SHIPT—Run of Mine.

MIZENER COAL CO.

General Office, Erie, Pa.
GM—Mason P. Mizener, Erie, Pa.
PA—Mason P. Mizener, Erie, Pa.

Grant Mine; Drift; Kittanning Seam, 38 in. thick.
PO—Claytonia, Pa.; SP—Same. CTY—Butler. RR—B. & O. & P.
MS—Wm. Skinner, Claytonia, Pa.
S of H—Mules, rope. Track gauge 37 in.
S of M—Elec. puncher.

PP—1 150 H. P. and 1 50 H. P. water tube boiler, 7 pumps.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

MOFFITT-STERLING GAS COAL CO.

General Office, Charleroi, Pa.
PR—John H. Moffitt, Charleroi, Pa.
VP—Asa M. Sterling, Dilliner, Pa.
TR—Guy Moffitt, Charleroi, Pa.
GM—Roy S. Sharpnack, Dilliner, Pa.
GS—Roy S. Sharpnack, Dilliner, Pa.
PA—Roy S. Sharpnack, Dilliner, Pa.
CE—Fayette Eng. Co., Uniontown, Pa.

Moffitt-Sterling Mine; Drift; Pittsburgh Seam, 100 in. thick.
PO—Dilliner, Pa.; SP—Same; CTY—Greene; RR—Monongahela.
S of H—Mules. Track gauge 42 in.
S of M—Hand. Shortwall machs.
PP—Purchased. Power. Transformer 2200-220 volts A. C., 1-150 K. W. M. G. Set, 250 volts D. C.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar & Shaker Screens, Picking Tables.

MOHAWK MINING CO.

General Office, Kittanning, Pa.
PR—N. L. Strong, Kittanning, Pa.
VP—Samuel Wallwork, Summerville, Pa.
TR—C. H. Ferne, Kittanning, Pa.
GM—C. H. Ferne, Kittanning, Pa.
PA—C. H. Ferne, Kittanning, Pa.
EM—J. R. Herbert, Kittanning, Pa.
SCO—Address the Company, Buyer, Steve Shelden, Kittanning, Pa.
SA—Geo. E. Warren Co., Boston, Mass.

Mohawk Mine; Drifts; Lower Kittanning Seam, 36-48 in. thick.
PO—Kittanning, Pa.; SP—Furnace Run, Pa.; CTY—Armstrong. RR—P. & S.
MS—D. H. Turner, Kittanning, Pa.
S of H—Mules and 9 trolley pole type locos. Track gauge, 42 in.
S of M—8 shortwall machs.
PP—Purchase power, 2 motor generators, set, 250 volts D. C., 3 phase, 60 cycles, 8 pumps.
EMP—210. Last years tonnage 139,460.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

MONESSEN COAL & COKE COMPANY.

General Office, 700 Union Arcade, Pittsburgh, Pa.
PR—John Binley, Pittsburgh, Pa.
VP—D. P. Bennett, Pittsburgh, Pa.
TR—D. P. Bennett, Pittsburgh, Pa.
GM—C. J. Morgan, Monessen, Pa.
GS—J. G. Parke, Jr., Monessen, Pa.
PA—R. M. McMillen, Pittsburgh, Pa.
EM—J. G. Parke, Jr., Monessen, Pa.

Monessen Mine; Drift; Pittsburgh Seam; 72 in. thick.
PO—Monessen, Pa.; SP—Same; CTY—Westmoreland; RR—P. & L. E.
S of H—Mules, rope. Track gauge 44 in.
S of M—4 shortwall machs.
PP—Power purchased, 150 K. W. M. G. set, 250 volts D. C., 5 pumps.
EMP—300. Daily tonnage 1,000.
SIZES SHIPT—Run of Mine, Slack.
PREP. EQUIPT—Crusher.

MONTEREY COAL CO.

General Office, Leechburg, Pa.
PR—S. N. Hicks, Denver, Colo.
GM—L. W. Hicks, Leechburg, Pa.
GS—E. A. Watters, Leechburg, Pa.
PA—D. L. Maher, Leechburg, Pa.
EM—S. E. Mognet, Leechburg, Pa.
EE—G. H. Ritchie, Leechburg, Pa.

Monterey Mine; Drift; Brookville Seam.
PO—W. Monterey, Pa.; SP—Same. CTY—Clarion; RR—P. R. R.
MS—A. J. Watson, West Monterey, Pa.
S of H—Elec. trolley locos. Track gauge 30 inches.
S of M—4 chain breast type machs.
PP—3 200 H. P. natural gas engines, 3 125 K. W. gen. units, 250 volts D. C., 4 pumps.
EMP—125. Last fiscal year output, 83,355 tons.
SIZES SHIPT—Run of Mine.

MONTEREY COLLIERY COMPANY

General Office, 917 Farmers Bank Bldg., Pittsburgh, Pa.
PR—H. E. Stedden, Pittsburgh, Pa.
VP—R. A. Campbell, Pittsburgh, Pa.
TR—Lewis W. Hicks, Pittsburgh, Pa.
GM—Lewis W. Hicks, Pittsburgh, Pa.
GS—Lewis W. Hicks, Pittsburgh, Pa.
PA—Lewis W. Hicks, Pittsburgh, Pa.
EM—E. A. Watters, Leechburg, Pa.

Note—Development not yet under way.

MONTOUR AND LAKE ERIE COAL CO.

General Office, 402 Vanadium Bldg., Pittsburgh, Pa.
PR—James S. Boggs, Pittsburgh, Pa.
VP—J. J. Rogers Flannery, Pittsburgh, Pa.
TR—F. H. Allison, Pittsburgh, Pa.
GM—James S. Boggs, Pittsburgh, Pa.
PA—James S. Boggs, Pittsburgh, Pa.

CE—Harrop & Hopkins, Home Trust Bldg., Pittsburgh, Pa.

Boggs Mine; Slope; Pittsburgh Seam, 60 to 72 in. thick.
PO—R. D. No. 1, Imperial, Pa.; SP—Boggs, Pa.; CTY—Allegheny; RR—Montour.

MS—Thos. D. Smith, Midway, Pa.
S of H—Mules and 2 trolley pole type locos. Track gauge, 42 in.
S of M—3 chain breast and 3 shortwall machs.
PP—3 100 H. P. water tube boilers, 2-100 K. W. gen. units, 250 volts D. C., 7 pumps.
EMP—117. Last years tonnage 130,180.
SIZES SHIPT—Run of Mine, Slack, Nut.
PREP. EQUIPT—Gravity Screens.

MOORE BROS. COAL CO.

General Office, Madera, Pa.
PR—S. K. Moore, Punxsutawney, Pa.
VP—John V. Moore, Barnesboro, Pa.
TR—Wm. S. Moore, Madera, Pa.
GM—Wm. S. Moore, Madera, Pa.
GS—Wm. S. Moore, Madera, Pa.
PA—Wm. S. Moore, Madera, Pa.
EM—S. K. Moore, Punxsutawney, Pa.

Moore No. 1 Mine; Drift; D Seam, 42 inches thick.
PO—Emigh, Pa.; SP—Same; CTY—Susquehanna; RR—N. Y. C.
S of H—Mules. Track gauge 36 inches.
S of M—Shortwall mach.
PP—Power purchased. Transformer 2200 to 440 volts A. C.
EMP—35. Daily tonnage 150.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by the Patchlo Coal Co.

MOORE COAL CO.

PR—Geo. L. Moore, So. Brownsville, Pa.
VP—F. D. Moore, Brownsville, Pa.
TR—Chas. L. Moore, So. Brownsville, Pa.
PA—Chas. L. Moore, So. Brownsville, Pa.
GM—Benj. Holliday, Glassmere, Pa.
CE—Samuel D. Brady, Fairmont, W. Va.
EM—L. G. Moskleiner, So. Brownsville, Pa.
Sales Agency, Crucible Fuel Company, Pittsburgh, Pa.

Moore Mine; Drift; Pittsburgh Seam, 84 in. thick.
PO—So. Brownsville, Pa.; SP—East Millsboro, Pa.; CTY—Fayette. RR—Monongahela, Main Line.
MS—John C. Miller, East Millsborough, Pa.
S of H—Mules. Track gauge 40 in.
S of M—Hand.
EMP—14. Last fiscal year output, 25,000 tons.
SIZES SHIPT—Run of Mine.

MOOSE CREEK COAL CO.

General Office, Clearfield, Pa.
GM—H. F. Bigler, Jr., Clearfield, Pa.
GS—Chas. Ros. Clearfield, Pa.
PA—H. F. Bigler, Jr., Clearfield, Pa.
EM—H. F. Van Valzal, Clearfield, Pa.

Moose Creek Mine; Drift; C Seam, 46 in. thick.
PO—Clearfield, Pa.; SP—Same; CTY—Clearfield; RR—R. & P.
S of H—Mules.
S of M—Hand.
PP—1 pump.
EMP—20. Daily tonnage 75.
SIZES SHIPT—Run of Mine.

MOOSE RUN COAL CO.

General Office, St. Marys, Pa.
PR—B. C. Mulhern, St. Marys, Pa.
TR—J. A. Benson, DuBois, Pa.
PA—J. A. Benson, DuBois, Pa.
SA—Moose Run Coal Co., St. Marys, Pa.

Moose Run Mine; Drift; Middle Kittanning Seam, 38 inches thick.
PO—Penfield, Pa.; SP—Same; CTY—Clearfield; RR—P. R. R.
MS—J. A. Benson, DuBois, Pa.
S of H—Mules. Track gauge 36 inches.
S of M—Hand.
EMP—30. Last years tonnage 8,000.
SIZES SHIPT—Run of Mine.

MORAVIAN COAL MINING COMPANY

General Office, Clarence, Pa.
PR—O. J. Harm, Clarence, Pa.
TR—H. J. O'Brien, Clarence, Pa.
GM—O. J. Harm, Clarence, Pa.

Moravian No. 1 Mine; Drift; B Seam, 48 inches thick.
PO—Grass Flat, Pa.; SP—Winburne, Pa.; CTY—Clearfield; RR—N.Y.C.
MS—Ed. Smouse, Grass Flat, Pa.
S of H—12 mules, 3 trolley pole type locos, 2 storage battery locos. Track gauge 36 inches.
S of M—3 shortwall machs.
PP—Power purchased. Transformer 2200 to 220 volts A. C., M. G. set, 220 volts D. C., 5 pumps.
EMP—350. Last fiscal year output, 200,000 tons.
SIZES SHIPT—Run of Mine.

Moravian No. 2 Mine; Drift; B Seam, 48 inches thick.
PO—Grass Flat, Pa.; SP—Winburne, Pa.; CTY—Clearfield; RR—N. Y. C.

(Continued on Next Page)

MOUNTAIN SPRING COAL CO., INC.
General Office, Newport, Pa.
PR—J. T. Foulke, Houtzdale, Pa.
GM—J. T. Foulke, Houtzdale, Pa.
TR—H. W. Wertz, Newport, Pa.
GS—H. W. Wertz, Newport, Pa.
CE—Jus. Ziegler, Houtzdale, Pa.

Mountain Spring Mine; drift; "B" Seam
46 in. thick.
PU Houtzdale, Pa. SP Same. CTY-
Clearfield. RR- P. R. R., Tyrone &
Clearfield. Rr.

SMT John Johnson, Jr., Hontzdale, Pa.
 S of H Moles.
 S of M Hand.
 PP Being Installed
 Last fiscal year output, 11,256 tons.
 SIZES SHIPPED Run of Mine.

MOUNTIZ, S. J. & CO.			
PR	-S. J. Mountiz,	Smith Mills, Pa	
TR	E. J. Mountiz,	" "	" "
GM	-E. J. Mountiz,	" "	" "
PA	E. J. Mountiz,	" "	" "
EE	-James McHugh,	" "	" "
EM	-N. M. Close,	" "	" "
SCO	-E. J. Mountiz & Co.	Boyer, E. J.	
	Mountiz, Smith Mills, Pa		

Viola No. 1 Mine; Slope; "B" Seam, 54
to 66 in. thick

Viola No. 1 Mine; Slope; "B" Seam, 54
to 66 in. thick
FO—Smith Mills, Pa.; SP Same; CT
—1 Pearlfield; RR Penna.
MS—Thomas Connell, Smith Mills, Pa.
S of H—Mules, rope, 2 elec. and 1
storage battery loco. Track gauge
42 in.
PP—Purchase power, 2 pumps.
EMP—160. Last fiscal year output

120,000 tons.
PREP. EQUIPT Run of Mine.
Viola No. 2 Mine; Drift; "E" Seam, 3
to 36 in. thick.
PO—Smith Mills, Pa.; SP—Smoke Run
Pa.; CFY—Clearfield; IRK—Penn
MS—Ernest Fasbender, Smith Mills, Pa.
S of H—Mules, 1 storage battery loc
Track gauge 42 in.
PP—250 volts H. C. Purchase power.
EMP—60. Last fiscal year outpu
40,000 tons.
SIZES SHIPT—Run of Mine.

SIZES SHIRT—Run of Mide.

SIZES SHIPT—Run of Mine.
S-106 Mine; Drift; Freeport Seam, 6
to 66 in. thick.
PO—Boyers, Pa.; Annandale, Pa.; CTY—
Butler; RR—B. & L. E.
MS—Daniel Farrow, Boyers, Pa.
S of H—Mules. Track gauge 42 in.
PP-1 pump.
EMP—60. Last fiscal year output
58,000 tons.
SIZES SHIPT—Run of Mine.
(old information)

MT PLEASANT BY-PRODUCTS COAL CO.

General Office, Greensburg, Pa.
 PE—J. U. Kohns, Greensburg, Pa.
 VP—C. D. Wilson, Greensburg, Pa.
 TR—C. J. Kline, Greensburg, Pa.
 GM—C. J. Kline, Greensburg, Pa.
 GS—C. J. Kline, Greensburg, Pa.
 PA—H. A. Creek, Greensburg, Pa.
 EM—P. B. Rule, Greensburg, Pa.
 SCU—Mt. Pleasant Supply Co. Buyer,
 E. Nicely, Greensburg, Pa.
 SA—Westmoreland Fuel Co., Greensburg,
 Pa.

PO—Greensburg, Pa. SP—Beatty Sta

Pa. CTY—Westmoreland. RR—P.
R.
MS. W. B. Kuhns, Greensburg, Pa.
S of H—Mules and trolley pole type loco
Track gage, 44 in.
S of M—Haud and 3 shortwall machs
PP—Purchase power, 3 pumps.
EMP—140
SIZES SHUPT—Run of Mine.
PREP. EQUIPT—Gravity Screens, Picki
Tables.

EMP—140

SIZES SHIPT—Run at Mine.
PREP. EQUIP—Gravity Screens, Pick-
Tables.

MI. PLEASANT COKE COMPANY.
 General Office, Greensburg, Pa.
 PR—J. C. Kuhns, Greensburg, Pa.
 TR—C. J. Kline, Greensburg, Pa.
 GM—C. J. Kline, Greensburg, Pa.
 A. B. Bank, Greensburg, Pa.

PA—H A Creek, Greensburg, Pa.

EM—P. E. Rude, Greensburg
SC—Mt. Pleasant Sup.
Geo. E. Neely, C
SA—Westmoreland
Pa.
Beatty, M. Seam,
Pro. L. Same; CITY
W. R. P. R. R
SM—Beatty, Pa.
M. C. Daniels, Beatty, Pa.

20. 44 10.

EMP—140. Daily output, 500 tons.

MT. PLEASANT-CONNELLVILLE COKE CO.
General Office, Greensburg, Pa.
PR—J. D. Kuhns, Greensburg, Pa.
VP—C. D. Wilson, Greensburg, Pa.
TR—C. J. Kline, Greensburg, Pa.
GM—C. J. Kline, Greensburg, Pa.
GS—C. J. Kline, Greensburg, Pa.
PA—H. A. Greek, Greensburg, Pa.
EM—P. B. Rule, Greensburg, Pa.
SCO—Mt. Pleasant Supply Co., Buyer, Geo. E. Nicely, Greensburg, Pa.
SA—Westmoreland Fuel Co., Greensburg, Pa.

Mt. Pleasant Mine; Shaft; Connellville Seam, 76 to 80 in. thick.
PO—R. F. D., Mt. Pleasant, Pa.; SP—Hecla, Pa.; CTY—Westmoreland; RR—P. R. R., S. W. P. Div.
MS—J. P. Murtba, R. F. D. No. 2, Mt. Pleasant, Pa.
SM—Geo. Vogel, Mt. Pleasant, Pa.
S of H—Mules, rope, Track gage 44 in. S of M—Hand.
PP—3 water tube boilers, total 1000 H. P., gen. units, 250 volts D. C., 5 pumps.
EMP—350. Daily output, 1,200 tons Coke ovens, 100 Bee Hive, 210 Rectangular.

MT. PLEASANT FUEL COMPANY.
General Office, Mt. Pleasant, Pa.
SA—Southern Fuel Company, Monongahia Bldg., Morgantown, W. Va.
Mt. Pleasant Mine; Drift; Redstone Seam, 60 in. thick.
PO—Mt. Pleasant, Pa.; SP—Same; CTY—Westmoreland; RR—B. & O.
S of H—Rope.
S of M—Hand.
Daily tonnage 100.
SIZES SHIPT—Run of Mine.

MOXHAM COAL CO.
General Office, Johnstown, Pa.
PR—John C. Cogrove, Johnstown, Pa.
TR—Frank Finstwhait, Cherry Tree, Pa.
GM—H. J. Merhan, Johnstown, Pa.
GS—Archie Collins, Johnstown, Pa.
PA—S. G. Simons, Johnstown, Pa.
EM—F. F. Fitzbarris, Johnstown, Pa.
Sales Agency, Cogrove & Co., Johnstown, Pa.
Additional Information on Page 721

Thermal No. 4 Mine; Drift; C Seam, 42 in. thick.
PO—Johnstown, Pa.; SP—Same. CTY—Cambria, RR—P. R. R.
MS—James H. Meehan, Johnstown, Pa. S of H—Mule. Track gage 36 in. S of M—Hand.
PP—Purchase power, 220 volts A. C. EMP—50. Last fiscal year output, 65,000 tons.
SIZES ISHPT—Run of Mine.

MULL, R. H.
General Office, Philipsburg, Pa.
GS—R. H. Mull, Philipsburg, Pa.
PA—R. H. Mull, Philipsburg, Pa.
EM—G. H. Ayers, Philipsburg, Pa.
SA—Garfield & Proctor Coal Co., 25 Beaver St., New York, N. Y.

Imperial No. 1 Mine; Drift; "E" Seam, 42 inches thick.
PO—Philipsburg, Pa.; SP—Same; CTY—Clearfield; RR—Penna.
MS—Toney Perno, Philipsburg, Pa. S of H—Mules. Track gage 33 inches. S of M—Hand.
EMP—25. Daily tonnage 100.
SIZES SHIPT—Run of Mine.

MURDOCK, J. M. & BRO.
General Office, Johnstown, Pa.
GS—I. W. Walter, Somerset, Pa.

Millford Mine; Drift and Shaft; A and E Beds; 30 to 48 inches thick.
PO—R. D. I., Somerset, Pa.; SP—Murdock, Pa.; CTY—Somerset; RR—B. & O.
S of H—Mules. Track gage 36 inches. S of M—Hand.
EMP—14. Last years tonnage 24,741.
SIZES SHIPT—Run of Mine.

MUTUAL COAL & COKE CO.
General Office, Masonic Bldg., Uniontown, Pa.
PR—Jno. J. McIntire, Uniontown, Pa.
VP—M. V. Callaghan, Uniontown, Pa.
TR—Abraham O. Bixler, Connellsville, Pa.
GM—Robert Shaw, Walnut St., Uniontown, Pa.
GS—Robert Shaw, Uniontown, Pa.
PA—H. N. Mitchell, Uniontown, Pa.
EM—Homer Burchinal, Uniontown, Pa.
SA—H. N. Mitchell, 621 Fayette Title & Trust Bldg., Uniontown, Pa.

Drift and Slope; Sewickley Seam, 64 in. thick.
PO—Uniontown, Pa.; SP—Shaw Mines Collier Sta., Pa.; CTY—Fayette; RR—B. & O., P. R. R., via Leckrone.
S of H—Mules. Track gage, 42 in. S of M—Hand.
EMP—50. Last fiscal year output, 34,371 tons.
SIZES SHIPT—Run of Mine.

MYERS COAL COMPANY
General Office, Houtzdale, Pa.
PR—John J. McGrath, Houtzdale, Pa.
GM—John Johnson, Jr., Houtzdale, Pa.
PA—John J. McGrath, Houtzdale, Pa.
Vulcan No. 3 Mine; Drift; Seam, 60 inches thick.
PO—Houtzdale, Pa.; SP—Ramey, Pa.; CTY—Clearfield; RR—Penna.
MS—John Johnson, Jr., Houtzdale, Pa. S of H—Mules. Track gage 36 inches. S of M—Hand.
EMP—40. Daily tonnage 200.
SIZES SHIPT—Run of Mine.

MYVAN COAL COMPANY
General Office, Box 672, Pittsburgh, Pa.
PR—Michael P. Sullivan, Pittsburgh, Pa.
VP—J. H. Wilkins, Homer City, Pa.
TR—P. J. Sullivan, 314 East Beau St., Washington, Pa.
CM—P. J. Sullivan, 314 East Beau St., Washington, Pa.
GS—J. H. Wilkins, Homer City, Pa.
EM—John M. Rayburn, Pittsburgh, Pa.

Laverne Mine; Shaft; Upper Freeport Seam; 72 to 78 in. thick.
PO—Homer City, Pa.; SP—Same; CTY—Indiana; RR—Penna., Indiana Br.
S of H—Mules. Track gage 42 in. S of M—Hand.
PP—220 volts A. C., 3 phase, 60 cycles. Purchase power.
Old information.

NANT-Y-GLO COAL MINING CO.
General Office, 727 Land Title Bldg., Philadelphia, Pa.

PR—G. D. Coleman, Philadelphia, Pa.
TR—Chas. Kronse, Philadelphia, Pa.
GS—John W. Harrison, Nanty-Glo, Pa.
PA—J. J. Matheson, Philadelphia, Pa.
CE—Joseph Breslove, Pittsburgh, Pa.
EM—S. R. Sharpless, Ebensburg, Pa.
EE—L. B. McTigue, Nant-Y-Glo, Pa.
SCO—Nant-Y-Glo Trading Co., Nant-Y-Glo, Pa.

Nanty-Glo No. 1 Mine; Drift; "B" Seam, 44 in. thick.
PO—Nant-Y-Glo, Pa.; SP—Same; CTY—Cambria; RR—Penna., Black Lick Branch; also Cambria & Indiana.

S of H—Rope and trolley pole type locos. Track gage 36 in.
S of M—1 shortwall elec. mach., 30 punchers.
PP—Transformer 2200-275 volts, M. G. sets, 275 volts D. C., 3 pumps.
EMP—100. Daily tonnage 300.
SIZES SHIPT—Run of Mine Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

Nant-Y-Glo No. 2 Mine; Drift; Lower Kittanning, B. or Miller Seam; 34 to 38 in. thick.

PO—Elmora, Pa.; SP—Bakerton; CTY—Cambria; RR—Penna., Cresson to Cherry Tree branch.
S of H—Mules. Track gage 36 in. EMP—50. Daily tonnage 200.
SIZES SHIPT—Run of Mine.

Nant-Y-Glo No. 3 Mine; Slope; Lower Kittanning, B. or Miller Seam; 44 to 52 in. thick.

PO—Nant-Y-Glo, Pa.; SP—Same; CTY—Cambria; RR—Cambria & Indiana. Nant-Y-Glo Branch, and Penna.
S of H—Rope, trolley pole type, storage battery and comb. locos. Track gage 36 in.

S of M—Shortwall machs.
PP—3—438 H. P. water tube boilers, gen. units, 1250-750-250-250 K. W., 275 volts A. C., 33 pumps.
EMP—500. Daily tonnage 1,800.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.

PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.
Note—In course of development.

NATIONAL MINING COMPANY
General Office, 412 Frick Bldg., Pittsburgh, Pa.

PR—W. H. Clingerman, Carnegie Bldg., Pittsburgh, Pa.
TR—J. L. Lowther, Frick Bldg., Pittsburgh, Pa.
GS—F. A. McDonald, Morgan, Pa.
PA—T. S. Duncan, Carnegie Bldg., Pittsburgh, Pa.
SCO—Union Supply Co., Morgan, Pa. Buyer, F. Walton, Frick Bldg., Pittsburgh, Pa.

No. 1 Mine; Slope; Pittsburgh Seam, 64 in. thick.
PO—Morgan, Pa.; SP—Sygan, Pa.; CTY—Allegheny; RR—P. C. C. & St. L.
SM—M. C. Stover, Cuddy, Pa.
S of H—Mules, 4 trolley pole type locos. Track gage 42 in.
S of M—20 chain breast type and 6 shortwall machs.
PP—Power purchased, Transformer 2,200 to 550 volts A. C., M. G. set, 500 volts D. C., 9 pumps.
EMP—400. Daily tonnage 2,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

No. 2 Mine; Shaft; Pittsburgh Seam, 64 in. thick.
PO—Cuddy, Pa.; SP—Treveskyn, Pa.; CTY—Washington; RR—Montour.
SM—M. C. Stover, Cuddy, Pa.
S of H—Mules and 6 trolley pole type locos. Track gage 42 in.
S of M—21 chain breast type and 7 shortwall machs.
PP—Power purchased, Transformer 2,200 to 550 volts A. C., M. G. sets, 500 volts D. C., 12 pumps.
EMP—530. Daily tonnage 2,100.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

No. 4 Mine; Drift and Shaft; Pittsburgh Seam, 66 in. thick.
PO—Courtney, Pa.; SP—Same; CTY—Washington; RR—Penna., & Monon.
S of H—Mules, main and tail rope and trolley pole type loco. Track gage 42 in.
S of M—Hand.
PP—Power purchased.

NAVY SMOKELESS COAL COMPANY
General Office, Ebensburg, Pa.
PR—F. B. Custer, Conemaugh, Pa.
VP—T. S. Davis, Ebensburg, Pa.
TR—W. C. Shiffer, Ebensburg, Pa.
PA—James Z. McClune, Ebensburg, Pa.
CE—H. F. Dorr, Ebensburg, Pa.
EM—C. C. Hautb, Ebensburg, Pa.
SCO—Navy Store Co., Buyer M. Q. Baker, Carrolltown Roads, Pa.
SA—Blair Parke Coal & Coke Co., Philadelphia, Pa.

Navy Colliery No. 1; Drift; Miller or B Seam, 42 inches thick.
PO—Carrolltown Roads, Pa.; SP—Same; CTY—Cambria; RR—Penna.
MS—Richard Bland, Carrolltown Roads, Pa.
S of H—Electric locos. Track gage 36 inches.
S of M—Hand and shortwall machs.
PP—M. G. sets, 250 volts A. C. and D. C.
EMP—225. Daily tonnage 600.
SIZES SHIPT—Run of Mine.
Note—Formerly operated by the Logan Coal Co.

NEBO COAL MINING COMPANY.
General Office, 809 Johnstown Bldg., Johnstown, Pa.
PR—Dr. H. Abrams, Johnstown, Pa.
VP—Dr. W. A. Evans, Wehrum, Pa.
TR—William H. Bittorf, Vintondale, Pa.
GM—Dr. H. Abrams, Johnstown, Pa.
GS—Dr. H. Abrams, Johnstown, Pa.
PA—Dr. H. Abrams, Johnstown, Pa.
CE—Dr. H. Abrams, Johnstown, Pa.

Mohawk Mine; Slope; Miller Seam, 42 in. thick.
PO—Champion, Pa.; SP—Nebo, Pa.; CTY—Fayette; RR—Indian Creek Valley.
MS—A. Abrams, Champion, Pa.
S of H—Mules, steam loco. Track gage 36 in.
S of M—Hand.
PP—1 35 H. P. fire tube boiler, 1—100 K. W. gen. unit, 250 volts D. C.
EMP—13.
SIZES SHIPT—Run of Mine.

NEELD, C. M.
General Office, 1419 Oliver Bldg., Pittsburgh, Pa.
PR—C. M. Neeld, Pittsburgh, Pa.

Johnston Mine; Stripping; Pittsburgh Seam; 78 inches thick.
PO—Brile Vernon, Pa.; SP—Same; CTY—Westmoreland; RR—P. & L. E.
S of H—Steam loco. Track gage 36 inches.
S of M—Steam shovel.
PP—Water tube boiler.
Daily output, 200 tons.
SIZES SHIPT—Run of Mine.

NELLIE COAL & COKE COMPANY.
General Office, Colonial Natl Bk. Bldg., Connellsville, Pa.
PR—G. Corrado, Connellsville, Pa.
VP—A. C. Corrado, Connellsville, Pa.
TR—P. Gallardi, Connellsville, Pa.
GM—G. Corrado, Connellsville, Pa.
GS—H. B. Cunningham, Connellsville, Pa.
PA—H. B. Cunningham, Connellsville, Pa.
CE—W. B. Bernhart, Connellsville, Pa.
SCO—Alden - Corrado Supply Company, Buyer, James J. Ash, Connellsville, Pa.
SA—G. Corrado Coal & Coke Interest, Connellsville, Pa.

Alden Mine; Drift; Pittsburgh Seam, 108 in. thick.
PO—Point Marion, Pa.; SP—Heard, W. Va.; CTY—Monongalia, W. Va.; RR—B. & O.
MS—G. L. Humphreys, Point Marion, Pa.
S of H—Storage Battery loco. Track gage 41 in.
S of M—Shortwall machs.

PP—Power purchased. Transformer, 250 volts D. C.
EMP—88.
NOTE—Formerly operated by the W. A. Stone Fuel Company.

Nellie Mine; Drift; Pittsburgh Seam, 108 in. thick.
PO—Vanderbilt, Pa.; SP—Dickerson, Pa.; CTY—Fayette; RR—P. & L. E.
MS—M. E. Adams, Vanderbilt, Pa.
S of H—Mules. Track gage 42 in. S of M—Hand.
PP—Power purchased. Transformer 550 volts D. C.
EMP—40.

NEW ALEXANDRIA COKE COMPANY.
General Office, Greensburg, Pa.
VP—J. B. Brunot, Greensburg, Pa.
GM—T. P. Jatta, Greensburg, Pa.
PA—T. P. McConnell, Greensburg, Pa.
EE—J. P. Berry, Greensburg, Pa.
SCO—Address the Company, Buyer, H. C. Nicewonger, Greensburg, Pa.
SA—Operators Fuel Agency, Greensburg, Pa.

New Alexandria Nos. 1, 2 and 4 Mines; Drift; Pittsburgh Seam, 96 in. thick.
PO—New Alexandria, Pa.; SP—Andrico, Pa.; CTY—Westmoreland; RR—Penna., Alexandria Branch.
MS—T. F. Cook, New Alexandria, Pa.
SM—Nick Palmer, New Alexandria, Pa. S of H—Mules. Track gage 42 in. S of M—Hand.
PP—2 fire tube boilers, 100 H. P., 1—150 K. W. gen. unit, 250 volts D. C., 4 pumps.
EMP—100. Last years tonnage 15,650.
SIZES SHIPT—Run of Mine.

New Alexandria No. 3 Mine; Drift; Pittsburgh Seam, 96 in. thick.
PO—New Alexandria, Pa.; SP—Andrico, Pa.; CTY—Westmoreland; RR—Penna., Alexandria Branch.
MS—T. F. Cook, New Alexandria, Pa.
SM—Nick Palmer, New Alexandria, Pa. S of H—Mules. Track gage 42 in. S of M—Hand.
PP—2 fire tube boilers, 100 H. P., 1—150 K. W. gen. unit, 250 volts D. C., 4 pumps.
Last years tonnage 15,421.
SIZES SHIPT—Run of Mine.

New Alexandria No. 5 Mine; Drift and Stripping, 96 in. thick.
PO—New Alexandria, Pa.; SP—Andrico, Pa.; CTY—Westmoreland; RR—Penna., Alexandria Branch.
MS—T. F. Cook, New Alexandria, Pa.
SM—Nick Palmer, New Alexandria, Pa. S of H—Mules, 2 trolley pole type locos. Track gage 42 in.
S of M—Hand.
PP—2 fire tube boilers, 100 H. P., 1—150 K. W. gen. unit, 250 volts D. C., 4 pumps.
Last years tonnage 135,065.
SIZES SHIPT—Run of Mine, Slack, Lump.

NEW CASTLE COAL COMPANY
General Office, Houtzdale, Pa.
PR—Joseph A. Rodkey, Houtzdale, Pa.
VP—Frank Kasubick and John M. Kinney, Houtzdale, Pa.
TR—John Scollins, Houtzdale, Pa.
GM—Thomas Kasubick, Houtzdale, Pa.
GS—Thomas Kasubick, Houtzdale, Pa.

New Castle No. 1 Mine; Drift; "C" Seam; 36 inches thick.
PO—Houtzdale, Pa.; SP—Brislin, Pa.; CTY—Clearfield; RR—P. & S., N. Y. C.
S of H—Mules. Track gage 36 inches. S of M—Hand.
PP—Purchase power.
EMP—20. Last years tonnage 6,000.
SIZES SHIPT—Run of Mine.

NEW GENEVA FUEL COMPANY
General Office, New Geneva, Pa.
PR—N. R. Moore, New Geneva, Pa.
VP—H. B. Moore, Dawson, Pa.
TR—T. J. McClelland, Uniontown, Pa.
GM—N. R. Moore, New Geneva, Pa.
GS—N. R. Moore, New Geneva, Pa.
PA—N. R. Moore, New Geneva, Pa.
SA—N. R. Moore, New Geneva, Pa.
Powell Mine; Drift and Stripping; Pittsburgh Seam, 96 in. thick.
PO—New Geneva, Pa.; SP—Same; CTY—Fayette; RR—Monon.
S of H—Mules and rope. Track gage 42 in.
S of M—3 shortwall machs.
PP—Power purchased, 250 volts D. C. EMP—40. Daily tonnage 500.
SIZES SHIPT—Run of Mine.
Old information.

NEWELL, C. P.
General Office, Mill Run, Pa.
Mill Run Mine.
PO—Mill Run, Pa.; CTY—Fayette; RR—Indian Creek Valley.
No report.

NEWFIELD BY-PRODUCT COAL CO

General Office, Cleveland, O.
PR—M. Andrews, Cleveland, O.
VP—J. D. Ireland and Wm. Collins, Cleveland, O.
TR—Sam W. Folsom, Cleveland, O.
GM—Michael Gallagher, Cleveland, O.
GS—John Whelan, Jr., Dillonvale, O.
SA—M. A. Hanna & Co., Cleveland, O.

New Field No. 1 Mine; Shaft; Freeport Seam, 84 in. thick.
PO—Pleasantdale, Pa.; SP—Same; CTY—Allegheny; RR—Penna.
MS—H. J. Nellins, North Bessemer, Pa.
S of H—Trolley pole type locos.
S of M—Shortwall machs.
PP—Power purchased.
Daily tonnage 2,500.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens

NEWTON, E. P. & COMPANY

General Office, Commerce Bldg., Altoona, Pa.
PR—E. P. Newton, Altoona, Pa.
TR—E. P. Newton, Altoona, Pa.
GM—E. P. Newton, Altoona, Pa.
GS—D. J. Davis, R. D. No. 3, Brookville, Pa.
PA—D. J. Davis, R. D. No. 3, Brookville, Pa.
SA—Newton & Moyer, Altoona, Pa.

Newton Mine; Drift; Kittanning Seam, 48 in. thick.
PO—R. P. D. No. 3, Brookville, Pa.; SP—Stanton, Pa.; CTY—Jefferson; RR—P. & S.
S of H—Mules. Track gage 36 in.
S of M—Hand.
EMP—100. Daily tonnage 400.
SIZES SHIPT—Run of Mine.
Note—Successors to Nolan-Newton Coal Company.

NICHOLSON COAL CO.

General Office, Uniontown, Pa.
Patrick No. 1 Mine.
PO—Masontown, Pa.; CTY—Fayette; RR—Monongahela.
No report.

NINEVEH COAL CO

General Office, Greensburg, Pa.
PR—R. K. Jamison, Greensburg, Pa.
VP—J. R. Eisman, Greensburg, Pa.
TR—A. Turney McConnell, Greensburg, Pa.
GM—T. P. Latta, Greensburg, Pa.
GS—C. L. Clark, Greensburg, Pa.
PA—A. T. McConnell, Greensburg, Pa.
CE—C. Cowan, Greensburg, Pa.
EM—Robert Ramsey, Greensburg, Pa.
EE—Joseph Berry, Greensburg, Pa.

Valley No. 2 Mine; Drift; B. Miller Seam, 42 in. thick.
PO—Seward, Pa.; SP—Same; CTY—Westmoreland; RR—P. R. R.
MS—Charles Martin, Seward, Pa.
S of H—2 6-ton storage battery locos.
Track gage 26 in.
S of M—3 shortwall machs.
PP—250 volts D. C., 4 pumps.
EMP—12.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Tippel equipped with Picking Tables.

NIVERTON COAL COMPANY.

General Office, Myersdale, Pa.
PR—C. E. Bird, Myersdale, Pa.
VP—C. M. Bird, Myersdale, Pa.
TR—C. M. Bird, Myersdale, Pa.
SECTY—C. A. Phillips, Myersdale, Pa.
PA—Chas. A. Bird, Myersdale, Pa.
GM—C. E. Bird, Myersdale, Pa.
GS—C. E. Bird, Myersdale, Pa.
Wilson Mine; Drift; Pittsburgh Seam, 96 in. thick.
PO—Myersdale, Pa.; SP—Niverton, Pa.; CTY—Somerset; RR—R. & O., Salisbury Br.
MS—Chas. Deist, Elk Lick, Pa.
S of H—Mules.
S of M—Hand.
PP—Gas engine, 1 pump.
EMP—18. Last years tonnage 18,000.
SIZES SHIPT—Run of Mine.

NOERR, F. B.

General Office, Punxsutawney, Pa.
SA—Burtner Coal Co., Punxsutawney, Pa.
Noerr Mine; Drift; Lower Freeport Seam, 66 inches thick.
PO—Anita, Pa.; SP—Same; CTY—Jefferson; RR—P. R. R.
MS—F. R. Noerr, Punxsutawney, Pa.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
Last years tonnage 12,000.
SIZES SHIPT—Run of Mine.

NOLAN-NEWTON COAL CO

Now E. P. Newton & Company.

NONPAREIL SEA COAL COMPANY
Out of business.

NORTH EAST COAL MINING COMPANY

PR—Thomas Radding, Pittsburgh, Pa.
VP—R. M. Carpenter, Pittsburgh, Pa.
TR—E. A. Morris, Pittsburgh, Pa.
GM—Thomas Radding, Pittsburgh, Pa.
GS—D. A. Thomas, Hilliards, Pa.
PA—T. H. Radding, Pittsburgh, Pa.

North East Mine; Drift; Brookville Seam, 40 inches thick.
PO—Hilliards, Pa.; SP—Argentine, Pa.; CTY—Butler; RR—E. & L. E.
S of H—4 elec. locos. Track gage 12 in.
S of M—Shortwall machs.
PP—2 100 K. W. gen. units, 250 volts D. C.
EMP—200. Last years tonnage 150,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Bar Screens
Note—Formerly operated by the Lake Trade Coal Mining Co.

NORTH PENN COAL COMPANY.

Now Sherwin Coal Mining Co.

NORTH PITTSBURGH REALTY CO.

General Office, Harmony, Pa.
VP—H. Etheridge, Harmony, Pa.
GM—H. Etheridge, Harmony, Pa.
GS—J. L. Lowther, Harmony, Pa.
EM—J. L. Lowther, Harmony, Pa.

Harmony Junction Mine; Shaft; Lower Freeport Seam, 34 inches thick.
PO—Harmony, Pa.; SP—Same; CTY—Butler.
S of H—Mules. Track gage 36 inches.
S of M—2 shortwall machs.
PP—Power purchased. Transformer 410-220 volts A. C., 2 pumps.
EMP—35. Last fiscal year output, 33,350 tons.
SIZES SHIPT—Run of Mine.

NORTHERN CAMERIA COAL COMPANY

General Office, Patton, Pa.
TR—M. B. Cowher, Patton, Pa.
GM—M. B. Cowher, Patton, Pa.
GS—H. B. Noel, Fallen Timber, Pa.
PA—M. B. Cowher, Patton, Pa.
SA—M. B. Cowher, Patton, Pa.

Noll Mine; Drift; "C" Seam, 36 in. thick.
PO—Frugality, Pa.; SP—Same; CTY—Cambria; RR—P. R. R., Cresson Div.
S of H—Mules. Track gage 36 in.
S of M—Hand.
Daily output, 75 tons.
SIZES SHIPT—Run of Mine.

NORTHERN CONNELLSVILLE COKE CO

Operations abandoned

NORTHWESTERN MINING & EXCHANGE CO

General Office, Scranton, Pa.
PR—W. A. May, " " "
TR—F. H. Wright, " " "
GS—E. W. Roberts n, DuBois, Pa.
CE—M. E. Walthall, Scranton, Pa.
EM—J. H. Nagle, DuBois, Pa.
SCO—J. H. Steell & Co., Eyer, R. W. Beadle, DuBois Mines, Pa.
General Sales Agents, Williams & Peters, 1 Broadway, New York, N. Y.

Dagus Mines, comprising Kifer, Eureka and Toby No. 3; Drifts; "D" Seam, 30 to 46 in. thick.
PO—Dagus Mines, Pa.; SP—Toby Mines, Pa.; CTY—Elk; RR—Erie.
MS—W. G. Adams, Dagus Mines, Pa.
H. P., 3 gen. units, 600 K. W., 250 volts D. C.
S of H—13 trolley pole type locos. Track gage 20 in.
S of M—18 shortwall machs.
PP—11 Water tube boilers total 1700
EMP—615. Last years tonnage 291,191
SIZES SHIPT—Run of Mine.

Clarion No. 4 Mine; Drift; "D" Seam, 28 to 60 in. thick.
PO—Trenshaw, Pa.; SP—Same, CTY—Jefferson; RR—Erie Br. Toby Br.
MS—J. F. Spoutart, Brookwayville, Pa.
SM—William Steel, Crenshaw, Pa.
S of H—2 trolley pole type locos. Track gage 20 in.
S of M—1 shortwall machs.
PP—1 250 K. W. gen. unit, 250 volts D. C.
EMP—40. Last years tonnage 28,413
SIZES SHIPT—Run of Mine.

Eriton Mine; Shaft; "D" Seam 60 to 108 in. thick.
PO—Eriton, Pa.; SP—Same; CTY—Clarified; RR—Erie.
MS—G. M. Pierce, Eriton, Pa.
SM—Fred Smith, Eriton, Pa.
S of H—13 elec. locos. Track gage 42 in.
S of M—40 comp. air punchers and 7 shortwall machs.
PP—10 water tube boilers, total 2,000 H. P., 2-700 K. W. gen. units, 250 volts D. C., 37 pumps.
EMP—662. Last years tonnage 599,938.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

Granville Mine; Drift; "D" Seam, 38 in. thick.
PO—Brookwayville, Pa.; SP—Same; CTY—Jefferson; RR—Toby.
MS—F. F. Spoutart, Brookwayville, Pa.
S of H—6 trolley pole type locos. Track gage 26 in.
S of M—10 shortwall machs.
PP—2 500 K. W. gen. units, 250 volts D. C.
EMP—315. Last years tonnage 246,887.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

NOWAK COAL CO

PR—John A. Nowak, Blossburg, Pa.
TR—Adam Grzlewski,

Jenkins Mine; Drift; "Bloss" Seam, 34 to 42 in. thick.
PO—Blossburg, Pa.; SP—Same; CTY—Tioga; RR—N. Y. C. & H. R.
MS—Adam Grzlewski, Blossburg, Pa.
S of H—Mules. Track gage 29 in.
S of M—Hand.
EMP—50. Last fiscal year output, 17,430 tons.
SIZES SHIPT—Run of Mine.

NUCEN COAL CO.

General Office, Morrisdale, Pa.
PR—Lawrence Nugent, Munson, Pa.
TR—Lawrence Nugent, Munson, Pa.
GM—Lawrence Nugent, Munson, Pa.
GS—Lawrence Nugent, Munson, Pa.
SA—W. M. Hollenback, Philadelphia, Pa.

Nugent No. 1 Mine; Drift; D Seam, 38 in. thick.
PO—McCartney, Pa.; SP—Same; CTY—Clearfield; RR—Penna.
S of H—Track gage, 30 in.
S of M—Hand.
EMP—50. Last fiscal year output 11,954 tons.
SIZES SHIPT—Run of Mine.

OAK HILL COAL COMPANY

General Office, 404 Fayette Trust Bldg., Uniontown, Pa.

PR—Robt. R. Mardesty, Waynesburg, Pa.
VP—T. H. Shannon, Waynesburg, Pa.
TR—G. C. Axford, Uniontown, Pa.
GM—G. C. Axford, Uniontown, Pa.
GS—A. W. Whitley, Ford City, Pa.
PA—G. C. Axford, Uniontown, Pa.
CE—D. E. Taylor, Freeport, Pa.

Oak Hill Mine; Drift; Freeport Seam, 48 inches thick.
PO—Ford City, Pa.; SP—Johnetta, Pa.; CTY—Armstrong; RR—P. R. R.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
EMP—50. Daily tonnage 250.
SIZES SHIPT—Run of Mine.

OAK HILL COAL MINING COMPANY

General Office, 604 Washington Trust Bldg., Washington, Pa.
PR—J. A. Burns, Washington, Pa.
VP—Chas. Alderson, Studa, Pa.
TR—W. A. Lindsey, Washington, Pa.
GM—J. A. Burns, Washington, Pa.
GS—J. A. Burns, Washington, Pa.
PA—W. A. Lindsey, Washington, Pa.
SA—Bixler Coal & Coke Co., Pittsburgh, Pa.

Knox Mine; Drift; Pittsburgh Seam, 60 in. thick.
PO—Stuba, Pa.; SP—Avelt, Pa.; CTY—Washington; RR—Penna., Langeloth Branch.
MS—Chas. Alderson, Studa, Pa.
S of H—Storage battery loco. Track gage 42 in.
S of M—1 chain breast type and 1 shortwall machs.
PP—Power purchased transformer 22000-2200 volts A. C., M. G. Sds, 200 K. W., 500 volts D. C., 2 pumps.
EMP—44. Last years tonnage 18,940.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens

OAK RIDGE COAL & COKE CO., INC

General Office, Hastings, Pa.
PR—H. J. Van Dusen, Ebensburg, Pa.
TR—B. R. Lloyd, Hastings, Pa.
GM—B. R. Lloyd, Hastings, Pa.
GS—J. W. Stephenson, Hastings, Pa.
PA—B. R. Lloyd, Hastings, Pa.
EM—Chas. E. Schlicher, Spangler, Pa.
EE—Oliver Rhudy, Hastings, Pa.
SCO—Van Dusen & Co., Buyer, B. J. Walz, Hastings, Pa.
SA—Whitely & Folsch, Wilkeson Bldg., Philadelphia, Pa. and 50 West St., New York, N. Y.

Oak Ridge No. 1 Mine; Drift; Lower Freeport Seam, 52 inches thick.
PO—Hastings, Pa.; SP—Same; CTY—Cambria; RR—P. R. R.
S of H—Main and tail race. Track gage 26 inches.
S of M—3 comp. air punchers.
PP—3 fire tube boilers, 500 H. P., 2 pumps.

EMP—70. Last fiscal year output 770 tons. Coke Ovens, 100,000 Blvs.
SIZES SHIPT—Run of Mine.

Oak Ridge No. 6 Mine; Slope; "C" Prime Seam, 12 inches thick.
PO—Hastings, Pa.; SP—Same; CTY—Cambria; RR—Penna.
S of H—Storage battery locos. Track gage 36 in.
S of M—4 comp. air punchers.
PP—Purchas d. Transformer 23000-2200 volts A. C., M. G. Sds, 1 pump.
EMP—40. Last fiscal year output, 7,000 tons.
SIZES SHIPT—Run of Mine.

Oak Ridge No. 7 Mine; Drift; Lower Freeport Seam, 52 inches thick.
PO—Hastings, Pa.; SP—Same; CTY—Cambria; RR—Penna.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—15. Last fiscal year output, 415 tons.
SIZES SHIPT—Run of Mine.

OAK VALLEY COAL COMPANY

General Office, Brookville, Pa.
PR—Fred D. Sayer, Brookville, Pa.
VP—Jos. O. Lucas, Brookville, Pa.
TR—Edward A. Carmalt, Brookville, Pa.
GM—Edw. A. Carmalt, Brookville, Pa.
GS—Edw. A. Carmalt, Brookville, Pa.
EM—Fred D. Sayer, Brookville, Pa.
SA—Edward A. Carmalt, Brookville, Pa.

Oak Valley Mine; Drift; Clarion and Kittanning Seams, 48 to 60 in. thick.
PO—Brookville, Pa.; SP—Sommerville, Pa., and Sutton, Pa.; CTY—Jefferson; RR—N. Y. C., Penna.
S of H—Mules. Track gage 36 in.
S of M—Hand and puncher.
PP—30 H. P. Boiler, 3 pumps.
EMP—20. Last years tonnage 25,000.
SIZES SHIPT—Run of Mine.

OAKVILLE COAL & COKE COMPANY

General Office, Greensburg, Pa.
PR—J. A. Sheetz, Greensburg, Pa.
TR—A. M. Wyant, Greensburg, Pa.
GM—J. A. Sheetz, Greensburg, Pa.
GS—J. A. Sheetz, Greensburg, Pa.
CE—Gibson-Thomas Engr. Co., Latrobe, Pa.
SCO—Elizabeth Supply Co., Buyer, H. P. Kuhns, Latrobe, Pa.
Sales Agency—Irahn Fuel Co., Latrobe, Pa.

Ann Mine; Shaft; Pittsburgh Seam, 72 to 84 in. thick.
PO—Latrobe, Pa.; SP—Same; CTY—Westmoreland; RR—Penna., Ligonier Valley Branch.
MS—Patrick J. Flynn, 201 Avenue R, Latrobe, Pa.
S of H—Mules and storage battery locos. Track gage, 36 in.
S of M—Hand.
PP—Power purchased d. 220 volts A. C. 2 pumps.
EMP—50. Last years tonnage 120,150.
SIZES SHIPT—Run of Mine.

OCEAN COAL CO.

General Office, Commercial Trust Bldg., Philadelphia, Pa.
PR—Edward J. Beraund, No. 1 Broadway, New York N. Y.
VP—H. A. Beraund, 1100 Commercial Trust Bldg., Philadelphia, Pa.
TR—E. H. Sashorn, Philadelphia, Pa.
GM—Thomas F. Heber, " " "
PA—W. W. Whitner, " " "

Ocean Nos. 1 and 2, Shafts, Pittsburgh Seam.
PO—Pittsburg, Pa.; SP—Same; CTY—Westmoreland; RR—P. R. R.
MS—H. C. Hutton, " " "
S of H—Mules and 13 Elec. locos.
S of M—Elec. mach.
PP—9 boilers, total 2,000 H. P. gen. unit, 1000 K. W., 500 volts D. C.
EMP—800.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Bar Screens.

OCTORARO COAL CO (THE).

Now Kay Coal Mining Company

O'DONNELL BROTHERS

General Office, Morrisdale, Pa.
GM—W. F. O'Donnell, " " "
GS—R. J. O'Donnell, " " "
PA—J. E. O'Donnell, " " "

East No. 3 Mine; Drift; "C" Seam, 52 inches thick.
PO—Morrisdale, Pa.; SP—Same; CTY—Tioga; RR—N. Y. C., Erie.
MS—M. M. Atkinson, Morrisdale, Pa.
S of H—Main and gravity. Track gage 26 in.
S of M—Hand.
EMP—100. Last fiscal year output, 60,000 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens

O'DONNELL, C. V. & CO.
Now O'Donnell C. V. & Sr.**O'DONNELL, C. V. & SR.**

General Office, Midland, Va.
PR—V. O'Donnell Sr., Midland, Va.
SA—C. V. O'Donnell, Sr., Midland, Va.

No. 2 Mine; Drift; Moshannon Seam, 52 in. thick.
PO—Farnwood, Pa.; SP—Phillipsburg, Pa.; CTY—Clearfield; RR—Pittsburgh & Susquehanna
MS—Edw. Latz, Phillipsburg, Pa.
S of H—Mules. Track gage 36 in.
S of M—Hand.
EMP—30. Last years tonnage 3,000.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by C. V. O'Donnell & Company.

O'DWYER BEACHLEY COAL COMPANY.

General Office, Berlin, Pa.
PR—William O'Dwyer, Berlin, Pa.
VP—D. J. Beachley, R. D. No. 5, Somerset, Pa.
TR—Wm. O'Dwyer, Berlin, Pa.
GM—William O'Dwyer, Berlin, Pa.
GS—F. A. Schulte, Somerset, Pa.
PA—William O'Dwyer, Berlin, Pa.
CE—Frank Fluck, Somerset, Pa.
SA—Wm. O'Dwyer, Berlin, Pa.

D. B. No. 1 Mine; Drift; B Seam, 36 in. thick.
PO—Berlin, Pa.; SP—Same; CTY—Somerset; RR—B. & O., S. & C. Br.
S of H—Mules. Track gage, 40 in.
S of M—Hand.
EMP—30. Last years tonnage 18,000.
SIZES SHIPT—Run of Mine.

OHIO RIVER COAL COMPANY.

General Office, Carroll Bldg., Pittsburgh, Pa.
PR—H. H. Patterson, Pittsburgh, Pa.
VP—E. W. Hicks, Leeburg, Pa.
TR—W. M. Henderson, Pittsburgh, Pa.
CE—Baton & Elliott, Pittsburgh, Pa.
SA—Henderson Coal Co., Pittsburgh, Pa.

Oblo River Mine; Drift; Upper Freeport Seam; 48 in. thick.
PO—Shippingport, Pa.; SP—Industry, care Cook's Ferry Siding, Pa.; CTY—Beaver; RR—Penna. C. & P. Br.
S of H—Mules, trolley pole type and storage battery locos. Track gage 34 inches.
S of M—2 chain breast type machs.
PP—1 ore tube boiler, 150 H. P., gen. unit, 100 K. W., 250 volts D. C., 2 pumps.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens, Picking Tables, Loading Booms.
NOTE—Mine in process of development.

OLD COLONY COAL MINING COMPANY

General Office, Altoona, Pa.
PR—W. H. Macurda, 23 Beaver St., New York, N. Y.
VP—T. C. Pray, 92 State St., Boston, Mass.
TR—W. E. Macurda, Boston, Mass.
GM—L. M. Ryan, Altoona, Pa.
GS—J. H. Murray, Hooversville, Pa.
PA—L. M. Ryan, Altoona, Pa.
CE—Jus. S. Silyman & Co., Altoona, Pa.
SA—Garfield & Proctor Coal Co., 92 State St., Boston, Mass.

Federal Nos. 1 and 2 Mines; Drift; B and C Prime Seams, 46 in. thick.
PO—Hooversville, Pa.; SP—Same; CTY—Somerset; RR—B. & O.
S of H—Mules and electric loco. Track gage 36 in.
S of M—2 chain breast machs.
PP—Power purchased. Transformer 22,000 to 2,200 volts A. C., M. G. set, 250 volts D. C.
EMP—60. Last years tonnage 30,000.
SIZES SHIPT—Run of Mine.

OLD CONNELLSVILLE COKE CO.

PR—R. S. Matthews, Connelville, Pa.
VP—B. F. Sterling, Uniontown, Pa.
TR—W. D. McGinnis, Connelville, Pa.
GM—W. D. McGinnis, Connelville, Pa.
GS—B. T. Greaves, Fairchance, Pa.
PA—B. T. Greaves, Fairchance, Pa.
CE—H. L. Burchinal, Uniontown, Pa.
SA—J. S. Burchinal & Co., Smithfield, Pa.
SA—Federal Fuel Co., Connelville, Pa.
Liberty Works.
PO—Outcrop, Pa.; SP—Same; CTY—Fayette; RR—B. & O.
Coke ovens, 34 Bee Hive.
EMP—25.
Note—Commercial Coking Plant—Coal purchased

OLD MEADOW COAL COMPANY

Operations abandoned.

OLIPHANT COAL & COKE COMPANY.

General Office, 300 Fayette Title & Trust Bldg., Uniontown, Pa.
PR—Evans C. Crow, Uniontown, Pa.
TR—Frank R. Crow, Uniontown, Pa.

GS—L. F. Roby, Uniontown, Pa.
GM—John R. Best, Uniontown, Pa.
PA—L. F. Roby, Uniontown, Pa.
EM—South Penn. Eng. Co., Uniontown, Pa.
EE—Wm. Hagan, Uniontown, Pa.

Jeffrey Nos. 1 and 2 Mines; Drift; Sewickley Seam, 60-72 in. thick.
PO—Uniontown, Pa.; SP—Same; CTY—Fayette; RR—Penna.
S of H—3 elec. trolley motors. Track gage 42 in.
S of M—4 shortwall machs.
PP—Power purchased. Transformer 2,200 volts A. C., 250 volts D. C., 7 pumps.
EMP—100. Last years tonnage 125,000.
SIZES SHIPT—Run of Mine.

OLIVER COAL MINING COMPANY.

General Office, Osceola Mills, Pa.
PR—Herndon Hewitt, Osceola Mills, Pa.
VP—E. M. Hewitt, Hollidaysburg, Pa.
RT—O. H. Hewitt, Hollidaysburg, Pa.
GM—Herndon Hewitt, Osceola Mills, Pa.
GS—Herndon Hewitt, Osceola Mills, Pa.
PA—Herndon Hewitt, Osceola Mills, Pa.
EM—E. M. Shillingford, Osceola Mills, Pa.
CE—Geo. A. Leet Co., Osceola Mills, Pa.

Coal Run No. 2 Mine; Drift; B Seam, 54 inches thick.
PO—Osceola Mills, Pa.; SP—Same; CTY—Clearfield; RR—Penna.
MS—Frank Withey, Osceola Mills, Pa.
S of H—Mules and main and tail rope. Track gage 30 inches.
S of M—Hand.
PP—Power purchased. Transformer 440-110 volts A. C., 3 pumps.
EMP—40. Daily output, 100 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Loading Booms.

OLIVER & SNYDER STEEL CO.

General Office, Pittsburgh, Pa.
PR—Henry Oliver, Pittsburgh, Pa.
VP—T. J. Crump, Pittsburgh, Pa.
TR—T. J. Crump, Pittsburgh, Pa.
SECY—John Jenkins, Pittsburgh, Pa.
GS—J. H. Lane, Oliver, Pa.
PA—E. A. Jenkins, Pittsburgh, Pa.
EM—Charles H. Hinsey, Oliver, Pa.
EE—C. G. Brahm, Oliver, Pa.
MM—C. B. Patterson and L. C. Smith, Uniontown, Pa.

Oliver Nos. 1, 2 and 3 Mines; Shaft; Connellsville Seam; 108 in. thick.
PO—Oliver, Pa.; SP—Same; Redstone Jct. and Oliver No. 3, Pa.; RR—P. R. R., B. & O., P. & L. E.
S of B—2 gasoline loco., rope and horses.
S of M—Hand.
PP—31 return tubular boilers, total 1910 H. P., 2 gen. units, 220 volts D. C., 2 compressors, 4 pumps.
EMP—1200; coke ovens, 1,108.
Live. Last fiscal year output 750,000 tons.

OLLETT BROS. COAL CO.

General Office, Bridgeville, Pa.
PR—F. B. Ollett, Bridgeville, Pa.
TR—Henry Winstein, Bridgeville, Pa.
R. F. D. No. 3.
GM—F. B. Ollett, Bridgeville, Pa.

Rosevale Mine; Drift; Pittsburgh Gas and Steam Seams, 56 in. thick.
PO—Bridgeville, Pa.; SP—Woodville, Pa.; CTY—Allegheny; RR—P. C. & Y.
MS—F. B. Ollett, Bridgeville, Pa.
S of H—Mules. Track gage, 42 in.
S of M—5 chain breast and 1 shortwall mach.
PP—Power purchased, M. G. set, 100 K. W., 250 volts D. C.
EMP—70. Last years tonnage 86,927.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens, Loading Booms.

ONEIDA COAL MINING COMPANY.

General Office, Philadelphia, Pa.
PR—Freas B. Snyder, Philadelphia, Pa.
TR—Robert F. Tatman, Philadelphia, Pa.
GM—J. W. Easton, Indian Head, Pa.
GS—J. W. Easton, Indian Head, Pa.
PA—J. W. Easton, Indian Head, Pa.
EM—S. E. Dickey, Johnstown, Pa.
SA—Indian Head Store Co., Boyer, F. E. Miller, Indian Head, Pa.
SA—J. Tatnall Lea & Co., Philadelphia, Pa.

Oneida No. 1 Mine; Slope; R Vein Seam, 40 in. thick.
PO—Indian Head, Pa.; SP—Same; CTY—Fayette, Pa.; RR—L. C. V. R., of B. & O.
S of H—Mules and rope. Track gage, 36 in.
S of M—Hand.
PP—1 water tube boiler, 100 H. P., 1 pump.
EMP—50. Last fiscal year output, 30,832 tons.
SIZES SHIPT—Run of Mine.

O'NEILL, H. & CO.

General Office, Lucinda, Pa.
OWNERS—Henry O'Neill, Lucinda, Pa.; Daniel O'Neill, Lucinda, Pa.

O'Neill Mine; Shaft; Clarion Seam, 48 inches thick.
PO—Lucinda, Pa.; SP—Same; CTY—Clarion; RR—B. & O.
MS—Daniel O'Neill, Lucinda, Pa.
S of H—Mules.
S of M—Hand and comp. air machs.
PP—2 120 H. P. water tube boilers.
EMP—26. Last years tonnage 26,000.
SIZES SHIPT—Run of Mine.

ONONDAGA COAL MINING COMPANY

General Office, 1012 Marine Trust Bldg., Buffalo, N. Y.
PR—Harry Yates, Buffalo, N. Y.
VP—Thos. A. Furniss, Punxsutawney, Pa.
TR—C. A. Colles, Buffalo, N. Y.
GM—Thos. A. Furniss, Punxsutawney, Pa.
GS—Amandus Olson, Furnondaga, Pa.
PA—Thos. A. Furniss, Punxsutawney, Pa.
CE—Thos. A. Furniss, Punxsutawney, Pa.
EM—H. M. Knarr, Punxsutawney, Pa.
EE—David Elder, Punxsutawney, Pa.
SA—Address the company. Buyer, Thos. A. Furniss, Punxsutawney, Pa.
SA—W. C. Tait, Buffalo, N. Y.

Onondaga Mine; Shaft; Lower Freeport Seam; 60 inches thick.
PO—Furnondaga, Pa.; SP—Punxsutawney, Pa.; CTY—Jefferson; RR—B. & S.
S of H—Electric. Track gage 42 inches.
S of M—Electric shortwall mach.
PP—4 water tube boilers, 600 H. P., gen. units, 2 200 K. W., 500 to 550 volts D. C.
EMP—240. Last years tonnage 230,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Crushers.

ONTARIO GAS COAL COMPANY

General Office, House Bldg., Pittsburgh, Pa.
PR—Julian Kennedy, Pittsburgh, Pa.
VP—R. C. Crawford, Pittsburgh, Pa.
TR—J. O. Miller, Pittsburgh, Pa.
GM—R. C. Crawford, Pittsburgh, Pa.
CE—Julian Kennedy, Pittsburgh, Pa.
EM—H. K. Knapp, Pittsburgh, Pa.

Ontario Mine; Shaft; Pittsburgh Gas Seam, 72 inches thick.
PO—Ellsworth, Pa.; SP—Same; CTY—Washington; RR—Penna.
MS—J. E. Hackett, Ellsworth, Pa.
S of H—Mules and storage battery locos. Track gage 42 inches.
S of M—Shortwall, longwall and chain breast machs.
PP—Purchase power. Transformer 22,000-2,300 volts A. C., M. G. set, 250 volts D. C., gen. units, 100 K. W., 250 volts D. C.
EMP—125. Daily tonnage 650.
SIZES SHIPT—Run of Mine, Slack, Nut, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

ORCHARD FUEL COMPANY

General Office, Scottsdale, Pa.
TR—T. Sutton Boyd, Scottsdale, Pa.
GS—Ray S. Conghenour, Scottsdale, Pa.
SA—T. Sutton Boyd, Scottsdale, Pa.

Orchard Mine; Drift; Pittsburgh Seam, 96 inches thick.
PO—Scottsdale, Pa.; SP—Same; CTY—Fayette; RR—B. & O.
S of H—Mules.
S of M—Hand.
NOTE—Formerly operated by the Orchard Hill Connellsville Coke Co.

ORIENT COKE CO.

Now part of American Coke Corp.

OSTERRED COAL COMPANY

General Office, Lucinda, Pa.
PR—Joseph Osterred, Arthurs, Pa.
VP—Martin Osterred, Lucinda, Pa.
TR—J. A. Schill, Lucinda, Pa.
GM—J. A. Schill, Lucinda, Pa.
SA—J. A. Schill, Lucinda, Pa.
Osterred Mine; Shaft; Upper Clarion Seam; 46 in. to 54 in. thick.
PO—Lucinda, Pa.; SP—Same; CTY—Clarion; RR—B. & O.
MS—Martin Osterred, Lucinda, Pa.
S of H—Mules. Track gage 33 in.
S of M—Hand.
PP—Gas engine.
EMP—15. Last years tonnage 11,000.
SIZES SHIPT—Run of Mine.

P. & Y. COAL COMPANY

General Office, Masontown, Pa.
PR—Dr. S. E. Peters, Masontown, Pa.
VP—Anton Kovach, Uniontown, Pa.
TR—Stephen T. Yanchus, Masontown, Pa.
GM—Steve C. Yanchus, Masontown, Pa.
GS—Steve C. Yanchus, Masontown, Pa.
PA—Steve C. Yanchus, Masontown, Pa.
EM—H. Paul Taylor, Masontown, Pa.

Christopher Mine; Drift; Waynesburg Seam; 73 inches thick.
PO—Adah, Pa.; SP—Antram, Pa.; CTY—Fayette; RR—Moonongahela.
S of H—Mules, rope. Track gage 42 in.
S of M—1 shortwall mach.
PP—Power purchased, 220 volts A. C., 42 K. W., 3 phase, 60 cycles, 2 pumps.
EMP—23. Daily tonnage 150.
SIZES SHIPT—Run of Mine, Lump.

P. C. & Y. COAL CO.

PR—A. F. Walsh, Crafton, Pa.
VP—Jos. Kamp, Crafton, Pa.
TR—C. C. McGregor, Crafton, Pa.
GM—C. C. McGregor, Crafton, Pa.
GS—C. C. McGregor, Crafton, Pa.
PA—Jas. McGregor, Crafton, Pa.
EM—F. J. McGregor, Crafton, Pa.
EE—J. Hembraugh, Crafton, Pa.
SA—C. C. McGregor, Crafton, Pa.

Thornburg Mine; Drift; Pittsburgh Seam, 58 to 63 in. thick.
PO—Crafton, Pa.; SP—Same; CTY—Allegheny; RR—P. C. & Y.
S of H—Mules. Track gage, 42 in.
S of M—2 shortwall and 2 chain breast machs.
PP—Power purchased, transformer 2200-167 volts A. C., rotary converters, 250 volts D. C., 2 pumps.
EMP—26. Last years tonnage 41,500.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Retarding, Conveyor.

P. V. & K. COAL COMPANY

General Office, Monongahela, Pa.
PR—A. K. Robinson, Wilkesburg, Pa.
VP—J. Springer Robinson, Le Junior, Ky.
TR—R. H. Robinson, Monongahela, Pa.
GM—R. H. Robinson, Monongahela, Pa.
PA—Edwin Hartland, Monongahela, Pa.
EM—John C. Rue, Follansbee, W. Va.

Home Mine; Drift; Pittsburgh Seam, 66 inches thick.
PO—Monongahela, Pa.; SP—Same; CTY—Washington; RR—Penna.
MS—Robt. Albright, Monongahela, Pa.
S of H—Mules. Track gage 42 inches.
S of M—1 shortwall mach.
PP—Power purchased. Rotary converters 220 volts D. C., 2 pumps.
EMP—50. Last fiscal year output, 52,000 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.
Note—Successors to the Home Coal Co.

PACKSADOLE COAL MINING CO.

General Office, Portage, Pa.
PR—W. D. Jones, Torrance, Pa.
VP—H. M. McAlarney, Expidet, Pa.
TR—F. M. Tompkins, Portage, Pa.
GM—F. M. Tompkins, Portage, Pa.
PA—F. M. Tompkins, Portage, Pa.
EM—Gardner Stoker, Johnstown, Pa.
SA—Portage Coal Co., Portage, Pa.

Packsaddle No. 1 Mine; Drift; E Seam, 42 inches thick.
PO—Torrance, Pa.; SP—Blairsville Intersection, Pa.; CTY—Westmoreland; RR—Penna.
MS—James Froggatt, Torrance, Pa.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—Power purchased. Transformer 2200-250 volts A. C., M. G. Sets, 250 volts D. C.
EMP—25. Last years tonnage 4,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.

PAGE, JAMES A. & SON

General Office, Mineral Point, Pa.
PR—Jas. A. Page, Mineral Point, Pa.
TR—R. D. Page, Mineral Point, Pa.
GM—Jas. A. Page, Mineral Point, Pa.
GS—R. D. Page, Mineral Point, Pa.
PA—Jas. A. Page, Mineral Point, Pa.
CE—Fetterman Engineering Co., Johnstown, Pa.
SA—Weston Dodson & Co., Inc., Bethlehem, Pa.

Page Mine; Drift; Miller or B Seam, 49 inches thick.
PO—Mineral Point, Pa.; SP—Frt., Same Exp., South Fork, Pa.; CTY—Cambria; RR—Penna.
MS—W. B. Troy, Mineral Point, Pa.
S of H—Mules and rope. Track gage 36 inches.
S of M—Hand.
PP—Power purchased. 220 volts D. C.
EMP—25. Last years tonnage 15,000.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by the Page Ford Coal Co.

PAINT COAL COMPANY.

General Office, Arthurs, Pa.
PR—S. A. Zacherl, Arthurs, Pa.
TR—John Schwabenbauer, Snidersburg, Pa.
GM—S. A. Zacherl, Arthurs, Pa.
GS—S. A. Zacherl, Arthurs, Pa.
PA—S. A. Zacherl, Arthurs, Pa.
SA—E. J. Carroll, Lucinda, Pa.

(Continued on Next Page)

Paint Coal Company—Cont.

Star Mine; Shaft; Upper Freeport Seam, 48 inches thick.
 PA—Arthur, Pa.; SP—Same; CTY—Clarion; RR—B. & O.
 S of H—Mules and gasoline loco. Track gage 36 in.
 S of M—1 longwall mach.
 PP—1 75 K. W., gen. unit, 250 volts D. C., 2 pumps.
 EMP—7. Last fiscal year output, 4,000 tons.
 SIZES SHIPT—Run of Mine.

PALMER COAL COMPANY

General Office, Queens Junction, Pa.
 PR—John W. Palmer, Stockdale, Pa.
 TR—Thos. W. Palmer, Queens Junction, Pa.
 SE—Y. Thos. W. Palmer, Queens Junction, Pa.
 GM—Thomas W. Palmer, Queens Junction, Pa.
 GS—Thomas W. Palmer, Queens Junction, Pa.
 PA—Thos. W. Palmer, Queens Junction, Pa.
 EM—Bohl Davis, Butler, Pa.
 SA—Thos. W. Palmer, Queens Junction, Pa.
 Palmer Mine; Drift; Twin Freeport Seam, 78 inches thick.
 PO—Queens Junction, Pa.; SP—Same; CTY—Butler; RR—Western Allegheny.
 S of H—Mules and rope. Track gage 36 inches.
 S of M—Hand.
 PP—Power purchased, 440 volts A. C., 1 fire tube boiler, 50 H. P., 3 pumps.
 Last years tonnage 72,000
 SIZES SHIPT—Run of Mine, Slack, Lump

PANSY COAL COMPANY.

General Office, Punxsutawney, Pa.
 PR—H. G. Bowers, Punxsutawney, Pa.
 VP—W. R. Camanem, Houtzdale, Pa.
 TR—A. P. Sutter, Valler, Pa.
 GM—A. P. Sutter, Valler, Pa.
 GS—A. P. Sutter, Valler, Pa.
 PA—A. P. Sutter, Valler, Pa.
 CE—H. M. Knarr, Punxsutawney, Pa.
 SCO—Valler Supply Co.; Buyer, Guy W. Sutter, Valler, Pa.
 SA—Burtner Coal Company, Philadelphia, Pa.

Pansy Mine; Slope and Shaft; Lower Freeport Seam, 60 in. thick.
 PO—Valler, Pa.; SP—Same; CTY—Indiana; RR—B. R. & P.
 MS—Nick Barnoff, Punxsutawney, Pa.
 S of H—Mules, rope and comp. air locos. Track gage, 36 in.
 S of M—7 comp. air machs.
 PP—3 150 H. P. water tube boilers, 3 pumps.
 EMP—50.
 SIZES SHIPT—Run of Mine.

PANTALL COAL COMPANY.

General Office, Punxsutawney, Pa.
 PR—J. Reece Pantall, Punxsutawney, Pa.
 TR—J. Reece Pantall, Punxsutawney, Pa.
 GM—J. Reece Pantall, Punxsutawney, Pa.
 EM—H. M. Knarr, Punxsutawney, Pa.
 Pantall Mine; Drift; C Prime and E Seams, 38-42 in. thick.
 PO—Punxsutawney, Pa.; SP—Same; CTY—Clearfield; RR—N. Y. C. & P.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 PP—1 pump.
 EMP—15.
 SIZES SHIPT—Run of Mine.

PANTHER RUN COAL CO.

General Office, Ridgway, Pa.
 PR—Earl Overhalter, Ridgway, Pa.
 VP—Louis Streuber, Erie, Pa.
 TR—R. A. Cartwright, Ridgway, Pa.
 GM—J. F. Joyce, Pardus, Pa.
 PA—J. F. Joyce, Pardus, Pa.
 EM—H. M. Knarr, Punxsutawney, Pa.
 EE—James L. Crawford, Pardus, Pa.
 SCO—Pardus Supply Co.; Buyer, E. R. Newton, Pardus, Pa.
 SA—J. F. Joyce, Pardus, Pa.

Panther Run Mine; Drift; Brookville "A" Seam, 54 in. thick.
 PO—Pardus, Pa.; SP—Frt. Sherwood, Pa.; Exp. Reynoldsville, Pa.; CTY—Jefferson; RR—P. R. R.
 MS—J. Skeban, Pardus, Pa.
 S of H—5 trolley pole type locos. Track gage, 3 ft.
 S of M—22 compressed air punchers, 4 shortwall machs.
 PP—5 water tube boilers, total 750 H. P., 2 gen. units, 200 K. W., 250 volts D. C., 2 compressors, 14 pumps.
 EMP—145. Daily tonnage 550.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

PARAGON COAL MINING CO., INC.

General Office, Osceola Mills, Pa.
 PR—C. P. Burtner, Philadelphia, Pa.
 VP—E. A. Burtner, Osceola Mills, Pa.

TR—V. H. Burtner, Osceola Mills, Pa.
 GM—V. H. Burtner, Osceola Mills, Pa.
 GS—V. H. Burtner, Osceola Mills, Pa.
 PA—V. H. Burtner, Osceola Mills, Pa.
 SCO—Penn Supply Co.; Buyer, V. H. Burtner, Osceola Mills, Pa.
 SA—Burtner Coal Co., 1004 Finance Bldg., Philadelphia, Pa.

Paragon No. 1 Mine; Drift; "C" Seam, 30 in. thick.
 PO—Osceola Mills, Pa.; SP—Same; CTY—Clearfield; RR—Penna.
 SM—E. A. Burtner, Osceola Mills, Pa.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 EMP—30. Last fiscal year output, 25,000 tons.
 SIZES SHIPT—Run of Mine.

Paragon No. 2 Mine; Drift; "E" Seam, 31 in. thick.
 PO—Osceola Mills, Pa.; SP—Same; CTY—Clearfield; RR—Penna.
 SM—E. A. Burtner, Osceola Mills, Pa.
 S of H—1 trolley pole type loco. Track gage, 36 in.
 S of M—1 shortwall mach.
 PP—Power purchased, Transformer 2200 to 250 volts A. C., M. G. set, 250 volts D. C.
 EMP—30.
 SIZES SHIPT—Run of Mine.

Paragon No. 3 Mine; Slope; "B" Seam, 38 in. thick.
 PO—Osceola Mills, Pa.; SP—Same; CTY—Clearfield; RR—Penna.
 SM—E. A. Burtner, Osceola Mills, Pa.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 PP—Power purchased, Transformer 2200 to 250 volts A. C., M. G. set, 250 volts D. C., 1 pump.
 EMP—5.
 SIZES SHIPT—Run of Mine.
 Note—Mine just opened

PARAMOUNT COAL MINING COMPANY

General Office, 513 Somerset St., Johnstown, Pa.
 PR—M. R. Brennan, Johnstown, Pa.
 TR—M. R. Brennan, Johnstown, Pa.
 GS—P. A. Curry, Johnstown, Pa.

Paramount No. 1 Mine; Drift; B or Lower Kittanning Seam, 58 inches thick.
 PO—Coalport, Pa.; SP—Same; CTY—Clearfield; RR—Penna.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 EMP—36. Daily tonnage 150
 SIZES SHIPT—Run of Mine.

PARK COAL CO

General Office, Leechburg, Pa.
 PR—E. E. Ball, Pittsburgh, Pa.
 TR—L. W. Hicks, Leechburg, Pa.
 GM—L. W. Hicks, Leechburg, Pa.
 GS—E. A. Watters, Leechburg, Pa.
 PA—D. L. Maher, Leechburg, Pa.
 EM—S. E. Mognet, Leechburg, Pa.
 EE—G. H. Ritchie, Leechburg, Pa.

Park Mine; Drift; Upper Freeport Seam, 44 in. thick.
 PO—Leechburg, Pa.; SP—Same; CTY—Armstrong; RR—P. R. R., Conemaugh Division.
 S of H—Trolley pole type locos. Track gage, 42 in.
 S of M—5 chainbreast type machs.
 PP—Power purchased, M. G. set, 250 volts D. C.
 EMP—120. Last fiscal year output, 91,195 tons.
 SIZES SHIPT—Run of Mine.

PARKER-COCHRAN COAL CO.

General Office, Connellsville, Pa.
 PR—A. C. Stickle, Connellsville, Pa.
 TR—R. H. Parker, Scottsdale, Pa.
 GM—W. P. Cochran, Scottsdale, Pa.
 GS—J. Brooks Ross, 304 Frick Bldg., Pittsburgh, Pa.
 PA—C. M. Stone, Connellsville, Pa.

Park Mine; Drift; Connellsville "A" Seam, 108 inches thick.
 PO—Connellsville, Pa.; SP—Bawson, Pa.; CTY—Fayette; RR—B. & O.
 S of H—Mules, gasoline locos. Track gage 42 inches.
 S of M—Hand.
 EMP—15.
 SIZES SHIPT—Run of Mine.

PARKHILL COAL CO.

PR—H. B. Moore, Dawson, Pa.
 VP—H. B. Moore, Dawson, Pa.
 TR—H. B. Moore, Dawson, Pa.
 GM—David Scurfield, Dawson, Pa.
 GS—David Scurfield, Dawson, Pa.
 PA—H. B. Moore, Dawson, Pa.
 EM—Thomas Zimmerman, Dawson, Pa.
 SA—H. B. Moore, Dawson, Pa.

Ruth Mine; Drift; Upper Freeport Seam, 48 in. thick.
 PO—Dawson, Pa.; SP—Same; CTY—Fayette; RR—B. & O.
 S of H—Mules and rope. Track gage 42 in.

S of M—1 shortwall mach.
 PP—1 100 H. P. boiler, 100 K. W. gen. unit, 250 volts D. C., 16 pumps.
 EMP—10. Last year, tonnage 18,000.
 SIZES SHIPT—Run of Mine.

PARNELL & RUSH COAL COMPANY

Out of business.
 PARSHALL, W. J.
 General Office, Uniontown, Pa.
 GM—W. J. Parshall, Mclellandtown, Pa.
 PA—W. J. Parshall, Mclellandtown, Pa.
 EM—Fayette Lng. Co., Uniontown, Pa.

Old Home Mine, Shaft and Slope.
 PO—Mclellandtown, Pa.; SP—Leechburg, Pa.; CTY—Fayette; RR—P. R. R., P. & L. E., R. & O.
 MS—L. W. Rider, Mclellandtown, Pa.
 S of H—Rope and mules.
 S of M—6 comp. air mach.
 PP—4 boilers, total 600 H. P.
 Coke oven, 100.
 and information.

PATTON CLAY MANUFACTURING CO.

General Office, Patton, Pa.
 PR—H. F. Good, Patton, Pa.
 VP—Geo. F. Good, Patton, Pa.
 TR—Geo. E. Prindle, Patton, Pa.
 GM—Geo. E. Prindle, Patton, Pa.
 GS—Geo. E. Prindle, Patton, Pa.
 PA—Geo. E. Prindle, Patton, Pa.
 EM—H. L. Gregg, Patton, Pa.

Patton Mine; Shaft; C Seam, 52 in. thick.
 PO—Patton, Pa.; SP—Same, CTY—Cambria; RR—N. Y. C.
 MS—John Chubb, Patton, Pa.
 S of H—Mules and steam hoist. Track gage 36 in.
 S of M—Hand.
 PP—2 water tube and 1 return tubular boilers, total 625 H. P.
 EMP—15. Last years tonnage 3,000.
 Mine for own use only.

PAULTON COAL MINING CO.

General Office, Leechburg, Pa.
 TR—L. W. Hicks, Leechburg, Pa.
 GM—L. W. Hicks, Leechburg, Pa.
 GS—E. A. Watters, Leechburg, Pa.
 PA—D. L. Maher, Leechburg, Pa.
 EM—S. E. Mognet, Leechburg, Pa.
 EE—G. H. Ritchie, Leechburg, Pa.

Paulton Mine; Drift; Upper Freeport Seam, 44 in. thick.
 PO—Apollo, Pa.; SP—Same, CTY—Westmoreland; RR—P. R. R.
 MS—H. C. Scott, Vandergrift, Pa.
 S of H—Trolley pole type locos. Track gage, 39 in.
 S of M—Elec. chain mach.
 PP—Power purchased, 2—150 K. W. M. G. sets, 250 volts D. C., 3 pumps.
 EMP—145. Last fiscal year output, 92,813 tons.
 SIZES SHIPT—Run of Mine.

PAWNEE COAL CO

General Office, Brookville, Pa.
 PR—C. C. Chittester, Brookville, Pa.
 VP—W. W. Henshey, Kittanning, Pa.
 TR—J. T. Armstrong, Brookville, Pa.
 GM—J. T. Armstrong, Brookville, Pa.
 GS—Philo Chittcott, R. D. 3, Brookville, Pa.
 PA—W. A. Rouser, Brookville, Pa.
 CE—W. W. Henshey, Kittanning, Pa.
 EM—F. D. Sayer, Brookville, Pa.
 EE—Jacob Black, Brookville, Pa.
 SCO—Economy Store Co. Buyer, R. E. Miller, Brookville, Pa.
 SA—Thorne, Neale & Co., Marine Bank Bldg., Buffalo, N. Y.

Pawnee Mine; Drift; Brookville Seam, 53 in. thick.
 PO—Brookville, Pa.; SP—Frt. Norman, Pa.; Exp. Brookville, Pa.; CTY—Jefferson; RR—Pittsburgh & Shawmut.
 S of H—4 trolley pole type locos. Track gage 42 in.
 S of M—5 elec. chain machs.
 PP—2 water tube boilers, 300 H. P., 1 150 K. W. gen. unit, 250 volts D. C., 7 pumps.
 EMP—140. Last years tonnage 126,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

PEABODY FUEL CO.

General Office, 1607 Oliver Bldg., Pittsburgh, Pa.
 PR—F. E. Peabody, Pittsburgh, Pa.
 VP—R. E. Peabody and W. Russell Carr, Pittsburgh, Pa.
 TR—C. M. Rhodes, Pittsburgh, Pa.
 SE—Y. C. M. Rhodes, Pittsburgh, Pa.
 GENERAL SALES MGR—T. J. Atkinson, Pittsburgh, Pa.
 PA—C. M. Rhodes, Pittsburgh, Pa.

Operating and controlling: American Coal Corporation plants: American No. 1, 2, 3, 4, 5 and Orient. American Gas Coal Co. (W. Va.) Plant Liberty.
 NOTE—Formerly known as the Peabody Fuel Co.

PEALE, PEACOCK & KERR, INC.

General Office, St. Benedict, Pa.
 PR—Benedict Peale, St. Benedict, Pa.
 VP—Richard Peale, St. Benedict, Pa.
 ASST. TR—G. A. Tutthill, New York, N. Y.
 GM—Richard Peale, St. Benedict, Pa.
 GS—Morritt Holton, St. Benedict, Pa.
 CE—Morritt Holton, St. Benedict, Pa.
 EM—R. J. Prockler, St. Benedict, Pa.
 EE—E. K. Davis, St. Benedict, Pa.
 SCO—Central Trading Corp., Buyer, F. R. Both, St. Benedict, Pa.

No. 1, 6 and 9 Mines, Drifts.
 PO—Wardensburg, Pa.; SP—Same, CTY—Clearfield; RR—N. Y. C. & H. R.
 MS—R. H. George, Wardensburg, Pa.
 S of H—10 elec. machs.
 S of M—10 elec. machs.
 PP—6 boilers, total 900 H. P., gen. units, 250 volts D. C.
 EMP—350.
 Decatur Nos. 3, 7 and 8 Mines, Drifts.
 PO—Philipsburg, Pa.; SP—Same, CTY—Clearfield; RR—N. Y. C. & H.
 S of H—Mules.
 S of M—Hand.

Glen Richey Nos. 1, 3, 4, 5, 6, 18 19 and 20 Mines, Drifts.
 PO—Glen Richey, Pa.; SP—Mitchell's Station, Pa.; CTY—Clearfield; RR—N. Y. C. & H. R.
 MS—J. O. Reese, Glen Richey, Pa.
 S of H—2 elec. locos., rope and mules.
 S of M—4 elec. mach. and hand.
 PP—5 boilers, total 750 H. P., gen. units, 250 volts D. C.

PEARCE, GEORGE & SONS

PR—John H. Cooney, Conemaugh, Pa.
 TR—C. C. Cook, Johnstown, Pa.
 GM—H. C. Cook, Johnstown, Pa.
 GS—I. B. Williams, Johnstown, Pa.
 PA—I. B. Williams, Johnstown, Pa.
 CE—L. G. Hastings, Johnstown, Pa.
 EM—John S. Silyman, Altoona, Pa.

Excelsior No. 1 Mine; Drift; "C" and "E" Seams, 48 in. thick.
 PO—Portland, Pa.; SP—Portage, Pa.; CTY—Cambria; RR—P. R. R., Portage Rr.
 S of H—2 storage battery locos. Track gage 36 in.
 S of M—Hand, 2 elec. machs.
 PP—2 water tube boilers, gen. units, 220 volts A. C. Purchase power.
 EMP—140. Last fiscal year output, 48,000 tons.
 SIZES SHIPT—Run of Mine.
 Old information

PEARSON COAL MINING COMPANY

New Albers Coal Co.
 General Office, 620 Fayette Title Trust Bldg., Uniontown, Pa.
 TR—Wm. C. Black, Uniontown, Pa.
 GM—Fred Blier, Uniontown, Pa.
 GS—Fred Blier, Uniontown, Pa.
 PA—Fred Blier, Uniontown, Pa.

Peerless Mine; Drift; Pittsburgh Seam, 108 in. thick.
 PO—Uniontown, Pa.; SP—Same; CTY—Fayette; RR—B. & O.
 S of H—Mules and incline. Track gage, 44 in.
 S of M—Hand.
 PP—1 20 H. P. fire tube boiler.
 EMP—10. Daily tonnage 50.
 SIZES SHIPT—Run of Mine.

PENELEC COAL CORP.

General Office, Johnstown, Pa.
 PR—E. T. Hephurn, New York City, N. Y.
 VP—P. J. Morrissey, Johnstown, Pa.
 TR—W. A. Reiber, Johnstown, Pa.
 GM—P. J. Morrissey, Johnstown, Pa.
 GS—D. L. Boyle, Johnstown, Pa.
 PA—F. F. Fullerton, Johnstown, Pa.
 CE—Warren Partridge, Johnstown, Pa.
 EM—M. J. Fulton, Johnstown, Pa.
 EE—W. H. Hickling, Johnstown, Pa.

Penelec No. 1 Mine; Drift; Cement Seam, 38 in. thick.
 PO—Johnstown, Pa.; SP—Same; CTY—Cambria; RR—Penna., R. & O.
 MS—John Reed, Johnstown, Pa.
 S of H—Mules, 2 trolley pole type. Track gage 34 in.
 S of M—1 electric puncher and wall machs.
 PP—Power purchased, 1—50 K. V. volts D. C., 10,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.
 Penelec No. 2 Mine; Drift; Sulphur Seam, 30 in. thick.
 PO—Johnstown, Pa.; SP—Same, CTY—Cambria; RR—Penna., N. Y. C.
 MS—John Reed, Johnstown, Pa.
 S of H—Mules. Track gage 36 in.
 S of M—1 shortwall mach.

(Continued on Next Page)

Penelec Coal Corp.—Cont.

PP—Purchase power, 220 volts A. C. 1 pump.
EMP—20. Last years tonnage 10,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

Penelec No. 3 Mine; Drift; "E" Seam, 28 in. thick.
PO—Rockwood, Pa.; SP—Same; CTY—Somerset; RR—B. & O., W. M.

MS—C. B. Bittner, Rockwood, Pa.
S of H—Mules and loco. Track gage 42 in.

S of M—2 shortwall machs.
PP—Purchase power, 220 volts A. C., 2 pumps.
EMP—25. Last years tonnage 12,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

Penelec No. 4 Mine; Shaft; A & B Seam, 48 in. thick.
PO—Phillipsburg, Pa.; SP—Same; CTY—Center; RR—Penna.

MS—T. W. Gitehouse, Phillipsburg, Pa.
S of H—2 trolley pole type locos. Track gage 42 in.

S of M—2 shortwall and 1 overhead cutter machs.
PP—Power purchased, 550 volts D. C., 12 pumps.

EMP—60. Last years tonnage 60,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

Penelec No. 5 Mine; Shaft; "E" Seam, 42 to 48 in. thick.
PO—Seward, Pa.; SP—Same; CTY—Indiana; RR—P. R. R.

MS—J. J. Pocar, Smokeless Pa.
S of H—2 elec. locos. Track gage 39 in.
S of M—6 shortwall machs.

PP—Power purchased, 250 volts D. C., 6 pumps.
EMP—60. Daily tonnage 450.
SIZES SHIPT—Run of Mine, Slack, Lump.
NOTE—Formerly operated by the Commonwealth Smokeless Coal Company.

PENFIELD COAL & COKE CO.

General Office, Penfield, Pa.
PR—S. C. Dunham, Clarkburg, W. Va.
TR—V. L. Highland, Clarkburg, W. Va.
GM—L. W. Smith, Penfield, Pa.
PA—J. W. Smith.
SCO—Penfield Supply Co., Buyer, L. W. Smith, Penfield, Pa.
Sales Agent, L. W. Smith, Penfield, Pa.

Penfield No. 1 Mine; Drift; Lower Kittanning Seam, 30 in. thick.
PO—Penfield, Pa.; SP—Same; CTY—Clarified; RR—P. R. R.

SM—W. A. Shea, Penfield, Pa.
S of H—2 elec. loco., track gage 36 in.

S of M—1 electric machs.
PP—2 water tube boilers, total 300 H. P., 1 gen. unit, 250 volts D. C., 2 pumps.

EMP—50. Last years tonnage 30,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar screens.

Coalville No. 2 Mine; Drift; Lower Kittanning Seam, 36 in. thick.
PO—Penfield, Pa.; SP—Weedville, Pa.; CTY—Elk; RR—P. R. R.

MS—H. R. Edwards, Penfield, Pa.
S of H—Mules, track gage 36 in.
S of M—Hand.

PP—1 water tube boiler, 150 H. P., 1 gen. unit, 250 volts D. C.
EMP—40. Last years tonnage 20,000.
SIZES SHIPT—Slack and Lump.
PREP. EQUIPT—Bar Screens.

PENKER COAL MINING CO.

General Office, Continental Bldg., Baltimore, Md.
PR—R. P. Maloney, Cumberland, Md.
TR—C. H. Avers, Baltimore, Md.
GM—R. P. Maloney, Cumberland, Md.
GS—John L. White, Portage, Pa.
PA—John L. White.
EM—Jos. S. Silliman, Altoona, Pa.
SA—C. H. Avers, Baltimore, Md.

Penker Mine No. 1; Drift; Miller or "B" Seam, 44 to 54 in. thick.
PO—Portage, Pa.; SP—Same; CTY—Cambria; RR—P. R. R.

S of H—Mules, 3 elec. hoists and 2 storage battery locos. Track gage 36 in.

S of M—Hand.
PP—Power purchased, Transformer 2200 to 220 volts A. C., M. G. set, 220 volts D. C.

EMP—150. Last years tonnage 80,000.
SIZES SHIPT—Run of Mine.

PENNS-AMERICAN GAS COAL COMPANY

General Office, 810 Magee Bldg., Third Ave., Pittsburgh, Pa.
PR—A. F. Haber, Pittsburgh, Pa.
VP—Geo. M. Warmuth, McKeesport, Pa.
TR—A. F. Schmidt, Pittsburgh, Pa.
GM—A. F. Schmidt, Pittsburgh, Pa.
PA—Geo. H. McCandless, Pittsburgh, Pa.
EM—D. E. Taylor, Freeport, Pa.
SA—West Penn Fuel Co., Inc., Pittsburgh, Pa.

Francis Mine; Drift; Pittsburgh Seam; 144 inches thick.
PO—West Lebanon, Pa.; SP—Same; CTY—Indiana; RR—B. & P.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
EMP—60.
SIZES SHIPT—Run of Mine, Nut, Lump.
PREP. EQUIPT—Bar Screens.
Old information.

PENN CARBON COAL CO.

General Office, 520 Alexander St., Greensburg, Pa.
GM—H. B. Nicely, Greensburg, Pa.
PA—H. B. Nicely, Greensburg, Pa.
EM—W. W. Helman, Greensburg, Pa.

Kemmerer Mine; Drift; Freeport Seam, 48 in. thick.
PO—Greensburg, Pa.; SP—Youngwood, Pa.; CTY—Westmoreland; RR—Penna.

MS—Thos. Coates, Greensburg, Pa.
S of H—Mules and 1 gasoline loco. Track gage, 36 in.

S of M—Hand.
EMP—33. Daily tonnage 165.
SIZES SHIPT—Run of Mine.
Old information.

PENN CENTRAL COAL & COKE CO.

PR—T. F. Barrett, First Nat. Bank Bldg., Pittsburgh, Pa.
TR—C. J. Maloney, Kittanning, Pa.
GS—J. W. Pletcher, Kittanning, Pa.
GE—P. A. Witherspoon, Pittsburgh, Pa.
MM—Jacob Emmick, West Monterey, Pa.
EE—William Llewellyn.
SCO—Penn Central Supply Co., Buyer, J. W. Pletcher, Kittanning, Pa.

Penn Central Mine; Drift; Lower Kittanning Seam; 36 to 42 in. thick.
PO—West Monterey, Pa.; SP—Upper Hillville, Pa.; CTY—Clarion; RR—P. R. R.

S of H—Mules, 1 comp. air, 1 elec. and 1 steam loco. Track gage 36 in.

S of M—1 elec., 1 comp. air, 9 chain breast and 2 shortwall machs.
PP—1 water tube boiler, total 250 H. P., 1 air comp., 1 gen. unit, 250 volts D. C. Purchase power.

EMP—70.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.
(Old Information)

PENN CLARION COAL CO., INC.

General Office, 716 Prudential Bldg., Buffalo, N. Y.
PR—M. G. Vondler, Buffalo, N. Y.
VP—C. A. Royce, Buffalo, N. Y.
TR—H. T. Turner, Buffalo, N. Y.
GM—C. A. Royce, Buffalo, N. Y.
CE—S. J. Taylor, Slippery Rock, Pa.
SA—Frontier Coal Co., Inc., Buffalo, N. Y.

Black Cat Mine; Drift; Lower Kittanning Seam; 48 inches thick.
PO—New Bethelham, Pa.; SP—Same; CTY—Clarion; RR—Penna., Low Grade Div.

S of H—Trolley pole type loco. Track gage 36 inches.

S of M—2 mining machs.
PP—1 100 K. W. and 1 35 K. W. gen. units, 250 volts D. C., 3 pumps.

EMP—50. Daily tonnage 200.
SIZES SHIPT—Run of Mine, Slack, Lump.

PENN FUEL CO.

General Office, Glen Campbell, Pa.
Penna. No. 1 Mine.
PO—Glen Campbell, Pa.; CTY—Indiana; RR—Penna. and N. Y. C.
No report.

PENN-MARY COAL CO.

Now Bethlehem Min's Corporation.

PENN-PITT COAL & COKE COMPANY

PR—J. M. Crawford, Point Marion, Pa.
TR—A. M. Sterling, Point Marion, Pa.
GM—J. B. Moore, Point Marion, Pa.
GS—J. M. Crawford, Point Marion, Pa.
PA—A. M. Sterling, Point Marion, Pa.
EM—Fayette Eng. Co., Point Marion, Pa.

Margaret Mine; Drift; Pgh. Seam, 92 in. thick.
PO—Point Marion, Pa.; SP—West Point Marion; CTY—Fayette; RR—M. & Mon. River.

SIZES SHIPT—Run of Mine, Slack, Lump.
(Old Information)

PENN SMOKELESS COAL COMPANY

General Office, Union Bank Bldg., Pittsburgh, Pa.
PR—Thurston Wright, Union Bank Bldg., Pittsburgh, Pa.
TR—John Gibson, Jr., Union Bank Bldg., Pittsburgh, Pa.
GM—John Gibson, Jr., Union Bank Bldg., Pittsburgh, Pa.
PA—G. O. W. Smith, Pittsburgh, Pa.
E—B. F. Baldwin, Jerome, Pa.
EM—S. E. Dickey & Co., Johnstown, Pa.
EE—Thos. Hamilton, Johnstown, Pa.

Hyasota No. 1 Mine; Slope; "C" Prime or Upper Kittanning Seam, 53 in. thick.

PO—Jerome, Pa.; SP—Same; CTY—Somerset; RR—B. & O., Jerome Br.
MS—B. F. Baldwin, Jerome, Pa.
S of H—4 trolley pole type locos and rope. Track gage, 42 in.
S of M—5 shortwall machs.
PP—Purchase power, transformer 22,000 to 2200 A. C., M. G. sets, 250 D. C., 2 pumps.
EMP—158. Last fiscal year output, 211,200 tons.
SIZES SHIPT—Run of Mine.

PENNIE-BRYNER COAL CO.

General Office, Connellsville, Pa.

Penbry Mine.

PO—Indian Creek, Pa.; CTY—Fayette; RR—B. & O.
No report.

PENNINGTON, H. H. COMPANY, THE

General Office, Glen Campbell, Pa.
PR—H. H. Pennington, Glen Campbell, Pa.
TR—W. H. McQuilkin, Glen Campbell, Pa.
GM—H. H. Pennington, Glen Campbell, Pa.
SA—W. H. McQuilkin, Glen Campbell, Pa.

Pennington Nos. 1, 2 and 3 Mines; Drift; C Prime Seam, 60 inches thick.

PO—Glen Campbell, Pa.; SP—Same; CTY—Indiana; RR—Penna.

S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—15. Daily tonnage 75.
SIZES SHIPT—Run of Mine.

PENNSVILLE COAL COMPANY

General Office, Connellsville, Pa.
PR—E. E. Markell, Connellsville, Pa.
TR—Chas. Detwiler, Connellsville, Pa.
GM—J. L. Schick, Connellsville, Pa.
GS—Jas. Laws, Connellsville, Pa.
PA—J. L. Schick, Connellsville, Pa.
EM—J. E. Hohnschell, Connellsville, Pa.

Detwiler & Pennsville Mine; Drift; Connellsville Seam, 108 inches thick.
PO—Connellsville, Pa.; SP—Same; CTY—Fayette; RR—Penna.

S of H—Mules and gasoline locos. Track gage 44 inches.

S of M—Hand.
SIZES SHIPT—Run of Mine.

PENNSY COAL COMPANY.

General Office, Franklin, Pa.
PR—Geo. C. Miller, Franklin, Pa.
VP—B. Park, Franklin, Pa.
TR—C. F. Heath, Franklin, Pa.
GM—Geo. C. Miller, Franklin, Pa.
GS—J. T. Holey, Clarion, Pa.
EM—H. T. Kissell, Clarion, Pa.
EE—W. E. Davis, Summerville, Pa.
SCO—Peoples Supply Co., Buyer, Geo. A. Getty, Summerville, Pa.
SA—Prudential Coal Sales Co., Buffalo, N. Y.

NOTE—Rogers No. 3 Mine now operated by Hailey & Heath Coal Co.

Carrier No. 5 Mine; Drift; Lower Kittanning Seam, 36 in. thick.

PO—Summerville, Pa.; SP—Carrier, Pa.; CTY—Jefferson; RR—L. E. F. & C.

MS—Richard Robbins, Summerville, Pa.
S of H—1 trolley pole type loco. Track gage, 36 in.

S of M—Hand.
PP—4 fire tube boilers, 2 pumps.
EMP—8. Last fiscal year output, 11,572 tons.

SIZES SHIPT—Run of Mine.
Hilltop No. 6 Mine; Drift; Lower Kittanning Seam, 30 in. thick.

PO—Summerville, Pa.; SP—Carrier, Pa.; CTY—Jefferson; RR—L. E. F. & C.

MS—G. R. Miller, Summerville, Pa.
S of H—2 trolley pole type locos. Track gage, 36 in.

S of M—3 electric punchers and 3 shortwall machs.
PP—M. G. sets, 250 volts D. C., 1 pump.

EMP—80. Last fiscal year output, 52,579 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

Reed No. 7 Mine; Drift; Lower Kittanning Seam, 36 in. thick.
PO—Summerville, Pa.; SP—Carrier, Pa.; CTY—Jefferson; RR—L. E. F. & C.

MS—Robert Dalrymple, Summerville, Pa.
S of H—3 trolley pole type locos. Track gage, 36 in.

S of M—3 shortwall machs.
PP—M. G. sets, 250 volts D. C., 5 pumps.
EMP—80. Last fiscal year output, 55,037 tons.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

Dayton No. 10 Mine; Drift; Brookville Seam, 53 in. thick.
PO—Summerville, Pa.; SP—Carrier, Pa.; CTY—Jefferson; RR—L. E. F. & C.

MS—John McClosky, Summerville, Pa.
S of H—Mules and 3 trolley pole type locos. Track gage, 36 in.

S of M—6 shortwall machs.
PP—M. G. sets, 250 volts D. C., 6 pumps.

EMP—110. Last fiscal year output, 95,489 tons.
SIZES SHIPT—Run of Mine.

Alsace No. 12 Mine; Drift; Lower Kittanning Seam, 42 in. thick.

PO—Sligo, Pa.; SP—Same; CTY—Clarion; RR—L. E. F. & C.

MS—Wm. Hurley, R. D., Sligo, Pa.
S of H—Mules and 1 trolley pole type locos. Track gage, 36 in.

S of M—3 shortwall machs.
PP—2 fire tube boilers, 300 H. P., 1 150 K. W. gen. unit, 250 volts D. C., 3 pumps.

EMP—90. Last fiscal year output, 5,413 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

PENNSY GAS COAL COMPANY
General Office, 332 Frick Bldg., Pittsburgh, Pa.

PR—F. Wilbert, Sr., Pittsburgh, Pa.
VP—J. W. Ely, Mercer, Pa.
TR—N. L. Wymard, Pittsburgh, Pa.

GM—J. W. Ely, Mercer, Pa.
GS—M. F. Crawford, Volant, Pa.
PA—James Wallace, Volant, Pa.
EM—M. V. McElmonds, Volant, Pa.
EE—Ray Brocklehurst, Volant, Pa.

SA—Penny Gas Coal Co.
Slope; Brookville Seam, 48 inches thick.
PO—Volant, Pa.; SP—Leesburg, Pa.; CTY—Mercer and Lawrence; RR—Penna.

S of H—Mules, rope. Track gage 36 in.
S of M—Hand, shortwall machs.

PP—3 fire tube boilers, 225 H. P., gen. units, 250 volts D. C.

EMP—100. Daily tonnage 600.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Bar Screens.

PENNSYLVANIA GOAL & COKE CORP.
General Office, 911 Whitehall Bldg., New York, N. Y.

PR—T. H. Watkins, New York City.
VP—C. L. Watkins, Cresson, Pa.
TR—A. G. Edwards, New York City.
R. E. & Ins. Supt.—S. W. Clark, Cresson, Pa.

PA—E. W. Snyder, Cresson, Pa.
EM—H. H. Hasler, Cresson, Pa.
EE—J. F. MacWilliams, Cresson, Pa.
SA—J. W. Seales, 911 Whitehall Bldg., New York, N. Y.

Additional Information on Pages 743-745
Penna. No. 1 Mine; Drift; Lower Kittanning Seam, 42 to 50 in. thick.

PO—Cassandria, Pa.; SP—Same; CTY—Cambria; RR—P. R. R.

MS—R. D. Mainwaring, Cresson, Pa.
S of H—Mules, 1 trolley pole type and 1 storage battery locos. Track gage, 36 in.

S of M—Hand.
PP—Power purchased, transformer 6600 to 2300 volts A. C., M. G. set, 250 volts D. C., 1 pump.

EMP—52. Last years tonnage 38,716.
SIZES SHIPT—Run of Mine, Lump.

Penna. No. 3 Mine; Drift; Lower Kittanning Seam, 41 to 44 in. thick.

PO—Ehrenfeld, Pa.; SP—Same; CTY—Cambria; RR—Penna.

MS—S. W. Blakslee, Ehrenfeld, Pa.
S of H—Mules, 16 trolley pole type and 5 storage battery locos. Track gage, 36 in.

S of M—9 shortwall machs.
PP—Power purchased, transformer 4500-6600 to 2300 volts A. C., M. G. set, 250 volts D. C., 9 pumps.

EMP—309. Last years tonnage 219,592.
SIZES SHIPT—Run of Mine, Lump.

Penna. No. 7 Mine; Drift; Upper Freeport Seam, 52 in. thick.

PO—Amsbury, Pa.; SP—Same; CTY—Cambria; RR—P. R. R.

MS—R. D. Mainwaring, Cresson, Pa.
S of H—Mules, 9 trolley pole and 4 storage battery loco. Track gage 36 in.

S of M—10 shortwall machs.
PP—Power purchased, transformer 6600 to 2300 volts A. C., M. G. set, 250 volts D. C., 4 pumps.

EMP—218. Last years tonnage 156,470.
SIZES SHIPT—Run of Mine, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

Penna. No. 8 Mine; Drift; Lower Freeport Seam, 44 in. thick.
PO—Ehrenfeld, Pa.; SP—Same; CTY—Cambria; RR—Penna.

MS—S. W. Blakslee, Ehrenfeld, Pa.
S of H—5 trolley pole type locos. Track gage 36 in.

S of M—5 shortwall machs.
PP—Power purchased, transformer 6600 to 2300 volts A. C., M. G. set, 250 volts D. C.

(Continued on Next Page)

Pennsylvania Coal & Coke Corp.—Cont.

EMP—130. Last years tonnage 73,460.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Pickling Tables.

Penna. No. 9 Mine; Shaft; Upper Freeport Seam, 24 to 49 in. thick.
PO—Cresson, Pa. SP—Same. CTY—Cambria. RR—P. R. R.
MS—R. D. Malnwarding, Cresson, Pa.
S of H—Mules, 11 trolley pole type and 2 storage battery locos. Track gage 42 in.
S of M—15 shortwall machs.
PP—Power purchased, transformer 45,000 to 2300 volts A. C., M. G. set, 250 volts D. C., 6 fire tube boilers, 900 H. P., 12 pumps.
EMP—198. Last years tonnage 134,715.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

Penna. No. 10 Mine; Slope; Upper Freeport Seam 42 to 51 in. thick.
PO—Gallitzin, Pa. SP—Same. CTY—Cambria. RR—P. R. R.
MS—R. D. Malnwarding, Cresson, Pa.
S of H—Mules and 12 trolley pole type locos. Track gage, 36 in.
S of M—17 shortwall machs.
PP—Power purchased, transformer 45,000-2300 to 2300 volts A. C., M. G. set, 7 pumps.
EMP—200. Last years tonnage 189,200.
SIZES SHIPT—Run of Mine, Slack, Lump.

Penna. No. 11 Mine; Drift; Lower Freeport Seam, 51 in. thick.
PO—Hastings, Pa. SP—Same. CTY—Cambria. RR—P. R. R.
MS—J. R. Nicholson, Marsteller, Pa.
S of H—Mules and 4 trolley pole type locos. Track gage, 36 in.
PP—Power purchased, transformer 6600 to 2300 volts A. C., M. G. set, 250 volts D. C., 2 pumps.
EMP—59.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Pickling Tables.

Penna. No. 11-E Mine; Drift; Upper Freeport Seam, 30 in. thick.
PO—Hastings, Pa. SP—Same. CTY—Cambria. RR—Penna.
MS—J. R. Nicholson, Marsteller, Pa.
S of H—Mules and 1 trolley pole type locos. Track gage, 36 in.
S of M—1 shortwall mach.
PP—Power purchased, transformer 6600 to 2300 volts A. C., M. G. set, 250 volts D. C.
EMP—7.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Pickling Tables.

Penna. No. 13 Mine; Slope; Lower Kittanning Seam, 48 in. thick.
PO—Hastings, Pa. SP—Same. CTY—Cambria. RR—Penna.
MS—J. R. Nicholson, Marsteller, Pa.
S of H—Bap. and 4 trolley pole type locos. Track gage 36 in.
S of M—6 shortwall machs.
PP—Power purchased, transformer 6600 to 2300 volts A. C., M. G. set, 250 volts D. C., 9 pumps.
EMP—132. Last years tonnage (Nos. 11, 11-E, 13), 128,352.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Pickling Tables.

Penna. No. 14 Mine; Drift; Lower Kittanning Seam, 38 to 59 in. thick.
PO—Nanty-Glo, Pa. SP—Same. CTY—Cambria. RR—Cambria & Indiana (N. Y. C.).
MS—E. G. Laport, Nanty-Glo, Pa.
S of H—Mules, 16 trolley pole type and 3 storage battery locos. Track gage, 36 in.
S of M—11 shortwall machs.
PP—Power purchased, transformer 2300 to 2300 volts A. C., M. G. set, 250 volts D. C., 16 pumps.
EMP—350. Last years tonnage 312,426.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Pickling Tables.

Penna. No. 15 Mine; Slope; Lower Kittanning Seam, 41 in. thick.
PO—Reaverdale, Pa. SP—Same. CTY—Cambria. RR—P. R. R.
MS—S. W. Blakely, Ehrenfeld, Pa.
S of M—3 shortwall machs.
PP—Power purchased, transformer 6600 to 2300 volts A. C., M. G. set, 250 volts D. C., 10 pumps.
EMP—120. Last years tonnage 78,546.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Pickling Tables.

Penna. No. 2 Mine; Slope; Upper Freeport Seam, 42 to 51 in. thick.
PO—Bennington, Pa. SP—Same. CTY—Blair. RR—Penna.

MS—R. D. Malnwarding, Cresson, Pa.
S of H—Mules and rope. Track gage, 36 in.
S of M—Hand.
SIZES SHIPT—Run of Mine.

Moss Creek No. 21 Mine; Drift; Lower Freeport Seam, 43 in. thick.
PO—Marsteller, Pa. SP—Spangler, Pa. CTY—Cambria. RR—Penna. and N. Y. C.
MS—J. R. Nicholson, Spangler, Pa.
S of H—3 trolley pole type locos. Track gage 36 in.
S of M—8 shortwall machs.
PP—Power purchased, transformer 45,000-2300 to 2300 volts A. C., M. G. sets, 2 200 K. W. Crocker-Wheeler, 250 volts D. C., 2 water tube boilers, 600 H. P., 4 pumps.
EMP—102. Last years tonnage (Nos. 21 and 22), 202,017.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Pickling Tables.

Penna. No. 22 Mine; Drift; Lower Freeport Seam, 43 in. thick.
PO—Marsteller, Pa. SP—Spangler, Pa. CTY—Cambria. RR—Penna. and N. Y. C.
MS—J. R. Nicholson, Spangler, Pa.
S of H—7 trolley pole type locos. Track gage, 36 in.
S of M—5 shortwall machs.
PP—Power purchased, transformer 6600-2300 to 2300 volts A. C., M. G. sets, 2 200 K. W. Crocker-Wheeler, 250 volts D. C., 2 water tube boilers, 600 H. P., 13 pumps.
EMP—144. Daily tonnage 600.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Pickling Tables.

Penna. No. 55 Mine; Slope; Lower Freeport Seam.
PO—Aleria, Pa. SP—Same. CTY—Indiana. RR—N. Y. C.
MS—J. R. Nicholson, Spangler, Pa.
S of H—Mules, rope, 2 trolley pole type and 2 storage battery locos. Track gage, 36 in.
S of M—4 comp. air punchers and 3 shortwall machs.
PP—Power purchased, transformer 6600 to 2300 volts A. C., M. G. set, 250 volts D. C., 6 pumps.
EMP—100. Last years tonnage 91,781.
SIZES SHIPT—Run of Mine.

Penna. No. 27 Mine; Drift; Lower Freeport Seam, 46 in. thick.
PO—Patton, Pa. SP—Same. CTY—Cambria. RR—P. R. R., N. Y. C.
MS—A. O. Sommerville, Patton, Pa.
S of H—Mules, rope and 2 trolley pole type and 1 storage battery loco. Track gage 36 in.
S of M—7 comp. air punchers, 2 shortwall machs.
PP—6 fire tube boilers, 500 H. P., 1 100 K. W. gen. unit, 250 volts D. C., 7 pumps.
EMP—78. Last years tonnage 47,679.
SIZES SHIPT—Run of Mine.

Penna. No. 28 Mine; Drift; Upper Kittanning Seam.
PO—Patton, Pa. SP—Same. CTY—Cambria. RR—P. R. R., N. Y. C.
MS—A. O. Sommerville, Patton, Pa.
S of H—Bap. and 8 trolley pole type and storage battery locos. Track gage 42 in.
S of M—6 shortwall machs.
PP—Power purchased, transformer 6600 to 2300 volts A. C., M. G. sets, 1 150 K. W. and 1 175 K. W., 250 volts D. C., 5 fire tube boilers, 775 H. P., 17 pumps.
EMP—125. Last years tonnage 160,055.
SIZES SHIPT—Run of Mine.

Penna. No. 30 Mine; Drift; Upper Kittanning Seam, 48 in. thick.
PO—Patton, Pa. SP—Same. CTY—Cambria. RR—P. R. R., N. Y. C.
MS—A. O. Sommerville, Patton, Pa.
S of H—Mules and 3 trolley pole type locos. Track gage 36 in.
S of M—2 shortwall machs.
PP—2 fire tube boilers, 200 H. P., M. G. set, 2 100 K. W. Goodman gen. units, 250 volts D. C., 4 pumps.
EMP—29. Last years tonnage 5,210.
SIZES SHIPT—Run of Mine.

Penna. No. 31 Mine; Drift; Lower Kittanning Seam, 48 in. thick.
PO—Patton, Pa. SP—Same. CTY—Cambria. RR—Penna. N. Y. C.
MS—A. O. Sommerville, Patton, Pa.
S of H—Mules and 3 trolley pole type locos. Track gage 36 in.
S of M—2 shortwall machs.
PP—2 fire tube boilers, 200 H. P., 2 100 K. W. Goodman gen. units, 250 volts D. C.
EMP—70. Last years tonnage 30,559.
SIZES SHIPT—Run of Mine.

Penna. Nos. 33 and 37 Mine; Drift; Upper Kittanning Seam.
PO—Patton, Pa. SP—Same. CTY—Cambria. RR—P. R. R., N. Y. C.
MS—A. O. Sommerville, Patton, Pa.
S of H—15 trolley pole type and 2 storage battery locos. Track gage 36 in.
S of M—7 shortwall machs.
PP—7 fire tube boilers, 1025 H. P., 200-185 K. W. gen. units, 250 volts D. C., 8 pumps.
EMP—190. Last years tonnage 255,291.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Pickling Tables and Washery.

Penna. No. 50 Mine; Drift; Lower Freeport Seam, 47 in. thick.
PO—Patton, Pa. SP—Same. CTY—Cambria. RR—Penna. N. Y. C.
MS—A. O. Sommerville, Patton, Pa.
S of H—Mules and 1 trolley pole type loco. Track gage 36 in.
S of M—1 shortwall mach.
EMP—75. Last years tonnage 48,181.
SIZES SHIPT—Run of Mine.

Penna. No. 40 Mine; Drift; Upper Freeport Seam, 50 in. thick.
PO—Arcadia, Pa. SP—Same. CTY—Indiana. RR—N. Y. C.
MS—J. E. Greene, Arcadia, Pa.
S of H—Mules and 1 gasoline loco. S of M—Hand.
EMP—46. Last years tonnage 45,329.
SIZES SHIPT—Run of Mine.

Penna. No. 41 Mine; Drift; Upper Freeport Seam, 45 in. thick.
PO—Arcadia, Pa. SP—Same. CTY—Indiana. RR—N. Y. C.
MS—J. E. Greene, Arcadia, Pa.
S of H—3 trolley pole type and 2 storage battery locos. Track gage 36 in.
S of M—3 shortwall machs.
PP—Power purchased, transformer 2300 volts A. C., M. G. set, 250 volts D. C., 4 pumps.
EMP—60. Last years tonnage 50,968.
SIZES SHIPT—Run of Mine.

Penna. No. 42 Mine; Drift; Upper Freeport Seam, 36 in. thick.
PO—Arcadia, Pa. SP—Same. CTY—Indiana. RR—N. Y. C.
MS—J. E. Greene, Arcadia, Pa.
S of H—3 trolley pole type and 2 storage battery locos. Track gage, 36 inches.
S of M—4 shortwall machs.
PP—Power purchased, transformer 2300 volts A. C., M. G. set, 250 volts D. C., 8 pumps.
EMP—108. Last years tonnage 45,656.
SIZES SHIPT—Run of Mine.

Penna. No. 43 Mine; Drift; Upper Freeport Seam, 48 in. thick.
PO—Arcadia, Pa. SP—Same. CTY—Indiana. RR—N. Y. C.
MS—J. E. Greene, Arcadia, Pa.
S of H—Mules and 1 gasoline loco. Track gage, 36 in. thick.
S of M—Hand.
PP—3 pumps.
EMP—44. Last years tonnage 31,941.
SIZES SHIPT—Run of Mine.

Penna. No. 44 Mine; Drift; Upper Freeport Seam, 48 in. thick.
PO—Arcadia, Pa. SP—Same. CTY—Indiana. RR—N. Y. C.
MS—J. E. Greene, Arcadia, Pa.
S of H—Mules and 1 gasoline loco. Track gage 36 in.
S of M—Hand.
PP—2 pumps.
EMP—21. Last years tonnage 14,832.
SIZES SHIPT—Run of Mine.

Winburne No. 46 Mine; Drift; Lower Kittanning Seam, 42 inches thick.
PO—Winburne, Pa. SP—Same. CTY—Clearfield. RR—N. Y. C.
MS—A. O. Sommerville, Patton, Pa.
S of H—7 trolley pole type and 2 storage battery locos. Track gage 34 in.
S of M—8 shortwall machs.
PP—Power purchased, transformer 2300 volts A. C., M. G. set, 250 volts D. C., 11 pumps.
EMP—289. Last years tonnage 233,921.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Pickling Tables.

Penna. No. 39 Mine; Drift; Upper Kittanning Seam.
PO—Patton, Pa. SP—Same. CTY—Cambria. RR—P. R. R., N. Y. C.
MS—A. O. Sommerville, Patton, Pa.
S of H—Bap. 6 trolley pole type and 2 storage battery locos. Track gage 36 in.
S of M—5 shortwall machs.
PP—Power purchased, transformer 6600 to 2300 volts A. C., M. G. set, 250 volts D. C., 13 pumps.
EMP—143. Last years tonnage 110,555.
SIZES SHIPT—Run of Mine.

Penna. No. 47 Mine; Drift; Upper Kittanning Seam.
PO—Winburne, Pa. SP—Same. CTY—Clearfield. RR—N. Y. C.
MS—A. O. Sommerville, Patton, Pa.
S of H—Mules and 3 trolley pole type locos. Track gage 36 in.
S of M—Hand.
PP—Power purchased, transformer 2300 volts A. C., M. G. set, 250 volts D. C., 8 pumps.
EMP—75. Last years tonnage 52,662.
SIZES SHIPT—Run of Mine.

Penna. No. 29 Mine; Slope; Upper Kittanning Seam, 50 in. thick.
PO—Patton, Pa. SP—Same. CTY—Cambria. RR—Penna. N. Y. C.
MS—A. O. Sommerville, Patton, Pa.
S of H—Mules and rope. 1 storage battery loco. Track gage 36 in.
S of M—Hand.
PP—6 fire tube boiler, 500 H. P., 1 100 K. W. Goodman gen. unit, 250 volts D. C., 1 pump.
EMP—60. Last years tonnage 66,950.
SIZES SHIPT—Run of Mine.

Penna. No. 35 Mine; Drift; Lower Freeport Seam, 52 in. thick.
PO—Patton, Pa. SP—Same. CTY—Cambria. RR—Penna. N. Y. C.
MS—A. O. Sommerville, Patton, Pa.
S of H—Mules, 2 trolley pole type and 3 gasoline locos. Track gage 36 in.
S of M—2 shortwall machs.
EMP—50. Last years tonnage 31,150.
SIZES SHIPT—Run of Mine.

Penna. No. 28-E Mine; Drift; Upper Freeport Seam.
PO—Patton, Pa. SP—Same. CTY—Cambria. RR—P. R. R., N. Y. C.
MS—A. O. Sommerville, Patton, Pa.
S of M—Hand.
PP—Power purchased, transformer, 6600 to 2300 volts A. C., M. G. sets, 1—150 K. W. and 1—175 K. W., 250 volts D. C., 5 fire tube boilers, 775 H. P., 1 pump.
EMP—5.
SIZES SHIPT—Run of Mine.

PENNSYLVANIA COLLIERIES, INC.
General Office, 500 Fifth Ave., New York, N. Y.
PR—R. M. Turner, New York, N. Y.
VP—(Operating)—R. M. Fast, Johnstown, Pa.
VP—(Sales)—H. M. Stagg, New York, N. Y.
SECTY TREAS.—M. A. Pappert, New York, N. Y.
GM—R. M. Fast, Johnstown, Pa.
GS—G. M. Thorn, Johnstown, Pa.
PA—G. M. Thorn, Johnstown, Pa.
CE—Horne & Jones Engineering Co., Indiana, Pa.
SA—H. M. Stagg, 500 Fifth Ave., New York, N. Y., and H. P. Torrey, Perry Bldg., Philadelphia, Pa.
Additional Information on Pages 746, 747.

Cassandra Mine; Drift; "E" Seam, 44 in. thick.
PO—Cassandra, Pa. SP—Same. CTY—Cambria. RR—Penna.
MS—Wm. Francy, Cassandra, Pa.
S of H—Mules and rope. Track gage 36 in.
S of M—Hand.
PP—1 fire tube boiler 75 H. P.
SIZES SHIPT—Run of Mine.

Lilly Mine; Drift; "E" Seam, 48 in. thick.
PO—Lilly, Pa. SP—Same. CTY—Cambria. RR—Penna.
MS—Wm. Francy, Cassandra, Pa.
S of H—1 trolley pole type loco. Track gage 36 inches.
S of M—1 shortwall mach.
PP—Power purchased, M. G. Sets 250 volts D. C.
SIZES SHIPT—Run of Mine.

Meroo No. 2 Mine; "E" Seam, 60 to 72 in. thick.
PO—Indiana, Pa. SP—Homer City, Pa. CTY—Indiana. RR—P. R. R., Yellow Creek Br.
MS—J. C. Davis, Indiana, Pa.
SM—C. R. Steek, Indiana, Pa.
S of H—4 trolley pole type locos. Track gage, 42 in.
S of M—1 electric puncher and 6 shortwall machs.
PP—Power purchased, transformer 2200 to 220 volts, motor gen. sets 250 volts D. C., 3 pumps.
SIZES SHIPT—Run of Mine.

Pretoria Nos. 1 and 2
Lower Kittanning Seam.
Upper Kittanning Seam.
PO—Hels, Pa. SP—Same. CTY—Penna.
MS—A. O. Sommerville, Patton, Pa.
S of H—1 trolley pole type locos. Track gage 36 in.
S of M—1 shortwall machs.
PP—Power purchased, transformer 2200 to 220-440 volts, motor gen. sets 250 volts D. C., 4 pumps.
SIZES SHIPT—Run of Mine.

PINE VALLEY COAL CO.

General Office, Hastings, Pa.
 PR—V. T. Abel, Hastings, Pa.
 TR—V. T. Abel, Hastings, Pa.
 GM—V. T. Abel, Hastings, Pa.
 PA—V. T. Abel, Hastings, Pa.
 EM—J. J. Pfeister, Hastings, Pa.
 SA—J. E. Stewart, Cresson, Pa.

Pine Valley No. 1 Mine; Drift; "B" or Miller Seam, 42 in. thick.
 PO—Hastings, Pa. SP—Same. CTY—Cambria. RR—Penna. Hastings of C. & C.
 MS—J. M. Dietrick, Hastings, Pa.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 EMP—30. Last fiscal year output, 20,754 tons.
 SIZES SHIPT—Run of Mine.

PINEY CREEK MINE COMPANY

PR—R. M. Williams, New Castle, Pa.
 VP—Geo. Brown, New Castle, Pa.
 TR—C. W. Nolan, New Castle, Pa.
 GM—R. M. Williams, New Castle, Pa.
 EM—R. M. Williams, New Castle, Pa.

Piney Creek Mine; Slope; Clarion Seam, 66 in. thick.
 PO—Madison, Pa.; SP—Same. CTY—Clarion; RR—N.Y.C.
 MS—J. Sweet, Madison, Pa.
 S of H—Mules. Track gage 20 in.
 S of M—Hand.
 EMP—15. Daily tonnage 150.
 SIZES SHIPT—Run of Mine.
 old information.

PINEY RUN MINING COMPANY

General Office, First National Bank Bldg., Johnstown, Pa.
 PR—Geo. W. Griffith, Johnstown, Pa.
 VP—W. W. Davis, Johnstown, Pa.
 TR—Geo. W. Reese, Johnstown, Pa.
 GS—J. A. Price, Johnstown, Pa.
 EM—J. A. Price, Johnstown, Pa.
 EE—Chas. L. Worley, Johnstown, Pa.

Morrellville No. 1 Mine; Drift; "B" or Miller Seam, 42 in. thick.
 PO—Johnstown, Pa.; SP—Same; CTY—Cambria; RR—Penna.
 S of H—Mules, main and tail rope and 3 trolley pole type locos. Track gage 42 in.
 S of M—3 shortwall mchrs.
 PP—Power purchased, 440 volts A. C., M. G. set, 200 K. W., 550 volts D. C., 1 pump.
 EMP—85. Daily tonnage 400.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.
 Note—Formerly operated by the Morrellville Coal Mining Co.

PIPER, M. K., COAL CO.

General Office, Lilly, Pa.
 PR—M. K. Piper, Lilly, Pa.
 TR—W. L. Piper, Lilly, Pa.
 GM—W. L. Piper, Lilly, Pa.
 GS—F. E. Phillippi, Kregar, Pa.
 CE—Jos. S. Silyman & Co., Altoona, Pa.

Piper No. 1 Mine; Drift; Lower Freeport Seam, 52 inches thick.
 PO—Kregar, Pa.; SP—Jones Mill, Pa.; CTY—Westmoreland; RR—B. & O.
 S of H—Mules and rope. Track gage, 42 in.
 S of M—Hand.
 EMP—15. Last years tonnage 6,532.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

PIPER, W. H. & CO.

General Office, Commercial Trust Bldg., Philadelphia, Pa.
 GM—W. D. Piper, Philadelphia, Pa.
 PA—Joseph Appleyard, Lilly, Pa.
 EM—Jos. S. Silyman & Co., Altoona, Pa.

Sonnan No. 2 Mine; Slope; "B" or Miller Seam, 34 in. thick.
 PO—Lilly, Pa. SP—Same. CTY—Cambria. RR—P. R. R. Lilly Branch.
 MS—Joseph Appleyard, Lilly, Pa.
 S of H—Mules and rope. Track gage, 42 in.
 S of M—Hand.
 PP—5 water tube boilers, 750 H. P., 1—150 H. P. Horizontal Tubular boilers, 1—100 K. W., 1—200 K. W. generator, 230 volts D. C., 15 pumps.
 EMP—72. Last years tonnage 48,330.
 SIZES SHIPT—Run of Mine.

PITCAIRN GAS COAL CO.

General Office, Irwin, Pa.
 PR—C. H. Bolton, Irwin, Pa.
 VP—W. O. Buchanan, Irwin, Pa.
 TR—F. L. Bolton, East McKeesport, Pa.
 GM—F. L. Bolton, East McKeesport, Pa.
 GS—F. L. Bolton, East McKeesport, Pa.
 PA—F. L. Bolton, East McKeesport, Pa.
 EM—T. P. Herron, Irwin, Pa.
 SA—F. L. Bolton, East McKeesport, Pa. and W. O. Buchanan, Irwin, Pa.

"The Wallace" Mine; Drift; Pittsburgh Seam, 70 in. thick.
 PO—Pittcairn, Pa.; SP—Same; CTY—Allegheny; RR—Penna.

S of H—Mules.
 S of M—Hand.
 EMP—20. Last years tonnage 21,454.
 SIZES SHIPT—Run of Mine.

PITT CAS COAL CO.

Now the Trumbull Coal Co.

PITTSBURGH & ALLEGHENY COAL CO.

Now Excelsior Coal Company, Inc.

PITTSBURGH & CLARION COAL CO.

General Office, Kittanning, Pa.
 PR—M. M. Hart, 51 Chambers St., New York, N. Y.
 GM—Charles Rothbard, Kittanning, Pa.

Phillipston Mine; Drift; Lower Kittanning Seam, 48 inches thick.
 PO—East Brady, Pa.; SP—Same; CTY—Clarion; RR—Penna. Allegheny Div.
 MS—Dan Crowe, East Brady, Pa.
 S of H—Mules. Track gage 36 inches.
 S of M—2 comp. air punchers.
 PP—1 200 H. P. fire tube boiler.
 Daily output, 150 tons.
 SIZES SHIPT—Run of Mine.
 old information.

PITTSBURGH & EASTERN COAL CO.

General Office, Leader News Bldg., Cleveland, O.

PR—M. Andrews, Cleveland, O.
 VP—Wm. Collins, Cleveland, O.
 VP—M. Gallagher, Cleveland, O.
 TR—S. W. Folsom, Cleveland, O.
 GM—Michael Gallagher, Cleveland, O.
 GS—John Whalen, Jr., Dillonvale, O.
 PA—C. K. Sheridan, Cleveland, O.
 CE—R. S. Waker, Cleveland, O.
 SCO—Cherry Valley Supply Co., Cherry Valley, Pa.
 SA—M. A. Hanna & Co., Cleveland, O.

Mines Nos. 1, 2 and 3; Shaft; Pittsburgh Seam, 5 ft. thick.
 PO—Cherry Valley, Pa.; SP—Same; CTY—Washington; RR—P. C. C. & St. L.
 MS—Robt. McKinney, Cherry Valley, Pa.
 S of H—Mules and trolley pole type locos. Track gage, 42 in.
 S of M—Chain breast mchrs.
 PP—Generate power.
 Last fiscal year output, 378,500 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables.

PITTSBURGH & ERIE COAL COMPANY.

General Office, Erie, Pa.
 PR—G. B. Taylor, Erie, Pa.
 TR—A. G. Scheldenhelm, Erie, Pa.
 GS—T. F. Whalen, Erie, Pa.
 EM—Stanley Gleason, Burgettstown, Pa.
 SCO—Erie Supply Co., Erie, Pa. Buyer, W. J. Whalen, Burgettstown, Pa.

Sumner No. 2 Mine; Slope; Pittsburgh Seam, 84 to 108 in. thick.
 PO—Brazzill, Pa.; SP—Same; CTY—Fayette; RR—P. V. & C. Redstone Br.
 MS—Thomas Hunt, Brazzill, Pa.
 SM—Anthony Wilson, Brazzill, Pa.
 S of H—Rope, mules and 4 elec. locos. Track gage 42 in.
 S of M—7 chain breast type and 2 shortwall mchrs.
 PP—Power purchased, Transformer 22,000 to 2,200 volts A. C., M. G. sets, 250 volts D. C.
 EMP—250. Last fiscal year output, 306,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Bar Screens.

Erie No. 1 Mine; Drift; Pittsburgh Seam, 48 to 72 in. thick.
 PO—Burgettstown, Pa.; SP—Same; CTY—Washington; RR—P. C. C. & St. L. Burgettstown Br.
 MS—M. P. Lilly, Burgettstown, Pa.
 S of H—Rope and 9 elec. locos. Track gage 42 in.
 S of M—10 chain breast type and 6 shortwall mchrs.
 PP—Power purchased, Transformer 22,000 to 2,200 volts A. C., M. G. sets, 250 volts D. C.
 EMP—235. Last fiscal year output, 230,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
 PREP. EQUIPT—Picking Table.

PITTSBURGH & SOUTHWESTERN COAL CO.

General Office, Greensburg, Pa.
 PR—Midge M. Steel, Greensburg, Pa.
 VP—Jos. W. Steel, Greensburg, Pa.
 TR—Jos. J. Knappenberger, Greensburg, Pa.

GM—A. M. Gardner, Avella, Pa.
 GS—A. M. Gardner, Avella, Pa.
 PA—A. M. Gardner, Avella, Pa.
 EM—Harrap & Hopkins, Pittsburgh, Pa.
 EF—S. L. Humphrey, Avella, Pa.
 Sales Mgr.—A. M. Gardner, Avella, Pa.
 No. 1 Mine; Drift; Pittsburgh Seam, 48 to 72 in. thick.
 PO—Avella, Pa. SP—Same. CTY—Washington; RR—Pittsburgh and W. Va.

MS—J. E. Campbell, Avella, Pa.
 S of H—Mules, Rope and 1 elec. loco. Track gage 40 in.
 S of M—5 elec. mchrs.
 PP—3 return tubular boilers, total 150 H. P., 1 175 K. W. gen. unit, 250 volts H. P., 1 air comp., 1 pump.
 EMP—150. Last fiscal year output, 120,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Bar Screens.

PITTSBURGH & WESTERN MINING CO.

General Office, 700 First National Bank Bldg. Pittsburgh.
 General Office, Greys, Pa.
 PR—James S. Pates, Pittsburgh, Pa.
 VP—Sylvester English, Bluefield, W. Va.
 TR—Wm. Forbes, Pittsburgh, Pa.
 GM—James S. Pates, Pittsburgh, Pa.
 GS—James S. Pates, Pittsburgh, Pa.
 PA—Geo. H. Yost, Pittsburgh, Pa.
 SA—Pittsburgh & Bessemer Coal Co., Pittsburgh, Pa.

English Mine; Drift; Pittsburgh Seam, 64 in. thick.
 PO—Greys, Pa.; SP—Oakdale, Pa.; CTY—Allegheny; RR—P. C. C. & St. L.
 MS—D. L. McGarry, Greys, Pa.
 S of H—Mules and 1 steam loco. Track gage 36 in.
 S of M—Hand and one mining mach.
 PP—Power purchased, Transformer 440 volts A. C., 1 20 H. P. fire tube boiler, 1 pump.
 EMP—60. Daily tonnage 300.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

PITTSBURGH COAL COMPANY.

General Office, Oliver Bldg., Pittsburgh, Pa.

PR—W. K. Field, Pittsburgh, Pa.
 VP—J. P. Walsh, Pittsburgh, Pa.
 VP—M. Wallace, Pittsburgh, Pa.
 VP—J. A. Donaldson, Pittsburgh, Pa.
 VP—J. B. L. Hornberger, Pittsburgh, Pa.
 SECY—F. J. LeMoine, Pittsburgh, Pa.
 TR—Wm. Miller, Pittsburgh, Pa.
 GM—J. M. Armstrong, Pittsburgh, Pa.
 Asst. GM—Arthur Neale, Pittsburgh, Pa.
 PA—E. E. Now, Pittsburgh, Pa.
 CE—E. J. Taylor, Pittsburgh, Pa.
 Chief Eng.—H. R. Miller, Pittsburgh, Pa.
 EE—A. B. Kiser, Pittsburgh, Pa.
 GEN. COUNSEL—J. H. Beal, Pittsburgh, Pa.

AUDITOR—J. D. McPherson, Pittsburgh, Pa.
 TRAFFIC MGR.—W. P. Badington, Pitts burgh, Pa.
 SCO—Federal Supply Co.; Buyer, W. J. Phillips, 8 Market St., Pittsburgh, Pa.

Allison Mine; Drift; Pittsburgh Seam, 57 in. thick.
 PO—Houston, Pa.; SP—Meadowlands, Pa.; CTY—Washington; RR—P. C. C. & St. L.
 MS—John Bartram, Houston, Pa.
 S of H—Mules and 3 trolley pole type locos. Track gage 44 in.
 S of M—9 chain breast type and 1 shortwall mach.
 PP—2 fire tube boilers, 300 H. P., 1—150 K. W. gen. units, 500 volts D. C., 6 pumps.
 EMP—146. Last years tonnage 120,084.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

Apollo Mine; Drift; Pittsburgh Seam, 89 in. thick.
 PO—Fayette City, Pa.; SP—Same; CTY—Fayette; RR—P. & L. E.
 MS—W. N. Ridgway, Fayette City, Pa.
 S of H—Mules and 2 trolley pole type locos. Track gage, 42½ in.
 S of M—8 chain breast type and 4 shortwall mchrs.
 PP—Power purchased, 500 volts D. C., 10 pumps.
 EMP—144. Last years tonnage 172,975.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

Arnold No. 2 Mine; Shaft; Pittsburgh Seam, 83 in. thick.
 PO—Arnold City, Pa.; SP—Fayette City, Pa.; CTY—Fayette; RR—P. & L. E.
 MS—Chas. Anderson, Arnold City, Pa.
 S of H—Mules, 5 trolley pole type locos. Track gage 42 in.
 S of M—12 chain breast type and 4 shortwall mchrs.
 PP—6 fire tube boilers, 900 H. P., 450 K. W. gen. units, 500 volts D. C., 14 pumps.
 EMP—267. Last years tonnage 217,637.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

Banning No. 1 Mine; Shaft; Pittsburgh Seam, 78 in. thick.
 PO—Van Meter, Pa.; SP—L. E. Fayette City, Pa.; CTY—Fayette; RR—P. & L. E.

MS—Geo. W. Morrell, Van Meter, Pa.
 S of H—Mules, 5 trolley pole type locos. Track gage 42 inches.
 S of M—7 shortwall and 8 chain breast mchrs.
 PP—Power purchased, 500 volts D. C., 8 pumps.
 EMP—194. Last years tonnage 200,593.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

Banning No. 2 Mine; Drift; Pittsburgh Seam, 86 in. thick.
 PO—Whitsett, Pa.; SP—Same; CTY—Fayette; RR—P. & L. E.
 MS—J. S. Forsythe, Whitsett, Pa.
 S of H—Mule, rope and 6 trolley pole type locos. Track gage 40 inch.
 S of M—4 chain breast type and 8 shortwall mchrs.
 PP—10 fire tube boilers, 1500 H. P., 900 K. W. gen. units, 500 volts D. C., 26 pumps.
 EMP—322. Last years tonnage 200,289.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

Banning No. 3 Mine; Slope; Pittsburgh Seam, 80 in. thick.
 PO—Van Meter, Pa.; SP—Jareds Creek, Pa.; CTY—Westmoreland; RR—P. & L. E.
 MS—Geo. W. Morrell, Van Meter, Pa.
 S of H—Mules and 1 trolley pole type loco. Track gage 40 inches.
 S of M—9 chain breast mchrs.
 PP—Power from central plant, 500 volts D. C., 4 fire tube boilers, 300 H. P., 9 pumps.
 EMP—227. Last fiscal year output, 20,233 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

Black Diamond Mine; Drift; Pittsburgh Seam, 65 in. thick.
 PO—Monongahela, Pa.; SP—Same; CTY—Washington; RR—P. V. & C.
 MS—Lance Linsley, Monongahela, Pa.
 S of H—Mules and 4 trolley pole type locos. Track gage 43 inches.
 S of M—1 shortwall and 13 chain breast mchrs.
 PP—Power purchased, 500 volts D. C., 2 fire tube boilers, 300 H. P., 9 pumps.
 EMP—209. Last years tonnage 213,704.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

Bridgeville Mine; Drift; Pittsburgh Seam, 62 in. thick.
 PO—Bridgeville, Pa.; SP—Same; CTY—Allegheny; RR—P. C. C. & St. L.
 MS—W. H. Linsley, Bridgeville, Pa.
 S of H—Mules and 3 trolley pole type locos. Track gage, 37½ in.
 S of M—12 chain breast type and 1 shortwall mach.
 PP—Power from Sumner Hill power plant, 500 volts D. C., 7 pumps.
 EMP—119. Last years tonnage 118,523.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

Catsburg Mine; Drift; Pittsburgh Seam, 65 in. thick.
 PO—Monongahela, Pa.; SP—Same; CTY—Washington; RR—P. V. & C.
 MS—Lance Linsley, Monongahela, Pa.
 S of H—Mules, rope, 4 trolley pole type locos. Track gage 45 in.
 S of M—13 chain breast type and 1 shortwall mach.
 PP—Power purchased, 500 volts D. C., 2 fire tube boilers, 300 H. P., 8 pumps.
 EMP—230. Last years tonnage 226,591.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

Champion Mine; Drift; Pittsburgh Seam, 57 in. thick.
 PO—Sturgeon, Pa.; SP—Same; CTY—Allegheny; RR—P. C. C. & St. L.
 MS—Jas. Davidson, Sturgeon, Pa.
 S of H—Mules and 2 elec. locos. Track gage 42 inches.
 S of M—11 chain breast type and shortwall mchrs.
 PP—3 fire tube boilers, 450 H. P., 300 K. W. gen. unit.
 D. C., 11 pumps.
 EMP—132. Last years tonnage 132,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

Cin. & P. R. R. Pittsburgh Seam, 57 in. thick.
 PO—Sturgeon, Pa.; SP—Montgomery, Pa.; RR—P. C. C. & St. L.
 MS—Jas. Davidson, Sturgeon, Pa.
 S of H—Mules, 3 trolley pole type locos. Track gage 40 inches.
 S of M—9 chain breast type and 1 shortwall mach.

(Continued on Next Page)

Pittsburgh Coal Co.—Cont.

PP—Power purchased, 500 volts D. C., 2 fire tube boilers, 300 H. P., 6 pumps.
 EMP—257. Last years tonnage 207,924.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.
 Coal Bluff Mine; Drift; Pittsburgh Seam, 63 in. thick.
 PO—Finleyville, Pa.; SP—Courtney, Pa.; CTY—Washington; RR—P. V. & C.
 MS—Matthew Dixon, Finleyville, Pa.
 S of H—Mules, rope and 3 trolley pole type locos. Track gage, 40 in.
 S of M—10 chain breast type and 2 short wall machs.
 PP—Power purchased, 500 volts D. C., 2 fire tube boilers, 250 H. P., 10 pumps.
 EMP—170. Last years tonnage 135,083.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.
 Crescent Mine; Drift; Pittsburgh Seam, 83 in. thick.
 PO—California, Pa.; SP—Same; CTY—Washington; RR—P. V. & C.
 MS—Geo. Harkess, California, Pa.
 S of H—Mules and 27 trolley pole type locos. Track gage 43 inches.
 S of M—24 chain breast type and 8 shortwall machs.
 PP—Purchase power, 3 water tube boilers, 1850 H. P., 1400 K. W. gen. units, 500 volts D. C., 42 pumps.
 EMP—642. Last years tonnage 793,087.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.
 Delmont Mine; Drift and Shaft; Pittsburgh Seam, 68 in. thick.
 PO—Export, R. D., Pa.; SP—Same; CTY—Westmoreland; RR—Penna.
 MS—George Waugh, R. D., Export, Pa.
 S of H—Mules, 5 trolley pole type locos. Track gage 44 in.
 S of M—Hand and 11 chain breast type machs.
 PP—2 fire tube boilers, 600 H. P., 2 gen. units, 450 K. W., 500 volts D. C., 15 pumps.
 EMP—373. Last years tonnage 179,981.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 Dickson Mine; Drift; Pittsburgh Seam, 56 in. thick.
 PO—Imperial, Pa.; SP—Cliff Mine, Pa.; CTY—Allegheny; RR—Montour.
 MS—Wm. Garrett, Imperial, Pa.
 S of H—Mules and 2 trolley pole type locos. Track gage, 42 in.
 S of M—9 chain breast type and 1 shortwall machs.
 PP—Purchase power, 500 volts D. C.
 EMP—124. Last years tonnage 134,984.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.
 Eclipse Mine; Drift; Pittsburgh Seam, 70 in. thick.
 PO—California, Pa.; SP—Rose, Pa.; CTY—Washington; RR—P. V. & C.
 MS—has Miller, California, Pa.
 S of H—Mules, rope and 4 trolley pole type locos. Track gage, 40 inches.
 S of M—16 chain breast type and 6 shortwall machs.
 PP—Purchase power, 500 volts D. C., 15 pumps.
 EMP—257. Last years tonnage 301,739.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 Equitable Mine; Drift; Pittsburgh Seam, 75 in. thick.
 PO—Webster, Pa.; SP—Same; RR—CTY—Westmoreland; RR—P. & L. E.
 MS—Robert Rughman, Webster, Pa.
 S of H—Mules, rope and 3 trolley pole type locos. Track gage 44 inches.
 S of M—13 chain breast type and 1 shortwall mach.
 PP—Power purchased, 500 volts D. C., 1—150 H. P. fire tube boiler, 12 pumps.
 EMP—201. Last years tonnage 158,981.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.
 Essen No. 3 Mine; Drift, Pittsburgh Seam, 60 in. thick.
 PO—Bardonia, Pa.; SP—Same; CTY—Allegheny; RR—P. C. & Y.
 MS—Ernest Barnes, Bardonia, Pa.
 S of H—Mules and 2 trolley pole type locos. Track gage, 42 in.
 S of M—16 chain breast type and 2 shortwall machs.
 PP—Power purchased, 500 volts D. C., 18 pumps.
 EMP—274. Last years tonnage 211,819.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.
 Gould Mine; Shaft; Pittsburgh Seam, 70 in. thick.
 PO—Fitz Henry, Pa.; SP—Same; CTY—Westmoreland; RR—R. & O.

MS—Oscar Steckman, Fitz Henry, Pa.
 S of H—Mules and 2 trolley pole type locos. Track gage, 40 in.
 S of M—8 chain breast type and 2 shortwall machs.
 PP—5 fire tube boilers, 750 H. P., 300 K. W. gen. units, 500 volts D. C., 13 pumps.
 EMP—83. Last years tonnage 70,560.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.
 Eureka Mine; Drift; Pittsburgh Seam, 83 in. thick.
 PO—Smithton, Pa.; SP—Same; CTY—Westmoreland; RR—R. & O.
 MS—David Leake, Jr., Smithton, Pa.
 S of H—Mules, rope and 3 trolley pole type locos. Track gage, 40 in.
 S of M—7 chain breast type and 2 shortwall machs.
 PP—Power purchased, 500 volts D. C., 2 fire tube boilers, 155,534.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.
 Fair Haven Mine; Drift; Pittsburgh Seam, 63 in. thick.
 PO—Willock, Pa.; SP—Local, Pa.; CTY—Allegheny.
 MS—L. R. Santmyer, Willock, Pa.
 S of H—Mules and 4 trolley pole type locos. Track gage 39 in.
 S of M—7 chain breast type and 1 shortwall machs.
 PP—5 750 H. P. fire tube boilers, 2 325 K. W. gen. units, 500 volts D. C., 8 pumps.
 EMP—121. Last years tonnage 103,978.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.
 Fayette City Mine; Drift; Pittsburgh Seam, 87 in. thick.
 PO—Fayette City, Pa.; SP—Same; CTY—Fayette; RR—Mon. River.
 MS—W. N. Ridgway, Fayette City, Pa.
 S of H—Mules, rope and 2 trolley pole type locos. Track gage 43 in.
 S of M—11 chain breast type and 3 shortwall machs.
 PP—Power purchased, 500 volts D. C., 2 fire tube boilers, 300 H. P., 14 pumps.
 EMP—224. Last years tonnage 285,804.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.
 Forest Hill Mine; Drift; Pittsburgh Seam, 60 in. thick.
 PO—Smithdale, Pa.; SP—Same; CTY—Allegheny; RR—P. & L. E.
 MS—David Ferguson, Smithdale, Pa.
 S of H—Mules and 3 trolley pole type locos. Track gage, 42 in.
 S of M—8 chain breast type and 4 shortwall machs.
 PP—Power from Scott Haven power plant, 500 volts D. C., 12 pumps.
 EMP—207. Last years tonnage 180,644.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens, Loading Booms.
 Gallatin Mine; Drift; Pittsburgh Seam, 60 in. thick.
 PO—Gallatin, Pa.; SP—Same; CTY—Allegheny; RR—P. & L. E.
 MS—Wm. Hulings, Gallatin, Pa.
 S of H—Mules and 4 trolley pole type locos. Track gage 42 inches.
 S of M—13 chain breast type and 2 shortwall machs.
 PP—Power from Gallatin power plant, 500 volts D. C.
 EMP—217. Last years tonnage 223,094.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.
 Harrison Mine; Drift; Pittsburgh Seam, 58 in. thick.
 PO—Beadling, Pa.; SP—Same; CTY—Allegheny; RR—P. C. & Y.
 MS—Wm. Young, Beadling, Pa.
 S of H—Mules and 4 trolley pole type locos. Track gage, 24 in.
 S of M—14 chain breast type and 4 shortwall machs.
 PP—Power purchased from Summer Hill power plant, 500 volts D. C., 9 pumps.
 EMP—187. Last years tonnage 121,487.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.
 Lordale Mine; Drift; Pittsburgh Seam, 68 in. thick.
 PO—Elizabeth, Pa.; SP—Wyle, Pa.; CTY—Allegheny; RR—P. & L. E.
 MS—Chas. McDaniel, Elizabeth, Pa.
 S of H—Mules and 2 trolley pole type locos. Track gage 43 in.
 S of M—11 chain breast type and 2 shortwall machs.
 PP—Power purchased, 500 volts D. C., 10 pumps.

EMP—190. Last years tonnage 104,223.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.
 Lyons Run Mine; Drift; Pittsburgh Seam, 73 in. thick.
 PO—Export, R. D., Pa.; SP—Saunders, Pa.; CTY—Westmoreland; RR—Penna.
 MS—George Waugh, R. D., Export, Pa.
 S of H—Mules. Track gage 44 inches.
 S of M—Hand.
 PP—Purchase power.
 EMP—53. Last years tonnage 37,778.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 Laurel Hill No. 5 Mine; Drift; Pittsburgh Seam, 60 inches thick.
 PO—Cecil, Pa.; SP—Gladden, Pa.; CTY—Allegheny; RR—P. C. C. & St. L.
 MS—S. Beaumariage, Cecil, Pa.
 S of H—Mules and 2 trolley pole type locos. Track gage, 40 in.
 S of M—8 chain breast type machs.
 PP—Power purchased, 9 pumps.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.
 NOTE—This mine closed temporarily.
 Lick Run Mine merged into Montour No. 10.
 Manown Mine; Drift; Pittsburgh Seam, 61 in. thick.
 PO—Gallatin, Pa.; SP—Manown, Pa.; CTY—Allegheny; RR—P. & L. E.
 MS—Wm. Barker, Gallatin, Pa.
 S of H—Mules rope, and 3 trolley pole type locos. Track gage, 42 in.
 S of M—11 chain breast type and 2 shortwall machs.
 PP—Power from Gallatin power plant, 6—150 H. P. fire tube boilers, 350 K. W., gen. units, 500 volts D. C., 5 pumps.
 EMP—190. Last years tonnage 121,487.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.
 Mansfield Mine; Drift; Pittsburgh Seam, 63 in. thick.
 PO—Lompurex, Pa.; SP—Carnegie, Pa.; CTY—Allegheny; RR—P. C. & Y.
 MS—Thos. ones, Lompurex, Pa.
 S of H—Mules and 7 trolley pole type locos. Track gage, 39 in.
 S of M—23 chain breast type and 5 shortwall machs.
 PP—Power from Summer Hill power plant, 500 volts D. C., 9 pumps.
 EMP—254. Last years tonnage 183,865.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.
 Margerum Mine; Drift; Pittsburgh Seam, 55 in. thick.
 PO—Imperial, Pa.; SP—Same; CTY—Allegheny; RR—Montour.
 MS—Wm. Garrett, Imperial, Pa.
 S of H—Mules and 2 trolley pole type locos. Track gage, 40 in.
 S of M—10 chain breast type and 2 shortwall machs.
 PP—Power purchased, 500 volts D. C., 8 pumps.
 EMP—149. Last years tonnage 175,669.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.
 Midland No. 1 Mine; Drift; Pittsburgh Seam, 56 in. thick.
 PO—Houston, Pa.; SP—Palanka, Pa.; CTY—Washington; RR—P. C. C. & St. L.
 MS—John Bartram, Houston, Pa.
 S of H—Mules and 3 trolley pole type locos. Track gage, 42 in.
 S of M—15 chain breast type and 1 shortwall mach.
 PP—Power purchased, 500 volts D. C., 16 pumps.
 EMP—298. Last years tonnage 197,348.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.
 Midland No. 3 Mine; Drift; Pittsburgh Seam, 62 in. thick.
 PO—Westland, Pa.; SP—Same; CTY—Washington; RR—P. C. C. & St. L.
 MS—John Bartram, Westland, Pa.
 S of H—Mules and 2 trolley pole type locos. Track gage, 42 in.
 S of M—13 chain breast type machs.
 PP—4 fire tube boilers, 600 H. P., 400 K. W., gen. units, 500 volts D. C., 16 pumps.
 EMP—95. Last years tonnage 88,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.
 Mongah Mine; Drift; Pittsburgh Seam, 60 in. thick.
 PO—Monongahela, Pa.; SP—Brownsdale, Pa.; CTY—Allegheny; RR—P. & L. E.
 MS—Wm. Barker, Monongahela, Pa.
 S of M—Mules and 6 trolley pole type locos. Track gage 43 inches.

S of M—15 chain breast type and 4 shortwall machs.
 PP—Power purchased, 18 pumps.
 EMP—265. Last years tonnage 301,016.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.
 Moon Run Mine; Drift, Pittsburgh Seam, 58 in. thick.
 PO—Moon Run, Pa.; SP—Same; CTY—Allegheny; RR—Montour.
 MS—Samuel Pritchard, Moon Run, Pa.
 S of H—Mules and 9 trolley pole type locos.
 S of M—26 chain breast and 3 shortwall machs.
 PP—6 fire tube boilers, 1050 H. P., 625 K. W., gen. units 500 volts D. C., 19 pumps.
 EMP—480. Last years tonnage 460,282.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.
 Montour No. 1 Mine; Shaft; Pittsburgh Seam, 55 in. thick.
 PO—Southview, Pa.; SP—Same; CTY—Washington; RR—Montour.
 MS—S. Beaumariage, Southview, Pa.
 S of H—Mules and 3 trolley pole type locos. Track gage 44 inches.
 S of M—19 chain breast type machs.
 PP—Power purchased, 500 volts D. C., 9 pumps.
 EMP—114. Last years tonnage 87,376.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.
 Montour No. 2 Mine; Shaft; Pittsburgh Seam, 60 in. thick.
 PO—Pitco, Pa.; SP—Cowden, Pa.; CTY—Washington; RR—Montour.
 MS—John Pascoe, Pitco, Pa.
 S of H—Mules, 4 trolley pole type and 1 storage battery loco. Track gage 44 inches.
 S of M—23 chain breast type and 6 shortwall machs.
 PP—Power purchased, 500 volts D. C., 15 pumps.
 EMP—410. Last years tonnage 377,997.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.
 Montour No. 4 Mine; Shaft; Pittsburgh Seam, 62 in. thick.
 PO—Lawrence, Pa.; SP—Hills, Pa.; CTY—Washington; RR—Montour.
 MS—John Bradburn, Lawrence, Pa.
 S of H—Mules, 4 trolley pole type and 5 storage battery locos. Track gage 44 in.
 S of M—15 chain breast type and 5 shortwall machs.
 PP—Power purchased 500 volts D. C., 3 pumps.
 EMP—266. Last years tonnage 241,853.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.
 Montour No. 8 Mine; Drift; Pittsburgh Seam, 60 in. thick.
 PO—Willock, Pa.; SP—McIvor, Pa.; CTY—Allegheny; RR—Montour.
 MS—L. R. Santmyer, Willock, Pa.
 S of H—Mules, 10 trolley pole type and 2 storage battery locos. Track gage 44 in.
 S of M—44 chain breast type machs.
 PP—Power purchased, 500 volts D. C., 2 fire tube boilers, 300 H. P., 25 pumps.
 EMP—468. Last years tonnage 447,156.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity and Shaker Screens.
 Montour No. 9 Mine; Drift; Pittsburgh Seam, 54 in. thick.
 PO—McDonald, Pa.; SP—McAdams, Pa.; CTY—Washington; RR—Montour.
 MS—A. E. Springfield, McDonald, Pa.
 S of H—Mules and 2 trolley pole type locos. Track gage, 44 in.
 S of M—11 chain breast and 1 shortwall mach.
 PP—Power purchased, 500 volts D. C., 6 pumps.
 EMP—208. Last years tonnage 204,148.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.
 Montour No. 10 Mine; Drift; Pittsburgh Seam, 62 in. thick.
 PO—Broughton, Pa.; SP—Library, Pa.; CTY—Allegheny; RR—Montour.
 MS—Wm. Phillips, Broughton, Pa.
 S of H—Mules and 5 elec. locos. Track gage 44 inches.
 S of M—34 chain breast type and 2 shortwall machs.
 PP—Power purchased, 500 volts D. C., 20 pumps.
 EMP—378. Last years tonnage 374,737.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 Ocean No. 2 Mine; Drift; Pittsburgh Seam, 62 in. thick.
 PO—Scott Haven, Pa.; SP—Same; CTY—Allegheny; RR—P. & L. E.

(Continued on Next Page)

Pittsburgh Coal Co.—Cont.

MS—Wm. Bregar, Scott Haven, Pa.
S of H—Mules and 5 trolley pole type
8 storage battery locos. Track gage
42½ in. S.
S of M—9 chain breast type and 6 short-
wall mch. S.
PP—Power purchased from Scott Haven
Power Plant, 500 volts D. C., 14
pumps.
EMP—212. Last years tonnage 192,453.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
PREP. EQUIPT—Gravity Screens.
Ocean No. 5 Mine; Drift; Pittsburgh
Seam, 64 in. thick.
PO—Smithdale, Pa.; SP—Same; CTY—
Allegheny; RR—P. & L. E.
MS—David Ferguson, Smithdale, Pa.
S of H—Mules and 4 trolley pole type
locos. Track gage, 41 in.
S of M—10 chain breast type and 3
shortwall mch. S.
PP—Power purchased, 500 volts D. C.,
14 pumps.
EMP—240. Last years tonnage 223,161.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
PREP. EQUIPT—Gravity Screens.
Partridge Mine; Drift; Pittsburgh Seam,
54 in. thick.
PO—Imperial, Pa.; SP—North Star, Pa.;
CTY—Allegheny; RR—Montom.
MS—Wm. Garrett, Imperial, Pa.
S of H—Mules and 4 trolley pole type
locos. Track gage, 40 in.
S of M—17 chain breast type and 1
shortwall mch. S.
PP—Power purchased, 500 volts D. C.,
12 pumps.
EMP—189. Last years tonnage 195,501.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
PREP. EQUIPT—Shaker Screens.
Shaner Mine; Slope; Pittsburgh Seam,
66 in. thick.
PO—Scott Haven, Pa.; SP—Guffey, Pa.;
CTY—Westmoreland; RR—B. & O.
MS—Wm. Bregar, Scott Haven, Pa.
S of H—Mules and 2 trolley pole type
locos. Track gage, 42 in.
S of M—7 chain breast type mch. S.
PP—4 fire tube boilers, 600 H. P., 260
K. W. g. n. units, 500 volts D. C.,
8 pumps.
EMP—120. Last years tonnage 86,166.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
PREP. EQUIPT—Gravity Screens.
Somers No. 2 Mine; Drift; Pittsburgh
Seam, 76 in. thick.
PO—Pricedale, Pa.; SP—Bellevue,
Pa.; CTY—Westmoreland; RR—P.
& L. E.
MS—J. T. Clark, Pricedale, Pa.
S of H—Mules and 2 trolley pole type
locos. Track gage, 42 in.
S of M—5 chain breast and 1 shortwall
mch. S.
PP—7 fire tube boilers, 1200 H. P.,
3 g. n. units, 640 K. W., 500
volts D. C., 10 pumps.
EMP—159. Last years tonnage 125,079.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
PREP. EQUIPT—Gravity Screens.
Somers No. 4 Mine; Drift; Pittsburgh
Seam, 78 inches thick.
PO—Pricedale, Pa.; SP—Bellevue,
Pa.; CTY—Westmoreland; RR—P.
& L. E.
MS—J. J. Clarke, Pricedale, Pa.
S of H—Rope and 5 trolley pole type
locos. Track gage 42 in.
S of M—10 chain breast type and 3
shortwall mch. S.
PP—Power from central power plant, 500
volts D. C., 18 pumps.
EMP—191. Last years tonnage 212,173.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
Sunnyside Mine; Drift; Pittsburgh Seam,
63 in. thick.
PO—Gallatin, Pa.; SP—Milleville, Pa.;
CTY—Allegheny; RR—P. & L. E.
MS—Wm. Buldings, Gallatin, Pa.
S of H—Mules and 3 trolley pole type
locos. Track gage, 42 in.
S of M—14 chain breast type and 2
shortwall mch. S.
PP—Power from Gallatin power plant,
500 volts D. C., 9 pumps.
EMP—182. Last years tonnage 204,212.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
PREP. EQUIPT—Gravity Screens.
Tremont Mine; Drift; Pittsburgh Seam,
77 in. thick.
PO—Arnold City, Pa.; SP—Tremont,
Pa.; CTY—Fayette; RR—P. & L. E.
MS—Chas. Anderson, Arnold City, Pa.
S of H—Mules and 2 trolley pole type
locos. Track gage, 40 in.
S of M—6 chain breast and 4 shortwall
mch. S.
PP—Power purchased, 500 volts D. C., 8
pumps.

EMP—97. Last years tonnage 134,029.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
PREP. EQUIPT—Gravity Screens.
Walton No. 2 Mine; Drift; Pittsburgh
Seam, 63 in. thick.
PO—Elizabeth, Pa.; SP—Floreffe, Pa.;
CTY—Allegheny; RR—Monongahela.
MS—John Young, Elizabeth, Pa.
S of H—Mules and 2 trolley pole type
locos. Track gage, 43½ in.
S of M—6 chain breast type and 2 short-
wall mch. S.
PP—4 fire tube boilers, 460 H. P., 1—
150 K. W. g. n. units, 250 volts
D. C., 10 pumps.
EMP—81. Last years tonnage 92,220.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Gravity Screens.
Waverly Mine; Shaft; Pittsburgh Seam,
77 in. thick.
PO—Sciditon, Pa.; SP—Same; CTY—
Westmoreland; RR—B. & O.
MS—David Leake, Jr., Sciditon, Pa.
S of H—Mules and 2 trolley pole type
locos. Track gage, 40 in.
S of M—5 chain breast and 2 shortwall
mch. S.
PP—Power purchased, 500 volts D. C.,
3 fire tube boilers, 150 H. P., 8
pumps.
EMP—158. Last years tonnage 114,141.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Gravity Screens.
West Newton Mine; Shaft; Pittsburgh
Seam, 72 in. thick.
PO—West Newton, Pa.; SP—Same; CTY—
Westmoreland; RR—P. & L. E.
MS—John Houser, West Newton, Pa.
S of H—Mules and 2 trolley pole type
locos. Track gage, 42½ in.
S of M—8 chain breast type and 1
shortwall mch. S.
PP—Power purchased, 500 volts D. C.,
1 fire tube boilers, 600 H. P., 11
pumps.
EMP—217. Last years tonnage 192,806.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
PREP. EQUIPT—Gravity Screens.
Yough No. 2 Mine; Drift; Pittsburgh
Seam, 66 in. thick.
PO—Elizabeth, Pa.; SP—Boston, Pa.;
CTY—Allegheny; RR—P. & L. E.
MS—Chas. McDaniel, Elizabeth, Pa.
S of H—Mules, rope and 3 trolley pole
type locos. Track gage 42 in.
S of M—9 chain breast mch. S.
PP—3 fire tube boilers, 450 H. P., 1—
100 K. W. g. n. unit, 250 volts D.
C., 5 pumps.
EMP—77. Last years tonnage 61,015.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.
Yough Slope Mine; Slope; Pittsburgh
Seam, 69 in. thick.
PO—West Newton, Pa.; SP—Same; CTY—
Westmoreland; RR—B. & O.
MS—John Houser, West Newton, Pa.
S of H—Mules and 2 trolley pole type
locos. Track gage, 37 in.
S of M—5 chain breast type and 3
shortwall mch. S.
PP—Power purchased, 3 fire tube boilers,
150 H. P., 10 pumps.
EMP—179. Last years tonnage 177,523.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Gravity Screens.
GALLATIN POWER PLANT
6 150 H. P. fire tube boilers, 400 K. W.
g. n. units, 500 volts D. C. Sup-
ply's power to Sunnyside, Gallatin
and Manow Mines.
SCOTT HAVEN POWER PLANT
2 150 H. P. fire tube, 2 125 H. P.
fire tube, 3 300 H. P. water tube
and 1 500 H. P. water tube boilers,
1500 K. W. g. n. units, 500 volts
D. C. Supply's power to Ocean No.
2 and Forst Hill Mines.
SUMMER HILL POWER PLANT
7 150 H. P. fire tube boilers, 900 K. W.
g. n. units, 500 volts D. C. Sup-
ply's power to Mansfield, Harrison
and Bridgeville Mines.
PITTSBURGH GAS COAL COMPANY
General Office, Indiana, Pa.
PR—L. W. Robinson, Indiana, Pa.
TR—P. H. Beck, Indiana, Pa.
GM—F. M. Fritschman, Indiana, Pa.
GS—F. R. Vinton, " "
PA—H. C. Smith, Indiana, Pa.
EM—George Rieg, " "
EE—L. W. Housholder, " "
SCO—Ridge Supply Co. Buyer, J. F.
Campbell, Indiana, Pa.
Sales Agents, Rochester & Pittsburgh Coal
& Iron Co., Rochester, N. Y.
Iselin Nos. 1, 2 and 6 Mine; Drifts;
Pittsburgh Seam, 56 to 86 in. thick.
PO—Iselin, Pa.; SP—Same; CTY—In-
diana; RR—P. & L. E.
MS—Jas. Patterson, Iselin, Pa.

S of H—20 elec. locos. Track gage,
42 in.
S of M—21 elec. and 10 comp. air
mch. S.
PP—6 Sterling return tubular boilers,
total 2,130 H. P., 5 g. n. units,
550 volts D. C., 2 air comp. and
32 pumps. Purchase some power.
EMP—710. Last fiscal year output,
802,195 tons.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Picking Belts, Shaker
Screens.
Iselin Nos. 3 and 5 Mine; Drifts; Pitts-
burgh Seam, 56 to 86 in. thick.
PO—Reed, Pa.; SP—East Olivet, Pa.;
CTY—Indiana; RR—P. & L. E.
Iselin Br.
MS—R. G. May, " " " " " " Reed, Pa.
S of H—7 elec. locos. Track gage, 42
in.
S of M—5 elec. and 12 comp. air
mch. S.
PP—5 return tubular boilers, total 300
H. P., g. n. units, 550 volts D.
C., 2 air comp. and 7 pumps.
EMP—215. Last fiscal year output,
337,423 tons.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Picking Belts.
Iselin No. 4 Mine; Drift; Pittsburgh
Seam, 56 to 86 in. thick.
PO—Iselin, Pa.; SP—Same; CTY—In-
diana; RR—B. & O. & P., Iselin Br.
MS—Jas. Patterson, Iselin, Pa.
S of H—4 elec. locos. Track gage, 42
in.
S of M—4 elec. and 12 comp. air
mch. S.
PP—550 volts D. C., 6 pumps.
EMP—115. Last fiscal year output,
150,744 tons.
SIZES SHIPT—Run of Mine, Slack, Lump
PREP. EQUIPT—Rat Screens.
PITTSBURGH-HANOVER COAL COMPANY
General Office, Vandergrift Bldg., Pitts-
burgh, Pa.
PR—Jas. R. Dordworth, Pittsburgh, Pa.
VP—Samuel Hollis, " "
TR—Jas. R. Dordworth, " "
GM—Samuel Hollis, " "
GS—E. M. Conlin, Hanlin Station, Pa.
PA—Samuel Hollis, Hanlin Station, Pa.
EM—E. M. Conlin, Hanlin Station, Pa.
SCO—Russell Supply Co. Buyer, Sam-
uel Hollis, Hanlin, Pa.
SA—C. S. B. Ward Co. Inc., 901 First
National Bank Bldg., Pittsburgh, Pa.
Russell Mine; Stripping; Pittsburgh Seam,
60 to 66 in. thick.
PO—Hanlin, Sta., Pa.; SP—Same; CTY—
Washington; RR—P. C. C. &
St. L.
S of H—4 steam locos. Track gage 56½
inches.
S of M—4 shovels.
PP—1 pump.
EMP—60. Last years tonnage 156,000.
SIZES SHIPT—Run of Mine, Slack, Lump
PREP. EQUIPT—Gravity Screens, Picking
Tables, Loading Rooms.
**PITTSBURGH PLATE GLASS CO (Coal
Dept.)**
General Office, Pittsburgh, Pa.
PR—Chas. W. Brown, Pittsburgh, Pa.
VP—E. H. Raymond, " "
TR—Edward Pitcairn, Pittsburgh, Pa.
GS—V. L. Henry, Creighton, Pa.
PA—J. A. Bechtel, Pittsburgh, Pa.
EM—D. J. Coadage, Creighton, Pa.
EE—F. P. Smith, Creighton, Pa.
SA—Edward Pitcairn, Pittsburgh, Pa.
Creighton Coal Works; Drift; Freeport
Seam, 58 to 88 in. thick.
PO—Creighton, Pa.; SP—Same; CTY—
Allegheny; RR—P. R. R., Cone
maugh Div.
S of H—11 elec. locos. Track gage 42
in.
S of M—5 shortwall mch. S.
PP—Power purchased, Transformer 6600-
2300 volts A. C., M. G. sets, 250
volts D. C., 3 fire tube boilers, 250
H. P., 1 150 K. W. g. n. unit, 12
pumps.
EMP—300. Last years tonnage 354,160.
SIZES SHIPT—Run of Mine, Nut, Slack,
Lump.
PREP. EQUIPT—Gravity Screens,
Note—Mine for own use only.
PITTSBURGH STEEL COMPANY
General Office, Union Arcade, Pittsburgh,
Pa.
PR—John Hindley, Union Arcade, Pitts-
burgh, Pa.
VP—Emil Winter, Pittsburgh, Pa.
TR—D. P. Bennett, Pittsburgh, Pa.
GS—J. J. Geary, Alicia, Pa.
Alicia No. 1 Mine; Shaft; Pittsburgh
Seam; 96 inches thick.
PO—Alicia, Pa.; SP—Same; CTY—
Fayette; RR—Monon.
S of H—3 elec. locos. Track gage 44
inches.
S of M—8 elec. mch. S.
PP—3 water tube boilers, total 1,125
H. P., 1 air compressor, 1 pump.
EMP—81. Last fiscal year output,
111,336 tons.
Not formerly operated by W. Harry
Bacon, Co. for entire output.
Old mine.

Alicia No. 2 Mine; Slope; Pittsburgh
Seam; 96 inches thick.
PO—R. D. No. 1, Masontown, Pa.; CTY—
Fayette.
MS—Edward Moore, Masontown, Pa.
S of H—2 elec. locos. Track gage 44
inches.
S of M—3 elec. mch. S.
PP—3 water tube boilers, total 1,125
H. P., 1 air compressor, 1 pump.
EMP—81. Last fiscal year output,
111,336 tons.
Not formerly operated by W. Harry
Bacon, Co. for entire output.
Old mine.
**PITTSBURGH TERMINAL RAILROAD &
COAL COMPANY**
General Office, 708 Wabash Bldg., Pitts-
burgh, Pa.
PR—A. W. Callaway, 708 Continental
Bldg., Baltimore, Md.
VP—M. P. Kirk, Pittsburgh, Pa.
TR—E. C. McKibbin, Pittsburgh, Pa.
GM—John Mahony, Pittsburgh, Pa.
PA—J. D. McTigue, Pittsburgh, Pa.
LE—Wm. Singleton, Pittsburgh, Pa.
SCO—Mutual Supply Co.; Buyer, J. E.
Davis, Pittsburgh, Pa.
SA—B. Nicoll & Co., Wabash Bldg.
Pittsburgh, Pa.
Additional Information on Page 749.
No. 2 Mine; Shaft; Pittsburgh Seam, 58
in. thick.
PO—Castle Shannon, Pa.; SP—Same;
CTY—Allegheny; RR—West Side
B-H, Saw Mill Run & Youghiogheny.
MS—Jos. Kagi, Castle Shannon, Pa.
SM—G. E. Potter, Castle Shannon, Pa.
S of H—Mules and 7 trolley pole type
locos. Track gage 44 inches.
S of M—14 chain breast type and 5
shortwall mch. S.
PP—Power from central plant, 3 fire
tube boilers, 600 H. P., 2 M. G.
sets, 250 volts D. C., 11 pumps.
EMP—414. Last years tonnage 445,592.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
PREP. EQUIPT—Gravity Screens.
No. 3 Mine; Shaft; Pittsburgh Seam, 58
in. thick.
PO—Mollenau, Pa.; SP—Benicoff,
Pa.; CTY—Allegheny; RR—West
Side Belt, Saw Mill Run & Yough-
iogheny.
MS—Wm. J. Ivill, Mollenau, Pa.
SM—Robert Gibson, Mollenau, Pa.
S of H—Storage battery and 12 trolley
pole type locos.
S of M—17 chain breast type and 6
shortwall mch. S.
PP—Power from central plant, 4 fire
tube boilers, 600 H. P., 2 M. G.
sets, 250 volts D. C., 11 pumps.
EMP—117. Last years tonnage 401,991.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
PREP. EQUIPT—Gravity Screens.
No. 4 Mine; Shaft; Pittsburgh Seam, 58
in. thick.
PO—Hornung, Pa.; SP—Same; CTY—
Allegheny; RR—West Side B-H,
Saw Mill Run & Youghiogheny.
MS—M. A. McEwee, Hornung, Pa.
SM—Wm. L. Meloy, Hornung, Pa.
S of H—Mules and 8 trolley pole type
locos. Track gage 44 inches.
S of M—2 chain breast type and 12
shortwall mch. S.
PP—Power from central plant, 2 M. G.
sets, 250 volts D. C., 6 water tube
boilers, 3612 H. P., 2 2500 K.
W. and 1 1500 K. W. turbine
generators, 12 pumps.
EMP—274. Last years tonnage 233,553.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
No. 6 Mine; Drift; Pittsburgh Seam, 58
in. thick.
PO—Brunton, Pa.; SP—Same; CTY—
Allegheny; RR—West Side B-H,
Saw Mill Run & Youghiogheny.
MS—John P. Kelly, Brunton, Pa.
SM—P. B. Swanswick, Brunton, Pa.
S of H—Mules and 9 trolley pole type
locos. Track gage 44 in.
S of M—13 chain breast type and 5
shortwall mch. S.
PP—2 g. n. units, 250 volts D. C., 10
pumps. Power from central plant.
EMP—351. Last years tonnage 290,125.
SIZES SHIPT—Run of Mine, Slack, N.
Lump.
No. 7 Mine; Drift; Pittsburgh Seam, 58
in. thick.
PO—Large, Pa.; SP—Same; CTY—
Allegheny; RR—West Side B-H,
Saw Mill Run & Youghiogheny.
MS—Landon, " "
SM—Robert, " "
S of H—Mules and 9 trolley pole type
locos. Track gage 44 in.
S of M—13 chain breast type and 7
shortwall mch. S.
PP—2 g. n. units, 250 volts D. C., 8
pumps. Power from central plant.
EMP—351. Last years tonnage 290,125.
SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.
(Continued on Next Page)

Pittsburgh Terminal Railroad & Coal Co.—
Cont.
No. 8 Mine; Slope; Pittsburgh Seam, 58 in. thick.
PO—Carnegie, Pa.; SP—Same; CTY—Carnegie; RR—Penna.
MS—Wm. C. Brown, Co. of the Pa.
S of H—Mules and trolley pole type locos. Track gage 44 in.
S of M—Chain breast type and longwall mchs.
PP—50. Last years tonnage 15,095.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Picking Tables.

PLETCHER, J. W.
General Office, McCance Block Bldg., Pittsburgh, Pa.
SA—J. W. Fletcher, Pittsburgh, Pa.
SA—Dominion Mine, Eastern Fuel Co., 408 Rick Bldg., Pittsburgh, Pa.
Additional Information on Page 750
Donnelly No. 1 Mine; Drift; Upper Freeport Seam, 48 in. thick.
PO—Kittanning, Pa.; SP—Johnetta, Pa.; CTY—Armstrong, RR—P. R. R.
MS—Geo. Fletcher, Kittanning, Pa.
S of H—Mules. Track gage 36 in.
S of M—Shortwall mchs.
PP—Gen. units, 75 K. W., 250 volts D. C.
EMP—50. Daily tonnage 250.
SIZES SHIPT—Run of Mine.

Dominion Mine; Drift; Lower Kittanning Seam, 48 in. thick.
PO—Kittanning, Pa.; SP—Johnetta, Pa.; CTY—Armstrong, RR—P. R. R.
MS—A. C. Wireman, Kittanning, Pa.
S of H—1 storage battery loco. Track gage 36 in.
S of M—3 shortwall mchs.
PP—1 M. G. Set, 500 volts D. C., 2 pumps.
EMP—84. Daily tonnage 300.
SIZES SHIPT—Run of Mine, Slack, Lump.

PLYMOUTH COAL MINING CO.
General Office, Real Estate Trust Bldg., Philadelphia, Pa.
PR—R. A. Hatfield, Norristown, Pa.
TR—J. T. Hilles, Wilmington, Del.
GS—J. F. Tobin, Portage, Pa.
PA—J. T. Hilles, Wilmington, Del.
SA—Hatfield & Hilles, Real Estate Trust Bldg., Philadelphia, Pa.

Plymouth Mine; Drift; C Prime Seam, 48 in. thick.
PO—Portage, Pa.; SP—Same; CTY—Cambria; RR—Penna.
S of H—Mules.
PP—1 water tube boiler, 1 pump.
EMP—55. Last years tonnage 42,056.
SIZES SHIPT—Run of Mine.

POINT MARION COAL CO.
General Office, 46 East Main St., Uniontown, Pa.
PR—T. L. Morgan, Uniontown, Pa.
VP—R. J. Brown, Uniontown, Pa.
TR—E. D. Brown, Uniontown, Pa.
GM—E. D. Brown, Uniontown, Pa.
GS—R. J. Brown, Uniontown, Pa.
CE—Fayette Engineering Co., Uniontown, Pa.
SCO—Point Marion Supply Co., Buyer, R. J. Brown, Uniontown, Pa.
SA—E. D. Brown, Uniontown, Pa.

Point Marion Mine; Drift; Pittsburgh Seam, 84 in. thick.
PO—Point Marion, Pa.; SP—Same; CTY—Fayette; RR—B. & O.
MS—T. J. Murphy, Point Marion, Pa.
S of H—Mules. Track gage, 44 in.
S of M—Mining mchs.
PP—4 pumps.
EMP—40. Daily tonnage 350.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

POLAND COAL COMPANY.
PR—Julian Kennedy, Pittsburgh, Pa.
TR—J. O. Miller, " "
GM—R. C. Crawford, " "
GS—J. M. Crawford, " "
NM—D. M. Downey, " "
PA—R. C. Crawford, Pittsburgh, Pa.
CE—K. K. Knapp, Pittsburgh, Pa.
SCO—Poland Supply Co., Buyer, H. M. Davidson, Point Marion, Pa.
SA—J. W. Wilson, 1013 House Bldg., Pittsburgh, Pa.

Poland No. 1 Mine; Drift; Pittsburgh Seam, 84 to 98 in. thick.
PO—Point Marion, Pa.; SP—Poland, Pa.; CTY—Fayette; RR—Penna.
Monongahela Div.
S of H—Mules and 8 trolley pole type locos. Track gage 44 in.
S of M—11 chain breast type and 1 shortwall mchs.
PP—Power purchased. Transformer 6,600 to 2,200 volts A. C., 2—150 K. W. M. G. sets, 250 volts D. C., 6 fire tube boilers, total 900 H. P., 18 pumps.
EMP—200. Last years tonnage 72,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

Poland No. 2 Mine; Slope; Pittsburgh Seam, 84 to 96 in. thick.
PO—Point Marion, Pa.; SP—Poland, Pa.; CTY—Fayette; RR—Penna.
Monongahela Div.
MS—Wm. Williamson, Point Marion, Pa.
S of H—Mules and trolley pole type locos. Track gage 44 in.
S of M—Chain breast type and longwall mchs.
PP—2 boilers, 1 gen. unit, 250 volts D. C., 4 pumps.
EMP—50. Last years tonnage 18,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

POLLARD-BRANT, INC.
Now Geo. P. Stein.

POLLINS, A. H.
General Office, Southwest, Pa.
PR—A. H. Pollins, Southwest, Pa.
TR—A. H. Pollins, " "
GM—A. H. Pollins, " "
GS—A. H. Pollins, Southwest, Pa.
PA—A. H. Pollins, " "
EM—Thos. P. Herron, Irwin, Pa.
SA—A. H. Pollins, Southwest, Pa.

Pollins No. 1 Mine; Slope; Latrobe Connelville Seam, 78 to 96 in. thick.
PO—R. F. D. No. 1, Derry, Pa.; SP—Bradenville, Pa.; CTY—Westmoreland; RR—Penna., Bradenville Br.

MS—John McKeena, R. F. D. No. 1, Latrobe, Pa.
S of H—Mules and locos. Track gage 33 in.
S of M—Hand.
EMP—17. Last fiscal year output, 17,535 tons.
SIZES SHIPT—Run of Mine.

Pollins No. 2 Mine; Drift; Pittsburgh and Irwin Gas Seams, 75 in. thick.
PO—Irwin, Pa.; R. F. D. No. 1, Pa.; SP—Same, and Pollins No. 2 Mine St. ing, Pa.; CTY—Westmoreland, RR—Penna.

MS—Wm. Lewis, Irwin, Pa.
S of H—Mules, rope and 1 steam loco. Track gage, 33 in.
S of M—Hand.
EMP—35. Last fiscal year output, 37,000 tons.
SIZES SHIPT—Run of Mine.
Old information.

POPLAR GROVE COAL COMPANY.
Out of Business.

PORTAGE COAL MINING CO.
General Office, St. Benedict, Pa.
PR—Rumbrandt Peale, St. Benedict, Pa.
TR—T. J. Fitzpatrick, 2710 Grand Central Terminal, New York, N. Y.
GM—Richard Peale, St. Benedict, Pa.
GS—Merritt Hutton, St. Benedict, Pa.
PA—G. E. Metzger, St. Benedict, Pa.
CE—Merritt Hutton, St. Benedict, Pa.
EM—R. J. Proizeller, St. Benedict, Pa.
EE—E. K. Ivatis, St. Benedict, Pa.
SCO—Portage Trading Co., Buyer, A. C. Hoover, St. Benedict, Pa.

Portage No. 2 Mine; Slope; C Prime Seam; 39 to 56 in. thick.
PO—Portage, Pa.; SP—Same; CTY—Cambria; RR—P. R. R., Martins Br.
MS—A. G. Hohnke, Portage, Pa.
SM—B. L. Murray, Portage, Pa.
S of H—Rope and 7 elec. locos. Track gage 36 in.
S of M—6 elec. and 4 comp. air mchs.
PP—1 water tube boiler, 2 return tubular boilers, total 575 H. P., 1 air compressor. Purchase power, 4 pumps.
EMP—288. Last fiscal year output 266,560 tons.
SIZES SHIPT—Run of Mine.

PORTAGE COLLIERY CO.
Portage, Pa.
No report.

PORTAGE SMOKELESS COAL CO.
General Office, Beaverdale, Pa.
PR—L. A. Boucher, Beaverdale, Pa.
TR—J. E. Evans, Ebensburg, Pa.
GM—L. A. Boucher, Beaverdale, Pa.
GS—George L. Miller, Portage, Pa.
PA—L. A. Boucher, Beaverdale, Pa.
EM—G. Shaker, Johnston, Pa.
Portage Smokeless Nos. 2 and 3 Mines; Drifts; "E" or Freeport Seam, 30 to 54 in. thick.
PO—Portage, Pa.; SP—Same; CTY—Cambria; RR—Penna.
S of H—Mules and 1 elec. loco. Track gage 36 in.
S of M—Hand and 2 elec. mchs.
PP—Purchase power, transformer 2200 to 250 volts, M. G. sets, 250 volts D. C.
EMP—30.
SIZES SHIPT—Run of Mine.

PORTER COAL CO.
General Office, Harrison Bldg., Philadelphia, Pa.
Potomac Mine.
PO—Barnesboro, Pa.; CTY—Cambria; RR—Penna.
No report.

POSTLEWAITE, P. H.

General Office, Valier, Pa.
Postlewaite Mine; Drift; Lower Freeport Seam, 60 in. thick.
PO—Valier, Pa.; SP—Same; CTY—Jefferson; RR—B. R. & P.
MS—P. H. Postlewaite, Valier, Pa.
S of H—Mules. Track gage 36 in.
S of M—Hand.
EMP—15. Daily tonnage 50.
SIZES SHIPT—Run of Mine.

POT RIDGE COAL COMPANY

General Office, Windber, Pa.
GM—D. T. Price, Windber, Pa.
GS—A. J. Wirick, Windber, Pa.
PA—D. T. Price, Windber, Pa.

Pot Ridge Mine; Drift; "B" Seam; 46 inches thick.
PO—Rummell, Pa.; SP—Same; CTY—Somerset; RR—P. R. R.
S of H—Mules and rope. Track gage 36 inches.
S of M—Hand.
PP—1 fire tube boiler, 35 H. P.
EMP—50. Last years tonnage 25,000.
SIZES SHIPT—Run of Mine.

POTTER, BIGLER & POTTER, INC.

General Office, Clearfield, Pa.
PR—A. W. Bigler, Clearfield, Pa.
TR—W. B. Potter, Karthaus, Pa.
GM—A. W. Bigler, Clearfield, Pa.
PA—A. W. Bigler, Clearfield, Pa.

Mt. Carmel Mine; "B" Seam, 42 in. thick.
PO—Karthaus, Pa.; SP—Same; CTY—Clearfield; RR—N. Y. C.
MS—Howard Lewis, Karthaus, Pa.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
EMP—50.
SIZES SHIPT—Run of Mine.

POTTER COAL AND COKE COMPANY.

General Office, Greensburg, Pa.
PR—C. E. Heller, Greensburg, Pa.
VP—J. P. Donohoe, Greensburg, Pa.
TR—Edw. E. Donohoe, Greensburg, Pa.
GM—John P. Donohoe, " "
GS—John J. Joyce, Coral, Pa.
PA—L. Frank Klingensmith, Greensburg, Pa.
MM—Andrew Black, " "
EM—Lucas Kinter, Coral, Pa.
EE—Thomas Kiley, Coral, Pa.

SCO—S. F. Potter & Co., Inc., Buyer B. F. Harris, Coral, Pa.
SA—Roberts Brown Co., Pittsburgh, Pa., and Crocker Bros., 21 East 40th St., New York, N. Y.

Potter Mine; Slope; Upper Freeport Seam, 64 to 70 in. thick. Operate washery.
PO—Coral, Pa.; SP—Same; CTY—Indiana; RR—Penna., Indiana Br.
S of H—Mules and rope and 3 comp air hoists. Track gage, 42 in.
S of M—35 comp. air mchs.
PP—Purchase power, transformer 2200 to 440 volts, 1 75 K. W., 1 100 K. W., gen. units, 250 volts D. C., 6 fire tube boilers, 900 H. P., 13 pumps.
EMP—300. Last years tonnage 230,000.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Picking Tables, Screens.

POTTS RUN COAL COMPANY

General Office, Clearfield, Pa.
PR—A. B. Kerr, New York City.
TR—F. B. Kerr, Clearfield, Pa.
GM—F. B. Kerr, " "
GS—A. M. Dunsmore, Boardman, Pa.
PA—Paul Staniffer, Boardman, Pa.
EM—G. A. Weber, Boardman and Clearfield, Pa.
EE—Frederick Patterson, Boardman, Pa.
SCO—Boardman Supply Co., Buyer, John Rong, Jr., Boardman, Pa.
SA—Potts Run Coal Sales Corp. of Mass., Boston, Mass.; Potts Run Coal Sales Corp. of New York, Syracuse, N. Y., and Dickerman & Engles, Inc., New York, N. Y.

Potts Run Nos. 1, 2 and 3 Mines; Drifts; "B" Seam, 48 to 56 in. thick.
PO—Boardman, Pa.; SP—Same; CTY—Clearfield; RR—N. Y. C. & H. R.
S of H—Mules and trolley pole type locos. Track gage 36 in.
S of M—Hand, elec. mchs.
PP—15 pumps.
EMP—220. Last years tonnage 163,000.
SIZES SHIPT—Run of Mine.

POWELL COAL CO., INC.

General Office, Powell, Pa.
PR—F. J. Monahan, Paterson, N. J.
VP—E. L. Sixx, Powell, Pa.
TR—E. L. Sixx, Powell, Pa.
GM—C. D. Sixx, Powell, Pa.
GS—C. D. Sixx, Powell, Pa.
PA—C. D. Sixx, Powell, Pa.
SA—Powell Coal Co., Inc., Powell, Pa.
Powell Mine; Drift; A. B. C. Seam, 60 in. thick.
PO—Powell, Pa.; SP—Same; CTY—Bradford; RR—S. & N. Y.

S of H—Mules. Track gage 33 inches.
S of M—Hand.
EMP—7. Daily tonnage 45.
SIZES SHIPT—Run of Mine, Lump.
NOTE—Formerly operated by the Cash Coal Co.

PRATT COAL CO.

General Office, Weber Bldg., Punxsutawney, Pa.
PR—H. G. Bowers, Punxsutawney, Pa.
VP—W. A. Bowers, Punxsutawney, Pa.
TR—A. F. McCall, Punxsutawney, Pa.
GM—W. A. Bowers, Punxsutawney, Pa.
GS—Jam. S. Pratt, Punxsutawney, Pa.
PA—H. G. Bowers, Punxsutawney, Pa.

Pratt Mine; Drift; Upper Freeport Seam, 52 in. thick.
PO—Rossiter, R. F. D., Pa.; SP—Hillman, Pa.; CTY—Indiana; RR—Pa.
SM—J. S. Neal, Rossiter, Pa.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—25. Last years tonnage 29,075.
SIZES SHIPT—Run of Mine.

PREMIER FUEL COMPANY

General Office, 702 Oliver Bldg., Pittsburgh, Pa.
PR—John L. Moore, Pittsburgh, Pa.
TR—John L. Moore, Pittsburgh, Pa.
GS—F. K. Woodard, Greensburg, Pa.
PA—A. I. Marshall, Pittsburgh, Pa.
SA—A. I. Marshall, Pittsburgh, Pa.

Ruff Mine; Shaft and Slope; Upper Freeport Seam; 48-60 in. thick.
PO—Youngwood, Pa.; SP—Same; CTY—Westmoreland; RR—Penna.
S of H—Mules, rope and 1 loco. Track gage 42 in.
S of M—2 shortwall cutting mchs.
PP—Power purchased from West Penn Power Co., 220 volts A. C., 3 phase.
EMP—40. Daily tonnage 300.
SIZES SHIPT—Run of Mine, Slack.
NOTE—Formerly operated by the Fuel Coal Company.

PRICE, W. A.

General Office, Gorman, W. Va.
Caldwell Mine.
PO—Curtisville, Pa.; CTY—Clearfield; RR—B. R. & P., N. Y. C., Penna.
No report.

PRISCILLA COAL & COKE CO.

PR—W. Frank Beck, Altoona, Pa.
TR—C. Leroy Simmons, Bridgeport, Pa.
GM—W. Frank Beck, Altoona, Pa.
GS—W. Frank Beck, Altoona, Pa.
PA—W. Frank Beck, Altoona, Pa.
EM—Walter Sylliman, Altoona, Pa.
SCO—Priscilla Supply Co., Buyer, W. Frank Beck, Altoona, Pa.
SA—W. Frank Beck, Altoona, Pa.

Priscilla Mine; Drift; C Prime Seam, 39 in. thick.
PO—Westover, Pa.; SP—Same; CTY—Clearfield; RR—P. R. R.
MS—Chas. Brown, Westover, Pa.
SM—C. Campbell Beck, Westover, Pa.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
EMP—37. Last years tonnage 25,000.
SIZES SHIPT—Run of Mine.

PRISCILLA COAL MINING CO.

General Office, 36 So. 7th St., Philadelphia, Pa.
PR—H. L. Merrick, Philadelphia, Pa.
GM—S. J. Brown, Philadelphia, Pa.
PA—E. J. Morgan, South Fork, Pa.
SA—Geo. W. Bailey Co., 36 So. 7th St., Philadelphia, Pa.

Priscilla No. 1 Mine; Drift; B Seam, 36 in. thick.
PO—South Fork, Pa.; SP—Same; CTY—Cambria, RR—P. R. R.
MS—E. J. Morgan, South Fork, Pa.
S of H—Mules. Track gage 36 in.
S of M—Hand.
SIZES SHIPT—Run of Mine.

PRODUCERS COAL CORPORATION

General Office, First National Bank Bldg., Pittsburgh, Pa.
PR—R. C. Masten, Pittsburgh, Pa.
VP—J. K. Barber, Pittsburgh, Pa.
TR—E. C. Hibbetts, Pittsburgh, Pa.
GM—H. A. Turner, Kittanning, Pa.
GS—H. A. Turner, Kittanning, Pa.
PA—H. H. Eisman, Pittsburgh, Pa.
CE—John M. Rayburn, Pittsburgh, Pa.
SA—Producers Fuel Co., Pittsburgh, Pa.

Masten Mine; Shaft; Pittsburgh Seam; 66 inches thick.
PO—Coon Island, Pa.; SP—Clayville, Pa.; CTY—Washington; RR—B. & O.
S of H—Mules, trolley pole type and storage battery locos. Track gage, 42 in.
S of M—4 electric punchers and shortwall mchs.
PP—4 water tube boilers, total 150 H. P., 1 150 K. W., gen. units, 250 volts D. C.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.

PROGRESS COAL COMPANY.
General Office, Ramsey, Pa.
OWNER—Chas. G. Broberg, Ramsey, Pa.

Progress No. 1 Mine; Drift and Strip-
ping; C, D and E Seams, 34 36 in.
thick.

PO—Ramsey, Pa.; SP—Same; CTY—
Clearfield; RR—P. & S.
MS—C. G. Broberg, Ramsey, Pa.
S of H—Mules. Track gauge, 36 in.
S of M—Hand.

PP—Power purchased, transformers 22-
000 volts, M. G. sets, 250 volts
D. C.

EMP—25. Daily output, 60 tons.
SIZES SHIPT—Run of Mine.
Old Information.

PROSPECT COAL COMPANY.
General Office, Greensburg, Pa.
PR—Jos. D. Wentling, Greensburg, Pa.
TR—Jos. D. Wentling, Greensburg, Pa.
GM—Jos. D. Wentling, Greensburg, Pa.
SA—Stanley E. Cook, Greensburg, Pa.
SA—Greensburg Coal & Coke Co., Phila-
delphia, Pa.

Prospect Mine; Slope; Pittsburgh Seam,
84 in. thick.

PO—Greensburg, Pa.; SP—Same; CTY—
Westmoreland; RR—Penna.

MS—Jos. D. Wentling, Greensburg, Pa.
S of H—Mules and electric locos.

S of M—Hand.

PP—Power purchased, transformer 2200
to 220 volts A. C.

EMP—15.
SIZES SHIPT—Run of Mine.

PROVIDENT COKE AND MINING CO.
General Office, Kelly Station, Pa.
PR—D. G. Bamford, Kelly Station, Pa.
VP—R. B. Caldwell, Kelly Station, Pa.
TR—H. J. Lindman, Kelly Station, Pa.
GM—H. J. Lindman, Kelly Station, Pa.
SA—H. J. Lindman, Kelly Station, Pa.
EM—W. G. Aye, Kittanning, Pa.
EE—Martin Moore, Kelly Station, Pa.
SA—Fairview Mining Co., Pittsburgh, Pa.

Provident Mine; Drift; Upper Freeport
Seam, 38 to 48 in. thick.

PO—Kelly Station, Pa.; SP—Same; CTY—
Armstrong; RR—Penna. A. V. Div.

MS—Paul H. Varner, Kelly Station, Pa.
S of H—3 trolley pole type locos. Track
gauge, 42 in.

S of M—5 shortwall machs.

PP—Power purchased, M. G. sets, 250
volts D. C., 1 pump.

EMP—100.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT.—Bar Screens.

PROVINS COAL COMPANY
General Office, 626 Fayette Title &
Trust Bldg., Uniontown, Pa.
PR—R. W. Playford, Uniontown, Pa.
VP—J. H. Dunn, Uniontown, Pa.
TR—L. L. Willard, Uniontown, Pa.
SEVY—John Farrell, Uniontown, Pa.
GM—John Sinecek, Uniontown, Pa.
PA—John Farrell, Uniontown, Pa.

Provins Mine; Drift; S-wickley Seam, 60
inches thick.

PO—Masontown, Pa.; SP—Grays Land-
ing, Pa.; CTY—Fayette; RR—Mo-
nongahela.

MS—Edw. A. Glrod, Masontown, Pa.
S of H—Mules.

PP—1 fire tube boiler, 150 H. P.

EMP—30. Last fiscal year output, 22-
500 tons.

SIZES SHIPT—Run of Mine.

PRYOR COAL CO
General Office, Greensburg, Pa.
PR—C. M. Jamison, Greensburg, Pa.
TR—John S. Sell, Greensburg, Pa.
GM—W. R. Turney, Greensburg, Pa.
PA—Robert Robson, Greensburg, Pa.
EM—Wm. R. Turney, Greensburg, Pa.
SA—Operators Fuel Agency, Pittsburgh,
Pa.

Avella No. 1, Drift, Pittsburgh Seam
No. 6, 4 ft. 8 in. thick.

PO—Avella, Pa.; SP—Same; CTY—
Washington. RR—Pittsburgh & W.
Va.

MS—J. E. Ranft, Avella, Pa.

S of H—Mules and trolley pole type locos.
Track gauge, 42 in.

S of M—1 shortwall and 6 chain breast
type machs.

PP—2 fire tube boilers, total 300 H. P.,
1 gen. unit, 200 K. W., 250 volts
D. C., 5 pumps.

EMP—40. Last years tonnage 43,000.

SIZES SHIPT—Run of Mine, Slack, Nut,
Lump.

PREP. EQUIPT—Gravity Screens.

PUCKETY COAL COMPANY
General Office, New Kensington, Pa.
PR—George H. Summers, New Kensing-
ton, Pa.
VP—Mrs. A. H. Rhodes, New Kensing-
ton, Pa.
TR—R. S. Woodward, New Kensington,
Pa.
GM—George H. Summers, New Kensing-
ton, Pa.

GS—George H. Summers, New Kensing-
ton, Pa.

PA—George H. Summers, New Kensing-
ton, Pa.

SA—George H. Summers, New Kensing-
ton, Pa.

EM—George H. Summers, New Kensing-
ton, Pa.

EE—George H. Summers, New Kensing-
ton, Pa.

SA—George H. Summers, New Kensing-
ton, Pa.

EM—George H. Summers, New Kensing-
ton, Pa.

EE—George H. Summers, New Kensing-
ton, Pa.

GS—George H. Summers, New Kensing-
ton, Pa.
PA—George H. Summers, New Kensing-
ton, Pa.
SA—George H. Summers, New Kensing-
ton, Pa.

Puckety Mine; Drift; Pittsburgh Seam;
72 in. thick.

PO—New Kensington, Pa.; SP—Same;
CTY—Allegheny; RR—Penna.

S of H—Mules. Track gauge 36 inches.

S of M—Hand.

EMP—12. Daily tonnage 40.

SIZES SHIPT—Run of Mine.

PUNXSUTAWNEY COAL MINING CO.
General Office, Buffalo, N. Y.
PR—Harry Yates, Buffalo, N. Y.
GM—Chas. Pearson, Jr., Buffalo, N. Y.
SA—C. J. Weber, Punxsutawney, Pa.
PA—Chas. J. Weber, Punxsutawney, Pa.
EM—H. M. Kanarr, Punxsutawney, Pa.
EE—J. M. Harvey, Punxsutawney, Pa.
SA—Francis Supply Co., Buyer, John
Murray, Rossiter, Pa.
SALES MGR—Wm. C. Tait, Buffalo, N.
Y.

Frances No. 1 Mine; Drift; Upper Free-
port Seam, 45 in. thick.

PO—Rossiter, Pa.; SP—Frances, Pa.;
CTY—Indiana; RR—R. R. & P.

S of H—2 trolley pole type locos. Track
gauge 42 inches.

S of M—2 longwall machs.

PP—Power purchased, Transformers 22-
000 to 2,300 volts A. C., M. G.
set, 250 volts D. C., 4 pumps.

EMP—125. Daily tonnage 400.

SIZES SHIPT—Run of Mine, Lump,
Slack.

PREP. EQUIPT—Gravity Screens.

Frances No. 2 Mine; Drift; Upper Free-
port Seam, 54 in. thick.

PO—Rossiter, Pa.; SP—Frances, Pa.;
CTY—Indiana; RR—R. R. & P.

S of H—1 trolley pole type loco. Track
gauge 42 in.

S of M—1 longwall mach.

PP—Power purchased, Transformer 22-
000 to 2,300 volts A. C., M. G.
sets, 250 volts D. C., 1 pump.

EMP—125. Daily tonnage 500.

SIZES SHIPT—Run of Mine, Lump,
Slack.

PREP. EQUIPT—Gravity Screens.

Frances No. 3 Mine; Drift; Upper Free
port Seam, 62 in. thick.

PO—Rossiter, Pa.; SP—Frances, Pa.;
CTY—Indiana; RR—R. R. & P.

S of H—1 trolley pole type loco. Track
gauge 42 inches.

S of M—1 longwall mach.

PP—Power purchased, Transformers 22-
000 to 2,300 volts A. C., M. G.
sets, 250 volts D. C., 1 pump.

EMP—25. Daily tonnage 100.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Gravity Screens.

PURITAN COKE CO
General Office, Uniontown, Pa.
PR—James R. Cray, Uniontown, Pa.
TR—G. S. Harab, Uniontown, Pa.
GM—W. W. Marshall, Uniontown, Pa.
GS—F. R. Crow, Uniontown, Pa.
PA—F. R. Crow, Uniontown, Pa.
CE—Henderson Steele, Uniontown, Pa.
EM—South Penn Engr. Co., Uniontown,
Pa.
EE—Chas. Brass, McClellandtown, Pa.
SA—Address the Company, Uniontown, Pa.

Puritan Nos. 2, 3, 4 and 5 Mines; Drift
and Slope; Pittsburgh Seam, 108 in.
thick.

PO—McClellandtown, Pa.; SP—Frt.,
Leckrone, Pa.; Exp., Masontown, Pa.

RR—P. R. R., Monongahela Div.

S of H—Mules and rope, 1 10-ton and 2
5-ton storage battery locos. Track
gauge 42 in.

S of M—Hand and 7 shortwall machs.

PP—6 boilers, 150 H. P. each, 1—
250 K. W. and 1—150 K. W.
gen. units 250 volts D. C., 13
pumps.

EMP—425. Last years tonnage 313,499.

SIZES SHIPT—Run of Mine.

(Old Information)

PURITY COAL COMPANY
General Office, Somerset, Pa.
PR—Jas. A. Meehan, Somerset, Pa.
TR—Fred Fitzharris, Johnstown, Pa.
GM—Jas. A. Meehan, Somerset, Pa.
PA—M. L. Biddle, Johnstown, Pa.
CE—F. Fitzharris, Johnstown, Pa.
EE—H. V. Brown, Cherry Tree, Pa.
SA—Cosgrove & Co., Johnstown, Pa.
Additional Information on Page 721

Purity No. 1 Mine; Shaft; E Seam, 36
in. thick.

PO—Somerset, Pa.; SP—Same; CTY—
Somerset; RR—B. & O.

S of H—Mules. Track gauge 36 in.

S of M—2 chain breast type machs.

PP—Power purchased, 1—60 H. P.
water tube boiler, M. G. sets, 250
volts D. C., 2 pumps.

EMP—23. Last years tonnage 5,000.

SIZES SHIPT—Run of Mine.

Partly No. 2 Mine; Drift; 42 in. thick.
PO—Somerset, Pa.; SP—Boswell, Pa.;
CTY—Somerset; RR—B. & O., Bos-
well Branch.

S of H—Mules. Track gauge 36 in.

S of M—Hand.

EMP—35. Last years tonnage 8,000.

SIZES SHIPT—Run of Mine.

Note—Formerly operated by William
Coal Co.

Old Information.

PURD COAL COMPANY.
Out of business.

PUTNEYVILLE COAL CO
Out of business.

PYRAMID COAL MINING COMPANY
General Office, Curwensville, Pa.
PR—Fred Pilkington, Curwensville, Pa.
VP—W. H. Ellery, 1 Broadway, New
York, N. Y.

TR—I. B. Norris, Curwensville, Pa.

GM—M. J. Kelly, Curwensville, Pa.

GS—Frederick Pilkington, Curwensville,
Pa.

PA—M. J. Kelly, Curwensville, Pa.

EM—Geo. H. Ayres, Phillipsburg, Pa.

SA—Sales Agents, Coalade Mining Co., No.
1 Broadway, New York, N. Y.

Pyramid No. 1 Mine; Drift; D Seam;
42 in. thick.

PO—Curwensville, Pa.; SP—Same; CTY—
Clearfield; RR—N. Y. C. & H.
R.

S of H—Mules. Track gauge, 36 in.

S of M—Hand.

PP—Power purchased, transformer 2200
to 220 volts A. C., 2 pumps.

EMP—45. Last years tonnage 40,000.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Picking Tables.

Old Information.

QUALITY COAL COMPANY
General Office, Meyersdale, Pa.
OWNER—T. Boone Brown, Meyersdale,
Pa.

Quality Nos. 1 and 2 Mines; Drift; Pitts-
burgh Seam, 48 in. thick.

PO—Meyersdale, Pa.; SP—Pine Hill,
Pa.; CTY—Somerset; RR—B. & O.

S of H—Mules and gasoline loco. Track
gauge 42 inches.

S of M—Hand.

EMP—15. Last fiscal year output,
10,000 tons.

SIZES SHIPT—Run of Mine.

QUALITY SMOKELESS COAL COMPANY
General Office, Meyersdale, Pa.
PR—T. Boone Brown, Meyersdale, Pa.

Quality No. 2 Mine; Drift; Seam 48 in.
thick.

PO—Meyersdale, Pa.; SP—Pine Hill,
Pa.; CTY—Somerset; RR—B. & O.

MS—T. Boone Brown, Meyersdale, Pa.

S of H—Mules. Track gauge 40 in.

S of M—Hand.

PP—2 pumps.

EMP—10.

SIZES SHIPT—Run of Mine.

Note—Formerly operated by John Willis.

QUEENSTOWN COAL CO
General Office, East Brady, Pa.
PR—E. J. Dickson, East Brady, Pa.

VP—B. F. Shuck, Littell Bldg., Buffalo,
N. Y.

TR—C. A. Webber, Littell Bldg., Buffalo,
N. Y.

GM—B. F. Shuck, Littell Bldg., Buffalo,
N. Y.

GS—B. F. Fassett, East Brady, Pa.

PA—B. F. Fassett.

SA—B. F. Shuck, Littell Bldg., Buffalo,
N. Y.

Queenstown Mine; Drift; Lower Kittan-
ing Seam, 39 in. thick.

PO—East Brady; SP—Same; CTY—Arm-
strong; RR—Western Allegheny to
B. & O.

S of H—Mules. Track gauge 36 in.

S of M—10 comp. air machs.

PP—2 water tube boilers, total 275
H. P., 4 pumps.

EMP—60. Last years tonnage 56,700.

SIZES SHIPT—Run of Mine, Slack, Lump

PREP. EQUIPT—Gravity Screens.

QUEMAHONING COAL COMPANY.
General Office, Somerset, Pa.
PR—D. B. Zimmerman, Somerset, Pa.
VP—Isaiah Good, Somerset, Pa.
TR—R. S. Zimmerman, Somerset, Pa.
GM—R. S. Zimmerman, Somerset, Pa.
GS—D. J. Mulholland, Ralphton, Pa.
PA—A. D. Graham, Somerset, Pa.
EM—E. M. Frederick, Somerset, Pa.
EE—L. Elliott, Somerset, Pa.
SA—A. D. Graham, Somerset, Pa.

Ralphton Mine; Slope; C Prime Seam,
48 in. thick.

PO—Ralphton, Pa.; SP—Same; CTY—
Somerset; RR—B. & O.

S of H—Rope, trolley pole type and 1
steam loco. Track gauge 42 in.

S of M—10 shortwall and 2 longwall
machs.

PP—8 boilers, gen. units, 2—
D. C., 75 pumps.

EMP—500. Daily tonnage 2,000.

SIZES SHIPT—Run of Mine.

Hasland Mine; Shaft, E Seam, 48 in.
thick.

PO—Zimmerman, R. D., Somerset, Pa.;
SP—Hasland, Pa.; CTY—Somerset;
RR—B. & O.

S of H—Trolley pole type locos. Track
gauge, 42 in.

S of M—10 shortwall machs.

PP—6 100 H. P. fire tube boilers, gen.
unit, 250 V. D. C.

EMP—12. Daily tonnage 500.

SIZES SHIPT—Run of Mine.

Ankeny Mine, Drift, Lemon Seam, 48
in. thick.

PO—R. D., Somerset, Pa.; SP—Grey,
Pa.; CTY—Allegheny; RR—B. &
O., W. M.

S of H—Trolley pole type locos. Track
gauge, 42 in.

S of M—Hand.

PP—Purchase power, transformers 230,
M. G. sets, 250 volts D. C., 1
pumps.

EMP—60. Daily tonnage 350.

SIZES SHIPT—Run of Mine.

Rockwood Mine; Drift; E seam, 48 in.
thick.

PO—South Rockwood, Pa.; SP—Same;
CTY—Somerset; RR—W. M.

S of H—Trolley pole type and 2 steam
locos. Track gauge, 42 in.

S of M—2 electric punchers.

PP—Power purchased.

EMP—75. Daily output, 250 tons.

SIZES SHIPT—Run of Mine.

Kountz Mine; Drift; B Seam, 44 in.
thick.

PO—Stoegastown, Pa.; SP—Same; CTY—
Somerset, Pa.; RR—B. & O.

S of H—Trolley pole type locos. Track
gauge, 42 in.

S of M—1 shortwall mach.

PP—Purchase power, 250 volts.

EMP—35. Daily tonnage 300.

SIZES SHIPT—Run of Mine.

QUEMAHONING CREEK COAL CO.
General Office, Somerset, Pa.
PR—J. C. Rydon, Somerset, Pa.
VP—J. E. David, New York, N. Y.
TR—J. C. Rydon, Somerset, Pa.
PA—E. M. Martin, Somerset, Pa.
EM—J. M. Kantner, Somerset, Pa.
SCU—Harrison Mercantile Co., Buyer, H.
W. Pugh, Quereck, Pa.
SA—J. H. Magee 25 Beaver St., New
York, N. Y.

Quemahoning Creek No. 1 Mine worked
out.

Quemahoning Creek No. 2 Mine; Slope;
C Prime Seam, 48 in. thick.

PO—Quereck, Pa.; SP—Harrison, Pa.;
CTY—Somerset; RR—B. & O.

S of H—12 trolley pole type locos. Track
gauge 42 in.

S of M—3 shortwall machs.

PP—Power purchased, transformer 22000
2200 volts A. C., M. G. sets, 250
volts D. C., 7 pumps.

Rainey, W. J.—Cont.

MS—Thomas Moore, Vanderblit, Pa.
SM—Harry Ellenberger, Dawson, Pa.
S of H—Mules and rope. Track gage, 42 in.
PP—3 fire tube boilers, 350 H. P., 3 pumps.
EMP—89. Last fiscal year output, 100,419 tons.
SIZES SHIPT.—Run of Mine.

Elm Grove Mine; Slope; Pittsburgh Seam, 90 in. thick.
PO—Dunbar, Pa.; SP—Vances Mills, Pa. CTY—Fayette. RR—E. & O.
MS—H. H. Smith, R.F.D., Dunbar, Pa.
SM—F. Harden, R. F. D., Dunbar, Pa.
S of H—Mules and rope. Track gage, 42 in.
PP—4 fire tube boilers, 360 H. P., 1 65 K. W. gen. unit, 3 pumps.
EMP—124. Last fiscal year output, 120,813 tons. Coke ovens, 100 Bee Hive.
SIZES SHIPT.—Run of Mine.

Acme Mine worked out.

Mt. Braddock Mine; Slope; Pittsburgh Seam, 100 in. thick.
PO—Mt. Braddock, Pa. SP—Same, and Gist, Pa. CTY—Fayette. RR—P. R. R. & O.
MS—David Ainsley, Mt. Braddock, Pa.
SM—Earl Foltz, Mt. Braddock, Pa.
S of H—Mules and rope. Track gage, 40 in.
S of M—1 comp. air puncher.
PP—5 water tube boilers, 1500 H. P., 2 335 K. W. gen. units, D. C. 11 pumps.
EMP—422. Last fiscal year output, 346,564 tons. 470 Rectangular Ovens.
SIZES SHIPT.—Run of Mine.

Revere Mine; Slope; Pittsburgh Seam, 90 in. thick.
PO—Udeli, Pa.; SP—Uniontown, Pa., CTY—Fayette; RR—P. R. R.
MS—A. A. Mitchell, Udeli, Pa.
SM—J. W. Snyder, Udeli, Pa.
S of H—Mules, rope and 2 gasoline locos. Track gage, 42 in.
S of M—3 comp. air punchers.
PP—9 water tube boilers, total 1240 H. P., 2 335 K. W. gen. units D. C., 11 pumps.
EMP—390. Last fiscal year output, 317,882 tons. 550 Rectangular Ovens.
SIZES SHIPT.—Run of Mine.

Royal Mine; Shaft; Pittsburgh Seam, 94 in. thick.
PO—Chestnut Ridge, Pa.; SP—Smock, Pa.; CTY—Fayette; RR—Penna.
MS—James Eaton, Chestnut Ridge, Pa.
SM—Geo. Stillwagon, Chestnut Ridge, Pa.
S of H—Mules and rope, 1 elec. and 2 storage battery locos. Track gage 42 in.
S of M—4 comp. air punchers.
PP—5 water tube boilers, total 1,560 H. P., 3 585 K. W. gen. units D. C., 10 pumps.
EMP—327. Last fiscal year output, 322,273 tons.
SIZES SHIPT.—Run of Mine.

Allison Mine; Shaft; Pittsburgh Seam, 90 in. thick.
PO—Allison, Pa.; SP—Brownsville, Pa.; CTY—Fayette. RR—Monongahela.
MS—Ben Davis, Allison, Pa.
SM—Albert Fleming, Allison, Pa.
S of H—Mules, rope and 8 elec. locos. Track gage, 42 in.
S of M—Comp. air punchers and chain breast machs.
PP—11 water tube boilers, total 3040 H. P., 3 A. C., 1350 K. W., 1 D. C., 200 K. W. gen. units, 220 volts, 19 pumps.
EMP—327. Last fiscal year output, 322,263 tons. 493 Rectangular Ovens.
SIZES SHIPT.—Run of Mine.

Stewart Mine; Shaft; Pittsburgh Seam, 100 in. thick.
PO—Southwest, Pa.; SP—Hecla, Pa.; CTY—Westmoreland; RR—P. R. R.
MS—F. E. Middleton, Southwest, Pa.
SM—W. H. Wood, Southwest, Pa.
S of H—Mules and rope. Track gage 42 in.
S of M—Comp. air punchers.
PP—Elec. hoist, M. G. Sets and air comp.
EMP—250.
SIZES SHIPT.—Run of Mine.

RALPHTON COAL CO.

General Office, Somerset, Pa.

Ralphton No. 4 Mine.
PO—Ralphton, Pa.; CTY—Somerset; RR—E. & O.
No report.

RALSTON COAL CO.

General Office, Ralston, Pa.

PR—H. W. Jones, Ralston, Pa.

VP—E. J. Dexter, Ralston, Pa.
TR—J. J. Holleran, Ralston, Pa.
GM—H. W. Jones, Ralston, Pa.
GS—James Maggio, Ralston, Pa.
PA—H. W. Jones, Ralston, Pa.

Red Run Mine; Drift; "B" Seam, 18 to 22 in. thick.
PO—Ralston, Pa.; SP—Same; CTY—Lycoming; RR—P. R. R., N. C. Div.
S of M—Steam loco, mules. Track gage 36 in.
S of M—Hand.
PP—4 return tubular boilers, total 240 H. P., 2 water tube boilers, gen. units, 250 volts D. C.
EMP—20. Last years tonnage 12,445.
SIZES SHIPT.—Run of Mine.
PREP. EQUIPT.—Picking Tables.
Old information.

RAMEY COAL CO.

General Office, Ramey, Pa.

PR—F. F. Kramp, Ramey, Pa.
TR—E. C. Davis, " "
GM—F. F. Kramp, " "
GS—F. F. Kramp, " "
PA—F. F. Kramp, " "

Ramey Mine No. 1. Drift Mine, B. Seam, 52 to 56 in. thick.
PO—Ramey, Pa.; SP—Same; CTY—Clearfield; RR—P. & S. Penna.
S of H—Mules and storage battery loco. Track gage 36 in.
S of M—Hand.
PP—Power purchased, transformer 2200 250 volts A. C., 3 pumps.
EMP—50. Last years tonnage 13,940
SIZES SHIPT.—Run of Mine.

RAMSEY & SCOTT.

General Office, Reynoldsville, Pa.

PR—Richard Ramsey, Reynoldsville, Pa.
TR—Richard Ramsey, Reynoldsville, Pa.
GM—Richard Ramsey, Reynoldsville, Pa.
GS—Richard Ramsey, Reynoldsville, Pa.
PA—Richard Ramsey, Reynoldsville, Pa.
SA—Stewart Coal Co., Knoxdale, Pa.

Black Prince Mine; Drift; Brookville Seam, 48 in. thick.
PO—Reynoldsville, Pa.; SP—Fuller, Pa.; CTY—Jefferson; RR—P. R. R.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
EMP—10. Last years tonnage 2,748.
SIZES SHIPT.—Run of Mine.
Old information.

RAMSAY COAL COMPANY

General Office, St. Marys, Pa.

TR—F. D. Lambert, St. Marys, Pa.
GM—P. B. McBride, St. Marys, Pa.
GS—H. Reynolds, Ramsaytown, Pa.
PA—G. F. Sturtevant, St. Marys, Pa.
SA—H. J. Matthews, Ramsaytown, Pa.
SCO—Shawmut Commercial Company, Buyer, F. A. Robinson, St. Marys, Pa.
SA—Northern Coal Mining Co., St. Marys, Pa.

Ramsay Mine; Drift; Lower Freeport Seam; 52 inches thick.
PO—Ramsaytown, Pa.; SP—Same; CTY—Jefferson; RR—Pittsburgh & Shawmut.
MS—James Lambeth, Ramsaytown, Pa.
SM—J. W. Fleming, Ramsaytown, Pa.
S of H—Mules and rope. Track gage 36 inches.
S of M—Hand.
PP—Power purchased. 220 volts D. C.
EMP—40. Daily output, 200 tons.
SIZES SHIPT.—Run of Mine.

RAMSEY COAL CO., INC.

General Office, Ligonier, Pa.

PR—E. C. Ramsey, Ligonier, Pa.
VP—G. C. Frank, Ligonier, Pa.
TR—H. S. Lohr, Ligonier, Pa.
GM—S. S. Brownfield, Ligonier, Pa.
GS—S. S. Brownfield, Ligonier, Pa.
PA—S. S. Brownfield, Ligonier, Pa.
EM—Fred Miller, Ligonier, Pa.
SA—H. B. Gans, Uniontown, Pa.
SA—B. F. & K. Fuel Co., Ligonier, Pa.

Ramsay Mine No. 2; Drift; Pittsburgh Connellsville Seam, 72 to 96 in. thick.
PO—Ligonier, Pa.; SP—Same; CTY—Westmoreland; RR—Ligonier Valley.
MS—Geo. E. Alexander, Ligonier, Pa.
S of H—Mules and trolley pole type locos. Track gage, 42 in.
S of M—Hand.
PP—2—150 H. P. fire tube boilers, 1—150 K. W. gen. unit, 250 volts D. C., 7 pumps.
EMP—95. Last years tonnage 148,052.
SIZES SHIPT.—Run of Mine.

RANDOLPH COAL COMPANY.

General Office, Somerset, Pa.

PR—R. E. Beers, Somerset, Pa.
VP—Edgar Statler, Somerset, Pa.
TR—H. C. Stehl, Somerset, Pa.
GM—E. N. Irwin, Somerset, Pa.
GS—H. C. Stehl, Somerset, Pa.
PA—E. N. Irwin, Somerset, Pa.
EM—J. J. Hildreth, Moresville, Pa.
SCO—Edgar Statler, Buyer, Edgar Statler, Hooversville, Pa.
SA—Randolph Coal Co., Somerset, Pa.

Randolph Mine; Drift; C Prime Seam, 36 in. thick.
PO—Boswell, Pa.; SP—Same; CTY—Somerset; RR—E. & O.
S of H—Trolley pole type locos. and mules. Track gage, 36 in.
S of M—Hand.
PP—Power purchased, transformer 2200 to 200 volts, motor gen. sets, 220 volts D. C., 6 pumps.
EMP—80. Last fiscal year output, 42,503 tons.
SIZES SHIPT.—Run of Mine.

RARIODAN & EAST BRADY COAL CO.

General Office, Pittsburgh, Pa.

PR—James C. Gray, Pittsburgh, Pa.
TR—E. Gray, Pittsburgh, Pa.
GM—Bertram E. Winrow, Pittsburgh, Pa.
GS—D. E. Solada, Kittanning, Pa.
PA—Bertram E. Winrow, Pittsburgh, Pa.
CE—W. G. Aye, Kittanning, Pa.
EE—M. C. Whitsell, Pittsburgh, Pa.
SA—Raridan & East Brady Coal Co., 724 Frick Bldg., Pittsburgh, Pa.

Raridan Mine; Drift; Upper Freeport Seam, 40 in. thick.
PO—Logansport, Pa.; SP—Frt. Glen, Pa.; Exp. Kelly, Pa.; CTY—Armstrong; RR—Penna.
S of H—6 shortwall machs.
S of M—5 shortwall machs.
PP—Power purchased, transformer 2200-440 volts A. C., M. G. sets, 250 volts D. C., 3 pumps.
EMP—80. Last years tonnage 91,000.
SIZES SHIPT.—Run of Mine, Slack, Lump.
PREP. EQUIPT.—Gravity Screens.
Old information.

RATTLESNAKE COAL COMPANY

General Office, Brockwayville, Pa.

PR—J. L. Bond, Brockwayville, Pa.
TR—H. Rittenhouse, Brockwayville, Pa.
GM—H. Rittenhouse, Brockwayville, Pa.
GS—H. Rittenhouse, Brockwayville, Pa.
PA—H. Rittenhouse, Brockwayville, Pa.
SA—Valley Coal Co., Brockwayville, Pa.

Rattlesnake Mine; Drift; Lower Kittanning Seam, 36 inches thick.
PO—Brockwayville, Pa.; SP—Same; CTY—Jefferson; RR—Penna.
MS—Charles Spyer, Brockwayville, Pa.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—60. Last years tonnage 30,000.
SIZES SHIPT.—Run of Mine.

READE COAL CO., INC.

General Office, Fallen Timber, Pa.

PR—W. H. Beers, Fallen Timber, Pa.
TR—R. E. Beers, Fallen Timber, Pa.
GM—W. H. Beers, Fallen Timber, Pa.
GS—Charles Lamb, Coalport, Pa.
PA—W. H. Beers, Fallen Timber, Pa.
CE—Jos. S. Silliman, Altoona Trust Bldg., Altoona, Pa.
SA—John C. Oak Coal Co., inc., Altoona Trust Bldg., Altoona, Pa.

Rade No. 1 Mine; Drift; D. Seam, 38 in. thick.
PO—Fulton, Pa.; SP—Same; CTY—Cambria; RR—C. & I. Br. P. R. R.
S of H—Mules. Track gage 36 inches.
S of M—Elec. puncher and shortwall machines.
PP—Power purchased transformer 22000-220 volts A. C., gen. unit, 100 K. W., 1 pump.
EMP—25. Last years tonnage 16,965.
SIZES SHIPT.—Run of Mine.

READING IRON CO.

General Office, Reading, Pa.

PR—L. E. Thomas, Reading, Pa.
VP—J. M. Callen, Reading, Pa.
TR—H. N. Yost, Reading, Pa.
SEY—Geo. W. Delany, Reading, Pa.
GM—J. P. Rice, Reading, Pa.
GS—Geo. J. Krebs, Kimmerton, Pa.
PA—Geo. J. Krebs, Kimmerton, Pa.
EM—Thos. Staken, Kimmerton, Pa.
EE—Clyde Kimmel, Kimmerton, Pa.

Reading No. 3 Mine; Drift; "C" Seam, 36 in. thick.
PO—Kimmerton, Pa.; SP—Stoyestown, Pa.; CTY—Somerset; RR—E. & O.
S of H—7 trolley pole type and 1 storage battery locos. Track gage, 36 inches.
S of M—9 electric punchers and 4 short-wall machs.
PP—2 water tube boilers, 400 H. P., 2 175 K. W. gen. units, 275 volts D. C., 20 pumps.
EMP—63. Last years tonnage 52,000.
SIZES SHIPT.—Run of Mine.

REAM, JOHN C.

General Office, Berlin, Pa.

GM—John O. Ream, Berlin, Pa.
PA—John O. Ream, Berlin, Pa.
EM—Flick & Moore, Somerset, Pa.

Ream Nos. 1 and 2 Mines; Drifts; Berlin Seam, 44 in. thick.
PO—Berlin, Pa.; SP—Same; CTY—Somerset; RR—E. & O.

S of H—Mules and 1 storage battery loco. Track gage, 42 in.
S of M—Hand.
PP—Power purchased, transformer 2200-220 volts A. C., 1 pump.
EMP—25. Last years tonnage 29,238.
SIZES SHIPT.—Run of Mine.
PREP. EQUIPT.—Gravity Screens.

RED BANK COAL COMPANY

General Office, Vandergrift Bldg., Pittsburgh, Pa.

PR—Wayland Rupert, Pittsburgh, Pa.
TR—R. D. Bortz, Pittsburgh, Pa.
GS—R. D. Bortz, Pittsburgh, Pa.
CE—Blum-Weldin & Co., Pittsburgh, Pa.
SCO—Monarch Supply Co., Buyer, R. Porter, Pittsburgh, Pa.

Monarch Mine; Drift; Lower Kittanning Seam, 42 inches thick.
PO—Red Bank, Pa.; SP—Same; CTY—Clarion; RR—Penna.
MS—S. E. Clark, East Brady, Pa.
S of H—2 elec. locos. Track gage 31 in.
S of M—7 shortwall machs.
PP—2—190 H. P. gas engines, 1—125, 1—100 K. W. generator, 250 volts D. C., 2 pumps.
EMP—160. Last years tonnage 118,000.
SIZES SHIPT.—Run of Mine, Slack, Lump.

RED TOP COAL CO.

General Office, Hastings, Pa.

OWNER—Chas. Hetrick, Hastings, Pa.
EM—Chas. E. Schlucker, Spangier, Pa.

Red Top Nos. 1 and 2 Mines; Drift; R or Miller Seam, 34-36 in. thick.
PO—Hastings, Pa.; SP—Same. CTY—Cambria. RR—P. R. R., C. & C. Div.

MS—C. E. Weston, R. F. D. No. 1, Hastings, Pa.
S of H—Mules and 1 storage battery loco. Track gage 36 in.
S of M—Hand.
EMP—30. Last years tonnage 30,000.
SIZES SHIPT.—Run of Mine.

REDDING, LAWRENCE

General Office, Clarence, Pa.

Valentine No. 1 Mine.
PO—Snow Shoe, Pa.; CTY—Center; RR—N. Y. C. and Penna.
No report.

REDSTONE COAL & COKE CO.

General Office, 514 Frick Bldg., Pittsburgh, Pa.

PR—E. W. Mudge, Pittsburgh, Pa.
VP—E. T. Weir, Pittsburgh, Pa.
TR—C. B. Ferree, Pittsburgh, Pa.
GM—O. G. Leebelter, Pittsburgh, Pa.
GS—W. T. Reid, Denbo, Pa.
PA—W. S. Scott, Pittsburgh, Pa.
CE—John M. Rayburn, Pittsburgh, Pa.
SCO—Oak Hill Supply Co., Pittsburgh, Pa.
Buyer, E. K. Seeman, Republic, Pa.

Thompson No. 1 Mine; Shaft; Pittsburgh Seam; 84 inches thick.
PO—Republic, Pa.; SP—Same; CTY—Fayette; RR—Monon.
S of H—Mules, comp. air. Track gage 42 inches.
S of M—Hand, comp. air mach.
PP—3 fire tube boilers, total 1700 H. P., 2—150 K. W. gen. units.
SIZES SHIPT.—Run of Mine.
NOTE—Formerly operated by the Thompson Connellsville Coal & Coke Co.

REED COLLIERY CO.

General Office, Dudley, Pa.

OPERATOR—W. H. Reed, Dudley, Pa.
SCO—C. D. Reed Co. Buyer, W. W. Reed, Dudley, Pa.
Sales Agent, W. H. Reed, Dudley, Pa.

Benedict Mine; Drift; Fulton Seam, 36 inches thick.
PO—Dudley, Pa. SP—Same. CTY—Huntingdon. RR—H. & R. T.
MS—W. P. Bradley, Dudley, Pa.
S of H—Mules.
S of M—Hand.
PP—1 fire tube boiler.
EMP—50. Last fiscal year output, 13,000 tons.
Old information.

REGAL COAL MINING COMPANY.

General Office, Clearfield, Pa.

PR—F. Gurney Smith, Clearfield, Pa.
VP—W. J. Williams, Ramey, Pa.
TR—Chas. T. Kurtz, Clearfield, Pa.
GS—F. Gurney Smith, Clearfield, Pa.
PA—F. Gurney Smith, Clearfield, Pa.
EM—Womelsdorf & Dunkle, Philipsburg, Pa.
SA—Regal Coal Mining Co., Clearfield, Pa.

Eleanor No. 2 Mine; Drift; Moshannon or D. Seam, 30-32 inches thick.
PO—Ramey, Pa.; SP—Same; CTY—Clearfield; RR—P. R. R., Muddy Run Br.
MS—W. J. Williams, Ramey, Pa.
S of H—Mules. Track gage 36 in.
EMP—80. Daily output, 200 tons.
SIZES SHIPT.—Run of Mine.

REID COAL COMPANY

General Office, Brookville, Pa.
PR—W. S. Reid, Brookville, Pa.
TR—C. T. Swartz, Brookville, Pa.
GM—J. N. Stewart, Brookville, Pa.
GS—W. B. Warren, Brookville, Pa.
PA—W. S. Reid, Brookville, Pa.
EM—Fred Sayores, Brookville, Pa.

Reld Mine; Drift; Upper Freeport Seam, 42-54 inches thick.
PO—Brookville, Pa.; SP—Caldwell, Pa.; CTY—Armstrong; RR—P. & S.
S of H—Trolley pole type loco. Track gage 36 inches.
S of M—Longwall machs.
PP—Purchase power, 250 volts D. C.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Sorters, Under development.

REILLY-CALLAGHAN COAL & COKE CO., INC.

General Office, Uniontown, Pa.
PR—W. J. Reilly, Uniontown, Pa.
VP—Joseph O. Malla, Mammoth, Pa.
TR—W. J. Reilly, Uniontown, Pa.
GM—W. J. Reilly, Uniontown, Pa.
GS—Joseph D. Karl, Uniontown, Pa.
PA—E. R. Ritz, Uniontown, Pa.
EM—H. R. Blackford, Uniontown, Pa.
SCO—Logan Ross Store, Buyer, Logan Ross, Highhouse, Pa.
Sales Agency, W. A. Stone & Co., Uniontown, Pa.

Additional Information on Page 751

Nellie Mine; Drift; Sewickley Seam, 60 to 72 in. thick.
PO—R. F. D. No. 2, Smithfield, Pa.; SP—Newcomer, Pa.; CTY—Fayette; RR—B. & O.
MS—Chas. Hoyhurst, Uniontown, Pa.
S of H—Mules. Track gage, 42 in.
S of M—Hand.
EMP—85. Daily tonnage 400.
SIZES SHIPT—Run of Mine.

Callaghan Mine; Slope; Sewickley Seam, 60 to 72 in. thick.
PO—R. F. D. No. 2, Smithfield, Pa.; SP—Newcomer, Pa.; CTY—Fayette; RR—B. & O.

MS—Pat Doyle, Smithfield, Pa.
S of H—Mules. Track gauge, 44 in.
S of M—Hand.
EMP—80. Daily tonnage 400.
SIZES SHIPT—Run of Mine.

Sapper Mine; Slope; Sewickley Seam, 60 to 72 in. thick.
PO—R. F. D. No. 2, Smithfield, Pa.; SP—Newcomer, Pa.; CTY—Fayette; RR—B. & O.
MS—Frank Malloy, Smithfield, Pa.
S of H—Mules, rope and steam. Track gage, 44 in.

S of M—Hand.
EMP—135. Daily tonnage 700. Coke ovens, 25 Bee Hive.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables

Reilly Mine; Slope; Freeport Seam, 72 in. thick.
PO—Confluence, Pa.; SP—Same; CTY—Somerset; RR—B. & O.
MS—Jes. Reane, Confluence, Pa.
S of H—Mules. Track gage 44 in.
S of M—Hand.
EMP—45. Daily tonnage 200.
SIZES SHIPT—Run of Mine.

Margaret Mine; Drift; Pittsburgh Seam, 108 in. thick.
PO—Smithfield, Pa.; SP—Same; CTY—Fayette; RR—B. & O.
MS—Jes. Karl, Smithfield, Pa.
S of H—Mules. Track gage 44 in.
S of M—Hand.
EMP—45. Daily tonnage 200.
SIZES SHIPT—Run of Mine, Lump.

REILLY, JOS. H., COAL COMPANY.

General Office, 305 Finance Bldg., Philadelphia, Pa.
PR—Jes. H. Reilly, Philadelphia, Pa.
VP—Wm. B. Reilly, Philadelphia, Pa.
TR—John E. Reilly, Spangler, Pa.
GM—Jes. H. Reilly, Philadelphia, Pa.
GS—Jno. E. Reilly, Spangler, Pa.
PA—John E. Reilly, Spangler, Pa.
EM—Charles E. Schlicher, Spangler, Pa.
SCO—C. R. Jones & Co. Buyer, C. R. Jones, Spangler, Pa.
SA—Os. H. Reilly, Philadelphia, Pa.

Reilly No. 1 Mine; Shaft; R or Miller Seam, 44 in. thick.
PO—Spangler, Pa. SP—Same. CTY—Cambria; RR—C. & C. P. R. R.
MS—O. J. Flammang, Spangler, Pa.
S of H—3 trolley pole type locos. Track gage 36 in.
S of M—2 comp. air punchers and 6 shortwall machs.
PP—Power purchased, Transformer 6,600 to 440 volts A. C., 15 M. G. set, 250 volts D. C., 15 pumps.
EMP—125. Last years tonnage 120,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Run of Mine.

REILLY-PEABODY FUEL CO.
Now Peabody Fuel Co.

REILLY, W. J. COAL & COKE CO.

General Office, Uniontown, Pa.
PR—W. J. Reilly, Uniontown, Pa.
TR—W. J. Reilly, Uniontown, Pa.
GM—W. J. Reilly, Uniontown, Pa.
GS—W. J. Reilly, Uniontown, Pa.
PA—R. R. Ritz, Uniontown, Pa.
EM—H. R. Blackford, Uniontown, Pa.
SA—W. A. Stone & Co., Uniontown, Pa.

Baxter Ridge Mine; Drift; Pittsburgh Seam, 108 in. thick.
PO—Smithfield, Pa.; SP—Same; CTY—Fayette; RR—B. & O.
MS—W. J. Reilly, Jr., Uniontown, Pa.
S of H—Mules. Track gage 44 in.
S of M—Hand.
EMP—40. Daily tonnage 175.
SIZES SHIPT—Run of Mine.

Billie Mine; Drift; Sewickley Seam, 48 in. thick.
PO—Newcomer, Pa.; CTY—Fayette; RR—Penna.
S of H—Mules. Track gage 44 in.
S of M—Hand.
EMP—40. Daily tonnage 200.
SIZES SHIPT—Run of Mine.

REITZ COAL COMPANY.

General Office, Windber, Pa.
PR—John Lochrie, Windber, Pa.
TR—Robert Morris, Windber, Pa.
GM—John Lochrie, Windber, Pa.
GS—Chas. Estep, Windber, Pa.
PA—Otto Schultz, Windber, Pa.
EM—Irvin Frailey, Windber, Pa.
EE—Wm. Blough, Windber, Pa.

No. 1 Mine; "E" Seam, 42 in. thick.
PO—Cairnbrook, Pa.; SP—Same; CTY—Somerset; RR—Penna.
S of H—Electric locos. Track gage 42 in.
S of M—3 electric machs.
PP—Electric pumps.
EMP—40. Last fiscal year output, 33,500 tons.

No. 2 Mine; "E" Seam.
PO—Cairnbrook, Pa.; SP—Same; CTY—Somerset; RR—Penna.
S of H—Electric locos. Track gage 36 in.
S of M—13 electric machs.
PP—Electric pumps.
EMP—310. Last fiscal year output 259,780 tons.

No. 3 Mine; Drift; "E" Seam.
PO—Cairnbrook, Pa.; SP—Same; CTY—Somerset; RR—Penna.
S of H—Electric locos.
S of M—Electric machs.

No. 4 Mine; Drift; "E" Seam, 48-50 in. thick.
PO—Windber, Pa.; SP—Same; CTY—Somerset; RR—Penna.
S of H—Electric locos. Track gage 42 in.
S of M—4 electric machs. and 3 electric pumps.
EMP—175. Last fiscal year output 106,000 tons.

No. 5 Mine; Drift; "E" Seam, 42-50 in. thick.
PO—Windber, Pa.; SP—Same; CTY—Somerset; RR—Penna.
S of H—Electric locos. Track gage 42 in.
S of M—4 electric machs.
PP—3 electric pumps.
EMP—175. Last fiscal year output, 106,000 tons.

No. 6 Mine; Drift; "E" Seam, 36-44 in. thick.
PO—Windber, Pa.; SP—Same; CTY—Somerset; RR—Penna.
S of H—Electric locos. Track gage 42 in.
S of M—1 electric mach.
PP—1 electric pump.
EMP—55. Last fiscal year output 46,000 tons.

RELIANCO COKE COMPANY.

General Office, 514 Frick Bldg., Pittsburgh, Pa.
PR—E. W. Mudge, Pittsburgh, Pa.
VP—C. B. Ferree, Pittsburgh, Pa.
TR—C. B. Ferree, Pittsburgh, Pa.
GM—O. G. Lechler, Pittsburgh, Pa.
GS—W. T. Reid, Denbo, Pa.
PA—W. S. Scott, Pittsburgh, Pa.
SCO—Denbo Supply Co. Buyer, H. B. Sinsley, Denbo, Pa.
SA—Edmund W. Mudge & Co., 514 Frick Bldg., Pittsburgh, Pa.

Denbo Mine; Shaft; Pittsburgh Seam, 72 to 108 in. thick.
PO—Denbo, Pa.; SP—Frt. Same; Exp. Brownsville, Pa.; CTY—Washington; RR—Penna.; Monongahela River.
MS—O. R. Loyer, Denbo, Pa.
S of H—Mules and trolley pole type locos. Track gage, 44 in.
S of M—Chain breast type and shortwall machs.
PP—3 water tube boilers, 1200 H. P., 2 200 gen. units, 250 volts D. C., 10 pumps.

EMP—260. Last fiscal year output, 267,754 tons.
Coke ovens, 236 Rectangular.
SIZES SHIPT—Run of Mine, Crushed

RENEE COAL COMPANY

General Office, Kittanning, Pa.
PR—I. Apple, Kittanning, Pa.
TR—D. W. Apple, Kittanning, Pa.
GM—John Benson, Kittanning, Pa.
GS—John Benson, Kittanning, Pa.
PA—D. W. Apple, Kittanning, Pa.
EM—Wm. Aye, Kittanning, Pa.
EE—James McLafferty, Kittanning, Pa.
SA—D. W. Apple, Kittanning, Pa.

Benson Mine; Drift; Lower Freeport Seam, 10 inches thick.
PO—Kitt., Pa.; SP—Same; CTY—Armstrong; RR—Penna.
S of H—Mules.
S of M—Shortwall machs.
EMP—29. Daily tonnage 100.
SIZES SHIPT—Run of Mine.

RENWICK COAL COMPANY

General Office, Ligonier, Pa.
OWNER—A. K. Renwick, Ligonier, Pa.
Renwick Mine; Drift; Pittsburgh Seam, 90 inches thick.
PO—Ligonier, Pa.; SP—Same; CTY—Westmoreland; RR—Ligonier Valley.
MS—J. A. Burke, R. D. Ligonier, Pa.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
EMP—25. Last fiscal year output, 30,000 tons.
SIZES SHIPT—Run of Mine.
Old Information.

REPUBLIC COAL & COKE CO.

General Office, 601 First Nat'l Bank Bldg., Connellsville, Pa.
PR—J. Fred Kurtz, Connellsville, Pa.
VP—F. E. Strling, Uniontown, Pa.
TR—W. B. M. Ginnis, Connellsville, Pa.
GS—M. Hayes Liston, Gans, Pa.
PA—M. Hayes Liston, Gans, Pa.
EM—Fayette Engineering Co., Uniontown, Pa.
SCO—Aitchison Supply Company, Buyer, Jas. McKee, Gans, Pa.
SA—Federal Fuel Co., Connellsville, Pa.

Freedom Mine; Drift; Pittsburgh Seam, 72 in. thick.
PO—Gans, Pa.; SP—Aitchison, Pa.; CTY—Fayette; RR—B. & O.
S of H—Mules, trolley pole type locos. Track gage 40 in.
S of M—2 chain breast type machs.
PP—Power purchased, 250 volts D. C., 2 pumps.
Coke ovens, 100 Bee Hive.
EMP—50. Last years tonnage 21,000.
SIZES SHIPT—Run of Mine.
Formerly operated by Republic Iron & Steel Co.

REPUBLIC COLLIERIES COMPANY

Now part of Republic Iron & Steel Co.

REPUBLIC GAS COAL CO.

PR—H. J. Christy, Kittanning, Pa.
VP—G. W. Forney, Pittsburgh, Pa.
TR—M. C. Briggs, Pittsburgh, Pa.
GM—H. J. Christy, Kittanning, Pa.
GS—W. G. Christy, Rimersburg, Pa.
PA—W. G. Christy, Rimersburg, Pa.
SA—Chas. S. Bygate Co., Union Arcade, Pittsburgh, Pa.

Betty Mine; Drift; Lower Kittanning Seam, 48 in. thick.
PO—Rimersburg, Pa.; SP—Same; CTY—Clarion; RR—P. R. R.
S of H—Mules and trolley pole type loco. Track gage 36 in.
S of M—3 chain breast type machs.
PP—G. n. rate power.
EMP—60. Last years tonnage 30,000.
SIZES SHIPT—Run of Mine.

REPUBLIC IRON & STEEL CO.

General Office, Youngstown, O.
PR—T. J. Gray, Youngstown, O.
1ST VP—H. L. Rownd, Youngstown, O.
2ND VP—J. W. Dietrick, Youngstown, O.
Asst. 2ND VP—John N. Reese, Youngstown, O.
TR—H. M. Hurd, Youngstown, O.
GS—G. H. H. Morse, 1745 Oliver Bldg., Pittsburgh, Pa.
PA—S. H. Hedg. S. Youngstown, O.
EM—F. W. Newhall, Youngstown, Pa.
EE—E. B. Winding, Youngstown, Pa.
SCO—Crescent Supply Co. Buyer, H. H. King, Uniontown, Pa.

Republic Mine; Shaft; Pittsburgh Seam, 84 in. thick.
PO—Republic, Pa.; SP—Same; CTY—Fayette; RR—Monon.
MS—W. G. Fowler, Republic, Pa.
S of H—6 trolley pole type locos. Track gage, 44 in.
S of M—7 shortwall machs.
PP—Power purchased, M. G. set, 250 volts D. C.
EMP—400. Coke ovens, 100 Bee Hive.
SIZES SHIPT—Run of Mine.
Martin Mine; Drift; Pittsburgh Seam, 84 in. thick.

PO—Martin, Pa.; FS—Same; CTY—Fayette; RR—Monon.
MS—John Fayton, Martin, Pa.
S of H—4 trolley pole type locos. Track gage, 36 in.
S of M—3 shortwall machs.
PP—3 fire tube boilers, 450 H. P., gen. units, 250 volts D. C.
EMP—200. Coke ovens, 244 Bee Hive.
SIZES SHIPT—Run of Mine.

Bowled Mine; Drift; Pittsburgh Seam, 84 in. thick.
PO—Smithfield, Pa.; SP—Same; CTY—Fayette; RR—B. & O.
MS—John Lalek, Smithfield, Pa.
S of H—4 trolley pole type locos. Track gage, 44 in.
PP—Power purchased, M. G. set, 250 volts D. C.
EMP—200.
SIZES SHIPT—Run of Mine.

Bowled No. 3 Mine; Drift; Pittsburgh Seam, 84 inches thick.
PO—Smithfield, Pa.; SP—Same; CTY—Fayette; RR—B. & O.
MS—John Lalek, Smithfield, Pa.
S of H—Mules. Track gage 44 inches.
S of M—Hand.
EMP—25.
SIZES SHIPT—Run of Mine.

Bessmer Nos. 1 and 2 Mines; Shaft, Upper Twin Freeport Seam.
PO—Russellton, Pa.; SP—Same; CTY—Allegheny; RR—B. & O.
MS—J. G. Bart, Russellton, Pa.
S of H—Trolley pole type locos. Track gage 42 inches.
S of M—Shortwall mach.

PP—Power purchased, Transformer 2200 volts A. C., motor gen. sets, 500 volts D. C.
EMP—700.
SIZES SHIPT—Run of Mine, Slack, Nut Lump.
PREP. EQUIPT—Shaker Screens, Picking Table, Loading Booms.

RICE FUEL COMPANY

General Office, 702 Second National Bank Bldg., Connellsville, Pa.
PR—W. E. Rice, Connellsville, Pa.
VP—W. P. Stillwagon, Connellsville, Pa.
TR—R. D. Klinefust, Connellsville, Pa.
PA—J. E. Wallace, Connellsville, Pa.
NOTE—Mine under development.

RICE SLOPE COAL CO.

Out of business.

RICH HILL COAL COMPANY.

General Office, Philadelphia, Pa.
PR—Jas. H. Allport, Barnesboro, Pa.
VP—C. H. Jacobs, Philadelphia, Pa.
GM—Jas. H. Allport, Barnesboro, Pa.
GS—W. H. Allport, Hastings, Pa.
TR—C. H. Jacobs, Philadelphia, Pa.
PA—W. H. Allport, Hastings, Pa.
EM—C. E. Schlicher, Spangler, Pa.
EE—E. V. Gans, Hastings, Pa.
Sales Agents, Whitby & Kemmerer, 504 Stephen Girard Bldg., Philadelphia, Pa.

Rich Hill No. 1 and 20 Mine; Drift "D" and "E" Seams, 42 in. thick.
PO—Hastings, Pa.; SP—Same; CTY—Cambria; RR—Penna.; Hastings to MS—W. C. Pollack, Hastings, Pa.
S of H—13 trolley pole type locos. Track gage, 36 in.
S of M—11 shortwall machs.
PP—Power purchased, transformer 600 to 2500 volts A. C., M. G. set, 2 200 K. W., 250 volts D. C., 10 pumps.
EMP—165. Last years tonnage 145,000.
SIZES SHIPT—Run of Mine.

RICH HILL COKE CO.

General Office, Uniontown, Pa.
PR—A. L. Moser, Uniontown, Pa.
TR—Wm. M. Thompson, Uniontown, Pa.
GM—D. S. Richey, Uniontown, Pa.
CS—D. S. Richey, Uniontown, Pa.
PA—C. E. Jones, Outcrop, Pa.
EM—H. L. Gans, Uniontown, Pa.
EE—M. S. Miles, Outcrop, Pa.
SCO—Out Crop Supply Co. Buyer, J. N. McGill, Out Crop, Pa.
SA—J. N. McGill, Outcrop, Pa.

Rich Hill Mine; Drift; Connellsville Seam, 72 to 84 in. thick.
PO—Outcrop, Pa.; SP—Same; CTY—Fayette; RR—B. & O.
MS—Fred Shultz, Outcrop, Pa.
S of H—1 Elec loco.
S of M—Hand.
PP—2 built up, 1 H. P., 1 grade power, 250 volts D. C., 250 volts A. C., 10 pumps.
EMP—120. Last years tonnage 120,000.
SIZES SHIPT—Run of Mine.

RICHLAND COAL MINING COMPANY

General Office, Hollidaysburg, Pa.
PR—Marion D. Patterson, Hollidaysburg, Pa.
V. D. Marion D. Patterson, Hollidaysburg, Pa.
GS—Andrew Pearson, Hollidaysburg, Pa.
(Continued on Next Page)

Richland Coal Mining Company—Cont.

PA—Martin J. Patterson, H. Haysburg, Pa.
SA—Wm. D. Patterson, Haysburg, Pa.
Ravens Nest No. 1 Mine; Drift; C Prime Seam, 44 inches thick.
PO—Lewart, Pa.; SP—Same; CTY—Lambert; RR—Penna.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
Last years tonnage 13,410.

RIDGE COAL COMPANY.

General Office, Greensburg, Pa.
PR—J. A. Sheetz, Greensburg, Pa.
TR—A. M. Wyam, Greensburg, Pa.
GM—J. A. Sheetz, Greensburg, Pa.
GS—J. A. Sheetz, Greensburg, Pa.
PA—A. L. Hurling, Greensburg, Pa.
CE—Gibson Thomas Engineering Co., Latrobe, Pa.
SCO—Elizabeth Supply Co. Buyer, Harry Kuhns, Latrobe, Pa.
SA—J. F. Irwin Fuel Co., Latrobe, Pa.

Frances Mine; Drift; Freeport Seam, 70 in. thick.
PO—Latrobe, Pa.; SP—Same; CTY—Westmoreland; RR—Penna.
S of H—Mules and storage battery locos. Track gage, 42 in.
S of M—1 shortwall and 1 longwall machs.
PP—Power purchased.
EMP—43. Last years tonnage 91,749.
SIZES SHIPT—Run of Mine.

Rosemary Mine abandoned.

RIDGEVIEW COAL CO.

General Office, Bolivar, Pa.
PR—Jesse K. Johnston, Bolivar, Pa.
VP—James A. Paisley, Cleveland, O.
TR—John McCarthy Kennedy, Pittsburgh, Pa.
GM—Jesse K. Johnston, Bolivar, Pa.
GS—Frank B. Hogan, Bolivar, Pa.
PA—Jesse K. Johnston, Bolivar, Pa.
CE—Andrew Crichton, Johnston, Pa.
EP—John Gohlberg, Bolivar, Pa.
SA—Valley Camp Coal Co., Cleveland, O.

Ridgeview Mine; Drift; E Seam, 78 in. thick.
PO—Bolivar, Pa.; SP—Same; CTY—Westmoreland; RR—Penna., Bolivar Branch.
S of H—Storage battery locos. Track gage 42 in.
S of M—3 shortwall machs.
PP—Power purchased, transformer 2200 volts A. C., 3 phase, 60 cycle, rotary converters, 220 volts D. C., 5 pumps.
EMP—105. Last fiscal year output, 105,000 tons.
SIZES SHIPT—Run of Mine.

RIDGEWAY COAL COMPANY

General Office, Ridgway, Pa.
PR—R. A. Cartwright, Ridgway, Pa.
GM—R. A. Cartwright, Ridgway, Pa.
GS—E. M. Campbell, Ridgway, Pa.
EM—E. W. H. Du Bois, Pa.
SA—Whitney & Kemmerer, New York, N. Y.

Kyler Mine; Drift; C Seam, 36 in. thick.
PO—Kersey, Pa. SP—Brookport, Pa. CTY—Elk. RR—Erie. Toby Br.
MS—C. J. Carlson, Kersey, Pa.
S of H—Mules.
S of M—Hand.
EMP—46. Last fiscal year output, 16,400 tons.
SIZES SHIPT—Run of Mine.
old information.

RIMERTON COAL COMPANY

General Office, Leechburg, Pa.
GM—L. W. Hicks, Leechburg, Pa.
GS—E. A. Watters, Leechburg, Pa.
PA—D. L. Maher, Leechburg, Pa.
EM—S. E. Mogut, Leechburg, Pa.
EE—G. H. Ritchie, Leechburg, Pa.

Rimerton Mine; Drift; Kittanning Seam; 42 inches thick.
PO—Rimer, Pa.; SP—Rimerton, Pa.; CTY—Armstrong; RR—Penna.
MS—A. J. Watson, West Montrose, Pa.
H. R. P. Billheimer, Rimer, Pa.
S of H—2 trolley pole type locos. Track gage 42 inches.
S of M—Shortwall machs.
PP—3 175 H. P. gas engines, 1 100 K. W. and 2 50 K. W. gen. units, 250 volts D. C., 4 pumps.
EMP—50. Daily output 300 tons.
SIZES SHIPT—Run of Mine.

RINGGOLD COAL CO.

General Office, Timblin, Pa.
TR—H. E. Kordes, Timblin, Pa.
GM—O. C. Kordes, Timblin, Pa.
Ringgold Mine; Drift; Lower Kittanning Seam, 36 in. thick.
PO—Timblin, Pa.; SP—Same; CTY—Jefferson; RR—P.
S of H—Mules and gasoline locos. Track gage 36 in.
S of M—Hand.

PP—Will purchase power.
EMP—25. Daily tonnage 75.
SIZES SHIPT—Run of Mine.

RINN, S. A. COAL COMPANY.

General Office, Punxsutawney, Pa.
PR—S. A. Rinn, Punxsutawney, Pa.
TR—E. H. Winslow, Punxsutawney, Pa.
GM—S. A. Rinn, Punxsutawney, Pa.
GS—W. N. Trussell, Punxsutawney, Pa.
PA—W. N. Trussell, Punxsutawney, Pa.
EM—Maurice Coulter, Punxsutawney, Pa.

Adrian No. 5 Mine; Drift; Freeport Seam, 60 in. thick.
PO—Punxsutawney, Pa.; SP—Same; CTY—Jefferson; RR—B. R. & P.
MS—Thos. Lingenfelter, Punxsutawney, Pa.
S of H—3 trolley pole type locos. Track gage, 42 in.
S of M—2 shortwall machs.
PP—Power 2 purchased, transformer 500 volts, 2 pumps.
EMP—82. Last years tonnage 49,919.
SIZES SHIPT—Run of Mine, Slack, Lump.

RIPPLE & HECKLER COAL CO.

General Office, Windber, Pa.
PR—B. F. Heckler, Windber, Pa.
TR—Ralph Ripple, Windber, Pa.
Ripple & Heckler Mine; Drift; C Prime Seam, 40 inches thick.
PO—Windber, Pa.; SP—Same; CTY—Somerset; RR—P. R. R.
MF—Jesse Wirick, Rummel, Pa.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—17. Last years tonnage 6,000.
SIZES SHIPT—Run of Mine.

RITTER & WINSLOW, INC.

General Office, Punxsutawney, Pa.
PR—E. H. Winslow, Punxsutawney, Pa.
TR—Daniel Ritter, Indiana, Pa.
GM—Daniel Ritter, Indiana, Pa.
GS—Wm. H. Hatherill, Juneau, Pa.
PA—E. H. Winslow, Punxsutawney, Pa.
CE—H. M. Knarr, Punxsutawney, Pa.
EE—R. J. Fogg, Punxsutawney, Pa.

Juneau No. 1 Mine; Drift; Upper Freeport Seam, 48 in. thick.
PO—Juneau, Pa.; SP—Same; CTY—Indiana; RR—P. R. R.
SM—G. A. White, Juneau, Pa.
S of H—1 elec. hoist and 2 6-ton motors. Track gage 42 in.
S of M—Three chain machs.
PP—Power purchased M. G. Set, 1—150 K. W., 250 volts D. C., 6 pumps.
EMP—92. Last years tonnage 124,200.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by the Juneau Coal Mining Company.

RIVERSIDE COAL COMPANY.

General Office, Uniontown, Pa.
TR—A. C. Bailey, Uniontown, Pa.
GM—A. C. Bailey, Uniontown, Pa.
PA—A. C. Bailey, Uniontown, Pa.

Bailey Mine; Drift; Clarion and Lower Kittanning Seams, 36 and 40 in. thick.
PO—Oblopyle, Pa.; SP—Same; CTY—Fayette; RR—E. & O.
S of H—Mules. Track gage, 42 in.
S of M—Hand.
EMP—30. Daily output, 100 tons.
SIZES SHIPT—Run of Mine.

RIVERSIDE COAL MINING CO.

General Office, South Fork, Pa.
PR—E. C. Sullivan, Worcester, Mass.
TR—E. C. Leonard, South Fork, Pa.
GM—B. C. Leonard, ..
PA—B. C. Leonard, ..
Sales Agent, Gormao-Leonard Coal Co., Worcester, Mass.

Riverside No. 1 Mine; Drift; "E" and "C" Seam, 36 and 40 in. thick.
PO—South Fork, Pa.; SP—Same; CTY—Cambria. RR—P. R. R.
S of H—4 elec. locos. Track gage 36 in.
S of M—4 electric machs.
PP—Purchase power.
SIZES SHIPT—Run of Mine.

ROBERTA COAL COMPANY

General Office, Johnstown, Pa.
PR—Dr. Louis Franke, Johnstown, Pa.
VP—L. R. Williams, Johnstown, Pa.
TR—Francis C. Martin, Johnstown, Pa.
GM—L. R. Williams, Johnstown, Pa.
GS—L. R. Williams, Johnstown, Pa.
SCU—Roberta Supply Co., La Jose, Pa.

Roberta Mine; Drift; D Seam, 42 inches thick.
PO—La Jose, Pa.; SP—Same; CTY—Clearfield; RR—P. R. R.
S of H—Elec. locos. Track gage 36 in.
S of M—Shortwall machs.
PP—Power purchased. Transformer 2200-250 volts A. C., M. G. Sets, 250 volts D. C.
EMP—40. Daily tonnage 100.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by W. H. Thompson.

ROBINSON COAL COMPANY

General Office, Second Nat'l Bank Bldg., Connellsville, Pa.
TR—W. E. Rice, Connellsville, Pa.
GM—W. E. Stillwagon, Connellsville, Pa.
GS—W. P. Stillwagon, Connellsville, Pa.

Robinson Mine; Drift; Pittsburg Seam, 72 inches thick.
PO—out Crop, Pa.; SP—Same; CTY—Fayette; RR—B. & O.
MS—Thomas Robinson, Connellsville, Pa.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
PP—3 pumps.
EMP—25. Last fiscal year output, 20,182 tons.
SIZES SHIPT—Run of Mine.

ROBINSON COAL COMPANY

General Office, Clearfield, Pa.
PR—B. B. Robinson, Clearfield, Pa.
VP—M. D. Robinson, Clearfield, Pa.
TR—Isaac H. Robinson, Clearfield, Pa.
GM—Isaac H. Robinson, Clearfield, Pa.
GS—D. G. McAtee, O. Shanter, Pa.
PA—Isaac Robinson, Clearfield, Pa.
EM—E. W. Hess, Clearfield, Pa.

ROCHESTER & PITTSBURGH COAL & IRON CO.

General Office, Indiana, Pa.
CHAIRMAN—L. W. Robinson, Indiana, Pa.
PR—B. M. Clark, Indiana, Pa.
VP—F. M. Fritchman, Indiana, Pa.
TR—George H. Clune, Rochester, N. Y.
ASST SECY—Geo. H. Clune, Rochester, N. Y.
GM—F. M. Fritchman, Indiana, Pa.
GS—F. R. Vinton, Indiana, Pa.
PA—H. C. Smith, Indiana, Pa.
CE—L. W. Householder, Indiana, Pa.
EM—George Rieg, .., Indiana, Pa.
EE—L. W. Householder, Indiana, Pa.
SCO—Mahoning Supply Co., Mgr., N. O. Meredith, Punxsutawney, Pa.
GEN SA—J. M. Nelson, Rochester, N. Y.

Adrian and Florence Mines; Slope.
PO—Delancy, Pa.; SP—Same; CTY—Jefferson; RR—B. R. & P.
MS—James Morrison, Adrian, Pa.
S of H—26 Elec. and 3 steam loco.
S of M—69 Comp. air mach.
PP—3 Return tubular boilers, total 3,700 H. P., 10 comp. and 8 pumps.
EMP—1,017.

Walston Mine; Slope.
PO—Walston, Pa.; SP—Same; CTY—Jefferson; RR—B. R. & P.
MS—Wm. Handle, Walston, Pa.
S of H—1 Elec. and 2 steam loco.
S of M—12 Comp. air mach.
PP—12 Return tubular boilers, total 1120 H. P. and 2 comp.
EMP—314.

Eleanora Mines; Shaft; Drift and Slope.
PO—Eleanora, Pa.; SP—Same; CTY—Jefferson; RR—B. R. & P.
MS—J. E. Yates, Eleanora, Pa.
S of H—14 Elec. and 2 steam loco.
S of M—56 Elec. mach.
PP—24 Return tubular boilers, total 3480 H. P., 7 comp. and 5 pumps.
EMP—657.

Helvetia Mine; Shaft.
PO—Helvetia, Pa.; SP—Stanley, Pa.; CTY—Jefferson; RR—B. R. & P.
MS—L. J. Harvey, .., Helvetia, Pa.
S of H—7 Elec. loco.
S of M—27 Comp. air mach.
PP—14 Return tubular boilers; total 1,820 H. P., 4 comp. and 3 pumps.
EMP—462.

Cowan Mine; Drift.
PO—Cowanville, Pa.; SP—Cowan, Pa.; CTY—Jefferson; RR—B. R. & P.
MS—L. J. Harvey, .., Helvetia, Pa.
S of H—Elec. loco. and rope.
S of M—4 comp. air mach.
PP—2 Return tubular boilers, total 300 H. P., 2 comp. and 1 pump.
EMP—86.

Lucerne Mine; Drift & Shaft; Upper Freeport Seam, 70 in. thick.
PO—Lucerne, Pa.; SP—Same; CTY—Indiana; RR—B. R. & P.
MS—A. B. McMillen, Lucernemines, Pa.
SM—D. H. McIntire, Punxsutawney, Pa.
S of H—36 trolley pole type and 1 storage battery locos. Track gage 42 in.
S of M—26 electric machs.
PP—12 Sterling water tube boilers, 3 gen. units, 550 volts D. C., 23 pumps.
EMP—1,178. Last years tonnage 384,332.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Revolving and Shaker Screens, Picking Tables.

ROCKHILL COAL & IRON COMPANY

General Office, 900 North American Bldg., Philadelphia, Pa.
PR—P. C. Madeira, Philadelphia, Pa.

VP—H. C. Voorhees, Philadelphia, Pa.
GM—J. S. Sommerville, Robertsdale, Pa.
ASST GM—C. L. Patterson, Robertsdale, Pa.

PA—J. K. Morrison, Robertsdale, Pa.
EM—Bernard Lucas, Robertsdale, Pa.
EE—E. H. Felton, Robertsdale, Pa.
SA—Madeira, Hill & Co., 900 North American Bldg., Philadelphia, Pa.

No. 1 Mine; Drift; Fulton Seam, 54 in. thick.
PO—Robertsdale, Pa.; SP—Same; CTY—Huntingdon RR—E. B. T.
MS—C. M. Fick, Robertsdale, Pa.
S of H—Mules and rope. Track gage, 36 in.
S of M—Hand.
PP—Transformer 2300 to 440 volts A. C. rotary converters, 1 250 K. W., 2 500 K. W. gen. units, 220-440 volts D. C.
EMP—100. Last years tonnage 89,837.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables, Loading Booms.

No. 5 Mine; Slope; Fulton Seam, 43 to 72 in. thick.
PO—Robertsdale, Pa.; SP—Same; CTY—Huntingdon and Bedford; RR—E. B. T. & C. Co.
MS—W. J. Young, Robertsdale, Pa.
S of H—Main and tail rope and storage battery locos. Track gage 36 in.
S of M—Hand.
PP—Power from No. 6 Mine. Transformer 2,300 to 220-440 volts A. C., M. G. set, 440 volts D. C., 18 pumps.
EMP—175. Last years tonnage 148,257.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

No. 6 Mine; Shaft; Fulton Seam, 48 to 72 in. thick.
PO—Robertsdale, Pa.; SP—Same; CTY—Huntingdon, Bedford and Fulton; RR—E. B. T. & C. Co.
MS—E. A. Hawley, Wood, Pa.
S of H—Mules and main and tail rope. Track gage 36 in.
S of M—Hand.
PP—4 water tube boilers, 1,500 H. P., 2—500 K. W. and 1—250 K. W. gen. units. Transformer 2,300 to 220-440 volts A. C., 25 pumps.
EMP—185. Last years tonnage 141,398.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

No. 7 Mine; Slope; Fulton Seam, 48 to 72 in. thick.
PO—Robertsdale, Pa.; SP—Same; CTY—Huntingdon; RR—E. Broadtop.
MS—Walter Williams, Robertsdale, Pa.
S of H—Mules and main and tail rope. Track gage 36 in.
S of M—Hand.
PP—Power from No. 6 Mine. Transformer 2,300 to 220-440 volts A. C., 5 pumps.
EMP—90. Last years tonnage 76,292.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

No. 8 Mine; Drift; Barnett Seam, 60 in. thick.
PO—Robertsdale, Pa.; SP—Same; CTY—Huntingdon; RR—E. B. T. & C. Co.
MS—Wallis Williams, Robertsdale, Pa.
S of H—Mules and gasoline loco. Track gage 36 in.
S of M—Hand.
PP—Power from No. 6 Mine. Transformer 2,300 to 220-440 volts A. C., 3 pumps.
EMP—40. Last years tonnage 38,014.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

No. 9 Mine; Slope; Fulton Seam, 60 in. thick.
PO—Robertsdale, Pa.; SP—Same; CTY—Fulton; RR—E. B. T. & C. Co.
MS—J. F. Bottinger, Wood, Pa.
S of H—Mules, main and tail rope. Track gage, 36 in.
S of M—Hand.
PP—Power from No. 6 Mine; 4 pumps.
EMP—50. Last years tonnage 50,091.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.
Note—Formerly operated by Rockhill Iron & Coal Co.

ROCKHILL IRON & COAL COMPANY

New Rockhill Coal & Iron Company.

ROCKWOOD COAL COMPANY.

General Office, Rockwood, Pa.
PR—Chas. C. Hower, Mt. Union, Pa.
VP—Ralph Gregory, Petersburg, Pa.
TR—Dr. Samuel Gregory, Mt. Union, Pa.
GS—H. G. Cockill, Rockwood, Pa.
PA—H. G. Cockill, Rockwood, Pa.

(Continued on Next Page)

Rockwood Coal Company—Cont.

EM—H. G. Cook, Rockwood, Pa.
SA—Lester Coal & Coke Co., Spring
field, Mass.
Sales Agent, E. A. Hower, Johnstown,
Pa.

Rockwood Nos. 1 and 2 Mine; Drifts; D
Seam, 18 in. thick.
PO—Rockwood, Pa.; SP—Same; CTY—
Somerset; RR—B. & O. and W. M.
MS—H. Hammon, Rockwood, Pa.
S of H—Mules and gasoline locos. Track
gauge, 42 in.
S of M—Hand.
EMP—50. Last years tonnage 12,000.
SIZES SHIPT—Run of Mine.

ROCKY LEDGE COAL COMPANY

General Office, Phillipsburg, Pa.
PR—P. P. Reece, Phillipsburg, Pa.
VP—Jas. A. Hartley, Knoxville, Iowa
TR—Silas Reece, Phillipsburg, Pa.
GM—P. P. Reece, Phillipsburg, Pa.
PA—P. P. Reece, Phillipsburg, Pa.
CE—P. P. Reece, Phillipsburg, Pa.

Rocky Ledge Nos. 1 and 2 Mines; E. and
D. Seams, 42-70 in. thick.
PO—Phillipsburg, Pa.; SP—Same; CTY—
Clearfield; RR—P. R. R.
S of H—Mules. Track gauge 36 inches.
S of M—Hand.
EMP—25. Daily tonnage 100.
SIZES SHIPT—Run of Mine.

ROOEN COAL MINING CO., INC.

General Office, Phillipsburg, Pa.
TR—Harry Barnes, Phillipsburg, Pa.
GM—E. Hunt Hughes, Phillipsburg, Pa.
GS—E. Hunt Hughes, Phillipsburg, Pa.
PA—E. Hunt Hughes, Phillipsburg, Pa.
W. S. Alden, 125 E. 46th St.,
New York, N. Y.
CE—E. Hunt Hughes, Phillipsburg, Pa.
SA—Alden Coal Mining Co., 125 E.
46th St., New York, N. Y.

Alden No. 1 Mine; Drift; B Seam, 60
in. thick.
PO—Phillipsburg, Pa.; SP—Same; CTY—
Clearfield; RR—Penna.
S of H—Trolley pole type locos. Track
gauge 36 in.
S of M—3 shortwall machs.
PP—Power purchased, transformer 2200
to 250 volts A. C., M. G. set,
250 volts D. C., 2 pumps.
EMP—125. Last years tonnage 50,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables, Loading
Rooms.

Alden No. 3 Mine; Drift and Slope; R
or Miller Seam, 48-66 in. thick.
PO—Phillipsburg, Pa.; SP—Same; CTY—
Clearfield; RR—P. R. R.
S of H—Trolley pole type locos. Track
gauge 36 in.
S of M—1 shortwall mach.
PP—Power purchased, transformer 2200
volts A. C., M. G. Set, 250 volts
D. C., 1 pump.
EMP—50. Daily tonnage 500.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables, Loading
Rooms.

Alden No. 4 Mine; Drift; "C" Seam,
36 in. thick.
PO—Phillipsburg, Pa.; SP—Same; CTY—
Clearfield; RR—P. R. R.
S of H—Mules and main and tail rope.
Track gauge 30 in.
S of M—Hand.
PP—Power purchased, transformer, 2200
volts A. C., M. G. Sets, 250 volts
D. C.
EMP—20. Daily tonnage 150.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables, Loading
Rooms.

ROGERS COAL COMPANY.

General Office, Scottsdale, Pa.
PR—J. W. Newbrough, Scottsdale, Pa.
TR—M. E. Reid,
GM—J. W. Newbrough, Scottsdale, Pa.

Rogers No. 1 Mine; Drift; Upper Kittan-
ing Seam, 60 in. thick.
PO—Clearfield, Pa.; SP—Rogers Mills,
Pa.; CTY—Fayette; RR—C. V.
MS—W. R. Jones, Clearfield, Pa.
S of H—Mules. Track gauge, 40 in.
S of M—Hand.
SIZES SHIPT—Run of Mine.

Rogers No. 2 Mine; Drift; Upper Kittan-
ing Seam, 60 in. thick.
PO—Clearfield, Pa.; SP—Rogers Mills,
Pa.; CTY—Fayette; RR—C. V.
S of H—Mules. Track gauge, 40 in.
EMP—14. Last fiscal year output
9,427 tons.
SIZES SHIPT—Run of Mine.

ROMESBURG & WEINSTEIN.

General Office, Meyersdale, Pa.
Woodrow No. 2 Mine.
PO—Gracy Run, Pa.; CTY—Somerset.
No report.

ROMESBURG COAL CO.

PR—M. J. Romesberg, Garrett, Pa.
TR—N. Romesberg, Garrett, Pa.
GM—N. Romesberg, Garrett, Pa.
GS—N. Romesberg, Garrett, Pa.
PA—N. Romesberg, Garrett, Pa.
CE—James Collier, Berlin, Pa.
EM—John Cook, Berlin, Pa.
Sales Agent, N. Romesberg, Garrett, Pa.
Buffalo Mine; Drift; Seam, 48 in. thick.
PO—Garrett, Pa.; SP—Same; CTY—Som-
erset; RR—B. & O.
S of H—Mules, trolley pole type and elec.
locos. Track gauge 40 inches.
S of M—Hand.
PP—Purchase power 220 volts D. C.
EMP—12. Daily tonnage 100.
SIZES SHIPT—Run of Mine.

Garrett Mine; Drift; Seam, 48 in. thick.
PO—Garrett, Pa.; SP—Same; CTY—Som-
erset; RR—B. & O.
S of H—Mules.
S of M—Hand.
EMP—6.
SIZES SHIPT—Run of Mine.

RONNEY COAL MINING CO.

General Office, 1444 Oliver Bldg., Pitts-
burgh, Pa.
PR—S. A. Gilmore, Pittsburgh, Pa.
TR—E. L. Morris, Pittsburgh, Pa.
GM—E. L. Morris, Pittsburgh, Pa.
PA—J. L. Boyd, Pittsburgh, Pa.
EM—S. E. Dickey & Co., Johnstown, Pa.
SA—Hulmer Coal & Trans. Co., Stock
Exch. Bldg., Philadelphia, Pa.

Little Squaw Mine; Slope; R or Miller
Seam, 41 in. thick.
PO—Indian Head, Pa.; SP—Same; CTY—
Fayette; RR—C. V.
MS—Joseph Kennedy, McLeort, Pa.
S of H—1-35 H. P. hoist 1-6-ton
rope loco. 250 volts D. C.
S of M—2 shortwall machs.
PP—Power purchased, 250 volts D. C.,
2 pumps.
SIZES SHIPT—Run of Mine.

ROSEDALE COAL COMPANY.

General Office, Morgantown, W. Va.
PR—John L. Hatfield, Morgantown, W.
Va.
VP—Mr. Morton, Van Voorhis W. Va.
TR—Aaron J. Garlow, Morgantown, W.
Va.
GS—P. J. Gandy, Van Voorhis, W. Va.
EM—Monongahela Valley Eng. Co., Mor-
gantown, W. Va.
SCO—Morton Supply Co., Buyer G. R.
Nicholson, Morgantown, W. Va.
SA—Blue Flame Fuel Co., Morgantown,
W. Va.

Rosdale No. 2 Mine; Drift; Sewickley
Seam, 59 in. thick.
PO—Dunkard, Pa.; SP—Poland, Pa.;
CTY—Greene; RR—Monongahela.
MS—John Dawson, Dunkard, Pa.
S of H—2 trolley pole type locos. Track
gauge 42 in.
S of M—2 shortwall machs.
PP—Power purchased, 250 volts D. C.,
2 pumps.
EMP—50. Last years tonnage 50,000.
SIZES SHIPT—Run of Mine.
NOTE—Successors to Mapleton Coal Co.

ROSS MINING COMPANY

General Office, Clarion, Pa.
TR—N. A. Rea, Clarion, Pa.
GM—N. A. Rea, Clarion, Pa.
PA—N. A. Rea, Clarion, Pa.
EM—H. Kissell, Clarion, Pa.
SA—Clarion Bit. Coal Co., Clarion, Pa.

Ross Mine; Drift; Lower Kittanning Seam,
30 inches thick.
PO—Shavers, Pa.; SP—Waterson, Pa.;
CTY—Clarion; RR—L. E. F. & C.
MS—H. Detrick, Shavers, Pa.
S of H—Mules and gasoline loco. Track
gauge 36 inches.
S of M—Hand.
EMP—25. Last years tonnage 14,700.
SIZES SHIPT—Run of Mine, Slack,
Nut and Lump.
PREP. EQUIPT—Shaker Screens.

ROSS RUN COAL COMPANY

General Office, Punxsutawney, Pa.
PR—Hans Olson, Punxsutawney, Pa.
VP—E. G. Rodkey, Punxsutawney, Pa.
TR—John A. Fisher, Punxsutawney, Pa.
GM—John A. Fisher, Punxsutawney, Pa.
GS—R. D. Hampson, Punxsutawney, Pa.
EM—R. D. Hampson, Punxsutawney, Pa.

Ross Run No. 1 Mine; Drift; Lower Free-
port Seam, 48 inches thick.
PO—Punxsutawney, Pa.; SP—Same; CTY—
Jefferson; RR—Penna.
S of H—Mules, main and tail rope. Track
gauge 42 inches.
S of M—Hand.
PP—1 fire tube boiler, 50 H. P.
EMP—20. Last fiscal year output, 20-
000 tons.
SIZES SHIPT—Run of Mine.

Ross Run No. 2 Mine; Drift; Lower Free-
port Seam, 42 inches thick.
PO—Punxsutawney, Pa.; SP—Same; CTY—
Jefferson; RR—Penna.

S of H—Mules. Track gauge 42 inches.
S of M—Hand.
EMP—10. Last fiscal year output, 10-
000 tons.
SIZES SHIPT—Run of Mine.

ROWE, C. J. & BROTHERS

General Office, Meyersdale, Pa.
PR—C. J. Rowe, Cumberland, Md.
VP—C. J. Rowe, Meyersdale, Pa.
TR—Fred R. Rowe, Meyersdale, Pa.
GM—Fred Rowe, Sr., Meyersdale, Pa.
GS—Fred Rowe, Sr., Meyersdale, Pa.
PA—C. J. Rowe, Cumberland, Md.
EM—L. H. Rowe, Meyersdale, Pa.
EE—Jas. Shank, Wellersburg, Pa.
SCO—Parker Supply Co., Buyer, Ralph
Rowe, Mt. Savage, Md.
SA—E. E. Rowe, Meyersdale, Pa.

Rose Mine; Drift; Pittsburgh Seam, 72
in. thick.
PO—Wellersburg, Pa.; SP—Exp. Mt.
Savage, Md.; Frt. Barreille, Md.;
CTY—Somerset; RR—Cumberland &
Penna.

MS—C. J. Rowe, Cumberland, Md.
S of H—Mules and trolley pole type locos.
Track gauge, 42 in.
S of M—Hand and machine.
PP—Power purchased, transformers 6600
to 275 volts A. C., 2 pumps
EMP—80. Last years tonnage 70,000.
SIZES SHIPT—Run of Mine
PREP. EQUIPT—Picking Tables.

Mystic Mine; Drift; Redstone Seam, 48
in. thick.
PO—Meyersdale, Pa.; SP—Same; CTY—
Somerset; RR—B. & O.
MS—C. J. Rowe, Meyersdale, Pa.
S of H—Mules and trolley pole type locos.
Track gauge, 42 in.
S of M—1 shortwall mach.
PP—Power purchased transformer, 550
volts A. C.
EMP—75. Last years tonnage 60,000.
SIZES SHIPT—Run of Mine.

Wills No. 1 Mine; Drift; Pittsburgh Seam,
48 in. thick.
PO—Berlin, Pa.; SP—Frt., Pine Hill,
Pa.; Exp. Meyersdale, Pa.; CTY—
Somerset; RR—B. & O.
MS—J. H. Gorman, Berlin, Pa.
S of H—Mules. Track gauge 40 inches.
S of M—Hand.
PP—3 pumps.
EMP—30. Last years tonnage 20,000
SIZES SHIPT—Run of Mine.

ROWLAND, H. H.

General Office, Phillipsburg, Pa.
Lulu No. 2 Mine.
PO—Phillipsburg, Pa.; CTY—Center; RR—
Penna., N. Y. C., P. & S.
No report.

ROYAL COAL COMPANY.

PR—J. P. Cameron, Farmers Bank Bldg.,
Pittsburgh, Pa.
TR—Thos. J. Fitzpatrick, New York, N.Y.
GM—Richard Peale, Winburne, Pa.
GS—Merritt Hutton, St. Benedict, Pa.
PA—G. E. Metzger, St. Benedict, Pa.
EM—Merritt Hutton, Winburne, Pa.
EE—E. K. Davis, Winburne, Pa.
SCO—Central Trading Corp., Buyer, F.
R. Booth, St. Benedict, Pa.

Ogle No. 7 Mine; Slope; "B" Seam, 40
in. thick.
PO—Winburne, Pa. SP—Munson, Pa.
CTY—Clearfield. RR—New York
Central, Royal Branch.
MS—R. H. George, Winburne, Pa.
S of H—Mules and rope. Track gauge
36 in.
S of M—2 elec. machines.
PP—Motor gen. set, 250 volts D. C.,
2200 A. C., 3 phase, 60 cycle, 1
pump. Purchase power.
EMP—30. Daily output 100 tons

RUNK, ROSS R.

General Office, Phillipsburg, Pa.
OPERATOR—Ross R. Runk, Phillipsburg,
Pa.

Klondike Mine; Drift; C Prim Seam, 36
inches thick.
PO—Phillipsburg, Pa.; SP—Same; CTY—
Clearfield; RR—Penna.
S of H—Mules. Track gauge 34 inches.
S of M—Hand.
Last years tonnage 2,000.
SIZES SHIPT—Run of Mine.

RUSH COAL COMPANY.

Operations exhausted.

RUSSELL COAL MINING COMPANY.

General Office, St. Benedict, Pa.
PR—Rembrandt Peale, St. Benedict, Pa.
TR—H. J. Swarhammer, St. Benedict, Pa.
GM—Richard Peale, St. Benedict, Pa.
GS—Merritt Hutton, St. Benedict, Pa.
PA—G. E. Metzger, St. Benedict, Pa.
EM—R. J. Pratzellar, St. Benedict, Pa.
EE—E. K. Davis, St. Benedict, Pa.
SCO—Central Trading Corp., Buyer, A.
C. Hoover, St. Benedict, Pa.

Bloom Victor No. 24 Mine; Slope; "D"
Seam, 34 to 60 in. thick.
PO—Clymer, Pa.; SP—Same; CTY—In-
diana; RR—Penna.

MS—J. W. Haddock, Clymer, Pa.
SM—W. J. Shankweiler, Iowa.
S of H—Rope and 4 elec. locos. Track
gauge 36 in.
S of M—10 elec. machs.
PP—7 return tubular boilers, total 1050
H. P., 1 gen. unit, 500 volts D.
C., 2 pumps.
EMP—160. Last fiscal year output
210,000 tons.
SIZES SHIPT—Run of Mine.

Bloom Victor No. 25 Mine; Drift; "D"
Seam, 30 to 42 in. thick.
PB—Clymer, Pa.; SP—Same; CTY—In-
diana; RR—Penna., C. T. & D. R.
MS—J. W. Haddock, Clymer, Pa.
S of H—1 elec. loco. Track gauge
36 in.
S of M—7 elec. machs.
EMP—70. Last fiscal year output
72,000 tons.
SIZES SHIPT—Run of Mine.

Bloom Victor No. 27 Mine; Drift; "D"
Seam, 36 to 60 in. thick.
PO—Dixonville, Pa.; SP—Same; CTY—
Indiana; RR—Penna., C. T. & D. R.
MS—J. W. Haddock, Clymer, Pa.
SM—S. P. Mechtly,
S of H—4 elec. locos.
S of M—10 elec. machs.
EMP—110. Last fiscal year output
105,000 tons.

Bloom Victor No. 29 Mine; Slope; "B"
Seam, 30 to 54 in. thick.
PO—Clymer, Pa.; SP—Same; CTY—In-
diana; RR—Penna., C. T. & D. R.
MS—J. W. Haddock, Clymer, Pa.
S of H—6 elec. machs.
PP—3 return tubular boilers, total 450
H. P., 1 air compressor and 2 pumps.
EMP—76. Last fiscal year output
79,000 tons.

RUSSET COAL CO.

General Office, Mineral Point, Pa.
PR—W. S. Lee, Altoona, Pa.
TR—James A. Page, Mineral Point, Pa.
GM—James A. Page, Mineral Point, Pa.
GS—C. B. London, Altoona, Pa.
PA—James A. Page, Mineral Point, Pa.
CE—Fosterman Engineering Co., Johns-
town, Pa.
EE—Roger Harrington, Coupon, Pa.
SA—C. B. London, Altoona, Pa.

Russett No. 2 Mine; Drift; B Seam, 48
in. thick.
PO—Coupon, Pa.; SP—Altoona, Pa.; CTY—
Blair; RR—Penna.
MS—Geo. Eichenlaub, R. D. Gallitan, Pa.
S of H—Mules and 2 elec. locos. Track
gauge 36 in.
S of M—2 mining machs.
PP—Power purchased, 150 K. W. M.
G. S. C., 250 volts D. C., 2 pumps.
EMP—88. Last years tonnage 75,000.
SIZES SHIPT—Run of Mine.

RUTH COAL CO.

General Office, Tarentum, Pa.
Sligo Mine.
PO—Karns City, Pa.; CTY—Butler; RR—
B. & O.
No report.

S. B. & B. COAL CO.

General Office, Uniontown, Pa.
McManus Mine.
PO—Masontown, Pa.; CTY—Fayette; RR—
Monon.
No report.

SACKETT, H. R., COAL & COKE CO.

General Office, Smithfield, Pa.
PR—H. R. Sackett, Smithfield, Pa.
TR—W. W. Parshall, Smithfield, Pa.
GM—H. R. Sackett, Smithfield, Pa.
GS—H. R. Sackett, Smithfield, Pa.
PA—H. R. Sackett, Smithfield, Pa.
EM—Humor Burchinal, Smithfield, Pa.
EE—Edward Burchinal, Smithfield, Pa.
SCO—Hare & Sprale, Outcrop, Pa.
SA—Hochboehmer & Co., Uniontown
Pa.
Sackett Mine; Drift; Pittsburgh Seam,
72 in. thick.
PO—Outcrop, Pa.; SP—Same; CTY—
Fayette; RR—B. & O.
S of H—Mules, elec. motor. Track gauge
44 inch s.
S of M—3 shortwall machs.
PP—Power purchased, 500 volts P.
EMP—10. Daily output, 20
coke bins, 30 ice P.
SIZES SHIPT—Run of M.

SAGAMORE COAL CP

General Office, Pittsburgh, Pa.
PR—S. A. G. Co., 19
VP—W. A. G. Co., 19
TR—S. A. G. Co., 19
GM—S. A. G. Co., 19
GS—S. A. G. Co., 19
PA—S. A. G. Co., 19
EM—S. A. G. Co., 19
EE—S. A. G. Co., 19
SCO—S. A. G. Co., 19
SA—S. A. G. Co., 19
SAGAMORE COAL CO. (Continued on Next Page)

Sagamore Coal Co.—Cont.

Bug (Chief Mine, Drift); 1 or Miller Seam, 44 in. thick.
 PO—Indian Head, Pa.; URT—Indian Head, Pa.; EX—Indian Creek, Pa.; CTY—Fayette; RR—Indian Creek Valley.
 MS—E. J. Cantarel, Indian Head, Pa.
 S of H—2 trolley pole type locos. Track gage 42 in.
 S of M—4 shortwall machs.
 PP—2 fire tube boilers, 150 H. P., 1—200 K. W. gen. unit, 250 volts D. C., 3 pumps.
 EMP—80. Daily tonnage 500.
 SIZES SHIPT—Run of Mine.

SAILOR COAL CO.

General Office, Obiopolis, Pa.
 GM—W. H. Gloffely, Obiopolis, Pa.
 GS—W. H. Gloffely, Obiopolis, Pa.
 PA—W. H. Gloffely, Obiopolis, Pa.
 SA—G. Conrads Coal & Coke Co., Connellsville, Pa.

Gloffely Mine; Slope; Lower Kittanning Seam 48 in. thick.
 PO—Obiopolis, Pa.; SP—Same; CTY—Fayette; RR—B. & O. and W. M.
 S of H—Mules, Track gage 42 in.
 PP—2 pumps.
 EMP—12. Daily tonnage 50.
 NOTE—Formerly operated by Rush Fuel Co., Connellsville, Pa.

SALEM COAL AND COKE CO.

General Office, DuBois, Pa.
 GS—E. H. Cowell, DuBois, Pa.
 PA—E. H. Cowell, DuBois, Pa.
 SCO—Address the Company. Buyer, E. H. Cowell, DuBois, Pa.
 SA—Salem Coal & Coke Co., DuBois, Pa.

Salem Mine No. 1; Drift; Lower Freeport Seam, 48 in. thick.
 PO—DuBois, Pa.; SP—Luthenberg, Pa.; CTY—Clearfield; RR—B. & O. & P. Clearfield Br.
 S of H—Mules, Track gage 36 in.
 S of M—Hand and 2 machs.
 PP—2 steam boilers, 60 H. P., 2 pumps.
 EMP—25. Daily tonnage 75.
 SIZES SHIPT—Run of Mine.
 Old information.

SALEM GAS COAL CO.

General Office, Greensburg, Pa.
 Laufer Mine.
 PO—Delmont, Pa.; CTY—Westmoreland; RR—Penna.
 No report.

SALT LICK COAL CO.

General Office, Indiana, Pa.
 Pershing Mine.
 PO—Indian Head, Pa.; CTY—Fayette; RR—Indian Creek Valley
 No report.

SALTSBURG COAL MINING CO.

General Office, Leechburg, Pa.
 PR—P. C. Maderia, Philadelphia, Pa.
 VP—L. W. Hicks, Leechburg, Pa.
 TR—Louis Maderia, Philadelphia, Pa.
 GM—L. W. Hicks, Leechburg, Pa.
 GS—E. A. Watters, Leechburg, Pa.
 PA—D. L. Maher, Leechburg, Pa.
 EM—S. E. Mognet, Leechburg, Pa.
 EE—Hubert Smith, Edri, Pa.

Foster Mine; Drift; Pittsburgh Seam, 60 in. thick.
 PO—Edri, Pa.; SP—Same; CTY—Indiana; RR—P. R. R.
 MS—Thos. Adams, Edri, Pa.
 S of H—Elec. trolley loco. Track gage 36 inches.
 S of M—Chain breast type machs.
 EMP—350. Last fiscal year output, 417,344 tons.
 SIZES SHIPT—Run of Mine.

SALTSBURG COLLIERY CO.

General Office, Leechburg, Pa.
 PR—P. C. Maderia, Philadelphia, Pa.
 VP—L. W. Hicks, Leechburg, Pa.
 GM—L. W. Hicks, Leechburg, Pa.
 GS—E. A. Watters, Leechburg, Pa.
 EM—S. E. Mognet, Leechburg, Pa.

Foster Nos. 4 and 5 Mines; Drift; Upper Freeport and Upper Kittanning Seams, 48-52 in. thick.
 PO—Avonmore, Pa.; SP—Same; CTY—Westmoreland; RR—Penna.
 MS—L. Adams, Avonmore, Pa.
 S of H—Elec. trolley locos. Track gage 42 in.
 S of M—Elec. chain machs.
 PP—250 volts, M. G. Set.
 SIZES SHIPT—Run of Mine.
 Note—Mine is new and just developing.

SAMPSON COAL COMPANY.

General Office, Donora, Pa.
 GM—Grant Sampson, Donora, Pa.
 GS—E. Jay Giamas, Donora, Pa.
 EM—E. J. Giamas, Donora, Pa.
 SA—Grant Sampson, Donora, Pa.

Sampson Mine; Slope; Pittsburgh Seam, 72 in. thick.
 PO—Donora, Pa.; SP—Same; CTY—Washington; RR—Penna.

S of H—Mules. Track gage, 42 in.
 S of M—Hand.
 SIZES SHIPT—Run of Mine.

SANDBERG COAL COMPANY.

General Office, Barnesboro, Pa.
 PR—A. L. Sandberg, Akron, Ohio.
 GM—M. A. Byrnes, Barnesboro, Pa.
 GS—M. A. Byrnes, Barnesboro, Pa.
 PA—M. A. Byrnes, Barnesboro, Pa.

Sandberg No. 1 Mine; Drift; "D" Seam, 54 in. thick.
 PO—Barnesboro, Pa.; SP—Same; CTY—Cambria; RR—P. R. R.
 S of H—Mules, Track gage 36 in.
 S of M—Hand.
 EMP—20. Daily tonnage 100.
 SIZES SHIPT—Run of Mine.

SANDY HOLLOW COAL COMPANY

General Office, Brookville, Pa.
 PR—J. B. Henderson, Brookville, Pa.
 VP—J. B. Henderson, Brookville, Pa.
 TR—John E. Gist, Brookville, Pa.
 GM—J. B. Henderson, Brookville, Pa.
 GS—J. B. Henderson, Brookville, Pa.
 PA—J. B. Henderson, Brookville, Pa.
 CE—Herbert & Henderson, Kittanning, Pa.

Sandy Hollow No. 1 Mine; Drift; Upper Freeport Seam; 60 inches thick.
 PO—Putneyville, Pa.; SP—Same; CTY—Armstrong; RR—Pittsburgh & Shawmut.

MS—J. M. Bain, Putneyville, Pa.
 S of H—Mules, Track gage, 36 in.
 S of M—Elec. puncher.
 PP—Generate power.
 EMP—25. Daily output, 250 tons.
 SIZES SHIPT—Run of Mine.

SANDY RUN COAL COMPANY.

Out of Business.

SANDY VALLEY COAL CO.

OPERATOR—F. M. Brown, Reynoldsville, Pa.
 Peterson Mine.
 PO—Reynoldsville, Pa.; SP—Falls Creek, Pa.; CTY—Clearfield; RR—B. R. & P.
 S of H—Mules.
 S of M—Hand.
 Daily tonnage 75.
 SIZES SHIPT—Run of Mine.

SANNER COAL COMPANY

General Office, Hooversville, Pa.
 PR—Thos. S. Sanner, Hooversville, Pa.
 VP—H. G. Hamer, Hooversville, Pa.
 TR—H. H. Dull, Hooversville, Pa.
 GM—Thos. S. Sanner, Hooversville, Pa.
 GS—Thos. S. Sanner, Hooversville, Pa.
 PA—J. C. Dull, Hooversville, Pa.
 EM—G. O. Kimmel, Coleman, Pa.
 SA—Sanner Coal Co., Hooversville, Pa.

Sanner No. 1 Mine; Drift; "E" Seam, 45 in. thick.
 PO—Hooversville, Pa.; SP—Mosteller, Pa.; CTY—Somerset; RR—B. & O.
 S of H—Mules and aerial tramway. Track gage 36 inches.
 S of M—Hand.
 PP—1 tubular boiler, 60 H. P., 1 engine, 25 H. P., 1 engine, 10 H. P., 1 pump.
 EMP—35. Daily tonnage 120.
 SIZES SHIPT—Run of Mine.

SAVAGE FIRE BRICK COMPANY.

General Office, Meyersdale, Pa.
 PR—Percy Allen Rose, Johnstown, Pa.
 GM—S. J. McClune, Meyersdale, Pa.
 PA—S. J. McClune, Meyersdale, Pa.

Glad City Mine; Drift; 40 in. thick.
 PO—Meyersdale, Pa.; SP—Same. CTY—Somerset. RR—B. & O.
 MS—Samuel Bowman, Meyersdale, Pa.
 S of M—Hand.
 EMP—12. Last years tonnage 861.
 Note—Output consumed in brick plant.

SAVAN COLLIERY COMPANY

General Office, Marshall Bldg., Indiana, Pa.

PR—W. L. Neal, Parkwood, R. D. No. 1, Pa.
 VP—J. M. Neal, R. D. No. 1, Parkwood, Pa.
 TR—H. A. Snyder, Indiana, Pa.
 GM—H. A. Snyder, Indiana, Pa.
 GS—H. A. Snyder, Indiana, Pa.
 PA—H. A. Snyder, Indiana, Pa.
 CE—Horner-Jones Engineering Co., Indiana, Pa.
 SCO—June Supply Company, Buyer, Victor June, Rochester Mills, Pa.
 SA—Savan Collieries Co., Indiana, Pa.

Savan No. 1 Mine; Drift; Upper Freeport Seam, 40-42 in. thick.
 PO—Rochester Mills, Pa.; SP—Savan, Pa.; CTY—Indiana; RR—B. R. & P.
 MS—Evan Morgan, Homr City, Pa.
 S of H—Mules and rope. Track gage, 36 in.
 S of M—Hand.
 PP—1 pump.
 EMP—65. Last years tonnage 24,340.
 SIZES SHIPT—Run of Mine.

SAXMAN COAL & COKE COMPANY

General Office, Latrobe, Pa.
 PR—M. W. Saxman, Latrobe, Pa.
 TR—J. V. Barnett, Latrobe, Pa.
 GM—M. W. Saxman, Latrobe, Pa.
 PA—E. F. Baker, Latrobe, Pa.
 SCO—Victor Store Co. Buyer, J. E. Heck, Latrobe, Pa.

Saxman No. 2 Mine; Shaft; Pittsburgh Seam; 80 in. thick.
 PO—Derry, Pa.; SP—Same; CTY—Westmoreland; RR—Penna.
 MS—A. Smith, Latrobe, Pa.
 S of H—Steam and electric locos.
 EMP—180.
 SIZES SHIPT—Run of Mine.

SCALP LEVEL COAL COMPANY.

General Office, Windber, Pa.
 OWNER—John Lochrie, Windber, Pa.

Scalp Level No. 2 Mine; Shaft; "B" Seam, 42 in. thick.
 PO—Dunlo, Pa.; SP—Same; CTY—Cambria; RR—P. R. R.
 MS—Chas. Estep, Windber, Pa.
 S of H—Electric locos.
 S of M—Shortwall machs.
 PP—Power purchased. 1—50 H. P. fire tube boiler. Transformer 2300 to 250 volts, gen. units, 150 K. W., 250 volts D. C.
 EMP—60. Last years tonnage 33,400.
 SIZES SHIPT—Run of Mine.

SCALP LEVEL COAL MINING CO.

Now part of Reitz Coal Co.

SCHELL COAL COMPANY.

General Office, Somerset, Pa.
 PR—P. A. Schell, Somerset, Pa.
 TR—P. A. Schell, Somerset, Pa.
 GM—W. E. Schell, Somerset, Pa.

Horner Mine; Slope; Pittsburgh Seam, 48 in. thick.
 PO—Somerset, Pa.; SP—Meyersdale, Pa.; CTY—Somerset; RR—W. M.
 S of H—1 storage battery loco. Track gage 42 in.
 S of H—Hand and elec. mach.
 PP—Purchase power, 220 volts.
 EMP—50. Daily output, 300 tons.
 SIZES SHIPT—Run of Mine.

SCHILL, J. A. & CO.

General Office, Lucinda, Pa.
 TR—J. A. Schill, Lucinda, Pa.
 SECY—J. A. Schill, Lucinda, Pa.

Sandy Ridge Mine; 2 Drifts and 1 shaft; Upper Clarion Seam, 48 in. thick.
 PO—Lucinda, Pa.; SP—Schills, Pa.; CTY—Clarion; RR—B. & O.
 MS—Leroy Barker, Lucinda, Pa.
 S of H—Mules and steam loco. Track gage 36 inches.
 S of M—Hand.
 PP—1 fire tube boiler, 60 H. P.
 EMP—30. Last years tonnage 4,700.
 SIZES SHIPT—Run of Mine.

SCHIPPER BROS. COAL MINING CO.

GM—C. F. Schipper, Boston, Mass.
 PA—R. E. Cutchall, Six Mile Run, Pa.
 SCO—Barnett Supply Co. Buyer, Wm. Lewis, Six Mile Run, Pa.

Langdon & Illinois Mines; Drift; Kelly Seam, 42 inches thick.
 PO—Six Mile Run, Pa.; SP—Riddlesburg, Pa.; CTY—Bedford; RR—H. & B. T.
 MS—B. E. Cutchall, Six Mile Run, Pa.
 S of M—Hand.
 PP—1 fire tube boiler, 100 H. P., gen. unit, 110 K. W., 250 volts D. C., 3 pumps.
 EMP—47. Last fiscal year output, 17,790 tons.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Picking Tables.

Smokeless Mine; Drift; Kelly Seam, 42 inches thick.

PO—Six Mile Run, Pa.; SP—Riddlesburg, Pa.; CTY—Bedford; RR—H. & B. T.
 MS—B. E. Cutchall, Six Mile Run, Pa.
 S of M—Hand.
 PP—1 pump.
 EMP—45. Last fiscal year output, 18,387 tons.
 SIZES SHIPT—Run of Mine.

SCHULTZ COAL COMPANY

General Office, Blossburg, Pa.
 PR—Herman Schultz, Blossburg, Pa.
 GS—A. W. Schultz, Blossburg, Pa.
 PA—A. W. Schultz, Blossburg, Pa.

Schultz Mine; Drift; B Seam, 24 in. thick.
 PO—Blossburg, Pa.; SP—Same; CTY—Tioga; RR—Erie.
 S of H—Mules. Track gage 26 in.
 S of M—Hand.
 SIZES SHIPT—Run of Mine.

SCOOTAC MINING CO.

General Office, Williamsport, Pa.
 PR—C. La Rue Munson, Williamsport, Pa.

VP—N. B. Buhb, Williamsport, Pa.
 TR—W. R. Kramer, Williamsport, Pa.
 GM—W. R. Kramer, Williamsport, Pa.
 PA—W. R. Kramer, Williamsport, Pa.

Scootac Mine; Drift; "A" Seam, 54 in. thick.
 PO—Lock Haven, Pa.; FR—North Fork, Pa.; EX—Lock Haven, Pa.; CTY—Clinton; RR—Penna.
 MS—A. C. Bowser, Lock Haven, Pa.
 S of H—Mules and rope. Track gage 36 in.
 S of M—Hand.
 PP—1 water tube boiler, 25 H. P., 2 pumps.
 EMP—60. Last years tonnage 33,550.
 SIZES SHIPT—Run of Mine.

SCOTCH HILLS COAL COMPANY

General Office, 601 Citizens Bank Bldg., Pittsburgh, Pa.

PR—W. J. Koerner, Grove City, Pa.
 VP—R. O. Dunne, Pittsburgh, Pa.
 TR—H. C. Dietz, Wilkensburg, Pa.
 GM—W. J. Koerner, Grove City, Pa.
 GS—E. L. Griffith, Grove City, Pa.
 PA—W. J. Koerner, Grove City, Pa.
 EM—W. J. Koerner, Grove City, Pa.
 SA—W. J. Koerner, Grove City, Pa.

Diamond No. 3 Mine; Slope; Brookville Seam; 54 inches thick.
 PO—Grove City, Pa.; SP—Same; CTY—Mercer; RR—B. & L. E.

S of H—Mules, rope, storage battery loco. Track gage 37 inches.
 S of M—Hand.
 PP—4 fire tube boilers, total 650 H. P., 2—150 K. W. gen. units 230 volts D. C.
 EMP—90. Daily tonnage 400.
 SIZES SHIPT—Run of Mine. Slack, Lump.
 PREP. EQUIPT—Bar Screens.

SCOTT COAL COMPANY

General Office, Meadville, Pa.
 PR—A. O. Davis, Charleroi, Pa.
 TR—W. G. Harper, Meadville, Pa.
 GM—W. G. Harper, Meadville, Pa.
 PA—W. G. Harper, Meadville, Pa.

Scott Mine; Stripping; Pittsburgh Seam; 74 inches thick.
 PO—Bridgeville, Pa.; SP—Same; CTY—Allegheny; RR—P. R. R.
 MS—R. E. Hollister, Bridgeville, Pa.
 S of H—Steam loco. Track gage 36 inches.
 S of M—Hand.
 PP—Power purchased, 220 volts A. C., 3 phase, 60 cycles, 5 fire tube boilers, 3 pumps.
 EMP—30. Daily output, 300 to 400 ton.
 SIZES SHIPT—Run of Mine.

SCOTT, H. B.

General Office, Philipsburg, Pa.
 GM—H. B. Scott, Philipsburg, Pa.
 PA—H. B. Scott, Philipsburg, Pa.
 Sales Agent—H. B. Scott, Philipsburg, Pa.

Colorado No. 5 Mine; Drift.
 PO—Munson Station, Pa.; SP—Same; CTY—Clearfield; RR—N. Y. C. & H.
 S of H—Elec. loco.
 S of M—Elec. mach.
 PP—3 Boilers, total 450 H. P., gen. units 500 volts D. C.
 SIZES SHIPT—Run of Mine.

SCOTT HAVEN COAL COMPANY.

General Office, 611 Mill St., Wilkensburg, Pa.

PR—John T. Gray, Box 413, Pittsburgh, Pa.
 VP—Jas. A. Smith, Dawson, Pa.
 TR—E. E. Smith, Wilkensburg, Pa.
 GM—E. E. Smith, Wilkensburg, Pa.
 GS—E. E. Smith, Wilkensburg, Pa.
 PA—E. E. Smith, Wilkensburg, Pa.
 EM—H. G. Apple, City and County Bldg., Pittsburgh, Pa.
 SA—E. E. Smith, 611 Mill St., Wilkensburg, Pa.

Spring Run Mine; Drift; Red Stone Seam, 48 to 60 in. thick.

PO—Box 413, Pittsburgh, Pa.; SP—Scott Haven, Pa.; CTY—Allegheny; RR—P. & L. E.
 MS—Andrew Henderson, Sutersville, Pa.
 S of H—Mules. Track gage 40 inches.
 S of M—Hand.
 PP—220 volts A. C., 1 pump.
 EMP—15. Daily tonnage 50.
 SIZES SHIPT—Run of Mine.

SCULL COAL COMPANY.

Now Highland Coal Company.

SEANOR COAL MINING COMPANY.

General Office, Box 374 Johnstown, Pa.
 PR—D. M. Caldwell, Johnstown, Pa.
 VP—E. F. Caldwell, Johnstown, Pa.
 TR—D. W. Caldwell, Johnstown, Pa.
 GM—D. M. Caldwell, Johnstown, Pa.
 GS—Ernest Sheets, Johnstown, Pa.
 PA—D. M. Caldwell, Johnstown, Pa.
 CE—Jack Burt, Windber, Pa.
 EE—Windber Electric Co., Windber, Pa.
 SCO—Eureka No. 38 Store, Buyer, M. Crist, Seanor, Pa.

(Continued on Next Page)

Seonor Coal Mining Company—Cont.

Heckler Nos. 1 and 2 Mine; Drift; 1
H. H. Seamon, 48-38 in. thick.
FO—Seonor, Pa.; SP—Same; CTY—
Somerset; RR—P. R. R.
S of H—Mules and elec. locos. Track gage
36 in.
S of M—Hand and comp. air punchers.
PP—Power purchased, transformer 2200-
650 volts A. C.
EMP—20. Last years tonnage 13,000.
SIZES SHIPT—Run of Mine.

SEOGAR COAL COMPANY

General Office, Hazleton, Pa.
PR—A. E. Dick, Hazleton, Pa.
VP—A. A. Read, Hazleton, Pa.
TR—G. W. Willmot, Hazleton, Pa.
GM—A. A. Read, Hazleton, Pa.
PA—A. A. Read, Hazleton, Pa.

Sedar Mine; Pittsburgh Seam; 96 inches
thick.
FO—Brownsville, Pa.; SP—Simpson and
Brownsville, Pa.; CTY—Fayette
RR—M. R. P. R. & L. E.
MS—J. M. McCabe, Brownsville, Pa.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
SIZES SHIPT—Run of Mine.
old information.

SEESSE, S. S.

General Office, Mineral Point, Pa.
PR—S. S. Seesse, Mineral Point, Pa.
EM—S. E. Dickey, c/o. Johnstown, Pa.
SA—Cargrove & Co., Geo. W. Bailey Co.,
Johnstown, Pa.

Seese No. 5 Mine; Drift; B and C Seam.
36-48 inches thick.
FO—Mineral Point, Pa.; SP—South Fork,
Pa.; CTY—Cambria; RR—P. R. R.
S of H—Mules and rope. Track gage 36
inches.
S of M—Hand.
PP—Power purchased. Transformer 2200-
220 volts A. C.
EMP—15. Daily tonnage 65.
SIZES SHIPT—Run of Mine.

SEGER BROS.

General Office, Ligonier, Pa.
PR—John Seger, Ligonier, Pa.
VP—J. Vogele, Ligonier, Pa.
TR—John Seger, Ligonier, Pa.
GM—J. Vogele, Ligonier, Pa.
GS—Robert McInnes, Ligonier, Pa.
PA—H. L. Kraeken, Ligonier, Pa.
EM—W. H. Matthews, Ligonier, Pa.
SC—Robert McInnes, Ligonier, Pa.
SC—Wilpen Supply Co., Buyer, J. L.
Thompson, Wilpen, Pa.
SA—Edwin Howard Fuel Co., Ligonier,
Pa.

Ligonier Diamond Mine No. 1; Drift;
Pittsburgh Seam; 78 in. thick.
FO—Wilpen, Pa.; SP—Ligonier, Pa.;
CTY—Westmoreland; RR—Ligonier
Valley.
MS—Earl Bates, Ligonier, Pa.
S of H—Mules. Track gage, 44 in.
S of M—Hand.
PP—3 pumps.
EMP—40. Last fiscal year output,
49,394 tons.
SIZES SHIPT—Run of Mine.

Ligonier Diamond Mine No. 2; Drift;
Pittsburgh Seam; 78 in. thick.
FO—Ligonier, Pa.; SP—Same; CTY—
Westmoreland; RR—Ligonier Valley.
MS—A. J. Clawson, Ligonier, Pa.
S of H—Mules and 1 gasoline loco.
S of M—Hand.
PP—1 pump.
EMP—75. Last fiscal year output,
100,926 tons.
SIZES SHIPT—Run of Mine.

St. Clair Mine; Drift; Pittsburgh Seam;
78 in. thick.
FO—Ligonier, Pa.; SP—Same; CTY—
Westmoreland; RR—Ligonier Val.
MS—W. A. Beveridge, Ligonier, Pa.
S of H—Mules. Track gage, 44 in.
S of M—Hand.
PP—2 pumps.
EMP—75. Last fiscal year output,
109,554 tons.
SIZES SHIPT—Run of Mine.

Vogele Mine; Drift; Pittsburgh Seam; 78
in. thick.
FO—Ligonier, Pa.; SP—Same; CTY—
Westmoreland; RR—Ligonier Valley.
MS—Thos. Scott, Ligonier, Pa.
S of H—Mules. Track gage, 44 in.
S of M—Hand.
PP—2 pumps.
EMP—60. Last fiscal year output,
80,549 tons.
SIZES SHIPT—Run of Mine.

Seger Bros. No. 1 Mine; Slope; Pitts-
burgh Seam, 78 in. thick.
FO—Millwood, Pa.; SP—Same; CTY—
Westmoreland; RR—Penna.
MS—Robt. Ridgely, Millwood, Pa.
SM—A. S. Kepple, Millwood, Pa.
S of H—Mules and trolley pole type
locos. Track gage, 44 in.
S of M—1 shortwall mach.

PP—Power purchased, transformer 2200
to 250 volts A. C., M. G. set, 250
volts D. C., 2 water tube boilers.
175 H. P.
EMP—60. Last fiscal year output,
22,827 tons.
SIZES SHIPT—Run of Mine.

SEMAN, JOHN

General Office, Morann, Pa.
SA—S. J. Mountz, Smith Mills, Pa.
Woodward No. 2 Mine; Drift; Moshan
non Seam, 30 in. thick.
FO—Morann, Pa.; SP—Houtdale, Amer-
ican Express; CTY—Clearfield; RR—
Penna.
MS—John Seman, Morann, Pa.
S of H—Mules. Track gage, 30 in.
S of M—Hand.
SIZES SHIPT—Slack, Lump.

SENECA COAL MINING COMPANY.

General Office, 708-712 Fidelity Bldg
Buffalo, N. Y.
PR—F. W. Alderman, Buffalo, N. Y.
TR—H. R. Alderman, Buffalo, N. Y.
GM—H. R. Alderman, Buffalo, N. Y.
GS—Thos. Donnelly, Chambersville, Pa.
PA—H. B. Alderman, Buffalo, N. Y.
CE—Thos. Pealor, Indiana, Pa.
SC—Seneca Mercantile Co., Buyer, V.
O. Meredith, Painsantown, Pa.
SA—R. H. Davison, Buffalo, N. Y.

Seneca No. 1 Mine; Drift; Upper Free-
port Seam, 60 in. thick.
FO—Chambersville, Pa.; SP—Same; CTY—
Indiana; RR—B. R. & P.
MS—F. J. Stapleton, Chambersville, Pa.
S of H—4 trolley pole type locos. Track
gage, 42 in.
S of M—27 comp. air punchers.
PP—5 water tube boilers, 250 volts.
D. C., 16 pumps.
EMP—145. Last years tonnage 183,000.
SIZES SHIPT—Run of Mine, Slack, Nut
Pea, Lump.
PREP. EQUIPT—Screens.

Seneca No. 2 Mine; Slope; Upper Free-
port Seam, 60 in. thick.
FO—Chambersville, Pa.; SP—Same; CTY—
Indiana; RR—B. R. & P.
MS—Thos. Donnelly, Chambersville, Pa.
SM—D. H. McIntyre, Painsantown, Pa.
Track gage, 42 in.
S of M—2 clec. machs.
PP—Get power from No. 1 Mine.
EMP—50. Last fiscal year output
75,000 to 100,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut,
Pea, Lump.
PREP. EQUIPT—Screens.

SERVICE COAL MINING COMPANY

General Office, Ramey, Pa.
GM—W. B. Minds, Ramey, Pa.
GS—W. B. Minds, Ramey, Pa.
PA—W. B. Minds, Ramey, Pa.
EM—H. M. Kanarr, Painsantown, Pa.
EE—Joseph Leckberg, Valler, Pa.
SA—Butah Coal Mining Co., 120 Broad-
way, N. Y.

Catherine Mine abandoned.
Vega No. 1 Mine; Lower Freeport Seam.
FO—Valier, Pa.; SP—Fordham, Pa.;
CTY—Jefferson; RR—Penna.
PP—2 fire tube boilers, total 300 H. P.,
gen. units, 250 volts D. C., 8
pumps.
S of H—2 mules, rope and 3 elec. locos.
Track gage 36 in.
S of M—2 shortwall machs.
EMP—85. Daily tonnage 400.
SIZES SHIPT—Run of Mine.

SEVENTH POOL COAL & COKE CO

General Office, Masontown, Pa.
PR—T. A. Hoover, Masontown, Pa.
VP—J. T. Hoover, Uniontown, Pa.
TR—P. H. Ralston, Masontown, Pa.
GM—P. H. Ralston, Masontown, Pa.
GS—W. J. Fagan, Masontown, Pa.
PA—P. H. Ralston, Masontown, Pa.
CE—Fayette Eng. Co., Uniontown, Pa.
SA—Poland Coal Co., Pittsburgh, Pa.

Rose Mine; Drift; Pittsburgh Seam, 90
in. thick.
FO—Greensboro, Pa.; SP—Poland No. 3
P. A.; CTY—Greene; RR—M. R. R.
S of H—Mules.
S of M—2 shortwall machs.
PP—Purchase power, 7 pumps.
EMP—45. Last fiscal year output, 29,
859 tons.
SIZES SHIPT—Run of Mine.
old information.

SEWICKLEY COAL COMPANY

Out of Business.

SHADE CREEK COAL CO.

Now a part of Imperial Coal Sales Co.

SHADE COAL MINING CORPORATION

General Office, Johnstown, Pa.
PR—H. E. Morgan, No. 1 Broadway,
New York, N. Y.
TR—Geo. R. Donaldson, Baltimore, Md.

GM—H. E. Morgan, 1 Broadway, New
York, N. Y.
CE—S. E. Dickey, Johnstown, Pa.
SC—Hague Supply Co.; Buyer, Geo. M.
Adams, Hago, Pa.
SA—Emerson & Morgan Coal Mining
Corporation, No. 1 Broadway, New
York, N. Y.

Hago, Nos. 1, 3 and 4 Mines, Drift;
Miller Seam, 48 in. thick.
FO—Hago, Pa.; SP—Windber, Pa.
CTY—Somerset; RR—P. R. R.
MS—J. P. Harrington, Hago, Pa.
S of H—Mules; 3 gasoline and 1 steam
loco. Track gage 36 inches.
S of M—5 shortwall machs.
PP—Power purchased, transformers, 449
volts A. C., gen. seis, 250 volts
D. C., 4 pumps.
EMP—125. Last fiscal year output,
100,000 tons.
SIZES SHIPT—Run of Mine.

SHADYSIDE COAL & COKE COMPANY

General Office, Masontown, Pa.
PR—D. P. Sweeney, R. D., Uniontown, Pa.
TR—R. B. Hays, Masontown, Pa.
GM—R. B. Hays, Masontown, Pa.
PA—R. B. Hays, Masontown, Pa.
EM—Douthitt & Gans, Uniontown, Pa.
SA—R. B. Hays, Masontown, Pa.

Shadyside Mine; Drift; Sewickley Seam,
66 in. thick.
FO—R. D., Uniontown, Pa.; SP—Exp.
Uniontown, Pa.; Frl., Collier Pa.
CTY—Fayette; RR—B. & O.
MS—Robert Williams, Fairchance, Pa.
S of H—Mules and locos. Track gage 42
in.
S of M—Hand and shortwall machs.
EMP—40. Last years tonnage 50,000.
SIZES SHIPT—Run of Mine.

SHANIL COAL COMPANY.

General Office, Saxton, Pa.
PR—R. L. Worsing, 1309 North Ameri-
can Bldg., Philadelphia, Pa.
VP—John Moyle, Saxton, Pa.
TR—R. L. Worsing, 1309 North Ameri-
can Bldg., Philadelphia, Pa.
GM—G. W. Moyle, Saxton, Pa.
GS—G. W. Moyle, Saxton, Pa.
SA—R. L. Worsing, 1309 North Ameri-
can Bldg., Philadelphia, Pa.

Shanil Mine; Drift; Barnett Seam, 36
in. thick.
FO—Ridgely, Pa.; SP—Same, CTY—
Bedford; RR—H. & B. T., Six
Mile Run.
S of H—Mules and gasoline loco. Track
gage 38 inches.
S of M—Hand.
EMP—22.
SIZES SHIPT—Run of Mine.

SHANNON COMPANY

General Office, Dudley, Pa.
GM—W. W. E. Shannon, Dudley, Pa.
GS—W. W. E. Shannon, Dudley, Pa.
PA—W. W. E. Shannon, Dudley, Pa.
SA—Carbon Coal & Coke Co., 85 Devon-
shire St., Boston, Mass.

Martha Slope and Martha Drift Mines;
Fulton and Barnett Seams.
FO—Dudley, Pa.; SP—Same; CTY—
Huntingdon; RR—H. & B. T.
S of H—Mules, rope.
S of M—Hand.
PP—2 water tube boilers.
EMP—131. Last fiscal year output,
49,329 tons.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by the Carbon
Coal & Coke Company.

SHARON COAL & LIMESTONE CO.

General Office, Mercer, Pa.
PR—W. H. Klingerman, Carnegie Bldg.,
Pittsburgh, Pa.
TR—Philip Keller, Mercer, Pa.
GS—P. P. Filler, Mercer, Pa.
PA—T. S. Duncan, Pittsburgh, Pa.

No. 2 Mine; Shaft; Brookville Seam
42 in. thick.
FO—Volant, R. D. No. 4; SP—Prake
Sta., via Leesburg, Pa.; CTY—
Lawrence; RR—Penna., Wolf Creek
Branch.
MS—Clyd. Grundy, R. D. No. 4, Volant,
Pa.
S of H—Mules and trolley pole type
locos. Track gage, 37 in.
S of M—2 shortwall machs.
PP—5 fire tube boilers, 500 H. P.,
1 gen. unit, 250 volts D. C., 19
pumps.
EMP—180. Last years tonnage 71,463.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

No. 5 Mine; Shaft; Brookville Seam,
48 in. thick.
FO—Mercer, R. D. No. 6, Pa.; SP—
Drake Sta., via Leesburg, Pa.; CTY—
Mercer; RR—Penna., Wolf Creek
Branch.
MS—George McCrea, Mercer, R. D. No.
No. 7, Pa.
S of H—Mules and trolley pole type
locos. Track gage, 37 in.

S of M—5 shortwall machs.
PP—5 fire tube boilers, 550 H. P.,
2 gen. units, 250 volts D. C.,
22 pumps.
EMP—180. Last years tonnage 119,131.
SIZES SHIPT—Run of Mine, Slack
Lump.
PREP. EQUIPT—Bar Screens.

SHARON-EDENBURG COAL CO.

General Office, Sharon, Pa.
PR—F. C. Ridd, Sharon, Pa.
VP—W. M. Ramey, Farrell, Pa.
TR—D. T. Haddock, Sharon, Pa.
GM—W. M. Ramey, Farrell, Pa.

Dickson Mine; Shaft; Seam, 60-72 inches
thick.
FO—Edenburg, Pa.; SP—Same; CTY—
Lawrence.
S of H—Hand. Track gage 36 inches.
S of M—Hand.
PP—Power purchased. Transformer 2200
to 2500 to 220-250 volts A. C.,
1-20 H. P. fire tube boiler.
SIZES SHIPT—Run of Mine, Slack
Lump.
PREP. EQUIPT—Bar Screens.
Operations under development.

SHAWMUT MINING CO.

General Office, St. Marys, Pa.
PR—H. S. Hastings, St. Marys, Pa.
TR—C. F. Stuenkel, St. Marys, Pa.
GM—W. R. Craig, St. Marys, Pa.
EM—L. H. Burch, Byrnedale, Pa.
SC—Shawmut Commercial Co., Buyer,
F. A. Robinson, St. Marys, Pa.
SA—Agut, G. H. Jones, Buffalo, N.
Y., Shawmut C. & C. Co.

No. 5 Elbon Mine; Drift; L. Kittan-
ning Seam; 24 to 36 in. thick.
FO—Elbon, Pa.; SP—Same; CTY—
Elk; RR—P. S. & N.
MS—C. W. Faulk, Elbon, Pa.
SM—James Ferretti, Elbon, Pa.
S of H—Trolley pole type locos. Track
gage, 30 in.
S of M—10 chain breast type and 4
shortwall machs.
PP—2 return tubular boilers, total 300
H. P., 2 200 K. W. gen. units,
250 volts D. C., 7 pumps.
EMP—69. Last years tonnage 40,188.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Gravity Screens.

Shawmut No. 8 Mine; Drift; Lower Kit-
tanning Seam, 36 in. thick.
FO—Shawmut, Pa.; SP—Same; CTY—
Elk; RR—P. S. & N.
MS—C. W. Faulk, Elbon, Pa.
SM—F. W. Jackson, Shawmut, Pa.
S of H—Mules. Track gage 30 in.
EMP—16. Last years tonnage 10,580.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Gravity Screens.

No. 10 Shawmut Mine; Drift; L. Kit-
tanning Seam, 18 to 32 in. thick.
FO—Shawmut, Pa.; SP—Same; CTY—
Elk; RR—P. S. & N.
MS—C. W. Faulk, Elbon, Pa.
SM—F. W. Jackson, Shawmut, Pa.
S of H—1 Steam loco, and mules; track
gage 30 in.
S of M—Hand.
EMP—37. Last years tonnage 5,803.
SIZES SHIPT—Run of Mine.

No. 31 Byrnedale; Drift; L. Kittan-
ning Seam, 32 to 44 in. thick.
FO—Byrnedale, Pa.; SP—Same; CTY—
Elk; RR—P. S. & N.; Kersey
Branch.

MS—J. A. Wennersten, Byrnedale, Pa.
SM—J. J. Blessel, " "
S of H—Trolley pole type locos. Track
gage, 30 in.
S of M—20 comp. air punchers.
PP—6 return tubular Erie boilers, total
900 H. P., 1 200 K. W. gen.
unit, 250 volts D. C., 6 pumps.
EMP—95. Last years tonnage 88,252.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Gravity Screens.

No. 41 Mine; Drift; Lower Kittanning
Seam, 32-44 in. thick.
FO—Elk, Pa.; SP—Same; CTY—Elk.
RR—P. S. & N.; Kersey Branch.
MS—David Bell, Forco, Pa.
SM—F. W. Nangle, Forco, Pa.
S of H—Mules and 1 steam loco. " "
gage, 30 in.
S of M—Hand.
PP—1 return tubular Fr
H. P., 1 pump.
EMP—34. Last years tonnage 1,800.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Gravity Screens.

No. 42 Mine; Drift; L. Kittanning
Seam, 32 to 40 in. thick.
FO—Elk, Pa.; SP—Same; CTY—Elk.
RR—P. S. & N.; Kersey Branch.
MS—J. A. Wennersten, Byrnedale, Pa.
SM—J. J. Blessel, " "
(Continued on Next Page)

Shawmut Mining Co.—Cont.

S of H—Trolley pole type locos. Track gage 36 in.
 S of M—4 chain breast type and 5 shortwall mchs.
 PP—4 fire tube boilers, total 600 H. P., 2 gen. units, 200 K. W., 2,300 volts A. C., 3 M. G. sets, 250 volts D. C., 5 pumps.
 EMP—113. Last years tonnage 120,117.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Shaker Screens, Loading Booms.

Ramsay Mine; Drift; Lower Kittanning Seam, 50 in. thick.
 PO—Ramsaytown, Pa.; SP—Same; CTY—Jefferson; RR—P. & S.
 MS—Hugh Reynolds, Ramsaytown, Pa.
 SM—J. W. Fleming, Ramsaytown, Pa.
 S of H—Trolley pole type locos. Track gage 36 in.
 S of M—10 chain breast type and 4 shortwall mchs.
 PP—4 fire tube boilers, total 600 H. P., 2 gen. units, 200 K. W., 2,300 volts A. C., 3 M. G. sets, 250 volts D. C., 5 pumps.
 EMP—172. Last years tonnage 190,750.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

SHAWNEE COAL COMPANY.

General Office, Winchester, Va.
 PR—C. L. Robinson, Winchester, Va.
 TR—Shirley Carter, Winchester, Va.
 GM—C. L. Robinson, Winchester, Va.
 GS—Charles Troy, Confluence, Pa.
 PA—Charles Troy, Confluence, Pa.
 EM—A. R. Crichton, Johnstown, Pa.
 SCO—Beachly Supply Co., Beachly, Pa.
 Beachly Mine; Drift; C. Prime Seam, 42-48 in. thick.
 PO—Beachly, Pa.; SP—Same; CTY—Summit; RR—B. & O.
 S of H—Mules and rope. Track gage 40 in.
 S of M—6 punchers.
 PP—1 boiler, 150 H. P., 2 pumps.
 EMP—22. Daily tonnage 100.
 SIZES SHIPT—Run of Mine.

SHEARN, JAMES G. & SON

PR—J. G. Shearn, Canonsburg, Pa.
 GM—Jas. C. Shearn, Canonsburg, Pa.
 PA—G. Scott Shearn.
 Shearn Mine; Drift; Pittsburgh Seam, 60 in. thick.
 PO—Canonsburg, Pa.; SP—Same; CTY—Washington; RR—P. R. R., Charles Valley branch.
 S of H—Mules; track gage 32 in.
 S of M—Hand.
 EMP—6 to 8.
 SIZES SHIPT—Slack, Egg, Lump.
 PREP. EQUIPT—Gravity Screens.
 Old information.

SHENANCO FURNACE CO. (THE)

General Office, 812 Oliver Bldg., Pgh, Pa.
 PR—W. P. Snyder, Jr., Pittsburgh, Pa.
 VP—Geo. L. Collard, Pittsburgh, Pa.
 TR—Henry Irwin, Jr., Pittsburgh, Pa.
 GM—Geo. L. Collard, Pittsburgh, Pa.
 GS—W. G. Snoddes, Ligonier, Pa.
 PA—W. G. Snoddes, Ligonier, Pa.
 CE—Geo. S. Eaton, Pittsburgh, Pa.
 EM—T. M. Stonerod, Ligonier, Pa.
 EE—Frank Ramsey, Wilpen, Pa.
 SCO—Walker & Co., Inc., Buyer, J. L. Smith, Wilpen, Pa.
 SA—H. M. Wilson, Oliver Bldg., Pittsburgh, Pa.

Wilpen Mine; Drift; Pgh Seam, 84 to 99 in. thick.
 PO—Wilpen, Pa.; SP—Frt. Same; Exp. Ligonier, Pa.; CTY—Westmoreland, RR—Ligonier Valley.
 MS—Elmer Mitchell, Wilpen, Pa.
 S of H—Mules and 4 trolley pole type locos. Track gage 42 in.
 S of M—1 overhead cutter.
 PP—2 water tube boilers, total 600 H. P., 1—200 K. W. A. C., 2—200 K. W. D. C., 250 volts D. C., 16 pumps.
 EMP—200. Last years tonnage 323,755.
 Coke Ovens, 104 Bee Hive.
 SIZES SHIPT—Run of Mine.

Little Mine; Drift; Pittsburgh Seam, 94 in. thick.
 PO—Wilpen, Pa.; SP—Same; CTY—Westmoreland; RR—Ligonier Valley, Penna.
 MS—John Alexander, Ligonier, Pa.
 S of H—Mules and 2 trolley pole type locos. Track gage 42 in.
 S of M—Shortwall and 1 overhead cutter mchs.
 PP—Power from Wilpen Mine.
 EMP—40. Last years tonnage 60,000.
 SIZES SHIPT—Run of Mine.
 Old information.

SHEPHERD COAL MINING COMPANY

General Office, Conemaugh, Pa.
 OWNERS—John A. Wilburn, Conemaugh, Pa.; Peter Robritz, Conemaugh, Pa.
 SA—Peerless Coal Company, Johnstown, Pa.

Shepherd Nos. 1 and 3 Mines; Drifts; D Seam, 36 in. thick.
 PO—Johnstown, Pa.; SP—Same; CTY—Cambria; RR—B. & O., Penna.
 MS—G. O. Wench, Conemaugh, Pa.
 S of H—Mules. Track gage 36 in.
 S of M—Hand.
 PP—Purchase power.
 SIZES SHIPT—Run of Mine.

SHERGLE COAL CO.

General Office, 220 Grave Ave., Canonsburg, Pa.
 Dandy Mine.
 PO—Houston, Pa.; CTY—Washington, RR—Penna.
 No report.

SHERIDAN COAL COMPANY

General Office, Philipsburg, Pa.
 OWNER—Fred J. Dunham, Philipsburg, Pa.
 PA—Fred W. Holbrook, Philipsburg, Pa.
 SA—Fred J. Dunham, Philipsburg, Pa.
 Sheridan No. 1 Mine; Drift; D and E Seams, 36-48 inches thick.
 PO—Philipsburg, Pa.; SP—Same; CTY—Clearfield; RR—N. Y. C.
 MS—Robert Rickard, Philipsburg, Pa.
 S of H—Mules. Track gage 30 inches.
 S of M—Hand.
 EMP—15. Daily tonnage 50.
 SIZES SHIPT—Run of Mine.

SHERIDAN COAL COMPANY

General Office, First National Bank Bldg., Johnstown, Pa.
 PR—R. E. Keedy, Johnstown, Pa.
 VP—W. E. Engle, Johnstown, Pa.
 TR—W. E. Engle, Johnstown, Pa.
 GM—W. E. Engle, Johnstown, Pa.
 GS—S. Hartland, Johnstown, Pa.
 Sheridan Mine; Drift; D or Limestone Seam.
 PO—Johnstown, Pa.; SP—Same; CTY—Cambria; RR—Penna.
 S of H—Mules.

SHERWIN COAL MINING CO.

PR—S. Sherwin, Karns City, Pa.
 TR—P. D. Sherwin, Jr., Karns City, Pa.
 SA—A. R. Hamilton Co., Pittsburgh, Pa.

Kaylor Mine; Slope; Kittanning Seam, 36 in. thick.
 PO—Kaylor, Pa.; SP—Same; CTY—Armstrong; RR—W. A.
 MS—S. Sherwin, Karns City, Pa.
 S of H—Mules, main and tail rope, trolley pole type loco. Track gage 42 in.
 S of M—3 chain breast type mchs.
 PP—4 fire tube boilers, total 600 H. P., gen. units, 250 volts D. C., 16 pumps.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens, Picking Tables.

Snow Hill Mine; Drift; Kittanning Seam, 36 in. thick.
 PO—Kaylor, Pa.; SP—Same; CTY—Armstrong; RR—W. A.
 MS—A. J. Baxter, Kaylor, Pa.
 S of H—Mules and trolley pole type loco. Track gage 42 in.
 S of M—6 chain breast type mchs.
 PP—12 pumps.
 SIZES SHIPT—Run of Mine.
 Note—Kaylor and Snow Hill Mines formerly operated by the North Penn Coal Co.

SHERWIN, SAMUEL.

General Office, Karns City, Pa.
 PR—S. Sherwin, Karns City, Pa.
 TR—P. D. Sherwin, Jr., Karns City, Pa.
 SCO—Karns City Supply Co., Karns City, Pa.
 SA—S. Sherwin, Karns City, Pa.
 Kincaid Mine; Drift; Freeport Seam, 46 in. thick.
 PO—Karns City, Pa.; SP—Same; CTY—Butler; RR—Western Allegheny.
 MS—S. Sherwin, Karns City, Pa.
 S of H—Mules and 1 trolley pole type loco. Track gage 30 in.
 S of M—2 shortwall mchs.

PP—3 fire tube boilers, total 450 H. P., gen. units, 250 volts D. C., 6 pumps.
 Daily tonnage 350.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Picking Tables, Loading Booms.
 Enterprise Mine; Drift; Freeport Seam, 46-60 in. thick.
 PO—Karns City, Pa.; SP—Same; CTY—Butler; RR—B. & O.
 MS—S. Sherwin, Karns City, Pa.
 S of H—Mules and steam loco. Track gage 30 in.
 S of M—4 comp. air punchers.
 PP—5 pumps.
 Daily tonnage 250.
 SIZES SHIPT—Run of Mine.

SHINN, W. H., COAL COMPANY.

General Office, Diamond Bank Bldg., Pittsburgh, Pa.
 PR—James H. Hammond, Pittsburgh, Pa.
 TR—Wm. H. Shinn, " "
 GM—Wm. H. Shinn, " "
 GS—Robert Carmichael, Jeffre, Pa.
 PA—T. W. Greer, Pittsburgh, Pa.
 EM—Andrews & Southard, Pittsburgh, Pa.
 Marie Mine; Drift; Pittsburgh Seam, 66 in. thick.
 PO—R. F. D. No. 3, Burgettstown, Pa.; SP—Bacon, Pa.; CTY—Washington; RR—P. C. C. & St. Cherry Valley Br.
 S of H—5 electric locos. Track gage 42 in.
 S of M—6 elec. mchs.
 PP—Power purchased, 5 pumps.
 EMP—113.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Crusher.

SHOEMAKER COAL MINING CO.

General Office, 1507 Real Estate Trust Bldg., Philadelphia, Pa.
 OWNER—T. S. Shoemaker, Philadelphia, Pa.
 PA—T. S. Shoemaker, Philadelphia, Pa.
 GS—John F. Foreman, Lilly, Pa.
 Wilmore No. 3 Mine; Slope; Upper Freeport Seam, 48 inches thick.
 PO—Lilly, Pa.; SP—Same. CTY—Cambria; RR—Penna.
 S of H—Mules, rope and 2 storage battery locos. Track gage, 36 in.
 S of M—Hand.
 PP—Purchase power. Transformer 2300-440 volts A. C., 7 water tube boilers, 830 H. P., 11 pumps.
 EMP—334. Last fiscal year output, 448,968 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

Miller Slope Mine; Slope; Lower Kittanning Seam, 46 inches thick.
 PO—Portage, Pa.; SP—Same; CTY—Cambria; RR—Penna.
 S of H—Mules and rope. Track gage, 36 in.
 PP—2 water tube boilers, total 200 H. P.
 S of M—Hand.
 EMP—85. Last fiscal year output, 74,719 tons.
 SIZES SHIPT—Run of Mine.

SIONEY COAL MINING COMPANY

General Office, 240 W. Susquehanna Ave., Philadelphia, Pa.
 PR—Charles P. Vaughan, Philadelphia, Pa.
 VP—Francis C. Greasley and Oliver F. Cutts, Philadelphia, Pa.
 TR—Ira Vaughan, Philadelphia, Pa.
 GM—Thos. E. Kirk, Philadelphia, Pa.
 PA—Thos. E. Kirk, 240 W. Susquehanna Ave., Philadelphia, Pa.
 EM—H. M. Kanarr, Punxsutawney, Pa.
 E. M. Lou Mine; Drift; Lower Kittanning Seam, 48 in. thick.
 PO—Punxsutawney, Pa.; SP—Sidney, Pa.; CTY—Indiana; RR—Penna.
 S of H—Mules. Track gage 36 in.
 S of M—Hand.
 PP—1 25 H. P. and 1—40 H. P. upright boilers, 3 pumps.
 EMP—18. Daily tonnage 50.
 SIZES SHIPT—Run of Mine.

SIXTH POOL COAL COMPANY

General Office, Brownsville, Pa.
 PR—T. W. English, Brownsville, Pa.
 TR—I. C. Moyer, Brownsville, Pa.
 GS—T. W. English, Brownsville, Pa.
 PA—I. C. Moyer, Brownsville, Pa.
 EM—South Penn Engineering Co., Uniontown, Pa.
 SA—Arden Fuel Co., Uniontown, Pa.
 Sixth Pool Mine; Drift; Waynesburg Seam, 66 in. thick.
 PO—Brownsville, Pa.; SP—Adah, Pa.; CTY—Fayette; RR—Monongahela M. Line.
 MS—Chas. Burns, Brownsville, Pa.

S of H—Mules. Track gage 44 in.
 S of M—Hand.
 EMP—25.
 SIZES SHIPT—Run of Mine.

SKELLY, W. B., COAL CO.

General Office, Export, Pa.
 PR—W. B. Skelly, Export, Pa.
 TR—James C. Gray, Pittsburgh, Pa.
 GM—W. B. Skelly, Export, Pa.
 PA—W. B. Skelly, " "
 CE—Horrop, Hopkins & Taylor, Export, Pa.
 EE—Geo. M. Fink, Export, Pa.
 SA—W. B. Skelly, Export, Pa.
 Elizabeth Mine, Drift, Pittsburgh Seam, 6 ft. thick.
 PO—Export, Pa.; SP—Same, CTY—Westmoreland; RR—P. R. R., Turtle Creek Valley.
 MS—Geo. M. Fink, Export, Pa.
 S of H—Mules and trolley pole type locos. Track gage, 40 in.
 S of M—3 chain breast type and 1 shortwall mchs.
 PP—3 fire tube boilers, 450 H. P., 2—250 K. W. gen. units, 550 volts D. C., 6 pumps.
 EMP—110. Last years tonnage 108,500.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

SLOAN COAL COMPANY.

General Office, Clarion, Pa.
 OWNER—J. W. Sloan, Clarion, Pa.
 SA—J. W. Sloan, Clarion, Pa.
 Sloan Mine; Shaft; Lower Kittanning Seam, 34 to 44 in. thick.
 PO—Clarion, Pa.; SP—Same; CTY—Clarion; RR—L. E. F. & C.
 MS—J. W. Sloan, Clarion, Pa.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 PP—1 return tubular boiler, total 35 H. P., 1 gen. unit, 1 pump.
 EMP—18. Last fiscal year output, 4,200 tons.
 SIZES SHIPT—Run of Mine.
 Old information.

SMILEY COAL COMPANY

General Office, Uniontown, Pa.
 OWNERS—J. C. and J. R. Smiley, Uniontown, Pa.
 TR—J. R. Smiley, Uniontown, Pa.
 GM—J. C. Smiley, Uniontown, Pa.
 GS—J. C. Smiley, Uniontown, Pa.
 PA—J. C. Smiley, Uniontown, Pa.
 EM—Fayette Engineering Co., Uniontown, Pa.

Smiley Mine; Drift; Sewickley Seam, 80 in. thick.
 PO—Uniontown, Pa.; SP—Fairchance, Pa.; CTY—Fayette; RR—Penna.
 S of H—Rope. Track gage, 42 in.
 S of M—Hand.
 PP—Power purchased, transformer, 6600 to 440 volts A. C., 1 water tube boiler, 20 H. P., 6 pumps.
 EMP—45. Last fiscal year output, 42,000 tons.
 SIZES SHIPT—Run of Mine.

SMITH & HONNKA

TR—Lewis Honnka, Morrisdale, Pa.
 GM—Lewis Honnka, Morrisdale, Pa.

Morrisdale Nos. 9 and 10 Mines; Drift. "D" Seam; 54 inches thick.
 PO—Morrisdale, Pa.; SP—Same; CTY—Clearfield; RR—N. Y. C.
 MS—L. R. Smith, Morrisdale, Pa.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 EMP—32. Daily output, 75 tons.
 SIZES SHIPT—Run of Mine.

Phoenix No. 1 Mine.

PO—Morrisdale, Pa.; SP—Same; CTY—Clearfield; RR—N. Y. C.
 S of H—Mules and rope. Track gage 36 in.
 S of M—Hand.
 EMP—15. Daily tonnage 50.
 SIZES SHIPT—Run of Mine.

SMITH COAL COMPANY

General Office, Smith Bldg., Indiana, Pa.
 PR—J. R. Smith, Indiana, Pa.
 TR—Wm. B. Smith, Indiana, Pa.
 GS—R. C. Smith, Indiana, Pa.
 PA—Wm. B. Smith, Indiana, Pa.
 EM—Horne-Jones Engineering Co., Indiana, Pa.
 SCO—Jewel Supply Company, Indiana, Pa.

Jewel No. 3 Mine; Drift; B or Miller Seam, 42 in. thick.
 PO—Indiana, Pa.; SP—Josephine, Pa.; CTY—Indiana; RR—Penna. and B. R. & P.
 MS—Wm. Hampson, Josephine, Pa.
 SM—G. E. Dougherty, Indiana, Pa.
 S of H—Mules and 3 storage battery locos. Track gage 36 in.
 S of M—2 shortwall mchs.
 PP—Power purchased, 1—150 K. W. and 1—25 K. W. gen. unit, M. G. sets, 250 volts D. C.
 EMP—60. Last years tonnage 60,000.
 SIZES SHIPT—Run of Mine.

SMITH, EDWARD COAL CO.

General Office, Tyler, Pa.
 GS—Ed. Smith, Tyler, Pa.
 ED—Smith Mine; Drift; Lower Kittanning Seam, 48 in. thick.
 PO—Tyler, Pa.; SP—Same; CTY—Elk; RR—P. S. & N.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 PP—2 pumps.
 EMP—14. Last years tonnage 9,983.
 SIZES SHIPT—Run of Mine.
 NOTE—Formerly operated by Tyler's Country Mines.

SMITH, ELIZA J. & BROTHERS.

General Office, Cherry Tree, Pa.
 GM—Br. J. H. Peterman, Cherry Tree, Pa.
 GS—Wm. Sharrer, Chambersville, Pa.
 PA—Wm. Sharrer, Chambersville, Pa.
 CE—Homer Jones, Indiana, Pa.
 SA—Dr. J. H. Peterman, Cherry Tree, Pa.

Peterman Mine; Drift; Upper Freeport Seam, 72 in. thick.
 PO—Chambersville, Pa.; SP—Same; CTY—Indiana; RR—E. R. & P.
 S of H—Mules and 1 gasoline loco.
 Track gage, 36 in.
 S of M—S comp. air punchers.
 PP—1 150 H. P. fire tube boiler, 3 pumps.
 EMP—40.
 SIZES SHIPT—Run of Mine.
 Old Information.

SMITH, I. S. COAL COMPANY.

General Office, Reynoldsville, Pa.
 PR—I. S. Smith, Reynoldsville, Pa.
 TR—Geo. L. Smith, Reynoldsville, Pa.
 GM—Geo. L. Smith, Reynoldsville, Pa.
 GS—Kold, Harvey, Eleanor, Pa.
 PA—Geo. L. Smith, Lucerne Mines, Pa.
 EM—G. L. Smith, Lucerne Mines, Pa.
 SA—Ira S. Smith, Reynoldsville, Pa.

Smith Mine; Drift; Lower Freeport Seam, 60 in. thick.
 PO—Eleanor, Pa.; SP—Reynoldsville, Pa.; CTY—Jefferson; RR—E. R. & P.
 S of H—Mules and 1 gasoline loco.
 Track gage, 42 in.
 S of M—Hand.
 PP—2 pumps.
 EMP—15. Last years tonnage 15,000.
 SIZES SHIPT—Run of Mine.

SMOKELESS COAL COMPANY.

General Office, 705 Johnstown Trust Bldg., Johnstown, Pa.
 PR—Jas. P. Thomas, Johnstown, Pa.
 TR—Wm. R. Thomas, Johnstown, Pa.
 GM—Chas. A. Owco, Johnstown, Pa.
 GS—James M. Cook, Johnstown, Pa.
 PA—James M. Cook, Johnstown, Pa.
 EE—Irwin Wilhelm, Johnstown, Pa.
 EM—W. H. Hinks, Johnstown, Pa.
 SA—Imperial Coal Corp., Philadelphia, Pa.

Smokeless No. 1 Mine; Slope "C" Prime Seam, 48 to 54 in. thick.
 PO—Johnstown, Pa.; SP—Same; CTY—Cambria; RR—B. & O.
 MS—T. R. Barber, Johnstown, Pa.
 S of H—Mules, rope and 1 elec. loco.
 Track gage 36 in.
 S of M—4 shortwall machs.
 PP—Purchase power, transformer 4000 to 2300 volts, M. G. sets, 275 volts D. C., 7 pumps.
 EMP—66. Last years tonnage 75,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.

Smokeless No. 2 Mine; Drift; "E" Coal Seam, 42 to 48 in. thick.
 PO—Johnstown, Pa.; SP—Same; CTY—Cambria; RR—B. & O.
 MS—T. R. Barber, Johnstown, Pa.
 S of H—1 gasoline loco. Track gage 36 in.
 S of M—Hand.
 PP—Purchase power, transformer 4000 to 2300 volts, 220 volts A. C. in mine.
 EMP—10. Last years tonnage 16,000.
 SIZES SHIPT—Run of Mine.

SMOKELESS QUEMAHONING COAL CO.

General Office, Somerset, Pa.
 PR—J. H. Bertrits, Somerset, Pa.
 VP—A. G. Smith, Myersdale, Pa.
 TR—H. C. Siehl, Somerset, Pa.
 GM—E. N. Irwin, Somerset, Pa.
 GS—H. C. Siehl, Somerset, Pa.
 PA—E. N. Irwin, Somerset, Pa.
 CE—F. B. Fluck, Somerset, Pa.

Alex No. 1 Mine; Slope; "E" Seam; 48 inches thick.
 PO—Friedens, Pa.; SP—Roswell, Pa.; CTY—Somerset; RR—R. & O.
 MS—Wm. Letcher, Roswell, Pa.
 S of H—Rope. Track gage 42 inches.
 S of M—2 shortwall machs.
 PP—Power purchased. Transformer 22,000 to 220 volts.
 EMP—45. Daily tonnage 250.
 SIZES SHIPT—Run of Mine.

SMOOTH HILL COAL COMPANY.

General Office, Phillipsburg, Pa.
 IR—P. E. Womelsdorf, Phillipsburg, Pa.
 VP—G. F. Dunkle, Phillipsburg, Pa.
 TR—T. J. Lee, Phillipsburg, Pa.
 GM—G. F. Dunkle, Phillipsburg, Pa.
 GS—G. F. Dunkle, Phillipsburg, Pa.
 PA—G. F. Dunkle, Phillipsburg, Pa.
 EM—Womelsdorf, Dunkle & Custer, Phillipsburg, Pa.
 EE—Phillipsburg Foundry & Machine Co., Phillipsburg, Pa.

Smooth Hill No. 1 Mine; Drift; Brookville Seam, 60 in. thick.
 PO—Phillipsburg, Pa. SP—Same. CTY—Center. RR—N. Y. C., one mile Run Br.
 MS—Thos. James, Phillipsburg, Pa.
 S of H—Mules. Track gage, 34 in. S of M—Hand.
 EMP—40. Daily tonnage 200.
 SIZES SHIPT—Run of Mine.

SMUTZINGER COAL COMPANY

General Office, Munson, Pa.
 PR—Jacob Smutzinger, Munson, Pa.
 TR—Jacob Smutzinger, Munson, Pa.
 GM—Fred Elsenhauer, Munson, Pa.
 GS—Jacob Smutzinger, Munson, Pa.
 PA—Jacob Smutzinger, Munson, Pa.
 CE—Womelsdorf & Dunkel, Phillipsburg, Pa.
 SA—Jacob Smutzinger, Munson, Pa.

Couldale No. 12 Mine; Drift; "A" Seam; 30 to 60 inches thick.
 PO—Munson, Pa.; SP—Same; CTY—Center; RR—N. Y. C.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 EMP—40. Daily output, 75 tons.
 SIZES SHIPT—Run of Mine.

SNOWDEN COKE COMPANY

General Office, Pittsburgh, Pa.
 PR—Isaac Taylor, Uniontown, Pa.
 TR—T. W. Friend, Pittsburgh, Pa.
 GM—Edw. H. Cox, Brownsville, Pa.
 GS—Edw. H. Cox, Brownsville, Pa.
 EM—G. O. E. Steyle, Brownsville, Pa.
 EF—John Carroll, Brownsville, Pa.
 SCO—Mt. Hope Supply Co., Buyer, E. H. Miller, Uniontown, Pa.
 Sales Agent—Snowden Coke Co., Pittsburgh, Pa.

Mt. Hope Mine; Drift; Pittsburgh Seam; 84 to 96 in. thick.
 PO—Brownsville, Pa.; SP—Linn Station, Pa.; CTY—Fayette; RR—Penna., P. V. & C.
 MS—Joseph Maize, Brownsville, Pa.
 SM—Earl Swearingen, Brazzell, Pa.
 S of H—4 elec. locos. Track gage 44 in.
 S of M—Hand, 4 elec. breast and 2 elec. shortwall machs.
 PP—Power purchased, 350 K. W. motor gen. set, 250 volts D. C., 50 H. P. A. C. fan motor, 3 pumps.
 EMP—200. Last years tonnage 160,000.
 Coke Ovens, 300 Rectangular.

SNYDER, M. A. & SONS

General Office, Markleton, Pa.
 TR—M. A. Snyder, Markleton, Pa.
 GM—M. A. Snyder, Markleton, Pa.
 SA—Iron Trade Products Company, Farmers Bank Bldg., Pittsburgh, Pa.

Snyder Mine; Drift and Slope; B Seam, 30-60 in. thick.
 PO—Markleton, Pa. SP—Same. CTY—Somerset. RR—W. M., Connellsville Division.
 MS—M. A. Snyder, Markleton, Pa.
 S of H—Mules, Track gage 24 inches.
 S of M—Hand.
 Daily tonnage 200.
 SIZES SHIPT—Run of Mine.

SOISSON, JOS., FIRE BRICK CO.

General Office, Connellsville, Pa.
 PR—J. N. Soisson, Connellsville, Pa.
 VP—E. E. Soisson, Connellsville, Pa.
 TR—W. F. Soisson, Connellsville, Pa.
 GM—W. F. Soisson, Connellsville, Pa.
 GS—V. H. Soisson, Connellsville, Pa.
 PA—F. W. Neuroth, Connellsville, Pa.
 Sales Agent—G. B. Freed, Connellsville, Pa.

Indiana Nos. 2 and 3 Mines; Miller or "B" Seam, 36-48 in. thick.
 PO—Bollivar, Pa.; SP—Same; CTY—Indiana; RR—F. R. K., Conemaugh Div.
 MS—D. D. Krouse, Bollivar, Pa.
 S of H—Rope and storage battery loco. Track gage 37 in.
 S of M—Hand and 1 shortwall mach.
 PP—Purchase power, transformer 2200 to 220 volts, M. G. sets, 220 volts D. C.
 EMP—75. Last years tonnage 11,000.
 SIZES SHIPT—Run of Mine, Slack.

SOMERFIELD COAL COMPANY.

General Office, Uniontown, Pa.
 PR—D. Goodstein, Uniontown, Pa.
 TR—B. A. Davis, Uniontown, Pa.

Somerfield Mine; Drift, D Seam, 50 in. thick.
 PO—Somerfield, Pa.; SP—Same; CTY—Somerset; RR—B. & O., California St.
 S of H—Mules. Track gage, 30 in.
 S of M—1 chain brood type mach.
 PP—1 fire tube boiler, 100 H. P., 1 75 K. W. gen. unit, 220 volts D. C., 2 pumps.
 EMP—10. Last fiscal year output, 8,000 tons.
 SIZES SHIPT—Run of Mine.
 Old information.

SOMERFIELD FUEL COMPANY.

Now Somerfield Mining Co.

SOMERFIELD MINING COMPANY

General Office, 700 Bowman Bldg., Pittsburgh, Pa.
 PR—Thomas R. Heyward, Jr., Pittsburgh, Pa.
 VP—Herman Kammerer, Morgantown, W. Va.
 TR—Samuel E. Coe, Pittsburgh, Pa.
 SCY—Samuel E. Coe, Pittsburgh, Pa.
 GM—Samuel E. Coe, Pittsburgh, Pa.
 GS—Elmer Kammerer, Somerfield, Pa.
 PA—Samuel E. Coe, Pittsburgh, Pa.
 CE—Fayette Engineering Co., Uniontown, Pa.
 EK—E. L. Purnell, Somerfield, Pa.
 SA—Thomas R. Heyward Co., Pittsburgh, Pa.

Thomasdale Mine; Slope; "E" or Upper Freeport Seam; 60 inches thick.
 PO—Somerfield, Pa.; SP—Same; CTY—Fayette; RR—Penna.
 S of H—Mules. Track gage 33 in.
 S of M—2 shortwall machs.
 PP—1 return tubular boiler, gen. units, 250 volts D. C.
 EMP—40. Last years tonnage 12,000.
 SIZES SHIPT—Run of Mine.
 Note—Successors to Somerfield Fuel Co.

SOMERSET & CAMBRIA SMOKELESS COAL MINING COMPANY

General Office, 1801 Oliver Bldg., Pittsburgh, Pa.
 PR—Geo. Foster, Pittsburgh, Pa.
 VP—H. S. Davison, 42nd St., Pittsburgh, Pa.
 TR—A. H. Stober, Pittsburgh, Pa.
 GS—D. B. Stober, Somerset, Pa.
 PA—A. J. Solisons, Pittsburgh, Pa.

Rlg Six Mine; Slope; C Prime Seam; 42 inches thick.
 PO—Wells Creek, Pa.; SP—Listie, Pa.; CTY—Somerset; RR—B. & O.
 S of H—Mules. Track gage 42 inches.
 S of M—1 shortwall mach.
 PP—Power purchased. Transformer 2300 440 volts A. C., M. G. sets, 250 volts D. C., 3 pumps.
 EMP—40. Daily tonnage 150.
 SIZES SHIPT—Run of Mine.

SOMERSET COAL MINING COMPANY

General Office, Somerset, Pa.
 GM—J. J. Holderbaum, Somerset, Pa.

Welfare Mine; Drift; "R" Seam; 60 inches thick.
 PO—Somerset, Pa.; SP—Same; CTY—Somerset; RR—B. & O.
 MS—F. A. Schulte, Somerset, Pa.
 S of H—Mules. Track gage 42 inches.
 S of M—Hand.
 PP—1 water tube boiler, 20 H. P.
 Last fiscal year output, 17,803 tons.
 SIZES SHIPT—Run of Mine.

SOMERSET CREEK FUEL COMPANY

General Office, Hooversville, Pa.
 PR—D. B. Specht, Hooversville, Pa.
 TR—Clammer B. Berkey, Hooversville, Pa.
 GM—Clyde Berkey, Hooversville, Pa.
 GS—Chalmers Jones, Hooversville, Pa.
 PA—Clammer B. Berkey, Hooversville, Pa.
 CE—M. C. Benedict, Hooversville, Pa.
 EM—George Kimmel, Hooversville, Pa.

Somerset Creek No. 1 Mine; Drift; "B" or Miller Seam, 42 inches thick.
 PO—Hooversville, Pa.; SP—Same; CTY—Somerset; RR—B. & O.
 S of H—Mules, storage battery loco. Track gage 36 in.
 S of M—2 shortwall machs.
 PP—Power purchased.
 Last years tonnage 12,000.
 SIZES SHIPT—Run of Mine, Slack.

SOMERSET MINING CO

General Office, Knickerbocker Bldg., Johnstown, Pa.
 PR—Telford Lewis, Johnstown, Pa.
 VP—James A. Hill, New York, N. Y.
 TR—P. M. Graff, Blairsville, Pa.
 GM—Telford Lewis, Johnstown, Pa.
 GS—Richard A. Supper, Johnstown, Pa.
 PA—Norman Lewis, Johnstown, Pa.
 SCO—Hooversville Supply Co., Buyer, Edward Lauer, Hooversville, Pa.
 Sales Agents—Knickerbocker Fuel Co., New York.

Knickerbocker No. 1, Drift, B Seam, 3 1/2 to 5 ft. thick.
 PO—Hooversville, Pa.; SP—Same; CTY—Somerset; RR—B. & O., Rockwood Branch.
 MS—S. C. Hiltner, Hooversville, Pa.

S of H—4 elec. locos. Track gage 36 in.
 S of M—2 Elec. machines and 2 hand.
 PP—2 boilers, total 300 H. P., 230 volts D. C.
 EMP—125. Last years tonnage 95,498.
 SIZES SHIPT—Run of Mine, Slack.
 PREP. EQUIPT—Picking Tables.

SOMMAN RBN COAL CO

General Office, 1000 Liberty Bldg., Philadelphia, Pa.
 PR—G. Banton Roberts, Philad lphia, Pa.
 VP—David E. Williams, Jr., Philadelphia, Pa.
 TR—Wm. A. South, Philadelphia, Pa.
 GM—A. M. Robb, 1719 3rd Ave., Altoona, Pa.
 GS—A. M. Robb, 1719 3rd Ave., Altoona, Pa.
 PA—D. E. Williams, Jr., Philadelphia, Pa.
 SCO—Excelsior Store Co. Buyer, W. F. Griest, Portage, Pa.
 SA—David E. Williams & Co., Philadelphia, Pa.

Somman No. 1 Mine; Drift; D Seam, 18 in. thick.
 PO—Portage, Pa.; SP—Same; CTY—Cambria; RR—Penna.
 MS—William Brown, Portage, Pa.
 S of H—Mules and elec. loco. Track gage 36 in.
 S of M—Shortwall machs.
 PP—Power purchased. Transformer 2300-250 volts D. C., M. G. sets, 140 K. W., 3 phase 60 cycles.
 EMP—75. Daily tonnage 500.
 SIZES SHIPT—Run of Mine.

SOMMAN SHAFT COAL COMPANY.

General Office, Minersville, Pa.
 PR—James B. Neale, Minersville, Pa.
 VP—Vance C. McCormick, Harrisburg, Pa.
 TR—S. B. Thorne, New York, N. Y.
 SECY—James H. Collier, Minersville, Pa.
 GM—Malcolm McDougall, Sonman, Pa.
 GS—Malcolm McDougall, Sonman, Pa.
 PA—Malcolm McDougall, Sonman, Pa.
 CE—J. S. Silberman & Co., Altoona, Pa.
 EE—Victor Dumas, Sonman, Pa.
 SCO—Sonman Shaft Co., Inc. Buyer, Lot R. Callahan, Sonman, Pa.
 Sales Agency, Thorne Neale & Co., Philadelphia, Pa.

Somman Shaft; Miller or B Seam, and Sonman Slope; E & C Prime Seam, 42 to 48 inches thick.
 PO—Sonman, Pa.; SP—Portage, Pa.; CTY—Cambria; RR—Penna.
 MS—William G. Strahan, Sonman, Pa.
 S of H—5 electric locos, and rope. Track gage 36 and 42 in.
 S of M—20 shortwall machs.
 PP—Power purchased. Transformer 6600 to 103 and 206 volts A. C., rotary converters, 300 volts D. C., 3 water tube boilers, 850 H. P., 18 pumps.
 EMP—650. Last years tonnage 374,457.
 SIZES SHIPT—Run of Mine.

SOUTH FAYETTE COAL CO.

General Office, 530 Oliver Bldg., Pittsburgh, Pa.
 PR—E. R. Weise, Pittsburgh, Pa.
 TR—F. E. Weise, Pittsburgh, Pa.
 GM—E. R. Weise, Pittsburgh, Pa.
 PA—E. R. Weise, Pittsburgh, Pa.
 EM—Wm. W. Andrews, Curry Bldg., Pittsburgh, Pa.
 SA—Steel City Gas Coal Co., Oliver Bldg., Pittsburgh, Pa.

McLose Mine; Slope; Pgh. Seam, 5 1/2 to 6 1/2 ft. thick.
 PO—Bridgeville, Pa.; SP—Same; CTY—Allegheny; RR—P. C. C. & ST. L., Chartiers Branch.
 MS—Geo. Lindner, Bridgeville, Pa.
 S of H—Mules and 1 elec. loco. Track gage 42 in.
 S of M—2 shortwall machs.
 PP—Purchase power, transformer 10,000 to 440 volts, motor gen. units, 500 volts in mine, 5 pumps.
 EMP—48. Last fiscal year output, 54,665 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

Presto Mine; Drift; Pittsburgh Seam, 6 1/2 in. thick.
 PO—Finchville, Pa. SP—Same. CTY—Washington, RR—B. & O.
 MS—Christy George, Finchville, Pa.
 S of H—Mules, 1 troll. loco. Track gage 48 in.
 S of M—3 shortwall machs.
 PP—Purchase power, transformer 1000 to 440 volts.
 EMP—10. Last years output, 1000 tons.

Fredericktown Mine; Drift, Pittsburgh Seam, 3 1/2 inches thick.
 PO—Fredericktown, Pa.; SP—East Fredericktown, Pa.; CTY—Fayette; RR—Monongahela.

(Continued on Next Page)

South Fayette Coal Co.—Cont.

MS—Louis W. L. Evansville, Pa.
S of H—Mules, trolley pole type and storage battery locos. Track gage 42 inches.
S of M—1 chain breast type and 3 shortwall mchs.
PP—Power purchased. Transformer 2,200 to 440 volts A. C., M. G. set, 500 volts D. C., 2 pumps.
EMP—120.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIP.—Shaker Screens, Picking Tables, Loading Booms.

SOUTH FORK BITUMINOUS COAL CO.

General Office, South Fork, Pa.
PR—Wallace Sherburne, Wilmore, Pa.
VP—Paul Nelson, Portage, Pa.
VP—W. T. Yeckley, Portage, Pa.
TR—James C. Stinemann, South Fork, Pa.
GM—James C. Stinemann, South Fork, Pa.
GS—James C. Stinemann, South Fork, Pa.
PA—James C. Stinemann, South Fork, Pa.
SCO—Stinemann Bros. Supply Co., South Fork, Pa.
SA—Stinemann-Gorman Coal Co., Hartford, Conn.

Bituminous No. 1 Mine; Slope; Upper Kittanning Seam; 42 in. thick.
PO—South Fork, Pa.; SP—Same; CTY—Cambria; RR—P. R. R. Windber Br.
S of H—Mules and elec. locos. Track gage 42 in.
S of M—4 shortwall mchs.
PP—Power purchased. Transformer, M. G. set, 150 K. W., 250 volts D. C., 2 pumps.
EMP—80. Last years tonnage 47,576.
SIZES SHIPT—Run of Mine.

SOUTH FORK COAL MINING CO.

General Office, 421 Chestnut St., Philadelphia, Pa.
PR—J. S. W. Holton, Philadelphia, Pa.
IR—M. L. Preston, " "
CE—Fetterman Engineering Co., Johnstown, Pa.

South Fork, No. 2 Mine, Slope.
PO—South Fork, Pa.; SP—Same; CTY—Cambria; RR—P. R. R.
MS—William Lamont, Elmora, P. O., Bakerton, Pa.
S of H—Rope and mules.
S of M—4 shortwall mchs.
EMP—100.
PP—Power purchased. Transformer 440 volts A. C. M. G. Sets 250 volts D. C., 1 pump.
SIZES SHIPT—Run of Mine.

SOUTH FORK COLLIERY COMPANY

General Office, South Fork, Pa.
PR—G. O. A. Slick, South Fork, Pa.
TR—Geo. T. Gardner, South Fork, Pa.
GM—G. O. T. Gardner, South Fork, Pa.
GS—G. O. T. Gardner, South Fork, Pa.
PA—Geo. T. Gardner, South Fork, Pa.

South Fork No. 1 Mine; Drift; "P" Seam, 36 inches thick.
PO—South Fork, Pa.; SP—Same; CTY—Cambria; RR—Penna.
S of H—Mules and electric locos. Track gage 42 inches.
S of M—Hand and shortwall mchs.
PP—Purchase power. Transformer 2200 250 volts A. C.
EMP—40. Last years tonnage 32,000.
SIZES SHIPT—Run of Mine.

SOUTH SIDE COAL COMPANY

Now Triple Vein Smokeless Coal Co.

SOUTH WILMERDING COAL COMPANY.

General Office, Wilmerding, Pa.
PR—E. R. Masters, Wilmerding, Pa.
VP—Geo. A. Stenson, Wilmerding, Pa.
TR—Geo. A. Stenson, Wilmerding, Pa.
GS—H. S. Welsh, East McKeesport, Pa.

No. 1 Mine; Drift; Pittsburgh Seam, 34 in. thick.
PO—Wilmerding, Pa.; SP—Same; CTY—Allegheny.
S of H—Mules. Track gage 42 in.
S of M—Hand.
EMP—22. Last fiscal year output, 15,109 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.

SOUTHERN CONNELLSVILLE COKE CO.

General Office, Connelville, Pa.
PR—Chas. Detweiler, R. F. D. No. 2, Connelville, Pa.
VP—F. E. Markell, Connelville, Pa.
TR—J. R. Davidson, Connelville, Pa.
GM—J. L. Schick, Connelville, Pa.
GS—J. L. Schick, Connelville, Pa.
PA—J. L. Schick, Connelville, Pa.
CE—J. E. Donahoe, Connelville, Pa.
EE—Chas. Walcott, Cheat Haven, Pa.
SCO—L. D. Sisler & Son, Buyer, L. D. Sisler, Cheat Haven, Pa.

Marian Mine; Drift; Connelville Seam 40 in. thick.
PO—Cheat Haven, Pa.; SP—Same; CTY—Fayette; RR—B. & O.

S of H—1 gasoline loco. Track gage, 42 in.
S of M—Shortwall mchs.
PP—Power purchased, transformer 6600-440-volts A. C. M. G. sets, 440 volts D. C., 1 fire tube boiler, 30 H. P., 5 pumps.
EMP—75. Last fiscal year output, 75,000 tons. Coke Ovens, 64 Beehive.
SIZES SHIPT—Run of Mine, Lump.

SPEERS, S. M. COAL COMPANY

General Office, Belle Vernon, Pa.
OWNER—S. M. Speers, Belle Vernon, Pa.
Mitchell Mine; Drift; Pittsburgh No. 8 Seam, 96 inches thick.
PO—Newell, Pa.; SP—Same; CTY—Fayette; RR—P. & L. E.
MS—S. M. Speers, Belle Vernon, Pa.
S of H—Mules, rope, electric hoist.
S of M—Hand.
PP—Power purchased. Transformer, 6,000 to 220 volts A. C.
EMP—15 to 20.
Old information.

SPRING VALLEY COAL COMPANY

General Office, Union Arcade Bldg., Pittsburgh, Pa.
PR—Hugh Lochrie, Windber, Pa.
VP—W. E. Stover, Butler, Pa.
TR—Fred Stover, Butler, Pa.
GS—E. E. Hobbs, Hilliards, Pa.
PA—Fred Stover, Butler, Pa.
EM—F. P. Graham & Co., Grove City, Pa.
EE—W. P. Vance, Butler, Pa.
SA—Chas. S. Bygate Co., Pittsburgh, Pa.

Spring Valley Mine; Drift; 42 to 48 in. thick.
PO—Hilliards, Pa.; SP—Same; CTY—Butler; RR—B. & L. E.
S of H—Mules and rope.
S of M—3 chain breast type mchs.
PP—250 volts D. C., 1 water tube boiler, 250 volts D. C., 4 pumps.
EMP—30. Last years tonnage 20,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIP.—Gravity Screens.

SPRINGER COAL CO.

General Office, Pittsburgh, Pa.
PR—T. F. Springer, Clarksville, Pa.
VP—C. H. Day, Clarksville, Pa.
TR—Hiram Harris, Pittsburgh, Pa.
GS—T. F. Springer, Clarksville, Pa.
PA—Hiram Harris, Pittsburgh, Pa.
EM—L. G. Mushner, Brownsville, Pa.

Springer Mine; Slope; Pittsburgh Seam, 70 in. thick.
PO—Clarksville, Pa.; SP—Millshore, Pa.; CTY—Washington; RR—Penna.
S of H—Mules. Track gage, 44 in.
S of M—1 chain breast and 1 shortwall mchs.
PP—Power purchased, 220 volts A. C., 2 pumps.
EMP—24. Last years tonnage 23,544.
SIZES SHIPT—Run of Mine.

SPRINGFIELD COAL MINING CO.

General Office, St. Benedict, Pa.
PR—Bernhardt Peale, St. Benedict, Pa.
VP—Richard Peale, St. Benedict, Pa.
TR—G. E. Metzger, St. Benedict, Pa.
GM—Richard Peale, St. Benedict, Pa.
GS—Merritt Hutton, St. Benedict, Pa.
PA—G. E. Metzger, St. Benedict, Pa.
CE—Merritt Hutton, St. Benedict, Pa.
EM—R. J. Protzeller, St. Benedict, Pa.
EE—E. K. Davis, St. Benedict, Pa.
SCO—Central Trading Corp., Buyer, A. C. Hower, St. Benedict, Pa.

Nos. 1, 2 and 3 Mines; Slopes and Drifts; "B" Seam, 42 to 48 in. thick.
PO—Nanty-Glo, Pa.; SP—Same; CTY—Cambria; RR—Penna.
MS—W. D. Dunsmore, Nanty-Glo, Pa.
SM—Jos. Goldth, Nanty-Glo, Pa.
S of H—5 elec. and 1 steam loco. Track gage 42 in.
S of M—Hand, 1 elec. and 1 comp-air mach.
PP—5 return tubular boilers, total 600 H. P., 1 motor gen. set, 200 volts K. W., 3 air compressors and 5 pumps.
EMP—400. Last fiscal year output 218,000 tons.

SPEAT, R. L.

General Office, Windber, Pa.
GM—R. L. Speat, Windber, Pa.
GS—R. L. Speat, Windber, Pa.
PA—R. L. Speat, Windber, Pa.
CE—S. E. Dickey & Co., Johnstown, Pa.
EM—S. E. Dickey & Co., Johnstown, Pa.

Speat Nos. 1, 2, 3, 4 and 5 Mines; Drift; Miller Seam, 48 in. thick.
PO—Windber, Pa.; SP—Same; CTY—Somerset; RR—B. & O.
S of H—Mules and rope. Track gage 36 inches.
S of M—Hand.
PP—Volts A. C., mch. at 410 volts A. C.
EMP—40. Last years tonnage 50,000.
SIZES SHIPT—Run of Mine.

SPURGEON, J. K.
Mine worked out and abandoned.

STADER COAL COMPANY

General Office, Soisson Theatre Bldg., Connelville, Pa.
PR—Carrie I. Stader, Indianapolis, Ind.
TR—J. C. Henry, Connelville, Pa.
GM—J. C. Henry, Connelville, Pa.
GS—J. C. Henry, Connelville, Pa.
PA—J. C. Henry, Connelville, Pa.
SA—J. C. Henry, Connelville, Pa.
SA—C. F. Donnelly, Connelville, Pa.

Stader No. 1 Mine; Drift; Upper Freeport Seam, 79 inches thick.
PO—Mill Run, Pa.; SP—Indian Creek, Pa.; CTY—Fayette; RR—L. C. V.
S of H—Mules.
S of M—Hand.
EMP—28. Last years tonnage 15,385.
SIZES SHIPT—Run of Mine.

STAGE, G. C. ESTATE

Now Gracemont Coal Company.

STANDARD COAL CO.

General Office, Altoona, Pa.
PR—P. N. Rich, Altoona, Pa.
TR—Samuel Wilson, Altoona, Pa.
GM—P. N. Rich, " "
PA—P. N. Rich, " "

Standard No. 1 Mine; Drift; "B" Seam, 38 in. thick.
PO—Lilly, Pa.; SP—Same; CTY—Cambria; RR—P. B. R., Lilly Br.
MS—Charles McGinn, Lilly, Pa.
S of H—Mules.
S of M—Hand and 1 comp. air mach.
SIZES SHIPT—Run of Mine.

STANDARD COAL CO.

General Office, Butler, Pa.
PR—C. F. Huford, r., Butler, Pa.
TR—John Jackson, Butler, Pa.
GS—John C. Hamilton, Argentine, Pa.

Royle Mine; Slope; Brookville Seam, 48 in. thick.
PO—Argentine, Pa.; SP—Same; CTY—Butler; RR—B. & L. E.
S of H—Gasoline loco. Track gage 37 in.
S of M—14 comp. air punchers.
PP—250 H. P. fire tube boilers.
EMP—40. Daily output, 200 tons.
SIZES SHIPT—Run of Mine, Slack, Lump, Egg.

Hamilton No. 3 Mine; Drift; Brookville Seam, 96 in. thick.
PO—Argentine, Pa.; SP—Same; CTY—Butler; RR—B. & L. E.
S of H—Gasoline loco. Track gage 37 in.
S of M—14 comp. air punchers.
PP—250 H. P. fire tube boilers, 3 pumps.
EMP—80. Daily output, 500 tons.
SIZES SHIPT—Run of Mine.

STANDARD MOSHANNON COAL CO.

General Office, Clearfield, Pa.
PR—F. Gurney Smith, Clearfield, Pa.
VP—W. Williams, Ramey, Pa.
TR—Chas. T. Kurtz, Clearfield, Pa.
GS—F. Gurney Smith, Clearfield, Pa.
PA—F. Gurney Smith, Clearfield, Pa.
EM—W. W. Wolsdorf & Dunkle, Phillipsburg, Pa.

SA—Regal Coal Mining Co., Clearfield, Pa.
Standard No. 4 Mine; Drift; Moshannon Seam, 34 in. thick.
PO—Ramey, Pa.; SP—Same; CTY—Clearfield; RR—Penna.
MP—W. J. Williams, Ramey, Pa.
S of H—Mules. 1 storage battery loco. Track gage 36 in.
S of M—Hand and mining mach.
PP—Power purchased, 220 volts A. C., 1 pump.
EMP—80. Daily tonnage 300 tons.
SIZES SHIPT—Run of Mine.

STANDARD-QUEMABONING COAL CO.

General Office, Roswell, Pa.
PR—Justus Volk, Roswell, Pa.
VP—K. R. Volk, Roswell, Pa.
TR—K. R. Volk, Roswell, Pa.
GM—Justus Volk, Roswell, Pa.
GS—K. R. Volk, Roswell, Pa.
PA—K. R. Volk, Roswell, Pa.
EM—G. C. Winslow, Roswell, Pa.

No. 3 Mine; Slope; "B" Seam, 45 to 48 in. thick.
PO—Roswell, Pa.; SP—Same; CTY—Somerset; RR—B. & O., Quema-boning Branch.
MS—D. J. Holsapple, Roswell, Pa.
S of H—Mules, rope and 1 steam engine. Track gage 42 in.
S of M—Hand.
PP—Purchase power, transformer 22-000-220 volts A. C., 1 25 H. P. fire tube boiler, 1 25 H. P. water tube boiler, 3 pumps.
EMP—33. Last fiscal year output 19,385 tons.
SIZES SHIPT—Run of Mine.

STANDARD SMOKELESS COAL COMPANY

General Office, Indiana, Pa.
PR—W. C. Smith, Indiana, Pa.
TR—D. A. Martin, Indiana, Pa.
GM—W. C. Smith, Indiana, Pa.
GS—W. C. Smith, Indiana, Pa.
PA—W. C. Smith, Indiana, Pa.
EM—Horner & Jones, Indiana, Pa.
SCO—Forest Supply Co., Buyer, D. A. Martin, Indiana, Pa.

Standard Mine; Drift; 42 inches thick.
PO—Indiana, Pa.; SP—Dias, Pa.; CTY—Indiana; RR—Penna.

S of H—Mules.
S of M—Machines.
EMP—35. Daily tonnage 250.
SIZES SHIPT—Run of Mine, Slack.

STANLEY COAL CO.

General Office, Connelville, Pa.

PO—Osceola Mills, Pa.; CTY—Clear-geld; RR—P. & S., Penna.
No report.

STANLEY COAL MINING COMPANY.

General Office, Brisbin, Pa.
PR—J. D. Walker, Brisbin, Pa.
TR—E. J. Walker, Brisbin, Pa.
GM—M. Walker, Brisbin, Pa.
GS—M. Walker, Brisbin, Pa.
PA—M. Walker, Brisbin, Pa.
EM—Willard Walker, Brisbin, Pa.
SCO—Address the Company. Buyer, E. J. Walker, Brisbin, Pa.
SA—J. D. Walker Coal Co., Brisbin, Pa.

Stanley No. 3 Mine; Drift; B Seam, 54 in. thick.
PO—Brisbin, Pa.; SP—Same. CTY—Clearfield; RR—Penna.
S of H—2 trolley pole type locos. Track gage, 36 in.
S of M—Hand.
PP—Gen. units, 250 volts D. C., 4 pumps. Purchase power.
EMP—50. Last years tonnage 33,400.
SIZES SHIPT—Run of Mine.

STAR FUEL COAL COMPANY.

Now part of the National Mining Company.

STATE LINE COAL CO.

General Office, Cheat Haven, Pa.

Stentz No. 1 Mine.
PO—Cheat Haven, Pa.; CTY—Fayette; RR—B. & O.
No report.

STATE MINING COMPANY.

General Office, Conemaugh, Pa.
PR—L. F. Link, Conemaugh, Pa.
VP—W. L. Holsel, Scalp Level, Pa.
TR—W. E. Wisinger, Johnstown, Pa.
GM—L. F. Link, Conemaugh, Pa.
PA—L. F. Link, Conemaugh, Pa.
EM—O. P. Thomas, Johnstown, Pa.
SA—Coale & Co., Cumberland, Md.

No. 1 Mine; Drift; C Prime Seam, 42 in. thick.
PO—Conemaugh, Pa.; SP—Same; CTY—Somerset; RR—B. & O., White's Creek Br.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
SIZES SHIPT—Run of Mine.
Old information.

STATLER, E. & SONS.

GM—H. H. Statler, Elk Lick, Pa.
GS—E. Statler, Elk Lick, Pa.
SCO—Address the Company. Buyer, H. H. Statler, Elk Lick, Pa.
SA—D. H. Newell, 1307-09 Western Bldg., Philadelphia, Pa.

Statler Mine; Drift; Pittsburgh Seam, 48 to 60 in. thick.
PO—Elk Lick, Pa.; SP—Meyersdale, Pa.; CTY—Somerset; RR—W. Md.
S of H—Mules, 1 storage battery loco. Track gage, 42 in.
S of M—Hand.
PP—Power purchased.
EMP—60. Last fiscal year output, 47,142 tons.
SIZES SHIPT—Run of Mine (old information).

STAUFFER KITTANNING COAL COMPANY

General Office, Box 590, Scottdale, Pa.
PR—John M. Stauffer, Scottdale, Pa.
VP—J. Geo. Lindman, Kittanning, Pa.
TR—F. L. Brown, Scottdale, Pa.

Stauffer Kittanning No. 1 Mine; Drift; Upper Freeport Seam, 42 inches thick.
PO—Kelly Station, Pa.; SP—Same; CTY—Armstrong; RR—H. V., Penna.
MS—J. Geo. Lindman, Kelly Station, Pa.

S of H—Mules.
S of M—Shortwall mchs.
PP—Power purchased. Transformer 2200-440 volts A. C.
Daily tonnage 100.
SIZES SHIPT—Run of Mine.

STAUFFER-QUEMABONING COAL CO.

Now operated by the Barnes-Quemaboning Coal Co.

STEIN, GEORGE P.
OWNER—Geo. P. Stein, Somerset, Pa.
"Stein" Mine; Drift; C Prime Seam, 30 in. thick.
PO—Garrett, Pa.; SP—Same; CTY—Somerset; RR—B. & O.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—1 20 H. P. water tube boiler, 1 pump.
EMP—30.
SIZES SHIPT—Run of Mine.
Note—Successors to Pollard-Brant, Inc.

STELLA COAL COMPANY
General Office, 818 Oliver Bldg., Pittsburgh, Pa.
PR—John E. E. Vilsack, Pittsburgh, Pa.
VP—J. G. Vilsack, Pittsburgh, Pa.
TR—J. G. Vilsack, Pittsburgh, Pa.
GM—John R. E. Vilsack, Pittsburgh, Pa.
GS—Wm. R. Dixon, Templeton, Pa.
PA—John B. E. Vilsack, Pittsburgh, Pa.
EM—Bernard Peters, Kittanning, Pa.
SA—Wholesale Coal Co., Chamber of Commerce Bldg., Pittsburgh, Pa.

Stella Mine; Drift; Upper Freeport Seam, 45 inches thick.
PO—Templeton, Pa.; Box 161; SP—Same; CTY—Armstrong; RR—Penna.
MS—Wm. R. Dixon, Box 161, Templeton, Pa.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
EMP—30.
SIZES SHIPT—Run of Mine.

STERLING & GRAHAM COAL CO.
General Office, Masontown, Pa.
TR—Wm. L. Graham, Masontown, Pa.
GM—Wm. L. Graham, Masontown, Pa.
GS—Wm. L. Graham, Masontown, Pa.
PA—Wm. L. Graham, Masontown, Pa.
SA—Wm. L. Graham, Masontown, Pa.

Stella Mine; Drift; Sewickley Seam, 54 in. thick.
PO—Masontown, Pa.; SP—Same; CTY—Fayette; RR—Monon., Penna. N. Y. C.
MS—F. L. Sterling, Masontown, Pa.
S of H—Trolley motors and storage battery locos. Track gage 44 in.
S of M—2 shortwall machs.
PP—Power purchased, 250 volts D. C., 3 pumps.
EMP—40. Last fiscal year output, 60,000 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Crusher.

STERLING COAL COMPANY
General Office, Connellsville, Pa.
PR—E. T. Morton, Connellsville, Pa.
TR—C. T. Stickle, Connellsville, Pa.
GM—G. E. Brooks, Connellsville, Pa.
GS—G. E. Brooks, Connellsville, Pa.
PA—M. A. McKevitt, Connellsville, Pa.
SA—Superba Coal Co., Connellsville, Pa.

Sterling Mine; Drift; Connellsville Seam, 108 inches thick.
PO—Connellsville, Pa.; SP—Broadford, Pa.; CTY—Fayette; RR—B. & O.
MS—Jam. S. Litten, Connellsville, Pa.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
SIZES SHIPT—Run of Mine.

STERLING COAL CO.
General Office, 421 Chestnut St., Philadelphia, Pa.
PR—J. S. W. Holton, Philadelphia, Pa.
VP—Robert E. Baker, New York, N. Y.
TR—De Veaux Powell, New York, N. Y.
GS—Wm. Lamont, Bakerton, Pa.
PA—F. Stanley Claypoole, Philadelphia, Pa.
EE—Chas. Hennigan, Bakerton, Pa.
SCO—Bakerton Supply Co., Buyer, John D. Bougher, Eleanor, Pa.

Sterling Nos. 1, 3, 5 and 6 Mines; Drifts; "R" Seams, 44 in. thick.
PO—Elmora, Pa.; SP—Bakerton, Pa.; CTY—Cambria; RR—Penna.
S of H—Trolley pole type locos.
S of M—Shortwall machs.
PP—Power purchased, 900 K. W. gen. erator units, M. G. S's 250 volts, D. C.

STERLING COAL MINING CO.
Gen. Office Woodland, Pa.
PR—S. S. Swift, Woodland, Pa.
TR—A. E. Woolridge, " "
GM—A. E. Woolridge, " "
GS—A. E. Woolridge, " "
PA—A. E. Woolridge, " "
EM—Geo. Ayres, Phillipsburg, Pa.

Sterling No. 1 Mine; Drift; B Vein; 60 in. thick.
PO—Houtzdale, Pa.; SP—Same; CTY—Clearfield; RR—Penna., White Side Branch.
S of H—Mules and trolley pole locos.
S of M—Hand.
PP—Power purchased, 4 pumps.
EMP—50. Last fiscal year output, 33,000 tons.
SIZES SHIPT—Run of Mine.

STERLING MOSHANNON COAL CO.
General Office, Houtzdale, Pa.
Sterling No. 3 Mine.
PO—Houtzdale, Pa.; CTY—Clearfield; RR—Penna., P. & S.
No report.

STERLING SISTERS COAL CO.
Masontown, Pa.
No report.

STERN COAL & COKE COMPANY
General Office, Masonic Bldg., Uniontown, Pa.
PR—J. J. McIntyre, Uniontown, Pa.
TR—Lee Stern, Uniontown, Pa.
GM—John J. McIntyre, Uniontown, Pa.
GS—John J. McIntyre, Uniontown, Pa.
PA—John J. McIntyre, Uniontown, Pa.

Snider Mine; Drift; Pittsburgh Seam, 96 in. thick.
PO—Uniontown, Pa.; SP—Same; CTY—Fayette; RR—Penna., M. R. R.
MS—John Hinkle, Uniontown, Pa.
S of H—Mules and rope. Track gage, 44 in.
S of M—Longwall mach., elec. puncher.
PP—Power purchased, transformers 2200 to 250 volts A. C., 1 pump.
EMP—55. Coke Ovens, 120 Bee Hive.
SIZES SHIPT—Run of Mine. Slack, Lump.

Rail Mine; Drift; Pittsburgh Seam, 96 in. thick.
PO—Uniontown, Pa.; SP—Same; CTY—Fayette; RR—Penna., M. R. R.
MS—W. H. Fee, Uniontown, Pa.
S of H—Mules and rope. Track gage, 44 in.
S of M—Hand.
PP—Power purchased.
EMP—50. Coke Ovens, 120 Bee Hive.
SIZES SHIPT—Run of Mine.
NOTE—Formerly the Stern Coal Company.

STERRETT COAL COMPANY
General Office, Westville, Pa.
PR—R. M. Sterrett, Westville, Pa.
TR—J. J. Sterrett, Westville, Pa.
SA—J. J. Sterrett, Westville, Pa.

Sterrett Mine; Drift; 48 inches thick.
PO—Westville, Pa.; SP—Brookwayville, Pa.; CTY—Jefferson; RR—E. R. & P.
S of H—Mules. Track gage 28 inches.
S of M—Hand.
EMP—25. Daily output, 100 tons.
SIZES SHIPT—Run of Mine.
Old information.

STEVENS COAL COMPANY
General Office, 246 Third Ave., Pittsburgh, Pa.
PR—C. L. Stevens, Pittsburgh, Pa.
VP—Howard Zacharias, Pittsburgh, Pa.
TR—C. L. Stevens, Pittsburgh, Pa.
GM—E. B. Rowe, New Kensington, Pa.
GS—E. B. Rowe, New Kensington, Pa.
PA—E. B. Rowe, New Kensington, Pa.
CE—E. B. Rowe, New Kensington, Pa.
EM—J. C. Cook, West Montrose, Pa.
EE—Harry S. Haslett, West Montrose, Pa.
SCO—Rohnd Supply Co., Buyer, Harry S. Haslett, West Montrose, Pa.
SA—Tri-State Coal & Coke Co.

Stevens Nos. 1, 2 and 3 Mines; Drift; Kittanning Seam; 46 inches thick.
PO—West Montrose, Pa.; SP—Same; CTY—Clarion; RR—Penna.
MS—Harry S. Haslett, West Montrose, Pa.
S of H—5 mules, 3 electric motors. Track gage 36 inches.
S of M—Electric puncher, 3 shortwall and 1 longwall mach.
PP—3 fire tube boilers, 600 H. P., 1 150 K. W., 250 volts D. C. generate power.
Daily capacity, 1,000 tons.
SIZES SHIPT—Run of Mine. Slack, Nut, Lump.
PREP. EQUIPT—Bar Screens.
Old information.

STEVENSON COAL CO.
General Office, Point Marion, Pa.
PR—Asa M. Sterling, Point Marion, Pa.
VP—W. T. Devlin, Point Marion, Pa.
TR—A. E. Dilliner, Point Marion, Pa.

Stevenson Mine; Drift; Sewickley and Pittsburgh Seams, 72 in. thick.
PO—Point Marion, Pa.; SP—New Geneva, Pa.; CTY—Fayette; RR—M. R. R.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine. Slack, Nut, Lump.
PREP. EQUIPT—Screen, Pickling Tables.

STEWART IRON CO., LTD.
Now The Stewart Furnace Co.

STICKEL COAL COMPANY
General Office, 145 Farragut Ave., Vandergrift, Pa.
PR—J. A. Stickel, Vandergrift, Pa.
TR—M. E. Painter, Vandergrift, Pa.
GM—J. A. Stickel, Vandergrift, Pa.

Stickel Mine; Drift; Lower Freeport Seam, 42-46 in. thick.
PO—Vandergrift, Pa.; SP—Same; CTY—Armstrong; RR—Penna.
S of H—Mules. Track gage 36 in.
S of M—1 shortwall mach.
PP—Power purchased, 220 volts A. C.
SIZES SHIPT—Run of Mine.

STINEMAN COAL & COKE CO.
General Office, 421 Chestnut Street, Philadelphia, Pa.
PR—Robert R. Baker, New York, N. Y.
VP—W. I. Stineman, South Fork, Pa.
TR—James H. Atkinson, Philadelphia, Pa.
GM—W. I. Stineman, South Fork, Pa.
PA—W. I. Stineman, South Fork, Pa.
EM—Geo. A. Gardner, South Fork, Pa.

Stineman No. 2 Mine, Drift, "B" Seam, 4 ft. thick.
PO—South Fork, Pa.; SP—Same; CTY—Cambria; RR—P. R. R., Main Line.
S of H—3 elec. loco. Track gage 30 in.
S of M—Hand.
PP—1 Return tubular boiler, 150 H. P., Gen. units 500 volts, D. C., 3 pumps.
SIZES SHIPT—Run of Mine.

Stineman No. 4 Mine, Slope, "B" Seam, 4 ft. thick.
PO—South Fork, Pa.; SP—Same; CTY—Cambria; RR—P. R. R., Main Line.
MS—W. I. Stineman, South Fork, Pa.
S of H—Rope. Track gage 30 in.
S of M—Hand.
PP—5 return tubular boilers, total 725 H. P.
EMP—152. Last fiscal year output, both mines, 231,188 tons.
SIZES SHIPT—Run of Mine.

STINEMAN COAL MINING CO.
General Office, Penna. Bldg., Philadelphia, Pa.
PR—James S. Whiteley, Baltimore, Md.
VP—Albert M. Stineman, South Fork, Pa.
TR—Leon Walker, Wilmington, Del.
GM—W. I. Stineman, South Fork, Pa.
PA—W. I. Stineman, " "
MM—W. W. Dumble, " "
GS—E. Morgan, " "
EM—Geo. A. Gardner, " "
SCO—Stineman Bros. Supply Co., Buyer, Lewis Yost, South Fork, Pa.
SA—Leon Walker, 306 Pennsylvania Bldg., Philadelphia, Pa.

Stineman No. 1 Mine, Drift, "C" Seam, 4 ft. thick.
PO—South Fork, Pa.; SP—Same; CTY—Cambria; RR—P. R. R., Main Line.
S of H—5 trolley pole type locos. Track gage, 30 in.
S of M—Hand.
PP—Purchase power, 500 volts A. C., 1 water tube boilers, 1000 H. P.
EMP—280. Last year's fiscal output, 232,552.
SIZES SHIPT—Run of Mine.

STINEMAN, B. C.
General Office, South Fork, Pa.
OWNER—H. C. Stineman, South Fork, Pa.
EM—Frank Slep, South Fork, Pa.
EE—J. N. George, South Fork, Pa.
SCO—Stineman Bros. Supply Co., Ltd. Buyer, Lewis Yost, South Fork, Pa.

Stineman No. 5, Drift, C Prime Seam 3 1/2 to 4 ft. thick.
PO—South Fork, Pa.; SP—Same; CTY—Cambria; RR—Penna.
MS—Samuel B. Jones, Homersville, Pa.
S of H—Mules, 1 trolley pole type, 2-8-ton and 1 storage battery locos. Track gage 36 in.
S of M—3 shortwall machs.
PP—Power purchased, Transformer 2200-220 volts A. C. M. G. Set, 250 volts D. C., 1 pump.
EMP—90. Daily tonnage 300.
SIZES SHIPT—Run of Mine.

STONE, W. A. FUEL COMPANY
Now Nellie Coal & Coke Co.

STONER COAL CO.
General Office, Berlin, Pa.
TR—H. K. Stoner, Berlin, Pa.
GM—H. K. Stoner, Berlin, Pa.

Stoner No. 2 Mine; Drift; Price Seam, 48 in. thick.
PO—Berlin, Pa.; SP—Same; CTY—Somerset; RR—B. & O.
S of H—Mules. Track gage 40 in.
S of M—Hand.
Daily tonnage 100.
SIZES SHIPT—Run of Mine.

STOTT, JAMES F. & CO.
General Office, Phillipsburg, Pa.

Stott No. 2 Mine.
PO—Phillipsburg, Pa.; CTY—Center, RR—Penna., N. Y. C., P. & S.
No report.

STOTT HARTLEY COAL CO.
General Office, Phillipsburg, Pa.
Hartley No. 2 Mine.
PO—Phillipsburg, Pa.; CTY—Center, RR—Penna., N. Y. C., P. & S.
No report.

Stott, James F. & Co.
PR—James F. Stott, Phillipsburg, Pa.
TR—J. W. Hellewell, Phillipsburg, Pa.
GS—Edward Hughes, Phillipsburg, Pa.
PA—J. W. Hellewell, Phillipsburg, Pa.
CE—Wemelsdorff & Dunkle, Phillipsburg, Pa.

EM—Wemelsdorff & Dunkle, Phillipsburg, Pa.
SCO—Stott, Bros. & Co., Buyer, Ephemer Goldthorp, Phillipsburg, Pa.

Red Jacket No. 1 Mine; Drift; B Seam 58 in. thick.
PO—Phillipsburg, Pa.; SP—Hawk Run CTY Centre, RR—N. Y. C., Ophir Branch.
S of H—Mules. Track gage 36 in.
S of M—Hand.
EMP—11. Last fiscal year output, 70,000 tons.
SIZES SHIPT—Run of Mine.

Rich Hill Mine; Drift; B Seam, 58 in. thick.
PO—Phillipsburg, Pa.; SP—Hawk Run CTY Centre; RR—N. Y. C., Ophir Branch.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
EMP—81. Last fiscal year output, 30,000 tons.
SIZES SHIPT—Run of Mine.
(Old information)

STRAITWELL COAL CO.
General Office, Punxsutawney, Pa.
PR—Irwin Sampson, Punxsutawney, Pa.
TR—H. G. Bowers, Punxsutawney, Pa.
GM—H. G. Bowers, Punxsutawney, Pa.
GS—D. M. Straitwell, Reynoldsville, Pa.
PA—H. G. Bowers, Punxsutawney, Pa.

Straitwell Mine; Drift; Lower Freeport Seam, 48 in. thick.
PO—Punxsutawney, Pa.; SP—Arlita, Pa.; CTY—Jefferson; RR—Penna.
S of H—Mules. Track gage 42 in.
S of M—Hand.
EMP—21. Last years tonnage 13,331.
SIZES SHIPT—Run of Mine.

STRANFORD COAL COMPANY.
TR—W. P. Graff, Blairsville, Pa.
GM—P. M. Graff, " "
PA—P. M. Graff, " "
CE—Albert Smith, Saltburg, Pa.
EM—Albert Smith, Saltburg, Pa.
MM—Chancy Shipley, " "
SCO—Kiskimuntas Supply Co. Buyer, Wm. G. Fletcher, Blairsville, Pa.
Sales Agent, Knickerbocker Fuel Co., New York, N. Y.

Stranford Mine, Drift; "E" or Upper Freeport Seam; 3 ft. 6 in. thick.
PO—Blairsville, Pa.; SP—Stranford, Pa.; CTY—Indiana; RR—P. B. R. Conemaugh, Pa.
MS—Ernest Fletcher, Saltburg, Pa.
SM—Ward Donahue, R. F. D. No. 4, Blairsville, Pa.
S of H—Tail rope, mules and 2 electric hoists. Track gage, 36 in.
S of M—Hand, 15 comp. air machs. and 2 mining machs.
PP—2 return tubular boilers, total 300 H. P., 1 engine, 2 air compressors, 3 pumps. Power purchased.
EMP—111. Last fiscal year output 66,604 tons.

STRATTONVILLE COAL MINING CO.
General Office, Clarion, Pa.
PR—C. O. McCalmont, Clarion, Pa.
VP—J. W. F. Wilkinson, Clarion, Pa.
TR—J. M. Harvey, Clarion, Pa.
GM—J. M. Harvey, Clarion, Pa.
GS—J. M. Harvey, Clarion, Pa.
PA—J. M. Harvey, Clarion, Pa.
EM—C. E. Imel, Clarion, Pa.
EE—F. O. Hewitt, Summerville, Pa.

Strattonville Mine; Shaft; Brookville Seam, 54 in. thick.
PO—Strattonville, Pa.; SP—Same; CTY—Clarion; RR—L. E. F. C.
MS—J. N. Beveridge, Clarion, Pa.
S of H—Mules. Track gage 42 in.
PP—1—100 K. W., gen. units 220 volts D. C.

STRAUB, G. B.
General Office, St. Marys, Pa.
PR—G. B. Straub, St. Marys, Pa.
GM—A. A. Straub, 444 Broad St., St. Marys, Pa.
GS—A. A. Straub, St. Marys, Pa.
PA—A. A. Straub, St. Marys, Pa.
SA—A. A. Straub, 444 Broad St., St. Marys, Pa.

Star Mine; Drift; Brookville Seam, 42 in. thick.
PO—St. Marys, Pa.; SP—Same; CTY—Clarion; RR—P. S. & N.
S of H—Mules. Track gage 32 inches.
S of M—Hand.
SIZES SHIPT—Run of Mine.

STRAYER BROS.
General Office, Coalport, Pa.
PR—W. G. Strayer, Flinton, Pa.
TR—D. A. Strayer, Coalport, Pa.
GS—W. G. Strayer, Flinton, Pa.
(Continued on Next Page)

Strayer Bros.—Cont.

Strayer Nos. 1, 2 and 3; Drift, D and E Seams, 4 ft. thick.
 PO—J. C. Strayer, Jr., SP—Same; CTY—Allegheny; RR—Penna.
 S of H—Mules, trolley pole type locos. Track gage 36 in.
 S of M—Shortwall machs.
 PP—Power purchased, transformer 2200 volts A. C., M. G. Sets, 250 volts D. C.
 EMP—40. Daily tonnage 150.
 SIZES SHIPT—Run of Mine.

STRUTHERS COAL & COKE CO.

Out of Business.

SUGAR CREEK COAL COMPANY.

General Office, 305 Schmidt Bldg. Pittsburgh, Pa.
 PR—Jenne M. Wilson, Pittsburgh, Pa.
 TR—J. M. Flanagan, Pittsburgh, Pa.
 GM—W. J. Flanagan, 305 Schmidt Bldg., Pittsburgh, Pa.
 PA—W. J. Flanagan, Pittsburgh, Pa.
 EE—Ed. Myers, Kaylor, Pa.
 SA—W. J. Flanagan, 305 Schmidt Bldg., Pittsburgh, Pa.

Doverspike Mine; Drift; Lower Kittanning Seam, 40 in. thick.
 PO—Kaylor, Pa. SP—Same. CTY—Armstrong. RR—Western Allegheny.
 MS—John Crawford, Kaylor, Pa.
 S of H—Mules. Track gage 42 inches.
 S of M—2 chain breast type machs.
 PP—50 K. W. gen. unit, 250 volts D. C., 2 pumps.
 SIZES SHIPT—Run of Mine.

SUGAR RUN COAL MNG. CO.

General Office, Altoona, Pa.
 PR—B. F. MacCartney, Altoona, Pa.
 TR—H. E. Clark, Altoona, Pa.
 GM—B. F. MacCartney, Altoona, Pa.
 GS—D. D. Angelo, Dysart, Pa.
 PA—D. D. Angelo, Dysart, Pa.

Sugar Run Nos. 1 and 2 Mines operated by Bennington Coal Co.

Dysart No. 2 Mine; Drift; B Seam; 44 to 50 in. thick.
 PO—Dysart, Pa.; SP—Same; CTY—Cambria; RR—P. R. R.
 S of H—2 elec. locos. Track gage 36 in.
 S of M—2 chain breast machs.
 PP—1 fire tube boiler, total 150 H. P., 1 gen. unit, 75 K. W., 250 volts D. C.
 EMP—42. Daily output, 150 tons.
 SIZES SHIPT—Run of Mine.

SUMMERVILLE COAL COMPANY

General Office, Brookville, Pa.
 PR—W. W. Brosius, Brookville, Pa.
 VP—Z. C. Sebring, Brookville, Pa.
 TR—Z. C. Sebring, Brookville, Pa.
 GM—R. F. Ferringer, Brookville, Pa.
 GS—R. F. Knappenberger, Mayport, Pa.
 PA—R. F. Ferringer, Brookville, Pa.
 CE—F. Schreckengast, Brookville, Pa.
 SCO—Address the Company. Buyer, R. F. Ferringer, Brookville, Pa.
 SA—R. F. Ferringer, Brookville, Pa.

No. 1 Mine; Drift; Kittanning Seam; 36 in. thick.
 PO—Brookville, Pa.; SP—Holden, Pa.; CTY—Clarion; RR—L. E. F. & C. SM—R. F. Knappenberger, Mayport, Pa.
 S of H—Mules, steam and trolley pole type locos. Track gage 36 inches.
 S of M—Shortwall machs.
 PP—2 150 H. P. fire tube boilers, gen. units, 250 volts D. C., 6 pumps.
 EMP—65. Daily tonnage 175.
 SIZES SHIPT—Run of Mine.

SUMMIT COAL MINING CO.

General Office, Punxsutawney, Pa.
 PR—S. A. Rinn, Punxsutawney, Pa.
 TR—G. P. Grube, Punxsutawney, Pa.
 GM—S. A. Rinn, Punxsutawney, Pa.
 GS—W. N. Trusell, Punxsutawney, Pa.
 PA—W. N. Trusell, Punxsutawney, Pa.
 PA—S. A. Rinn, Punxsutawney, Pa.
 EM—Mauriel Coulter, Punxsutawney, Pa.

Summit Nos. 1, 3 and 4 Mines; Drifts; Freeport Seams, 50 in. thick.
 PO—Dayton, Pa.; SP—Same; CTY—Armstrong; RR—B. & P.
 MS—S. A. Henry, Dayton, Pa.
 S of H—Mules, trolley pole type, 1 storage battery and 1 steam loco. Track gage, 42 in.
 S of M—3 comp. air punchers and 8 shortwall machs.
 PP—3 water tube boilers, 450 H. P., 1 250 K. W. and 1 200 K. W. gen. units, 500 volts D. C., 24 pumps.
 EMP—320. Last years tonnage 211,000.
 SIZES SHIPT—Run of Mine.

SUMMIT-CONNELLVILLE COAL & COKE COMPANY.

General Office, Box 759, Connellsville, Pa.
 PR—C. B. Franks, Connellsville, Pa.
 TR—A. C. Stickel, Connellsville, Pa.
 GM—A. C. Stickel, Connellsville, Pa.
 GS—C. Brooks Ross, Frick Bldg., Pittsburgh, Pa.

PA—C. M. Stone, Connellsville, Pa.
 SA—International Fuel & Iron Corp., Frick Bldg., Pittsburgh, Pa.

Franklin Mine; Drift; Connellsville Seam, 108 in. thick.
 PO—Owensdale, Pa.; SP—Everson, Pa.; CTY—Fayette; RR—Penna., P. & L. E.
 MS—F. Ottenberg, Owensdale, Pa.
 S of H—Mules and 1 steam loco. Track gage 42 inches.
 S of M—Hand.
 EMP—26. Daily output, 500 tons.
 Coke ovens, 20 Bee Hives.
 SIZES SHIPT—Run of Mine.

SBN COAL CO. (THE).

General Office, Stoneboro, Pa.
 PR—W. E. Cann, Stoneboro, Pa.
 VP—W. A. McMaster, Jamestown, Pa.
 TR—L. J. Cann, Stoneboro, Pa.
 GM—L. J. Cann, Stoneboro, Pa.
 GS—L. J. Cann, Stoneboro, Pa.
 PA—L. J. Cann, Stoneboro, Pa.
 EM—Geo. F. Martinez, Stoneboro, Pa.
 SCO—Sun Supply Co.; Buyer, W. J. Houston, Stoneboro, Pa.

Sun No. 1 Mine; Slope; Irvin Vein Freeport Seam, 42 in. thick.
 PO—Sarver, Pa.; SP—Frt. Cunningham, Pa.; Exp., Ivywood, Pa.; CTY—Allegheny; RR—B. & L. E.
 MF—Francis Harford, Sarver, Pa.
 SM—J. A. Stewart, Sarver, Pa.
 S of H—Rope and storage battery loco. Track gage, 42 in.
 S of M—5 shortwall machs.
 PP—Power purchased, transformer 6600-220 volts A. C., 1 35 H. P. fire tubular boiler, 6 pumps.
 EMP—1,000. Last years tonnage 85,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Crusher, Gravity Screens.

SUNSET COAL CO.

Now Lingood Coal Company.

SUNSHINE COAL MINING CO.

General Office, South Fork, Pa.
 Stineman No. 8 Mine.
 PO—South Fork, Pa.; CTY—Cambria; RR—Penna. No report.

SUPERIOR COAL CO.

PR—J. O. Clark, Glen Campbell, Pa.
 TR—J. O. Clark, Glen Campbell, Pa.
 GM—J. O. Clark, " " "
 GS—J. H. Miller, " " "
 PA—J. H. Miller, " " "
 CE—Womelsdorf & Dunkle, Philipsburg, Pa.
 SCO—Lochvale Supply Co., Buyer, W. S. Marts, Glen Campbell, Pa.
 Additional Information on Page 753

Superior No. 1 Mine; Drift; "B" Seam 4 ft. thick.
 PO—Lochvale, Pa.; SP—Glen Campbell, Pa.; CTY—Indiana; RR—P. R. R.
 MS—S. S. Lamborn, Lochvale, Pa.
 SM—J. W. A. Bolley.
 S of H—Mules and 2 elec. locos. Track gage 42 in.
 S of M—Hand and 3 elec. machs.
 PP—1 pumps. Power purchased, 250 volts D. C.
 EMP—50. Last fiscal year output, 85,000 tons.
 SIZES SHIPT—Run of Mine.
 (Old Information)

SUPERIOR CONNELLVILLE COAL CO.

General Office, 501 Union Trust Bldg., Uniontown, Pa.
 PR—George Whyel, Uniontown, Pa.
 TR—F. C. Weddell, Uniontown, Pa.
 GS—George Whyel, Uniontown, Pa.
 PA—C. B. Garland, Uniontown, Pa.
 SCO—Sewickley Supply Co., Buyer, John H. Yoder, Uniontown, Pa.
 SA—Pioneer Coal & Coke Co., Oliver Bldg., Pittsburgh, Pa.

Sharpnack Mine; Slope and Shaft; Pittsburgh Seam; 96 to 108 inches thick.
 PO—Brownsville, Pa.; R. F. D. No. 1; SP—Exp. Same, Frt., Simpson Station, Pa.; CTY—Fayette; RR—Monongahela.
 S of H—Mules, 1—10-ton storage battery 1—6-ton, 1—13-ton trolley pole type locos. Track gage 44 in.
 S of M—1 chain breast type and 2 shortwall machs.
 PP—2 water tube boilers, total 610 H. P., 1 gen. unit, 250 volts D. C., 5 pumps.
 EMP—85. Last years tonnage 150,000.
 SIZES SHIPT—Run of Mine.

SUPERIOR FUEL CO.

General Office, Russellton, Pa.
 PR—John L. Kemmerer, New York, N. Y.
 SEC—C. H. Jacobs, Philadelphia, Pa.
 TR—M. W. Saxman, Latrobe, Pa.
 GM—E. B. Rowe, Russellton, Pa.
 PA—E. B. Rowe, Russellton, Pa.
 EM—Leo S. Gibson, Latrobe, Pa.
 EE—Chas. Cann, Russellton, Pa.
 SCO—Russellton Supply Co.; Buyer, Chas. Ellias, Russellton, Pa.
 SA—Whitney & Kemmerer, New York, N. Y.

Superior No. 1 Mine; Shaft; Freeport Seam, 78 in. thick.
 PO—Russellton, Pa.; SP—Same; CTY—Allegheny; RR—B. & L. E.
 MS—John Beattie, Russellton, Pa.
 S of H—Mules, trolley pole type locos, 8 elec. punchers. Track gage 40 in.
 S of M—1 chain breast type and longwall machs.
 PP—Power purchased, transformer 5600-2200 volts, 150 K. W., motor gen. units, 250 volts D. C., 5 ore tube boilers, 750 H. P., 17 pumps.
 EMP—375. Daily tonnage 1,500.
 SIZES SHIPT—Run of Mine Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Gravity and Shaker Screens, Loading Booms.

Superior No. 2 Mine; Slope; Freeport Seam, 84 in. thick.
 PO—Gibsonia, Pa.; SP—Same; CTY—Allegheny; RR—B. & L. E.
 MS—J. Toward, Gibsonia, Pa.
 S of H—Mules and rope. Track gage, 40 in.
 S of M—2 elec. punchers and 1 chain breast type mach.
 PP—1 125 H. P. fire tube boiler, gen. units, 250 volts D. C., 3 pumps.
 EMP—25.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

SUPERIOR MINING CO.

General Office, 701 Diamond Bank Bldg., Pittsburgh, Pa.
 PR—D. J. Kennedy, Pittsburgh, Pa.
 VP—Wm. H. Shino, Carnegie, Pa.
 TR—T. W. Greer, Carnegie, Pa.
 GM—Wm. H. Shino, Carnegie, Pa.
 GS—Wm. J. McGregor, Eldersville, Pa.
 EM—Andrews & Southard, Pittsburgh, Pa.
 SCO—Economy Mercantile Co., Buyer, Max Little, Eldersville, Pa.

Superior Mine; Drift; Pittsburgh Seam, 60 in. thick.
 PO—Eldersville, Pa.; SP—Hanlin, Pa.; CTY—Washington; RR—P. C. C. & St. L.
 S of H—Elec. loco.
 S of M—Shortwall and longwall machs.
 PP—Power purchased.
 EMP—180.
 SIZES SHIPT—Run of Mine, Crushed, Lump.

SUSOBHANNA FUEL COMPANY

General Office, Glen Campbell, Pa.
 TR—Aaron P. Clark, Glen Campbell, Pa.
 GM—Aaron P. Clark, Glen Campbell, Pa.
 GS—J. H. Miller, Glen Campbell, Pa.
 PA—J. H. Miller, Glen Campbell, Pa.
 SA—Clark Bros. Coal Mining Co., Philadelphia, Pa.

Falcon Nos. 8 and 9 Mines; Drifts; "C" and "D" Seams; 40 to 42 inches thick.
 PO—Glen Campbell, Pa.; SP—Same; CTY—Indiana; RR—Penna.
 S of H—Rope.
 S of M—Hand.
 PP—Power purchased.
 EMP—30. Last fiscal year output, 26,205 tons.
 Old information.

SUTERVILLE COAL COMPANY.

General Office, Colonial National Bank Bldg., Connellsville, Pa.
 PR—G. Corrado, Connellsville, Pa.
 VP—A. S. Rodak, Connellsville, Pa.
 TR—P. Galliard, Connellsville, Pa.
 GM—G. Corrado, Connellsville, Pa.
 GS—H. B. Cunningham, Connellsville, Pa.
 PA—F. R. Yoder, Connellsville, Pa.
 CE—W. B. Barnhart, Connellsville, Pa.
 EE—H. B. Cunningham, Connellsville, Pa.
 SA—G. Corrado Coal & Coke Ints., J. J. Ash, Sales Manager, Connellsville, Pa.

Corrado Mine; Drift; Irwin Gas Field Seam, 68 in. thick.
 PO—Suterville, Pa.; SP—Suter Station, Pa.; CTY—Westmoreland; RR—B. & O.
 MS—Jas. Small, Connellsville, Pa.
 S of H—Mules. Track gage, 44 in.
 S of M—Hand.
 EMP—35. Daily output, 200 tons.
 SIZES SHIPT—Run of Mine.

SUTTER COAL CO.

General Office, Punxsutawney, Pa.
 PR—A. P. Sutter, Valler, Pa.
 TR—E. H. Winslow, Punxsutawney, Pa.
 GM—A. P. Sutter, Valler, Pa.
 GS—A. P. Sutter, Valler, Pa.
 PA—A. P. Sutter, " " "
 CE—H. M. Knarr, Punxsutawney, Pa.
 SCO—Valler Supply Co.; Buyer, Guy W. Sutter, Valler, Pa.
 SA—Ritter & Winslow, Punxsutawney, Pa.

Valler Mines Nos. 1 and 2, Drifts. Lower Freeport Seam, 3 to 4 ft. thick.
 PO—Valler, Pa. SP—Same. CTY—Jefferson. RR—B. R. & P.

MS—D. D. Borts, Valler, Pa.
 S of M—Hand.
 S of H—Mules, rope, 1 steam loco. Track gage 36 in.
 PP—2 Water tube boilers, total 150 H. P., 1 Air Compressor and 2 pumps.
 EMP—40. Daily output, 200 tons.
 SIZES SHIPT—Run of Mine.

SUTTER-RINN COAL COMPANY

General Office, Savings Trust Bldg., Indiana, Pa.
 PR—L. F. Sutter, Indiana, Pa.
 VP—J. (old Rinn, Indiana, Pa.
 GM—L. F. Sutter, Indiana, Pa.
 PA—L. F. Sutter, Indiana, Pa.
 SA—Address the Company, Indiana, Pa.

Sutter-Rinn Mine; Slope; Upper Freeport Seam, 48 in. thick.
 PO—Plumville, Pa.; SP—Same; CTY—Indiana; RR—B. & S.
 MS—J. O. Taylor, Plumville, Pa.
 S of H—Rope and steam locos. Track gage 36 in.
 S of M—4 comp. air punchers.
 PP—2 water tube boilers, 100 H. P., 3 pumps.
 EMP—30. Daily tonnage 100.
 SIZES SHIPT—Run of Mine.

SWANKS, H. & SONS.

General Office, Johnstown, Pa.
 Woodvale Mine.
 PO—Johnstown, Pa.; CTY—Cambria; RR—B. & O. Penna., Johnston & Stony Creek.
 No report.

TARTOWN COAL COMPANY

General Office, Brockwayville, Pa.
 PR—Gust Josephson, Dagus Mines, Pa.
 VP—R. G. Dowie, Kersy, Pa.
 TR—J. B. Warren, Brockwayville, Pa.
 GS—Geo. Hall, Dagus Mines, Pa.

Tartown Mine; Drift; Lower Kittanning Seam, 42 inches thick.
 PO—Kittanning, Pa.; SP—Tartown, Pa.; CTY—Armstrong; RR—P. & S.
 S of H—Mules and gasoline loco. Track gage 30 inches.
 S of M—Shortwall mach.
 PP—M. G. S-16, 160 amp. and 750 R.P.M., 250 volts D. C.
 EMP—15. Last years tonnage 2,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.
 NOTE—Formerly operated by the Dowie Coal Co.

TAYLOR & MCCOY COAL & COKE CO. THE

General Office, Baltimore, Md.
 PR—Frank J. Taylor, Baltimore, Md.
 TR—John C. Wolf, Baltimore, Md.
 GM—F. J. Taylor, Baltimore, Md.
 CS—F. D. McNeill, Gallitzin, Pa.
 PA—F. D. McNeill, " " "
 EM—J. S. Silliman & Co., Altoona, Pa.
 EE—Henry Fisher, Gallitzin, Pa.
 SCO—Taylor, McCoy & Co. Buyer, A. T. Stauffer, Gallitzin, Pa.

Gallitzin Mine; Shaft; "E" or Lemon Seam, 46 to 51 in. thick.
 PO—Gallitzin, Pa.; SP—Same; CTY—Cambria; RR—P. R. R.
 MS—A. J. McGeary, Gallitzin, Pa.
 S of H—Mules, rope, trolley pole type and storage battery locos. Track gage 36 inches.
 S of M—4 chain breast type machs.
 PP—Power purchased, Transformer 2300 to 440 volts A. C., M. G. set 150 K. W., 220 volts D. C., 4 water tube boilers, total 500 H. P., 8 pumps.
 EMP—160. Last fiscal year output, 75,410 tons, Coke Ovens, 210 Bee Hive.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

TAYLOR COAL AND COKE COMPANY.

Now operated by the Bourne Fuller Coke Company.

TAYLOR RUN COAL COMPANY

General Office, Union Arcade, Pittsburgh, Pa.
 PR—H. J. Christy, Kittanning, Pa.
 VP—H. A. Turner, Kittanning, Pa.
 TR—M. C. Briggs, Pittsburgh, Pa.
 GM—H. J. Christy, Kittanning, Pa.
 GS—J. Eden, Kelly Station, Pa.
 PA—H. J. Christy, Kittanning, Pa.
 SA—Chas. S. Bygate Co., Pittsburgh, Pa.

Taylor Run Mine; Drift; Freeport Seam, 36 in. thick.
 PO—Kelly Station, Pa.; SP—Same; CTY—Armstrong; RR—P. R. R.
 S of H—Mules, storage battery locos.
 S of M—3 chain breast type machs.
 PP—Purchase power.
 EMP—40. Last fiscal year output, 40,000 tons.
 SIZES SHIPT—Run of Mine.

TELFORD COAL CO.
General Office, Kulekbocker Bldg.,
Johnstown, Pa.
PR—Telford Lewis, Johnstown, Pa.
VP—C. H. Suppes, Jr., Johnstown, Pa.
TR—P. M. Graft, Blairsville, Pa.
GM—Telford Lewis, Johnstown, Pa.
GS—Richard A. Suppes, Johnstown, Pa.
PA—Norman Lewis, Johnstown, Pa.
EM—C. T. Oaks, Hooversville, Pa.
SA—Kulekbocker Fuel Co., 1 Broadway,
New York, N. Y.

Telford No. 1 Mine; Drift; "E" Seam;
44 to 48 in. thick.
PO—Johnstown, Pa.; SP—Same; CTY—
Cambria; RR—Penna.
MS—Geo. Playez, Johnstown, Pa.
S of H—2 trolley pole type loco. Track
gauge, 42 in.
S of M—3 shortwall mchs.
PP—Power purchased. Transformer; M.
G. sets, 250 volts D. C.
EMP—100. Last years tonnage 129,576.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT.—Picking Tables.

THATCHER MANUFACTURING COMPANY
General Office, Elmira, N. Y.
PR—F. E. Baldwin, Elmira, N. Y.
VP—R. W. Neve, Elmira, N. Y.
TR—P. M. Mills, Elmira, N. Y.
PA—R. A. Brown, Elmira, N. Y.

Thatcher Mine; Drift; Kittanning Seam,
36 inches thick.
PO—Strattonville, Pa.; SP—Same; CTY—
Clarion; RR—L. E. F. & C.
S of H—Mules, 1 trolley pole type loco.
S of M—2 shortwall mchs.
PP—Power generated, 100 K. W. gen.
units, 240 volts D. C., 3 pumps.
EMP—40. Daily output, 100 tons.
PREP. EQUIPT.—Gravity Screens.
NOTE—Mine for own use.

THERMAL SMOKELESS COAL CO.
General Office, Johnstown, Pa.
GM—H. Meekins, Johnstown, Pa.
GS—A. Collins, Johnstown, Pa.
SA—Fosgrove & Co., Johnstown, Pa.
Additional Information on Page 721

Thermal Nos. 1 and 2 Mines; Drift and
Slope; Miller Seam, 48 inches thick.
PO—Puritan, Pa.; SP—Same; CTY—
CTY—Cambria; RR—Penna.
MS—C. M. Switzer, Portage, Pa.
S of H—Mules, rope and trolley pole type
loco. Track gauge 36 inches.
S of M—Shortwall mchs.
PP—Power purchased. Transformer 2250
volts A. C., rotary converters, 500
volts D. C., 1 pump.
EMP—110. Daily output, 300 tons.
SIZES SHIPT—Run of Mine.
Old information.

THOMAS, IVOR COAL CO.
Now being operated by Purity Coal Co.

THOMAS MILLS COAL MINING CO., THE
General Office, First National Bank Bldg.,
Johnstown, Pa.
PR—R. E. Keely, Johnstown, Pa.
VP—W. E. Engle, Johnstown, Pa.
TR—W. E. Engle, Johnstown, Pa.
GM—W. E. Engle, Johnstown, Pa.
GS—Fred Mitchell, Johnstown, Pa.

Thomas Mills Mine; Drift; C Prime or
Cement Seam.
PO—Pattow, Pa.; SP—Same; CTY—
Cambria; RR—Penna.
S of H—Mules.
S of M—Hand.

THOMPSON-CONNELLSVILLE COKE CO
General Office, First Nat'l Bank Bldg.,
Pittsburgh, Pa.
PR—M. P. Sullivan, Pittsburgh, Pa.
ASST to PR—W. L. Afielder, Pittsburgh,
Pa.
VP—A. R. Sheets, First National Bank
Bldg., Pittsburgh, Pa.
TR—A. R. Sheets, First National Bank
Bldg., Pittsburgh, Pa.
GS—Frank B. Dunbar, First National
Bank Bldg., Pittsburgh, Pa.
Asst. GS—M. D. Cooper, Brownsville, Pa.
PA—W. W. Gillett, Pittsburgh, Pa.
EM—J. D. Martin, Pittsburgh, Pa.
EO—J. A. Malady, Pittsburgh, Pa.
SCO—Hillman Supply Company, Buyer,
M. P. Sullivan, Pittsburgh, Pa.
SA—Hillman Coal & Coke Co., Pitts-
burgh, Pa.

Thompson No. 2 Mine; Shaft; Pittsburgh
Seam, 84 to 108 inches thick.
PO—Republic, Pa.; SP—Same; CTY—
Fayette; RR—Penna., Monon, Div.
MS—A. N. Young, Republic, Pa.
SM—C. K. Ebard, Republic, Pa.
S of H—5 comp. air and 2 gasoline locos.
Track gauge 42 inches.
S of M—14 comp. air punchers.
PP—8 150 H. P. fire tube boilers, 2
150 K. W. gen. units, 250 volts
D. C., 1 high and 1 low air com-
pressor, 7 pumps.
EMP—270. Last years tonnage 291,261.
Coke Ovens, 400 Bee Hive.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT.—Gravity Screens.
Thompson No. 1 Mine; Shaft; P. Stone Coal
& Coke Co., Pittsburgh, Pa.

THOMSON-LEA COAL MINING CO.
General Office, La Jose, Pa.
PR—W. H. Thomson, La Jose, Pa.
VP—Langdon Lea, Philadelphia, Pa.
TR—R. F. Tatum, Philadelphia, Pa.
GM—W. H. Thomson, La Jose, Pa.
GS—J. T. Mackley, La Jose, Pa.
PA—W. H. Thomson, La Jose, Pa.
EM—H. M. Kanarr, Punksatwney, Pa.
SCO—Elton Supply Co., Buyer, W. H.
Thomson, La Jose, Pa.
SA—J. Tatum & Co., 1016 Ste-
phen Girard Bldg., Phila., Pa.

Elton Colliery No. 1 Mine; Drift; C
Seam, 40 inches thick.
PO—La Jose, Pa.; SP—Same; CTY—
Clearfield; RR—P. R. R.
SM—R. D. Riddle, La Jose, Pa.
S of H—1 trolley pole type loco. Track
gauge 36 inches.
S of M—3 shortwall mchs.
PP—Power purchased. Transformer 2200-
250 volts A. C., M. G. sets, 250
volts D. C., 2 pumps.
EMP—45. Last years tonnage 38,000.
SIZES SHIPT—Run of Mine.

THOMPSON, W. H.
Now being operated by the Roberta Coal
Company.

THORNBOTTOM COAL CO.
General Office, First National Bank Bldg.,
Connellsville, Pa.
PR—C. L. Work, Connellsville, Pa.
TR—A. C. Stickle, Connellsville, Pa.
GM—A. C. Stickle, Connellsville, Pa.
GS—G. Brooks Ross, Frick Bldg., Pitts-
burgh, Pa.
PA—C. M. Stone, Connellsville, Pa.
SA—International Fuel & Iron Corp.,
Pittsburgh, Pa.

Work Mine; Drift; Connellsville Seam,
108 in. thick.
PO—Connellsville, Pa.; S—Same; CTY—
Fayette; RR—Penna., R. & O., W. M.
MS—C. L. Work, Connellsville, Pa.
S of H—Mules. Track gauge 42 in.
S of M—Hand.
SIZES SHIPT—Run of Mine.

THORNE COAL MINING CO.
General Office, 60 Broadway, New York,
N. Y.
Clear Creek No. 1 Mine.
PO—Flinton, Pa.; CTY—Cambria; RR—
Penna.
No report.

THROPP, JOSEPH E.
General Office, Everett, Pa.
PR—Jos. E. Thropp, Everett, Pa.
GM—D. S. Thropp, Everett, Pa.
GS—J. R. Britton, Saxton, Pa.
PA—D. S. Thropp, Everett, Pa.
SA—D. S. Thropp, Everett, Pa.

Gordon-Fulton Mine; Slope; Fulton
Seam, 58 inches thick.
PO—Dudley, Pa.; SP—Frt. Melrose,
Pa.; Exp. Dudley, Pa.; CTY—
Huntingdon; RR—H. & B. T.
SM—C. O. Grissinger, Dudley, Pa.
S of H—Mules, rope and trolley pole type
loco. Track gauge, 36 in.
S of M—Hand.
PP—2 fire tube boilers, 200 H. P., 1—
100 K. W. gen. units, 250 volts
D. C., 11 pumps.
EMP—104. Last years tonnage 64,583.
SIZES SHIPT—Run of Mine, Slack, Lump.

Miller Mine; Drift; Fulton Seam, 45
inches thick.
PO—Dudley, Pa.; SP—Frt. Melrose,
Pa.; Exp. Dudley, Pa.; CTY—
Huntingdon; RR—H. & B. T.
SM—C. O. Grissinger, Dudley, Pa.
S of H—Mules. Track gauge, 36 in.
S of M—Hand.
EMP—6. Last years tonnage 3,893.
SIZES SHIPT—Run of Mine.

Melrose Mine; Drift; Barnett Seam, 55
inches thick.
PO—Dudley, Pa.; SP—Frt. Melrose,
Pa.; Exp. Dudley, Pa.; CTY—
Huntingdon; RR—H. & B. T.
SM—C. O. Grissinger, Dudley, Pa.
S of H—Mules. Track gauge, 36 in.
S of M—Hand.
PP—1 pump.
EMP—24. Last years tonnage 22,401.
Coke Ovens, 90 Bee Hive.
SIZES SHIPT—Run of Mine.

Barnett Nos. 2 and 3 Mines; Drift and
Slope; Barnett Seam, 32 inches
thick.
PO—Kearney, Pa.; SP—Frt. Kearney,
Pa.; Exp. Homewell, Pa.; CTY—
Bedford; RR—H. & R. T.
SM—G. R. Baker, Kearney, Pa.
S of H—Mules and rope. Track gauge,
36 in.
S of M—Hand.
PP—2 fire tube boilers, 225 H. P.,
gen. units, 1 200 K. W., 250
volts D. C., 2 pumps.
EMP—68. Last years tonnage 42,395.
SIZES SHIPT—Run of Mine.

Kelly Plane Mine; Drift, Kelly Seam, 50
inches thick.
PO—Kearney, Pa.; SP—Frt. Kearney,
Pa.; Exp. Homewell, Pa.; CTY—
Bedford; RR—H. & R. T.
SM—G. R. Baker, Kearney, Pa.
S of H—Mules. Track gauge, 36 in.
S of M—Hand.
EMP—20. Last years tonnage 19,815.
SIZES SHIPT—Run of Mine.
Old information.

TIDAL VALLEY COAL COMPANY
General Office, Tidal, Pa.
TR—R. F. Sharpe, Tidal, Pa.
GM—R. F. Sharpe, Tidal, Pa.
GS—R. F. Sharpe, Tidal, Pa.
PA—R. F. Sharpe, Tidal, Pa.
SA—R. F. Sharpe, Tidal, Pa.

Riverside Mine; Drift; Clarion Seam, 60
in. thick.
PO—Tidal, Pa.; SP—Rimerton, Pa.;
CTY—Armstrong; RR—Penna.
S of H—Mules and compressed air loco.
Track gauge, 30 in.
S of M—2 comp. air puncher mchs.
Daily output, 100 tons.
SIZES SHIPT—Run of Mine.
Old information.

TIDE COAL MINING COMPANY.
General Office, Indiana, Pa.
PR—L. W. Robinson, Rochester, N. Y.
VP—L. W. Robinson, Indiana, Pa.
TR—J. A. O'Connor, Rochester, N. Y.
GM—L. W. Robinson, Jr., Indiana, Pa.
GS—Thomas D. Thomas, Indiana, Pa.
PA—H. C. Smith, Indiana, Pa.
CE—L. W. Householder, Indiana, Pa.
EM—L. W. Bank, Indiana, Pa.
EO—H. H. Van Kester, Indiana, Pa.
SCO—Hillside Supply Co., Lucerne Mines,
Pa., Buyer, J. F. Campbell, Indiana,
Pa.

SA—J. M. Nelson, Rochester, N. Y.
Tide Mine; Drift; R or Miller Kittan-
ning Seam, 48 in. thick.
PO—Lucerne Mines, Pa.; SP—Same;
CTY—Indiana; RR—B. R. & P.
MS—R. G. Ruddock, Lucerne Mines, Pa.
SM—J. W. Cashion, Homer City, Pa.
S of H—5 G. E. storage battery locos.
Track gauge, 42 in.
S of M—6 shortwall mchs.
PP—Power purchased, transformer 6000
to 270 volts A. C., rotary conver-
ters, 200 K. W., 550 volts D. C.
2 pumps.
EMP—161. Last fiscal year output,
161,036 tons.
SIZES SHIPT—Run of Mine, Slack.
PREP. EQUIPT.—Gravity Screens, Picking
Tables.

TIMBLIN COAL COMPANY
General Office, Timblin, Pa.
PR—E. C. Snyder, Timblin, Pa.
VP—C. P. Dinger, Timblin, Pa.
TR—G. W. E. Snyder, Timblin, Pa.
GM—Wayne Anderson, Timblin, Pa.
GS—G. W. E. Snyder, Timblin, Pa.
PA—Wayne Anderson, Timblin, Pa.
EO—Ned McCartney, Timblin, Pa.
SA—Pittsburgh & Shawmut Coal Co.,
Kittanning, Pa. and Pendleton Coal
Co., Dunbars, Pa.

Timblin Mine; Drift; Freeport Seam, 48
inches thick.
PO—Timblin, Pa.; SP—Same; CTY—
Jefferson; RR—P. & S.
S of H—Mules. Track gauge 36 inches.
S of M—Hand.
PP—1 16 H. P. gasoline holler
EMP—41. Last years tonnage 31,182.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT.—Screens.

TOBY COAL MINING CO.
General Office, Brockwayville, Pa.
PR—L. M. Groves, Brockwayville, Pa.
VP—W. M. August, Brockwayville, Pa.
TR—M. M. Groves, Brockwayville, Pa.
GS—W. M. August, Brockwayville, Pa.
PA—L. M. Groves, Brockwayville, Pa.
GM—W. M. August, Brockwayville, Pa.
EM—M. M. Groves, Brockwayville, Pa.
SA—W. M. August, Brockwayville, Pa.
SCO—L. M. Groves & Co., Buyer, L. M.
Groves, Brockwayville, Pa.

Groves Nos. 1 and 2 Mines; Drifts; Up-
per and Lower Freeport Seams, 30
and 42 inches thick.
PO—Brockwayville, Pa.; SP—Bedwood,
Pa.; CTY—Jefferson; RR—B. R. &
P.
MS—M. M. Groves, Brockwayville, Pa.
S of H—Mules. Track gauge 36 in.
S of M—6 compressed air mchs.
PP—1—100 H. P. return tubular
boiler air compressor, 3 pumps.
EMP—60. Last fiscal year output, 31-
000 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT.—Bar Screens.

Five Points Mine; Drift; Lower Kittan-
ning Seam, 42 in. thick.
PO—Weedville, R. D. Pa.; SP—Byrd-
dale, Five Points, Pa.; RR—P. & S.
—Elk; RR—P. & S. & N.

MS—W. L. Stroup, Brockwayville, Pa.
S of H—1 5 ton. elec. and
loco. Track gauge 36 in.
S of M—2 chain breast type mchs.
shortwall mchs.
PP—2 125 H. P. return tubular boilers,
gen. unit, 175 K. W., 250 volts
D. C., 2 pumps.
EMP—19. Last fiscal year output, 23-
000 tons.
SIZES SHIPT—Run of Mine.

TOMAJKO, EDWARD
General Office, Adamsburg, Pa.
GM—John G. Tomajko, Adamsburg, Pa.
SA—Bixler Coal & Coke Co., Pittsburgh,
Pa.

Little G in Mine; Slope; Pittsburg Seam;
48 inches thick.
PO—Adamsburg, Pa.; SP—Manor, Pa.;
CTY—Westmoreland; RR—B. & O.
S of H—Mules. Track gauge 42 inches.
S of M—Hand.
PP—Power purchased.
EMP—16. Daily output, 100 tons.
SIZES SHIPT—Run of Mine.

TOWER HILL CONNELLSVILLE COKE CO.
General Office, Connelville, Pa.
PR—J. H. Hillman, Jr., Pittsburgh, Pa.
ASST to PR—W. L. Afielder, Pittsburgh,
Pa.
VP—A. R. Sheets and T. W. Guthrie,
Pittsburgh, Pa.
TR—R. W. Flenniken, Pittsburgh, Pa.
GM—Frank B. Dunbar, Pittsburgh, Pa.
ASST GS—M. D. Cooper, Brownsville, Pa.
PA—W. W. Gillett, Pittsburgh, Pa.
EM—J. D. Martin, Pittsburgh, Pa.
EE—J. A. Malady, Pittsburgh, Pa.
SCO—Address the Company, Buyer, M. P.
Sullivan, Pittsburgh, Pa.
SA—Hillman Coal & Coke Co., Pitts-
burgh, Pa.

Tower Hill No. 2 Mine; Shaft; Connell-
sville Seam, 96 inches thick.
PO—Republic, Pa. SP—Same; CTY—Fay-
ette; RR—Monon.
MS—F. A. Coffroth, Republic, Pa.
SM—J. H. Foltz, Republic, Pa.
S of H—Mules, comp. air and storage
battery locos. Track gauge, 44 in.
S of M—Comp. air and shortwall mchs.
PP 4 water tube boiler, total 1400
H. P., 2—200 K. W. M. G. Sets,
1—200 K. W. and 1—100 K. W.
Engine Gen. Sets, 250-550 volts
D. C., 7 pumps.
EMP—278. Last years tonnage 284,943.
Coke Ovens, 110 Bee Hive, 254
Rectangular.
SIZES SHIPT—Run of Mine.

TRIANGLE COAL COMPANY
New Midway Coal Corporation.

TRIPLE VEIN SMOKELESS COAL CO.
General Office, Somerset, Pa.
PR—C. F. Roy, Somerset, Pa.
TR—H. P. Wood, Brodlynn, N. Y.
GM—R. D. Roy, Somerset, Pa.
PA—R. D. Roy, Somerset, Pa.

Triple Vein Mine; Drift; "C" Prime
Seam, 48 in. thick.
PO—Garrett, Pa.; SP—Same; CTY—
Somerset; RR—B. & O.
MS—P. L. Purcell, Garrett, Pa.
S of H—Mules and steam hoist.
S of M—Hand.
EM—80. Daily tonnage 400.
SIZES SHIPT—Run of Mine.
Note—Formerly operated by the South
Side Coal Co.

TRI-STATE COLLIERIES COMPANY.
General Office, 904 American Bldg., Bal-
timore, Md.
PR—Frank A. Furst, 904 American
Bldg., Baltimore, Md.
VP—E. Clay Timanus, Baltimore, Md.
TR—Peter E. Tome, 904 American Bldg.,
Baltimore, Md.
CE—B. W. Robinson, Cumberland, Md.
EM—J. L. Crawford, Garrett, Pa.
EE—M. D. Crawford, Garrett, Pa.
SA—E. H. Ray, 904 American Bldg.,
Baltimore, Md.

Garrett Slope; Slope; Upper Kittanning
Seam, 50 inches thick.
PO—Garrett, Pa. SP—Same. CTY—Som-
erset; RR—B. & O., Main Line
MS—G. A. Cokely, Garrett, Pa.
S of H—4 6-ton locos. Track gauge
S of M—4 shortwall mchs.
PP—Power purchased. Total
000 to 220 volts D. C.
boiler, 150 H. P.
volts D. C.
EMP—100. Last years tonnage 1-
SIZES SHIPT—Run of Mine.

TRIOIAN COAL MINING COMPANY.
General Office, N. J.
PR—J. H. Sargent, Broadway, New
York, N. Y.
GS—R. R. Silverman, Clearfield, Pa.
PA—R. R. Silverman, Clearfield, Pa.
EM—H. F. Van Valzah, Clearfield, Pa.
(Continued on Next Page)

Trojan Coal Mining Company—Cont

Trojan No. 1 Mine; Shaft to the Briar Hill Coal Co., Cambria, Pa.
 Trojan No. 2 Mine; Drift; D Seam, 40 in. thick.
 PO—Gipsy, Pa. SP—Same; CTY—Indiana, RR—N. Y. C., Hooverhurst Branch.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 PP—2 pumps.
 EMP—50. Last fiscal year output, 19,106 tons.
 EMP—45. Last fiscal year output, 15,734 tons.

Trojan No. 3 Mine; Slope; "B" Seam, 40 in. thick.
 PO—Gipsy, Pa.; SP—Same; CTY—Indiana, RR—N. Y. C.
 MS—F. M. Friel, Gipsy, Pa.
 S of H—1 gasoline loco. Track gage 36 in.
 S of M—Hand.
 PP—Gen. unit, 220 volts A. C., 60 cycles, 2 pumps.
 EMP—30. Daily tonnage 100.
 SIZES SHIPT—Run of Mine.

TROUT RUN COAL COMPANY

General Office, Madera, Pa.
 PR—C. G. Gill, Madera, Pa.
 TR—E. B. Manaffey, Madera, Pa.
 PA—C. G. Gill, Madera, Pa.
 SA—H. B. Swoope, Madera, Pa.

Trout Run Mine; Drift; "B" Seam; 48 in. thick.
 PO—Madera, Pa.; SP—Oscoda Mills, Pa.; CTY—Center, RR—Penna.
 MS—C. G. Gill, Madera, Pa.
 S of H—Mules. Track gage 34 inches.
 S of M—Hand.
 EMP—35. Last fiscal year output, 20,000 tons.
 SIZES SHIPT—Run of Mine.

TROUT RUN COAL MINING CO.

General Office, St. Benedict, Pa.
 PR—Richard Peale, St. Benedict, Pa.
 TR—A. T. Simpson, New York, N. Y.
 GS—Merritt Hutton, St. Benedict, Pa.
 PA—G. E. Metzger, St. Benedict, Pa.
 EM—K. J. Protzellar, St. Benedict, Pa.
 EE—E. K. Davis, St. Benedict, Pa.
 SCO—Portage Trading Co., Buyer, A. C. Hoover, St. Benedict, Pa.

Trout Run No. 5 Mine; Slope; E of Upper Freeport Seam; 36 to 50 in. thick.
 PO—Portage, Pa.; SP—Same; CTY—Cambria; RR—Penna., Martinsburg.
 S of H—Rope and 2 elec. locos. Track gage 36 in.
 S of M—5 elec. mach.
 PP—Power purchased 1—200 K. W. gen. units, 250 volts D. C., 1—125 H. P. return tubular boiler, 2 pumps.
 EMP—80.
 SIZES SHIPT—Run of Mine.

TRUCKS COAL MINING COMPANY

General Office, Leechburg, Pa.
 PR—L. S. Roberts, Leechburg, Pa.
 GS—F. A. Reiter, Leechburg, Pa.
 EM—Mathias Becker, Leechburg, Pa.
 SA—Iron Trade Products Co., Pittsburgh, Pa., New York, N. Y., Philadelphia, Pa.

Trucks No. 1 Mine; Drift; Lower Kitzling Seam, 42 in. thick.
 PO—Leechburg, Pa.; SP—Apollo, Pa.; CTY—Armstrong; RR—P. R. R.
 S of H—Mules. Track gage 36 in.
 S of M—Hand.
 PP—Power purchased transformer G600-220 volts A. C.
 EMP—40. Last years tonnage 8,000.
 SIZES SHIPT—Run of Mine.

Trucks No. 2 Mine; Drift; Upper Freeport Seam, 43 in. thick.
 PO—Leechburg, Pa.; SP—Same; CTY—Armstrong; RR—P. R. R., Conemaugh Div.
 SIZES SHIPT—Run of Mine.

Trucks No. 3 Mine; Drift; Upper Freeport Seam, 52 in. thick.
 PO—Leechburg, Pa.; SP—Apollo, Pa.; CTY—Armstrong; RR—P. R. R., Conemaugh Div.
 SIZES SHIPT—Run of Mine.

TRUMBULL COAL CO., THE

General Office, 707 Oliver Bldg., Pittsburgh, Pa.
 PR—W. H. Warner, Cleveland, O.
 VP—A. M. Flora, Warren, O.
 TR—Whitney Warner, Cleveland, O.
 GM—Whitney Warner, Cleveland, O.
 GS—William Callan, Clarksville, Pa.
 PA—F. A. Needham, 1600 Union Natl Bank Bldg., Cleveland, O.
 CE—E. L. Thrower, Cleveland, O.
 SCO—John Palotta Store, Buyer, John Palotta, Champion, Pa.
 SA—W. H. Warner & Co., Cleveland, O.

Trumbull Mine; Slope; Pittsburgh Seam, 84 in. thick.
 PO—Clarksville, Pa.; SP—Frt. Rosecoe, Pa.; Exp., Millsboro, Pa.; CTY—Washington-Green; RR—Penna.

S of H—Mules and main and tail rope.
 2 trolley pole type locos. Track gage 44 inches.
 S of M—2 chain breast type and 3 shortwall machs.
 PP—Power purchased. Transformer 6600-440 volts A. C., M. G. Sets, 50 K. W. and 150 K. W., 250 volts D. C.
 EMP—73. Last years tonnage 95,319.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Bar Screens.
 NOTE—Formerly operated by the Pitt Gas Coal Co.

TUB MILL COAL CO.

General Office, West Salisbury, Pa.
 PR—John A. Knecht, West Salisbury, Pa.
 TR—L. L. Beachy, West Salisbury, Pa.
 GM—John A. Knecht, West Salisbury, Pa.
 GS—John A. Knecht, West Salisbury, Pa.
 PA—John A. Knecht, West Salisbury, Pa.

Tub Mill Mine; Drift; Red Stone Seam, 38 to 84 in. thick.
 PO—West Salisbury, Pa.; SP—Same; CTY—Somerset; RR—B. & O., Salisbury Branch.
 S of H—Mules. Track gage 42 in.
 S of M—Hand.
 EMP—15. Last years tonnage 9,000.
 SIZES SHIPT—Run of Mine.

TUNNEL COAL & COKE CO.

General Office, Uniontown, Pa.
 PR—S. Ray, Shelby, Uniontown, Pa.
 TR—Delbert Rush, Uniontown, Pa.
 GM—S. Ray, Shelby, Uniontown, Pa.
 PA—S. Ray, Shelby, Uniontown, Pa.
 EM—Fayette Eng. Co., Uniontown, Pa.
 SA—S. Ray, Shelby, Uniontown, Pa.

Tunnel Mine; Drift; Pittsburgh Seam, 98 in. thick.
 PO—Outcrop, Pa.; SP—Same; CTY—Fayette; RR—B. & O.
 MS—C. E. Cornish, Outcrop, Pa.
 S of H—Mules. Track gage, 44 in.
 S of M—Hand.
 EMP—60. Last fiscal year output, 40,000 tons.
 SIZES SHIPT—Run of Mine.

TUNNEL SMOKELESS COAL CO.

General Office, Windler, Pa.
 Hillside Mine.
 PO—Kelson, Pa.; CTY—Somerset.
 No report.

TURLEY COAL MINING COMPANY

General Office, 436 Land Title Bldg., Philadelphia, Pa.
 PR—Wm. H. Greenfield, Jr., Philadelphia, Pa.
 TR—W. C. Greenfield, Philadelphia, Pa.
 GM—Wm. H. Greenfield, Jr., Philadelphia, Pa.
 PA—Wm. H. Greenfield, Jr., Philadelphia, Pa.
 EM—H. E. Kanarr, Pottsville, Pa.
 Wister No. 3 Mine; Drift; B Seam, 48 in. thick.
 PO—Irona, Pa.; SP—Same; CTY—Clearfield; RR—Penna.
 MS—Jess Richner, Irona, Pa.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 PP—1 pump.
 EMP—30. Last fiscal year output, 7,000 tons.
 SIZES SHIPT—Run of Mine.

TWO POINT GAS COAL CO.

General Office, Newell, Pa.
 PR—Chas. O. Downer, Newell, Pa.
 VP—J. A. Gardiner, Newell, Pa.
 TR—Wm. Smith, Newell, Pa.
 GM—Chas. O. Downer, Newell, Pa.
 GS—Chas. O. Downer, Newell, Pa.
 PA—Chas. O. Downer, Newell, Pa.
 CE—Bowser & Brownsville, Newell, Pa.
 EE—Jas. Gardiner, Newell, Pa.

Two Point Mine; Drift; Pittsburgh Seam, 96 in. thick.
 PO—Newell, Pa.; SP—Same; CTY—Fayette; RR—P. & L. E.
 S of H—Mules. Track gage 44 in.
 S of M—Hand.
 PP—Power purchased transformer 2775 volts A. C., 2 pumps.
 EMP—25. Daily tonnage 200.
 SIZES SHIPT—Run of Mine.
 old information.

TYRONE COAL COMPANY

Property exhausted.

TYRONE FUEL & SUPPLY COMPANY.

General Office, Tyrone, Pa.
 PR—H. R. Miller, Tyrone, Pa.
 VP—W. B. Murdoch, Jr., Tyrone, Pa.
 TR—Nevin N. Miller, Tyrone, Pa.
 GM—Nevin N. Miller, Tyrone, Pa.
 GS—Nevin N. Miller, Tyrone, Pa.
 PA—Nevin N. Miller, Tyrone, Pa.

Miller Brothers Mine; Drift; C. & D. Seam, 50 inches thick.
 PO—Mountfordale, Pa.; SP—Same; CTY—Cambria; RR—Penna. Railroad Division.
 MS—T. V. McCartney, Mountfordale, Pa.
 S of H—Mules and 1 gasoline loco. Track gage 36 inches.
 S of M—Hand.
 EMP—25. Last fiscal year output, 10,000 tons.
 SIZES SHIPT—Run of Mine.

TYSON, WILL H.
 General Office, Big Run, Pa.
 OWNER—Will H. Tyson, Big Run, Pa.

Big Run Mine; Drift; Lower Freeport Seam; 36 inches thick.
 PO—Big Run, Pa.; SP—Same; CTY—Jefferson; RR—B. & P.
 MS—T. Matthews, Big Run, Pa.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 EMP—75. Daily tonnage 400.
 SIZES SHIPT—Run of Mine.

UNION COAL AND COKE COMPANY.

General Office, Johnstown, Pa.
 PR—A. C. Dunkey, Philadelphia, Pa.
 VP—A. A. Corey, Jr., Philadelphia, Pa.
 TR—W. B. Dickson, Philadelphia, Pa.
 GM—J. C. H. Lubken, Johnstown, Pa.
 GS—Jos. Lewis, Bentleyville, Pa.
 PA—F. C. Yeates, Philadelphia, Pa.
 EM—A. A. McDonald, Bentleyville, Pa.
 EE—C. S. Prowfoot, Bentleyville, Pa.
 SCO—Miners Supply Co., Buyer, R. R. Bobbins, Monongahela, Pa.

Marianna Mine; Shaft; Pittsburgh Seam, 72 to 78 in. thick. Operate washery.

PO—Marianna, Pa.; SP—Same; CTY—Washington; RR—Penna., Monongahela Div.
 MS—J. O. Davis, Marianna, Pa.
 SM—T. J. Ramsey, Marianna, Pa.
 S of H—3 trolley pole type and 3 storage battery locos. Track gage, 48 inches.
 S of M—4 comp. air and 12 chain breast type machs.
 PP—7 water tube boilers, total 3500 H. P., 1 500 K. W. gen. unit, 300 volts D. C., 26 pumps.
 EMP—527. Last years tonnage 471,923.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens and Washeries.

Aema Mine; Nos. 1 and 2 Shaft and Slope; Pittsburgh Seam, 72 to 78 in. thick. Operate washery.
 PO—Bentleyville, Pa.; SP—Same; CTY—Washington; RR—M. & W., P. V. & C.

MS—Mark Jones, Bentleyville, Pa.
 S of H—Mules, endless rope and 6 trolley pole type locos. Track gage 44 in.
 S of M—15 chain breast type and 5 shortwall machs.
 PP—Power purchased. Transformer 25,000 to 2,200 volts A. C., M. G. sets and rotary converters, 4—150 K. W., 250 volts D. C., 20 pumps.
 EMP—458. Last years tonnage 523,418.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens and Washeries.

Hazel Kirk No. 2 Mine; Shaft; Pittsburgh Seam, 66 to 72 in. thick.
 PO—Van Voorhis, Pa.; SP—Same; CTY—Washington; RR—M. & W., P. V. & C.

MS—Thomas J. Jones, Van Voorhis, Pa.
 SM—Jos. Krinock, Van Voorhis, Pa.
 S of H—Mules and 3 trolley pole type locos. Track gage 42 in.
 S of M—14 shortwall machs.
 PP—Power purchased. Transformer 6,600 to 2,200 volts A. C., M. G. set, 1—150 K. W., 250 volts D. C., 4 fire tube boilers, total 550 H. P., 12 pumps.
 EMP—296. Last years tonnage 222,671.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

Hazel Kirk No. 1 Mine; Shaft; Pittsburgh Seam, 66 to 72 in. thick.
 PO—Monongahela, Pa.; R. F. D.; SP—Hazel Kirk, Pa.; CTY—Washington; RR—M. & W., P. V. & C.
 MS—Thos. Jones, Monongahela, Pa.
 SM—Jos. Krinock, B. F. D., Monongahela, Pa.

S of H—Mules and 2 trolley pole type locos. Track gage 42 in.
 S of M—12 chain breast type and 2 shortwall machs.
 PP—5 return tubular boilers, total 750 H. P., 2—100 K. W. M. G. Sets, 250 volts D. C., 19 pumps.
 EMP—294. Last years tonnage 215,137.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

Dunkirk Mine abandoned.

UNION COLLIERIES CO.

General Office, 410 Union Arcade, Pittsburgh, Pa.
 PR—W. R. Calverley, Pittsburgh, Pa.
 VP—W. A. Luce, Pittsburgh, Pa.
 TR—W. A. Luce, Pittsburgh, Pa.
 GM—W. R. Calverley, Pittsburgh, Pa.
 GS—Jas. A. Gould, Renton, Pa.
 PA—F. L. Barnhart, Pittsburgh, Pa.
 EM—E. L. Baird, Renton, Pa.
 EE—E. R. Graff, Renton, Pa.
 SCO—Renton Stores; Buyer, G. J. Matthews, Renton, Pa.
 SA—F. C. Bortz, 410 Union Arcade, Pittsburgh, Pa.

Renton No. 1 Mine; Drift; Pittsburgh Seam, 72 in. thick.
 PO—Renton, Pa.; SP—Same; CTY—Allegheny; RR—B. & L. E.
 S of H—Trolley pole type loco. Track gage 48 in.
 S of M—1 chain breast type and 3 shortwall machs.
 PP—Power purchased, M. G. set, 250 volts D. C., 6 pumps.
 EMP—120. Last fiscal year output, 102,120 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

Renton No. 2 Mine; Drift; Pittsburgh Seam, 72 in. thick.
 PO—Renton, Pa.; SP—Same; CTY—Allegheny; RR—B. & L. E.
 S of H—4 trolley pole type locos. Track gage, 48 in.
 S of M—4 shortwall machs.
 PP—Power purchased, M. G. set, 250 volts D. C., 6 pumps.
 EMP—95. Last fiscal year output, 81,845 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

Renton No. 3 Mine; Shaft; Thick Freeport Seam, 84 in. thick.
 PO—Renton, Pa.; SP—Same; CTY—Allegheny; RR—B. & L. E.
 S of H—6 trolley pole type locos. Track gage, 48 in.
 S of M—10 shortwall machs.
 PP—Power purchased, M. G. set, 250 volts D. C., 12 pumps.
 EMP—275. Last fiscal year output, 333,035 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Marcus Combination Screens, Picking Tables.

Renton No. 4 Mine; Drift; Pittsburgh Seam, 72 in. thick.
 PO—Renton, Pa.; SP—Same; CTY—Allegheny; RR—B. & L. E.
 S of H—4 trolley pole type locos. Track gage, 48 in.
 S of M—4 shortwall machs.
 PP—Power purchased, M. G. Set, 250 volts D. C., 6 pumps.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

UNION CONNELLSVILLE COKE CO

General Office, 57 West Main St., Uniontown, Pa.
 PR—James R. Cray, Uniontown, Pa.
 VP—Jacob H. Lynn, Uniontown, Pa.
 TR—Wm. Allison, Uniontown, Pa.
 GM—Wm. Allison, Uniontown, Pa.
 PA—William Allison, Uniontown, Pa.
 SCO—Simpson Supply Company, Buyer, H. H. Hugh, R. D. No. 1, Brownsville, Pa.

Katherine Mine; Shaft; Pittsburgh Seam, 102 in. thick.
 PO—Brownsville, Pa.; R. D. No. 1; SP—Simpson, Pa.; CTY—Fayette; RR—Monon.
 MS—T. J. O'Toole, Brownsville, Pa.
 S of H—Mules, 1 gasoline loco. Track gage 44 inches.
 S of M—1 chain breast and 1 shortwall mach.
 PP—4 return tubular boilers, total 600 H. P., 5 pumps, 650 volts D. C. Purchase power.
 EMP—145. Last fiscal year output, 140,000 tons. Coke Ovens, 140 Rectangular.
 SIZES SHIPT—Run of Mine.

UNION FUEL COMPANY

General Office, Jeannette, Pa.
 PR—Thomas Edwards, Yukon, Pa.
 VP—Chas. F. Ely, Jeannette, Pa.
 GM—Moss Hawk, Ruffsedale, Pa.
 GS—Moss Hawk, Ruffsedale, Pa.
 PA—Moss Hawk, Ruffsedale, Pa.
 SA—A. R. Hamilton Co., Pittsburgh, Pa.

Hunker No. 1 Mine; Drift; Freeport Seam; 54 in. thick.
 PO—Jeannette, Pa.; SP—Hunker and New Station, Pa.; CTY—Westmoreland; RR—Penna.
 S of H—Mules, rope and trolley pole type locos.
 S of M—Shortwall machs.
 EMP—25. Last years tonnage 19,000.
 SIZES SHIPT—Run of Mine.

UNION MINING COMPANY

General Office, DuBois, Pa.
 VP—Jas. H. Moore, 231 West Long Ave., DuBois, Pa.
 VP—Willard H. Moore, DuBois, Pa.
 GM—H. A. Moore, DuBois, Pa.
 GS—Willard H. Moore, DuBois, Pa.
 PA—H. A. Moore, DuBois, Pa.
 CE—E. W. Heese, DuBois, Pa.
 SA—H. A. Moore, DuBois, Pa.

Union Mine; Drift; D Seam, 36 in. thick.
 PO—DuBois, Pa.; SP—Rockton, Pa.; CTY—Clearfield; RR—B. R. & P. C. & M. Div.
 S of H—Mules and incline plane, Track gage 36 in.
 S of M—Hand.
 EMP—30 Daily tonnage 100.
 SIZES SHIPT—Run of Mine.

UNITED FUEL COMPANY

General Office, Connellsville, Pa.
 PR—Alex. R. Hood, Connellsville, Pa.
 VP—Jas. T. Johnston, Connellsville, Pa.
 TR—John Madigan, Connellsville, Pa.
 PA—F. M. Richey, Connellsville, Pa.
 EM—Jas. Hochenschell, Connellsville, Pa.

United Fuel Mine.
 S of H—Mules and rope, Track gage 36 inches.
 S of M—Hand.
 EMP—20 Last years tonnage 15,000.
 SIZES SHIPT—Run of Mine.

UNITED REFRACATORIES COMPANY.

General Office, Dunbar, Pa.
 PR—W. E. Crow, Uniontown, Pa.
 VP—G. W. Greenwood, Dunbar, Pa.
 TR—G. W. Greenwood, Dunbar, Pa.

Palmer Mine; Drift; Kittanning Seam, 38 in. thick.
 PO—Dunbar, Pa. SP—Ferguson, Pa. CTY—Fayette. RR—R. & O.
 S of H—2 trolley pole type locos, Track gage 36 in.
 S of M—2 shortwall machs.
 PP—Power purchased, 550 volts D. C., 3 pumps.
 SIZES SHIPT—Run of Mine.

UNITED SMOKELESS COAL COMPANY.

General Office, Humbert, Pa.
 PR—I. T. Huff, Humbert, Pa.
 TR—H. I. Campbell, Humbert, Pa.
 GM—I. T. Huff, Humbert, Pa.
 PA—I. T. Huff, Humbert, Pa.
 CE—S. E. Dickey, Johnstown, Pa.
 SA—Rorden & Lovell, 11 Broadway, New York, N. Y.

Baldwin Mine; Drift; C Prime Seam, 42 in. thick.
 PO—Humbert, Pa.; SP—Ursina, Pa.; CTY—Somerset; RR—Ursina & North Fork
 MS—Jack Stephens, Humbert, Pa.
 S of H—1 gasoline and trolley pole type locos, Track gage, 40 in.
 S of M—2 elec. shortwall machs.
 PP—2 100 H. P. fire tube boilers, gen. unit, 250 volts D. C.
 EMP—41 Last years tonnage 19,640
 SIZES SHIPT—Run of Mine.

UNITED STATES BUREAU OF MINES

General Office, 4800 Forbes St., Pittsburgh, Pa.
 DIRECTOR—H. Foster Bain, Bureau of Mines, Washington, D. C.
 GS—H. C. Howarth, Brimont, Pa.
 PA—A. H. Eam's, 4800 Forbes St., Pittsburgh, Pa.
 EM—J. W. Paul, 4800 Forbes St., Pittsburgh, Pa.
 Department of the Interior, Washington, D. C.

Experimental Mine; Drift; Pittsburgh Seam, 60 to 66 in. thick.
 PO—Brimont, Pa.; SP—Same; CTY—Allegheny; RR—B. & O.
 S of H—Mules, Track gage 42 in.
 S of M—1 comp. air mach.
 PP—2 fire tube boilers, 140 H. P., 17 K. W., 140 F. W. gas units, 110 volts, 228 volts D. C., pumps.
 EMP—12 to 18
 Note—Mine used for experimental purposes only

UNITED STATES FUEL COMPANY

General Office, 2126 Oliver Bldg., Pittsburgh, Pa.
 PR—Geo. Whyel, Pittsburgh, Pa.
 VP—Chas. F. Colbert, Jr., Pittsburgh, Pa.
 TR—John Husband, Pittsburgh, Pa.
 GM—Chas. F. Colbert, Jr., Pittsburgh, Pa.
 GS—P. J. Walsh, Grays Landing, Pa.
 PA—Chas. F. Colbert, Jr., Pittsburgh, Pa.

Donald No. 6 Mine; Slope; Sewickley Seam, 60 inches thick.
 PO—Grays Landing, Pa.; SP—Same; CTY—Fayette; RR—Monon.
 S of H—Electric locos, Track gage 42 inches.

S of M—Electric punchers
 PP—Power purchased.
 EMP—20 Daily tonnage 400.
 SIZES SHIPT—Run of Mine.

UNITY-CONNELLVILLE COKE CO.

General Office, Greensburg, Pa.
 PR—J. A. Sheetz, Greensburg, Pa.
 TR—A. M. Wyant, Greensburg, Pa.
 GM—J. A. Sheetz, Greensburg, Pa.
 GS—J. A. Sheetz, Greensburg, Pa.
 PA—William Beatty, Latrobe, Pa.
 CE—Gibson-Thomas Engineering Co., Latrobe, Pa.
 SCO—Elizabeth Supply Co. Buyer Harry F. Kuhns, Latrobe, Pa.
 SA—Irwin Fuel Co., Latrobe, Pa.

Elizabeth Mine; Slope; Pittsburgh Seam, 78 in. thick.
 PO—Latrobe, Pa.; SP—Same; CTY—Westmoreland; RR—Ligonier Valley.
 MS—James P. McGinnis, Latrobe, Pa.
 S of H—Mules, Track gage, 42 in.
 S of M—Hand.
 PP—4 fire tube boilers, 350 H. P., 1 pumps.
 EMP—70 Last years tonnage 36,963
 Coke Ovens, 100 Bee Hive.

UREY RIDGE COAL COMPANY

General Office, 100 Liberty Bldg., Philadelphia, Pa.
 PR—G. Brinton Roberts, Philadelphia, Pa.
 TR—William A. Smith.
 GM—A. M. Riddell, Altoona, Pa.
 GS—A. M. Riddell, Altoona, Pa.
 PA—D. E. Williams, Philadelphia, Pa.
 EM—Chas. E. Schlicker, Spangler, Pa.
 SA—D. E. Williams & Co., Broad and Chestnut Sts., Philadelphia, Pa.

Urey Nos. 1, 2, 5 and 6 Mines; Drifts, Prime Sam. 48 in. thick.
 PO—Glen Campbell, Pa.; SP—Same; CTY—Indiana; RR—Penna., C. & P. Div.
 MS—John Downing, Glen Campbell, Pa.
 S of H—Mules, 2 elec. locos, Track gage 36 in.
 S of M—8 elec. machs.
 PP—Power purchased, motor generator set, 250 volts D. C., 2 pumps.
 EMP—67 Last years tonnage 87,000
 SIZES SHIPT—Run of Mine.

URSINA FUEL COMPANY

General Office, Somerset, Pa.
 PR—L. G. McCrum, Somerset, Pa.
 VP—W. B. Conway, Rockwood, Pa.
 TR—W. R. Deamer, Somerset, Pa.
 GM—E. E. Caddell, Ursina, Pa.
 GS—E. E. Caddell, Ursina, Pa.
 PA—W. R. Conway, Rockwood, Pa.
 CE—S. E. Dickey, Johnstown, Pa.
 SA—Ursina Supply Co., Buyer, E. E. Caddell, Ursina, Pa.
 SA—W. H. Bradford & Co., Somerset, Pa.

Mill Mine; Drift; "E" Seam, 42 in. thick.
 PO—Ursina, Pa.; SP—Same; CTY—Somerset; RR—U. & N. P.
 S of H—Mules and rope, Track gage 36 inches.
 S of M—Hand.
 PP—2 pumps.
 EMP—40 Last years tonnage 18,000
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT.—State Pickler.
 NOTE—Formerly operated by Parnell & Rush Coal Co.

VALLEY CAMP COAL COMPANY.

General Office, Cleveland, O.
 PR—J. A. Paisley, Cleveland, O.
 TR—F. W. Friser, Cleveland, O.
 GM—J. A. Paisley, Cleveland, O.
 GS—H. E. Kinloch, Parnassus, Pa.
 PA—H. E. Kinloch, Parnassus, Pa.

Kinloch Mine; Slope; Freeport Seam, 84 in. thick.
 PO—Parnassus, Pa. SP—Same; CTY—Westmoreland; RR—P. B. R.
 SM—H. Ester, Parnassus, Pa.
 S of H—4 trolley pole type locos, Track gage 44 in.
 S of M—8 shortwall machs.
 PP—1 gen. unit, 250 volts D. C., 9 pumps, Purchase power.
 Last fiscal year output, 400,671 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT.—Shaker Screens, Picking Tables, Loading Rooms.

Valley Camp No. 1 Mine; Slope; Freeport Seam.
 PO—New Kensington, Pa. SP—Valley Camp, Pa. CTY—Westmoreland. RR—P. B. R.
 MS—John Schwelnsberg, Parnassus, Pa.
 S of H—9 trolley pole type locos, Track gage 44 in.
 S of M—7 shortwall machs.
 PP—1 gen. unit, 250 volts D. C., 9 pumps, Purchase power.
 Last fiscal year output, 230,957 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.

Soudan Mine; Slope; Pittsburgh Seam, 70 to 74 in. thick.
 PO—Van Voorhis, Pa. SP—Same; CTY—Washington, RR—P. V. & C.
 MS—Thos. Steche, Van Voorhis, Pa.
 S of H—2 and 10 electric locos, Track gage 44 in.

S of M 13 elec. machs.
 PP—Power purchased.
 Last fiscal year output, 290,182 tons.
 PREP. EQUIPT.—Bar Screens.

VALLEY COAL & SUPPLY COMPANY

General Office, Carnegie, Pa.
 PR—Samuel Gamble, Carnegie, Pa.
 VP—Samuel Gamble, Carnegie, Pa.
 TR—W. D. HPL, Carnegie, Pa.
 GM—Charles S. Bullions, Carnegie, Pa.
 GS—J. J. Laughlin, McDonald, Pa.
 Elizabeth Mine; Drift; Pitts Vehn No. 8 Seam.
 PO—Carnegie, Pa.; SP—Oakdale, Pa.; CTY—Allegheny; RR—P. C. C. & St. L.
 S of H—Mules, Track gage 44 inches.
 S of M—Hand.
 EMP—30 Daily tonnage 200.
 SIZES SHIPT—Run of Mine, Pea.
 PREP. EQUIPT.—Bar Screens.

VALLEY COAL COMPANY.

General Office, Leechburg, Pa.
 PR—E. H. Beale, Leechburg, Pa.
 VP—S. J. McCabe, Leechburg, Pa.
 TR—L. W. Hicks, Leechburg, Pa.
 GM—L. W. Hicks, Leechburg, Pa.
 GS—E. A. Watters, Leechburg, Pa.
 PA—D. L. Maher, Leechburg, Pa.
 EM—S. E. Mignitt, Leechburg, Pa.
 EE—G. H. Righetti, Leechburg, Pa.

Valley Mine; Drift; Upper Freeport Seam, 36 to 42 in. thick.
 PO—Leechburg, Pa.; SP—Same; CTY—Westmoreland; RR—P. B. R.
 MS—Geo. Faemyer, Leechburg, Pa.
 S of H—Trolley pole type locos, Track gage, 42 in.
 S of M—5 elec. chain breast machs.
 PP—Power purchased, Motor-Generator set, 500 volts D. C., 3 pumps.
 EMP—60 Last fiscal year output 80,905 tons.
 SIZES SHIPT—Run of Mine.

VALLEY SMOKELESS COAL CO.

General Office, Bethlehem, Pa.
 PR—John C. Dawson, 4th & Chestnut St., Philadelphia, Pa.
 VP—T. M. Dodson, Bethlehem, Pa.
 TR—A. C. Dodson, Bethlehem, Pa.
 GS—C. C. Doney, Johnstown, Pa.
 PA—J. B. Coan H. Bethlehem, Pa.
 CE—C. T. Starr, Bethlehem, Pa.
 EM—Fetterman Engineering Co., Johnstown, Pa.
 EE—James Walton, Johnstown, Pa.
 SCO—Cupp Grocery Co. Buyer, C. E. Mitchell, Johnstown, Pa.
 SA—Wilton Dodson & Co., Bethlehem, Pa.

Valley No. 1 Mine; Drift; Upper Kittanning Seam, 63 7/2 in. thick.
 PO—Johnstown, Pa.; SP—Same; CTY—Cambria; RR—P. B. R. & O.
 MS—C. E. Mitchell, Johnstown, Pa.
 S of H—6 trolley pole type locos, Track gage, 36 in.
 S of M—4 shortwall machs.
 PP—Power purchased, 4000-220 volts A. C., 2 motor gen. sets, 250 volts D. C., 1 fire tube boiler, 2 pumps.
 EMP—150 Last years tonnage (for 3 mines), 151,165.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT.—Shaker Screens, Picking Tables.

Valley No. 3 Mine; Shaft; Lower Kittanning Seam, 44 in. thick.
 PO—Johnstown, Pa.; SP—Same; CTY—Cambria; RR—P. B. R. & O.
 MS—C. E. Mitchell, Johnstown, Pa.
 S of H—2 trolley pole type locos, Track gage, 36 in.
 S of M—4 elec. shortwall machs.
 PP—Power purchased, 4000-220 volts A. C., motor gen. sets, 250 volts D. C., 1 fire tube boiler, 2 pumps.
 EMP—25
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT.—Shaker Screens, Picking Tables.

No. 4 Mine; Drift; Lower Kittanning Seam, 44 in. thick.
 PO—Johnstown, Pa.; SP—Same; CTY—Cambria; RR—P. B. R. & O.
 MS—C. E. Mitchell, Johnstown, Pa.
 S of H—1 trolley pole type loc. Track gage, 36 in.
 S of M—2 shortwall machs.
 PP—Power purchased, 4000-220 volts A. C., motor gen. sets, 250 volts D. C., 2 pumps.
 EMP—8 Last fiscal year output, 6,312 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT.—Shaker Screens, Picking Tables.

VANDERBILT COAL & COKE CO

General Office, Colonial National Bldg., Connellsville, Pa.
 PR—G. Corrado, Connellsville, Pa.
 VP—A. Radstone, Connellsville, Pa.
 TR—A. C. Corrado, Connellsville, Pa.
 GM—G. Corrado, Connellsville, Pa.
 GS—H. B. Cramer, Connellsville, Pa.

PA—F. R. Yoder, Connellsville, Pa.
 CE—W. B. Barnhart, Connellsville, Pa.
 EE—H. B. Cunningham, Connellsville, Pa.
 SCO—Vanderbilt Supply Co. Buyer, Paul T. Rich, Connellsville, Pa.
 SA—G. Corrado, Coal & Coke Co., Connellsville, Pa.

Clarissa Mine; Drift; Pittsburgh Seam, 102 in. thick.
 PO—Vanderbilt, Pa.; SP—Dickerson, Run, Pa.; CTY—Fayette; RR—P. A. L. E.
 MS—L. B. Martin, Vanderbilt, Pa.
 S of H—Mules and 2 steam locos, Track gage, 42 in.
 S of M—Hand.
 EMP—90, Daily output, 200 tons.
 Bee Hive Coke Ovens.
 SIZES SHIPT—Run of Mine.

Morgan Mine; Slope; Pittsburgh Seam, 108 in. thick.
 PO—Broad Road, Pa.; SP—Same; CTY—Fayette; RR—P. & L. E.
 MS—J. D. Cullen, Dayton, Pa.
 S of H—Mules, Track gage, 39 in.
 S of M—Hand.
 EMP—15, Daily output, 50 tons.
 SIZES SHIPT—Run of Mine.

VEGA COAL MINING COMPANY

General Office, Hontzdale, Pa.
 PR—George Dahlin, Hontzdale, Pa.
 GM—George Dahlin, Hontzdale, Pa.
 PA—George Dahlin, Hontzdale, Pa.
 TR—W. R. Mims, Punxsutawney, Pa.
 GS—A. V. Dahlin, Hontzdale, Pa.
 CE—H. Knarr, Punxsutawney, Pa.

Vega No. 1 Mine; Slope; Lower Freeport Seam, 66 in. thick.
 PO—Valler, Pa.; SP—Same, on B. R. A. P.; CTY—Jefferson; RR—P. B. R. Railroad Branch.
 S of H—Mules, Track gage 36 in.
 S of M—Hand.
 PP—2 return tubular boilers, total 300 H. P., 1 gen. unit, 250 volts D. C.
 SIZES SHIPT—Run of Mine.
 (Old Information)

VENUS COAL CO., THE

General Office, Stonyboro, Pa.
 PR—Geo. H. Bortz, Uniontown, Pa.
 VP—Robt. P. Cann, Stonyboro, Pa.
 TR—W. J. Houston, Stonyboro, Pa.
 GM—W. J. Houston, Stonyboro, Pa.
 GS—W. J. Houston, Stonyboro, Pa.
 PA—W. J. Houston, Stonyboro, Pa.
 SA—The Sun Coal Co., Stonyboro, Pa.

Venus Mine; Drift, Slope, Stripping Seam, 60 inches thick.
 PO—Sandy Lake, Pa.; SP—Same; CTY—Mercer; RR—N. Y. C.
 MS—Ralph Hinder, Sandy Lake, Pa.
 S of H—Rope, Track gage 30 inches.
 S of M—Hand.
 PP—4 200 H. P. water tube boilers.
 EMP—20 Last years tonnage 9,878
 SIZES SHIPT—Slack.

VERDON COAL CO

General Office, Osceola Mills, Pa.
 PR—John R. Swartzle, Clearfield, Pa.
 SECV—Price Rowles, Osceola Mills, Pa.
 GM—Price Rowles, Osceola Mills, Pa.
 GS—Price Rowles, Osceola Mills, Pa.
 PA—Price Rowles, Osceola Mills, Pa.

Verdon Mine; Drift; Slope; A Seam, 36 4/4 in. thick.
 PO—Osceola Mills, Pa.; SP—Same; CTY—Tearfield; RR—Penna. Big Run Br.
 S of H—Mules.
 S of M—Hand.
 EMP—25
 SIZES SHIPT—Run of Mine

VERNER COAL & COKE COMPANY.

General Office, 519 Oliver Bldg., Pittsburgh, Pa.
 PR—John A. Bohl, Pittsburgh, Pa.
 TR—H. B. Salkeld, Pittsburgh, Pa.
 GM—H. B. Salkeld, Pittsburgh, Pa.
 PA—Ed. D. Friedrichsauer, Pittsburgh, Pa.
 EM—R. C. Salkeld, Pittsburgh, Pa.
 EE—Thomas Kinopp, Butler, Pa.
 SCO—Bulger Supply Co. Buyer, C. E. Bulger, Butler, Pa.
 Additional Information on Page 8

Verner No. 1 Mine; Slope; Pittsburgh Seam, 44 in. thick.
 PO—Butler, Pa.; SP—Same; CTY—Butler; RR—P. B. R. & O.
 MS—C. E. Mitchell, Butler, Pa.
 S of H—2 trolley pole type locos, Track gage, 36 in.
 S of M—2 shortwall machs.
 PP—Power purchased, 4000-220 volts A. C., motor gen. sets, 250 volts D. C., 12 pumps.
 EMP—200 Last fiscal year output 230,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut.
 PREP. EQUIPT—Gravity Screens.
 Verner No. 2 Mine; now Cedar Grove Mine of Carnegie Coal Co.

VERNON COLLIERIES COMPANY

General Office, Huntingdon, Pa.
 TR—R. Jones, Jr., Sallito, Pa.
 GM—J. R. Griffith, Sallito, Pa.
 GS—J. R. Griffith, Sallito, Pa.
 PA—J. R. Griffith, Sallito, Pa.

Vernon No. 1 and 2 Mines; Drift; Fullon A Seam, 84 inches thick.
 PO—Sallito, Pa.; SP—Rocky Ridge, Pa.; CTY—Huntingdon; RR—E. B. & T.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 EMP—20. Last years tonnage 10,000.
 SIZES SHIPT—Run of Mine.

VESTA COAL COMPANY.

General Office, Jones & Laughlin Bldg., Pittsburgh, Pa.
 PR—R. P. Jones, Jr., Pittsburgh, Pa.
 VP—Wm. Larimer Jones, Pittsburgh, Pa.
 2nd VP—M. C. Angello, Pittsburgh, Pa.
 TR—J. C. Watson, Pittsburgh, Pa.
 AUJTOR—Elmer E. Toerge, Pittsburgh, Pa.

GS—Jus. Edwards, California, Pa.
 PA—F. W. Ochsenhirt, Jr., Pittsburgh, Pa.
 EN—M. H. Francis, California, Pa.
 EE—H. H. Laughlin, Pittsburgh, Pa.
 SCO—Pittsburgh Mercantile Co., Buyer, Edw. Gray, Pittsburgh, Pa.

No. 1 Mine; Drift; Pittsburgh Seam, 75 in. thick.
 PO—Allenport, Pa.; SP—Same; CTY—Washington; RR—Penna., Monongahela Div.
 MS—Arch Dunlap, Allenport, Pa.
 S of H—Mules and 2 trolley pole type locos. Track gage 44 in.
 S of M—3 chain breast type and 3 shortwall machs.
 PP—Power purchased, M. G. set, 550 volts D. C., 7 pumps.
 EMP—120.
 SIZES SHIPT—Run of Mine (Crushed).
 No. 3 mine abandoned.

No. 4 Mine; Drift; Pittsburgh Seam, 75 in. thick.
 PO—California, Pa.; SP—Same; CTY—Washington; RR—Penna., Monongahela Div.
 MS—Robert Barr, California, Pa.
 S of H—Main and tail rope and 35 trolley pole type locos. Track gage 48 in.
 S of M—28 chain breast type and 6 shortwall machs.
 PP—Power purchased, Transformer 6,600 volts A. C., M. G. sets, 3—300 K. W., 550 volts D. C., 12 water tube boilers, total 3,600 H. P., 39 pumps.
 EMP—1,070.
 SIZES SHIPT—Run of Mine (Crushed).

No. 5 Mine; Drift; Pittsburgh Seam, 75 in. thick.
 PO—Vestaburg, Pa.; SP—Same; CTY—Washington; RR—Penna., Monon. Div.
 MS—Jerome M. Crystle, Vestaburg, Pa.
 S of H—Mules, endless rope, 9 trolley pole type locos, 22 storage battery locos. Track gage 48 in.
 S of M—50 chain breast type and 6 shortwall machs.
 PP—Power purchased, Transformer 6,600 volts A. C., M. G. sets, 2—300 K. W., 550 volts D. C., 8 water tube boilers, 2,800 H. P., 42 pumps.
 EMP—925.
 SIZES SHIPT—Run of Mine (Crushed).

No. 6 Mine; Slope; Pittsburgh Seam, 78 in. thick.
 PO—Denbo, Pa.; SP—Same; CTY—Washington; RR—Penna., Monongahela Div.
 MS—W. R. Musser, Denbo, Pa.
 S of H—Rope, 7 storage battery, 2 trolley pole type locos. Track gage 48 in.
 S of M—9 shortwall machs.
 PP—Power purchased, Transformer 6,600 to 440 volts A. C., 12 pumps.
 EMP—425.
 SIZES SHIPT—Run of Mine (Crushed).

No. 7 Mine; Shaft; Pittsburgh Seam, 84 in. thick.
 PO—West Brownsville, Pa.; SP—Same; CTY—Washington; RR—P. R. R.
 MS—John Cairns, West Brownsville, Pa.
 S of H—Mules, hoisting rope, 2 trolley pole type and 1 storage battery locos. Track gage 48 in.
 S of M—4 chain breast type machs.
 PP—2 water tube boilers, total 600 H. P., 1—350 K. W. generator unit, 550 volts D. C., 5 pumps.
 EMP—182.
 SIZES SHIPT—Run of Mine.

VICTOR COAL COMPANY.

New Victor Hill Coal Co.

VICTOR COAL MINING COMPANY.

General Office, Somerset, Pa.
 PR—Lloyd G. McCrum, Somerset, Pa.
 VP—R. R. Ruttlinger, Philadelphia, Pa.
 GM—Lloyd G. McCrum,

TR—R. R. Ruttlinger, Philadelphia, Pa.
 PA—W. B. Conway, Somerset, Pa.
 CE—Thomas Holton, Johnstown, Pa.
 EM—S. E. Dickey & Co., Johnstown, Pa.
 MM—H. Brallier, Holtsopple, Pa.
 EE—J. C. Rogers,
 SCO—Holtsopple Supply Co., Buyer, C. J. Lehman, Holtsopple, Pa.
 Sales Agency, W. H. Bradford & Co., Inc., New York and Philadelphia, Pa.

Additional information on Page 718

Haws No. 1 Mine; Drift; "C" Prime or Upper Kittanning Seam; 28 to 46 in. thick.
 PO—Holtsopple, Pa.; SP—Same; CTY—Somerset; RR—E. & O. S. & C. Br.
 MS—Jas. Stephenson, Holtsopple, Pa.
 S of H—Trolley pole type and storage battery locos. Track gage 36 in.
 S of M—2 elec. and 7 comp. air machs.
 PP—2 water tube boilers, total 300 H. P., 1 air compressor and 2 pumps.
 EMP—90. Last fiscal year output, 57,000 tons.

SIZES SHIPT—Run of Mine.
 Haws No. 3 Mine; Shaft; B or Miller Seam, 48 in. thick.
 PO—Holtsopple, Pa.; SP—Same. CTY—Somerset. RR—E. & O.
 MS—Jas. Stephenson, Holtsopple, Pa.
 S of H—Trolley pole type locos and storage battery locos. Track gage 42 in.
 S of M—2 elec. and 6 comp. air machs.
 PP—2 return tubular boilers, 2 air compressors, 6 pumps. Purchase power.
 EMP—85. Last fiscal year output, 56,000 tons.

SIZES SHIPT—Run of Mine.**VICTOR COLLIERIES COMPANY.**

General Office, Coalport, Pa.
 PR—Jerome Thomas, Coalport, Pa.
 No. 1 Mine; Drift; "D" Seam, 42 in. thick.
 PO—Coalport, Pa.; SP—Irvena, Pa.; CTY—Clearfield; RR—P. R. R.
 S of H—Steam
 S of M—Hand and machine.
 PP—1 pump.
 EMP—30.
 SIZES SHIPT—Run of Mine.

VICTOR HILL COAL COMPANY.

General Office, Coalport, Pa.
 PR—J. A. Thomas, Coalport, Pa.
 TR—J. W. Laing, Coalport, Pa.
 GM—J. A. Thomas, Coalport, Pa.
 PA—J. W. Laing, Coalport, Pa.
 SA—Victor Coal Company, Coalport, Pa.
 Victor Hill No. 1 Mine; Drift; "B" or Miller Seam, 48 in. thick.
 PO—Coalport, Pa.; SP—Same; CTY—Clearfield; RR—P. R. R.
 MS—J. C. Gill, Coalport, Pa.
 S of H—Mules, rope and electric locos. Track gage 36 in.
 S of M—Hand and shortwall machs.
 PP—Power purchased, Transformer 2200—220 volts A. C.
 EMP—70. Last years tonnage 25,000.
 SIZES SHIPT—Run of Mine.
 NOTE—Formerly operated by the Victor Coal Company.

VICTORIA COAL COMPANY.

General Office, 341 Oliver Bldg., Pittsburgh, Pa.
 PR—Jas. G. Marks, Pittsburgh, Pa.
 TR—Fred Stover, Butler, Pa.
 GM—Fred Stover, Butler, Pa.
 GS—Fred Stover, Butler, Pa.
 PA—Fred Stover, Butler, Pa.
 EM—W. P. Vance, Butler, Pa.
 EE—W. E. Stover, R. D. No. 1, Butler, Pa.
 SCO—Imperial Supply Co., Buyer, Fred Stover, Butler, Pa.
 SA—Chas. S. Bygate Co., Pittsburgh, Pa.
 Victoria No. 2 Mine; Drift; Brockville Seam, 42 in. thick.
 PO—Butler, Pa.; SP—Same; CTY—Butler; RR—R. & I. E.
 MS—W. E. Stover, R. D. No. 1, Butler, Pa.
 S of H—1 storage battery loco.
 S of M—2 shortwall machs.
 PP—3 pumps.
 EMP—29. Last years tonnage 30,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

VICTORIA COAL MINING CO.

General Office, 11 Broadway, New York, N. Y.
 PR—W. J. Wittenberg, New York, N. Y.
 VP—A. M. Wittenberg, New York, N. Y.
 TR—E. J. MacNamara, New York, N. Y.
 GM—Hugh Archibald, Philadelphia, Pa.
 PA—B. Rich, Philadelphia, Pa.
 SCO—Pennsylvania Mercantile Co., Buyer, L. D. Revis, Hawk Run, Pa.
 SA—W. J. Wittenberg, New York, N. Y.
 Aeme No. 6 Mine; Drift; "B" Seam, 42 inches thick.
 PO—Philadelphia, Pa.; SP—Hawk Run, Pa.; CTY—Clearfield; RR—N. Y. C.
 MS—John Ball, Morrisdale, Pa.
 S of H—4 trolley pole type locos.
 S of M—1 shortwall machs.
 PP—Purchase power, 500 volts D. C., 3 pumps.

EMP—40. Last years tonnage 42,500.
 SIZES SHIPT—Run of Mine.

VICTORY COAL COMPANY.

General Office, St. Marys, Pa.
 TR—P. B. McBride, St. Marys, Pa.
 GM—F. D. Lambert, St. Marys, Pa.
 GS—Jos. A. Fritz, St. Marys, Pa.
 PA—J. E. Dietzman, St. Marys, Pa.
 SA—Northern Coal Mug. Co., St. Marys, Pa.

Victory Nos. 1 and 2 Mines; Drift; Freeport & Kittanning Seam, 40-36 in. thick.
 PO—Brady Camp, Pa.; SP—Same; CTY—Elk; RR—P. S. & N.
 S of H—Mules and rope. Track gage 30 in.
 S of M—Hand.
 EMP—20. Daily tonnage 125.
 SIZES SHIPT—Run of Mine.

VICTORY COAL MINING COMPANY

General Office, Ellicott Square, Buffalo, N. Y.
 PR—J. F. Morlock, Ellicott Square, Buffalo, N. Y.

Victory Mine; Drift; Kittanning Seam; 36 inches thick.
 PO—Clarion, Pa.; SP—Same; CTY—Clarion; RR—E. P. & C.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 EMP—30 to 40. Last fiscal year output, 30,000 tons.
 SIZES SHIPT—Run of Mine.

VINTON COLLIER CO.

General Office, 50 East Forty-second St., New York, N. Y.
 GS—Otto Hoffman, Vintondale, Pa.
 SCO—Vintondale Supply Co., Vintondale, Pa.

Vinton No. 1 Mine; Drift; "B" or Miller Seam, 42 in. thick.
 PO—Vintondale, Pa.; SP—Same; CTY—Cambria; RR—Penna.
 S of H—Rope and 7 trolley pole type locos. Track gage, 36 in.
 S of M—8 shortwall machs.
 PP—4 water tube boilers, 2000 H. P., 2375 Kva. and 250 K. W. gen. units, 250 volts A. C. and D. C., 14 pumps.
 EMP—189. Last years tonnage 186,386.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens, Picking Tables, Washeries.

Vinton No. 6 Mine; Slope; "B" or Miller Seam, 42 in. thick.
 PO—Vintondale, Pa.; SP—Same; CTY—Cambria; RR—Penna., R. R. & P.
 S of H—9 trolley pole type locos. Track gage, 36 in.
 S of M—9 shortwall machs.
 PP—Power purchased, transformer 2300 to 250 volts A. C., M. G. sets, 2 237 Kva. and 4 250 K. W., 250 volts A. C. and D. C., 4 water tube boilers, 2000 H. P., 26 pumps.
 EMP—450. Last years tonnage 383,080.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

Vinton No. 16 Mine; Drift; "B" or Miller Seam, 30 in. thick.
 PO—Claghorn, Pa.; SP—Same; CTY—Indiana; RR—Penna., R. R. & P.
 MS—A. Abrams, Claghorn, Pa.
 S of H—2 trolley pole type locos. Track gage, 36 in.
 S of M—3 shortwall machs.
 PP—Power purchased, transformer 2300 to 250 volts A. C., M. G. set, 250 volts D. C., 3 pumps.
 EMP—123. Last years tonnage 70,741.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

VIRGINVILLE COAL COMPANY

General Office, Chamber of Commerce Bldg., Pittsburgh, Pa.
 PR—J. E. Stewart, Pittsburgh, Pa.
 VP—Thos. B. Murray, West Newton, Pa.
 TR—D. C. Eaton, Pittsburgh, Pa.
 GM—J. E. Stewart, Pittsburgh, Pa.
 GS—H. H. Kallaway, Pittsburgh, Pa.
 PA—N. A. Barnhart, Pittsburgh, Pa.
 CE—M. D. Gibson, Pittsburgh, Pa.
 SA—Bertha Coal Co., Pittsburgh, Pa.

Helen Mine; Slope; Pittsburgh Seam, 84 in. thick.
 PO—Smithton, Pa.; SP—Same; CTY—Westmoreland; RR—R. & O., Pittsburgh Div.
 MS—Robert Howard, Pittsburgh, Pa.
 S of H—Mules. Track gage, 42 in.
 S of M—3 shortwall machs.
 PP—Power purchased 1—125 K. W. M. G. sets, 250 volts D. C., 8 pumps.
 EMP—32. Last years tonnage 55,261.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Rock.
 PREP. EQUIPT—Gravity Screens.

VOGEL COAL CO.

OWNER—J. H. Vogel, Cresson, Pa.

Vogel Mine; Drift.
 SP—Bakerstown, Pa.; CTY—Cambria; RR—P. R. R.

MS—Geo. Moore, Bakerstown, Pa.

EMP—18. Daily tonnage 80.

VOGLEY COAL CO.

General Office, Butler, Pa.
 TR—Theodore Vogley, Butler, Pa.
 GM—Theo. Vogley, Butler, Pa.
 GS—Harry Gould, 106 Zeigler Ave., Butler, Pa.
 PA—Theo. Vogley, Butler, Pa.

Vogley Mine; Drift; Upper Freeport Seam, 40 to 42 in. thick.
 PO—Butler, Pa.; SP—Same; CTY—Butler; RR—P. R. R.
 S of H—2 trolley pole type locos. Track gage, 30 in.
 S of M—2 shortwall machs.
 TP—1 gen. unit, 250 volts D. C., 4 pumps. Buy power.
 EMP—35. Last years tonnage 28,119.
 SIZES SHIPT—Run of Mine, Slack, Lump.

WALTON COAL COMPANY

General Office, Indiana, Pa.
 TR—C. K. Horner, Indiana, Pa.
 GM—C. K. Horner, Indiana, Pa.
 GS—C. K. Horner, Indiana, Pa.
 PA—C. K. Horner, Indiana, Pa.
 CE—Horner Jones Eng. Co., Indiana, Pa.
 SA—C. K. Horner, Indiana, Pa.

Brewster No. 2 Mine; Drift; Upper Kittanning Seam, 30 in. thick.
 PO—Evans City, Pa.; SP—Same; CTY—Butler; RR—B. & P. and R. & O.
 S of H—Mules. Track gage 36 in.
 S of M—1 shortwall mach.
 PP—Power purchased, Transformer 1300—440 volts A. C., 1 pump.
 EMP—18.
 SIZES SHIPT—Run of Mine.

WALLWORK COAL COMPANY

General Office, Summerville, Pa.
 PR—Samuel Wallwork, Summerville, Pa.
 TR—J. C. Wallwork, Summerville, Pa.
 GM—A. C. Wallwork, Mosgrove, Pa.
 PA—A. C. Wallwork, Mosgrove, Pa.
 CE—Herbert & Henderson, Kittanning, Pa.

EE—Elmer Ringbloom, Mosgrove, Pa.
 SCO—Mosgrove Supply Co., Buyer, E. R. Smith, Mosgrove, Pa.
 SA—Samuel Wallwork, Summerville, Pa.

Panecost Mine; Drift; Upper Kittanning Seam, 34 inches thick.
 PO—Reynoldsville, R. D. No. 1, Pa.; SP—Falls Creek, Pa.; CTY—Jefferson; RR—Penna.
 MS—Samuel Wallwork, Jr., Reynoldsville, Pa.
 SM—C. E. Kiel, Reynoldsville, Pa.
 S of H—Mules, 1 trolley pole type loco. Track gage 36 inches.
 S of M—9 shortwall machs.
 PP—1 fire tube boiler, 150 H. P., 75 K. W. gen. units, 250 volts D. C., 1 pump.
 EMP—60. Last fiscal year output, 45,600 tons.
 SIZES SHIPT—Run of Mine.

NOTE—Mosgrove Mine now being operated by the Wallwork Mining Co.

WALLWORK MINING CO.

General Office, Summerville, Pa.
 PR—Samuel Wallwork, Summerville, Pa.
 TR—J. C. Wallwork, Summerville, Pa.
 GM—A. C. Wallwork, Mosgrove, Pa.
 PA—A. C. Wallwork, Mosgrove, Pa.
 CE—Herbert & Henderson, Kittanning, Pa.
 EE—Elmer Ringbloom, Mosgrove, Pa.
 SCO—Mosgrove Supply Co., Buyer, E. R. Smith, Mosgrove, Pa.
 SA—Samuel Wallwork, Summerville, Pa.

Mosgrove Mine; Drift; Upper Freeport Seam, 47 in. thick.
 PO—Mosgrove, Pa.; SP—Same; CTY—Armstrong; RR—Penna.
 MS—A. C. Wallwork, Mosgrove, Pa.
 S of H—Mules, 2 trolley pole type locos. Track gage 36 in.
 S of M—4 shortwall machs.
 PP—2 fire tube boilers, 150 H. P., 125 K. W., M. G. Set, 250 volts D. C., 1 pump.
 EMP—90. Last years tonnage 76,500.
 SIZES SHIPT—Run of Mine.
 Note—Formerly operated by the Wallwork Coal Co.

WALTERS, ALVA M.

General Office, Upper Middletown, Pa.
 SCO—Address the Company, Buyer, Gwendolyn Walters, Upper Middletown, Pa.

Walters Mine; Drift; Hager Seam; 40 inches thick.
 PO—Upper Middletown, Pa.; SP—Waltersburg, Pa.; CTY—Fayette; RR—P. R. R.
 MS—Alva M. Walters, Upper Middletown, Pa.
 S of M—2 gasoline locos. Track gage 40 inches.
 S of M—Hand.
 EMP—10. Daily output, 50 tons.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Expect to put in screens.

WALTERS & McCAY.

PARTNERS—Alva M. Walters and John McCay, Upper Middletown, Pa.
GM—Alva M. Walters, Upper Middletown, Pa.
GS—Alva M. Walters, Upper Middletown, Pa.
PA—Alva M. Walters, Upper Middletown, Pa.

Donach Mine; Slope; Pittsburgh Seam, 108 in. thick.
PO—Upper Middletown, Pa.; SP—Waltersburg, Pa.; CTY—Fayette; RR—P. & L. E.

S of H—Mules, Track gage 42 in.
S of M—Hand.
EMP—8. Last years tonnage 1,138.
SIZES SHIPT—Run of Mine.

WALTERSBURG COKE CO.

General Office, Second National Bank Bldg., Uniontown, Pa.
PR—Wm. Allison, Uniontown, Pa.
VP—W. A. Stone, Uniontown, Pa.
TR—Wm. C. Black, Uniontown, Pa.
GM—Harry Boyd, Uniontown, Pa.
GS—Harry Boyd, Uniontown, Pa.
PA—Harry Boyd, Uniontown, Pa.
CE—Fayette Engineering Co., Uniontown, Pa.
EE—James Dunn, Uniontown, Pa.
SCO—Waltersburg Supply Co.; Buyer Harry E. Henshaw, Waltersburg, Pa.
SA—W. A. Stone & Co., Uniontown, Pa.

Edna Mine; Slope; Pgh. Seam, 6 to 9 ft. thick.
PO—Waltersburg, Pa.; SP—Same; CTY—Fayette; RR—P. & L. E.
MS—O. P. Stone, Waltersburg, Pa.
S of H—Mules and 3 elec. locos. Track gage 44 in.
S of M—Hand and 2 elec. machs.
PP—2 Return tubular boilers, total 100 H. P., gen. unit, 250 volts D. C., 3 pumps. Purchase power.
EMP—150. Last fiscal year output, 60,000 tons. Coke ovens, 160 Bee Hive.

WARNER-YOUCIOGHREY COAL CO.

General Office, First Nat'l Bank Bldg., Pittsburgh, Pa.
TRUSTEES—W. H. Warner Whitney Warner and H. A. Davis, Pittsburgh, Pa.
GM—H. A. Davis, Pittsburgh, Pa.
PA—J. R. Jones, Pittsburgh, Pa.
SCO—Maple Supply Co. (Rider Mine Store), Buyer, H. J. Hixenbaugh, Charleroi, Pa.
SA—W. H. Warner & Co., Cleveland, O.

Rider Mine; Slope; Pittsburgh Seam, 72 in. thick.
PO—Charleroi, Pa.; SP—Same; CTY—Washington; RR—P. & L. E.
MS—John Brewer, Charleroi, Pa.
S of H—Mules, rope. Track gage 44 in.
S of M—8 shortwall machs.
PP—Power purchased. Transformer 23,000-2200 M. G. sets, 250 volts D. C., 4 water tube boilers, 200 H. P., 6 pumps.
EMP—150. Daily tonnage 1,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

Maxwell Mine; Drift; Pittsburgh Seam, 72 inches thick.
PO—Charleroi, Pa.; SP—Same; CTY—Washington; RR—P. & L. E.
MS—John Brewer, Charleroi, Pa.
S of H—Mules, trolley pole type locos. Track gage 44 inches.
S of M—1 chain breast type machs.
PP—Power purchased. Transformer 23,000-2200 volts A. C., M. G. sets, 250 volts D. C., 4 pumps.
EMP—100. Daily output, 400 tons.
SIZES SHIPT—Run of Mine.

Leonard Mine; Slope; Pittsburgh Seam, 84 inches thick.
PO—Fayette City, Pa.; SP—Same; CTY—Fayette; RR—P. & L. E.
MS—John Brewer, Charleroi, Pa.
S of H—Mules, Track gage 44 inches.
S of M—4 chain breast type machs.
PP—Power purchased. Transformer 23,000-2200 volts A. C., M. G. sets, 250 volts D. C., 4 pumps.
EMP—60. Daily tonnage 300.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

WARRICK COAL CO.

PR—G. W. Warrick, Indian Creek, Pa.
TR—C. S. Pare, Indian Creek, Pa.
GM—H. T. Spiker, Indian Creek, Pa.
GS—H. T. Spiker, Indian Creek, Pa.
PA—C. S. Pare, Indian Creek, Pa.
CE—Q. C. Jones, Indian Creek, Pa.
MM—Ollie Witt, Indian Creek, Pa.
Sales Agent, C. S. Pare, Indian Creek, Pa.

Warrick Mine; Slope; Kittanning Seam, 52 in. thick.
PO—Indian Creek, Pa. SP—Same. CTY—Fayette. RR—P. & L. E.
S of H—Mules and rope. Track gage 36 in.

S of M—Hand.
EMP—15. Last fiscal year output, 10,000 tons.
SIZES SHIPT—Run of Mine.

WASHINGTON COAL & COKE CO.

General Office, Dawson, Pa.
PR—M. M. Cochran, Uniontown, Pa.
VP—M. E. Strawn, Dawson, Pa.
TR—J. H. Price, Dawson, Pa.
GM—H. M. McDonald, Dawson, Pa.
GS—W. E. Lahn, Star Junction, Pa.
EM—T. M. Zimmerman, Dawson, Pa.
SCO—Star Supply Co., Ltd.; Buyer, J. B. Knox, Star Junction, Pa.
SA—N. P. Hyndman, First National Bank Bldg., Pittsburgh, Pa.

Washington No. 1 Mine; Shaft; Pittsburgh Seam, 96 in. thick.
PO—Star Junction, Pa.; SP—Same; CTY—Fayette; RR—W. R. P. & L. E.
S of H—Mules, rope and 8 trolley pole type locos. Track gage, 50 in.
S of M—6 comp. air punchers and 6 chain breast type machs.
PP—5 water tube boilers, 1550 H. P., 4 fire tube boilers, 500 H. P., 200 K. W. gen. units, 2300 volts D. C., 14 pumps.
EMP—602. Last years tonnage 457,358.
Coke Ovens 500 Bee Hive.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

Washington No. 2 Mine; Slope; Pittsburgh Seam, 96 in. thick.
PO—Star Junction, Pa.; SP—Same; CTY—Fayette; RR—W. R. P. & L. E.
S of H—Mules, rope and 6 trolley pole type locos. Track gage, 50 in.
S of M—3 comp. air punchers and 5 chain breast type machs.
PP—4 water tube boilers, 350 H. P., total 1400 H. P., gen. units, 750 K. W., 600 volts D. C., 25 pumps.
EMP—420. Last years tonnage 530,105.
Coke Ovens 500 Bee Hive.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

WASHINGTON GAS COAL COMPANY

General Office, 804 First National Bank Bldg., Pittsburgh, Pa.
PR—H. A. Davis, Pittsburgh, Pa.
VP—J. H. Billman, Jr., Pittsburgh, Pa.
TR—H. A. Davis, Pittsburgh, Pa.
GM—H. A. Davis, Pittsburgh, Pa.
GS—W. P. Pilkington, Pittsburgh, Pa.
PA—J. R. Jones, Pittsburgh, Pa.
CE—Baton & Elliott, Pittsburgh, Pa.

Tyler Mine; Shaft; Pittsburgh Seam, 60 inches thick.
PO—Washington, Pa.; CTY—Washington.
MS—F. J. Connihan, Washington, Pa.
S of H—Mules, 1-6-ton trolley type loco. Track gage 42 in.
S of M—3 shortwall and 1 breast machs.
PP—Power purchased. Transformer 23,000 to 2300 volts A. C., M. G. sets, 550 volts D. C., 7 pumps.
EMP—99. Last years tonnage 58,045.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

WATKINS COAL COMPANY.

General Office, 366 Madison Ave., New York, N. Y.
PR—C. Law Watkins, Cresson, Pa.
VP—J. M. Townsend, Jr., New York, N. Y.
TR—J. C. Thornton, New York, N. Y.
GS—J. G. Nicholson, Barnesboro, Pa.
PA—J. G. Nicholson, Barnesboro, Pa.
FM—Charles E. Schleicher, Spangler, Pa.
EE—Ernest Stahl, Jr., New York, N. Y.
Additional Information on Pages 756, 757

Watkins Nos. 1 and 2 Mines; Drift; D. and E. Seams, 42 in. thick.
PO—Barneshoro, Pa. SP—Same. CTY—Cambria. RR—Penna. Walnut Run Branch, Cresson Div.
S of H—4 10-ton and 2 5-ton motors.
S of M—Hand, 3 elec. and 4 punch machs.
PP—4 boilers, total 460 H. P., 1-200 K. W. rotary converter, 1-200 K. W. generator, 250 volts D. C., 5 pumps.
EMP—183. Daily tonnage 650.
SIZES SHIPT—Run of Mine.

WATKINS COAL MINING COMPANY

General Office, 366 Madison Ave., New York, N. Y.
PR—C. Law Watkins, Cresson, Pa.
VP—J. M. Townsend, Jr., New York, N. Y.
TR—J. C. Thornton, New York, N. Y.
GS—J. G. Nicholson, Barnesboro, Pa.
PA—J. G. Nicholson, Barnesboro, Pa.
FM—Chas. E. Schleicher, Spangler, Pa.
EE—Ernest Stahl, Jr., 120 Broadway, New York.
SA—Watkins Coal Co., 366 Madison Ave., New York, N. Y.

Watkins No. 3 Mine; Drift; "B" Seam, 42 inches thick.
PO—Barneshoro, Pa.; SP—Spangler, Pa.; CTY—Cambria; RR—Penna.

S of H—1 15-ton, 1 10-ton and 2 4-ton locos. Track gage 36 in.
S of M—Hand, 3 elec. machs.
PP—Purchase power 2,200 K. W. rotary converters, 9 pump.
EMP—194. Daily tonnage 775.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Screens.

WATSON COAL COMPANY.

General Office, Saltsburg, Pa.
PR—E. M. Graft, Blairsville, Pa.
TR—James P. Watson, Saltsburg, Pa.
GM—James P. Watson, " "
GS—Charles S. Ray, " "
EM—Albert Smith, " "
PA—W. G. Fletcher, Blairsville, Pa.
EE—Banks Peddicord, Saltsburg, Pa.
SCO—Kiskimincus Supply Co., Buyer, W. G. Fletcher, Blairsville, Pa.
SA—Graft Bros., Blairsville, Pa.

Watson No. 1 and 2 Mines; Drift; E. Upper Freeport Seam, 39 to 48 in. thick.
PO—Mooswen, Pa.; SP—White, Pa.; CTY—Indiana; RR—P. & L. E.
MS—M. S. Maguire, Mooswen, Pa.
SM—Wm. Wagonman, Saltsburg, Pa.
S of H—Elec. locos. Track gage 39 in.
S of M—11 longwall machs. and 14 elec. and chain breast machs.
PP—3 water tube boilers, 450 H. P., 1 250 K. W., 2 100 K. W., gen. units, 250 volts A. C., 6 pumps.
EMP—150. Daily output, 400 tons.
SIZES SHIPT—Run of Mine.
Old information.

WAVERLY COAL & COKE CO.

General Office, 2212 Oliver Bldg., Pgh., Pa.
PR—E. M. Love, Pittsburgh, Pa.
TR—S. C. Cook, Washington, Pa.
EM—J. M. Rayburn, Home Bldg., Pittsburgh, Pa.
SA—S. C. Cook, 2212 Oliver Bldg., Pittsburgh, Pa.

Waverly Mine, Drift, Pgh. Seam, 64 in. thick.
PO—Penova, Pa.; SP—Same; Prepay; CTY—Washington; RR—P. & W. Va.
MS—Harry Chappel, Penova, Pa.
S of H—Mules and trolley pole type locos. Track gage 42 in.
S of M—3 chain breast type and 5 shortwall machs.
PP—Power purchased M. G. Sets, 150 volts.
EMP—160. Last years tonnage 125,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Gravity Screens.

WAYCHOFF COAL COMPANY.

Out of business.
WEAVER, FRANK
Out of Business.

WEAVER, JOHN W.

PR—John W. Weaver, Smithfield, Pa.
TR—John W. Weaver, " "
GM—John W. Weaver, Smithfield, Pa.
GS—George Whetzel, Smithfield, Pa.
PA—L. M. Weaver, " "
SA—T. P. Weller, Smithfield, Pa.

Lillian Mine; Drift; Pittsburgh Seam, 84 to 144 in. thick.
PO—Smithfield, Pa.; SP—Same; CTY—Fayette; RR—B. & O.
S of H—Mule. Track gauge 44½ in.
S of M—Hand.
PP—2 pumps.
EMP—14. Last years tonnage 9,000. 80 Bee Hive Coke Ovens.
SIZES SHIPT—Run of Mine.
Old information.

WEAVER, WM. B.

PR—Wm. B. Weaver, California, Pa.
TR—Wm. B. Weaver, California, Pa.
GM—Wm. B. Weaver, California, Pa.
PA—Wm. B. Weaver, California, Pa.
GS—W. J. Weaver, California, Pa.

Weaver Mine; Drift; Pittsburgh Seam, 84 in. thick.
PO—California, Pa.; SP—Same; CTY—Washington; RR—Penna., P. V. & C. Mon. Div.
S of H—Mules. Track gage 38 in.
S of M—Hand.
Daily tonnage 100.
SIZES SHIPT—Run of Mine.

WEBER COAL COMPANY.

PR—Wm. Weber, Howard, Pa.
TR—Matthew Rogers, Jr., Howard, Pa.
Weber Mine; Seam, 48 in. thick.
PO—Not yet established. SP—Mitchel, Pa. CTY—Clearfield. RR—N. Y. C.
S of H—Mules.
S of M—Hand.
Operations under development.
Old information.

WEINMAN BROTHERS.

GM—J. Weinman, Wilkingsburg, Pa.
GS—J. Weinman, Wilkingsburg, Pa.
SA—J. Weinman, " "

Weinman's Mine, Drift; "B" Seam, 6 ft. thick.
PO—Wilkingsburg, Pa. SP—Same. CTY—Allegheny. RR—P. & R. R.
S of H—Mules. Track gage 40 in.
S of M—Hand.
SIZES SHIPT—Run of Mine.

WELLS, LOUIS M.

General Office, Myersdale, Pa.
OWNER—Louis M. Wells, Myersdale, Pa.
Wells Mine; Drift; Brookville and B. Seams, 12 to 18 inches thick.
PO—Fayette, Pa.; SP—W. R. P. & L. E.; RR—P. & L. E.
MS—Louis M. Wells, Myersdale, Pa.
S of H—Mules, rope. Track gage 36 inches.
S of M—Shortwall machs.
EMP—6. Daily tonnage 75.
SIZES SHIPT—Run of Mine.
Note—Now in process of development.

WELSH RUN COAL CO.

General Office, Brookville, Pa.
PR—E. W. Welford, Brookville, Pa.
VP—Edward Carmalt, Brookville, Pa.
TR—Glenn Shaffer, Brookville, Pa.
GM—Edward A. Carmalt, Brookville, Pa.
PA—Edward A. Carmalt, Brookville, Pa.
CE—Frank H. Hewitt, Brookville, Pa.
SA—Edward A. Carmalt, Brookville, Pa.

Welsh Run Mine; Drift; Clarion Seam, 42 in. thick.
PO—Brookville, Pa.; SP—Summersville, Pa.; CTY—Jefferson; RR—N. Y. C.
S of H—Mules, rope and elec. loco. Track gage 36 in.
S of M—Chain breast and shortwall mach.
PP—1 200 H. P. water tube boiler, gen. unit, 125 volts D. C.
EMP—30. Last years tonnage 25,000.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Bar Screens, Picking Tables.

WENDELL COAL MINING COMPANY

General Office, Altoona Trust Bldg., Altoona, Pa.
PR—W. H. Macurda, 25 Beaver St., New York, N. Y.
VP—T. C. Pray, Boston, Mass.
TR—W. E. Macurda, 92 State St., Boston, Mass.
GM—L. M. Ryan, Altoona, Pa.
GS—L. M. Ryan, Altoona, Pa.
PA—L. M. Ryan, Altoona, Pa.
CE—J. S. Silliman & Co., Altoona, Pa.
SA—Garfield & Proctor Coal Co., New York, N. Y., and Boston, Mass.

Chesterfield No. 1 Mine; Drift; "B" Seam, 35 to 40 inches thick.
PO—Utahville, Pa.; SP—Smoke Run, Pa.; CTY—Clearfield; RR—Penna.
MS—A. T. Marshall, Berarica, Pa.
S of H—1 6-ton trolley pole type loco. Track gage 36 inches.
S of M—2 shortwall machs.
PP—Power purchased. Transformer 2,200 to 440 volts A. C., rotary converters, 250 volts D. C., 1 pump.
EMP—25. Last years tonnage 25,000.
SIZES SHIPT—Run of Mine.

WERDER COAL COMPANY.

General Office, Box 89, New Florence, Pa.
PR—G. J. Werder, New Florence, Pa.
VP—A. E. Werder, New Florence, Pa.
TR—H. J. Werder, New Florence, Pa.
GM—H. J. Werder, New Florence, Pa.
GS—H. J. Werder, New Florence, Pa.
PA—H. J. Werder, New Florence, Pa.
CE—Borner-Jones Co., Indiana, Pa.
EE—H. F. Randolph, Pittsburgh, Pa.
SCO—Werder Supply Co.; Buyer, H. J. Werder, New Florence, Pa.
SA—R. A. Mourvaring, Philadelphia, Pa.

Nos 1 and 2 Mines; Drift; Upper and Middle Kittanning Seams, 32-37 in. thick.
PO—New Florence, Pa.; SP—Same; CTY—Westmoreland; RR—Penna.
MS—O. E. Werder, New Florence, Pa.
S of H—Gasoline and storage battery locos. Track gage 42 in.
S of M—Hand and mach.
PP—220 volts D. C.
EMP—20. Last years tonnage 5,000.
SIZES SHIPT—Run of Mine.

WEST BRANCH COAL COMPANY

General Office, St. Marys, Pa.
PR—E. C. Gerber, St. Marys, Pa.
VP—F. E. May, St. Marys, Pa.
GM—F. E. May, St. Marys, Pa.
PA—F. E. May, St. Marys, Pa.
SA—Jackson & Harrigan, St. Marys, Pa.
Benzinger Mine; Drift; Brookville A Seam, 48 inches thick.
PO—St. Marys, Pa.; SP—Same; CTY—Elk; RR—Penna.
MS—Peter Rurt, St. Marys, Pa.
S of H—Mules. Track gage 30 inches.
S of M—Hand.
EMP—26. Last years tonnage 26,274.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.
Note—Successors to Benzinger Coal Co.

WEST CARROLL COAL MINING CO.

General Office, Ebensburg, Pa.
 TR—E. M. Burns, Ebensburg, Pa.
 GS—W. H. Smith, Ebensburg, Pa.
 PA—W. H. Smith, Ebensburg, Pa.
 SA—E. M. Burns, Ebensburg, Pa.

West Carroll No. 2 Mine; Drift; C Prime Seam, 44 inches thick.
 PO—Ebensburg, Pa.; SP—Carrolltown Road, Pa.; CTY—Cambria; RR—N. Y. C.

S of H—Storage battery loco. Track gage 36 inches.

S of M—Shortwall machs.
 PP—Power purchased. Transformer 2300 to 220 volts A. C., rotary converters, 220 volts A. C.

EMP—60. Last years tonnage 55,000
 SIZES SHIPT—Run of Mine.

NOTE—Formerly operated by Milson Coal Company.

WEST KITTANNING COAL COMPANY

Now West Kittanning Mining Co.

WEST KITTANNING MINING CO.

General Office, Kittanning, Pa.
 TR—C. H. Ferpe, Kittanning, Pa.
 GM—C. H. Ferpe, Kittanning, Pa.
 EM—H. H. H. Henderson, Kittanning, Pa.

SA—Geo. E. Warren Co., Boston, Mass.

West Kittanning Mine; Slope; Lower Kittanning Seam, 44 in. thick.

PO—Kittanning, Pa.; SP—Same; CTY—Armstrong; RR—P. & S.

MS—John Laugstrom, Kittanning, Pa.
 S of H—Mules, rope, track gage 36 in.

S of M—3 shortwall machs.
 PP—Power purchased. Transformer 2300 volts A. C., 2 pumps.

EMP—70. Daily tonnage 300.
 SIZES SHIPT—Run of Mine.
 Successor to West Kittanning Coal Co.

WEST LEECHBURG STEEL CO.

General Office, Farmers Bank Bldg., Pittsburgh, Pa.

PR—James Lippincott, Pittsburgh, Pa.
 VP—J. L. Kirkpatrick, Pittsburgh, Pa.
 TR—D. M. Campbell.

GM—James Lippincott, Pittsburgh, Pa.
 GS—C. S. Todd, Leechburg, Pa.
 PA—A. S. Gelger Leechburg, Pa.

West Leechburg Mine; Drift; Upper Freeport Seam, 48 inches thick.

PO—Leechburg, Pa.; SP—Same; CTY—Armstrong; RR—Penna.

MS—H. W. McKallip, Leechburg, Pa.
 S of H—Mules. Track gage 41 inches.

S of M—3 elec. machs.
 PP—Power supplied by steel plant.
 EMP—50. Last years tonnage 51,500.
 SIZES SHIPT—Run of Mine.
 NOTE—Consumes entire output.

WEST OVERTON COAL COMPANY.

General Office, Scottdale, Pa.
 PR—E. Ralph Loucks, Scottdale, Pa.

TR—W. F. Stauffer, Scottdale, Pa.
 GM—W. F. Stauffer, Scottdale, Pa.
 GS—Chas. A. Colborn, Scottdale, Pa.

PA—Chas. A. Colborn, Scottdale, Pa.

Overtown Nos. 1 and 2 Mines; Drift; Pittsburgh Seam, 108 in. thick.

PO—Scottdale, Pa.; SP—Same; CTY—Westmoreland; RR—P. R. R., Overton Br.

S of H—Horses.
 S of M—Hand.
 EMP—8. Daily tonnage 50.
 SIZES SHIPT—Run of Mine.

WEST PENN BY-PRODUCT COAL CO.

General Office, Pittsburgh, Pa.
 PR—H. A. Davis, Pittsburgh, Pa.

VP—J. H. Hillman, Pittsburgh, Pa.
 TR—John D. Hitchman, Mt. Pleasant, Pa.

GM—H. A. Davis, Pittsburgh, Pa.
 GS—W. P. Pilkington, Pittsburgh, Pa.

PA—J. R. Jones, Pittsburgh, Pa.
 EM—J. L. Mountain, Pittsburgh, Pa.
 SCO—Merritt Supply Co. Buyer, A. G. Page, Mt. Pleasant, Pa.

Marion Mine; Drift; Pittsburgh Seam, 40 in. thick.

PO—Mt. Pleasant, Pa.; SP—Fet., Udell, Pa.; Ex., Trauger, a.; CTY—Westmoreland; RR—Penna.

MS—A. G. Page, Mt. Pleasant, Pa.
 S of H—Mules and trolley pole type locos.

Track gage 42 in.
 S of M—Hand.
 PP—Power purchased, 750 volts D. C., 4 pumps.

EMP—62. Last years tonnage 30,632.
 Coke Ovens, Bee Hive 33.
 SIZES SHIPT—Run of Mine.
 Note—Successors to West Penn Coke Co.

WEST PENN COAL MINING COMPANY.

Now Freeport Fuel Co.

WEST PENN COKE COMPANY.

Now the West Penn By-Product Coal Co.

WEST PENN FUEL CO.

General Office, Penna. Bldg., Philadelphia, Pa.

Penn. Fuel Mine.
 PO—Olivette, Pa. No report

WEST PENN MINING COMPANY.

General Office, Leechburg, Pa.
 PR—C. H. McKee, Pittsburgh, Pa.
 TR—L. W. Hicks, Leechburg, Pa.
 GM—L. W. Hicks, Leechburg, Pa.
 GS—E. A. Watters, Leechburg, Pa.
 PA—D. L. Mahor, Leechburg, Pa.
 EM—S. E. Mognet, Leechburg, Pa.
 EE—G. H. Ritchie, Leechburg, Pa.

West Penn Mine; Drift; Upper Freeport Seam, 42 in. thick.

PO—Leechburg, Pa.; SP—Same; CTY—Westmoreland; RR—Penna.

MS—Geo. Faecmyer, Leechburg, Pa.
 S of H—Trolley pole type locos. Track gage, 39 in.

S of M—4 elec. chain machs.
 PP—Power purchased, 3 pumps.

EMP—35. Last fiscal year output, 40,160 tons.
 SIZES SHIPT—Run of Mine.

WEST POINT MARION COAL WORKS.

General Office, Dilliner, Pa.
 PR—Asa M. Sterling, Dilliner, Pa.

TR—John B. Moore, Pt. Marion, Pa.
 GM—Asa M. Sterling, Pt. Marion, Pa.
 GS—John B. Moore, Pt. Marion, Pa.

PA—Asa M. Sterling, Pt. Marion, Pa.
 EM—Fred L. Baker, Dilliner, Pa.

SCO—Walnut Hill Supply Co., Guyer, A. W. Evans, Pt. Marion, Pa.

SA—A. R. Hamilton & Co., Pittsburgh, Pa.

Walnut Hill Mine; Drift; Pittsburgh Seam, 72 in. thick.

PO—Dilliner, Pa.; SP—West Pt. Marion, Pa.; CTY—Greene; RR—Mon.

S of H—Mules and gasoline locos. Track gage, 42 in.

S of M—2 shortwall machs.
 PP—Power purchased. Transformer 6600—220 volts. A. C., 4 pumps.

EMP—80. Last years tonnage 87,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Gravity Screens.

WEST TARENTUM FUEL COMPANY

General Office, Freeport, Pa.
 PR—W. A. Isaman, Freeport, Pa.

VP—W. A. Isaman, Tarentum, Pa.
 TR—W. A. Isaman, Tarentum, Pa.

GM—W. A. Isaman, Tarentum, Pa.
 GS—W. A. Isaman, Tarentum, Pa.

PA—W. A. Isaman, Tarentum, Pa.
 EM—D. E. Taylor, Freeport, Pa.

EE—John Ferguson, Apollo, Pa.
 SA—H. Robinson, 609 Main St., Sharpsburg, Pa.

Peterson Mine; Drift; Upper Freeport Seam, 48 inches thick.

PO—Tarentum, Pa.; SP—Same; CTY—Allegheny; RR—Penna.

MS—Daniel Burtoft, Tarentum, Pa.
 S of H—Rope. Track gage 44 inches.

S of M—Shortwall machs.
 PP—Power purchased. M. G. sets, 500 volts D. C., 2 pumps.

EMP—120. Daily output, 500 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Picking Tables, Loading Rooms.

WESTMORELAND COAL COMPANY

General Office, 224 South Third St., Philadelphia, Pa.

PR—S. Pemberton Hutchinson, Philadelphia, Pa.

VP—Geo. McCall, Philadelphia, Pa.
 TR—Herman Roll, Philadelphia, Pa.

GM—A. P. Cameron, Irwin, Pa.
 PA—H. R. Yeasley, Philadelphia, Pa.

Genl Sales Mgr.—G. B. Seyms, Philadelphia, Pa.

Additional Information on Page 755

Export Nos. 1 and 2 Mines; Drift; Pittsburgh Seam, 78 in. thick.

PO—Export, Pa.; SP—Same; CTY—Westmoreland; RR—Penna., Manor Branch.

S of H—Mules, trolley pole type loco. Track gage 40 in.

S of M—11 shortwall machs.
 PP—10 return tubular boilers, total 1,400 H. P., 4 gen. units, 12 pumps.

Last years tonnage 288,991.
 SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Bar Screens.

Denmark Mine; Slope; Pittsburgh Seam, 78 in. thick.

PO—Claridge, Pa.; SP—Same; CTY—Westmoreland; RR—Penna., Manor Branch.

S of H—Mules, trolley pole type loco. Track gage 40 in.

S of M—2 chain breast type and 6 short-wall machs.

PP—2 water tube boilers, total 300 H. P., gen. units, 3 pumps.

Last years tonnage 163,574.
 SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Shaker Screens.
 Note—New Mine.

Biddle Mine; Shaft; Pittsburgh Seam, 78 in. thick.

PO—Irwin, Pa.; SP—Same; CTY—Westmoreland; RR—Penna.

S of H—Mules and 3 trolley pole type locos.

S of M—5 chain breast type and 5 short-wall machs.

PP—10 water tube boilers, total 2,300 H. P., 6 gen. units, 7 pumps.

Last years tonnage 239,943.
 SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Bar Screens.

Penn Mine; Slope; Pittsburgh Seam, 78 in. thick.

PO—Irwin, Pa.; SP—Penna. Pa.; CTY—Westmoreland; RR—Penna.

S of H—Mules and 2 trolley pole type locos.

S of M—8 shortwall machs.
 PP—2 return tubular boilers, total 300 H. P., 1 gen. unit, 5 pumps.

Power from own central station.
 Last years tonnage 154,279.

SIZES SHIPT—Run of Mine, Lump, Slack.

PREP. EQUIPT—Bar Screens.

Adams Mine; Shaft; Pittsburgh Seam, 78 in. thick.

PO—Irwin, Pa.; SP—Same; CTY—Westmoreland; RR—Penna.

S of H—Mules and 3 trolley pole type locos.

S of M—4 shortwall machs.
 PP—6 water tube boilers, total 1,500 H. P., 3 gen. units, 8 pumps.

Last years tonnage 204,642.
 SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Bar Screens.

Criterion Mine; Shaft; Pittsburgh Seam, 78 in. thick.

PO—Ridgely, Pa.; SP—Same; CTY—Westmoreland; RR—Penna., Young Branch.

S of H—Mules and 4 elec. locos. Track gage 44 in.

S of M—12 comp. air machs.
 PP—9 return tub. boilers, total 1,350 H. P., 1 gen. unit, 2 air compressors, 5 pumps.

Last years tonnage 329,477.
 SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Bar Screens.

Marchand Mine; Slope; Pittsburgh Seam, 78 in. thick.

PO—Lower, Pa.; SP—Same; CTY—Westmoreland; RR—Penna., Young Branch.

S of H—Mules and 3 elec. locos. Track gage 40 in.

S of M—10 elec. machs.
 PP—6 water tube boilers, total 900 H. P., 2 gen. units, 2,200 volts D. C., 3 pumps.

Last years tonnage 210,472.
 SIZES SHIPT—Run of Mine, Slack, Lump.

Magie Mine; Slope; Pittsburgh Seam, 78 in. thick.

PO—Yukon, Pa.; SP—Same; CTY—Westmoreland; RR—Penna., Sewickley Branch.

S of H—Mules and rope, 4 elec. locos. Track gage 40 in.

S of M—15 elec. machs.
 PP—4 water tube boilers, total 1,200 H. P., 2 gen. units, 550 volts D. C., 4 pumps.

Last years tonnage 388,240.
 SIZES SHIPT—Run of Mine, Slack, Lump.

South Side Mine; Drift; Pittsburgh Seam, 78 in. thick.

PO—Irwin, Pa.; SP—Same; CTY—Westmoreland; RR—Penna.

S of H—Mules.
 S of M—Hand.

Last years tonnage 38,026.

WESTMORELAND-CONNELLSVILLE COAL & COKE CO.

General Office, 514 Frick Bldg., Pittsburgh, Pa.

PR—E. W. Mudge, Pittsburgh, Pa.

VP—C. B. Ferree, Pittsburgh, Pa.

TR—C. B. Ferree, Pittsburgh, Pa.

GM—O. G. Lechlitter, Pittsburgh, Pa.

GS—W. T. Reid, Denbo, Pa.

PA—W. S. Scott, Pittsburgh, Pa.

EE—J. M. Mull, Ligonier, Pa.

SCO—Fort Palmer Supply Co., Buyer, J. H. Fry, Ligonier, Pa.

Sales Agent—Edmond W. Mudge & Co., Pittsburgh, Pa.

Fort Palmer No. 1 Mine, Drift, Pgh Seam 6 to 8 ft. thick.

PO—Ligonier, Pa.; SP—Same; CTY—Westmoreland; RR—Ligonier Valley

MS—J. M. Mull, Ligonier, Pa.

S of H—Mules, trolley pole type and storage battery locos. Track gage, 42 in.

S of M—Hand.
 PP—2 fire tube boilers, 300 H. P., 1 200 K. W., 1 100 K. W. and 1 125 K. W. gen. units, 250 volts D. C., 5 pumps.

EMP—200. Last years tonnage 178,353.
 Coke Ovens, 160 Rectangular.

SIZES SHIPT—Run of Mine.

WESTMORELAND-FAYETTE COAL AND COKE COMPANY.

General Office, Greensburg, Pa.

PR—Morris L. Painter, Greensburg, Pa.

VP—C. H. Fog, Greensburg, Pa.

TR—H. S. Scheibler, Greensburg, Pa.

GM—H. S. Scheibler, Greensburg, Pa.

GS—A. A. Allan, Cheat Haven, Pa.

PA—H. S. Scheibler, Cheat Haven, Pa.

CE—C. H. Fog, Greensburg, Pa.

EM—R. G. Gill, Greensburg, Pa.

SCO—Superior Merc. Co. Buyer, Donald Laing, Cheat Haven, Pa.

SA—Cambria Westmoreland Coal & Coke Co., Greensburg, Pa.

Ada Mine; Drift; Pittsburgh Seam, 65 to 69 in. thick.

PO—Cheat Haven, Pa.; SP—Same; CTY—Fayette; RR—B. & O.

MS—A. A. Allen, Cheat Haven, Pa.

S of H—Mules, 2 storage battery locos. 1—6-ton trolley loco. Track gage 42 in.

S of M—2 shortwall machs.
 PP—1 pump. Purchase power.

EMP—60. Daily output, 350 tons.
 Coke ovens, 40 Bee Hive.

SIZES SHIPT—Run of Mine, Slack, Screen.

Robt Mine; Drift; Pittsburgh Seam, 60 to 90 in. thick.

PO—Beatty, Pa.; SP—Same; CTY—Westmoreland; RR—Penna.

MS—W. P. Conder, Latrobe, Pa.

S of H—Mules, rope, 2 gasoline locos. Track gage 42 inches.

S of M—Hand.
 EMP—50. Last years tonnage 68,118.

SIZES SHIPT—Run of Mine.

WESTMORELAND GAS COAL COMPANY

Now being operated by J. L. Kendall.

WHEELER MINING COMPANY

General Office, Mosgrove, Pa.

PR—J. S. Wheeler, Marion, S. C.

VP—J. S. Wheeler, Marion, S. C.

TR—Ben Record, Elmira, N. Y.

GM—Ben Record, Elmira, N. Y.

GS—Ben Record, Elmira, N. Y.

PA—Harry Record, Mosgrove, Pa.

EM—Herbert & Henderson, Kittanning, Pa.

Wheeler Mine; Drift; Limestone Seam, 48 in. thick.

PO—Mosgrove, Pa.; SP—Same; CTY—Armstrong; RR—P. & S.

S of H—Mules.

S of M—Hand.
 SIZES SHIPT—Run of Mine.

Old information.

WHITE OUGAN COAL CO.

General Office, Phillipsburg, Pa.

PR—Geo. R. Meek, Bellefonte, Pa.

TR—Jas. F. Dugan, Osceola Mills, Pa.

GM—F. K. White, Phillipsburg, Pa.

PA—F. K. White, Phillipsburg, Pa.

Columbia No. 2 Mine; Drift; "C" and "D" Seams, 30-32 in. thick.

PO—Phillipsburg, Pa.; SP—Osceola Mills, Pa.; CTY—Clearfield; RR—P. & S.

MS—Thos. Green, Osceola Mills, Pa.

S of H—Mules. Track gage, 36 in.

S of M—Hand.</

WHYEL COKE COMPANY.

General Office, Uniontown, Pa.
PR—Harry Whyel, Uniontown, Pa.
TR—George Whyel, " "
GM—Harry Whyel, " "
GS—J. A. Abraham, " "
PA—J. A. Abraham, " "
CE—J. A. Abraham, " "
EM—B. S. Boyd, " "
SCO—Sewickley Supply Co., Buyer, John A. Voder, Uniontown, Pa.
 Ellen No. 1 Mine exhausted.
PO—Whitney, Pa.; SP—Same; CTY—Westmoreland; RR—P. R. R. Unity Branch.
MS—G. R. Work, Whitney, Pa.
 S of H—Mules and 1 elec. loco. Track gage 42 in.
S of M—Hand.
PP—Purchase power.
EMP—60. Last fiscal year output, 35,000 tons. Coke ovens, 50 bee-hive.
 Yukon Mine; Drift; Pittsburgh Seam; 90 in. thick.
PO—Yukon, Pa.; SP—Same; CTY—Westmoreland; RR—P. R. R. Yukon Br.
MS—E. V. Leadbetter, Yukon, Pa.
 S of H—Mules and 1 elec. loco. Track gage 42 in.
S of M—0 elec. machs.
PP—1 air compressor, 250 volts D. C., 1 gen. unit, 3 pumps. Purchase power.
EMP—100. Last fiscal year output, 110,000. Coke ovens, 36 bee-hive.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens, Washeries.
 Klondike Mine; Drift; Pittsburgh Seam; 90 in. thick.
PO—Yukon, Pa.; SP—Same; CTY—Westmoreland; RR—P. R. R. Yukon Branch.
MS—O. W. Bovard, Yukon, Pa.
 S of H—Mules and 1 elec. loco. Track gage 42 in.
S of M—7 elec. machs.
PP—1 gen. unit, 250 volts D. C., 1 pump.
EMP—90. Last fiscal year output, 100,000 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.
 Oakridge Mine; Drift; Pittsburgh Seam; 90 in. thick.
PO—Yukon, Pa.; SP—Same; CTY—Westmoreland; RR—P. R. R.
MS—O. W. Bovard, Yukon, Pa.
SM—William McKean, Yukon, Pa.
 S of H—Mules and 1 elec. loco. Track gage 42 in.
S of M—2 elec. machs.
PP—1 gen. unit, 250 volts D. C. Purchase power.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.
 Thomas Mine; Drift; Pittsburgh Seam; 84 in. thick.
PO—R. D. Smithfield, Pa.; SP—Smiley, Pa.; CTY—Fayette; RR—P. R. R. B. & O.
MS—Walter Thomas, Uniontown, Pa.
 S of H—Mules and 2 steam locos.
S of M—Hand.
PP—220 volts A. C. Purchase power.
EMP—70. Last fiscal year output, 20,000 tons. Coke ovens, 40 bee-hive.
 Meadowbrook Mine now operated by Meadowbrook Fuel Co.

WHYEL, JOHN A. & CO.

Out of business.

WICK HAVEN COAL COMPANY

Now operated by the Wick Haven Fuel Co.

WICK HAVEN FUEL CO.

General Office, Wick Haven, Pa.
PR—A. M. Hall, Indianapolis, Ind.
SA—Pennsylvania Fuel Corp., Park Bldg., Pittsburgh, Pa.
 Wick Haven Mine; Drift; Redstone Seam, 59 in. thick.
PO—Banning, Pa.; SP—Same; CTY—Fayette; RR—B. & O., Rannings.
MS—O. W. Hall, Banning, Pa.
 S of H—Storage battery locos. Track gage 42 in.
S of M—3 shortwall machs.
PP—Power generated. Transformers.
EMP—50. Last years tonnage 75,000.
SIZES SHIPT—Run of Mine, Slack, Nut.
WIDDOWSON COAL MINING CO.
 General Office, Altoona, Pa.
PR—R. F. Nottley, Altoona, Pa.
GM—R. F. Nottley, Altoona, Pa.
GS—D. H. Williams, Dixonville, Pa.
PA—R. F. Nottley, Altoona, Pa.
 Widdowson No. 1 Mine; Drift; D Seam, 52 in. thick.
PO—Dixonville, Pa.; SP—Same; CTY—Indiana; RR—Cherry Tree & Dixonville.
 S of H—Mules. Track gage, 36 in.
S of M—Hand.
EMP—45. Last years tonnage 27,950.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.

WIDMAN COAL COMPANY.

Now Huber Street Coal Co.

WIDNOON COAL MINING CO.

General Office, Reynoldsville, Pa.
PR—P. H. Beck, Indiana, Pa.

TR—W. B. Alexander, Reynoldsville, Pa.
PA—F. M. Brown, Reynoldsville, Pa.
EM—S. L. Mortimer, Lawsonham, Pa.
SCU—Widnoon Supply Co., Buyer, R. E. Merdith, Lawsonham, Pa.
SA—J. P. Roberts, 941 Elliott St., Buffalo, N. Y.

Widnoon Mine (Armstrong County). Drift, Lower Kittanning Seam, 5½ to 4½ in. thick.
PO—Lawsonham, Pa.; SP—Same. CTY—Clarion; RR—A. V.
MS—Chas. Traister, Lawsonham, Pa.
 S of H—Mules, rope and storage battery loco. Track gage 42 in.
S of M—Hand and 3 comp. air machines.
PP—2 return tubular boilers and 1 locomotive type boiler, total 400 H. P., 2 compressors and 1 haulage engine, 7 pumps.
EMP—185. Last years tonnage 50,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Screens.

WILCOX COAL MINING CO.

General Office, Knickerbocker Bldg. Johnstown, Pa.
PR—J. W. Campbell, Philadelphia, Pa.
TR—F. M. Graff, Blairsville, Pa.
GM—Telford Lewis, Johnstown, Pa.
GS—Richard A. Suppes, Johnstown, Pa.
PA—Norman Lewis, Johnstown, Pa.
EM—O. T. Onks, Hooversville, Pa.
SCO—Hooversville Supply Co. Buyer, Edward Lauer, Hooversville, Pa.
SA—Knickerbocker Fuel Co., 1 Broadway, New York, N. Y.
 Knickerbocker No. 4 Mine; Drift; "R" Seam, 54 inches thick.
PO—Stoyestown, R. F. D. No. 2, Pa.; SP—Same; CTY—Somerset; RR—B. & O.
MS—S. C. Halverson, Hooversville, Pa.
SM—J. A. Gohn, Stoyestown, R. F. D. No. 2, Pa.
 S of H—Trolley pole type locos. Track gage, 36 in.
S of M—4 shortwall machs.
PP—Power purchased, transformer 2200, M. G. sets, 250 volts D. C., 2 pumps.
EMP—80. Last years tonnage 89,441.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.
 Knickerbocker No. 5 Mine; Drift; "R" Seam, 38 inches thick.
PO—Landstreet, Pa.; SP—Same; CTY—Somerset; RR—B. & O.
MS—S. C. Halverson, Hooversville, Pa.
SM—F. J. Lauer, Landstreet, Pa.
 S of H—Trolley pole type locos. Track gage, 42 in.
S of M—2 shortwall machs.
PP—Power purchased, 250 volts D. C., 4 pumps.
EMP—40. Last years tonnage 38,000.
SIZES SHIPT—Run of Mine.
 Knickerbocker No. 6 Mine; Drift; B or Mill-r Seam, 45 inches thick.
PO—Landstreet, Pa.; SP—Same; CTY—Somerset; RR—B. & O.
MS—S. C. Halverson, Hooversville, Pa.
SM—Frank J. Lauer, Landstreet, Pa.
 S of H—Trolley pole type locos. Track gage, 42 inches.
S of M—Hand.
EMP—50. Last years tonnage 40,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.

WILEY COAL COMPANY

General Office, Curwensville, Pa.
PR—A. Z. Wolfe, Curwensville, Pa.
VP—F. F. Tate, Curwensville, Pa.
TR—H. B. Hartwick, Clarfield, Pa.
GM—O. Norris, Curwensville, Pa.
GS—O. Norris, Curwensville, Pa.
PA—W. S. Wiley, Hyde, Pa.
CE—Ralph H. ss, Curwensville, Pa.
EE—John Hampt, Curwensville, Pa.
SA—W. S. Wiley, Hyde, Pa.
 Wiley Mine; Drift; Moshannon or D Seam, 42 in. thick.
PO—Hyde, Pa.; SP—Same; CTY—Clearfield; RR—P. R. R.
 S of H—Elec. locos.
S of M—1 shortwall mach.
PP—Power purchased.
EMP—60.
SIZES SHIPT—Run of Mine.

WILKEY COAL & COKE COMPANY

General Office, Uniontown, Pa.
OWNER—W. H. Wilkey, Uniontown, Pa.
GS—Wm. Macdonald, Whitsett, Pa.
 Anlea and Prospect Mines; Drift and Stone; Pittsburgh Seam; 84 inches thick.
PO—Whitsett, Pa.; SP—Same; CTY—Fayette; RR—P. & L. E. Monon.
 S of H—Mules. Track gage 42 inches.
S of M—Hand.
PP—Fire tubular boiler, 50 H. P.
 Last fiscal year output, 15,000 tons.
 Old installation

WILKINSBURG DOMESTIC COAL CO.

General Office, P. O. Box 88, Wilkinsburg, Pa.
PR—G. M. Lippert, Wilkinsburg, Pa.
VP—Matt Seller, Jeannette, Pa.
TR—H. M. Garman, Jeannette, Pa.
GM—G. M. Lippert, Wilkinsburg, Pa.

GS—L. J. R. work, Wilkinsburg, Pa.
PA—G. M. Lippert, Wilkinsburg, Pa.
SA—G. M. Lippert, Wilkinsburg, Pa.
 Hampton Mine; Drift; Pittsburgh Seam; 68 inches thick.
PO—Wilkinsburg, Pa.; SP—Same; CTY—Allegheny; RR—Penna.
MS—John Tucker, P. O. Box 88, Wilkinsburg, Pa.
 S of H—Mules. Track gage 44 inches.
S of M—Hand and comp. air mach.
PP—1 pump.
EMP—12. Daily tonnage 65.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar and Shaker Screens.

WILLARD COAL CO.

General Office, Philipsburg, Pa.
PR—H. W. Todd, Philipsburg, Pa.
VP—J. T. Todd, Philipsburg, Pa.
GM—W. N. Todd, Philipsburg, Pa.
 Willard No. 1 Mine; Drift; Seam, 48 in. thick.
PO—Philipsburg, Pa.; SP—Houtzdale, Pa.; CTY—Clearfield; RR—P. & S.
MS—W. N. Todd, Philipsburg, Pa.
 S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—3 fire tube boilers.
EMP—100. Daily tonnage 300.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by the Lingle Coal Company.

WILLIAMS & GINDER COAL COMPANY.

PR—E. M. Binder, Barnesboro, Pa.
GM—B. R. Williams, Barnesboro, Pa.
GS—B. R. Williams, Barnesboro, Pa.
PA—R. R. Williams, Barnesboro, Pa.
CE—Horne & Jones, Indiana, Pa.
 Sales Agency, Spring Coal Co., Boston, Mass.
 Williams & Binder Mine; Drift; D Seam, 40 to 60 in. thick.
PO—H. Wood, Pa.; SP—Grismore, Pa.; CTY—Indiana, RR—Cambria & Indiana.
SM—B. R. Williams, Barnesboro, Pa.
 S of H—Storage battery locos. Track gage, 36 in.
S of M—Hand.
EMP—55. Last fiscal year output, 40,000 tons.

WILLIAMS COAL COMPANY

PR—S. J. Williams, Corsica, Pa.
TR—F. M. Morrow, Punxsutawney, Pa.
GM—S. J. Williams, Corsica, Pa.
GS—S. J. Williams, Corsica, Pa.
PA—F. M. Morrow, Punxsutawney, Pa.
 Williams Mine; Slope; Lower Kittanning Seam, 54 in. thick.
PO—Corsica, Pa.; SP—Holden, Pa.; CTY—Clarion; RR—L. E. F. & C.
 S of H—Mules. Track gage 42 inches.
S of M—Hand.
PP—2 pumps.
EMP—25. Last years tonnage 14,000.
SIZES SHIPT—Run of Mine.

WILLIAMS COAL COMPANY

Now part of Purity Coal Co.

WILLIAMS RUN COAL COMPANY.

General Office, Punxsutawney, Pa.
PR—J. B. Williamson, Punxsutawney, Pa.
VP—N. R. Blaisdell, Punxsutawney, Pa.
TR—W. S. Blaisdell, Punxsutawney, Pa.
GM—W. S. Blaisdell, Punxsutawney, Pa.
GS—N. S. White, Punxsutawney, Pa.
PA—has A. Knarr, Punxsutawney, Pa.
CE—H. W. Robinson, Punxsutawney, Pa.
EM—H. M. Knarr, Punxsutawney, Pa.
SCU—Anita Supply Co., Buyer, C. H. Ford, Punxsutawney, Pa.
SA—W. S. Blaisdell, Punxsutawney, Pa.
 Williams Mine; Drift; Lower Freeport Seam, 60 in. thick.
PO—Punxsutawney, Pa.; SP—Same; CTY—Jefferson; RR—B. R. & P.
 Penna.
SM—J. A. Doran, Punxsutawney, Pa.
 S of H—Mules and rope. Track gage 42 in.
S of M—8 comp. air punchers.
PP—2 water tube boilers, 150 H. P.
EMP—125. Last fiscal year output 80,000 tons.
SIZES SHIPT—Run of Mine.

WILLIAMS, I. J.

General Office, Brookville, Pa.
OWNER—T. J. Williams, Brookville, Pa.
GM—T. J. Williams, Brookville, Pa.
GS—John Moir, Shigo, Pa.
PA—T. J. Williams, Brookville, Pa.
EE—Chas. Shaver, Brookville, Pa.
 Glo Gora Mine; Drift; Lower Kittanning Seam, 28 to 40 in. thick.
PO—Elkhon, Pa.; SP—Hydes, Pa.; CTY—Elk; RR—Erie.
 S of H—Mules and rope and 1 6-ton loco. Track gage 36 in.
S of M—2 shortwall machs.
PP—2 150 H. P. return tubular boilers, 1—75 K. W. generator, 125 H. P. engine, 3 pumps.
EMP—41. Last years tonnage 17,012.
SIZES SHIPT—Run of Mine.
WILLS, JOHN.
 Wills No. 1.
 Now operated by Rowe, C. J. & Bros.

Wills No. 2 Mine.
 Now operated by Quality Smokeless Coal Company.

Wills No. 3 mine.
 Now Buffalo Creek Coal Mining Co.

WILMER-BURD COAL COMPANY

Burd Mine; Drift; Upper Freeport Seam, 48 in. thick.
PO—Latrobe, Pa.; SP—Kingston, Pa.; CTY—Westmoreland; RR—Ligonier Valley.
MS—E. A. Bord, Latrobe, Pa.
 S of H—Mules.
 S of M—Hand.
 Sales Agent—H. W. Blisdel, Latrobe, Pa.
SIZES SHIPT—Run of Mine.

WILMORE BASIN COAL CO.

Altoona, Pa.
 Wilmore Basin No. 1 Mine; Drift.
 No report.

WILSON-BEGGLE COAL COMPANY

General Office, 1504 Keenan Bldg., Pittsburgh, Pa.
PR—H. R. Beggle, New Galilee, Pa.
VP—T. H. Robinson, Pittsburgh, Pa.
TR—T. E. Wilson, Pittsburgh, Pa.
GS—Geo. Sutherland, Darlington, Pa.
 Drift; Nos. 6 and 7 Seams; 36 to 48 inches thick.
PO—Darlington, Pa.; SP—E. Palestine, Pa.; CTY—Columbia, Pa.; RR—P. F. W. & C., P. L. & W.
 S of H—Rope.
 S of M—Hand.
PP—Power purchased. Transformer 13,000 to 440 volts.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.
 Note: Mine runs under the state line, with an opening in each state.

WILSON BROTHERS COAL COMPANY.

General Office, Fairbance, Pa.
PR—C. H. Wilson, Fairbance, Pa.
VP—E. D. Wilson, Cheat Haven, Pa.
TR—J. B. Wilson, Fairbance, Pa.
GM—C. Patterson, Cheat Haven, Pa.
GS—C. Patterson, Cheat Haven, Pa.
PA—C. H. Wilson, Fairbance, Pa.
EM—H. B. Bans, Uniontown, Pa.
 Hill Mine; Drift; Pittsburgh Seam; 84 in. thick.
PO—Cheat Haven, Pa.; SP—Same; CTY—Fayette; RR—B. & O.
MS—E. D. Wilson, Cheat Haven, Pa.
 S of H—Mules and 1 gasoline loco. Track gage, 44 in.
S of M—1 shortwall mach.
PP—Power purchased, transformer 2200 to 440-220 volts A. C., 4 pumps.
EMP—50. Last years tonnage 31,000.
SIZES SHIPT—Run of Mine.

WILSON COAL & COKE COMPANY

TR—F. M. Heddick, Brookville, Pa.
PA—F. M. Heddick, Brookville, Pa.
 Eliss Mine; Slope; Seam, 36 to 42 in. thick.
PO—Brookville, Pa.; SP—Elsa, Pa.; CTY—Clarion; RR—L. E. F. & C.
MF—Preston Stahman, Clarion, Pa.
 S of H—Mules. Track gage 36 in.
S of M—Hand.
SIZES SHIPT—Run of Mine.

WINDBER FUEL COMPANY

General Office, Windber, Pa.
PR—L. L. Faust, Windber, Pa.
GS—L. L. Faust, Windber, Pa.
PA—L. L. Faust, Windber, Pa.
 Windber Fuel No. 1 Mine; Drift; D Seam, 40 inches thick.
PO—Scap Level, Pa.; SP—Windber, Pa.; CTY—Cambria; RR—Penna.
 S of H—Mules.
S of M—Hand.
 Last years tonnage 2,000.
SIZES SHIPT—Run of Mine.

WINDROVE COAL CO.

General Office, Morgantown, W. Va.
 Echart Mine.
PO—Mill Run, Pa.; CTY—Fayette; RR—Indian Creek Valley. No report.

WINELAND-GILMORE COAL & COKE CO

General Office, Uniontown, Pa.
PR—J. W. Abraham, Uniontown, Pa.
VP—B. A. Hloway, Philadelphia, Pa.
TR—Elias Wineland, Philadelphia, Pa.
GM—J. W. Abraham, Uniontown, Pa.
GS—J. W. Abraham, Uniontown, Pa.
PA—J. W. Abraham, Uniontown, Pa.
CE—H. L. Burchinal, " "
EM—F. G. Christopher, " "
SCO—Sewickley Supply Co., Uniontown, Pa.
 Winnore Mine, Drift; Pittsburgh seam, 9 ft. thick.
PO—Smithfield, Pa.; SP—Same; CTY—Westmoreland; RR—B. & O.
MS—F. Christopher, Smithfield, Pa.
 S of H—Storage battery locos and 1 elec. loco. Track gage 42 in.
S of M—Hand.
PP—Power purchased. Transformer 440 to 220 volts A. C. 100 150 K. W. M. G. Sets, 250 volts D. C.
EMP—98. Last years tonnage 48,000.
SIZES SHIPT—Run of Mine.

Directory of Mines by Counties

PENNSYLVANIA—Bituminous

Company.	Mines.	Post Office of Mines.
Aerial Coal Co.	Flshwick	Hays
Allegheny C. & C. Co.	Avenue	Brackenridge
Allegheny-Pittsburgh Coal Co.	No. 1	Logans Ferry
Beatty Gas Coal Co.	Beatty	North Bessemer
Bess-Etta Coal Co.	Bess Etta	Walkers Mill
Boston Coal Co.	Becker	Conneville
Bowman Bros. Co.	Hiland	McKeesport
Broughton Coal Co.	Forster	Broughton
Bruxton Fuel Co.	Forster	Bruxton
Bull Creek Coal Co., Inc.	Golding	Tarentum
Butler Junction Coal Co.	Butler Junction	Freepart
Camden Coal Co.	Camden	Burgess
Carbon Center Coal Co.	Carbon	North Bessemer
Carnegie Coal Co.	Oakdale	Oakdale
Carothers, C. E. Coal Co.	Bell Bridge	Bell Bridge
Cleaver Gas Coal Co.	Staub	Moon Run
Clinton Black Coal Co.	Clinton and Clinton No. 2	Imperial
Consumers Fuel Co.	Gould	Wilson
Consumers Mining Co.	Harmar	Harmarville
County Coal Co.	Leo	Longport
Crawford, D. J. Coal Co.	Crawford	Honestead
Craigdon Coal Co.	Craigdon No. 2	Crafton
Cribbs, Hyatt M.	Roadside, Delmas	Verona
Cruikshank Fuel Co.	Cornell	Glassmere
Curry Coal Co.	Curry	Bumala
Dalliba Coal Co.	Dalliba	Oakmont
Diamond Coal & Coke Co.	Blaine	Lock No. 3
Diamond Coal & Coke Co.	Oakmont	Parnassus, R. F. D. No. 2
East Pittsburgh Gas Coal Co.	Oak Hill	East Pittsburgh
Equitable Coke Co.	Harwick	Harwick
Evans Gas Coal Co.	Clyde	Epton
F. S. & M. Coal Co.	Elia May Nos. 1 & 2	Versailles
Fair Haven Coal Co.	Fair Haven	Mc. Oliver
Fair Haven Coal Co.	Chickens Rocks and Beck	McKees Rocks
Fayette Coal Co.	Chalfant	Noblesstown
Ford Collieries Co.	Benjamin, Francis	Curwsville
Ford Collieries Co.	Berry	Bairdport
Gallatin Coal Co.	Gallatin No. 1	Gallatin
Glass Run Coal Co.	Glass Run	Hays
Haas Coal Co.	Haas	Tarentum
Hall Coal Co.	Hall	Turtle Creek
Hammill, B. S.	Hammill No. 2	R. F. D. No. 1, Oakdale
Happy Hollow Fuel Co.	Elia May No. 2	Versailles
Harper, Thos. Coal Co.	Harper No. 1 and Plum Creek	Turtle Creek
Hays Gas Coal Co.	Smith	Hays
Hillman Coal & Coke Co.	Elia	Sunnyside
Hillman Coal & Coke Co.	Hoffrichter	Elizabeth
Hoffrichter, J. F.	Hoffrichter, R. F. D. No. 1	Bridgeville
Hornell Coal Co.	Federal No. 2	Hickman
Howe Coal Co.	Howe and Rippel	Lock No. 3
Inland Collieries Co.	Indianola	Indianola
Jean Coal Co.	Jean	Imperial
Kite, Wm. J.	No. 1	Buena Vista
Lake Shore Gas Coal Co.	Dravo	Buena Vista
Liggett Spring & Axle Co.	Liggett	Allegheny
Linsboro Coal Co.	Jeannette	Bridgeville
Lottie Coal Co.	Lottie Mine	Crafton
McAulity Coal Co.	McAulity No. 1	Pittsburgh
McLane Mining Co.	McLane	Cuddy
McConnell & Berg	McConnell & Berg	Wilkesburg
McDonald Coal Co.	Willow Grove	McDonald
McFetridge Bros. Coal Co.	McFetridge	Craigdon
McHugh, H., Coal Co.	Cherry	Bennersdale
McLean, R. J., Coal Co.	Berna	Oakdale
McShane Coal Co.	No. 1 or Carbon No. 2 or Tepe Mines.	Crafton Sta., Pittsburgh
Marcon Coal Co.	Marshall	Imperial
Margaret Coal Co.	Margaret	Bridgeville
Mayer, C. P. Brick Co.	Nos. 1 and 2	Bridgeville
Montour & Lake Erie Coal Co.	Boggs	R. D. No. 1, Imperial
National Mining Co.	National No. 1	Morgan
Newfield By-Product Coal Co.	Newfield No. 1	Piercedale
Oak Hill Coal Co.	Oak Hill	Leechburg
Olett Bros. Coal Co.	Rosevale	Bridgeville
Pennsylvania Salt Mfg. Co.	Natrona No. 1	Natrona
Peters Creek Coal Co.	Dale	Large
Peters Creek Gas Coal Co.	Piney Fork	Finleyville
Pierce, Clyde W., Coal Co.	Pierce	Elizabeth
Pike Coal Co.	Steuben No. 1	McDonald
Pitcairn Gas Coal Co.	Wallace	Pitcairn
Pittsburgh & Western Mining Co.	English	Groves
Pittsburgh Coal Co.	Bridgeville	Bridgeville
Pittsburgh Coal Co.	Champion	Sturgeon
Pittsburgh Coal Co.	Dickson, Margerum, Partridge	Imperial
Pittsburgh Coal Co.	Essen No. 3	Burdine
Pittsburgh Coal Co.	Fair Haven and Montour No. 8	Willow
Pittsburgh Coal Co.	Forest Hill, Ocean No. 5	Seaside
Pittsburgh Coal Co.	Gallatin, Manown and Sunnyside	Gallatin
Pittsburgh Coal Co.	Harrison	Beading
Pittsburgh Coal Co.	Laurel Hill No. 5	Cecil
Pittsburgh Coal Co.	Loredale, Walton No. 2	
Pittsburgh Coal Co.	Young No. 2	Elizabeth
Pittsburgh Coal Co.	Mansfield	Loupurex
Pittsburgh Coal Co.	Montour No. 10	Broughton
Pittsburgh Coal Co.	Moon Run	Moon Run
Pittsburgh Coal Co.	Ocean No. 2 and Shaner	Scott Haven
Pittsburgh Plate Glass Co.	Craigdon Coal Works	Craigdon
Pittsburgh, Terminal R. R. & Coal Co.	No. 2	Castle Shannon
Pittsburgh, Terminal R. R. & Coal Co.	No. 3	Mollenauer
Pittsburgh, Terminal R. R. & Coal Co.	No. 4	Burnham
Pittsburgh, Terminal R. R. & Coal Co.	No. 6	Broughton
Pittsburgh, Terminal R. R. & Coal Co.	No. 7	Large
Pittsburgh Terminal Railroad & Coal Co.	No. 8	Coverdale
P. C. & Y. Coal Co.	Thornburg	Crafton
Puckety Coal Co.	Puckety	New Kensington
Republic Iron & Steel Co.	Bessemer Nos. 1 and 2	Russellton
Scott Coal Co.	Scott	Bridgeville
Scott Haven Coal Co.	Spring Run	Box 413, Bridgeville
South Fayette Coal Co.	Melrose	Bridgeville
So. Wilmerding Coal Co.	No. 1	Wilmerding

Company.	Mines.	Post Office of Mines.
Sun Coal Co. (The)	Sun No. 1	Sarver
Superior Fuel Co.	Superior No. 1	Russellton
Superior Fuel Co.	Superior No. 2	Gibsonia
Union Collieries Co.	Renton Nos. 1, 2, 3 & 4	Renton
United States Bureau of Mines	Experimental	Brownston
Valley Coal & Supply Co.	Elizabeth	Carnegie
Verner Coal & Coke Co.	Verner No. 1	Bulger
Wegman Brothers	Wegman's	Wilkesburg
West Tarentum Fuel Co.	Peterson	Tarentum
Wilkesburg Domestic Coal Co.	Hampton	Wilkesburg
Wright, C. D., Coal Co.	Duncan	Duncan

ARMSTRONG COUNTY		
A. G. & S. Mining Co.	Brilliant	Kittanning
Aladdin Coal & Coke Co.	Aladdin	Schenley
Allegheny River Mng Co.	Seminole	Scm. nols
Allegheny River Mng Co.	Chickasaw	Chickasaw
Allegheny River Mng Co.	Furnace Run	Furnace Run
Allegheny River Mining Co.	Cadogan	Cadogan
American Sheet & Tin Plate Co.	Kirkpatrick	Leechburg
Armstrong Coal Co.	Armstrong	Oak Ridge
Armstrong County Coal Co.	Armstrong	Leechburg
Avonmore Coal & Coke Co.	Avonmore	Edri
Bagdad Coal & Coke Co.	Bagdad	Leechburg
Baxter Coal Co.	Baxter	Kittanning
Belle & Beale Coal Co.	Beale	Vandergift
Bowers, Watson	Watson Bowers	Cowansville
Brady's Bond Coal Co.	Brady's Bond	East Brady
Buffala & Susquehanna Coal & Coke Co.	Sagamore	Sagamore
Century Coal Co.	Century No. 2	Freepart
Charleston Coal Co.	Charleston	B. D. 4, New Bethlehem
Conemaugh Coal Mining Co.	Conemaugh Nos. 1, 2, 3, 4 & 5	Apollo
Consolidated Coal & Coke Co.	Consolidated No. 2, R. F. D., Worthington	Worthington
Cowanshannock C. & C. Co.	Yatesboro	Yatesboro
Cowanshannock Mining Co.	Cowanshannock No. 1	Kittanning
Crum Ross Coal Mining Co.	Crescent	Craigsville
Duck Hollow Coal Co.	Duck Hollow	New Kensington
Elder Mining Co.	Elder	Timblin
Elder Run Coal Co., Inc.	Elder	Leechburg
Excelsior Coal Co., Inc.	Kelly	Kelly
Ford City Coal & Lime Co.	Garretts Run	Garretts Run
Franklin-Im-Logansport Coal Corp.	Jethel	Logansport
Freepart Fuel Co.	West Penna.	Apollo
Garretts Run Coal Co.	Toy	Kittanning
Gilpin Coal Co.	Gilpin	Leechburg
Gladys Coal Mining Co.	Gladys	Leechburg
Guaranty Coal Co.	Graft	Worthington
Haddon Coal Co.	Haddon	Leechburg
Harbison Mining & Mfg. Co.	Stella	Freepart
Henry Coal Co.	Henry	Kittanning
Highland View Coal Co.	Highland View	Kittanning
Hillsdale Mining Co.	Glicksade	Kittanning
James, W. J. Coal Co.	Van Buren	R. D. 10
Johnetta Brick & Coal Co.	Johnetta	Johnetta
Josephson Coal Co.	Montgomery No. 2	Adrian
Joyce, M. V.	Fern	New Bethlehem
Kelly Station Mining Co.	Kelly Station	Kelly Station
Kepple Coal Mining Co.	Kepple	Leechburg
Kittanning Iron & Steel Co.	Rayburn	Cowanshannock
Kittanning Iron & Steel Co.	Cowanshannock Nos. 1 and 2	Kittanning
Kittanning Mining Co.	Peash Hill	Kittanning
Kittanning Steam Coal Co.	Edgington Nos. 1 & 2	Kittanning
Lasher Mining Co.	Lasher	Templeton
Leet Coal Co.	No. 1	Mahoning
Lower Kittanning Mining Co.	Lower Kittanning	Kittanning
Lumsted Mining Co.	Lumsted No. 1	Echo
McGregor Coal Co.	McGregor Nos. 1 & 2	Timblin
McNees Reese Coal Co.	McNees Reese	Kittanning
Maher Coal & Coke Co.	No. 4	Leechburg
Mahoning River Coal Co., Inc.	Thayerton	New Bethlehem
Majestic Coal Mining Co.	Majestic No. 1	Leechburg
Melrose Coal & Mining Co.	Melrose	Cowanshannock
Mill-Site Colliery Co., Inc.	Columbia	New Bethlehem
Mineo Coal Co.	Mineo	Parkers Landing
Mohawk Mining Co.	Mohawk	Kittanning
Mores Coal Co.	Mores	Mosgrove
Oak Hill Coal Co.	Oak Hill	Ford City
Park Coal Co.	Park	Leechburg
Pine Furnace Fuel Co.	Dorothy	Kittanning
Pine Run Coal Co.	Nos. 4, 5, 8, 9 & 10	New Bethlehem
Pletcher, J. W.	Donnelly No. 1 & Dominion	Kittanning
Provident Coal & Mng Co.	Provident	Kelly Station
Queenstown Coal Co.	Queenstown	East Brady
Raridan & East Brady Coal Co.	Raridan	Logansport
Renne Coal Co.	Benson	Kelly
Rimerton Coal Co.	Rimerton	Leechburg
Sandy Hollow Coal Co.	Sandy Hollow No. 1	Pittsburgh
Sherwin Coal Mining Co.	Kessler and Snow Hill	Kelly
Stauffer Kittanning Coal Co.	Stauffer Kittanning No. 1	Pittsburgh
Stella Coal Co.	Stella	Pittsburgh
Stickel Coal Co.	Stickel	Vandergift
Sugar Creek Coal Co.	Doverspike Mine	Leechburg
Summit Coal Mining Co.	Summit Nos. 1, 2 & 3	Leechburg
Tartown Coal Co.	Tartown	Leechburg
Taylor Run Coal Co.	Taylor Run Mine	Leechburg
Tidal Valley Coal Co.	Riverside	Tidal
Trucks Coal Mining Co.	Truck No. 1	Leechburg
Walkway Coal Co.	McGregor	Leechburg
West Leechburg Steel Co.	W. L. K.	Kittanning
West Kittanning Mining Co.	West Kittanning	Mosgrove
Wheeler Mining Co.	Wheeler	Mosgrove

BEAVER COUNTY		
American Sewer Pipe Co.	Beaver Clay	New Brighton
Beaver Cannel Coal Co.	Beaver Cannel	Beaver Valley
Beaver Clay Mfg. Co.	Beaver Clay	New Galilee
Berresford, Ike & Co.	Berresford	Cann. ton
Cannel Bituminous Mining Co.	Saw Bee No. 1	Cann. ton
Cannelton Clay & Coal Co.	Cannelton	Cannelton
Ohio River Coal Co.	Ohio River	Shippingport
Wilson Beagle Coal Company	Wilson Beagle	Darlington

Company.	Mines.	Post Office of Mines.
BEDFORD COUNTY		
Baylor Coal Mining Co.	Fulton No. 1.	Hantington
Bunker Hill Coal Co.	Bunker Hill	Six Mile Run
Carlton Coal & Coke Co., The	Cambria No. 3	Langsdale
Central Iron Co.	Judith No. 1	Riddlesburg
Elehdorfer, E., & Co.	Bacon Nos. 1 and 2	Six Mile Run
Huntingdon Coal Co.	Delaware No. 2	Six Mile Run
Kay Coal Mining Co.	Octoraro Nos. 1 & 2, Mt. Equity	
Langdon Coal Co.	Hickory Hill, Rockbar, Riddlesburg and Chevington Nos. 3 and 4, Hopewell	
Langdon Coal Co.	Glendale No. 4	Six Mile Run
Lenore Coal Co.	Lenore No. 1	Riddlesburg
Lenore Coal Co.	Lenore No. 2	Dufance
McIntyre, James M. & Co.	Shreve Run Nos. 1, 2, 6 and 7	
Schipper Bros. Coal Mining Co.	Langdon & Illinois and Smokeless	Six Mile Run
Shanil Coal Co.	Shanil	Riddlesburg
Thropp, Joseph E.	Barnett Nos. 2 and 3 and Kelly Plane	Kearoy
BLAIR COUNTY		
Bland, L. E.	Bland Colliery No. 3	Bellwood
Bradley Mine Coal Co.	Bradley	Gallitzin
Glen White Coal & Lumber Co.	Glen White No. 2	Glen White
Pennsylvania Coal & Coke Corp.	Penna. No. 2	Pennington
Russett Coal Co.	Russett No. 2	Coupon
BRAEFORD COUNTY		
Chilson, M., Mines.	Barclay	Laquin
Fowell Coal Co., Inc.	Powell	Powell
BUTLER COUNTY		
Annandale Coal Co.	Erie No. 1	Boyers
Argentine Coal Co.	Maple Furnace	Argentine
Boston Mining Co.	Boston	Argentine
Arvin Coal Co.	Arvin	Arvin
Butler Coal Mining Co.	Say	Butler
Butts Candel Coal Co.	Bessemer	Deegan
Consolidated Coal & Coke Co.	Consolidated Nos. 2, 4 & 5	Fenelon
Cooper Coal Co.	Cooper	Argentine
Crock Coal Co.	Betty	Chicora
Cunningham Coal Co.	Chicora	Branchton
Hynde Coal & Coke Co.	Nelson Bridge	Ferris
Erie Coal Mining Co.	Keystone Nos. 1, 2, 3 and 4	
Eucild Coal Co.	Sherwin	R. D. 2, Euclid
Fenelon Coal Trust	Fenelon	Fenelon
Filer, F. P. & Co.	Kilcoo No. 1	Euclid
Filer, F. P. & Co.	Kildoo No. 2	Mayne
Fox Coal Co.	Fox No. 1	Pottersville
Gracemont Coal Co.	Gracemont	Claytonia
Jamisonville Coal Co.	Jamisonville	Euclid
Jupiler Coal Co.	Jupiler	Prospect
Kerr Coal Co.	Kerr No. 2	Freeport
Klee Coal Co.	Fay No. 1	Evans City
Lexie Mining Co.	Lexie Nos. 1 and 2—B. D. 3, Portersville	
Liberty Coal Mining Co.	Liberty	Queen Junction
McAulity Coal Co.	McAulity No. 2	Freeport
Markle & Minch	Barnhart No. 113	Euclid
Mizener Coal Co.	Grant Mine	Claytonia
Mount, S. J. & Co.	S-106	Boyers
North East Coal Mining Co.	North East	Hilliards
North Pittsburgh Realty Co.	Harmony Junction	Harmony
Northern Cambria Coal Co.	No. 11	Frugality
Palmer Coal Co.	Palmer	Queens Junction
Ruth Coal Co.	Sligo	Karns City
Sherwin, Samuel	Knead and Enterprise	Karns City
Spring Valley Coal Co.	Spring Valley Mine	Hilliards
Standard Coal Co.	Royal and Hamilton No. 3	Argentine
Victoria Coal Co.	Victoria No. 2	Butler
Vogley Coal Co.	Vogley	Butler
Whitton Coal Co.	Brewster No. 2	Evans City
Whitlaw Coal & Coke Co.	Refractory	Saxonburg
Winfield Coal Co.	West Winfield	West Winfield
Worth Mining Co.	Worth	Portersville
Zenith Coal Co.	Zenith No. 1 and 2	Butler
CAMBRIA COUNTY		
Allen Coal Co.	Allen No. 1	Nanty-Glo
Altoma Coal & Coke Co.	Delaney No. 7	Coupon
Argyle Coal Co.	Argyle Nos. 1 and 2	South Fork
Bakerton Coal Co.	Bakerton No. 1	Indiana
Barnes Coal Co.	Lancashire No. 14	Barnesboro
Barnes & Tucker Co.	Porter No. 1, Lancashire Nos. 3, 7, 12, 10, 15	Barnesboro
Beachly Coal Co.	Beachly Nos. 1, 3, 4, 6 & 7	Portage
Bacon Coal Co.	Peerless Nos. 1 and 2	Fallen Timber
Bear Rock Coal Co.	Bear Rock Nos. 1 and 3	Lilly
Beaver Coal Co.	Beaver No. 1	Indiana
Beaver Run Coal Co.	Beaver and Viking	Beaverdale
Bellfield Coal & Coke Co.	Bend No. 5	Blandburg
Bend-dieting Coal Co.	Emily Eliza No. 1	Spangler
Bennington Coal Co.	Sugar Run Nos. 1 and 2	Gallitzin
Benshoff Coal Co.	Benshoff No. 1	Johnstown
Berwind-White Coal Mining Co.	Eureka Nos. 30, 31, 35, 36, 37, 39, 40 and 42	Windber
Bethel Coal Mining Co.	Bethel	Expedit
Big Bend Coal Mng Co.	Nonpareil No. 1	Expedit
Binder Bros Coal Co.	Binder Bros Nos. 1 & 2	Hastings
Binder Coal Mining Co.	Binder Nos. 1 and 2	Carrolltown
Bird Coal Co.	Bird No. 1	Krings
Bland, Fred Jr.	Bland Nos. 1 & 2	Blandburg
Boucher-Cortright Coal Co.	Viking	Beaverdale
Bowen Bros & Tyler	High Spot Nos. 1, 3 & 4	Hastings
Calorie Coal Co.	Calorie	Flint
Cambria Steel Co.	Rolling Mill, Franklin Nos. 1, 2, 3 and 4	Johnstown
Carrolltown Coal Co.	Victor Nos. 1, 2, 3, 6 and 12	St. Benedict
Cherry Tree Coal Co.	Victor Nos. 15 & 17	Emich
Citizens Coal Co.	Gautier, Greco Hill and Dale	Johnstown
Cleaveland R. Coal Corp.	West Branch	Barnesboro
Commercial Coal Mining Co.	Commercial Nos. 3, 4, 5 and 15	Expedit
Conemaugh Coal Mining Co.	Park Hill	Johnstown
Curry Coal Mining Co.	Sugar Camp No. 1 and Expedit	
Cymbria Coal Co.	Cymbria Nos. 1, 2 and 3	Cymbria Mines
Deer Hill Coal Co.	Deer Hill	Fallen Timber
Deringer Bros	Woodland Colliery No. 2	Spangler
Deringer Coal Mining Co.	Woodland No. 4	Spangler
Dexear Coal Mining Co.	Clare	Ashville
Hill Coal Co.	"Chapman"	Barnesboro
Duncan-Spangler Coal Co.	Delta Nos. 1 and 2 and Blubaker No. 13	Spangler

Company.	Mines.	Post Office of Mines.
Ealy, E. T.	Ealy No. 1	Barnesboro
Eastern Bituminous Coal Mining Bonds	Dean Nos. 8 and 10	Frugality
Emmishung Coal Co.	Emmishung No. 1	Colver
Emma Coal Mining Co.	Emma No. 1	Expedit
Empire Coal Mining Co.	Empire A, E and G	Barnesboro
Fallen Timber Coal Co.	Fallen Timber	Fallen Timber
Fernhill Coal Co.	Fernhill	Johnstown
Figart Run Coal Co.	Fricks	Blandburg
Flemmer Coal Co.	Flemmer No. 1	South Fork
Forge Coal Mining Co.	Forge Nos. 1 and 2	Portage
Forks Coal Mining Co.	Hughes No. 12	South Fork
Garmao, F. A.	Garman No. 3	Dysart
Glasgow Fuel Co., Inc.	Glasgow No. 1	Glasgow
Glen-Dale Coal Co.	Glen-Dale	Johnstown
Great Bend Coal Co.	Great Bend No. 1	Mountandale
Gregory Coal Mining Co.	Rockville No. 1	South Fork
Gwin, J. Sons	Mountandale No. 1	Mountandale
Hahman & Richards	Bea Creek	Lilly
Haman Coal Co.	Haman	Johnstown
Harris, Jas., & Sons	Harris No. 2	Lilly
Hastings Coal & Coke Co.	Kinport Nos. 1 and 2	Kinport
Hastings Fuel Co.	Hastings No. 1	Hastings
Henriette Coal Mining Co.	Henriette No. 2	Dunlo
Hillsboro Coal Co.	Hillsboro	Johnstown
Holland Coal Co.	Hughes No. 5	Flint
Home Co., The	Sbaver No. 1	Ashville
Huber Street Coal Co.	Huber Street Nos. 1 and 2	Johnstown
Huether Coal Co.	Huether	Hastings
Hughes, C. A. & Co.	Hughes No. 2	Cassandra
Hughes, W. H. & Co.	Hughes No. 1	Lilly
Hughea, W. H. & Co.	Hughes No. 3	Portage
Ideal Coal Co.	Thermal Nos. 5 and 6	Johnstown
Inland Coal Co.	Cardiff	Netleton
Inland Coal Co.	Greenswich No. 2 and 3	Saxma
Inland Coal Co.	Tunnel No. 1	Gallitzin
Jackson Coal Mining Co.	Tackson No. 1	Expedit
Jashill Coal Mining Co.	Flinton No. 1 & Rebecca No. 1	Flinton
Johnstown Smokeless Coal Co.	Shaft and No. 7	Johnstown
Juniata Coal Co.	Juniata Nos. 2 and 3	Lilly
Lantz & Clark Coal Co.	Lantz No. 1	Hastings
Leahy Coal Co.	Leahy No. 1	Lilly
Leap, John A.	No. 1	Lilly
Lenox Coal Co.	Lenox	Hastings
Liberty Smokeless Coal Co.	Liberty No. 1	Johnstown
Lilly Coal Co.	Lilly No. 2	Lilly
Linden Coal Co.	Lincoln	Nanty-Glo
Lingood Coal Co.	Sunset No. 1	Carrolltown
Lloydell Fuel Co.	Lloydell No. 1	Lloydell
Logan Coal Co.	Logan Nos. 1 and 7	Dunlo
Logan Coal Co.	Logan Nos. 2, 4 and 6	Beaverdale
Logan Coal Co.	Logan No. 8	Ruthford
Logan Coal Co.	Logan Hanna Nos. 3 and 4	Onalinda
Loyal Hanna Coal & Coke Co.	Spangler Nos. 3 and 4	Barnesboro
Madera-Hill Coal Mining Co.	Branch No. 1	Portage
Martin's Branch Coal Mining Co.	Maryland	St. Michael
Maryland Coal Co.	Miller No. 1	Portage
Miller Coal Co.	Miller Run No. 1	Hastings
Miller Run Coal Mining Co.	Miller Run No. 1	Hastings
Mineral Point Coal Co.	Smokeless Nos. 3 and 4	Mineral Point
Moshannon Smithing Coal Co.	Clenmar No. 1	Becaria
Moss Creek Coal Co.	Moss Creek	Barnesboro
Mondy, F. B.	Myra No. 1	Portage
Mountain Coal Co.	Yellow Run	Dunlo
Moxham Coal Co.	Thermal No. 4	Johnstown
Nant-Y-Glo Coal Mining Co.	Nant-Y-Glo Nos. 1 and 3	Nanty-Glo
Nant-Y-Glo Coal Mining Co.	Nant-Y-Glo No. 2	Elmora
Navy Smokeless Coal Co.	Navy Colliery No. 1	Carrolltown Roads
Oak Ridge Coal & Coke Co., Inc.	Oak Ridge Nos. 1, 6 and 7	Hastings
Page, Jas. A., & Son	Page	Mineral Point
Patton, Clay, Mfg.	Patton	Patton
Pearce, George & Sons	Excelsior No. 1	Puritan
Penckle Coal Co.	Penckle No. 1	Johnstown
Penker Coal Mining Co.	Penker	Portage
Pennsylvania Coal & Coke Corp.	Penna. No. 1	Cassandra
Pennsylvania Coal & Coke Corp.	Penna. Nos. 3 & 8	Ehrnfeld
Pennsylvania Coal & Coke Corp.	Penna. No. 7	Amsbury
Pennsylvania Coal & Coke Corp.	Penna. No. 9	Cresson
Pennsylvania Coal & Coke Corp.	Penna. No. 10	Gallitzin
Pennsylvania Coal & Coke Corp.	Penna. Nos. 11, 11-E and 13	Hastings
Pennsylvania Coal & Coke Corp.	Penna. No. 14	Nanty-Glo
Pennsylvania Coal & Coke Corp.	Penna. No. 15	Beaverdale
Pennsylvania Coal & Coke Corp.	Moss Creek Nos. 2 & 22	Marsteller
Pennsylvania Coal & Coke Corp.	Penna. Nos. 27, 28, 28-E, 29, 30, 31, 33, 35, 37, 38 & 50	Patton
Pennsylvania Collieries, Inc.	Lilly	Lilly
Pennsylvania Collieries, Inc.	Cassandra No. 1	Cassandra
Pergrin Coal Co.	Pergrin	Nant-Y-Glo
Pine Valley Coal Co.	Pine Valley No. 1	Hastings
Piney Run Mining Co.	Morrellville No. 1	Johnstown
Piper, W. H. & Co.	Sonman No. 2	Lilly
Plymouth Coal Mng Co.	Plymouth	Portage
Portage Coal Mng Co.	Portage No. 2	Portage
Portage Smokeless Coal Co.	Portage Smokeless Nos. 2 and 3	Portage
Porter Coal Co.	Potomac	Barnesboro
Priscilla Coal Mining Co.	Priscilla	South Fork
Red Top Coal Co., Inc.	Rede No. 1	Flinton
Red Top Coal Co.	Red Top Nos. 1 and 2	Hastings
Reilly, Jos. H. Coal Co.	Reilly Colliery No. 1	Spangler
Rich Hill Coal Co.	Rich Hill Nos. 1 and 20	Hastings
Richland Coal Mining Co.	Richland No. 1	Dysart
Riverside Coal Mining Co.	Riverside No. 1	South Fork
Sandberg Coal Co.	Sandberg No. 1	Barnesboro
Scalp Level Coal Co.	Scalp Level No. 2	Dunlo
Seese, S. S.	Seese No. 1	Mineral Point
Shepherd Coal Mining Co.	Shepherd Nos. 1 and 3	Johnstown
Sheridan Coal Co.	Sheridan	Johnstown
Shoemaker Coal Mining Co.	Miller Slope	Portage
Shoemaker Coal Mining Co.	Wilmore No. 3	Lilly
Smokeless Coal Co.	Smokeless Nos. 1 and 2	Johnstown
Sonman Run Coal Co.	Sonman No. 1	Portage
Sonman Shaft Coal Co.	Sonman Shaft	Sonman
South Fork Bituminous Coal Co.	Bituminous No. 1	South Fork
South Fork Coal Mining Co.	South Fork No. 2	South Fork
South Fork Colliery Co.	South Fork No. 1	South Fork
Springfield Coal Mining Co.	Springfield Nos. 1, 2, and 3	Nanty-Glo
Standard Coal Co.	Standard	Lilly
Sterling Coal Co.	Sterling Nos. 1, 3, 5, and 6	Elmora
Stinemman Coal & Coke Co.	Stinemman Nos. 2 and 4	South Fork
Stinemman Coal Mining Co.	Stinemman No. 1	South Fork
Stinemman, H. C.	Stinemman No. 5	South Fork
Strayer Brothers	Strayer No. 1	Flinton
Sugar Run Coal Mining Co.	Dysart No. 2	Dysart
Sunshine Coal Mining Co.	Sunshine No. 8	South Fork
Swanks, H., & Sons	Woodvale	Johnstown

(Continued on Next Page)

Mines.

Post Office of Mines.

... Taylor & McCoy Coal & Coke Co., The	... Gallitzin	... Gallitzin
Thermal Coal Co.	Telford	Johnstown
Thermal Smokeless Coal Co.	Thermal Nos. 1 and 2	Puritan
Thomas Mills Coal Mining Co., The	Thomas Mills	Patton
Thorne Coal Mining Co.	Clear Creek No. 1	Flinton
Trout Run Coal Mining Co.	Trout Run No. 5	Portage
Turner Fuel & Supply Co.	Miller Brothers	Mountaindale
Valley Smokeless Coal Co.	Valley Nos. 1, 3 and 4	Johnstown
Vinton Colliery Co.	Vinton Nos. 1 and 6	Vintondale
Vogel	Vogel	Bakersboro
Watkins Coal Co.	Watkins Nos. 1, 2 and 3	Barnesboro
Watkins Coal Mining Co.	Watkins No. 3	Barnesboro
West Carroll Coal Mining Co.	West Carroll No. 2	Ebensburg
Windsor Fuel Co.	Windsor Fuel No. 1	Sculp Level
Wood & Boucher Coal Co.	Wood & Boucher Nos. 2 and 3	Barnesboro
Woodland Coal & Coke Co.	Woodland Colliery No. 1	Spangler

CAMERON COUNTY

Mount Hope Coal & Coke Co.....Mount Hope No. 1.....Sterling Run

CENTER COUNTY

Atherton & Barnes	Belfast	Phillipsburg
Banner Coal Mining Co.	P. o. liss No. 4	Osceola Mills
Barnes, Harry & Co.	Tin Top	Phillipsburg
Bear Run Coal Mining Co.	Bear Run No. 1	Osceola Mills
Bigelow Run Coal Co.	Bigelow Run No. 1	Phillipsburg
Blair Bros Coal Co.	Brent No. 3	Pocahontas
Clarence Coal Co.	Clarence Nos. 1 and 10	Clarence
Dunham, Fred J.	Sheldens Nos. 1 and 2	Phillipsburg
Ghem Coal Co.	Ghem	Osceola Mills
Gramplan Coal Mining Co.	Heun No. 5	Osceola Mills
Harbison-Walker Refractories Co.	Retort	Sandy Ridge
Hartley-Sparkman Coal Co.	Cherry No. 1	Phillipsburg
Hooton, Isaac F. & Son	Cherry No. 3	Moshannon
Hindle Coal Co.	Hindle No. 1	Phillipsburg
Holler Coal Co.	Margorie No. 1	Phillipsburg
Horn, J. Edward & Co.	Horn No. 9 (Ophir No. 9 and Bloom No. 9)	Phillipsburg
Kato Coal Co.	Kato No. 5	Kato
Kelly Bros. Coal Co.	Cherry Nos. 3, 6, 4; Valentine No. 2	Snow Shoe
Lanark Coal Mining Co.	Lanark	Phillipsburg
Lehigh Valley Coal Co.	Nos. 22, 25 and 26	Snowshoe
Lucas Coal Co.	Cherry Run No. 7	Snow Shoe
Moravian Coal Mining Co.	Moravian No. 8	Moshannon
Moshannon Coal Mining Co.	Moshannon No. 11	Phillipsburg
Moshannon Creek Coal Mining Co.	Moshannon Creek	Phillipsburg
Pendee Coal Co.	Pendee No. 4	Phillipsburg
Redding, Lawrence	Valentine No. 1	Snow Shoe
Rowland, H. H.	Lulu No. 2	Phillipsburg
Smooth Hill Coal Co.	Smooth Hill Mine	Phillipsburg
Smutzinger Coal Co.	Caldale No. 12	Munson
Stott Hartley Coal Co.	Hartley No. 2	Phillipsburg
Stott, James F. & Co.	R. d. Jacks No. 1 and Rich Hill	Phillipsburg
Trout Run Coal Co.	Trout Run	Mader

CLARION COUNTY

Acme Gas Coal Co.	Acme, Penn.	Rimer-sh
Baldau Coal & Coke Co.	Drift	Showers
Beattie Mining Co.	Nos. 2 & 5.	Fairmont City
Ben Adhem Coal Co.	Ben Adhem	Sligo
Boron-Wesuky Coal Co.	Boron-Wesuky	St. Petersburg
Bostaph Coal Co.	Bostaph	St. Petersburg
Carroll-Gatesman Coal Co.	Carroll	Lucinda
Cherry Run Fuel Co.	Vogle	Rimersburg
Cherry Run Mining Co.	Cherry Run	Sligo
Chestnut Ridge Coal Mining Co.	Chestnut Ridge	Rimersburg
Church Hill Mining Co.	Church Hill	Leechburg
Clarion Coal Mining Co.	Clarion	Hacy
Clarion Mining Co.	No. 1	Clarion
Collum, A. T.	McDonald	Arthurs
Consumers Coaleries Corp.	Turkey Run	Sligo
CowanShannock Mining Co.	Badger	Strattonville
Eagle Coal Co.	Glenora	Catfish
Eureka Coal Co.	Strattonville	Strattonville
Farmington Coal & Mining Co.	Farmington	Leeper
Federal Coal Mining Co., Inc.	Federal	Chiron
Fredell Mining Co.	Eagle	R. D. 1, W. Monterey
Freepert & Mahoning Coal Co.	Ruth	New Bethlehem
Graham, John C.	Graham	Sligo
Griebel, Jos. J. & Sons.	Maniller	Snyderburg
Hamler Coal Co.	Hamler No. 1	Havy
Harvey Coal Co.	Harvey	Clarion
Hofen-Eiseworth Coal Co.	Kurus	Waterson
Hill Fuel Co., The	Miller	Sligo
Holden Coal Co.	Holden	Corsica
Jam's, W. J. Coal Co.	Emblenton	Emblenton
Jam's, W. J. Coal Co.	Phillipston & East rady.	Phillipston
Joe-Ann Coal Co.	Rine Goose.	West Monterey
Keystone Mining Co.	Sarah Furnace No. 1 and Sterling	
	No. 3	East Brady
Klamath Coal Co.	Cummings No. 1.	Summerville
Lawsonham Coal Co.	Lawsonham	Lawsonham
Lucinda Coal Co.	Frankton & Bajns.	Lucinda
McDonald, C. A.	McDonald	Arthurs
Mercer Iron & Coal Co.	No. 2 Sutton	Kingsville
Monterey Coal Co.	Monterey	W. Monterey
O'Neill, H., & Co.	O'Neill	Lucinda
Osterr, Coal Co.	Osterr	Lucinda
Paint Coal Co.	Star	Arthurs
Penn. Central Coal & Coke Co.	Penn. Central	West Monterey
Penn. Clarion Coal Co., Inc.	Black Cat	New Bethlehem
Pennsy Coal Co.	Asace No. 12	Sligo
Pine Run Coal Co.	No. 2	Pullock
Pine Run Coal Co.	No. 11	New Bethel-m
Piney Creek Mine Co.	Piney Creek	Madison
Pittsburgh & Clarion Coal Co.	Phillipston	East Brady
Red Bank Coal Co.	Monarch	R-d Bank
Republic Gas Coal Co.	Betty	Rimersburg
Ross Mining Co.	Ross	Showers
Schill, J. A., & Co.	Sandy Ridge	Lucinda
Sloan Coal Co.	Sloan	Clarion
Stevens Coal Co.	Strattonville	Strattonville
Strattonville Coal Mining Co.	No. 1	Brookville
Summerville Coal Co.	Thatcher	Strattonville
Tate's Manufacturing Co.	Victory	Clarion
Victory Coal Mining Co.	Widnoon	Lawsonham
Widnoon Coal Mfg. Co.	Williams	Corsica
Williams Coal Co.	Els	Brookville
Wilson Coal & Coke Co.		

CLEARFIELD COUNTY

Ming

Post Office of Mines

Abel Coal Co.	No. 1	DuBois
Alberts Coal Co.	No. 1	Houtzdale
Alexander Coal Co.	Standard No. 1	Madison
Armstrong Coal Mining Co.	Glen	Winthrop
Ashtown Coal Co.	Glen	Munson
Atlantic Coal Mng Co.	Atlantic	West Moshannon
Axleford Coal Co.	Axleford	Houtzdale
B & B Coal Co., Inc.	B & B	New Milford
Bald Hill Coal Co.	Victor No. 41	Leventis Mills
Bald Hill Coal Co.	Victor No. 44	Bald Hill
Barrett Coal Co.	Barrett	Clearfield
Beccaria Coal & Coke Co.	Stan Mar No. 1	Beccaria
Beccaria Coal & Coke Co.	Stan Mar No. 2	Osceola Mills
Beccaria Coal Co.	Standard No. 1	McGees Mills
Bee Hive Coal Mining Co.	Bee Hive	Houtzdale
Belfast Coal Co.	Belfast	Grampian
Bell Run Coal Co.	Bell Run No. 1	Borisdale
Bellmore Coal Co.	Bellmore Nos. 1 & 2	Ramey
Bermoshan Coal Co., Inc.	Coal Run No. 1	Osceola Mills
Bernard Mining Co.	Bernard	Bramoak
Bershadale Coal Co.	Bershadale No. 1	Houtzdale
Berkley White Coal Mining Co.	Berkley Nos. 28 & 29	Houtzdale
Bessener Coal Co.	Bessener	Madison
Betty Coal & Fire Clay Co.	Burley No. 1	Madison
Betz Coal Mng Co.	Betz No. 2	Beri
Black Oak Coal Co.	Olympia	Osceola Mills
Bloom, Kelly D.	Bloom	Curwensville
Blue Run Coal Co.	Blue Run No. 1	Glen Hope
Boardman Coal Mining Co.	Boardman No. 4	Boardman
Boston Collieries Corporation	Massot No. 1	Houtzdale
Bowers Chas. Coal Co.	Bowers No. 1	Lehigh
Brogansan Coal Mining Co.	Brogansan Nos. 1 and 2	Osceola Mills
Buffalo & Susquehanna Coal & Coke Co.	Buffalo Nos. 1 and 2	Indios
Bulah Shaft Coal Co.	Bulah No. 1	Ramey
Burns Brothers	Burns No. 3	Grampian
Butterworth Brothers	Keyline Nos. 1, 2, 3 & 4	Phillipsburg
Caldwell Smokeless Coal Co.	Caldwell No. 4	Phillipsburg
Campbell Ridge Coal Co.	Campbell	Phillipsburg
Carruth Coal Co.	Carruth Nos. 2 & 3	Carnwath
Cascade Coal & Coke Co.	Cascade	Tyler
Cassidy Coal Co.	Cassidy	Curwensville
Caswin Coal Mining Co.	Caswin No. 1 and Wester	Osceola Mills
Cedar Hill Coal Mining Co.	Mountain Branch	Osceola Mills
Chase Bros Coal Co.	Famue No. 1	Famue
Clearfield Bit Coal Corp.	Coon & Pleasant Hill	Grassflat
Clearfield Colliery Co.	Caldwell	Clearfield
Coal & Clay Co.	Mouse Creek No. 1	Clearfield
Coal Hill Mining Co.	Coal Hill	Lehighburg
Coal Junction Coal Mining Co.	Coal Run Junction No. 1	Osceola Mills
Commercial Collieries Co.	Alde Run	Morrisdale
Conestoga Coal Co.	Conestoga No. 1	Irona
Conquest Coal Mining Co.	Conquest No. 1, No. 1 "C," No. 1	Imperial
Craig-Gould Coal Co.	Sarah Nos. 1 and 2	Brisblo
Crescent Refractories Co.	Rowles No. 1, 3 and 4	Curwensville
Cunard Coal Co.	Cunard	Montezuma
Cushake Coal Mining Co.	Cushake	Burisdale
Dablin Bros Coal Co.	Stanley and Dauntless	Houtzdale
Deatur Coal Mining Co.	Penn Nos. 8 & 9	Osceola Mills
Deuro Coal Mining Co., Inc.	Albin Nos. 2 & 3	Curwensville
Deiby Branch Coal Co.	Colorado No. 1	Phillipsburg
DuBois Mining Co.	Luthersburg	Burisdale
Dugan, Jas. F. & Co.	Beacon No. 1	Osceola Mills
Dunsmore, R. F.	Cuba No. 2	Phillipsburg
Dunshan Coal Mining Co.	Dunshan No. 1	Osceola Mills
Elery Coal Mining Co.	Coalade No. 15	Grampian
Ellyer-Schote Mining Co.	Coalade No. 16	Osceola Mills
Eureka Coal Co.	Falls Creek	Indios
Eyes Collieries Co.	Eagle No. 1	Clearfield
Fadon No. 3 Mining Corporation	Falcon No. 3	Beccaria
Falk Coal Co.	Prospect No. 2	Houtzdale
Fasley Coal Co.	Gasley No. 2	Houtzdale
Gearhart Coal Co.	Gearhart	Phillipsburg
Glen Brook Collieries Co.	Glen Brook No. 2	Irona
Glen Brook Mining Co.	Glen Brook No. 1	Houtzdale
Glen Hope Coal Mining Co.	Glen Hope No. 1	Glen Hope
Glen Richey Coal Mining Co.	Manhattan	Lehighburg
Glenwood Coal Co.	Glenwood No. 10	Burisdale
Good Clay & Coal Co.	Good A-22	Bells Landing
Good Clay & Coal Co.	Good A-23	New Milford
Good Clay & Coal Co.	Good No. 24	Gintar
Goshen Coal Co.	Goshen Nos. 1, 2, 3, 1, 5 & 6	Surveyor
Gould, W. A. & Bro.	Midvale Nos. 1, 3 and 4, Loraine and Black Diamond	Brlshin
Grampian Coal Mining Co.	Derator No. 11	Osceola Mills
Grass Flat Coal Co.	Drift	Grass Flat
Greenwood Coal Mining Co.	Greenwood	Madera
Guerney Coal Co.	Hurietta No. 2	Houtzdale
Gulton Coal Co.	Gulton	Phillipsburg
Halden-Kelly Coal Co.	Lower Moshannon	Clearfield
Hale Coal Co.	Hale No. 1, Elizabeth Nos. 1 & 2	Clearfield
Hamp Coal Co.	Haney No. 1	Clearfield
Harbison-Walker Refractories Co.	Croft	Surveyor
Harbison-Walker Refractories Co.	Phage	Woodland
Harris Bros. Coal Mining Co.	Black Jacket No. 4	West Decatur
Harris, Wm. Coal Co.	Lane No. 1	Phillipsburg
Hawkins Coal Co.	Hawkins No. 1	Phillipsburg
Hegarty, S. S. Sons	Oakland Nos. 1, 2, 3 and 4	Coalport
Hennetta Coal Co.	Henrietta No. 5	Houtzdale
Hinter Coal Co.	Hedrick Nos. 1 and 2	Leventis Mills
HH Bros. Coal Co.	Ashman No. 4	Morrisdale
Hopkins Coal Co.	Hopkins No. 2 & Sandwick	Leventis Mills
Hughes, H. M.	Riding No. 3	Osceola Mills
Imperial Coal Corp.	Cambria No. 1	Imperial
Iryena Coal & Coke Co.	Iryena Nos. 5 and 10	Leventis Mills
Jaffa Coal Mining Co.	Flouence	Glen
Janesville Coal Co.	Fernwood	Ramey
Jefferson Ridge Coal Co.	Jefferson	Phillipsburg
Kelly Bros Coal Co.	Olanta	Gianta
Living John E. Coal Co.	Laurie	DuBois
Lakeside Coal Co.	Lake	Borisdale
Lane Coal Co.	Lane No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100	

(Continued on Next Page)

Clearfield County—Continued

Company.	Mines.	Post Office of Mines.
Lost Run Coal Mining Co.	Lost Run No. 1.	Maheaffrey
McDonald, C. A.	Rochester & New Rochester.	Falis Creek
McKenzia, Alex. & Sons.	McKenzie No. 1.	Houtzdale
Mackelvon Coal Mining Co.	Center No. 1.	Oseola Mills
Maple Run Coal Co.	Maple Run.	R. F. D. 4, Olanta
Maryland Coal & Coke Co.	Imperial No. 2 and Shaft No. 2.	Houtzdale
Maryland Coal & Coke Co.	Imperial No. 4.	Oseola Mills
Meadow Brook Coal Co.	Meadow Brook Gray No. 1 & 2.	Phillipsburg
Meadow Brook Fuel Co.	Meadow Brook.	R. D. 5, Uniontown
Myers Coal Co.	Vulcan No. 1.	R. D. 5, Uniontown
Minos, George, Jr.	Clear Run.	DuBois
Moore Creek Coal Co.	Moore Creek.	Clearfield
Moore Run Coal Co.	Moore Run.	Penfield
Moravian Coal Mining Co.	Moravian Nos. 1, 2 and 3.	Grass Flat
Morrisdale Coal Co.	Morrisdale Nos. 1 and 3.	Morrisdale
Moshannon Coal Mining Co.	Moshannon Nos. 10 and 12.	Oseola Mills
Moshannon Collieries Co.	Wallace.	O'Shanter
Mountain Spring Coal Co., Inc.	Mountain Spring.	Houtzdale
Moutz, S. J. & Co.	Viola Nos. 1 and 2.	Smith Mills
Mull, B. H.	Imperial No. 1.	Phillipsburg
New Castle Coal Co.	New Castle No. 1.	Houtzdale
Northwestern Mining & Exchange Co.	Eriton.	Eriton
Nugent Coal Co.	Nugent No. 1.	McCartney
O'Donnell, C. V. & Co.	No. 2.	Fernwood
Oliver Coal Mining Co.	Coal Run No. 2.	Oseola Mills
Pantall Coal Co.	Pantall.	Punxsutawney
Paragon Hill Mining Co., Inc.	Paragon Nos. 1, 2 and 3.	Oseola Mills
Paramount Coal Mining Co.	Paramount No. 1.	Coalport
Peale Peacock & Kerr, Inc.	Glen Richey Nos. 1, 3, 4, 5, 8, 18 and 20.	Glen Richey
Peale, Peacock & Kerr, Inc.	Nos. 1, 6 and 9.	Winburne
Peale Peacock & Kerr, Inc.	Decatur Nos. 3, 7 and 8.	Phillipsburg
Peaslee Coal Co.	Peaslee No. 2.	Clearfield
Penfield Coal & Coke Co.	Penfield No. 1.	Penfield
Pennsylvania Coal & Coke Co.	Winburne Nos. 16 and 47.	Winburne
Phoenix Coal Co.	Phoenix No. 1.	Madera
Pine Ridge Coal Co.	Ames Nos. 1, 2, 3 & 4.	La Jose
Potter, Bigler & Potter, Inc.	Mt. Carmel.	Karthaus
Potts Run Coal Co.	Potts Run Nos. 1, 2 and 3.	Boardman
Price, W. A.	Caldwell.	Curwensville
Priscilla Coal & Coke Co.	Priscilla.	Westover
Progress Coal Co.	Progress No. 1.	Ramey
Pyramid Coal Mining Co.	Pyramid No. 1.	Curwensville
Quinn-Simlar Coal Co.	McCartney No. 3.	McCartney
Ramey Coal Co.	Ramey No. 1.	Ramey
Regal Coal Mining Co.	Eleanor No. 2.	Ramey
Roberta Coal Co.	Roberta.	La Jose
Rocky Lodge Coal Co.	Rocky Lodge Nos. 1 & 2.	Phillipsburg
Ryder Coal Mining Co., Inc.	Aden Nos. 1, 3, & 4.	Phillipsburg
Royal Coal Co.	Ogle No. 1.	Windburne
Runk, Ross R.	Klondike.	Phillipsburg
Salem Coal & Coke Co.	Salem No. 1.	Du Bois
Sandy Valley Coal Co.	Peterson.	Reynoldsville
Scott, H. B.	Colorado No. 5.	Munson Station
Seman, Jno.	Woodward No. 2.	Moran.
Sheridan Coal Co.	Sheridan No. 1.	Phillipsburg
Smith & Hohnka.	Morrisdale Nos. 9 & 10.	Phoenix No. 1.
Standard Moshannon Coal Co.	Standard No. 4.	Morrisdale
Stanley Coal Mining Co.	Stanley No. 3.	Bri-shin
Sterling Coal Mining Co.	Sterling No. 1.	Houtzdale
Sterling Moshannon Coal Co.	Sterling No. 3.	Houtzdale
Thompson-Lea Coal Mining Co.	Elton Colliery No. 1.	La Jose
Turley Coal Mining Co.	Wister No. 3.	Irvona
Union Mining Co.	Union.	DuBois
Verdun Coal Co.	Verdun.	Oseola Mills
Victor Collieries Co.	No. 1.	Coalport
Victor Hill Coal Co.	Victor Hill No. 1.	Coalport
Victoria Coal Mining Co.	Acme No. 6.	Phillipsburg
Weber Coal Co.	Weber.	Mitchel
Wendell Coal Mining Co.	Chesterfield No. 1.	Utahville
White-Iugan Coal Co.	Columbia No. 2.	Phillipsburg
Wiley Coal Co.	Wiley.	Hyde
Willard Coal Co.	Willard.	Phillipsburg
Woodland Canal Coal Co.	Canal Creek.	Maheaffrey
Woodland Coal Mining Co.	Howard No. 1.	Maheaffrey
Woodridge Coal Co.	Woodridge No. 2.	Woodland
Yorkshire Coal Co.	Yorkshire Nos. 1 and 2.	Madera
Ziegler Coal Co.	Belle Vernon No. 2.	Houtzdale

CLINTON COUNTY

Kettle Creek Coal Mining Co.	Kettle Creek	Bitumen
Scotac Mining Co.	Scotac	Lock Haven

ELK COUNTY

Bennetts Branch Coal Co.	Bennetts Branch Nos. 2 & 3.	Dents Run
Brandy Camp Coal Co.	Brandy Camp.	Elhon
Bucktail Coal Co.	Bucktail.	Weedville
Elk Coal Co.	Elk.	Elhon
Dureka Coal Co.	Benzingen.	St. Marys
Burkva Coal Co.	Caledonia.	Caledonia
Haberberger Mine	Haberberger.	St. Marys
Haw Coal Co.	Haw.	Kersey
Jackson-Harrigan Coal Co.	Cuneo.	Kersey
Jackson-Harrigan Coal Co.	Weedville.	Weedville
Josephson Coal Co.	Eckey No. 1.	Kersey
Kronenwetter Coal Co.	Kronenwetter.	St. Marys
McCullough Coal Co.	McCullough No. 1.	St. Marys
McLaughlin Coal Co.	McLaughlin.	Weedville
Northwestern Mng. & Exchange Co.	Dagus.	Dagus
Penfield Coal & Coke Co.	Coalville No. 2.	Penfield
Ridgeway Coal Co.	Kyler.	Kersey
Shawmut Mining Co.	No. 5 Elhon.	Elhon
Shawmut Mining Co.	Shawmut Nos. 8 & 10.	Shawmut
Shawmut Mining Co.	Byrnedale No. 31.	Browns Run No. 42
Shawmut Mining Co.	No. 41 & Proctor.	Force
Smith, Edward, Coal Co.	Ed Smith.	Tyler
Straub, G. B.	Star.	Box 123, St. Marys
Toby Coal Mining Co.	Five Points.	R. D. 1, Weedville
Victory Coal Co.	Victory Nos. 1 & 2.	Brady Camp
West Branch Coal Co.	Benzingen.	St. Marys
Williams, T. J.	Glo-Gora.	Elhon
Witten Coal Co.	Witten.	Tyler

FAYETTE COUNTY

Amend Coal Co.	Playford Nos. 1 and 2.	Uledi
Amend Coal Co.	Amend Nos. 1, 2, 3, R. F. D. 3.	Uniontown
American Coal Oil & Gas Co.	Flint Rock.	Uniontown
American Coke Corp.	American No. 1.	Braznell
American Coke Corp.	American No. 2.	Martin

Company.	Mines.	Post Office of Mines.
American Coke Corp.	Orient.	Orient
American Manganese Mfg. Co.	Hill Farm, Furnace No. 1, Fec. No. 2.	Dunbar
Arcensberg Coal Co.	Arcensberg.	Brownsville
Atlantic Coal Co.	Willia Poole No. 34.	New Geneva
Atlas Coke Co.	Lafayette.	Helen
Baker Coal Co.	Emery.	Masontown
Basin Coal Co.	Basin.	Fayette City
Beacon Hill Coal Co.	Riverside.	Uniontown
Beal Coal Co.	Beal.	Revere
Belboise Coal Co.	Belboise.	Belboise Sta.
Bell Coal & Coke Co.	Josephine.	Smithfield
Blue Bidge Coal Co.	Blue Bidge.	Fairchance
Bortz, C. E.	Ross Nos. 1 & 2.	Masontown
Bourne Fuller Co.	Sealight.	Uniontown
Bowers Coal Co.	Bowers No. 2.	Point Marion
Boyd Coal Co.	Boyd.	McClellandtown
Brier Hill Coal Co.	Brier Hill.	Brier Hill
Brown, L. A.	Brown No. 1.	Fayette City
Browns Ferry Coal Co.	Browns.	Adah
Brownfield Coal & Coke Co.	Mario, Martha and Meyers.	Uniontown
Buttermore Coal Co.	Brooker.	R. F. D. No. 2, Uniontown
Campbell & Sons Coal Co.	Campbell.	Edenborn
Campbell Coal Co.	Campbell Nos. 1 and 2.	Normalville
Central Fuel Co.	Lawyer.	Pennsville
Century Coal Co.	Century.	Brownsville
Champion Conn. Coke Co.	Champion.	Brownsville
Chess Coal Co.	Chess.	Cheat Haven
Chester Hill Coal Co.	Allee No. 1.	Uniontown
Clark Coal Co.	Poster.	Outcrop
Cochran Bros.	Spring Grove.	Dawson
Columbia Coal & Coke Co.	Percy.	Lemont
Connellsville By-Product Coal Co.	Lock View.	Point Marion
Connellsville Central Coke Co.	Herbert.	R. F. D., New Salem
Connellsville Coke Co.	Kester.	Scottdale
Consolidated Coke Co.	Donald Nos. 1, 2, 3 and 5.	Grays Landing
Consolidated Coke Co.	Mt. Sterling.	Mt. Sterling
Corrado Coal Co.	Corrado No. 1.	Connellsville
Corrado-Schenck Coal Co.	Eagle.	Broad Ford
Costa Coal Co.	Lucy.	Sand Rock
Crawford Coal & Coke Co.	Crawford.	Connellsville
Crozier Run Coal Co.	Crozier.	Uniontown
Davidson-Connellsville Coal & Coke Co.	Frederick No. 1.	Point Marion
Deyarman Coal Co.	Deyarman.	Uniontown
Diamond Coal & Coke Co.	Pike.	Brownsville
Donald Coal & Coke Co.	Stillwagon.	Cheat Haven
Dornon Coal Co.	Stewarton.	Stewarton
Dunn, J. H.	Liberty.	Vanderbilt
East Connellsville Coke Co.	Hilltop.	Newcomer
East Fayette Coal Co.	Forrester.	Ohio Erie
East River Side Coal Co.	Jacobs.	E. Millsboro
Eastern Coke Co.	Tower Hill No. 1.	E. Republic
Elmo Coal Co.	Elmo.	R. D. 1, East Millsboro
Etna-Connellsville Coke Co.	Garwood.	R. D. 20, Brownsville
Eureka Coal & Coke Co.	Adams.	Uniontown
Evans Coal & Coke Co.	Evans No. 3.	Uniontown
Eyre Fuel Co.	Eyre.	Ohio
Fairchance Coal & Coke Co.	"Daugherty".	Fairchance
Fairchance Coal & Coke Co.	Jimtown Nos. 4, 5 & 6.	Jimtown
Fairchance Coal & Coke Co.	Bice.	Smithfield
Faith Coal Co.	Faith.	Lemont Furnace
Fancy Hill Coal Works.	Eagle.	Cheat Haven
Fayette Coal Co.	Shamrock.	New Salem
Federal-Connellsville Coal & Coke Co.	Ida.	Point Marion
Fiat Coal Co.	Fiat.	McClellandtown
Florence Coal & Coke Co.	Browning.	Uniontown
Franklin Coke Co.	Leon.	Brownsville
Frick, H. C. Coke Co.	Colonial No. 1.	Smock
Frick, H. C. Coke Co.	Leckrone.	Leckrone
Frick, H. C. Coke Co.	Leisenring No. 2.	West Leisenring
Frick, H. C. Coke Co.	Kyle and Wynn.	Fairchance
Frick, H. C. Coke Co.	Collier, Continental Nos. 1 and 2.	Dearth, Leith, Phillips and York
Frick, H. C. Coke Co.	Run.	Uniontown
Frick, H. C. Coke Co.	Ralph.	Republic
Frick, H. C. Coke Co.	Adelaide.	Adelaide
Frick, H. C. Coke Co.	Junata and Leisenring No. 3.	Dunbar
Frick, H. C. Coke Co.	Bridgeport.	Brownsville
Frick, H. C. Coke Co.	Buffington & Foodale.	New Salem
Frick, H. C. Coke Co.	Trotter and Davidson.	Connellsville
Frick, H. C. Coke Co.	Colonial Nos. 3 and 4.	Grindstone
Frick, H. C. Coke Co.	Continental No. 3.	Newcomer
Frick, H. C. Coke Co.	Edenborn.	Edenborn
Frick, H. C. Coke Co.	Filbert.	Fairbanks
Frick, H. C. Coke Co.	Lemont Nos. 1 & 2.	Lemont Furnace
Frick, H. C. Coke Co.	Oliphant.	Oliphant Furnace
Frick, H. C. Coke Co.	Redstone, Shoaf.	Brownfield
Frick, H. C. Coke Co.	Gates and Palmer.	Adab
Frick, H. C. Coke Co.	Lambert.	Lamberton
Frick, H. C. Coke Co.	Leisenring No. 1.	Leisenring
Frick, H. C. Coke Co.	Ranco.	Ranco
Frick, H. C. Coke Co.	Bitner.	Bitner
Frick, H. C. Coke Co.	Crossland.	Crossland Mine
Frick, H. C. Coke Co.	Maxwell.	La Belle
Frick, H. C. Coke Co.	Youngstown.	Lemont Furnace
Gaddis Coal Co.	Gaddis.	Uniontown
Genuine Connellsville Coke Co.	Park Hill.	Waltersburg
Georges Coal Co.	Love and Nora.	Fairchance
Gilliland Coal Co.	Leon.	Brownsville
Gilmore Coke Ovens.	Gilmore.	Smiley
Harrah Coal & Coke Co.	Harrah.	Outcrop
Hartley Coal Co.	Hartley No. 1.	Adah
Hayden Coal Co.	Hayden Nos. 1, 2 and 3.	Newcomer
Hays, R. B., Coal Co.	Hays.	Newcomer
Hecla Coal & Coke Co.	Griffin Nos. 1 and 2.	Masontown
Hecla Coal & Coke Co.	Crystal.	Gans
Hela Coal & Coke Co.	Isabella.	Hillcoke
Herd & Son.	Herd.	Connellsville
Hertzog Coal Co.	Hertzog.	Gans
Hill Top Coal & Coke Co., Inc.	Hill Top Nos. 1 & 2.	Uniontown
Hilman Coal & Coke Co., Inc.	Naomi.	Belleverna
Hope Coal Co.	Hope.	Smithfield
Howard Coal Co.	Kimmel.	Indian Creek
Hustead-Semans Coal & Coke Co.	Hustead-Semans.	East Millsboro
Indian Creek Coal & Coke Co.	Sparks.	Indian Head
Jacobs, T. J.	Jacobs.	Somerfield
Jamison Coal & Coke Co.	Jamison Nos. 21 and 22.	Perryopolis
Jennings Coal & Coke Co.	Jennings.	Outcrop
Jimtown Coal Co.	Cox.	Dawson
La Belle Coal Co.	La Belle.	La Belle
Laurel Coke Co.	Laurel.	Uniontown
Lawrence Coal Co.	Elizabeth.	Newcomer
Liberty Coal & Coke Co.	Liberty No. 1.	Newcomer

(Continued on Next Page)

Fayette County—Continued

Company.	Mines.	Post Office of Mines.
Lilley Coal & Coke Co.	Lilley	South Brownsville
Lincoln Coal & Coke Co.	Lincoln	Waltersburg
Locust Hill Coal Co.	Locust Hill	Point Marion
Lower Gas Coal Co.	Fayette	Fayette City
Luzerne Coal & Coke Co.	Luzerne	La Rella
Lyons Coal Co.	Lyons	Gans
McClellandtown Coal & Coke Co.	McClellandtown	McClellandtown
McIntyre Coal Co.	McIntyre	Uniontown
McKee Coal Co.	Geneva	Martin
Mahoney, C. C.	Mahoney	Uniontown
Martin, J. S.	Martin	Fairchance
Matyas-Krause Coal Co.	Crecent	McClellandtown
Meleroft Coal Co.	Meleroft Nos. 1 and 2	Meleroft
Miller, Clark S.	Miller	Normalville
Morgan Coal & Coke Co.	Cornish	Uniontown
Morris Connellsville Fuel Co.	Dawberry	Uniontown
Mutual Coal & Coke Co.	Mutual	Uniontown
Nebu Coal Mining Co.	Mohawk	Champion
Nelle Coal & Coke Co.	Nelle	Vanderbilt
New Geneva Fuel Co.	Powell	New Geneva
Newell, C. P.	Mill Run	Mill Run
Nicholson Coal Co.	Patrick No. 1	Masontown
Old Connellsville Coke Co.	Liberty	Outcrop
Oliphant Coal & Coke Co.	Jeffrey Nos. 1 and 2	Uniontown
Oliver & Snyder Steel Co.	Oliver Nos. 1, 2 & 3	Oliver
Onelda Coal Mining Co.	Onelda No. 1	Indian Head
Orchard Fuel Co.	Orchard	Scottdale
P. & Y. Coal Co.	Christopher	Adah
Parker Cochran Coal Co.	Dick	Jimtown
Parhill Coal Co.	Dick	Dawson
Parshall, W. J.	Old Home	McClellandtown
Peerless Fuel Co.	Peerless	Uniontown
Pennie Bryner Coal Co.	Pembry	Indian Creek
Penn-Pitt Coal & Coke Co.	Margarette	Point Marion
Pennsville Coal Co.	Detwiler and Pennsville	Connellsville
Phyllis Mining Co.	Phyllis	Cheat Haven
Pittsburgh Coal Co.	Arnold No. 2, Tremont	Arnold City
Pittsburgh Coal Co.	Banning Nos. 1 and 3	Van Meter
Pittsburgh Coal Co.	Banning No. 2	Whitsett
Pittsburgh Coal Co.	Apollo and Fayette City	Fayette City
Pittsburgh & Erie Coal Co.	Sumner No. 2	Brazo-II
Pittsburgh Steel Co.	Albion No. 1	Albion
Pittsburgh Steel Co.	Albion No. 2	R. D. No. 1
Point Marion Coal Co.	Point Marion	Point Marion
Poland Coal Co.	Poland Nos. 1 and 2	Point Marion
Provinc Coal Co.	Provinc	Masontown
Puritan Coke Co.	Puritan Nos. 2, 3, 4, 5	McClellandtown
Rainey, W. J.	Revere	Uledi
Rainey, W. J.	Elm Grove	Dunbar
Rainey, W. J.	Royal	Chestnut Ridge
Rainey, W. J.	Mount Braddock	Mt. Braddock
Rainey, W. J.	Paul	Vanderbilt
Rainey, W. J.	Fort Hill	Dawson
Rainey, W. J.	Allison	Allison
Ranney Coal Mining Co.	Little Squaw	Indian Head
Redstone Coal & Coke Co.	Thompson No. 1	Republic
Reilly-Callaghan Coal & Coke Co., Inc.	Nellie, Callaghan, Sapper and Margaret, R. F. D. No. 2, Smithfield	Smithfield
Reilly, W. J., Coal & Coke Co.	Baxter Ridge	Smithfield
Republic Coal & Coke Co.	Freedom	Gans
Republic Iron & Steel Co.	Rowood and Rowood No. 3	Smithfield
Republic Iron & Steel Co.	Republic	Republic
Republic Iron & Steel Co.	Martin	Outcrop
Rich Hill Coke Co.	Rich Hill Mine	Outcrop
Riverside Coal Co.	Reilly	Ohio Pyle
Robinson Coal Co.	Robinson	Out Crop
Rogers Coal Co.	Rogers Nos. 1 & 2	Clairecrest
Romney Coal Mining Co.	Romney No. 1	Meleroft
S. R. & R. Coal Co.	McManus	Masontown
Sackett H. R. Coal & Coke Co.	Sackett	Outcrop
Sagamore Coal Co.	Big Chief	Indian Head
Sailor Coal Co.	Gluffely	Ohiovale
Salt Lick Coal Co.	Pershing	Indian Head
Sedar Coal Co.	Sedar	Brownsville
Shady Side Coal & Coke Co.	Shady Side	R. D.
Sixth Pool Coal Co.	Sixth Pool	Brownsville
Smiley Coal Co.	Smiley	Uniontown
Snowden Coal Co.	Mt. Hope	Brownsville
Somerfield Mining Co.	Thomasdale	Somerfield
South Fayette Coal Co.	Blackstone	Fredricktown
Southern Connellsville Coke Co.	Marion	Cheat Haven
Speers, S. M. Coal Co.	Mitchell	Newell
Stader Coal Co.	Stader No. 1	Mill Run
State Line Coal Co.	Stentz No. 1	Cheat Haven
Sterling & Graham Coal Co.	Stella	Masontown
Sterling Coal Co.	Sterling	Connellsville
Stern Coal & Coke Co.	Snider and Ball	Uniontown
Stevenson Coal Co.	Stevenson	Point Marion
Summit-Connellsville Coal & Coke Co.	Franklin	Owensdale
Superior Connellsville Coal Co.	Sharpnack	Brownsville
Thompson-Connellsville Coal Co.	Thompson No. 2	Connellsville
Thorn Bottom Coal Co.	Work	Connellsville
Tower Hill Connellsville Coke Co.	Tower Hill No. 2	Republic
Tunnel Coal & Coke Co.	Tunnel	Outcrop
Two Point Gas Coal Co.	Two Point	Newell
Union Connellsville Coke Co.	Kathrine	Brownsville
United Refractories Co.	Palmer	Dunbar
United States Fuel Co.	Donald No. 6	Grays Landing
Vanderbilt Coal & Coke Co.	Clarissa	Vanderbilt
Vanderbilt Coal & Coke Co.	Morgan	Broad Ford
Walters, Alva M. Co.	Walters	Upper Middletown
Walters & McCay	Dunacher	Upper Middletown
Waltersburg Coal Co.	Edna	Waltersburg
Warner-Youghiogheny Coal Co.	Leonard	Fayette City
Warwick Coal Co.	Warwick	Indian Creek
Washington Coal & Coke Co.	Washington No. 1 and 2	Star Junction
Waver, John W.	Lillian	Smithfield
Westmoreland-Fayette Coal & Coke Co.	Thomas	Cheat Haven
Wick Haven Fuel Co.	Wick Haven	E. D. Smithfield
Wilkey Coal & Coke Co.	Anica and Prospect	Banning
Wilson Brothers Coal Co.	Hill	Whitsett
Wingrove Coal Co.	Echert	Cheat Haven
Winnett, A. M.	Winnett	Mill Run
Winona Coal Co.	Winona	Relle Vernon
Winstead Coal Co.	Winstead	Masontown
Wishart Coal Co.	Wishart	Point Marion
Woods Coal Co.	Woods	East Rose
Youghiogheny Coal & Coke Co.	Flonoe	Dawson
Zebley Coal Co.	Zebley	Fairchance

FULTON COUNTY

Rockhill Coal & Iron Co.	No. 9	Robertsdale
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GREENE COUNTY

Company.	Mines.	Post Office of Mines.
Buckeye Coal Co.	Nemacolin No. 1	Nemacolin
Crucible Fuel Co.	Crucible	Crucible
Cumberland Fuel Co.	Cumberland	Uniontown
Fredricktown Coal & Coke Co.	Sandy Run	Martin
Frick, H. C. Coke Co.	Dillworth	Ricea Landing
Greene County Coal & Coke Co.	Jeannette	Point Marion
Mabel Coal Works	Mable Mines	Poland
Mabel Sterling Coal Works	Dunard Nos. 1 and 2	Dunard
Moffitt Sterling Gas Coal Co.	Moffitt Sterling	Dunard
Pickands, Mather & Co.	Mather Collieries	Mather
Rosedale Coal Co.	Rosedale No. 3	Dunard
Seventh Pool Coal & Coke Co.	Seventh Pool	Greensboro
Trumbull Coal Co., The	Trumbull	Clarksville
West Point Marion Coal Works	Walnut Hill	Dilliner

HUNTINGDON COUNTY

Company.	Mines.	Post Office of Mines.
Black, A. J.	Black Nos. 3, 4, 5, 7, 8, Fisher No. 2	Brond Top
Broad Top Coal & Mineral Co.	Jacobs	Cokes Summit
Carbon Coal & Coke Co. (The)	Carbon No. 5, Ocean Nos. 4 & 5	Dudley
Jonathan Coal Mining Co.	Jonathan	Dudley
Kenrock Coal Co.	Kenrock	Saxton
Middleton Coal Co.	Middleton	Dudley
Miller, J. H.	Joller	Joller
Reed Colliery Co.	Benedict	Dudley
Rockhill Coal & Iron Co.	Nos. 1, 5, 6, 7 & 8	Robertsdale
Shannon Co.	Martha	Dudley
Thropp, Joseph E.	Gordon-Fulton, Miller and Melrose	Dudley
Vernon Collieries Co.	Vernon Nos. 1 & 2	Saltfido

INDIANA COUNTY

Company.	Mines.	Post Office of Mines.
Ake, Everett C.	Melena No. 4	Glen Campbell
Alton Coal Co.	Alton No. 3	Sidney
Amerford Mining Co.	Amerford	Dilltown
Banks Coal Company	Rurter Nos. 1 and 2	Sidney
Bells Mill Coal Co.	Bells Mill	Blairsville
Bethlehem Mines Corp.	Penn. Mary Nos. 1, 2, 3, 7, 8, 9, 11 & 12	Hillwood
Brown Coal Co.	Brown	Clarksburg
Brush Creek Coal Mining Co.	Coy, Waterman, Snyder Nos. 1, 2 and 3	Waterman
Brush Creek Coal Mining Co.	Luchshoro	Luchshoro
Caldwell Smokeless Coal Co.	Caldwell No. 1	Dilltown
Caldwell Smokeless Coal Co.	Caldwell No. 2	Heshbon
Cameron Bottom Smokeless Coal Co.	Cameron No. 1	Hillwood
Charley-Frank Coal Co.	Charley-Frank No. 1	Clymer
Clark Coal Mining Co.	Peterman No. 1	Chambersville
Clark, H. E.	Indiana	Glen Campbell
Clearfield Bituminous Coal Corp.	Rossiter Nos. 1, 3, 4 and 5	Rossiter
Clearfield Bituminous Coal Corp.	Commodore Nos. 1 and 2	Commodore
Clearfield Bit. Coal Corp.	Sample Run	Clymer
Clearfield Bituminous Coal Corp.	Barr	Dixonville
Coal Run Mining Co.	Coal Run	McIntyre
Conemaugh Coal Co.	Conemaugh	Blairsville
Consolidated Coal & Coke Co.	Consolidated No. 1	Plumville
Deringer Fuel Co.	Woodland No. 5 "B"	Spangler
Dilltown Smokeless Coal Co.	Dilltown No. 1	Dilltown
Dixonville Coal Co.	Randolph No. 2	Dixonville
Dor-Mar Coal Co.	Dor-Mar No. 1	Rochester Mills
Electric Coal Co.	Electric Nos. 7 and 8	Glen Campbell
Elliott Coal Co.	Elliott	Robinson
Ellsworth-Dunham Coal Co.	Victor Nos. 11 and 14	Areadia
Empire Coal Mining Co.	Empire "1"	Idamar
Empire Coal Mining Co.	Empire M, Empire R, Empire D	Clymer
Empire Coal Mining Co.	Empire P	Starford
Esop Bros. Coal Mining Co.	Pleasant Valley No. 1, Millbar No. 1	Starford
Federal Gas Coal Co.	Federal	Saltburg
Ferrier Run Coal Co.	Ferrier No. 1	Indiana
Garfield Smokeless Coal Co.	Nos. 1, 2 & 3	Robinson
Glenide Coal Co.	Glenide No. 3	Starford
Glenwood Coal Co.	Glenwood No. 14	Glen Campbell
Gracetown Coal & Coke Co.	Gracetown Nos. 2 and 3	Gracetown
Gypsy Coal Co.	Indiana No. 6	Glen Campbell
Harve-Mack Coal Co.	Harve-Mack Nos. 1 and 2	Starford
Hines Coal Co.	Hines No. 7	Starford
Homer City Coal Co.	Homer	Homer City
Imperial Coal Corp.	Diamond Nos. 1 and 2	Boltz
Jefferson & Clearfield Coal & Iron Co.	McIntyre	McIntyre
Jefferson & Clearfield Coal & Iron Co.	Ernest, Fulton and Cummings Shaft	Ernest
Jefferson & Clearfield Coal & Iron Co.	Aultman Nos. 3, 4, 5 and 6	Aultman
Jones Coal Co.	Yellow Creek	Indiana
Keystone Coal Co.	Mooswen	Mooswen
Kiskimuntus Coal Co.	Tunnelton	Tunnelton
Kiskimuntus Coal Co.	Brush Valley	Armagh
Lackawanna Coal & Coke Co.	Nos. 3 and 4	Wehrum
Land Coal Co.	Briek Yard	Blairsville
Locust Colliery Co.	Locust	Rochester Mills
Lowther Coal Mining Co., Inc.	Ruth	Clarksburg
Lydick Coal Co.	Lydick	Indiana
McCombs Coal Co.	McCombs No. 1	Reed
McCombs Coal Co.	McCombs No. 2	Rossmoyne
Manufacturers Coal Co.	Aldine No. 2	Indiana
Margaret Coal Mining Co.	Margaret	Heshbon
Marion Center Coal Mining Co.	Marion Center	Marion Center
Millbar Coal Co.	Miller No. 1	Starford
Millrich Coal Co.	Miller No. 3	Rochester Mills
Mills, Chas. W.	Climax Nos. 2 and 3	Lockport Station
Myvan Coal Co.	Laverne	Homer City
Pansy Coal Co.	Pansy	Valley
Peneloe Coal Corp.	Peneloe No. 5	Seward
Penn-American Gas Coal Co.	Francis	West Lebanon
Penn. Fuel Co.	Penn. No. 1	Glen Campbell
Pennington, H. H. Co.	Pennington Nos. 1, 2 & 3	Glen Campbell
Pennsylvania Coal & Coke Corp.	Penna. 40, 41, 42, 43, 44	Avoca
Pennsylvania Coal & Coke Corp.	Penna. No. 55	Altoona
Pennsylvania Collieries, Inc.	Meeco No. 2	Indiana
Pine Hill Coal Co.	Pine Hill No. 1	Hillman
Pittsburgh Gas Coal Co.	Yellin Nos. 1, 2, 4 and 6	Iselin
Pittsburgh Gas Coal Co.	Iselin Nos. 3 and 5	Reed
Potter Coal & Coke Co.	Potter	Coral
Pratt Coal Co.	Pratt	R. F. D. Rossiter
Punxsutawney Coal Mining Co.	Francis Nos. 1, 2 and 3	Rossiter
Rochester & Pittsburgh Coal & Iron Co.	Luzerne	Luzerne
Russell Coal Mining Co.	Bloom Victor Nos. 24, 25, 29	Clymer
Russell Coal Mining Co.	Bloom Victor No. 27	Dixonville
Saltburg Coal Mining Co.	Estler	Ford
Savan Colliery Co.	Savan No. 1	Rochester Mills
Seneeca Coal Mining Co.	Seneeca Nos. 1 and 2	Chambersville
Sidney Coal Mining Co.	S. M. Low	Punxsutawney
Smith Coal Co.	Jewel No. 3	Indiana
Smith, Eliza J. & Bros.	Peterman Mine	Chambersville

(Continued on Next Page)

Indiana County—Continued

Company.	Mines.	Post Office of Mines.
Soisson, Jos., Fire Brick Co.	Indiana Nos. 2 & 3.	Boliviar
Standard Smokeless Coal Co.	Indiana	Indiana
Strangford Coal Co.	Strangford	Blairsville
Superior Coal Co.	Superior No. 1	Glen Campbell
Susquehanna Fuel Co.	Fulton Nos. 8 and 9.	Glen Campbell
Sutter-Kinn Coal Co.	Sutter-Kinn	Plumville
Tide Coal Mining Co.	Tide	Luzerne Mines
Trojan Coal Mining Co.	Trojan Nos. 2 and 3.	Gipsy
Urey Ridge Coal Co.	Urey Nos. 1, 3, 5 and 6.	Glen Campbell
Vinton Colliery Co.	Vinton No. 16	Claghoro
Watson Coal Co.	Watson Nos. 1 and 2.	Moorewood
Widdowson Coal Mining Co.	Widdowson	Dixonville
Williams & Blinder Coal Co.	Williams & Blinder.	Hellwood

JEFFERSON COUNTY

Allegheny River Mining Co.	Conifer	Conifer
Anita Coal Mining Co.	Nos. 1, 2, 6 and 7.	Punksutawney
Anthracite Oil, Gas & Coal Co.	Clover	Bastier
Arthur Coal Co.	Arthur	Punksutawney
Beadle & McCauley Coal Co.	Beadle & McCauley	Brookwayville
Big Run Coal Co.	Big Run	Big Run
Bowersville Coal Co.	Bowersville Colliery	Bowersville
Britton Coal Co.	Britton	Brookwayville
Carrick Coal Co.	No. 3.	R. D. Punksutawney
Carrier Brothers & Co.	Wyse	Summitville
Cascade Coal & Coke Co.	Sikesville	Sikesville
Cortez Coal Co.	Cortez No. 2.	Anita
Dora Coal Co.	Dora	Dora
Eagle Valley Coal Co.	Eagle Valley	Timblin
East Branch Coal Co.	East Branch	Cool Springs
Elk Run Coal Mining Co.	Shaller	Florence
Fordham Mining Co.	Fordham	Punksutawney
Frostburg Coal Co.	Waiston No. 6	Waiston
Gashill Coal Co.	No. 2	Big Run
Gilbert Coal Co.	No. 1	Timblin
Green Valley Coal Co.	Green Valley	Knoxdale
Hudon Coal Co.	Hudon	Brookville
Jefferson Coal Co.	Jefferson	Winstow
Jefferson Fuel Co.	Perry No. 1	Coal Gen
Kays W. A. Coal Co.	Logue	Brookwayville
Knoxdale Coal & Coke Co.	Nos. 1, 2 and 5.	Knoxdale
Kurtz & Rinn.	Kurtz & Rinn.	Walston
Light Coal Mining Co.	Light No. 1.	Valler
Lindsey Mining Co.	Lindsey No. 1.	Punksutawney
Loach Coal Co.	Loush Nos. 1 and 2.	Knoxdale
McConnell Coal Co.	Sugar Hill, Buckton	Westville
McCullough Coal Co.	McCullough No. 2.	Brookville
McKnight Coal Co.	McKnight Nos. 1 and 2.	Brookwayville
McEwen Run Coal Co.	McEwen	Lane's Landing
Meadow Coal Co.	Meadow No. 1.	Knoxville
Mill Coal Co.	Stewart No. 4.	Timblin
Newton, E. P. & Co.	Newton	R. F. D. No. 3, Brookville
Noerr, F. B.	Noerr	Anita
Northwestern Mng & Exchange Co.	Clarion No. 4.	Greenlaw
Northwestern Mining & Exchange Co.	Granville	Brookwayville
Oak Valley Coal Co.	Oak Valley	Brookville
Onondaga Coal Mining Co.	Onondaga	Furnondaga
Panther Run Coal Co.	Panther Run	Pardus
Pawnee Coal Co.	Pawnee	Brookville
Penny Coal Co.	Carrier No. 5, Hilltop No. 6, Reed No. 7, Dayton No. 10.	Summerville
Postlewaite, P. H.	Postlewaite	Valler
Ramsey & Scott.	Black Prince	Reynoldsville
Ramsay Coal Co.	Ramsay	Ramsaytown
Rattlesnake Coal Co.	Rattlesnake	Brookwayville
Ringgold Coal Co.	Ringgold	Timblin
Rinn, S. A. Coal Co.	Adrian No. 5	Punksutawney
Rochester & Pittsburgh Coal & Iron Co.	Adrian and Florence.	Delancey
Rochester & Pittsburgh Coal & Iron Co.	Walston	Walston
Rochester & Pittsburgh Coal & Iron Co.	Eleanora	Eleanora
Rochester & Pittsburgh Coal & Iron Co.	Helvetia	Helvetia
Rochester & Pittsburgh Coal & Iron Co.	Cowan	Cowanville
Ros Run Coal Co.	Nos. 1 and 2.	Punksutawney
Service Coal Mining Co.	Vega No. 1.	Valler
Shawmut Mining Co.	Ramsay	Ramsaytown
Smith, I. S. Coal Co.	Smith	Eleanora
Sturrett Coal Co.	Sturrett	Westville
Straitwell Coal Co.	Straitwell	Punksutawney
Sutter Coal Co.	Sutter Nos. 1 and 2.	Valler
Timblin Coal Co.	Timblin	Timblin
Toby Coal Mining Co.	Groves Nos. 1 and 2.	Brookwayville
Tyson, Will H.	Big Run	Big Run
Vega Coal Mining Co.	Vega No. 1.	Valler
Wallwork Coal Co.	Pancoast	Reynoldsville
Welsh Run Coal Co.	Welsh Run	Brookville
Williams Run Coal Co.	Williams	Punksutawney
Winslow & Williams	Williams	Punksutawney
Winslow & Williams	Winslow	Winslow

LANCASTER COUNTY

Pierson Coal Mining Co.	Kiski Junction	Littitz
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LAWRENCE COUNTY

Beaver Coal & Coke Co.	Beaver Nos. 6 and 7.	Wampum
Mercer Gas Coal Co.	Oakes	Volant
Penns Gas Coal Co.	Slope Brookville	Volant
Sharon Coal & Limestone Co.	No. 2	R. D. No. 4, Volant
Sharon-Edenburg Coal Co.	Dickson	Edenburg

LYCOMING COUNTY

Ralston Coal Co.	Red Run	Ralston
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MERCER COUNTY

Cann Coal Co.	Carver	Stoneboro
Filer & Jenkins.	Pardoe No. 1.	Pardoe
McCurdy, J. M., & Son.	McCurdy	Jackson Center
Mercer Iron & Coal Co.	Stoneboro Nos. 3 and 7, Restwick No. 11	Stoneboro
Scotch Hills Coal Co.	Diamond No. 3.	Grove City
Sharon Coal & Limestone Co.	No. 5	Mercer
Venus Coal Co., The	Venus	Sandy Lake

SOMERSET COUNTY

Alexander Coal Co.	Nemacolin	Listonburg
Allen Coal Mining Co.	Allen No. 3	Boswell
Ambrose-Shaffer Collieries Corp.	Ambrose No. 1.	Listonburg
Ambrose-Somerset Collieries Corp.	Ambrose-Somerset No. 1.	Listonburg
Arrow Coal Milog Co.	Arrow No. 1.	Arrow
Arrow Coal Mining Co.	Arrow Nos. 5 and 6.	Ritz
Atlantic Big Veto Coal Co.	Keystone Nos. 1, 2, 3 and 4.	Meyersdale
Atlantic Coal Co.	Atlantic No. 1.	Boswell

Company.	Mines.	Post Office of Mines.
Atlantic Coal Co.	Atlantic No. 2	Meyersdale
Atlas Smokeless Coal Co.	Atlas	Rowena
Baker-Whitely Coal Co.	Elma Nos. 1 and 2.	Hooversville
Barnes Quemahoning Coal Co.	Stauffer Nos. 1 & 3 and Boswell Br.	Stauffer
Belmont Smokeless Coal Co.	Belmont No. 4	Acosta
Berger-Alken Coal Co.	Markleton	Markleton
Borkey Bros. Coal Co.	Borkey	Somerset
Berkley Coal Co.	Berkley	Meyersdale
Berlio Coal Co.	Salco	Berlio
Berwind-White Coal Mining Co.	Eureka Nos. 30, 31, 35, 36, 37, 39, 40 and 42.	Windber
Black Top Coal Co.	Black Top	Rockwood
Bowman, C. K. & Co.	Chapman No. 2.	Boytown
Bowman Coal Co.	Hamilton	Boytown
Brothers Valley Coal Co.	Pen-Mar Nos. 2, 3, 4 and 5.	Macdonaldton
Buffalo Creek Coal Mining Co.	Marie Valley	Berlio
Burger Smokeless Coal Co.	Burger Smokeless	Somerville
Cambria Fuel Co.	Cambria Nos. 1 and 2.	Hollsopple
Casselman River Smokeless Coal Co.	Casselman No. 1.	Markleton
Cassler H. H. Coal Co.	Cassler's	Hollsopple
Confluence Coal Co.	Coughenour	Confluence
Consolidation Coal Co.	Consolidation Nos. 112 and 113.	Berlin
Consolidation Coal Co.	Consolidation Nos. 108, 114.	Rockwood
Consolidation Coal Co.	Con. Nos. 118 and 119.	Jenners
Consolidation Coal Co., The.	Consolidation Nos. 120 and 121.	Acosta
Consolidation Coal Co.	Consolidation Nos. 123 and 124.	Gray
Consolidation Coal Co.	Consolidation Nos. 125, 126, 127.	Bell
Consolidated Coke Co.	Consolidation Nos. 104, 105, 106 and 107.	Meyersdale
Coxes Creek Coal Co.	Coxes Creek No. 3.	Rockwood
Cumberland Smokeless Coal Co.	Owl Hill.	Harborsville
Curry, Thomas F.	Aspach	Harborsville
Custer Coal Co.	Custer No. 1.	Hooversville
Datesman Coal Co.	Datesman	Confluence
Davis Coal & Coke Co.	Grenda No. 1.	Boswell
Dickey, S. E. Coal Co.	Dickey Nos. 1 and 2.	Johnstown
East Windber Coal Co.	East Windber	Windber
Edwenna Coal Mining Co.	Emma	Rockwood
Egolf Coal Mining Co.	Katherine No. 1.	Cairnbrook
Engle Brothers Coal Co.	Engle No. 1.	Elk Lick
Enterprise Coal Co.	Ponfeigh and Enterprise.	Garrett
Fair Oak Coal Co.	Fair Oak	Confluence
Flora Coal Co.	Flora No. 3.	Hooversville
Fort Hill Coal Co.	Fort Hill	Fort Hill
Frauenheim-Logansport Coal Corp.	Antoinette	Frauenheim
Georges Creek Coal Co.	Miller	Listonburg
Georges Creek-Parker Coal Co., The.	Ritter Nos. 1 and 2.	Coleman
Ginder Coal Co., Inc.	Ginder	Berlin
Grassy Run Coal Co.	Grassy Run Nos. 1, 2, 3, 4.	Elk Lick
Grazier Coal Mining Co.	Grazier Nos. 1 and 2.	Hollsopple
Harding Coal Co.	Margaret	Elk Lick
Hays Coal Co.	Hays	Rockwood
Highland Coal Co.	Highland	Somerset
Hillcrest Smokeless Coal Co.	Hillcrest	Storestown
Hillman Coal & Coke Co.	Jerome Nos. 1 and 2.	Jerome
Hilsdale Coal Co.	Theodore	Garrett
Hillworth Coal Co.	Belmont Nos. 1, 2 and 3.	Acosta
Hocking Coal Co.	Hocking	Rockwood
Horne Quemahoning Coal Co.	Horne No. 1.	Boswell
Hurd Coal Co.	Gonder	Boswell
Huskin Coal Mining Co., Inc.	Huskin No. 1.	R. F. D. 2, Hooversville
Huskin Coal Mining Co., Inc.	Huskin No. 3.	R. F. D. 2, Gahagen
Hygrade Coal Co.	Hygrade No. 1.	Storestown
Imperial Coal Corp.	Shade Creek	Miller Run
Ines Coal Mining Co.	Ines No. 1.	Cairnbrook
Ivy Ridge Coal Mining Co.	Ivy Ridge	Rockwood
Jasahill Coal Mining Co.	Knickerbocker	Hollsopple
Jenners Fuel Co.	Perrell No. 1.	Boswell
Kennery Coal Mining Co.	Kennery No. 1.	Confluence
Keystone Lime & Coal Co.	Peck	Elk Lick
Knickerbocker Smokeless Coal Co.	Knickerbocker Nos. 2, 3.	Hooversville
Kreger Brothers	Kreger Brothers	Humbert
Laurel Coal Mining Co.	Reid	Confluence
Lehman & Estep Coal Co.	Lehman & Estep No. 1.	Windber
Liberty Coal Co.	Liberty Nos. 1 and 2.	Berlin
Lily Kutz Barron Co.	Alma	Humbert
Listie Coal Co.	Louise and Junior.	Listie
Lochrie Price Coal Co.	Lochrie Price No. 1.	Eleanora
Loyal Hanna Coal & Coke Co.	Loyal Hanna Nos. 6 and 7.	Cairnbrook
MacAllen Coal Co.	Garrey	Garrett
MacGregor Coal Co.	MacGregor Nos. 1 and 2.	R. D. No. 1 Somerset
Maderia Hill Smithing Coal Co.	Maderia Slope No. 1.	Friedens
Maple Ridge Coal Co.	Maple Ridge and Bethel.	Hollsopple
Marine Smokeless Coal Co.	Marine	Casselman
Markleton Coal Co.	Forge No. 1.	Markleton
Maust Coal Co.	Chapman Nos. 3 and 4.	Elk Lick
Meyersdale Fuel Co.	Fuel Nos. 1, 2 and 3.	Meyersdale
Meyersdale Smokeless Coal Co.	Dill	Casselman
Mountain Smokeless Coal Co.	Mountain Smokeless.	Casselman
Murdock, J. M., & Brother.	Millford	R. D. 1 Somerset
Niverton Coal Co.	Wilson	Meyersdale
O'Dwyer Beachley Coal Co.	O. D. No. 1.	Berlin
Old Colony Coal Mining Co.	Federal Nos. 1 and 2.	Hooversville
Peneloe Coal Corp.	Peneloe No. 3.	Rockwood
Penn Smokeless Coal Co.	Hyasota No. 1.	Jerome
Pennsylvania Collieries, Inc.	Protoria Nos. 2 and 3.	Hollsopple
Pennsylvania Smithing Coal Co.	Adams	Wells Creek
Pine Hill Fuel Co.	Gambert Nos. 1 and 2.	Meyersdale
Pot Ridge Coal Co.	Pot Ridge	Rummell
Purity Coal Co.	Purity Nos. 1 and 2.	Somerset
Quality Coal Co.	Quality Nos. 1 and 2.	Meyersdale
Quality Smokeless Coal Co.	Quality No. 2.	Meyersdale
Quemahoning Coal Co.	Ralphton	Ralphton
Quemahoning Coal Co.	Hushand	Zimmerman
Quemahoning Coal Co.	Rockwood	South Rockwood
Quemahoning Coal Co.	Koontz	Storestown
Quemahoning Creek Coal Co.	Quemahoning Creek No. 2.	Ralphton
Ralphton Coal Co.	Ralphton No. 4.	Ralphton
Randolph Coal Co.	Randolph	Boswell
Reading Iron Co.	Reading No. 3.	Kennelton
Ream, J. O.	Ream Nos. 1 and 2.	Berlio
Reilly-Callaghan Coal & Coke Co., Inc.	Reilly	Confluence
Reitz Coal Co.	Nos. 1, 2 and 3.	Cairnbrook
Ritz Coal Co.	Nos. 4, 5 and 6.	Windber
Ripple & Heckler Coal Co.	Ripple & Heckler.	Windber
Ritter & Winslow, Inc.	Juneau No. 1.	Juneau
Rockwood Coal Co.	Rockwood No. 1 & 2.	Rockwood
Romberg & Weinstein.	Woodrow No. 2.	Gracy Run
Romberg Coal Co.	Buffalo and Garrett	Garrett
Rowe, C. J., & Brothers.	Wills No. 1.	Berlin
Rowe, C. J. & Bro.	Mystic	Meyersdale

(Continued on Next Page)

Company.	Mines.	Post Office of Mines.
Rowe, C. J. & Bros.	Rowe	Wellersburg
Sanner Coal Co.	Sanner No. 1	Hooversville
Savage Fire Brick Co.	Glade City	Meyersdale
Schell Coal Co.	Horne	Somerset
Seaver Coal Mining Co.	Hickler No. 1 & 2	Seaver
Shade Coal Mining Corp.	Hagerstown Nos. 1, 3 and 4	Hagerstown
Shawnee Coal Co.	Beacny	Beacny
Smokeless Quarantining Coal Co.	Alb No. 1	Fredericks
Snyder, M. A. & Sons	Snyder	Marketon
Somerfield Coal Co.	Somerfield	Somerfield
Somerset Cambria Smokeless Coal Mfg. Co.	Big Six	Wells Creek
Somerset Coal Mining Co.	Welfare	Somerset
Somerset Creek Fuel Co.	Somerset Creek No. 1	Hooversville
Somerset Mining Co.	Knickelhooker No. 1	Hooversville
Sprout, R. L.	Sprout Nos. 1, 2, 3, 4 & 5	Windhorst
Standard-Quarantining Coal Co.	No. 3	Boswell
State Mining Co.	No. 1	Confluence
Statler, E. & Sons	Statler	Elk Lick
Steln, George P.	Steln	Garrett
Stoner Coal Co.	Stoner No. 2	Berlin
Triple Vein Smokeless Coal Co.	Triple Vein	Garrett
Tri-State Collieries Co.	Garrett	Garrett
Tub Mill Coal Co.	Tub Mill	West Salisbury
Tunnel Smokeless Coal Co.	Hillside	Kiso
United Smokeless Coal Co.	Baldwin	Humbert
Ursina Fuel Co.	Ursina	Ursina
Victor Coal Mining Co.	Haws 1 and 3	Hollsopple
Weld, Louis M.	Weld	Fairhope
Wilbur Coal Mining Co.	Knickelhooker No. 4	Stoyestown
Wilbur Coal Mining Co.	Knickelhooker Nos. 5 and 6	Landstreet

SUSQUEHANNA COUNTY

Moore Brothers Coal Co.	Moore No. 1	Emeligh
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TIOGA COUNTY

Bloss Vein Coal Co., Inc.	Bloss Vein	Blossburg
Blossing Coal Co.	Nos. 1, 2, 5 and Maple Hill	Arnot
Burgess England Coal Co.	Lundquist	Wellsville
Edinboro Coal Co.	Edinboro	Edinboro
Flower Run Coal Co.	Flower Run	Blossburg
Jenkins, Scott Coal Co.	Scott Jenkins	Blossburg
Morris Run Coal Mining Co.	Morris Run	Morris Run
Novak Coal Co.	Jenkins	Blossburg
O'Donnell Brothers	East Nos. 1, 2, 3 and 4	Morris Run
Schultz Coal Company	Schultz	Blossburg

WASHINGTON COUNTY

Acme Coal & Coke Co.	Wilson	Ellsworth
Allison Valley Coal Co.	Rose	Washington
Anderson-Rees Coal Producers	Anderson	Venitia
Avella Coal Co.	Penobscot	R. F. D. 2, Avella
Bertha Coal Co.	Bertha & Jean	Burgittstown
Bulger Block Coal Co.	Bulger	Bulger
Burgittstown Coal Co.	Patterson	Burgittstown
Canonsburg Gas Coal Co.	Davis	Canonsburg
Carnegie Coal Co.	McDonald	R. F. D. McDonald
Carnegie Coal Co.	Atlas	Atlasburg
Carnegie Coal Co.	Loose Grove	Studia
Carnegie Coal Co.	Louise and Armide	Joffre
Carnegie Coal Co.	Primrose	Primrose
Carnegie Coal Co.	Aspy No. 7	Joffre
Champion Gas Coal Co.	Champion	Millersburg
Charles Creek Coal Company	Hazel	Canonsburg
Clarksville Gas Coal Co.	Clarksville	Clarksville
Clippert Coal Co.	Lock Four	Speers
Clyde Coal Co.	Clyde	Fredericktown
Cochrane Coal Co.	Cochrane	Monongahela
Cokeburg Coal Co.	Mitchell	Cokeburg
Consumers Fuel Co.	Gould	Washington
Country Club Coal Co.	Lutton	Washington
Diamond Coal & Coke Co.	Diamond	West Brownsville
Diamond Coal & Coke Co.	Houston	Courtney
Dunsmuir Coal & Coke Co.	Aurora	Avella
Eclipse Gas Coal Co.	Eclipse	Thomas
Edwina Coal Co.	Edwina	Fredericktown
Ellsworth Collieries Co.	Nos. 1 and 2	Ellsworth
Ellsworth Collieries Co.	Nos. 3 and 4	Cokeburg
Export Coal Co.	Beech Hill	Houston
Fifth Pool Coal & Coke Co.	Dawson	Denbo
Finleyville Gas Coal Co.	Elm	Venitia
Fredricktown Coal & Coke Co.	Fredricktown	Fredricktown
Fredericktown Cross Creek Coal Co.	Fredericktown Cross Creek	Burgittstown
Greensburg-Connellsville Coal & Coke Co.	Francis	Burgittstown
Hanlin Coal Co.	Bradford, Dawson and Patton	California
Hanover Coal Co.	Hanlin	Hanlin Station
Harmon Creek Coal Co.	Fulton, Wilson and Florence	Burgittstown
Henderson Coal Co.	No. 1	Henderville
Henderson Coal Co.	No. 2	Finleyville
Hillman Gas Coal Co.	Gibson	Bentleyville
Hornor Coal Co.	Hornor	Millersburg
Houston Coal Co.	Arnold	Houston
Jefferson Gas Coal Co.	Jefferson No. 1	Avella
Lacey Coal Co.	Virginia	Millersburg
Langeloth Coal Co.	Langeloth	Stovan
Lincoln Gas Coal Co.	Lincoln No. 1	Washington
Lindley Coal Co.	Lindley	Houston
McClane Mining Co.	Rich Hill Nos. 1 & 2	Meadowland
Maple Glen Coal Works	Maple Glen and Driftwood	Shoring
Masten Coal Co.	Dande	Houston
Meadow Lands Coal Co.	Meadow Lands No. 2	Arden
Meadow Lands Coal Co.	Meadow Lands No. 3	Avella
Midway Coal Co.	Midway No. 1	Midway
Millersburg Coal & Coke Co.	Millersburg	Millersburg
National Mining Co.	National No. 2	Cuddy
National Mining Co.	No. 4	Courtney
Oak Hill Coal Mining Co.	Knox	Studia
Ontario Gas Coal Co.	Ontario	Ellsworth
P. V. & K. Coal Co.	Home	Monongahela
Pittsburgh & Eastern Coal Co.	Nos. 1, 2 and 3	Cherry Valley
Pittsburgh & Erie Coal Co.	Erie No. 1	Burgittstown
Pittsburgh & Southwestern Coal Co.	No. 1	Avella
Pittsburgh Coal Co.	Crescent, Eclipse	California
Pittsburgh Coal Co.	Montour No. 1	Southview
Pittsburgh Coal Co.	Montour No. 2	Pitco
Pittsburgh Coal Co.	Montour No. 9	McDonald
Pittsburgh Coal Co.	Midland No. 3	Westland
Pittsburgh Coal Co.	Black Diamond, Catshurg and Mongab	Monongahela
Pittsburgh Coal Co.	Cincinnati and Coal Bluff	Finleyville
Pittsburgh Coal Co.	Allison and Midland No. 1	Houston
Pittsburgh-Hanover Coal Co.	Russell	Hanlin
Producers Coal Corp.	Masten	Coco Island

Company	Mines	Post Office of Mines
Prior Coal Co.	Avella No. 1	Avella
Reliance Coal Co.	Denbo	Denbo
Sampson Coal Co.	Sampson	Donora
Shenon, James G. & Son	Shenon	Canonsburg
Shingle Coal Co.	Shenon	Houston
Shiner, W. H. Coal Co.	Marle	Burgittstown
South Fayette Coal Co.	Presto	Finleyville
Springer Coal Co.	Springer	Clarksville
Superior Mining Co.	Superior	Eldersville
Trumbull Coal Co., The	Trumbull	Clarksville
Union Coal & Coke Co.	Acme Nos. 1 & 2	Bentleyville
Union Coal & Coke Co.	Hazel Kirk No. 1	Monongahela
Union Coal & Coke Co.	Hazel Kirk No. 2	Van Vorhis
Union Coal & Coke Co.	Marlanna	Marlanna
Valley Camp Coal Co.	Sundon	Van Vorhis
Vesta Coal Co.	No. 1	Allenport
Vesta Coal Co.	No. 4	California
Vesta Coal Co.	No. 5	Vestaburg
Vesta Coal Co.	No. 6	Denbo
Vesta Coal Co.	No. 7	West Brownsville
Warner Youghiogheny Coal Co.	Rider and Maxwell	Charleroi
Washington Gas Coal Co.	Tyler	Washington
Waverly Coal & Coke Co.	Waverly	Pennwa
Wood Run Gas Coal Co.	Wood Run	N. Well
Youghiogheny & Ohio Coal Co. (The)	Mountain Nos. 1 and 2	Manford
Youghiogheny & Ohio Coal Co. (The)	Enterprise	Meadow Lands
Youghiogheny & Ohio Coal Co.	Charleroi	Charleroi

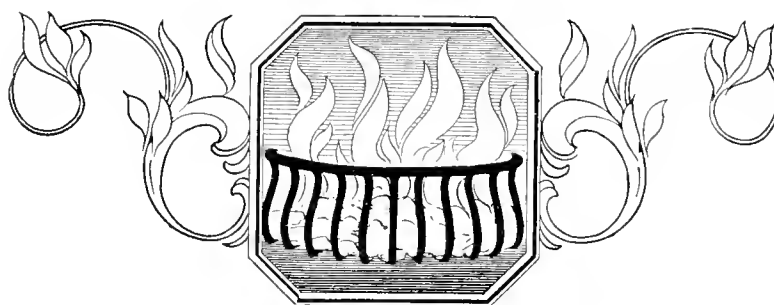
WESTMORELAND COUNTY

Alberia Coal Co.	Alberia	Smithton
Andrews Run Coal Co.	Rainbow	R. F. D. Irwin
Apollon Coal Mining Co.	Northwest	Salina
Atlantic Crushed Coke Co.	Atlantic Nos. 2 and 3	Newberry
B. & L. Coal Co.	B. & L.	Hunkers
Barnett Coal Co.	Barnett No. 1	Barnett
Barnett Coal Co.	Barnett No. 2	Millwood
Ben Franklin Coal Co.	Brachman and Metcalf	Brachman
Bigley Coal Co.	Bigley	Dravosburg
Black Coal Co.	Kregar	Kregar
Blanchard Coal Co.	Blanchard No. 1	Wyano
Boyd, Geo. E. Coal Co.	Elizabeth	Tarentum
Bradenville Coal & Coke Co.	Bradenville	Bradenville
Brown, W. E., Inc.	Fenn	Ligonier
Brush Run Coal Co.	Brush Run, R. F. D. No. 1, Mt. Pleasant	Alverton
Byars Coal & Coke Co.	Byars	Alverton
Byerly Gas Coal Co.	Byerly	Irwin
Byrne Coal & Coke Co.	Virgie Nos. 1, 2 & 3	Export
Cambird Coal Co.	McAlister No. 1	Slickville
Cambria Steel Co.	Slickville	Slickville
Carter Coal Co.	No. 1	Monessen
Catherine Coal Co.	Gail	New Station
Central Yough Coal Co.	Central Yough No. 1	Yobogany
Clare Coal Co.	Clare Mines	R. F. D. 1, Mt. Pleasant
Claridge Coal Co.	Kew	Claridge
Cline, H. A. Coal Co.	No. 1	Bollivar
Cochran Coal Co.	Cochran No. 1	Salina
Commercial Coal Co.	Commercial No. 6	Wyano
Connellsville Coal & Fuel Co.	Hazelburg	Ligonier
Delmont Gas Coal Co.	Delmont No. 2 and Delmont Colliery	Delmont
Delmont Gas Coal Co.	No. 4	Delmont
Doherty Coal Co.	Doherty No. 1	Delmont
Dunsmuir Coal Co.	Dunsmuir	Greensburg
Edwards Coal Co.	Edwards No. 2	Export
Edwards Coal Co.	Edwards No. 3	Slickville
Edwards Coal Co.	Edwards No. 4	Horminie
Edwards Coal Co.	Edwards No. 5	New Alexandria
Edman Coal Co.	Edman	Madison
Eleanor Coal Co.	Eleanor	Wyano
Export Coal Co.	Spring Hill	Tratford
Export Mining Co.	Carrie	Export
Fair Haven Coal Co.	Hermine	Hermine
Fairview Coal Co.	Fairview	Greensburg
Four States Coal & Coke Co.	Eloise	Bradford Jet
Frick, H. C. Coal Co.	Alverton Nos. 1, 2 and 3	Alverton
Frick, H. C. Coal Co.	Bagsley	Bagsley
Frick, H. C. Coal Co.	Brinkerton Mutual	Greensburg
Frick, H. C. Coal Co.	Calumet	Calumet
Frick, H. C. Coal Co.	Central and South West No. 3	Tarr
Frick, H. C. Coal Co.	Hecla Nos. 1 and 3	South West
Frick, H. C. Coal Co.	Hecla No. 2	Trusser
Frick, H. C. Coal Co.	Mammoth	Mammoth
Frick, H. C. Coal Co.	South West Nos. 1, 2 and Standard	Mt. Pleasant
Frick, H. C. Coal Co.	United	United
Frick, H. C. Coal Co.	Chambers, Dorothy and Marguerite	Latrobe
Fulton Coal & Coke Co.	Fulton	Waltz
Greensburg Coal Co.	Hawthorn	Greensburg
Greensburg-Connellsville Coal & Coke Co.	Old Colony No. 1	Ligonier
Greensburg Eastern Coal Co.	Dalley	Latrobe
Hempfield Coal Co.	Nickwanger	Luzor
Hart-Marble Coal Mining Co.	Kennedy	West Newton
Henderson Coal Co.	Hilda	Webster
Hilda Coal Co.	Edna No. 1	Tratford
Hillman Coal & Coke Co.	Edna No. 2	Adamsburg
Hillman Coal & Coke Co.	Ella	Wendell
Hillman Coal & Coke Co.	Naomi	Sunnyside
Hillman Coal & Coke Co.	Hoosier Keystone	Bellevernon
Hoosier Keystone Coal Co.	Hoosier Keystone	West Newton
Hostetter-Connellsville Coal Co.	Hostetter	Hostetter
Hostetter-Connellsville Coal Co.	Whitney	Whitney
Howard Gas Coal Co.	Louise No. 1	Slickville
Howell Coal Co.	Howell	Hermine
Humbreys Coal & Coke Co.	Humbreys	Greensburg
Humphries, E. A. & C. C. Co.	Chester No. 2	Export
Irwin Gas Coal Co.	Irwin Gas No. 2	Export
Irwin Gas Coal Co.	Irwin Gas Nos. 3, 4 and 5	Slickville
Irwin Valley Gas Coal Mining Co.	Schade and Colliery	Irwin
Jamison Coal & Coke Co.	No. 1	Luxor
Jamison Coal & Coke Co.	No. 2	Uniontown
Jamison Coal & Coke Co.	No. 3	Forbes Road
Jamison Coal & Coke Co.	No. 4	Crabtree
Jamison Coal & Coke Co.	No. 6	R. F. D. No. 4, Greensburg
Jamison Coal & Coke Co.	Bertha	Pleasant Unity
Jennette Coal Co.	Hillside	Hermine
Kendall, J. L.	Arora	Arona
Keystone Coal & Coke Co.	Keystone	Darraig
Keystone Coal & Coke Co.	Claridge	Claridge
Keystone Coal & Coke Co.	Salem and Greensburg Nos. 1, 2, 3	Abantria
Keystone Coal & Coke Co.	Cross Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100	Greensburg
Kier Fire Brick Co.	Salina	Salina
Kiskiminetas Valley Coal Co.	Kiskiminetas Valley No. 1	Apollon
Kiskiminetas Coal Co.	Boaring Run	Apollon

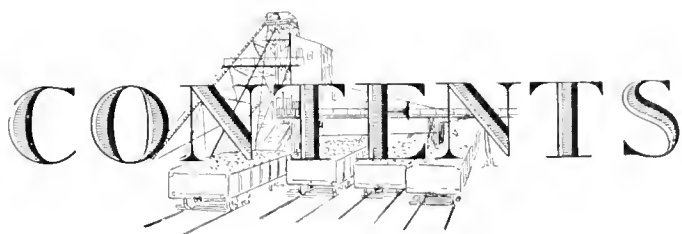
(Continued on Next Page)

Westmoreland County—Continued.

Company.	Mines.	Post Office of Mines.
Larimer Gas Coal Co.	Larimer No. 1	Larimer
Latrobe-Conneville Coal & Coke Co.	Derry No. 1	Brandenville
Latrobe-Conneville C. & C. Co.	Conneville, Superior No. 2	Superior
Latrobe-Cresson Coal Mining Co.	Island	Latrobe
Latrobe-Hygrade Coal Co.	Pearl	Derry
Leechburg Coal & Coke Co.	Leechburg	Leechburg
Lowber Gas Coal Co.	Lowber	Lowber
Lowie Coal Co.	Lowie	Youngwood
McAllister & Gray Coal Co.	Star	Export
Maher & Graff	River	Blairsville
Mahoning Coal & Coke Co.	Peerless	Alverton
Marietta-Conneville Coke Co.	Chair No. 2	Ligonier
Mears Coal Co.	Ransol	Greensburg
Mill Conn Coal Co.	Brinker Run	Scottdale
Monessen Coal & Coke Co.	Monessen	Monessen
Mt. Pleasants By-Products Coal Co.	St. Vincent	Greensburg
Mt. Pleasant Coke Co.	Beatty	Beatty
Mt. Pleasant Fuel Co.	Mt. Pleasant	Mt. Pleasant
Nield, C. M.	Johnston	Bellevue
New Alexandria Coke Co.	New Alexandria Nos. 1, 2, 3, 4, 5,	New Alexandria
Nineveh Coal Co.	Valley No. 2	Seward
Oakville Coal & Coke Co.	Ann	Latrobe
Ocean Coal Co.	Ocean Nos. 1, 2	Hermine
Packsaddle Coal Mining Co.	Packsdale No. 1	Torrance
Paulton Coal Mng Co.	Paulton	Apollo
Penn Carbon Coal Co.	Kemmerer	Greensburg
Perry, F. V. Coal Co.	Westmoreland Fair	Youngwood
Pine Run Coal & Coke Co.	Pine Run	Leechburg
Pine Run Co.	Lewis	Vandergriff
Piper, M. K. Coal Co.	Piper No. 1	Kregar
Pittsburgh Coal Co.	Delmont, Lyons Run	Export
Pittsburgh Coal Co.	Equitable	Webster
Pittsburgh Coal Co.	Euclid	Fitz Henry
Pittsburgh Coal Co.	Eureka	Smithton
Pittsburgh Coal Co.	Eureka, Waverly	Smithton
Pittsburgh Coal Co.	Somers Nos. 2 and 4	Pricedale
Pittsburgh Coal Co.	West Newton, Yough	West Newton
Pollins, A. H.	Pollins No. 1	R. F. D. No. 1, Derry
Pollins, A. H.	Pollins No. 2	Irwin
Premier Fuel Co.	Ruff	Youngwood
Prospect Coal Co.	Prospect	Greensburg
Rainey, W. J.	Stewart	Southwest
Ramsey Coal Co., Inc.	Ramsey No. 2	Ligonier
Renwick Coal Co.	Renwick	Ligonier
Ridge Coal Co.	Frances	Latrobe
Ridgeview Coal Co.	Ridgeview	Bolivar
Salem Gas Coal Co.	Lauffer	Delmont
Saltsburg Colliery Co.	Foster No. 4 and 5	Avonmore
Saxman Coal & Coke Co.	Saxman No. 2	Derry
Seger Bros.	Seger Bros. No. 1	Millwood
Seger Bros.	Ligonier Diamond No. 1	Wilpen
Seger Bros.	Ligonier Diamond No. 2, St. Clair and	Ligonier
Shenango Furnace Co., The	Vogele	Ligonier
Skelly, W. B., Coal Co.	Wilpen and Lytle	Wilpen
Suterville Coal Co.	Elizabeth	Export
Tomajko, Edward	Corrado	Suterville
Union Fuel Co.	Little Gem	Adamsburg
Unity-Conneville Coke Co.	Hunker No. 1	Jeannette
Valley Camp Coal Co.	Elizabeth	Latrobe
Valley Camp Coal Co.	Kinloch	Parnassus
Valley Coal Co.	Valley Camp No. 1	New Kensington
Virginville Coal Co.	Valley	Leechburg
Weaver, Wm. B.	Helen	Smithton
Werder Coal Co.	Weaver	California
West Overton Coal Co.	Werder Nos. 1 and 2	New Florence
West Penn By-Product Coal Co.	Overton Nos. 1 and 2	Scottdale
West Penn Mining Co.	Marion	Mt. Pleasant
Westmoreland Coal Co.	West Penn	Leechburg
Westmoreland Coal Co.	Criterion	Riffton
Westmoreland Coal Co.	Export Nos. 1 and 2	Export
Westmoreland Coal Co.	Mages	Yukon
Westmoreland Coal Co.	Denmark, McCullough	Claridge
Westmoreland Coal Co.	Biddle, Penn, Adams, South Side	Irwin
Westmoreland Coal Co.	Marchand	Lowber
Westmoreland-Fayette Coal & Coke Co.	Ruth	Beatty
White Valley Coal Co.	Port Palmer No. 1	Ligonier
Whyel Coke Co.	White Valley	Export
Whyel Coke Co.	Ellen No. 2	Whitney
Whyel-Burd Coal Co.	Klondyke, Oakridge, Yukon	Yukon
Wineland-Gilmore Coal & C. Co.	Burd	Latrobe
Youghiogheny & Ohio Coal Co.	Winmore	Smithton
Youngwood Coal & Coke Co.	Osborn Nos. 1 and 2	Wyand
	Faxtown	Greensburg



TENNESSEE



CONTENTS

Map of Mining Field.....opp. page 872
 Sectional View of Coal Formations....opp. page 873
 General Description of Coal Resources.....872

The Northwestern Coal Field.....873
 Wilder Seam.....875 Isoline Seam.....874
 Rockwood Seam.....874 Bear Creek.....874

The Northeastern Coal Field.....875
 Rex Seam.....875 Big Mary Seam.....876
 Kent Seam.....875 Black Wax Seam.....876
 Jordan Seam.....875 Blue Gem Seam.....876
 Rich Mountain Seam.....876 Newcomb Seam.....876
 Swamp Angel Seam.....876 Red Ash Seam.....877
 Dixie Seam.....876 Coal Creek Seam.....877
 Jellico Seam.....876 Lower Dean Seam.....877
 Klondike Seam.....876 State Seam.....877
 Log Mountain Seam.....876 Brushy Mtn. Seam.....877
 Kramor Seam.....876

The Southern Coal Field.....878
 Sewanee Seam.....878 Bon Air Seam.....879

Preparation and Sizing of Coal.....879
 Supplementary Analyses.....880 to 882
 List of Mines by Seams.....883 to 885
 Alphabetical Directory of Coal Mines...886 to 892

TENNESSEE*

General Description of the Geology of State and Its Coal Seams, With a Map Showing the Location of the Coal Bearing Area; Vertical Section of Coals of Post-Lee Age; Railroads Traversing the Coal Districts; Kinds of Coal; General Analysis, Etc.

The coal field of Tennessee is a part of the great Appalachian field, extending from northern Pennsylvania to central Alabama. In the northern part of the State are found the same beds as in Kentucky, and in the southern part the same beds as in Alabama and Georgia. The coals have the same general character as those of eastern Kentucky, western West Virginia and Pennsylvania, though not the qualities of Pocahontas coal of Virginia and West Virginia, nor of the Clearfield coal of Pennsylvania.

The coal field of Tennessee is coincident with the Cumberland Plateau, lying in a northeast and southwest direction across the State, a little east of the center. The field has an average width of from 35 to 50 miles. It covers practically all of Morgan, Scott, Cumberland, Sequatchie, Bledsoe and Marion counties; the western part of Claiborne, Campbell, Anderson, Roane, Rhea and Hamilton counties; nearly all of Fentress, Van Buren and Grundy counties, and a part of the eastern side of Pickett, Overton, Putnam, White, Warren, Coffee and Franklin counties.

The Cumberland Plateau is a broad upland, standing about 2,000 feet above the sea level. While many of the streams flowing out to the east and west or to the south have cut ravines into this upland, still, as a rule, the ravines occupy but a narrow part of the area in contrast with the broad upland, which, in many places is nearly flat, and in many others only slightly rolling. As a result of this condition, the coals have been rendered accessible at a large number of points; at the same time, they have been broadly protected, so that in many cases almost as large an area of beds remain as though they were entirely below drainage. In the northeastern part of the coal field are many hills and mountains that rise from several hundred to a thousand feet or more above the general level of the plateau. These hills retain the higher coals that have been entirely removed from the rest of the field.

All of the coal bearing rocks of Tennessee are of Carboniferous age. The Carboniferous in turn is subdivided into Pennsylvanian, or Upper Carboniferous, and Mississippian, or Lower Carboniferous. The upper beds of the Lower Carboniferous are slightly coal bearing in Virginia, and to a less extent in Tennessee. The main coal bearing rocks of the Appalachian field are all of the Pennsylvanian age. Again, the Pennsylvanian may be divided into Pottsville, or lower Pennsylvanian, and post-Pottsville, or upper Pennsylvanian. No rocks of post-Pottsville age are found in Tennessee, though it is more than probable that rocks of at least the lower part of the upper Pennsylvanian existed in this State, though long since carried away by erosion. The coal measures of Tennessee contain only the lower Pennsylvanian, or Pottsville.

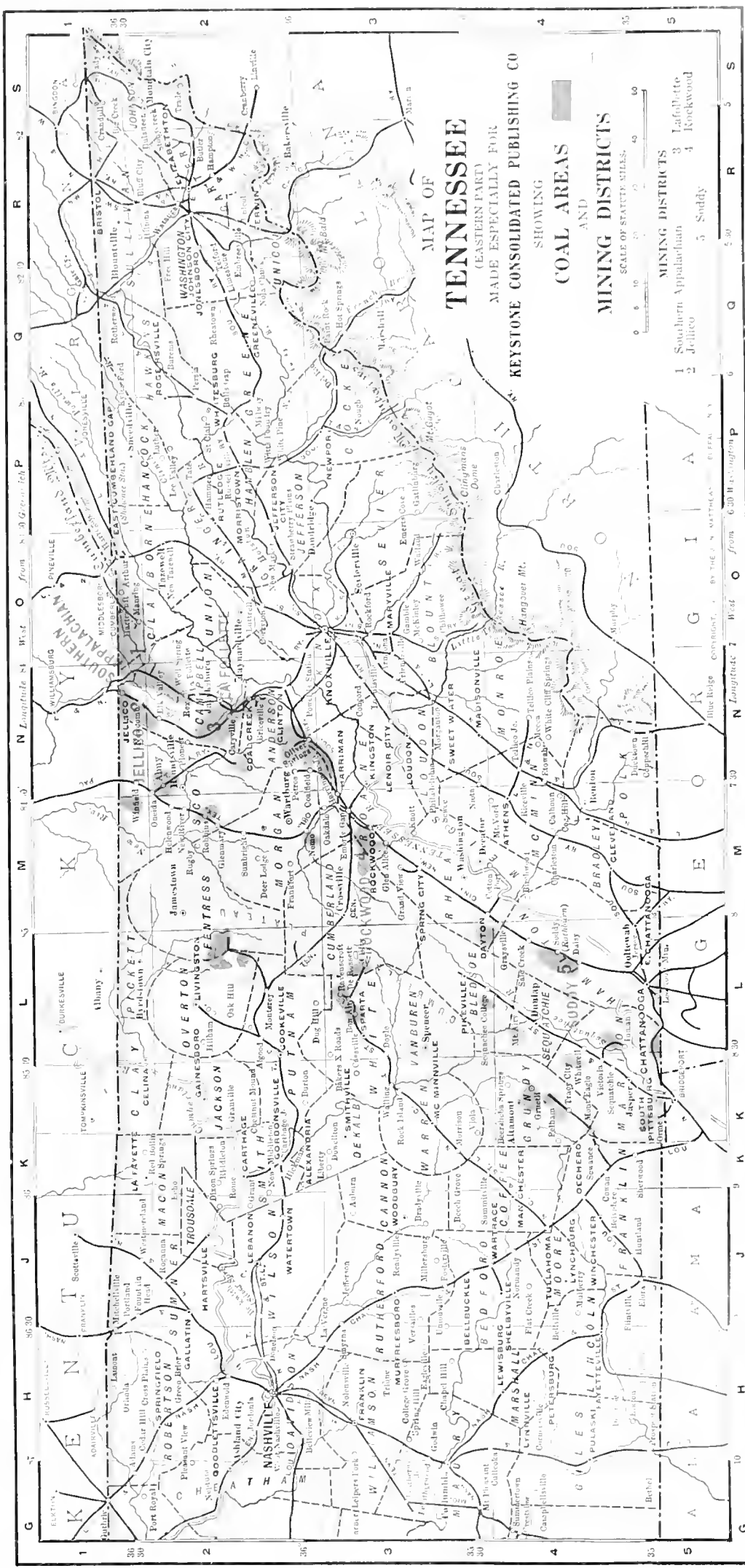
The coal bearing rocks of Tennessee consist of a series of sandstones, shales, coal beds and clay beds. Coal is known to have been deposited at over fifty horizons, in beds ranging from a few inches to 8 or 9 feet in thickness, or locally to 20 to 30 feet, or in one case, possibly due to squeezing, over 100 feet thick. As practically all of the coal beds are underlain by clay, at least locally, quite as many clay beds are found. The shales occur in beds often several scores of feet thick. They are usually quite sandy and in places grade over into sandstones. The sandstones are the rocks commonly seen. While many of them are soft, and weather rapidly, many of the beds are hard and resistant and project out of the hill slopes as massive ledges or cliffs. Such sandstones are often 100 feet or more thick, and a few of them make prominent cliffs that can be traced long distances. These cliff-making sandstones serve as key-rocks, and the position of any coal bed is described as so many feet above or below the top or bottom of a certain sandstone.

So far, there are no shaft mines in Tennessee of any moment, although there are slope mines and some very long inclined planes. At Caryville there are two beds of coal, one 2,300 feet and the other 2,700 feet above sea level. These are worked by inclines from 1 to 2 miles long, having a vertical rise in each district of over 1,000 to 1,400 feet.

The following railroads traverse the mining fields: Nashville, Chattanooga & St. Louis; Southern; Queen & Crescent; Louisville & Nashville; Central of Georgia; Tennessee Central; and Tennessee, Harriman and Northeastern.

For the sake of description, this State has been divided into the northern and southern fields, which are separated by the Tennessee Central Railroad, starting at Monterey at the west of the field and ending at Harriman on the eastern border. The northern field is subdivided by the Queen & Crescent Railroad, which runs north from Harriman to the Kentucky border, into the northeastern and the northwestern fields.

*We are largely indebted to "The Resources of Tennessee," Vol. VI, No. 3, by L. C. Glenn and Wilbur A. Nelson, Tennessee Geological Survey, for the information here presented on Tennessee coals.



TENNESSEE

(EASTERN PART)
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COAL AREAS

SHOWING

MINING DISTRICTS

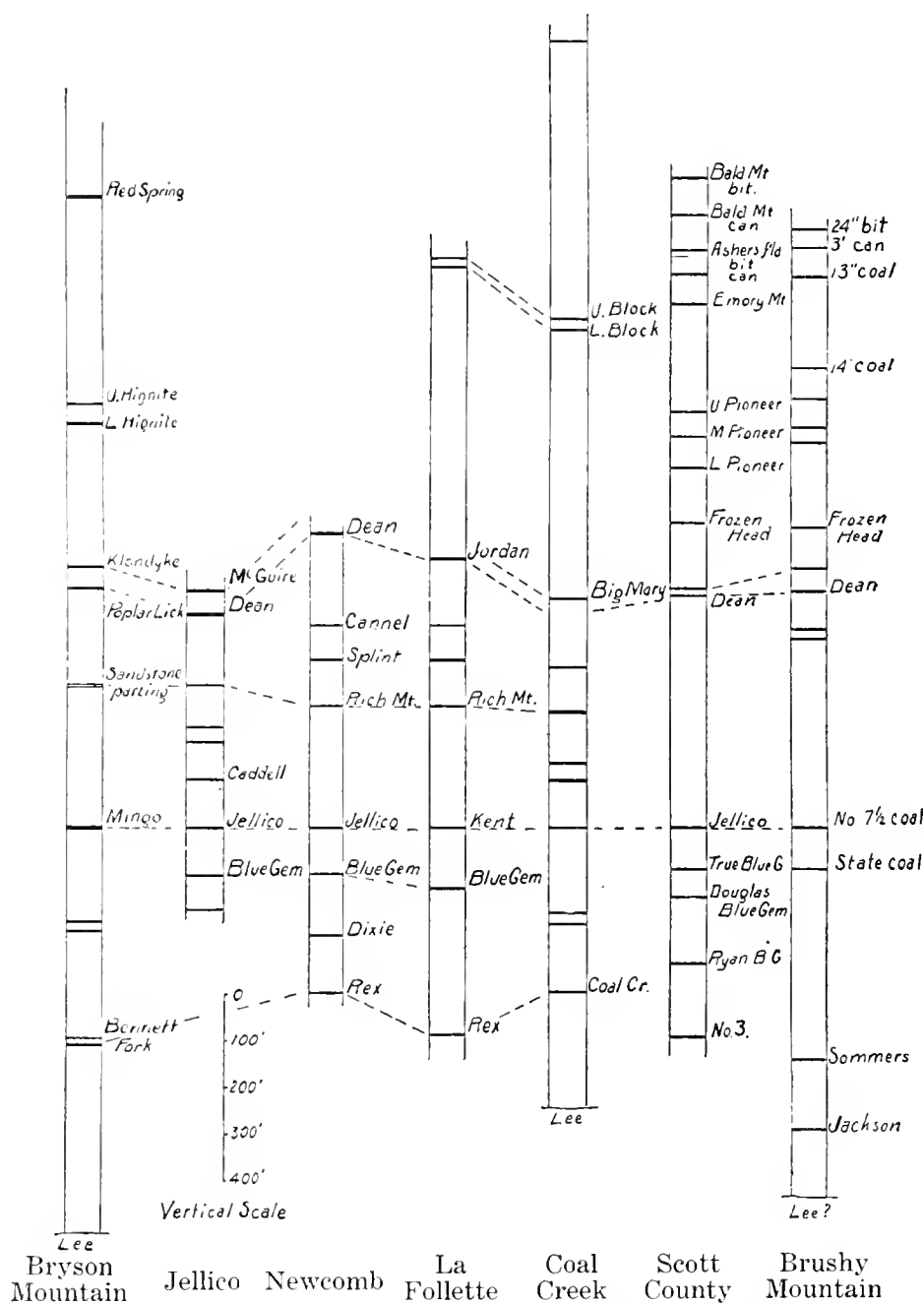
SCALE OF STATUTE MILES.

- MINING DISTRICTS
- 1 Southern Appalachian
 - 2 Jellico
 - 3 Lafayette
 - 4 Rockwood

0 10 20 30 40 50 60

SECTIONS OF COALS OF POST-LEE AGE

TENNESSEE*



*From Bulletin No. 9 Tennessee Geological Survey Series

THE NORTHWESTERN COAL FIELD

This area lies, as has been said, north of the Tennessee Central and west of the Queen & Crescent Railroads, and embraces parts of Pickett, Overton, Fentress, Putnam, Cumberland, Morgan and Scott counties.

Topographically, it is a broad plateau, with an average elevation of 1,200 to 2,000 feet. Its surface is level or gently rolling except along the larger streams, which flow in deep and narrow gorges, whose sides are formed in large part by cliffs of sandstone or conglomerate that in many places are 100 to 200 feet or more in height.

The coals outcrop only along the western edge of the plateau and in the sides of the deeper gorges cut by the streams that drain the western side of the plateau. Back from this eroded edge of the escarpment and from the stream gorges, they are entirely concealed by the rocks that form the surface of the plateau, and can only be reached by drilling. Prospecting and development, where there are outcrops above drainage, will be by simple and inexpensive drifting, but back on the plateau prospecting can only be done by drilling, and development must be by shafts, the depth of which will vary from 150 to 400 or 500 feet, according to location, the greatest depth being where the conglomerate is thickest in eastern Pickett and Fentress, northern Morgan and western Scott counties.

The coals of the northwestern area are mined in comparatively few places, and there are very few country banks or natural exposures. In much of the region the coals are entirely below drainage over large areas and our knowledge of this section is therefore limited.

The characteristic of these conglomerate coals is their variability. Their thickness is rarely the same over any considerable area. In one mine it varies often materially from room to room, and it is not certain that any one bed is continuous for more than a few or a few score miles. It seems certain that the coals of the conglomerate were deposited in local basins, and that while neighboring basins in some cases were contemporaneous, in others they probably differed somewhat in age. This greatly complicates the problem of tracing and correlating the coals of the conglomerate.

The lowest coals rest in places almost on the Mississippian limestone, while in other places they are 25, 50 or more feet above. A mile south of Cook Place, the old Murdock opening shows a hard, clean splint coal that varies from 18 to 20 inches in thickness in a drift 125 feet in length. The roof varies from a good sandy shale to a weak slickensided clay. At an opening in this same hollow and probably only a few yards away, but now covered up, Safford reported this coal to be four feet thick. It seems to be of excellent quality, and would be quite valuable if, on investigation, it proved to average as much as three or three and a half feet over an area large enough to mine. Practically no prospecting has been done in the vicinity, and its extent and average thickness are unknown. It is about 55 feet above the limestone.

At Wilder, some five or six miles to the southeast, two thin, rashy coals 10 to 12 feet apart occur at about the horizon of the Murdock coal some 75

to 80 feet above the limestone. Sixty-five feet higher the Wilder coal occurs. It is actively mined at Wilder, where it averages three and a half to four and a half feet in thickness, though it occasionally runs higher or lower than these measurements. It has no parting, but separates naturally into an upper, middle and lower bench, the lower being the highest grade, and the middle carrying some sulphur in balls or thin streaks. A mile and a half away the same coal is mined. It varies there from four and a half to six feet in thickness, with an average of about five feet, and is without partings. The same coal is mined at Crawford, where it averages three to three and a half feet in thickness, but varies considerably from this by thickening in sags in the floor and thinning in crossing intervening ridges. These sags run as a series of parallel troughs with a general northeast-southwest direction, and vary in width from a few to 1,200 feet each. On the ridge between adjacent troughs the coal may thin to 15 inches for a few feet or yards. The roof and floor are generally good.

Six miles south of Crawford a coal is mined at Obey City that is probably the same as the Wilder coal. It is in about the same stratigraphic position, and is similar in general character, though it probably carries somewhat more sulphur. It averages 34 to 40 inches in thickness and does not vary greatly from these limits.

North of Wilder a coal is known in several places on the tributaries of the East Fork of Obey River that is believed to be the Wilder coal, and it may be the same as the coal in Buffalo Cove at two places and measuring 54 and 56 inches, respectively. The doubt in correlation arises from the fact that this coal is very close above the limestone, while the coal at Wilder is 130 to 150 feet above the limestone. The two coals may nevertheless prove the same, the discrepancy in the distance down to the limestone being due to irregularities in the surface on which the coal measures began to be deposited.

Farther north in Poplar Cove a coal averaging three to three and a half feet, and worked for use in Jamestown, occupies about the horizon of the Buffalo Cove coal, while farther northwest some six or eight miles a coal reported to be four and a half to five feet was formerly mined extensively for local use at several places on the ridge on either side of Crickett Creek.

Three churn-drill holes on Clear fork some eight miles southeast of Allardt show four and a half feet of coal each.

From what can be gathered as to elevation it seems very probable that these records are all of the same coal, and that this coal is certainly the same as the Buffalo Cove coal, and probably identical with the Wilder coal. This coal shows an average of about four feet, with a few places where it is thin or absent. From the wide distribution of the holes, it seems that there is a large body of coal three to five and a half feet thick in that region, that may be reached from the plateau level at a depth of 250 feet near the Buffalo Cove edge of the plateau, or of 350 feet some six or eight miles to the east, or may be reached in the valleys of Crooked

Creek and other streams at 150 feet or less, dependent on location.

On the headwaters of Wolf River the coal appears to be thin. Several exposures show two or two and a half feet as the maximum thickness, though considerable areas have never been prospected.

To the northeast of Allardt and Jamestown the plateau level is not cut deeply enough by streams to reveal this coal until the Stearns mines in Kentucky, some 25 miles away, are reached. There several coals, quite regularly four to five feet in thickness and of excellent quality, are mined. Two of these coals are only a few feet apart and very close above the limestone, the other, known as the Barthell coal, is some 40 to 60 feet higher. This latter coal may represent the Allardt coal, and if so, it would seem probable that the drill would show the Pickett and Fentress county region between these places to contain the same coal.

At Isoline there is a coal locality thick enough to be of commercial importance that seems to lie at a higher horizon than the coals that have been described. It is only a few feet beneath the 60 to 100-foot bed of soft conglomerate that makes the plateau surface over large areas there and elsewhere. The coal lies in a trough 600 to 1,200 feet wide and is known to extend westward for two and a half miles, where it is five feet thick. What its farther extension is in that direction is not known. It runs from two and a half to five feet in thickness.

The coal is bright, fairly hard, lumps well and seems free from sulphur balls and streaks.

About 13 miles northeast of Crossville, and in the northeastern part of Cumberland county, it is reported that a thick vein of coal has been opened near Peavine.

Just west of Crab Orchard Station, on the Tennessee Central, and again in Crab Orchard Mountain just east of the station, the conglomerate is upturned and its entire thickness exposed to view. Attempts have been made in both places to mine the coal exposed in it, but it was found too badly crushed and disturbed to make the venture a success.

Just above the conglomerate on the east side of Crab Orchard Mountain, at Fall, Millstone and Mannys Creeks, the Rockwood coal has been mined where it has been thickened up to 10, 20 or exceptionally 40 feet in lenticular pockets. The pockety nature of the coal has made its mining very uncertain. It seems very probable that a little farther east of these mines there are a good number of square miles of territory in the middle of the broad flat-bottomed syncline between the Crab Orchard and the Cumberland Mountains, where this Rockwood coal will be found by drilling to be of good thickness and free from disturbance. So far as is known, this region has not been explored with the drill. The Rockwood mines, however, have been operating for years on the eastern margin of the same coal and have workings that are now some two miles back from the mine mouth. The coal is about four feet in thickness and is coked and used at Rockwood in making iron. There is undoubtedly a large area in this section where careful prospect-

ing would reveal coal thick enough and regular enough in its thickness to make it commercially practicable to mine it on as large a scale as might be desired.

The quality of the conglomerate coals is not as high as the Coal Creek or some of the other coals of the northeastern section. This would not make much difference from a commercial standpoint, however, since these northwestern coals would not naturally find their market in the territory of the coals on the east of them, but would be shipped westward into middle and western Tennessee and Kentucky, where they would compare favorably in quality with the coals from western Kentucky with which they would come into competition, and ought to be able easily to hold their own.

Before they can be developed to any great extent it will be necessary to construct railways into the region. Much of it is 40 to 50 miles from transportation at present, and must remain undeveloped as long as the present lack of transportation continues.

The conglomerate coals vary enough in thickness, and are locally absent over small areas often enough, to make it necessary to prospect any given property very thoroughly with a diamond drill before making purchase or attempting development. It seems from all of the evidence available that the coals are more irregular and pockety in the region about Monterey, where an attempt to mine them failed because of the very pockety character of the seam, and to the east and southeast, and that they become more persistent to the northeast and will probably be found, when prospected, in northern Fentress and middle and eastern Pickett counties to be more nearly like the Stearns coals in their thickness, regularity and quality.

Above the conglomerate the only coals of value in this northwestern section would seem to be the ones in its southeastern and northeastern corners.

The rocks of this northwestern area dip gently eastward, and near the eastern edge of the area pass beneath the shales and sandstones that make the surface rocks of the northeastern distinct. At a number of places these higher rocks extend westward across the Queen & Crescent Railroad, especially from Sunbright northward to the Kentucky line. From near Oneida northward these higher rocks west of the railroad contain a coal that is mined at Bear Creek, and is also mined at a number of places east of the railroad, as for instance at Glen Mary, Robbins, Almy, LeMoyné and elsewhere.

This Bear Creek coal traces southwestward to Paint Rock at Almy and eastward to the LeMoyné mine on Gum Fork of Jellico Creek, and farther tracing eastward makes it probably the same as the Dixie coal at Newcomb and Jellico.

In summary it may be said of this northwestern coal field that it is very imperfectly known, largely because of the fact that except along its eroded western edge its coals generally lie several hundred feet beneath the plateau surface and are more expensive to prospect than where they crop at the surface. The conglomerate coals so far developed are relatively high in ash and sulphur and are not coked, but are used exclusively as steam and domestic coals. They are marketed along the line of the Tennessee Central Railroad, a large part going to Nashville, and some is shipped through Nashville to points on other railways in competition with coal

from West Kentucky. Little or none goes east beyond the end of the Tennessee Central, since it then comes into competition with the nearby coals on the Southern and Louisville & Nashville Railroads in the northeastern section of the field next to be described.

The Bear Creek coal finds its market on the Queen & Crescent road either for use by that road or for steam and domestic use northward in Kentucky or southward toward Chattanooga. Under

certain market conditions, especially when strikes prevail in the West Virginia or the Illinois-Indiana region, this coal finds a market north of the Ohio River.

GENERAL ANALYSIS WILDER COAL		Per Cent.
Moisture		2.95
Volatile Matter		35.60
Fixed Carbon		19.05
Ash		12.40
Sulphur		3.40
B. t. u.'s		12,800

THE NORTHEASTERN COAL FIELD

This field embraces the coal-bearing area of Tennessee lying east of the Queen & Crescent Railway. It is roughly triangular and is bounded on the north by Kentucky, on the west by the railway just mentioned, and on the southeast by the somewhat irregular but sharply defined line made by the Cumberland Mountain escarpment extending from Harriman to Cumberland Gap. It is the most important coal-producing area in the State.

Topographically it stands in sharp contrast to the northwestern region just described. Instead of being a plateau with a broadly flat or rolling surface beneath which narrow stream gorges here and there are cut, it is a maze of sharp crested ridges winding and branching in the most intricate fashion and separated from each other by deep and usually narrow V-shaped valleys, cut by the many-branching streams of the region. Many of the ridge crests rise to 3,000 and some even to 3,500 feet in height.

Where the coals crop from the mountain side as those in this region do over most of their extent, it is so easy to open them by drift that when a coal goes under drainage level no effort is made to reach it by shaft. In many places a shaft mine would not be more expensive to open, operate and maintain, down say to the Coal Creek coal after it has gone under drainage level, than are some of the long, steep inclines used to reach the coals high on the mountain sides where the area of coal is probably small and the life of the mine correspondingly short as compared with a shaft mine, where the entire area about the mine contains coal. There are no shaft mines in the district, the nearest approach to such being the slopes by which the Rex coal is reached at LaFollette.

The geology also of this northeastern division is in direct contrast to the northwestern. Instead of one formation a few hundred feet thick in which sandstone and conglomerates predominate, we have here a number of different formations aggregating 2,000 to 3,000 feet in thickness in which shales predominate. Instead of having one, two or three coals, as in the conglomerate, we have here a dozen or two of coals, quite a number of which are at one place or another of commercial thickness and value. In addition to these coals above the conglomerate, and accessible over most of this region above drainage, the conglomerate itself also extends under all of this region and doubtless contains coals of value that will some day be reached by shaft, as the top of the conglomerate lies only a few to a few hundred feet beneath drainage level in much of this northeastern section.

The Clear Creek basin between the Pine and Cumberland mountains may be considered as a unit. It is crossed diagonally by the Louisville & Nashville Railroad, and a branch of the Southern extends up Clear Fork to the Kentucky line. Numerous mines are operated on these lines of road and the relation to each other of the coals now developed is reasonably clear.

The lowest coal mined in the basin is the **Rex**. It is about 300 feet above the Lee conglomerate and is doubtless equivalent to the Coal Creek coal, which it resembles in various ways.* It is mined at LaFollette. The roof is a slate that where undisturbed may hold very well, but which falls readily when shot down along entries. About a foot from the top the coal generally has a parting that varies from 0 to 12 inches with an average of about 2 inches, while the coal beneath it averages two feet. This coal is low in ash and sulphur, and is coked for the furnace at LaFollette. Above it at LaFollette 513 feet is a coal locally known as the **Kent**. This coal was formerly worked immediately above Rex mine No. 2. The section varied much in different parts of the mine. The top coal varied from 5 to 25 inches, then came a dirt band from 1 to 18 inches, beneath which the bottom coal varied from 18 to 26 inches. It was high in sulphur and ash. It seems very probable that it is the equivalent of the Jellico coal.

At the Gem mine some seven miles north of LaFollette on the ridge between the head of Lick and Rocky creeks a seam locally known as the **Jordan** is worked. It is reported to be 1,200 feet above the Rex coal there, which was supposed to be reached in a bore hole at a depth of 620 feet. Two small coals regarded as the Kent, there split, are found 500 feet beneath the Jordan, which has an elevation above sea of 1,987 feet at the mine mouth. It dips gently northwestward and varies but little from 48 inches of coal with a parting usually about a foot from the top that varies from one to six inches. This parting may be rash, or clay, and either free from or mixed with coal. The area, owing to the elevation, is limited, but two or three miles to the northeast it is mined at Cotula, where it has very similar section and thickness, except that the parting varies from zero to four inches, and part of the coal runs up to five feet or occasionally more in thickness.

In the section along the Louisville & Nashville Railroad from Cotula north to Chasca, the lowest

*Evidence is accumulating that the Rex coal is lower or older than the Coal Creek coal, and that the Coal Creek and Kent are the same.

seam exposed is the **Kent**.^{*} It is split into two benches, the lower of which has been mined at several places generally under the name of the **Italy seam**. It averages 34 inches and has a sandstone roof and hard shale floor that make working expensive. At Cotula, it is below railway grade, but near Chasca it begins to rise rapidly to the north-west under the influence of the Pine Mountain fault.

About 220 to 290 feet above the Kent, or Italy seam, along this section of Davis Creek is the **Rich Mountain seam**, mined at Wynn, Remy, Rich Mountain, Cupp, Kimberly and Chasca. It has an average thickness that varies in different mines from 30 to 44 inches and may or may not have a thin clay parting of rash beneath it. It is probably the **Blue Gem** coal.

Some 90 to 125 feet above the Rich Mountain coal on Davis Creek is the **Log Mountain seam**. This seam is mined only at Jackson and Westbourne, where it averages about 44 inches and is solid. Elsewhere it seems to be split or thin in this section in the few places where search has been made for it. In the western part of each of the above mines the upper 10 inches is cannel. In the eastern workings this cannel disappears.

This Log Mountain, or Westbourne, coal is the same as the Pruden and Mingo and is believed to be the same as Jellico, the Twin seam of the Briceville region and the Petros, or State, seam. The area above this horizon in the ridges in the Clear Creek basin is in the aggregate large and further prospecting will doubtless disclose other areas where it is of workable thickness, as it is a coal of widespread occurrence both in Kentucky and Tennessee.

About 150 feet above the Log Mountain is the **Jordan**, which, as has been seen, is mined at the Gem Mine at Peabody, and at Cotula. It is probably the same as the Splint coal at Elk Valley and is close below the Lower Pioneer coal. About 100 to 125 feet above the Poplar Lick coal in the Middlesboro region is the **Klondike**, or McGuire, coal, which carries marine fossils. In the Coal Creek and New River region a coal known as the **Big Mary** is also characterized by the marine fossils it carries, and is associated with other coals above it, one of which is usually correlated with the Dean. It is probable that the marine fossils characterize the same coal, and if so the Dean could not be below it in one region and above it in another. This tangle of correlation can only be worked out by future detailed work.

At Morley, two mines work a coal that is locally called the **Kramor** seam. It is 32 to 35 inches thick, is reported to be about 250 feet above the top of the conglomerate and is probably to be correlated with the Kent seam of the LaFollette region.

On Clear Fork at Anthras and Clairfield several mines operate on a coal generally considered to be the **Jellico**, but that is more probably the equivalent of the Kent, the Jellico being represented by the Pruden coal some 420 feet higher at Clairfield. It varies much in thickness in the mines and prospect openings that have been made. Where mined it averages from 42 to 52 inches and may be solid or may have a parting that varies up to 12 inches in thickness, but is frequently absent. In a prospect on Rock Creek the thickness is reported as 68 inches. There is a large area to the south of Clear

Fork in which this coal occurs, though its thickness there is not known.

Near the head of Clear Fork at Pruden and at Fonde a coal some five or six feet in thickness is extensively mined. It is usually split into three benches by two clay partings, and in a portion of the area the upper parting is so thick that only the two lower benches of coal are mined, while in other portions the upper parting is thin and the lower so thick that the middle and upper benches of the coal are alone removed.

In some places it splits into four or five benches of coal, but generally some two are large enough and near enough together to be worked. This coal is the same as the Mingo coal of Bennett Fork and is the same as the Log Mountain, the Westbourne and the Jellico coal. At Clairfield it is 420 feet above the coal there mined.

The discussion of the remaining portion of the northeastern coal field can best be undertaken by districts, beginning at Jellico and going southward and westward around the margin of the basin. This description may be relatively brief, since many of the largest mines are on one or other of a very few seams, such as the Coal Creek and the Jellico.

At Jellico the lowest coal known locally is the **Swamp Angel**. It is found at or a short distance below drainage level and is reported to be 32 to 34 inches in thickness. It is not mined. About 100 feet above it is another unmined coal known as the **Dixie**. It may be solid or split by a clay parting and is said to be 24 to 36 inches thick. Either this or the Swamp Angel is at about the horizon of the Coal Creek coal. This Dixie coal, when traced westward, correlates with the coal mined at the LeMoynes mine on Gum Fork of Jellico Creek. At LeMoynes there is a main bench of 30 to 33 inches above which there is a parting that is left as the roof. Above this parting, which varies from 8 to 36 inches, there are five inches of poor bony coal that is not mined.[†] About 100 to 120 feet above the Dixie there is a thin coal near Newcomb, known as the **Black Wax**, and some 60 or 70 feet above it is the **Blue Gem** coal. This latter coal is always thin, but is of such excellent quality as a domestic fuel that a thickness of 18 to 22 inches is mined in numerous places about Jellico. It is also mined at Elk Valley, where it varies from 16 to 24 inches.

About Jellico the **Jellico** coal is 90 to 110 feet above the Blue Gem. It varies greatly in thickness and in details of section within short distances. In one mine it varies from two to six feet. It may be solid, but more frequently has one or two partings, which vary in thickness, and in position, but which rarely prevent the coal from being mined. It is mined at Jellico, Newcomb and Elk Valley.

Four hundred and forty feet by aneroid above the Jellico coal at Newcomb there is an excellent cannel. It shows a top bench of 24 to 26 inches of cannel, 1 to 2 inches of parting and 8 to 11 inches of cannel, and is known to underlie a considerable area in thickness great enough to mine. Some other coals are known to occur above and below this cannel, but they have not been prospected sufficiently to determine their thickness or value.

^{*}The Kent is probably not the same as the Jellico, but older. The Kent and the Little Italy, the Anchor, Anthras, Egan and King's Mountain coals are believed to be the same.
[†]This is the same as the coal at Almy, Bear Creek, Huntsville, Helenwood, and Robbins and Glen Mary.

It is underlaid by a flint clay that is of widespread occurrence and an excellent horizon marker.

Three miles south of Pioneer a spur track passes east through the gap in Fork Mountain and reaches the Rector mine, which was opened on what appears to be the Kent seam. When driven in about a thousand feet the coal was cut off by a fault and the mine was abandoned. Some three miles east of there on the head of Ollice Creek the same coal occurs. In each place it is four feet thick. This coal is also known at several points on Stinking Creek north of Walnut Mountain, so that it underlies much the larger part of the Clear Creek basin from Fork Mountain northeast to the Louisville & Nashville Railroad. We have already noted its development along that railroad, where it is usually known as the Italy coal, and its development also at Anthras and elsewhere on Clear Fork, where it is incorrectly known as the Jellico.

At Turley, Block, Red Ash and Caryville there are a number of mines that work one or the other of two coals, situated near the tops of the mountain ridges. The strata rise considerably to the southward, so that each coal is carried higher in that direction. Their general elevation where mined may, however, be taken as 2,300 to 2,750 feet above sea level.

At Block, 325 feet by aneroid below the Rock Spring coal, another coal occurs that averages three feet in thickness. It is known as the **Red Ash**, and is mined at Block and is generally believed to be the coal mined at Red Ash, Caryville and the Sun mine. At Red Ash this coal has a top bench of 38 inches, then, clay 2 inches and coal $1\frac{1}{2}$ inches. At Caryville the coal is solid and averages 46 to 48 inches, and seems quite regular. At the Sun it varies from $3\frac{1}{2}$ to 5 feet in thickness, and on the right workings is solid, but on the left a soft clay appears slightly below the middle and had run up to 8 inches when further work in that direction was stopped. It is not yet certain that these are all the same coal, though the Caryville and Red Ash mines are on the same seam.

The next mining region south of Caryville is Coal Creek, with which Briceville is included. The Coal Creek seam has been mined here for years on an extensive scale. The coal crops close above drainage for some 8 to 10 miles along Coal Creek and Valley Fork. It averages in the various mines 40 to 48 inches in thickness, with 42 inches as a general average, but varies greatly in detail in any one mine. Where of average thickness it perhaps more often has a knife-edge to 4-inch parting than not. This parting is usually slightly below the middle. In some places the coal runs up to six feet locally and in a small mine just north of Briceville it is even thicker. The roof varies from a good sandy shale to a soft clay from place to place in the same mine, and when of clay requires much timbering and care to hold until worked. The top 6 to 8 inches of the floor is a clay that softens when wet. The mines on this coal are usually dry and sprinkling is often necessary.

Near the crop, this coal dips westward as much as 8 to 12 per cent in places, but soon flattens out and over large areas has scarcely any dip. Some of the workings extend two miles into the mountain. Northward from Coal Creek its outcrop is soon concealed by the great Walden Ridge fault line except

for a short distance near Caryville, where it is mined. In the Briceville-Coal Creek region this is the only coal mined.

Southwestward from Coal Creek the next mining center is the Oliver Springs region. Oliver Springs bears much the area that Coal Creek does. The coal there mined, often called the **Poplar Creek** coal, has generally been correlated with the Coal Creek coal. It is now known to lie 160 to 180 feet below the Coal Creek coal in the Oliver Springs region. This Oliver Springs, or Poplar Creek, coal outcrops at a number of places on Poplar Creek, Big and Little Cow creeks, and westward on the head of Little Emory River north of Coalfield. It has been mined at numerous places in this Oliver Springs district in the past and is now mined at Big Mountain and elsewhere on Indian Creek, and in the vicinity of Coalfield. It lies only a short distance above drainage, in most places. Its average thickness is about 48 inches, and it may be with or without a parting and the roof may be either a shale or a soft clay. Beneath it there is always clay. This coal is not definitely known northward on the New River basin. It is probable that it is one of several small coals that rise above water level near the mouth of Bull Creek, a few miles below Norma.

Some 1,300 to 1,400 feet above the Oliver Springs coal there is a seam that is extensively mined at Windrock, where it is considered to be the **Lower Dean**. It averages 54 inches in thickness, but varies much in detail. In a part of the mine the coal is solid, while in another part a thin band appears that thickens, as shown by the drill, to 35 or 40 feet and then thins away again in no great distance to a few inches. Splits are of frequent occurrence in many of the coals of this northeastern region, and while rarely known to be anything like as large as the above one, they serve to puzzle the prospector and increase the difficulty and expense of operation. This is the horizon of the flint fire clay. It is 60 feet at Windrock below the Big Mary horizon. This Windrock, or Lower Dean, coal is very soft and friable and is sold almost exclusively as a steam coal.

Northwest of Coalfield the Oliver Springs coal soon goes under drainage and on the upper slopes of little Brushy Mountain at an elevation of 1,700 feet, the **State, or Brushy Mountain**, seam some 600 feet above the Oliver Springs seam, appears and is worked by the Little Brushy Coal Company. Its average thickness there is 34 inches, and it is without parting. Northward at Petros it is mined by the Big Brushy Company and by the State. It varies much in thickness, but averages some 40 to 44 inches. It may be free from partings or one or more may be present, either of rash or of clay. These partings are frequently in lenses only two to five feet across, or they may be persistent for some distance. The roof is generally a good shale, the floor is a clay. This seam is driven through to daylight on the New River side, but it has not been prospected beyond a mile or two north of its crop. It is a soft coal, cokes well and goes as coke to the iron furnaces chiefly at Dayton and Chattanooga, or is sold to the steam trade.

In the New River basin very little prospecting has been done and almost no mining. On Straight Fork of Smoky Creek the **Big Mary** coal was opened and mined for a short time. Where measured it

has a main bench of 37½ inches, above which were several thin alternations of coal, bone and partings. As usual, it carries marine shells in the roof. The attempt to mine this coal was soon abandoned, partly because of local freight rates and partly because of the unsatisfactory character of the seam. The Big Mary seam is everywhere variable and unreliable, although it often presents locally a very attractive appearance. This coal has been faced on the head of Brimstone Creek of Smoky Creek, where the only bench of consequence is a bottom one of 27½ inches. Two hundred and fifty feet higher another coal 50 to 52 inches, and solid, has been faced, and 60 feet still higher there is a 38-inch solid facing. The 52-inch coal is a good-looking, clean, hard coal.

Some prospecting has recently been done in the upper part of the New River basin that shows the Big Mary coal to be more promising in thickness and regularity than in the Block region. It is probable that considerable areas of it might be mined successfully in that region.

Just westward from Round Knob on Brimstone Creek 20 to 60 feet above water level is a coal that has been faced at a number of places from below Hutson's branch up to Mill Creek, where it goes under drainage. It is about a thousand feet below the flint clay coal at the Jones place. It varies somewhat, but averages about 36 inches of solid, good-looking coal. Westward on Indian Fork at the Sam Walker opening it shows top and bottom benches of 20 to 38 inches of coal separated by 15

inches of clay. On the head of Aaron branch it has top coal 37 inches, bony shales 4 inches, coal 18 inches. Opposite the mouth of Pemberton branch it is 42 inches and solid. At Robbins it shows 31 inches of solid coal.

This coal is widely developed in Brimstone Creek basin and crops on the mid-slopes or near the base of the hills. It is the same as the coal mined at Glen Mary, Helenwood, Almy, Bear Creek and LeMoyne. At and near Almy there are a number of mines working it. It averages there 24 to 30 inches, and at Glen Mary has about the same average. The roof there is usually good and the coal is clean. Most of it is used as steam coal.

GENERAL ANALYSIS

	Coal Creek	Jellico	Blue Gem
Moisture	2.00	3.30	4.30
Volatile Matter . .	37.25	37.70	38.10
Fixed Carbon . .	56.00	54.30	55.50
Ash	4.75	4.70	2.10
Sulphur	0.85	1.40	1.00
B. t. u.	14,100	13,700	13,850

GENERAL ANALYSIS

	Rich Mountain	Mingo
Moisture	4.20	3.65
Volatile Matter . .	38.60	37.50
Fixed Carbon . .	55.10	54.75
Ash	2.10	4.10
Sulphur	0.80	1.15
B. t. u.	13,970	13,950

THE COAL FIELD SOUTH OF THE TENNESSEE CENTRAL RAILROAD

This field comprises 2,200 square miles, although the area containing coal measures above the Sewanee conglomerate comprises only 1,420 square miles. The rocks are all of sedimentary origin and consist of more or less pure layers of limestones, shales and sandstones. The upper parts, sloping to the top of the plateau, are composed of a series of sandstones and shales. It is in these shales that the coal seams occur. The southern field can be divided into three districts, namely, Tracy City, Bon Air and Walden Ridge. The Tracy City district includes all of Grundy county and parts of Bledsoe, Franklin, Marion and Sequatchie counties. The Bon Air district is comprised of that part of Cumberland and Putnam counties south of the Tennessee Central Railroad and the parts of Van Buren and White counties that lie on the plateau.

The Walden Ridge district comprises the eastern part of Bledsoe, Hamilton, Marion, Rhea and Sequatchie counties.

Sewanee Seam. (Mined in Bledsoe, Grundy, Marion, Rhea, Roane, Sequatchie and White counties.)

In the Tracy City district the main Sewanee seam occurs about 50 feet above the top of the only heavy sandstone conglomerate of this area. This sandstone is here coincident with and forms the surface of most of the general plateau, and on it lies numerous low hills, the only remnants that are left of the higher measures. It is in these hills that the Sewanee coal seams are found. Only the upper bed, which varies greatly in thickness,

is worked. Although many measurements show the seam to be five or six feet, and some as high as ten or more feet, the general average is from three to three and a half feet. The floor of the seam is a very plastic grayish-white clay, or a gray shale. Above the seam is a very fossiliferous gray shale, carrying a large variety of plant impressions. New mines have been opened at Penner, which is now becoming the largest mining camp in this district.

In the Bon Air district the Sewanee coal is mined at Eastland and Clifty, and is here known as the Clifty coals. There are two seams occurring at this point, the lower one resting directly on top of the sandstone upon which Clifty is built, and the upper one about 15 feet high and separated from it by shale. The upper coal, which is soft and slacks very easily, is the main seam and is the one generally worked. It contains too much sulphur to permit of making commercial coke. At Eastland the seam averages 48 inches, and has a bluish-gray shale roof, and a gray clay bottom. At Clifty, about a half mile distant, the coal in one of the mines averages 48 inches, and 42 inches in another. The floor of the seam is gray clay, and the roof is bluish-gray shale or a thin sandstone.

GENERAL ANALYSIS

	Bledsoe	Grundy	White
Moisture	3.20	3.50	3.60
Volatile Matter . .	29.30	29.50	35.10
Fixed Carbon . .	59.70	57.20	49.60
Ash	7.80	9.80	11.70
Sulphur	0.86	0.90	4.00
B. t. u.	13,500	13,100	12,800

Bon Air Seam. (Mined in White county.)

There are two Bon Air coal seams, an upper and a lower, which are separated by about 20 feet of clay and shale. In some places the upper seam is worked, while at others it is the lower vein which is the thicker. Often there is a third seam, or, one might say, an under rider of the lower Bon Air, which occurs five or six feet below it and is separated from it by clay. This seam rests on limestone, or is separated from it by a foot or two of clay. From field observations, it appears that where one of the Bon Air coals occurs in workable thickness the other is too thin to be utilized. In the shaft mine the seam averages 36 inches. It must not be thought that the only coal found immediately above the limestone strata is the Bon Air, for this overlying coal formation is a line of unconformity. That is, the rock series is broken, and

some of the members are missing, because they were never laid down. In this manner, as one travels from the east to the west, it is seen that the lower coal measures are gradually cut out. For example, the coals that lie next to the limestone along the eastern edge of Walden Ridge are many feet lower stratigraphically than the coals that lie next to the limestone along the western escarpment of the Cumberland Plateau, as at Bon Air and Sewanee.

GENERAL ANALYSIS

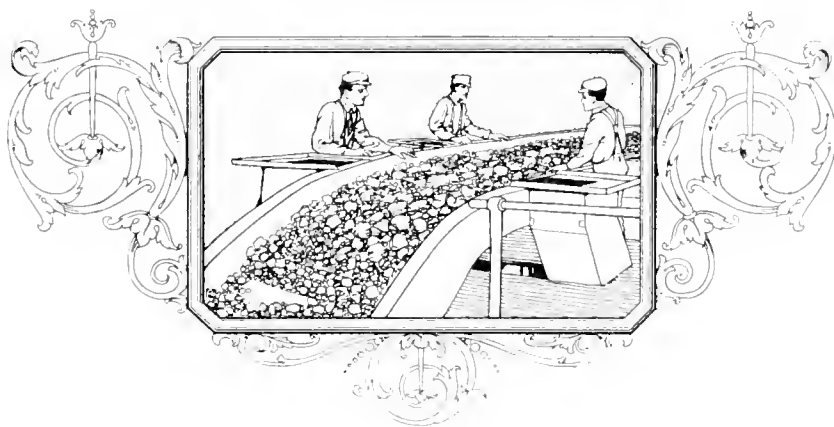
Moisture	3.00
Volatile Matter	39.00
Fixed Carbon	49.30
Ash	8.70
Sulphur	2.90
B. t. u.	13,350

PREPARATION OF COAL

Most of the coal mined in Tennessee is consumed within its borders as domestic coal, railroad fuel, or by the iron industries in the form of coke. Owing to the thinness of the seam, together, oftentimes, with its irregularity of occurrence, there are but few mines of large size, hence there is less frequently found here the large investment in

tipple devices, such as characterize the mines of Kentucky and West Virginia.

Bar screens are common, however, and shaker screens, pickling tables, booms, etc., are gradually being introduced at such mines as cater to a domestic trade.



Analyses of Tennessee Seams by Counties and Localities

(ALL ANALYSES MADE ON MINE SAMPLES "AS RECEIVED")

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carbon	Oxygen	RATIOS		
											Carbon	P. C.	V. M.
											Oxy. + Ash.		
*Angel.....	Bledsoe, 2 mi. n. w. of Litton.....	Hale.....	3.33	27.89	63.17	5.61	1.88	14,130	.....	.....	.....	.....	2.26
*Angel.....	Bledsoe, 4 mi. n. of Litton.....	Prospect.....	5.04	25.48	61.81	7.67	0.59	13,487	.....	.....	.....	.....	2.43
*Battle Creek.....	Marion, 1½ mi. n. of Orme.....	Battle Creek No. 3.....	3.4	34.8	53.3	8.5	1.05	13,290	.....	.....	.....	.....	1.53
*Battle Creek.....	Marion, 1½ mi. n. of Orme.....	Battle Creek No. 4.....	2.8	34.9	49.0	13.3	2.00	12,590	.....	.....	.....	.....	1.40
*Battle Creek.....	Marion, 1 mi. n. of Orme.....	Battle Creek.....	3.31	31.71	51.87	13.11	1.30	12,193	.....	.....	.....	.....	1.64
*Battle Creek.....	Marion, 1 mi. n. of Orme.....	Battle Creek.....	3.37	32.38	53.13	11.12	0.65	.....	.....	.....	.....	.....	1.65
*Billogoat.....	Claborn, s. w. of Bosworth.....	Battle Creek Nos. 3, 4, 5.....	3.10	35.80	51.62	9.48	1.57	13,198	73.89	8.25	.....	.....	1.44
*Blue Gem.....	Campbell, ¾ mi. n. w. of Elk Valley.....	Yellow Creek No. 3.....	3.34	39.87	54.02	2.77	1.03	14,290	79.29	8.94	6.77	1.35	1.35
*Blue Gem.....	Campbell, 1 mi. n. w. of Elk Valley.....	Elkhart.....	4.64	37.98	55.25	2.13	1.19	13,871	77.51	11.44	5.71	1.45	1.45
*Blue Gem.....	Campbell, 1½ mi. n. w. of Elk Valley.....	Perkins Branch.....	3.92	39.06	54.70	2.32	0.96	13,993	78.03	10.82	5.94	1.40	1.38
*Blue Gem.....	Campbell, 1½ mi. s. e. of Jellico.....	Blue Gem.....	4.40	39.53	54.03	2.06	1.03	14,177	78.70	10.44	6.30	1.37	1.37
*Blue Gem.....	Campbell, 1½ mi. s. of Jellico.....	Evans.....	5.19	38.10	54.79	1.92	0.83	13,729	76.45	12.69	5.19	1.44	1.44
*Blue Gem.....	Campbell, 2 mi. s. of Newcomb.....	Jellico Cannel.....	1.5	45.1	34.1	19.3	1.16	12,340	75.23	13.74	4.66	.....	0.76
*Blue Gem.....	Campbell, 1½ mi. n. e. of Newcomb.....	Italian Blue Gem.....	5.39	37.46	54.76	2.39	0.89	13,442	.....	.....	.....	.....	1.46
*Blue Gem.....	Morgan, 1¼ mi. s. e. of Coalfield.....	Thornton.....	4.5	37.0	47.4	11.1	4.35	12,670	.....	.....	.....	.....	1.28
*Blue Gem.....	Scott, 1 mi. s. of Robbins.....	Clay No. 1.....	2.7	39.7	48.4	9.2	3.75	13,330	.....	.....	.....	.....	1.22
*Bon Air No. 2.....	Fentress, 1½ mi. n. of Highland Jct.....	Davidson.....	3.1	36.6	50.1	10.23	3.04	13,090	71.96	7.84	3.98	1.37	1.37
*Bon Air No. 2.....	Fentress, ½ mi. n. of Davidson.....	Highland No. 2.....	2.77	36.85	50.71	9.67	3.01	13,216	72.68	7.76	4.16	1.38	1.38
*Bon Air No. 2.....	Fentress, Wilder.....	Wilder No. 3.....	3.40	35.15	51.53	9.92	2.64	13,050	71.63	9.20	3.75	1.47	1.47
*Bon Air No. 2.....	Overtown, 2½ mi. n. w. of Highland Jct.....	Overtown.....	3.43	35.58	50.64	10.35	3.14	12,992	72.25	7.56	4.03	1.42	1.42
*Bon Air No. 2.....	Overtown, ½ mi. w. of Obey City Sta.....	Peacock.....	2.8	36.4	50.8	10.0	3.30	13,170	.....	.....	.....	.....	1.40
*Bon Air No. 2.....	Overtown, ½ mi. e. of Obey Sliding.....	Obey River.....	2.6	36.0	49.1	12.3	3.80	12,870	.....	.....	.....	.....	1.36
*Bon Air No. 2.....	Putnam, 2 mi. n. of Monterey.....	Monterey.....	3.4	38.2	48.7	9.7	3.43	13,100	.....	.....	.....	.....	1.27
*Bon Air.....	White, 1¼ mi. s. of Bon Air.....	Bon Air.....	3.15	38.31	50.94	7.60	2.80	13,417	74.45	8.51	4.62	1.33	1.33
*Bon Air.....	White, 1¼ mi. s. of Bon Air.....	Bon Air.....	2.7	39.8	47.5	10.0	3.36	13,240	.....	.....	.....	.....	1.19
*Brushy Mountain.....	Morgan, Petros.....	Big Brushy.....	5.59	33.62	51.03	9.76	3.23	.....	70.08	10.07	3.53	1.55	1.55
*Castle Rock.....	Marion, 1 mi. s. w. of Whiteside.....	Castle Rock.....	3.78	23.44	62.03	10.75	2.45	13,187	74.80	6.11	4.44	2.65	2.65
*Coal Creek.....	Anderson, ½ mi. w. of Briceville.....	Cross Mtn. No. 1.....	1.55	35.36	56.49	6.60	0.75	14,017	78.39	7.35	5.61	1.60	1.60
*Coal Creek.....	Anderson, 3 mi. n. w. of Coal Creek.....	Cross Mtn. No. 1.....	1.70	35.02	53.14	10.14	1.06	13,462	75.32	6.71	4.47	1.52	1.52
*Coal Creek.....	Anderson, 3 mi. n. w. of Coal Creek.....	Black Diamond No. 1.....	1.8	36.6	55.5	5.08	1.32	14,200	78.95	7.32	6.36	1.54	1.54
*Coal Creek.....	Anderson, 3 mi. n. w. of Coal Creek.....	Klondike.....	1.83	36.5	55.4	6.34	0.99	13,920	78.06	7.22	5.76	1.52	1.52
*Coal Creek.....	Anderson, 3 mi. n. w. of Coal Creek.....	Klondike.....	1.93	36.57	55.80	5.70	0.87	14,090	78.75	7.31	6.05	1.53	1.53
*Coal Creek.....	Anderson, 4½ mi. s. w. of Coal Creek.....	Middle Ridge.....	2.3	37.4	56.1	4.2	0.89	14,180	.....	.....	.....	.....	1.50
*Coal Creek.....	Anderson, 5 mi. s. w. of Coal Creek.....	Tennessee.....	2.4	36.0	53.2	8.39	1.61	13,520	75.23	7.70	4.67	1.48	1.48
*Coal Creek.....	Anderson, 3 mi. s. w. of Coal Creek.....	Thistle.....	2.19	37.24	54.45	6.12	1.39	13,961	77.61	7.45	5.72	1.46	1.46
*Coal Creek.....	Anderson, 1¼ mi. n. e. of Oliver Springs.....	Hall.....	2.1	40.5	53.4	4.0	1.60	14,220	.....	.....	.....	.....	1.32
*Coal Creek.....	Anderson, 3 mi. n. e. of Oliver Springs.....	Piedmont.....	2.02	38.36	55.66	3.96	1.85	14,675	79.45	7.07	7.20	1.45	1.45
*Coal Creek.....	Anderson, 1½ mi. w. of Coal Creek.....	Smith.....	3.9	38.4	54.8	2.9	0.84	14,140	.....	.....	.....	.....	1.43
*Coal Creek.....	Campbell, 1½ mi. s. w. of Caryville.....	Bear Wallow.....	2.3	36.7	56.8	4.16	0.92	14,190	79.20	8.34	6.34	1.54	1.54
*Coal Creek.....	Campbell, 4 mi. n. w. of Coal Creek.....	Vasper.....	2.12	36.59	57.46	3.83	0.77	14,332	79.71	8.27	6.59	1.57	1.57
*Coal Creek.....	Campbell, ½ mi. n. w. of Vasper.....	Conger.....	1.95	37.66	56.30	4.09	1.23	14,179	79.27	7.98	6.57	1.49	1.49
*Coal Creek.....	Morgan, 1½ mi. n. e. of Coalfield.....	Slope.....	1.88	38.46	51.52	8.14	4.04	13,847	75.26	5.17	5.65	1.34	1.34
*Coal Creek.....	Morgan, 1½ mi. n. e. of Coalfield.....	Prudential.....	3.3	39.1	52.9	4.7	3.29	14,200	.....	.....	.....	.....	1.35
*Coal Creek.....	Morgan, 3½ mi. n. w. of Oliver Springs.....	Richards.....	1.51	39.65	49.55	9.29	4.43	13,680	74.19	4.93	5.22	1.25	1.25
*Coal Creek.....	Morgan, 3 mi. n. w. of Oliver Springs.....	Williams.....	1.49	40.02	48.93	9.56	5.40	13,541	72.83	5.26	4.91	1.22	1.22
*Coal Creek.....	Morgan, 1½ mi. n. w. of Oliver Springs.....	Williams.....	2.7	37.6	54.4	5.3	1.10	13,940	.....	.....	.....	.....	1.45

*Bulletins Bureau of Mines.

(Continued on Next Page)

COAL CATALOG

ANALYSES OF TENNESSEE SEAMS BY COUNTIES AND LOCALITIES—Continued

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	A	Sulphur	Determined by T. U.	Carbon	RATIOS	
										Oxy. + Ash	F. C. V. M.
*Dean, Lower.	Anderson, Oliver Springs.	Windrock No. 1.	6.39	32.32	51.76	9.53	0.98	12.578	70.16	12.36	1.60
*Dean, Upper.	Campbell, 1½ mi. s. w. of Caryville.	Pee Wee.	3.70	37.49	55.35	3.46	0.70	13.876	77.92	10.77	1.48
*Eagle, Old.	Campbell, 1½ mi. s. w. of Oliver Springs.	Rock Springs.	3.53	36.58	48.35	11.54	2.80	12.593	69.81	9.38	1.32
*Etna, Old.	Morgan, 1½ mi. n. w. of Whiteside.	Old Mount Carbon.	2.5	39.4	54.9	3.2	1.18	14.130	.....	.....	1.39
*Etna, Old.	Marion, 1 mi. s. w. of Whiteside.	Bessie.	5.2	25.3	67.4	2.1	0.63	14.430	.....	.....	2.66
*Etna, Old.	Marion, near Whiteside.	Old Etna Nos. 1, 2.	5.09	26.60	65.63	2.68	0.90	14.492	81.92	7.69	2.47
*Frozen Head.	Campbell, 1½ mi. w. of Whiteside.	Old Etna No. 2.	5.6	26.7	64.8	2.9	1.06	14.380	.....	.....	2.43
*Frozen Head.	Campbell, 1½ mi. s. w. of Vasper.	Disney.	4.7	37.5	54.0	3.8	0.69	13.600	.....	.....	1.44
*Hooper.	Morgan, 1½ mi. n. of Petros.	Frozen Head.	3.1	35.2	55.0	6.7	0.89	13.520	.....	.....	1.56
*Hooper.	Morgan, 1½ mi. s. of Christmas Siding.	Grassy Ridge.	3.0	39.3	54.1	3.6	1.81	14.320	.....	.....	1.38
*Jellico.	Morgan, 1½ mi. s. of Anthras.	Smith.	3.6	36.4	54.7	5.3	0.77	13.910	.....	.....	1.50
*Jellico.	Campbell, 1½ mi. s. of Habersham.	Anthras.	3.2	36.8	56.9	3.11	0.87	14.120	78.83	9.60	1.55
*Jellico.	Campbell, 2½ mi. w. of Jellico.	Davis Creek.	4.06	38.57	55.15	2.22	0.72	13.979	77.88	11.30	1.43
*Jellico.	Campbell, 2½ mi. w. of Jellico.	Indian Mtn. Nos. 1, 2, 5.	4.69	36.83	55.32	3.16	1.36	13.678	76.39	11.31	1.50
*Jellico.	Campbell, 1½ mi. s. e. of Morley.	Red Moon.	3.3	38.3	53.7	4.7	1.16	13.780	.....	.....	1.40
*Jellico.	Campbell, 1½ mi. s. e. of Morley.	Red Moon.	3.6	37.9	53.6	4.85	1.82	13.670	76.08	9.70	1.41
*Jellico.	Campbell, 3 mi. n. w. of Newcomb.	Marion-Anna.	3.2	37.6	53.3	5.93	1.85	13.480	75.25	9.49	1.42
*Jellico.	Claiborne, ¾ mi. e. of Clairfield.	King Mountain.	2.99	37.15	55.92	3.94	1.16	14.026	78.50	8.91	1.51
*Jellico.	Claiborne, ¾ mi. e. of Clairfield.	Standard.	2.94	37.69	56.15	3.22	0.90	14.161	79.10	9.22	1.49
*Jellico.	Claiborne, ¾ mi. s. of Eagen.	Buffalo.	3.12	37.84	55.65	3.39	1.19	14.114	78.49	9.32	1.47
*Jellico.	Morgan, 1 mi. e. of Petros.	Petros No. 5.	2.25	36.43	54.21	7.11	2.51	13.680	75.60	7.43	1.49
*Jellico.	Morgan, 1 mi. n. of Petros.	State No. 3.	2.25	36.36	53.29	8.10	2.61	13.588	74.94	7.10	1.47
*Jellico.	Morgan, 1½ mi. s. w. of Stephens.	Little Brushy.	2.87	37.28	54.75	5.10	2.63	14.067	77.44	7.49	1.47
*Jellico.	Scott, Newland.	Arch Mountain.	2.90	36.13	55.56	5.41	1.87	13.840	77.09	8.03	1.54
*Jordan.	Campbell, 2 mi. n. e. of Kilsyth.	Gem No. 4.	4.32	36.71	55.88	3.09	0.71	13.671	77.38	11.31	1.52
*Jordan.	Campbell, 1½ mi. w. of Cotula.	Southern.	4.29	37.12	55.07	3.52	1.19	13.658	76.72	11.10	1.48
*Kell.	Marion, 7 mi. n. w. of Whiteside.	New Etna Nos. 1, 2.	3.52	37.63	61.67	7.18	1.28	13.801	78.09	6.66	2.23
*Log Mountain.	Campbell, 2½ mi. n. e. of Gatlin.	Westborne.	5.09	35.79	52.31	6.81	0.98	13.295	73.54	11.53	1.46
*Mingo.	Claiborne, 5½ mi. s. w. of Fork Ridge.	Bryson Mtn. No. 1.	3.55	37.35	54.29	4.81	1.35	13.703	76.33	10.17	1.45
*Mingo.	Claiborne, Hartranft.	Fork Ridge No. 1.	3.85	36.61	54.90	4.64	1.19	13.693	76.38	10.31	1.50
*Mingo.	Claiborne, Hartranft.	Reliance No. 1.	3.7	37.2	54.6	4.5	1.39	13.860	.....	.....	1.47
*Mingo.	Claiborne, Hartranft.	Prudence No. 2.	3.5	37.9	55.4	3.2	1.10	14.100	.....	.....	1.46
*Mingo.	Claiborne, 1 mi. e. of Pruden.	High Cliff.	3.09	37.14	55.27	4.50	1.39	13.874	77.24	9.30	1.49
*Morgan Springs.	Claiborne, 1½ mi. s. of Pruden.	Monarch.	3.16	38.31	55.15	3.38	1.19	14.067	78.10	9.73	1.44
*Mud Slip.	Cumbarland, n. of Litton.	Hale.	6.05	27.75	55.65	10.55	2.65	12.640	70.32	9.50	1.30
*Paint Rock.	Scott, 8 mi. s. e. of Robbins.	Hughett.	3.8	36.2	56.0	4.0	0.89	14.120	.....	.....	1.55
*Paint Rock.	Scott, 2 mi. n. of Bear Creek Jet.	Phillips.	3.75	38.50	51.23	6.52	1.93	13.403	74.32	9.80	1.33
*Poplar Lick.	Claiborne, 1½ mi. s. w. of Manning.	Keaton Bros.	4.1	37.0	54.6	4.3	0.77	13.880	.....	.....	1.48
*Poplar Lick.	Claiborne, Hartranft.	Sterling.	3.41	35.49	51.87	9.23	0.95	12.991	72.51	9.85	1.46
*Ralston.	Claiborne, Fork Ridge.	Mingo No. 5.	2.89	37.66	50.17	9.28	2.73	13.045	72.66	8.10	1.33
*Red Ash.	Campbell, 1½ mi. s. w. of Caryville.	Sun.	4.81	32.91	51.13	11.15	1.58	12.569	69.22	11.32	1.55
*Red Ash.	Campbell, 1¼ mi. n. w. of Caryville.	Red Ash.	3.45	38.61	51.91	6.03	1.13	13.410	75.95	9.64	1.34
*Red Ash.	Campbell, 1½ mi. n. w. of Caryville.	Caryville.	3.46	38.47	52.23	5.84	1.90	13.478	75.02	10.83	1.36
*Red Ash.	Campbell, 1 mi. s. w. of Block.	Pee Wee.	3.38	38.41	52.39	5.82	1.22	13.495	75.36	10.30	1.36
*Regal Block.	Campbell, Gatlin.	Regal.	3.8	38.4	51.9	5.9	1.14	13.440	.....	.....	1.33
*Regal Block.	Campbell, 2 mi. n. e. of LaFollette.	Rex No. 1.	4.25	35.31	56.31	4.13	0.93	13.666	72.41	12.33	1.59
*Rex.	Campbell, 2 mi. n. e. of LaFollette.	Rex No. 1.	5.38	34.54	53.03	7.05	0.99	13.048	.....	.....	1.51
*Rex.	Campbell, 2 mi. n. e. of LaFollette.	Rex No. 1.	3.2	37.5	56.6	2.7	0.89	14.100	78.56	9.59	1.50
*Rex.	Campbell, 1½ mi. e. of Habersham.	Rich Mountain.	3.12	37.46	56.25	3.23	1.04	14.013	74.95	10.29	1.82
*Rich Mountain.	Campbell, 1 mi. e. of Habersham.	Rich Mountain.	2.92	32.04	58.23	6.81	1.14	13.514	76.49	9.60	1.38

(Continued on Next Page)

*Bathetics Bureau of Mines

COAL CATALOG

ANALYSES OF TENNESSEE SEAMS BY COUNTIES AND LOCALITIES—Continued

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carbon	Oxygen	RATIOS
									Carbon	Oxygen	Carbon + Ash V. M.
*Rich Mountain...	Campbell, 2 mi. s. e. of Habersham.	Remy.	4.4	38.0	55.1	2.5	0.69	13,900	78.49	10.88	1.45
*Rich Mountain...	Campbell, 1 mi. s. of Cotula.	Wynn.	3.96	38.80	55.17	2.07	0.86	14,004	78.49	10.88	1.42
*Rich Mountain...	Campbell, Chaska.	Chaska.	4.43	38.37	55.34	1.86	1.04	13,941	78.89	10.28	1.44
*Sewanee.	Bledsoe, 1 mi. n. of Apontley.	Apontley No. 6.	2.9	30.3	59.8	7.0	0.82	13,750	...	...	1.97
*Sewanee.	Bledsoe, 1 mi. n. of Apontley.	Apontley No. 6.	3.1	28.7	58.8	9.4	1.25	13,380	...	...	2.05
*Sewanee.	Bledsoe, 1 mi. n. of Apontley.	Apontley No. 6.	3.1	29.8	58.9	8.24	1.02	13,560	...	...	1.98
*Sewanee.	Bledsoe, about 10 mi. w. of Pikeville.	Vaughn Bros.	4.38	26.66	62.37	6.59	0.68	13,376	76.67	7.55	2.34
*Sewanee.	Bledsoe, near Herbert.	Hale.	3.44	31.10	57.63	7.83	0.56	13,473	...	...	1.85
*Sewanee.	Cumberland, 4 mi. n. of Litton.	B.	4.30	25.71	62.51	7.48	0.56	13,361	...	...	2.43
*Sewanee, Lower.	Cumberland, 3 mi. n. w. of Waldensia.	Yellow Creek No. 1.	3.89	27.61	54.07	14.43	0.78	12,514	74.04	8.93	1.96
*Sewanee.	Grundy, Coalmont.	Coalmont Old A.	4.68	28.75	57.31	9.26	0.65	13,163	73.85	9.96	1.99
*Sewanee.	Grundy, 1/2 mi. n. w. of Coalmont.	Coalmont No. 1.	2.9	29.7	56.4	11.01	1.10	12,990	73.30	8.31	1.90
*Sewanee.	Grundy, 1/2 mi. n. w. of Coalmont.	Coalmont No. 1.	3.1	30.2	54.5	12.2	0.87	12,810	...	...	1.80
*Sewanee.	Grundy, 1/2 mi. n. w. of Coalmont.	Flanagan.	2.9	30.1	58.1	8.9	0.72	13,250	...	...	1.93
*Sewanee.	Grundy, 1/2 mi. e. of Tracy City.	Reed Hill No. 2.	3.3	29.8	56.6	10.27	1.52	13,040	73.88	7.95	1.90
*Sewanee.	Grundy, 2 1/2 mi. n. w. of Tracy City.	West Ramsey.	4.2	29.1	58.9	7.76	0.59	13,230	75.26	9.81	2.02
*Sewanee.	Marion, 5 1/2 mi. e. of Tracy City.	Long Ridge.	3.8	28.4	59.2	8.6	1.14	13,180	...	...	2.08
*Sewanee.	Marion, 5 1/2 mi. e. of Tracy City.	Pryor Ridge No. 1.	2.8	30.7	54.7	11.8	4.26	12,870	...	...	1.78
*Sewanee.	Marion, 5 1/2 mi. e. of Tracy City.	Pryor Ridge No. 1.	3.08	29.60	57.01	10.31	2.22	13,115	73.92	7.21	1.93
*Sewanee.	Marion, near Whitwell.	Whitwell No. 1.	3.3	28.5	60.0	8.2	0.58	13,460	...	...	2.11
*Sewanee.	Rhea, 2 1/2 mi. n. of Graysville.	Montague No. 3.	2.5	28.8	54.3	14.4	0.91	12,610	76.49	7.89	2.14
*Sewanee.	Rhea, 2 1/2 mi. n. of Graysville.	Montague No. 5-A.	4.2	29.9	55.1	10.8	0.77	12,970	...	...	1.84
*Sewanee.	Roane, 3/4 mi. s. of McLean Siding.	McLean.	3.0	30.2	55.0	11.82	1.25	12,960	72.96	7.67	1.82
*Sewanee.	Roane, 3/4 mi. s. of McLean Siding.	McLean.	2.25	28.73	52.70	16.32	1.37	12,397	69.80	6.51	1.83
*Sewanee.	Sequatchie, 2 mi. w. of Dunlap.	Rockwood.	3.61	27.68	56.98	11.73	0.51	12,964	73.71	7.86	2.06
*Bon Air.	White, 1/2 mi. n. e. of Ravenscroft.	Ravencroft.	2.8	29.5	57.9	9.79	1.27	13,370	75.53	7.01	1.96
*Sewanee.	White, 1/4 mi. e. of Clifty.	Clifty No. 1.	3.83	36.15	48.09	11.93	4.22	12,758	71.00	7.78	1.18
*Soddy.	White, Clifty.	Soddy No. 1.	3.12	32.91	49.85	14.12	4.74	12,517	68.20	7.03	1.51
*Soddy.	Hamilton, 1 1/4 mi. w. of Rathburn.	Big Soddy.	2.69	29.12	61.12	7.07	1.25	13,946	78.86	6.12	2.10
*Soddy.	Hamilton, 1 1/4 mi. w. of Rathburn.	Sheephead.	3.2	28.0	63.8	5.0	1.62	14,050	75.67	6.81	2.28
*Soddy.	Hamilton, 1 1/2 mi. n. w. of Rathburn.	Furman.	3.42	27.08	59.40	10.10	0.90	13,331	75.67	6.81	2.19
*Soddy.	Hamilton, 3 mi. s. w. of Rathburn.	Catoosa.	2.75	29.83	61.23	6.21	0.69	14,018	79.43	7.11	2.05
*Walden Ridge.	Morgan, 3 mi. s. w. of Nemo.	Walden Ridge.	2.9	32.2	57.6	7.3	1.29	13,900	...	...	1.79
*Walden Ridge.	Roane, 2 mi. n. e. of Harriman.	Walden Ridge.	4.3	33.1	54.1	8.5	0.48	13,130	...	...	1.63
*Wilder.	Fentress, Wilder.	Fentress.	3.03	34.91	49.21	12.85	3.26	12,602	69.26	8.33	1.41
*Wilder.	Overton, Crawford.	Crawford.	2.71	35.43	47.56	14.30	3.28	...	...	...	1.34
*Wilder.	Hamilton, 3/4 mi. n. e. of Daisy.	Abel.	2.6	30.4	58.3	8.7	1.49	13,830	...	...	1.92
*Wilder.	Hamilton, 2 3/8 mi. w. of Montlake.	Montlake.	2.9	29.0	57.1	11.03	3.00	13,210	73.94	5.81	1.97
*Wilder.	Scott, 6 mi. s. e. of Robbins.	Long.	4.3	36.4	55.2	4.1	1.20	13,870	...	...	1.52

*Bulletins Bureau of Mines.

List of Mines By Seams, Including Name of Company, General Office Address
County, Railroad and Shipping Point

TENNESSEE

BON AIR SEAM

Mined in Fentress, Overton and White counties. Bituminous rank. Suitable for Cement Burning, Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Big Laurel Coal Co., The	Wildor, Tenn.	Big Laurel No. 2	Fentress	Tenn. Central	Wildor, Tenn.
BBT's Branch Coal Co.	Monterey, Tenn.	BBT's Branch	Overton	Tenn. Central	Bill's Branch, Tenn.
Bon Air Coal & Iron Corp.	Nashville, Tenn.	Cavala	White	N. C. St. L.	Bon Air, Tenn.
Brier Hill Collieries Co.	Crawford, Tenn.	Baier	Overton	Tenn. Central	Crawford, Tenn.
Brier Hill Collieries Co.	Crawford, Tenn.	Twin	Overton	Tenn. Central	Crawford, Tenn.
Davidson Coal Co.	Davidson, Tenn.	Davidson	Fentress	Tenn. Central	Davidson, Tenn.
East Laurel Mining Co.	No. 1 Arcade, Nashville, Tenn.	East Laurel	Fentress	Ouida & Western	Gernt, Tenn.
Fentress Coal Co.	Wildor, Tenn.	Fentress	Fentress	Tenn. Central	Wildor, Tenn.
Gooch Mining Co.	Davidson, Tenn.	Buckeye	Fentress	Tenn. Central	Davidson, Tenn.
Highland Coal & Lumber Co.	Nashville, Tenn.	Highland	Fentress	Tenn. Central	Davidson, Tenn.
Peacock Coal & Coke Co.	Lebanon, Tenn.	Peacock No. 1	Overton	Tenn. Central	Monterey, Tenn.
Peacock Mining Co.	Monterey, Tenn.	Peacock	Overton	Tenn. Central	Ober City, Tenn.

BLUE GEM SEAM

Mined in Campbell, Morgan and Roane counties. Bituminous rank. Suitable for Cement Burning, Melting, Powdered, Tile and Pottery Burning, Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Blue Gem Coal Co.	Jellico, Tenn.	Blue Gem	Campbell	Southern	Jellico, Tenn.
Fagan, J. A. & Son	Coalfield, Tenn.	Fagan	Morgan	H. & N. E.	Blue Gem, Tenn.
Falls Branch Coal Co.	Woodridge, Tenn.	Powhatan	Campbell	Southern	Oswego, Tenn.
Italian Blue Gem Coal Corp.	Newcomb, Tenn.	Italian Blue Gem	Campbell	Southern	Newcomb, Tenn.
Meadow Branch Coal Co.	Morley, Tenn.	Meadow Branch	Campbell	L. & N.	Morley, Tenn.
Riddle Coal Co.	Jattanooga, Tenn.	Fogal	Scott	Tenn.	Ouida, Tenn.
Vermillion, C. C.	Jellico, Tenn.	Fast Tennessee	Campbell	L. & N. Sou.	Jellico, Tenn.
Woodridge Jellico Coal Co.	Woodridge, Tenn.	Washington	Campbell	Southern, Coster Div.	Newcomb, Tenn.

COAL CREEK SEAM

Mined in Anderson, Campbell, Morgan and Roane counties. Bituminous rank. Suitable for Bee-hive Coking, By-product Coking, Cement Burning, Melting, Powdered, Tile and Pottery Burning, Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Bear Wallow Coal Co.	Knoxville, Tenn.	Bear Wallow No. 1	Campbell	Southern	Caryville, Tenn.
Bear Wallow Coal Co.	Knoxville, Tenn.	Bear Wallow No. 2	Campbell	Southern	Caryville, Tenn.
Big Mountain Collieries	Maryville, Tenn.	Big Mountain	Morgan	Southern	Oliver Springs, Tenn.
Black Diamond Collieries (The)	Coal Creek, Tenn.	Black Diamond No. 1	Anderson	Southern	Coal Creek, Tenn.
Black Diamond Collieries (The)	Coal Creek, Tenn.	Black Diamond No. 5	Anderson	Southern	Coal Creek, Tenn.
Brieville Coal Co.	Brieville, Tenn.	Brieville	Anderson	Southern	Brieville, Tenn.
Cambria Coal Mining Co.	Knoxville, Tenn.	Cambria	Campbell	Southern	Coal Creek, Tenn.
Cambria Coal Mining Co.	Knoxville, Tenn.	Minersville	Anderson	Southern	Coal Creek, Tenn.
Cambria Coal Mining Co.	Knoxville, Tenn.	Tennessee	Anderson	Southern	Coal Creek, Tenn.
Coal Creek Coal Co.	Knoxville, Tenn.	Fraterville	Anderson	Southern	Coal Creek, Tenn.
Coal Creek Coal Co.	Knoxville, Tenn.	Thistle	Anderson	Southern	Coal Creek, Tenn.
Coal Creek Leasing Co.	Knoxville, Tenn.	Black Eagle	Anderson	Southern	Coal Creek, Tenn.
Coal Creek Leasing Co.	Knoxville, Tenn.	Central	Anderson	Southern	Coal Creek, Tenn.
Coalfield Coal Co.	Knoxville, Tenn.	No. 2	Morgan	H. & N. E.	Coalfield, Tenn.
Conger Coal Co.	Coalmont, Tenn.	Conger	Morgan	H. & N. E.	Coalfield, Tenn.
Cross Mountain Coal Co.	Knoxville, Tenn.	Cross Mountain No. 1	Anderson	Southern	Brieville, Tenn.
Cross Mountain Coal Co.	Knoxville, Tenn.	Cross Mountain No. 2	Anderson	Southern	Brieville, Tenn.
Cross Mountain Coal Co.	Knoxville, Tenn.	Volunteer	Anderson	Southern	Brieville, Tenn.
McGlothlin, R. H.	Oliver Springs, Tenn.	McGlothlin	Morgan	Southern	Oliver Springs, Tenn.
Mt. Carbon Coal Co.	Oliver Springs, Tenn.	Mt. Carbon No. 1	Morgan	Southern	Oliver Springs, Tenn.
Mt. Carbon Coal Co.	Oliver Springs, Tenn.	Mt. Carbon No. 2	Morgan	L. & N.	Oliver Springs, Tenn.
New Eagle Coal Co.	Oliver Springs, Tenn.	New Eagle	Morgan	Southern	Oliver Springs, Tenn.
Poplar Creek Coal Co.	Oliver Springs, Tenn.	Poplar Creek	Morgan	L. & N.	Oliver Springs, Tenn.
Vaspar Coal Mining Co.	Vaspar, Tenn.	Vaspar	Campbell	Southern	Vaspar, Tenn.
Wilfield Coal Co.	Pioneer, Tenn.	Wilfield	Campbell	Southern	Pioneer, Tenn.

JELlico SEAM

Mined in Campbell, Claiborne and Morgan counties. Bituminous rank. Suitable for Cement Burning, Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Campbell Coal Mining Co.	Westbourne, Tenn.	Eagon	Campbell	L. & N., Sou.	Eagon, Tenn.
Clairfield Jellico Coal Co.	Clairfield, Tenn.	King Mountain	Claiborne	L. & N., Sou.	Clairfield, Tenn.
Falls Branch Coal Co.	Woodridge, Tenn.	Falls Branch	Campbell	Southern	Oswego, Tenn.
Kresge Coal & Mining Co.	Cincinnati, O.	Morley No. 1	Campbell	L. & N.	Morley, Tenn.
New Standard Jellico Mining Co.	Knoxville, Tenn.	New Standard Jellico	Claiborne	L. & N., Sou.	Clairfield, Tenn.
Petros Coal Co.	Harriman, Tenn.	Petros	Morgan	H. & N. E.	Petros, Tenn.
Proctor Coal Co.	Red Ash, Ky.	Indian Mountain	Campbell	L. & N., Sou.	Jellico, Tenn.
Roach Creek Coal Co.	Cincinnati, O.	Roach Creek	Scott	Tenn.	Norma, Tenn.
Rogers Coal Mining Co.	Clairfield, Tenn.	Rogers	Claiborne	L. & N., Southern	Clairfield, Tenn.
Rosedale Coal Co.	Rosedale, Tenn.	No. 1	Anderson	Tenn.	Rosedale, Tenn.
Splint Jellico Coal Corp.	Elk Valley, Tenn.	Jellico	Campbell	Southern	Elk Valley, Tenn.
Splint Jellico Coal Corp.	Elk Valley, Tenn.	Splint	Campbell	Southern	Elk Valley, Tenn.
Tennessee-Jellico Coal Corp.	Knoxville, Tenn.	Tenn. Jellico	Campbell	Southern, L. & N.	Anthras, Tenn.
Woodridge Jellico Coal Co.	Woodridge, Tenn.	Marion-Anna	Campbell	Southern	Newcomb, Tenn.
Wyno Coal Co.	Cotula, Tenn.	No. 2	Campbell	L. & N.	Cotula, Tenn.

MINGO SEAM.

Mined in Claiborne county. Bituminous rank. Suitable for Cement Burning, Melting, Powdered, Tile and Pottery Burning, Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Highcliff Coal Co.	Knoxville, Tenn.	Highcliff	Claiborne	L. & N., Sou.	Pruden, Tenn.
Pruden Coal & Coke Co.	Knoxville, Tenn.	Black Creek	Claiborne	L. & N.	Pruden, Tenn.
Pruden Coal & Coke Co.	Knoxville, Tenn.	Pruden	Claiborne	L. & N.	Pruden, Tenn.
Pruden Coal & Coke Co.	Knoxville, Tenn.	Valley Creek	Claiborne	L. & N., Sou.	Pruden, Tenn.
Reliance Coal & Coke Co.	Hartranft, Tenn.	Reliance No. 1	Claiborne	L. & N., Sou.	Middlesboro, Ky.
Reliance Coal & Coke Co.	Hartranft, Tenn.	Reliance No. 2	Claiborne	L. & N., Sou.	Middlesboro, Ky.

RICH MOUNTAIN SEAM

Mined in Campbell county. Bituminous rank. Suitable for Cement Burning, Melting, Powdered, Tile and Pottery Burning, Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Campbell Coal Mining Co.	Westbourne, Tenn.	Starbourn	Campbell	L. & N.	Remy, Tenn.
Rich Mountain Coal Co.	Knoxville, Tenn.	Rich Mountain	Campbell	L. & N.	Habersham, Tenn.
Wynn Coal Co.	Cotula, Tenn.	No. 1	Campbell	L. & N.	Cotula, Tenn.

SEWANEE SEAM

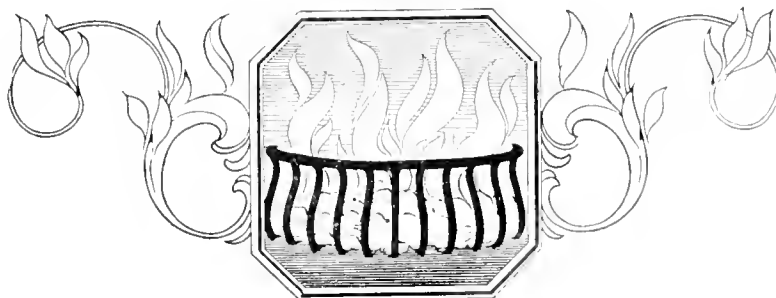
Mined in Bledsoe, Cumberland, Grundy, Marion, Rhea, Roane, Sequatchie and White counties. Bituminous rank. Suitable for Bee-hive Coking, By-product Coking, Cement Burning, Melting, Powdered, Tile and Pottery Burning, Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Astor Collieries Corp.	New York, N. Y.	North Pole	Rhea	Southern	Dayton, Tenn.
Bon Air Coal & Iron Corp.	Nashville, Tenn.	Eastland	White	N. C. & St. L.	Eastland, Tenn.
Bon Air Coal & Iron Corp.	Nashville, Tenn.	Clifty No. 1	White	N. C. & St. L.	Clifty, Tenn.
Bon Air Coal & Iron Corp.	Nashville, Tenn.	Clifty No. 2	White	N. C. & St. L.	Clifty, Tenn.
Bon Air Coal & Iron Corp.	Nashville, Tenn.	Clifty No. 3	White	N. C. & St. L.	Clifty, Tenn.
Cannon Creek Coal Co.	Cannon Creek, Tenn.	Cannon Creek	Bledsoe	N. C. & St. L.	Cannon Creek, Tenn.
Chattanooga Iron & Coal Corp.	Chattanooga, Tenn.	Dunlap	Sequatchie	N. C. & St. L.	Dunlap, Tenn.
Commercial Coal & Coke Co.	Chicago, Ill.	Victory No. 2	Bledsoe	N. C. & St. L.	Pikeville, Tenn.
Emory Gap Coal Mining Co.	Harriman, Tenn.	Emory Gap	Roane	T. C. & N. O., T. P.	Emory Gap, Tenn.
Fall Creek Coal & Coke Co.	Nashville, Tenn.	Fall Creek No. 1	Cumberland	Tenn. Central	Ozone, Tenn.
Flat Branch Coal Co.	Tracy City, Tenn.	Flat Branch	Grundy	N. C. & St. L.	Tracy City, Tenn.
Haley Mountain Coal Co.	Crossville, Tenn.	Haley Mountain	Cumberland	Tenn. Central	Crab Orchard, Tenn.
Knox Mining Co.	Rockwood, Tenn.	Rockwood	Roane	Southern, T. C.	Rockwood, Tenn.
Palmetto Coal Co.	Fountain Inn, S. C.	Palmetto	Sequatchie	N. C. & St. L.	Carthage, Tenn.
Sewanee Fuel & Iron Co.	Coalmont, Tenn.	"B"	Grundy	N. C. & St. L.	Coalmont, Tenn.
Sewanee Fuel & Iron Co.	Coalmont, Tenn.	"S"	Grundy	N. C. & St. L.	Coalmont, Tenn.
Tennessee Coal, Iron & Railroad Co.	Birmingham, Ala.	Whitwell	Marion	N. C. & St. L.	Whitwell, Tenn.
Tennessee Consolidated Coal Co.	Tracy City, Tenn.	Palm No. 1	Grundy	N. C. & St. L.	Palmer, Tenn.
Tracy City Coal Co.	Tracy City, Tenn.	Freemont	Grundy	N. C. & St. L.	Tracy City, Tenn.
Waldensia Coal & Coke Co.	Waldensia, Tenn.	Waldensia No. 1	Cumberland	Tenn. Central	Waldensia, Tenn.

MISCELLANEOUS SEAMS

Mined in Anderson, Campbell, Claiborne, Cumberland, Hamilton, Marion, Morgan, Rhea, Scott and Walker counties. Bituminous rank. Suitable, according to seams, for Cement Burning, Beehive Coking, By-product Coking, Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	SEAM	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Appalachian Washed Coal Co.	Tazewell, Tenn.	Appalachian	Appalachian	Claiborne	L. & N. Sou.	Nicholson, Tenn.
Astor Collieries corp.	New York, N. Y.	Nelson	Rhea	Rhea	Southern	Dayton, Tenn.
Astor Collieries corp.	New York, N. Y.	Nelson	Prospect	Rhea	Southern	Dayton, Tenn.
Astor Collieries corp.	New York, N. Y.	Nelson	Mr. Pike	Rhea	Southern	Dayton, Tenn.
Barbour Coal & Coke Co.	Harriman, Tenn.	Catoosa	Catoosa No. 1	Morgan	Morgan & Fentress	Catoosa, Tenn.
Barbour Coal & Coke Co.	Harriman, Tenn.	Catoosa	Cowford	Morgan	Morgan & Fentress	Catoosa, Tenn.
Barbour Coal & Coke Co.	Harriman, Tenn.	Catoosa	Flat Rock No. 2	Morgan	Morgan & Fentress	Catoosa, Tenn.
Barbour Coal & Coke Co.	Harriman, Tenn.	Catoosa	Panther No. 2	Morgan	Morgan & Fentress	Catoosa, Tenn.
Battle Creek Coal & Coke Co.	Atlanta, Ga.	Battle Creek	Battle Creek	Marion	N. C. & St. L.	Orme, Tenn.
Bell, C. W. & Sons	Crab Orchard, Tenn.	Crab Orchard	Daisy Mt.	Cumberland	Tenn. Central	Crab Orchard, Tenn.
Bessemer Coal, Iron & Land Co.	Birmingham, Ala.	Dean	Wind Rock	Anderson	L. & N.	Windrock, Tenn.
Big Brushy Coal Operating Co.	Chattanooga, Tenn.	State	Big Brushy	Morgan	H. & N. E.	Petros, Tenn.
Big Creek Coal Co.	La Follette, Tenn.	Rex	Big Creek	Campbell	L. & N.	Kalsyth, Tenn.
Black Coal & Coke Co.	Knoxville, Tenn.	Dean	Black	Campbell	Southern	Black, Tenn.
Bon Air Coal & Iron Corp.	Nashville, Tenn.	White	Ravcroft	White	N. C. & St. L.	Ravcroft, Tenn.
Brushy Mountain Coal Co.	Petros, Tenn.	Brushy Mountain	Brushy Mountain	Morgan	H. & N. E.	Petros, Tenn.
Bryson Mountain Coal & Coke Co.	Bryson, Tenn.	Sterling	Bryson No. 2	Claiborne	L. & N. & St. L.	Middlesboro, Ky.
Devonia Coal Co.	Devonia, Tenn.	Dean	Buffalo No. 1	Anderson	Tenn.	Sagamore, Tenn.
Devonia Coal Co.	Devonia, Tenn.	Dean	Buffalo No. 2	Anderson	Tenn.	Sagamore, Tenn.
Cagle Coal Co., Inc.	Chattanooga, Tenn., & Rome, Ga.	Battle Creek	Cagle	Bledsoe	N. C. & St. L.	College, Tenn.
Campbell Coal Mining Co.	Westbourne, Tenn.	Log Mountain	Westbourne	Campbell	L. & N.	Westbourne, Tenn.
Central Paint Rock Coal Co.	Owens, Tenn.	Paint Rock	Iron Jaw	Scott	Tenn.	Jakes Tank, Tenn.
Co-Operative Coal Co.	Catoosa, Tenn.	Catoosa	Red Eye	Morgan	Morgan & Fentress	Catoosa, Tenn.
Cormont Mining Co.	Rosedale, Tenn.	State	Fermont	Anderson	Tenn.	Rosedale, Tenn.
Durham Coal & Iron Co.	Chattanooga, Tenn.	Soddy No. 9	Big Soddy	Hamilton	Southern	Kathburn, Tenn.
Durham Coal & Iron Co.	Chattanooga, Tenn.	No. 5	Graysville	Rhea	Southern	Graysville, Tenn.
Durham Coal & Iron Co.	Chattanooga, Tenn.	Soddy No. 7	Soddy No. 1	Hamilton	Southern	Kathburn, Tenn.
Durham Coal & Iron Co.	Chattanooga, Tenn.	Soddy No. 7	Soddy No. 2	Hamilton	Southern	Kathburn, Tenn.
Durham Coal & Iron Co.	Chattanooga, Tenn.	No. 2	Graysville	Rhea	Southern	Graysville, Tenn.
Durham Coal & Iron Co.	Chattanooga, Tenn.	Durham	Lurham	Walker	C. of G.	Durham, Ga.
Fail Creek Coal & Coke Co.	Nashville, Tenn.	Nelson	Fail Creek No. 1	Cumberland	Tenn. Central	Owens, Tenn.
Fork Mountain Coal Co.	Petros, Tenn.	Big Brushy	Fork Mountain	Anderson	Tenn.	Fork Mountain, Tenn.
Fork Ridge Coal & Coke Co.	Fork Ridge, Tenn.	Mason	Fork Ridge	Claiborne	L. & N.	Middlesboro, Ky.
Francis Jellico Coal Co.	Pioneer, Tenn.	Red Ash	Francis	Campbell	Southern	Pioneer, Tenn.
Hail Coal Co.	Oliver Springs, Tenn.	Hall	Hall	Anderson	Southern	Oliver Springs, Tenn.
Hamilton Coal Mining Co.	Cannon Creek, Tenn.	Cannon Crk No. 2	Cannon Crk No. 2	Bledsoe	N. C. & St. L.	Cannon Creek, Tenn.
Helenwood Coal Co.	Robert, Tenn.	No. 4	Helenwood	Scott	C. N. O. & T. P.	Helenwood, Tenn.
Jellico Fuel Company	Louisville, Ky.	Doors Creek	Jellico	Campbell	L. & N.	Fresh, Tenn.
La Follette Coal & Iron Co.	La Follette, Tenn.	Rex	Rex No. 1	Campbell	L. & N. Southern	La Follette, Tenn.
La Follette Coal & Iron Co.	La Follette, Tenn.	Kent	Kent	Campbell	L. & N. Southern	La Follette, Tenn.
La Follette Coal & Iron Co.	La Follette, Tenn.	Jordan	Gen.	Campbell	L. & N.	Kalsyth, Tenn.
Laxton, Dexter	Owens, Tenn.	Paint Rock	Laxton	Scott	Southern	Owens, Tenn.
Mingo Coal & Coke Co.	Middlesboro, Ky.	Sterling	Mingo No. 1	Claiborne	L. & N.	Hartraft, Tenn.
Mingo Coal & Coke Co.	Middlesboro, Ky.	Sterling	Mingo No. 3	Claiborne	L. & N.	Hartraft, Tenn.
Mingo Coal & Coke Co.	Middlesboro, Ky.	Sterling	Mingo No. 4	Claiborne	L. & N.	Hartraft, Tenn.
Mingo Coal & Coke Co.	Middlesboro, Ky.	Sterling	Mingo No. 5	Claiborne	L. & N.	Hartraft, Tenn.
Minnesota Coal & Timber Co.	Knoxville, Tenn.	No. 3	Isoline No. 5	Cumberland	Tenn. Central	Isoline, Tenn.
New Caryville Coal Co.	Williamsburg, Ky.	Red Ash	New Caryville	Campbell	Southern	Caryville, Tenn.
Norman, B. P.	Brieville, Tenn.	Norman No. 1	Norman No. 1	Anderson	Southern	Brieville, Tenn.
No. 13 Coal Co.	Petros, Tenn.	No. 13	Hanging Rk No. 1	Morgan	Southern	Petros, Tenn.
Oakdale Coal Co.	Oakdale, Tenn.	Eagle	Oliver Springs	Morgan	Sou. (C. N. O. & T. P.)	Oakdale, Tenn.
Oliver Springs Brick Co.	Oliver Springs, Tenn.	Paint Rock	Morning Glory	Scott	Sou. via Tenn. Ry.	Oliver Springs, Tenn.
Owens Consolidated Coal Co.	Owens, Tenn.	Paint Rock	Paint Rock No. 1	Scott	Southern	Owens, Tenn.
Paint Rock Coal Corp.	Owens, Tenn.	Paint Rock	Pioneer	Campbell	Southern	Pioneer, Tenn.
Pioneer Coal Co.	Chattanooga, Tenn.	Chattanooga	Raccoon	Marion	Sou. N. C. & St. L.	Chattanooga, Tenn.
Raccoon Coal Co.	Chattanooga, Tenn.	Red Ash	Red Ash	Campbell	Southern	Caryville, Tenn.
Red Ash Coal Co.	Chattanooga, Tenn.	Sandstone Parting	No. 2	Claiborne	Southern, L. & N.	Middlesboro, Ky.
Rhance Coal & Coke Co.	Hartraft, Tenn.	Poplar Lick	No. 3	Claiborne	Southern, L. & N.	Middlesboro, Ky.
Rhance Coal & Coke Co.	Hartraft, Tenn.	Poplar Lick	Adies Ridge	Anderson	Southern	Coal Creek, Tenn.
Rowe, John A.	Coal Creek, Tenn.	Middle	Middle	Anderson	Southern	Coal Creek, Tenn.
Rowe, John A.	Birmingham, Ala.	No. 4	Scott	Scott	Southern	Helenwood, Tenn.
Scott Coal Co.	Newland, Tenn.	Dean	Shaw	Scott	Tenn.	Norma, Tenn.
Shaw Coal Mining Co., The	Chattanooga, Tenn.	Chattanooga	Signal Mountain	Hamilton	C. N. O. & T. P.	Montlake, Tenn.
Signal Mountain Coal Mining Co.	Chattanooga, Tenn.	Chattanooga	Ronny	Marion	N. C. & St. L.	Whiteside, Tenn.
Slopewell Coal Co.	Whiteside, Tenn.	Zenith	Zenith	Fentress	O. & W., C. N. O. & T. P.	Zenith, Tenn.
South Fork Coal Co.	Chattanooga, Tenn.	Chattanooga	Robbins	Scott	C. N. O. & T. P.	Robbins, Tenn.
Southern Clay Mfg. Co.	Owens, Tenn.	Guthrie	Guthrie	Scott	Tenn.	Tugal, Tenn.
Stanley-West Coal Co.	Tracy City, Tenn.	No. 5	Daisy	Hamilton	C. N. O. & T. P.	Albion, Tenn.
Sterling Coal & Coke Co.	Manning, Tenn.	Sterling	Sterling	Claiborne	Southern	Middlesboro, Ky.
Sun Coal Co.	Caryville, Tenn.	Red Ash	Sun	Campbell	Southern	Caryville, Tenn.
Thomas, O. E.	Grayville, Tenn.	Gill's Creek	Gill's Creek	Rhea	Southern	Grayville, Tenn.
Trico Coal Co., Inc.	Chattanooga, Tenn.	Glen Mary	Trio	Morgan	L. & N. O. & T. P.	Huffman, Tenn.
Virginia Mining Co.	Danville, Ky.	No. 4	Helenwood	Scott	Su. Ky.	Helenwood, Tenn.
Virginia Mining Co.	Danville, Ky.	No. 4 Gas	Roberts	Scott	Su. Ky.	Winfield, Tenn.
Weldon's Fork Coal Co.	Knoxville, Tenn.	Whitwell	Weldon's Fork	Campbell	Southern	Coal Creek, Tenn.
Whitwell Coal Co.	Whitwell, Tenn.	Nelson	Burchard No. 2	Marion	N. C. & St. L.	Condra, Tenn.
Williams & Van Voorhis Co.	Grayville, Tenn.	Dean	W. and B. No. 1	Rhea	Southern	Dayton, Tenn.
Wind Rock Coal & Coke Co.	Birmingham, Ala.	Dean	Wind Rock No. 1	Anderson	L. & N.	Elston, Tenn.



TENNESSEE

Alphabetical Directory of Coal Mines, Giving Complete Detailed Information Covering Each Mine

For List of Abbreviations See Page 13.

APPALACHIAN WASHED COAL COMPANY

General Office, Tazewell, Tenn.

PR—James P. Kivett, Tazewell, Tenn.
VP—Jas. P. Kivett, Tazewell, Tenn.
TR—James P. Kivett, Tazewell, Tenn.
GM—James P. Kivett, Tazewell, Tenn.
GS—Jas. P. Kivett, Tazewell, Tenn.
PA—Jas. P. Kivett, Tazewell, Tenn.
EM—J. C. Richardson, Middlesboro, Ky.
SCO—Address the Company Buyer, J. L. Bair, Fork Ridge, Tenn.
SA—J. P. Kivett, Tazewell, Tenn.

Appalachian Mine; Drift; Appalachiao Seam, 42 in. thick.

PO—Fork Ridge, Tenn.; SP—Nicholson, Tenn.; CTY—Claiborne; RR—L. & N. Son.

MS—B. Watson, Fork Ridge, Tenn.

S of H—Mules and rope. Track gage 44 in.

S of M—Hand.

PP—Power purchased. Transformer 220 volts A. C.

EMP—75. Last years tonnage 40,000.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.

PREP. EQUIPT—Revolving and Shaker Screens, Picking Tables, Washeries.

ASTOR COLLIERIES CORP.

General Office, 115 Broadway, New York, N. Y.

PR—H. S. Matthews, New York, N. Y.
VP—John Astor, Squiers, Stoddard Hoffman, New York, N. Y.
TR—Walter N. Stapleton, New York, N. Y.

GM—H. S. Matthews, New York, N. Y.

GS—Andy Holden, Dayton, Tenn.

PA—E. H. Jones, Dayton, Tenn.

CE—P. Ludwig, Dayton, Tenn.

EM—J. M. Trucas, Dayton, Tenn.

SCO—Address the Company, New York, N. Y.

Prospect Mine; Slope; Nelson Seam, 60 in. thick.

PO—Dayton, Tenn.; SP—Same; CTY—Rhea; RR—Sou.

SM—E. H. Jones, Dayton, Tenn.

S of H—Main and tail rope, comp. air and steam locos. Track gage 36 in.

S of M—Hand.

PP—1 fire tube boiler, 3—500 H. P. water tube boilers, 250 volts A. C., 5 pumps.

EMP—150. Daily tonnage 400.

SIZES SHIPT—Run of Mine, Crushed.

PREP. EQUIPT—Revolving Screens, Washeries.

NOTE—Formerly operated by the Dayton Coal, Iron & Railway Co.

North Pole Mine; Drift; Sewanee Seam, 36 in. thick.

PO—Dayton, Tenn.; SP—Same; CTY—Rhea; RR—Southern.

SM—E. H. Jones, Dayton, Tenn.

S of H—Main and tail rope, storage battery locos. Track gage 36 in.

S of M—Hand.

PP—3 water tube boilers, 145 H. P., 1 pump.

EMP—35. Daily tonnage 100.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Gravity Screens, Washeries.

Nelson Mine; Drift; Nelson Seam, 60 in. thick.

PO—Dayton, Tenn.; SP—Same; CTY—Rhea; RR—Southern.

S of H—Mules. Track gage 36 in.

S of M—Hand.

Daily tonnage 75.

SIZES SHIPT—Run of Mine.

BARBOUR COAL & COKE COMPANY

General Office, Harriman, Tenn.

VP—F. H. Enwright, Harriman, Tenn.

TR—M. V. Wilkey, Harriman, Tenn.

GM—Ira Shaddon, Catonsa, Tenn.

PA—M. V. Wilkey, Harriman, Tenn.

SA—Enwright Lumber & Coal Co., Harriman, Tenn.

SCO—Tennessee Mineral & Store Co., Buyer, Edw. Zumstein, Catonsa, Tenn.

Catonsa No. 1 Mine; Drift; Catonsa Seam, 33 in. thick.

PO—Catonsa, Tenn.; SP—Frt., Same, Exp., Nemo, Tenn.; CTY—Morgan; RR—Morgan & Fentress.

MS—Geo. E. Sylvester, Catonsa, Tenn.

S of H—Mules. Track gage 36 in.

S of M—Hand.

EMP—35. Daily tonnage 75.

SIZES SHIPT—Run of Mine.

Cowford Mine; Drift; Catonsa Seam, 33 in. thick.

PA—Catonsa, Tenn.; SP—Frt., Same, Exp., Nemo, Tenn.; CTY—Morgan; RR—Morgan & Fentress.

S of H—Mules. Track gage 36 inches.

S of M—Hand.

EMP—50. Daily tonnage 100.

SIZES SHIPT—Run of Mine.

Paothor No. 2 Mine; Drift and Slope; Catonsa Seam, 33 in. thick.

PO—Catonsa, Tenn.; SP—Frt., Same, Exp., Nemo, Tenn.; CTY—Morgan; RR—Morgan & Fentress.

S of H—Mules. Track gage 36 in.

S of M—Hand.

EMP—65. Daily tonnage 125.

SIZES SHIPT—Run of Mine.

Flat Rock No. 3 Mine; Drift; Catonsa Seam, 33 in. thick.

PO—Catonsa, Tenn.; SP—Frt., Same, Exp., Nemo, Tenn.; CTY—Morgan; RR—Morgan & Fentress.

S of H—Mules. Track gage 33 in.

S of M—Hand.

EMP—65. Daily tonnage 125.

SIZES SHIPT—Run of Mine.

BATTLE CREEK COAL & COKE CO.

General Office, Atlanta, Ga.

PR—F. P. Thompson, Orme, Tenn.

VP—H. B. Tompkins, Atlanta, Ga.

GM—F. P. Thompson, Orme, Tenn.

GS—Geo. Cain, Orme, Tenn.

PA—J. E. Muecke, Orme, Tenn.

EM—George Cain, Orme, Tenn.

SCO—Address the Company, Buyer, John H. Sullivan, Orme, Tenn.

Battle Creek Mine; Drift; Battle Creek Seam, 36 in. thick.

PO—Orme, Tenn.; SP—Same. CTY—Marion. RR—N. C. & St. L.

S of H—Mules and steam locos. Track gage 36 in.

S of M—Comp. air mach. and hand.

PP—2 150 H. P. and 1—250 H. P. boilers, 2 air compressors, 250 volts D. C., 6 pumps.

EMP—140. Last years tonnage 73,680.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.

PREP. EQUIPT—Shaker Screens, Picking Tables.

BEAR WALLOW COAL COMPANY

General Office, Knoxville, Tenn.

PR—Jno. L. Boyd, Knoxville, Tenn.

VP—A. H. Bowling, Knoxville, Tenn.

TR—S. V. Carter, Knoxville, Tenn.

GM—Jno. L. Boyd, Knoxville, Tenn.

GS—J. W. Goans, Caryville, Tenn.

PA—D. K. Kendren, Caryville, Tenn.

EM—Geo. W. Wendling, Coal Creek, Tenn.

EE—H. D. Brock, Caryville, Tenn.

SCO—Bear Wallow Store, Buyer, D. K. Kendren, Caryville, Tenn.

SA—Tennessee & Southeastern Coal Co., Knoxville, Tenn.

Rear Wallow No. 1 Mine; Drift; Coal Creek Seam, 30 in. thick.

PO—Caryville, Tenn.; SP—Same; CTY—Campbell; RR—Sou.

S of H—3 trolley pole type locos. Track gage 36 in.

S of M—4 electric punchers.

PP—1 fire tube boiler, 150 H. P., 150 K. W. gen. unit, 250 volts D. C., 4 pumps.

EMP—45. Daily tonnage 100.

PREP. EQUIPT—Gravity Screens.

Bear Wallow No. 2 Mine; Drift; Coal Creek Seam, 42 in. thick.

PO—Caryville, Tenn.; SP—Same; CTY—Campbell; RR—Sou.

S of H—3 trolley pole type locos. Track gage 36 in.

S of M—4 electric punchers.

PP—1 fire tube boiler, 150 H. P., 150 K. W. gen. unit, 250 volts D. C., 4 pumps.

EMP—45. Daily tonnage 100.

PREP. EQUIPT—Gravity Screens.

S of H—Mules and 1 6-ton gasoline loco. Track gage 36 in.

S of M—Hand.

PP—2 pumps.

EMP—40. Daily tonnage 125.

SIZES SHIPT—Run of Mine.

BELL, C. W., & SONS.

Haley Mt. Mine.

PO—Crab Orchard, Tenn.; CTY—Cumberland; RR—Tenn. Central.

MS—C. W. Bell, Crab Orchard, Tenn.

EMP—30.

No report.

BESSEMER COAL IRON & LANO CO.

General Office, 1312 American Trust Bldg., Birmingham, Ala.

PR—H. Badham, Birmingham, Ala.

VP—R. E. Evans, Birmingham, Ala.

TR—W. A. Reed, Birmingham, Ala.

GM—W. C. Hutcheson, Birmingham, Ala.

GS—J. R. Pruett, Belle Ellen, Ala.

PA—W. C. Hutcheson, Birmingham, Ala.

EM—D. G. Cummings, Belle Ellen, Ala.

EE—E. J. Stավall, Belle Ellen, Ala.

SCO—Address the Company, Buyer, T. L. Coover, Belle Ellen, Ala.

SA—Grider Coal Sales Agency, Birmingham, Ala.

Wind Rock Mine; Drift and Incline; Dean Seam, 60 in. thick.

PO—Windrock, Tenn.; SP—Same; CTY—Anderson; RR—L. & N.

SM—E. C. Sienknecht, Windrock, Tenn.

S of H—Elec. loco.

S of M—Hand.

Last years tonnage 97,189.

BIG BRUSHY COAL OPERATING CO.

General Office, Chattanooga, Tenn.

PROPRIETOR—R. J. Riddle, Chattanooga, Tenn.

TR—R. J. Riddle, Chattanooga, Tenn.

GM—R. J. Riddle, Chattanooga, Tenn.

GS—J. F. Bolton, Petros, Tenn.

PA—R. J. Riddle, Chattanooga, Tenn.

EM—J. F. Bolton, Petros, Tenn.

SCO—Petros Merc. Co. Buyer, Geo. F. Slaughter, Petros, Tenn.

SA—Riddle Coal Co., Chattanooga, Tenn.

Big Brushy Mine; Drift; State Seam, 36 inches thick.

PO—Petros, Tenn.; SP—Same; CTY—Morgan; RR—H. & N. E.

S of H—2 trolley pole type locos. Track gage 36 inches.

S of M—2 chain breast type machs.

PP—3 fire tube boilers, 300 H. P., M. G. St., 220 volts D. C., 6 pumps.

EMP—75. Last years tonnage 25,000.

SIZES SHIPT—Run of Mine.

NOTE—Formerly operated by the Big Brushy Fuel Co.

BIG BRUSHY FUEL COMPANY.

Now Big Brushy Coal Operating Co.

BIG CREEK COAL COMPANY

General Office, La Follette, Tenn.

PR—G. Walter Card, La Follette, Tenn.

VP—W. A. Carden, La Follette, Tenn.

TR—W. A. Higginbotham, La Follette, Tenn.

GM—G. Walter Card, La Follette, Tenn.

GS—John Ausmus, La Follette, Tenn.

PA—W. A. Higginbotham, La Follette, Tenn.

EM—L. J. Sergeant, La Follette, Tenn.

SA—Volunteer Coal & Coke Co., La Follette, Tenn.

Big Creek Mine; Drift; Rex Seam; 34 inches thick.

PO—Kilsythe, Tenn.; SP—Same; CTY—Campbell; RR—L. & N.

MS—G. Walter Card, La Follette, Tenn.

S of H—Mules and rope. Track gage 36 inches.

S of M—Hand.

PP—1 water tube boiler, 40 H. P., 1 pump.

EMP—40. Last years tonnage 8,770.

SIZES SHIPT—Run of Mine, Nut, Block.

PREP. EQUIPT—Bar Screens.

BIG LAUREL COAL CO., THE

General Office, Wilder, Tenn.

SA—Geo. U. Stephenson, Hamilton Natl. Bank Bldg., Chattanooga, Tenn.

Big Laurel No. 2 Mine; Drift; Bon Air No. 2 Seam; 44 inches thick.

PO—Wilder, Tenn.; SP—Same; CTY—Fentress; RR—Tenn. Central.

S of H—Storage battery. Track gage 42 inches.

S of M—Hand.

PP—4 40 H. P. fire tube boilers, gen. unit, 22½ K. W., 250 volts D. C.

EMP—40. Last fiscal year output, 3,776 tons.

SIZES SHIPT—Run of Mine, Egg, Block.

PREP. EQUIPT—Bar Screens, Picking Tables, Loading Rooms.

Old information.

EMP—40. Last fiscal year output, 3,776 tons.

SIZES SHIPT—Run of Mine, Egg, Block.

PREP. EQUIPT—Bar Screens, Picking Tables, Loading Rooms.

Old information.

BIG MOUNTAIN COLLIERIES.

General Office, Route 3, Maryville, Tenn.

PR—C. L. Babcock, Maryville, Tenn.

VP—L. C. Gunter, Knoxville, Tenn.

TR—N. S. Jenkins, Knoxville, Tenn.

GM—C. L. Babcock, Maryville, Tenn.

GS—E. M. McGlothlin, Oliver Springs, Tenn.

PA—Davis Supply Co., Frick Bldg., Pittsburg, Pa.

CE—Schorn & Kenedy, Knoxville, Tenn.

SCO—Big Mountain Sakey, Buyer, W. A. Richards, Oliver Springs, Tenn.

SA—Chinch Run Coal Co., Knoxville, Tenn.

Big Mountain Mine; Drift; Coal Creek Seam, 42 in. thick.

PO—Oliver Springs, Tenn.; SP—Same; CTY—Morgan; RR—Southern.

S of H—Gasoline motor. Track gage 36 in.

PP—1 water tube boiler, 1 pump.

EMP—35. Daily tonnage 125.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Gravity Screens.

BILL'S BRANCH COAL COMPANY

General Office, Monterey, Tenn.

PR—J. W. Welch, Monterey, Tenn.

VP—Geo. N. Welch, Nashville, Tenn.

TR—J. P. Welch, Monterey, Tenn.

GM—J. P. Welch, Monterey, Tenn.

GS—S. A. Rhinehart, Monterey, Tenn.

PA—J. W. Welch, Monterey, Tenn.

EM—Paul Kennedy, Knoxville, Tenn.

SCO—Address the Company, Buyer, Robt. A. McClain, Monterey, Tenn.

Bill

BLOCK COAL & COKE CO.

General Office, 400 Empire Bldg., Knoxville, Tenn.
PR—L. I. Coleman, Knoxville, Tenn.
VP—Earl S. Gwin, Louisville, Ky.
TR—E. H. Wedekind, Louisville, Ky.
GM—L. I. Coleman, Knoxville, Tenn.
GS—John W. Howe, Jellico, Tenn.
PA—Jas. Smiddy, Jellico, Tenn.
EM—Clarence Lynch, Block, Tenn.
SCO—Address the company. Buyer, Joe Smiddy, Block, Tenn.
SA—L. I. Coleman, Knoxville, Tenn.

Block Mine; Drift; Dean Seam, 56 in. thick.
PO—Block, Tenn.; SP—Same; CTY—Campbell; RR—Southern.
S of H—Mules, 2 gasoline locos. Track gage 36 in.
S of M—2 shortwall machs.
PP—3 125 H. P. fire tube boilers, 5 pumps.
EMP—200. Last years tonnage 84,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Shaker Screens, Picking Tables.

BLUE GEM COAL COMPANY.

PR—J. E. Moses, Louisville, Ky.
GM—L. E. Woody, Jellico, Tenn.
PA—L. E. Woody, Jellico, Tenn.
EM—B. L. Loyd, Jellico, Tenn.
SCO—Address the Company, Jellico, Tenn.

Blue Gem Mine; Drift; Blue Gem Seam, 24 in. thick.
PO—Jellico, Tenn.; SP—Same; CTY—Campbell; RR—Southern.
MS—L. E. Woody, Jellico, Tenn.
S of H—Mules. Track gage 34 in.
S of M—Hand.
PP—1 pump.
EMP—80. Last fiscal year output, 24,000 tons.
SIZES SHIPT—Run of Mine, Lump, Block.
PREP. EQUIPT—Bar Screens.

BON AIR COAL & IRON CORPORATION

General Office, Nashville, Tenn.
PR—Jas. R. O'Neil, Chicago, Ill.
VP—W. J. Cummins, Nashville, Tenn.
TR—John McE. Bowman, Nashville, Tenn.
GM—W. J. Cummins, Nashville, Tenn.
GS—W. B. Young, Bon Air, Tenn.
PA—John D. Cummins, Nashville, Tenn.
EM—J. A. Welch, Bon Air, Tenn.
SCO—Address the Company. Buyer, Jno. D. Cummins, Nashville, Tenn.
SA—F. Leake, Nashville, Tenn.

Cavala Mine; Shaft; Bon Air Seam, 42 in. thick.
PO—Bon Air, Tenn.; SP—Same; CTY—White; RR—N. C. St. L.
MS—W. W. Gilbreath, Bon Air, Tenn.
SM—J. McBride, Bon Air, Tenn.
S of H—4 trolley pole type locos. Track gage 42 in.
S of M—5 shortwall machs.
PP—3 125 H. P. water tube boilers, 200 K. W. gen. units, 250 volts D. C., 11 pumps.
EMP—108. Last years tonnage 59,040.
SIZES SHIPT—Lump, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens.
Ravencroft Mine; Shaft; Seam 48 inches thick.
PO—Ravencroft, Tenn.; SP—Same; CTY—White; RR—N. C. St. L.
MS—W. W. Gilbreath, Bon Air, Tenn.
SM—W. P. Hunter, Ravencroft, Tenn.
S of H—One trolley pole type loco. Track gage 42 inches.
S of M—20 comp. air punchers.
PP—6 water tube boilers, total 520 H. P., M. G. set, 250 volts D. C., 17 pumps.
EMP—127. Last years tonnage 59,935.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

Eastland Mine; Drift; Sewanee Seam, 48 in. thick.
PO—Eastland, Tenn.; SP—Same; CTY—White; RR—N. C. St. L.
MS—W. W. Gilbreath, Bon Air, Tenn.
SM—E. A. Brown, Eastland, Tenn.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
PP—2 pumps.
EMP—171. Last years tonnage 80,083.
Coke Ovens, 200 Bee Hive.
SIZES SHIPT—Run of Mine.

Clifty Nos. 1, 2 and 3 Mines; Drift; Sewanee Seam; 36 inches thick.
PO—Clifty, Tenn.; SP—Same; CTY—White; RR—N. C. St. L.
MS—W. W. Gilbreath, Bon Air, Tenn.
SM—Z. W. Rachley, Clifty, Tenn.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—1 100 H. P. water tube boiler, 4 pumps.
EMP—275. Last years tonnage 79,062.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.

BONNEY, H. B. COAL CO.
Now Slopeville Coal Co.

BRICEVILLE COAL COMPANY

General Office, Briceville, Tenn.
PR—G. P. Norman, Briceville, Tenn.
VP—M. H. Irwin, Briceville, Tenn.
TR—K. C. Norman, Briceville, Tenn.
GM—G. P. Norman, Briceville, Tenn.
PA—G. P. Norman, Briceville, Tenn.
SCA—G. P. Norman, Buyer, G. P. Norman, Briceville, Tenn.
SA—Cross Mountain Coal Co., Briceville, Tenn.

Briceville Mine; Drift; Coal Creek Seam, 48 inches thick.
PO—Briceville, Tenn.; SP—Same; CTY—Anderson; RR—Southern.
MS—C. K. Williams, Briceville, Tenn.
S of H—Mules. Track gage, 32 in.
S of M—Hand.
SIZES SHIPT—Run of Mine.

BRIER HILL COLLIERIES CO.

General Office, Crawford, Tenn.
PR—H. C. Pierre, New York, N. Y.
TR—A. E. Baker, New York, N. Y.
GM—E. P. Tipton, Crawford, Tenn.
ASST. MGR.—H. E. Beadle, Crawford, Tenn.
GS—E. P. Tipton, Crawford, Tenn.
CE—C. D. Clark, 120 Broadway, New York, N. Y.
EM—J. C. Laird, Harriman, Tenn.
EE—H. W. Bryson, Twinton, Tenn.
MM—E. P. Tipton, Crawford, Tenn.
SCO—Address the Company, Buyer, J. C. McElroy, Crawford, Tenn.
SA—H. E. Beadle, Crawford, Tenn.

Twin Mine; Drift; Bon Air No. 2 Seam, 56 in. thick.
PO—Twinton, Tenn.; SP—Crawford, Tenn.; CTY—Overton; RR—Tenn. Central.
MS—H. W. Bryson, Twinton, Tenn.
S of H—4 trolley pole type locos. Track gage 36 in.
S of M—3 shortwall machs.
PP—1 180 H. P. fire tube boilers, 1 200 K. W., gen. unit, 250 volts D. C., 3 pumps.
EMP—100. Daily tonnage 1,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables.

Baker Mine; Drift; Bon Air No. 2 Seam, 44 in. thick.
PO—Crawford, Tenn.; SP—Same; CTY—Overton; RR—Tenn. Central.
S of H—2 trolley pole type locos. Track gage, 36 in.
S of M—Shortwall machs.
PP—1 180 H. P. fire tube boilers, 1 200 K. W., gen. unit, 250 volts D. C., 4 pumps.
EMP—100. Daily tonnage 1,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables.

BRUSHY MOUNTAIN COAL CO

General Office, Petros, Tenn.
TR—State Treasurer, Nashville, Tenn.
GM—W. H. Nelson, Petros, Tenn.
GS—L. L. Quisenberry, Petros, Tenn.
PA—S. H. Alexander, Nashville, Tenn.
EM—L. L. Quisenberry, Petros, Tenn.
EE—J. B. Kelly, Petros, Tenn.
SCO—Address the Company. Buyer, S. H. Alexander, Nashville, Tenn.
Brushy Mountain Mine; Drift; Brushy Mountain Seam, 32 in. thick.
PO—Petros, Tenn.; SP—Same; CTY—Morgan, Tenn.; RR—Harriman & Northeastern.
SM—W. W. Gibson, Petros, Tenn.
S of H—Mules, 6 trolley pole type and 1 storage battery locos. Track gage 36 in.
S of M—4 shortwall machs.
PP—4 water tube boilers, 500 H. P., 250 volts D. C., 13 pumps.
EMP—458. Daily tonnage 500.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Washeries.

BRY-MAC COAL COMPANY.

Now Helenwood Coal Co.

DRYSON MOUNTAIN COAL & COKE CO

General Office, Bryson, Tenn.
PR—Tim Cookill, Mahanoy City, Pa.
TR—J. H. Keeney, Middleshoro, Ky.
GM—J. H. Keeney, Middleshoro, Ky.
GS—A. B. Keeney, Bryson, Tenn.
PA—A. B. Keeney, Bryson, Tenn.
CR—J. C. Richardson, Middleshoro, Ky.
SCO—Address the Company; Buyer, A. B. Keeney, Bryson, Tenn.

Bryson No. 2 Mine; Drift; Sterling Seam, 66 in. thick.
PO—Bryson, Tenn.; SP—Middlesboro, Ky.; CTY—Chalbone; RR—L. N. & S.
MS—W. H. Billingsley, Bryson, Tenn.
S of H—Mules and 2 trolley pole type locos. Track gage, 44 in.
S of M—Shortwall mach.

PP—Power purchased. Transformer 33,000 to 4,400 volts A. C., rotary converters, 250 volts D. C., 8 pumps.
EMP—120. Last years tonnage 85,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

BUFFALO COAL COMPANY

General Office, Devonia, Tenn.
PR—A. B. Day, Oliver Springs, Tenn.
VP—A. W. Evans, Petros, Tenn.
TR—F. F. Spencer, Knoxville, Tenn.
GM—A. W. Evans, Petros, Tenn.
PA—A. W. Evans, Petros, Tenn.
EM—A. W. Evans, Petros, Tenn.
SCO—Address the company. Buyer, R. I. Gillis, Devonia, Tenn.

Buffalo Nos. 1 & 2 Mines; Drift; Dean Seam, 84 inches thick.
PO—Devonia, Tenn.; SP—Sagamore, Tenn.; CTY—Anderson; RR—Tenn. MS—H. Murray, Devonia, Tenn.
S of H—Mules and gasoline motors.
S of M—Hand.
PP—Power purchased. M. G. Sets, 250 volts D. C., 2 pumps.
EMP—88. Last years tonnage 15,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.
NOTE—New operation.

CAGLE COAL COMPANY, INC.

General Office, 926 James Ridge, Chattanooga, Tenn., and Rome, Ga.
PR—J. E. Deane, Rome, Ga.
TR—Robert W. Graves, Rome, Ga.
GM—W. M. Nixon, Chattanooga, Tenn.
PA—Wm. Nixon, Chattanooga, Tenn.
EM—P. B. Custred, R. F. D. No. 2, Pikeville, Tenn.
SA—Graves-Harper Co., Rome, Ga.

Cagle Mine; Slope; Battle Creek Seam; 72 to 110 inches thick.
PO—R. F. D. No. 2, Pikeville, Tenn.; SP—College, Tenn.; CTY—Bedsee; RR—N. C. & St. L.
MS—John Cagle, R. F. D. No. 2, Pikeville, Tenn.
S of H—Rope, comp. air, gasoline and steam locos. Track gage 42 inches.
S of M—4 comp. air machs.
PP—2 fire tube boilers, 125 H. P., 4 pumps.
EMP—30. Last years tonnage 4,500.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.

CAMBRIA COAL MINING CO.

General Office, Knoxville, Tenn.
PR—C. W. Henderson, Knoxville, Tenn.
VP—L. D. Tyson, Knoxville, Tenn.
TR—C. W. Henderson, Knoxville, Tenn.
GM—H. S. Pless, Coalfield, Tenn.
GS—H. M. Stokes, Briceville, Tenn.
PA—L. S. Sexton, Briceville, Tenn.
SCO—Address the Company; Buyer, L. S. Sexton, Briceville, Tenn.

Cambria Mine; Drift; Coal Creek Seam, 42 in. thick.
PO—Coal Creek, Tenn.; SP—Same; CTY—Campbell; RR—Southern.
MS—J. L. Jones, Coal Creek, Tenn.
SM—J. Jones, Coal Creek, Tenn.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
EMP—35. Last fiscal year output, 10,700 tons.
SIZES SHIPT—Run of Mine.

Tennessee Mine; Drift; Coal Creek Seam, 47 in. thick.
PO—Briceville, Tenn.; SP—Coal Creek, Tenn.; CTY—Anderson; RR—Southern.
S of H—Mules and trolley pole type locos. Track gage, 36 in.
S of M—Hand.
PP—1 100 H. P. water tube boilers, 3 pumps.
EMP—55. Last fiscal year output, 30,000 tons.
SIZES SHIPT—Run of Mine.

Minersville Mine; Drift; Coal Creek Seam, 47 in. thick.
PO—Briceville, Tenn.; SP—Coal Creek, Tenn.; CTY—Anderson; RR—Southern.
S of H—Mules and trolley pole type locos. Track gage, 36 in.
S of M—Hand.
PP—2 pumps.
EMP—50. Last fiscal year output, 21,000 tons.
SIZES SHIPT—Run of Mine.
old information.

CAMPBELL COAL MINING COMPANY.

General Office, Westbourne, Tenn.
PR—H. C. Williams, Westbourne, Tenn.
VP—J. B. Campbell, Atlanta, Ga.
TR—R. R. Johnson, Westbourne, Tenn.
ASST. TR—E. L. Elledge, Westbourne, Tenn.
GM—H. C. Williams, Westbourne, Tenn.
GS—H. Revan, Westbourne, Tenn.
PA—Charles Cochran, Winchester, Ky.
EM—P. L. Lindemul, Knoxville, Tenn.
EE—Robert Searborough, Westbourne, Tenn.

SCO—Stores Nos. 1, 2, 3, Buyer, Charles Cochran, Westbourne, Tenn.
SA—Blue Diamond Coal Sales Co., Knoxville, Tenn.

Westbourne Mine; Drift; Log Mountain Seam, 42 to 46 in. thick.
PO—Westbourne, Tenn.; SP—Westbourne (Propay); CTY—Campbell; RR—L. & N.; Hog Camp Br.
SM—Charles Cochran, Westbourne, Tenn.
S of H—Mules and 7 elec. locos. Track gage 36 in.
S of M—5 elec. and 18 comp. air machs.
PP—7 return tubular boilers, total 1,050 H. P., 3 gen. units, 250 volts D. C., 2,200 volts A. C., 3 phase, 60 cycles, 3 air compressors and 19 pumps.
EMP—131. Last years tonnage 103,943.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Loading Booms, Picking Tables.

Starbourne Mine; Drift; Rich Mountain Seam, 30 to 36 in. thick.
PO—Westbourne, Tenn.; SP—Remy, Tenn. (Propay); CTY—Campbell; RR—L. & N.; Hog Camp Br.
S of H—Mules, 1 elec. loco. Track gage 42 in.
S of M—3 elec. machs.
PP—1 gen. unit, 2,200 volts A. C., 250 volts D. C., pump. Power from Westbourne Mine.
EMP—80. Last years tonnage 31,798.
SIZES SHIPT—Run of Mine, Slack, Nut, Block.

Eagan Mine; Drift; Jellico Seam, 34 to 42 in. thick.
PO—Eagan, Tenn.; SP—Same; CTY—Campbell; RR—L. & N. and Sou. Clear Fork Br.
MS—Jos. Stoncphor, Eagan, Tenn.
S of H—Mules, 6 elec. locos. Track gage 36 in.
S of M—26 air punchers and 3 elec. machs.
PP—4 return tube boilers, 600 H. P., 1 gen. unit, 250 volts D. C., 2 air compressors, 3 pumps.
EMP—120. Last years tonnage 106,737.
SIZES SHIPT—Run of Mine, Slack, Nut, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables.

CANNON CREEK COAL COMPANY

PR—W. G. Lusk, Cannon Creek, Tenn.
GS—Wm. G. Lusk, Cannon Creek, Tenn.
PA—Wm. G. Lusk, Cannon Creek, Tenn.
SCO—Address the Company, Buyer, William G. Lusk, Cannon Creek, Tenn.

Cannon Creek Mine; Drift; Sewanee Seam, 40 inches thick.
PO—Cannon Creek, Tenn.; SP—Same; CTY—Bedsee; RR—N. C. & St. L.
S of H—Mules and rope. Track gage 36 inches.
S of M—Hand.
PP—1 150 H. P. water tube boiler, 3 pumps.
EMP—100. Last years tonnage 36,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.
Note—Successors to Lusk Coal Corp.

CATOOSA COAL MINING COMPANY.

Out of business.

CENTRAL PAINT ROCK COAL CO.

General Office, Oneida, Tenn.
TR—M. F. Caldwell, Jr., Oneida, Tenn.
GS—Paul Caldwell, Oneida, Tenn.
PA—M. F. Caldwell, Jr., Oneida, Tenn.
SCO—Address the Company. Buyer, M. F. Caldwell, Jr., Oneida, Tenn.

Possum Jaw Mine; Drift; Paint Rock Seam, 24 inches thick.
PO—Oneida, R. No. 1B No. 70, Tenn.; SP—Jakes Tank, Tenn.; CTY—Scott; RR—Tenn.
S of H—Mules. Track gage 26 inches.
S of M—Hand.
SIZES SHIPT—Run of Mine.

CHATTANOOGA IRON & COAL CORP

General Office, Chattanooga, Tenn.
PR—George A. Harder, 90 West St., New York, N. Y.
VP—R. R. Rust, 90 West St., New York, N. Y.
TR—Stephen Barker, 90 West St., New York, N. Y.
GM—H. R. Lacey, Chattanooga, Tenn.
GS—John M. Smith, Dadeville, Tenn.
SCO—Address the Company. Buyer, H. R. Lacey, Chattanooga, Tenn.
SA—W. H. Stokes, 90 West St., New York, N. Y.

Dunlap Mine; Slope; Sewanee Seam, 40 in. thick. Operate washery.
PO—Dunlap, Tenn.; SP—Same; CTY—Squatable; RR—N. C. & St. L.
S of H—Mules, gasoline locos, 2 steam locos. Track gage 36 in.
PP—1 air comp. and 3 pumps.
Coke Ovens—268 Bee Hive.
SIZES SHIPT—Run of Mine, Lump.

CHICAGO-TENNESSEE COAL & COKE CO.
Now the Waldensia Coal & Coke Co.

CLAIRFIELD JELICO COAL CO.

General Office, Chattanooga, Tenn.
 PR—A. M. Stewart, Knoxville, Tenn.
 VP—J. I. Sabiston, Clairfield, Tenn.
 TR—B. N. Ford, Cincinnati, O.
 GM—A. M. Stewart, Clairfield, Tenn.
 GS—W. O. La Prade, Clairfield, Tenn.
 PA—A. M. Stewart, Clairfield, Tenn.
 SCO—Address the Company, Buyer, W. O. La Prade, Clairfield, Tenn.
 Sales Agency—Mathews Addy Co., Cincinnati, O.

King Mountain Mine; Drift; Jelico Seam, 48 to 36 in. thick.
 PO—Clairfield, Tenn.; SP—Same; CTY—Clairborne; RR—L. & N. and Sou.
 S of H—Mules and 2 trolley pole type locos. Track gage, 42 in.
 S of M—4 shortwall and 1 chain breast type machs.
 PP—2 boilers, total 200 H. P., 2—150 K. W. generators, 250 volts D. C., 7 pumps.
 EMP—75. Last years tonnage 40,000.
 SIZES SHIPT—Run of Mine, Slack, Nut Lump, Block.
 PREP. EQUIPT—Gravity Screens, Loading Booms.

COAL CREEK COAL CO.

General Office, Knoxville, Tenn.
 PR—H. N. Camp, Knoxville, Tenn.
 TR—H. N. Camp, Knoxville, Tenn.
 GM—H. N. Camp, Knoxville, Tenn.
 GS—W. H. Branscum, Coal Creek, Tenn.
 PA—J. A. Rowe, Coal Creek, Tenn.
 EM—P. P. Lynch, Coal Creek, Tenn.
 SCO—Address the Company; Buyer, J. A. Rowe, Coal Creek, Tenn.

Fraterville Mine; Drift; Coal Creek Seam, 46 in. thick.
 PO—Coal Creek, Tenn.; SP—Same; CTY—Anderson; RR—Southern.
 S of H—Mules and rope. Track gage 36 inches.
 S of M—Hand.
 PP—2 water tube boilers, 275 H. P., 2 pumps.
 EMP—50. Daily output, 150 tons.
 SIZES SHIPT—Run of Mine.

Thistle Mine; Drift; Coal Creek Seam, 46 inches thick.
 PO—Coal Creek, Tenn.; SP—Same; CTY—Anderson; RR—Southern.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 PP—2 water tube boilers, 250 H. P., 2 pumps.
 EMP—60. Daily tonnage 200.
 SIZES SHIPT—Run of Mine.

COAL CREEK LEASING CO.

General Office, Knoxville, Tenn.
 PR—G. M. Camp, Knoxville, Tenn.
 VP—John L. Boyd, Knoxville, Tenn.
 TR—W. H. Branscum, Coal Creek, Tenn.
 GM—G. M. Camp, Knoxville, Tenn.
 GS—W. H. Branscum, Coal Creek, Tenn.
 PA—G. M. Camp, Knoxville, Tenn.
 EM—E. A. Sehorn, Knoxville, Tenn.
 SCO—Coal Creek Coal Co., Coal Creek, Tenn.; Buyer, John A. Rowe, Coal Creek, Tenn.

Black Eagle Mine; Drift; Coal Creek Seam, 42 inches thick.
 PO—Coal Creek, Tenn.; SP—Same; CTY—Anderson; RR—Southern.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 EMP—15. Daily tonnage 60.
 SIZES SHIPT—Run of Mine.

Central Mine now operated by Welden's Fork Coal Co.

COALFIELD COAL CO.

General Office, Knoxville, Tenn.
 PR—W. S. Robinson, Harriman, Tenn.
 TR—C. W. Henderson, Knoxville, Tenn.
 GM—C. W. Henderson, Knoxville, Tenn.
 PA—C. W. Henderson, Knoxville, Tenn.
 EM—J. C. Elmore, Briceville, Tenn.
 SCO—Address the Company, Buyer, O. W. Robinson, Coalfield, Tenn.
 SA—C. W. Henderson, Knoxville, Tenn.

No. 2 Mine; Drift and Slope; Coal Creek Seam, 48 in. thick.
 PO—Coalfield, Tenn.; SP—Same. CTY—Morgan. RR—G. N. O. & T. P. H. & N. E. Div.
 MS—Ernest Lewis, Coalfield, Tenn.
 S of H—Mules, rope, trolley pole type loco. Track gage 36 in.
 S of M—Hand.
 PP—4 100 H. P. water tube boilers, 1—100 K. W., 1—150 K. W. gen. units, volts D. C., 8 pumps.
 EMP—150. Last years tonnage 46,000.
 SIZES SHIPT—Run of Mine.

COMMERCIAL COAL & COKE COMPANY.

General Office, 639 East 63rd St., Chicago, Ill.
 PR—Gus E. Anderson, Chicago, Ill.
 VP—Chas. Nordstrom, Chicago, Ill.
 TR—Samuel A. Riley, Chicago, Ill.
 GS—V. Highland, Pikeville, Tenn.
 PA—V. Highland, Pikeville, Tenn.
 EM—F. R. Custred, Chicago, Ill.
 SA—V. Highland, Pikeville, Tenn.

Victor No. 2 Mine; Drift; Sewanee Seam, 43 in. thick.
 PO—Pikeville, Tenn.; SP—Same; CTY—Bledsoe; RR—N. C. & St. L.
 S of H—Mules. Track gage 36 in.
 S of M—Hand.
 PP—1 pump.
 EMP—25. Daily tonnage 25.
 SIZES SHIPT—Run of Mine, Slack, Egg, Block.
 PREP. EQUIPT—Gravity Screens.

CONGER COAL CO.

General Office, Coalmont, Tenn.
 PR—Hilf Conger, Coalmont, Tenn.
 VP—John E. Patton, Chattanooga, Tenn.
 TR—Hilf Conger, Coalmont, Tenn.
 GS—H. G. Smith, Harriman, Tenn.
 PA—S. A. Patton, Coalfield, Tenn.
 SCO—Address the Company, Buyer, S. A. Patton, Coalfield, Tenn.
 SA—Sewanee Coal Company, Chattanooga, Tenn.

Conger Mine; Drift; Coal Creek Seam, 42 in. thick.
 PO—Coalfield, Tenn.; SP—Same; CTY—Morgan; RR—H. & N. E. Div. Southern.
 S of H—Mules and trolley pole type locos. Track gage, 36 in.
 S of M—Hand and 2 shortwall machs.
 PP—1 fire tube boiler, 250 H. P., g-w. unit, 100 K. W., 250 volts D. C., 3 pumps.
 EMP—75. Daily tonnage 150.
 SIZES SHIPT—Run of Mine.

CO-OPERATIVE COAL CO.

Red Eye Mine; Catoosa Seam, 27 in. thick.
 PO—Catoosa, Tenn.; CTY—Morgan; RR—Morgan & Fentress.
 MS—W. A. Stulze, Catoosa, Tenn.
 EMP—75.
 No report.

CROSS MOUNTAIN COAL COMPANY

General Office, Knoxville, Tenn.
 PR—W. H. Van Benschoten, West Park on Hudson, N. Y.
 VP—Morrow Chamberlain, Chattanooga, Tenn.
 TR—H. W. Van Benschoten, Knoxville, Tenn.
 SECY—H. W. Van Benschoten, Knoxville, Tenn.
 GM—W. P. Davis, Knoxville, Tenn.
 GS—P. F. Lynch, Briceville, Tenn.
 ASST SUPT—J. F. Landram, Briceville, Tenn.
 PA—H. W. Van Benschoten, Knoxville, Tenn.
 CE—P. F. Lynch, Briceville, Tenn.
 EE—F. F. Elliott, Briceville, Tenn.
 SCO—Address the Company, Buyer, J. E. Cox, Briceville, Tenn.

Cross Mountain No. 1 Mine; Drift; Coal Creek Seam, 42 in. thick.
 PO—Briceville, Tenn.; SP—Frt., Briceville, Tenn., Exp., Coal Creek, Tenn.; CTY—Anderson; RR—Sou.
 MF—W. D. Fagan, Briceville, Tenn.
 S of H—6 trolley pole type locos. Track gage 32 in.
 S of M—2 chain breast type and 3 short-wall machs.
 PP—4 fire tube boilers, total 1000 H. P., gen. units 250 volts D. C., 6 pumps.
 EMP—200. Daily tonnage 600.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Shaker Screens, Loading Booms.

Volunteer Mine; Drift; Coal Creek Seam, 48 in. thick.
 PO—Briceville, Tenn.; SP—Frt., Briceville, Tenn., Exp., Coal Creek, Tenn.; CTY—Anderson; RR—Sou.
 MF—Lee Hill, Briceville, Tenn.
 S of H—3 mules and 1 trolley pole type loco. Track gage 32 in.
 S of M—Hand.
 PP—250 volts D. C., 2 pumps.
 EMP—50. Daily tonnage 200.
 PREP. EQUIPT—Shaker Screens.

Cross Mountain No. 2 Mine; Drift; Coal Creek Seam, 48 in. thick.
 PO—Briceville, Tenn.; SP—Frt., Briceville, Tenn., Exp., Coal Creek, Tenn.; CTY—Anderson; RR—Sou.
 MF—R. T. Travis, Briceville, Tenn.
 S of H—5 mules, 1 trolley pole type loco. Track gage 32 in.
 S of M—1 shortwall mach.
 PP—1 290 K. W. gen. unit, 250 volts D. C.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Shaker Screens.

DAVIDSON COAL CO.

General Office, Davidson, Tenn.
 PR—R. F. Pope, Davidson, Tenn.
 VP—C. H. Benedict, Davidson, Tenn.
 TR—S. Clark, Davidson, Tenn.
 GM—R. F. Pope, Davidson, Tenn.
 GS—R. F. Pope, Davidson, Tenn.
 EM—Schon & Kennedy, Knoxville, Tenn.

Davidson Mine; Drift; Bon Air No. 2 Seam, 56 in. thick.
 PO—Davidson, Tenn.; SP—Same; CTY—Fouries; RR—Tenn. Central.
 S of H—Mules and 1 gasoline loco. Track gage, 36 in.
 S of M—3 comp. air punchers.
 PP—Purchase power, 3 pumps.
 EMP—65. Last years tonnage 21,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables.

DAYTON COAL, IRON & RAILWAY CO.

Now a part of the Astor Collieries Corp.

DEERMON, COAL COMPANY

Now Deermon Mining Co.

DEERMON MINING COMPANY

General Office, Rosedale, Tenn.
 PR—G. T. Irish, Rosedale, Tenn.
 TR—Hugh Stokes, Briceville, Tenn.
 GM—Hugh Stokes, Briceville, Tenn.

Deermon Mine; Drift; State Seam, 40 in. thick.
 PO—Rosedale, Tenn.; SP—Same; CTY—Anderson; RR—Tenn.
 S of H—Mules and gravity.
 S of M—Hand.
 Daily tonnage 50.
 SIZES SHIPT—Run of Mine.
 Note—Formerly the Deermon Coal Co. Old information.

DURHAM COAL & IRON CO.

General Office, Chattanooga, Tenn.
 PR—L. T. Wallie, New York, N. Y.
 VP—C. E. James, Chattanooga, Tenn.
 TR—W. A. Tollner, Chattanooga, Tenn.
 GS—J. H. Jones, Chattanooga, Tenn.
 PA—W. A. Tollner, Chattanooga, Tenn.
 EM—R. Y. Wert, Soddy, Tenn.
 EE—Paul Thrasher, Soddy, Tenn.
 SCO—Address the Company; Buyer, L. M. Guinsley, Soddy, Tenn.
 SA—A. C. Stephenson, Chattanooga, Tenn.

Soddy Nos. 1 and 2 Mines; Drift; Soddy No. 7 Seam, 27 in. thick.
 PO—Soddy, Tenn.; SP—Rathburn, Tenn.; CTY—Hamilton; RR—Southern.
 MS—R. Y. Wert, Soddy, Tenn.
 S of H—Mules, rope and 2 trolley pole type locos. Track gage, 36 in.
 S of M—Hand.
 PP—9 fire tube boilers, total 1,000 H. P., 2—150 K. W. gen. units, 250 volts D. C., 31 pumps.
 EMP—350. Daily tonnage 600.
 SIZES SHIPT—Slack, Nut, Lump.
 PREP. EQUIPT—Gravity, Screens, Washeries.

Big Soddy Mine; Drift; No. 9 Seam, 36 in. thick.
 PO—Soddy, Tenn.; SP—Rathburn, Tenn.; CTY—Hamilton; RR—Southern.
 MS—R. Y. Wert, Soddy, Tenn.
 SM—L. M. Guinsley, Soddy, Tenn.
 S of H—Mules and rope. Track gage, 36 in.
 S of M—Hand.
 PP—1 80 H. P. fire tube boiler, 3 pumps.
 EMP—150. Daily tonnage 350.
 SIZES SHIPT—Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

Graysville Mine; Drift; Nos. 2 and 5 Seams, 30 in. thick.
 PO—Graysville, Tenn.; SP—Same; CTY—Rhea; RR—Southern.
 MS—R. Y. Wert, Graysville, Tenn.
 SM—J. B. Coulter, Graysville, Tenn.
 S of H—Mules, rope and 2 steam locos. Track gage, 36 in.
 S of M—Hand.
 PP—3 150 H. P. fire tube boilers, 3 pumps.
 EMP—120. Daily tonnage 200.
 SIZES SHIPT—Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

Durham Mine; Drift; Durham Seam, 26 inches thick.
 PO—Pittsburg, Ga.; SP—Durham, Ga.; CTY—Walker; RR—C. of G.
 MS—C. W. McMillan, Pittsburg, Ga.
 SM—D. W. Williams, Pittsburg, Ga.
 S of H—Mules, 3 gasoline and 2 steam locos. Track gage, 36 in.
 S of M—Hand.
 PP—5 fire tube boilers, total 320 H. P., 8 pumps.
 EMP—120. Daily tonnage 200.
 SIZES SHIPT—Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens, Washeries.

EAST LAUREL MINING COMPANY

General Office, No. 1 Arcade, Nashville, Tenn.
 PR—Jno. P. Williams, Jr., Nashville, Tenn.
 VP—J. P. Pearson, Alticrest, Tenn.
 TR—Jno. P. Williams, Jr., Nashville, Tenn.
 GM—P. F. Ligon, Gernt, Tenn.
 PA—J. P. Ligon, Gernt, Tenn.
 EM—J. C. Laird, Harriman, Tenn.

SCO—Address the Company, Buyer, B. F. Williams, Gernt, Tenn.
 SA—Dr. Jno. P. Williams, Jr., No. 1 Arcade, Nashville, Tenn.

East Laurel Mine; Slope; Bon Air No. 1 Seam, 48 inches thick.
 PO—Gernt, Tenn.; SP—Frt., Same; Exp., Oneida, Tenn.; CTY—Fentress; RR—Oneida & Western.
 MS—Jos. Hargis, Gernt, Tenn.
 S of H—Mules. Track gage 36 in.
 S of M—Hand.
 PP—2—100 H. P. ore tube boilers, 1 Air compressor, 1 pump.
 EMP—30. Last years tonnage 7,500.
 SIZES SHIPT—Run of Mine, Slack, Lump, Block.
 PREP. EQUIPT—Gravity Screens.

ELK VALLEY BLUE GEM COAL CO.

Out of business.

EMORY GAP COAL MINING COMPANY

General Office, Harriman, Tenn.
 PR—Jno. W. Staples, Harriman, Tenn.
 VP—G. W. Candler, Harriman, Tenn.
 TR—Horace M. Carr, Harriman, Tenn.
 GM—H. E. Carr, Harriman, Tenn.
 EM—H. E. Carr, Harriman, Tenn.

Emory Gap Mine; Slope; Swanee Seam, 42 inches thick.
 PO—Harriman, Tenn.; SP—Emory Gap, Tenn.; CTY—Roane; RR—Tenn. Cea.
 MS—H. E. Carr, Harriman, Tenn.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 PP—1 80 H. P. water tube boiler, 2 pumps.
 EMP—50. Daily tonnage 30.
 SIZES SHIPT—Run of Mine.
 Old information.

FAGAN, J. A.

General Office, Coalfield, Tenn.
 OWNER—J. A. Fagan, Coalfield, Tenn.
 SA—L. O. Scott, Harriman, Tenn.

Fagan Mine; Drift; Blue Gem Seam, 24 in. thick.
 PO—Coalfield, Tenn.; SP—Blue Gem, Tenn.; CTY—Morgan; RR—H. & N. E.
 MS—J. A. Fagan, Coalfield, Tenn.
 S of H—Mules. Track gage 36 in.
 S of M—Hand.
 EMP—15. Daily tonnage 25.
 SIZES SHIPT—Run of Mine.
 Note—Formerly operated by J. A. Fagan & Son.
 Old information.

FALL CREEK COAL & COKE COMPANY.

General Office, Nashville, Tenn.
 PR—Paul Roberts, Nashville, Tenn.
 VP—H. Dudley, Nashville, Tenn.
 TR—Oscar Mather, Nashville, Tenn.
 GM—Paul Roberts, Nashville, Tenn.
 GS—Albert Roberts, Ozone, Tenn.
 PA—Paul Roberts, Nashville, Tenn.
 EM—Albert Roberts, Ozone, Tenn.

Fall Creek No. 1 Mine; Drift & Slope; Sewanee & Nelson Seam 5 to 16 in. thick.
 PO—Ozone, Tenn.; SP—Same; CTY—Cumberland; RR—Tenn. Central.
 MS—Gao Fritts, Nashville, Tenn.
 S of H—Mules, rope and 1 steam loco.
 S of M—Comp. air puncher mach.
 PP—1 75 H. P. loco. type boiler, generating plant 220 volts D. C., 3 pumps.
 EMP—100. Daily tonnage 100.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Washer and Shaker Screens.

FALLS BRANCH COAL COMPANY.

General Office, Woodridge, Tenn.
 PR—P. Woodridge, Louisville, Ky.
 TR—J. B. Brickey, Woodridge, Tenn.
 GM—J. B. Brickey, Woodridge, Tenn.
 GS—P. T. Neely, Woodridge, Tenn.
 PA—J. H. Miller, Woodridge, Tenn.
 EM—R. L. Loyd, Jellico, Tenn.
 EE—L. Douglass, Woodridge, Tenn.
 SCO—Address the Company, Buyer, J. H. Miller, Woodridge, Tenn.
 SA—Jas. R. Woodridge, Woodridge, Tenn.

Falls Branch and Powhatan Mines; Drift; Jellico & Blue Gem Seams, 40-24 in. thick.
 PO—Woodridge, Tenn.; SP—Oswego, Tenn.; CTY—Campbell; RR—Southern.
 S of H—Mules, 2 gasoline and 1 steam locos. Track gage 39 in.
 S of M—Hand.
 PP—Power purchased, 2 pumps.
 EMP—85. Last years tonnage 65,400.
 SIZES SHIPT—Run of Mine, Slack, Lump, Block.
 PREP. EQUIPT—Gravity Screens.

FENTRESS COAL CO.

PR—W. D. Boyer, Scranton, Pa.
 TR—Geo. G. Bronks, Scranton, Pa.
 GM—C. Hoyt Bradford, Nashville, Tenn.
 GS—A. B. Adkins, Wilder, Tenn.

(Continued on Next Page)

Fentress Coal Co.—Cont.

PA—J. W. Ruberford, Wilder, Tenn.
EE—Sillas R. Wright, Wilder, Tenn.
SCO—Address the Company, Buyer, R. E. Evans, Wilder, Tenn.

Fentress Mine; Drift; Bon Air Seam, 51 66 in. thick.
PO—Wilder, Tenn.; SP—Same; CTY—Fentress; RR—T. C. C.
S of H—7 trolley pole type and 1 storage battery locos. Track gage, 36 inches.

S of M—6 shortwall machs.
PP—4 fire tube boilers, 600 H. P., 2 150 K. W. gen. units 520 volts D. C., 9 pumps.
EMP—250. Last years tonnage 1,000.
SIZES SHIPT—Run of Mine, Stack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

FLAT BRANCH COAL COMPANY.

General Office, Tracy City, Tenn.
PR—Grover Styles, Tracy City, Tenn.
VP—S. R. Hampton, Tracy City, Tenn.
TR—C. B. Roberts, Tracy City, Tenn.
GM—R. B. Roberts, Tracy City, Tenn.
GS—R. B. Roberts, Tracy City, Tenn.
MM—Wm. Petty, Tracy City, Tenn.

Flat Branch Mine; Drift; Sewanee Seam, 36 in. thick.
PO—Tracy City, Tenn.; SP—Same; CTY—Grundy; RR—N. C. & St. L.
S of H—Mules. Track gage 26 in.
S of M—Hand.
PP—1 pump.
EMP—150. Last years tonnage 48,000.
SIZES SHIPT—Run of Mine.

FORK MOUNTAIN COAL CO.

General Office, Petros, Tenn.
PR—W. W. Baird, Petros, Tenn.
VP—J. D. Rodas, Petros, Tenn.
TR—W. W. Baird, Petros, Tenn.
GM—W. W. Baird, Petros, Tenn.
PA—W. W. Baird, Petros, Tenn.
EM—C. H. Rogers, Petros, Tenn.
SCO—Address the company, Buyer, W. W. Baird, Petros, Tenn.
SA—Fork Mountain Coal Co., Petros, Tenn.

Fork Mountain Mine; Drift; Big Brushy seam, 43 inches thick.
PO—Petros, Tenn.; SP—Fork Mountain, Tenn.; CTY—Anderson; RR—Tenn.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—1 30 H. P. fire tube boiler, 2 pumps.
EMP—65. Daily tonnage 250.
SIZES SHIPT—Run of Mine.

FORK RIDGE COAL & COKE CO.

PR—D. G. Hinks, Fork Ridge, Tenn.
TR—E. W. Silvers, Fork Ridge, Tenn.
GS—John Lewis, Fork Ridge, Tenn.
PA—D. G. Hinks, Fork Ridge, Tenn.
EE—L. Hines, Fork Ridge, Tenn.
CE—J. C. Richardson, Middleboro, Ky.
SCO—Address the Company, Buyer, C. S. Collier, Fork Ridge, Tenn.

Fork Ridge Mine; Drift; Mason Seam, 72 in. thick.
PO—Fork Ridge, Tenn.; SP—Middleboro, Ky.; CTY—Clatsboro; RR—L. & N.
S of H—14 elec. locos. Track gage 42 inches.
S of M—3 elec. mach. and hand.
PP—6 water tube boiler, total 900 H. P., 3 gen. units, 250 volts D. C.
EMP—600. Last years tonnage 334,920.

FRANCIS JELICO COAL COMPANY.

General Office, Pioneer, Tenn.
PR—Philip Francis, Jellico, Tenn.
VP—J. M. Smith, Jellico, Tenn.
TR—Wayne Chambers, Pioneer, Tenn.
GM—Paul Francis, Pioneer, Tenn.
PA—Wayne Chambers, Pioneer, Tenn.
EM—Paul Francis, Jellico, Tenn.
EE—Tom Francis, Jellico, Tenn.
SCO—Address the Company, Buyer, Wayne Chambers, Pioneer, Tenn.

Francis Mine; Drift; Red Ash Seam, 55 in. thick.
PO—Pioneer, Tenn.; SP—Same; CTY—Campbell; RR—Southern.
MS—Frank Neatti, Pioneer, Tenn.
S of H—Mules and locos. Track gage 36 in.
S of M—Hand.
PP—250 volts D. C.
SIZES SHIPT—Run of Mine, Nut, Lump, Block.

GOOCH MINING COMPANY

General Office, Davidson, Tenn.
PR—C. M. Gooch, Nashville, Tenn.
TR—W. Beck, Nashville, Tenn.
GM—E. W. Patterson, Davidson, Tenn.
GS—E. W. Patterson, Davidson, Tenn.
PA—E. W. Patterson, Davidson, Tenn.
SCO—Patterson & Co. Buyer, H. H. Patterson, Davidson, Tenn.
SA—C. M. Gooch, Nashville, Tenn.

Buckeye Mine; Drift; Bon Air Seam, 48 inches thick.
PO—Davidson, Tenn.; SP—Same; CTY—Fentress & Overton; RR—Tenn. Central.
MS—W. F. Blevins & Joe Soard, Davidson, Tenn.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—100. Last years tonnage 96,000.
SIZES SHIPT—Run of Mine, Nut, Block, Lump.
PREP. EQUIPT—Bar Screens.

HALEY MOUNTAIN COAL COMPANY.

General Office, Crossville, Tenn.
PR—Jos. B. Johnson, Crossville, Tenn.
GM—Jos. B. Johnson, Crossville, Tenn.
GS—Charles W. Bell, Crab Orchard, Tenn.

Haley Mountain Mines; Slopes; Upper & Lower Sewanee Seams; 60 in. thick.
PO—Crab Orchard, Tenn.; SP—Same; CTY—Cumberland; RR—Tennessee Central.
S of H—Rope. Track gage 36 in.
S of M—Hand.
PP—Small steam hoists, 2 pumps.
EMP—20.
SIZES SHIPT—Run of Mine.
Old information.

HALL COAL COMPANY

General Office, Oliver Springs, Tenn.
OPERATOR C. A. Hall, Oliver Springs, Tenn.
Hall Mine; Drift; Seam, 36 in. thick.
PO—Oliver Springs, Tenn.; SP—Same; CTY—Anderson; RR—Southern.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine, Stack, Lump.

HAMILTON COAL MINING CO.

Cannon Creek No. 2 Mine.
PO—Cannon Creek, Tenn.; CTY—Birdsue.
MS—D. P. Morgan, Cannon Creek, Tenn.
EMP—155.
No report.

HELENWOOD COAL CO.

General Office, Roberta, Tenn.
OWNER—L. E. Bryant, Roberta, Tenn.
GM—L. E. Bryant, Roberta, Tenn.
Helenwood Mine; Drift; No. 4 Seam, 36 in. thick.
PO—Helenwood, Tenn.; SP—Same; CTY—Scott; RR—C. N. O. & T. P. Branch of Southern Kentucky.
MS—L. E. Ryan, Helenwood, Tenn.
SM—L. E. Ryan, Helenwood, Tenn.
S of H—Mules and steam. Track gage, 36 in.
S of M—Hand.
PP—3 pumps.
EMP—10. Last fiscal year output, 20,000 tons.
SIZES SHIPT—Run of Mine, Lump, Block.
PREP. EQUIPT—Gravity Screens.

HICKS BLUE GEM COAL CO.

Out of business.

HIGHCLIFF COAL COMPANY.

General Office, Knoxville, Tenn.
PR—Alex. Rounyman, Knoxville, Tenn.
TR—J. B. Campbell, Atlanta, Ga.
GM—Joseph Richards, Winchester, Ky.
CS—Joseph Richards, Winchester, Tenn.
PA—Charles Cochran, Westbourne, Tenn.
EM—D. L. Lindamood, Westbourne, Tenn.
EE—Lack Tipton, Pruden, Tenn.
SCO—Address the Company, Buyer, Chas. Cochran, Westbourne, Tenn.
SA—Blue Diamond Coal Sales Co., 924 Union Central Bldg., Cincinnati, O. 1102 Holster Bank Bldg., Knoxville, Tenn.

Highcliff Mine; Drift; Mingo Seam, 66 to 70 in. thick.
PO—Pruden, Tenn.; SP—Same; CTY—Clatsboro; RR—L. & N. and Southern.
MS—W. T. Richards, Pruden, Tenn.
SM—J. P. Foster, Pruden, Tenn.
S of H—Mules, 2 elec. locos. Track gage 44 in.
S of M—Hand.
PP—1 return tubular boiler, 150 H. P., 1 gen. unit, 250 volts D. C., 1 pumps.
EMP—100. Last years tonnage 112,000.
SIZES SHIPT—Run of Mine, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

HIGHLAND COAL & LUMBER COMPANY

General Office, Nashville, Tenn.
PR—W. V. Davidson, Nashville, Tenn.
VP—J. N. Hays, Nashville, Tenn.
TR—J. Clark, Nashville, Tenn.
GM—L. Clark, Nashville, Tenn.
GS—M. T. Tilton, Davidson, Tenn.
PA—B. J. Dudley, Davidson, Tenn.
CE—Schorn & Kennedy, Knoxville, Tenn.
EM—Paul Kennedy, Knoxville, Tenn.
EE—R. I. Hamilton, Davidson, Tenn.

SCO—Address the Company, Buyer, Brooks L. Dooley, Davidson, Tenn.
SA—Geo. W. Stephenson, Chattanooga, Tenn.

Highland Mine; Drift; Bon Air Seam, 52 in. thick.
PO—Davidson, Tenn.; SP—Same; CTY—Fentress; RR—Tenn. Central.
S of H—1 gasoline and 1 steam locos. Track gage, 36 in.
S of M—16 comp. air punchers.
PP—3 80 H. P. fire tube boilers, 1 100 Kva. gen. unit, 2200 volts A. C., transformer 2200 110 220 volts A. C.
EMP—200. Last fiscal year output, 220,000 tons.
SIZES SHIPT—Run of Mine, Stack, Nut, Block, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

ITALIAN BLUE GEM COAL CORP.

General Office, Newcomb, Tenn.
PR—Peter Zechlin, Newcomb, Tenn.
VP—Thomas Zechlin, Newcomb, Tenn.
TR—Tene Zechlin, Newcomb, Tenn.
GM—Thomas Zechlin, Newcomb, Tenn.
GS—Thomas Zechlin, Newcomb, Tenn.
PA—Peter Zechlin, Newcomb, Tenn.
CE—W. C. Barker, Jellico, Tenn.
SCO—Mrs. Campbell, Newcomb, Tenn.
SA—Peter Zechlin, Newcomb, Tenn.

Italian Blue Gem Mine; Drift; Blue Gem Seam, 24-32 in. thick.
PO—Newcomb, Tenn.; SP—Same; CTY—Campbell; RR—Southern.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
PP—1 150 H. P. fire tube boiler.
EMP—200.
Old information.

JELICO FUEL COMPANY.

General Office, 807 Republic Bldg., Louisville, Ky.
PR—H. Bank, Kimball, W. Va.
TR—E. H. Ludinsky, Welch, W. Va.
GM—Ludis Warner, Louisville, Ky.
GS—Max Goodman, Depoy, Ky.
PA—Max Goodman, Depoy, Ky.

Jellico Mine; Drift; Inners Creek Seam, 54 in. thick.
PO—Cupp, Tenn.; Frl. Fresno, Tenn.; Exp. Habersham, Tenn.; CTY—Campbell; RR—L. & N.
MS—P. P. Haddleton, Cupp, Tenn.
S of H—Mules and rope. Track gage, 36 in.
S of M—Hand.
EMP—60.
PREP. EQUIPT—Bar Screens.

KIMBERLY MINING COMPANY

Operations suspended indefinitely.

KNOX MINING COMPANY.

General Office, Rockwood, Tenn.
PR—C. F. Millean, Rockwood, Tenn.
VP—T. A. Wright, Knoxville, Tenn.
TR—W. H. Hamm, Rockwood, Tenn.
GM—C. F. Millean, Rockwood, Tenn.
PA—Roane Iron Co., Rockwood, Tenn.
EM—Howard Howie, Rockwood, Tenn.
SCO—Roane Iron Co. Buyer, J. P. Name, Rockwood, Tenn.

Roane Iron Co., Rockwood Colliery; Slope; Sewanee Seam, 24 to 72 in. thick; Operate washery.
PO—Rockwood, Tenn.; SP—Same; CTY—Roane; RR—Southern and T. C.
MS—W. V. Snow, Rockwood, Tenn.
S of H—Mules, rope, compressed air and 5 gasoline locos. Track gage, 32 inches.
S of M—Hand.
PP—Power purchased, 1 fire tube boilers, total 500 H. P., 11 pumps.
EMP—200. Last years tonnage 150,380.
Note—Entire output is coked.

KRESGE COAL & MINING CO.

General Office, Room 701, St. Paul Bldg., Cincinnati, O.
RECEIVER Lyman H. Dresbach, Cincinnati, O.

Morley No. 1 Mine; Drift; Jellico Seam, 10 inches thick.
PO—Morley, Tenn.; SP—Same; CTY—Campbell; RR—L. & N.
MS—S. S. Douglas, Morley, Tenn.
SM—A. B. Witt, Morley, Tenn.
S of H—Mules, comp. air and gasoline locos. Track gage 36 inches.
S of M—Comp. air punchers.
PP—1 water tube boiler, 150 H. P., 4 pumps.
EMP—60. Daily tonnage 250.
SIZES SHIPT—Stack, Lump.
PREP. EQUIPT—Gravity Screens, Picking Tables.
NOTE—Formerly operated by Queen & Crescent Coal Co. and B. J. Morley Coal Co.

LA FOLLETTE COAL & IRON CO.

General Office, LaFollette, Tenn.
PR—L. C. Crew, LaFollette, Tenn.
VP—Stewart W. Webb, Boston, Tenn.
TR—S. S. Pratt, LaFollette, Tenn.

GM—L. C. Crew, LaFollette, Tenn.
PA—S. S. Pratt, LaFollette, Tenn.
EM—L. J. Sengcant, LaFollette, Tenn.
SCO—LaFollette Stores Co.; Buyer, W. D. Barton, LaFollette, Tenn.

Rex No. 1 Mine; Slope; Rex Seam, 43 in. thick.
PO—LaFollette, Tenn.; SP—Same; CTY—Campbell; RR—L. & N., Sou.
MS—W. L. Hendren, LaFollette, Tenn.
S of H—Rope and steam locos. Track gage, 36 in.
S of M—6 shortwall machs.
PP—3 water tube boilers, gen. units, 1 840 Kva., 1 150 Kva., M. G. sets, 250 volts D. C., 1 pump.
EMP—250. Last years tonnage 201,030.
Coke thins, 300 Bee Hive.
SIZES SHIPT—Run of Mine, Egg, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms, Washeries.

Gem Mine; Drift; Jordan Seam, 43 in. thick.
PO—LaFollette, Tenn.; SP—Kilguth, Tenn.; CTY—Campbell; RR—L. & N.

MS—J. F. Hendren, LaFollette, Tenn.
S of H—Trolley pole type locos. Track gage, 36 in.
S of M—3 chain breast type machs.
PP—1 840 Kva., 1 150 Kva., gen. units, M. G. sets, 250 volts D. C., 3 water tube boilers, 1 pump.
EMP—160. Last years tonnage 50,850.
Coke thins, 300 Bee Hive.
SIZES SHIPT—Run of Mine, Stack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms, Washeries.
Kent Mine; Drift; Kent Seam, 43 in. thick.
PO—LaFollette, Tenn.; SP—Same; CTY—Campbell; RR—L. & N., Sou.
MS—J. F. Hendren, LaFollette, Tenn.
S of H—Mules and gasoline locos. Track gage, 36 in.
Note—Mine developing.

LAXTON, DEXTER

Laxton Mine; Paint Rock Seam, 22 in. thick.
PO—Onida, Tenn.; CTY—Scott; RR—Southern.
MS—Dexter Laxton, Onida, Tenn.
EMP—21.
No report.

LUSK COAL CORP.

Now Cannon Creek Coal Co.

McGLOTHLIN, R. H.

General Office, Oliver Springs, Tenn.
GM—R. H. McGlothlin, Oliver Springs, Tenn.

McGlothlin Mine; Drift; Coal Creek Seam, 54 inches thick.
PO—Oliver Springs, Tenn.; SP—Same; CTY—Morgan; RR—Southern.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
Last years tonnage 1200.
SIZES SHIPT—Run of Mine.

MAIN JELICO MOUNTAIN COAL CO.

See Kentucky data.

MEADOW BRANCH COAL COMPANY

General Office, Morley, Tenn.
PR—L. F. Card, Jellico, Tenn.
VP—J. W. Card, Chillicothe, O.
TR—W. T. Martin, Jellico, Tenn.
GM—L. F. Card, Jellico, Tenn.
GS—L. F. Card, Jellico, Tenn.
PA—F. M. Baird, Morley, Tenn.
EM—R. L. Lloyd, Jellico, Tenn.
SCO—Address the Company, Buyer, F. M. Baird, Morley, Tenn.
SA—Cherokee Coal & Coke Co., Knoxville, Tenn.

Meadow Branch Mine; Drift; Blue Gem Seam, 30 in. thick.
PO—Morley, Tenn.; SP—Same; CTY—Campbell; RR—L. & N.
S of H—Mules, gravity incline. Track gage 36 in.
S of M—Hand.
EMP—25. Last years tonnage 10,000.
SIZES SHIPT—Run of Mine, Lump, Block.
PREP. EQUIPT—Gravity Screens.

MINGO COAL & COKE COMPANY

General Office, Middleboro, Ky.
PR—J. P. Gooch, Middleboro, Ky.
VP—J. P. Gooch, Middleboro, Ky.
TR—J. P. Gooch, Middleboro, Ky.
GM—J. P. Gooch, Middleboro, Ky.
GS—J. P. Gooch, Middleboro, Ky.
PA—J. P. Gooch, Middleboro, Ky.
EM—J. P. Gooch, Middleboro, Ky.
SCO—Address the Company, Buyer, George V. Gooch, Middleboro, Ky.
SA—J. P. Gooch, Middleboro, Ky.

Mingo Mines Nos. 1, 2, 4 & 5; Drift; Sterling Seam, 44 in. thick.
PO—Huttrant, Tenn.; SP—Same; CTY—Clatsboro; RR—L. & N.
(Continued on Next Page)

Mingo Coal & Coke Company—Cont

S of H—Mules, electric and storage battery loco. Track gage 42 inches.
S of M—4 shortwall machs.
LP—Power purchased, 5 pumps.
EMP—25%. Last years tonnage 100,000.
SIZES SHIPT—Run of Mine, Slack.
PREP. EQUIPT—Shaker Screens.

MINNESSEE COAL & TIMBER CO.

General Office, 603 Holston Bank Bldg., Knoxville, Tenn.
PR—P. J. Youngdahl, Knoxville, Tenn.
TR—S. J. Singer, Knoxville, Tenn.
GM—S. J. Singer, Knoxville, Tenn.
SCO—Address the Company, Buyer, Buyer D. J. Singer, Knoxville, Tenn.

Isoline No. 5 Mine; Slope; No. 3 Seam, 30-62 in. thick.
PO—Isoline, Tenn.; SP—Same; CTY—Cumberland; RR—Tenn. Central.
MS—R. A. Shifflett, Isoline, Tenn.
S of H—Mules and main and tail rope. Track gage 36 in.
S of M—Hand.
PP—1—100 H. P. fire tube boiler, 1—100 H. P. water tube boiler, 4 pumps.
LMP—40.
SIZES SHIPT—Run of Mine, Slack, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables.

MT CARBON COAL CO.

Mt. Carbon Nos. 1 and 2 Mines; Coal Creek Seam, 48 in. thick.
PO—Oliver Springs, Tenn.; CTY—Morgan; RR—L. & N.
EMP—94.
No report.

NEW CARYVILLE COAL CO.

General Office, Williamsburg, Ky.
PR—E. C. Mahan, Williamsburg, Ky.
VP—T. B. Mahan, Williamsburg, Ky.
TR—N. B. Perkins, Williamsburg, Ky.
GM—N. B. Perkins, Williamsburg, Ky.
GS—G. W. Wendling, Coal Creek, Tenn.
PA—N. B. Perkins, Williamsburg, Ky.
EM—G. W. Wendling, Coal Creek, Tenn.
EE—J. E. Gider, Caryville, Tenn.
SCO—Address the Company; Buyer, C. C. Brown, Caryville, Tenn.
SA—Southern Coal & Coke Co., Cincinnati, O. and Knoxville, Tenn.

New Caryville Mine; Drift; Red Ash Seam, 48 in. thick.
PO—Caryville, Tenn.; SP—Same; CTY—Campbell; RR—Southern.
S of H—Mules, 4 trolley pole type locos. Track gage 36 inches.
S of M—4 shortwall machs.
LP—Power purchased, rotary converters, 250 volts D. C., 3 pumps.
EMP—100. Last fiscal year output, 70,000 tons.
SIZES SHIPT—Run of Mine, Lump, Block.
PREP. EQUIPT—Gravity Screens.

NEW EAGLE COAL COMPANY.

General Office, Box 203, Oliver Springs, Tenn.
PR—J. K. Butler, Oliver Springs, Tenn.
GM—J. K. Butler, Oliver Springs, Tenn.
GS—T. C. Butler, Oliver Springs, Tenn.
PA—J. K. Butler, Oliver Springs, Tenn.
EM—J. K. Butler, Oliver Springs, Tenn.
SA—W. J. Butler, Oliver Springs, Tenn.

New Eagle Mine; Drift; Coal Creek Seam, 36 in. thick.
PO—Oliver Springs, Tenn.; SP—Same; CTY—Morgan; RR—Southern.
S of H—Mules. Track gage 36 in.
S of M—Hand.
EMP—20. Last years tonnage 12,000.
SIZES SHIPT—Run of Mine.
old information.

NEW ETNA COAL COMPANY

Out of business.

NEW STANDARD JELICO MINING CO.

General Office, Knoxville, Tenn.
PR—Dr. E. A. Guynes, Knoxville, Tenn.
VP—C. E. Roth, Knoxville, Tenn.
TR—Roy Roth, Knoxville, Tenn.
GM—C. E. Roth, Knoxville, Tenn.
GS—E. L. Guynes, Knoxville, Tenn.
PA—James Nelson, Knoxville, Tenn.
SCO—Address the Company, Buyer, James Nelson, Knoxville, Tenn.
SA—Clarence E. Roth, Knoxville, Tenn.

New Standard Jellico Mine; Drift; Jellico Seam, 36 in. thick.
PO—Clairfield, Tenn.; SP—Same; CTY—Claiborne; RR—L. & N. and Sou.
S of H—Mules and gas motors.
S of M—Comp. air machs.
LP—Water tube boiler.
LMP—96. Daily tonnage 250.
SIZES SHIPT—Run of Mine, Slack, Lump, Block.
PREP. EQUIPT—Bar Screens.
Note—Formerly operated by the Standard Jellico Mining Co.

NORMAN, G. P.

Norman No. 1 Mine.
PO—Briceville, Tenn.; CTY—Anderson; RR—Southern.
MS—G. P. Norman, Briceville, Tenn.
EMP—17.
No report.

NUMBER THIRTEEN COAL CO.

No. 13 Mine; Seam, 38 in. thick.
PO—Petros, Tenn.; CTY—Morgan; RR—Southern.
MS—J. F. Morton, Petros, Tenn.
EMP—9.
No report.

OAKDALE COAL COMPANY.

General Office, Oakdale, Tenn.
PR—J. C. Alley, Oakdale, Tenn.
TR—P. B. Caldwell, Oakdale, Tenn.
GM—H. O. Ramsey, Oakdale, Tenn.
GS—W. C. Lindsay, Oakdale, Tenn.
SA—Tennessee Fuel Exchange, Oakdale, Tenn.

Hanging Rock No. 1 Mine; Drift; Seam 36 in. thick.
PO—Oakdale, Tenn.; SP—Same; CTY—Morgan; RR—Sou. (C. N. O. & T. P.).
S of H—Mules. Track gage 35 in.
S of M—Hand.
EMP—20.
SIZES SHIPT—Run of Mine.

OLIVER SPRINGS BRICK COMPANY.

General Office, Oliver Springs, Tenn.
PR—Jas. J. Kelly, Oliver Springs, Tenn.
VP—J. L. Kennedy, Knoxville, Tenn.
GM—Jas. J. Kelly, Oliver Springs, Tenn.

Oliver Springs Mine; Drift; Eagle Seam, 28 in. thick.
PO—Oliver Springs, Tenn.; SP—Same; CTY—Morgan; RR—Southern.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—1—125 H. P. water tube boiler.
EMP—25.
SIZES SHIPT—Run of Mine, Block.
PREP. EQUIPT—Bar Screens.
NOTE—Formerly operated by the Oliver Spring Coal & Clay Co.

OLIVER SPRINGS COAL & CLAY CO.

Now operated by the Oliver Springs Brick Company.

ONEIDA CONSOLIDATED COAL CO.

General Office, Knoxville, Tenn.
PR—J. Albert Robbins, Knoxville, Tenn.
TR—J. Albert Robbins, Knoxville, Tenn.
GS—Claude Smith, Oneida, Tenn.
PA—J. A. Robbins, Knoxville, Tenn.
SA—Claude Smith, Oneida, Tenn.
SCO—Address the company. Buyer, Claude Smith, Oneida, Tenn.
SA—Riddle Coal Co., Chattanooga, Tenn.

Morning Glory Mine; Drift; Paint Rock Seam, 24 inches thick.
PO—Oneida, Tenn.; SP—Ex., Same; Frt., Morning Glory, Tenn.; CTY—Scott; RR—Sou. via Tenn. Ry.
MS—H. L. Lay, Oneida, Tenn.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—Power purchased.
EMP—60. Last years tonnage 12,000.
SIZES SHIPT—Run of Mine Nut, Block.
PREP. EQUIPT—Bar Screens.

PAINT ROCK VALLEY COAL CO.

PR—M. E. Thompson, Oneida, Tenn.
TR—H. S. Bassett, Oneida, Tenn.
GM—J. D. Ruffner, Oneida, Tenn.
PA—H. S. Bassett, Oneida, Tenn.
EM—John Terry, Oneida, Tenn.
SA—H. S. Bassett, Oneida, Tenn.

Paint Rock Nos. 2 and 3 Mines; Slope; Seam, 30 inches thick.
PO—Oneida, Tenn.; SP—Same; CTY—Scott; RR—Tennessee.
MS—Jas. Buthane, Oneida, Tenn.
S of H—Mules.
S of M—15 chain breast type machs.
EMP—30. Daily tonnage 100.
SIZES SHIPT—Run of Mine, Lump.

PALMETTO COAL COMPANY

General Office, Fountain Inn, S. C.
PR—T. D. Wood, Fountain Inn, S. C.
VP—F. H. Hendrix, Leesville, S. C.
TR—C. G. Gulgard, Columbia, S. C.
GM—T. D. Wood, Fountain Inn, S. C.
GS—A. E. Thomas, Cartwright, Tenn.
PA—T. D. Wood, Fountain Inn, S. C.
EM—B. C. Grayson, Cartwright, Tenn.
SCO—Address the Company, Buyer, J. F. Kelley, Cartwright, Tenn.

Palmetto Mine; Drift; Sewanee Seam, 42 in. thick.
PO—Cartwright, Tenn.; SP—Same; CTY—Southern; RR—N. C. & St. L.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—Gen. Units 250 volts D. C., 3 pumps.
EMP—130. Daily tonnage 300.
SIZES SHIPT—Run of Mine, Nut, Lump.
PREP. EQUIPT—Bar Screens.

PEACOCK COAL & COKE CO.

General Office, Lebanon, Tenn.
PR—J. T. Odum, Lebanon, Tenn.
GS—J. C. Lusk, Monterey, Tenn.
EM—J. C. Lusk, Monterey, Tenn.

Peacock No. 1 Mine; Drift; Bon Air No. 2 Seam, 36 in. thick.
PO—Monterey, Tenn.; SP—Same; CTY—Overton; RR—T. C.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
(Old Information)

PEACOCK MINING COMPANY

General Office, Monterey, Tenn.
GM—A. H. Mercer, Monterey, Tenn.
PA—O. H. Mercer, Monterey, Tenn.
SCO—Address the company. Buyer, C. C. Jared, Monterey, Tenn.
SA—A. H. Mercer, Monterey, Tenn.

Peacock Mine; Drift; Bon Air No. 2 Seam, 36 inches thick.
PO—Monterey, Tenn.; SP—Obey City, Tenn.; CTY—Overton; RR—Tenn. Central.
MS—J. M. Clift, Monterey, Tenn.
S of H—Mules. Track gage 35 inches.
S of M—Hand.
EMP—50. Daily tonnage 100.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

PETROS COAL COMPANY

General Office, Harriman, Tenn.
PR—Stiles Kennedy, Harriman, Tenn.
VP—H. M. Winslow, Harriman, Tenn.
TR—Stiles Kennedy, Harriman, Tenn.
GM—Stiles Kennedy, Harriman, Tenn.
PA—Stiles Kennedy, Harriman, Tenn.

Petros Mine; Drift; Jellico Seam, 38 inches thick.
PO—Petros, Tenn.; SP—Same; CTY—Morgan; RR—H. & N. E.
MS—W. R. Bedford, Petros, Tenn.
S of H—Mules and gasoline loco. Track gage 36 inches.
S of M—Hand and comp. air mach.
PP—1 150 H. P. fire tube boiler.
EMP—75. Last years tonnage 35,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

PIEDMONT COAL AND COKE CO.

Out of business.

PIONEER COAL CO.

Pioneer Mine; Seam, 48 in. thick.
PO—Pioneer, Tenn.; CTY—Campbell; RR—Southern.
MS—C. M. Barnes, Pioneer, Tenn.
EMP—46.
No report.

PIONEER JELICO COAL COMPANY

Now Francis Jellico Coal Co.

POCAHONTAS & SEWANEE COAL & COKE COMPANY

Now Commercial Coal & Coke Company.

POPLAR CREEK COAL CO.

Poplar Creek Mine; Coal Creek Seam, 38 in. thick.
PO—Oliver Springs, Tenn.; CTY—Morgan; RR—L. & N.
MS—J. T. Williams, Oliver Springs, Tenn.
EMP—146.
No report.

PROCTOR COAL COMPANY

General Office, Red Ash, Ky.
PR—Chas. Finley, Red Ash, Ky.
VP—E. E. Wood, Williamsburg, Ky.
TR—F. W. Finley, Williamsburg, Ky.
GM—Chas. Finley, Red Ash, Ky.
GS—R. B. Carter, Red Ash, Ky.
PA—G. W. Davenport, Red Ash, Ky.
EM—J. H. Hordin, Jellico, Tenn.
EE—R. L. Hicks, Red Ash, Ky.
SCO—Address the Company, Buyer, G. W. Davenport, Red Ash, Ky.
SA—J. L. Boyd, Knoxville, Tenn.

Indian Mountain Mine; Drift; Jellico Seam, 42 inches thick.
PO—Red Ash, Ky.; SP—Jellico, Tenn.; CTY—Campbell; RR—L. & N. Sou.
S of H—Mules and elec. locos. Track gage 40 inches.
S of M—4 shortwall machs.
PP—2 water tube boilers, 300 H. P. Transformer, 2300 440 volts A. C., M. G. Sets, 250 volts D. C., 3 pumps.
EMP—150. Last years tonnage 62,000.
SIZES SHIPT—Run of Mine, Slack, Lump, Block.
PREP. EQUIPT—Gravity Screens.

PRUDEN COAL & COKE CO.

General Office, Knoxville, Tenn.
PR—V. N. Hacker, Knoxville, Tenn.
VP—C. A. Griffith, Pruden, Tenn.
TR—J. P. Gaut, Knoxville, Tenn.
GM—C. A. Griffith, Pruden, Tenn.
GS—C. A. Griffith, Pruden, Tenn.
PA—W. R. Harlin, Pruden, Tenn.
EM—J. C. Richardson, Middlesboro, Ky.

EE—D. S. Winchester and H. M. Snelling, Pruden, Tenn.
SCO—Address the Company, Buyer, W. B. Harlin, Pruden, Tenn.

Pruden, Back Creek and Valley Creek Mines; Drift; Mingo Seam, 84 in. thick.
PO—Pruden, Tenn.; SP—Same; CTY—Claiborne; RR—L. & N. Sou.
MS—R. C. Speaks, Pruden, Tenn.
S of H—14 trolley pole type locos. Track gage 44 in.
S of M—6 shortwall machs.
PP—4—150 H. P. return tube boilers, 1—500 K. W. gen. unit, 1—200 K. W. turbine, 250 volts D. C., 3 pumps.
EMP—260. Daily tonnage 1,400.
SIZES SHIPT—Run of Mine.

PRUDENTIAL COAL CO.

Out of business.

QUEEN & CRESCENT COAL CO.

Now Kresge Coal & Mining Company.

RACCOON COAL CO.

General Office, 602 James Bldg., Chattanooga, Tenn.
PR—E. W. Virden, Gilmann, Ia.
VP—E. D. LaPlant, Cedar Rapids, Ia.
TR—G. F. Stansberry, Gilmann, Ia.
GM—W. L. Weaver, Chattanooga, Tenn.
GS—A. W. Welby, St. Elmo, Tenn.
PA—W. L. Weaver, Chattanooga, Tenn.
SCO—Raccoon Co. Commissary, Buyer, W. L. Weaver, Chattanooga, Tenn.

Raccoon Mine; Drift; Seam, 40 in. thick.
PO—K. F. D. No. 4, St. Elmo, Tenn.; SP—Chattanooga, Tenn.; CTY—Marion.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
EMP—35.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.

RED ASH COAL COMPANY

General Office, Knoxville, Tenn.
PR—C. M. Moore, Knoxville, Tenn.
VP—W. T. Gallagher, Kingston, Tenn.
TR—G. E. Moore, Caryville, Tenn.
GM—G. E. Moore, Caryville, Tenn.
PA—G. E. Moore, Caryville, Tenn.
EM—G. W. Wendling, Coal Creek, Tenn.
EE—C. M. Andrews, Caryville, Tenn.
SCO—Address the Company, Buyer, G. E. Moore, Caryville, Tenn.

Red Ash Mine; Drift; Red Ash Seam, 36 in. thick.
PO—Caryville, Tenn.; SP—Same; CTY—Campbell; RR—Southern.
S of H—Trolley pole type locos. Track gage, 42 in.
S of M—Chain breast type and longwall machs.
PP—2 water tube boilers, total 300 H. P., gen. units, 250 volts D. C., 3 pumps.
EMP—100. Last years tonnage 52,000.
SIZES SHIPT—Run of Mine, Slack, Lump, Block.
PREP. EQUIPT—Shaker Screens.

RELIANCE COAL & COKE CO.

General Office, Hartranft, Tenn.
PR—Daniel Cooper Swab, Hartranft, Tenn.
GM—Daniel Cooper Swab, Hartranft, Tenn.
GS—Daniel Cooper Swab, Hartranft, Tenn.
PA—A. H. Wright, Hartranft, Tenn.
EE—Daniel S. Whitman, Hartranft, Tenn.
SCO—Address the Company; Buyer, A. H. Wright, Hartranft, Tenn.

Reliance No. 1 Mine; Drift; Mingo or Mason Seam, 60 in. thick.
PO—Hartranft, Tenn.; SP—Exp. Middlesboro, Ky.; CTY—Claiborne; RR—Southern, L. & N.
S of H—Rope. Track gage, 36 in.
S of M—Hand.
PP—Power purchased, transformer 4000-110-220 volts A. C., rotary converters, 250 volts D. C., 2 pumps.
EMP—50. Daily output, 250 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

Reliance No. 2 Mine; Drift; Sandstone Parting Seam, 66 in. thick.
PO—Hartranft, Tenn.; SP—Exp. Middlesboro, Ky.; CTY—Claiborne; RR—Southern, L. & N.
S of H—Mules. Track gage, 44 in.
S of M—Hand.
EMP—25. Daily output, 150 tons.
SIZES SHIPT—Run of Mine.

No. 3 Mine; Drift; Poplar Lick Seam, 60 in. thick.
PO—Hartranft, Tenn.; SP—Exp. Middlesboro, Ky.; CTY—Claiborne; RR—Southern, L. & N.
S of H—Mules. Track gage, 44 in.
S of M—Hand.
SIZES SHIPT—Run of Mine.

RICH MOUNTAIN COAL CO.

General Office, Knoxville, Tenn.
PR—T. P. Witherspoon, Knoxville, Tenn.
VP—G. G. Groley, Bennett, Tenn.
TR—E. R. Davis, Knoxville, Tenn.
GM—G. G. Groley, Bennett, Tenn.
GS—Luther Phyllis, Bennett, Tenn.
SCO—Address the Company, Buyer, W. A. Boy, Bennett, Tenn.
SA—Witherspoon Coal Co., Knoxville, Tenn.

Rich Mountain Mine; Drift, Seam, 34 inches thick.
PO—Bennett, Tenn.; SP—Hahersham, Tenn.; CTY—Campbell; RR—L. & N.
S of H—Mules, rope and gasoline loco.
Track gage 42 inches.
S of M—Hand and comp. air puncher.
PP—3 100 H. P. water tube boilers.
EMP—125. Daily tonnage 300.
SIZES SHIPT—Run of Mine, Slack, Lump, Block.
PREP. EQUIPT—Shaker Screens.
NOTE—Formerly operated by the Rich Mountain Coal & Coke Co.

RICH MOUNTAIN COAL & COKE CO.

Now operated by the Rich Mountain Coal Company.

RIDDLE COAL CO.

General Office, Chattanooga, Tenn.
PR—R. J. Riddle, Chattanooga, Tenn.
VP—D. S. Riddle, Chattanooga, Tenn.
TR—S. W. Riddle, Chattanooga, Tenn.
GM—D. S. Riddle, Chattanooga, Tenn.
GS—W. C. Torre, Oneida, Tenn.

Fogal Mine; Drift; Blue Gem Seam, 36 in. thick.
PO—Oneida, Tenn.; SP—Same; CTY—Scott; RR—Tenn.
MS—J. L. Thomson, Oneida, Tenn.
S of H—Mules.
S of M—Chain breast type mach.
PP—2 pumps.
EMP—45. Daily tonnage 75.
SIZES SHIPT—Run of Mine, Slack, Lump, Block.
PREP. EQUIPT—Gravity Screens.
NOTE—Formerly operated by the Terry-West Coal Company.

ROACH CREEK COAL COMPANY

General Office, 4 East 9th St., Cincinnati, O.
PR—Orville K. Jones, Cincinnati, O.
VP—Leo B. Townsend, Cincinnati, O.
TR—Carl Slough, Cincinnati, O.
GM—Leo B. Townsend, Cincinnati, O.
EM—Leo B. Townsend, Cincinnati, O.
Roach Creek Mine; Drift and Slope; Jellico Seam, 60 in. thick.
PO—Norma, Tenn.; SP—Same; CTY—Scott; RR—Tenn.
S of H—Elec. storage battery and gasoline loco.
S of M—Electric puncher, chain breast, longwall and overcutter machs.
PP—Generate power.
SIZES SHIPT—Run of Mine, Slack.
PREP. EQUIPT—Revolving Screens, Pick-

ROGERS COAL MINING COMPANY

General Office, Clairfield, Tenn.
PR—W. N. Day, Lone Mountain, Tenn.
VP—M. R. Carr, Tazewell, Tenn.
TR—W. N. Day, Lone Mountain, Tenn.
GM—Dillard Smith, Clairfield, Tenn.
GS—Dillard Smith, Clairfield, Tenn.
PA—W. N. Day, Lone Mountain, Tenn.
SCO—Address the Company, Buyer, Leonard Baird, Clairfield, Tenn.
SA—Superior Coal Co., Knoxville, Tenn.

Rogers Mine; Drift; Jellico Seam, 32 in. thick.
PO—Clairfield, Tenn.; SP—Same; CTY—Clairborne; RR—Southern, L. & N.
MS—Frank Lett, Clairfield, Tenn.
SM—J. F. Simpson, Clairfield, Tenn.
S of H—Mules. Track gage 44 in.
S of M—Hand.
EMP—50. Daily tonnage 100.
SIZES SHIPT—Run of Mine, Slack, Lump, Block.
PREP. EQUIPT—Gravity Screens.

ROSEDALE COAL COMPANY

General Office, Rosedale, Tenn.
PR—John F. Shea, Knoxville, Tenn.
VP—A. J. Thompson, Rosedale, Tenn.
TR—G. E. Thompson, Rosedale, Tenn.
GM—W. P. Shea, Knoxville, Tenn.
GS—A. J. Thompson, Rosedale, Tenn.
PA—G. E. Thompson, Rosedale, Tenn.
EMP—J. C. Laird, Harriman, Tenn.
SCO—Address the Company, Buyer, G. E. Thompson, Rosedale, Tenn.
SA—C. K. Goodson Co., Oliver Springs, Tenn.

No. 1 Mine; Drift; Jellico Seam; 48 inches thick.
PO—Rosedale, Tenn.; SP—Same; CTY—Anderson; RR—Tenn. to Oneida, via Sou. R. R.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—1 20 H. P. fire tube boiler, 2 pumps.
EMP—100. Daily tonnage 250.
SIZES SHIPT—Run of Mine.

ROWE, JNO. A.

Andies Ridge and Middle Mines.
PO—Coal Creek, Tenn.; CTY—Anderson; RR—Southern.
MS—Jno. A. Rowe, Coal Creek, Tenn.
EMP—25.
No report.

SCOTTEN COAL COMPANY

General Office, 1016 Woodward Bldg., Bham, Ala.
PR—Emile Godchaux, New Orleans, La.
VP—R. C. Milling, New Orleans, La.
TR—J. M. Gore, New Orleans, La.
GM—D. B. Gore, New Orleans, La.
SCO—Scotten Coal Co., Inc., Bham, Ala.
Buyer, W. T. Ellis, Helenwood, Ala.
SA—Louisiana-Alabama Coal Co., Bham, Ala.

Scotten Mine; Drift; No. 4 Seam, 58 inches thick.
PO—Helenwood, Tenn.; SP—Same; CTY—Scott; RR—Southern.
MS—C. B. Sittman, Helenwood, Tenn.
S of H—Mules, steam locos. Track gage 36 inches.
S of M—Hand.
EMP—80. Daily tonnage 225.
SIZES SHIPT—Run of Mine, Slack, Lump, Block.
PREP. EQUIPT—Bar Screens, long Tables, Loading Booms.

SEWANEES FUEL & IRON CO.

General Office, Coalmont, Tenn.
PR—John E. Patton, Coalmont, Tenn.
VP—J. H. Northcutt, Altamont, Tenn.
TR—J. M. Adams, Coalmont, Tenn.
GM—John E. Patton, Coalmont, Tenn.
GS—James A. Sweeten, Coalmont, Tenn.
PA—J. M. Adams, Coalmont, Tenn.
EM—W. A. Patton, Coalmont, Tenn.
EE—W. B. Hollingsworth, Coalmont, Tenn.
SCO—Coalmont; Buyer, Hilt Cenger, Coalmont, Tenn.
SA—Sewanees Coal Company, Chattanooga, Tenn.

"B" Mine; Drift; Sewanee Seam, 36 in. thick.
PO—Coalmont, Tenn.; SP—Same; CTY—Grundy; RR—N. C. & St. L.
S of H—Mules and combination loco. Track gage, 26 in.
S of M—Hand.
PP—3 60 H. P. fire tube boilers, gen. units, 220 volts D. C., 4 pumps.
EMP—119. Last fiscal year output, 77,324 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
PREP. EQUIPT—Revolving and Shaker Screens, Washeries.

"S" Mine; Drift; Sewanee Seam, 40 in. thick.
PO—Coalmont, Tenn.; SP—Same; CTY—Grundy; RR—N. C. & St. L.
S of H—Mules and gasoline locos. Track gage, 26 in.
S of M—Hand.
PP—1 pump.
EMP—91. Last fiscal year output, 73,321 tons.
SIZES SHIPT—Run of Mine, Pea.
PREP. EQUIPT—Gravity Screens.

SHAW COAL MINING CO., THE

General Office, Newland, Tenn.
PR—J. S. Shaw, Atlanta, Ga.
VP—J. T. Shaw, Knoxville, Tenn.
TR—I. F. Jennings, Newland, Tenn.
GM—J. T. Shaw, Knoxville, Tenn.
GS—J. T. Shaw, Knoxville, Tenn.
PA—I. F. Jennings, Newland, Tenn.
EM—J. S. Shaw, Atlanta, Ga.
SCO—Address the company, Buyer, J. F. Jennings, Newland, Tenn.

Shaw Mine; Drift; State and Dean Seam, 48 inches thick.
PO—Newland, Tenn.; SP—Norma, Tenn.; CTY—Scott; RR—Tenn.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—40. Last years tonnage 15,000.
SIZES SHIPT—Run of Mine, Slack, Lump, Block.
PREP. EQUIPT—Gravity Screens.

SIGNAL MOUNTAIN COAL MINING CO.

General Office, 1220-21 James Building, Chattanooga, Tenn.
PR—G. P. Meehan, Chattanooga, Tenn.
VP—F. M. Crossman, New York, N. Y.
TR—M. G. Y. Forman, Chattanooga, Tenn.
GM—L. S. Berg, Chattanooga, Tenn.
SECY—L. S. Berg, Chattanooga, Tenn.
PA—L. S. Berg, Chattanooga, Tenn.
EM—L. A. Carden, Chattanooga, Tenn.
SCO—Address the company, Buyer, L. S. Berg, Chattanooga, Tenn.

Signal Mountain Mine; Drift; No. 10 Seam, 33 to 55 in. thick.
PO—Montlake, Tenn.; SP—Same; CTY—Hamilton; RR—C. N. O. & T. P.
MS—L. A. Carden, Montlake, Tenn.
SM—Wm F. Hodges, Montlake, Tenn.
S of H—Mules, rope and 1 storage battery loco. Track gage 36 in.
S of M—Hand.

PP—1 110 H. P. and 2 10 H. P. fire tube boilers, 2 pumps.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by the Suck Creek Coal Co.

SLOPEWELL COAL CO.

General Office, Whiteside, Tenn.
VP—J. C. Higdon, Whiteside, Tenn.
GM—H. R. Bond, Whiteside, Tenn.
GS—J. C. Clause, Whiteside, Tenn.
SA—U. S. Fuel Corp., Chattanooga, Tenn.

Rony Mine; Drift.
PO—Whiteside, Tenn.; SP—Same; CTY—Marion; RR—N. C. & St. L.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
SIZES SHIPT—Run of Mine.

SOUTH FORK COAL COMPANY.

General Office, Zenith, Tenn.
TR—L. S. Kuehn, Zenith, Tenn.
GM—L. S. Kuehn, Zenith, Tenn.
EM—L. S. Kuehn, Zenith, Tenn.
SCO—Address the Company, Buyer, Ora Thompson, Zenith, Tenn.
SA—South Fork Coal Co., Chattanooga, Tenn.

Zenith Mine; Slope; Seam 31 in. thick.
PO—Zenith, Tenn.; SP—Same; CTY—Fentress; RR—O. & W., C. N. O. & T. P.

MS—T. F. Vahle, Zenith, Tenn.
S of H—Mules. Track gage 42 in.
S of M—Hand and shortwall machs.
PP—1—150 H. P. fire tube boiler, 1—125 K. W. gen. unit, 250 volts D. C.
EMP—10. Daily tonnage 60.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Bar Screens.

SOUTHERN CLAY MFG. CO.

General Office, Chattanooga, Tenn.
PR—W. M. Lasley, Chattanooga, Tenn.
VP—W. C. Brown, Chattanooga, Tenn.
TR—W. C. Brown, Chattanooga, Tenn.
GM—J. D. Harvey, Chattanooga, Tenn.
PA—E. Britton, Chattanooga, Tenn.
SCO—Southern Clay Mfg. Co., Buyer, J. H. Hargroves, Robbins, Tenn.
SA—J. D. Harvey, Chattanooga, Tenn.

Robbins Mine; Drift; Seam 30 in. thick.
PO—Robbins, Tenn.; SP—Same; CTY—Scott; RR—C. N. O. & T. P.
MS—John Ott, Robbins, Tenn.
S of H—Mules and 2 steam locos. Track gage 36 in.
S of M—4 electric punchers.
PP—4 fire tube boilers, total 500 H. P., gen. unit, 220 volts A. C., 5 pumps.
EMP—300. Last years tonnage 20,000.
SIZES SHIPT—Run of Mine.

SPLINT JELICO COAL CORP.

General Office, Elk Valley, Tenn.
PR—C. R. Baird, Jellico, Tenn.
VP—M. E. Baird, Jellico, Tenn.
GM—S. C. Davenport, Elk Valley, Tenn.
GS—S. C. Davenport, Elk Valley, Tenn.
SCO—Splint Jellico Coal Corp. Commissary, Buyer, A. D. Gwin, Elk Valley, Tenn.
SA—Cumberland Coal Co., Knoxville, Tenn., and Southern Jellico Coal Co., Jellico, Tenn.
Splint and Jellico Mine; Drift; Splint and Jellico Seam, 30 inches thick.
PO—Elk Valley, Tenn.; SP—Same; CTY—Campbell; RR—Southern.
S of H—Mules and steam loco.
S of M—Hand.
EMP—50. Daily tonnage 150.
SIZES SHIPT—Run of Mine, Nut, Block.
PREP. EQUIPT—Shaker Screens.

STANDARD JELICO MINING COMPANY

Now New Standard Jellico Mining Co.

STANLEY-WEST COAL COMPANY

General Office, Oneida, R. 1, Tenn.
GM—Alfred West, Oneida, R. 1, Tenn.
Griffith Mine; Drift.
PO—Oneida, Tenn.; SP—Togal, Tenn.; CTY—Scott; RR—Tenn.
MS—Alfred West, Oneida, R. 1, Tenn.
S of H—Mules.
EMP—20. Last years tonnage 5,000.
SIZES SHIPT—Run of Mine.

STAU COAL COMPANY

General Office, Tracy City, Tenn.
PR—C. E. Werner, Tracy City, Tenn.
VP—John P. Staub, Knoxville, Tenn.
TR—G. M. Thorogood, Cowan, Tenn.
GM—J. K. Werner, Tracy City, Tenn.
GS—Wm P. Hays, Tracy City, Tenn.
CE—E. M. Jones, Chattanooga, Tenn.

Daisy Mine; Slope; Nos. 5, 7 and 10 Seam, 36 in. thick.
PO—Daisy, Tenn.; SP—Millsback, Tenn.; CTY—Hamilton, RR—C. N. O. & T. P.
S of H—Mules. Track gage 36 in.
S of M—Hand.
SIZES SHIPT—Run of Mine.

STERLING COAL & COKE CO.

General Office, Maunring, Tenn.
PR—J. P. Tomblin, Maunring, Tenn.
VP—R. A. Hugan, Maunring, Tenn.
TR—M. G. Hubbard, Maunring, Tenn.
GM—M. G. Hubbard, Maunring, Tenn.
PA—M. G. Hubbard, Maunring, Tenn.
EMP—J. C. Richardson, Middleboro, Ky.
SCO—Address the Company; Buyer, Robt. Johns, Maunring, Tenn.

Sterling Mine; Drift; Sterling Seam, 48 in. thick.
PO—Maunring, Tenn.; SP—Middleboro, Ky.; CTY—Clairborne; RR—Southern.
MS—T. C. Miller, Maunring, Tenn.
S of H—Mules and 8 trolley pole type loco. Track gage, 44 in.
S of M—4 shortwall machs.
PP—Power purchased, transformer 4100—250 volts A. C., rotary converters, 250 volts D. C., 6 pumps.
EMP—200.
SIZES SHIPT—Slack, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables.

SUCK CREEK COAL COMPANY

Now operated by the Signal Mountain Coal Co.

SUN COAL CO.

General Office, Caryville, Tenn.
PR—A. G. Hill, Beaver Dam, Wis.
VP—A. Zander, Beaver Dam, Wis.
TR—M. A. Jacobs, Beaver Dam, Wis.
GM—J. H. Bowling, Lexington, Ky.
GS—Wm. Alverson, Caryville, Tenn.
PA—H. S. Russell, Caryville, Tenn.
CE—George W. Wendling, Coal Creek, Tenn.
EE—W. R. Bemor, Caryville, Tenn.
SCO—Address the Company; Buyer, H. S. Russell, Caryville, Tenn.
SA—Southern Coal & Coke Co., Knoxville, Tenn. and Cincinnati, O.

Sun Mine; Drift; Red Ash Seam, 42 in. thick.
PO—Caryville, Tenn.; SP—Same; CTY—Campbell; RR—Southern.
S of H—Trolley pole type loco. Track gage 36 in.
S of M—5 shortwall machs.
PP—3 fire tube boilers, 50 H. P., transformer 2300 volts A. C., 400 K. W. M. G. Sets, 250 volts D. C.
EMP—200. Last years tonnage 100,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens.

TENNESSEE COAL, IRON & RAILROAD CO.

General Office, Birmingham, Ala.
1 Mine in Tenn., 20 Mines in Ala.
PR—George C. Crawford, Birmingham, Ala.
TR—L. T. Beecher.
VP—H. C. Rydberg, Birmingham, Ala.
SECY—L. T. Beecher, Birmingham, Ala.
PA—Geo. H. Gray.
AUDITOR—F. R. Winslow, Birmingham, Ala.
GM—Edwin Ball, Birmingham, Ala.
Chief Elevator—F. Elliott, Ensley, Ala.
General Manager of Sales—William Wilson, Birmingham, Ala.

Whitwell Mine; Drift; Sewanee Seam, 40 in. thick.
PO—Whitwell, Tenn.; SP—Same; CTY—Marion; RR—N. C. & St. L.
MS—W. A. Meagher, Whitwell, Tenn.
S of H—8 elec. loco.
S of M—Hand.
PP—Gen. units, 2300 volts A. C., 250 volts D. C., 3 pumps.
EMP—369. Last fiscal year output, 261,105 tons.
Old Information.

TENNESSEE CONSOLIDATED COAL CO.

General Office, Tracy City, Tenn.
PR—E. L. Hampton, Tracy City, Tenn.
VP—R. R. Roberts, Tracy City, Tenn.
TR—Preston Lunsford, Tracy City, Tenn.
GM—E. L. Hampton, Tracy City, Tenn.
GS—J. K. Custard, Palmer, Tenn.
PA—W. H. Buford, Tracy City, Tenn.
CE—P. L. Dyer, Birmingham, Ala.
EM—C. M. Dechant, Tracy City, Tenn.
EE—A. W. Long, Palmer, Tenn.

Palmer No. 1 Mine; Drift; Seam, 45 in. thick.
PO—Palmer, Tenn.; SP—Same; CTY—Grundy; RR—N. C. & St. L.
SM—D. H. Bennett, Palmer, Tenn.
S of M—Hand.
PP—2 150 H. P. fire tube boiler, 1—300 K. W. gen. units, M. G. Sets, 250 volts D. C., 10 pumps.
EMP—800. Daily tonnage 1,600. Coke Run, 60 Rec Hise.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.

TENNESSEE JELICO COAL CORPORATION

General Office, Knoxville, Tenn.
PR—L. I. Coleman, Knoxville, Tenn.
VP—Earl S. Gwin, Cincinnati, O.
TR—E. H. Wedekind, Louisville, Ky.

(Continued on Next Page)

Tennessee Jellico Coal Corporation—Cont.

GM—L. J. Coleman, Empire Bldg., Knoxville, Tenn.
 GS—Jno. W. Howe, Jellico, Tenn.
 PA—Jos. Smiddy, Jellico, Tenn.

Tennessee Jellico Mine; Drift; Jellico Seam, 36 to 48 in. thick.
 PO—Anthracite, Tenn.; SP—Same; CTY—Campbell; RR—L. & N., Southern.
 MS—Wilky Brad n. Anthracite, Tenn.
 SM—Chas. Lambdin, Anthracite, Tenn.
 S of H—Mules, 1 gasoline loco. elec. motor. Track gage 40 in.
 S of M—3 shortwall machs.
 PP—150 H. P., 1 air comp.
 EMP—225. Last years tonnage 50,000.
 SIZES SHIPT—Run of Mine, Pea, Block.
 PREP. EQUIPT—Bar Screens.

TERRY-WEST COAL COMPANY

Now being operated by the Riddle Coal Co

THOMAS, O. E.

GIIP's Creek Mine.
 PO—Graysville, Tenn.; CTY—Rhea; RR—Southern.
 MS—W. M. Holden, Dayton, Tenn.
 No report.

TRACY CITY COAL COMPANY.

PR—S. W. Chambliss, Chattanooga, Tenn.
 TR—E. W. Nuff, Tracy City, Tenn.
 GM—John Flanagan, " "
 PA—John Flanagan, " "
 EM—W. R. Brown, Chattanooga, Tenn.
 SCO—Tracy City Commissary Store; Buyer, W. R. Curtiss, Tracy City, Tenn.

Freemont Mine; Drift; Sewanee Steam Coal Seam, 42 in. thick.
 PO—Tracy City, Tenn.; SP—Same; CTY—Grundy; RR—N. C. & St. L., Campbell Br.
 MS—W. R. Barton, Coalmont, Tenn.
 SIZES SHIPT—Run of Mine.
 (Old Information)

TRIO COAL COMPANY, INC.

General Office, Chattanooga, Tenn.
 PR—A. M. Tompkins, Chattanooga, Tenn.
 VP—R. S. Forney, Chattanooga, Tenn.
 TR—E. L. Davis, Chattanooga, Tenn.
 GM—A. M. Tomlinson, Chattanooga, Tenn.
 GS—E. L. Davis, Chattanooga, Tenn.
 TR—E. L. Davis, Chattanooga, Tenn.
 SA—E. L. Davis, Chattanooga, Tenn.

Trio Mine; Drift; Glen Mary Seam; 36 inches thick.
 PO—R. D. No. 1, Glenn Mary, Tenn.; SP—Frt., Huffman, Tenn.; Exp., Sunbright, Tenn.; CTY—Morgan; RR—C. N. O. & T. P.
 S of H—Mules and 1 steam loco. Track gage 36 in.
 S of M—Hand.
 EMP—20. Daily tonnage 50.
 SIZES SHIPT—Run of Mine, Slack, Lump, Block.
 PREP. EQUIPT—Screens.

VASPER COAL MINING CO.

Vasper No. 1 Mine; Coal Creek Seam, 40 in. thick.
 PO—Vasper, Tenn.; CTY—Campbell; RR—L. & N.
 MS—J. Hendron, Vasper, Tenn.
 EMP—146.
 No report.

VERMILION, C. C.

General Office, Jellico, Tenn.
 PR—C. C. Vermillion, Jellico, Tenn.
 TR—C. C. Vermillion, Jellico, Tenn.
 GM—C. C. Vermillion, Jellico, Tenn.
 GS—C. C. Vermillion, Jellico, Tenn.
 PA—C. C. Vermillion, Jellico, Tenn.
 CE—B. L. Lloyd, Jellico, Tenn.
 SA—East Tennessee Coal Co., Knoxville, Tenn.

East Tennessee Blue Gem Mine; Drift; Blue Gem Seam, 20 to 30 in. thick.
 PO—Jellico, Tenn.; SP—Same; CTY—Campbell; RR—L. & N. and Sou.
 S of H—Mules and 1 steam loco
 S of M—Hand.
 Last years tonnage 6,457.
 PREP. EQUIPT—Bar Screens.
 Old information.

VIRGINIA MINING COMPANY

PR—W. S. Glove, Danville, Ky.
 VP—L. E. Bryant, Roberta, Tenn.
 TR—D. E. Bryant, Danville, Ky.
 GM—L. E. Bryant, Roberta, Tenn.
 GS—L. E. Bryant, Roberta, Tenn.
 PA—L. E. Bryant, Roberta, Tenn.
 SCO—Address the Company, Buyer, L. E. Bryant, Roberta, Tenn.
 SA—Jas. C. Lee, 1021 Hamilton Natl. Bank Bldg., Chattanooga, Tenn.

Roberta Mine; Drift; No. 4 Gas Seam, 36 in. thick.
 PO—Roberta, Tenn.; SP—Winfield; CTY—Scott; RR—Southern Ky.
 S of H—4 elec. locos. Track gage 36 in.
 S of M—7 shortwall machs.
 PP—250 volts D. C., for haulage and pumping, 5 pumps.
 EMP—10. Last years tonnage 3,000.
 SIZES SHIPT—Run of Mine, Lump.
 PREP. EQUIPT—Gravity Screens.

Helenwood Mine; Drift and Stripping; No. 4 Seam.
 PO—Helenwood, Tenn.; SP—Same; CTY—Scott; RR—So. Ky.
 MS—L. E. Ryan, Helenwood, Tenn.
 SM—L. E. Ryan, Helenwood, Tenn.
 S of H—Mules, 1 steam loco. Track gage 36 in.
 S of M—Hand.
 PP—1 fire tube boiler, 20 H. P., 6 pumps.
 EMP—100. Last fiscal year output, 25,000 tons.
 SIZES SHIPT—Run of Mine, Block.
 PREP. EQUIPT—Gravity Screens.

WALDENSIA COAL & COKE CO.

General Office, Waldensia, Tenn.
 PR—E. F. Johnson, Chicago, Ill.
 VP—has. A. Goodman, Marinette, Wis.
 TR—K. F. Clew, Chicago, Ill.
 GM—W. F. Dibrell, Waldensia, Tenn.
 SCO—Waldensia Coal & Coke Co., Buyer, C. L. Kilgore, Waldensia, Tenn.

Waldensia No. 1 Mine; Slope; Sewanee Seam, 72-102 in. thick.
 PO—Waldensia, Tenn.; SP—Same; CTY—Cumberland; RR—Tenn. Central.
 MS—E. P. Melvin, Waldensia, Tenn.
 S of H—Mules and Rope. Track gage 30 in.
 S of M—Hand.
 PP—2—150 H. P., 1—100 H. P. boilers, 10 pumps.
 EMP—175. Last years tonnage 62,702.
 Coke Ovens, 90 Bee Hive.
 SIZES SHIPT—Run of Mine, Nut Slack.
 PREP. EQUIPT—Bar Screen, Washeries.
 NOTE—Successors to the Chicago-Tennessee Coal & Coke Co.

WELDON'S FORK COAL CO.

General Office, Knoxville, Tenn.
 PR—C. W. Henderson, Knoxville, Tenn.
 TR—John A. Rowe, Coal Creek, Tenn.
 GS—D. D. Hutson, Coal Creek, Tenn.
 SA—John A. Rowe, Coal Creek, Tenn.

Weldon's Fork Mine; Drift and Slope; Seam, 40 inches thick.
 PO—Coal Creek, Tenn.; SP—Same; CTY—Campbell; RR—Southern.
 S of H—Mules. Track gage 32 inches.
 S of M—8 shortwall and longwall machines.
 PP—Purchase power.
 EMP—30. Daily tonnage 50.
 SIZES SHIPT—Run of Mine.

WHITWELL COAL COMPANY

General Office, Whitwell, Tenn.
 PR—W. A. Meagher, Whitwell, Tenn.
 VP—James Dixon, Whitwell, Tenn.
 TR—S. L. Rogers, Jasper, Tenn.
 GM—W. A. Meagher, Whitwell, Tenn.
 GS—E. P. Taylor, Whitwell, Tenn.
 PA—W. A. Meagher, Whitwell, Tenn.
 CE—W. W. Gilbreath, Whitwell, Tenn.
 EM—John Wilson, Whitwell, Tenn.
 SCO—Wisemao & Co., Buyer, C. B. Wisemao, Whitwell, Tenn.
 SA—S. L. Rogers, Jasper, Tenn.

Morgansville Mine; Drift; Whitwell Seam, 42 in. thick.
 PO—Whitwell, Tenn.; SP—Condra, Tenn.; CTY—Marion; RR—N. C. & St. L.
 MS—John Lexton, Whitwell, Tenn.
 SM—W. E. Hargis, Whitwell, Tenn.
 S of H—Mules. Track gage 32 inches.
 S of M—Hand.
 PP—2 pumps.
 EMP—65. Last years tonnage 44,651.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.

WILFIELD COAL CO.

Wilfield Mine; Coal Creek Seam, 44 in. thick.
 PO—Pioneer, Tenn.; CTY—Campbell; RR—Southern.
 MS—John Willis, Pioneer, Tenn.
 EMP—10.
 No report.

WILLIAMS & VAN VOORHIS COMPANY.

General Office, Graysville, Tenn.
 Burchard No. 2 Mine; Slope; Nelson Seam, 60 in. thick.
 PO—Graysville, Tenn.; SP—Dayton, Tenn.; CTY—Rhea; RR—Sou.
 MS—John Burchard, Graysville, Tenn.
 S of H—Mules. Track gage 24 in.
 S of M—Hand.
 PP—Power purchased.
 EMP—10. Last years tonnage 4,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.

WIND ROCK COAL & COKE CO.

General Office, 1312 American Trust Bldg., Birmingham, Ala.
 PR—H. L. Radham, Birmingham, Ala.
 TR—W. A. Reed, Birmingham, Ala.
 GM—W. C. Hutcheson, Birmingham, Ala.
 GS—W. T. Badham, Wind Rock, Tenn.
 PA—W. T. Badham, Wind Rock, Tenn.
 EM—W. T. Badham, Wind Rock, Tenn.
 SCO—Wind Rock Store, Buyer, E. C. Siemknecht, Wind Rock, Tenn.
 Sales Mgrs.—H. L. Radham, Birmingham, Ala.; W. C. Hutcheson, Wind Rock, Tenn.

Wind Rock No. 1 Mine, Drift, Dean Seam, 42 to 72 in. thick.
 PO—Wind Rock, Tenn.; SP—Khotan, Tenn.; CTY—Anderson, RR—Louisville & Nashville, Coal Creek Br.
 MF—H. M. Duncan, Wind Rock, Tenn.
 S of H—8 elec. locos. and gravity. Track gage 42 in.
 S of M—Hand and 4 elec. chain machs., 11—2 water tube boilers, total 300 H. P. gen. units 250 volts D. C. and 2300 volts A. C., 3 phase 60 cycles, 3 pumps.
 EMP—200. Last fiscal year output 115,186 tons.
 SIZES SHIPT—Run of Mine.

WOOLDRIDGE JELICO COAL CO.

General Office, Wooldridge, Tenn.
 PR—P. Wooldridge, Louisville, Ky.
 TR—J. B. Brickey, Wooldridge, Tenn.
 GM—J. B. Brickey, Wooldridge, Tenn.
 GS—P. T. Neely, Wooldridge, Tenn.
 PA—J. H. Miller, Wooldridge, Tenn.
 EM—B. L. Lloyd, Jellico, Tenn.
 EE—L. Douglass, Wooldridge, Tenn.
 SCO—Address the Company, Buyer, J. H. Miller, Wooldridge, Tenn.
 SA—Jas. R. Wooldridge, Wooldridge, Tenn.

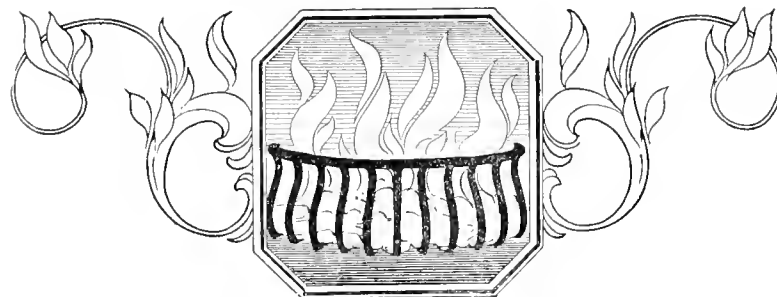
Marion-Anna & Washington Mines; Drift; Jellico & Blue Gem Seams, 39-24 in. thick.
 PO—Wooldridge, Tenn.; SP—Newcomb, Tenn.; CTY—Campbell; RR—Southern.
 S of H—Mules 1 elec. motor and 1 steam engine. Track gage 39 in.
 S of M—Hand and 5 machs.
 PP—2—150 H. P. fire tube boilers, gen. unit, 300 volts D. C., 2 pumps.
 EMP—75. Last years tonnage 23,870.
 SIZES SHIPT—Run of Mine, Slack, Lump, Block.
 PREP. EQUIPT—Gravity Screens.

WYNN COAL COMPANY.

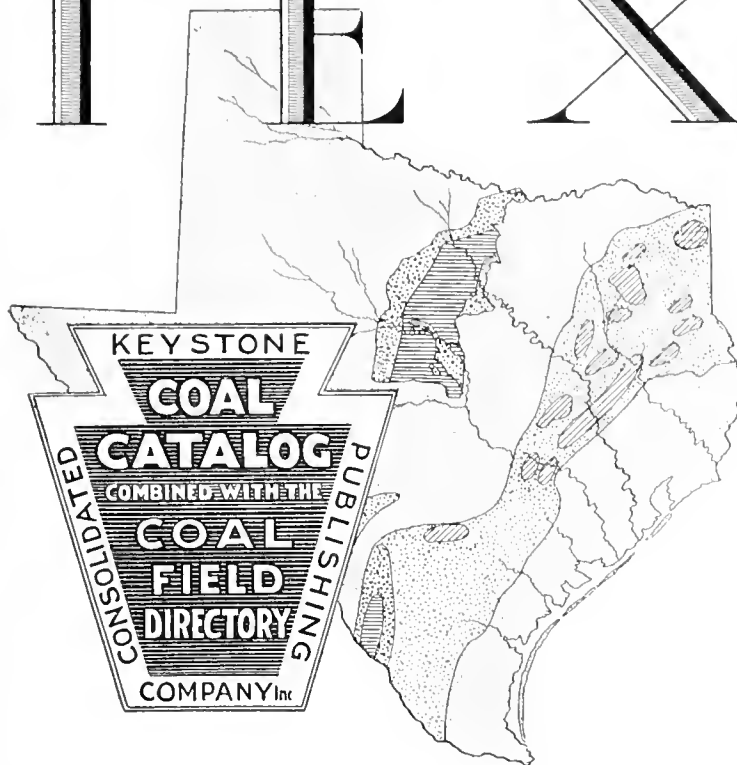
General Office, Cotula, Tenn.
 PR—A. J. Jones, Cotula, Tenn.
 VP—H. Wynn, Cotula, Tenn.
 TR—J. H. Tinsley, Cotula, Tenn.
 GM—J. H. Wynn, Cotula, Tenn.
 PA—J. H. Wynn, Cotula, Tenn.
 EE—Charles Coffee, Cotula, Tenn.
 SCO—Wynn Store Co., Buyer, C. E. Hollingsworth, Cotula, Tenn.
 SA—J. H. Tinsley, Cotula, Tenn.

No. 1 Mine; Drift; Rich Mountain Seam, 33-40 in. thick.
 PO—Cotula, Tenn.; SP—Same; CTY—Campbell; RR—L. & N.
 MS—J. H. Wynn, Cotula, Tenn.
 S of H—3 trolley pole type and 1 storage battery loco. Track gage 40 in.
 S of M—5 shortwall machs.
 PP—2 fire tube boilers, 200 H. P., 1 150 K. W., gen. unit, 250 volts D. C., 3 pumps.
 EMP—85.
 SIZES SHIPT—Run of Mine, Block.
 PREP. EQUIPT—Shaker Screens.

No. 2 Mine; Drift and Shaft; Jellico Seam, 32-40 in. thick.
 PO—Cotula, Tenn.; SP—Same; CTY—Campbell; RR—L. & N.
 MS—J. H. Wynn, Cotula, Tenn.
 S of H—Trolley pole locos. Track gage 40 in.
 S of M—2 shortwall machs.
 PP—2 fire tube boilers, 200 H. P., 1 100 K. W., gen. unit, 275 volts D. C., 1 pump.
 EMP—85.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens.



T E X A S



C O N T E N T S

Map of Mining Fields.....894

Geological Column of Coal Measures.....895

General Description of Coal Resources.....896

North-Central Field.....896

No. 1 Seam.....896

No. 7 Seam.....897

Laredo Field.....897

Eagle Pass Field.....897

Lignite Fields of Texas.....898

Preparation and Sizing of Coal.....898

Supplementary Analyses.....899, 900

List of Mines by Ranks of Coal.....901

Alphabetical Directory of Coal Mines....902 to 904

Map of Coal Fields

TEXAS



GEOLOGICAL COLUMN OF TEXAS COAL ^{AND} LIGNITE FIELDS.				
SERIES	GROUP	FORMATION	THICKNESS (FEET)	CHARACTER OF STRATA
EOCENE	CLAIBORNE	Jackson	400-500	Clays, sands, sandstones, shales and thin beds of lignite
		Frio	550-650	Clays and sands
		Fayette	400-600	Sands, sandstones, clays and thin beds of lignite. Houston, Nacogdoches and Shelby County Lignite Fields.
		Yegua	375-800	Clays, sands and thin beds of lignite.
		Cook Mountain	400-500	Clays, sands and thin beds of lignite
		Mount Selman	225-475	Sands, thin beds of iron-ore, lenses of lignite, clay and concretions of limonite.
		Queen City-Carrizo	50-200	Sands and Clays.
	WILCOX	Wilcox	800-1200	Sands, sandstones, clays, shales and thick beds of lignite-coal. Principal lignite seams of Texas. Rockdale, Bastrop, Leon, Henderson and Wood County Lignite Fields.
		Midway	200-400	Clays, sands and limestones.
UPPER CRETACEOUS	EAGLE PASS	Escondido Beds	400-600	Sands, sandstones, conglomerates interbedded with clays and rare layers of limestone.
		Coal Series	300-350	Clays, dark shales, sandstone, sub-bituminous coal beds. Eagle Pass Coal Field.
		San Miguel Beds	300-400	Sandstones, clays and shales.
		Upton Clay (Taylor Marls)	600-650	Clays, marls, sands, oil and gas. Corsicana, Mexia, Rockdale, Thrall and Somerset Oil and Gas Fields.
		Austin Chalk	400-750	Thick bedded, impure chalk interstratified with marly beds.
		Eagle Ford Beds	50-600	Clays, shales and limestones.
COMANCHEAN CRETACEOUS		Washita	100-300	Clays, marls and limestone.
		Fredericksburg	80-700	Clays and limestones.
		Trinity	600-900	Sands, sandstones, conglomerates and limestone.
PERMIAN		Albany	1000-1500	Red, bluish and gray-white sandstones, red concretionary clays, occasional blue shales and clay-ball conglomerate.
PENNSYLVANIAN		Cisco	700-800	Beds of blue clay, shales, sandstones, thin beds limestone, oil, gas and seams of bituminous coal. Electra, Petrolia and Burkburnett Oil Fields. New Castle Coal Field.
		Canyon	800-900	Bluish limestone, blue clay, reddish sandstone, conglomerate and thin seams of bituminous coal. Bridgeport Coal Field.
		Strawn	4000-5000	Sandstones, blue-clay, conglomerate and shales, oil, gas and several thin seams of bituminous coal. Strawn, Ranger and Breckenridge Oil Fields. Strawn and Thurber Coal Fields.

Bruce Gentry
Rockdale Series

TEXAS*

General Description of the Geology of the State With the Ranks of Coal Produced: Treats of the Mining Fields, With a Map Showing the Location of the Various Coals; Analyses; Etc.

The bituminous coal supply of Texas is taken at 8,000,000,000 tons and the total workable area at 8,200 square miles, with an additional area of 5,300 square miles that may contain available seams. The bituminous mines are located in Eastland, Erath, Maverick, Palo Pinto, Webb, Wise and Young counties; the lignite mines are in Bastrop, Hopkins, Houston, Lee, Leon, Medina, Milam, Henderson, Robertson, Titus, Nacogdoches and Wood counties. The yearly output is about 2,500,000 tons and is about equally divided between the lignite and bituminous coals. Union labor is largely employed in the bituminous field; in the lignite fields the labor is generally Mexican and negro.

The coal fields of Texas are varied in character and widely distributed. They belong to the Carboniferous, Cretaceous and Eocene geological periods, and represent all gradations between soft brown lignites and a good grade of bituminous coal. There are four areas:

- 1 The Carboniferous deposits, lying in the north-central portion of the state, about 150 miles northwest of Austin. The coal here is of bituminous rank and is approximately 11,000 square miles in extent, comprising the producing counties of Eastland, Palo Pinto, Erath, Wise and Young.
- 2 The Cretaceous deposits, confined to a rather small area in the vicinity of Eagle Pass in Maverick county. The coal here is of sub-bituminous rank.
- 3 The Eocene deposits of both subbituminous and lignitic rank, and extending in a broad belt across the state from the southwest corner of Arkansas to the Rio Grande. Except in Webb and Dimmitt counties, all these deposits consist of lignite which have been
- worked in many different localities but not extensively in any one place. The coal beds of this period cover an area of 60,000 square miles, but are irregular in thickness and occurrence and cannot be traced or correlated from district to district. For this reason many of the coal beds have not been specifically named. In Webb and Dimmitt counties the Eocene contains deposits of a good grade of subbituminous coal which possesses many of the characteristics of cannel. The production comes almost altogether from Webb county.
- 4 A series of small disconnected areas in western Texas of little present importance.

There are three generally recognized mining fields:

NORTH-CENTRAL FIELD

This division includes the counties of Brown, Coleman, Comanche, Erath, Eastland, Jack, McCulloch, Palo Pinto, Parker, San Saba, Shackelford, Stephens, Wise and Young. It comes south of the Colorado River in McCulloch and San Saba counties. Its coal is of Carboniferous age and bituminous rank. It is entered by the following railroads: Texas & Pacific; Texas Central; Chicago, Rock Island & Gulf; Fort Worth & Denver; Fort Worth & Rio Grande (Frisco); Gulf, Colorado & Santa Fe; Wichita Falls & Southern; Mineral Wells & Northwestern; Stephenville, North & South Texas; Gulf, Texas & Western.

This field produces by far the greatest proportion of the coal mined in Texas, one county alone, Erath, yielding more than 50 per cent of the entire output of the state. The known coal-bearing strata are confined to the central part of the field.

Structurally this field is a simple monoclinical fold with a prevailing low but variable dip to the west and northwest. The seams of coal are not thick, no single bench running more than 24 inches. Nearly all of the output is used for railroad purposes, the remainder going to stationary boilers. But little of it is used for domestic fires, and no coke is made, although some of the coals are capable of yielding a coke of fair strength, but high

in ash and comparatively high in sulphur. No attempt has been made to wash these coals in a modern plant, and it appears probable that the loss in coal would be excessive, as there is not much difference between the density of the coal and the non-coal.

There are three workable coal beds found in the North-Central field: the lowest of these is known as No. 1 Seam; the highest is known as No. 7 Seam; the bed lying between, about 100 feet beneath No. 7 Seam, is known as the Chaffin seam. No coal is being produced from the last-named seam at this time.

No. 1 Seam

This is the lowest coal in the Texas field, and it occurs at the top of the Millsap formation, about 1,000 feet above the base of the Coal Measures. It is mined at Thurber, Strawn, Rock Creek and Bridgeport. So far as it has been prospected or mined this coal bed is found to be continuous, though changing in thickness along its outcrop,

*Information on Texas coals here presented has been gathered from the 22nd Annual Report, U. S. G. S.; Bulletin 207 and 365 of the University of Texas; and the description of Texas coals by Dr. Heinrich Ries in *Mines and Minerals*, Vol. 26, pg. 104, and by Prof. B. L. Miller in *Coal Age*, Vol. 4, pg. 260.

through a distance of about 80 miles. The very low dip of the rocks and the general level surface of the country give an area of several hundred square miles of accessible coal.

In Wise county, at its northernmost occurrence, this bed varies from 11 to 26 inches in thickness. In western Parker county the bed is 18 to 26 inches in thickness, with an average of 22 inches. At the Strawn mines, in southern Palo Pinto county, the coal is 26 inches, and in the Thurber mines, at the southern end of the coal outcrop in northern Erath county, it has an average thickness of 28 inches.

With very few exceptions both the roof and floor of the coal are shale, which has sufficient hardness to admit of the coal being successfully mined. The railroads take most of the coal produced from this seam.

GENERAL ANALYSIS

	Wise County	Erath County
Moisture	12.50	5.25
Volatile Matter	32.50	34.00
Fixed Carbon	42.25	45.75
Ash	12.75	15.00
Sulphur	1.75	2.00
B. t. u.	12,000	12,600

No. 7 Seam

This coal occurs in the Cisco group, about 300 feet above its base. The outcrop of the coal has been traced through the field from the vicinity of Waldrip, in McCulloch county, to Bowie, in Montague county, a distance of 250 miles. The

structure of this coal and its associated beds is practically the same as of the No. 1 Seam, i. e., the rocks dip at very low angles toward the west and northwest, so that the coal may be mined successfully for a distance of several miles from the outcrop.

It has been prospected and mined for local use in all of the eight counties in which it occurs. The coal has been opened for commercial purposes in southern Coleman county, near Bowie in Montague county, and at Cisco in Eastland county, but most of the operations have ceased. It has a thickness varying from 12 to 42 inches, and, except at one or two localities where the coal is thinnest, it contains one and in places several layers of shale which require to be taken down and rejected in mining operations. In the Bowie mines the coal is about 40 inches thick and is separated near the middle by a 6-inch bed of shale. From Bowie to Cisco, southward through Jack, Young, Stevens and northern Eastland counties, the coal varies in thickness from 12 to 42 inches and contains one and sometimes several partings of shale. In the vicinity of Cisco the coal is 33 inches thick, but is separated by two bands of shale 4 to 20 inches in thickness.

GENERAL ANALYSIS

	Coleman County	McCulloch County
Moisture	6.00	4.55
Volatile Matter	37.75	38.50
Fixed Carbon	46.50	44.80
Ash	9.75	12.15
Sulphur	2.70	8.00

LAREDO FIELD

The Laredo field includes all of Webb county and extends also into Dimmitt and Zavala counties, but there are no commercial operations in these latter counties. The coal is of Tertiary age. It is of subbituminous rank and occurs in thin beds which outcrop in many places along the Rio Grande River and its tributaries flowing from the north. It has a lustrous appearance and breaks with a conchoidal fracture, contains much volatile matter and is more or less oily, similar to cannel coal, which it likewise resembles in its manner of burning. For this reason it is called a cannel coal by the United States Geological Survey and also by the state Bureau of Economic Geology. On exposure to the air it weathers slowly. It does not crumble readily, so there is little dust produced in mining or shipping. The strike of the seams is approximately parallel to the course of the Rio Grande River.

Although in most places there are several beds of coal, only two seams, the Santo Tomas and San Pedro, are of sufficient thickness to encourage development. The thickness of the Santo Tomas, which is the upper bed and lies at a depth of about 70 feet, averages 27 inches; that of the San Pedro, at a depth of about 160 feet, averages 24 inches. The coal in the two beds is similar and is used for railroad, steam and domestic purposes.

GENERAL ANALYSIS

Moisture	2.55
Volatile Matter	52.25
Fixed Carbon	35.45
Ash	9.75
Sulphur	2.15
B. T. U.	12,150

EAGLE PASS FIELD

This is a small field of triangular shape located in Maverick county and taking its name from Eagle Pass, where most of the mines are located. The coals are subbituminous of Cretaceous age. The coals here are lower in volatile matter and sulphur, and higher in ash and moisture than the Laredo coals, the fixed carbon being about the same. The seam mined is known as the Eagle Pass coal. It varies from 60 to 90 inches in thickness, but its steep dip soon brings it to so great a depth below the overlying sandstones and clays as to pre-

vent profitable working in a wide range of territory.

GENERAL ANALYSIS

Moisture	6.50
Volatile Matter	31.50
Fixed Carbon	46.40
Ash	15.60
Sulphur	1.85
B. t. u.	11,100

LIGNITE FIELDS OF TEXAS

The lignite area of Texas comprises nearly one-half of the entire known lignitic area in the United States and is almost as large as the entire state of Missouri, comprising an area of over 60,000 square miles. The original supply of lignite may be taken to have been in excess of 30,000,000,000 tons, and as it has scarcely been touched the supply of this fuel need occasion no anxiety for the next thousand years or so. There is found in Texas every known variety of lignite, from a material carrying but a few per cent of fixed carbon to nearly 45 per cent, and with from 30 per cent of volatile combustible matter to more than 76 per cent. Physically the lignites range from what is but little more than carbonized wood to a material almost like bituminous coal. In thickness the beds run to 15 feet and more, and are found from the surface to depths of 400 to 800 feet.

The counties in which workable beds of lignite occur are the following: Anderson, Angelina, Atacosa, Bastrop, Bowie, Brewster, Caldwell, Camp, Cass, Cherokee, Dimmitt, Fayette, Freestone, Grimes, Harrison, Henderson, Hopkins, Houston, Jasper, Lee, Leon, Limestone, McMullen, Marion, Medina, Milan, Morris, Nacogdoches, Newton, Panola, Rains, Robertson, Rusk, Sabine, San Augustine, Shelby, Smith, Titus, Upshur, Van Zandt, Webb, Wood and Zavalla. The producing counties amongst these are: Bastrop, Fayette, Henderson, Hopkins, Houston, Leon, Medina, Milam, Rains, Robertson, Van Zandt and Wood.

In a general way, workable lignite is found in all that part of Texas lying east of the 97th meridian of west longitude and north of the 31st degree of north latitude, but there are important areas outside of these boundaries.

In the year 1892, Mr. E. T. Dumble, State Geologist, issued a comprehensive and valuable report on Brown Coal and Lignite, and this still remains the chief source of information as to the geology and occurrence of lignite in Texas. Mr. Dumble classed the lignite deposits as belonging to the Tertiary formation. They occur in the Gulf slope, from the Red River to the Rio Grande, in an area 650 miles in length and 200 miles in width. He says that the greater amount of the deposits are found in the Eocene series of the Tertiary, and

in the following divisions: Fayette, Yegua and Timber Belt.

The lowest deposits are in the Timber Belt series, and this contains the heaviest and best beds. This series is especially developed in the counties extending southwest from Bowie county, on the Red River, such as Cass, Marion, Harrison, Morris, Titus, Hopkins, Camp, Upshur, Woods, Rains, Van Zandt, Smith, Henderson, Anderson, Freestone, Limestone, Leon, Robertson, Milam, Lee, Bastrop and Caldwell.

The Yegua division, including the lower portion of the Fayette beds, is divided into three sections, viz., East Texas, Brazos River and Rio Grande.

The Fayette division of the Tertiary, comprising the uppermost beds of the lignite-bearing Eocene, he divides into four sections, viz., East Texas, Brazos River, Colorado River and Rio Grande.

The greater part of the Texas lignites is consumed by steam plants, the remainder being used in domestic fires and in gas producers. None is used unmixed in locomotives and none briquetted. Tests made at St. Louis show that Texas lignite, when used in the gas producer in a dry state, will produce more power than the best West Virginia steam coals used under the boiler. This indicates the potential value of lignites in the future industrial development of the country.

Texas lignites on exposure fall to pieces and soon go into a more or less coarse dust. The strata immediately overlying the coal is rather soft, and the roof therefore is inclined to be poor. In mining, entries are run from the foot of the shaft to the edges of the area to be worked, and the coal is then mined on the retreat, mostly by hand.

AVERAGE ANALYSIS

Moisture	33.40
Volatile Matter	40.40
Fixed Carbon	17.20
Ash	9.00
Sulphur	1.10
B. T. U.	7,600

PREPARATION OF COAL

At the mines producing lignite there is little attempt made to size or prepare the product. At many of the bituminous operations the coal is loaded directly into railroad cars without passing

over screens, while at other points a considerable preparation and sizing is first given the coal. At many of the Eagle Pass mines washeries are used to reduce the percentage of ash and sulphur.

Analyses of Texas Seams by Counties and Localities

BITUMINOUS, SUBBITUMINOUS AND CANNEL

(ALL ANALYSES MADE ON MINE SAMPLES "AS RECEIVED")

COUNTY AND LOCATION	SEAM	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Detemolod B. T. U.	Carbon	RATIOS		
										Oxyga	Carbon	F. C. V. M.
Brewster, Cub Spring.	Subbituminous.	.....	10.65	50.91	19.52	18.92	0.86	8.432	.....	.....	.....	0.38
Brewster, Kimble Pits.	Subbituminous.	.....	4.74	29.84	49.84	15.58	1.26	11.887	.....	.....	.....	1.67
Brewster, Chisos Pen.	Subbituminous.	.....	1.16	32.79	44.53	21.52	3.39	11.950	.....	.....	.....	1.36
Burnet, near Marble Falls.	Subbituminous.	.....	3.72	42.27	39.41	14.60	.....	.....	.....	.....	.....	0.93
Cherokee, Alto.	Subbituminous.	.....	12.10	42.90	32.80	12.20	2.25	9.819	.....	.....	.....	0.75
Coleman, n. e. of Santa Anna.	Bituminous.	.....	2.36	38.55	43.88	15.21	5.91	.....	.....	.....	.....	1.14
Coleman, Rockwood.	Bituminous.	.....	3.07	33.05	39.10	24.78	3.10	.....	.....	.....	.....	1.18
Coleman, Waldrip.	Bituminous.	.....	8.25	38.27	47.27	6.20	3.25	.....	.....	.....	.....	1.24
Coleman, Silver Moon.	Bituminous.	.....	6.90	36.00	41.10	16.00	4.56	.....	.....	.....	.....	1.14
Coleman, Bull Creek.	Bituminous.	.....	10.40	35.94	49.46	4.19	1.53	.....	.....	.....	.....	1.38
Eastland, Cisco.	Bituminous.	.....	13.44	34.86	36.37	15.33	2.54	9.609	50.94	11.86	1.87	1.04
Erath, Thurber.	Bituminous.	.....	4.31	35.61	44.53	15.53	3.00	12.264	58.27	6.74	2.62	1.25
Erath, Thurber.	Bituminous.	.....	2.70	40.82	48.73	7.75	1.93	12.188	69.85	10.45	3.84	1.19
Erath, Thurber.	Bituminous.	.....	2.30	34.48	61.28	0.60	1.14	.....	.....	.....	.....	1.78
Erath, Thurber.	Bituminous.	.....	0.88	31.57	56.81	8.93	1.48	.....	.....	.....	.....	1.80
Erath, Thurber.	Bituminous.	.....	10.24	34.28	35.02	20.46	1.66	9.434	54.11	8.86	1.85	1.02
Jack, Jermyn.	Bituminous.	.....	4.55	38.50	44.80	12.14	7.96	.....	.....	.....	.....	1.16
McCulloch, Waldrip.	Subbituminous.	.....	2.80	32.80	55.55	8.85	0.80	13.163	.....	.....	.....	1.69
Maverick, Eagle Pass.	Subbituminous.	.....	6.50	31.51	37.37	24.62	1.87	9.010	51.84	8.91	1.55	1.19
Maverick, Eagle Pass.	Subbituminous.	.....	4.85	38.30	46.30	10.55	2.04	11.128	64.22	12.34	2.81	1.21
Maverick, Eagle Pass.	Subbituminous.	.....	9.40	33.08	40.09	17.43	1.28	11.149	62.55	8.07	2.45	1.21
Maverick, Eagle Pass.	Subbituminous.	.....	6.91	38.16	36.82	18.11	1.96	11.472	58.85	9.60	2.12	0.96
Palo Pinto, Strawn.	Subbituminous.	.....	1.06	39.28	50.12	9.54	2.88	13.421	.....	.....	.....	1.28
Palo Pinto, Strawn.	Bituminous.	.....	4.00	31.78	42.04	22.18	2.39	11.524	58.01	6.62	2.01	1.33
Parker, Keeler.	Bituminous.	.....	5.31	31.24	38.69	24.76	4.76	11.171	57.13	2.34	2.11	1.24
Parker, Rock Creek.	Bituminous.	.....	6.81	29.17	42.48	21.51	2.82	11.493	57.86	5.23	2.16	1.46
Presidio, San Carlos Field.	Subbituminous.	.....	4.60	39.20	50.10	6.10	0.62	12.157	.....	.....	.....	1.28
Shackelford, 6 mi. n. of Albany.	Subbituminous.	.....	0.94	34.48	58.96	5.62	0.64	.....	.....	.....	.....	1.71
Shackelford, 6 mi. n. of Albany.	Subbituminous.	.....	4.12	31.98	35.10	28.80	.....	9.993	.....	.....	.....	1.10
Stephens, Coal Branch.	Bituminous.	.....	6.90	38.07	37.03	18.00	6.49	.....	.....	.....	.....	0.97
Stephens, Coal Branch.	Bituminous.	.....	3.15	41.95	43.60	11.30	3.75	.....	.....	.....	.....	1.04
Webb, Laredo.	Cannel.	.....	2.50	45.27	49.27	22.96	2.44	10.917	.....	.....	.....	0.65
Webb, Laredo.	Cannel.	.....	3.46	48.84	36.61	11.09	2.09	.....	66.65	7.46	3.59	0.75
Webb, Laredo.	Cannel.	.....	2.80	49.05	37.04	11.11	2.04	.....	64.22	11.84	2.80	0.76
Webb, Laredo.	Cannel.	.....	2.30	52.78	37.10	7.82	2.20	12.315	69.41	9.06	4.11	0.70
Webb, Minera.	Cannel.	.....	4.09	47.95	38.89	9.07	2.45	11.052	69.55	11.32	3.41	0.81
Webb, Minera.	Cannel.	.....	3.46	48.84	36.61	11.09	2.09	12.036	66.65	7.46	3.59	0.75
Webb, Minera.	Cannel.	.....	5.50	37.31	38.14	19.05	2.66	10.752	.....	.....	.....	1.02
Webb, San Jose.	Cannel.	.....	2.00	31.47	56.32	8.15	1.47	.....	.....	.....	.....	1.79
Wise, Bridgeport.	Bituminous.	.....	9.20	33.96	43.02	13.82	1.82	10.233	57.94	10.33	2.40	1.27
Wise, Bridgeport.	Bituminous.	.....	9.40	34.65	42.53	13.42	3.09	10.144	61.49	8.47	2.81	1.23
Wise, Bridgeport.	Bituminous.	.....	12.56	34.13	41.99	11.32	1.63	10.373	58.33	11.17	2.59	1.23
Wise, Bridgeport.	Bituminous.	.....	12.50	31.72	42.98	12.80	1.84	10.656	56.87	11.14	2.38	1.35
Wise, Bridgeport.	Bituminous.	.....	18.50	31.70	37.10	12.70	1.92	10.442	.....	.....	.....	1.17
Young, near Loving.	Bituminous.	.....	7.00	37.56	40.18	15.26	1.99	10.203	56.93	11.29	2.14	1.07
Young, Newcastle.	Bituminous.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

(Continued on Next Page)

†United States Geological Survey Reports. ‡State Geological Survey Reports.

ANALYSES OF TEXAS SEAMS BY COUNTIES AND LOCALITIES—Continued
LIGNITES

COUNTY AND LOCATION	SEAM	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carbon	Oxygen	RATIOS		
											Carbon	F. C.	V. M.
Atascosa, Poteet.	+	Poteet.	34.82	19.73	34.65	10.80	1.26	7.860	....	....	....	....	1.76
Bastrop.	+	Sayer.	32.50	28.96	32.18	6.36	...	7.325	....	....	....	....	1.11
Bastrop, Bishop.	+	Glenn-Belto.	35.40	36.88	21.22	6.50	0.94	7.859	42.24	10.67	2.46	....	0.58
Bastrop, Phelan.	+	Independence.	37.26	31.85	24.81	6.08	0.57	6.416	38.10	13.74	1.92	....	0.78
Bexar, near Cassin Station.	+	Outcrop.	23.64	43.51	23.15	9.70	2.03	8.104	....	....	....	....	0.53
Brown, Brownwood.	+	Outcrop.	18.04	44.91	35.82	1.23	1.77	10.794	....	....	....	....	0.80
Camp, near Newsome.	+	Bray Shaft.	20.74	37.26	28.60	13.60	...	8.416	....	....	....	....	0.77
Freestone, Donie.	+	Melcher.	27.40	26.53	36.71	9.36	1.39	7.977	39.04	12.48	1.58	....	1.38
Fayette, Quinn.	+	No. 2 Shaft.	31.12	33.95	22.66	12.27	0.93	6.688	....	....	....	....	0.67
Freestone, Teague.	+	12 ft. Seam.	26.90	33.80	29.40	9.90	1.65	7.714	....	....	....	....	0.87
Henderson, n. of Malakoff.	+	Lone Star.	12.60	40.20	26.40	20.80	2.27	8.338	....	....	....	....	0.66
Hopkins, Como.	+	Como.	27.50	35.20	27.30	10.00	0.73	7.040	43.20	14.48	1.76	....	0.78
Hopkins, Como.	+	Como.	36.64	28.33	27.02	8.01	0.41	6.717	36.16	15.02	1.57	....	0.95
Houston, Crockett.	+	Houston County.	33.87	45.88	3.41	16.84	0.68	6.474	34.05	11.15	1.22	....	0.07
Houston, Lovelady.	+	Houston County.	25.58	39.37	25.30	9.75	0.60	7.592	42.57	16.12	1.65	....	0.64
Houston, Wooters Station.	+	Houston County.	36.16	33.16	19.93	10.75	0.40	7.518	34.93	13.69	1.43	....	0.60
Lee, Blue Ranch.	+	...	33.50	39.50	16.25	10.75	0.56	7.142	....	....	....	....	0.41
Lee, Hicks.	+	...	16.50	36.07	27.17	10.26	1.66	9.774	....	....	....	....	1.03
Leon, Jewett.	+	Rockdale.	12.60	44.75	33.90	8.75	0.63	9.774	56.34	16.64	2.22	....	0.76
Leon, Newby.	+	Bear Grass.	29.96	41.68	22.24	6.12	0.70	6.903	44.01	14.76	2.11	....	0.53
Medina, Lytle.	+	Bertetti.	23.04	33.72	35.20	8.04	1.29	8.697	....	....	....	....	1.04
Medina, Lytle.	+	Carr.	22.40	41.68	24.77	10.15	0.55	8.156	45.34	16.00	1.73	....	0.59
Medina, Lytle.	+	Carr.	24.36	33.89	25.64	16.11	0.74	7.068	42.13	11.76	1.51	....	0.76
Medina, Lytle.	+	Carr.	35.30	36.33	28.85	7.52	0.93	7.903	41.36	10.76	2.26	....	0.79
Medina, Rockdale.	+	Bertetti.	34.29	40.31	18.50	6.90	1.20	7.536	41.01	13.82	1.98	....	0.46
Milam, Rockdale.	+	Araucan Pass.	29.07	28.96	24.47	7.60	3.29	7.430	38.65	7.32	2.59	....	0.85
Milam, Olsen.	+	Olsen.	35.56	28.91	27.49	8.04	0.75	7.870	....	....	....	....	0.95
Milam, Rockdale.	+	Black Diamond.	31.52	34.26	22.73	8.29	1.04	7.697	41.93	11.03	2.17	....	0.66
Milam, Rockdale.	+	Big Lump.	34.72	34.26	22.73	8.29	0.93	8.046	41.15	14.68	1.94	....	0.39
Milam, Rockdale.	+	Olsen.	33.63	46.78	7.45	6.51	0.99	7.359	38.78	10.89	1.68	....	0.16
Milam, Rockdale.	+	Worley.	32.79	37.09	22.91	7.21	1.18	7.763	41.01	13.82	1.95	....	0.62
Milam, Rockdale.	+	Lignite Eggete.	32.27	44.30	15.26	8.17	2.31	7.383	38.56	14.85	1.68	....	0.34
Milam, Timpson.	+	Timpson.	31.96	39.53	23.05	5.46	1.46	8.053	43.85	13.05	2.37	....	0.58
Milam, Big Lump.	+	American.	29.94	39.03	21.09	9.94	0.55	6.291	37.70	17.48	1.37	....	0.54
Milam, Olsen.	+	Olsen.	31.06	27.67	33.39	7.88	0.99	7.870	....	....	....	....	1.21
Robertson, Calvert.	+	South West.	25.64	35.55	30.28	8.53	0.96	7.459	43.00	17.17	1.67	....	0.85
Robertson, Calvert.	+	Central Texas.	22.86	51.00	10.00	9.14	0.91	7.929	43.17	12.78	1.97	....	0.20
Shelby, Timpson.	+	...	31.96	39.53	23.05	5.46	1.46	8.053	43.85	13.05	2.37	....	0.58
Titus, Mt. Pleasant.	+	Cookville.	31.24	40.29	21.07	7.40	0.73	6.727	39.73	16.30	1.68	....	0.52
Van Zandt, Wells Point.	+	Edgewood.	27.20	40.90	27.09	4.81	0.48	7.682	44.72	17.92	1.97	....	0.66
Wood, Alba.	+	Alba-Malakoff.	15.00	43.61	32.71	8.68	0.94	8.789	49.47	20.95	1.67	....	0.75
Wood, Alba.	+	Alba.	29.28	34.02	29.04	6.66	0.57	7.238	39.61	19.71	1.50	....	0.85
Wood, Alba.	+	North Texas.	34.23	41.74	19.85	4.87	0.56	7.691	42.27	14.83	2.15	....	0.48
Wood, Hoyt.	+	Consumers.	10.80	38.92	38.92	9.08	0.61	9.670	48.80	25.99	1.39	....	0.94
Wood, Hoyt.	+	Hoyt.	33.71	29.25	29.76	7.28	0.53	7.348	42.52	42.09	0.86	....	1.02
Wood, Hoyt.	+	Consumers.	23.83	38.32	29.22	8.63	...	8.007	....	....	....	....	0.76
Wood, Hoyt.	+	No. 3.	33.85	27.50	31.35	7.30	0.51	7.497	43.12	41.68	0.88	....	1.14

*Bull. U. S. Bureau of Mines.

†State Geological Survey Reports.

List of Mines Including Name of Company, General Office Address, County,
Railroad and Shipping Point

TEXAS

BITUMINOUS

Mined in Erath, Palo Pinto, Webb, Wise and Young Counties. Suitable for Cement Burning, Steam, Producer Gas, Railway and Domestic purposes.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Belknap Coal Co.	New Castle, Texas.	No. 5.	Young.	W. F. & Sou.	New Castle, Texas
Bridgeport Coal Co.	Bridgeport, Texas.	No. 2.	Wise.	C. R. I. & P.	Bridgeport, Texas
Bridgeport Coal Co.	Bridgeport, Texas.	No. 3.	Wise.	C. R. I. & P.	Bridgeport, Texas
Strawn Coal Co.	Strawn, Tex.	ML Marlon.	Palo Pinto.	T. & P.	Strawn, Tex.
Strawn Coal Co.	Strawn, Tex.	No. 4.	Palo Pinto.	T. & P.	Strawn, Tex.
Texas & Pacific Coal Co.	Thurber, Tex.	No. 1.	Erath.	T. & P.	Mingus, Tex.
Wise County Coal Co.	Bridgeport, Tex.	No. 6.	Wise.	C. R. I. & P.	Bridgeport, Tex.

SUBBITUMINOUS

Mined in Maverick County. Suitable for Steam, Domestic, Producer Gas and Locomotive Fuel.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
International Coal Mines Co.	Eagle Pass, Texas.	International.	Maverick.	G. H. & S. A.	Eagle Pass, Texas
Olmos Coal Co.	Eagle Pass, Tex.	Lamar.	Maverick.	G. H. & S. A.	Eagle Pass, Tex.

CANNEL

Mined in Webb county. Suitable for Cement Burning, Steam, Producer Gas, Railway and Domestic purposes.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Cannel Coal Co.	Laredo, Texas.	Dolores.	Webb.	R. G. & E. P.	Dolores, Texas

LIGNITE

Mined in Bastrop, Fayette, Freestone, Henderson, Hopkins, Houston, Leon, Milam, Robertson, Titus and Wood counties. Suitable for Steam, Railway, Producer Gas and Domestic uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Alba-Malakoff Lignite Co.	Sulphur Springs, Tex.	Alba No. 7.	Wood.	M. K. & T., T. S. L.	Alba, Tex.
Alba-Malakoff Lignite Co.	Sulphur Springs, Tex.	Crush No. 2.	Hopkins.	M. K. & T.	Sulphur Springs, Tex.
Alba-Malakoff Lignite Co.	Sulphur Springs, Texas.	Malakoff No. 4.	Henderson.	St. L. & W. of Tex.	Malakoff, Tex.
Athens Lignite Co.	Athens, Tex.	Athens.	Henderson.	St. L. & S. W.	Malakoff, Tex.
Bastrop Lignite Coal Co.	McDade, Tex.	Titanic No. 1.	Bastrop.	M. K. & T.	Glenham, Tex.
Bastrop Lignite Coal Co.	McDade, Tex.	Titanic No. 2.	Bastrop.	M. K. & T.	Glenham, Tex.
Belto Coal Co.	Bastrop, Texas.	Belto.	Bastrop.	M. K. & T.	Bastrop, Tex.
Bertetti Coal Co., Inc.	San Antonio, Texas.	Exar.	Somerset.	Somerset.	Somerset, Tex.
Big Lump Lignite Co.	Rockdale, Texas.	No. 1.	Milam.	I. & G. N.	Rockdale, Tex.
Big Lump Lignite Co.	Rockdale, Texas.	Big Lump.	Milam.	I. & G. N.	Rockdale & Big Lump, Tex.
Big Lump Lignite Co.	Rockdale, Texas.	No. 7.	Milam.	I. & G. N.	Philan, Tex.
Bunira Coal Co.	R. F. D. No. 1, McDade, Texas.	No. 6.	Bastrop.	M. K. & T.	Leubetter, Tex.
Callaway Coal & Gravel Co.	Leubetter, Texas.	Callaway.	Bastrop.	M. K. & T.	Calvin, Tex.
Calvin Coal Co.	Calvin, Tex.	Calvin No. 1.	Bastrop.	M. K. & T.	Calvin, Tex.
Calvin Coal Co.	Calvin, Tex.	Calvin No. 2.	Bastrop.	M. K. & T.	Calvin, Tex.
Colorado Mining Co.	R. F. D. No. 2 McDade, Texas.	Carr.	Bastrop.	M. K. & T.	Carr Spur Glenham, Tex.
Consolidated Coal Co.	Rockdale, Tex.	Consolidated.	Milam.	I. & G. N.	Rockdale, Tex.
Consumers Lignite Co.	Hoyt, Tex.	No. 10.	Wood.	M. K. & T.	Alba, Tex.
Consumers Lignite Co.	Hoyt, Tex.	No. 14.	Wood.	M. K. & T.	Alba, Tex.
Denison Coal Co.	R. F. D. No. 2 McDade, Texas.	Erhard.	Bastrop.	M. K. & T.	Calvin, Tex.
Denison, F. I.	Temple, Tex.	Sayers.	Bastrop.	M. K. & T.	Glenham, Tex.
Dodd, W. C. Lignite Co.	Malakoff, Tex.	Tredlow.	Henderson.	St. Louis & Texas.	Tredlow, Tex.
East Texas Coal & Oil Co.	Houston, Texas.	No. 1 Garrison.	Nacogdoches.	H. E. & W. T.	Harrison, Texas
Federal Fuel Co.	San Antonio, Tex.	Federal.	Milam.	I. & G. N.	Rockdale, Tex.
Fry Lignite Co.	Como, Texas.	Fry.	Hopkins.	M. K. & T.	Como, Tex.
Garrison Coal & Oil Co.	Dallas, Tex.	Garrison.	Nacogdoches.	H. E. & W. T.	Garrison, Texas
Hicks Coal Co.	Hicks, Tex.	Hicks.	Law.	S. A. & A. P.	Rockdale, Tex.
Highgrade Lignite Co.	Greenville, Tex.	Highgrade No. 1.	Hopkins.	M. K. & T.	Como, Tex.
Highgrade Lignite Co.	Greenville, Tex.	Highgrade No. 2.	Hopkins.	M. K. & T. Shreveport	Como, Tex.
Houston-Leon County Coal Co.	Crockett, Tex.	Evansville No. 6.	Leon.	H. & T. C.	Evansville, Tex.
Houston-Leon County Coal Co.	Crockett, Tex.	Wooters No. 4.	Houston.	I. & G. N.	Wooters, Tex.
Houston-Leon County Coal Co.	Crockett, Tex.	Wooters No. 5.	Houston.	I. & G. N.	Wooters, Tex.
Independence Mining Co.	Phelan, Tex.	No. 4.	Bastrop.	M. K. & T.	Phelan, Tex.
Lignite Products Co.	Chicago, Ill.	Carbondale.	Bowie.	Cotton Belt.	Carbondale, Texas
McKay Lignite Mining Co.	Dallas, Tex.	McKay No. 2.	Hopkins.	M. K. & T.	Como, Tex.
Madison Oil & Coal Co.	Houston, Texas.	No. 1.	Madison.	H. & T. C. T. & B. V.	North Zulich, Texas
Rockdale Lignite Co.	Rockdale, Texas.	Witcher.	Milam.	I. & G. N.	Rockdale, Tex.
Santa Fe Coal Co.	Rockdale, Texas.	Santa Fe.	Milam.	Santa Fe.	Milano, Texas
Southwestern Fuel Co.	Fort Worth, Tex.	No. 1.	Robertson.	I. & G. N.	Calvert & Calving, Tex.
Southwestern Fuel Co.	Fort Worth, Tex.	No. 2.	Robertson.	I. & G. N.	Calvert & Calving, Tex.
Texas Coal Co.	Rockdale, Texas.	No. 1.	Milam.	I. & G. N.	Rockdale, Tex.
Texas Coal Co.	Rockdale, Texas.	No. 3.	Milam.	I. & G. N.	Rockdale, Tex.
Timson-Lignite Coal Co.	Temple, Texas.	Timson Lignite.	Scott.	H. P. & W. L.	Timson, Texas
Vogel Coal & Mfg. Co.	Rockdale, Texas.	Vogel.	Milam.	I. & G. N.	Rockdale, Tex.
Winfield Lignite Coal Co.	Winfield, Texas.	Winfield.	Titus.	St. L. & S. W.	Winfield, Texas

TEXAS

Alphabetical Directory of Coal Mines Giving Complete Detailed
Information Covering Each Mine

For List of Abbreviations See Page 13.

ALBA-MALAKOFF LIGNITE CO.

General Office, Sulphur Springs, Tex.
PR—A. Hicks, Tyler, Tex.
VP—A. Hicks, r., Malakoff, Tex.
TR—Howard Hicks, Sulphur Springs, Tex.
GM—A. Hicks, Tyler, Tex.
GS—Howard Hicks, Sulphur Springs, Tex.
PA—Howard Hicks, Sulphur Springs, Tex.
SA—McAlester Fuel Co., Dallas, Tex.

Malakoff No. 4 Mine; Shaft; Malakoff Seam, 72 in. thick.
PO—Malakoff, Tex.; SP—Same; CTY—Henderson; RR—St. L. S. W. of Texas.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
PP—1—100 H. P. fire tube boiler, 3 pump.
EMP—50. Daily tonnage 200.
SIZES SHIPT—Run of Mine.

Alba No. 5 Mine worked out.

Burford No. 1 Mine abandoned.

Alba No. 7 Mine; Shaft; Alba Seam, 66 in. thick.
PO—Alba, Tex.; SP—Same; CTY—Wood; RR—M. K. & T., T. S. L.
MS—Jas. Motes, Alba, Tex.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
PP—1—100 H. P. fire tube boiler, 4 pumps.
EMP—40. Daily tonnage 200.
SIZES SHIPT—Run of Mine.

Crush No. 2 Mine; Slope; Seam, 72 in. thick.
PO—Sulphur Springs, Tex.; SP—Same; CTY—Hopkins; RR—M. K. & T.
MS—Boyd Lynn, Sulphur Springs, Tex.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—1 125 H. P. fire tube boiler, 2 pumps.
EMP—35. Daily tonnage 150.
Note—Formerly operated by the Greenville Lignite Co.

ATRENS LIGNITE CO.

General Office, Athens, Tex.
PR—J. F. Gilmore, Athens, Tex.
VP—Walter Wiley, Tyler, Tex.
TR—J. P. Kelly, Athens, Tex.
GM—J. F. Gilmore, Athens, Tex.
GS—J. P. Kelly, Malakoff, Tex.
PA—J. P. Kelly, Athens, Tex.
SA—Cohen Fuel Co., Fort Worth, Tex.
H. Williams Coal Co., Ft. Worth, Tex.

Athens Lignite Mine; Slope; Seam, 108 in. thick.
PO—Malakoff, Tex.; SP—Same; CTY—Henderson; RR—St. L. S. W.
S of H—Mules and steam locos. Track gage 30 inches.
S of M—Hand.
PP—2 20 H. P. and 60 H. P. water tube boilers.
EMP—50. Last years tonnage 36,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Shaker Screens.

ATRENS POTTERY COMPANY

Not operating coal property.

BASTROP LIGNITE COAL COMPANY

General Office, McDade, Tex.
PR—F. L. Denison, McDade, Tex.
VP—F. W. Denison, Calvin, Tex.
GM—F. L. Denison, McDade, Tex.
GS—J. G. Jacks, McDade, Tex.
PA—F. L. Denison, McDade, Tex.
EM—F. W. Denison, Calvin, Tex.

Titania No. 1 Mine; Shaft; Bastrop Seam, 108 in. thick.
PO—McDade, Tex.; R. F. D. No. 2; SP—Glenham, Tex.; CTY—Bastrop; RR—M. K. & T.
MS—Victor Cibari, McDade, Tex.
SM—M. L. Davis, McDade, Tex.
S of H—Mules. Track gage 30 in.
S of M—Hand.
PP—2 80 H. P. fire tube boilers, 3 pumps.
EMP—100.
SIZES SHIPT—Run of Mine.

Titania No. 2 Mine; Shaft; Bastrop Seam, 108 in. thick.
PO—R. F. D. No. 2, McDade, Tex.; SP—Glenham, Tex.; CTY—Bastrop; RR—M. K. & T.
MS—Leo Descamp, McDade, Tex.

SM—M. L. Davis, McDade, Tex.
S of H—Mules. Track gage 30 in.
S of M—Hand.
PP—1 75 H. P. fire tube boiler, 1 pump.
EMP—15.
SIZES SHIPT—Run of Mine.

BEAR GRASS COAL CO.

Out of business.

BELKNAP COAL COMPANY

General Office, Newcastle, Tex.
PR—J. J. Perkins, Wichita Falls, Tex.
VP—Frank Kell, Wichita Falls, Tex.
TR—W. F. Nance, Newcastle, Tex.
GM—W. F. Nance, New Castle, Tex.
GS—W. F. Nance, Newcastle, Tex.
CE—Arthur D. Scott, Dallas, Tex.
EM—B. W. Smettem, New Castle, Tex.
SCO—Address the Company, Buyer, W. F. Nance, Newcastle, Tex.
SA—Frank Kell, Wichita Falls, Tex.

No. 5 Mine; Shaft; No. 7 Seam, 36 to 54 in. thick.
PO—New Castle, Tex.; SP—Same; CTY—Young; RR—Wichita Falls & Southern.
MS—Chas. Romans, New Castle, Tex.
S of H—Mules and elec. locos. Track gage 34 in.
S of M—Hand.
PP—2 80 H. P. return tubular boilers and 2—60 H. P. return tubular boilers, 1—25 K. W. and 1—50 K. W. gen. units, 250 volts D. C., 5 pumps.
EMP—150. Last years tonnage 101,000.
SIZES SHIPT—Run of Mine, Nut, Lump.
PREP. EQUIPT—Bar Screens.
Note—No. 4 Mine not operating. Old information.

BELTO COAL CO.

General Office, Bastrop, Tex.
GM—E. S. Orgain, Bastrop, Tex.
GS—Jno. Belto, Bastrop, Tex.
PA—E. S. Orgain, Bastrop, Tex.
EM—John Belto, Bastrop, Texas.
SCO—John Belto Store, Buyer, John Belto, Bastrop, Texas.

Belto Mine; Shaft; Bastrop Seam, 72 in. thick.
PO—Bastrop, Tex.; SP—Same; CTY—Bastrop; RR—M. K. & T.
S of H—Mules. Track gage, 30 in.
S of M—Hand.
PP—1 85 H. P. water tube boiler, 4 pumps.
EMP—75. Last years tonnage 28,000.
SIZES SHIPT—Run of Mine.

BERTETTI COAL CO., INC.

General Office, San Antonio, Tex.
PR—J. Rubiola, San Antonio, Tex.
TR—E. Broggi, San Antonio, Tex.
GM—E. Broggi, San Antonio, Tex.
GS—L. Bertetti, Somerset, Tex.
PA—E. Broggi, San Antonio, Tex.
CE—E. Broggi, San Antonio, Tex.
SA—E. Broggi, San Antonio, Tex.

No. 1 Mine; Shaft; Lignite Seam; 60 inches thick.
PO—Somerset, Tex.; SP—Same; CTY—Bexar; RR—Southern.
MS—Simon Jimenez, R. F. D., Atascosa, Texas.

S of H—Steam loco.
S of M—Hand.
PP—1 fire tube boiler, 40 H. P.
EMP—75. Daily tonnage 200.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar and Revolving Screens.

BIG LUMP LIGNITE COMPANY.

General Office, Rockdale, Texas.
PR—H. C. Meyer, Rockdale, Texas.
VP—C. K. Stribling, Rockdale, Tex.
TR—E. B. Phillips, Rockdale, Tex.
GM—E. B. Phillips, Rockdale, Tex.
PA—C. K. Stribling, Rockdale, Tex.
CE—B. S. Gentry, Rockdale, Tex.
SCO—Big Lump & Texas Coal Co., Buyer, C. K. Stribling, Rockdale, Tex.

Lignite Mine; Shaft; Second Seam, 120 in. thick.
PO—Big Lump, Tex.; SP—Rockdale, Tex.; CTY—Milam; RR—I. & G. N.
MS—Harry Stineberg, Big Lump, Tex.
S of H—Mules. Track gage 30 in.
S of M—Hand.
PP—4 boilers, total 400 H. P., 10 pumps.
EMP—70. Daily tonnage 250.
SIZES SHIPT—Run of Mine.

No. 7 Mine; Shaft; Second Vein Seam, 120 in. thick.
PO—Big Lump, Tex.; SP—Rockdale, Tex.; CTY—Milam; RR—I. & G. N.
S of H—Mules. Track gage 30 in.
PP—2 water tube boilers, 250 H. P., 3 pumps.
EMP—New mine.
SIZES SHIPT—Run of Mine.

BOWIE COAL MINES COMPANY

Out of business.

BRIDGEPORT COAL COMPANY.

General Office, Bridgeport, Texas.
PR—W. H. Astun, Meadow View, Tex.
VP—J. E. Cockrell, Dallas, Tex.
TR—W. H. Astun, Bridgeport, Tex.
GM—W. H. Astun, Bridgeport, Tex.
PA—W. H. Astun, Bridgeport, Tex.
EM—W. H. Astun, Bridgeport, Tex.
EE—W. H. Lane, Bridgeport, Tex.
SCO—Address the Company, Buyer, Jos. Street, Bridgeport, Tex.

No. 2 Mine; Shaft; No. 1 Seam, 19 in. thick.
PO—Bridgeport, Tex.; SP—Same; CTY—Wise; RR—C. E. I. & G.
MF—T. J. McFar, Bridgeport, Tex.
SM—E. T. Bingham, Bridgeport, Tex.
S of H—Mules. Track gage 30 in.
S of M—Hand and longwall mach.
PP—2 return tubular boilers, total 250 H. P., 1 gen. unit, 75 K. W., 220 volts D. C., 4 pumps.
EMP—125. Last fiscal year output, 20,162 tons.
SIZES SHIPT—Lump.
PREP. EQUIPT—Gravity Screens.

No. 3 Mine; Shaft; No. 1 Seam, 19 in. thick.
PO—Bridgeport, Tex.; SP—Same; CTY—Wise; RR—C. E. I. & G.
MF—J. A. McAfee, Bridgeport, Tex.
S of H—Mules. Track gage 30 in.
S of M—Hand and longwall mach.
PP—1 return tubular boiler, total 80 H. P., 2 pumps.
EMP—125. Last fiscal year output, 14,515 tons.
SIZES SHIPT—Lump.
PREP. EQUIPT—Gravity Screens.

BUNIVA COAL COMPANY

General Office, R. F. D. No. 1, McDade, Tex.
PR—D. Buniva, McDade, Tex.
VP—R. W. Carr, Austin, Tex.
TR—Mrs. J. C. Chalmers, McDade, Tex.
GM—R. W. Carr, Austin, Tex.
GS—D. Buniva, McDade, Tex.
PA—D. Buniva, McDade, Tex.
CE—R. W. Carr, Austin, Tex.
SCO—Evergreen Commissary, Buyer Mrs. J. C. Chalmers, McDade, Tex.
SA—Carr Coal Company, Rockdale, Tex.

No. 6 Mine; Shaft; Bastrop Seam, 54 in. thick.
PO—R. F. D. McDade, Tex.; SP—Philan, Tex.; CTY—Bastrop; RR—M. K. & T.
S of H—Mules. Track gage, 23 in.
S of M—Hand.
PP—1 fire tube boiler, 50 H. P., 1 pump.
EMP—50. Daily tonnage 200.
SIZES SHIPT—Run of Mine.

CALLAWAY COAL & GRAVEL CO.

General Office, Ledbetter, Tex.
GM—W. P. Callaway, Ledbetter, Tex.
CE—Jack Young, Ledbetter, Tex.
EM—W. P. Callaway, Ledbetter, Tex.
SCO—Callaway Supply Co.; Buyer, W. P. Callaway, Ledbetter, Tex.

Callaway Mine; Shaft; Seam, 72 in. thick.
PO—Ledbetter, Tex.; SP—Same; CTY—Washington and Fayette; RR—H. & T. C.
MS—Jess Burns, Ledbetter, Tex.
S of H—Mules and steam. Track gage, 36 in.
S of M—Comp. air and longwall machs.
PP—1 fire tube boiler, 60 H. P.
EMP—135. Daily output, 500 tons.
SIZES SHIPT—Run of Mine.
Old information.

CALVIN COAL CO.

General Office, Calvin, Tex.
PR—W. C. Silliman, Los Angeles, Cal.
VP—Winchester Kelso, San Antonio, Tex.
TR—H. S. Jenkins, Calvin, Tex.

SECY—H. S. Jenkins, Calvin, Tex.
GM—W. C. Silliman, Los Angeles, Cal.
GS—R. M. Vaughn, Calvin, Tex.
PA—R. M. Vaughn, Calvin, Tex.
EM—R. M. Vaughn, Calvin, Tex.
SA—W. C. Silliman, Calvin, Tex.

Calvin Nos. 1 and 2 Mines; Slope and Shaft; Brown-Lignite Seam, 112 in. thick.
PO—Calvin, Tex.; SP—Same; CTY—Bastrop; RR—M. K. & T.
S of H—Mules. Track gage, 30 in.
S of M—Hand.
PP—2 water tube boilers, 300 H. P., 150 K. W., gen. unit, 5 pumps.
EMP—100. Last fiscal year output, 60,000 tons.
SIZES SHIPT—Run of Mine.

CANNEL COAL CO.

General Office Laredo, Texas.
PR—C. B. Wright, 266 South 16th St., Philadelphia, Pa.
Asst—C. C. Biggio, Laredo, Tex.
VP—D. D. Davis, Dolores, Tex.
TR—Chas. Lang, Laredo, Tex.
GM—H. D. Davis, Dolores, Tex.
PA—J. S. Thomas, Laredo, Tex.
EM—R. W. Davis, Dolores, Tex.
EE—W. F. Shutt, Dolores, Tex.
SCO—Address the Company, Buyer, J. S. Thomas, Laredo, Tex.
SA—H. G. DaCamara, Laredo, Tex.

Dolores Mine; Shaft; Santo Tomas and San Pedro Seams, 22 to 28 in. thick.
PO—Dolores, Tex.; SP—Same; CTY—Webb; RR—R. G. & E. P.
MS—R. W. Davis, Dolores, Tex.
SM—Thos. Worsham and John Loftus, Dolores, Tex.
S of H—Mules, elec. and gasoline locos. Track gage 36 in.
S of M—Hand and 2 shortwall machs.
PP—1—250 H. P. water tube, 3—150 H. P. and 3—200 H. P. return tubular boilers, 1—150 K. W. gen. unit, 250 volts D. C. 23 pumps.
EMP—426. Last years tonnage 70,616.
PREP. EQUIPT—Gravity bar, picking tables.

COLORADO MINING COMPANY

General Office, R. F. D. No. 2, McDade, Tex.
PR—D. Buniva, R. R. No. 2, McDade, Tex.
TR—Mrs. T. C. Chalmers, B. F. D. No. 2, McDade, Tex.
GM—R. W. Carr, Austin, Tex.
EM—R. W. Carr, Austin, Tex.
SCO—Evergreen Commissary, Buyer, Mrs. T. C. Chalmers, R. F. D. No. 2, McDade, Tex.
SA—Carr Coal Co., Rockdale, Tex.

Carr Mine; Shaft; Bastrop or Lower Vein Seam, 120 in. thick.
PO—R. F. D. No. 2, McDade, Tex.; SP—Carr Spur, Glenham; CTY—Bastrop; RR—M. K. & T.
MS—Kirby Shelton, R. D. No. 2, McDade, Tex.
S of H—Mules. Track gage 30 in.
S of M—Hand.
PP—2 return tubular boilers, total 180 H. P., 2 gen. units, 5 pumps.
EMP—60. Last years tonnage 35,527.
SIZES SHIPT—Run of Mine.
Note—Successors to Carr Coal Co.

CONSOLIDATED COAL CO.

General Office, Rockdale, Texas.
PR—R. W. Carr, Austin, Tex.
VP—Mrs. J. S. Carr, San Antonio, Tex.
TR—Mrs. J. S. Carr, San Antonio, Tex.
GM—R. W. Carr, Austin, Tex.
SCO—Evergreen Commissary; Buyer, W. R. Crittenden, Rockdale, Tex.
SA—Carr Coal Co., Rockdale, Tex.

Consolidated Mine; Shaft; Second Seam, 96 inches thick.
PO—Rockdale, Texas; SP—Same; CTY—Milam; RR—I. & G. N.
MS—F. T. Rutherford, Rockdale, Tex.
S of H—Mules. Track gage 30 in.
S of M—Hand.
PP—2 pumps.
EMP—85. Last years tonnage 45,000.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by the Rockdale Consolidated Coal Co.

CONSUMERS LIGNITE CO.

General Office, Hoyt, Tex.
PR—L. E. Blount, Washington, D. C.
VP—L. B. Speer, Hoyt, Tex.
TR—Geo. L. Speer, Hoyt, Tex.
GM—Geo. L. Speer, Hoyt, Tex.
GS—R. H. Chaney, Hoyt, Tex.
PA—R. N. Smith, Hoyt, Tex.
EM—Joe Jelinek, Hoyt, Tex.

Nos. 10 and 14 Mines; Slope; Lignite Seam, 72 in. thick.
PO—Hoyt, Tex.; SP—Albia, Tex.; CTY—Wood; RR—M. K. & T. and T. S. L.
S of H—Mules and rope. Track gage 30 in.
S of M—Hand.
PP—5 pumps.
EMP—125. Daily tonnage 400.
SIZES SHIPT—Run of Mine.

DENISON COAL CO.

General Office, McAdams, Tex.; R. F. D. No. 2.
PR—F. D. Denison, McAdams, Tex.; R. F. D. No. 2.
VP—F. W. Denison, Calvin, Tex.
GM—F. L. Denison, McAdams, Tex.; R. F. D. No. 2.
GS—F. W. Denison, Calvin, Tex.
PA—F. W. Denison, Calvin, Tex.
EM—F. W. Denison, Pheasant, Tex.
SCO—Address the Company, Pheasant, Texas.

Biglo Mine abandoned.
Erhard Mine; Shaft; Bastrop Seam, 108 in. thick.
PO—Calvin, Tex.; SP—Same; CTY—Bastrop; RR—M. K. & T.
MS—Otto Nissen, Calvin, Tex.
S of H—Mules. Track gage, 30 in.
S of M—Hand.
PP—1 80 H. P. fire tube boilers, 2 pumps.
EMP—35.
SIZES SHIPT—Run of Mine.

DENISON, F. L.

General Office, Temple, Tex.
OWNER—F. L. Denison, McAdams, Tex.
GS—J. G. Jacks, McAdams, Tex.
PA—Pablo Rosas, McAdams, Tex.
CE—F. W. Denison, Calvin, Tex.
SCO—Address the Company, Buyer, Pablo Rosas, McAdams, Tex.
SA—Bastrop Lignite Coal Co., McAdams, Tex.

Sayers Mine; Shaft; Sayer's No. 2 Seam, 84 in. thick.
PO—McAdams, R. F. D. No. 4, Tex.; SP—Glenham, Tex.; CTY—Bastrop; RR—M. K. & T.
S of H—Mules. Track gage, 30 in.
S of M—Hand.
PP—1 80 H. P. fire tube boiler, 1 pump.
EMP—70.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

0000, W. C. LIGNITE COMPANY

General Office, Malakoff, Tex.
PR—W. C. Dodd, Malakoff, Tex.
GM—W. C. Dodd, Malakoff, Tex.
GS—G. C. Churchwell, Malakoff, Tex.

Tredlow Mine; Slope; Seam 120 in. thick.
PO—Malakoff, Tex.; SP—Tredlow, Tex.; CTY—Henderson; RR—St. Louis of Texas.
S of H—Mules. Track gage 30 in.
S of M—Hand.
PP—Purchase power, 1 75 H. P. water tube boiler, 2 pumps.
EMP—50. Last years tonnage 60,000.
SIZES SHIPT—Run of Mine.
old information.

EAST TEXAS COAL & OIL CO.

General Office, 1217 Carters Bldg., Houston, Texas.
PR—H. D. Garrison, Houston, Texas.
VP—L. Lipper, Houston, Texas.
TR—J. C. Abernathy, Houston, Texas.
GM—H. D. Garrison, Houston, Texas.

No. 1 Garrison Mine; Slope; Seam, 6 feet thick.
PO—Garrison, Texas; SP—Same; CTY—Nacogdoches; RR—H. E. & W. T.
MS—Robt. Anderson, Garrison, Texas.
S of H—Mules. Track gage 30 inches.
S of M—Hand.
PP—120 H. P. water tube boiler.
EMP—50. Daily tonnage 150.
SIZES SHIPT—Run of Mine.

FEDERAL FUEL COMPANY

General Office, 808 Gunter Bldg., San Antonio, Tex.
PR—Henry G. Butler, Rockdale, Tex.
VP—J. M. Sampson, San Antonio, Tex.
TR—O. P. Hall, San Antonio, Tex.
GM—Wm. Butler, Rockdale, Tex.
PA—W. A. Butler, San Antonio, Tex.
CE—W. A. Butler, San Antonio, Tex.
SCO—Address the Company, Buyer, W. A. Butler, San Antonio, Tex.
SA—W. A. Butler, San Antonio, Tex.

Federal Mine; Stripping; Lignite Seam 174 in. thick.
PO—Rockdale, Tex.; SP—Same; CTY—Milam; RR—L. & G. N.
MS—W. A. Butler, San Antonio, Tex.
S of H—Steam loco. Track gage, 36 1/2 inches.
S of M—Hand.
PP—4 water tube boilers.
EMP—10.
SIZES SHIPT—Run of Mine.
old information.

FRY LIGNITE COMPANY

PR—F. E. Fry, Ladonia, Tex.
VP—L. E. Fry, Como, Tex.
TR—L. F. Fry, Ladonia, Tex.
GM—D. L. Jeringan, Como, Tex.
GS—D. L. Jeringan, Como, Tex.
PA—D. L. Jeringan, Como, Tex.
EM—Joe Jelinek, Como, Tex.

Fry Mine; Slope; Lignite Seam, 60 to 84 in. thick.
PO—Como, Tex.; SP—Same; CTY—Hopkins; RR—M. K. & T.
S of H—Mules and rope. Track gage 36 S of M—Hand.
PP—1 return tubular boiler, total 70 H. P., 2 pumps.
EMP—35. Last years tonnage 260,924.
SIZES SHIPT—Lump.

GARRISON COAL & OIL COMPANY

General Office, 503-504 Insurance Bldg., Dallas, Tex.
PR—Sterling P. Strong, Dallas, Tex.
VP—W. M. Liggett, Dallas, Tex.
TR—T. Strong, Dallas, Tex.
GM—Sterling P. Strong, Dallas, Tex.
GS—W. D. Elliott, Garrison, Tex.
PA—Sterling P. Strong, Dallas, Tex.
CE—W. D. Elliott, Garrison, Tex.
SA—W. D. Elliott, Garrison, Tex.

Garrison Mine; Slope; Texas Lignite Seam, 56 in. thick.
PO—Garrison, Tex.; SP—Same; CTY—Nacogdoches; RR—H. E. & W. T.
S of H—Mules and rope. Track gage S of M—Hand.
PP—4 pumps.
EMP—15. Daily tonnage 20.
SIZES SHIPT—Run of Mine, Slack.
old information.

HICKS COAL COMPANY

General Office, Hicks, Tex.
PR—P. H. Wissingier, Hicks, Tex.
VP—J. P. Sparks, Rockdale, Tex.
TR—S. D. Yoakum, Rockdale, Tex.
GM—P. H. Wissingier, Hicks, Tex.
SCO—Hicks Commissary, Buyer, John Cherry, Hicks, Tex.

Hicks Mine; Slope; Lignite Seam, 64 in. thick.
PO—Hicks, Tex.; SP—Rockdale, Tex.; CTY—Lee; RR—S. A. & A. P.
MS—Wm. Clampett, Hicks, Tex.
S of H—Mules. Track gage 30 in.
S of M—Hand.
PP—1 fire tube boiler, 20 H. P.
EMP—15. Daily tonnage 30.
SIZES SHIPT—Run of Mine.
old information.

HIGHGRADE LIGNITE COMPANY.

General Office, Greenville, Tex.
PR—Jno. D. Middleton, Greenville, Tex.
VP—F. J. Phillips, Greenville, Tex.
GM—Jno. D. Middleton, Greenville, Tex.
GS—S. R. Hill, Como, Tex.
PA—Jno. D. Middleton, Greenville, Tex.
SA—Highgrade Lignite Co., Greenville, Tex.

Higraide Nos. 1 and 2 Mines; Slope; Lignite Seam, 66-95 in. thick.
PO—Como, Tex.; SP—Same; CTY—Hopkins; RR—M. K. & T., Shreveport Div.
S of H—Mules, engine, cable. Track gage 30 in.
S of M—Hand.
PP—1 return tubular boiler, total 100 H. P.
EMP—40. Last years tonnage 20,350.
SIZES SHIPT—Run of Mine.
Note—Successors to Kelly Lignite Co.

HOUSTON-LEON COUNTY COAL COMPANY

General Office, Crockett, Tex.
PR—G. Q. King, Crockett, Tex.
VP—D. A. Nunn, Crockett, Tex.
TR—John LeGory, Crockett, Tex.
GM—G. Q. King, Crockett, Tex.
PA—G. Q. King, Crockett, Tex.
EM—J. A. Grant, Crockett, Tex.
SCO—Address the Company, Buyer, A. A. Waller, Lovelady, Tex.; and Chas. A. Salmon, Evansville, Tex.

Wooters No. 4 Mine; Shaft; Seam, 72 in. thick.
PO—Lovelady, Tex.; SP—Wooters; CTY—Houston; RR—L. & G. N.
MS—W. E. Elkins, Lovelady, Tex.
S of H—Mules and tail rope, 1 4-ton gasoline loco. Track gage 36 in.
S of M—Hand.
PP—1 100 H. P. fire tube boiler, 4 pumps.
EMP—80. Last years tonnage 32,646.
SIZES SHIPT—Run of Mine, Nut Lump.
PREP. EQUIPT—Gravity Screens.

Wooters No. 5 Mine; Shaft; Seam, 72 in. thick.
PO—Lovelady, Tex.; SP—Wooters; CTY—Houston; RR—L. & G. N.
MS—W. E. Elkins, Lovelady, Tex.
S of H—Mules and tail rope, 1 4-ton gasoline loco. Track gage 36 in.
S of M—Hand.
PP—2 175 H. P. fire tube boilers, 1 pump.
EMP—70. Last years tonnage 74,215.
SIZES SHIPT—Run of Mine, Nut Lump.
PREP. EQUIPT—Gravity Screens.

Evansville No. 6 Mine; Shaft; Seam, 108 in. thick.
PO—Evansville, Tex.; SP—Same; SP—Ft. Same; Exp., Jewett, Tex.; CTY—Leon; RR—H. & T. C.
MS—Robt. Clampett, Evansville, Tex.
SM—W. Z. Lunn, Evansville, Tex.
S of H—Mules and 1 4-ton gasoline loco. Track gage 36 in.
S of M—Hand.
PP—2 170 H. P. fire tube boilers, 7 pumps.
EMP—120. Last years tonnage 79,218.
SIZES SHIPT—Run of Mine, Nut Lump.
PREP. EQUIPT—Gravity Screens.

INDEPENDENCE MINING CO.

General Office, Pheasant, Tex.
PR—J. C. Pheasant, Pheasant, Tex.
VP—H. C. Pheasant, Dayton, O.
TR—Iago Menschbach, Pheasant, Tex.
GM—L. C. Pheasant, Pheasant, Tex.
GS—Iago Menschbach, Pheasant, Tex.
PA—Iago Menschbach, Pheasant, Tex.
EM—F. G. Phillips, Pheasant, Tex.
SCO—Pheasant Mercantile Co.; Buyer, Iago Menschbach, Pheasant, Tex.

No. 4 Mine; Shaft; Seam, 114 in. thick.
PO—Pheasant, Tex.; SP—Same; CTY—Bastrop; RR—M. K. & T.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
PP—2 water tube boilers 300 H. P., 5 pumps.
EMP—217. Last fiscal year output, 23,000 tons.
SIZES SHIPT—Run of Mine.

INTERNATIONAL COAL & BRICK CO.

Now Rockdale Lignite Co.

INTERNATIONAL COAL MINES CO.

General Office, Eagle Pass, Tex.
PR—R. R. James, Cotton Plant, Ark.
VP—J. T. Rateman, Brinkley, Ark.
TR—D. H. Echols, Cotton Plant, Ark.
SECY—H. P. Mathis, Eagle Pass, Tex.
EM—Homer Cote, Eagle Pass, Tex.
International Mines; Shaft; Seam 72 inches thick.
PO—Eagle Pass, Tex.; SP—Same; CTY—Maverick; RR—G. H. & S. A.
MS—Homer Cote, Eagle Pass, Tex.
S of H—Mules and rope. Track gage 36 in.
S of M—Elec. punchers, longwall machs.
PP—Power purchased. Transformer 2300 220 volts A C, 3 pumps.
EMP—200. Daily tonnage 250.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

LIGNITE PRODUCTS CO.

General Office, 23 Metropolitan Bldg., Chicago, Ill.
PR—Walker Powell, Title City Bldg., St. Louis, Mo.
VP—Col. Henry A. Allen, Chicago, Ill.
EMP—125. Last years tonnage 23,519 water tube boilers 2 pumps.
TR—M. E. Kennedy, Title Guaranty Bldg., St. Louis, Mo.
PA—Col. Henry A. Allen, Chicago, Ill.

Carbondale Mine; Stripping; Cannel Seam, 144 in. thick.
PO—Carbondale, Tex.; SP—Same; CTY—Rowie; RR—Cotton Belt.
S of H—Mules.
S of M—Hand.
Daily tonnage 250.
old information.

LOVE STAR COAL MINING CO.

Como, Texas.
No report.

LOVING COAL COMPANY

Out of business.

McKAY LIGNITE MINING COMPANY.

General Office, Dallas, Tex.
PR—H. B. McKay, Dallas, Tex.
VP—H. J. McKay, Dallas, Tex.
TR—H. J. McKay, Dallas, Tex.
GM—H. J. McKay, Dallas, Tex.
GS—Pee Saunders, Como, Tex.
PA—L. E. Davis, Dallas, Tex.
EM—Joe Jelinek, Como, Tex.
SCO—McKay Coal Co., Dallas, Tex.

McKay No. 2 Mine; Slope; Lignite Seam, 66-84 in. thick.
PO—Como, Tex.; SP—Same; CTY—Hopkins; RR—M. K. & T.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—1 40 H. P. fire tube boiler, 1 pump.

EMP—35. Daily output, 300 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Screens.

MADISON OIL & COAL CO.

General Office, Stewart Bldg., Houston, Texas.
PR—Hall Etter, Houston, Texas.
VP—J. E. Hooper, Houston, Texas.
TR—W. H. Whisler, Houston, Texas.
GM—Hall Etter, Houston, Texas.
GS—J. E. Hooper, Houston, Texas.
PA—W. H. Whisler, Houston, Texas.
CE—David M. Duller, Houston, Texas.
EM—Dr. F. C. S. Barlow, Houston, Texas.
EG—P. T. Sealy, Houston, Texas.

No. 1 Mine; Slope and Stripping; Seam, 120 inches thick.
PO—North Zulch, Texas; SP—Same; CTY—Madison; RR—H. & T. C. & B. V.
MS—Dr. F. C. S. Barlow, Houston, T.
SIZES SHIPT—Lump.

OLMOS COAL CO.

General Office, Eagle Pass, Tex.
PR—Ernesto Madero Parras, Coahuila, Mex.
VP—L. M. Lamar, San Antonio, Tex.
TR—Ernesto Madero, Jr., Parras, Coahuila, Mex.
GM—L. M. Lamar, San Antonio, Tex.
PA—L. Madero, Eagle Pass, Tex.
SCO—Lamar Commissary, Buyer, Salvador Rodriguez, Eagle Pass, Tex.
Lamar Mine; Shaft; Semi Blumman Seam, 84 in. thick.
PO—Eagle Pass, Tex.; SP—Same; CTY—Maverick; RR—G. H. & S. A.
MS—W. H. Walker, Eagle Pass, Tex.
S of H—Mules and rope. Track gage 36 in.
S of M—1 electric cutter and 1 chain breast type machs.
PP—Power purchased. Transformer 2300-220 volts A C, 2 125 H. P.
SIZES SHIPT—Pea, Nut, Egg, Lump.
PREP. EQUIPT—Revolving and Shaker Screens, Washeries.

ROCKDALE CONSOLIDATED COAL CO.

Now operated by the Consolidated Coal Co.

ROCKDALE LIGNITE COMPANY.

General Office, Rockdale, Tex.
PR—J. P. Sparks, Rockdale, Tex.
TR—J. P. Sparks, Rockdale, Tex.
GM—J. P. Sparks, Rockdale, Tex.
GS—S. D. Yoakum, Rockdale, Tex.
PA—J. P. Sparks, Rockdale, Tex.
SCO—International Commissary, Buyer, W. B. Porter, Rockdale, Tex.

Witcher Mine; Shaft; No. 2 Vein, 96 inches thick.
PO—Rockdale, Tex. SP—Same; CTY—Milam; RR—L. & G. N. Witcher Sport Branch.
S of H—Mules. Track gage 30 inches.
S of M—Hand.
PP—3 pumps.
EMP—65. Daily tonnage 300.
SIZES SHIPT—Run of Mine, Slack.
old information.

SANTA FE COAL COMPANY

General Office, Rockdale, Tex.
PR—J. P. Sparks, Rockdale, Tex.
VP—E. A. Camp, Rockdale, Tex.
TR—Fred Graves, Rockdale, Tex.
GM—J. P. Sparks, Rockdale, Tex.
GS—S. J. Taylor, Milano, Tex.
PA—J. P. Sparks, Rockdale, Tex.
SCO—Santa Fe Commissary, Buyer, S. J. Taylor, Milano, Tex.

Santa Fe Mine; Shaft; Seam 66 inches thick.
PO—Milano, Tex.; SP—Same; CTY—Milam; RR—Santa Fe.
S of H—Mules. Track gage 30 inches.
S of M—Hand.
old information.

SOUTHWESTERN FUEL COMPANY.

General Office, 2351 N. Main St., Fort Worth, Tex.
SECTY—R. A. Keon, Fort Worth, Tex.

No. 1 Mine; Shaft; Lignite Seam, 78 to 168 in. thick.
PO—Calvert, Tex.; SP—Same, and Calvert, Tex.; CTY—Robertson; RR—L. & G. N.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—2 water tube boilers, 1 125 H. P., 1 100 H. P., 1 75 H. P., 3 pumps.
SIZES SHIPT—Slack, Lump.
PREP. EQUIPT—Gravity Screens.

No. 2 Mine; Shaft; Lignite Seam, 78 to 168 in. thick.
PO—Calvert, Tex.; SP—Same, and Calvert, Tex.; CTY—Robertson; RR—L. & G. N., Ft. Worth Div.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—4 water tube boilers, 525 H. P., 1 gen. unit, 75 K. W., 220 volts D. C., 6 pumps.
SIZES SHIPT—Slack, Lump, Run of PREP. EQUIPT—Gravity Screens.
NOTE—Operations suspended. Reorganization under way.

STRAWN COAL CO.

General Office, Strawn, Tex.
 PR—Willard Burton, Ft. Worth, Tex.
 VP—E. B. Ritchie, Strawn, Tex.
 TR—A. DeLoach, Ft. Worth, Tex.
 GM—E. B. Ritchie, Strawn, Tex.
 PA—E. B. Ritchie, Strawn, Tex.
 EM—L. D. Pair, Strawn, Tex.
 SCO—Strawn Mds. Co.; Buyer, D. H. Mackay, Strawn, Tex.
 SA—Burton-Lingo Co., Ft. Worth, Tex.

Mt. Marion Mine; Shaft; Seam, 28 in. thick.
 PO—Strawn, Tex.; SP—Same; CTY—Palo Pinto; RR—Texas & Pacific.
 MS—L. D. Pair, Strawn, Tex.
 S of H—Mules and 3 storage battery locos.
 S of M—Hand.
 PP—4 water tube boilers, 2 40 Kva. gen. units, transformer 2300-110 volts A. C., 5 pumps.
 EMP—500. Daily output, 700 tons.
 SIZES SHIPT—Slack, Nut, Lump.

No. 4 Mine; Shaft.
 PO—Strawn, Tex.; SP—Same; CTY—Palo Pinto; RR—Texas & Pacific.
 MS—L. D. Pair, Strawn, Tex.
 S of H—Mules.
 S of M—Hand.
 PP—3 pumps.
 EMP—250.
 SIZES SHIPT—Slack, Nut, Lump.

TEXAS & PACIFIC COAL CO.

PR—Edgar L. Marston,
 24 Broadway, New York, N.Y.
 TR—Edgar J. Marston,
 24 Broadway, New York, N.Y.
 GM—W. K. Gordon, ...Thurber, Tex.

Shaft Mine.

PO—Thurber, Tex.; SP—Mogus, Tex.;
 CTY—Erath; RR—T. & Pac.
 S of H—Elec. Loco.
 S of M—3 Elec. mach. and hand.
 EMP—2,000. Last fiscal year output 745,360 tons.
 (Old Information)

TEXAS COAL CO.

General Office, Rockdale, Tex.
 PR—H. C. Meyer ...Rockdale Tex.
 VP—C. K. Stribling, Rockdale, Tex.
 TR—E. B. Phillips ...Rockdale, Tex.
 PA—C. K. Stribling, Rockdale, Tex.
 CE—E. S. Centry, Rockdale, Tex.
 SCO—Big Lump & Texas Coal Company, Buyer, C. K. Stribling, Rockdale, Tex.

Nos. 1 and 3 Mines; Shaft; 72 to 120 in. thick.

PO—Rockdale, Tex.; SP—Same; CTY—Milam; RR—I. & G. N.
 MS—S. J. Taylor, Rockdale, Tex.
 S of H—Mules and rope. Track gage 30 inches.
 S of M—Hand.
 PP—4 water tube boilers, total 400 H. P., 6 pumps.
 EMP—70. Daily tonnage 250.
 SIZES SHIPT—Run of Mine, Lump.

No. 4 Mine; Shaft
 PO—Rockdale, Tex.; SP—Same; CTY—Milam; RR—I. & G. N.
 MS—S. J. Taylor, Rockdale, Tex.
 S of H—Mules. Track gage 30 in.
 PP—8 pumps.
 EMP—60. Daily tonnage 250.

TIMPSON-LIGNITE COAL CO.

PR—Geo. Houghton, Temple, Tex.
 VP—J. F. Lillard, Temple, Tex.
 TR—A. E. Childress, Temple, Tex.
 GM—Geo. Houghton, Temple, Tex.
 PA—A. E. Childress, Temple, Tex.
 EM—W. Flatt, Temple, Tex.
 SA—McAlister Fuel Company, Dallas, Tex.

Timpson-Lignite Mine; Shaft;
 PO—Timpson, Tex.; SP—Same; CTY—Shelby; RR—H. F. & W. L.
 MS—Geo. Houghton, Temple, Tex.
 S of H—Mules. Track gage 36 in.
 S of M—Hand.
 PP—1 fire tube boiler, 80 H. P., 2 pumps.
 EMP—60. Daily tonnage 225.
 SIZES SHIPT—Run of Mine.
 Note—Successors to the Texas Lignite Coal Co.

VOGEL COAL & MFG. COMPANY.

General office, Rockdale, Tex.
 PR—Gus Vogel, ...Rockdale, Tex.
 VP—H. Vogel, ...Rockdale, Tex.
 TR—Gus Lorenz, " "
 SA—Ira Perry, ...Rockdale, Tex.

Vogel Mine; Shaft; Top Vein Seam, 72 in. thick.
 PO—Rockdale, Tex.; SP—Same; CTY—Milam; RR—I. & G. N.
 MS—Gus Lorenz, Rockdale, Tex.
 S of H—Mules. Track gage, 28 in.
 S of M—Hand.
 PP—1 boiler, total 60 H. P., 1 gen. unit, 3 pumps.

EMP—25. Last fiscal year output, 43,852 tons.
 SIZES SHIPT—Run of Mine.
 PREP. & EQUIP—Gravity Screens.
 Old information.

WINFIELD LIGNITE COAL COMPANY.

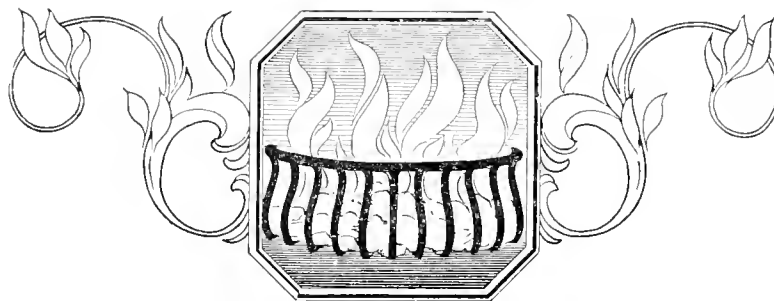
General office, Winfield, Tex.
 PR—J. A. Lokey, Winfield, Tex.
 VP—J. W. Barrett, Winfield, Tex.
 TR—W. L. Nelson, Winfield, Tex.
 GM—C. B. Richbourg, Winfield, Tex.
 GS—C. B. Richbourg, Winfield, Tex.
 PA—C. B. Richbourg, Winfield, Tex.
 CE—C. B. Richbourg, Winfield, Tex.

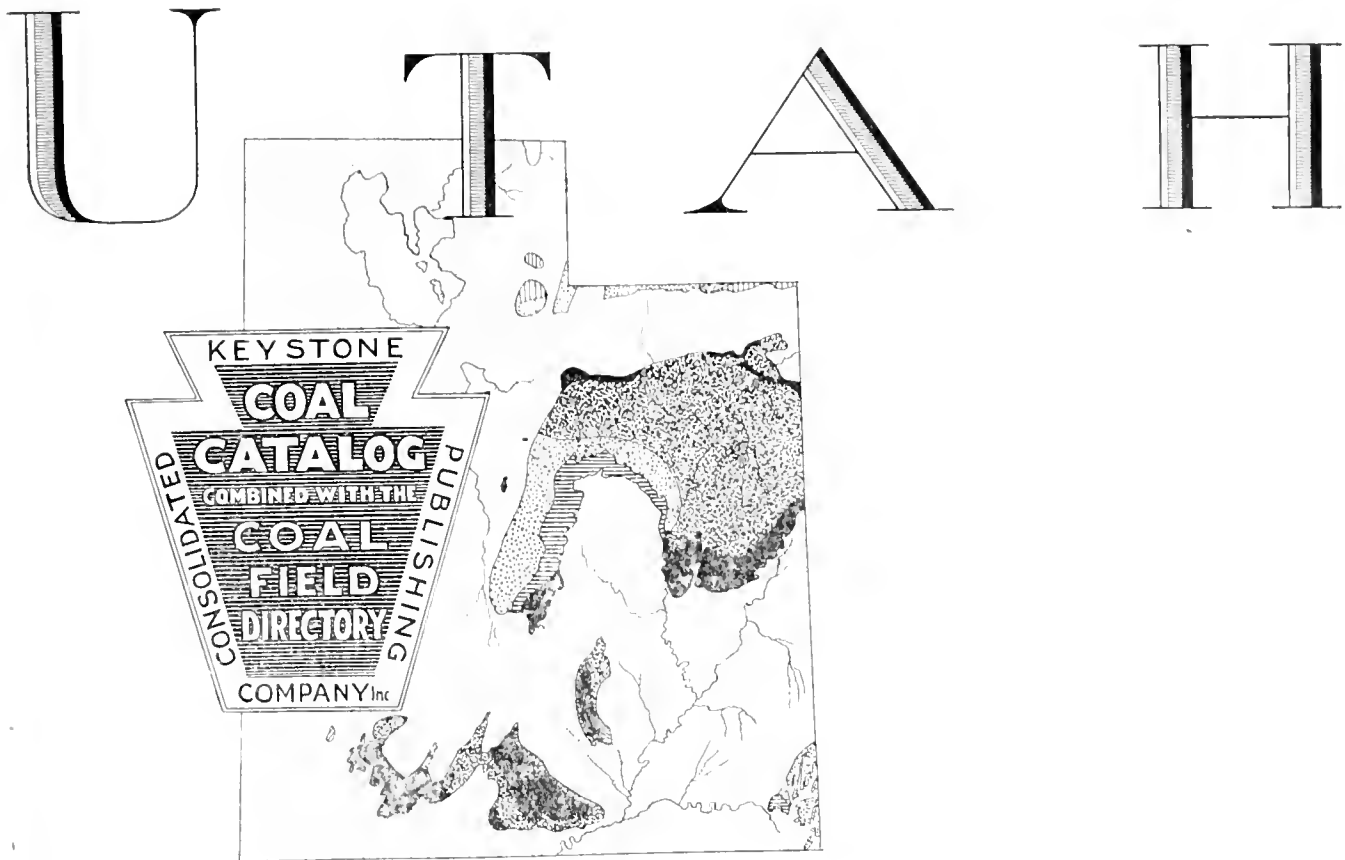
Winfield Mine; Slope; Seam, 80 in. thick.
 PO—Winfield, Tex.; SP—Same; CTY—Titus; RR—St. L. S. W.
 S of H—Mules. Track gage 30 in.
 S of M—Hand.
 PP—1 fire tube boiler, 60 H. P.
 EMP—50. Daily tonnage 200.
 SIZES SHIPT—Run of Mine.

WISE COUNTY COAL CO.


PR—A. J. Clendenen, ...Bridgeport, Tex.
 TR—Ben J. Tiller, " "
 GM—A. J. Clendenen, " "

No. 6 Mine; Shaft; Seam 18 in. thick.
 PO—Bridgeport, Tex.; SP—Same; CTY—Wise; RR—C. R. I. & P.
 S of M—Mules.
 S of H—Hand.
 PP—1 return tubular boiler, 70 H. P., 1 gen. unit.
 EMP—60. Last years tonnage 6,783.
 SIZES SHIPT—Run of Mine Lump.
 Old information.





CONTENTS



Map of Mining Fields.....905

Sectional View of Coal Formations.....907

General Description of Coal Resources.....908

Carbon County Coal.....908

Emery County Coal.....909

Grand County Coal.....909

Summit County Coal.....909

San Pete County Coal.....909

Uinta County Coal.....909

Iron County Coal.....909

Washington County Coal.....909

Preparation and Sizing of Coal.....909

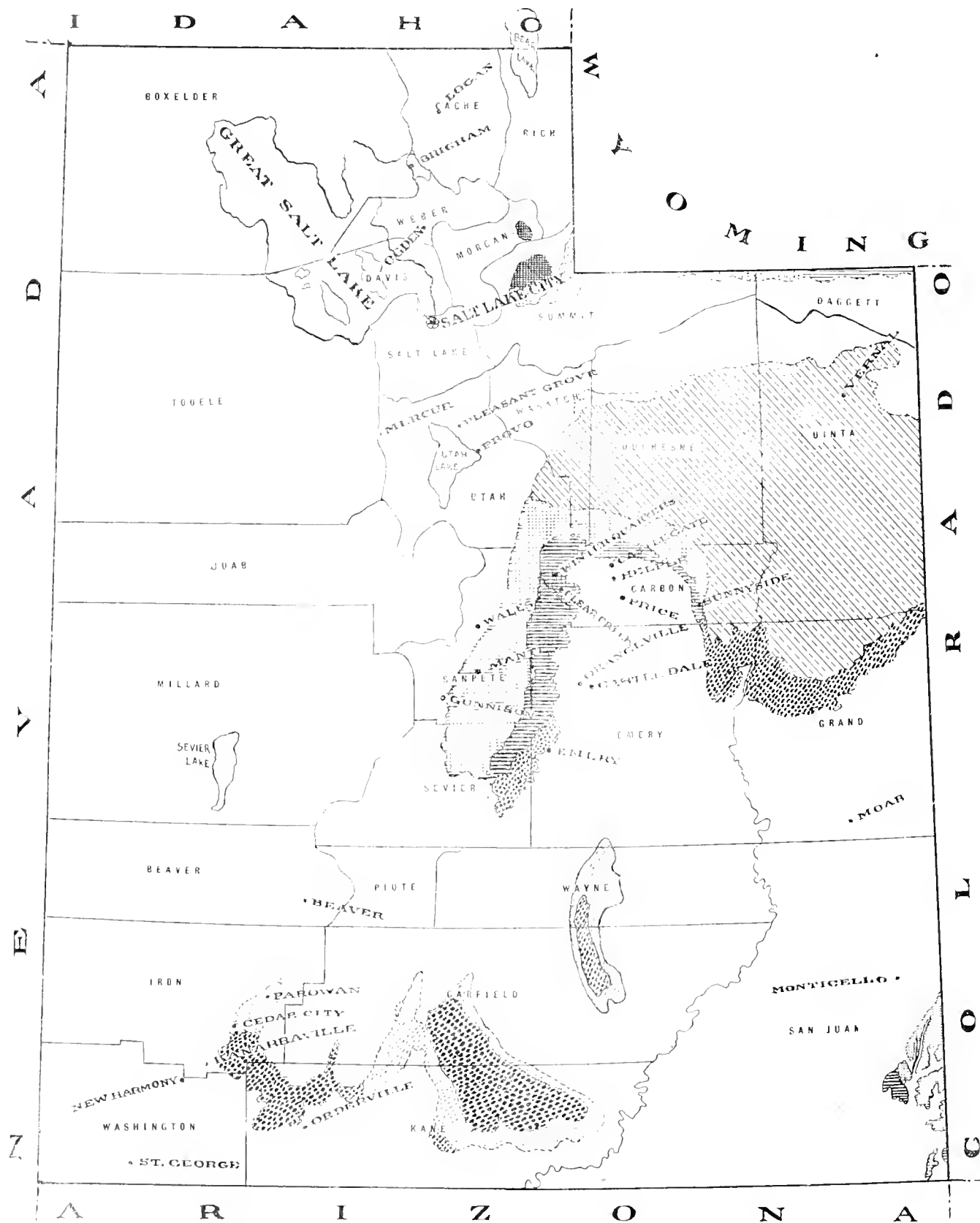
Supplementary Analyses.....910

Descriptive Advertisements.....911

List of Mines by Counties.....912

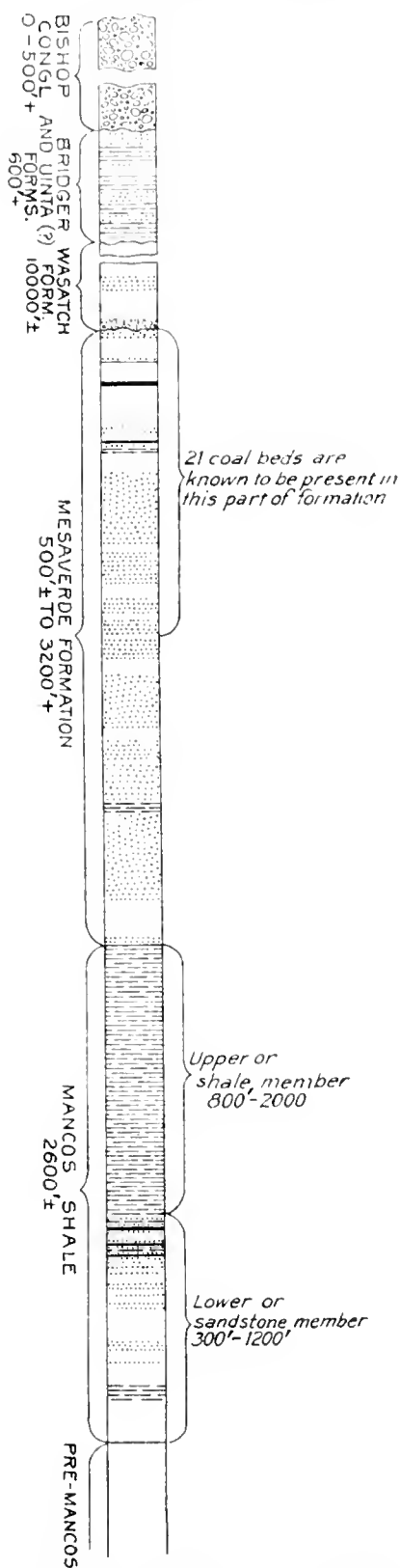
Alphabetical Directory of Coal Mines.....913, 914

Map of Mining Fields—UTAH

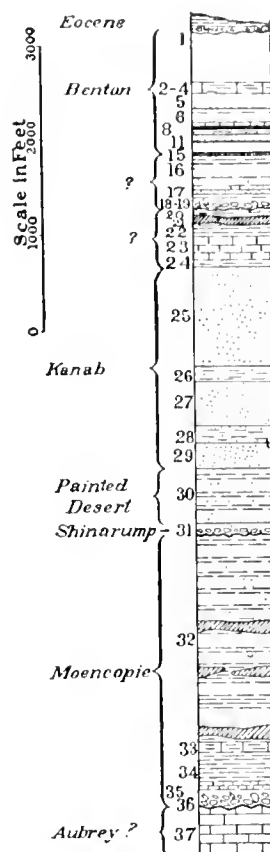


UTAH

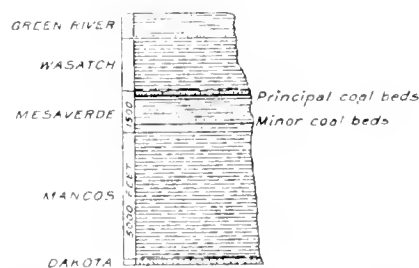
Vertical Sections Showing Arrangement of Coal Seams*



Vertical section of Blacktail Mountain Coal Field, Wasatch county.



Diagrammatic section (condensed) of rocks exposed in the western part of Colob Plateau.



Vertical section of the Vernal Coal Field.

*From Bulletins 316, 341 and 471 of the U. S. G. S.

UTAH*

General Description of the Coal Resources of the State, With the Ranks of Coal Produced; Treats of the Counties In Which the Producing Beds Occur; Map of the State Showing Mining Fields; Sectional Views of Formations; Analyses, Etc

The coal bearing measures of Utah containing workable coal seams cover an area between 13,000 and 15,200 square miles, and in addition there are possibly 2,000 square miles that have not been proven. The largest, and commercially the most important coal field, is that of the Great Uinta Basin, which lies parallel with the Uinta Mountains. This field extends over Crested Butte about one-third of the way across Colorado on the east and to the western part of Carbon and Emery counties on the west. This basin underlies large portions of Uinta, Wasatch and Carbon counties, its southern border being in Grand and Emery counties. The coal measures belong to the Mesaverde formation of the Cretaceous period.

The character of the coal from the producing mines is nearly all bituminous. The yearly output ranges between 4,000,000 and 5,000,000 tons, and the production of coke is in the neighborhood of 425,000 tons annually. The coke is used mostly in the smelters of Utah, Montana, Nevada and Idaho.

By far the most important field lies in Carbon county, from which 85 to 90 per cent of the state's production is being mined. Emery county ranks next in importance. Other producing counties of Utah are Grand, Iron, Sanpete, Summit, Uinta and Washington. The railroads traversing the coal regions are the Denver & Rio Grande; Union Pacific; Sanpete; Utah; and the San Pedro, Salt Lake & Los Angeles Railroad. The coal fields of Utah will be discussed by counties.

CARBON COUNTY

There are three separate coal horizons in this county, known locally as the upper, main and sub-coal. The upper coal measures lie just under the Castlegate Reef, which is a massive gray sandstone from 200 to 700 feet in thickness. None of the coal seams in the upper measures have any commercial value at the present time.

The main coal horizon is from 200 to 500 feet thick, and consists of alternating beds of sandstones and shales with from two to four workable coal seams varying from 5 to 28 feet in thickness. The main workable bed, known as the Castlegate seam, varies from 5 to 20 feet in thickness.

The subcoal horizon lies directly under the Castlegate formation, but the coal beds contained in this formation are usually too thin to be workable. Most of the production of this county comes from the Castlegate seam, although there are at least two workable seams throughout most of the field, and these are generally found in one coal horizon. In several sections, however, there are three and sometimes four workable beds.

The physical characteristics of the beds vary considerably throughout the district. Some of the coals have a bright, shiny luster with pronounced face cleavages, brittle and hard, and break in generally slabby shapes. In other sections the coal has good cleavages, but is much more massive and tough, though no harder, while in still other sections it is tough, with no pronounced cleavages, and breaks in large pieces. In general, all the coals stand shipment and storage well and are excellent for domestic and steam purposes. The average maximum pitch does not exceed 10 per cent.

The Castlegate seam, or lower seam of the main coal horizon, is found to have a much more even bed than the others, whereas the upper seams are more or less rolling. In some mines the warping of the

strata or the irregularity of the bed is such that the direction of the pitch is changed materially, and this feature makes it somewhat difficult to lay out the workings in a systematic manner.

Much of the mining in Carbon county is done under heavy cover. In some places at present the cover is over 2,000 feet thick and in but few localities it is less than 1,000 feet. In some sections faulting has taken place to a great extent and some of the displacements are found to be as great as 1,500 feet. A peculiarity which is observable in many of the coal fields of the Rocky Mountain States is the burning out of the coal beds, due to spontaneous combustion at points along the outcrop. The distances in from the outcrop from which the coal has been burned in some instances are really remarkable, the burned areas being found 2,500 feet in from the outcrop.

The product from the mines of Carbon county is a good grade of bituminous coal and that from the Castlegate district is a coking coal, although the coke produced in the ordinary bee-hive oven is somewhat inferior in structure. A large proportion of the product from the mines is used by the railroad companies for locomotive fuel, while a part reaches the market as far west as San Francisco.

GENERAL ANALYSIS

Moisture	5.50
Volatile Matter	39.20
Fixed Carbon	47.80
Ash	7.50
Sulphur	0.60
B. T. U.	12,500

*The information here presented on Utah coals has been largely gathered from U. S. G. S. Bulletins Nos. 316, 341, 471 and from a description of Utah coals by A. C. Watts in Coal Age, Vol. 10, pages 214 and 258.

EMERY, GRAND, SUMMIT, SANPETE AND UINTA COUNTIES

These counties constitute a large part of what is known as the Wasatch field of Utah, which extends eastward from the Wasatch Mountains to the Colorado lines. The western portion of the field extends along the base of the Wasatch Mountains for a distance of sixty miles. The outcrop then turns southwest, following along the edge of the monoclinical ridge of the Roan or Book Cliffs, a distance of 140 miles to the Colorado lines. Nearly the whole of this basin is covered by the Eocene beds, the coal measures being exposed in a narrow strip along its southern and eastern borders and at a few points along the northern edge, where erosion has carried away the overlying formations.

The measures in Emery, Carbon and Wasatch counties have been subjected to serious displace-

ments, while those in Grand and Uinta counties generally have a uniform northward dip of from 10 to 15 degrees. The coals of this field as found in the counties named are bituminous. A large portion of the product of the mines in these counties is used by the railroad companies for locomotive fuel.

GENERAL ANALYSIS

	Emery	Grand	Summit	Sanpete	Uinta
Moisture	6.60	8.80	14.00	8.00	9.00
Volatile Matter	37.60	32.50	38.00	42.60	34.70
Fixed Carbon . .	49.70	45.70	43.00	43.30	47.00
Ash	6.10	13.00	5.00	6.10	9.30
Sulphur	0.80	0.55	1.40	0.90	1.70
B. T. U.	12,250	10,600	10,700	11,750	11,250

IRON AND WASHINGTON COUNTIES

The coal areas of Iron and Washington counties belong to what is known as the southwestern Utah region, and until recent years very little has been done in the way of exploring the coal resources of these counties. As in general throughout the Rocky Mountain provinces, the coal bearing rocks are of Cretaceous age. Coal occurs in the lower part of the Cretaceous System between 250 to 500 feet above the Jurassic rocks. In general, in any one section only one bed of workable coal has been found, but in some localities six are present. The beds of coal thicken and thin out like lenses, and no single bed has been found to be continuous for more than a few miles.

Most of the operating mines in both counties are located in what is known as the Harmony field. The coal in this field occurs in a narrow belt of Cretaceous strata and has been metamorphosed by the intrusion of a large amount of andesite into the coal bearing rocks. They are deep black in color, having a brilliant luster, and break with a semi-conchoidal and a cubical fracture and are fairly hard, though they can be crushed in the hands. The coal is streaked with seams of bone and shale in intimate association and, at least locally, much foreign matter is present. The composition of the coal varies in accordance with the distance from the intrusive rock, thus the beds

which are farthest away from the andesite are the least altered. The fuel ratios indicate that the coal in this field can be classed as anthracite, to semi-anthracite, to semibituminous.

The coals of the Colob field of Washington county occur in the lower few hundred feet of the Cretaceous section in rocks of Colorado age. No bed can be traced continuously throughout the field, as they are variable in extent and lenslike in their development. The Colob coals are deep black and have a shiny luster. They are slick and do not soil the hands like the better grades of bituminous coal. Their fracture generally is irregular, with a tendency to split along bedding planes. The coal contains considerable moisture and in general a large amount of ash and sulphur. The coals are intrinsically of medium low grade, and judging from their analyses they range from a low grade bituminous to subbituminous.

GENERAL ANALYSIS

	High Volatile	Low Volatile
Moisture	10.00	7.80
Volatile Matter . . .	36.50	9.40
Fixed Carbon	47.80	54.80
Ash	5.70	28.00
Sulphur	6.00	3.20
B. T. U.	10,800	9,100

PREPARATION OF COAL

In the Utah field substantially twelve different grades are required, as follows: run of mine coal, lump coal over 1½-inch perforations, lump coal over 3-inch, lump coal over 5-inch, lump coal over 8-inch, slack coal through 1½-inch, pea coal through 1½-inch and over ½-inch, dust through ½-inch, nut coal through 3-inch and over 1½-inch, egg coal through 5-inch and over 3-inch, soft coal through 5-inch and over 1½-inch, California lump coal

through 8-inch and over 3-inch. These are the general sizes of coal demanded by the trade. The size of the perforations vary at different mines. All the mines in Carbon county, where commercial coal is mined, are equipped with shaking screen plants making four principal sizes, as follows: lump over 4½-inch round perforations, nut through 4½-inch and over 1½-inch round, slack through 1½-inch and over ¾-inch round, dust through ¾-inch round.

Analyses of Utah Seams by Counties and Localities

(ALL ANALYSES MADE ON MINE SAMPLES "AS RECEIVED")

COUNTY AND LOCATION	SEAM	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carbon	Oxygen	Ratioes
									Carbon	F. C.	
									Oxy. + Ash	V. M.	
Carbon, 1 1/4 mi. n. of Carbon.....	Castlegate.....	Panther.....	3.56	45.62	45.44	5.38	0.58	13.342	74.33	12.23	4.22
Carbon, Castlegate.....		Castlegate No. 1.....	3.81	44.68	44.42	7.09	0.61	12.953	71.86	13.17	3.55
Carbon, 3/4 mi. n. e. of Castlegate.....		Castlegate No. 2.....	3.70	42.80	43.81	5.31	0.40	13.185	73.94	13.38	3.90
Carbon, 1 1/2 mi. n. e. of Castlegate.....		Cameron No. 1.....	3.30	42.52	47.99	6.19	0.40	13.064	73.22	13.24	3.77
Carbon, 10 mi. e. of Castlegate.....		Gibson.....	5.42	36.32	52.16	6.10	0.54	12.220	69.46	15.68	3.07
Carbon, Hiawatha.....		Hiawatha No. 2.....	5.65	40.79	46.51	6.95	0.56	12.647	67.84	16.32	2.68
Carbon, Kenilworth.....		Four Points.....	5.58	38.92	46.51	8.99	0.51	12.470	72.72	15.38	3.61
Carbon, Kenilworth.....		Aberdeen.....	4.47	40.79	49.98	4.76	0.32	12.982	72.72	15.12	3.62
Carbon, Price.....		Huntington Creek.....	6.05	42.02	47.06	4.87	0.55	13.151	72.32	15.12	3.62
Carbon, 9 mi. n. e. of Price.....		Jesse Knight.....	5.68	41.87	47.68	4.77	0.58	12.638	73.12	13.29	3.79
Carbon, Standardville.....		Standard.....	3.77	45.76	44.67	6.00	0.36	13.070	71.79	14.88	3.62
Carbon, near Storrs.....		Spring Canyon No. 2.....	6.01	42.92	46.14	4.93	0.85	12.944	71.28	13.45	3.57
Carbon, Sunnyside.....		No. 1.....	5.96	38.68	47.77	6.59	1.73	12.841	69.46	15.68	3.07
Carbon, Winterquaters.....		No. 1.....	8.10	40.21	45.91	5.78	0.86	12.162	73.12	13.29	3.79
Emery, 2 1/4 mi. e. of Emery.....		Williams.....	3.95	41.83	42.60	11.62	4.66	11.900	69.85	16.48	3.13
Emery, 3/4 mi. from Black Hawk.....		Black Hawk.....	7.18	42.16	44.81	5.85	0.68	12.537	73.02	13.89	3.68
Emery, 4 mi. s. of Emery.....		Browning.....	3.93	40.92	49.22	5.93	0.39	12.965	73.02	13.89	3.68
Emery, 4 mi. s. e. of Emery.....		Casper.....	5.21	39.06	41.61	14.12	0.81	11.273	69.46	15.68	3.07
Emery, 12 mi. s. of Emery.....		.....	16.67	34.29	41.94	7.10	1.12	5.277	69.46	15.68	3.07
Emery, 14 mi. n. of Woodside.....		.....	4.76	38.16	52.09	4.99	0.74	13.185	69.46	15.68	3.07
Grand, 10 mi. n. e. of Green River.....		Black Baby.....	5.58	32.77	43.61	18.04	0.72	.....	59.10	14.97	1.74
Grand, 5 mi. n. of Thompsons.....		Ballard.....	6.35	31.89	42.74	19.02	0.58	10.602	63.01	11.19	2.60
Iron, 4 mi. s. e. of Cedar City.....		Corry.....	4.93	37.24	44.79	13.04	6.72	11.412	61.24	17.24	2.28
Iron, 7 mi. s. e. of Cedar City.....		Jones.....	10.35	36.33	43.70	9.62	5.82	10.874	48.48	11.32	1.10
Iron, 4 mi. n. w. of New Harmony.....		New Harmony.....	8.29	13.44	45.64	32.63	3.17	8.235	62.13	21.23	2.39
Iron, 5 mi. e. of Kanarraville.....		Kanarra.....	12.56	36.43	46.21	4.80	5.24	10.942	57.11	28.39	1.65
Iron, 6 mi. n. e. of Kanarraville.....		Culver.....	14.19	33.39	42.50	9.92	.....	9.927	62.95	16.03	1.32
Kane, 1 1/2 mi. n. e. of Glendale.....		Glendale.....	20.56	32.43	40.79	6.22	1.19	9.794	62.95	16.03	1.32
Kane, 13 mi. n. w. of Glendale.....		Cannel King.....	12.69	37.34	46.03	3.94	4.03	10.969	61.40	25.31	2.03
Kane, 13 mi. n. w. of Glendale.....		Cannel King.....	7.35	46.93	22.48	23.24	1.61	10.355	63.77	23.87	2.34
Kane, 2 mi. s. of Orderville.....		Kroft.....	16.59	32.59	37.38	13.44	3.41	7.882	59.16	22.92	1.83
Sanpete, 2 mi. e. of Sterling.....		Morrison.....	8.07	42.59	43.20	6.14	0.92	11.767	61.03	19.05	1.97
Sanpete, 2 mi. w. of Wales.....		Wales.....	2.17	33.50	50.94	13.39	4.62	.....	64.10	19.84	2.30
Sanpete, 5 mi. s. w. of Wales.....		Coal Creek.....	3.65	29.16	44.68	22.51	6.79	10.291	61.40	25.31	2.03
Sevier, 15 mi. s. of Emery.....		Hogan.....	18.41	33.86	42.16	5.57	0.41	9.486	63.77	23.87	2.34
Sevier, 15 mi. n. e. of Fremont.....		Kearns & Duggins.....	23.57	32.61	33.25	10.57	2.88	7.823	59.16	22.92	1.83
Sevier, about 15 mi. e. of Salina.....		Sevier.....	6.38	45.10	36.28	12.24	0.44	11.752	61.40	25.31	2.03
Summit, 1 mi. s. e. of Coalville.....		Superior.....	17.08	36.94	41.24	4.74	1.53	10.179	63.77	23.87	2.34
Summit, 3 mi. n. e. of Coalville.....		Wasatch.....	14.2	36.0	44.8	5.0	1.41	10.630	59.16	22.92	1.83
Summit, 6 mi. n. e. of Coalville.....		Rees-Grass Creek.....	12.18	42.18	42.25	3.39	1.90	11.257	61.03	19.05	1.97
Uinta, 3 mi. n. of Vernal.....		Gibson.....	11.66	34.40	44.50	9.44	1.92	10.575	61.03	19.05	1.97
Uinta, 7 mi. n. of Vernal.....		Blue Bell.....	9.78	37.19	43.50	9.53	1.49	.....	61.03	19.05	1.97
Uinta, 5 mi. n. w. of Vernal.....		Rich.....	8.21	34.30	45.70	11.79	1.76	11.074	64.10	19.84	2.30
Uinta, 7 mi. n. w. of Vernal.....		Rich.....	8.64	36.09	47.21	8.06	1.39	11.581	61.40	25.31	2.03
Wasatch, about 3 mi. e. of Hanna.....		Reynolds.....	11.25	35.61	46.43	6.71	0.95	11.383	61.40	25.31	2.03
Wasatch, about 20 mi. w. of Vernal.....		Winchester.....	27.40	32.14	37.87	2.59	0.60	10.382	61.40	25.31	2.03
Wasatch, about 25 mi. s. w. of Hanna.....		.....	14.58	38.48	41.00	5.94	0.82	10.382	61.40	25.31	2.03
Wasatch, about 28 mi. s. e. of Heber.....		Cummings.....	19.15	37.04	37.60	6.21	0.69	8.723	53.31	11.17	1.32
Washington, Harmony Field.....		.....	8.21	4.41	58.02	29.36	2.28	10.408	62.77	6.86	2.17
Washington, Harmony Field.....		.....	7.02	10.30	60.61	22.07	4.06	10.408	62.77	6.86	2.17
Washington, Harmony Field.....		.....	8.29	13.44	45.64	32.63	3.17	8.235	48.48	11.32	1.10

*Bulletins Bureau of Mines.

†United States Geological Survey Reports.

COAL CATALOG

PEABODY COAL COMPANY

CHICAGO, ILL.

CINCINNATI, OHIO
PINEVILLE, KENTUCKY
ST. LOUIS, MISSOURI
KANSAS CITY, MISSOURI

BRANCHES
MINNEAPOLIS, MINNESOTA
SPRINGFIELD, ILLINOIS
PEORIA, ILLINOIS

OMAHA, NEBRASKA
DEADWOOD, SOUTH DAKOTA
SHERIDAN, WYOMING
SPOKANE, WASHINGTON

For General Summary of Peabody Management Service See Page 249

Coal Mine Management

PURCHASING AGENT, AUDITOR AND ACCOUNTANT

Purchasing Agent

In connection with our management service we act as purchasing agent for our clients, looking after the buying of all supplies, machinery and equipment.

Buying for a large number of mines, the aggregate purchases naturally receive benefits in price reductions.

Deliveries are insured by anticipating requirements for many months.

Further economics are effected by standardizing, as far as possible, all equipment and supplies.

Auditor and Accountant

The clients of Peabody Coal Company are supplied regularly with detailed information on properties managed. Each month they receive statements showing the financial condition and earnings, cost of coal classified under various headings, supplies used, detailed inventory, complete details on prices realized on various sizes and the average price of all coal shipped.

A complete system of Cost Accounting is maintained and each item of cost is constantly and carefully checked and any irregularities promptly corrected.

Reserves are set up for compensation under the laws of the various states.

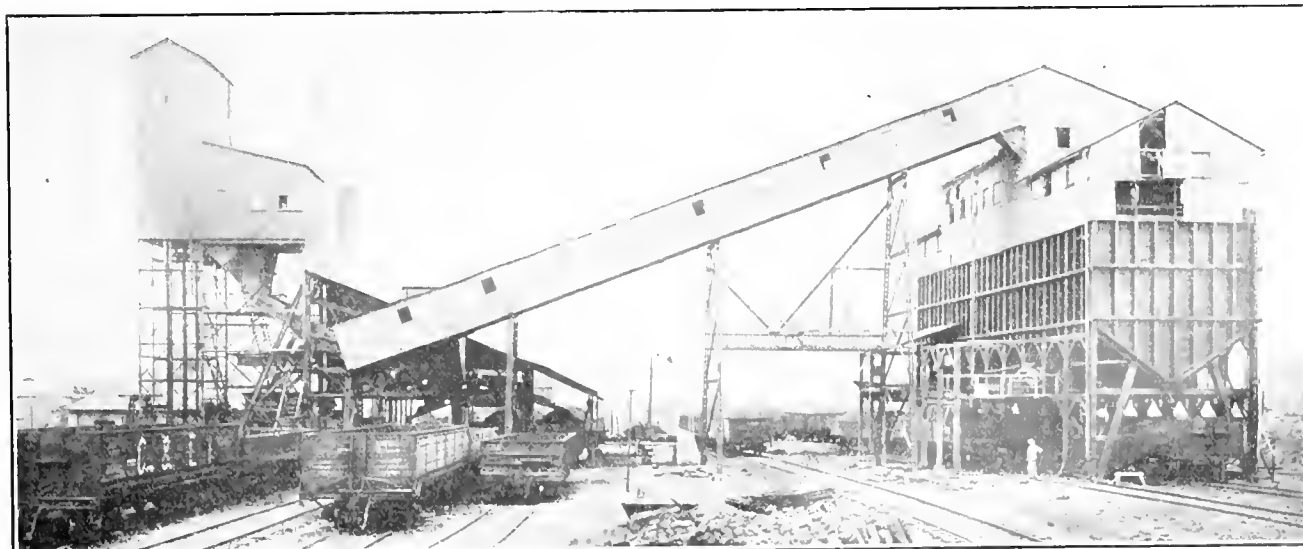
The intricate problems of depreciation and depletion are solved by using the experience of the company in operating a large number of mines in various fields.

Income and profit taxes are worked out by men who have given special study to Internal Revenue Laws.

Actual inventories of supplies are taken at least twice a year and a constant check kept on all material and equipment.

SOME OF OUR CLIENTS

Acmec Coal Company, Acmec, Wyoming
Amalgamated Development Corp., Carneyville, Wyoming
Big Muddy Fuel Company, Johnston City, Illinois
Black Mountain Corporation, Everts, Kentucky
By-Products Coke Corporation, Chicago, Illinois
Central Ill. Public Service Company, Chicago, Illinois
Chicago, Burlington & Quincy Railroad, Chicago, Illinois
Chicago, Rock Island & Pacific Railway, Chicago, Illinois
Commonwealth-Edison Company, Chicago, Illinois
Consumers Company, Chicago, Illinois
Continental & Commercial Nat'l Bank, Chicago, Illinois
Department of the Interior, United States Government
Federal Coal Company, Cartersville, Illinois
First National Bank, Sheridan, Wyoming
Fuel Controller for the Dominion of Canada
Indiana Hocking Coal Company, Shelbyville, Indiana
Jasper Park Collieries Co., Ltd., Duluth, Minn. and Pocatonton, Alberta, Canada
Kool Coal Company, Kool, Wyoming
Manufacturers Coal & Coke Company, Hellier, Kentucky
Merchants Loan & Trust Company, Chicago, Illinois
Middle West Utilities Company, Chicago, Illinois
Monarch Coal Mining Company, Sheridan, Wyoming
Peabody, Houghteling & Company, Chicago, Illinois
Peoples Gas Light & Coke Company, Chicago, Illinois
Public Service Co. of Northern Illinois, Chicago, Illinois
Semet-Solvay Company, Syracuse, N. Y.
Sheridan-Wyoming Coal Company, Sheridan, Wyoming
Springfield Coal Mining Company, Springfield, Illinois
Springfield District Coal Mining Co., Springfield, Illinois
Superior Smokeless Coal & Mining Co., Tahona, Oklahoma
United States Distributing Corporation, New York City
Harry Payne Whitney, New York City
J. Woolley Coal Company, Evansville, Indiana



The Original Peabody Mine. Located at Marion, Williamson County, Illinois. In addition to producing upwards of a million tons of coal per annum, this mine is used as an experiment and research station.

List of Mines by Counties, Including Name of Company, General Office Address
Railroad and Shipping Point

UTAH

CARBON COUNTY COAL

Bituminous rank. Suitable for Domestic, Locomotive Fuel, Producer Gas, Steam, Bee-hive Coking, Cement Burning, Melting, Powdered and Tile and Pottery Burning uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Cameron Coal Co.	Salt Lake City, Utah.	Cameron.	Carbon.	D. & R. G.	Castle Gate, Utah.
Cannon, George M.	20 East South Temple St., Salt Lake City, Utah.	Cannon.	Carbon.	D. & R. G.	Kenilworth, Utah.
Carbon Fuel Co.	Salt Lake City, Utah.	Rains.	Carbon.	D. & R. G.	Raines, Utah.
Independent Coal & Coke Co.	Salt Lake City, Utah.	Aberdeen No. 1.	Carbon.	D. & R. G.	Kenilworth, Utah.
Independent Coal & Coke Co.	Salt Lake City, Utah.	Aberdeen No. 2.	Carbon.	D. & B. G.	Kenilworth, Utah.
Kinney Coal Co.	202-3 Newhouse Bldg., Salt Lake City, Utah.	Kinney No. 1.	Carbon.	D. & R. G.	Scotfield, Utah.
Liberty Fuel Co.	Salt Lake City, Utah.	Liberty.	Carbon.	D. & R. G.	Latuda, Utah.
Lion Coal Co.	Ogden, Utah.	Wattis No. 1.	Carbon.	Utah.	Wattis Jet., Utah.
Mutual Coal Co.	Salt Lake City, Utah.	Annis.	Carbon.	D. & R. G.	Helper, Utah.
Mutual Coal Co.	Salt Lake City, Utah.	Mutual.	Carbon.	D. & R. G.	Helper, Utah.
Mutual Coal Co.	Salt Lake City, Utah.	Demsey.	Carbon.	D. & R. G.	Helper, Utah.
Peerless Coal Co.	Salt Lake City, Utah.	Peerless.	Carbon.	D. & R. G.	Helper, Utah.
Scotfield Coal Co.	Evanston, Wyo.	Union Pacific.	Carbon.	D. & R. G.	Scotfield, Utah.
Spring Canyon Coal Co.	817 Newhouse Bldg., Salt Lake City, Utah.	Spring Canyon No. 1.	Carbon.	D. & R. G.	Helper, Utah.
Spring Canyon Coal Co.	817 Newhouse Bldg., Salt Lake City, Utah.	Spring Canyon No. 3.	Carbon.	D. & R. G.	Helper, Utah.
Standard Coal Co.	Salt Lake City, Utah.	Standard.	Carbon.	D. & R. G.	Helper, Utah.
United States Fuel Co.	Salt Lake City, Utah.	Black Hawk.	Carbon.	Utah.	Hiawatha, Utah.
United States Fuel Co.	Salt Lake City, Utah.	Hiawatha.	Carbon.	Utah.	Hiawatha, Utah.
Utah Fuel Co.	Salt Lake City, Utah.	Pantler.	Carbon.	Utah.	Heiner, Utah.
Utah Fuel Co.	Salt Lake City, Utah.	Castle Gate.	Carbon.	D. & R. G.	Castle Gate, Utah.
Utah Fuel Co.	Salt Lake City, Utah.	Clear Creek.	Carbon.	D. & R. G.	Scotfield, Utah.
Utah Fuel Co.	Salt Lake City, Utah.	Sunnyside.	Carbon.	D. & R. G.	Sunnyside, Utah.
Utah Fuel Co.	Salt Lake City, Utah.	Utah.	Carbon.	D. & R. G.	Scotfield, Utah.
Utah Fuel Co.	Salt Lake City, Utah.	Winter Quarters.	Carbon.	D. & R. G.	Scotfield, Utah.

EMERY COUNTY COAL

Bituminous rank. Suitable for Domestic, Locomotive Fuel, Producer Gas, Steam, Cement Burning, Melting, Powdered and Tile and Pottery Burning uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
United States Fuel Co.	Salt Lake City, Utah.	Mohrland.	Emery	Utah	Mohrland, Utah.

GRAND COUNTY COAL

Bituminous rank. Suitable for Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
American Fuel Co. of Utah	Utah Sav. & Tr. Bldg., Salt Lake City, Utah	Utah-Grand.	Grand	D. & R. G.	Thompson, Utah.

SUMMIT COUNTY COAL

Bituminous rank. Suitable for Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Chappell Bros.	Coalville, Utah.	Chappell Bros.	Summit.	U. P.	Coalville, Utah.
Grass Creek Fuel Co.	Grass Creek, Utah.	Grass Creek.	Summit.	U. P.	Coalville, Utah.
Weber Coal Co.	Salt Lake City, Utah, P. O. Box 1328	Wasatch.	Summit.	U. P.	Coalville, Utah.

UINTA COUNTY COAL

Bituminous rank. Suitable for Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Rich, Joseph	Vernal, Utah	Rich	Uinta	Utah	Vernal, Utah

UTAH

Alphabetical Directory of Coal Mines, Giving Complete Detailed Information Covering Each Mine

For List of Abbreviations See Page 13.

AMERICAN FUEL CO. OF UTAH.

General Office, 602 Utah Savings & Trust Bldg., Salt Lake City, Utah.
PR—T. A. Williams, Scott Bldg., Salt Lake City, Utah.
VP—H. A. Schwelkhart, Salt Lake City, Utah.
TR—B. F. Bauer, Salt Lake City, Utah.
GM—R. W. Vandenberg, Utah Savings & Trust Bldg., Salt Lake City, Utah.
PA—R. W. Vandenberg, Utah Savings & Trust Bldg., Salt Lake City, Utah.
EM—H. E. Webb, Sego, Utah.
SCU—Neslen Mercantile Company, Buyer, W. D. McDonald Sego, Utah.
Sales Agent, R. W. Vandenberg, Utah Savings & Trust Bldg., Salt Lake City, Utah.

Utah-Grand Mine; Slope; Sego No. 1 Seam, 90 in. thick.
PO—Sego, Utah; SP—Thompson. CTY—Grand. RR—D. & R. G.
MS—A. L. Black Sego, Utah.
S of H—2 10-ton trolley pole type, 1 7-ton trolley pole type and 1 2½-ton storage battery locos; 12 mules. Track gage 42 in.
S of M—Room and pillar, 4 shortwall machs.
PP—3 boilers, 310 H. P., 3 M. G. Sets, 2300 volts A. C., to 250 volts D. C., 65 K. W. each, 1—200 K. W. engine, 2300 volts A. C., 1—75 K. W. engine, 250 volts D. C., 8 pumps.
EMP—120. Last years tonnage 131,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

CAMERON COAL COMPANY.

General Office, Salt Lake City, Utah.
PR—Franklin H. Ralapp, Salt Lake City, Utah.
VP—S. F. Balliff, Jr., Salt Lake City, Utah.
TR—M. H. Sawies, Salt Lake City, Utah.
GM—Franklin H. Ralapp, Salt Lake City, Utah.
GS—Chas. Ledger, Salt Lake City, Utah.
SA—Royal Coal Sales Co., Salt Lake City, Utah.

Cameron Mine; Slope; Castle Gate Seam, 84 to 96 in. thick.
PO—Castle Gate, Utah; SP—Same. CTY—Carbon. RR—D. & R. G.
S of H—Mules. Track gage 42 in.
S of M—12 longwall machs.
PP—Purchase power, transformer 11,000 to 2200-440 volts A. C.
EMP—150. Last years tonnage 175,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

CANNON, GEORGE M.

General Office, 20 East, South Temple St., Salt Lake City, Utah.
GM—George M. Cannon, Salt Lake City, Utah.

Cannon Mine; Drifts and Slopes; Seam, 120 inches thick.
PO—Price, Utah and Kenilworth, Utah; SP—Same; CTY—Carbon; RR—D. & R. G.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine, Lump.

CARBON FUEL CO.

General Office, 601 Cliff Bldg., Salt Lake City, Utah.
PR—L. F. Rains, Salt Lake City, Utah.
VP—C. P. Heaton, San Francisco, Cal.
TR—A. H. Jenkinson, Salt Lake City, Utah.
GM—L. F. Rains, Salt Lake City, Utah.
GS—W. W. Wetzel, Rains, Utah.
PA—J. K. Rains, Salt Lake City, Utah.
CE—W. W. Jones, Price, Utah.
EM—E. L. Collier, Rains, Utah.
EF—L. M. Rurdick, Rains, Utah.
SCU—Rains Mercantile Co. Buyer, S. W. Jenkinson, Rains, Utah.

Rains Mine; Slope; Seam 120 to 216 in. thick.
PO—Rains, Utah; SP—Same; CTY—Carbon; RR—D. & R. G.
S of H—Mules and elec. loco.
S of M—Hand and elec. machs.
PP—Power purchased, 3 pumps.
EMP—100. Last years tonnage 225,000.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Pickling Tables, Box Car Loaders.

CRAPPELL BROS.

General Office, Coalville, Utah.
GM—Thos. Crappell, Coalville, Utah.
GS—Wm. H. Crappell, Coalville, Utah.
SA—Coalville Sales Co., Coalville, Utah.
Crappell Bros. Mine; Weber Seam, 110 in. thick.
PO—Coalville, Utah; SP—Same; CTY—Summit; RR—U. P., Park City Br.
SM—William Crappell, Coalville, Utah.
S of H—2 Mules, Track gage 26 in.
S of M—Hand.
PP—Power purchased, transformers 11,000 to 220 volts A. C.
SIZES SHIPT—Slack, Egg, Lump.

GRASS CREEK FUEL COMPANY

General Office, Grass Creek, Utah.
PR—Frank Pingree, Salt Lake City, Utah.
VP—J. H. Roberts, Grass Creek, Utah.
TR—W. A. Shepherd, Salt Lake City, Utah.
GM—J. H. Roberts, Grass Creek, Utah.
GS—J. H. Roberts, Grass Creek, Utah.
PA—J. H. Roberts, Grass Creek, Utah.
EM—A. W. Buchanan, Grass Creek, Utah.
Grass Creek Mine; Drift and Slope; Wasatch Seam, 120 in. thick.
PO—Grass Creek, Utah; SP—Coalville, Utah; CTY—Summit; RR—Union Pacific.
S of H—Mules, rope, and stationary hoist. Track gage, 36 in.
S of M—Hand.
PP—Power purchased. Transformer, 11,000 to 440 volts A. C., 2 pumps.
EMP—35. Last years tonnage 23,892.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

INDEPENDENT COAL & COKE COMPANY

General Office, Walker Bldg., Salt Lake City, Utah.
PR—Chas. W. Buckley, Chicago, Ill.
VP—C. W. Fransworth, Salt Lake City, Utah.
TR—C. W. Fransworth, Salt Lake City, Utah.
GM—John H. Tonkin, Salt Lake City, Utah.
GS—W. J. Elwood, Kenilworth, Utah.
PA—P. W. Nixon, Salt Lake City, Utah.
EM—J. Richardson Roof, Kenilworth, Utah.
SCU—W. H. Woodhead, Kenilworth, Utah.
SA—Samuel Woodhead, Kenilworth, Utah.
ST—Roy Cook, Salt Lake City, Utah.

Aberdeen Nos. 1 and 2 Mines; Slopes; Aberdeen and Kenilworth Seams, 197 PO—Kenilworth, Utah; SP—Same; CTY—Carbon; RR—D. & R. G.
SM—E. S. Seaman, Kenilworth, Utah.
S of H—Mules, trolley pole type and combination locos. Track gage, 42 inches.
S of M—10 shortwall machs.
PP—Power purchased, transformer 2300-220 volts A. C., M. G. Set, 220 volts D. C., 3 ore tube boilers 375 H. P., 1 pump.
EMP—376. Last years tonnage 472,438.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Revolving and Shaker Screens, Pickling Tables.

KINNEY COAL COMPANY

General Office, 202-3 Newhouse Bldg., Salt Lake City, Utah.
PR—J. C. Kinney, Cokeville, Wyo.
VP—Wm. Monay, Salt Lake City, Utah.
TR—Wm. Monay, Salt Lake City, Utah.
GM—Wm. Monay, Salt Lake City, Utah.
GS—E. F. Ober, Salt Lake City, Utah.
PA—L. E. Smith, Salt Lake City, Utah.
SA—The Service Coal Company, Salt Lake City, Utah.
Kinney No. 1 Mine; Drift; Bookcliff Seam; 96 inches thick.
PO—Scotfield, Utah; SP—Same; CTY—Carbon; RR—D. & R. G.
S of H—Mules, rope, electric loco. Track gage 42 inches.
S of M—Shortwall machs.
PP—2 ore tube boilers, 100 H. P., 185 K. W. gen. unit, 220-440 volts A. C.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

KNIGHT INVESTMENT CO.

General Office, Provo, Utah.
PR—O. Raymond Knight, Provo, Utah.
VP—J. Wm. Knight, Provo, Utah.
TR—R. E. Allen, Provo, Utah.
GM—O. Raymond Knight, Provo, Utah.
PA—L. E. Adams, 817 Newhouse Bldg., Salt Lake City, Utah.
CE—H. R. Tenholm, Provo, Utah.
EM—Frank Allen Silver City, Utah.
Gruntvig Mine; Drift.

LIBERTY FUEL CO.

General Office, 809 Kearns Bldg., Salt Lake City, Utah.
PR—Frank Latuda, Trinidad, Colo.
VP—C. N. Cameron, Salt Lake City, Utah.
TR—L. R. Weber, Salt Lake City, Utah.
GM—F. N. Cameron, Salt Lake City, Utah.
GS—Geo. A. Schultz, Latuda, Utah.
PA—B. F. Deviny, Salt Lake City, Utah.
EM—George A. Schultz, Latuda, Utah.
Liberty Mine; Slope; Castle Gate Sun Seam, 78 in. thick.
PO—Latuda, Utah; SP—Frt. Latuda; Exp. Helper, Utah; RR—D. & R. G.
S of H—Mules and rope. Track gage, 42 in.
S of M—8 shortwall machs.
PP—Power purchased, transformer 11,000-440 volts A. C., 1 pump.
EMP—130. Last years tonnage 202,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

LION COAL COMPANY

General Office, 723 Eccles Bldg., Ogden, Utah.
PR—Joseph Scowcroft, Ogden, Utah.
VP—Adam Peterson, Ogden, Utah.
TR—Royal Eccles, Ogden, Utah.
GM—D. H. Pape, Ogden, Utah.
GS—P. H. Burnett, Ogden, Utah.
PA—L. R. Adamson, Ogden, Utah.
EM—W. J. Hillabrant, Ogden, Utah.
EE—Elmer Brown, Rock Springs, Utah.
EE—J. A. Hubalt, Ogden, Utah.
SCU—Wattis Merc. Co., Wattis, Utah.
SA—James T. Hill, Ogden, Utah.
Wattis No. 1 Mine; Drift; Mesaverde Seam; 120 inches thick.
PO—Wattis, Utah; SP—Wattis Junction, Utah; CTY—Carbon; RR—Utah Coal Route.
MS—W. J. Reid, Wattis, Utah.
S of H—Mules, rope, electric. Track gage 42 inches.
S of M—12 shortwall machs.
PP—Purchase power. Transformers 44,000 to 2,300 volts A. C. and 250 volts D. C.
EMP—200.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

MUTUAL COAL COMPANY

General Office, 422-23 Ness Bldg., Salt Lake City, Utah.
PR—Fred J. Leonard, Salt Lake City, Utah.
VP—M. H. Coffin, Salt Lake City, Utah.
TR—E. C. Coffin, Salt Lake City, Utah.
GM—Fred J. Leonard, Salt Lake City, Utah.
GS—M. H. Coffin, Jr., Salt Lake City, Utah.
PA—E. C. Coffin, Salt Lake City, Utah.
CE—Geo. A. McGonigal, Salt Lake City, Utah.
EM—A. H. Shaw, Salt Lake City, Utah.
SA—M. H. Coffin, Salt Lake City, Utah.
Mutual and Annis and Demeyer Mines; Slope; Castle Gate Seam, 72-24½ feet thick.
PO—Rains, Utah; SP—Helper, Utah; CTY—Carbon; RR—D. & R. G.
S of H—Mules, rope, elec. locos. Track gage 42 inches.
S of M—Elec. punchers, shortwall machines.
PP—Power purchased, Transformer 11,000-440-220 volts A. C.
EMP—75. Daily tonnage 300.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Pickling Tables.

PEERLESS COAL COMPANY

General Office, 1105 Newhouse Bldg., Salt Lake City, Utah.
PR—Ezra Thompson, Salt Lake City, Utah.

VP—L. H. Thompson, Salt Lake City, Utah.
TR—Jas. D. Murdoch, Salt Lake City, Utah.
GM—Ezra Thompson, Salt Lake City, Utah.
GS—R. H. Howard, Helper, Utah.
PA—L. H. Thompson, Salt Lake City, Utah.
SA—B. D. Lyon, Salt Lake City, Utah.
Peerless Mine; Drift; Slope; Seam, 15½ in. thick.
PO—Helper, Utah; SP—Same; CTY—Carbon; RR—Denver & Rio Grande, Spring Canyon Branch.
S of H—Mules and rope. Track gage 42 inches.
S of M—9 shortwall machs.
PP—Power purchased, Transformer, 440 volts A. C.
EMP—100. Daily tonnage 1000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

RICH, JOSEPH.

GM—Geo. Blackas, Vernal, Utah.
Rich Mine; Drift; Seam, 72 in. thick.
PO—Vernal, Utah; SP—Same; CTY—Utah.
MS—Joseph E. Rich, Vernal, Utah
S of H—Mules.
S of M—Hand.
Last years tonnage 2,000.
SIZES SHIPT—Lump.

SCOTFIELD COAL COMPANY

General Office, Evanston, Wyo.
PR—Geo. E. Pexton, Evanston, Wyo.
VP—J. H. Martin, Evanston, Wyo.
TR—O. E. Bradbury, Evanston, Wyo.
GM—J. H. Martin, Evanston, Wyo.
GS—J. H. Martin, Evanston, Wyo.
PA—J. H. Martin, Evanston, Wyo.
CE—O. E. Bradbury, Evanston, Wyo.
EM—J. H. Martin, Evanston, Wyo.
SCU—F. I. Johnson, Evanston, Wyo.

Union Pacific Mine; Slope; Pleasant Valley Seam, 168 in. thick.
PO—Scotfield, Utah; SP—Same; CTY—Carbon; RR—D. & R. G.
MS—Bernard Newren, Scotfield, Utah
S of H—Mules, rope, steam loco. Track gage 42 inches.
S of M—Hand.
PP—2 ore tube boilers, 150 H. P. gen. units, 4440 volts D. C., 3 pumps.
EMP—110. Last years tonnage 125,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

SPRING CANYON COAL COMPANY

General Office, 817 Newhouse Bldg., Salt Lake City, Utah.
PR—O. Raymond Knight, Salt Lake City, Utah.
VP—J. Wm. Knight, Provo, Utah
TR—J. A. Stallings, Salt Lake City, Utah.
GM—J. Wm. Knight, Provo, Utah.
GS—G. A. Murphy, Storrs, Utah.
MM—S. R. Jewkes, Storrs, Utah.
PA—L. E. Adams, 817 Newhouse Bldg., Salt Lake City, Utah.
EM—W. W. Clyde, Storrs, Utah.
SCU—Storrs Mercantile Company, Buyer, A. R. Peterson, Storrs, Utah.
SA—J. A. Stallings, 817 Newhouse Bldg., Salt Lake City, Utah.

Spring Canyon No. 1 Mine; Slope; Sub-bituminous Seam, 96 in. thick.
PO—Storrs, Utah; SP—Helper, CTY—Carbon; RR—D. & R. G., Spring Canyon Branch.
S of H—11 elec. locos. Track gage 40 in.
S of M—10 shortwall machs.
PP—Power purchased, 4 M. G. Sets, 500 K. W., 250 volts D. C.
EMP—115. Last years tonnage 148,175.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Revolving and Shaker Screens, Pickling Tables.
Spring Canyon No. 3 Mine; Slope; Castle Gate Seam, 96 in. thick.
PO—Storrs, Utah; SP—Helper; CTY—Carbon; RR—D. & R. G.
S of H—11 elec. Track gage 40 in.
S of M—6 shortwall machs.
PP—Purchase power.
EMP—300. Last years tonnage 390,420.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Revolving and Shaker Screens, Pickling Tables.

STANDARD COAL COMPANY

General Office, 918 Kearns Bldg., Salt Lake City, Utah.
 PR—F. A. Sweet, Salt Lake City, Utah.
 TR—J. H. Riddle, Salt Lake City, Utah.
 PA—D. G. Blake, Salt Lake City, Utah.
 EM—R. E. Mitten, Standardville, Utah.
 SCO—Standard Stores Co., Buyer, C. A. Pons, Standardville, Utah.
 SA—W. H. MacLean, 918 Kearns Bldg., Salt Lake City, Utah.

Standard Mine Drift Book Cliffe Seam, 144 in. thick.
 PO—Standardville, Utah; SP—Helper, Utah; CTY—Carbon; RR—Denver & Rio Grande.
 MS—F. C. Hennes, Standardville, Utah.
 S of H—Mules and 6 trolley pole type locos. Track gage 42 in.
 S of M—4 shortwall machs and 2 overhead cutters.
 PP—Power purchased, Transformer 2300-250 volts A. C., M. G. Set, 250 volts D. C., 4 pumps.
 EMP—250. Last years tonnage 265,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables.

UNITED STATES FUEL COMPANY.

General Office, Salt Lake City, Utah.
 PR—Sidney J. Jennings, 120 Broadway, New York, N. Y.
 VP—Moroni Heiner, Salt Lake City, Utah.
 TR—G. E. Forrester, Salt Lake City, Utah.
 GS—R. M. Magraw, Hiawatha, Utah.
 PA—T. W. Lewis, Hiawatha, Utah.
 EM—J. E. Forrester, Hiawatha, Utah.
 SCO—Carbon-Emery Stores Co. Buyer, Geo. McDermald, Hiawatha, Utah.
 SA—H. H. Calvin, Salt Lake City, Utah.

Black Hawk Mine; Drift; Mesa Verde Seam, 204 in. thick.
 PO—Hiawatha, Utah; SP—Same; CTY—Carbon and Emery; RR—Utah.
 MS—C. N. Orr, Hiawatha, Utah.
 SM—G. L. Reckstead, Hiawatha, Utah.
 S of H—Horses, 9 trolley pole type and 2 storage battery locos. Track gage 42 in.
 S of M—11 shortwall and 1 overhead cutter mach.
 PP—Power purchased, transformers 44-000-11,000-2300 A. C., M. G. sets, 250 volts D. C., 18 pumps.
 EMP—400. Last years tonnage 507,044.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Revolving and Shaker Screens.

Hiawatha Mine; Drift; Mesa Verde Seam, 144 in. thick.
 PO—Hiawatha, Utah; SP—Same; CTY—Carbon; RR—Utah.
 MS—Otto Herres, Hiawatha, Utah.
 SM—S. E. Potter, Hiawatha, Utah.
 S of H—Horses, 8 elec. trolley pole and 1 storage battery locos. Track gage 42 in.
 S of M—9 shortwall machs.
 PP—Power purchased, transformers 44-000-11,000-2300 volts A. C., M. G. sets, 250 volts D. C., 18 pumps.
 EMP—275. Last years tonnage 425,789.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Revolving and Shaker Screens.

Mohrland Mine; Drift; Mesa Verde Seam, 240 in. thick.
 PO—Mohrland, Utah; SP—Same; CTY—Emery; RR—Utah.
 MS—F. C. Hill, Mohrland, Utah.
 SM—E. C. Young, Mohrland, Utah.
 S of H—Horses, 9 trolley pole type and 1 storage battery locos. Track gage 42 in.
 S of M—12 shortwall machs, 1 overhead cutter mach.
 PP—Power purchased, transformers 44-000-11,000-2300 volts A. C., M. G. Set, 250 volts D. C., 22 pumps.
 EMP—350. Last years tonnage 475,805.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Revolving and Shaker Screens, Loading Booms.

Panther Mine; Drift; Mesa Verde Seam, 84 in. thick.
 PO—Heioer, Utah; SP—Same; CTY—Carbon; RR—Utah.
 MS—J. E. Pettit, Helper, Utah.
 SM—W. G. Perry, Heiner, Utah.
 S of H—Mules. Track gage, 40 in.
 S of M—6 shortwall machs.
 PP—Power purchased, transformers, 11-000-2300-220 volts A. C., 2 pumps.
 EMP—115. Last years tonnage 140,222.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker and Revolving Screens, Loading Booms.

UTAH FUEL COMPANY.

General Office, Salt Lake City, Utah.
 PR—E. T. Jeffery, New York, N. Y.
 VP—A. H. Cowie, Salt Lake City, Utah.
 ASST TR—E. A. Greenwood, Salt Lake City, Utah.
 CM—A. H. Cowie, Salt Lake City, Utah.
 CS—Wm. Littlejohn, Castle Gate, Utah.
 PA—H. N. How, Salt Lake City, Utah.

CE—A. C. Watts, " "
 EM—A. C. Watts, Salt Lake City, Utah
 EE—Leonard Wilson, Salt Lake City, Utah
 SCO—Wasatch Store Co., Salt Lake City, Utah.
 Sales Agent—A. D. Pierson, Salt Lake City, Utah.

Castle Gate Mine; Drift; Castle Gate Seam, 126 in. thick.
 PO—Castle Gate, Utah; SP—Same; CTY—Carbon; RR—D. & R. G.
 MS—Oliver Sutch, Castle Gate, Utah.
 SM—Levi Davis, Castle Gate, Utah.
 S of H—Mules, rope and trolley pole type locos. Track gage, 40 in.
 S of M—20 shortwall machs.
 PP—11 fire tube boilers, 125 H. P., 1 2500 K. W., gen. unit, 500 volts D. C., 6 pumps.
 EMP—440. Last years tonnage 427,389.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaking Screens.

Winter Quarters Mine; Pleasant Valley Seam, 140 in. thick.
 PO—Winter Quarters, Utah; SP—Scofield, Utah; CTY—Carbon; RR—D. & R. G.
 MS—T. C. Harvey, Winter Quarters, Utah.
 SM—C. E. Bostwick, Winter Quarters, Utah.
 S of H—Mules, rope and 2 locos. Track gage, 36 in.
 S of M—4 shortwall and 1 overhead cutter machs.
 PP—9 fire tube boilers, 125 H. P., 4 200 K. W. gen. units, 500 volts D. C., 5 pumps.
 EMP—215. Last years tonnage 217,249.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaking Screens.

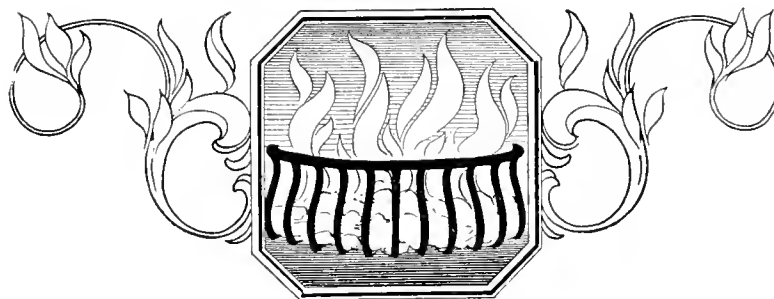
Clear Creek Mine; Drift; Clear Creek Seam, 96 to 168 in. thick.
 PO—Clear Creek, Utah; SP—Scofield, Utah; CTY—Carbon; RR—D. & R. G.
 MS—T. A. Stroup, Clear Creek, Utah.
 SM—C. O. Burrows, Clear Creek, Utah.
 S of H—Mules, rope and 2 locos. Track gage, 40 in.
 S of M—3 overhead cutter machs.
 PP—7 fire tube boilers, 125 H. P., 3 175 K. W. gen. units, 500 volts D. C., 6 pumps.
 EMP—200. Last years tonnage 237,977.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Revolving and Shaker Screens.
 Utah Mine; Drift; Pleasant Valley Seam, 36 to 120 in. thick.
 —Carbon; RR—D. & R. G.

PO—Utah Mine, Utah; SP—Scofield, Utah; CTY—Carbon; RR—D. & R. G.
 MS—T. A. Stroup, Clear Creek, Utah.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 PP—2 return tubular boilers, total 160 H. P., 2 pumps.
 EMP—50. Last years tonnage 28,082.
 SIZES SHIPT—Run of Mine.

Sunnyside Mine; Slope and Drift; Sunnyside Seam, 60 to 132 in. thick.
 PO—Sunnyside, Utah; SP—Same; CTY—Carbon; RR—D. & R. G.
 MS—E. Ostlaund, Sunnyside, Utah.
 SM—D. A. Haymond, Sunnyside, Utah.
 S of H—Mules, rope and 4 locos. Track gage, 40 in.
 S of M—23 shortwall machs.
 PP—16 fire tube boilers, 125 H. P., 2 250 K. W., 1 150 K. W. gen. units, 500 volts D. C., 13 pumps.
 EMP—850. Last years tonnage 572,030.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Revolving and Shaker Screens.

WEBER COAL CO.

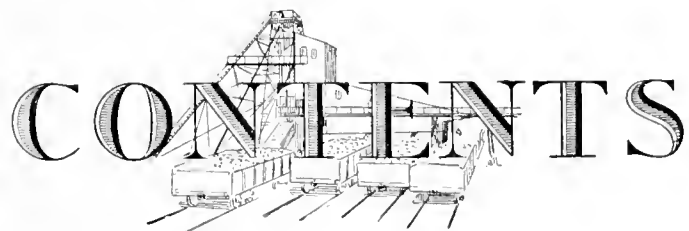
General Office, Box 1328, Salt Lake City, Utah.
 PR—Ernest Bamberger, Salt Lake City, Utah.
 VP—H. G. McMillan, Salt Lake City, Utah.
 TR—Herbert Cohen, Salt Lake City, Utah.
 GM—C. B. Bamberger, Salt Lake City, Utah.
 GS—T. J. Lewis, Box 42, Coalville, Utah.
 PA—Leonard Davis, Salt Lake City, Utah.
 CE—N. A. Dunyon, Park City, Utah.
 EM—Lafayette G. Burton, Salt Lake City, Utah.
 SCO—Address the Company, Buyer, Leonard Davis, Salt Lake City, Utah.
 SA—Herbert Cohen, Box 1328, Salt Lake City, Utah.
 Wasatch Mine; Slope; No. 10 Weber River Seam, 126 in. thick.
 PO—Box 42, Coalville, Utah; SP—Same; CTY—Summit; RR—Union Pac.
 S of H—Horses and rope. Track gage, 30 in.
 S of M—Hand.
 PP—Power purchased, 3 transformers, each 15 K.V.A., 6600-440-220 volts A. C., for power use, 1-3 K.V.A., 6600-220-110 volts A. C., for light purpose, 6 pumps.
 EMP—15. Last years tonnage 37,460.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—1 Perforated Shaker, 2 Gravity and 3 Revolving Screens.



VIRGINIA



CONTENTS



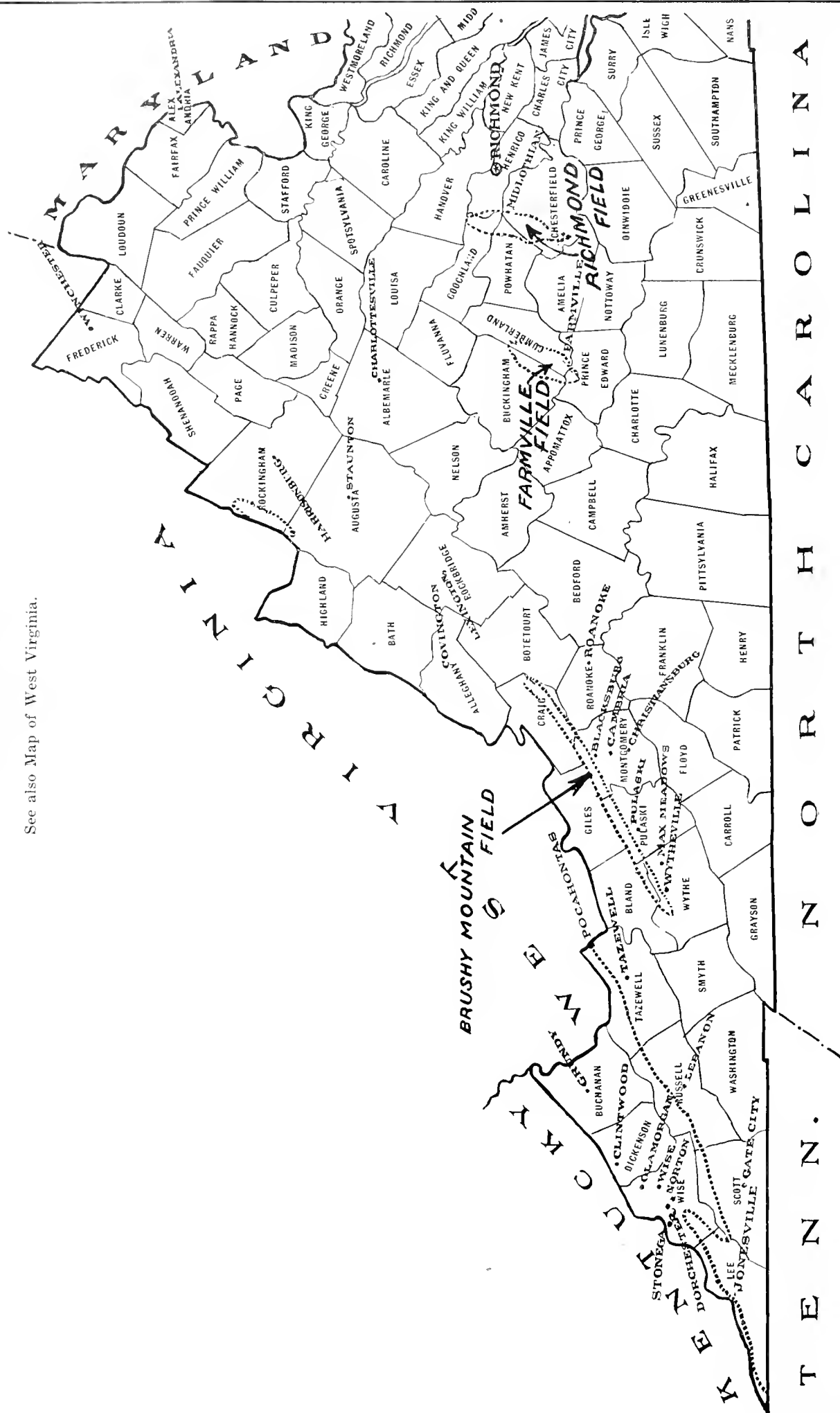
Map of Mining Fields.....	916
Sectional View of Coal Formations.....	917
General Description of Coal Resources.....	918

Pocahontas or Flat Top Field.....	918
Clinch Valley and Southwestern Virginia Fields.....	919
Farmville Field.....	919
Richmond Field.....	919
Brushy Mountain Field.....	919
Pocahontas No. 3 Seam.....	920
Raven Seam.....	920
Upper Banner Seam.....	921
Lower Banner Seam.....	921
Imboden Seam.....	921
Kennedy Seam.....	922
Jawbone Seam.....	922
Darby Seam.....	922

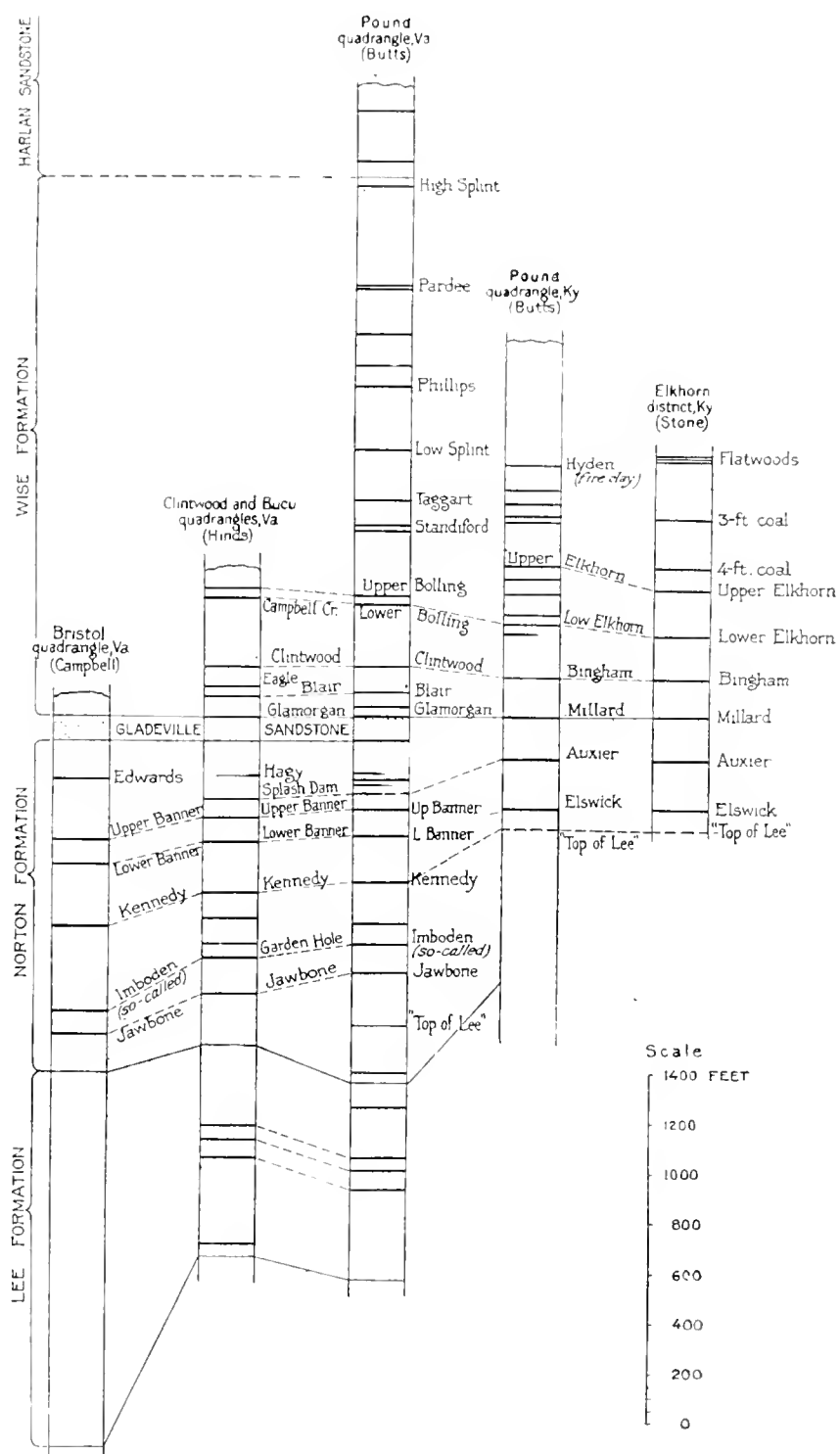
Preparation and Sizing of Coal.....	922
Supplementary Analyses.....	923 924
Descriptive Advertisements.....	925 to 930
List of Mines by Seams.....	931 to 933
Alphabetical Directory of Coal Mines.....	934 to 940

Map of Mining Fields VIRGINIA

See also Map of West Virginia.



Sections Showing Correlations With Adjoining Areas VIRGINIA



VIRGINIA*

General Description of the Geology of the Coal Fields With the Ranks of Coal Produced; Treats of the Mining Fields, With a Map Showing Their Location; All Seams Lying Within the Fields and the Railroads Serving Same; Description of the Producing Seams, With a Section Showing Their Geological Order, General Analysis, Etc.

Coals representative of two geological ages are found in Virginia, first, two small coal fields in the eastern part of the state, in which the coals are of Triassic age, and second, a larger area in the southwestern part of the state in which the coals are a part of the Appalachian basin, and therefore of Carboniferous age. Practically the entire production of coal within the state comes from the southwestern field, amounting to about 9,000,000 tons yearly, with an annual production of 700,000 tons of coke. It is vastly the largest, most productive and most important field in the state, indeed, it is due to this area that Virginia is entitled to rank among the principal coal producing states in the United States. It is estimated that the area of coal bearing formations in this field comprise 1,850 square miles, with probably 80 per cent of it productive.

The southwestern Virginia coal area is located on the west side of the Great Valley and occupies the eastern and southeastern portions of the Cumberland Plateau region in Virginia. It forms the southwestern part of the Kanawha basin, and comprises the following counties: Tazewell, Russell, Scott, Buchanan, Wise, Dickenson and Lee. Of these Wise and Tazewell are at present the two most important producers. The other counties contain very large coal reserves which, in places, are undergoing development as rapidly as railroad facilities are being provided.

The coal bearing rocks of the southwestern Virginia area belong to the Coal Measures division of the Carboniferous. Probably most, if not all, of the coal bearing rocks in this area correspond in age to the Pottsville series, the lowest formation of the Pennsylvania section. In the Pocahontas field, situated in the northeastern part of the Virginia field, the Pocahontas formation of Campbell is the basal member of the series, and to the southwest in the Southwestern Virginia field, the Lee formation becomes the basal member. The subdivision in southwestern Virginia is separated by a probable thickness of coal bearing rocks of from 2,800 to 3,000 and more feet.

The three principal subdivisions of the southwestern Virginia area are known as (a) the Pocahontas, or Flat Top Field, (b) the Clinch Valley Field, and (c) the Southwestern Virginia Field.

THE POCAHONTAS OR FLAT TOP FIELD

In the year 1883 the Norfolk and Western completed an extension of their line from Bluestone to Pocahontas, thus opening up the Pocahontas or Flat Top Field, one of the most valuable coal areas in the country. The field itself is comparatively small, consisting of a narrow belt bordering Buchanan county, Virginia, and McDowell county, West Virginia, on the northwest. At least 15 coal beds are 30 inches or more thick over areas of sufficient size to justify mining. In general the coal is of excellent coking quality and has a high fuel rank, hence thin beds can be worked more profitably than in some other parts of the State. In going from east to west, successively higher coal beds are encountered coming in at the top of the hills, the lower beds disappearing below drainage. This results in the exposure of a large number of beds over small areas, but since comparatively little drilling has been done, practically no information is available for any bed except in the region where it outcrops. From the somewhat limited data available it appears that the thick deposits of coal in this area are lenticular and elongated in a northeast-southwest direction, making a small angle with the fault lines at the south side of the fields.

At some remote time the Tazewell county coal field extended to the southeast of its present limit, as shown on the accompanying map. Giant folds and faults lifted the coal-bearing rocks in the region to the southeast far above those of the present coal field, and they were subsequently worn down and carried away by the erosive forces which tend to reduce the general land surface to the same level. These faults by abruptly terminating the field on the southeast border provide a boundary to the coal measures.

In general succeeding higher coals become thick in a southwest direction from the east end of the area. No bed is sufficiently constant in thickness or has sufficiently well-marked characters to be identified throughout the area of its outcrop, even though that area be small. The roof may change from clay

*We are indebted to the following sources for much of the information here presented on Virginia coals: Mineral Resources of Virginia, Watson; Bulletins Nos. 9, 12, 19 and 21, Virginia Geological Survey; Bulletin No. 348, U. S. G. S.

to coarse sandstone within a few feet, and partings an inch thick on one side of a spur may increase to several feet on the other side, making the bed worthless. Because of the extreme variability of the coal beds in this region, plans for development should be preceded by careful and thorough prospecting under the direction of an experienced geological engineer. In a region of such irregular deposits as Tazewell county it is not safe to install equipment for mining unless the thickness and character of the coal bed are known around three sides of the area. Hence beds which go below drainage should be proved by prospecting with the diamond drill.

The Pocahontas coal field is especially well located with reference to the various markets. The greater part of the present production is available for either the seaboard or the western markets.

CLINCH VALLEY AND SOUTHWESTERN VIRGINIA FIELDS

The building of the Clinch Valley division of the Norfolk and Western Railway in 1891 marked the beginning of developments in these fields, and although opened up nearly 10 years after the famous Pocahontas field, it is much the largest producer of coal and coke. Wise county is at present the largest coal and coke producing county in the state.

The Clinch Valley and Southwestern Virginia fields lie to the southwest of the Pocahontas field and occupy a much greater area, located in the counties of Tazewell, Russell, Wise, Lee and Dickenson. The southern and eastern borders are irregular, being largely the margin of the Coal Measures. Both fields are part of a long and narrow basin which extends northeast and southwest, bounded on either side by sharp and rocky ridges. Deep cutting by the streams and light dip of the strata are conducive to economic mining over much of the areas.

The principal seams worked are the Lower Banner, Upper Banner, Darby, Imboden, Kennedy, Roda, Raven and Taggart, ranging in thickness from 3½ to 12 feet. The great majority of the mines in these seams produce high volatile coal, with a few falling into the medium volatile class. Coal from these fields is distinguished by its high quality, making it compare most favorably with the superior high volatile coals of West Virginia and Kentucky. The moisture and sulphur contents are consistently low, while the ash seldom exceeds 8 per cent and the average is below this figure. The amount of oxygen is also low and because of these favorable features, the great portion of output is well fitted for coking, both beehive and by-product, gas making, metallurgical fuel, and other special usages. The coal from these regions also commends itself as being a reasonably high rank, high heat value, low ash and low sulphur lump coal for export, as well as for domestic use.

Export coals from these fields are taken to tidewater by the Norfolk and Western Railway, with piers at Hampton Roads, Va., and the Southern Railroad with piers at Charleston, S. C.

RAILROADS

The railroads transporting Virginia coals are the Norfolk & Western; Southern; Louisville & Nashville; Virginian; Interstate, Virginia & South Western; and Clinchfield, Carolina & Ohio.

Farmville Field.

This area lies in Buckingham, Cumberland and Prince Edward counties, and has a northeast and southwest extension of 20 miles, a maximum width of about 5 miles and an area of 60 square miles. The rocks are of Triassic age and in general show a close correspondence with the section in the Richmond area on the east. The strata are much disturbed, sometimes dipping to the west, sometimes to the east. At least four north-south faults affect the central portions of the area on the eastern quarter about 2 miles north of Farmville. A heavy marginal fault has been shown in mines. Here the coal bearing beds abut against granite. A number of thin seams of coal have been found.

Rogers reports the presence of a seam of bituminous coal nearly 2 feet thick in the southern end of the southern basin. He states that the material of these seams is usually of a friable mixture of carbonaceous and earthly matter, in some places assuming the appearance of a hard bluish-black mass of rather porous texture resembling coke. In his official report Rogers discouraged attempts at mining coal in this field, and it is, at this time, practically undeveloped.

Richmond Field. (Included in Chesterfield, Powhatan, Henrico and Goochland counties.)

In the eastern part of Virginia is found another small area containing coal of Triassic age. The Richmond area is well known, the coal here

having been at one time quite extensively worked. It is an area of approximately 150 square miles, the greater part of which is believed to be coal bearing. The basin has the general appearance of a broad shallow syncline which has been disturbed by flexures and faultings. Numerous trap dikes intersect the field. On the eastern margin of the main basin there are usually three workable beds. In the old workings at Midlothian, one bed is described as having an average thickness of 20 feet, being 36 and as much as 50 feet thick in places. The coal of the Richmond basin is normally bituminous and coking, although, because of the intrusions of diabase, at least one of the beds is usually converted either wholly or partly into natural coke.

Mining in this field has been intermittent, due to the uncertain nature of the coal field. The gaseous nature of the coal has led to a few serious explosions, fire, and much loss of life.

GENERAL ANALYSIS

Moisture	1.80
Volatile Matter	29.80
Fixed Carbon	54.80
Ash	13.60
Sulphur	0.50

Brushy Mountain Field. (In Montgomery and Pulaski Counties.)

Of the numerous Lower Carboniferous coal areas known in Virginia, the Montgomery-Pulaski

field is the most important one. This area is located 30 to 50 miles west of Roanoke. It lies near the northern border of the two counties and is crossed by New River, which is the dividing line between the two counties. The total estimated area of the Montgomery county portion of the field is about 7,000 acres. The extent of the Pulaski part is not certain, but it is probably equal to the Montgomery part. It extends from New River to within six miles of the town of Pulaski.

The coal seams occur in strata of Lower Carboniferous (Mississippian) age. The rock series consists of variable thicknesses of sandstone, conglomerate and shale, dipping at angles varying from 20 to 40 degrees.

Two beds of coal have been mined in this field, known as the Big or Merrimac bed and the Little or Langhorne bed. The Merrimac bed seems to be present throughout the part of the field mentioned above, with a thickness ranging from five to eleven feet, but in every mine the bed contains many shale partings that can be separated from the coal only with difficulty, and consequently the coal as it is put upon the market contains a large percentage of ash. The Langhorne bed is also generally present throughout the field, but so far as known it is thick enough for commercial mining only west of New River and north of Pulaski, where it ranges in thickness from three to five feet. In that part of the field west of Wytheville the coal beds are generally thinner and more impure than they are farther east.

The coal from this field, while often called anthracite, is in reality a much softer coal and is of semianthracite rank. As mined in some parts of this field it compares favorably with the coal from the Pocahontas field, except that its ash content is greater, while in other parts it is harder, and contains less volatile matter. When properly prepared the higher-rank coal makes an excellent domestic fuel.

Analyses show that the most objectionable feature of the coal is its large percentage of ash, which has made it difficult to market in competition with the purer bituminous coals of the west. Careful preparation before loading eliminates the large impurities, and it is quite likely that washing would so much reduce the percentage of ash as to make it of excellent quality for both domestic and steam use. The coal from Price Mountain is harder and consequently not so free burning as the coal from Brush Mountain.

GENERAL ANALYSIS

	Brushy Mountain	Price Mountain
Moisture	2.95	3.30
Volatile Matter	11.70	10.20
Fixed Carbon	66.00	65.90
Ash	19.35	20.60
Sulphur	0.65	0.56
B. t. u.	12,080	11,760

Pocahontas No. 3 Seam. (Mined in Tazewell county.)

This seam is a continuation of the celebrated Pocahontas steaming and coking coal of West Virginia, and sustains the reputation of this coal as one of the purest beds in the United States. It varies in thickness from 8 to 13 feet with an average of about 9 feet. The roof is generally a

shale which disintegrates readily, so that a portion of the coal is left remaining as a protection. The floor is a soft clay with a smooth surface. In mining, the coal separates readily from both the roof and the floor. The coal as mined has a columnar structure, and, being soft, produces a large amount of small coal. It ignites readily, cokes strongly, and burns with a short white flame. The combustion is slow and comparatively little smoke is given off, hence it is known to the trade as a smokeless coal. The amount of ash is small with a fusing temperature ranging from 2,150° F. to 2,600° F.

The Pocahontas No. 3 seam is mined only on Laurel Fork, where it has its best development and where it outcrops in the steeply dipping rocks at the south side of the coal field. Unlike the seam lying higher up, the No. 3 bed thins very noticeably to the west and southwest from Pocahontas, and drill records indicate that the bed also becomes thin in going to the northwest.

With a fuel of this wonderful purity the uses are many. Because of its high calorific value it is the standard for naval and merchant vessels. It has been used for many years as a locomotive fuel, although the tendency of late amongst railroads has been to use a higher volatile and cheaper coal. It produces an excellent coke, but as with all low volatile coals, coking is done at the expense of some of the fixed carbon. For mixture with higher volatile coals used in the by-product industry it is unexcelled. As a steam producer for stationary plants it holds first rank. Further usage is as a domestic coal and for kilns or furnaces.

GENERAL ANALYSIS

Moisture	2.90
Volatile Matter	21.20
Fixed Carbon	71.50
Ash	4.40
Sulphur	0.55
B. t. u.	14,550

Raven Seam. (Known also as the Red Ash seam.)
(Mined in Tazewell county.)

One of the most valuable beds outcropping in the western part of Tazewell county is the Raven, so named from the locality in which it is mined on Coal Creek. It is the same as the Lower Douglas of the West Virginia Geological Survey. The coal is of sufficient thickness to be an attractive proposition at the present time, and is being mined extensively on Coal Creek, at the head of Big Creek, and on Town Hill Creek. It lies approximately 1,800 feet above the horizon of the Pocahontas No. 3 bed. The Raven seam has an average thickness of 4½ feet in the mines at the head of Big Creek and along Sandy Ridge to the east, but it is locally worthless in small areas because of thick and irregular partings. It contains one or more clay partings, which are easily separated from the coal, in most of the area where it is more than the normal thickness of 3 to 3½ feet.

GENERAL ANALYSIS

Moisture	3.20
Volatile Matter	28.85
Fixed Carbon	62.25
Ash	5.70
Sulphur	0.68
B. t. u.	14,300

Upper Banner Seam. (Mined in Dickenson, Russell and Wise counties.)

The Upper Banner is one of the best known and most important coal beds in southwest Virginia, and is extensively mined at Wilder, Dante, Toms Creek, and elsewhere. The mine at Wilder is in the Bucu quadrangle, and one of the largest mines near Dante and another near Toms Creek extend northward under Sandy Ridge into the Clintwood quadrangle. The average distance of the bed above the Lower Banner is 100 feet and that above the Lee formation is about 900 feet. There are shales and thin-bedded sandstones below the coal and a ledge-making, coarse-grained sandstone about 20 feet or less above it. One of the most marked characteristics of the Upper Banner is the persistent sandstone parting less than 2 inches thick in the upper half of the bed.

There are two large areas and three smaller ones in which the Upper Banner is especially attractive for mining. One of these includes the territory under and near Sandy Ridge from the southwest corner of the quadrangle east to Road Fork, where the bed contains coal averaging 4 to 6 feet in thickness and only thin partings. Another is on both sides of McClure River north of Big Branch, extending westward to and beyond Cranenest River and eastward to and beyond Lick Creek. In this area the average thickness of coal is 4 to 5 feet and partings are thin. In smaller areas on the west side and at the head of Fryingpan Creek the bed is in similar condition. Outside of these districts, the Upper Banner is split into two or three parts by a thickening of shale partings above and below the thin sandstone parting. These parts are so widely separated that they could not be mined as one bed, and commonly so close that only one could be utilized. In places one or the other of the separated parts contains from 2 to 4 feet of coal. Northeast of Russell Fork all the divisions of the Upper Banner are so thin, except locally, that they cannot be regarded as an important economic resource. Indeed, it is probable that coal is lacking at the Upper Banner horizon in most of the Levisa Fork drainage basin except along parts of the Prater Creek.

GENERAL ANALYSIS

	Russell	Wise
Moisture	2.50	2.50
Volatile Matter	35.50	32.30
Fixed Carbon	55.60	60.20
Ash	6.40	5.00
Sulphur	0.58	0.52
B. t. u.	14,150	14,400

Lower Banner Seam. (Mined in Russell and Wise counties.)

A bed about 200 feet above the Kennedy coal and 800 feet above the Lee formation is widely known as the Lower Banner in the mining districts in the general region of its type locality at Banner, on the Norfolk & Western Railway. Along upper Levisa River the same bed has been called the Cary by private investigators. This coal is extensively mined at Wilder in the Bucu quadrangle, and at Dante, a short distance south of the Clintwood quadrangle. Like the Kennedy, the Lower Banner has a sandstone bottom-rock, but is much thinner and less conspicuous on hillsides. The strata from

the Kennedy to the bottom-rock and from the Lower Banner to the Upper Banner coal are shales and thin-bedded sandstones in most places.

The Lower Banner is minable, even under present commercial conditions, in several areas. One of the best areas is under and in the vicinity of Sandy Ridge from Coon Branch of Open Fork east to Cane Creek and the ridge east of Road Fork, where the average thickness of coal is 3 to 5 feet. Another very promising area is north of Drill, along the eastern border of the Bucu quadrangle, where the bed is about 4 to 5 feet thick. In the greater part of both areas it is exceptionally free from partings. The Lower Banner is about 3 feet thick in four small areas and 2 to 3 feet in many places. It is a very persistent bed, though locally thin in most of the area of the quadrangles.

GENERAL ANALYSIS

Moisture	2.55
Volatile Matter	34.50
Fixed Carbon	57.85
Ash	5.10
Sulphur	0.70
B. t. u.	14,150

Imboden Seam. (Possibly the same as the Edwards Seam.) (Mined in Wise county.)

This bed contains one of the most prominent coals of Virginia. Its name is generally recognized as a synonym of a heavy seam of fine coking coal. It is found at a vertical distance of 180 feet below the Gladeville sandstone, and according to Campbell, it occurs at the same horizon as the Edwards coal. Throughout its entire extent, it furnishes an excellent grade of bituminous coal capable of supplying many uses and especially valuable in the development of the industries of the middle South. In thickness it varies from 5 to 10 feet and is even, without partings, but where the bed begins to thicken it does so by splitting in two benches. In this event, a mass of dirty coal enters like a wedge, sometimes swelling the thickness to 9 feet. In almost all parts of the basin its altitude is such that the coal can be mined and transported at a small expense. The bed generally is above water level and has such gentle inclinations as to favor both drainage and haulage.

The Edwards seam is found in several outcrops near the summit of the highest hills in the northern part of the field. It occurs about 150 feet below the base of the Gladeville sandstone, and 250 feet above the next highest, or Upper Banner coal seam. It is exposed on the ridge west of Big Tom Creek and on Sandy Ridge near the head of Left Fork of Russell Creek. At the former locality, an opening shows a thickness of 4 feet 5 inches of clean coal, and at the latter the thickness is practically the same, including a small shale parting near the top.

GENERAL ANALYSIS

(Imboden Seam)

Moisture	2.20
Volatile Matter	33.10
Fixed Carbon	58.20
Ash	6.50
Sulphur	0.65
B. t. u.	14,000

Kennedy Seam. (Known also as the Widow Kennedy Seam.) (Mined in Russell and Wise counties.)

A bed that lies about 600 feet above the Lee has long since been known as the Kennedy or Widow Kennedy in the mining district a short distance south of the Clintwood quadrangle. It has yielded considerable coal at shipping mines at Dante and elsewhere, but has not yielded much profit to the operators and is not now extensively mined. Some coal is shipped from it, however, from mines in the Bucu quadrangle, near Drill, on Lewis Creek. One of its marked characteristics in the region south and west of Russell Fork is its generally crushed condition and great irregularity in thickness. In the Levisa Fork drainage basin, where it is called the Harris seam in private reports, the coal is clean and as regular in thickness as any other bed.

The Kennedy contains a large aggregate of coal in the south half of the Clintwood quadrangle in deposits that range from a few inches to 10 feet thick within short distances. It thins to the north-west and was not found along the foot of Pine Mountain. In the Bucu quadrangle the bed is less than 2 feet thick, except locally, in most parts of the Russell Fork and Clinch River drainage basins. Near the heads of Russell Fork and Lewis Creek, however, the Kennedy's thickness averages about 3 feet, and it is slightly more along part of Fryingspan Creek. The bed is persistent in the Levisa Fork basin, and thickens to the east from about 27 inches along Little Prater Creek to 4 or 5 feet at the east boundary of the quadrangle.

GENERAL ANALYSIS

Moisture	2.75
Volatile Matter	32.50
Fixed Carbon	58.00
Ash	6.75
Sulphur	1.25
B. t. u.	13,900

Jawbone Seam. (Mined in Wise and Dickenson counties.)

The Jawbone coal commonly lies above a coarse, quartzose, locally conglomerate sandstone that separates it from the Tiller seam, the interval between the two coals being 100 feet or less. The bed takes its name from Jawbone Hollow, a tributary of Bull Run between Virginia City and Banner.

This coal, which is one of minor importance and the least attractive of all the coals, makes its best showing where it unites with the Tiller bed. It is probably also thick in other areas in the southwestern part of the Bucu quadrangle, as it includes 3½ to 8 feet of somewhat impure coal in exposures on Hurricane Fork, a short distance south of the area herein described. No thick coal was found at its horizon on Musick Creek, however. Along Russell Fork near Council the coal is from 2 to 6 feet thick, but it thins to the north to less than 30 inches along Levisa Fork. Drill records show that it is a persistent bed in the Clintwood quadrangle and it may be minable in places. No coal was noted at the Jawbone horizon at its exposure on Pine Mountain or in The Breaks.

GENERAL ANALYSIS

Moisture	3.20
Volatile Matter	28.10
Fixed Carbon	53.70
Ash	15.00
Sulphur	1.20
B. t. u.	12,400

Darby Seam. (Also known as No. 5 Seam; the Roda or Taggart coal of Wise county.) (Mined in Lee county.)

The Darby coal is the most important in the so-called Pocket coal field of Lee county at the present time. The seam varies from 26 to 50 inches in thickness and is mined at many places along Fawn Branch, Bailey Trace, Straight Creek and Gin Creek. It is a clean coal, free from parting, is hard, and when cut breaks into splinters as well as blocks. It stands handling and weathering, ignites quickly, burns splendidly in the grate, stove or furnace, and leaves only a small quantity of light reddish ash when complete combustion is obtained. This coal also makes a good coke. It is overlain with a heavy sandstone parting, but the sandstone is sometimes cut out by a draw slate. The bottom is clay.

GENERAL ANALYSIS

Moisture	3.60
Volatile Matter	36.50
Fixed Carbon	57.50
Ash	2.40
Sulphur	0.70
B. t. u.	14,600

PREPARATION OF COAL

In the Pocahontas region a considerable portion of the output is shipped as run-of-mine coal, in addition to a large quantity which enters into the manufacture of coke. Most of the larger mines are equipped for the separation of coal into sizes, along

with the required machinery for facilitating removal of refuse from the output. The same general type of equipment is found in the Clinch Valley and Southwestern Virginia fields, making it possible to answer any call from the trade for prepared sizes.

For additional information on uses and analyses of Virginia coals, see the descriptive advertisements on coal mines following the Supplementary Analyses.

Analyses of Virginia Seams by Counties and Localities

(ALL ANALYSES MADE ON MINE SAMPLES "AS RECEIVED")

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carbon	Oxygen	RATIOS	
											Carbon	F. C.
											Oxy. + Ash	V. M.
*B.....	Henrico, 1 mi. from Gayton.....	Carbon Hill.....	2.11	23.58	56.95	17.36	2.16	12,200	69.22	5.23	3.06	2.42
†Banner, Lower.....	Russell, Dante.....	Clinchfield.....	2.1	33.7	57.7	6.45	0.65	14,140	78.59	7.34	5.70	1.71
*Banner, Lower.....	Russell, Wilder.....	No. 55.....	2.72	33.82	57.68	5.78	0.65	14,245	79.33	7.50	5.97	1.71
*Banner, Lower.....	Russell, Dante.....	No. 52.....	2.3	35.5	55.5	6.71	0.67	14,000	78.84	6.83	5.82	1.56
†Banner, Lower.....	Russell, ½ mi. e. of Dante.....	Clinchfield.....	2.12	33.75	57.68	6.45	0.65	14,135	78.59	7.34	5.71	1.71
Wise, Banner.....	Wise, Banner.....	Fleming No. 1.....	2.20	33.30	57.00	7.50	0.70	13,880	78.05	7.10	5.35	1.71
Russell, 1½ mi. n. of Dante.....	Russell, 1½ mi. n. of Dante.....	.....	2.1	35.9	56.7	5.3	0.57	14,330	80.24	6.98	6.53	1.58
†Banner, Upper.....	Russell, Dante.....	Clinchfield No. 3.....	2.3	35.7	55.0	7.00	0.66	13,940	77.91	7.42	5.40	1.54
*Banner, Upper.....	Russell, Dante.....	.....	2.04	36.72	55.08	8.20	0.56	13,799	.....	.....	.....	1.50
*Banner, Upper.....	Russell, Wilder.....	Nos. 2 and 5.....	2.65	35.50	57.45	7.05	0.68	14,073	.....	.....	.....	1.62
*Banner, Upper.....	Russell, 2 mi. n. e. of Dante.....	No. 6.....	3.34	35.05	55.90	5.71	0.55	14,080	78.72	8.28	5.63	1.57
*Banner, Upper.....	Russell, 1 mi. e. of Dante.....	No. 2.....	1.84	36.15	55.48	6.53	0.54	14,098	79.28	6.91	5.89	1.53
*Banner, Upper.....	Russell, 1 mi. e. of Dante.....	No. 3.....	2.28	35.69	55.03	7.00	0.66	13,936	77.91	7.42	5.40	1.54
*Banner, Upper.....	Russell, Dante.....	Upper Banner No. 3.....	2.36	32.40	57.92	7.32	0.66	.....	.....	.....	.....	1.79
*Banner, Upper.....	Russell, 2 mi. n. of Dante.....	No. 5.....	2.07	35.90	56.70	5.33	0.57	14,335	80.24	6.98	6.52	1.58
*Banner, Upper.....	Russell, 2 mi. n. of Dante.....	No. 2.....	2.76	34.96	56.51	5.77	0.59	14,148	80.13	6.76	6.40	1.62
*Banner, Upper.....	Wise, Georget.....	Swansea.....	2.48	31.71	60.30	5.51	0.52	14,252	79.69	7.13	6.30	1.90
*Banner, Upper.....	Wise, 1½ mi. n. w. of Toms Creek.....	Cranesnest No. 1.....	2.3	32.9	59.9	4.9	0.53	14,460	80.78	6.71	6.96	1.82
†Banner, Upper.....	Wise, Toms Creek.....	Coburn.....	2.7	32.4	60.4	4.5	0.52	14,540	.....	.....	.....	1.86
†Banner, Upper.....	Wise, Toms Creek.....	Caney.....	2.20	32.40	59.10	6.30	0.55	14,130	79.72	6.65	6.16	1.82
†Banner, Upper.....	Wise, Toms Creek.....	Lee.....	2.90	33.00	58.90	5.20	0.55	14,140	80.06	7.26	6.43	1.79
*Banner, Upper.....	Wise, Toms Creek.....	Sexton.....	3.20	30.40	52.00	14.40	0.60	12,660	71.30	7.38	3.28	1.71
*Banner, Upper.....	Montgomery, 10 mi. w. of Blacksburg.....	Poverty.....	4.80	10.12	67.05	18.03	0.63	11,961	69.27	7.50	2.77	6.63
*Big.....	Montgomery, Merrimac.....	Big Vein.....	2.05	6.58	58.22	33.15	0.46	9,688	57.97	5.17	1.51	8.85
*Bolling, Lower.....	Wise, 2 mi. e. of Flat Gap.....	Reuben Bolling.....	6.92	30.37	54.57	8.14	0.95	12,976	.....	.....	.....	1.80
*C.....	Henrico, 1 mi. from Gayton.....	Carbon Hill.....	2.81	25.70	62.47	9.02	1.43	13,493	76.55	6.29	5.00	2.43
*Clintonwood.....	Dickenson, near Clintwood.....	Yeates.....	2.18	34.19	60.44	3.19	0.85	14,594	.....	.....	.....	1.77
*Clintonwood.....	Dickenson, 3 mi. s. e. of Clintwood.....	Elbert Powers.....	4.28	29.40	62.11	4.21	1.02	.....	.....	.....	.....	2.11
*Darby.....	Lee, Darbyville.....	Black Mountain.....	3.42	34.36	58.83	3.39	0.58	14,134	77.98	11.51	5.23	1.71
*Darby.....	Lee, Darby.....	Darby.....	3.89	34.89	58.16	3.05	0.34	14,144	.....	.....	.....	1.67
*Dorches (cf.....	Wise, Glamorgan.....	Glamorgan No. 3.....	3.20	31.30	59.10	6.40	0.87	13,910	78.02	7.82	5.40	1.89
*Duncan.....	Scott, 1½ mi. from Ka.....	Hagan.....	3.14	33.31	57.11	6.44	0.85	13,644	76.24	9.59	4.76	1.71
*Eagle.....	Dickenson, near mth. of Pond Riv.....	Local.....	3.00	32.40	58.40	6.20	1.62	14,030	.....	.....	.....	.....
*Glamorgan.....	Wise, Glamorgan.....	Glamorgan No. 3.....	3.2	31.3	59.1	6.37	0.87	13,910	78.02	7.82	5.50	1.89
*Glamorgan.....	Wise, Glamorgan.....	Glamorgan No. 3.....	2.6	33.1	59.3	5.0	1.37	14,420	.....	.....	.....	1.80
High Splint.....	Wise, Pardee.....	.....	1.30	36.40	58.00	4.30	0.67	14,800	.....	.....	.....	1.60
*Imboden.....	Wise, Stonega.....	Stonega.....	2.16	33.10	58.27	6.47	0.68	13,594	77.85	8.24	5.29	1.76
†Jawbone.....	Tazewell, 1½ mi. w. of Richlands.....	West.....	1.90	31.10	53.80	13.13	0.48	12,980	73.57	6.80	3.69	1.73
†Jaw Bone.....	Wise.....	.....	1.50	31.40	49.80	17.30	1.25	12,190	68.93	6.47	2.90	1.59
†Jaw Bone.....	Wise, Virginia City.....	Mine No. 2 Twin City.....	3.00	29.20	54.90	12.90	0.71	12,700	72.26	7.99	3.46	1.88
*Jaw Bone.....	Wise, Virginia City.....	Virginia City No. 1.....	3.37	28.58	53.09	14.96	1.18	12,449	.....	.....	.....	1.86
*Kennedy.....	Dickinson, Nova.....	Nova.....	3.05	27.81	54.17	14.94	1.24	12,413	.....	.....	.....	1.95
*Kennedy.....	Russell, ½ mi. s. of Drill.....	Sandy Ridge.....	2.63	26.18	61.71	9.48	0.74	13,640	77.60	5.86	5.06	2.36
*Kennedy.....	Russell, n. w. of Dante.....	No. 103.....	4.7	30.8	59.4	5.14	0.96	13,964	78.33	8.74	5.64	1.93
*Kennedy.....	Russell.....	Kennedy No. 4.....	2.9	31.9	57.8	7.4	1.78	13,780	.....	.....	.....	1.81
*Kennedy.....	Russell.....	Kennedy No. 4.....	1.90	31.54	60.87	5.69	1.47	11,824	78.33	6.74	6.50	1.90
†Kennedy.....	Tazewell, 7 mi. w. of Raven.....	Sandy Ridge.....	4.70	30.80	59.40	5.14	0.96	13,960	78.33	6.74	6.50	1.93

*Bathelme Bureau of Mines †United States Geological Survey Reports. ‡State Geological Survey Reports

(Continued on Next Page)

COAL CATALOG

ANALYSES OF VIRGINIA SEAMS BY COUNTIES AND LOCALITIES—Continued

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carbon	Oxygen	RATIOS	
											Carbon	F. C.
											Wgt. + Ash	V. M.
*Large	Montgomery, 5 mi. n. w. of Blacksburg	Seymour-Price	4.7	11.5	65.4	18.44	0.56	11,820	70.19	6.29	2.83	5.69
*Large	Montgomery, 3½ mi. n. Blacksburg	Slusser	1.88	12.34	66.81	18.97	0.67	12,157	72.33	3.64	3.20	5.41
*Large	Montgomery, 3½ mi. n. w. of Christiansburg	Lykens Hill	1.7	9.4	66.6	22.32	0.71	11,570	69.24	3.73	2.66	7.09
*Large	Montgomery, 4 mi. n. w. of Blacksburg	Punkett & Wall	2.5	12.4	67.5	17.60	0.51	12,360	72.83	4.58	3.28	5.44
*Large	Pulaski, Parrott	Parrott	2.4	11.6	63.3	22.73	0.67	11,310	67.26	5.22	2.41	5.46
*Large	Pulaski, north of Pulaski	Little Walker Mtn.	4.60	10.00	71.30	14.10	0.57	12,520	78.17	8.01	5.74	1.53
*Large	Wise, 3 mi. n. of Max Meadows Station	Blackwood	2.9	36.1	55.4	5.61	1.06	13,960	77.02	4.99	4.99	1.59
*McConnell	Lee	Wilson Farm	3.35	35.13	55.94	5.58	0.92	13,932	74.23	6.60	3.84	1.90
*Meadow	Tazewell, Richlands	No. 2	2.23	29.36	55.69	12.72	0.61	13,135	75.29	7.14	4.13	2.08
*Merrimac	Tazewell, Richlands	No. 4	3.30	27.82	57.80	11.08	0.63	13,212	75.29	7.14	4.13	2.08
*Merrimac	Montgomery, Price Mountain	South Side	3.60	9.50	67.60	19.30	0.46	11,850	78.17	8.01	5.74	1.53
*Merrimac	Montgomery, Price Mountain	North Side	3.00	10.90	64.20	21.90	0.68	11,670	78.17	8.01	5.74	1.53
*Merrimac	Montgomery, near Blacksburg	Blackwood	1.90	14.00	68.90	15.20	0.52	12,740	78.17	8.01	5.74	1.53
*Milner	Montgomery, Poverty Gap	Blackwood	1.60	13.30	61.50	23.60	0.67	11,400	78.17	8.01	5.74	1.53
*Milner	Scott, 5 mi. from Ka	Milner	3.21	33.03	58.06	5.70	1.64	13,745	76.89	8.85	5.28	1.76
*Mohawk	Euchanan, 1 mi. s. e. of Blackey	Blackey	4.06	31.71	61.25	2.98	1.07	14,465	80.91	8.17	7.26	1.93
*No. 4	Russell, 1 mi. n. e. of Slump	No. 201	2.2	31.9	59.4	6.50	0.46	14,110	79.69	7.20	5.82	1.86
*No. 9	Lee, Darbyville	Gin Creek	4.44	35.99	53.59	5.98	0.76	13,363	71.95	14.87	3.45	1.49
*No. 12	Lee, Darbyville	Gin Creek	5.49	36.03	51.87	6.61	1.24	13,109	71.47	14.37	3.41	1.44
*Pardee	Wise, 1 mi. n. w. of Pardee Station	Pardee No. 1	3.0	35.9	55.5	5.6	0.78	13,970	71.47	14.37	3.41	1.44
*Pardee	Wise, 1 mi. n. w. of Pardee Station	Pardee No. 1	2.7	36.3	54.5	6.5	1.37	13,850	71.47	14.37	3.41	1.44
*Pardee	Wise, Pardee	Pardee	2.29	33.84	54.86	9.21	1.56	13,358	74.46	8.21	4.27	1.64
*Pardee	Wise, Pardee	Pardee	1.26	35.57	56.82	6.35	1.14	14,110	74.46	8.21	4.27	1.64
*Pardee	Wise, Pardee	Pardee	1.24	38.31	56.40	5.29	0.69	14,695	74.46	8.21	4.27	1.64
*Pocahontas No. 3	Tazewell, Boissevain	No. 4	4.0	17.5	74.2	4.31	0.62	14,520	82.56	6.72	7.49	4.24
*Pocahontas No. 3	Tazewell, Boissevain	Boissevain	1.63	17.17	75.34	5.86	0.75	14,672	83.14	4.65	7.91	4.39
*Pocahontas No. 3	Tazewell, Russell	Baby Pocahontas	3.8	15.5	77.8	2.92	0.63	14,860	84.70	5.67	9.86	5.00
*Pocahontas No. 3	Tazewell, Pocahontas	Baby Pocahontas	3.9	15.5	76.5	4.1	0.60	14,640	84.70	5.67	9.86	5.00
*Pocahontas No. 3	Tazewell, Pocahontas	W. Pocahontas	4.1	16.5	75.2	3.18	0.63	14,740	84.29	5.72	9.47	4.56
*Pocahontas No. 3	Tazewell, Richlands	Richlands	5.62	23.07	61.52	9.79	1.21	13,264	73.35	9.61	3.78	2.67
*Pocahontas No. 3	Tazewell, Pocahontas	Big Vein Nos. 1 and 2	3.03	20.93	73.66	5.41	0.59	14,648	83.84	5.21	8.71	3.40
*Pocahontas No. 3	Tazewell, Pocahontas	Baby	2.70	21.10	71.78	4.42	0.51	14,605	84.00	5.20	8.65	3.57
*Pocahontas No. 3	Tazewell, Pocahontas	West	3.00	20.25	72.24	4.51	0.47	14,675	84.41	5.10	9.17	3.33
*Pocahontas No. 3	Tazewell, Boissevain	Boissevain	2.60	21.51	71.65	4.10	0.50	14,627	83.75	5.72	8.61	3.52
*Pocahontas No. 3	Tazewell, s. of Pocahontas	Big Vein No. 1	3.10	20.52	72.33	4.01	0.63	14,620	83.52	5.53	8.35	3.36
*Pocahontas No. 3	Tazewell, s. of Boissevain	Big Vein No. 2	2.80	21.25	71.43	4.47	0.59	14,620	81.31	5.65	6.64	3.07
*Pocahontas No. 3	Tazewell, 2½ mi. w. of Boissevain	No. 7	3.40	22.10	67.90	6.60	0.58	14,140	81.31	5.65	6.64	3.07
*Pocahontas No. 3	Tazewell, 2½ mi. w. of Boissevain	No. 8	3.60	21.90	69.20	5.26	0.59	14,320	82.54	5.60	7.60	3.16
*Pocahontas No. 3	Tazewell, 3½ mi. w. of Boissevain	No. 6	3.60	21.30	69.70	5.41	0.51	14,320	82.42	5.64	7.46	3.27
*Pocahontas No. 3	Tazewell, 2 mi. w. of Boissevain	War Creek	2.20	16.40	73.00	8.44	0.69	14,010	80.70	4.53	6.22	4.45
*Pocahontas No. 5	Tazewell, 7 mi. w. of Faraday	John's Branch	2.20	17.30	71.60	8.88	0.64	13,950	80.36	4.49	6.01	4.14
*Pocahontas No. 5	Tazewell, 6 mi. w. of Faraday	Jewell No. 1	3.40	25.30	65.60	5.69	0.73	14,360	80.98	6.15	6.84	2.59
*Raven	Tazewell, Jewell	Red Ash	2.90	32.00	59.40	5.73	0.63	14,230	80.18	6.61	6.50	1.86
*Raven	Tazewell, Jewell	Red Ash	34.70	34.70	50.90	12.50	2.18	12,860	72.04	7.08	3.68	1.47
*Raven	Wise	Mine No. 1 Twin City	1.90	29.00	61.80	6.10	0.58	14,210	80.04	6.87	6.17	2.13
*Seaboard, Upper	Tazewell, Seaboard	No. 6½	3.2	11.4	43.8	41.59	0.33	8,020	47.98	6.43	1.00	3.84
*Small	Montgomery, 3½ mi. n. w. of Blacksburg	Clements Hollow	2.20	31.90	59.40	6.50	0.46	14,110	79.69	7.20	5.82	1.86
*Tiller	Dickenson, Hurricane Fork	201 Clinchfield	3.00	30.50	59.00	7.49	0.62	13,810	77.96	7.57	5.18	1.93
*Tiller	Tazewell, 1½ mi. w. of Richlands	East	2.5	10.8	63.1	23.6	0.41	11,250	71.47	14.37	3.41	1.44
*Upper	Pulaski, 5½ mi. n. w. of Dublin Station	Cloyd	5.69	34.43	51.77	8.11	2.31	13,117	76.59	10.92	4.89	1.61
*Wilson	Lee, Crab Orchard	Morris	4.06	34.93	56.28	4.73	1.20	13,826	76.59	10.92	4.89	1.61
*Wilson	Lee, Crab Orchard	Morris	4.06	34.93	56.28	4.73	1.20	13,826	76.59	10.92	4.89	1.61

*Bulletins Bureau of Mines. †State Geological Survey Reports.

BEAVER COAL COMPANY, Inc.

NORTON, VIRGINIA

Mine Office: TACOMA, VIRGINIA

Miners of
"Beaver Red Ash" Coal

"Beaver Red Ash" coal is the trade name under which we market the output of the Beaver mine, operating in the Lower Banner and Red Ash seams.

The coal now being worked is part of a 1,000-acre tract which holds in reserve millions of tons of an exceptional fuel, well qualified for steam, by-product and domestic use.

This coal may be classed as medium-high volatile with a small percentage of impurities, an analysis of a sample taken in the mine showing about four per cent. of moisture and ash combined. The sulphur content is also very low, thus fitting it especially for use in by-product coking and for all metallurgical uses where a raw coal running low in sulphur and high in heat value is specified.

A recently installed and up-to-date screening plant helps us in the preparation and sizing of our shipments, although due to natural causes the coal mines clean. Lump and block sizes are made in the interest of the retail coal trade, where "Beaver Red Ash" coal is held in the highest regard. Power plants find this a most satisfactory coal, as it gives little or no trouble from clinkers, owing to the high fusion point of its ash.

Beaver mine is located on the Clinch Valley division of the Norfolk & Western Railroad, giving us an easy outlet to tidewater and also to Western points. We will be glad to quote you prices on shipments from trial order size to large quantities, in the certain knowledge that an acquaintance with "Beaver Red Ash" coal will prove our claim that it is a

LOW ASH, HIGH HEAT VALUE, VERY CLEAN COAL

STONEGA COKE AND COAL CO., Inc.

Main Office
BIG STONE GAP, VA.

Offices
Philadelphia, Pa.
1727 Land Title Bldg.
Norfolk, Va.
Haddington Bldg.

Miners of

Offices
Charleston, S. C.
Exchange Bldg.
Spartanburg, S. C.
Allen & Law Bldg.

Stonega Steam and Roda Gas Coal



Organization

The Stonega Coke and Coal Company opened its first Mine at Stonega in 1896. Originally intended as a Coking operation, the high quality of the coal produced and resulting demand gradually made it necessary to open up new operations, which where a high volatile, high heat, low sulphur and clean coal is required.

Kinds of Coal Produced

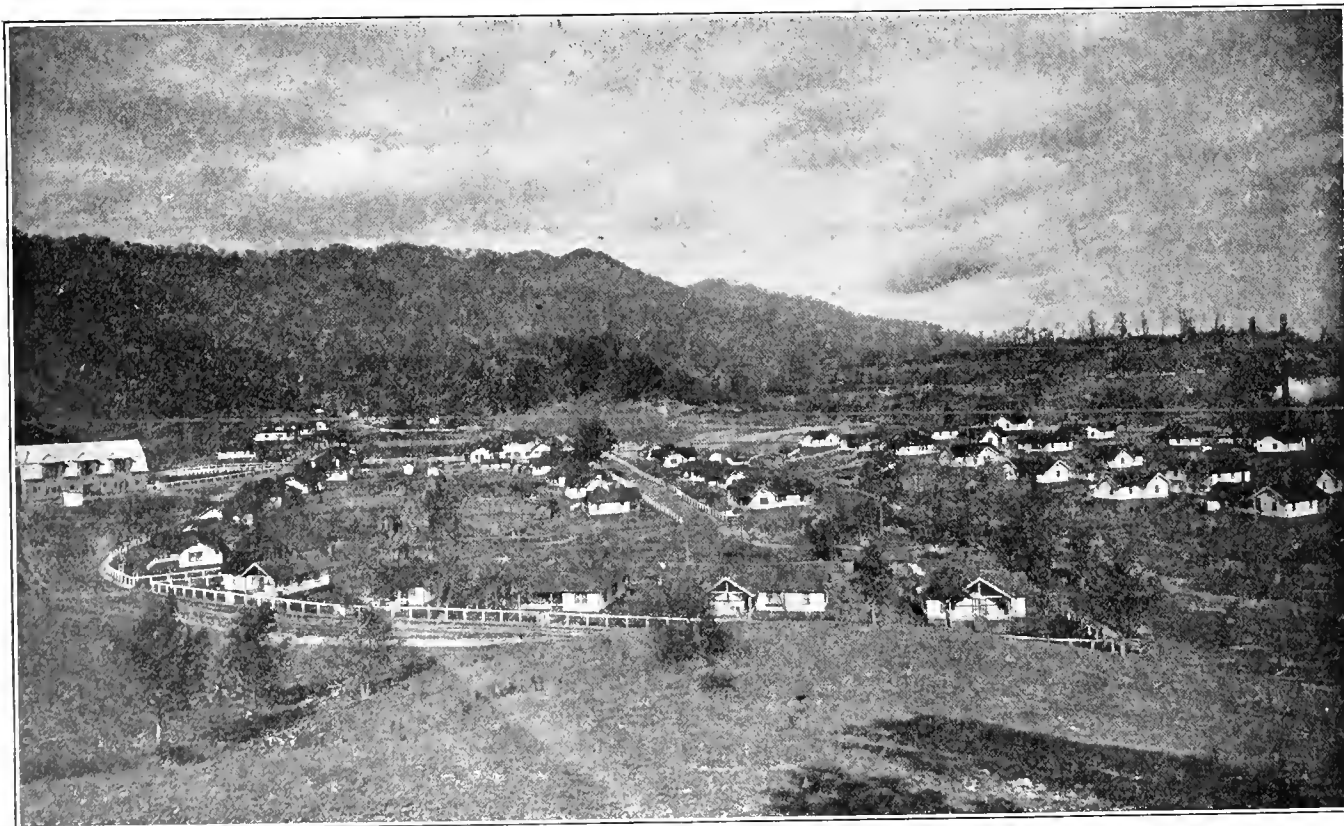
Four kinds of coal are produced at these operations — Steam, By-Product, Gas and Domestic. These coals are held in high repute for all purposes where a High Volatile, High Heat, Low Sulphur and clean coal is required.

Stonega and Roda Coke

Is manufactured at several of the plants. These cokes are of low ash and sulphur content and are always in demand for Gas manufacture, Foundry and Furnace practice.

Inspection and Preparation

Three methods of inspection are used—First, an inside inspection at working face; Second, inspection on tippie as coal is dumped and loaded, and of coke on being loaded, and Third, in chemical laboratory where daily samples of coal and coke are analyzed. This rigid inspection accounts for the high quality of both the coal and coke.



Where Contentment Reigns Supreme, Keokee, Va.

**Stonega Steam Coal**

Stonega steam coal is mined from the Imboden seam at Stonega, Osaka, Imboden, Arno, Exeter and Keokee. This coal is an excellent steam and by-product coal and largely used for bunker purposes.



Chemical and Physical Laboratory

Analyses

A representative analysis of the Imboden seam is as follows:

Moisture	Dry Basis
Volatile Matter	32.75
Fixed Carbon	59.67
Ash	7.58
<hr/>	
Sulphur	100.00
B. t. u.	0.76
	14,289

Car Supply

The plants of the Stonega Company are located on the Southern Railway and Interstate Railroad, having connections with the Louisville and Nashville Railroad, Norfolk and Western Railway and Carolina, Clinchfield and Ohio Railroad, thus assuring an adequate car supply and prompt shipments.

Facilities for Export

The Stonega Coke and Coal Company is fortunate in having a geological location which gives entry to southern, middle western and eastern markets. The benefit of location is especially emphasized with respect to export shipments, since it has available two tidewater points, viz., Charleston, S. C., and Lamberts Point, Va. The first named port is reached in six days without difficulty through the Southern Railway. Stonega coal has been sent to Lamberts Point on the Norfolk & Western Railway in four days, though six is the average time required.

Stonega coal is carried in stock at Charleston, S. C., and Savannah, Ga., which makes it possible to supply promptly the bunker requirements of vessels calling at either port.

**Roda Gas Coal**

Roda gas coal is mined from the Taggart seam at Roda and Dunbar. This coal is of the highest grade for gas and by-product purposes and has a reputation second to none.

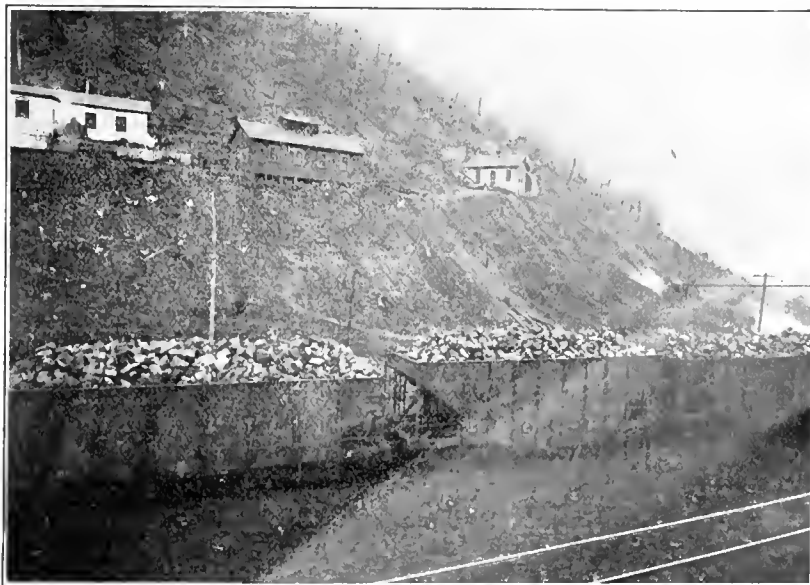
Analyses

Analysis of Roda gas coal and resulting gas are as follows:

COAL	
Moisture	Dry Basis
Volatile Matter	35.00
Fixed Carbon	62.13
Ash	2.87
<hr/>	
Sulphur	100.00
B. t. u.	0.48
	15,246
APPROXIMATE GAS ANALYSIS	
Hydrocarbon	4.20%
Carbon Monoxide	5.40%
Hydrogen	50.18%
Methane	32.73%
Nitrogen	7.49%
Specific Gravity .....	.38%
B. t. u. per cu. ft. gas.....	661
B. t. u. per pound coal.....	3,298
Gallons coal tar per ton.....	13
Lbs. Amm. Sulph. per ton.....	26
Cubic feet gas per ton.....	11,200
Per cent coke per ton.....	63.8

Yearly Capacity

Under existing conditions there is a possible production of 5,000,000 tons. While a huge total, such as this, suggests early exhaustion of our property resources, the fact is that having a total of forty square miles of coal lands which are underlaid with seams ranging from 4½ to 7½ feet in thickness, we are assured enough coal to last for the next 200 years, at the present rate of production. The capacity of all coke ovens at the company's mines is about 93,000 tons monthly.



Block Coal Ready for Shipment from Roda Mines

C. H. ZEHNDER, President
120 Broadway, New York, N. Y.

GROVER E. ORR, Business Manager
St. Charles, Va.

BENEDICT COAL CORPORATION

ST. CHARLES, VIRGINIA

Miners and Shippers of

"Benedict" Bituminous Coal

The Nos. 5 and 7 mines of the Benedict Coal Corporation are located at St. Charles, Lee county, Virginia.

Number 5 mine opening is in the well known Number 5 seam. Coal from this operation is in high regard as a domestic coal, and most of the past shipments have been for this purpose, but it is also a high grade by-product coal and is best suited for that use.

Mine Number 7 works the Number 7 seam. This coal is especially adapted for steam and domestic purposes. It is prepared by the most modern shaker screen equipment, and, most important of all, it is prepared in accordance with the customer's purposes. The fusion point of the ash is high, 2714 deg. F., which guarantees that you will not be troubled with clinkers when you burn Number 7 "Benedict" coal. As an evidence of its high quality, this mine has operated full time during the depression years of 1919 and 1921.

The analysis of Number 7 "Benedict" coal is as follows:*

Moisture	1.96
Volatile Matter	33.88
Fixed Carbon	57.75
Ash	6.41
Sulphur	0.77
B.t.u.	13,987
Fusion point of ash.....	2714° F.

*Analysis by Pittsburgh Testing Laboratory.

Labor and Shipping Facilities

Our facilities for attracting and holding a good labor supply are excellent. The mining camps are up-to-date, and since the time of our starting operations we have maintained a full operating crew even when labor was scarce.

We are located on two railroads—the Louisville & Nashville and the Southern. Shipments can be made both to the North and the South, the major portion of shipments in the past having been made to the South.

Buy Your Coal from Benedict and be a Satisfied Customer

PENN LEE COAL COMPANY

General Office

PENNINGTON GAP, VA.

Miners of

High Volatile Virginia Coal

The Penn Lee mine produces one of the highest grade coals of any in the Southwestern Virginia field. It is located at Pennington Gap, in Lee County, and mines the Black Mountain No. 1 seam, which here has a thickness of about four feet.

"Penn Lee" coal is a splendid fuel for general steam purposes, and, in addition, is particularly fitted for domestic usage, as it is clean and free burning. For this latter purpose we recommend our lump and block sizes, carefully screened and prepared. "Penn Lee" coal will meet every requirement of a gas coal and any other usage calling for a high grade high volatile coal.

Our mine is modernly equipped and we are in position to meet all requests for moderate tonnages. Shipments to the West and South over the Louisville & Nashville and the Southern Railroads.

UNITED COLLIERIES, INCORPORATED

ST. CHARLES, VIRGINIA

Miners and Shippers of

Bondurant's Virginia Blue Gem Coal

Both the Bondurant and Dominion mines of the United Collieries, Incorporated, are located at St. Charles, in Lee county, Virginia, and both mine the No. 5 seam of coal.

The trade name under which our coal is sold is "Bondurant's Virginia Blue Gem." It is a remarkable coal, as will be noted from its analysis. It is particularly fitted for illuminating gas and by-product plants, and is especially good for brick, tile and pottery burning, as it is a long-flame coal.

The coal as it lies in the mountain is absolutely clean. There is a hard sandstone top and a solid bottom. Natural conditions are as good as could be wanted. All of these favorable features are reflected in the quality of the coal shipped.

At the Dominion mine we make a specialty of careful preparation for domestic coal, using all modern equipment, such as shaker screens, picking tables and loading booms. The following are the popular sizes: 2-inch nut and slack; 2x4-inch egg; 4-inch select block; there is also made at this tipple a 4-inch steam size, running the slack and egg together, the whole making a splendid steam fuel.

Our domestic coal trade will sustain the statement that we have one of the highest grade domestic coals on the market. During the past 18 years we have been selling to the trade direct, passing on to our customers the usual broker's profit. Our records show that many of our customers have been buying Bondurant's Virginia Blue Gem coal year after year.

During the war period the Government offered a 10 per cent. premium for quality and preparation. There were eighty operators in the entire United States who received this bonus, and we were one of them. We merely add that the standard which earned a premium for our coal during the war remains our standard today. Our coal shows less loss from ash than any known coal in the world.

Bondurant's Virginia Blue Gem coal is also a superior gas coal. It has been tested both at home and abroad. The Paris Gas Company, Paris, France, tested our coal in competition with No. 7

Welch coal, supposed to be the best coal mined in Europe, and the Virginia coal stood higher in all things but one by-product. The coal tested at Paris was a cargo of straight run-of-mine coal. The analysis as well as the result of the gas making and coking tests are as follows:

Analyses of Coal

Moisture	2.05
Volatile Matter	36.55
Fixed Carbon	59.49
Ash	1.51
Sulphur	0.40
B.t.u.	14,677

GAS MAKING AND COKING TEST*

	Sample of Bondurant's "Blue Gem"	Sample of Best Bruay Pit No. 7
Ash, per cent.....	2.75	3.10
Volatile Matter, per cent..	39.10	37.60
Gas, cubic meters per ton..	264.2	270.0
Tar, kilograms per ton....	97.5	90.8
Ammoniacal Waters	60.1	56.9
Ammonia	2.61	2.75
Benzol from tar distilling..	10.2	9.1
Benzol from Scrubbing and Washing	3.4	3.8
Coke, kilograms per ton...	665.7	675.1

Fractional Distillation of All Benzols

Temperature (Centigrade)	00	100	110	120	130	140	150
"Blue Gem"	14.5	32.6	41.3	49.7	55.4	60.0	62.9
Bruay, No. 7	9.4	27.3	39.1	45.4	53.0	57.6	62.0

Temperature (Centigrade)	160	170	180	190	200	210
"Blue Gem"	65.1	67.3	69.1	71.0	73.5	75.2
Bruay, No. 7	63.2	65.6	66.8	70.0	71.2	72.5

*Made by Paris Gas Company, Paris, France.

Labor is plentiful in our field, and this, in conjunction with the fact that our mines are located on two railroads, the Louisville & Nashville and the Southern, giving us a full car supply, puts us in position to make prompt shipments at all times.

List of Mines By Seams Including Name of Company, General Office Address.
County, Railroad and Shipping Point

VIRGINIA

BANNER, LOWER SEAM

Mined in Wise and Russell counties. Bituminous rank. Suitable for Bee-hive Coking, By-Product Coking, Export, Cement Burning, Illuminating Gas, Melting, Tile and Pottery Burning, Powdered, Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Appalachian Coal Corporation	Wilder, Va.	502 Lower Banner	Russell	C. C. & O.	Clinchfield, Va.
Beaver Coal Co.	Tacoma, Va.	Beaver	Wise	N. & W.	Tacoma, Va.
Blue Ridge Coal Co.	Columbus, O.	Blue Ridge	Wise	N. & W.	Pin, Va.
Bondtown Coal Corp.	Norton, Va.	Sheep Rock	Wise	N. & W.	Cochurn, Va.
Clear Creek Coal Co.	Norton, Va.	Clear Creek	Wise	L. & N., N. & W., Int.	Norton, Va.
Clinchfield Coal Corporation	Dante, Va.	Dante, No. 52	Russell	C. C. & O.	and, Va.
Clinchfield Coal Corporation	Wilder, Va.	Laurel No. 55	Russell	C. C. & O.	Clinchfield Id., Va.
Corder Coal Co.	Norton, Va.	Corder	Wise	Interstate	Glamorgan, Va.
Esser, J. A. Coke Co.	Essersville, Va.	Essersville	Wise	Interstate	Essersville, Va.
Fleming, Robert & Co.	Norton, Va.	Lower Banner	Wise	N. & W.	Renton, Va.
Gladville Coal Co.	Wise, Va.	Gladville No. 2	Wise	N. & W.	Wise, Va.
Gladville Coal Co.	Wise, Va.	Gladville No. 3	Wise	N. & W.	Norton, Va.
Hawthorne Coal Corp.	Roanoke, Va.	Hawthorne No. 1	Wise	N. & W. Inter.	Norton, Va.
Hawthorne Coal Corp.	Roanoke, Va.	Hawthorne No. 2	Wise	N. & W. Inter.	Norton, Va.
Hawthorne Coal Corp.	Roanoke, Va.	Hawthorne No. 3	Wise	N. & W. Inter.	Norton, Va.
Hawthorne Coal Corp.	Roanoke, Va.	Hawthorne No. 4	Wise	N. & W. Inter.	Norton, Va.
Hayter, C. M., Coal Co.	Trammel, Va.	Hayter	Dickinson	C. C. & O.	Trammel, Va.
Little Tom Coal Co.	Norton, Va.	Little Tom	Wise	Interstate	Norton, Va.
McClanahan Coal & Coke Co.	Norton, Va.	Clear Creek	Wise	V. & A. Inter-state	Clear Creek, Va.
North Fork Coal Co.	St. Charles, Va.	North Fork	Lee	Southern	St. Charles, Va.
Norton Coal Co.	Norton, Va.	Norton	Wise	N. & W., L. & N.	Norton, Va.
Pioneer Red Ash Coal Corp.	Drill, Va.	Pioneer	Russell	N. & W.	Patton, Va.
Tarklin Coal Co.	Honaker, Va.	Tarklin	Russell	N. & W.	Honaker, Va.
Wise Coal & Coke Co.	Dorchester, Va.	Wise	Wise	Int., L. & N.	Dorchester, Va.

BANNER, UPPER SEAM

Mined in Dickenson, Russell and Wise counties. Bituminous rank. Suitable for Bee-hive Coking, Bunker, By-Product Coking, Export, Cement Burning, Illuminating Gas, Melting, Tile and Pottery Burning, Powdered, Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Bandy & Tringle, Operators	Norton, Va.	No. 1	Wise	N. & N.	Norton, Va.
Banner Raven Coal Corp.	Drill, Va.	Banner No. 1	Russell	N. & W.	Drill, Va.
Banner Raven Coal Corp.	Drill, Va.	Banner No. 2	Russell	N. & W.	Drill, Va.
Bondtown Coal Corp.	Norton, Va.	Sheep Rock	Wise	N. & W.	Cochurn, Va.
Bradley Coal Co.	Wise, Va.	No. 1	Wise	N. & W.	Wise, Va.
Clinchfield Coal Corporation	Dante, Va.	Cranes Nest	Wise	N. & W.	Trist Creek, Va.
Clinchfield Coal Corporation	Dante, Va.	Dante No. 2	Russell	C. C. & O.	Dante, Va.
Clinchfield Coal Corporation	Dante, Va.	Dante No. 5	Russell	C. C. & O.	Dante, Va.
Clinchfield Coal Corporation	Dante, Va.	Dante No. 3	Russell	C. C. & O.	Dante, Va.
Clinchfield Coal Corporation	Dante, Va.	Laurel No. 6	Russell	C. C. & O.	Clinchfield, Va.
Clinchfield Coal Corporation	Dante, Va.	No. 7	Dickinson	C. C. & O.	Moss, Va.
Clinchfield Coal Corporation	Dante, Va.	Moss No. 8	Dickinson	C. C. & O.	Moss, Va.
Clinchfield Coal Corporation	Dante, Va.	Moss No. 9	Dickinson	C. C. & O.	Moss, Va.
Clinchfield Coal Corporation	Cochurn, Va.	Calhoun	Wise	N. & W.	Toms Creek, Va.
Culbertson Coal Co.	Norton, Va.	Upper Banner	Wise	N. & W.	Banner, Va.
Fleming, Robt., & Co.	Swords Creek, Va.	Four Seam	Russell	N. & W.	Swords Creek, Va.
Four Seam Coal Co.	Drill, Va.	Banner No. 1	Russell	N. & W.	Drill, Va.
Garden Coal Co., Inc.	Drill, Va.	Banner No. 2	Russell	N. & W.	Swords Creek, Va.
Garden Coal Co., Inc.	Swords Creek, Va.	No. 5	Russell	N. & W.	Swords Creek, Va.
Kennedy Coal Corp.	Swords Creek, Va.	No. 9	Russell	N. & W.	Swords Creek, Va.
Kennedy Coal Corp.	Swords Creek, Va.	No. 2	Russell	N. & W.	Toms Creek, Va.
Kennedy Coal Corp.	Cochurn, Va.	Shop Ridge	Wise	N. & W.	Steinman, Va.
Shop Ridge Coal Co.	Tarpon, Va.	Bentridge	Dickinson	C. C. & V.	Trammel, Va.
Steinman Development Co.	Johnson City, Tenn.	Virginia Banner	Dickinson	C. C. & O.	Cochurn, Va.
Virginia Banner Coal Corp.	Roanoke, Va.	Marion	Wise	N. & W.	Toms Creek, Va.
Virginia Iron, Coal & Coke Co.	Roanoke, Va.	Toms Creek	Wise	N. & W.	Dorchester, Va.
Virginia Iron, Coal & Coke Co.	Dorchester, Va.	No. 5	Wise	Int., L. & N.	Dorchester, Va.

DARBY SEAM (Known also as NO. 5 SEAM)

Mined in Lee county. Bituminous rank. Suitable for Cement Burning, Bee-hive Coking, By-Product Coking, Export, Illuminating Gas, Melting, Tile and Pottery Burning, Powdered, Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Black Mountain Mining Co.	Big Stone Gap, Va.	No. 1	Lee	L. & N.	St. Charles, Va.
Black Mountain Mining Co.	Big Stone Gap, Va.	No. 2	Lee	Sou. L. & N.	St. Charles, Va.
Briar Ridge Coal Corp.	Pineville, Ky.	Briar Ridge	Lee	L. & N. Sou.	St. Charles, Va.
Consumers Coal Mining Corp.	St. Charles, Va.	Pot Branch	Lee	Sou. L. & N.	St. Charles, Va.
Dixie Splint Coal Co.	Clinchfield, Va.	Dixie No. 1	Russell	C. C. & O.	Clinchfield, Va.
Dixie Splint Coal Co.	Clinchfield, Va.	Dixie No. 2	Russell	C. C. & O.	Clinchfield, Va.
Old Virginia Coal Co.	St. Charles, Va.	Monarch	Lee	L. & N., Southern	St. Charles, Va.
United Coal Mining Corp.	Pittsburgh, Pa.	United	Lee	Sou. L. & N.	St. Charles, Va.
United Collieries, Inc.	St. Charles, Va.	New Roundant No. 2	Lee	Southern, L. & N.	St. Charles, Va.
United Collieries, Inc.	St. Charles, Va.	Dominion	Lee	Southern, L. & N.	St. Charles, Va.
United Collieries, Inc.	St. Charles, Va.	New Dominion	Lee	Sou. L. & N.	St. Charles, Va.
United Collieries, Inc.	St. Charles, Va.	Roundant No. 3	Lee	Sou. L. & N.	St. Charles, Va.
Virginia-Lee Co., Inc. (The)	St. Charles, Va.	Virginia Lee	Lee	L. & N., V. & S. W.	St. Charles, Va.

IMBODEN SEAM (Probably the same as the EDWARDS SEAM)

Mined in Russell and Wise counties. Bituminous rank. Suitable for Bee-hive Coking, By-Product Coking, Cement Burning, Export, Illuminating Gas, Melting, Tile and Pottery Burning, Powdered, Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Clinchfield Coal Corporation	Dante, Va.	No. 201	Russell	C. C. & O.	Clinchfield, Va.
Cumberland Coal Co., Inc.	Big Stone Gap, Va.	Cumberland	Lee	Southern	Keoket, Va.
Pelton Coal Co., Inc.	Wise, Va.	Grano	Wise	N. & W.	Tacoma, Va.
Guests River Coal Co., Inc.	Tacoma, Va.	Guests River	Wise	N. & W.	Tacoma, Va.
Hardy Branch Coal Co.	St. Paul, Va.	Hardy Branch	Wise	N. & W.	St. Paul, Va.
Heaton Coal Co., Inc.	Tacoma, Va.	Redlin	Wise	N. & W.	Tacoma, Va.
Hillman, J. M.	St. Paul, Va.	"Hillman"	Wise	N. & W.	Tacoma, Va.
McClanahan Coal & Coke Co.	Norton, Va.	Clear Creek	Wise	N. & W.	St. Paul, Va.
Russell Fork Coal Mining Co., Inc.	Charlottesville, Va.	Burtons Ford	Wise	V. & K., Interstate	Clear Creek, Va.
Stonega Coal & Coke Co.	Big Stone Gap, Va.	Arno	Russell	C. C. & O.	Lorton Ford, Va.
Stonega Coal & Coke Co.	Big Stone Gap, Va.	Ex ter	Wise	Int. state	Andover, Va.
Stonega Coal & Coke Co.	Big Stone Gap, Va.	Imboden	Wise	Int. state	Exeter, Va.
Stonega Coal & Coke Co.	Big Stone Gap, Va.	Osaka No. 1	Wise	Southern	Imboden, Va.
Stonega Coal & Coke Co.	Big Stone Gap, Va.	Stonega	Wise	Interstate	Osaka, Va.
Twin City Coal Corp.	Leburn, Va.	Twin City	Wise	Interstate	Stonega, Va.
Virginia Iron, Coal & Coke Co.	Roanoke, Va.	Lemon	Wise	N. & W.	St. Paul, Va.
Virginia Iron, Coal & Coke Co.	Roanoke, Va.	Lydon	Wise	L. & N., Southern	Appalachia, Va.
Wise Coal & Coke Co.	Dorchester, Va.	No. 2	Wise	L. & N., Southern	Appalachia, Va.
				Interstate, L. & N.	Dorchester, Va.

EDWARDS SEAM

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Caswell, John Coal Corp., The	Tacoma, Va.	No. 1	Wise	M. & W., C. C. & O.	Tacoma, Va.
Charlton Coal Co.	Norton, Va.	Yellow Creek	Wise	N. & W.	Wise, Va.
Huetel Coal Corp.	Norton, Va.	Huetel	Wise	N. & N.	Norton & Wise, Va.
Jonesville Coal Corp., The	Tacoma, Va.	No. 1	Wise	N. & W.	Tacoma, Va.
St. Pauls Coal Co.	Wise, Va.	No. 1	Wise	L. & N.	Wise, Va.
Stonegap Colliery Co.	Chattanooga, Tenn.	Glamorgan No. 3	Wise	Interstate	Glamorgan, Va.
Stonegap Colliery Co.	Chattanooga, Tenn.	Glamorgan No. 4	Wise	Interstate	Glamorgan, Va.

KENNEDY SEAM (Known also as the WIDOW KENNEDY SEAM)

Mined in Russell and Wise counties. Bituminous rank. Suitable for Bee-hive Coking, By-Product Coking, Cement Burning, Export, Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Big Chi f Coal Co.	Drill, Va.	Big Chi f	Russell	N. & W.	Drill, Va.
Blue Ridge Coal Co.	Columbus, O.	Blue Ridge	Wise	N. & W.	Pine, Va.
Buckle-Irvine Coal Co.	Swords creek, Va.	Kedy	Russell	N. & W.	Swords Creek, Va.
Camilla Red Ash Coal Co.	Bramwell, W. Va.	Camilla No. 1	Russell	N. & W.	Drill, Va.
Camilla Red Ash Coal Co.	Bramwell, W. Va.	Camilla No. 2	Russell	N. & W.	Drill, Va.
Camilla Red Ash Coal Co.	Bramwell, W. Va.	Camilla No. 3	Russell	N. & W.	Drill, Va.
Garden Coal Co., Inc.	Drill, Va.	Widow Kennedy No. 2	Russell	N. & W.	Drill, Va.
Garden Coal Co., Inc.	Drill, Va.	Widow Kennedy No. 6	Russell	N. & W.	Drill, Va.
Kennedy Coal Corp.	Drill, Va.	No. 6	Russell	N. & W.	Swords Creek, Va.
Lewis Creek Banner Coal Co.	Tazewell, Va.	Widow Kennedy	Russell	N. & W.	Drill, Va.
Longley Coal Co.	Drill, Va.	Longley	Russell	N. & W.	Drill, Va.
Moyers Coal Corp.	Drill, Va.	Moyers	Russell	N. & W.	Drill, Va.
Russell Coal Corp.	Drill, Va.	Russell	Russell	N. & W.	Honaker, Va.
Standard Coal Co.	Co-burn, Va.	Standard	Wise	N. & W.	Drill, Va.
					Co-burn, Va.

BRUSHY MOUNTAIN FIELD COALS

Mined in Montgomery and Pulaski counties. Semianthracite rank. Suitable for Domestic, Producer Gas, Railroad and Steam uses. Known as Smokeless Coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Anthracite Coal Corp.	Galena, Ill.	Yathny	Montgomery	Virginian	Vicker, Va.
Brinton Minerals Corp.	Christiansburg, Va.	Brinton's	Montgomery	Virginian, N. & W.	Merrimac, Va.
Merrimac Anthracite Coal Corp.	Merrimac Mines, Va.	Merrimac	Montgomery	N. & W.	Merrimac Mines, Va.
Pulaski Anthracite Coal Co.	Parrott, Va.	Parrott	Pulaski	N. & W.	Parrott, Va.
Slusser, M. C., & Co.	Blacksburg, Va.	Brush Mountain	Montgomery	N. & W.	Blacksburg, Va.
Superior Anthracite Coal Corp.	Roanoke, Va.	McCoy	Montgomery	Virginian	McCoy, Va.
Virginia Anthracite Coal Corporation	Pulaski, Va.	No. 1	Pulaski	N. & W.	Pulaski, Va.

POCAHONTAS NO. 3

Mined in Tazewell county. Semibituminous rank. Suitable for Bee-hive Coking, By-Product Coking, Bunker, Export, Domestic, Locomotive Fuel, Producer Gas, Smithing and Steam uses. Known to the trade as Smokeless Coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Big Vein Pocahontas Co.	Columbus, O., and Baltimore, Md.	No. 1	Tazewell	N. & W.	Pocahontas, Va.
Big Vein Pocahontas Co.	Columbus, O., and Baltimore, Md.	No. 2	Tazewell	N. & W.	Ollivette, Va.
Jewell Ridge Coal Corp.	Tazewell, Va.	Jewell Ridge	Tazewell	N. & W.	Jewell, Va.
Pocahontas Fuel Co., Inc.	Pocahontas, Va.	Boissevain Colliery	Tazewell	N. & W.	Boissevain, Va.
Pocahontas Fuel Co., Inc.	Pocahontas, Va.	Pocahontas Colliery	Tazewell	N. & W.	Pocahontas, Va.

RAVEN SEAM (Known also as RED ASH SEAM)

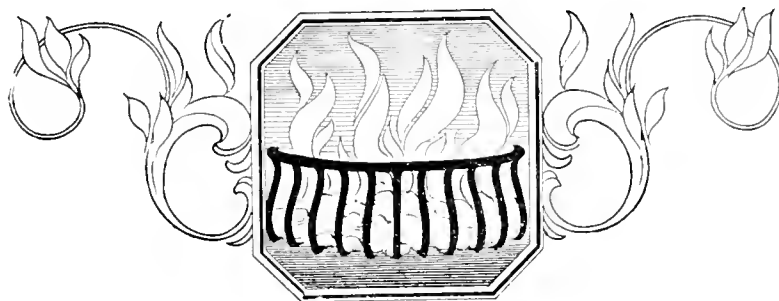
Mined in Tazewell county. Bituminous. Suitable for Export, Domestic, Locomotive Fuel, Producer Gas and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Ball, Robert H. Mining Co.	Dayton, O.	Irre	R.	N. & W.	Raven, Va.
Excelsior Red Ash Coal Co., Inc.	Raven, Va.	Red Ash	R.	N. & W.	Raven, Va.
Matz, Samuel L., Coal Corporation.	Raven, Va.	DIXIE No. 1	Tazewell	N. & W.	Red Ash, Va.
Matz, Samuel L., Coal Corporation.	Raven, Va.	Domestic No. 2	Tazewell	N. & W.	Red Ash, Va.
Raven Red Ash Coal Co.	Beckley, W. Va.	Red Ash	Tazewell	N. & W.	Red Ash, Va.
Scott, Field Coal Co.	Richlands, Va.	Red Ash No. 2	Tazewell	N. & W.	Red Ash, Va.
Scott, Field Coal Co.	Richlands, Va.	Red Ash No. 1	Tazewell	N. & W.	Red Ash, Va.
Shreve, R. W., Coal Co.	Doran, Va.	No. 2	Tazewell	N. & W.	Richmond, Va.
Tomb Coal Co.	Raven, Va.	Tomb	Tazewell	N. & W.	Raven, Va.

MISCELLANEOUS HIGH VOLATILE COALS

Mined in Lee, Russell, Tazewell, Wise and Wythe counties. Bituminous rank. Suitable, according to seam and locality, for Cement Burning, Bee-hive Coking, By-Product Coking, Export, Illuminating Gas, Melting, Powdered, Tile and Pottery Burning, Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	SEAM	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Bar Creek Coal Corp.	Wise, Va.	Bar	Bar Creek	Wise	N. & W.	Wise, Va.
Benedict Coal Corp.	St. Charles, Va.	No. 7	No. 7	Lee	L. & N., Southern	St. Charles, Va.
Bird-Wright Coal Co.	Pennington Gap, Va.	No. 1	Bird Wright	Lee	Southern	Pocket, Va.
Black Diamond Coal Co.	Middlesboro, Ky.	No. 3	Black Diamond	Lee	Southern	St. Charles, Va.
Blackwood Coal & Coke Co.	Blackwood, Va.	Red Bird	Roaring Fork	Wise	Interstate, L. & N.	Blackwood, Va.
Blackwood Coal & Coke Co.	Blackwood, Va.	Black Creek	Blackwood	Wise	L. & N., Interstate	Blackwood, Va.
Blackwood Coal & Coke Co.	Blackwood, Va.	Fair	Parler	Wise	Interstate, L. & N.	Blackwood, Va.
Burdy Coal Co., Inc.	Big Stone Gap, Va.	No. 2	Johnsons Mill	Lee	Southern	Krook, Va.
Carter Coal Co.	Coalwood, W. Va.	No. 2	Seaboard	Tazewell	N. & W.	Seaboard, Va.
Carter Coal Co.	Coalwood, W. Va.	No. 2	Empire	Tazewell	N. & W.	Lark, Va.
Carter Coal Co.	Coalwood, W. Va.	No. 1	Seaboard	Tazewell	N. & W.	Seaboard, Va.
Carter Coal Co.	Coalwood, W. Va.	No. 1	Empire	Tazewell	N. & W.	Lark, Va.
Crest Coal Co.	Big Stone Gap, Va.	No. 1	No. 1	Lee	Southern	Crest, Va.
Crest Coal Co.	Big Stone Gap, Va.	No. 2	No. 2	Lee	Southern	Crest, Va.
Crest Coal Co.	Big Stone Gap, Va.	No. 3	No. 3	Lee	Southern	Crest, Va.
Crest Coal Co.	Big Stone Gap, Va.	Kelly	Cumberland	Lee	Southern	Krook, Va.
Cumberland Coal Co., Inc.	Big Stone Gap, Va.	Kelly	Cumberland	Lee	Southern	Krook, Va.
Dash Coal Corp.	Kingsport, Tenn.	Edge	Essville	Wise	Interstate	Essville, Va.
Lillaura Coal & Coke Co.	Kingsport, Tenn.	Splash Dam	Edaura	Lee	L. & N.	Pennington Gap, Va.
Fall Branch Coal Co.	Chatham, Va.	Shannon	Fall Branch	Dickenson	C. C. & O.	Bartlett, Va.
Hamlin Coal Co., Inc.	Chatham, Va.	Shannon	Hamlin No. 1	Russell	C. C. & O.	Hamlin or St. Paul, Va.
Hill Creek Coal Co.	Johnson City, Tenn.	No. 2	Hill Creek	Tazewell	N. & W.	Richlands, Va.
Intermont Coal & Iron Corp.	Big Stone Gap, Va.	Josephine	Josephine	Wise	L. & N.	Dorchester, Va.
J. S. T. Coal Corp.	Dungannon, Va.	Edge	J. S. T.	Scott	C. C. & O.	Dungannon, Va.
Leecova Coal Co.	Pennington Gap, Va.	Black Mountain	Leecova	Lee	L. & N., Southern	St. Charles, Va.
Liberty Coal Co.	Norton, Va.	Big D. or Chester	Liberty	Wise	Norfolk & Inter.	Norfolk, Va.
Mill Branch Coal Co.	Tryden, Va.	Mohawk	Mill Branch	Lee	Southern	Johnson Mills, Va.
Mohawk Coal Mining Co., Inc.	Tryden, Va.	Mohawk	Mohawk	Lee	Southern	Krook, Va.
O'Donnell, C. V.	St. Paul, Va.	No. 7	No. 7	Wise	C. C. & O.	St. Paul, Va.
Penn Lee Coal Co.	Pennington Gap, Va.	Black Mtn. No. 1	Penn Lee	Lee	Southern, L. & N.	Manass, Va.
Powell River Coal Co.	St. Charles, Va.	Kelly	Low II No. 1	Lee	Southern	St. Charles, Va.
Richlands Coal Corp.	Richlands, Va.	No. 2	Richlands No. 2	Tazewell	N. & W.	Richlands, Va.
Roberts Coal Co.	Wise, Va.	Glamorgan	No. 1	Wise	Interstate	Glamorgan, Va.
Russell Fork Coal Mng. Co., Inc.	Charlottesville, Va.	Splash Dam	Hays	Dickenson	C. C. & O.	Hays, Va.
Splash Dam Coal Corp.	Splash Dam, Va.	Splash Dam	Splash Dam No. 1	Dickenson	C. C. & O.	Bartlett, Va.
Stonaga Coal & Coke Co.	Big Stone Gap, Va.	Taggart	Splash Dam No. 2	Dickenson	C. C. & O.	Splash Dam, Va.
Stonaga Coal & Coke Co.	Big Stone Gap, Va.	Taggart	Taggart	Wise	Interstate	Donbar, Va.
Stonaga Coal & Coke Co.	Big Stone Gap, Va.	Marker	Donbar	Wise	Interstate	Donbar, Va.
Stonaga Coal & Coke Co.	Big Stone Gap, Va.	Krook	Krook	Lee	Southern	Krook, Va.
Stonaga Coal & Coke Co.	Big Stone Gap, Va.	Nelson	Krook	Lee	Southern	Krook, Va.
Stonaga Coal & Coke Co.	Big Stone Gap, Va.	Taggart	Roda	Wise	Interstate	Roda, Va.
Twin City Coal Corp.	Cochran, Va.	Shawnee	Twin City	Wise	N. & W., C. C. & O.	St. Paul, Va.
Virginia Elu. Gem Coal Co., The	Pennington Gap, Va.	Sorlie Fork	Va. Blue Gem No. 2	Lee	Southern	Purell, Va.
Virginia Elkhorn Coal Co.	Prairie, Ky.	Splash Dam	Virginia	Dickenson	C. C. & O.	Bartlett, Va.
Virginia Iron, Coal & Coke Co.	Roanoke, Va.	Taggart	Laura	Wise	Southern, L. & N.	Abrahamia, Va.
Virginia Iron, Coal & Coke Co.	Roanoke, Va.	Shannon	Shannon	Wise	C. C. & O.	Shannon, Va.
Virginia Iron, Coal & Coke Co.	Roanoke, Va.	Jawhron	Virginia City No. 1	Wise	N. & W.	Verona, City, Va.
Virginia Iron, Coal & Coke Co.	Roanoke, Va.	No. 6	Imperial	Lee	L. & N., Southern	St. Charles, Va.
Virginia Iron, Coal & Coke Co.	Roanoke, Va.	No. 7	Imperial	Lee	L. & N., Southern	St. Charles, Va.



VIRGINIA

Alphabetical Directory of Coal Mines, Giving Complete Detailed Information Covering Each Mine

For List of Abbreviations See Page 13.

ANTHRACITE COAL CORPORATION

General Office, Galena, Ill.
PR—C. C. Mathey, Galena, Ill.
VP—H. F. Cochran, Milwaukee, Wis.
TR—C. C. Mathey, Galena, Ill.
GM—C. C. Mathey, Galena, Ill.
GS—C. C. Mathey, Galena, Ill.

Mathey Mine; Slope; Va. Anthracite Seam, 84 in. thick.
PO—Vicar Switch, Va.; SP—Vicker, Va.; CTY—Montgomery; RR—Virginian.
S of H—Rope, steam. Track gage 36 inches.

S of M—Hand, shortwall mach.
PP—3 fire tube boilers 280 H. P., gen. units, 250 volts D. C.
EMP—40. Daily output, 100 tons.
SIZES SHIPT—Pea, Nut, Egg, Lump.
PREP. EQUIPT—Bar, Revolving & Shaker Screens, Washeries.

APPALACHIAN COAL CORPORATION

General Office, Wilder, Va.
PR—D. L. Bumgar, Wilder, Va.
VP—Peter Xenos, Wilder, Va.
TR—W. E. Wolfe, Wilder, Va.
GM—S. H. Brown, Wilder, Va.
SA—Dixie Splint Coal Co., Clinchfield, Va.

No. 502 Lower Banner Mine; Drift; Lower Banner Seam; 54 inches thick.
PO—Wilder, Va.; SP—Clinchfield, Va.; CTY—Russell; RR—C. C. & O.
S of H—Mules, storage battery locos. Track gage 36 inches.
S of M—Electric punchers and shortwall machs.
PP—Purchase power, 250 volts D. C.
EMP—25. Daily tonnage 60.
SIZES SHIPT—Run of Mine.

BALL, ROBERT H. MINING COMPANY

General Office, Dayton, O.
PR—Robt. H. Ball, Dayton, O.
GM—Robt. H. Ball, Dayton, O.
GS—Robt. H. Ball, Dayton, O.
PA—Robt. H. Ball, Dayton, O.

Irene Mine; Drift; Red Ash Seam, 48 in. thick.
PO—Raven, Va.; SP—Same; CTY—Russell; RR—N. & W.
MS—J. A. Biesz, Raven, Va.
S of H—2 mules. Track gage 44 in.
S of M—Hand.
EMP—12. Daily tonnage 50.
SIZES SHIPT—Run of Mine.
Note—Mine Run only.

BANDY & TRINKLE, OPERATORS

General Office, Norton, Va.
PR—H. M. Bandy, Norton, Va.
TR—Mrs. H. M. Bandy, Norton, Va.
GM—J. A. Trinkle, Norton, Va.
GS—J. A. Trinkle, Norton, Va.
PA—H. M. Bandy, Norton, Va.
EM—Scarborough & Dotson, Norton, Va.

No. 1 Mine; Drift; Banner Seam; 50 inches thick.
PO—Norton, Va.; SP—Same; CTY—Wise; RR—N. & N.
MS—C. F. Bruce, Norton, Va.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—Purchase power.
EMP—18. Last years tonnage 23,000.
SIZES SHIPT—Run of Mine.

BANNER RAVEN COAL CORP.

General Office, Drill, Va.
PR—Barnes Gillespie, Tazewell, Va.
VP—W. J. Gillespie, Tazewell, Va.
TR—W. J. Gillespie, Tazewell, Va.
GM—Geo. J. Walker, Drill, Va.
GS—W. E. McCall, Drill, Va.
PA—Geo. J. Walker, Drill, Va.
CE—J. P. Williams, Jr., Tazewell, Va.
EM—P. F. Brown, Drill, Va.
SCO—Gardner-Banner Store Buyer, H. G. Donath, Drill, Va.
SA—Hutton Brown & Co., Roanoke, Va.

Banner Mine 1 and 2; Drift; Upper Banner Seam, 48 in. thick.
PO—Drill, Va.; SP—Fr., Same; Ex., Honaker, Va.; CTY—Russell; RR—N. & W.
MS—J. W. Burns, Drill, Va.
S of H—5 storage battery locos. Track gage 48 in.
S of M—3 shortwall machs.
PP—2 boilers, 1—150 K. W. generator, 250 volts D. C., 1 pump.
EMP—150. Last years tonnage 9,700.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

BEAR CREEK COAL CORP.

General Office, Wise, Va.
PR—R. S. Arrants, Kingsport, Tenn.
VP—C. A. Harris, Kingsport, Tenn.
TR—J. F. Anderson, Wise, Va.
GM—J. F. Anderson, Wise, Va.
GS—J. F. Anderson, Wise, Va.
PA—J. F. Anderson, Wise, Va.

Bear Creek Mine; Drift; Blair Seam, 40 in. thick.
PO—Wise, Va.; SP—Same; CTY—Wise; RR—N. & N.
S of H—Mules Track gage 36 in.
S of M—Shortwall mach.
PP—Purchase power. Transformer 2300-250 volts A. C., M. G. Sets, 250 volts D. C.
EMP—30. Last years tonnage 1,000.
SIZES SHIPT—Run of Mine, Slack.

BEAVER COAL COMPANY

General Office, Tacoma, Va.
PR—H. D. May, Norton, Va.
VP—J. M. Yeory, Tacoma, Va.
TR—J. Milton Carter, Tacoma, Va.
GM—J. M. Yeory, Tacoma, Va.
CE—Scarborough & Dotson, Norton, Va.
PA—J. Milton Carter, Tacoma, Va.
CE—Scarborough & Dotson, Norton, Va.
S O—Address the Company, Buyer, J. Milton Carter, Tacoma, Va.
SA—Virginia Coal & Coke Company, Tacoma, Va.

Additional Information on Page 925

Beaver Mine; Drift; Lower Banner Seam, 54 in. thick.
PO—Tacoma, Va.; SP—Same; CTY—Wise; RR—N. & W., Clinch Valley Div.
MS—Pat. Jones, Tacoma, Va.
S of H—Mules and 1 steam loco. Track gage, 42 in.
S of M—2 shortwall machs.
PP—Power purchased, transformer 2300-110-220 volts, 220 volts D. C.
EMP—80.
SIZES SHIPT—Slack, Nut, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

BELHAMPTON COAL COMPANY

Out of business.

BENEDICT COAL CORPORATION

General Office, St. Charles, Va.
PR—C. H. Zehnder, 120 Broadway, New York, N. Y.
VP—F. C. Wright, Washington, D. C.
TR—C. H. Zehnder, New York, N. Y.
GM—Grover E. Orr, St. Charles, Va.
GS—Grover E. Orr, St. Charles, Va.
PA—Grover E. Orr, St. Charles, Va.
CE—W. W. Taylor, Signal Mountain, Tenn.
EM—Peabody Syndicate, Pineville, Ky.
EE—West Virginia Engineering Co., Norton, Va.
C to—Address the Company, Buyer, Champ Caywood, St. Charles, Va.
SA—Bewley-Darst Coal Co., Knoxville, Tenn.

Additional Information on Page 928

No. 7 Mine; Drift; No. 7 Seam, 60 in. thick.
PO—St. Charles, Va.; SP—Same; CTY—Lee; RR—L. & N., Southern.
MS—W. A. Arnold, St. Charles, Va.
S of H—7 trolley pole type locos. Track gage 44 in.
S of M—5 shortwall machs.
PP—200 K. W. rotary converters 250 volts D. C., 3 pumps.
EMP—150. Last years tonnage 85,000.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables.

BIG CHIEF COAL COMPANY

PR—E. H. Witten, Drill, Va.
GM—E. H. Witten, Drill, Va.
TR—J. W. McGuire, Drill, Va.
EM—J. B. Deaton, Drill, Va.
SCO—Address the Company, Buyer, J. W. McGuire, Drill, Va.
Sales Agency—Wm. C. Atwater & Co., 1 Broadway, New York, N. Y.
Big Chief Mine; Drift; Widow Kennedy Seam, 36 in. thick.
PO—Drill, Va.; SP—Same; CTY—Buswell; RR—N. & W.
MS—J. B. Deaton, Drill, Va.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine.
(old Information)

BIG VEIN POCAHONTAS COMPANY

General Office, Columbus, O. and Baltimore, Md.
PR—H. H. Helmer, Columbus, O.
GM—H. H. Helmer, Columbus, O.
TR—J. J. Sheehan, Baltimore, Md.
AUDITOR—S. W. Gilliland, Columbus, O.
MM—Frank Woods, Columbus, O.
EE—William Bailey, Pocahontas, Va.
EM—D. C. Jones, Bramwell, W. Va.
SCO—Big Vein Pocahontas Co. Buyer, A. E. Greene, Pocahontas, Va.

No. 1 Mine; Shaft; Pocahontas No. 3 Seam, 120 to 144 in. thick.
PO—Pocahontas, Va.; SP—Same; CTY—Tazewell; RR—N. & W. Pocahontas Division.
MS—S. B. Maxey, Pocahontas, Va.
S of H—Mules and 1 elec. loco. Track gage 36 inches.
S of M—Hand.
PP—Power from Central Station at No. 2 Mine.
EMP—100. Last years tonnage 35,000.

No. 2 Mine; Slope; Pocahontas No. 3 Seam, 120 to 144 in. thick.
PO—Pocahontas, Va.; SP—Ollivette; CTY—Tazewell; RR—N. & W. Pocahontas Division.
MS—Walter Leatboe, Pocahontas, Va.
S of H—5 elec. locos. Track gage 44 in.
S of M—1 elec. mach.
PP—4 Babcock & Wilcox return tubular boilers, 2 gen. units, 550 volts D. C., 3 pumps.
EMP—275. Last years tonnage 65,000.

BIRD-WRIGHT COAL COMPANY

General Office, Pennington Gap, Va.
PR—E. B. Wright, Pennington Gap, Va.
TR—J. M. Baker, Pennington Gap, Va.
GM—E. B. Wright, Pennington Gap, Va.
SCO—Address the Company, Buyer, J. M. Baker, Pennington Gap, Va.
SA—Allen Brokerage Co., Baker & Morrell, Big Stone Gap, Va.

Bird-Wright Mine; Drift; No. 1 Seam, 48 inches thick.
PO—Pennington, Va.; SP—Pocket, Va.; CTY—Lee; RR—Southern.
MS—E. B. Wright, Pennington Gap, Va.
S of H—Mules Track gage 24 inches.
S of M—Hand.
EMP—10. Last years tonnage 11,000.
SIZES SHIPT—Run of Mine.

BLACK DIAMOND COAL & COKE CO.

Now Black Diamond Coal Co.

BLACK DIAMOND COAL COMPANY

General Office, Middlesboro, Ky.
PR—Joe. T. Alderson, Middlesboro, Ky.
VP—S. E. Lawson, Middlesboro, Ky.
TR—Joe. T. Alderson, Middlesboro, Ky.
GM—B. Bailey, St. Charles, Va.
GS—A. J. Leedy, St. Charles, Va.
PA—B. Bailey, St. Charles, Va.
EM—C. W. Davidson, Middlesboro, Ky.
SCO—Address the Company, Buyer, B. Bailey, St. Charles, Va.
SA—Bewley-Darst Coal Co., Knoxville, Tenn.

Black Diamond Mine; Drift; No. 3 Seam, 48 in. thick.
PO—St. Charles, Va.; SP—Same; CTY—Lee; RR—Sou., L. & N.
SM—W. W. Gilly, St. Charles, Va.
S of H—Mules. Track gage 36 in.
S of M—Hand.
EMP—65. Last years tonnage 30,000.
SIZES SHIPT—Run of Mine.
Note—Formerly the Black Diamond Coal & Coke Co.

BLACK MOUNTAIN MINING COMPANY

General Office, Big Stone Gap, Va.
PR—J. W. Kelly, Big Stone Gap, Va.
VP—R. T. Irvine, Big Stone Gap, Va.
TR—N. H. Russell, Big Stone Gap, Va.
GM—J. W. Kelly, Big Stone Gap, Va.
GS—C. P. Kelly, St. Charles, Va.
PA—C. P. Kelly, St. Charles, Va.
CE—Peabody Coal Company, Pineville, Ky.
SCO—Black Mountain Commissary, Buyer, R. B. Carter, St. Charles, Va.
SA—Bewley-Darst Coal Co., Knoxville, Tenn.

Nos. 1 and 2 Mines; Drift; No. 5 Seam, 38 in. thick.
PO—St. Charles, Va.; SP—Same; CTY—Lee; RR—Sou., L. & N.

S of H—Mules and trolley pole type locos. Track gage 44 in.
S of M—6 shortwall machs.
PP—Power purchased, 5 pumps.
EMP—107. Last years tonnage 38,107.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens.

BLACKWOOD COAL & COKE CO.

General Office, Blackwood, Va.
PR—C. Pardee, 447 Drexel Bldg., Philadelphia, Pa.
VP—Ario Pardee, Philadelphia, Pa.
TR—H. W. Warden, Jr., Philadelphia, Pa.
GS—C. J. Creveling, Blackwood, Va.
PA—C. J. Creveling, Blackwood, Va.
EM—E. L. Goble, Blackwood, Va.
EE—J. E. Griffith, Roaring Fork, Va.
SCO—Roaring Fork Store, Buyer, M. E. Wells, Farlee, Va.
SA—C. F. Rice, Jr., Spartanburg, S. C.

Roaring Fork Mine; Drift; Red Bird Seam, 48 in. thick.
PO—Roaring Fork, Va.; SP—Blackwood, Va.; CTY—Wise; RR—Interstate, L. & N.
MS—G. S. Fuller, Roaring Fork, Va.
SM—V. B. Keys Roaring Fork, Va.
S of H—Trolley pole type locos. Track gage 44 in.
S of M—Electric puncher and 6 shortwall machs.
PP—Power purchased, transformer 2300-550 volts A. C., rotary converters, 500 volts D. C., 2 pumps.
EMP—125. Daily output, 500 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.

Pardee Mine; Drift; Pardee Seam, 148 in. thick.
PO—Pardee, Va.; SP—Blackwood, Va.; CTY—Wise; RR—Interstate and L. & N.
MS—W. A. Owens, Pardee, Va.
S of H—Trolley pole type locos. Track gage 44 in.
S of M—7 shortwall machs.
PP—Power purchased, transformer 2300-500 volts A. C., rotary converter, 500 volts D. C., 2 pumps.
EMP—250. Daily output, 1,200 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

Blackwood Mine; Drift; Black Creek Seam, 52 in. thick.
PO—Blackwood, Va.; SP—Same; CTY—Wise; RR—L. & N. and Interstate.
SM—S. C. Blackwell, Blackwood, Va.
S of H—Mules.
S of M—Hand.
PP—Power purchased, transformer 2300-550 volts A. C., rotary converter, 500 volts D. C.
Coke Owens, 282 Bee Hive.

BLUE RIDGE COAL COMPANY.

General Office, 16 E. Broad St., Columbus, O.
PR—F. G. Hutton, Columbus, O.
VP—Wm. M. Brown, Columbus, O.
TR—Wm. M. Brown, Columbus, O.
GS—Creed Jones, Box 227, Coeburn, Va.
PA—F. G. Hutton, Columbus, O.
SCO—Address the Company, Buyer, Ernest Jones, Coeburn, Va.
SA—Hutton, Brown & Co., Columbus, O.

Blue Ridge Mine; Drift; Banner & Kennedy Seam, 60 in. thick.
PO—Box 227, Coeburn, Va.; SP—Exp. Coeburn, Va.; Frl. Pine, Va.; CTY—Wise; RR—N. & W.
S of H—Mules and rope. Track gage 36 inches.
S of M—Hand.
PP—1—150 H. P. loco. type boiler, 3 pumps.
EMP—35. Last years tonnage 35,000.
SIZES SHIPT—Run of Mine.

BONOTOWN COAL CORP.

General Office, Norton, Va.
PR—Geo. H. Pepper, Norton, Va.
VP—V. S. Paine, Norton, Va.
TR—V. S. Paine, Norton, Va.
GS—J. J. Body, Coeburn, Va.

(Continued on Next Page)

Bundtown Coal Corp.—Cont.

PA—J. J. Body, Coeburn, Va.
CE—Horace Fox, Big Stone Gap, Va.
EM—H. N. Clayett, Norton, Va.
EE—West Virginia Engineering Co., Norton, Va.
SA—Paine-Pepper Co., Norton, Va.

Sheep Rock Mine; Drift; Upper and Lower and Banner Seams, 48 in. thick.
PO—Coeburn, Va.; SP—Same; CTY—Wise; RR—N. & W.
S of H—Mules. Track gage 30 in.
S of M—2 chain breast type and short-wall mch.
PP—100 H. P. fire tube boiler.
EMP—75. Daily tonnage 100 to 200.
SIZES SHIPT—Run of Mine, Block.
PREP. EQUIPT—Shaker Screens.

BRALEY COAL COMPANY

General Office, Wise, Va.
PR—E. L. Stephens, Wise, Va.
TR—E. D. Vissors, Wise, Va.
GM—F. L. Stephens, Wise, Va.
GS—F. L. Stephens, Wise, Va.
PA—F. L. Stephens, Wise, Va.
EM—F. T. Dotson, Norton, Va.

No. 1 Mine; Drift; Upper Banner Seam; 36 inches thick.
PO—Wise, Va.; SP—Same; CTY—Wise; RR—N. & W.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—25. Last years tonnage 30,000.
SIZES SHIPT—Run of Mine.
Old information.

BRIAR RIDGE COAL CORPORATION

General Office, Pineville, Ky.
PR—E. H. Mould, Pineville, Ky.
TR—F. A. Kruse, Cincinnati, O.
PA—E. H. Mould, Pineville, Ky.

Briar Ridge Mine; Drift; No. 5 Seam; 42 in. thick.
PO—St. Charles, Va.; SP—Same; CTY—Lee; RR—L. & N., Southern.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
Daily tonnage 200.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Bar Screens.

BRINTON MINERALS CORPORATION

General Office, Christiansburg, Va.
PR—C. R. Brinton, Christiansburg, Va.
VP—C. T. Hancock, New York, N. Y.
TR—I. S. Kelley, New York, N. Y.
GM—C. R. Brinton, Christiansburg, Va.
GS—C. R. Brinton, Christiansburg, Va.
PA—C. R. Brinton, Christiansburg, Va.
EM—C. R. Brinton, Christiansburg, Va.
SA—Brinton's Store, Ruyter, Lou Barber, Christiansburg, Va.

SA—Grand Central Terminal, New York, N. Y., Brinton Minerals Corp.
Brinton's Mine; Slope and Shaft; Big Vein Seam, 52 inches thick.
PO—Christiansburg, Va.; SP—Merrimac, Va.; CTY—Montgomery; RR—Virginian; N. & W.
MS—Lou Barber, Christiansburg, Va.
S of H—Rope and steam loco.
S of M—Hand and shortwall mach.
PP—2 25 H. P. water tube boilers.
EMP—35. Daily tonnage 250.
SIZES SHIPT—Run of Mine, Nat. Egg.
PREP. EQUIPT—Revolving and Shaker Screens, Picking Tables, Loading Booms.

BUCKHANAN COAL COMPANY

Now Mayers Coal Corp.

BUCKLE-IRVINE COAL COMPANY

TR—Wm. C. Buckle, Swords Creek, Va.
GM—C. C. Irvine, Swords Creek, Va.
Reedy Mine; Drift; Widow Kennedy Seam, 60 in. thick.
PO—Swords Creek, Va.; SP—Same; CTY—Russell; RR—N. & W.
S of H—Mules. Track gage 32 in.
S of M—Hand.
Daily tonnage 30.
SIZES SHIPT—Run of Mine.
Old information.

BURDY COAL CO., INC.

General Office, Big Stone Gap, Va.
PR—A. W. Gilly, Johnsons Mill, Va.
VP—J. T. Maynar, Ironsides, W. Va.
TR—D. P. Morrison, Jr., Vanwood, W. Va.
GM—A. W. Gilly, Johnsons Mill, Va.
GS—A. W. Gilly, Johnsons Mill, Va.
PA—A. W. Gilly, Johnsons Mill, Va.
SA—A. W. Gilly, Johnsons Mill, Va.

Johnsons Mill Mine; Drift and Slope; Seam 36-54 in. thick.
PO—Johnsons Mill, Va.; SP—Keoku, Va.; CTY—Lee; RR—Southern.
S of H—Mules, Steam loco. Track gage 36 in.
S of M—Hand.
EMP—15.
SIZES SHIPT—Run of Mine.

CAMILLA RED ASH COAL COMPANY

General Office, Bramwell, W. Va.
PR—T. B. Bryan, Jr., Bramwell, W. Va.
VP—C. W. Freeman, Bramwell, W. Va.
TR—Dr. E. M. Tanner, Bramwell, W. Va.
GM—Jas. Grainger, English, W. Va.
GS—T. A. Lewis, Honaker, Va.
PA—R. E. Toy, Honaker, Va.
EM—R. O. Morgan, Richlands, Va.
SA—Address the Company, Ruyter, R. E. Toy, Honaker, Va.
SC—Bluefield Coal & Coke Co., Bluefield, W. Va.

Camilla Nos. 1, 2 and 3 Mines; Drift; Widow Kennedy Seam, 42 in. thick.
PO—Honaker, Va.; SP—Drill, W. Va.; CTY—Russell; RR—N. & W.
S of H—Mules and 1 storage battery loco. Track gage 44 in.
S of M—Hand.
EMP—75.
SIZES SHIPT—Run of Mine.

CARTER COAL COMPANY.

General Office, Coalwood, W. Va.
PR—Geo. L. Carter, Coalwood, W. Va.
TR—C. A. Hall, Coalwood, W. Va.
GM—J. W. Carter, Coalwood, W. Va.
PA—J. W. Carter, Coalwood, W. Va.
Chief Eng. M. H. Hall, Coalwood, W. Va.
EE—W. F. Searles, Coalwood, W. Va.
SC—Buyer, M. M. King, Coalwood, W. Va.
SA—Address the Company, Coalwood, W. Va.; Dixie Terminal Bldg., Cincinnati, O.

Empire Mine; Drift; Nos. 1 and 2 Seams, 48-72 in. thick.
PO—Alfredton, Va.; SP—Lark, Va.; CTY—Tazewell; RR—N. & W.
MS—C. R. Irving, Alfredton, Va.
SM—G. R. Jennings, Alfredton, Va.
S of H—6 trolley pole type locos.
S of M—5 shortwall mch.
PP—4 water tube boilers, 250 H. P., gen. units, 250 volts D. C., 5 pumps.
EMP—200. Daily output, 250 tons.

Seaboard Mine; Drift; Nos. 1 and 2 Seams, 36-60 in. thick.
PO—Alfredton, Va.; SP—Seaboard, Va.; CTY—Tazewell; RR—N. & W.
MS—C. R. Irving, Alfredton, Va.
SM—S. B. Weddle, Alfredton, Va.
S of H—6 trolley pole type locos.
S of M—5 shortwall mch.
PP—4 water tube boilers, 600 H. P., 250 volts D. C., 5 pumps.
EMP—200. Daily output, 275 tons.

CARTER RED ASH COLLIERIES CO., INC.

Now Matz, Samuel L. Coal Corp.

CASWELL, JOHN COAL CORP. (THE).

General Office, Tacoma, Va.
PR—F. A. Cosgrove, Pineville, Ky.
VP—A. B. Welis, Corbin, Ky.
TR—J. S. Johnson, Tacoma, Va.
GS—J. S. Johnson, Tacoma, Va.
PA—J. S. Johnson, Tacoma, Va.
EM—Scarborough & Dotson, Norton, Va.
SC—Address the Company, Ruyter, J. S. Johnson, Tacoma, Va.

No. 1 Mine; Drift; Edwards Seam, 42 in. thick.
PO—Tacoma, Va.; SP—Same; CTY—Wise; RR—Norfolk & Western.
MS—A. A. Johnson, Tacoma, Va.
S of H—Mules. Track gage, 42 in.
S of M—Hand.
EMP—8. Last fiscal year output, 2,563
SIZES SHIPT—Run of Mine.

CHARLEROI COAL COMPANY.

General Office, Norton, Va.
PR—R. P. Fuller, Norton, Va.
VP—C. I. Fuller, Norton, Va.
TR—C. P. Macdonald, Norton, Va.
GM—Lee Kilgore, Norton, Va.
GS—Lee Kilgore, Norton, Va.
PA—Lee Kilgore, Norton, Va.
CE—Scarborough & Dotson, Norton, Va.
SC—Address the Company, Ruyter Lee Kilgore, Norton, Va.
SA—Hall & Macdonald, Norton, Va.

Yellow Creek Mine; Drift; Edwards Seam, 42 in. thick.
PO—Wise, Va.; SP—Same; CTY—Wise; RR—Norton & Northern.
MS—P. H. Jones, Wise, Va.
S of H—Mules. Track gage 42 in.
S of M—Electric punchers and shortwall mach.
PP—Power purchased, transformer 2200-220 volts A. C.
EMP—60. Last years tonnage 40,000.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by the Yellow Creek Coal & Coke Co.

CHESAPEAKE & POTOMAC FUEL CO., INC.

General Office, 316 Woodward Bldg., Washington, D. C.
PR—L. A. Sneed, Washington, D. C.
VP—Pere A. Wilmer, Washington, D. C.
TR—Egbert S. Harvey, Washington, D. C.
GM—W. R. Swingle, Washington, D. C.
PA—Pere A. Wilmer, Washington, D. C.

CLEAR CREEK COAL CO.

General Office, Norton, Va.
PR—H. M. Bundy, Norton, Va.
TR—M. E. Leppo, Wise, Va.
GM—J. A. Trinkle, Norton, Va.
GS—J. A. Trinkle, Norton, Va.
PA—H. M. Bundy, Norton, Va.
CE—Scarborough & Dotson, Norton, Va.
SA—Paine & Kepper Co., Norton, Va.

Clear Creek Mine; Drift; Lower Banner Seam, 50 in. thick.
PO—Norton, Va.; SP—Same; CTY—Wise; RR—L. & N., N. & W., Int.
S of H—Mules and hoist. Track gage 30 in.
S of M—Hand.
PP—Power purchased transformer, 220 volts A. C., 2 pumps.
EMP—20. Last years tonnage 20,000.
SIZES SHIPT—Run of Mine.

CLINCH RIVER COAL COMPANY

Now O'Donnell, C. V.

CLINCHFIELD COAL CORP.

General Office, Dante, Va.
PR—C. E. Bockus, Dante, Va.
VP—Lee Long, Dante, Va.
TR—E. D. Fisher, Dante, Va.
GM—Lee Long, Dante, Va.
PA—J. L. Tibel, Dante, Va.
CHIEF ENGR. G. T. Stevens, Dante, Va.
EE—C. A. Booker, Dante, Va.
SC—Address the Company, Buyer, M. C. Matthews, Dante, Va.
SA—Clinchfield Fuel Co., Spartanburg, S. C.

Dante Nos. 2 and 5 Mines; Drifts; Upper Banner Seams, 54-66 in. thick.
PO—Dante, Va.; SP—Same; CTY—Russell; RR—C. C. & O.
MS—R. G. John, Dante, Va.
S of H—38 trolley pole type locos. Track gage 48 in.
S of M—17 shortwall mch.
PP—Power purchased, transformer 87,000-66,000 volts A. C., M. G. sets, 250 volts D. C., 8 pumps.
EMP—550. Last years tonnage 630,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

Dante No. 3 Mine; Drift; Upper Banner Seam, 48-60 in. thick.
PO—Dante, Va.; SP—Same; CTY—Russell; RR—C. C. & O.
MS—J. M. Bailey, Dante, Va.
S of H—11 trolley pole type locos. Track gage 48 in.
S of M—4 shortwall mch.
PP—Power purchased, M. G. sets, 250 volts D. C., 5 pumps.
EMP—240. Last years tonnage 188,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

Dante No. 52 Mine; Drift; Lower Banner Seam, 36-48 in. thick.
PO—Dante, Va.; SP—Same; CTY—Russell; RR—C. C. & O.
MS—Geo. W. Pike, Dante, Va.
S of H—2 trolley pole type locos. Track gage 36 in.
S of M—2 shortwall mch.
PP—Power purchased, M. G. sets, 250 volts D. C., 2 pumps.
EMP—60. Last years tonnage 117,000.
SIZES SHIPT—Run of Mine.

Clinchfield No. 201 Mine; Slope; Imboden Seam, 42-54 in. thick.
PO—Clinchfield, Va.; SP—Same; CTY—Russell; RR—C. C. & O.
MS—Geo. T. Ayers, Clinchfield, Va.
SM—T. B. Thompson, Clinchfield, Va.
S of H—6 trolley pole type locos. Track gage 48 in.
S of M—3 shortwall mch.
PP—Power purchased, M. G. sets, 250 volts D. C., 6 pumps.
EMP—60. Last years tonnage 94,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Gravity and Shaker Screens, Picking Tables.

Laurel No. 6 Mine; Drift; Upper Banner Seam, 54-66 in. thick.
PO—Wilder, Va.; SP—Clinchfield, Va.; CTY—Russell; RR—C. C. & O.
MS—D. L. Humgway, Wilder, Va.
SM—C. M. Jenks, Wilder, Va.
S of H—14 trolley pole type locos. Track gage 48 in.
S of M—5 shortwall mch.
PP—Power purchased, M. G. sets, 250 volts D. C., 7 pumps.
EMP—325. Last years tonnage 369,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity and Shaker Screens.

Laurel No. 75 Mine; Drift; Lower Banner Seam, 42-54 in. thick.
PO—Wilder, Va.; SP—Clinchfield, Va.; CTY—Russell; RR—C. C. & O.
MS—D. L. Humgway, Wilder, Va.
SM—C. M. Jenks, Wilder, Va.

S of H—11 trolley pole type and 1 storage battery locos. Track gage, 36 inches.
S of M—9 shortwall mch.
PP—Power purchased, M. G. sets, 250 volts D. C., 6 pumps.
EMP—255. Last years tonnage 178,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity and Shaker Screens.

Craze, Nest No. 1 Mine; Drift; Upper Banner Seam, 60-72 in. thick.
PO—Toms Creek, Va.; SP—Same; CTY—Wise; RR—N. & W.
MS—J. C. Jackson, Toms Creek, Va.
SM—G. C. Smith, Toms Creek, Va.
S of H—15 trolley pole type locos. Track gage, 44 in.
S of M—6 shortwall mch.
PP—Power purchased, M. G. sets, 250 volts D. C., 6 pumps.
EMP—160. Last years tonnage 160,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

Moss No. 7 Mine; Drift; Upper Banner Seam, 60-72 in. thick.
PO—Clinch, Va.; SP—Moss, Va.; CTY—Dickinson; RR—C. C. & O.
MS—Frank R. Clark, Clinch, Va.
SM—H. H. Strickley, Clinch, Va.
S of H—10 trolley pole type locos. Track gage, 48 in.
S of M—8 shortwall mch.
PP—Power purchased, M. G. sets, 250 volts D. C.
EMP—500. Last years tonnage 278,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

Moss No. 8 Mine; Drift; Upper Banner Seam, 54-66 in. thick.
PO—Clinch, Va.; SP—Moss, Va.; CTY—Dickinson; RR—C. C. & O.
MS—Frank R. Clark, Clinch, Va.
SM—H. H. Strickley, Clinch, Va.
S of H—2 trolley pole type locos. Track gage, 48 in.
S of M—2 shortwall mch.
PP—Power purchased, M. G. Set 250 volts D. C.
EMP—50. Last years tonnage 75,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Shaker Screens, Picking Tables.

Moss No. 9 Mine; Drift; Upper Banner Seam, 60-72 in. thick.
PO—Clinch, Va.; SP—Moss, Va.; CTY—Dickinson; RR—C. C. & O.
MS—Frank R. Clark, Clinch, Va.
SM—H. H. Strickley, Clinch, Va.
S of H—2 trolley pole type locos. Track gage 48 in.
S of M—2 shortwall mch.
PP—Power purchased, M. G. sets, 250 volts D. C.
EMP—52. Last years tonnage 12,500.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

CLINTWOOD COAL CORPORATION

Not operating.

CONSUMERS COAL MINING CORP

General Office, St. Charles, Va.
GS—T. B. Lane, St. Charles, Va.

Pot Branch Mine; Drift; No. 5 Seam, 40 in. thick.
PO—St. Charles, Va.; SP—Same; CTY—Lee; RR—Sou., L. & N.
S of H—Mules. Track gage, 42 in.
EMP—R. Daily output, 30 tons.
SIZES SHIPT—Run of Mine.
Old information.

CORDER COAL COMPANY

General Office, Norton, Va.
OWNER & CONTROLLER—A. L. P. Corder, Norton, Va.
EM—Scarborough & Dotson, Norton, Va.
EE—W. Va. Engineering Co., Norton, Va.
SC—Address the company, Ruyter, A. L. P. Corder, Norton, Va.

Corder Mine; Slope; Banner Seam, 66-42-36 inches thick.
PO—Glomorgan, Va.; SP—Same; CTY—Wise; RR—L. & N.
MS—U. W. Warren, Glomorgan, Va.
S of H—Mules and elec. loco. Track gage 42 inches.
S of M—Hand.
PP—Power purchased Transformer 2200-220 volts A. C.
EMP—40. Last years tonnage 20,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.

CREST COAL COMPANY

General Office, Big Stone Gap, Va.
PR—R. B. Tinsley, Big Stone Gap, Va.
VP—J. A. Goodloe, Big Stone Gap, Va.
TR—J. W. Tinsley, Jr., Richmond, Va.
GM—R. B. Tinsley, Big Stone Gap, Va.
GS—J. A. Goodloe, Big Stone Gap, Va.
PA—W. T. Goodloe, Big Stone Gap, Va.
(Continued on Next Page)

Crest Coal Company—Cont.

CE—H. F. Fox, Big Stone Gap, Va.
EM—R. B. Lindsay, Big Stone Gap, Va.
FE—J. A. Goodloe, Big Stone Gap, Va.
SCD—Address the Company, Buyer, J. A. Goodloe Bros. Co., Inc., Big Stone Gap, Va.

No. 1, 2 and 3 Mines; Drift and Slope; Seam 66 inches thick.

PO—Big Stone Gap, Va.; SP—Crest, Va.; CTY—Lee, RR—Southern.

MS—Jas. Collingsworth, Keeoke, Va. S of H—Mules, 2 gas locos. Track gage 36 inches.

S of M—Hand.

PP—1 35 H. P. and 1 50 H. P. ore tube boilers, 1 pump.

EMP—50. Daily output, 100 tons.

SIZES SHIPT—Run of Mine.

CULBERTSON COAL COMPANY.

General Office, Coeburn, Va.
PR—R. F. Culbertson, Toms Creek, Va.
VP—J. B. Galtner, Toms Creek, Va.
TR—R. F. Culbertson, Toms Creek, Va.
GM—R. F. Culbertson, Toms Creek, Va.
GS—R. F. Culbertson, Toms Creek, Va.
PA—R. F. Culbertson, Toms Creek, Va.
EM—Frank E. Gaul, Toms Creek, Va.
FE—W. L. Vilgor, Toms Creek, Va.
SA—Shumate & Dodd, Coeburn, Va.

Culbertson No. 1 Mine; Drift; Upper Banner Seam, 44 in. thick.

PO—Toms Creek, Va.; SP—Same; CTY—Wise; RR—N. & W.

MS—E. B. Linkous, Toms Creek, Va.

S of H—Mules, 1 trolley pole type loco

Track gage 44 in.

S of M—1 shortwall mach.

PP—250 volts D. C.

SIZES SHIPT—Run of Mine.

CUMBERLAND COAL CO., INC.

General Office, Big Stone Gap, Va.
PR—H. J. Ayers, Big Stone Gap, Va.
TR—H. J. Ayers, Big Stone Gap, Va.
GM—J. B. Ayers, Keeoke, Va.
GS—J. B. Ayers, Keeoke, Va.
PA—J. B. Ayers, Keeoke, Va.
EM—Scarborough & Dotson, Wise, Va.
SA—Baskley-Dunst Coal Co., Knoxville, Tenn.

Cumberland Mine; Drift and Slope; Kelly and Imboden Seams, 60 in. thick.

PO—Keeoke, R. F. D. 65, Va.; SP—Same; CTY—Lee; RR—Southern.

S of H—Mules, Track gage, 42 in.

S of M—Hand.

PP—1 pump.

EMP—40. Last years tonnage 18,000.

SIZES SHIPT—Run of Mine.

Old information.

DAAB COAL CORP.

General Office, Norton, Va.
PR—Henry Daab, Norton, Va.
VP—Mary Daab, Norton, Va.
TR—Henry Daab, Norton, Va.
GM—Henry Daab, Norton, Va.
GS—Henry Daab, Norton, Va.
PA—Henry Daab, Norton, Va.
CE—Scarborough & Dotson, Norton, Va.
SCD—Address the Company, Buyer Henry Daab, Norton, Va.

Essenville Mine; Drift; Essenville Seam, 48 in. thick.

PO—Essenville, Va.; SP—Same; CTY—Wise; RR—Interstate.

S of H—Mules and rope and elec. loco.

S of M—Hand.

PP—Power purchased, transformer, 220 volts A. C.

EMP—20.

SIZES SHIPT—Run of Mine.

DARBY COAL MINING CO

New operated by the United Coal Mining Corp.

DAW COAL COMPANY

Norton, Va.

Daw Mine

PO—Essenville, Va.; CTY—Wise; RR—Interstate.

No report.

DIXIE SPLINT COAL COMPANY.

General Office, Clinchfield, Va.
PR—Scott Litton, Clinchfield, Va.
VP—Lee Long, Dante, Va.
TR—Scott Litton, Clinchfield, Va.
SECY—P. H. Smith, Clinchfield, Va.
GM—Scott Litton, Clinchfield, Va.
GS—Scott Litton, Clinchfield, Va.
PA—P. H. Smith, Clinchfield, Va.
SCD—Address the Company, Buyer, P. H. Smith, Clinchfield, Va.

No. 1 Mine; Drift; No. 55 Seam, 60 in. thick.

PO—Clinchfield, Va. SP—Same. CTY—Russell. RR—C. C. & O., Dumps Creek Br.

S of H—Mules, 2 5-ton storage battery and 1 trolley pole type loco.

Track gage 44 in.

S of M—1 shortwall mach.

PP—Power purchased, 250 volts D. C., 1 pump.

EMP—65. Last years tonnage 56,000.

SIZES SHIPT—Run of Mine.

No. 2 Mine; Drift; No. 55 Seam, 60 in. thick.

PO—Clinchfield, Va.; SP—Same; CTY—Russell; RR—C. C. & O.

S of H—1 5-ton storage battery and 1 10-ton trolley locus, 4 mules, 6 ponies. Track gage 48 in.

S of M—Hand.

PP—Power purchased, 250 volts D. C., 2 pumps.

EMP—55. Last years tonnage 56,000.

SIZES SHIPT—Run of Mine.

EDGE COAL COMPANY.

Out of business.

ELLAURA COAL & COKE CO

General Office, Kingsport, Tenn.

Ellaura Mine; PO—Pennington Gap, Va.

No report.

ELSWICK & WEATHERLY.

Out of business.

ESSER, J. A COKE CO.

General Office, Essville, Va.

PR—John A. Esser, Norton, Va.

TR—John A. Esser, Norton, Va.

GM—Geo. H. Esser, Norton, Va.

GS—P. W. Crockford, Norton, Va.

PA—Geo. H. Esser, Norton, Va.

CE—F. T. Dotson, Norton, Va.

SCD—Address the Company, Buyer, DeWitt Cox, Norton, Va.

SA—Rgers, Brown & Co, Cincinnati, O.

Esserville Mine; Drift; Lower Banner Seam, 38 to 42 in. thick.

PO—Esserville, Va.; SP—Fitt, Same, Exp., Norton, Va.; CTY—Wise; RR—Interstate.

MS—J. H. Arnold, Essville, Va.

S of H—Mules, 1 steam and 3 storage battery locos. Track gage 44 in.

S of M—3 shortwall machs

PP—Power purchased, Transformer 23000

—220 volts A. C., 7 pumps

EMP—125. Daily tonnage 250. Coke

Ovens, 122 Bee Hive.

SIZES SHIPT—Run of Mine.

EXCELSIOR RED ASH COAL CO., INC

General Office, Raven, Va.

PR—Geo. R. McCall, Raven, Va.

VP—R. J. Blankenship, Raven, Va.

TR—A. W. Horton, Raven, Va.

GM—Ad. Harman, Raven, Va.

GS—The Red Ash Fuel Sales Corp., Raven, Va.

Red Ash Mine; Shaft; Red Ash Seam, 38 in. thick.

PO—Raven, Va.; SP—Same; CTY—Russell; RR—N. & W.

S of H—Mules, Track gage 36 inches.

S of M—Hand.

EMP—40. Daily tonnage 60.

SIZES SHIPT—Run of Mine.

FALL BRANCH COAL CO.

GM—L. R. Thornburg, Splash Dam, Va.

GS—L. R. Thornburg, Splash Dam, Va.

Fall Branch Mine; Drift; Splash Dam Seam, 40 in. thick.

PO—Splash Dam, Va.; SP—Bart Lick, Va.; CTY—Dickenson; RR—C. C. & O.

S of H—Mules, Track gage 42 in.

S of M—Hand.

Last years tonnage 10,000.

SIZES SHIPT—Run of Mine.

NOTE—Successors to Sutherland Coal Co., Inc.

FELTON COAL CO., Inc.

General Office, Wise, Va.

OPERATOR—R. P. Bruce, Wise, Va.

Greno Mines; Slope; Imboden Seam, 48 to 144 in. thick.

PO—Tacoma, Va.; SP—Same; CTY—Wise; RR—N. & W., Clinch Valley Div.

S of H—Mules.

S of M—Hand.

SIZES SHIPT—Run of Mine.

Old information.

FLATROCK COAL COMPANY

New Camilla Red Ash Coal Co.

FLEMING, ROBERT & CO.

General Office, Norton, Va.

PR—Robert Fleming, Norton, Va.

TR—W. R. Fleming, Norton, Va.

GM—Charles B. Fleming, Norton, Va.

GS—Charles B. Fleming, Norton, Va.

PA—Charles B. Fleming, Norton, Va.

EM—Scarborough & Dotson, Norton, Va.

EE—W. Va. Elec. Engineering Co., Norton, Va.

SCD—Address the Company; Buyer, J. Johnston, Banner, Va.

Upper Banner No. 1 Mine; Drift; Upper Banner Seam, 54 in. thick.

PO—Banner, Va.; SP—Same; CTY—Wise; RR—Norfolk & Western.

MS—S. H. Evans, Banner, Va.

S of H—Mules and 2 trolley pole type locos. Track gage, 36 in.

S of M—3 shortwall machs.

EMP—80. Last years tonnage 76,000.

SIZES SHIPT—Run of Mine.

Lower Banner Mine; Drift; Lower Banner Seam, 42 in. thick.

PO—Banner, Va.; SP—Same; CTY—Wise; RR—Norfolk & Western.

PP—Power purchased, 2200 volts A. C.

M. G. Sets, 100 K. W., 250 volts D. C.

S of H—Mules and 1 trolley pole type loco.

S of M—1 shortwall mach.

PP—Power purchased, transformer 250 volts A. C., motor gen sets, 250 volts D. C.

EMP—25.

SIZES SHIPT—Run of Mine.

FOUR SEAM COAL COMPANY

General Office, Swords Creek, Va.

PR—C. T. Lunsmyer, Bluefield, W. Va.

VP—F. E. Bartian, Narrows, Va.

TR—C. K. Adair, Narrows, Va.

GM—C. T. Lunsmyer, Bluefield, W. Va.

GS—H. E. McQueen, Swords Creek, Va.

Four Seam Mine; Drift; Upper Banner Seam, 72 inches thick.

PO—Swords Creek, Va.; SP—Same; CTY—Russell; RR—N. & W.

S of H—Mules.

S of M—Hand.

EMP—12. Last fiscal year output, 2,400 tons.

Old information.

GAUDEN COAL COMPANY, INC.

General Office, Drill, Va.

PR—A. S. Higginbotham, Tazewell, Va.

VP—W. H. Worth, Tazewell, Va.

GM—M. Ziegler, Drill, Va.

PA—M. Ziegler, Drill, Va.

EM—P. F. Brown, Drill, Va.

SCD—Garden-Banner Store, Buyer, G. W. Douthat, Drill, Va.

SA—Virginia Smokeless Coal Co., Tazewell, Va., and Bluefield, W. Va.

Banner No. 1 Mine; Drift; Upper Banner Seam, 38 inches thick.

PO—Drill, Va.; SP—Same; CTY—Russell; RR—N. & W.

MS—A. Blevins, Drill, Va.

S of H—3 trolley pole type locos. Track gage 48 in.

S of M—3 cutting machs.

EMP—40. Daily tonnage 200.

SIZES SHIPT—Run of Mine.

Banner No. 2 Mine; Drift; Upper Banner Seam, 36 inches thick.

PO—Drill, Va.; SP—Same; CTY—Russell; RR—N. & W.

MS—A. Blevins, Drill, Va.

S of H—2 trolley pole type locos. Track gage 48 in.

S of M—3 cutting machs.

EMP—30. Daily tonnage 150.

SIZES SHIPT—Run of Mine.

Widow Kennedy No. 2 Mine; Drift; Widow Kennedy Seam, 60 in. thick.

PO—Drill, Va.; SP—Same; CTY—Russell; RR—N. & W.

MS—A. Blevins, Drill, Va.

S of H—Mules. Track gage 48 inches.

S of M—Hand.

EMP—20. Daily tonnage 100.

SIZES SHIPT—Run of Mine.

Widow Kennedy No. 6 Mine; Drift; Widow Kennedy Seam, 36 in. thick.

PO—Drill, Va.; SP—Same; CTY—Russell; RR—N. & W.

MS—A. Blevins, Drill, Va.

S of H—Mules. Track gage 48 inches.

S of M—Hand.

EMP—10. Daily tonnage 50.

SIZES SHIPT—Run of Mine.

GLADEVILLE COAL COMPANY.

PR—J. M. Beatty, Wise, Va.

VP—N. F. Bolling, Wise, Va.

TR—R. T. Ashbury, Wise, Va.

GM—W. C. Bolling, Wise, Va.

EM—F. T. Dotson, Norton, Va.

SCD—J. M. Beatty & Co. Buyer, J. M. Beatty, Wise, Va.

Gladeville Nos. 2 and 3 Mines; Drift; Lower Banner Seam, 40 in. thick.

PO—Wise, Va.; SP—Same; CTY—Wise; RR—Northern & Northern.

MS—J. H. Huff, Wise, Va.

S of H—Mules and elec. hoist. Track gage 44 in.

S of M—3 shortwall machs

PP—Power purchased, 220 volts A. C., 2 pumps.

EMP—75. Last years tonnage 70,000.

SIZES SHIPT—Run of Mine.

NOTE—Successors to Lipps Coal Co.

GUESTS RIVER COAL CO., INC.

PR—Dr. O. J. Woods, Herndon, W. Va.

TR—Thos. A. Weeks, Tacoma, Va.

GM—Thos. A. Weeks, Tacoma, Va.

PA—Thos. A. Weeks, Tacoma, Va.

EM—Scarborough & Dotson, Norton, Va.

Sales Agency, Virginia Coal Sales Co., Norton, Va.

Guests River Mine; Imboden Seam, 54 to 72 in. thick.

PO—Tacoma, Va. SP—Same. CTY—Wise.

RR—N. & W.

MS—B. H. Taylor, Tacoma, Va.

S of H—Mules.

S of M—Hand.

SIZES SHIPT—Run of Mine.

Old information.

HAMLIN COAL COMPANY, INC.

General Office, Chatham, Va.

PR—E. S. Reid, Chatham, Va.

VP—W. O. Smith, Atavista, Va.

TR—Edwin S. Reid, Chatham, Va.

GM—Edwin S. Reid, Chatham, Va.

GS—J. T. Evans, Castlewood, Va.

Hill Creek Coal Co.—Cont

Hill Creek Mine; Drift; No. 2 Seam, 60 in. thick.
 r0—Richlands, Va.; SP—Same; CTY—Tazewell; RR—N. & W.
 S of H—18 miles and 2 storage battery locos. Track gage, 42 in.
 S of M—Hand.
 PP—1 60 H P. water tube boiler, gen. units, 1 20 K. W., 1—50 K. W. volts D. C., 3 pumps.
 EMP—75. Daily tonnage 300.
 SIZES SHIPT—Run of Mine, Nut, Lump.
 PREP. EQUIPT—Bar Screens.

HILLMAN J. M.

General Office, St. Paul, Va.
 GM—J. M. Hillman, St. Paul, Va.
 "Hillman" Mine; Drift; Onboden Seam, 72 in. thick.
 PO—St. Paul, Va.; SP—Same; CTY—Wise; RR—N. & W.
 S of H—Mules. Track gage 36 in.
 S of M—Hand.
 EMP—15. Daily tonnage 50.
 SIZES SHIPT—Run of Mine, Slack.

HUETTLE COAL CORPORATION

General Office, Norton, Va.
 PR—G. Huettel, Norton, Va.
 VP—Mack Thompson, Norton, Va.
 TR—L. O. Huettel, Norton, Va.
 GM—G. Huettel, Norton, Va.
 GS—G. Huettel, Norton, Va.
 PA—G. Huettel, Norton, Va.
 EM—Leo Huettel, Norton, Va.
 Huettel Mine; Drift; Edwards Seam, 42 inches thick.
 PO—Norton, Va.; SP—Norton and Wise, Va.; CTY—Wise; RR—N. & W.
 S of H—Mules. Track gage 42 inches.
 S of M—Hand.
 SIZES SHIPT—Run of Mine.

HURT COAL COMPANY, INC.

Now Little Tom Coal Co.

INDIAN FUEL COMPANY

Now Heaton Coal Company, Inc.

INTERMONT COAL & IRON CORP.

General Office, Big Stone Gap, Va.
 PR—R. T. Irvine, Big Stone Gap, Va.
 VP—L. C. Williams, Richmond, Va.
 TR—J. C. Stephenson, Big Stone Gap, Va.
 GM—M. H. Maury, Big Stone Gap, Va.
 GS—J. P. Adams, Dooley, Va.
 PA—M. H. Maury, Big Stone Gap, Va.
 EM—H. E. Fox, Big Stone Gap, Va.
 SCO—Address the Company, Buyer, M. J. Dougherty, Dooley, Va.
 Josephine Mine; Drift; 36 to 72 inches thick.
 PO—Dooley, Va.; SP—Dorchester, Va.; CTY—Wise; RR—L. & N., Interstate.
 S of H—Mules. Track gage 42 inches.
 S of M—Hand.
 PP—1 150 H P. water tube boiler, 3 pumps.
 EMP—22.5. Daily output, 350 tons.
 Coke ovens, 100 Bee Hive.
 SIZES SHIPT—Run of Mine.

INTERSTATE COAL COMPANY

Norton, Va.
 Interstates and Lower Banner Mines.
 PO—Norton, Va.; CTY—Wise; RR—L. & N. No report.

J. S. I. COAL CORPORATION

General Office, Dungannon, Va.
 PR—Lewis C. McNeer, Dante, Va.
 VP—R. G. John, Dante, Va.
 TR—E. E. Thacker, Dante, Va.
 GM—J. E. Snapp, Dungannon, Va.
 J. S. I. Mines; Drift; Edge Seam, 72 in. thick.
 PO—Dungannon, Va.; SP—Same; CTY—Scott; RR—P. C. & O.
 MS—J. E. Snapp, Dungannon, Va.
 S of H—Mules. Track gage 32 and 36 in.
 S of M—Hand.
 EMP—25. Last years tonnage 11,164.
 SIZES SHIPT—Run of Mine, Slack, Lump, Block.
 PREP. EQUIPT—Gravity Screens.

JEWELL RIDGE COAL CORPORATION.

General Office, Tazewell, Va.
 PR—Walter L. Righter, Plainfield, N. J.
 TR—C. W. St. Clair, Tazewell, Va.
 GM—E. V. Walker, Jewell Ridge, Va.
 PA—E. V. Walker, Jewell Ridge, Va.
 EM—B. B. Chambliss, Drift, Va.
 VP—J. B. Hains, Jewell Ridge, Va.
 SCO—J. C. Burke Store, Buyer, J. C. Burke, Jewell Ridge, Va.
 SA—Virginia Smokeless Coal Co., Tazewell, Va.
 Jewell Ridge Mine; Drift; Pocahontas No. 8 Seam, 48 to 72 in. thick.
 PO—Jewell Ridge, Va.; SP—Jewell, Va.; CTY—Tazewell; RR—N. & W.
 MS—C. B. Stewart, Jewell Ridge, Va.
 S of H—0 (elec. locos. Track gage 44 in. S of M—5 electric machs.
 PP—Power purchased, 250 volts D. C., 1 pump.
 EMP—150.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Screens.

JONCSOELL COAL CORP., THE

General Office, Tacoma, Va.
 PR—F. A. Cosgrove, Jackson, Ky.
 VP—A. B. Wells, Corbin, Ky.
 TR—J. S. Johnson, Tacoma, Va.
 GM—J. S. Johnson, Tacoma, Va.
 No. 1 Mine; Drift; Edwards Seam, 36 in. thick.
 PO—Tacoma, Va.; SP—Same; CTY—Wise; RR—N. & W.
 MS—J. S. Johnson, Tacoma, Va.
 S of H—Mules and 1 gasoline loco. Track gage 42 in.
 S of M—Hand.
 EMP—10. Last years tonnage 1,475.
 SIZES SHIPT—Run of Mine.

KENNEDY COAL CORPORATION

General Office, Swords Creek, Va.
 PR—C. W. Boyd, Tazewell, Va.
 VP—Barnes Gillespie, Tazewell, Va.
 TR—W. T. Gillespie, Tazewell, Va.
 GM—R. W. Liddle, Swords Creek, Va.
 GS—J. P. Shockey, Swords Creek, Va.
 PA—J. P. Shockey, Swords Creek, Va.
 EM—P. P. Brown, Drift, Va.
 No. 2 Mine; Drift; Upper Banner Seam; PO—Swords Creek, Va.; SP—Same; CTY—Russell; RR—N. & W.
 S of H—Mules and 3 steam locos. Track gage 40 inches.
 S of M—Hand.
 EMP—42. Daily output, 265 tons.
 PREP. EQUIPT—Gravity Screens.
 No. 5 Mine; Drift; Upper Banner Seam; PO—Swords Creek, Va.; SP—Same; CTY—Russell; RR—N. & W.
 S of H—Mules. Track gage 40 inches.
 S of M—Hand.
 EMP—8. Daily tonnage 200.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

No. 6 Mine; Drift; Widow Kennedy Seam, 18 in. thick.
 PO—Swords Creek, Va.; SP—Same; CTY—Russell; RR—N. & W.
 S of H—Mules. Track gage 40 in.
 EMP—3. Daily tonnage 40.
 SIZES SHIPT—Run of Mine.

No. 9 Mine; Drift; Upper Banner Seam; PO—Swords Creek, Va.; SP—Same; CTY—Russell; RR—N. & W.
 S of H—Mules. Track gage 40 in.
 S of M—Hand.
 EMP—20. Daily tonnage 150.
 SIZES SHIPT—Run of Mine, Lump, Egg, Slack.
 PREP. EQUIPT—Shaker Screens.

KILGORE COAL CORPORATION

Now Standard Coal Co.

LAUREL BRANCH COAL CO.

Dante, Va.
 Laurel Branch Mine.
 PO—Dante, Va.; CTY—Russell; RR—C. C. & O.
 No report.

LEECOVA COAL COMPANY.

General Office, Pennington Gap, Va.
 PR—D. C. Long, Pennington Gap, Va.
 TR—D. C. Long, Pennington Gap, Va.
 GM—D. C. Long, Pennington Gap, Va.
 Sales Agency, Bawley-Dart Coal Co., Knoxville, Tenn.
 Leecova Mine; Drift; No. 2-A Black Mountain Seam, 36 in. thick.
 PO—St. Charles, Va.; SP—Same; CTY—Lee; RR—L. & N. and Southern Black Mountain Br.
 MS—D. C. Long, Pennington Gap, Va.
 S of H—Mules.
 S of M—Hand.
 Daily output, 100 tons.
 SIZES SHIPT—Run of Mine.
 Old information.

LEWIS CREEK BANNER COAL CO.

General Office, Tazewell, Va.
 PR—A. S. Higginbotham in Tazewell, Va.
 VP—W. H. Wirth, Tazewell, Va.
 TR—R. O. Van Dyke, Drift, Va.
 GM—M. Ziegler, Richlands, Va.
 CE—P. P. Brown, Drift, Va.
 SCO—Address the company, Buyer, G. D. Van Dyke, Drift, Va.
 SA—Virginia Smokeless Coal Co., Tazewell, Va., and Bluefield, W. Va.
 Widow Kennedy Mine; Drift; Seam, 40 inches thick.
 PO—Drift, Va.; SP—Same; (Prepay) CTY—Russell; RR—N. & W.
 MS—R. M. Cartright, Drift, Va.
 S of H—Mules, and storage battery locos. Track gage 48 inches.
 S of M—Hand.
 EMP—30. Last years tonnage 23,566.
 SIZES SHIPT—Run of Mine.

LIBERTY COAL COMPANY

General Office, Norton, Va.
 PR—C. R. Popper, Norton, Va.
 VP—E. M. Jones, Norton, Va.
 TR—G. C. Scarborough, Norton, Va.

GM—F. T. Dalton, Norton, Va.
 GS—F. T. Dalton, Norton, Va.
 PA—F. T. Dalton, Norton, Va.
 EM—Scarborough & Dalton, Norton, Va.

Liberty Mine; Drift; Big D. or Chester Seam, 72 inches thick.
 PO—Norton, Va.; SP—Same; CTY—Wise; RR—Norfolk and Interstate.
 S of H—Mules. Track gage 44 inches.
 S of M—Hand.
 PP—Purchase power.
 Last years tonnage 9,000.
 SIZES SHIPT—Run of Mine.

LITTLE TOM COAL COMPANY.

General Office, Norton, Va.
 GM—E. M. Jones, Norton, Va.

Little Tom Mine; Drift; Lower Banner Seam, 12 in. thick.
 PO—Norton, Va.; SP—Same; CTY—Wise; RR—L. R. R.
 SM—J. N. Harman, Norton, Va.
 S of H—Mules. Track gage 12 in.
 S of M—Hand.
 Last years tonnage 10,000.
 SIZES SHIPT—Run of Mine.
 NOTE—Formerly operated by the Hunt Coal Company.

LONE MOUNTAIN COAL COMPANY.

Out of Business.

LONGLEY COAL COMPANY

General Office, Drift, Va.
 GM—Frank L. Longley, Bluefield, W. Va.
 GS—R. T. Pearson, Drift, Va.
 EM—R. O. Morgan, Drift, Va.
 SCO—Address the Company, Buyer, L. H. Catlett, Drift, Va.
 SA—Bluefield Coal & Coke Co., Bluefield, W. Va.

Longley Mine; Drift; Widow Kennedy Seam, 42 in. thick.
 PO—Drift, Va.; SP—Same; CTY—Russell; RR—N. & W.
 S of H—Mules and gasoline loco. Track gage 48 in.
 S of M—Hand.
 EMP—40.
 SIZES SHIPT—Run of Mine.

McCLANAHAN COAL & COKE COMPANY

PR—K. S. McClanahan, Amigo, W. Va.
 TR—Wm. McClanahan, Amigo, W. Va.
 GM—Wm. McClanahan, " "
 PA—Wm. McClanahan, " "
 EM—Scarborough & Dalton, Norton, Va.

Clear Creek Mine; Drift; Banner Nos. 1 and 2, Imboden and Barker Seams, 60 in. thick.
 PO—Norton, Va.; SP—Clear Creek, Va.; CTY—Wise; RR—V. & K., Interstate, Clear Creek Branch.
 S of H—2 storage battery locos.
 S of M—1 elec. mach.
 PP—Purchase power.
 SIZES SHIPT—Run of Mine, Slack, Egg and Lump.
 Old information.

MATZ, SAMUEL L. COAL CORPORATION

General Office, Raven, Va.
 PR—Samuel L. Matz, Cincinnati, O.
 VP—L. Magrell, Pocahontas, Va.
 TR—Max Matz, Cincinnati, O.
 GM—Samuel L. Matz, Cincinnati, O.
 GS—Chas. Cave, Raven, Va.
 PA—Harry Gross, Raven, Va.
 EM—L. B. Crawford, Bluefield, W. Va.
 EC—Chas. Cave, Raven, Va.
 SCO—Address the Company, Buyer, Harry Gross, Raven, Va.
 SA—Bluefield Coal & Coke Co., Bluefield, W. Va.

Dixie No. 1 Mine; Drift; Raven Red Ash Seam; 30 to 48 inches thick.
 PO—Raven, Va.; SP—Red Ash, Va.; CTY—Tazewell; RR—N. & W.
 S of H—Mules, electric loco. Track gage 42 inches.
 S of M—Shortwall mach.
 PP—Power purchased, M. G. set, 1 75 K. W., 210 volts D. C., 1 water tube boiler, 150 H P.
 EMP—50.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Shaker Screens.

Domestic No. 2 Mine; Drift; Raven Red Ash Seam; 30 to 48 inches thick.
 PO—Raven, Va.; SP—Red Ash, Va.; CTY—Tazewell; RR—N. & W.
 S of H—Mules, electric loco. Track gage 46 inches.
 S of M—Shortwall mach.
 PP—Power purchased, M. G. set, 1 200 K. W., 250 volts D. C., 1 water tube boiler, 150 H P.
 EMP—50.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Shaker Screens.
 Note—Successors to Carter Red Ash Coal Mines Co.

MERRIMAC ANTHRACITE COAL CORP

TR—G. H. Dean, Merrimac, Va.
 GM—W. E. Rothwell, Merrimac, Va.
 SUPP.—W. R. Jones, Merrimac, Va.
 PA—R. T. Black, Merrimac, Va.
 SCO—Address the company, Buyer, R. T. Black.

Merrimac Mine; Slope, Price Mountain Seam, 78 in. thick.
 PO—Merrimac, Va.; SP—Same; CTY—Montgomery; RR—N. & W.
 S of H—Gasoline loco.
 S of M—Steam shovel.
 PP—3 water tube boilers.
 SIZES SHIPT—Stove, Pea, Nut, Egg, Bunkah at old location.

MILL BRANCH COAL CO.

General Office, Dryden, Va.
 PR—W. P. Livingston, Dryden, Va.
 VP—C. E. Herndon, Dryden, Va.
 TR—C. E. Herndon, Dryden, Va.
 GM—W. P. Livingston, Dryden, Va.
 PA—C. E. Herndon, Dryden, Va.

Mill Branch Mine; Drift; Seam, 60 in. thick.
 PO—Johnson, Mill, Va.; SP—Same; CTY—Lee; RR—Southern.
 S of H—Mules. Track gage 40 in.
 S of M—Hand.
 PP—1 20 H P. fire tube boiler, 1 pump.
 EMP—5. Daily output, 275 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.
 Old information.

MOHAWK COAL MINING CO., INC.

General Office, Kokee, Va.
 PR—H. P. May, Norton, Va.
 TR—J. M. Yary, Kokee, Va.
 GM—J. M. Yary, Kokee, Va.
 GS—J. C. Danick, Kokee, Va.
 PA—J. M. Yary, Kokee, Va.
 CE—Scarborough & Dalton, Norton, Va.
 SCO—Mohawk Company, Buyer, J. M. Yary, Kokee, Va.
 SA—J. M. Yary, Kokee, Va.

Mohawk Mine; Drift; Mohawk Seam; 60 inches thick.
 PO—Kokee, Va.; SP—Same; CTY—Lee; RR—Southern.
 SM—B. W. W. Kokee, Va.
 S of H—Mules and rop. Track gage 26 inches.
 S of M—Hand.
 PP—Power purchased, 1 fire tube boiler, 150 H P., 2 pumps.
 EMP—60. Daily tonnage 350.
 SIZES SHIPT—Run of Mine.
 Old information.

MOYERS COAL CORPORATION

General Office, Drift, Va.
 PR—L. S. Hill, Bluefield, W. Va.
 TR—H. B. Thompson, Bluefield, W. Va.
 GM—J. H. Moyer, Drift, Va.
 GS—J. H. Moyer, Drift, Va.
 PA—Amos Breeding, Drift, Va.
 SCO—Address the Company, Buyer, Amos Breeding, Drift, Va.
 SA—Bluefield Coal & Coke Co., Bluefield, W. Va.

Moyers Mine; Drift; Widow Kennedy Seam, 12 in. thick.
 PO—Drift, Va.; SP—Hacker, Va.; CTY—Russell; RR—N. & W.
 S of H—Mules. Track gage 48 in.
 S of M—Hand.
 PP—3 pumps.
 EMP—25. Daily tonnage 120.
 SIZES SHIPT—Run of Mine.

NORTH FORK COAL COMPANY.

General Office, St. Charles, Va.
 PR—M. D. Kelly, St. Charles, Va.
 VP—L. E. Reeb, Pennington, Va.
 TR—J. Marion Smith, Jansville, Va.
 GM—M. D. Kelly, St. Charles, Va.
 GS—M. D. Kelly, St. Charles, Va.
 PA—M. D. Kelly, St. Charles, Va.
 CE—Robert Hixley, Darbyville, Va.
 SCO—Address the Company, Buyer, M. D. Kelly, St. Charles, Va.
 SA—M. D. Kelly, St. Charles, Va.

North Fork Mine; Drift; Lower No. 1 Seam, 70 in. thick.
 PO—St. Charles, Va.; SP—Same; CTY—Lee; RR—South.
 S of H—Mules. Track gage 42 in.
 S of M—Hand.
 EMP—20. Daily tonnage 100.
 SIZES SHIPT—Run of Mine.
 Old information.

NORTON COAL COMPANY

PR—W. B. J. White, Norton, Va.
 TR—Robert P. Carr, Norton, Va.
 GM—L. K. Taggart, Norton, Va.
 GS—R. W. Edmond, Norton, Va.
 MM—L. P. Bess, Norton, Va.
 PA—H. G. Dalton, Norton, Va.
 EM—W. N. Light, Norton, Va.
 SCO—Address the Company, Buyer, L. H. Shaggs, Norton, Va.

Norton Mine; Drift; Slope; Banner Seam, 48 to 66 in. thick.
 PO—Norton, Va.; SP—Same; CTY—Wise; RR—L. & N., N. & W., Southern and Interstate.
 MS—G. H. Walters, Norton, Va.
 S of H—Mules, elec. storage battery locos.

(Continued on Next Page)

Horton Coal Company—Cont.

S of M—2 shortwall, 1 longwall and 1 overhead cutter machs.
PP—250 volts D. C., 11 pumps. Purchase power.
EMP—300. Last fiscal year output, 250,000 tons.
Coke Ovens, 150 Bee Hive.
SIZES SHIPT—Run of Mine, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

O'DONNELL, C. V.

General Office, St. Paul, Va.
VP—C. V. O'Donnell, Sr., Midland, Va.
GM—C. V. O'Donnell, Jr., St. Paul, Va.
PA—J. B. O'Donnell, St. Paul, Va.
EM—C. L. Ganot, St. Paul, Va.
EE—Frank W. O'Donnell, St. Paul, Va.
SCO—Arthur Castell Store, Buyer, Arthur Castell, Lowland, Va.
SA—C. V. O'Donnell, Sr., Midland, Va.

C. V. O'Donnell No. 7 Mine; Drift; Jawbone Seam 72 in. thick.
PO—Lowland, Va.; SP—St. Paul, Va.; CTY—Wise; RR—C. C. & O.
MS—C. V. O'Donnell, St. Paul, Va.
SM—J. B. O'Donnell, St. Paul, Va.
S of H—Mules. Track gage 36 in.
S of M—Hand.
EMP—42. Last years tonnage 7,000.
SIZES SHIPT—Run of Mine.
Note—Successors to Clinch River Coal Company.

OLD VIRGINIA COAL COMPANY.

PR—R. H. Bartlett, Cincinnati, O.
TR—H. R. Hooten, Cincinnati, O.
GM—C. H. Thompson, St. Charles, Va.
GS—R. T. Boone, " "
PA—C. M. Bowles, " "
EM—Robert Houseley, " "
EE—A. H. Hughes, St. Charles, Va.
SCO—Address the company. Buyer, C. M. Bowles, St. Charles, Va.
SA—Darby Coal Sales Co., 1306 U. T. Bldg., Cincinnati, O.

Monarch Mine; Drift; No. 5 Seam, 44 in. thick.
PO—St. Charles, Va.; SP—Same; CTY—Lee; RR—L. & N., Southern.
S of H—Trolley pole type locos. Track gage 44 in.
S of M—4 shortwall machs.
PP—Power purchased, Transformer 4,000 to 440 volts A. C., rotary converters, 250 volts D. C., 2 pumps.
EMP—78. Last years tonnage 78,000.
SIZES SHIPT—Run of Mine, Slack, Lump, Block.
PREP. EQUIPT—Shaker Screens, Washeries.

PENN LEE COAL CO.

General Office, Pennington Gap, Va.
PR—W. H. Polly, Pennington Gap, Va.
TR—J. E. Laninghap, Pennington Gap, Va.
GM—J. E. Laninghap, Pennington Gap, Va.
PA—W. H. Polly, Pennington Gap, Va.
EM—Robert Houseley, St. Charles, Va.
SCO—Address the company; Buyer, W. H. Polly, Pennington Gap, Va.
SA—Bewley-Darst Coal Co., Knoxville, Tenn.

Additional Information on Page 929

Penn-Lee Mine; Drift; Black Mountain No. 1 Seam, 46 in. thick.
PO—Pennington Gap, Va.; SP—Maness, Va.; CTY—Lee; RR—Southern, L. & N.
S of H—Mules 1 trolley pole type loco. Track gage 42 in.
S of M—Hand.
PP—Power purchased, Transformers 23,000-250 volts D. C., rotary converters.
EMP—100. Daily tonnage 400.
SIZES SHIPT—Run of Mine, Slack, Lump, Block.
PREP. EQUIPT—Gravity Screens.

PIONEER RED ASH COAL CORPORATION

PR—W. E. Spratt, Richlands, Va.
TR—M. E. Spratt, Richlands, Va.
GM—H. L. Spratt, Tazewell, Va.
PA—H. L. Spratt, Tazewell, Va.
SCO—Address the company—Buyer, H. L. Spratt, Tazewell, Va.

Pioneer Red Ash Mine; Drift; Banner Seam, 48 in. thick.
PO—Drill, Va. SP—Putnam, Va. CTY—Russell, RR—N. & W.
S of H—Mules. Track gage, 48 in.
S of M—Hand.
EMP—15.
SIZES SHIPT—Run of Mine.
Note—Mine formerly operated by Lewis Creek Coal Company.
Old information.

POCAHONTAS FUEL CO., INC.

General Office, Pocahontas, Va.
Mines in Virginia and West Virginia.
PR—Isaac T. Mann, Bramwell, W. Va.
VP—Jas. Elwood Jones, Pocahontas, Va.
SECY—L. B. Crawford, Pocahontas, Va.
TR—B. E. Ward, Pocahontas, Va.
GM—Jas. Elwood Jones.
SCO—111 First Pocahontas, Va.
PA—Jno. Boray, Pocahontas, Va.

MM—W. A. Bishop, Pocahontas, Va.
EM—H. B. Wright.
SCO—Address the company—Buyer, J. W. Bailey, Pocahontas, Va.

Pocahontas Colliery; Drift; Pocahontas No. 3 Seam, 96 to 144 in. thick.
PO—Pocahontas, Va. SP—Same. CTY—Tazewell. RR—N. & W.
MS—R. Wallace, Pocahontas, Va.
SM—H. L. Craft, Pocahontas, Va.
S of H—Mules, trolley pole type, storage, combination and steam locos. Track gage, 36 in.
S of M—5 chain breast type machs.
PP—Purchase power, transformer 2200 to 250 volts, 10 pumps.
EMP—800. Daily output, 2,500 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Picking Tables, Loading Booms, Bar, Revolving and Shaker Screens.

Boissevain Colliery Mine; Shaft; Pocahontas No. 3 Seam, 120 in. thick.
PO—Boissevain, Va. SP—Same. CTY—Tazewell; RR—N. & W., Western Br.
MS—J. K. Whitehead, Boissevain, Va.
SM—O. D. Woody, Boissevain, Va.
S of H—12 electric locos. Track gage, 36 in.
S of M—4 chain breast type machs.
PP—Purchase power, transformer 2200-550 volts, 2 pumps.
EMP—400. Daily output, 1,500 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Picking Tables, Loading Booms, Shaker Screens.

POWELL RIVER COAL CO.

General Office, St. Charles, Va.
GS—W. O. Bentley, St. Charles, Va.
EM—W. O. Bentley, St. Charles, Va.
SCO—Address the company; Buyer, Mrs. W. O. Bentley, St. Charles, Va.
SA—W. O. Bentley, St. Charles, W. Va.

Powell No. 1 Mine; Drift; Kelly Seam, 38-46 in. thick.
PO—St. Charles, Va.; SP—Same; CTY—Lee; RR—Southern.
S of H—Mules. Track gage, 48 in.
S of M—Hand.
EMP—10. Last fiscal year output, 6,000 tons.
SIZES SHIPT—Slack, Lump.
PREP. EQUIPT—Gravity and Shaker Screens, Loading Booms.
Old information.

PULASKI ANTHRACITE COAL CO.

General Office, Parrott, Va.
PR—W. DeL. Walbridge, New York, N. Y.
VP—J. H. Parrott, Roanoke, Va.
TR—H. B. Walbridge, Parrott, Va.
SCO—Address the company. Buyer, J. E. Province, Parrott, Va.
SA—Smokeless Fuel Co., Charleston, W. Va.

Parrott Mine; Slope; Brushy Mountain Seam, 84 in. thick.
PO—Parrott, Va. SP—Same. CTY—Pulaski; RR—Radford Div., N. & W.
MS—D. M. Stanton Parrott, Va.
S of H—Mules & rope. Track gage 38 in.
S of M—Hand.
PP—8 water tube boilers, total 1,200 H. P., generate power for hoisting engine, 4 pumps.
EMP—110. Daily tonnage 400.
SIZES SHIPT—Pea, Nut, Egg, Stove.
PREP. EQUIPT—Shaker Screens, Picking Tables, Washeries.

RAVEN COAL & MINING CO., INC.

Now operated by the Tomb Coal Co

RAVEN COLLIERIES CO., INC.

Now Radon Red Ash Coal Co.

RAVEN RED ASH COAL CO.

General Office, Beckley, W. Va.
PR—J. B. Clifton, Beckley, W. Va.
VP—M. H. Tomb, Bluefield, W. Va.
TR—C. H. Meador, Beckley, W. Va.
GM—W. I. Beavers, Red Ash, Va.
PA—W. I. Beavers, Red Ash, Va.
EE—T. R. Ragland, Beckley, W. Va.
EM—Geo. Whitt, Red Ash, Va.
SCO—Address the company. Buyer, O. S. Powers, Red Ash, Va.
SA—Raleigh Smokeless Fuel Company, Beckley, W. Va.

Red Ash Mine; Drift; Raven Seam, 37 in. thick.
PO—Red Ash, Va.; SP—Same; CTY—Tazewell; RR—N. & W.
S of H—5 elec. trolley and 1 Tronton storage battery locos. Track gage 48 in.
S of M—Shortwall machs.
PP—2 fire tube boilers, 300 H. P., 2 gen. units, 250 volts D. C., 2 pumps.
EMP—150. Last years tonnage 105,000.
PREP. EQUIPT—Gravity Screens.
Note—Successors to Raven Collieries Co.

RICHLANDS COAL CORP.

General Office, Richlands, Va.
PR—A. S. Adams, Rockmount, Va.
TR—A. S. Adams, Rockmount, Va.
GS—Peter McQuade, Richlands, Va.
PA—Peter McQuade, Richlands, Va.
SCO—Address the company, Buyer, Peter McQuade, Richlands, Va.

Richlands No. 2 Mine; Drift; 36 inches thick.
PO—Richlands, Va.; SP—Same; CTY—Tazewell; RR—N. & W.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—14.
SIZES SHIPT—Run of Mine.
Note—Mines Nos. 1, 3 and 4 under development.
Old information.

ROBERTS COAL COMPANY.

General Office, Wise, Va.
PR—R. R. Roberts, Wise, Va.
TR—W. H. Roberts, " "
GM—R. R. Roberts, " "
PA—R. R. Roberts, " "
MM—George Fallon, Glamorgan, Va.
GS—W. F. Roberts, Glamorgan, Va.
EM—Scarborough & Dotson, Norton, Va.
SCO—Address the company—Buyer, J. R. Richmond, Glamorgan, Va.

Nos. 1 and 2 Mine; Drift and Slope; Glamorgan Seam, 60 in. thick.
PO—Glamorgan, Va.; SP—Same; CTY—Wise; RR—Interstate.
MS—R. E. Bolton, Glamorgan, Va.
EMP—58. Last fiscal year output, 15,000 tons.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine.
Old information.

RUSSELL COAL CORPORATION.

General Office, Drill, Va.
PR—E. M. Evans, Honaker, Va.
VP—H. W. Evans, Honaker, Va.
TR—E. M. Evans, Honaker, Va.
GM—H. W. Evans, Drill, Va.
SCO—Evans Mercantile Co., Buyer, J. B. Evans, Drill, Va.
SA—Walter Bledsoe & Co., Cincinnati, O., and Kentonia Coal Sales Co., Bluefield, W. Va.

Russell Mine; Drift; Widow Kennedy Seam, 48 in. thick.
PO—Drill, Va.; SP—Drill, Va., and Honaker, Va.; CTY—Russell; RR—N. & W.
MS—H. W. Evans, Drill, Va.
S of H—Mules. Track gage 40-44 in.
S of M—Hand.
PP—1 pump.
EMP—45. Last years tonnage 18,000.
SIZES SHIPT—Run of Mine.

RUSSELL FORK COAL MINING CO., INC.

General Office, Charlottesville, Va.
PR—S. A. Birch, Charlottesville, Va.
VP—S. A. Birch, Charlottesville, Va.
TR—C. B. Harris, Scottsville, Va.
SECY—W. F. H. Enos, Charlottesville, Va.
EM—C. D. Jones, Bramwell, W. Va.
SCO—Address the company, Charlottesville, Va.

Haysi Mine; Drift; Splash Dam Seam, 44 inches thick.
PO—Haysi, Va.; SP—Same; CTY—Dickenson; RR—C. C. & O.
MS—Geo. H. Trammell, Haysi, Va.
SM—E. C. Brintley, Burton Ford, Va.
S of H—Mules and 1 trolley pole type loco. Track gage 42 inches.
S of M—1 comp. air puncher and 2 shortwall machs.
PP—3 water tube boilers, 310 H. P., 8 pumps.
EMP—125. Last years tonnage 15,000.
SIZES SHIPT—Run of Mine.

Burton Ford Mine; Slope; Imboden Seam, 102 inches thick.
PO—Burton Ford, Va.; SP—Same; CTY—Russell; RR—C. C. & O.
SM—E. C. Brintley, Burton Ford, Va.
S of H—Main and tail rope. Track gage 36 inches.
S of M—Hand.
PP—1 60 H. P. water tube boiler, 2 pumps.
EMP—15. Last years tonnage 3,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

SCOTT, FIELD COAL COMPANY

General Office, Richlands, Va.
OWNER—Field Scott, Athens, O.
GM—W. J. Elgin, Richlands, Va.
PA—W. J. Elgin, Richlands, Va.
EM—W. J. Elgin, Richlands, Va.
SCO—Address the company, Buyer, F. F. Coates, Richlands, Va.
SA—Gen. Hocking Fuel Co., Wyoming Coal Sales Co., Richlands, Va.

Red Ash Nos. 2 and 4 Mines; Drift; Red Ash Seam, 36-60 in. thick.
PO—Richlands, Va.; SP—Zeal, Va. (Prepaid); CTY—Tazewell; RR—N. & W.
MS—Jno. Joice, Richlands, Va.

S of H—Mules and 1 storage battery loco. Track gage 42 in.
S of M—Hand.
PP—1 100 H. P. fire tube boiler, 1-75 K. W. gen. unit, 250 volts D. C.
EMP—50. Daily tonnage 200.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Gravity Screens.

SHOP RIDGE COAL COMPANY

General Office, Coeburn, Va.
PR—S. G. McCarty, Coeburn, Va.
TR—E. H. Horne, Coeburn, Va.
GM—E. H. Horne, Coeburn, Va.
GS—E. H. Horne, Coeburn, Va.
PA—E. H. Horne, Coeburn, Va.
EM—Scarborough & Dotson, Norton, Va.
SA—Virginia Smokeless Coal Company, Tazewell, Va.

Drift; Upper Banner Seam; 102 inches thick.
PO—Coeburn, Va.; SP—Toms Creek, Va.; CTY—Wise; RR—N. & W.
S of H—Mules. Track gage 44 in.
S of M—Hand.
PP—Power purchased, 220 volts A. C. Last years tonnage 23,000.
SIZES SHIPT—Run of Mine.

SHREVE, R. W. COAL CO.

General Office, Doran, Va.
SCO—Address the company. Buyer, R. W. Shreve, Doran, Va.

No. 2 Mine; Drift; Red Ash Seam, 36 inches thick.
PO—Doran, Va.; SP—Richlands, Va.; CTY—Tazewell; RR—N. & W.
MS—John D. Shreve, Doran, Va.
S of H—Mules. Track gage 40 inches.
S of M—Hand.
PP—1 12 H. P. gas engine.
EMP—20. Daily tonnage 75.
SIZES SHIPT—Run of Mine.

SLUSSER, M. C. & CO.

General Office, Blacksburg, Va.
PR—M. C. Slusser, Blacksburg, Va.
TR—M. C. Slusser, Blacksburg, Va.
GM—M. C. Slusser, Blacksburg, Va.
GS—C. W. Allen, Blacksburg, Va.
PA—M. C. Slusser, Blacksburg, Va.
EM—A. Murfill, Blacksburg, Va.
SCO—Address the company. Buyer, M. C. Slusser, Blacksburg, Va.

Brush Mountain Mine; Slope; Brush Mountain Seam, 84 in. thick.
PO—Blacksburg, Va.; SP—Same; CTY—Montgomery; RR—N. & W.
S of H—Mules and rope, steam loco. Track gage 24 in.
S of M—Hand and longwall machs.
PP—1 fire tube boiler.
EMP—19. Last years tonnage 4,000.
SIZES SHIPT—Pea, Nut, Egg, Lump.
PREP. EQUIPT—Gravity Screens.
Old information.

SMITH, CLYDE COAL CO.

Now Superior Anthracite Coal Corporation.

SPLASH DAM COAL CORPORATION.

General Office, Splash Dam, Va.
VP—F. M. Montgomery, Spartansburg, Va.
PR—M. T. McArthur, Splash Dam, Va.
TR—I. W. Richardson, Splash Dam, Va.
GM—I. W. Richardson, Splash Dam, Va.
GS—I. W. Richardson, Splash Dam, Va.
PA—I. W. Richardson, Splash Dam, Va.
EM—R. W. Shumway, Huntington, W. Va.
SCO—Address the company, Buyer, G. P. Callaway, Splash Dam, Va.
SA—Bewley-Darst Coal Co., Knoxville, Tenn.

Splash Dam Nos. 1 and 2 Mines; Drift; Splash Dam Seam, 42-58 in. thick.
PO—Splash Dam, Va.; SP—No. 1, Bartlett, Va.; No. 2, Splash Dam, Va.; RR—C. C. & O., Elkhorn Extension
S of H—3 elec. pole locos. Mules.
S of M—2 shortwall elec. machs.
PP—1 water tube boiler, 150 H. P., 1 100 K. W. gen. unit, 250 volts D. C.
EMP—40. Last years tonnage 40,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

STANDARD COAL COMPANY

PR—S. G. McCarty, Coeburn, Va.
TR—E. H. Horne, Coeburn, Va.
GM—E. H. Horne, Coeburn, Va.
GS—E. H. Horne, Coeburn, Va.
PA—E. H. Horne, Coeburn, Va.
EM—Scarborough & Dotson, Norton, Va.
SCO—Address the company, Buyer, E. H. Horne, Coeburn, Va.
SA—Virginia Smokeless Coal Co., Tazewell, Va.

Standard Mine; Drift; Widow Kennedy Seam, 84 in. thick.
PO—Coeburn, Va.; SP—Same; CTY—Wise; RR—N. & W.
S of H—Mules, rope and steam locos. Track gage 44 in.

(Continued on Next Page)

Standard Coal Company—Cont.

S of M—Hand.
PP—Power purchased. Transformer 6600 to 220 volts A. C., 1—60 H. P. fire tube boiler, 3 pumps.
EMP—25. Last years tonnage 6,000.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
Note—Formerly operated by the Kilgore Coal Corp.

STEINMAN DEVELOPMENT COMPANY

PR—John F. Steinman, Lancaster, Pa.
TR—Jas. H. Steinman, Lancaster, Pa.
GM—Humeon C. Anderson, Tarpon, Va.
EM—E. N. Patton, Tarpon, Va.
SCO—Address the Company. Buyer, W. W. Stevenson, Tarpon, Va.
SA—Bewley-Darst Coal Co., Knoxville, Tenn.

Bent Ridge Mine; Drift; Upper Banner Seam, 66 in. thick.
PO—Tarpon, Va.; SP—Frt., Steinman, Va.; Exp., Delano, Va.; CTY—Dickenson; RR—C. C. & O.

S of H—Elec. locos. Track gage 44 in. S of M—Mining machs.
EMP—50. Daily tonnage 300.
SIZES SHIPT—Run of Mine.
Note—New mine; still in development stage.

STEPHENS COAL COMPANY

PR—F. L. Stephens, Wise, Va.
GM—F. L. Stephens, " "
GS—F. L. Stephens, " "
PA—F. L. Stephens, " "
EM—Scarborough & Dotson, Norton, Va.

Drift Mine; Edwards Seam; 36 to 50 in. thick.
PO—Wise, Va.; SP—Same; CTY—Wise; RR—N. & N.
MS—W. C. Belcher, Wise, Va.
S of H—Mules. Track gage 42 in. S of M—Hand.
EMP—16.
SIZES SHIPT—Run of Mine.
Old information

STONEGA COAL & COKE CO

General Office, Big Stone Gap, Va.
PR—Col. D. R. Wentz, 1727 Land Title Bldg., Philadelphia, Pa.
VP—H. R. Prior, Philadelphia, Pa.
GM—R. E. Taggart, Big Stone Gap, Va.
GS—W. C. Shunk, Big Stone Gap, Va.
PA—J. W. Gilliam, Big Stone Gap, Va.
EM—J. D. Rogers, Big Stone Gap, Va.
EE—Rescoe Woltz, Big Stone Gap, Va.
SCO—Address the Company; Buyer, S. J. Gaudry, Stonega, Va.
SA—D. B. Pierson, Big Stone Gap, Va.
Additional Information on Pages 926, 927

Arno Mine; Drift; Imboden Seam, 72 in. thick.
PO—Arno, Va.; SP—Andover, Va.; CTY—Wise; RR—Interstate.
MS—C. W. Rotenberry, Arno, Pa.
SM—E. R. Tankersly, Arno, Pa.
S of H—Mules and 5 elec. locos. Track gage 44 in.
S of M—5 arcwall machs.
PP—Power purchased, 2—150 K. V. A. rotary converters, 250 volts D. C., 12 pumps.
EMP—400. Last years tonnage 330,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravety Screens.

Dunbar Mine; Drift; Marker and Taggart Seam, 54 in. thick.
PO—Roaring Fork, Va.; SP—Dunbar, Va.; CTY—Wise; RR—Interstate.
MS—E. A. Compton, Roaring Fork, Va.
SM—T. J. Adams, Roaring Fork, Va.
S of H—11 6-ton elec. trolley pole type locos. Track gage 44 in.
S of M—5 shortwall machs.
PP—Power purchased, 1—150 K. V. A. rotary converter, 250 volts D. C., 4 pumps.
EMP—325. Last years tonnage 180,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Loading Rooms.

Exeter Mine; Drift; Imboden Seam, 72 in. thick.
PO—Exeter, Va.; SP—Camz; CTY—Wise; RR—Interstate.
MS—A. E. Griffith, Exeter, Va.
SM—R. T. Rason, Exeter, Va.
S of H—3 13-ton and 8 6-ton elec. locos. Track gage 44 in.
S of M—5 arcwall machs.
PP—Power purchased. Transformer 2300—196 volts A. C., rotary converter, 2—150 K. V. A., 250 volts D. C.
EMP—325. Last years tonnage 200,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens.

Imboden Mine; Drift; Imboden Seam, 72 in. thick.
PO—Imboden, Va.; SP—Same; CTY—Wise; RR—Southern.
MS—G. R. Marrs, Imboden, Va.
SM—W. A. Hicks, Imboden, Va.

S of H—40 13-ton and 8 6-ton elec. locos., 13 mules. Track gage 44 in. S of M—3 arcwall machs.
PP—Power purchased. Transformers 33000—2300—196 volts A. C., rotary converters, 12—K. V. A., 250 volts D. C.
EMP—375. Last years tonnage 355,000.
SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravety Screens
Keeoke Mine; Drift; Taggart & Nelson Seams, 50 in. thick.
PO—Keeoke, Va.; SP—Same; CTY—Lee; RR—Southern.
MS—O. R. Rogers, Keeoke, Va.
SM—J. R. Parsons, Keeoke, Va.
S of H—6 13-ton and 18 3-ton to 6-ton elec. locos. Track gage 44 in.
S of M—1 arcwall and 9 shortwall machs.
PP—Power purchased. Transformers 33000—2300—196 volts A. C., 5—150 K. V. A., rotary converters, 250 volts D. C.
EMP—350. Last years tonnage 250,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Loading Rooms.

Osaka Mine; Drift; Imboden Seam, 72 in. thick.
PO—Osaka, Va.; SP—Same CTY—Wise; RR—Interstate.
MS—Thomas Green, Osaka, Va.
SM—C. H. Slomp, Osaka, Va.
S of H—3 13-ton and 4 6-ton elec. locos., 30 mules. Track gage 44 in.
S of M—4 arcwall and 1 shortwall machs.
PP—Power purchased, transformers 33000—2300—196 volts A. C., 2—150 K. V. A. rotary converters 250 volts D. C.
EMP—485. Last years tonnage 320,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravety Screens.

Roda Mine; Drift; Taggart Seam, 70 in. thick.
PO—Roda, Va.; SP—Same; CTY—Wise; RR—Interstate.
MS—H. S. Estill, Roda, Va.
SM—T. V. Riddle, Roda, Va.
S of H—Mules, 9 13-ton and 26 6-ton elec. locos. Track gage 44 in.
S of M—13 shortwall machs.
PP—Power purchased, transformers 33000—2300—196 volts A. C., 6—150 K. V. A. rotary converters, 250 volts D. C.
EMP—675. Last years tonnage 610,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Loading Rooms.

Stonega Mine; Drift; Imboden Seam, 72 in. thick.
PO—Stonega, Va.; SP—Same; CTY—Wise; RR—Interstate.
MS—H. A. Alexander, Stonega, Va.
SM—W. H. McElmough and L. H. Edwards, Stonega, Va.
S of H—35 mules, 7 13-ton and 5 6-ton elec. locos. Track gage 44 in.
S of M—6 arcwall machs.
PP—Power purchased, transformers 33000—2300—196 volts A. C., 5—150 K. V. A. rotary converters, 250 volts D. C.
EMP—900. Last years tonnage 410,000.
SIZES SHIPT—Run of Mine, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Loading Rooms.

STONEGA COLLIERIES COMPANY

General Office, Chattanooga, Tenn.
PR—E. O. Wells, Rockwood, Tenn.
VP—M. K. Kelly, Glamorgan, Va.
TR—M. Chamberlain, Chattanooga, Tenn.
GM—M. K. Kelly, Glamorgan, Va.
GS—R. Schwank, Glamorgan, Va.
PA—R. Schwank, Glamorgan, Va.
CE—J. E. Williams, Glamorgan, Va.
EM—J. T. Outson, Norton, Va.
EE—West Virginia Engineering Co., Norton, Va.
SCO—Address the Company. Buyer, W. H. Mullins, Glamorgan, Va.
SA—M. K. Kelly, Glamorgan, Va.

Glamorgan No. 3 Mine; Drift; Edwards Seam, 54 in. thick.
PO—Glamorgan, Va.; SP—Same; CTY—Wise; RR—Interstate.
S of H—13 elec. motors and 2 storage battery locos. Track gage 44 in.
S of M—5 shortwall machs.
PP—Power purchased. Transformer 22,000 to 2,200 volts A. C., M. G. sets and rotary converters, 250 volts D. C., 2 fire tube boilers, total 300 H. P., 19 pumps.
EMP—265. Last years tonnage 104,622.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Gravety Screens, Picking Tables.

Glamorgan No. 4 Mine; Drift; Edwards Seam, 54 in. thick.
PO—Glamorgan, Va.; SP—Same; CTY—Wise; RR—Interstate.
S of H—14 elec. locos. and 2 storage battery locos. Track gage 44 in.

S of M—5 shortwall machs.
PP—Power purchased. Transformer, rotary converters, 250 volts D. C., 7 pumps.
EMP—275. Last years tonnage 141,874.
Coke Ovens, 350.
SIZES SHIPT—Run of Mine, Block.

SUPERIOR ANTHRACITE COAL CORP.

General Office, Roanoke, Va.
PR—Clyde E. Smith, Pulaski, Va.
VP—C. W. Tharnton, Roanoke, Va.
TR—R. S. Hager, McCoy, Va.
GM—Clyde Smith, McCoy, Va.
GS—Clyde Smith, McCoy, Va.
PA—Clyde Smith, McCoy, Va.
SCO—Address the Company, Buyer, Clyde E. Smith, Pulaski, Va.

McCoy Mine; Slope; King Vlight Seam, 84 in. thick.
PO—McCoy, Va.; SP—Same; CTY—Montgomery; RR—Virginian.
S of H—Gasoline motor. Track gage 24 in. S of M—Hand.
PP—1—80 H. P. and 1—100 H. P. fire tube boiler, 1 pump.
Daily tonnage 200.
SIZES SHIPT—Slack, Pea, Nut, Egg, Lump, Block.
PREP. EQUIPT—Revolving Screens.
NOTE—Successors to the Clyde Smith Coal Company.

SUTHERLAND COAL COMPANY, INC.

Now The Falls Branch Coal Company.

TARKILN COAL COMPANY

General Office, Honaker, Va.
PR—R. F. Thompson, Honaker, Va.
VP—Perry Thompson, Honaker, Va.
TR—C. W. Fuller, Honaker, Va.
GM—C. W. Fuller, Honaker, Va.
GS—C. W. Fuller, Honaker, Va.
PA—C. W. Fuller, Honaker, Va.

Tarkiln Mine; Drift; Lower Banner Seam, 42 inches thick.
PO—Honaker, Va.; SP—Same; CTY—Russell; RR—N. & W.
MS—R. M. Mann, Honaker, Va.
S of H—Mules and 1 gasoline loco. Track gage 40 in.
S of M—Hand.
EMP—38. Last fiscal year output, 13,000 tons.
SIZES SHIPT—Run of Mine.
Old information.

TOMB COAL COMPANY

General Office, Raven, Va.
PR—Rex L. Tomb, Charleston, W. Va.
VP—F. L. Conway, Beckley, W. Va.
TR—M. H. Tomb, Bluefield, W. Va.
GM—M. H. Tomb, Red Ash, Va.
GS—M. H. Tomb, Red Ash, Va.
PA—M. H. Tomb, Red Ash, Va.
EM—Robert Morgan, Richland, Va.
SA—Richd. Smokeless Fuel Co., Beckley, W. Va.

Tomb Mine; Slope; Raven Red Ash Seam, 10 in. thick.
PO—Raven, Va.; SP—Same; CTY—Tazewell; RR—N. & W.
S of H—Mules and endless rope. Track gage 41 in.
S of M—Hand.
PP—1—30 H. P. water tube boiler, 1 pump.
EMP—50. Daily tonnage 100.
SIZES SHIPT—Run of Mine.
Note—Formerly operated by the Raven Coal & Mining Co.

TWIN CITY COAL CORP.

General Office, Coeburn, Va.
PR—P. F. Lay, Coeburn, Va.
VP—W. L. Lay, Coeburn, Va.
TR—C. O. Ramsey, Coeburn, Va.
GM—W. T. Poole, St. Paul, Va.
GS—W. T. Poole, St. Paul, Va.
PA—W. T. Poole, St. Paul, Va.
EM—P. F. Brown, Drill, Va.

Twin City Mine; Drift; Imboden and Shawnee Seams, 72 in. thick.
PO—St. Paul, Va.; SP—Same; CTY—Wise; RR—N. & W. C. C. & O.
MS—John Kilgare, St. Paul, Va.
S of H—Mules and 3 steam locos. Track gage 44 in.
S of M—Hand.
EMP—40. Last years tonnage 23,000.
SIZES SHIPT—Run of Mine.

UNITED COAL MINING CORPORATION

General Office, Pittsburgh, Pa.
PR—Charles Yen, Pittsburgh, Pa.
VP—Lawrence Snapp, Pittsburgh, Pa.
TR—L. E. Huggans, Pittsburgh, Pa.
GM—Lawrence Snapp, Pittsburgh, Pa.
ASST. GM—J. K. Snapp, St. Charles, Va.
EM—Robert Honsley, St. Charles, Va.

United Mines; Drift; "Darby" or No. 5 Seam, 45 in. thick.
PO—St. Charles, Va.; SP—Same; CTY—Lee; RR—Sou. L. & N.
MS—J. H. Farmer, St. Charles, Va.
S of H—Electric loco. Track gage 42 inches.
S of M—Shortwall machs.
PP—Purchase power. 250 volts D. C.
EMP—150. Last years tonnage 40,000.
SIZES SHIPT—Run of Mine, Slack (Washed), Egg, Block.

PREP. EQUIPT—Shaker Screens, Wash-circles.
Note—Formerly operated by the Darby Coal Mining Co.

UNITED COLLIERIES, INC.

General Office, St. Charles, Va.
PR—C. W. Bondurant, St. Charles, Va.
TR—S. N. Bondurant, St. Charles, Va.
GM—C. W. Bondurant, St. Charles, Va.
GS—C. W. Bondurant, St. Charles, Va.
PA—C. W. Bondurant, St. Charles, Va.
CE—P. Richardson, Middleshoro, Ky.
EE—W. Va. Engineering Co., Norton, Va.
SCO—Bondurant & Dominion Store, Buyers, I. P. Weston and J. N. Newman, St. Charles, Va.

Additional Information on Page 930

New Bondurant No. 2 Mine; Drift; No. 5 Seam, 50 in. thick.
PO—St. Charles, Va.; SP—Same; CTY—Lee; RR—Southern, L. & N.
MS—I. P. Weston, St. Charles, Va.
S of H—Mules.
S of M—Hand.
PP—Power purchased.
EMP—75. Daily tonnage 200.
SIZES SHIPT—Run of Mine.

Bondurant No. 3 Mine; Drift; No. 5 Seam, 50 inches thick.
PO—St. Charles, Va.; SP—Same; CTY—Lee; RR—So. and L. & N.
MS—I. P. Weston, St. Charles, Va.
S of H—Mules. Track gage 44 in.
S of M—Hand.
PP—Power purchased.
EMP—100. Daily tonnage 250.
SIZES SHIPT—Run of Mine.

Dominion Mine; Drift; No. 5 Seam, 44 in. thick.
PO—St. Charles, Va.; SP—Same; CTY—Lee; RR—Southern, L. & N.
MS—W. M. Risdin, St. Charles, Va.
S of H—Trolley pole type loco. Track gage 44 in.
S of M—3 shortwall machs.
PP—Power purchased, transformers 33000—2410 volts A. C., rotary converters, 250 volts D. C., 2 pumps.
EMP—200. Daily tonnage 350.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms, Washeries.

New Dominion Mine; Drift; No. 5 Seam, 42 in. thick.
PO—St. Charles, Va.; SP—Same; CTY—Lee; RR—So. and L. & N.
MS—W. M. Risdin, St. Charles, Va.
S of H—Mules. Track gage 44 in.
S of M—Hand.
EMP—25. Daily tonnage 200.
SIZES SHIPT—Run of Mine.

UNITED FUEL CORP.

St. Charles, Va.
United Mine
PO—St. Charles, Va.; CTY—Lee, RR—L. & N., Southern
No report

VIRGINIA ANTHRACITE COAL CORP.

General Office, Pulaski, Va.
PR—D. Binkhorst, Pulaski, Va.
VP—S. J. Aslane, 17 Battery Place, New York, N. Y.
TR—B. C. Motcher, Elmira, N. Y.
GM—John G. Hayes, Pulaski, Va.
GS—C. E. Atwell, Pulaski, Va.
PA—F. J. Hargrave, Pulaski, Va.
CE—Stephen Knight, Scranton, Pa.
EM—A. E. Halsey, Pulaski, Va.
EE—D. W. Gallimore, Pulaski, Va.
SCO—Store No. 1, Buyer, James M. Crockett, Pulaski, Va.
SA—D. Binkhorst, Pulaski, Va.

No. 1 Mine; Slope; Little Vein Seam, 48 to 84 in. thick.
PO—Binkton, Va.; SP—Pulaski, Va.; CTY—Pulaski; RR—N. & W.
S of H—Mules, rope, steam loco. Track gage 32 inches.
S of M—Hand.
PP—Power purchased 4 150 H. P. boilers, 3 pumps.
EMP—200. Last years tonnage 26,000.
SIZES SHIPT—Slack, Pea, Nut, Egg.
PREP. EQUIPT—Shaker Screens, Picking Tables.

VIRGINIA BANNER COAL CORP

General Office, Johnson City, Tenn.
PR—T. H. Morris, Johnson City, Tenn.
TR—J. R. Hagan, Johnson City, Tenn.
GS—W. H. Devenny, Trammel, Va.
PA—J. R. Hagan, Johnson City, Tenn.
EM—G. T. Stevens, Dante, Va.
EE—J. E. Murray, Trammel, Va.
SCO—Virginia Banner Coal Corp. Store, Buyer, W. G. Newland, Trammel, Va.
SA—Dixie Fuel Co., Johnson City, Tenn.

Virginia Banner Mine; Drift; Upper and Lower Banner Seams, 72-48 in. thick.
PO—Trammel, Va.; SP—Same; CTY—Dickenson; RR—C. C. & O.

(Continued on Next Page)

Virginia Banner Coal Corp.—Cont

S of H—7 6-ton locos, 1 8-ton trolley type loco. Track gage 48 in.
S of M—5 chain breast machs.
PP—4 150 H. P. return tubular boilers, gen. unit, 250 volts D. C., 4 pumps.

EMP—250. Last years tonnage 200,000.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Gravity Screens, Picking Tables, Loading Booms.

VIRGINIA BLUE GEM COAL CO., THE

General Office, Pennington Gap, Va.
PR—J. L. Rh. a, Pennington Gap, Va.
VP—W. H. Wren, Big Stone Gap, Va.
TR—W. H. Wren, Big Stone Gap, Va.
GS—M. F. Steelman, Pennington Gap, Va.
EM—H. E. Fox, Big Stone Gap, Va.

Virginia Blue Gem No. 2 Mine; Drift, North Fork Seam, 60 inches thick.
PO—Pennington Gap, Va.; SP—Purcell, Va.; CTY—Le. & N. Southern.
S of H—Mules and steam loco. Track gage 42 inches.

S of M—Hand.
PP—1 15 H. P. fire tube boiler.
EMP—15. Daily tonnage 100.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Bar Screens, Washeries.

VIRGINIA ELKHORN COAL CO.

General Office, Praise, Ky.
PR—Alex H. Loony, Praise, Ky.
TR—R. S. Johnson, Praise, Ky.
GS—Alex H. Loony, Praise, Ky.
PA—Alex H. Loony, Praise, Ky.
SA—Alex H. Loony, Praise, Ky.

Virginia Mine; Slope; Splasheddam Seam, 42 inches thick.
PO—Splasheddam, Va.; SP—Bortelsick, Va.; CTY—Hickerson; RR—L. & N. Southern.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.

VIRGINIA IRON, COAL & COKE CO.

General Office, Roanoke, Va.
PR—Jno. B. Newton, Roanoke, Va.
VP—D. D. Hull, Jr., Roanoke, Va.
ASST TO PR—C. E. Bertie, Roanoke, Va.
TR—J. W. Cure, Roanoke, Va.
GS—Douglas A. Patterson, Toms Creek, Va.
PA—M. A. Shuff, Roanoke, Va.
CE—Jas. McTier, Roanoke, Va.
EM—J. A. Dorton, Toms Creek, Va.
SCO—Address the Company, Boyer, M. A. Shuff, Roanoke, Va.
SA—J. F. Hunter, Roanoke, Va.

Toms Creek Mine; Drift; Upper Banner Seam, 84 in. thick.
PO—Toms Creek, Va.; SP—Same; CTY—Wise; RR—N. & W.
MS—W. M. Hoffman, Toms Creek, Va.
SM—S. B. Grey, Toms Creek, Va.
S of H—Mules, 22 trolley pole type and 4 storage battery locos. Track gage 44 in.
S of M—16 shortwall machs.
PP—15 return tubular boilers, total 1400 H. P., 2 water tube boilers, 600 H. P., 5 gen. units, 1 300 K. W., 500 volts D. C., 20 pumps.

EMP—1,300. Daily output, 2,500 tons. Coke ovens, 800 Bee Hive.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker and Gravity Screens, Picking Tables, Loading Booms, Washeries.

Marion Mine; Drift; Upper Banner Seam, 48 in. thick.
PO—Vico, Va.; SP—Coburn, Va.; CTY—Wise; RR—N. & W.
MS—H. F. Gibson, Vico, Va.
SM—R. H. Wagner, Vico, Va.
S of H—Mules and 7 trolley pole type locos. Track gage, 44 in.
S of M—1 chain breast type and 4 shortwall machs.
PP—Power purchased.
EMP—165. Daily output, 450 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Gravity Screens.

Inman Mine; Drift; Imboden Seam, 84 in. thick.
PO—Inman, Va.; SP—Appalachia, Va.; CTY—Wise; RR—L. & N. Southern.
MS—N. H. Ingles, Inman, Va.
SM—F. J. Milgram, Inman, Va.
S of H—Mules, 1 trolley pole type loco. Track gage, 44 in.
S of M—Hand.
PP—2 fire tube boilers, total 160 H. P., 4 pumps. Power from Linden plant.
EMP—180. Daily output, 600 tons. Coke Ovens, 176 Bee Hive.
SIZES SHIPT—Run of Mine, Slack.
PREP. EQUIPT—Bar Screens.

Linden Mine; Drift; Imboden Seam, 79 in. thick.
PO—Inman, Va.; SP—Appalachia, Va.; CTY—Wise; RR—L. & N. Southern.
MS—N. H. Ingles, Inman, Va.
SM—F. J. Milgram, Inman, Va.
S of H—Mules and 9 trolley pole type locos. Track gage, 44 in.
S of M—8 shortwall machs.
PP—7 fire tube boilers, total 1000 H. P., 3 gen. units, 600 K. W., 500 volts D. C., 12 pumps.
EMP—380. Daily output, 1,500 tons.
SIZES SHIPT—Run of Mine, Slack.
PREP. EQUIPT—Bar Screens.

Imperial Mine; Drift; Nos. 6 and 7 Seams, 54 in. thick.
PO—Leona Mines, Va.; SP—St. Charles, Va.; CTY—Lee, Va.; RR—L. & N. Southern.
MS—S. G. Hill, Leona Mines, Va.
SM—D. E. Priskill, Leona Mines, Va.
S of H—10 trolley pole type locos. Track gage 44 in.
S of M—6 shortwall machs.
PP—Power purchased.
EMP—130. Daily output, 600 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens.

Shannon Mine; Drift; Shannon Seam, 40 in. thick.
PO—Dahna, Va.; SP—Shannon, Va.; CTY—Wise; RR—C. C. & O.
MS—Jas. Williams, Dahna, W. Va.
S of H—Mules, 1 storage battery and 1 steam locos. Track gage, 44 in.
S of M—Hand.

PP—I fire tube boiler, 75 H. P., 1 gen. unit, 75 K. W., 250 volts D. C., 3 pumps.
EMP—65. Daily tonnage 300.
SIZES SHIPT—Run of Mine.

Virginia City No. 1 Mine; Drift; Jawbone Seam, 60 in. thick.
PO—Virginia City, Va.; SP—Same; CTY—Wise; RR—N. & W.
MS—Jas. Williams, Virginia City, Va.
SM—G. G. Rannon, Virginia City, Va.
S of H—3 storage battery and 2 steam locos. Track gage, 44 in.
S of M—Hand.
PP—2 return tubular boilers, total 300 H. P., 3 gen. units, 250 volts A. C. and D. C., 4 pumps.
EMP—90. Daily tonnage 500.
SIZES SHIPT—Run of Mine, Slack, Egg.
PREP. EQUIPT—Shaker Screens.

Lama Mine; Drift; Taggart Seam, 44 in. thick.
PO—Inman, Va.; SP—Appalachia, Va.; CTY—Wise; RR—Southern, L. & N.
MS—N. H. Ingles, Inman, Va.
SM—E. W. Bond, Inman, Va.
S of H—3 storage battery, 1 trolley pole type locos. Track gage 44 in.
S of M—3 shortwall machs.
PP—Power from Linden plant, 2 pumps.
EMP—60. Daily output, 200 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

VIRGINIA LEE CO., INC. (THE)

PR—Jas. M. Butler, St. Charles, Va.
VP—A. W. Wagner, St. Charles, Va.
TR—A. W. Wagner, St. Charles, Va.
GM—A. W. Wagner, St. Charles, Va.
GS—A. W. Wagner, St. Charles, Va.
PA—A. W. Wagner, St. Charles, Va.
EM—Fox & Peck, Big Stone Gap, Va.
Sales Agents—Chinfield Fuel Co., Sparrowsburg, S. C.

Virginia Lee Mine, Drift, No. 5 Seam, 42 to 48 in. thick.
PO—St. Charles, Va.; SP—Same. CTY—Lee. RR—L. & N. V. & S. W.
S of H—Trolley pole type locos. Track gage, 44 in.
S of M—Hand and 5 electric machs.
PP—2 return tubular boilers, 1 150 K. W. gen. unit, 250 volts D. C., 3 pumps.
EMP—100. Last years tonnage 63,000.
SIZES SHIPT—Slack, Egg, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables.

WISE COAL & COKE COMPANY

General Office, Dorchester, Va.
PR—J. L. Kemmerer, New York, N. Y.
TR—W. E. Decker, New York, N. Y.
GM—Douglas Trupstra, Dorchester, Va.
GS—Douglas Trupstra, Dorchester, Va.
PA—J. M. Cameron, Dorchester, Va.
CE—G. C. Scarborough, Norton, Va.
EM—G. C. Scarborough, Dorchester, Va.
PP—es. Glintie, Dorchester, Va.
SCO—Address the Company, Boyer, J. U. Glinwater, Dorchester, Va.
Sales Agent—Whitney-Kemmerer Co., Philadelphia, Pa., and Norton, Va.

No. 2 Mine; Drift; Imboden Seam, 72 in. thick.
PO—Dorchester, Va.; SP—Same; CTY—Wise; RR—Int., L. & N.
S of H—Mules and endless rope, trolley pole type locos. Track gage 44 in.
S of M—Chain breast type, shortwall and longwall machs.
PP—Water tube boiler, gen. units, 500 volts A. C., 5 pumps. Purchase power.
EMP—200. Last fiscal year output, 200,000 tons. Coke ovens, 400 Bee Hive.
SIZES SHIPT—Run of Mine, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

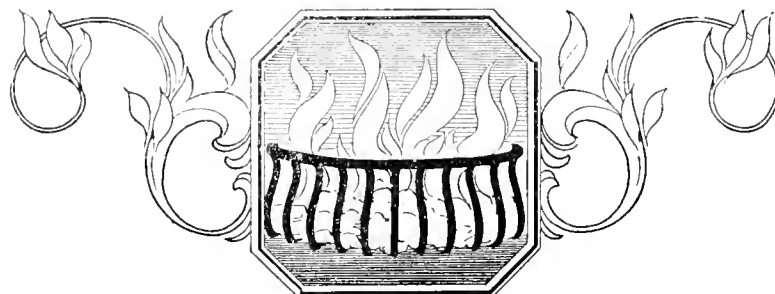
No. 3 Mine; Drift; Lower Banner Seam, 60 in. thick.
PO—Dorchester, Va.; SP—Same; CTY—Wise; RR—Int., L. & N.
S of H—Mules and endless rope, trolley pole type locos. Track gage 44 in.
S of M—Chain breast type, shortwall and longwall machs.
PP—Water tube boiler, gen. units, 500 volts A. C. Purchase power.
EMP—200. Last fiscal year output, 200,000 tons.
SIZES SHIPT—Run of Mine, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

No. 5 Mine; Drift; Upper Banner Seam, 60 in. thick.
PO—Dorchester, Va.; SP—Same; CTY—Wise; RR—Int., L. & N.
S of H—Mules and endless rope, trolley pole type loco. Track gage 44 in.
S of M—Chain breast type, shortwall and longwall machs.
PP—Water tube boiler, gen. units, 500 volts A. C., 3 pumps. Purchase power.
EMP—100. Last fiscal year output, 200,000 tons.
SIZES SHIPT—Run of Mine, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

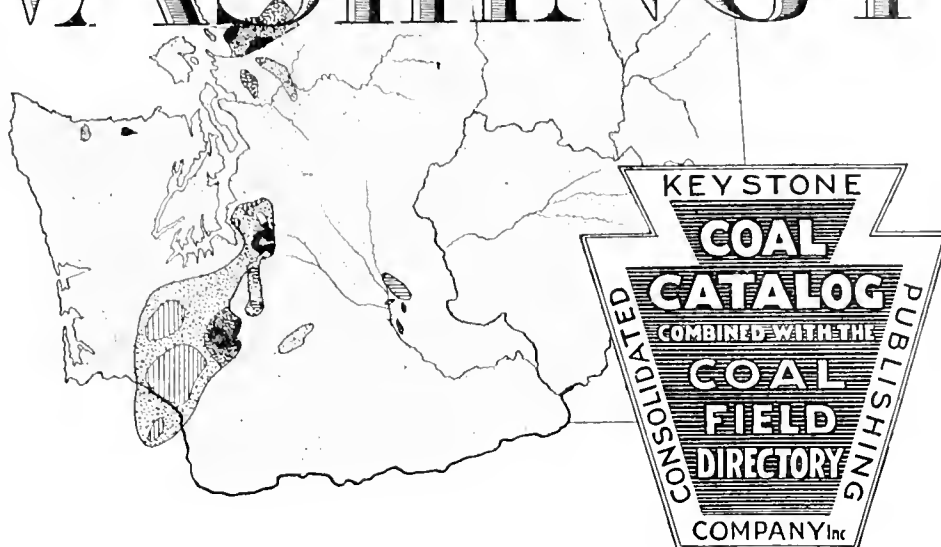
NORTH CAROLINA**CUMMOCK COAL MINING CO., INC.**

General Office, Norfolk, Va.
PR—C. F. Millard, Norfolk, Va.
TR—M. Manly, Norfolk, Va.
GM—P. L. Nicholson, Norfolk, Va.
GS—W. H. Hill, Cummock, N. C.
PA—L. M. Jones, Norfolk, Va.
EM—E. E. Rajrd, Norfolk, Va.
SCO—Address the Company, Boyer, J. H. Rose, Cummock, N. C.

Cummock Mine; Shaft; 72 inches thick.
PO—Cummock, N. C.; SP—Same; CTY—Lee; RR—S. & N. S.
S of H—Mules and rope. Track gage 30 inches.
S of M—Hand and 1 shortwall mach.
PP—3 fire tube boilers, 80 H. P., 2 water tube boilers, 3 pumps.
EMP—75. Last years tonnage 7500.
SIZES SHIPT—Run of Mine.



WASHINGTON

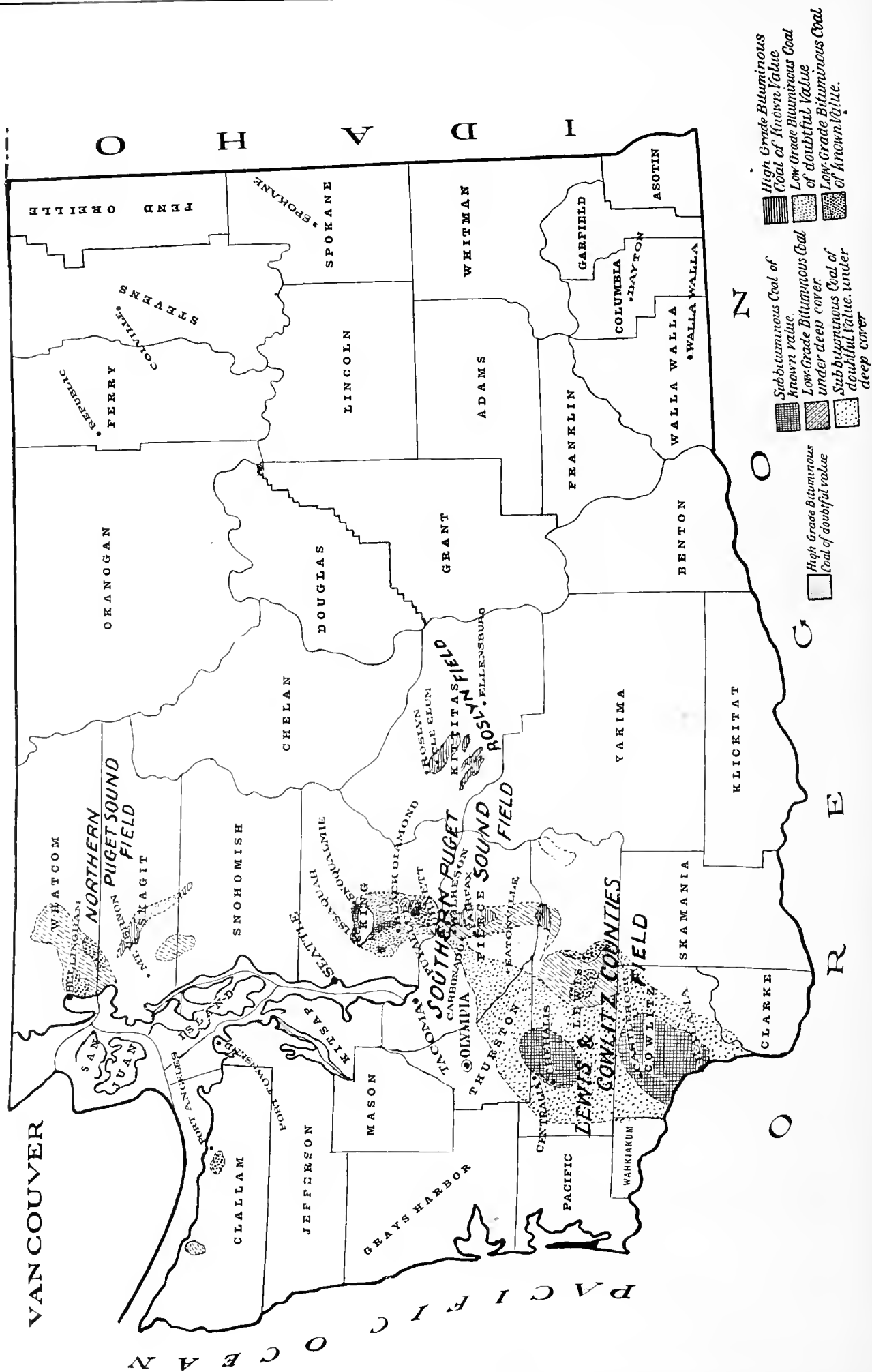


CONTENTS

Map of Mining Fields.....	942
Sectional View of Coal Formations.....	943
General Description of Coal Resources.....	944
Kittitas County Coal.....	944
King County Coal.....	945
Pierce County Coal.....	946
Thurston County Coal.....	947
Lewis County Coal.....	947
Whatcom County Coal.....	947
Preparation and Sizing of Coal.....	948
Supplementary Analyses.....	949 to 952
List of Mines by Counties.....	953
Alphabetical Directory of Coal Mines....	954 to 955

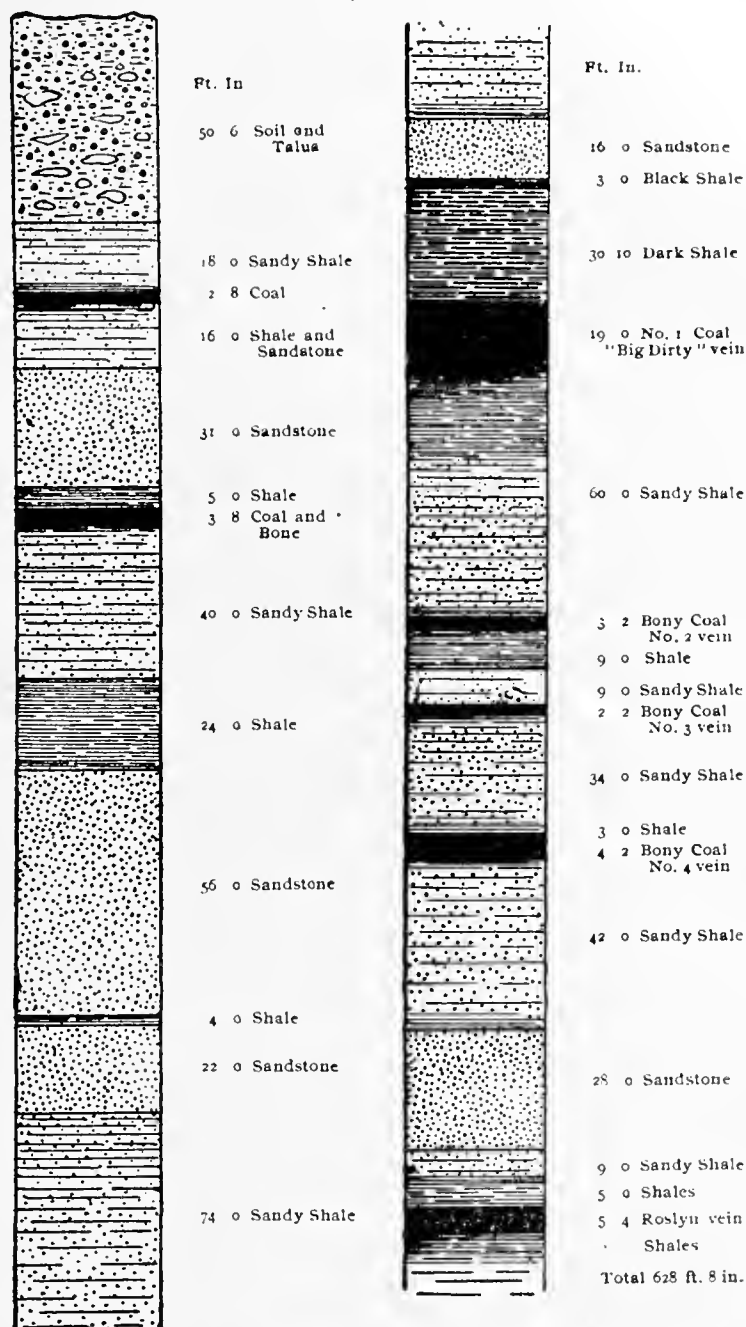
Map of Mining Fields—WASHINGTON

BRITISH COLU MBIA

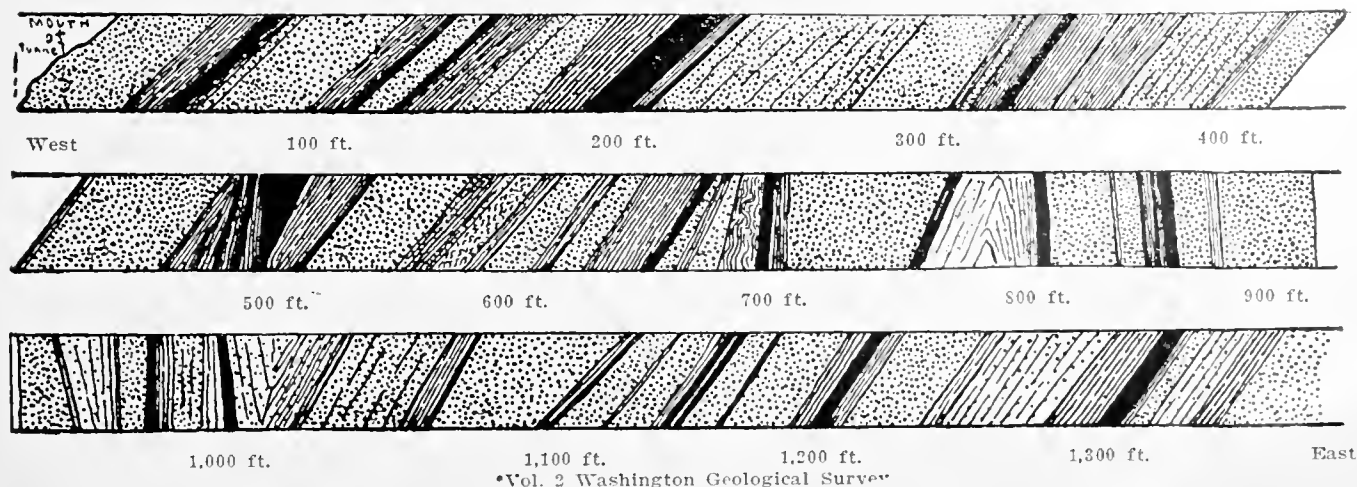


GEOLOGICAL SECTIONS WASHINGTON*

Roslyn Field



Cross-Section of Coal Measures as Shown in the Melmont Tunnel



WASHINGTON*

General Description of the Coal Resources of the State, With the Ranks of Coal Produced; Discussion of the Coals Produced By Counties; Mining Conditions; Map of State, Showing Districts; Columnar Formation, Analyses, Etc.

The coal fields of Washington are confined to the western and central portions of the state. Four large coal fields may be mentioned: The northern and southern Puget Sound coal fields, the Roslyn Basin, and the southwestern field of Lewis and Cowlitz counties. The boundaries of the coal fields of western Washington are more or less indefinite, owing to the thick mantle of glacial deposit in this part of the state.

The northern Puget Sound coal field includes the coal mines of Skagit and Whatcom counties, in the northwestern part of the state; the southern Puget Sound field is situated in King and Pierce counties, and includes that portion of the Puget Sound Basin directly east of the cities of Seattle and Tacoma. Coal is mined in many different parts of this area, and in point of production this is the most important field of the state. Districts included in this field are the Wilkinson-Carbonado in Pierce county, and the Green River, Renton-Cedar River and Newcastle-Issaquah districts of King county. In some parts of the southern Puget Sound field over 100 coal seams may be found of thickness and quality sufficient to attract the attention of a prospector, and the workable beds in a single district may vary from five to ten in number. The Roslyn coal field is situated in Kittitas county, near the center of the state, and on the eastern slope of the Cascade Mountains. The outlines of this basin are quite definitely determined.

As far as known the coal formations of Washington are of Eocene age. The rocks associated with the coal beds are very rich in fossil plants, and the study of this flora quite definitely determines the age as Eocene. The similarity between the fossil plants found in the rocks of the Puget formation in the western coal fields and those occurring in the Roslyn formation east of the Cascade Mountains affords a basis for a correlation of the two coal-bearing formations as of approximately the same age. The Puget formation doubtless presents a longer epoch of time, as shown both by the variation in its flora at different horizons and by the much greater thickness of sediments as compared with the Roslyn formation.

The coals of Washington range from lignite to bituminous coking to anthracite. Even within the principal field the variations in composition of the coal are considerable, the moisture ranging from less than 1% to over 13%, and the fixed carbon from about 40% to 60%. The amount of ash in the coal as shipped is commonly large, ranging from 2% to 14% in the product of the same mine, and even reaching 18% in the marketable coal. The sulphur content of Washington coals is quite uniformly low.

The market for Washington coal lies chiefly in the three Pacific states. San Francisco furnishes the largest market, while the railroads of the northwest consume large quantities of the steam coals of this state. The local markets of Washington and adjoining states constitute the third important demand for these coals. The coke manufactured in Washington is of high grade and is consumed by smelters at Tacoma, Everett and Northport, and in California.

The railroads entering the coal fields of the state are: Northern Pacific; Great Northern; Chicago, Milwaukee & St. Paul; Pacific Coast; Eastern Railroad & Lumber Company; Tacoma Eastern; Centralia Eastern; Columbia & Puget Sound, and Oregon-Washington Railroad & Navigation Company.

The annual production of coal in Washington is in the neighborhood of 4,000,000 tons, coming from the following counties, named in order of importance: Kittitas, King, Pierce, Thurston, Lewis and Whatcom. Because of the multiplicity of seams, and the absence of correlation in some of the districts, the discussion of Washington coals will be by counties.

KITTITAS COUNTY

The coal areas of Kittitas county lie on the eastern slope of the Cascade Mountains, under the western edge of the Columbia Lava Plateau, at elevations ranging from 2,000 to 4,500 feet. They are found in the Yakima River basin in the northwestern part of the county, including the upper part of the Yakima River valley, together with the valleys of several of its larger tributaries, from which the different fields are named. They occupy only a small portion of the total area of the county. Practically all of the coal shipped up to date is mined from the Roslyn-Clealum field, covering an area of about 10,000 acres. The most important supply of coal is found in the upper part of the Roslyn formation, which consists of a series of sandstones and shales.

Nearly all of the coal mined comes from the Roslyn seam. A cross section taken at the Roslyn shaft of the upper 620 feet of the productive coal measures shows six beds of coal above the Roslyn bed, only one of which, known as the "Big Dirty," about 210 feet above the Roslyn, is now being worked. A total of eleven beds are shown in the section, the combined thickness of which is 47 feet, of which the Roslyn bed furnishes the highest grade coal in the field, and is so easily worked that very little has been done in opening up other beds.

*The information here presented on Washington coals has been gathered from the 22nd Annual Report, Part 3, U. S. G. S.; Bulletin No. 474, U. S. G. S., "Coals of the State of Washington," by E. Eggleston Smith; Bulletin No. 9, Washington Geological Survey, "The Coal Fields of Pierce County," by Joseph Daniels; Bulletin No. 10, Washington Geological Survey, "The Coal Fields of Kittitas County," by Edwin J. Saunders.

When the Roslyn bed is exhausted these other beds will undoubtedly be used more than at present.

The Roslyn seam, which is everywhere bituminous, changes considerably in character and quality from the eastern, or Clealum, end to the western, or Jonesville, end of the field. Near Clealum the coal is banded or laminated and breaks with a splintery fracture. At Jonesville the coal is denser and less banded, and breaks with a somewhat irregular cubical fracture. It is also more jointed and friable than at the east end. The amount of ash at Clealum runs slightly higher than at Jonesville, and the heating value slightly lower. The coal at the west end makes a fairly good coke, while that at the east will scarcely coke at all. None of it, however, is manufactured directly into coke, except as the by-product in the manufacture of illuminating gas. In other words, the coal has undergone further changes at Jonesville than at Clealum. Roslyn coal is well adapted for steam raising and gas making, and the coal is extensively used in gas plants. It is an excellent fuel for locomotives, and over one-half of the production is used for this purpose. The clean character of the coal, its high percentage of lump, and its low moisture content makes it well fitted for shipment, as it does not crumble readily during transportation or storage. No preparation is necessary for market beyond the separation of the thicker partings and the sulphur balls in the mine and the picking of the lump coal at the tippie. Naval tests have shown that Roslyn coal ignites quickly, combustion being rapid and thorough and the coal swelling on the surface of the fire. Considerable soot is produced, however, in the burning, and very little of the coal is used in steamship trade.

The normal thickness of the Roslyn seam is 4 feet 6 inches, made up of an upper bench of coal 29 inches thick, a parting of coal and shale 4 to 6 inches, and a lower bench 20 inches thick. The dip

varies in different parts of the field from 10 degrees to 30 degrees, gradually flattening in the deeper mines as the synclinal axis is approached and varying in any one mine through the limits indicated. Throughout the entire field variations of lesser extent are found. These are locally known as "faults," but are really warpings or small rolls which have thinned and thickened the coal, and have changed the angle of dip as well as the direction of levels and slopes within the affected areas. Only one true fault has been found in the field. Mining conditions on the whole are very favorable and the cost of production of Roslyn seam coal is the lowest in the state.

The second bed of any importance in this field is known as the "Big Dirty" from the fact that the total thickness of the bed is 15 to 19 feet, though it contains only 5 to 6 feet of workable coal, located in the lower part of the seam. Lying about 200 feet above the Roslyn, it has been eroded in many sections where the Roslyn bed is still present. The sections of the "Big Dirty" show two distinct benches of fairly good coal, separated by a narrow clay band in the lower part of the coal seam. Above these are bands of shale, carbonaceous shale and bony coal solid enough to make a fairly good roof above the workable coal.

Of the beds below the Roslyn the only one that has been worked to any extent is a 4-foot bed known as the Lakedale or Wright bed, about 400 feet below the Roslyn.

GENERAL ANALYSIS

	Roslyn Seam Clealum	Roslyn Seam Roslyn	Big Dirty	Lakedale
Moisture	8.00	3.70	0.93	4.45
Volatile Matter . .	34.60	34.30	39.60	29.52
Fixed Carbon . . .	41.70	48.60	44.36	44.55
Ash	12.70	13.40	15.11	21.48
Sulphur	0.45	0.30	0.42	0.35
B. T. U.	11,410	12,250	13,000	11,219

KING COUNTY

The extent of the coal fields of King county is not well known. The surface is covered by dense timber and undergrowth, and by gravel and glacial drift, so that it is very difficult to trace the outcrops of the formations, and the character of the rocks is so variable and the quality of the coal so different within short distances that it is almost impossible to correlate coal beds on these criteria. Variations in the quality of the coal from subbituminous to bituminous are regional rather than local, except where the beds have been altered by volcanic action. No coal bed so far as known can be said to be subbituminous in one part of the field and bituminous in another part. Both bituminous and subbituminous beds are constant in character within the fields in which they are known to occur, but variations in the character of coal of adjoining fields believed to be closely associated are often very marked.

The coal measures dip from 20 to 40 degrees in the Newcastle-Issaquah district, while at other places they approach a horizontal position. At many mines coal is available from more than one

seam, and at Bayne sixteen beds of coal and carbonaceous material, appearing in descending order, are reported. Seven of these beds have been developed at different times.

The subbituminous coal of King county is usually of a grayish black color, banded, and has a splintery to conchoidal fracture. It slacks slightly when exposed to the direct rays of the sun, but does not contain enough moisture to cause it to weather when shipped in closed cars.

The coal of the McKay bed is a pitch black bituminous, has a dark brown streak, and breaks in an irregular and slightly conchoidal fracture. The coal contains a small amount of moisture and does not slack when exposed to the sun. This bed yields a non-coking bituminous coal which compares very favorably with the better grades of bituminous coal abounding in the eastern states.

Lying above the McKay bed, and separated from it by from 10 to 90 feet of shale and sandstone, is the "Little" or "Upper McKay" seam. The coal from the upper seam may be readily distinguished

from the McKay coal by its slightly banded texture. It contains about the same amount of moisture as the McKay, and does not slack when exposed to the sun, but its ash content is somewhat higher. Like the McKay, it is a non-coking bituminous coal of good quality.

Gas is present in many of the mines of this county. In the mines of Black Diamond it is so abundant as to necessitate the use of safety lamps in all the workings. It occurs in small quantities in the subbituminous coal at Coal Creek, and chiefly

in the bituminous coal nearer the main crest of the Cascade Mountains.

GENERAL ANALYSIS

	Subbituminous	McKay	Upper McKay
Moisture	14.25	6.30	7.30
Volatile Matter . .	32.50	40.50	37.30
Fixed Carbon . .	42.25	48.60	44.80
Ash	11.00	4.60	10.60
Sulphur	0.60	1.00	0.50
B. T. U.	10,000	12,600	11,600

PIERCE COUNTY

The coal fields of Pierce county occupy a relatively small portion of the areal extent of the county. The sedimentary rocks which make up the coal bearing series of this field are sandstones, shales and the intermediate phases of transitional sandy shales and shaly sandstones of Eocene age. No conglomerates have been found within the areas already examined.

The name Puget formation was early given to the coal bearing measures of western Washington by C. A. White. The thickness of the Puget group represented in Pierce county is undoubtedly much greater than 10,000 feet. Associated with the members of this group, within the borders of the coal field, are the Tertiary volcanic rocks which make up the foothills of the Cascades on the eastern boundary and which also define the western limit of the field south of the Carbon River to the Nisqually. The coal field is seen to occupy a relatively narrow belt trending north and south between these larger bodies of eruptives. These lavas are andesites, and in the area under discussion appear to be related to the pyroxene-andesites of Mount Rainier. Within the narrow belt of sedimentaries small igneous masses are encountered as flows and dikes. These have been developed in the underground workings at South Willis, Wilkeson, Carbonado, Melmont and Fairfax, with the greater preponderance of disturbance in the southern mines. The presence of these dikes and flows has had a marked effect in altering the character as well as the structure of the coal beds. All the evidence points to the conclusion that the greater masses of lava and the small intrusions are later than the deposition and folding of the Eocene sedimentaries.

Within the Puget group Willis made three local subdivisions, which may be summarized according to the order of their economic importance into (1) the Carbondale formation, which consists of the lower and most important seams; (2) the Wilkeson formation, which is practically barren; and (3) the Burnett formation, made up of the uppermost beds exposed in the Pierce county area and having within it commercial beds of coal of a quality not so high as those of the lower productive formation.

The Carbonado formation, which contains the principal producing mines, is the most interesting and complicated from a structural standpoint.

Practically the entire tonnage of Pierce county comes from the seams in this formation, and this means that the greatest mine development is to be found here. The coal seams already named occupy places throughout the entire length of the known local stratigraphic column, but the most important development is in the Carbonado formation.

The complex folding and faulting, the marked variation in rock interval between seams, the differences in the character of the strata and the seams themselves, as well as the fact that the mine workings are largely isolated from each other, have made difficult the exact correlation of the seams in the Carbonado formation. Some identifications are readily made; others are more difficult, and not until more data is obtained can the entire correlation said to be final and exact.

All the Pierce county coal is bituminous, but the composition varies between wide limits in the same seam, and between associated seams as well as seams in the different formations represented. Some anthracite has been found, but as it represents local metamorphism near the contacts with igneous dikes it will not be further considered.

The seams of the Burnett formation are adapted to steam generation, but are not suitable for gas or coke manufacture; the better seams in the Carbonado formation excel in gas and coking properties, while the other washed products are good domestic and steam coals; and the formation below the Carbonado is best suited for coking coals. Some blacksmith coal is prepared from the lower seams.

The coking industry has been carried on extensively since 1884 in Pierce county. Practically all of the coke is made from washed coal and no mine-run is used today, although in earlier days in the northern field this was attempted without success. The percentage of ash is higher than in eastern coke, ranging from 16 per cent upward, but sulphur and phosphorus are low. The coke made is firm, strong and heavy, and is suitable for foundry and smelter purposes. At the present time this coke is mainly used at the Tacoma smelter, some is shipped to the California smelters, and some to the Granby smelter in British Columbia.

The Pierce county coal meets the requirements of a metallurgical coke, and while at present it is largely used in copper and lead smelting and in foundry work, there seems little doubt that it will be satisfactory coke for the manufacture of iron in blast furnaces.

The principal market for Pierce county coal is in western Washington, both for local consumption and for the steamship trade. Some coal is shipped

to Oregon and Alaska. Very little coal, if any, is sold east of the Cascades.

GENERAL ANALYSIS

	High Volatile Carbonado	Medium Volatile Carbonado
Moisture	3.80	3.80
Volatile Matter	36.00	29.30
Fixed Carbon	51.20	49.90
Ash	9.00	17.00
Sulphur	0.50	0.50
B. T. U.	13,400	11,500

THURSTON COUNTY

The coals of Thurston county are either subbituminous or are on the border between subbituminous and lignite. All the mines worked at present are in the southern part of the county between Tenino and Centralia. The relief of the region is low and the outcrops are obscured by gravel, soil and dense undergrowth. The geology of the coal bearing beds has not been worked out and their extent and relation to each other is not known. The dips of the bed are generally very low. The subbituminous coal is commonly black in color with a slightly banded texture and breaks with a conchoidal fracture. Because of its high

moisture content the coal weathers very readily when exposed to the sun, but it will stand transportation some distances when shipped in closed cars. This coal has been successfully used in locomotives, after equipping them with specially designed fire-boxes.

GENERAL ANALYSIS

Moisture	20.50
Volatile Matter	32.00
Fixed Carbon	37.50
Ash	10.00
Sulphur	1.00
B. T. U.	8,650

LEWIS COUNTY

Lewis county contains a wide variety of coals obtained from three fields: first, the semianthracite field on the head waters of the Cowlitz River; second, the bituminous field at Ladd; and third, the subbituminous field near Centralia and Chehalis. The geologic relation of these fields to one another has not been determined, except that the coal bearing rocks in all three fields belong to the Puget formation of the Tertiary system.

Anthracite coal is mined from the Primrose bed, which at places is about 20 feet in thickness between the hanging and foot walls, although there is interspersed in the seam thin layers of bone, graphitic shale and black shale to such an extent that only a small proportion of the seam can be depended upon to yield a fuel pure enough to be of any commercial value. The coal is very bright, pitch black, large and massive, and dense, and breaks with a conchoidal fracture.

Semianthracite and semibituminous grades of coal are likewise found in the Primrose bed. This coal burns in an open fire with a short blue flame and in general leaves a large amount of ash. The percentage of volatile matter in the coal on Summit Creek is somewhat higher than in the average Pennsylvania anthracite, but lower than that of the semianthracite coals of Sullivan county, Pennsylvania. The Primrose seam usually has a steep pitch and is overturned on Summit Creek.

Because of the large amount of impurity in this bed it is necessary that separation of these from the coal be made before being shipped.

A good grade of bituminous coal is found at Ladd in beds which dip about 40 degrees to the southwest. The coal from No. 2 bed, while high in ash, produces coke of a fairly good quality. The coal from No. 3 bed has a higher specific gravity than that from bed No. 2, but is not nearly so bright or well-jointed. The coal from both seams is considered fairly good for railroad and domestic uses.

Subbituminous coal is mined at Mendota, where several seams are exposed. This coal is grayish black in color and slacks readily upon exposure to the air, due to the large amount of moisture it contains. Irregular lengths of a soft cannel-like coal occur in this locality. The percentage of volatile matter in them is very high, for large pieces can easily be ignited in the hand with a match, burning with a long, smoky, yellow flame.

GENERAL ANALYSIS

	Semianthracite	Bituminous	Subbituminous
Moisture	3.75	7.30	29.00
Volatile Matter	8.30	30.60	34.00
Fixed Carbon	58.75	42.10	29.00
Ash	29.20	20.00	8.00
Sulphur	0.80	0.80	0.95
B. T. U.	10,100	10,260	7,770

WHATCOM COUNTY

The coals of Whatcom county have been mined in the vicinity of Lake Whatcom for many years. The only mine of commercial importance at the present time is at Park, near the shore of Lake Whatcom. The coal has a fixed carbon content equal to that of any of the high grade bituminous coals of the state and a small amount of ash and moisture. Unless it is too badly jointed, it should hold well in transportation to market. Anthracite coal occurs in Whatcom county. The seams cannot

be traced continuously for any great distance, although they outcrop here and there.

GENERAL ANALYSIS

	Bituminous
Moisture	0.30
Volatile Matter	22.30
Fixed Carbon	62.50
Ash	14.90
Sulphur	0.15

PREPARATION OF COAL

The coal has heretofore been graded as follows: lump, over a 2-inch screen; nut, 2 in. to $\frac{5}{8}$ or $\frac{3}{4}$ in.; pea, $\frac{5}{8}$ or $\frac{3}{4}$ in. to $\frac{1}{8}$ in.; mine-run includes all but the lump. With few exceptions, all the coal under 2 in. in size needs washing, and all over that size requires handpicking to eliminate the rock and heavy bone.

The preparation of Washington coals show a wide range in the equipment used, depending upon the mining conditions. We cite methods of preparation commonly found in the Roslyn field, where conditions are very favorable, and also that practiced in Pierce county, where the seams are steeply pitching.

Coal Preparation in the Roslyn Field*

Coal from the Roslyn seam is ordinarily clean as it comes from the mine. The center bands of shale are removed in the mining and any cap rock is gobbled in the rooms. The upper and lower benches break in good sized lumps and the percentage of fine coal is low. Any sulphur balls are eliminated in the mine. The result is a coal which requires little further preparation except screening. The Roslyn Fuel Company is now washing some of the coal from its mines.

Coal mined by the Northwestern Improvement Company is used in the locomotives of the Northern Pacific Railway, and is not even screened before loading into the cars. The other companies in the field sell the coal for steam, gas and domestic purposes, and screen the coal before shipping, but that is the only preparation necessary. The usual sizes marketed are run-of-mine, lump, steam and egg coal, but the screen sizes of these market grades vary with the different operators.

The mine cars are unloaded at the tipples by one of three types of car dump—the simple push-back or horn dump, the crossover, or the rotary type. Gravity screens are in general use; only one mine employs shaking screens. Rock and waste which come to the tipple are dumped into rock chutes and bins and loaded into side-dump cars which are hoisted by motor-driven drum rope over a bull-wheel to the top of the rock pile, where the cars are automatically discharged by a tripper, or else the waste is hauled away in cars and used for grading around the tipple.

Coal Preparation in Pierce County†

Those who are familiar with the methods of mining the pitching seams of Pierce county know that everything in the chutes and breasts goes to

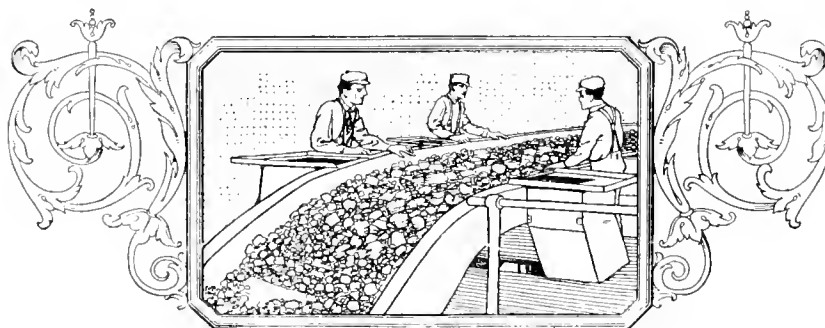
the washer, including all of the bands rejected in the usual method of sampling, together with the cap and bottom rock, which cannot be handled except by sending it with the mine-run. In many cases all of this material goes directly to the washers without preliminary hand picking. The greater part of the non-carbonaceous material is removed by washing, but a large part of the original ash content of the seam proper cannot be removed because the coal itself is high in original ash and in secondary ash, due to the accumulation of fine silt that was intimately mixed with the vegetal matter at the time of deposition of the coal beds. The coal washing process is essentially the removal of the thicker bands in the coal seams and the elimination of the foreign material obtained in mining. The problem of reduction of ash in the coal itself is a second phase of the entire question.

The refuse in coals from the eastern states will run as low as 6 per cent; in Washington the figures are from 15 to 20 per cent, with many single operations showing refuse in even greater quantities. The problem of removing the heavier shale and sandstone from the coal is simpler than the problem of getting a low ash product from the coal and bony coal. Separation at 1.7 specific gravity will eliminate all rock, but will leave the bone and bony coal, which is high in ash. In order to get ash low enough to pass commercial requirements the coals must generally be separated at 1.5 specific gravity. These figures are general, and only float-and-sink tests on the various sizes from the individual seams will determine the proper washing point. The separation problem is further complicated by the practice of mixing coal from seams having widely differing washing properties.

Tests indicate that the finer sizes of Pierce county coal show a lower percentage of ash than the coarser sizes. This is highly important from the standpoint of a coking coal, but it does not solve the problem of domestic and steam coals, which must be of larger size and which, therefore, have correspondingly greater natural ash content.

Practice in washing coal varies widely in details. In general, the mine-run is screened and the larger sizes handpicked and shipped as lump. The finer sizes are sent to tub washers, or to jigs, or these may be combined so that the tub product goes to jigs. It will be noted that all of the Pierce county coal is washed.

*Bulletin No. 9. Washington Geological Survey.
†Bulletin No. 10. Washington Geological Survey.



Analyses of Washington Seams by Counties and Localities

(ALL ANALYSES MADE ON MINE SAMPLES "AS RECEIVED")

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	In-determined B. T. U.	Carbon	Oxygen	RATIOS	
											Carbon	F. C.
											0.87 + Ash	V. M.
†	Cowlitz, 12 mi. w. of Kelso.	Prospect.	22.22	33.30	27.11	17.37	4.03	.....	.....	.....	.....	0.81
†	Cowlitz, 12 mi. w. of Kelso.	Prospect.	15.24	36.28	29.54	18.94	4.39	.....	.....	.....	.....	0.81
†	Clallam, 6 mi. e. of Clallam.	Clallam.	11.2	40.0	36.2	12.57	5.10	10.490	56.70	18.76	1.81	0.91
†	Clallam, 4 mi. e. of Clallam.	Fuca.	11.24	39.99	36.20	12.57	5.10	10.487	56.70	18.76	1.81	0.91
†	Pierce, Ashford.	Machel.	4.0	22.0	36.0	38.04	0.68	8.410	46.95	9.37	0.99	1.64
†	King, near Barneston.	.....	14.0	5.5	51.7	28.8	0.45	8.010	.....	.....	.....	0.94
†	King, 1 mi. s. of Payne.	Eureka.	5.9	31.3	43.9	18.92	0.47	10.940	60.35	14.05	1.83	1.40
†	Pierce, Carbonado.	Carbon Hill.	4.6	29.1	50.3	16.0	0.45	12.130	67.18	9.35	2.65	1.73
†	King, Cumberland.	Naval.	4.8	35.6	47.4	12.16	0.52	12.190	66.81	13.51	2.60	1.33
†	King, 1 mi. s. of Cumberland.	Independent.	6.0	29.7	40.8	23.5	0.65	10.050	.....	.....	.....	1.37
†	King, Danville.	Danville.	18.1	32.6	41.3	8.0	0.51	9.810	.....	.....	.....	1.27
†	Kittitas, 1½ mi. n. w. of Beekman.	Prospect.	5.3	27.5	42.6	24.6	0.38	10.550	.....	.....	.....	1.55
†	Kittitas, 1 mi. n. w. of Beekman.	Lakedale.	4.5	29.5	44.5	21.48	0.35	11.220	61.45	10.52	1.92	1.51
†	Kittitas, ½ mi. n. e. of Clealum.	Roslyn No. 7.	5.0	36.1	46.8	12.15	0.36	11.900	66.00	14.60	2.47	1.30
†	Kittitas, 25 mi. w. of Ellensburg.	Manastash.	10.42	30.33	36.43	22.82	1.13	8.978	.....	.....	.....	1.20
†	Kittitas, Ronald.	Roslyn No. 3.	3.1	35.6	49.9	11.37	0.40	12.860	70.29	10.87	3.16	1.40
†	Lewis, Chehalis.	Superior No. 2.	30.5	34.9	29.6	4.95	1.25	7.930	45.48	40.68	1.00	0.85
†	Lewis, 1 mi. n. of Chehalis.	Superior No. 1.	27.2	33.8	28.1	10.92	0.33	7.570	43.88	37.80	0.90	0.83
†	Lewis, 1 mi. n. e. of Chehalis.	Twin City.	30.6	31.8	27.9	9.74	0.27	7.230	41.82	40.88	0.83	0.88
†	Lewis, 2 mi. e. of Chehalis.	Chehalis.	29.1	34.7	28.5	7.67	1.77	7.940	45.28	37.85	1.00	0.82
†	Lewis, 3 mi. e. of Chehalis.	Sheldon.	29.9	34.0	30.4	5.75	0.58	7.930	45.50	40.34	0.99	0.89
†	Lewis, 4 mi. n. w. of Littell.	Crescent.	32.1	31.9	27.3	8.7	2.97	7.140	.....	.....	.....	0.86
†	Lewis, near Ladd and Glenavon.	Luthkens.	8.5	27.3	44.8	19.4	0.27	10.500	.....	.....	.....	1.64
†	Lewis, Kopiah.	Monarch.	27.82	33.66	29.74	8.78	0.39	7.942	45.34	37.33	0.98	0.88
†	Lewis, Mendota.	Mendota.	20.5	33.5	33.7	12.31	1.28	8.690	48.91	30.44	1.14	1.01
†	Lewis, 4 mi. n. of Morton.	.....	11.84	8.40	57.30	22.46	0.79	9.691	.....	.....	.....	6.82
†	Pierce, Pittsburg.	Pittsburg.	7.79	31.27	40.53	30.41	0.40	10.274	57.19	15.32	1.25	1.25
†	Pierce, Pittsburg.	Black Carbon.	5.08	32.82	39.14	22.96	0.54	10.442	57.33	12.71	1.61	1.19
†	Pierce, Fairfax.	Fairfax.	3.3	21.0	63.0	12.72	0.68	13.050	73.14	6.68	3.77	3.00
†	King, Franklin.	Gem.	7.30	34.00	47.90	10.80	0.53	11.430	63.53	18.07	2.19	1.41
†	King, Black Diamond.	No. 14.	7.40	39.50	49.00	4.10	1.28	12.500	68.25	18.92	2.96	1.24
†	King, Black Diamond.	Morgan.	7.4	39.3	49.2	4.07	1.28	12.500	68.25	18.92	2.97	1.25
†	King, 1 mi. n. w. of Black Diamond.	Lawson.	6.8	40.0	47.9	5.34	1.35	12.330	67.67	17.99	2.90	1.20
†	King, 1 mi. n. e. of Black Diamond.	Gem.	4.90	42.00	48.60	4.50	0.47	13.140	72.41	15.18	3.68	1.16
†	King, Franklin.	King, Franklin.	6.1	39.2	51.3	3.44	0.48	13.230	72.72	15.76	3.79	1.31
†	King, Issaquah.	Issaquah.	17.9	29.8	43.8	9.3	0.35	9.810	.....	.....	.....	1.47
†	King, 3 mi. n. of Issaquah.	King, 3 mi. n. of Issaquah.	17.5	31.2	38.5	12.77	0.37	9.330	52.11	27.82	1.28	1.23
†	King, Ravensdale.	McKay.	13.7	28.0	36.4	21.9	0.58	8.480	.....	.....	.....	1.30
†	King, Ravensdale.	McKay.	11.7	34.7	38.0	5.64	0.36	11.400	64.04	22.09	2.31	1.38
†	King, Ravensdale.	McKay.	11.15	39.72	45.13	4.00	0.52	11.768	65.89	21.78	2.56	1.14
†	King, Black Diamond.	No. 14.	7.98	37.69	45.95	8.38	0.45	11.732	64.79	19.09	2.36	1.22
†	King, 1 mi. n. e. of Black Diamond.	Lawson.	6.1	36.2	43.5	14.90	0.56	11.410	62.38	16.10	2.01	1.20
†	King, 1 mi. n. w. of Black Diamond.	Morgan.	7.77	37.97	45.10	9.16	0.44	11.673	61.07	19.17	2.24	1.19
†	King, 1½ mi. s. w. of Issaquah.	Superior.	12.80	28.50	43.60	15.11	0.68	10.120	55.68	21.86	1.51	1.54
†	Pierce, Ashford.	.....	5.81	15.28	54.68	24.23	0.41	10.408	.....	.....	.....	3.58

•Bull. Bureau of Mines †United States Geological Survey Reports ‡State Geological Survey Reports (Continued on Next Page) COAL ANALYSES

ANALYSES OF WASHINGTON SEAMS BY COUNTIES AND LOCALITIES—Continued

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carbon	Oxygen	RATIOS
											Carbon Oxy. + Ash. V. M.
*Montezuma.....	Pierce, 2 mi. s. of Fairfax.	Melmont.....	3.57	20.60	41.93	33.90	0.55	6,219	63.00	11.54	2.04
*Muldoon.....	Pierce, Melmont.	Ford.....	7.05	20.46	53.73	18.76	0.34	11,344	63.00	11.54	2.04
*No. 1.....	King, Bayne.	Bayne.....	14.33	31.54	42.38	11.75	0.44	9,965	56.12	24.60	1.54
*No. 1 (Coking).....	King, 1/2 mi. n. e. of Bayne.	Carbon.....	8.7	30.2	42.1	19.03	0.48	10,380	57.31	16.88	1.68
*No. 1.....	Pierce, Carbonado.	Carbon Hill.....	4.2	32.4	52.3	11.13	0.45	12,570	69.00	12.76	2.89
*No. 1.....	Pierce, Carbonado.	Carbon Hill.....	3.38	32.21	50.77	11.33	3.22	12,037	65.62	6.16	2.68
*No. 1.....	King, Coal Creek.	Bagley.....	12.05	36.82	40.72	14.88	0.45	12,247	67.24	10.10	2.69
*No. 1.....	King, 1 mi. s. e. of Cumberland.	Sunset.....	12.73	31.06	43.73	12.48	0.34	10,414	58.15	23.98	1.41
*No. 1.....	Pierce, 1 mi. s. of Fairfax.	Montezuma.....	5.68	19.22	62.37	12.73	0.97	12,643	.....	.....	.....
*No. 1.....	King, Grand Ridge.	Grand Ridge.....	14.23	30.29	43.82	11.66	0.36	10,040	56.70	24.45	1.57
*No. 1.....	King, Kummer.	Kummer.....	14.15	29.87	47.06	8.92	0.43	10,435	58.39	25.14	1.71
*No. 1.....	King, Kummer.	Kummer.....	12.4	30.4	34.8	22.4	0.59	8,510	.....	.....	.....
*No. 1.....	Pierce, Melmont.	Melmont.....	9.20	9.37	63.73	17.10	0.66	11,128	.....	.....	6.80
*No. 1.....	King, New Castle.	Coal Creek.....	12.05	36.82	40.72	10.41	0.34	10,414	.....	.....	1.11
*No. 1.....	King, Renton.	Denny-Renton.....	16.3	32.1	39.4	12.16	0.48	9,410	53.58	26.68	1.23
*No. 1.....	Pierce, Wilkeson.	Gale Creek.....	5.49	36.40	50.05	8.06	0.80	13,023	71.24	12.29	3.50
*No. 2.....	King, Bayne.	Occidental.....	5.4	33.0	47.1	14.51	0.70	11,590	64.12	14.19	2.23
*No. 2.....	King, 1/2 mi. n. e. of Bayne.	Carbon.....	5.1	30.8	56.0	8.10	0.36	12,850	72.48	12.73	3.48
*No. 2.....	Pierce, Burnett.	Burnett.....	3.7	36.0	52.2	8.13	0.76	13,570	73.89	9.66	4.15
*No. 2.....	Pierce, Carbonado.	Carbon Hill.....	3.84	27.05	53.74	15.37	0.39	12,334	68.20	9.03	2.79
*No. 2.....	King, Coal Creek.	Bagley.....	9.3	39.9	36.8	14.00	3.82	10,620	57.85	17.47	1.84
*No. 2.....	King, Coal Creek.	Bagley.....	12.32	36.76	39.76	11.16	0.89	10,325	57.75	23.22	1.68
*No. 2.....	King, 1 mi. s. e. of Cumberland.	Sunset.....	4.5	34.1	39.6	21.77	0.77	10,730	59.23	12.41	1.73
*No. 2.....	Pierce, 1 mi. s. of Fairfax.	Fairfax.....	3.03	18.09	56.15	22.73	0.71	11,245	.....	.....	3.10
*No. 2.....	King, Grand Ridge.	Grand Ridge.....	13.80	32.50	36.00	17.70	0.49	9,135	51.24	23.98	1.23
*No. 2.....	King, 3 mi. e. of Issaquah.	Grand Ridge.....	13.8	32.4	36.1	17.70	0.49	5,075	51.24	23.98	1.23
*No. 2.....	Lewis, Ladd.	East Creek Ladd.....	4.1	26.9	51.7	17.31	1.26	11,860	66.51	8.74	2.55
*No. 2.....	Pierce, Ladd.	Ladd.....	10.70	26.85	47.10	16.35	0.84	10,561	.....	.....	1.82
*No. 2.....	Pierce, Melmont.	Me. Imont.....	5.6	12.0	63.9	18.5	0.38	11,600	.....	.....	5.32
*No. 2.....	King, Renton.	Renton.....	14.5	31.8	38.8	14.85	0.68	9,330	53.24	24.45	1.35
*No. 2.....	King, Taylor.	Denny-Renton.....	6.37	36.68	41.47	15.48	1.33	11,144	.....	.....	1.13
*No. 2.....	Pierce, Wilkeson.	Gale Creek.....	3.9	35.0	55.1	5.98	0.96	13,740	74.97	10.51	4.55
*No. 2.....	Pierce, Wilkeson.	Wilkeson.....	3.69	27.08	56.63	12.60	0.45	12,978	72.54	7.14	3.67
*No. 3.....	King, Bayne.	Occidental.....	5.06	34.39	48.90	11.65	1.18	12,069	66.72	14.15	2.59
*No. 3.....	Pierce, Burnett.	Burnett.....	3.2	35.0	49.3	12.46	0.38	12,720	70.74	9.17	3.27
*No. 3 (Coking).....	Pierce, Carbonado.	Carbon Hill.....	4.2	30.0	52.4	13.44	0.30	12,660	70.13	9.15	3.10
*No. 3.....	King, Coal Creek.	Ford.....	14.45	32.53	45.65	7.37	0.42	10,420	59.60	25.68	1.80
*No. 3.....	King, 1 mi. s. e. of Cumberland.	Sunset.....	5.56	34.40	45.03	15.01	2.41	11,684	63.79	12.70	2.30
*No. 3.....	Pierce, Fairfax.	Fairfax.....	1.9	23.3	64.5	10.31	0.53	13,720	77.18	4.85	5.09
*No. 3.....	Pierce, 1 mi. s. of Fairfax.	Montezuma.....	3.95	18.13	58.51	19.41	0.49	11,815	.....	.....	3.23
*No. 3.....	King, 3 mi. e. of Grand Ridge.	Grand Ridge.....	15.92	36.04	38.47	9.57	0.49	9,967	.....	.....	1.07
*No. 3.....	Lewis, Ladd.	East Creek Ladd.....	7.23	34.35	37.81	20.61	0.53	10,109	.....	.....	1.10
*No. 3.....	Pierce, Melmont.	Melmont.....	3.66	23.58	59.29	13.47	0.35	12,751	71.61	7.88	3.35
*No. 3 (Cannel).....	Lewis, Mendota.	Mendota No. 1.....	7.88	61.57	15.11	15.44	0.29	11,920	58.92	18.12	2.51
*No. 3.....	King, Ravensdale.	Ravensdale No. 1.....	9.00	35.36	43.47	12.17	0.95	11,150	61.90	18.21	2.04
*No. 3.....	King, Renton.	Renton.....	14.30	33.03	41.30	11.37	0.72	10,208	57.27	23.74	1.63
*No. 3.....	King, 1 1/2 mi. s. w. of Shouqualmie.	Niblock.....	8.23	27.18	53.90	10.69	0.47	12,442	69.24	12.14	3.03
*No. 3.....	King, Taylor.	Denny-Renton.....	4.94	36.12	34.04	24.90	1.92	10,003	.....	.....	0.94
*No. 3.....	Pierce, Wilkeson.	Wilkeson.....	5.34	20.44	59.27	14.95	0.45	12,299	69.79	8.38	2.99
*No. 3.....	Pierce, Wilkeson.	Wilkeson.....	2.5	27.7	61.3	8.53	0.42	13,890	76.94	6.83	5.00

*Bull. Bureau of Mines.

(Continued on Next Page)

COAL CATALOG

ANALYSES OF WASHINGTON SEAMS BY COUNTIES AND LOCALITIES—Continued

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carbon	Oxygen	RATIOS
											Carbon F. C. Oxy. + Ash V. M.
*No. 4	Pierce, Carbonado.	Carbon Hill.	3.19	34.84	51.54	10.43	0.32	13,212	72.54	9.34	3.67
*No. 4	King, Coal Creek.	Ford.	14.81	33.28	43.65	8.26	0.37	10,235	58.48	25.52	1.31
*No. 4	King, 1/4 mi. w. of Cumberland.	Naval.	5.47	32.30	41.20	21.03	0.69	10,822	59.49	12.14	1.79
*No. 4	Pierce, 1 mi. s. of Fairfax.	Montezuma.	2.55	21.04	65.62	10.79	0.56	13,419	...	...	3.12
*No. 4	King, 3 mi. e. of Grand Ridge.	Grand Ridge.	15.60	33.41	30.36	20.63	2.27	8,392	...	...	0.91
*No. 4	King, Issaquah.	Issaquah.	17.90	29.00	43.80	9.30	0.35	9,810	...	...	1.51
*No. 4	Lewis, Ladd.	East Creek Ladd.	8.57	32.56	34.38	24.49	0.85	9,241	...	...	1.06
*No. 4	King, Ravensdale.	Ravensdale No. 1.	7.42	37.42	43.92	11.24	0.51	11,498	63.91	17.19	1.18
*No. 4	King, 1 1/2 mi. s. w. of Snoqualmie.	Niblock.	6.09	22.69	58.81	12.41	0.88	10,710	...	...	2.59
*No. 4	King, Taylor.	Denny-Renton.	4.76	36.45	48.74	10.05	0.81	12,406	68.09	14.33	1.34
*No. 4	King, Taylor.	Denny-Renton.	6.2	34.2	41.4	18.23	0.69	10,890	60.12	14.60	1.83
*No. 5	King, Taylor.	Bayne.	5.06	33.82	42.69	18.43	0.63	11,063	60.12	14.25	1.84
*No. 5	King, Bayne.	Bayne.	12.1	31.3	43.6	13.02	0.46	9,840	56.76	23.19	1.57
*No. 5	Pierce, Carbonado.	Carbon Hill.	3.60	29.73	50.29	16.38	0.56	11,707	65.52	10.50	2.44
*No. 5	King, Issaquah.	Issaquah.	15.06	29.36	44.23	11.35	1.12	9,956	55.58	25.21	1.52
*No. 5	King, Ravensdale.	Ravensdale No. 1.	8.14	37.17	42.73	11.96	0.29	11,149	61.85	19.00	1.15
*No. 5	King, Ravensdale.	Ravensdale No. 1.	9.1	35.1	39.2	16.64	1.24	10,230	56.49	18.84	1.59
*No. 5	King, Ravensdale.	No. 1.	9.2	38.0	45.6	7.16	0.35	11,820	66.63	18.76	2.57
*No. 5	King, Ravensdale.	No. 1.	9.1	35.1	39.2	16.64	1.24	10,230	56.49	18.84	1.59
*No. 5	King, 1 1/2 mi. s. w. of Snoqualmie.	Niblock.	4.85	27.25	43.56	24.34	1.48	10,577	57.86	10.02	1.69
*No. 5	King, Taylor.	Denny-Renton.	5.4	24.5	31.6	38.5	0.51	7,660	...	...	1.29
*No. 5	King, Taylor.	Denny-Renton.	4.30	35.60	45.25	14.85	0.74	11,867	65.14	12.47	2.38
*No. 5	King, Bayne.	Denny-Renton.	5.55	31.80	40.85	21.80	0.50	10,409	57.00	14.49	1.57
*No. 6	Lewis, 12 mi. e. of Longmire.	Occidental.	4.20	10.50	51.20	34.05	0.48	8,885	53.61	7.91	1.28
*No. 6	King, Taylor.	Weikel.	5.6	35.9	44.1	14.38	0.94	11,550	63.91	14.33	2.23
*No. 6	King, Taylor.	Denny-Renton.	4.94	26.44	30.08	38.54	0.41	7,990	...	...	1.14
*No. 7	King, 1 mi. s. e. of Cumberland.	Sunset.	2.82	18.48	45.44	33.26	0.47	9,571	53.81	7.03	1.34
*No. 7	Pierce, Fairfax.	Fairfax.	16.45	34.63	36.38	12.54	0.38	9,581	...	...	1.05
*No. 7	King, 3 mi. e. of Grand Ridge.	Grand Ridge.	3.74	23.17	61.13	9.76	0.41	13,165	74.04	8.53	4.05
*No. 7	Pierce, Wilkeson.	Wilkeson.	7.32	29.00	51.76	15.50	0.52	12,130	67.37	9.40	2.71
*No. 9	Pierce, Carbonado.	Carbon Hill.	4.45	40.30	46.56	5.82	0.63	12,371	68.28	17.64	1.16
*No. 9	King, Ravensdale.	Ravensdale No. 1.	4.16	28.45	47.59	19.51	0.39	11,270	62.34	11.13	2.03
*No. 11	Pierce, Carbonado.	Carbon Hill.	4.16	33.14	45.47	17.23	0.38	...	...	...	1.37
*No. 14	King, Bayne.	Occidental.	4.0	35.2	48.7	12.09	0.49	12,340	67.50	12.67	2.73
*No. 14	King, Bayne.	Hudson.	4.4	25.0	37.3	33.3	0.58	8,950	...	...	1.49
*Pittsburg.	Pierce, Paimer Junction.	Black Carbon.	4.69	32.71	42.32	20.38	0.55	10,856	59.19	13.18	1.76
*Pocahontas.	King, 1 1/2 mi. e. of Bayne.	Big Six.	4.6	31.0	52.2	12.24	0.73	12,730	70.07	10.64	3.06
*Potlatch.	Lewis, 1 1/2 mi. n. e. of Centralia.	Richmond.	26.7	32.8	32.1	8.41	1.52	8,030	45.85	36.83	1.01
*Primrose.	Lewis, 3 mi. n. of Centralia.	Perth.	25.1	32.3	34.0	8.65	0.82	8,170	47.26	25.91	1.37
*Primrose.	Lewis, e. of Cowitz River.	...	7.4	4.8	52.0	35.8	0.74	8,200	...	...	10.8
*Primrose.	Lewis, Summit Creek.	...	5.1	8.6	36.6	49.7	1.00	5,980	...	...	4.26
*Primrose.	Lewis, Summit Creek.	...	3.7	7.3	47.8	41.16	0.70	7,990	47.64	6.99	6.55
*Primrose.	Lewis, Summit Creek.	...	3.6	8.4	59.6	23.40	0.66	10,050	60.00	6.78	1.71
*Primrose.	Lewis, Summit Creek.	...	2.7	7.1	79.5	10.67	0.62	13,350	79.22	4.69	5.16
*Queen.	Pierce, Wilkeson.	Gale Creek.	2.79	33.78	53.87	9.56	1.01	13,451	73.88	8.11	4.18
*Queen.	Pierce, Wilkeson.	Gale Creek.	3.60	33.30	51.20	11.90	0.90	13,030	...	...	1.54
*Roslyn.	King, 3 1/2 mi. e. of Ravensdale.	McIntyre.	10.5	35.2	42.4	11.93	0.35	10,700	59.74	21.50	1.79
*Roslyn.	Kittitas, Beckman.	Beckman.	3.5	38.4	48.3	9.8	0.41	13,220	...	...	1.26
*Roslyn.	Kittitas, Beckman.	Beckman.	1.37	33.21	49.48	12.94	0.35	12,324	69.83	9.86	3.06
*Roslyn.	Kittitas, 1 1/4 mi. n. w. of Beckman.	Beckman.	7.82	33.06	41.91	14.18	0.45	11,903	64.67	13.81	2.31
*Roslyn.	Kittitas, Cle Elum.	Cle Elum No. 2.	8.00	34.50	45.16	12.04	0.45	11,455	63.64	16.98	2.19
*Roslyn.	Kittitas, 1 mi. n. of Cle Elum.	Summit.	7.66	35.17	45.16	12.01	0.44	11,578	63.88	16.70	2.22

(Continued on Next Page)

*Bull. U. S. Geol. Surv. Geol. Surv. Reports

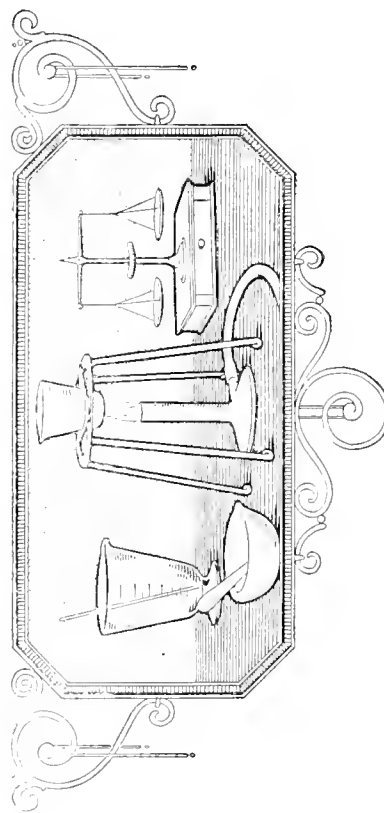
ANALYSES OF WASHINGTON SEAMS BY COUNTIES AND LOCALITIES—Continued

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carbon	Oxygen	VALUES	
											Carbon	F. C.
											85% + Ash	V. M.
Roslyn	Kittitas, Roslyn	Roslyn No. 1	3.89	37.00	46.49	12.62	0.37	12.434	68.55	11.57	2.83	1.26
Roslyn	Kittitas, Roslyn	Roslyn No. 2	4.7	36.0	46.8	12.46	0.38	12.240	66.86	12.09	2.62	1.30
Roslyn	Kittitas, Roslyn	Roslyn No. 6	4.6	36.1	46.8	12.53	0.40	12.150	67.42	12.98	2.64	1.30
Roslyn	Kittitas, Roslyn	Roslyn No. 4	3.39	37.34	48.88	10.39	0.33	12.847	...	...	...	1.31
Roslyn	Kittitas, Roslyn	Roslyn No. 4	3.7	34.3	48.6	13.40	0.36	12.250	67.87	11.96	2.68	1.42
Roslyn	Kittitas, 1 1/2 mi. n. e. of Roslyn	A. & E.	5.70	36.95	41.66	12.69	0.45	11.934	65.55	14.56	2.41	1.21
Roslyn	Kittitas, 1 1/2 mi. s. e. of Roslyn	Roslyn No. 5	4.9	36.0	47.3	11.77	0.40	12.250	67.68	13.34	2.70	1.31
Roslyn	Kittitas, 2 1/2 mi. w. of Roslyn	Busy Bee	3.30	36.22	51.54	8.94	0.41	13.374	...	...	...	1.42
Roslyn	Kittitas, 3 1/2 mi. n. w. of Roslyn	Patrick-McKay	3.1	35.6	50.0	11.27	0.41	12.850	70.18	11.07	3.14	1.40
Roslyn	Kittitas, 3 1/2 mi. w. of Roslyn	Black Carbon	6.67	32.75	42.11	18.47	0.41	10.640	58.85	15.63	1.73	1.29
Lady Wellington	Pierce, Pittsburg	Renton	14.3	33.0	41.3	11.37	0.72	10.210	57.27	23.74	1.63	1.25
Windsor	Pierce, Renton	Snell	6.7	25.7	50.1	17.5	0.78	11.560	...	...	...	1.95
Wingate	Pierce, Wilkeson	Brier Hill	4.7	29.8	37.0	28.50	1.15	9.540	52.42	11.89	1.30	1.24
Wingate	Pierce, South Willis	South Willis	3.15	30.17	45.50	21.18	0.41	11.237	62.56	9.47	2.04	1.51
Wingate	Pierce, Carbonado	Carbon Hill	2.90	30.94	50.12	16.04	0.46	12.433	...	...	...	1.62
Wingate	Pierce, Carbonado	Carbon Hill	5.83	30.59	49.93	13.65	0.42	12.073	66.54	12.13	2.58	1.63
Wingate	Thurston, 2 mi. s. e. of Tenino	Black Bear	16.02	31.86	28.93	23.19	1.50	7.803	43.44	26.10	0.88	0.91
Wingate	Thurston, 3 mi. s. w. of Tenino	King	22.44	33.65	32.96	10.95	2.40	8.771	48.88	31.01	1.16	0.98
Wingate	Thurston, Tono	Hannaford No. 1	21.0	33.1	36.7	9.2	0.42	8.910	...	...	...	1.11
Wingate	Thurston, Tono	Hannaford No. 1	22.70	31.00	38.30	8.02	0.37	8.630	49.56	34.78	1.16	1.24
Wingate	Thurston, Centralia	Perth	25.08	32.25	34.02	8.65	0.82	8.170	47.26	35.99	1.06	1.05
Wingate	Whatcom, Blue Canyon	Blue Canyon	0.310	22.265	62.395	11.885	0.145	...	...	...	...	2.80
Wingate	Whatcom, 4 mi. s. of Glacier	Discovery Tunnel	4.36	7.45	75.96	12.23	0.96	12.593	77.25	5.11	4.46	10.2

*Bullietins Bureau of Mines.

†United States Geological Survey Reports.

‡State Geological Survey Reports.



List of Mines by Counties, Including Name of Company, General Office Address,
Railroad and Shipping Point

WASHINGTON

KING COUNTY COALS

Bituminous and Subbituminous ranks. Suitable for Cement Burning, Domestic, Locomotive Fuel, Illuminating Gas, Melting, Powdered, Producer Gas, Steam and Tile and Pottery Burning uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Carbon Coal & Clay Co.	Bayne, Wash.	Carbon	King	N. P., C. M. & St. L.	Bayne, Wash.
Central Coal Co.	Seattle, Wash.	Grand Ridge	King	N. P.	Issaquah, Wash.
Central Coal Co.	Seattle, Wash.	Raven	King	N. P.	Ravensdale, Wash.
Denny-Renton Clay & Coal Co.	652 Pioneer Bldg., Seattle, Wash.	Denny-Renton	King	Pacific Coast	Taylor, Wash.
Durham Colliery Co.	621 Tacoma Bldg., Tacoma, Wash.	Durham No. 1	King	B. J. & E. L.	Durham, Wash.
Durham Colliery Co.	621 Tacoma Bldg., Tacoma, Wash.	Durham No. 2	King	B. J. & E. L.	Durham, Wash.
Hilde Coal Co.	Seattle, Wash.	Hyd.	King	N. P.	Cumbyland, Wash.
Ozark Coal Mining Co.	Tacoma, Wash.	Navy	King	N. P.	Cumbyland, Wash.
Pacific Coast Coal Co.	Seattle, Wash.	Black Diamond	King	C. & P. S.	Black Diamond, Wash.
Pacific Coast Coal Co.	Seattle, Wash.	Canon	King	C. & P. S.	Parson, Wash.
Pacific Coast Coal Co.	Seattle, Wash.	Coal Creek	King	C. & P. S.	New Castle, Wash.
Pacific Coast Coal Co.	Seattle, Wash.	Isaquah	King	Northern Pacific	Issaquah, Wash.
Pocahontas Coal & Coke Co.	Palmer, Wash.	Pocahontas	King	N. P.	Pocahontas, Wash.
Renton Coal Co.	Seattle, Wash.	Renton	King	P. S. E., C. M. & St. P.	Renton, Wash.

KITTITAS COUNTY—ROSLYN SEAM.

Bituminous rank. Suitable for Bunker, Cement Burning, Bee-hive Coking, Domestic, Illuminating Gas, Melting, Powdered, Producer Gas, Steam and Tile and Pottery Burning purposes.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Independent Coal & Coke Co.	818 White Bldg., Seattle, Wash.	Queen	Kittitas	N. P.	Clallum, Wash.
Northwestern Improvement Co.	Tacoma, Wash.	Roslyn No. 3	Kittitas	N. P.	Roslyn, Wash.
Northwestern Improvement Co.	Tacoma, Wash.	No. 5	Kittitas	N. P.	Roslyn, Wash.
Northwestern Improvement Co.	Tacoma, Wash.	Roslyn No. 6	Kittitas	N. P.	Roslyn, Wash.
Northwestern Improvement Co.	Tacoma, Wash.	Roslyn No. 7	Kittitas	N. P.	Roslyn, Wash.
Northwestern Improvement Co.	Tacoma, Wash.	Roslyn No. 8	Kittitas	N. P.	Roslyn, Wash.
Roslyn-Cascade Coal Co.	S. Bellingham, Wash.	No. 1	Kittitas	N. P.	Roslyn, Wash.
Roslyn-Cascade Coal Co.	S. Bellingham, Wash.	No. 2	Kittitas	N. P.	Roslyn, Wash.
*Roslyn Coal & Coke Co.	Roslyn, Wash.	No. 2	Kittitas	N. P.	Roslyn, Wash.
Roslyn Fuel Co., The	818 White Bldg., Seattle, Wash.	Seaman No. 3	Kittitas	N. P.	Bekman, Wash.

*Lake Dale Seam

LEWIS COUNTY COALS

Bituminous, Semibituminous and Semianthracite ranks. Suitable for Domestic, Locomotive Fuel, Producer Gas and Steam uses. Semianthracite coals are Smokeless.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Centralia Coal Mining Co.	Centralia, Wash.	Empress	Lewis	N. P., O. W., G. N.	Centralia, Wash.
Ford's Prairie Coal Co.	Centralia, Wash.	Ford's Prairie	Lewis	N. P.	Centralia, Wash.
Hutchinson Coal Co.	Tacoma, Wash.	Brier Hill	Lewis	N. P.	Littell, Wash.
Litcoln Coal Mining Co.	Centralia, Wash.	Litcoln	Lewis	O. & W.	Calvin, Wash.
Mendota Coal & Coke Co.	Centralia, Wash.	No. 1	Lewis	N. P.	Mendota, Wash.
Monarch Coal Mining Co.	Centralia, Wash.	Monarch	Lewis	E. Ry. & Lbr. Br.	Centralia, Wash.
Mountain Coal Co.	Mineral, Wash.	Ladd	Lewis	C. M. & St. P.	Mineral, Wash.
Olympic Coal & Mining Co.	Centralia, Wash.	Olympic	Lewis	N. P.	Olympic Spur, Wash.
Salzer Valley Coal Co.	Centralia, Wash.	Salzer Valley	Lewis	N. P., G. N., O. W. R. N.	Centralia, Wash.
Tilton River Bituminous Coal Co.	Lindberg, Wash.	Tilton River Bitum.	Lewis	C. M. & St. P.	Lindberg, Wash.

PIERCE COUNTY COALS

Bituminous rank. Suitable for Bunker, Cement Burning, Bee-hive Coking, Domestic, Illuminating Gas, Locomotive Fuel, Melting, Powdered, Producer Gas, Smithing, Steam and Tile and Pottery Burning uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
American Smelting & Refining Co.	New York, N. Y.	Fairfax	Pierce	N. P.	Fairfax, Wash.
Carbon Hill Coal Co.	Carbonado, Wash.	Carbon No. 6	Pierce	N. P.	Carbonado, Wash.
Carbon Hill Coal Co.	Carbonado, Wash.	Carbon No. 10	Pierce	N. P.	Carbonado, Wash.
Carbon Hill Coal Co.	Carbonado, Wash.	Donty No. 8	Pierce	N. P.	Carbonado, Wash.
Carbon Hill Coal Co.	Carbonado, Wash.	Donty No. 9	Pierce	N. P.	Carbonado, Wash.
Carbon Hill Coal Co.	Carbonado, Wash.	Wilder	Pierce	N. P.	Carbonado, Wash.
Carbon Hill Coal Co.	Carbonado, Wash.	Wingate	Pierce	N. P.	Carbonado, Wash.
Pacific Coast Coal Co.	Seattle, Wash.	Burnett	Pierce	N. P.	Burnett, Wash.
Wilkeson Coal & Coke Co.	Tacoma, Wash.	Wilkeson	Pierce	N. P.	Wilkeson, Wash.

SKAGIT, THURSTON AND WHATCOM COUNTY COALS

Bituminous rank. Suitable for Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Bellingham Coal Mines	Bellingham, Wash.	Bellingham	Whatcom.	C. M. & St. P., G. N. N. P.	Bellingham, Wash.
Cokedale Coal Co.	S. de Woolley, Wash.	Cokedale	Skagit	G. N.	Cokedale, Wash.
Washington Union Coal Co.	Tono, Wash.	Tono No. 1	Thurston	O. W. R. R. & N.	Tono, Wash.

WASHINGTON

Alphabetical Directory of Coal Mines, Giving Complete Detailed Information Covering Each Mine

For List of Abbreviations See Page 13.

AMERICAN SMELTING & REFINING CO.
General Office, 120 Broadway, New York, N. Y.
PR—Simon Guggenheim, New York, N. Y.
TR—F. W. Hills, New York, N. Y.
GM—H. Y. Walker, Tacoma Smelter, Tacoma, Wash.
PA—E. S. Pierce Tacoma Smelter, Tacoma, Wash.

Fairfax Mine; Drift; No. 4 Fairfax Seam, 39 in. thick.

PO—Fairfax, Wash.; SP—Same; CTY—Pierce, RR—N. P.

MS—Charles Hollister, Fairfax, Wash. S of H—2 trolley pole type locos. Track gage 26 in.

S of M—Hand and marbs.

PP—2 fire tube boilers, 300 H. P., 2—225 A. M. P. gen. units, 500 volts D. C., 2 pumps.

EMP—75. Last years tonnage 33,973. Note—Successors to Fairfax Mine, Inc.

BELLINGHAM COAL MINES

General Office, Bellingham, Wash.

PR—J. C. Eden, 613 Seaboard Bldg., Seattle, Wash.

TR—J. C. Earles, Box 366, Bellingham, Wash.

GM—J. C. Eden, 613 Seaboard Bldg., Seattle, Wash.

GS—J. H. Pascoe, Box 366, Bellingham, Wash.

PA—J. C. Earles, Box 366, Bellingham, Wash.

EM—E. C. Lyle, Bellingham, Wash.

SA—E. P. Lucas, Bellingham, Wash.

Bellingham Mine; Slope; No. 1 Seam, 156 to 168 in. thick.

PO—Bellingham, Wash.; SP—Same; CTY—Whatcom; RR—C. M. & St. P.

G. N. N. P.

S of H—Mules and rope. Track gage 36 in.

S of M—1 shortwall mach.

PP—Power purchased Transformer 2200-440 volts A. C., 3 fire tube boilers, 250 H. P., 5 pumps.

EMP—200. Daily tonnage 90.

SIZES SHIPT—Slack, Pea, Nut, Lump.

PREP. EQUIPT—Gravity and Revolving Screens, Washeries, Picking Tables.

CARBON COAL & CLAY CO

General Office, Bayne, Wash.

PR—D. S. Hanley, Seattle, Wash.

VP—John W. Roberts, Seattle, Wash.

TR—C. M. Burger, Seattle, Wash.

GM—D. S. Hanley, Seattle, Wash.

EM—H. L. Handley, Bayne, Wash.

MM—H. L. Handley, Bayne, Wash.

PA—D. S. Hanley, Seattle, Wash.

SCO—Address the Company, Buyer, Byron Isanhart, Bayne, Wash.

Carbon Mine; Drift; Carbon Seam, 54 in. thick.

PO—Bayne, Wash.; SP—Same; CTY—Pac; RR—Northern Pacific O. M.

S of H—3 trolley pole type loco. Track gage, 36 in.

S of M—Hand.

PP—3 fire tube boilers, 345 H. P., 1 100 K. W., 400 volts D. C., 1 gen. unit, 1 60 K. W., 240 volts D. C., 4 pumps.

EMP—125. Daily tonnage 300.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Shaker Screens, Picking Tables, Washeries.

CARBON HILL COAL COMPANY

General Office, Carbonado, Wash.

PR—W. H. Crocker, Crocker Bldg., San Francisco, Cal.

VP—Leon Sloss, Crocker Bldg., San Francisco, Cal.

TR—S. F. B. Morse, Crocker Bldg., San Francisco, Cal.

GM—S. F. B. Morse, Crocker Bldg., San Francisco, Cal.

GS—R. J. Wulzen, Carbonado, Wash.

EM—John Harvey, Carbonado, Wash.

EE—E. Hinrichs, Carbonado, Wash.

SCO—Carbon Hill Coal Co., Store Dept., Buyer, Clarence Whaley, Carbonado, Wash.

SA—W. E. Pearce, 167 Conn. St., Seattle, Wash.

Wingate Mine; Slope; No. 11 Seam; Miller Mine; Slope; No. 12 Seam; Carbon No. 6 Mine; Drift No. 6 Seam; Carbon No. 10 Mine; Slope; No. 10 Seam; Dooty Nos. 8 and 9 Mines; Drifts; Nos. 2 and 9 Seams; 56, 48, 84, 54, 60 and 101 in. thick.

PO—Carbonado, Wash.; SP—Same; CTY—Pierce; RR—N. P.

MS—D. E. Roberts and Edwin Husband, Carbonado, Wash.

S of H—Mules, 7 trolley pole type and 1 storage battery locos. Track gage 36 in.

S of M—Hand and comp. air punchers.

PP—Power purchased. Transformer 60,000 to 2,300 volts A. C., 750 K. W. gen. set, 575 volts D. C., 8—60 H. P. fire tube boilers, 10 pumps.

EMP—350. Last years tonnage 190,000.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Screens and Washers.

CENTRAL COAL COMPANY

General Office, 707 Security Bldg., Seattle, Wash.

PR—C. J. Smith, Seattle, Wash.

VP—A. S. Kerry, Seattle, Wash.

TR—J. O. Hannah, Seattle, Wash.

GM—J. O. Hannah, Seattle, Wash.

GS—L. Harris, Seattle, Wash.

PA—J. O. Hannah, Seattle, Wash.

EM—Chas. Simonstad, Seattle, Wash.

Grand Ridge Mine; Slope; Nos. 1, 3, 7 and 9 Seams, 72 in. thick.

PO—Issaquah, Wash.; SP—Same; CTY—King; RR—Northern Pacific.

S of H—Mules and 2 trolley pole type locos. Track gage 36 in.

S of M—5 comp. air punchers.

PP—Power purchased. Transformer 2,200 to 500 volts D. C., M. G. set, 250 volts D. C.

EMP—125. Last years tonnage 80,151.

SIZES SHIPT—Pea, Nut, Lump.

PREP. EQUIPT—Shaker and Revolving Screens, Picking Tables, Washeries.

Raven Mine; Drift; Nos. 1 and 4 Seams, 60 in. thick.

PO—Ravensdale, Wash.; SP—Same; CTY—King; RR—Northern Pacific.

S of H—1 trolley pole type loco. Track gage 36 in.

S of M—Hand.

PP—1 75 H. P. fire tube boiler, 100 K. W. gen. unit, 250 volts D. C., 1 pump.

EMP—65. Last years tonnage 8,656.

SIZES SHIPT—Run of Mine, Pea, Nut, Lump.

PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

Note—Formerly operated by Raven Coal Company.

CENTRALIA COAL MINING COMPANY

PR—M. L. McGraw, Portland, Ore.

TR—W. Patterson, Portland, Ore.

GM—M. L. McGraw, Portland, Ore.

EM—T. H. Martin, Centralia, Wash.

MM—Geo. Farrell, Centralia, Wash.

Sales Agent—M. L. McGraw, E. 2d and Market Sts., Portland, Ore.

Empress Mine; Shaft; Lignite Seam, 102 in. thick.

PO—Centralia, Wash.; SP—Same; CTY—Lewis; RR—N. P., O. W., G. N.

S of H—Mules. Track gage 36 in.

S of M—Hand.

PP—2 pumps.

FMP—50.

SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.

PREP. EQUIPT—Shaker Screens.

COKEDEALE COAL COMPANY

General Office, Sedro, Woolley, Wash.

PR—A. F. Coats, Seattle, Wash.

VP—F. R. Bates, Seattle, Wash.

TR—J. J. Swallow, Seattle, Wash.

GM—F. C. Ferree, Seattle, Wash.

GS—Frank Good, Sedro Woolley, Wash.

PA—Frank Good, Sedro Woolley, Wash.

SA—Arrow Coal Co., 809 White Bldg., Seattle, Wash.

Cokedale Mine; Drift; Klondike Seam, 360 in. thick.

PO—Sedro Woolley, Wash.; SP—Cokedale, Wash.; CTY—Skagit; RR—Great Northern.

S of H—Mules. Track gage, 36 in.

S of M—Hand.

PP—Power purchased. Transformer 60,000 to 220-440 volts A. C., 1 pump.

EMP—40. Last years tonnage 12,000.

SIZES SHIPT—Run of Mine, Egg.

PREP. EQUIPT—Shaker Screens, Picking Tables, Washeries.

Old information.

DENNY-RENTON CLAY & COAL CO.

General Office, 632 Pioneer Bldg., Seattle, Wash.

PR—E. J. Mathews, Seattle, Wash.

TR—Chas. M. Thomsen, Seattle, Wash.

GM—K. A. Swain, Seattle, Wash.

GS—W. E. Junley, Taylor, Wash.

PA—Silas Rich, Seattle, Wash.

SCO—Address the Company, Buyer, Robt. Woods, Seattle, Wash.

SA—G. Lingren, Pioneer Bldg., Seattle, Wash.

Denny-Renton Mine; Drift and Shaft; Taylor Syncline Seam, 60 in. thick.

PO—Taylor, Wash.; SP—Same; CTY—King; RR—Pacific Coast.

S of H—2 trolley pole type locos. Track gage 36 in.

S of M—Hand.

PP—3 water tube boilers, total 600 H. P., 2—500 K. W. gen. units, 250 volts D. C., 4 pumps.

EMP—150. Last years tonnage 60,000.

SIZES SHIPT—Run of Mine, Pea, Nut.

PREP. EQUIPT—Picking Tables, Washeries.

DURHAM COLLIERY COMPANY.

General Office, 621 Tacoma Bldg., Tacoma, Wash.

PR—Chas. A. Foster, Tacoma, Wash.

TR—Chas. A. Foster, Tacoma, Wash.

GM—Chas. A. Foster, Tacoma, Wash.

PA—D. R. Wing, Tacoma, Wash.

EM—F. E. Black, Durham, Wash.

Durham Nos. 1 and 2 Mines; Drifts; Durham Seam, 96 in. thick.

PO—Durham, Wash.; SP—Same; CTY—King.

MS—Geo. Marshall, Durham, Wash.

S of H—Storage battery locos. Track gage, 36 in.

S of M—Hand.

PP—Power purchased, transformer 2200-440 volts A. C., M. G. sets, 2 water tube boilers, 75 H. P.

EMP—100. Last fiscal year output, 51,443 tons.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms, Washeries.

Old information.

FAIRFAX MINE, INC.

Now American Smelting and Refining Co.

FORD'S PRAIRIE COAL CO.

General Office, Centralia, Wash.

PR—A. D. Foron, Centralia, Wash.

TR—Henry Foron, " "

GM—A. D. Foron, " "

SA—W. J. Pineard, Tacoma, Wash.

Ford's Prairie Mine; Slope; No. 1 Seam, 86 in. thick.

PO—Centralia, Wash.; SP—Same; CTY—Lewis; RR—N. P., C. M. & St. P.

MS—A. D. Foron, Centralia, Wash.

S of H—Mules and main rope, comp. air loco. Track gage 30 in.

S of M—Hand and comp. air mach.

PP—2 fire tube boilers, total 200 H. P., 4 pumps.

EMP—30. Last years tonnage 15,356.

SIZES SHIPT—Run of Mine, Pea, Nut, Egg, Lump.

PREP. EQUIPT—Revolving and Shaker Screens, Washery.

HUTCHINSON COAL COMPANY.

General Office, 507 Equitable Bldg., Tacoma, Wash.

PR—E. Hutchinson, Tacoma, Wash.

VP—Dr. W. Spencer, Tacoma, Wash.

TR—H. A. Miller, Tacoma, Wash.

GM—E. Hutchinson, Tacoma, Wash.

GS—J. Andrus, Tacoma, Wash.

PA—E. Hutchinson, Tacoma, Wash.

EM—W. J. Wood, Tacoma, Wash.

Brier Hill Mine; Slope; Seam, 72-96-124 in. thick.

PO—Littell, Wash.; SP—Same; CTY—Lewis; RR—N. P.

S of H—Mules, rope and steam locos.

S of M—Hand.

PP—3—200 H. P. fire tube boilers.

EMP—40.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Shaker Screens, Picking Tables, Washeries.

HYDE COAL COMPANY.

General Office, 618 L. C. Smith Bldg., Seattle, Wash.

PR—E. C. Ward, Seattle, Wash.

VP—N. D. Moore, Seattle, Wash.

SECY—H. M. Watkins, Seattle, Wash.

TR—H. M. Watkins, Seattle, Wash.

GM—S. H. Green, Seattle, Wash.

GS—R. Simpson, Cumberland, Wash.

PA—M. McPhee, Seattle, Wash.

EM—R. W. Smith, Seattle, Wash.

GEN. SALES MGR—W. Hemphill, 563 R. R. So., Seattle, Wash.

Hyde Mine; Slope; McKay and Fulton Seams, 48 to 84 in. thick. Operate washery.

PO—Cumberland, Wash.; SP—Same; CTY—King; RR—N. P., Palmer Er.

S of H—Mules and rope. Track gage 36 in.

S of M—Hand.

PP—2 return tubular boilers, total 250 H. P., 3 gen. units, 240 volts A. C., 2 phase, 60 cycles, 3 pumps.

EMP—116.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Shaking Screen Picking Table.

INDEPENDENT COAL & COKE COMPANY.

General Office, 818 White Bldg., Seattle, Wash.

PR—Prescott Oakes, Seattle, Wash.

VP—D. F. Buckingham, Seattle, Wash.

TR—Prescott Oakes, Seattle, Wash.

GM—D. F. Buckingham, Seattle, Wash.

GS—Wm. Shaw, Cle Elum, Wash.

PA—A. G. Clark, Seattle, Wash.

EM—W. H. Simons, Seattle, Wash.

Queen Mine; Slope; Roslyn Seam, 54 in. thick.

PO—Cle Elum, Wash.; SP—Same; CTY—Kittitas; RR—Northern Pacific.

MS—Robert Scobie, Jr., Cle Elum, Wash.

S of H—Mules, rope, 2 storage battery locos. Track gage, 36 in.

S of M—Hand.

PP—1 fire tube boiler, 150 H. P., 3 water tube boilers, 750 H. P., 2 250 K. W. gen. units, 440 volts A. C., 7 pumps.

EMP—110. Last years tonnage 143,259.

SIZES SHIPT—Run of Mine, Slack, Egg, Lump.

PREP. EQUIPT—Shaker Screens.

LINCOLN COAL MINING CO.

General Office, Box 127, Centralia, Wash.

GM—T. E. Martin, Galvin, Wash.

EM—T. E.

MONARCH COAL MINING COMPANY

General Office, Centralia, Wash.
GM—Jay Agnew, Centralia, Wash.
Monarch Mine; Slope; Seam 84 in. thick.
PO—Centralia, Wash.; SP—Same; CTY—Lewis; RR—E. Ry. & Lbr. Co.
MS—Geo. C. Clark, Centralia, Wash.
S of H—Rope, comp. air locos. Track gage 30 in.
S of M—Comp. air punchers.
PP—2 water tube boilers, gen. units, 5 pumps.
EMP—42. Daily tonnage 350.
SIZES SHIPT—Run of Mine, Slack, Lump, Nut.
PREP. EQUIPT—Shaker Screens, Washeries.

MOUNTAIN COAL COMPANY

General Office, Mineral, Wash.
PR—J. W. Eddy, Seattle, Wash.
PO—T. H. Ellis, Mineral, Wash.
EM—T. H. Ellis, Mineral, Wash.
Ladd Mines; Slope and Drift; No. 2 Vein, 54 in. thick.
PO—Mineral, Wash.; SP—Same; CTY—Lewis; RR—C. M. & St. P.
S of H—1 elec. and 2 steam locos. Track gage 36 in.
S of M—1 comp. air mach.
PP—1 return tubular boiler, 200 H. P., 1 gen. unit, 110 volts D. C.
EMP—25.
SIZES SHIPT—Run of Mine, Nut, Egg, Lump.
PREP. EQUIPT—Installing Forrester Washers.
Note—Successors to Phoenix Coal, Co.

NORTHWESTERN IMPROVEMENT CO.

General Office, Tacoma, Wash.
PR—Howard Elliott, New York, N. Y.
VP—Charles Donnelly, St. Paul, Minn.
PA—F. G. Prest, St. Paul, Minn.
PA Asst.—D. S. Kinney, Tacoma, Wash.
GM—F. C. Andersen.
EM—D. H. Swam, Tacoma, Wash.
ASST. CONTROLLER—J. L. Taggard, Tacoma, Wash.
Roslyn Nos. 3, 5, 6, 7 and 8 Mines; Incline and Slope; Roslyn No. 5 Seam, 54 in. thick.
PO—Roslyn, Wash.; SP—Same; CTY—Kittitas; RR—N. P.
MS—Peter Bagley, Roslyn, Wash.
S of H—Mules, trolley pole type and storage battery locos. Track gage 36 in.
S of M—Hand.
PP—Purchase and generate power.
EMP—1,360. Last years tonnage 1,369,546.
SIZES SHIPT—Run of Mine.
All coal mined used by Northern Pacific Railway.

OLYMPIC COAL & MINING CO.

General Office, P. O. Box 121, Centralia, Wash.
PR—D. P. Damascus, Centralia, Wash.
GM—D. P. Damascus, Centralia, Wash.
GS—J. J. Jones, Centralia, Wash.
PA—D. P. Damascus, Centralia, Wash.
CF—R. B. Ober, Tono, Wash.
Olympic Mine; Slope; Seam, 18 feet thick.
PO—Box 121, Centralia, Wash.; SP—Olympic Spur; CTY—Lewis; RR—Northern Pacific.
S of H—Mules, main and tail rope, storage battery loco. Track gage 30½ in.
S of M—Comp. air punchers.
PP—125 H. P. fire tube boiler, 1 pump.
EMP—18. Last years tonnage 17,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.

OSARK COAL MINING COMPANY

General Office, 229-30 Tacoma Bldg., Tacoma, Wash.
PR—Dr. W. T. Bobo, Battle Creek, Mich.
TR—E. D. Strain, Battle Creek, Mich.
GM—Geo. W. Sheatsley, Cumberland, Wash.
GS—Jas. D. Davies, Cumberland, Wash.
PA—Geo. W. Sheatsley, Cumberland, Wash.
EM—John Williams, Cumberland, Wash.
Sales Agent—F. M. Love, Tacoma, Wash.
Navy Mine; Slope; Navy Seam, 48 in. thick.
PO—Cumberland, Wash.; SP—Same; CTY—King; RR—N. P., Buckley Br.
S of H—Mules, 1 comp. air and 1 gasoline locos. Track gage 36 in.
S of M—Hand.
PP—Purchase power, transformer 2300 to 440 volts A. C., 1 30 H. P. fire tube boiler, 2 pumps.
EMP—65. Last years tonnage 58,000.
SIZES SHIPT—Run of Mine, Pea, Nut.
PREP. EQUIPT—Revolving Screens, Picking Tables, Washeries.

PACIFIC COAST COAL COMPANY

General Office, Seattle, Wash.
PR—E. C. Ward, Seattle, Wash.
TR—H. M. Watkins, "

GM—N. D. Moore, Seattle, Wash.
MINE MGR—S. H. Green, Seattle, Wash.
PA—M. McPhee, Seattle, Wash.
CE—A. F. Marlow, "
EM—K. W. Smith, "
Combustion Eng.—George N. Calkins, Seattle, Wash.
EE—H. B. Keith, Seattle, Wash.
SCO—Address the Company, Buyer, C. P. Blanchard, Seattle, Wash.
Gen. Sales Mgr.—Lyle Hamphill, Seattle, Wash.
Dist. Mgr.—A. L. Stephens, Portland, Ore.
Dist. Mgr.—J. F. Torrence, Tacoma, Wash.

Coal Creek Mine; Slope; Muldoon Seam, 46 to 72 in. thick. Operate washery.
PO—New Castle, Wash.; SP—Same; CTY—King; RR—C. & P. S., New Castle Branch.
MS—S. H. Ash, New Castle, Wash.
SM—L. C. McLean, New Castle, Wash.
S of H—9 elec. locos. Track gage 36 in.
S of M—36 comp. air mach.
PP—8 return tubular boilers, total 1,200 H. P., 2 compressors, 5 pumps.
EMP—350. Last years tonnage 168,147.
SIZES SHIPT—Slack, Pea, Lump.
PREP. EQUIPT—Revolving and Shaker Screens, Picking Tables, Loading Booms.

Black Diamond Mine; Slope; McKay Seam, 42 to 66 in. thick. Operate washery.
PO—Black Diamond, Wash.; SP—Same; CTY—King; RR—C. & P. S.
MS—M. A. Morgan, Black Diamond, Wash.
SM—H. McDowell, Black Diamond, Wash.
S of H—10 elec. locos. and rope. Track gage 36 in.
PP—13 Return tubular boilers, total 1900 H. P., 4 gen. units, 500 volts D. C., 21 pumps.
EMP—129. Last fiscal year output 326,705 tons.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT—Revolving and Shaker Screens, Loading Booms.

Burnett Mine; Slope, Nos. 1, 2 and 3 Seam, 40 to 60 in. thick. Operate washery.
PO—Burnett, Wash.; SP—Same; CTY—Pierce; RR—N. P.
SM—McGinnis Burnett, Burnett, Wash.
S of H—6 elec. and 1 steam locos. Track gage 36 in.
S of M—4 Comp. air mach.
PP—8 Return tubular boilers, total 1000 H. P., 4 gen. units, 500 volts D. C., 4 compressors, 8 pumps, also purchase power.
EMP—230. Last fiscal year output, 130,499 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Revolving and Shaker Screens, Picking Tables.

Caenon Mine; Slope; McKay Seam, 48 to 72 in. thick.
PO—Pacoeon, Wash.; SP—Same; CTY—King; RR—C. & P. C.
MS—Geo. Stonebridge, Pacoeon, Wash.
SM—C. U. Stevens, "
S of H—3 elec. locos. Track gage 36 in.
S of M—Hand.
PP—4 boilers, total 700 H. P., gen. units, 500 volts D. C., 10 pumps.
EMP—110. Last fiscal year output, 36,246 tons (10 months).
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables and Loading Booms.

Issaquah Mine; Drift; Alvo Seam, 84 in. thick.
PO—Issaquah, Wash.; SP—Same; CTY—King; RR—Northern Pacific.
S of H—2 trolley pole type locos. Track gage 36 in.
S of M—15 comp. air machs.
PP—1 air compressor, gen. units, 250 volts D. C., 1 pump. Purchase power.
EMP—115. Ten months' output 66,039 tons.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT—Saker Screens, Picking Tables, Loading Booms, Washeries.

PHOENIX COAL COMPANY

Now Mountain Coal Co.

PIERCE COUNTY COAL COMPANY

Operations exhausted.

POCANTONAS COAL & COKE CO.

General Office, Palmer, Wash.
PR—J. R. Miller, 7536 Wilson Ave., Seattle, Wash.
TR—L. D. Jones, Seattle, Wash.
GM—J. R. Miller, 7536 Wilson Ave., Seattle, Wash.
Pocantonas Mine; Drift; Pocantonas Nos. 2 and 3 Seams; No. 2 192 in. and No. 3 180 in.
PO—Palmer, Wash.; SP—Exp. Same; Frrt. Pocantonas, Wash.; CTY—King; RR—N. P.
S of H—Mules and rope. Track gage, 36 in.
S of M—Hand.
PP—Power purchased, transformer 2200-

220 110 volts A. C.
EMP—50 to 75. Daily output, 125 tons.
SIZES SHIPT—Run of Mine, Pea, Nut.
PREP. EQUIPT—Gravity, Revolving and Shaker Screens, Washeries.

RENTON COAL CO.

General Office, Seattle, Wash.
PR—Alton W. Leonard, Stuart Bldg., Seattle, Wash.
TR—F. W. Brownell, Electric Bldg., Seattle, Wash.
GM—W. J. Grambs, Seattle, Wash.
GS—Wm. Strain, Renton, Wash.
PA—W. B. Donaldson, Seattle, Wash.
EE—S. C. Lindsay, Seattle, Wash.
SA—J. M. Wilmot, Electric Bldg., Seattle, Wash.

Renton Mine; Slope; Sub-Bituminous Seam, 84 in. thick.
PO—Renton, Wash.; SP—Same; CTY—King; RR—P. S. E., C. M. & St. P., C. C. N. P.
SM—R. W. Peterson, Renton, Wash.
S of H—Mules, rope and 1 trolley pole type loco. Track gage, 36 in.
S of M—1 electric puncher.
PP—Power purchased. Transformer 13,000 to 2,200 volts A. C., 440 volts D. C., 1 pump.
Daily tonnage 500.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms, Washeries.

ROSLYN-CASCADE COAL COMPANY.

General Office, South Bellingham, Wash.
PR—F. P. Larrabee, South Bellingham, Wash.
VP—A. Patrick, Seattle, Wash.
PA—Wm. McKay, Roslyn, Wash.
GM—Wm. Markey, Roslyn, Wash.
EE—T. A. Rycek, Roslyn, Wash.
SA—John Rycek, Roslyn, Wash.
No. 1 Mine; Slope; Roslyn Seam, 52 in. thick.
PO—Roslyn, Wash.; SP—Same; CTY—Kittitas; RR—Northern Pacific.
S of H—Mules. Track gage, 30 in.
S of M—Hand.
PP—2—75 H. P. fire tube boilers, 1 pump.
EMP—48. Last years tonnage 43,985.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Gravity Screens.

Mine No. 2; Slope; Roslyn Seam, 54 in. thick.
PO—Roslyn, Wash.; SP—Same; CTY—Kittitas; RR—Northern Pacific.
S of H—Mules. Track gage, 30 in.
S of M—Hand.
PP—1 150 H. P. fire tube boiler, 1 75 K. W. gen. unit, A. C., 2 pumps.
EMP—46. Last years tonnage 66,265.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Gravity Screens.

ROSLYN COAL & COKE CO.

General Office, Roslyn, Wash.
PR—George H. Reed, Tacoma, Wash.
TR—A. F. Plant, Roslyn, Wash.
GM—A. F. Plant, "
PA—A. F. Plant, "
EM—William Moses, "
NM—Clinton Lackey, "
No. 2 Mine; Slope; 48 to 56 in. thick.
PO—Roslyn, Wash.; SP—Lakdale; CTY—Kittitas; RR—N. P., Roslyn R.
S of H—Mules, gasoline loco. Track gauge 30 in.
S of M—Hand.
PP—2 water tube boilers, 2 geo. units, 6 pumps.
EMP—40. Last fiscal year output, 24,050 tons.
SIZES SHIPT—Run of Mine, Slack, Nut.
PREP. EQUIPT—Bar Screens, Picking Tables.
Old information.

ROSLYN FUEL CO. (TNE).

General Office, 818 White Bldg., Seattle, Wash.
PR—Prescott Oakes, Seattle, Wash.
VP—Mary B. Oakes, Seattle, Wash.
TR—Prescott Oakes, Seattle, Wash.
GM—D. F. Buckingham, Seattle, Wash.
GS—W. C. Shaw, Roslyn, Wash.
PA—A. G. Clark, Seattle, Wash.
EM—W. H. Simons, Roslyn, Wash.
EE—Martin Wickson, Roslyn, Wash.
SA—C. D. Hesse, Yakima, Wash.; J. W. Bell, Spokane, Wash.
Beckman No. 1 and 2 Mines Closed.
Beckman No. 3 Mine; Slope; Roslyn No. 6 Veln Seam, 48 in. thick.
PO—Roslyn, Wash.; SP—Beckman, Wash.; CTY—Kittitas; RR—Northern Pacific.
MS—Harry Munsey, Roslyn, Wash.
S of H—Mules, rope and 2 steam locos. Track gage 36 in.
S of M—Hand.
PP—6 water tube boilers 1650 H. P., 1 fire tube boiler, 300 H. P., 2—290 K. W. gen. units, 440 volts A. C., 1—180 K. W. gen. units, 410 volts D. C., 5 pumps.
EMP—225. Last years tonnage 173,324.
SIZES SHIPT—Run of Mine, Nut.
PREP. EQUIPT—Shaker Screens, Picking Tables, Washeries.
Summit Mine closed

SALTER VALLEY COAL COMPANY.

General Office, Centralia, Wash.
PR—M. E. Johnson, Centralia, Wash.
TR—O. A. Keto, Centralia, Wash.
Salzer Valley Mine; Drift; Seam 204 in. thick.
PO—Centralia, Wash.; SP—Same; CTY—Lewis; RR—N. P., G. N., O. W. R. N.
S of H—Mules and gasoline locos. Track gage 16 in.
S of M—Hand and shortwall machs. Last years tonnage 5,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Bar Screens.

SHELOON COAL COMPANY.

Out of business.

SUPERIOR COAL COMPANY, INC.

Operations abandoned.

TILTON RIVER BITUMINOUS COAL CO

General Office, Lindberg, Wash.
PR—W. H. Buckett, Lindberg, Wash.
VP—W. L. Brass, Centralia, Wash.
TR—W. B. Kier, Centralia, Wash.
GM—W. W. Canon, Lindberg, Wash.
EM—Arthur Espeland, Lindberg, Wash.
Tilton River Bituminous Mine; Nos. 3, 4, 6 and 6-A Seams, 36 to 120 in. thick.
PO—Lindberg, Wash.; SP—Same; CTY—Lewis; RR—C. M. & St. P.
S of H—Mules. Track gage 36 in.
S of M—Hand.
EMP—35.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
PREP. EQUIPT—Screens and washery.

WASHINGTON UNION COAL COMPANY

General Office, Tono, Wash.
PR—J. D. Farrell, Seattle, Wash.
TR—C. W. Miller, Portland, Ore.
GS—William Hahn, Tono, Wash.
PA—E. C. Way, Tono, Wash.
EM—Frank V. Hicks, Tono, Wash.
SCO—Address the Company, Buyer, T. H. Gaines, Tono, Wash.

Tono No. 1 Mine; Slope; Hannaford Seam, 192 in. thick.
PO—Tono, Wash.; SP—Same; CTY—Thurston; RR—O. W. R. R. & N. Co. (C. P. System).
S of H—Mules and main and tail rope, 2 gasoline locos. Track gage 30 in.
S of M—Hand.
PP—3 fire tube boilers, total 550 H. P., 2—150 K. W. gen. units, 220 and 440 volts A. C., 5 pumps.
EMP—200. Last years tonnage 225,000.
PREP. EQUIPT—Gravity Screens.

WESTERN COKE & COLLIERIES CO

Stoquahmie, Wash.

No report.

WILKESON COAL & COKE CO.

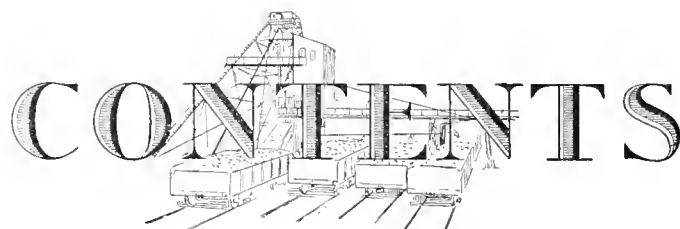
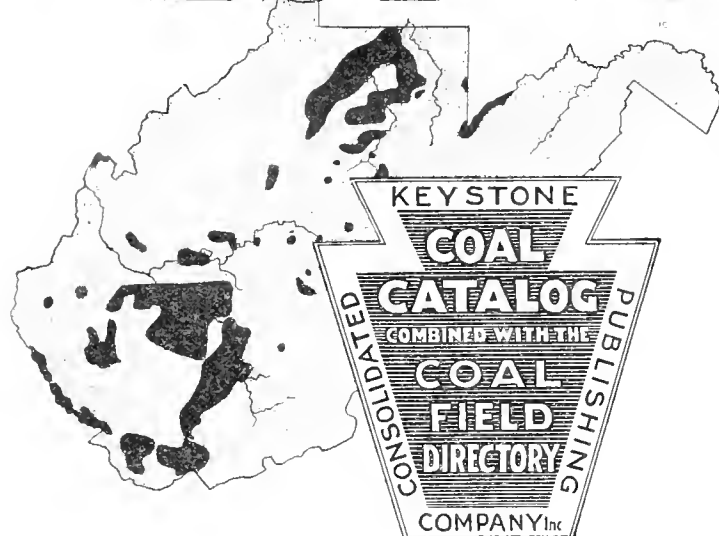
General Office, Tacoma, Wash.
PR—J. J. Hewitt, Tacoma, Wash.
VP—J. H. Scott, Wilkeson, Wash.
TR—J. J. Hewitt, Tacoma, Wash.
GS—J. T. Lee, Wilkeson, Wash.
PA—J. T. Lee, Wilkeson, Wash.
EM—C. E. White, Wilkeson, Wash.
EE—E. T. Barry, Wilkeson, Wash.
Wilkeson Mine; Drift and Slope; Nos. 1, 2 and 3 Seams, 96 in. thick.
PO—Wilkeson, Wash.; SP—Same; CTY—Pierce; RR—N. P.
S of H—3 storage battery and 3 steam locos. Track gage, 36 in.
S of M—Hand.
PP—Power purchased, transformer 2200-2200 volts A. C.
EMP—170. Last fiscal year output, 90,569 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Revolving Screens, Washeries.

OREGON

BEAVER HILL COAL COMPANY.

General Office, 65 Market St., San Francisco, Cal.
PR—Paul Shoup, San Francisco, Cal.
TR—W. F. Ingram, San Francisco, Cal.
SECY—G. L. King, San Francisco, Cal.
AUDITOR—T. O. Edwards, San Francisco, Cal.
PA—F. W. Taylor, San Francisco, Cal.
CE—George Watkins Evans, Seattle, Wash.
EM—J. J. Corey, Preuss, Ore.
S.O.—Address the Company, Buyer, S. J. Foster, Preuss, Ore.
Beaver Hill Mine; Slope; Sub-Bituminous Seam, 72 in. thick.
PO—Preuss, Ore.; SP—Frrt. Beaver Hill, Ore.; Exp. Marshfield, Ore.; CTY—Cous. RR—Southern Pacific.
MS—J. J. Corey, Preuss, Ore.
S of H—5 trolley pole type locos. Track gage, 36 in.
S of M—Hand.
PP—4 fire tube boilers, 500 H. P., 2 100 K. W. gen. units, 230 volts D. C., 5 pumps.
EMP—54. Last years tonnage 10,631.
SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Egg, Lump.
PREP. EQUIPT—Revolving Screens, Picking Tables, Loading Booms, Washeries.

WEST VIRGINIA



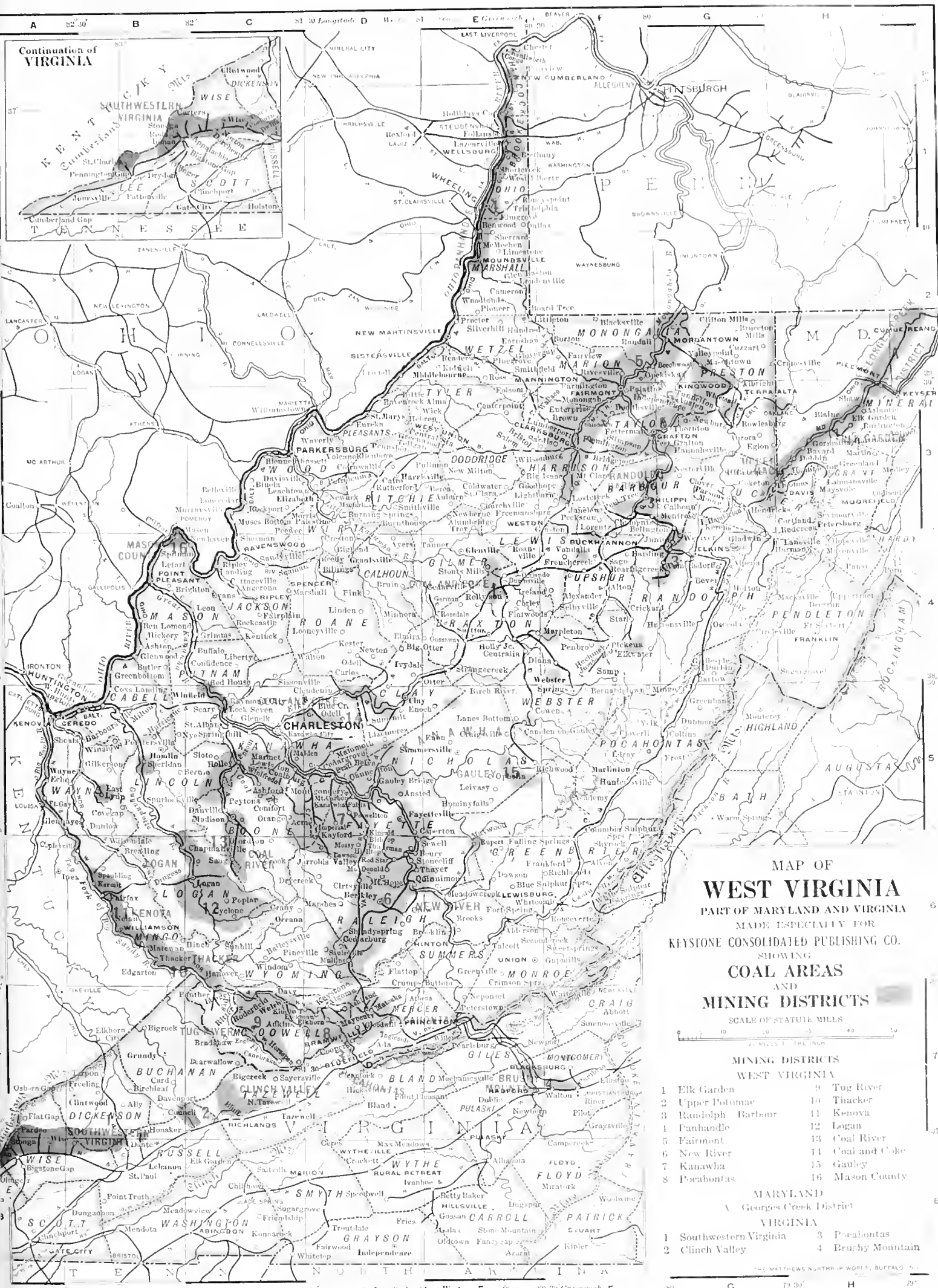
CONTENTS

Map of Mining Districts.....opp. page 956
 Sectional View of Coal Formations....opp. page 957
 General Description of Coal Resources.....957

SEAMS		SEAMS	
Waynesburg	958	Cedar Grove.....	961
Sewickley	958	Alma	962
Redstone	958	No. 2 Gas.....	962
Pittsburgh	959	Powellton	962
Bakerstown	959	Eagle	962
Upper Freeport.....	959	Iaeger	963
Lower Freeport.....	960	Sewell	963
Upper Kittanning...	960	Welch	963
Lower Kittanning...	960	Beckley	963
No. 5 Block.....	960	Fire Creek.....	964
Stockton-Lewiston ..	960	Pocahontas No. 6....	964
Coalburg	961	Pocahontas No. 4....	964
Winifrede	961	Pocahontas No. 3....	964
Chilton	961	Pocahontas Th'k V'n.	965

Preparation and Sizing of Coal.....965
 Supplementary Analyses.....966 to 974
 Descriptive Advertisements.....975 to 1059
 List of Mines by Seams.....1060 to 1079
 Alphabetical Directory of Coal Mines...1080 to 1148
 List of Mines by Counties.....1149 to 1154

Continuation of
VIRGINIA



MAP OF
WEST VIRGINIA
PART OF MARYLAND AND VIRGINIA
MADE ESPECIALLY FOR
KEYSTONE CONSOLIDATED PUBLISHING CO.
SHOWING
COAL AREAS
AND
MINING DISTRICTS

SCALE OF STATUTE MILES



MINING DISTRICTS
WEST VIRGINIA

- | | |
|--------------------|------------------|
| 1 Elk Garden | 9 Tug River |
| 2 Upper Potomac | 10 Thacker |
| 3 Randolph Barbour | 11 Kenova |
| 4 Panhandle | 12 Logan |
| 5 Fairmont | 13 Coal River |
| 6 New River | 14 Coal and Coke |
| 7 Kanawha | 15 Gauley |
| 8 Pocahontas | 16 Mason County |

MARYLAND

A Georges Creek District

VIRGINIA

- | | |
|-------------------------|-------------------|
| 1 Southwestern Virginia | 3 Pocahontas |
| 2 Clinch Valley | 4 Brushy Mountain |

THE MATTHEWS NORTH MAP WORKS, BUFFALO, N. Y.

COLUMN SHOWING BITUMINOUS COAL BEDS IN

WEST VIRGINIA

Compiled and Revised to Date
June 3, 1916

By RAY V. HENNEN, Asst. Geologist W. Va. Geological Survey.

Name of Coal		Thickness Seam, Feet	Thickness Interval, Feet	Totals From Top to Coal, Feet	Name of Coal (Continued)		Thickness Seam, Feet	Thickness Interval, Feet	Totals From Top to Coal, Feet					
Dunkard Series 1000' to 1180'					Kanawha Group—1830'									
Permian-Carboniferous 1000' to 1180'					(100' to 1830')									
Upper Proctor Sandstone and Crest of Dunkard Series.....					40 to 40				40	Little Chilton.....	0 " 2	30 " 46	3200	
Windy Gap.....					1/2 " 1				180	Heroshaw.....	2 " 4	0 " 26	3250	
Gilmore.....					1/2 " 1				291	Diogess.....	0 " 4	20 " 62	3280	
Nioevah "A".....					1/4 " 1	30 " 49			455	Williamson.....	1 " 8	40 " 94	3350	
Nioevah.....					1/2 " 1	60 " 74			505	Cedar Grove—"Upper Thacker".....	3 " 6	1/4 " 70	3450	
Hostetter.....					1/2 " 1	75 " 94			580	Lower Cedar Grove—"Lower Thacker".....	3 " 5	20 " 34	3525	
Fish Creek.....					1/2 " 1	40 " 64			675	Alma "A".....	0 " 1	0 " 15	3560	
Dunkard.....					1/2 " 1	30 " 49			740	Alma—"Draper".....	2 " 5	20 " 53	3635	
Jollytown.....					1/2 " 1	35 " 44			790	Little Alma.....	0 " 2	30 " 54	3695	
Hundred.....					1/4 " 1	60 " 84			835	Campbell Creek—"No. 2 Gas".....	3 " 6	0 " 26	3725	
Washington "A".....					1/2 " 1	75 " 105			920	Lower Campbell Crk—"Up. War Eagle".....	2 " 4	0 " 21	3747	
Washington.....					2 " 5	15 " 24	1030				Powellton "A".....	0 " 1	0 " 19	3770
Little Washington.....					0 " 1	40 " 52	1055				Powellton.....	0 " 4	30 " 58	3833
Waynesburg "A".....					0 " 3	50 " 70	1110				Matewan.....	0 " 5	20 " 37	3872
Waynesburg.....					3 " 5	30 " 44	1185				Eagle "A".....	0 " 2	0 " 47	3925
Little Waynesburg.....					1/2 " 1	40 " 52	1230				Eagle—"Middle War Eagle".....	1 " 6	0 " 32	3960
Uniontown.....					1 " 3	80 " 99	1285				Bens Creek.....	0 " 3	30 " 77	4040
Lower Uniontown.....					0 " 1	80 " 95	1385				Cedar.....	0 " 4	50 " 74	4140
Sewickley—"Mapletown".....					3 " 5	40 " 55	1485				Little Cedar.....	0 " 1	30 " 42	4185
Redstone.....					3 " 5	20 " 37	1545				Lower War Eagle.....	1 " 3	75 " 95	4285
Pittsburgh.....					5 " 8	40 " 48	1590				Glenalum Tunnel.....	0 " 5	60 " 69	4355
Little Pittsburgh.....					1 " 2	75 " 99	1640				Gilbert "A".....	0 " 1	0 " 21	4380
Little Clarksburg.....					1/2 " 1	40 " 49	1740				Gilbert.....	1 " 4	70 " 115	4496
Normantown.....					0 " 1	30 " 46	1790				Douglas "A".....	0 " 1	0 " 20	4520
Elklick.....					2 " 4	10 " 19	1840				Douglas—"Red Ash".....	0 " 4	80 " 121	4645
West Milford.....					0 " 1	60 " 98	1860				Lower Douglas—"Hughes Ferry".....	2 " 4	40 " 63	4710
Harlem.....					1/2 " 2	80 " 56	1960				Iaeger "B".....	0 " 2	30 " 49	4760
Bakerstown.....					2 " 4	70 " 89	2020				Iaeger "A".....	0 " 1	40 " 60	4825
Brush Creek.....					1/2 " 1	50 " 64	2110				Iaeger.....	2 " 5	20 " 45	4872
Mahoning.....					0 " 1	35 " 45	2175				Lower Iaeger.....	0 " 2	100 " 131	5005
Upper Freeport.....					2 " 5	40 " 67	2225				Castle.....	0 " 2	60 " 80	5090
Lower Freeport.....					1 " 3	40 " 54	2295				Sewell "B".....	0 " 5	0 " 24	5115
Upper Kittanning "Rider".....					0 " 1	0 " 20	2375				Sewell "A".....	0 " 1	0 " 55	5180
Upper Kittanning.....					3 " 5	40 " 62	2445				Sewell—"Davy".....	3 " 10	40 " 60	5245
Middle Kittanning.....					0 " 8	15 " 47	2500				Welch.....	0 " 5	60 " 78	5325
No. 5 Block—Lower Kittanning.....					3 " 8	30 " 46	2550				Little Raleigh "A".....	0 " 2	0 " 28	5355
Clarion (possibly identical with No. 5 Block).....					1 " 4	60 " 88	2640				Little Raleigh.....	0 " 2	40 " 53	5410
Stoctor "A".....					0 " 2	20 " 35	2685				Beckley "Rider".....	0 " 2	0 " 20	5440
Stoctor.....					3 " 10	5 " 125	2820				Beckley.....	3 " 10	0 " 100	5545
Coalburg.....					3 " 10	5 " 23	2845				Fire Creek—"Quinnimont".....	0 " 5	20 " 28	5575
"Buffalo Creek" (Winifrede?).....					0 " 5	40 " 90	2920				Little Fire Creek.....	0 " 2	30 " 70	5650
Winifrede.....					1 " 10	15 " 18	3020				No. 9 Pocahontas.....	2 " 5	0 " 28	5680
Lower Winifrede.....					0 " 2	20 " 27	3040				No. 8 Pocahontas.....	0 " 2	30 " 67	5750
Chilton "A".....					0 " 3	40 " 58	3070				No. 7 Pocahontas.....	0 " 3	60 " 105	5860
Chilton "Rider".....					0 " 4	0 " 20	3132				No. 6 Pocahontas.....	0 " 5	50 " 72	5937
Chilton.....					3 " 8	0 " 38	3160				No. 5 Pocahontas.....	0 " 5	0 " 20	5965
(Continued in Next Column)											No. 4 Pocahontas.....	0 " 8	40 " 58	6025
Scale: 1"=400'											No. 3 Pocahontas "Rider".....	0 " 2	0 " 10	6050
											No. 3 Pocahontas.....	5 " 15	40 " 68	6120
											No. 2 Pocahontas.....	0 " 2	20 " 34	6155
											No. 1 Pocahontas.....	0 " 1	0 " 23	6176
											Keystone.....	0 " 1	0 " 25	6200
											Simmons.....	0 " 1	100 " 122	6226
											Squire Jim.....	0 " 2		6350
											To base of Pottsville.....		0 " 50	6400

WEST VIRGINIA *

General Description of the Geology of the State With the Ranks of Coal Produced;
Treats of the Mining Districts, With a Map Showing Their Location, All
Seams Lying Within the Territory, and the Railroads Serving Same,
Description of the Producing Seams Showing Their Geological
Order, Kinds of Coal, General Analysis, Etc.

West Virginia has a total of 102 coal seams, 52 of which are of sufficient thickness to be classified as minable. Geographically it lies in the widest portion of the Appalachian field and contains some of the purest fuels known to the world. Owing to the proximity of Western Pennsylvania and Ohio coal, which for many years controlled the markets of the west and northwest, the development of the coal resources of the state has come within comparatively recent years. The present rapid growth of the industry is largely due to the excellence of the product, enabling these coals to enter into competition with those produced in the middle west, and also to successfully invade the eastern markets. In tonnage produced West Virginia ranks second to Pennsylvania.

According to the West Virginia Geological Survey the coal area of West Virginia includes 9500 square miles, and the estimated original coal supply, including coal that is easily accessible, and also what can be won with difficulty, is 60,800,000,000 short tons. About 2 per cent. of this has been mined to date. The coals in the northern part of the state are classed as bituminous, while those in the eastern, central and southern parts are either bituminous or semibituminous. A small amount of canal is found in the central and southwestern parts.

Because of the generally prevailing use of natural gas for domestic purposes and the scarcity of industries, only about 8 per cent. of the coal produced is used within the state. The railroads serving as carriers to points outside the state are the Monongahela Railroad in the northern part; the Baltimore and Ohio and Western Maryland in the northern and eastern parts; the Chesapeake and Ohio in the central and southeastern part; the Kanawha and Michigan in the central part; the Virginian in the southeastern part, and the Norfolk and Western running closely parallel to the southern boundary.

There are at present 16 different mining districts in West Virginia. Some of these are named because of railroad connections while others are in accordance with the time of development. There is however, much overlapping and distinct geographic lines cannot be given.

MINING DISTRICTS OF WEST VIRGINIA

1. Elk Garden. Includes all of Mineral county. Seams mined are the Pittsburgh, Upper Freeport, Lower Kittanning and Bakers-town. These produce steam, bunker, export, railway and domestic coals. Railroads serving are Baltimore & Ohio and Western Maryland.
2. Upper Potomac. Includes Tucker, Grant and Randolph counties. Seams mined are the Upper Freeport, Lower Freeport and Lower Kittanning. These produce steam, bunker, coking, railway, export and domestic coals. Railroads serving are Baltimore & Ohio and Western Maryland.
3. Randolph-Barbour. Includes Randolph, Barbour, and northern Upshur counties. Seams mined are the Upper Freeport, Lower Freeport, Lower Kittanning and Redstone. These produce coking, smithing, steam, railway and domestic coals. Railroad serving is Baltimore & Ohio.
4. Panhandle. Includes Brooke, Ohio and Marshall counties. Seams mined are the Pittsburgh and Lower Freeport. These produce steam, railroad and domestic coals. Railroads serving are the Baltimore & Ohio and the P. C. C. & St. L.
5. Fairmont. Includes Harrison, Marion, Monongalia, Wetzel, Preston and western Taylor counties. Seams mined are the Pittsburgh, Redstone, Sewickley, Upper Freeport and Waynesburg. These produce steam, gas, railroad, export, domestic and coking coals.
6. New River. Includes eastern Fayette, southern Greenbrier, southern Raleigh, Summers and Wyoming counties. Seams mined are the Beckley, Sewell and Fire Creek. These produce steam, bunker, export, railroad and domestic coals. Railroads serving are Virginian and Chesapeake & Ohio.
7. Kanawha. Includes northern Boone, northern Fayette, eastern Lincoln, northern Raleigh and all of Kanawha counties. Seams mined are Alma, Coalburg, Stockton-Lewiston, Winifrede, No. 2 Gas, No. 5 Block, Eagle, Cedar Grove, Chilton and Powellton. These produce steam, domestic, export, gas, railroad and by-product coking coals. Railroads serving are Chesapeake & Ohio and Kanawha & Michigan.
8. Pocahontas. Includes McDowell, Wyoming and Mercer counties. Seams mined are Pocahontas Nos. 3, 4 and 6. These produce steam, railroad, export, bunker, domestic and by-product coking coals. Railroads serving are the Norfolk & Western and Virginian.
9. Tug River. Includes western McDowell county. Seams mined are Iaeger, Sewell, Welch and Beckley. These produce steam, railroad,

*For much of the information on West Virginia coals we are indebted to West Virginia State Geological Reports; J. S. Burrows in Coal Age, Vol. 7, pg. 670; F. R. Wadleigh in Coal Age, Vol. 7, pgs. 165, 331, 375; H. H. Stock in Mines and Minerals, Vol. 20.

- export, domestic and by-product coking coals. Railroad serving is the Norfolk & Western.
10. **Thacker.** Includes eastern Mingo county. Seams mined are the Thacker (Cedar Grove), Alma, Freeburn, Warfield, Upper War Eagle, Coalburg and Winifrede. These produce steam, railroad, export, gas, domestic and by-product coking coals. Railroad serving is the Norfolk & Western.
 11. **Kenova.** Includes western Mingo county. Seams mined are the Coalburg, Winifrede and No. 5 Block. These produce steam, railroad, export, gas, domestic and by-product coking coals. Railroad serving is the Norfolk & Western.
 12. **Logan.** Includes all of Logan county. Seams mined are the Alma, Chilton, Eagle, Island Creek, No. 2 Gas and Winifrede. These produce steam, railroad, export, gas, domestic and by-product coking coals. Railroad serving is the Chesapeake & Ohio.
 13. **Coal River.** Includes southwestern portion of Boone county. Seams mined are Cedar Grove, Chilton, Eagle, No. 5 Block, No. 2 Gas and Winifrede seams. These produce steam, railroad, gas, domestic and by-product coking coals. Railroad serving is the Chesapeake and Ohio.
 14. **Coal and Coke.** Includes Gilmer, Braxton, Clay and southern part of Upshur counties. Seams mined are the Upper Freeport, Pittsburgh, Coalburg, Winifrede and Stockton-Lewiston. These produce steam, railroad, export and domestic coals. Railroad serving is the Baltimore & Ohio (Coal and Coke Division).
 15. **Gauley.** Includes Nicholas, Webster and northern Greenbrier counties. Seams mined are Cedar Grove, Eagle, Coalburg, Stockton-Lewiston and Sewell. These produce steam, railroad, export and domestic coals. Railroads serving are the Chesapeake & Ohio and Baltimore & Ohio.
 16. **Mason.** Includes Mason county. Pittsburgh seam is mined, producing a steam, railroad and domestic coal. Railroad serving is the Baltimore & Ohio.
- As shown by the coal column, workable seams are found in each of the five series, but at the present time none of the seams in the upper, or Dunkard, series has any commercial value and discussion on the coals of this series will, therefore be omitted.

MONONGAHELA SERIES

The Monongahela Series is that division of the rock column which begins at the base with the bottom of the Pittsburgh coal bed and extends to the top of the Waynesburg coal. In West Virginia the thickness of this group of rocks ranges from 260 feet along the western borders of Ohio and Marshall counties to over 435 feet in southeastern Doddridge and southwestern Harrison counties. Four seams of coal are being worked in this formation, the principal of these being the Pittsburgh bed. All coals produced are splendid steam coals, and, as a rule, characterized by a higher sulphur content than coals of the older formations.

Waynesburg Seam. (Mined in Fairmont District.)

This seam occupies the topmost formation of the Monongahela series. Its best development is found in Monongalia and Marion counties, in the former of which it is being mined for shipment on a small scale. It is always multiple bedded and is generally separated into two benches, upper and lower, by a shale parting 1 to 36 inches thick. The whole sometimes attains a thickness of 10 to 12 feet. Owing to its occurrence in a region abounding with better coals, the development of this seam has been unattractive. It is found generally in small patches and carries a large amount of ash. Local use has demonstrated that it is satisfactory as a domestic fuel, giving fine results when burned in an open grate. The following may be considered a general analysis:

Moisture	1.75
Volatile Matter	34.70
Fixed Carbon	49.40
Ash	14.15
Sulphur	3.45
B. t. u.	12,265

Sewickley Seam. (Also known as Mapletown Seam.) (Mined in the Fairmont District.)

Many new openings have been made in this seam during the past few years in the counties of Marion and Monongalia. It attains a fine development on Scotts Run in the latter county but thins down and disappears southwestward from Marion county. The coal is usually interlaminated by thin layers of mineral charcoal. This structure causes it to burn with a bright flame, leaving a fine ash

with little clinker. It has a fine reputation as a steam and domestic coal and is in demand for railroad fuel. It mines and stands shipment as well as the Pittsburgh seam, about 95 feet beneath. The roof conditions are excellent and the coal can be cleanly mined. A general analysis of the coal along Scotts Run is about as follows:

Moisture	1.25
Volatile Matter	36.15
Fixed Carbon	53.75
Ash	8.85
Sulphur	2.50
B. t. u.	13,930

Redstone Seam. (Mined in the Fairmont and Randolph-Barbour Districts.)

This seam lies from 30 to 50 feet above the Pittsburgh. In the Fairmont district it is of commercial importance in a small part of Monongalia county drained by Scotts Run and Robinson Run. Here it attains a thickness of four feet and mines in large lumps or blocks. The coal thins out as it passes both north and south from here. It reappears and is mined south of Clarksburg with some difficulty owing to the large number of clay veins. Going farther south it becomes an important bed in southern Harrison, and adjoining regions of Barbour, Upshur and Lewis counties. It is here usually free from slate or slate partings and has a thickness varying from four to six feet. An excellent roof is everywhere characteristic of the seam. It mines in cubical blocks and stands shipment well, entering the market as a steam and domestic coal.

GENERAL ANALYSIS	
Moisture	0.65
Volatile Matter	36.55
Fixed Carbon	54.90
Ash	7.90
Sulphur	2.65
B. t. u.	13,800

Pittsburgh Seam. (Mined in Fairmont, Panhandle and Elk Garden Districts.)

This is by far the most important seam in northern West Virginia and carries one of the most valuable coals in the United States. It covers the counties of Brooke, Ohio, Marshall, Wetzel, Marion and Harrison; the eastern portions of Monongalia, Tyler and Doddridge; and smaller portions of Lewis, Barbour, Taylor, Upshur, Braxton, Gilmer, Roane, Kanawha and Putnam counties. It is a notably persistent seam and aggregates more than a million acres in one almost solid block.

The fame of the Fairmont region, which for more than 30 years has been one of the great producing regions of the country, rests entirely upon the excellence of the Pittsburgh coal. The seam here averages from 7 to 9 feet, mines in large, hard, rectangular lumps and stands transportation well. While the seam is very regular and free from

disturbances, it nevertheless varies quite considerably in the sulphur content, and this largely defines the use to which it is put. Proceeding westward from the Monongahela river it appears to carry more sulphur, reaching as high as 4 per cent. in the Wheeling region. On the other hand, it seems to lose this element as it approaches the mountain system to the east, reducing to 0.88 per cent. at Elk Garden. A like variation in sulphur is noted in traveling to the south. While the analyses show around 4 per cent. in the vicinity of Morgantown, it becomes less than 1 per cent. in large areas about Fairmont and again ascends to about 4 per cent. as it reaches Clarksburg. Coals from the low sulphur areas are used for the manufacture of gas and the production of bee-hive and by-product coke; that from the high sulphur sections is favored for steam, railroad and domestic purposes.

	General Analysis Steam Coal Fairmont Region	General Analysis Gas Coal Fairmont Region
Moisture	1.45	1.15
Volatile Matter	36.75	35.35
Fixed Carbon	54.65	57.10
Ash	7.15	6.40
Sulphur	2.20	0.95
B. t. u.	14,250	14,300

CONEMAUGH SERIES

The Conemaugh Series extends from the Upper Freeport at the base up to the Pittsburgh coal at the top. Its thickness ranges from 550 feet in western Monongalia county to 600 feet along the Monongahela river in the same county. The Ames limestone, which owing to the marine fossils contained serves as a marker, occurs about midway in the Series and thus affords a ready means of identifying the Pittsburgh and Upper Freeport coal beds. None of the seams in this formation have sufficient thickness to become of great commercial importance, and it is only at scattered points that any one seam is thick enough to invite operation. In a small way, the Elk Lick, Bakerstown and Mahoning beds are worked at several points.

Bakerstown Seam. (Mined in Elk Garden District.)

This is one of the thinner seams, seldom reaching more than 4 feet in thickness. It is the only productive measure of the Conemaugh Series. For many years it was mined at Colliers on the Ohio river and used as a railroad fuel. At Masontown and Reedsville in Preston county it attains a thickness of from 2 to 4 feet. It is mined for commercial purposes only in the Elk Garden District,

and that in a restricted area of Mineral county. It is a good steam producer and valued as a domestic fuel.

GENERAL ANALYSIS	
Moisture	0.95
Volatile Matter	31.95
Fixed Carbon	58.70
Ash	8.40
Sulphur	2.85
B. t. u.	13,700

ALLEGHENY SERIES

The coals of the Allegheny Series are found in the eastern counties of the State, being enclosed within the great folds of the Alleghany Mountain range along the North Potomac basin of Mineral, Grant and Tucker counties. Due to having been subjected to considerable metamorphic change, they are much lower in volatile content than the coals lying farther west. Practically all of these coals are shipped to eastern markets, and because of their nearness to tidewater, they have an advantage in freight rates over those coals lying west from the Alleghany Mountains. They are much prized for steam and general fuel purposes, as well as for such special purposes as for smithing use and beehive coking.

Upper Freeport Seam. (Mined in Elk Garden, Upper Potomac and Fairmont Districts.)

This coal is found in the northern counties, Monongalia, Preston, Tucker, Grant and Mineral. At several places in Upshur county it averages 3 feet in thickness and is mined for local use. It thins out as it passes into Marion and Taylor counties. A good portion of the production from the Preston county mines is shipped to by-product coke ovens at eastern steel mills, while some of it is used for coking in beehive ovens at the mines. The tendency of this coal to contract in coking instead of expanding, as is the case with many coals, is a very

valuable asset in preventing injury to by-product ovens. The seam in Preston county measures 9 feet 6 inches, but this includes 12 inches of slate parting lying toward the bottom and 12 inches of bone near the top. Only the 4 foot section between the big slate and the top bone is recovered. The coal from this seam in Tucker, Grant and Mineral Counties is semibituminous in character. It is harder than the Lower Kittanning beneath, breaks with a cubical fracture and stands transportation well. Run-of-mine from the Upper Freeport seam ranks high as a steam coal; lump coal is used as a domestic fuel; slack is well adapted for coking purposes.

	General Analysis (Preston Co.)	General Analysis (Upper Potomac District)
Moisture	2.10	0.95
Volatile Matter	28.40	14.65
Fixed Carbon	61.40	75.35
Ash	8.10	9.05
Sulphur	1.20	1.55
B. t. u.	13,950	14,670

Lower Freeport Seam. (Mined in Upper Potomac, Panhandle and Randolph-Barbour Districts.)

This seam is found in the northern counties in the eastern section of the State, and also in the Panhandle district in the western part, but nowhere does it attain much commercial value. It is a multiple bed reaching a thickness of nearly 12 feet, more than half of which is worthless slate and bony material. The workable portion ranges from 3 to 4 feet and provides a low ash coal of good quality for steam and domestic purposes.

GENERAL ANALYSIS		Workable Portion
Moisture		1.70
Volatile Matter		32.75
Fixed Carbon		62.25
Ash		3.30
Sulphur		1.58

Upper Kittanning Seam. (Mined in the Randolph-Barbour District.)

This coal, like the other coals of the Allegheny Series, is of a soft nature. It is found in minable thicknesses in Barbour, Upshur and Randolph counties. The best development in Barbour county is along the Tygart Valley River, between the Taylor county line and Tygart Junction. The only place it is workable in Randolph county is in the northern part of the Roaring Creek region. The coal in this vicinity varies in thickness from 2 to 5 feet and usually has a parting of slate or bone about one foot from the bottom.

GENERAL ANALYSIS	
Moisture	1.25
Volatile Matter	32.25
Fixed Carbon	55.35
Ash	11.15
Sulphur	3.00
B. t. u.	13,500

Lower Kittanning Seam. (Known as No. 5 Block in Kanawha District.) (Mined in Elk Garden, Upper Potomac and Randolph-Barbour Districts.)

This is one of the major seams of the state. It is widely persistent and is the only seam in the Allegheny series that extends continuously across the state in commercial thickness and value. It is extensively mined, yielding a large tonnage of semibituminous coal in the Upper Potomac region and vicinity, and high volatile coal in the Roaring Creek region and vicinity. A thickness of 14 feet is reached at times, but only 5 to 7 feet is usually mined. It is frequently divided into two distinct seams by a shale parting which sometimes reaches a thickness of several feet. The coal shows a columnar structure, typical of all good coking coals. Physically it is soft and easily broken by hand. This seam furnishes a valuable railroad, steam, smithing and domestic coal. A great deal of that used for steam purposes is shipped as run-of-mine.

GENERAL ANALYSIS		
	North Potomac	Roaring Creek
Moisture	1.00	1.05
Volatile Matter	14.90	30.20
Fixed Carbon	72.20	58.00
Ash	11.90	10.75
Sulphur	2.65	1.60
B. t. u.	13,730	13,800

No. 5 Block Seam. (Mined in the Kanawha and Kenova Districts.)

As the Lower Kittanning passes southward to the Kanawha River it gradually becomes harder and changes to a type known as "block" coal from the large and hard blocks into which it breaks when mined. This characteristic is preserved as the seam passes on southwestward through Boone, Lincoln, Wayne and Mingo counties to the Kentucky line. In the Kanawha region this seam is about 7½ feet thick, and unlike the coal in the northern part of the State, is high in volatile matter and contains layers of soft coal. It is highly valued for steam and domestic purposes, and is well adapted for export, being low in both sulphur and ash.

GENERAL ANALYSIS	
Moisture	1.55
Volatile Matter	24.45
Fixed Carbon	55.85
Ash	8.15
Sulphur	1.25
B. t. u.	13,600

POTTSVILLE SERIES—Kanawha Group—Upper Division

Next below the Allegheny Series in the geological column comes the Kanawha group of the Pottsville Series. This group of strata has a great thickness, more than 1,000 feet, along the Kanawha River in the vicinity of Montgomery. It holds 7 or more seams of commercial importance, of which the principal ones in descending order are: Stockton-Lewiston, Coalburg, Winifrede, Chilton, Cedar Grove, No. 2 Gas and Eagle. The first three named represent the hard or blocky coal which many years ago was given the name "Kanawha Splint" and under which name it won a great reputation, especially in the Middle West, as a steam and domestic fuel. By splint coal is meant that in mining the coal is broken into solid oblong blocks, about 70 to 75 per cent. of the production being in lumps. These splint coals are quite hard and are distinguished by an almost metallic ring. They ignite readily, make a beautiful fire, and have no injurious effect on grates and heating surfaces. The ash of the splint coals is practically non-fusible and makes little or no clinker. There is very little deterioration in handling, and being low in both ash and sulphur, the splint coals are especially fitted for export.

Stockton-Lewiston Seam. (Known also as Belmont Seam.) (Mined in Kanawha, Coal and Coke, Gauley and Thacker Districts.)

This bed covers a wide territory at a horizon of from 50 to 80 feet above the Coalburg seam. The thickness ranges from 4 to 12 feet with partings. It is always multiple bedded and in 2 to 4

divisions separated by shales. The upper portion of the seam sometimes turns into cannel. Coal from this seam is free burning, leaves little ash, and stands severe handling well, being considered one of the standard domestic coals. It is one of the three seams of the Upper Kanawha Series whose coal is splinty in character. These coals are

prized for the manufacture of illuminating gas, for gas producers, railroad, domestic, metallurgical, export and steam purposes.

GENERAL ANALYSIS

Moisture	1.50
Volatile Matter	33.40
Fixed Carbon	59.00
Ash	6.10
Sulphur	0.85
B. t. u.	13,530

Coalburg Seam. (Also known as Buffalo Creek Seam.) (Mined in Kanawha, Thacker, Coal and Coke, Gauley and Kenova Districts.)

This is a multiple bedded seam, being a mixture of pure splint coal and alternating layers of softer, or gas, coals. It varies from 4 to 8 feet in thickness and has the greatest development of any of the splint coals. It holds a place as one of the earliest mined seams in the Kanawha district, in fact to this seam is due the credit for establishing the reputation of Kanawha splint coals. It lies at a variable interval above the Winifrede—also a splint coal—but it is interesting to note that the Coalburg and Winifrede never occur as workable seams in the same vicinity. Coal from this seam in Mingo county is shipped extensively for steam and domestic fuel. Being a splint coal, the uses already enumerated apply equally to the Coalburg.

GENERAL ANALYSIS

Moisture	1.65
Volatile Matter	32.90
Fixed Carbon	57.65
Ash	7.80
Sulphur	0.80
B. t. u.	13,800

Winifrede Seam. (Known also as Black Band Seam, Dorothy Seam in Raleigh county.) (Mined in Kanawha, Thacker, Coal and Coke and Kenova Districts.)

This seam has been mined for many years in the Kanawha region and is now being extensively developed in the Thacker region. It varies from 4 to 12 feet in thickness, and, like the Coalburg, is a mixture of gas and splint coals, the latter, however, largely predominating and making it an excellent fuel for practically every purpose. The seam lying north of the Kanawha river does not maintain the standard of purity, while that lying to the southwest gives promise of even exceeding the standard of that found along the river. The general remarks on splint coal adequately describe the commercial uses of this seam.

The DOROTHY SEAM is a multiple-bedded splint coal which received its name from the town of Dorothy in Raleigh county where this bed reaches its greatest development. The section in which it is mined includes Seng Creek, Clear Fork as far south as Sycamore Creek, and Marsh Fork as far south as Hazy Creek, all of these streams being tributaries of Big Coal River.

At Dorothy it appears to be a double seam ranging from eight to fourteen feet in thickness. In going to the north of Dorothy the seam is split and the lower portion disappears so that mines in this section are working in the upper portion of the bed.

The Dorothy Seam has few impurities and there is sufficient gas and block coal in its structure to make it a superior steam and domestic fuel.

GENERAL ANALYSIS

	Winifrede	Dorothy
Moisture	1.55	1.05
Volatile Matter	33.05	35.05
Fixed Carbon	58.35	58.25
Ash	7.05	5.65
Sulphur	0.75	0.50
B. t. u.	14,100	14,570

POTTSVILLE SERIES—Kanawha Group—Lower Division

The coals in the Lower Division of the Kanawha Group are of a softer type than the coals of the Upper Division and contain fewer layers of "splinty" coals. They are excellent for general steam and domestic purposes and are also well adapted for by-product coking and the manufacture of illuminating and producer gas. Most of the Kanawha coals are shipped to western points, including western Kentucky, portions of Ohio, Indiana, Illinois, Michigan, Iowa, Wisconsin and to Lake cities. A small amount of coal shipped from the Kanawha district to the East is used for locomotive and domestic purposes.

Chilton Seam. (Mined in the Logan District.)

This bed occurs from 70 to 150 feet under the Winifrede coal. It attains its greatest development in southern Boone and eastern Logan counties, where it attains a thickness of from four to five feet and is mined on a commercial scale, particularly on Dingess Run, Rum and Buffalo Creeks in Logan county and on Spruce Fork of Coal River in Boone and Logan counties. Cannel coal is sometimes found in the top portions of the bed. Chilton seam coal is highly regarded as a gas and by-product coal and is also much used for domestic and general steam purposes.

GENERAL ANALYSIS

Moisture	1.90
Volatile Matter	36.20
Fixed Carbon	56.05
Ash	5.85
Sulphur	0.75
B. T. U.	14,260

Cedar Grove Seam. (Known as the Island Creek Seam in Logan county; as the Red Jacket, Thacker and Upper Thacker in Mingo county.) (Mined in the Kanawha, Logan, Gauley, Kenova and Thacker districts.)

The Cedar Grove coal in the Kanawha region is a thin seam, averaging about 2 feet 8 inches and seldom exceeding 3 feet. It is a high volatile coal and is locally the source of high grade cannel coal.

This coal in the Logan field is known as the ISLAND CREEK SEAM. It is nearly always multiple bedded, containing gas and splint coals in about equal proportions. It reaches a fine development in this district, with a thickness varying from 6 to 9½ feet. The coal mines in large rectangular blocks or prisms which are very hard and stand handling and transportation with very little deterioration. Island Creek coal is in great demand for fine domestic trade, and because of its purity is also much used for the manufacture of gas. This bed has a noticeable tendency to develop local de-

posits of cannel coal in amounts sufficient to warrant separation, as at Switzer, Micco, mines on the waters of Island Creek and in the Peytonia region of Boone county. The Island Creek coal occurs geologically about midway between the Chilton and No. 2 Gas coals, and, according to the State Geological Survey ranks next to the No. 2 Gas as the most valuable deposit in Logan and Mingo counties.

As the THACKER SEAM this is the most important coal of the Thacker district. It is also referred to as the UPPER THACKER and the RED JACKET Seam. It is mined commercially at Matewan and on the waters of Mate, Sulphur, Thacker and Grapevine Creeks. Here it is a thick multiple bed, the greater portion consisting of hard coal in the form of splinty layers interspersed with some soft ones. It stands transportation well and deteriorates little in storage; ignites readily and burns with a long bright flame with considerable smoke; has a high ash fusing point and usually a white ash. It ranks high as a locomotive fuel, as a steam coal for general use, and for gas producers and furnaces. Several of the mines on the Kentucky side of Tug river have their tipples in West Virginia, the river being the boundary line.

GENERAL ANALYSIS

	Cedar Grove	Thacker	Island Creek
Moisture	1.05	1.85	1.75
Volatile Matter	35.35	32.25	36.75
Fixed Carbon	58.20	59.60	56.45
Ash	5.40	6.30	5.05
Sulphur	0.95	1.20	1.20
B. t. u.	14,220	13,560	14,290

Alma Seam. (Also known as Peerless Seam.)
(Mined in Kanawha and Thacker Districts.)

This is a thin seam, varying from 2 to 5 feet in thickness and is somewhat softer than the Cedar Grove. It is a comparatively unimportant bed in the Kanawha district but wherever mined provides an excellent gas coal. As the Alma coal of the Thacker district it has considerable value, being used for locomotive fuel, gas producers, furnaces and general steam purposes.

GENERAL ANALYSIS

Moisture	1.30
Volatile Matter	39.55
Fixed Carbon	53.80
Ash	5.35
Sulphur	1.30
B. t. u.	14,120

No. 2 Gas Seam. (Known as Campbell Creek; Upper War Eagle, Freeburn, Burnwell, Rawl, and Warfield in Thacker Districts.)
(Mined in Kanawha, Kenova, Logan and Thacker Districts.)

The No. 2 Gas Seam is in reality the lower split of the Campbells Creek coal, the upper member being the Peerless bed.

It is the most persistent and valuable bed of the Kanawha series and varies from 5 to 10 feet in thickness. In point of production it holds first place, and as an all-around fuel is excelled by few in the country. It is a good coking coal and is now extensively used in the by-product industry, being mixed with the lower-volatile New River or Pocahontas coals, in such proportions as to produce a coal of about 27 per cent volatile matter. There is considerable variation in the structure and hardness of the coal in this bed.

The No. 2 Gas coal is the most valuable and most widely persistent seam in Logan and Mingo counties. In the Logan district there are large operations in the vicinity of Earling and Manbar and on Buffalo Creek between Man and Amherstdale. In Mingo county this seam is mined at Kermit, Warfield and up Tug Fork under various local names.

No. 2 Gas coal, from whichever district produced, is an excellent steam coal, has a wide use as a locomotive fuel and answers well for gas producer plants and for the manufacture of illuminating gas.

GENERAL ANALYSIS

Moisture	1.20
Volatile Matter	33.50
Fixed Carbon	59.80
Ash	5.50
Sulphur	0.85
B. t. u.	14,280

Powellton Seam. (Mined in Kanawha District.)

In the Kanawha district, at points along the Kanawha River and up Armstrong Creek, the Powellton seam shows a fine development. While of comparatively limited extent, it is widely persistent in Fayette county where it ranges from 5 to 7 feet in thickness. It mines in columnar form, is soft and friable and yields a large per cent of fine coal in mining. It is low in ash and ranks high as a steam coal. Owing to the low sulphur content and the total absence of phosphorus it is better adapted for coke making and by-product purposes than most of the Kanawha coals.

GENERAL ANALYSIS

Moisture	1.15
Volatile Matter	32.25
Fixed Carbon	60.75
Ash	5.85
Sulphur	0.95
B. t. u.	14,335

Eagle Seam. (Known also as No. 1 Gas; Middle War Eagle in Mingo county; Mohawk seam in western McDowell county.) (Mined in Kanawha, Gauley, Logan, Thacker and Tug River Districts.)

The Eagle seam is somewhat lower in volatile matter than the coals of the Kanawha group and is also correspondingly higher in fixed carbon and calorific value. As a medium-volatile coal it appears to occupy an intermediate stage between the "gas" and "splint" types of the upper two-thirds of the Kanawha group and the exceptionally low volatile beds of the underlying New River group.

In Fayette county the Eagle coal is soft and columnar, its bed structure being in marked contrast to that prevailing in the same region for the coal beds in the upper portion of the Kanawha group. A considerable portion of the northwestern part of Raleigh county is underlaid with this seam. The Eagle coal, as a minable bed in Logan and Mingo counties, is confined to a narrow belt extending northeast and southwest along the southeast borders of both counties. As in the Kanawha and Fayette regions it is a soft coal of the "gas" type and in physical appearance resembles the New River coals. In the Tug River region, where it is known as the Mohawk seam, splinty layers are common. Its thickness in the areas under discussion varies from 3 to 7 feet.

This seam has a wide reputation for the uniform character of output, and is one of the premier coals for by-product purposes, being mixed with some of the lower volatile coals of the New River and Pocahontas group before charging into the ovens. It also enjoys a well established reputation as a smithing coal. For steam purposes it ranks especially high.

GENERAL ANALYSIS

Moisture	0.80
Volatile Matter	31.00
Fixed Carbon	63.10
Ash	5.10
Sulphur	0.85
B. t. u.	14,710

POTTSVILLE SERIES—New River Group

The New River Group of the Pottsville Series varies from 900 to 1,300 feet in thickness and contains 20 seams of coal, 10 of which may be classified as beds of commercial thickness and purity. The fame of the New River coals rests upon the excellence of the fuel from the three principal seams in the Group, viz., Sewell, Beckley and Fire Creek. These coals are known the world over as first-class steam producing fuels. This distinction rests equally with all three beds, as the coal from each seam is of about the same composition, structure and appearance. They outcrop on the New River canon high in the hills, but gradually dip westward and go below water level a short distance west of Gauley Bridge. They are semibituminous in character and because of their comparative freedom from smoke are known as "Smokeless" coals. The amount of ash in burning is small and drops from the coal as it burns, providing a fresh surface for combustion and leaving a small amount of clinker. Their sootless qualities make them desirable for domestic purposes, and, owing to their great heat content, they are in great demand for naval vessels. There is little depreciation in storage and little or no danger of spontaneous combustion. Conclusions drawn from tests on New River coal, under severe conditions of outdoor exposure to the weather, are that it deteriorates in heating value approximately 1 per cent. in the first year of storage, 2 per cent. in the first two years, and not over 3 per cent. in five years. Storage under water prevents practically all deterioration during one year, and no more than 0.5 per cent. has been found in any test for two years or less.

Two railroads traverse this field; the Chesapeake & Ohio, over which coal is shipped both to the East and the West, and the Virginian, over which coal is shipped to Virginia tidewater points. Usually about one-fourth of the tonnage produced in the New River field has been shipped to the West and to lake docks. Of the remainder, outside of that converted into coke, shipment has been to the southeastern states and to New England and foreign markets by way of Hampton Roads. There is a large tonnage shipped to the Canal Zone. The navy has been and still is a large buyer of these coals.

Iaeger Seam. (Mined in Tug River District.)

This seam varies from 2 to 5 feet in thickness and is usually so much charged with impurities as to be unworkable. It is, however, mined to a limited extent in the vicinity of Iaeger, McDowell county, the coal being used chiefly for steam, railroad and domestic purposes.

GENERAL ANALYSIS

Moisture	0.87
Volatile Matter	25.61
Fixed Carbon	68.88
Ash	4.64
Sulphur	0.66
B. t. u.	14,370

Sewell Seam. (Known as Davy Seam in Tug River District.) (Mined in New River and Tug River District.)

This seam is the most important of the three great producing beds of the New River series, holding first place in production for many years. It is more regular in formation and extends over a greater area than either the Beckley or Fire Creek, which are the other members of this celebrated group. The finest developments are found along New River and the small streams tributary thereto. Here at places it attains a thickness of 6 feet, thinning down as it leaves the river until it reaches 2½ feet at the northwestern edge of the field. The average thickness as shown by measurements made at 50 mines by Bureau of Mines engineers is 5.01 feet.

Sewell coal produces an excellent quality of coke, the Davy seam in the Tug River district being used largely at by-product ovens. It burns with a short white flame and intense heat.

The Sewell seam is found in minable thickness, from 2 to 5 feet, in Randolph county. It is here of good quality, having the typically soft columnar appearance of the New River coal. Tests have shown it to be an excellent coking coal.

GENERAL ANALYSIS

	New River	Randolph County
Moisture	0.75	0.95
Volatile Matter	19.90	29.35
Fixed Carbon	76.15	63.80
Ash	3.20	5.90
Sulphur	0.80	0.85
B. t. u.	15,130	13,950

Welch Seam. (Known also as Tug River Seam.) (Mined in Tug River District.)

This seam is mined in McDowell county. It varies in thickness, ranging as mined from 3 to 7 feet. The coal is free from partings, except for a characteristic gray and impure splint which occurs at varying distances from the top and which is discarded in the mining. It is sold as a steam and domestic coal and for mixture with other by-product coals.

GENERAL ANALYSIS

Moisture	0.80
Volatile Matter	18.80
Fixed Carbon	72.20
Ash	8.20
Sulphur	0.70
B. t. u.	14,500

Beckley Seam. (Known as War Creek in Tug River District.) (Mined in New River and Tug River Districts.)

Most of the more recent developments along the Virginian and Chesapeake and Ohio railroads

are in this seam and it is gradually passing into first place in the production of New River coals. It is not found in workable thickness along the New river but it increases in thickness to the south and west, attaining commercial importance about Beckley, the county seat of Raleigh county. It is noted for irregularities in section, showing great local differences in thickness, owing to rolls in the sandstone roof and the variation in its bone or slate partings. Frequently it is split in two, and while the quality of the coal is consistently good its mining value is diminished. It varies in thickness from 4 feet 6 inches to 11 feet, with an average of 5 feet 3 inches.

GENERAL ANALYSIS

Moisture	0.65
Volatile Matter	17.20
Fixed Carbon	78.25
Ash	3.90
Sulphur	0.65
B. t. u.	15,120

Fire Creek Seam. (Known also as Quinnimont Seam.) (Mined in New River District.)

This seam was the earliest mined of the New River group, and, due to partial exhaustion, now ranks third in point of production. It varies in thickness from 3 feet 6 inches at the east to 7 feet in the vicinity of Thurmond, the average being a little over 4 feet. It thins out toward the northwest and beyond Sewell is not of workable thickness. In this connection it is interesting to note that all three of the New River coal beds are never found in workable thicknesses in the same vertical section, since one seam usually thins out as the other increases.

GENERAL ANALYSIS

Moisture	0.60
Volatile Matter	19.95
Fixed Carbon	75.20
Ash	4.25
Sulphur	0.65
B. t. u.	15,210

POTTSVILLE SERIES—Pocahontas Group

The Pocahontas Group of the Pottsville Series has a thickness of from 600 to 700 feet. The celebrated Pocahontas coals are found in this Group. These are characterized by being low in volatile matter and high in heat content, so that when burned there is very little smoke given off, hence, like the coals of the New River Group lying higher up, they are everywhere known to the trade as "Smokeless" coals. The main difference between the New River and Pocahontas coals is that the latter contain 4 to 7 per cent. less of volatile matter. In fuel value they are about the same. Both are of the soft and coking type. Pocahontas coal is used for mixing with coals containing higher volatile matter in the by-product oven.

Coal from the three Pocahontas seams mined in this Group is moved westward over the Norfolk & Western, and eastward over the same railroad and the Virginian. Exporting is done largely from Norfolk and Newport News.

Pocahontas No. 6 Seam. (Mined in Pocahontas District.)

This seam ranges from 3 to 5 feet in thickness and produces only a small amount of the coal shipped from the Pocahontas district. It is semi-bituminous in character and similar in composition and uses to the Pocahontas No. 3 seam. It is mined on a small scale at a few places in McDowell county.

GENERAL ANALYSIS

Moisture	0.70
Volatile Matter	19.65
Fixed Carbon	76.55
Ash	3.10
Sulphur	0.60
B. t. u.	15,190

Pocahontas No. 4 Seam. (Mined in Pocahontas and Tug River Districts.)

This seam is second in importance to the No. 3 seam. In thickness it varies from 4 to 7 feet, and averages about 6 feet. The quality of coal produced is quite equal to that from the No. 3 seam. Only about 10 per cent. of the regional production comes from this bed, nearly all of this being from the western end of the district. This is because the No. 4 seam is thin, as compared with the No. 3, and its location for development is not so advantageous.

GENERAL ANALYSIS

Moisture	0.95
Volatile Matter	16.10
Fixed Carbon	78.65
Ash	4.30
Sulphur	0.55
B. t. u.	15,010

Pocahontas No. 3 Seam. (Known also as Pocahontas Thick Vein.) (Mined in Pocahontas District.)

This seam produces 90 per cent of the tonnage shipped from the Pocahontas region and is the main source of the celebrated Pocahontas steaming and coking coal, one of the purest coals in the United States. Its excellence is such that it is used as a standard by which all other steam coals are graded. Most of the seam lies above water level, ranges from 5 to 12 feet in thickness, with an average of 6½ feet, and covers a territory of 300 square miles. Geologically, it lies just above the Mauch Chunk red shales and is therefore one of our oldest bituminous beds. The dip of the seam is toward the northwest, in which direction it shows a tendency to thin out and also to decrease in volatile matter. There are two partings varying in thickness from a fraction of an inch to 3 inches—one a bony coal of some fuel value, and the other a hard slate. Both bands are cast out either by the miners or by pickers.

Pocahontas coal has a columnar structure and being soft produces a large amount of small coal in mining. It ignites readily, cokes strongly, and burns with a short white flame. The combustion

is slow and comparatively little smoke is given off, hence it is known to the trade as a smokeless coal. The amount of ash is small with a fusing temperature ranging from 2150 deg. F. to 2600 deg. F.

With a fuel of this wonderful purity the uses are many. Because of its high calorific value it is the standard for naval and merchant vessels. It has been used for many years as a locomotive fuel, although the tendency of late amongst railroads has been to use a higher volatile and cheaper coal. It produces an excellent coke, but as with all low volatile coals, coking is done at the expense of some of the fixed carbon. For mixture with higher volatile coals used in the by-product industry, it is unexcelled. As a steam producer for stationary plants it holds first rank. Further usage is as a domestic coal and for kilns or furnaces.

GENERAL ANALYSIS	
Moisture	0.60
Volatile Matter	16.30
Fixed Carbon	78.10
Ash	4.70
Sulphur	0.65
B. t. u.	15,100

Thin Vein Pocahontas Seams. (Mined mostly in Tug River District.)

The term "Thin Vein Pocahontas" is applied to those coals above the Pocahontas Nos. 3 and 4 seams which are mined principally in the Tug River district. They comprise the Sewell-Davy, Welch, Bradshaw, and other seams of minor importance, all having similar physical characteristics and chemical analyses as the Pocahontas Nos. 3 and 4 Seams.

PREPARATION OF COAL

During the past few years much attention has been given in West Virginia to this subject. Practically all the newer mines are being provided with the latest tipple devices, and many of the older operations have discarded the old-time bar screen and chute, and in place thereof have complete in-

stallations of mechanical appliances to assist in the cleaning of the coal and in the maintenance of uniform sizes. The central and southern districts especially have been alert in this matter, and fine examples of modern tipple installations may be found.

From the Fairmont region the following sizes are shipped:

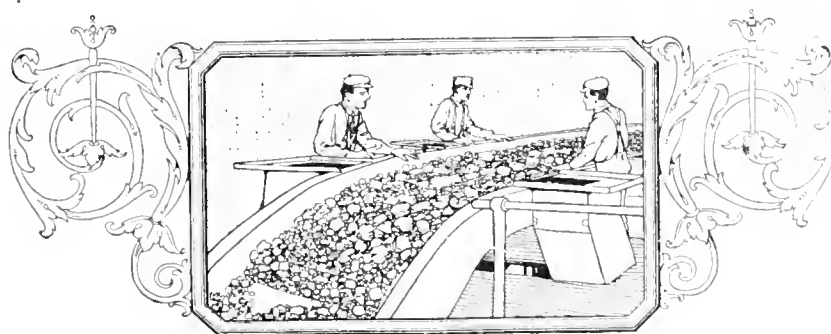
- (a) Lump—Four inches, 3 inches, $2\frac{1}{2}$ inches, 2 inches, $1\frac{1}{2}$ inches, $1\frac{1}{4}$ inches, and $\frac{3}{4}$ inch.
- (b) Egg and Nut—The sizes depend upon the size of lump.
- (c) Pea—Through $\frac{3}{4}$ -inch and over $\frac{1}{2}$ -inch.
- (d) Slack—Through $\frac{1}{2}$ -inch.

The recent tendency is towards a simplification in the number of sizes.

In the Kanawha, New River and Pocahontas districts of West Virginia the designation of sizes is as follows:

- Run-of-mine..standard 35% to 40% lump.
- Lump..all over 3-inch screens.
- Egg..all through 3-inch and over $1\frac{1}{2}$ -inch screens.
- Nut..all through $1\frac{1}{2}$ -inch and over $\frac{3}{4}$ -inch screens.
- Nut and Slack..all through $1\frac{1}{2}$ -inch screen.
- Slack..all through 1-inch or $\frac{3}{4}$ -inch screen.

For additional information on uses and analyses of West Virginia coals, see descriptive advertisements on coal mines following the Supplementary Analyses.



Analyses of West Virginia Seams by Counties and Localities

CALL ANALYSES MADE ON MINE SAMPLES "AS RECEIVED"

See Descriptive Advertisements of West Virginia Mines for Additional Analyses

SEAM	COUNTY AND LOCATION	MINE	Moisture	Matter Volatile	Fixed Carbon	Ash	Sulphur	Detemined R. T. C.	Carbon	Oxygen	RATIOS	
											Carbon Oxy. + Ash	F. C. V. M.
Alma.....	Boone, 1/2 mi. n. e. of Boone.....	Bias.....	1.24	39.96	54.45	4.35	1.24	14,550	80.52	7.08	7.04	1.60
Alma.....	Boone, 1/2 mi. s. e. of Grandview.....	Bennett.....	1.25	39.50	51.78	7.47	1.14	14,140	77.37	7.35	5.22	1.31
Alma.....	Boone, 1/2 mi. n. of Grandview.....	Allen.....	1.06	38.14	53.21	7.59	1.99	13,900	76.76	7.11	5.22	1.40
Alma.....	Boone, 8 m. s. e. of Madison.....	Curry.....	1.29	41.98	53.20	3.53	1.33	14,550	79.70	8.71	6.51	1.31
Alma.....	Boone, Ottawa.....	Coal River.....	1.44	37.95	55.79	4.82	0.67	14,500	79.43	8.31	6.04	1.47
Alma.....	Boone, average for County.....	Johnson.....	1.29	39.53	53.80	5.36	1.32	14,120	77.82	7.45	6.08	1.36
Alma.....	Logan, Hughey.....	Lewis.....	1.85	40.87	52.21	5.07	1.98	14,290	78.12	7.80	6.03	1.28
Alma.....	Kanawha, Cabin Creek.....	.....	0.83	38.73	57.27	3.17	0.67	14,450	79.87	9.60	6.25	1.48
Alma.....	Kanawha, average for County.....	.....	0.84	38.21	56.59	4.36	1.06	14,577	79.87	9.60	5.72	1.45
Alma.....	Logan, Big Creek.....	Black Hawk.....	1.86	36.15	54.83	7.16	1.91	13,537	75.20	10.80	4.51	1.52
Alma.....	Logan, Kitchen.....	Kitchen.....	1.22	43.33	50.99	4.46	1.57	.....	.....	.....	.....	1.18
Alma.....	Logan, Logan.....	Wilson.....	1.53	32.59	54.81	11.07	0.97	13,245	74.71	7.40	4.04	1.68
Alma.....	Logan, 1/2 mi. n. e. of Stone Branch Sta.....	Stone Branch.....	1.96	35.71	56.46	5.87	2.14	13,503	75.13	10.86	4.49	1.58
Alma.....	Logan, average for County.....	.....	1.78	34.36	57.42	6.44	1.29	13,863	77.22	8.85	5.05	1.67
Alma.....	Mingo, 1/2 mi. s. e. of Matewan.....	Mate Creek.....	1.75	30.94	61.78	5.53	0.49	14,106	81.34	7.02	6.48	2.00
Alma.....	Mingo, 3 mi. n. w. of Matewan.....	Marvin.....	1.59	33.26	61.60	3.55	0.57	14,470	80.34	8.89	6.46	1.85
Alma.....	Braxton, Corley.....	Bright.....	0.92	36.63	51.15	11.30	1.59	13,230	73.35	7.39	3.92	1.40
Bakerstown.....	Mineral, average of County.....	.....	0.70	15.05	73.83	10.42	2.23	14,204	.....	.....	.....	4.91
Bakerstown.....	Preston, 1/2 mi. e. of Irona.....	Craig.....	0.93	28.77	65.56	4.74	0.60	14,620	81.31	6.45	7.27	2.28
Bakerstown.....	Preston, average for County.....	.....	1.33	30.31	61.61	6.75	2.00	.....	.....	.....	.....	2.03
Bakerstown.....	Taylor, average for County.....	.....	0.95	31.96	58.67	8.42	2.57	13,935	76.28	6.15	5.24	1.83
Beckley.....	McDowell, 4 mi. s. of English.....	Yukon No. 1.....	0.80	15.10	75.95	8.15	0.62	14,554	82.68	3.43	7.14	5.03
Beckley.....	McDowell, Erin.....	Flanagan No. 1.....	1.05	19.15	67.82	11.98	1.46	13,730	78.36	2.55	5.39	3.54
Beckley.....	McDowell, 1.1 mi. s. w. of War.....	Warrior.....	2.67	17.87	71.41	8.05	0.68	14,150	80.25	5.04	6.13	4.00
Beckley.....	McDowell, War.....	War Creek.....	2.18	16.36	73.02	8.44	0.69	14,006	80.70	4.53	6.22	4.46
Beckley.....	McDowell, average for County.....	.....	1.07	17.90	73.28	7.75	0.81	14,145	80.43	3.67	6.22	4.10
Beckley.....	Raleigh, Glen White.....	Glen White.....	4.70	13.00	77.90	4.42	0.83	14,340	82.31	6.24	7.72	6.00
Beckley.....	Raleigh, 3 mi. w. of Hotcoal.....	Big Stick.....	2.24	17.54	75.40	4.82	0.63	14,573	83.73	4.83	8.81	4.30
Beckley.....	Raleigh, McAlpin.....	McAlpin.....	2.20	17.23	77.05	3.52	0.59	14,738	84.87	4.83	10.16	4.47
Beckley.....	Raleigh, Raleigh.....	Raleigh No. 3.....	0.96	16.15	80.56	2.33	0.56	15,355	88.17	3.19	15.97	5.00
Beckley.....	Raleigh, 1 mi. e. of Riley.....	Piney No. 4.....	0.99	16.46	78.12	4.43	0.72	15,064	85.73	3.66	10.57	4.75
Beckley.....	Raleigh, 4 mi. e. of Slab Fork.....	Slab Fork No. 1.....	1.41	16.22	78.77	3.60	1.00	15,140	86.23	3.24	12.61	4.86
Beckley.....	Raleigh, Slab Fork.....	Slab Fork No. 5.....	3.33	17.35	76.03	3.29	0.47	14,704	84.37	5.49	9.61	4.38
Beckley.....	Raleigh, 6 mi. n. w. of Winding Gulf.....	Winding Gulf No. 2.....	2.17	17.39	77.77	2.67	0.50	14,987	86.28	4.35	12.29	4.77
Beckley.....	Raleigh, average for County.....	.....	1.17	17.81	77.10	3.92	0.72	15,041	85.18	4.30	11.01	4.33
Beckley.....	Wyoming, Pineville.....	.....	0.29	22.03	75.62	2.06	1.44	.....	.....	.....	.....	3.61
Beckley.....	Boone, 1.2 mi. n. w. of Andrew.....	Abshire.....	1.24	40.31	57.70	3.75	1.22	14,460	80.17	8.29	6.67	1.61
Cedar Grove.....	Boone, Crook District.....	Arbogast.....	0.43	56.99	33.90	8.68	1.85	15,000	76.38	6.77	4.68	0.58
Cedar Grove.....	Boone, average for County.....	.....	1.34	41.38	53.35	3.93	1.36	14,610	78.28	6.60	6.14	1.29
Cedar Grove.....	Kanawha, 1 mi. s. of Hershaw.....	No. 2.....	1.06	37.59	57.66	3.69	0.74	14,220	77.01	11.69	5.01	1.53
Cedar Grove.....	Logan, Amherstdale.....	Amherst No. 1.....	1.45	34.92	58.78	4.85	0.84	14,580	81.62	6.13	7.43	1.68
Cedar Grove.....	Logan, 4 mi. n. e. of Holden.....	Island Creek No. 2.....	1.42	33.91	55.50	9.17	3.75	13,327	74.85	6.35	4.82	1.64
Cedar Grove.....	Logan, 1 mi. n. w. of Holden.....	Island Creek No. 7.....	1.88	39.59	53.19	5.34	1.27	14,150	77.78	8.95	5.44	1.34
Cedar Grove.....	Logan, 1 mi. n. w. of Holden.....	Island Creek No. 8.....	3.60	39.24	52.37	4.79	1.06	14,010	77.97	9.72	5.37	1.33
Cedar Grove.....	Logan, 1 mi. w. of Logan.....	Gay.....	1.62	36.58	57.47	4.33	1.55	14,198	79.33	8.66	6.11	1.57
Cedar Grove.....	Logan, 9 mi. n. w. of Logan.....	Aracoma No. 1.....	1.84	38.85	53.96	5.35	1.19	14,330	77.95	8.37	5.68	1.39
Cedar Grove.....	Logan, Monaville.....	Mona.....	1.83	37.98	56.13	4.06	0.80	14,570	79.83	8.18	6.52	1.48

*Bullietus Bureau of Mines.

†State Geological Survey Reports.

(Continued on Next Page)

COAL CATALOG

ANALYSES OF WEST VIRGINIA SEAMS BY COUNTIES AND LOCALITIES—Continued

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. V.	Carbon	Oxygen	RATIOS		
											Carbon	F C	Oxy. + Ash V M
Cedar Grove.....	Logan, Monitor.....	Monitor No. 1.....	1.11	35.61	59.23	4.05	1.99	14.178	77.90	9.69	5.60	1.66	1.66
Cedar Grove.....	Logan, 3 mi. w. of Monitor.....	Yuma.....	1.09	36.00	58.46	4.45	1.34	14.367	79.03	8.63	6.04	1.62	1.62
Cedar Grove.....	Logan, Shamrock.....	Litz.....	1.73	39.49	53.88	4.90	1.31	14.190	78.17	8.63	5.77	1.36	1.36
Cedar Grove.....	Logan, Stowe.....	Long Flame.....	1.52	34.31	59.97	4.20	0.87	14.630	81.77	6.96	7.33	1.75	1.75
Cedar Grove.....	Logan, Switzer.....	Island Creek.....	1.83	37.98	56.13	4.06	0.80	14.570	79.83	8.18	6.52	1.48	1.48
Cedar Grove.....	Logan, Switzer.....	Switzer.....	0.55	49.10	37.47	12.88	0.48	14.100	75.29	3.89	4.59	0.76	0.76
Cedar Grove.....	Logan, 3 mi. s. e. of Whitman.....	Island Creek No. 4.....	1.67	39.21	54.24	4.88	1.32	14.370	78.84	8.32	5.97	1.38	1.38
Cedar Grove.....	Logan and Mingo, average for County.....	.....	1.76	36.76	56.43	5.05	1.20	14.280	79.26	7.95	6.10	1.54	1.54
Cedar Grove.....	Logan, Whitman.....	No. 3.....	1.86	38.95	54.50	4.69	1.30	14.280	79.13	8.20	6.15	1.40	1.40
Cedar Grove.....	Mingo, 1.2 mi. n. w. of Glenalum.....	Glenalum No. 1 Plant.....	1.83	35.85	57.37	4.95	0.73	14.530	80.35	7.44	6.49	1.60	1.60
Cedar Grove.....	Mingo, 1/2 mi. s. e. of Matewan.....	Magolia.....	2.05	38.19	55.34	4.42	1.01	14.440	80.05	7.89	6.50	1.45	1.45
Cedar Grove.....	Mingo, 7 mi. n. e. of Red Jacket.....	Red Jacket.....	3.51	33.95	57.57	4.97	0.53	13.627	78.64	9.94	5.26	1.70	1.70
Cedar Grove.....	Mingo, 1 mi. e. of Thacker Mines.....	Thacker No. 2 Plant.....	1.61	37.17	56.13	5.09	0.69	14.520	80.36	7.17	6.55	1.51	1.51
Cedar Grove.....	Mingo, s. e. of Thacker Mines.....	No. 6.....	1.69	36.79	55.51	6.01	0.90	14.280	79.06	7.56	5.83	1.51	1.51
Cedar Grove.....	Mingo, 1 mi. n. e. of New Thacker.....	Thacker No. 1 Plant.....	1.50	38.12	55.44	4.94	1.19	14.510	80.23	6.92	6.77	1.45	1.45
Cedar Grove.....	Webster average for County.....	.....	0.85	32.99	56.25	9.91	2.25	.....	.....	.....	.....	.....	.....
Cedar Grove.....	Boone, Ottawa.....	Coal River.....	1.55	35.21	56.80	6.41	0.56	13.870	78.12	8.52	5.25	1.61	1.61
Chilton (Cannel).....	Boone, 2 mi. s. e. of Turtle Creek.....	Nelson.....	0.52	50.92	35.82	12.74	1.10	13.830	73.63	5.35	1.07	0.70	0.70
Chilton.....	Boone, average for County.....	.....	1.28	41.67	51.10	5.95	0.91	13.850	76.03	6.93	4.66	1.23	1.23
Chilton.....	Logan, Amherst.....	Amherst No. 1.....	2.29	34.67	59.39	3.65	0.65	14.450	81.69	7.39	7.40	1.71	1.71
Chilton.....	Logan, 3 mi. w. of Ethel.....	Logan.....	1.52	31.47	57.73	9.28	1.29	12.871	73.83	10.01	3.82	1.83	1.83
Chilton.....	Logan, 1/2 mi. n. e. of Ethel.....	Ethel.....	1.52	32.94	58.70	6.84	0.62	13.577	76.76	9.89	4.57	1.78	1.78
Chilton.....	Logan, 1/2 mi. n. e. of Ethel.....	Freeze Fork.....	1.53	34.75	56.19	7.53	0.67	13.880	77.48	7.51	5.15	1.62	1.62
Chilton.....	Logan, 1/3 mi. s. e. of Ethel.....	George's Creek.....	1.41	37.78	56.95	3.86	0.57	14.390	81.03	7.93	6.88	1.56	1.56
Chilton.....	Logan, 2.1 mi. s. e. of Ethel.....	Rex.....	1.82	33.46	58.44	6.28	0.66	14.054	80.32	7.11	6.00	1.71	1.71
Chilton.....	Logan, Ethel.....	Fort Branch.....	1.91	34.99	58.58	4.52	0.98	14.210	80.39	8.02	6.41	1.67	1.67
Chilton.....	Logan, Fort Branch.....	Sunbeam.....	1.74	40.39	53.09	4.78	0.86	14.320	78.46	8.96	5.85	1.31	1.31
Chilton.....	Logan, Hughey.....	Johnson.....	2.46	38.14	52.85	6.55	0.62	13.770	76.46	9.46	4.77	1.39	1.39
Chilton.....	Logan, 4 mi. e. of Seng.....	Spruce Valley.....	2.98	36.99	56.25	3.78	0.60	14.540	79.34	9.16	6.13	1.52	1.52
Chilton.....	Logan, Manitoba.....	Manitoba.....	1.47	38.50	53.44	6.59	0.67	14.030	78.09	7.84	5.41	1.39	1.39
Chilton.....	Logan, Slagle.....	McGregor.....	0.78	35.45	57.47	6.30	0.70	14.040	78.57	7.74	5.59	1.62	1.62
Chilton.....	Logan, Volyn.....	Paragon.....	1.58	36.29	58.49	3.64	0.66	14.690	81.85	7.06	7.65	1.61	1.61
Chilton.....	Logan, 1/2 mi. w. of Volyn.....	Argyle No. 2.....	1.81	37.54	57.08	3.54	0.65	14.580	81.44	7.61	7.30	1.52	1.52
Chilton.....	Logan and Mingo, average for County.....	.....	1.97	35.79	56.66	5.58	0.71	14.094	78.84	8.31	5.70	1.58	1.58
Coalburg.....	Boone, 2 1/2 mi. s. e. of Chap.....	Berwind.....	1.44	36.76	57.40	4.40	0.78	14.400	79.28	8.33	6.23	1.56	1.56
Coalburg.....	Boone, s. w. of Nelson.....	Lackawana.....	0.91	38.67	58.29	2.13	0.63	15.080	84.05	6.52	9.72	1.51	1.51
Coalburg.....	Boone, average for County.....	.....	1.33	36.96	56.33	5.38	1.08	14.557	.....	.....	.....	.....	.....
Coalburg.....	Clay, Carterboro.....	Carter.....	2.47	33.50	57.08	6.95	0.90	13.898	75.47	10.08	4.43	1.70	1.70
Coalburg.....	Clay, 2 mi. s. w. of Carterboro.....	Scott.....	2.10	31.89	51.96	14.05	0.76	13.047	72.30	7.55	3.35	1.63	1.63
Coalburg.....	Clay, 3/4 mi. s. of Clay.....	Elliott.....	1.83	38.13	55.90	4.14	0.74	14.300	79.95	8.71	6.22	1.47	1.47
Coalburg.....	Clay, 2 mi. s. w. of Greendale.....	Raven.....	2.18	33.64	57.79	6.39	0.70	14.151	78.95	7.59	5.65	1.72	1.72
Coalburg.....	Clay, 2.1 mi. n. e. of Lizemores.....	Brown.....	1.50	38.47	54.38	5.55	0.78	14.060	79.07	8.37	5.68	1.54	1.54
Coalburg.....	Clay, 3 mi. n. of Lizemores.....	Jones.....	1.75	32.31	57.17	8.74	1.03	13.245	.....	.....	.....	.....	.....
Coalburg.....	Clay, average for County.....	.....	1.98	34.05	56.10	7.87	0.81	13.754	76.15	8.40	4.70	1.65	1.65
Coalburg.....	Fayette, Gamora.....	Midvale.....	1.96	33.20	60.08	4.76	0.71	14.484	79.22	8.84	5.82	1.81	1.81
Coalburg.....	Fayette, Wyndal.....	Dietz.....	2.17	33.51	59.19	4.83	0.67	14.809	79.09	9.00	5.71	1.76	1.76
Coalburg.....	Fayette, average for County.....	.....	1.69	33.48	58.38	6.45	0.69	14.609	78.96	9.09	5.08	1.74	1.74
Coalburg.....	Kanawha, Cabin Creek.....	Kelley's Creek No. 1.....	1.36	36.30	55.68	6.66	0.81	14.050	78.36	7.60	5.49	1.53	1.53
Coalburg.....	Kanawha, Mucklow.....	Seranton.....	1.60	33.47	53.71	11.19	0.74	13.295	73.78	8.55	3.74	1.60	1.60
Coalburg.....	Kanawha, 1 mi. s. e. of Wacomah.....	Banner.....	1.60	33.45	55.76	9.19	0.63	13.802	75.91	8.32	4.33	1.67	1.67
Coalburg.....	Kanawha, Ward.....	No. 3.....	1.18	37.38	57.68	3.76	0.85	14.650	79.72	8.63	6.43	1.54	1.54
Coalburg.....	Kanawha, 1/2 mi. s. of Ward.....	No. 3.....	3.44	35.20	53.08	8.28	0.70	13.304	75.06	9.24	4.29	1.51	1.51

COAL CATALOG

(Continued on Next Page)

*Bull. U. S. Bureau of Mines. †State Geological Survey Reports.

ANALYSES OF WEST VIRGINIA SEAMS BY COUNTIES AND LOCALITIES—Continued

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carbon	Oxygen	RATIO'S	
											Carbon	E. C. Oxy + Ash V. M.
†Coalburg.....	Mingo, 2 mi. n. e. of Chattaroy.....	Buffalo.....	2.24	36.95	51.22	9.59	0.81	13,120	73.83	9.58	3.85	1.39
†Coalburg.....	Mingo, 8 mi. n. e. of Chattaroy.....	Buffalo.....	2.51	37.54	49.80	10.15	0.97	13,000	72.05	10.34	3.52	1.33
†Coalburg.....	Mingo, 2 mi. e. of Chattaroy.....	Howard.....	1.99	38.66	51.15	8.20	0.83	13,510	75.03	9.36	4.27	1.32
†Coalburg.....	Mingo, ½ mi. w. of Eugene.....	Big Block.....	3.74	31.06	53.52	13.68	0.60	12,079	67.77	12.56	2.58	1.66
†Coalburg.....	Mingo, Cinderella.....	Cinderella.....	2.39	36.19	53.62	7.80	0.79	13,510	74.94	10.07	4.19	1.48
†Coalburg.....	Mingo, 1 mi. n. e. of Rawl.....	Crystal Block.....	2.32	38.97	53.24	5.47	0.70	14,070	77.70	9.07	5.34	1.37
†Coalburg.....	Logan and Mingo, average for County.....	.....	2.92	35.84	52.16	9.08	0.78	13,104	73.31	10.55	3.73	1.46
†Coalburg.....	Nicholas.....	National.....	1.85	32.25	55.28	10.62	0.59	13,406	74.18	8.81	3.82	1.71
†Coalburg.....	Nicholas, 1 mi. n. of Dixie.....	Mt. Carmel.....	1.60	33.60	57.35	7.45	2.07	13,839	75.00	9.53	4.42	1.71
†Coalburg.....	Nicholas, on Open Fork of Bell Creek.....	Arminius.....	3.60	31.95	51.98	9.47	1.21	13,586	75.00	8.69	4.13	1.72
†Coalburg.....	McDowell, ½ mi. s. e. of Jaeger.....	Lone Jack.....	2.53	26.07	68.99	2.41	0.65	14,980	84.73	5.94	10.14	2.65
†Douglas.....	Boone, Echert.....	Wharton.....	1.49	35.86	57.18	5.47	0.59	14,090	79.28	8.33	5.75	1.59
†Eagle.....	Boone, average of County.....	.....	1.39	34.98	57.55	6.08	0.64	14,120	.....	.....	.....	1.65
†Eagle.....	Braxton, 1 mi. s. of Centralia.....	Greenbrier.....	0.87	36.38	50.02	12.73	3.63	13,030	70.45	6.68	3.63	1.37
†Eagle.....	Fayette, Belva.....	Rush Creek.....	2.35	37.25	56.55	3.85	0.52	14,650	80.06	8.13	6.68	1.52
†Eagle.....	Fayette, 3 mi. from Belva.....	No. 2 North.....	1.18	44.90	49.86	3.44	0.87	15,330	80.57	6.65	7.98	1.11
†Eagle.....	Fayette, 1½ mi. e. of Boomer.....	Willis Branch.....	2.96	33.57	59.18	4.29	0.78	14,292	80.01	7.83	6.61	1.76
†Eagle.....	Fayette, Heberton.....	Hickory Camp.....	1.50	28.25	66.61	3.64	0.74	15,129	85.10	4.88	9.99	2.39
†Eagle.....	Fayette, Hickory Camp.....	No. 5.....	2.06	25.50	66.80	4.43	0.73	14,500	81.66	6.50	7.47	2.62
†Eagle.....	Fayette, ½ mi. s. e. of Hickory Camp.....	Heberton.....	3.30	28.05	65.34	4.55	0.72	14,615	78.25	9.62	5.52	2.33
†Eagle.....	Fayette, 1½ mi. w. of Kingston.....	No. 1.....	1.50	33.05	60.10	5.35	0.67	14,610	80.50	6.96	6.54	1.82
†Eagle.....	Fayette, 1½ mi. w. of Kingston.....	Milburn.....	4.32	29.19	61.38	5.11	0.66	14,210	77.42	10.24	5.04	2.10
†Eagle.....	Fayette, Krebs.....	Eagle No. 1.....	1.14	28.79	62.19	6.10	0.48	14,070	78.34	8.77	5.27	2.16
†Eagle.....	Fayette, Page.....	Loup Creek No. 8.....	2.39	31.72	62.31	4.82	1.03	14,740	82.24	5.65	7.78	1.96
†Eagle.....	Fayette, ½ mi. e. of Page.....	Eagle.....	1.71	27.55	67.23	3.51	0.93	14,779	81.53	7.71	7.27	2.44
†Eagle.....	Fayette, ½ mi. n. w. of Parol.....	Beech Creek.....	2.39	31.72	61.33	4.56	1.62	14,465	79.85	7.76	6.48	1.93
†Eagle.....	Fayette, average for County.....	.....	3.00	28.00	63.40	5.60	0.97	14,210	79.73	6.85	6.40	2.26
†Eagle.....	Kanawha, average for seven mines.....	.....	1.75	30.99	62.07	5.19	0.78	14,583	80.42	7.75	6.21	2.00
†Eagle.....	Kanawha, Detroit.....	Detroit.....	1.14	31.98	62.35	4.53	0.77	14,685	.....	.....	.....	1.98
†Eagle.....	Kanawha, Tomsburg.....	Grose No. 1.....	2.08	32.05	60.20	5.67	0.73	14,414	79.28	8.03	5.78	1.90
†Eagle.....	Kanawha and Mingo, average for County.....	Mephisto.....	1.55	30.21	64.44	3.80	0.76	14,700	79.27	9.44	5.99	2.13
†Eagle.....	Mingo, Mephisto.....	Margaret No. 1.....	1.66	28.86	65.05	4.96	1.43	14,493	81.74	5.71	7.66	2.29
†Eagle.....	Mingo, 1½ mi. n. e. of War Eagle.....	Panther No. 1.....	1.38	28.17	63.77	4.18	1.32	14,818	82.38	5.62	8.40	2.26
†Eagle.....	McDowell, 8 mi. e. of Douglas.....	Mohawk.....	2.07	31.68	62.20	4.05	1.54	14,104	81.12	4.92	6.99	2.26
†Eagle.....	McDowell, 2¼ mi. n. e. of Mohawk.....	Lathrop.....	2.03	28.05	64.73	5.19	1.19	14,294	80.12	7.12	6.51	2.31
†Eagle.....	McDowell, 4 mi. n. w. of Panther.....	.....	1.96	34.16	60.39	3.49	1.28	14,850	81.25	7.13	7.67	1.77
†Eagle.....	McDowell, average for County.....	.....	1.28	30.71	64.03	3.98	1.26	14,557	81.20	6.91	7.32	2.09
†Eagle.....	Nicholas, Muddlety.....	Solvay Prospect.....	4.54	33.66	56.69	5.11	0.93	13,815	76.18	6.54	6.54	1.68
†Eagle.....	Raleigh, 1½ mi. n. e. of Artie.....	.....	2.33	31.76	62.56	3.35	0.55	.....	.....	.....	.....	1.97
†Eagle.....	Webster, average for County.....	Beechwood No. 2.....	1.00	35.45	54.04	9.51	3.37	.....	.....	.....	.....	1.52
†Eagle.....	Fayette, 1 mi. n. e. of Claremont.....	Layland No. 3.....	3.46	16.37	75.59	4.58	0.54	14,513	82.71	5.77	7.96	4.62
†Fire Creek.....	Fayette, Gentry.....	Layland No. 1.....	2.72	16.30	75.49	5.49	0.66	14,440	81.71	5.77	7.26	4.63
†Fire Creek.....	Fayette, 1 mi. s. of Gentry.....	Laurel.....	2.87	15.41	76.91	4.81	0.70	14,521	82.35	5.73	7.81	4.32
†Fire Creek.....	Fayette, Laurel Creek.....	Glendale.....	2.69	15.48	76.91	4.92	0.59	14,591	83.55	4.69	8.69	4.97
†Fire Creek.....	Fayette, 6 mi. s. of Lawton.....	Newlyn.....	3.30	15.58	74.46	6.66	0.94	14,150	80.66	5.45	6.66	4.78
†Fire Creek.....	Fayette, Newlyn.....	Export.....	1.33	19.57	75.12	3.98	0.61	14,943	85.41	4.67	9.84	4.74
†Fire Creek.....	Fayette, 2¼ mi. n. e. of Quinnimont.....	Rush Run.....	2.80	16.50	78.21	2.49	0.59	14,970	85.24	5.15	11.16	4.74
†Fire Creek.....	Fayette, Rush Run.....	Stone Cliff.....	1.53	21.54	71.88	5.05	0.65	14,807	82.87	4.99	8.25	3.33
†Fire Creek.....	Fayette, ½ mi. e. of Stonecliff.....	Terry.....	2.63	17.81	73.48	6.08	0.43	14,281	82.08	5.22	7.26	4.12
†Fire Creek.....	Fayette, ¾ mi. s. w. of Terry.....	2.75	15.99	76.01	5.25	0.64	14,508	82.56	5.28	7.84	4.75

(Continued on Next Page)

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COAL CATALOG

ANALYSES OF WEST VIRGINIA SEAMS BY COUNTIES AND LOCALITIES—Continued

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined E. T. U.	Carbon	Oxygen	RATIOS	
											Carbon	F. C. Oxy. + Ash V. M.
Fire Creek.....	Fayette, Thayer.....	Buffalo.....	0.44	21.43	71.21	3.92	0.55	15.147	86.56	4.21	.....	3.46
Fire Creek.....	Fayette, Thurmond.....	Fire Creek.....	0.78	17.98	78.52	2.72	0.63	15.106	86.56	4.21	.....	4.37
Fire Creek.....	Fayette, 1.3 mi. n.w. of Thurmond.....	No. 1.....	3.05	17.32	74.00	5.63	0.57	14.422	81.56	5.70	.....	4.27
Fire Creek.....	Fayette, average for County.....	Royal.....	3.19	16.83	74.48	5.50	0.69	14.386	81.79	5.62	.....	4.43
Fire Creek.....	Raleigh, s. of Royal.....	Royal.....	0.62	18.57	78.36	2.45	0.62	15.438	.....	.....	.....	4.22
Fire Creek.....	Webster, average for County.....	Webster, average for County.....	1.29	29.08	69.74	8.89	0.63	.....	.....	.....	.....	2.10
Fire Creek.....	Hancock, Zalia.....	Hall.....	6.46	33.88	49.74	9.92	5.04	.....	.....	.....	.....	1.47
Fire Creek.....	Braxton, 3 1/2 mi. s. w. of Centralia.....	Ott No. 20.....	1.50	38.32	52.18	8.00	2.53	13.520	74.67	8.33	.....	1.36
Fire Creek.....	Mineral, 1 mi. n. of Elk Garden.....	Morris.....	1.29	14.77	72.55	11.39	1.53	13.634	.....	.....	.....	4.91
Fire Creek.....	Monongalia, 7 mi. n. w. of Anita.....	Johnson.....	2.19	28.94	54.32	14.55	0.75	12.400	68.01	11.11	.....	2.65
Fire Creek.....	Monongalia, 1/4 mi. n. e. of Clinton Furnace.....	Chess.....	1.46	29.22	57.04	12.28	1.38	12.680	73.90	7.34	.....	3.77
Fire Creek.....	Monongalia, 6 mi. n. e. of Ices Ferry.....	Richard.....	1.57	29.98	62.74	5.71	0.61	14.380	78.46	9.13	.....	5.29
Fire Creek.....	Monongalia, 4 mi. s. e. of Morgantown.....	Weaver.....	2.29	29.86	57.62	10.23	1.06	13.558	75.13	7.17	.....	4.32
Fire Creek.....	Monongalia, 1 mi. s. of Ridgedale.....	Bretz.....	3.43	29.24	60.48	6.85	0.66	13.260	73.43	12.45	.....	3.80
Fire Creek.....	Preston, Bretz.....	Vulcan.....	1.48	28.58	61.55	8.39	0.90	14.069	77.82	5.22	.....	2.15
Fire Creek.....	Preston, 2 mi. w. of Hiorra.....	Kingwood No. 2.....	4.51	28.47	59.50	7.52	0.73	13.610	76.05	9.40	.....	1.49
Fire Creek.....	Preston, 4 mi. s. of Howesville.....	Borgman.....	0.74	31.72	55.20	12.34	4.48	13.380	72.73	4.36	.....	1.74
Fire Creek.....	Preston, 1 mi. s. of Irona.....	Preston No. 3.....	0.74	31.72	55.20	12.34	4.48	13.380	72.73	4.36	.....	1.74
Fire Creek.....	Preston, Newburg.....	Scotch Hill.....	2.21	29.56	60.32	7.91	1.59	13.910	76.92	7.10	.....	5.12
Fire Creek.....	Preston, 1.6 mi. n. of Reedsville.....	Elkins No. 7.....	0.76	28.33	61.09	9.82	2.75	13.770	74.79	6.44	.....	2.16
Fire Creek.....	Preston, average for County.....	Jennings.....	1.66	27.12	64.64	6.58	1.82	14.240	79.14	6.28	.....	2.38
Fire Creek.....	Taylor, 7 mi. s. e. of Thornton.....	Thomas No. 23.....	1.83	27.25	62.52	8.40	1.69	13.989	77.28	7.09	.....	2.29
Fire Creek.....	Tucker, Thomas.....	Florence.....	1.14	32.19	57.52	9.15	1.50	13.900	75.63	7.35	.....	1.79
Fire Creek.....	Upshur, Adrian.....	Shumate.....	1.70	29.90	58.95	9.45	0.99	13.566	75.00	8.67	.....	1.97
Fire Creek.....	McDowell, Jaeger.....	No. 4.....	3.14	19.90	69.37	7.59	1.05	13.961	74.63	8.55	.....	3.49
Fire Creek.....	Wyoming, s. e. of Saulsville.....	Luella.....	2.50	32.50	56.30	8.71	1.65	13.590	.....	.....	.....	4.32
Fire Creek.....	Barbour, Arden.....	Midland.....	0.87	25.61	68.88	4.64	0.66	.....	.....	.....	.....	2.67
Fire Creek.....	Barbour, 1/2 mi. s. of Arden.....	Dartmoor No. 4.....	0.36	23.90	68.03	7.71	2.09	13.474	.....	.....	.....	2.85
Fire Creek.....	Barbour, nr. Berryburg Jct.....	Sarah.....	0.66	30.78	55.39	13.17	2.52	13.474	78.11	6.18	.....	1.77
Fire Creek.....	Barbour, 7 mi. s. of Dartmoor.....	Phillips.....	1.89	32.58	57.70	7.83	1.37	13.980	70.07	8.95	.....	3.38
Fire Creek.....	Barbour, 3/4 mi. s. w. of Hiram.....	Grafton Fuel Co.....	2.11	30.23	55.92	11.74	3.54	13.045	73.82	9.24	.....	1.92
Fire Creek.....	Barbour, 1/2 mi. n. of Lillian.....	Meridan.....	4.92	29.25	56.26	9.57	1.54	13.642	74.24	7.92	.....	4.03
Fire Creek.....	Barbour, Meridan.....	Humphrey.....	1.78	29.05	58.66	10.51	1.46	14.870	81.78	5.07	.....	1.98
Fire Creek.....	Barbour, 8 mi. s. of Philippi.....	Davis No. 5.....	0.76	31.49	62.43	5.32	1.26	13.390	75.27	7.44	.....	1.57
Fire Creek.....	Mineral.....	Smith.....	2.16	34.09	53.48	9.97	1.65	13.460	75.42	7.55	.....	1.81
Fire Creek.....	Monongalia, 1/4 mi. e. of Halleck.....	Reppert.....	3.58	31.13	53.33	8.96	1.57	13.480	74.99	8.23	.....	1.76
Fire Creek.....	Monongalia, nr. Preston County Line.....	Coalton No. 1.....	1.81	30.50	57.25	10.44	1.59	13.360	75.58	6.47	.....	1.88
Fire Creek.....	Preston, 2 mi. s. w. of Independence.....	Coalton No. 1.....	0.85	15.40	72.55	11.20	2.54	.....	.....	.....	.....	4.71
Fire Creek.....	Preston, 3/4 mi. s. of Irondale.....	Coalton No. 1.....	1.43	29.85	58.61	10.11	2.35	13.680	74.60	6.56	.....	1.96
Fire Creek.....	Preston, 3.9 mi. s. of Terra Alta.....	Harding.....	1.80	29.19	57.29	11.72	1.08	13.030	74.51	7.03	.....	1.91
Fire Creek.....	Preston, average of County.....	Swad No. 5B.....	2.46	30.81	59.01	7.66	1.40	13.960	76.92	7.64	.....	5.03
Fire Creek.....	Randolph, Coalton.....	Willlette.....	1.07	31.50	54.87	12.56	2.06	13.300	72.78	6.51	.....	3.82
Fire Creek.....	Randolph, 9 mi. n. e. of Harding.....	Sterling.....	4.24	22.89	66.30	6.57	0.54	13.840	78.30	8.42	.....	2.90
Fire Creek.....	Randolph, 1/2 mi. n. e. of Weaver.....	.....	1.93	28.35	60.80	8.92	1.36	13.777	79.59	7.13	.....	4.96
Fire Creek.....	Randolph, average of County.....	.....	1.45	28.97	59.48	10.10	0.98	13.718	75.75	6.87	.....	4.46
Fire Creek.....	Taylor, Cecil.....	.....	2.47	30.01	56.41	11.11	2.02	13.190	74.09	6.69	.....	4.16
Fire Creek.....	.....	.....	2.28	30.35	57.01	10.33	1.91	13.470	75.24	6.46	.....	4.48
Fire Creek.....	.....	.....	2.88	30.25	57.01	10.33	1.91	13.470	75.24	6.46	.....	4.48
Fire Creek.....	.....	.....	2.30	31.08	55.73	10.89	1.23	13.300	75.52	6.58	.....	4.32
Fire Creek.....	.....	.....	1.49	32.14	55.63	10.74	1.88	13.551	75.06	7.32	.....	4.11
Fire Creek.....	.....	.....	1.47	29.06	60.58	8.89	3.36	14.250	77.37	4.37	.....	5.83

*Bullietus Bureau of Mines. †State Geological Survey Reports.

(Continued on Next Page)

COAL CATALOG

ANALYSES OF WEST VIRGINIA SEAMS BY COUNTIES AND LOCALITIES—Continued

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fix'd Carbon	Ash	Sulphur	Determin'd B. T. C.	Carbon	Oxygen	RATIOS	
											Carbon	F. C.
											Oxy. + Ash	V. M.
† Kittanning, Lower...	Taylor, Coffman...	Winona No. 2...	1.53	30.60	57.23	10.64	2.56	13.500	73.63	7.07	4.21	1.87
† Kittanning, Lower...	Taylor, average of County...	Thomas No. 34...	2.20	30.84	56.78	10.18	2.54	13.543	73.97	7.14	4.27	1.84
* Kittanning, Lower...	Tucker, Thomas...	Coketon No. 37...	1.22	20.42	70.79	7.57	0.96	14.006	81.47	3.83	7.15	3.47
† Kittanning, Lower...	Tucker, 1½ mi. s. w. of Thomas...	Webster, average for County...	1.18	22.48	68.36	7.58	0.98	13.997	80.09	4.74	...	3.04
† Kittanning, Middle...	Braxton, ½ mi. n. w. of Palmer...	Meriden No. 5...	3.29	34.27	52.85	9.59	1.81	...	...	...	...	1.54
† Kittanning, Middle...	Braxton, average for County...	Duffield...	1.40	33.30	58.86	6.41	0.74	14.461	82.19	4.95	7.21	1.76
† Kittanning, Upper...	Barbour, Meriden...	Callison...	2.39	36.23	54.72	6.65	0.77	13.646	78.51	8.15	5.66	1.51
† Kittanning, Upper...	Braxton, 1½ mi. s. e. of Sutton...	Stone...	3.18	31.21	54.56	11.05	4.06	13.040	72.29	6.54	4.11	1.75
† Kittanning, Upper...	Clay, 1.4 mi. e. of Groves...	Jones...	0.68	48.05	47.65	16.25	0.93	12.520	67.33	9.42	2.62	1.37
† Kittanning, Upper...	Clay, 1.2 mi. s. of Lizenmores...	Preston, average for County...	1.18	42.32	53.96	8.85	3.27	13.440	72.34	7.14	4.52	1.13
† Kittanning, Upper...	Monongalia, 1½ mi. s. of Clinton Furnace...	Taylor, average for County...	1.66	39.64	59.47	4.74	0.80	13.970	77.13	10.59	5.04	1.36
† Kittanning, Upper...	Taylor, average for County...	Webster, average for County...	1.10	30.11	60.89	9.32	1.42	13.840	75.11	7.84	4.39	1.98
† Kittanning, Upper...	Boone, average for County...	Boone, average for County...	1.10	27.94	60.89	10.07	2.37	13.430	73.67	7.03	4.31	2.18
† Kittanning, Upper...	Boone, average for County...	Boone, average for County...	1.19	30.47	56.29	12.05	3.11	13.220	72.23	6.51	3.39	1.33
† Kittanning, Upper...	Boone, average for County...	Boone, average for County...	0.90	37.05	53.41	8.64	0.95	...	...	...	...	1.44
† No. 5 Block...	Braxton, 6 mi. s. e. of Jennings...	Taylor...	1.68	37.31	55.73	5.28	0.75	13.670	76.68	8.03	4.93	1.49
† No. 5 Block...	Clay, 1.6 mi. e. of Leatherwood Creek...	Elliot...	1.50	37.94	53.86	6.70	1.21	13.800	76.08	9.32	4.75	1.42
† No. 5 Block...	Clay, Widen...	Rich Run...	1.17	37.30	55.86	5.67	0.93	14.220	79.12	7.74	5.90	1.50
† No. 5 Block...	Clay, average for County...	Crescent...	1.25	34.53	55.76	8.46	0.65	13.880	76.89	7.74	4.75	1.61
† No. 5 Block...	Fayette, nr. Crescent...	Eureka No. 14...	1.29	35.49	56.98	6.24	0.98	13.781	77.49	8.29	5.33	1.61
† No. 5 Block...	Fayette, Donwood...	Mecca...	1.11	34.63	59.07	5.19	0.74	...	...	...	...	1.71
† No. 5 Block...	Fayette, Kimberley...	Mt. Carbon...	1.49	34.1	61.31	3.04	0.76	14.369	80.78	9.36	6.51	1.79
† No. 5 Block...	Fayette, average for County...	Claybrook...	2.84	31.20	57.70	6.26	0.59	13.642	75.91	11.13	4.36	1.91
† No. 5 Block...	Kanawha, Big Sandy District...	Blakeley...	1.20	33.36	60.46	4.98	0.76	...	...	...	...	1.81
† No. 5 Block...	Kanawha, Blakeley...	Eureka...	1.36	34.27	59.49	4.82	0.74	14.006	78.35	10.24	5.20	1.74
† No. 5 Block...	Kanawha, 1 mi. s. w. of Donwood...	St. Kanawha...	1.89	39.55	53.46	5.63	1.04	13.860	76.96	10.05	4.90	1.35
† No. 5 Block...	Kanawha, Elk District...	Wills Hollow...	1.18	34.10	58.73	5.28	0.56	13.888	76.11	11.90	4.43	1.72
† No. 5 Block...	Kanawha, Elk District...	Pond Creek...	1.00	37.02	55.21	6.59	0.60	14.140	76.72	9.56	4.75	1.40
† No. 5 Block...	Lincoln, near Jenks...	Peytona...	1.99	36.80	52.58	9.62	2.64	13.167	73.87	9.65	3.72	1.43
† No. 5 Block...	Boone, 1.8 mi. w. of Jarrolds Valley...	Haufield...	0.81	44.21	49.90	5.08	0.98	13.017	73.87	9.38	3.69	1.13
† No. 2 Gas...	Boone, Peytona...	Tony...	1.08	40.39	55.06	3.47	0.74	14.730	82.30	6.63	8.15	1.36
† No. 2 Gas...	Boone, 8 mi. s. w. of Pond...	No. 2...	1.15	38.16	53.47	7.22	1.70	13.800	76.75	8.10	5.01	1.53
† No. 2 Gas...	Boone, Sterling...	No. 1...	0.96	35.21	59.40	4.43	0.75	14.540	82.26	6.50	7.52	1.68
† No. 2 Gas...	Boone, average of County...	Boomer No. 3...	1.28	35.96	59.00	3.76	0.62	14.430	80.83	8.30	6.70	1.64
† No. 2 Gas...	Fayette, Boomer...	Diamond...	1.43	37.27	57.17	4.13	1.14	14.370	80.13	8.03	6.59	1.53
† No. 2 Gas...	Fayette, Boomer...	Columbia...	1.08	43.11	52.52	3.29	2.07	14.470	80.83	7.30	7.63	1.22
† No. 2 Gas...	Fayette, Boomer...	Mecca...	1.35	38.31	55.51	4.83	0.95	14.325	...	...	...	1.45
† No. 2 Gas...	Fayette, Boomer...	Fort Defiance...	1.07	32.50	60.64	5.79	0.84	14.461	79.71	7.65	5.93	1.87
† No. 2 Gas...	Fayette, Boomer...	Willisburg...	1.33	33.34	62.48	2.85	1.34	14.859	79.91	9.29	6.58	1.87
† No. 2 Gas...	Fayette, Boomer...	Long Branch...	0.63	37.74	56.20	5.43	0.60	14.700	...	...	...	1.49
† No. 2 Gas...	Fayette, Columbia...	Long Branch...	1.13	33.01	60.81	5.05	1.16	14.339	80.03	7.64	6.31	1.84
† No. 2 Gas...	Fayette, Donwood...	Long Branch...	1.78	31.92	60.41	5.89	0.59	14.272	79.21	8.16	5.64	1.89
† No. 2 Gas...	Fayette, Gamoca...	Long Branch...	1.37	32.23	62.38	4.02	0.72	14.675	79.62	9.01	6.11	1.94
† No. 2 Gas...	Fayette, Gauley Bridge...	Long Branch...	2.12	32.41	62.58	2.89	0.82	14.975	79.99	9.48	6.47	1.93
† No. 2 Gas...	Fayette, Gauley Bridge...	Long Branch...	1.21	33.35	60.06	5.38	0.91	14.166	78.73	8.25	5.78	1.80
† No. 2 Gas...	Fayette, 1½ mi. w. of Herberton...	Long Branch...	2.12	28.66	63.46	5.76	0.76	14.470	80.21	6.67	6.45	2.21
† No. 2 Gas...	Fayette, 2½ mi. n. w. of Herberton...	Long Branch...	2.82	29.06	63.37	4.75	0.78	14.420	78.02	7.66	5.93	1.61
† No. 2 Gas...	Fayette, ½ mi. n. e. of Hickory Camp...	Long Branch...	2.02	35.39	57.10	5.49	2.27	14.420	78.02	7.66	5.93	1.61
† No. 2 Gas...	Fayette, Jodie...	Long Branch...	0.67	36.54	57.52	5.27	1.32	14.650	80.60	6.25	7.00	1.56
† No. 2 Gas...	Fayette, ¼ mi. s. e. of Longacre...	Long Branch...	2.42	35.45	56.68	5.45	1.02	14.159	78.92	7.72	5.99	1.60
† No. 2 Gas...	Fayette, Mahan...	Christian No. 3...	2.58	32.79	57.71	6.92	2.19	13.940	77.28	7.31	5.43	1.82

(Continued on Next Page)

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COAL CATALOG

ANALYSES OF WEST VIRGINIA SEAMS BY COUNTIES AND LOCALITIES—Continued

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. V.	Carbon	Oxyg. u	RATIOS
									Carbon		F. C. Oxy. + Ash. V. M.
No. 2 Gas.	Fayette, Marting.	Columbus No. 1.	1.37	32.57	59.40	6.66	0.84	14.438	78.95	7.53	5.56 1.82
No. 2 Gas.	Fayette, Page.	Page No. 2.	3.74	31.04	61.31	3.91	0.89	14.436	80.50	8.07	6.72 1.98
No. 2 Gas.	Fayette, 2 mi. n. of Page.	Beards Fork.	0.90	33.00	61.86	4.24	0.84	15.030	82.31	6.29	7.82 1.87
No. 2 Gas.	Fayette, near Page.	Ansted.	2.65	29.69	63.50	4.16	1.29	14.587	...	...	...
No. 2 Gas.	Fayette, 2 1/4 mi. n. of Page.	Ansted.	3.32	28.88	62.72	5.08	0.80	14.209	79.73	7.73	6.22 2.17
No. 2 Gas.	Fayette, Wyndal.	Dietz.	1.40	33.35	59.18	6.07	0.80	14.078	78.28	8.63	5.32 1.77
No. 2 Gas.	Fayette, average for County.	Keystone.	1.03	33.88	59.82	5.27	1.11	14.572	79.51	7.88	6.05 1.80
No. 2 Gas.	Kanawha, Acme.	...	2.66	33.30	59.60	4.44	1.14	14.368	...	...	...
No. 2 Gas.	Kanawha, average of Cabin Creek Mines.	...	0.66	31.10	61.59	5.85	1.35	14.217	...	...	...
No. 2 Gas.	Kanawha, Coal Fork.	Virginia.	1.44	39.97	55.35	3.24	0.91	14.440	78.57	10.57	5.69 1.38
No. 2 Gas.	Kanawha, 1/2 mi. s. of Eskdale.	No. 2.	0.32	35.12	58.00	6.56	1.65	14.220	77.74	8.14	5.29 1.65
No. 2 Gas.	Kanawha, Kayford.	Kayford.	1.30	28.00	65.49	5.21	1.10	14.412	78.82	9.22	5.46 2.34
No. 2 Gas.	Kanawha, Laing.	Berlin.	1.02	29.58	60.70	8.70	2.45	13.673	74.73	9.17	4.18 2.05
No. 2 Gas.	Kanawha, 1/2 mi. e. of Leewood.	Holly.	1.15	30.45	61.10	7.30	1.36	14.069	77.73	7.96	5.09 2.01
No. 2 Gas.	Kanawha, 1 1/2 mi. s. e. of Leewood.	Quarrier.	1.15	28.80	64.52	5.53	1.70	14.166	78.27	8.79	5.47 2.24
No. 2 Gas.	Kanawha, Wake Forest.	Wake Forest.	0.70	32.73	62.22	4.35	1.42	14.610	78.55	9.59	5.63 1.90
No. 2 Gas.	Logan, Holden.	No. 3.	1.66	32.89	59.94	5.51	0.93	14.126	78.97	8.17	5.77 1.82
No. 2 Gas.	Logan, 3 mi. e. of Lox Station.	Summers.	0.99	34.75	60.21	4.05	0.67	14.700	82.79	5.88	8.34 1.73
No. 2 Gas.	Logan, 3 mi. n. w. of Manbar.	Eardling.	1.86	35.68	57.95	4.51	0.73	14.320	81.29	6.71	7.24 1.62
No. 2 Gas.	Logan, 5 mi. n. w. of Manbar.	Manbar.	1.77	34.06	59.28	4.89	0.69	14.450	80.79	7.23	6.57 1.74
No. 2 Gas.	Logan, 8 mi. n. w. of Manbar.	Wilbur.	1.65	35.65	58.05	4.65	0.70	14.470	80.33	7.89	6.41 1.63
No. 2 Gas.	Logan and Mingo, average for County.	...	1.72	32.20	61.02	5.06	0.72	14.342	80.39	7.49	6.41 1.90
No. 2 Gas.	Mingo, 8 mi. n. w. of Kermit.	Grey Eagle.	2.46	34.11	55.60	7.83	1.73	13.107	73.32	11.35	3.82 1.63
No. 2 Gas.	Mingo, 1.7 mi. n. e. of War Eagle.	Margaret.	1.31	28.72	64.35	5.62	0.55	14.460	81.46	5.94	7.05 2.24
No. 2 Gas.	Mingo, 2 mi. n. w. of War Eagle.	War Eagle.	1.70	27.72	65.42	5.16	0.49	14.099	81.17	7.23	6.55 2.36
No. 2 Gas.	Webster, average for County.	...	0.78	38.01	59.26	1.95	0.67	...	...	...	...
Peerless.	Barbour, Berryburg.	Consolidation No. 37.	1.52	39.11	52.78	6.59	2.12	14.140	77.19	7.25	5.57 1.56
Pittsburgh.	Braxton, Copen.	No. 11.	2.53	38.22	52.51	6.74	2.47	13.629	74.52	9.92	4.47 1.45
Pittsburgh.	Braxton, 6 mi. n. e. of Progress.	No. 6.	2.33	38.24	52.90	6.53	2.11	13.615	75.53	9.64	4.67 1.38
Pittsburgh.	Braxton, 3 mi. s. of Teeny Knob.	Tucker.	1.83	39.67	49.80	8.70	2.80	13.110	72.76	9.56	3.98 1.26
Pittsburgh.	Braxton, average for County.	...	2.09	39.68	51.78	6.45	2.11	13.451	74.27	9.71	4.37 1.30
Pittsburgh.	Brooke, 1 mi. w. of Colliers.	Lewis-Finley No. 1.	4.58	35.36	54.05	6.01	1.28	13.234	73.81	12.07	4.08 1.53
Pittsburgh.	Gilmer, Gilmer.	Gilmer.	2.66	41.16	49.65	6.53	1.94	13.790	76.02	9.04	4.88 1.21
Pittsburgh.	Gilmer, average for County.	...	1.26	41.88	50.39	6.47	2.35	...	...	...	...
Pittsburgh.	Harrison, Clarksburg.	Pitcairn.	1.95	39.94	50.25	7.86	3.48	13.790	74.07	8.10	4.64 1.26
Pittsburgh.	Harrison, 3 mi. e. of Clarksburg.	Ocean.	2.01	37.31	52.13	8.55	2.54	13.811	75.83	6.57	5.02 1.40
Pittsburgh.	Harrison, 1.3 mi. s. e. of Clarksburg.	Grasselli.	2.08	40.78	49.95	7.19	3.82	13.624	74.15	8.41	4.74 1.22
Pittsburgh.	Harrison, Dola.	Fayette.	2.54	38.41	53.15	5.90	2.71	13.689	76.16	8.73	5.20 1.31
Pittsburgh.	Harrison, 8 mi. n. w. of Dola.	Girard No. 2.	1.52	41.09	50.61	6.78	3.44	13.689	75.66	7.92	5.15 1.23
Pittsburgh.	Harrison, Erie.	Erie.	1.52	38.90	53.00	6.58	3.46	13.978	75.68	8.05	5.17 1.36
Pittsburgh.	Harrison, Enterprise.	Consol. No. 49.	1.79	36.06	54.31	7.84	3.09	13.636	75.96	6.93	5.14 1.51
Pittsburgh.	Harrison, 1 1/2 n. of Enterprise.	Bingamon.	1.54	38.08	54.33	6.08	2.22	13.943	76.42	8.81	5.12 1.43
Pittsburgh.	Harrison, 7 mi. n. w. of Grasselli.	Barnard.	4.89	36.42	53.48	5.21	1.93	13.937	74.65	11.80	4.39 1.47
Pittsburgh.	Harrison, 1 1/2 mi. n. w. of Haywood.	No. 36.	0.87	40.28	50.97	7.88	4.24	13.608	75.39	6.24	5.34 1.27
Pittsburgh.	Harrison, 1 1/2 mi. n. e. of Haywood.	Haywood.	2.11	39.20	51.29	7.40	3.43	13.636	74.31	8.58	4.65 1.31
Pittsburgh.	Harrison, 1 1/2 mi. s. of Kilarn.	Galilee.	1.52	37.54	54.09	6.85	2.00	14.038	78.14	6.76	5.74 1.44
Pittsburgh.	Harrison, Robinson Run.	No. 42.	1.12	39.00	51.98	7.90	3.66	13.593	75.23	7.29	4.95 1.33
Pittsburgh.	Harrison, Roselud.	Sylvester.	1.57	38.79	52.19	7.45	3.74	13.567	75.79	7.10	5.21 1.35
Pittsburgh.	Harrison, 2 mi. s. e. of Shinnston.	Willard No. 1.	1.92	36.52	55.55	6.01	1.97	14.006	77.68	8.03	5.53 1.52
Pittsburgh.	Harrison, Shinnston.	No. 65.	2.27	35.01	56.58	6.14	0.86	13.719	76.65	5.12	6.81 1.62
Pittsburgh.	Harrison, Viropa.	Consolidation No. 40.	1.40	36.31	55.20	7.09	2.48	13.927	75.50	8.36	4.89 1.52

*Bullietins Bureau of Mines 48State Geological Survey Reports.

(Continued on Next Page)

COAL CATALOG

ANALYSES OF WEST VIRGINIA SEAMS BY COUNTIES AND LOCALITIES—Continued

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carbon	Oxygen	RATIOS	
											Carbon	F. C.
											Oxy. + Ash	V. M.
†Pittsburgh	Harrison, 9 mi. n. w. of Wilsonburg	Chieftain	1.54	40.08	51.84	6.54	3.46	14,125	74.98	8.87	4.87	1.29
†Pittsburgh	Harrison, ½ mi. n. e. of Wolf Summit	O'Gara	1.43	40.53	51.19	6.85	3.59	14,169	76.83	6.51	5.75	1.26
†Pittsburgh	Harrison, average for County		1.63	38.24	53.53	6.60	1.94	13,800	76.04	8.14	5.16	1.40
†Pittsburgh	Kanawha, 1 mi. s. of Mink P. O.	Haynes	2.77	33.84	57.41	5.98	1.21	13,546	74.49	11.89	4.17	1.70
†Pittsburgh	Kanawha, 2.2 mi. s. w. of Sissonville	Ray	2.91	39.39	51.44	6.26	2.70	13,937	72.32	11.40	4.10	1.30
†Pittsburgh	Marion, 1 mi. w. of Barrackville	No. 7	0.55	37.78	55.30	6.37	1.79	14,200	76.58	6.68	4.02	1.46
†Pittsburgh	Marion, ¾ mi. s. w. of Catawba	Catawba	1.50	34.93	57.68	5.89	1.17	13,650	76.40	9.91	4.84	1.65
†Pittsburgh	Marion, Grant Town	Federal	1.39	37.42	55.15	6.30	1.62	14,000	76.37	8.95	5.01	1.47
†Pittsburgh	Marion, James Fork	Jamison No. 9	1.13	37.42	55.14	6.34	0.90	14,107	78.00	7.94	5.46	1.50
†Pittsburgh	Marion, Kingmont	Kingmont	1.75	36.77	55.14	6.38	1.46	14,080	76.64	9.14	4.94	1.49
†Pittsburgh	Marion, Montana	Consolidation No. 24	1.37	37.02	55.23	6.38	1.46	14,190	77.26	8.92	5.32	1.52
†Pittsburgh	Marion, ½ mi. e. of Montana	Morgan	1.91	36.68	55.81	5.60	1.54	14,110	76.80	8.32	5.18	1.52
†Pittsburgh	Marion, ¾ mi. e. of Montana	Elizabeth	1.21	36.65	55.63	6.51	1.73	14,110	76.80	8.32	5.18	1.52
†Pittsburgh	Marion, Murray	No. 45	0.87	37.67	54.31	7.15	2.36	14,050	75.72	8.08	4.97	1.49
†Pittsburgh	Marion, Stafford	Stafford	2.67	34.84	55.25	7.24	2.01	13,860	75.66	8.52	4.80	1.58
†Pittsburgh	Marion, ¾ mi. e. of Underwood	Jamison No. 8	1.27	35.55	57.68	7.24	0.98	14,010	77.57	9.24	5.26	1.65
†Pittsburgh	Marshall, Benwood	Benwood Mill	1.72	39.69	49.71	8.88	4.48	13,460	71.73	8.24	4.19	1.25
†Pittsburgh	Marshall, Glendale	Glendale	2.86	39.93	50.06	7.15	4.67	13,318	71.79	9.80	4.23	1.25
†Pittsburgh	Marshall, Moundsville	Mound	1.80	38.25	53.04	6.91	3.74	13,758	73.68	8.86	4.67	1.39
†Pittsburgh	Marshall, Moundsville	Panama	3.39	41.58	48.01	7.02	3.35	13,313	72.86	10.17	4.24	1.15
†Pittsburgh	Mason, Hartford	Liverpool	4.59	37.47	52.99	4.95	0.90	13,269	72.81	14.88	3.67	1.41
†Pittsburgh	Mason, Hartford	Hartford	5.96	39.83	49.37	4.84	1.52	12,991	71.61	15.27	3.56	1.25
†Pittsburgh	Mason, Rankin Hill	Rankin Hill	4.45	38.33	49.49	7.73	2.19	12,773	70.09	13.77	3.26	1.29
†Pittsburgh	Mineral, Wabash	Wabash No. 9	1.06	17.20	73.84	7.90	1.12	14,112	81.67	3.25	7.32	4.29
†Pittsburgh	Monongalia, Beechwood	No. 30	4.46	34.68	54.50	6.36	1.77	13,230	73.54	11.58	4.10	1.57
†Pittsburgh	Monongalia, near Morgantown	Great Scott	0.75	36.93	53.52	8.80	3.65	13,720	75.07	6.02	5.07	1.45
†Pittsburgh	Monongalia, 2 mi. n. e. of Morgantown	Elkins No. 5	2.09	34.56	54.18	9.17	2.06	14,282	78.00	4.86	5.56	1.54
†Pittsburgh	Monongalia, ½ mi. s. of Opekiska	Opekiska	0.91	38.23	55.36	5.65	1.95	14,290	77.28	8.56	5.44	1.45
†Pittsburgh	Monongalia, 4 mi. w. of Roundbottom	Grant	1.25	35.78	56.43	6.54	2.27	13,970	75.74	9.21	4.80	1.58
†Pittsburgh	Putnam, Black Betsey	Black Betsey	3.10	39.83	51.16	5.84	0.66	13,581	74.19	12.79	3.98	1.28
†Pittsburgh	Putnam, average for County		3.61	39.00	50.93	6.46	1.97	13,228	72.70	12.63	3.81	1.31
†Pittsburgh	Taylor, ½ mi. n. e. of Flemington	Flemington	1.18	37.54	55.16	6.12	3.17	14,280	76.56	7.52	5.62	1.47
†Pittsburgh	Taylor, ½ mi. s. e. of Flemington	T. B. Davis	1.08	36.92	55.54	6.46	3.53	14,140	74.98	8.39	5.05	1.50
†Pittsburgh	Taylor, ½ mi. s. of Rosemont	Tyrconnel	1.31	37.90	54.56	6.23	2.78	14,230	75.79	8.41	5.18	1.44
†Pittsburgh	Taylor, ½ mi. s. e. of Rosemont	Rosemont	1.34	38.97	53.64	6.05	3.15	14,220	76.33	7.62	5.58	1.38
†Pittsburgh	Taylor, ¾ mi. e. of Simpson	New York	0.33	38.88	53.67	7.12	3.45	14,400	75.22	7.68	5.08	1.38
†Pittsburgh	Taylor, 1 mi. n. w. of Simpson	Sand Lick	0.75	36.65	56.76	5.84	1.87	14,400	77.71	7.79	5.70	1.55
†Pittsburgh	Taylor, average for County		1.34	36.63	55.62	6.41	1.91	14,048	76.17	8.93	4.97	1.52
†Pocahontas No. 6	Fayette, Meadow Bridge	New River	0.33	19.90	77.34	2.43	0.66	14,670	84.62	6.68	9.29	3.88
†Pocahontas No. 6	Fayette, Meadow Creek	Gwynn	1.09	21.16	75.39	2.36	0.43	14,670	85.16	6.54	9.57	3.56
†Pocahontas No. 6	Fayette, Rainelle	Meadow River	0.32	21.60	74.61	3.47	0.54	15,210	86.24	4.02	11.51	3.45
†Pocahontas No. 6	Fayette, average for County		0.58	22.89	75.78	2.75	0.54	14,850	85.34	5.75	10.04	3.63
†Pocahontas No. 6	Mercer, McComas		2.94	18.10	75.34	3.62	0.48	14,924	84.67	4.58	9.26	4.86
†Pocahontas No. 6	Wyoming, 1.5 mi. n. of Crumpler	Zenith	0.64	19.36	75.09	4.91	0.76	14,620	82.90	6.56	7.72	4.35
†Pocahontas No. 4	McDowell, 8 mi. s. e. of Coalwood	Coalwood	3.80	17.20	74.28	4.17	0.40	14,809	82.36	6.58	7.26	5.26
†Pocahontas No. 4	McDowell, Davy	Blackstone	2.87	14.91	78.39	3.83	0.81	14,550	82.36	6.58	7.26	5.26
†Pocahontas No. 4	McDowell, Dearing	Black Wolf	3.40	14.00	77.80	4.77	0.69	15,332	86.33	4.42	10.91	4.72
†Pocahontas No. 4	McDowell, ½ mi. s. e. of Elbert	U.S.C. & C. No. 8	1.92	16.42	78.07	3.28	0.63	15,727	82.90	5.76	7.51	5.04
†Pocahontas No. 4	McDowell, 7 mi. n. e. of Gary	U.S.C. & C. No. 3	1.62	15.42	77.68	5.28	0.97	14,322	85.88	3.57	10.78	4.89
†Pocahontas No. 4	McDowell, 9 mi. s. e. of Olmsted	No. 2	1.36	16.00	78.24	4.40	0.56	15,247	85.88	3.57	10.78	4.89
†Pocahontas No. 4	McDowell, 4 mi. s. e. of Wilcoe	U.S.C. & C. No. 1	1.32	13.03	78.40	7.25	0.75	14,501	82.60	4.58	9.26	4.86
†Pocahontas No. 4	McDowell, average for County		1.91	15.93	77.40	4.76	0.65	14,661	84.67	4.58	9.26	4.86

(Continued on Next Page)

†State Geological Survey Reports.

*Bulletins Bureau of Mines.

COAL CATALOG

ANALYSES OF WEST VIRGINIA SEAMS BY COUNTIES AND LOCALITIES—Continued

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carbon	Oxygen	RATIOS	
											Carbon	F. C.
											Oxy + Ash	V. M.
Pocahontas No. 3...	Fayette, Meadow Bridge...	Bucry...	0.32	22.70	73.07	3.91	1.92	15,030	85.95	2.42	13.58	3.22
Pocahontas No. 3...	McDowell, 1½ mi. e. of Gary...	U.S.C. & C. No. 11...	2.11	15.04	77.65	5.20	0.77	14,795	83.59	5.14	8.08	5.16
Pocahontas No. 3...	McDowell, 8 mi. n. of Hartwell...	No. 4...	1.46	17.66	75.82	5.06	1.01	14,828	84.61	4.38	8.96	4.29
Pocahontas No. 3...	McDowell, Havaco...	Jed...	1.49	14.18	79.14	5.19	0.74	14,713	84.45	4.28	8.92	5.38
Pocahontas No. 3...	McDowell, 1 mi. n. w. of Fayette...	Page No. 1...	1.72	16.18	78.78	3.32	0.60	15,207	86.26	4.46	11.09	4.87
Pocahontas No. 3...	McDowell, 9 mi. n. e. of Thorpe...	U.S.C. & C. No. 4...	2.23	15.96	77.24	4.57	0.69	14,949	84.57	4.66	9.16	4.85
Pocahontas No. 3...	McDowell, average for County...		1.16	17.90	76.13	4.81	0.76	14,957	84.67	4.48	9.00	4.25
Pocahontas No. 3...	Mercer, Coaldale...	Coaldale...	3.43	14.58	77.89	4.10	0.67	14,602	83.79	5.59	8.65	5.34
Pocahontas No. 3...	Mercer, 1 mi. n. w. of Coopers...	E. Mill Creek...	3.78	15.40	76.80	4.02	0.84	14,612	84.04	5.26	9.06	4.99
Pocahontas No. 3...	Mercer, Hiawatha...	Hiawatha...	1.78	15.91	77.59	4.72	0.66	14,750	83.53	6.07	7.74	4.25
Pocahontas No. 3...	Mercer, 1 mi. s. w. of Matoaka...	Pawama...	1.94	15.35	77.29	5.42	0.86	14,843	82.32	5.51	7.53	5.04
Pocahontas No. 3...	Mercer, 2 mi. w. of Simmons...	Caswell-Hemlock...	3.60	14.50	78.30	3.58	0.70	14,670	84.95	5.01	8.86	5.40
Pocahontas No. 3...	Mercer, Weyanoke...	Weyanoke...	1.89	15.93	77.94	4.24	0.51	15,052	84.86	5.16	9.03	4.89
Pocahontas No. 3...	Mercer, average for County...		1.31	16.30	77.06	5.33	0.67	14,746	83.05	5.40	7.57	4.73
Pocahontas No. 3...	Raleigh, Hiawatha...	Hiawatha...	3.41	12.91	78.26	5.42	0.64	14,391	82.86	5.38	7.67	6.06
Pocahontas No. 3...	Raleigh, 7 mi. s. of Manning...	Sagamore Nos. 1 & 2...	3.16	18.17	74.69	3.98	0.56	14,639	84.13	5.56	8.82	4.11
Pocahontas No. 3...	Raleigh, 1.6 mi. n. w. of Simmons...	Buckeye...	3.80	13.50	79.40	3.34	0.80	14,670	82.67	7.30	7.77	5.88
Pocahontas No. 3...	Raleigh, 1.8 mi. n. w. of Simmons...	Caswell...	4.40	15.00	76.50	4.10	0.73	14,470	81.14	8.10	6.65	...
Pocahontas No. 3...	Raleigh, average for County...		1.31	16.30	77.06	5.33	0.67	14,746	83.05	5.40	7.74	4.73
Pocahontas No. 3...	Wilmington, 1.3 mi. s. w. of Mullens...	Mead Poc...	0.66	18.81	75.98	4.55	0.84	...	...	...	...	...
Pocahontas No. 3...	Fayette, Elk Ridge...	Elk Ridge No. 1...	1.22	30.78	62.64	5.36	0.69	14,400	77.83	9.56	5.22	2.04
Pocahontas No. 3...	Fayette, Keeferton...	Milburn No. 2...	2.76	30.92	62.36	3.96	0.54	14,620	80.77	8.35	6.56	2.02
Pocahontas No. 3...	Fayette, 9 mi. s. w. of Keeferton...	Westerley No. 2...	0.48	31.52	63.15	4.85	0.91	14,790	81.51	6.38	7.43	2.00
Pocahontas No. 3...	Fayette, Krebs...	Eagle...	0.78	35.32	54.96	8.94	0.80	14,010	78.08	6.27	5.13	1.56
Pocahontas No. 3...	Fayette, Kingston...	Westerley No. 8...	1.66	29.44	61.51	7.39	1.39	14,160	78.23	5.46	5.28	1.79
Pocahontas No. 3...	Fayette, average for County...		1.87	31.45	61.36	5.32	0.80	14,224	78.74	8.67	5.63	1.95
Pocahontas No. 3...	Kanawha, London District...	Butler...	0.48	43.62	53.59	2.31	0.60	14,330	79.05	10.81	6.02	1.24
Pocahontas No. 3...	Barbour, 1½ mi. e. of Century...	Century No. 2...	2.14	38.36	54.13	5.17	1.70	13,990	78.02	8.75	5.61	1.40
Pocahontas No. 3...	Harrison, ¾ mi. s. e. of Johnstown...	Harris...	0.76	39.03	55.34	4.87	2.82	13,991	77.27	8.77	5.66	1.42
Pocahontas No. 3...	Harrison, 1 mi. n. of McWhorter...	McIntyre...	1.40	35.57	58.72	4.31	1.01	13,897	79.15	9.43	5.76	1.65
Pocahontas No. 3...	Harrison, ¾ mi. s. e. of McWhorter...	Polar...	2.48	33.83	59.46	4.25	1.03	13,967	77.68	10.44	5.28	1.79
Pocahontas No. 3...	Harrison, 1¼ mi. n. e. of McWhorter...	Page...	1.28	37.57	54.45	6.70	3.06	13,643	75.15	8.70	4.88	1.45
Pocahontas No. 3...	Lewis, 7 mi. s. e. of McWhorter...	Polar...	1.37	36.25	57.40	4.99	1.91	13,978	...	...	...	...
Pocahontas No. 3...	Monongalia, near Morgantown...	Tait...	2.48	33.83	59.46	4.25	1.03	13,967	77.68	10.44	5.28	1.76
Pocahontas No. 3...	Fayette, Glen Jean...	Nichol...	1.44	32.08	55.61	10.87	1.77	12,630	70.61	10.96	3.23	1.73
Pocahontas No. 3...	Fayette, Heberton...	Weirwood...	0.72	16.37	77.39	5.52	0.82	15,114	84.65	3.39	9.50	4.73
Pocahontas No. 3...	Fayette, Lochgelly...	Lochgelly...	4.37	20.01	73.22	2.40	0.64	14,850	83.26	7.01	8.85	3.66
Pocahontas No. 3...	Fayette, Nallen...	Wilderness...	0.94	21.35	74.29	3.42	0.42	15,024	85.85	4.95	10.26	3.48
Pocahontas No. 3...	Fayette, Stonecliff...	Sewell Knob...	0.61	28.34	67.64	3.41	0.63	14,850	84.50	5.31	9.69	2.39
Pocahontas No. 3...	Fayette, Whitney...	Catact...	1.16	20.62	72.33	5.89	3.07	14,441	81.87	3.51	8.71	3.51
Pocahontas No. 3...	Fayette, average for County...		1.30	25.23	68.95	4.52	0.63	14,555	81.03	7.61	6.68	2.77
Pocahontas No. 3...	Greenbrier, 9 mi. s. e. of Richwood...	Spruce Knob...	0.88	24.05	71.29	3.68	0.82	14,759	83.68	5.17	9.44	2.97
Pocahontas No. 3...	McDowell, Big Sandy...	Big Sandy...	3.91	26.20	64.09	5.80	0.62	14,058	79.33	7.66	5.90	2.45
Pocahontas No. 3...	McDowell, 1 mi. s. of Davy...	Superior-Poca. No. 1...	1.72	17.49	73.56	6.87	0.68	14,571	82.71	3.98	7.62	4.12
Pocahontas No. 3...	McDowell, ½ mi. n. of Hensley...	J.B.B. No. 3...	1.66	17.85	78.34	2.51	0.79	15,258	85.87	4.64	12.01	4.48
Pocahontas No. 3...	McDowell, 3 mi. n. of Marytown...	J.B.B. No. 5...	1.59	18.16	76.48	3.77	0.62	15,235	86.42	3.35	12.13	4.21
Pocahontas No. 3...	McDowell, 3 mi. n. e. of Premier...	Premier Poca. No. 2½...	1.34	18.50	76.89	3.27	0.66	14,866	85.77	4.71	10.75	4.16
Pocahontas No. 3...	McDowell, average for County...		1.94	20.63	74.75	2.68	0.59	15,330	86.87	3.83	13.34	3.14
Pocahontas No. 3...	Raleigh, 6 mi. n. of Beckley...	Sprague...	1.47	20.29	74.78	3.46	0.75	14,953	85.18	4.70	11.01	3.69
Pocahontas No. 3...	Raleigh, 2.9 mi. n. e. of Beckley...	Cranberry...	1.17	18.55	78.67	1.61	0.58	15,418	86.94	4.93	13.29	4.24
Pocahontas No. 3...	Raleigh, 1 mi. from Graham...	Tamroy...	1.51	18.01	78.94	1.54	0.47	15,441	86.69	5.65	12.06	1.38
Pocahontas No. 3...			2.90	16.49	78.06	2.55	0.55	14,924	84.92	5.40	10.68	4.73

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(Continued on Next Page)

COAL CATALOG

ANALYSES OF WEST VIRGINIA SEAMS BY COUNTIES AND LOCALITIES—Continued

SEAM	COUNTY AND LOCATION	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined by T. U.	Carbon	Oxygen	Calorific Value
									by T. U.	by T. U.	by T. U.
†Sewell.....	Raleigh, Mabscott.....	Mabscott.....	0.95	17.22	78.51	3.32	0.97	15.050	85.29	4.56	10.82 4.56
†Sewell.....	Raleigh, Price Hill.....	Price Hill.....	0.95	19.77	73.74	5.54	2.17	14.801	83.65	3.23	9.54 3.73
†Sewell.....	Raleigh, 1 mi. s. of Price Hill.....	Oswald.....	0.78	19.67	75.68	3.57	1.12	15.300	85.64	3.57	11.51 3.85
†Sewell.....	Raleigh, 1 mi. n. of Stonewall.....	Sewell.....	0.90	20.11	76.57	2.42	0.71	15.439	85.74	5.23	11.21 3.81
†Sewell.....	Randolph, 2.7 mi. w. of Lee Bell.....	Prospect.....	0.40	26.00	61.22	12.38	0.55	13.615	77.76	3.95	4.76 2.35
†Sewell.....	Raleigh, average for County.....		1.15	18.87	77.00	2.98	0.88	15.150	85.43	4.98	10.73 4.08
†Sewell.....	Webster, 2½ mi. n. e. of Bergho.....	Hamrick.....	0.78	27.35	62.78	9.09	0.67	14.400	81.76	6.01	7.10 2.29
†Sewell.....	Webster, 3 mi. s. w. of Clifton Ford.....	Roller.....	1.10	30.75	62.65	5.50	0.67	14.400	81.76	6.01	7.10 2.29
†Sewell.....	Webster, 8 mi. n. e. of Ralph.....	Prospect.....	0.88	30.78	63.27	5.07	0.63	14.400	81.76	6.01	7.10 2.29
†Sewell.....	Webster, average for County.....		1.00	30.07	62.08	6.85	0.65	14.400	81.76	6.01	7.10 2.29
†Sewickley.....	Marion, Dakota.....	Dakota.....	1.16	37.96	51.84	9.04	3.59	13.542	74.11	7.03	4.61 1.34
†Sewickley.....	Marion, Montana.....	Parker Run.....	1.81	39.06	49.81	9.32	3.90	13.415	73.62	6.71	4.59 1.28
†Sewickley.....	Marion, ½ mi. e. of Rivesville.....	Parker Run.....	0.60	38.59	52.16	8.65	3.96	13.600	73.69	7.33	4.61 1.35
†Sewickley.....	Marion, average for County.....		1.02	37.89	52.34	8.75	2.96	13.628	73.16	8.90	4.15 1.88
†Sewickley.....	Mineral, Elk Garden.....	Tyson No. 10.....	2.82	17.70	71.15	8.33	1.04	13.960	73.16	8.90	4.15 1.88
†Sewickley.....	Monongalia, Scotts Run.....	Martin.....	1.54	35.33	55.95	7.18	1.54	13.870	74.84	10.18	4.31 1.56
†Stockton-Lewiston.....	Boone, 2.4 mi. n. e. of Orange.....	Foster.....	1.30	35.39	59.10	4.21	0.67	14.190	78.18	10.39	5.35 1.67
†Stockton-Lewiston.....	Boone, 2.2 mi. s. w. of Woodville.....	Horse Creek.....	2.62	40.36	54.21	2.81	0.87	14.190	79.43	10.16	6.12 1.32
†Stockton-Lewiston.....	Boone, average for County.....		1.88	38.98	54.50	4.64	0.85	14.210	78.82	9.56	5.66 1.40
†Stockton-Lewiston.....	Kanawha, Cabin Creek.....	Foster.....	1.30	35.39	59.10	4.21	0.67	13.930	78.18	10.30	5.39 1.67
†Stockton-Lewiston.....	Kanawha, Cabin Creek.....	Davis.....	0.96	39.07	53.39	6.58	1.40	13.550	76.71	9.29	4.83 1.34
†Stockton-Lewiston.....	Kanawha, Malden District.....	Virginia.....	1.85	36.30	55.69	6.16	1.06	13.100	74.43	12.14	4.07 1.51
†War Eagle.....	Mingo, Glen Alum.....	Glen Alum.....	2.86	33.23	58.08	5.83	0.67	14.105	78.38	8.68	5.40 1.75
†Waynesburg.....	Mingo, 3 mi. n. e. of War Eagle.....	Mephisto.....	3.35	30.91	58.87	6.87	1.11	13.828	78.38	8.68	5.40 1.75
†Waynesburg.....	Marshall, Union District.....	Sheppard.....	0.71	37.58	46.64	15.07	4.25	12.433	65.45	8.76	2.75 1.24
†Waynesburg.....	Marshall, Webster District.....	Dague.....	0.43	34.40	47.67	17.50	3.70	12.008	63.23	8.24	2.45 1.39
†Waynesburg.....	Monongalia, Cass District.....	Wade.....	1.57	32.73	56.71	8.99	0.93	13.460	72.18	11.88	3.46 1.73
†Waynesburg.....	Monongalia, nr. Fairview.....	Statler.....	1.82	34.73	51.71	11.74	1.98	12.960	69.97	9.69	3.27 1.49
†Waynesburg.....	Monongalia, near Mt. Morris.....	Brand.....	0.40	36.50	52.91	10.19	2.25	13.240	71.38	10.05	3.53 1.45
†Waynesburg.....	Monongalia, average for County.....		1.50	34.35	51.95	12.20	2.23	12.928	69.41	10.05	3.12 1.51
†Welch.....	McDowell, ½ mi. s. w. of Deegans.....	Pando.....	1.65	16.51	72.92	8.92	1.33	14.505	81.10	3.51	6.52 4.42
†Welch.....	McDowell, ½ mi. s. w. of Hemphill.....	Ima.....	1.93	16.73	75.53	5.81	0.61	15.008	84.48	3.46	9.11 4.51
†Welch.....	McDowell, ½ mi. s. w. of Hemphill.....	Hemphill.....	1.00	16.29	74.90	7.81	0.55	14.203	81.64	4.38	6.69 4.60
†Welch.....	McDowell, 3 mi. s. w. of Premier.....	Premier Poca No. 2.....	2.43	20.19	71.53	5.85	0.61	14.660	82.66	4.86	7.71 3.54
†Welch.....	McDowell, 9 mi. s. e. of Ritter.....	Colonial Poca No. 2.....	1.44	22.49	67.38	8.69	0.70	14.330	80.42	4.33	6.18 3.00
†Winfrede.....	McDowell, average for County.....		1.38	19.39	72.01	7.22	0.74	14.407	82.06	4.11	7.24 3.71
†Winfrede.....	Boone, Chap.....	Berwind.....	0.71	35.02	56.62	7.65	0.77	14.400	79.82	5.61	6.02 1.62
†Winfrede.....	Boone, High Coal.....	Anchor.....	1.40	36.52	58.88	3.20	0.59	14.760	82.21	7.24	7.87 1.61
†Winfrede.....	Boone, 2 mi. w. of High Coal.....	Webb.....	1.17	35.17	56.71	6.95	0.67	14.100	78.86	7.21	5.57 1.61
†Winfrede.....	Boone, 3.8 mi. s. w. of Nelson.....	Dickinson.....	1.40	40.08	52.48	6.04	1.48	14.130	77.57	8.26	5.42 1.31
†Winfrede (Cannel).....	Boone, 3.8 mi. n. w. of Pond.....	Jarrell.....	1.15	38.16	53.47	7.22	1.70	13.800	76.75	8.10	5.01 1.40
†Winfrede.....	Boone, 1½ mi. s. of Whitesville.....	Blue Star.....	1.08	40.48	51.50	6.94	1.29	14.000	78.55	6.87	5.69 1.27
†Winfrede.....	Boone, average for County.....		1.35	36.97	54.19	7.49	0.95	14.198	78.55	6.87	5.69 1.27
†Winfrede.....	Logan, Seng Camp Creek.....	No. 3.....	1.22	38.79	56.38	3.61	0.78	14.198	78.55	6.87	5.69 1.27
†Winfrede.....	Logan and Mingo, average for County.....		1.26	39.77	53.74	5.23	0.68	14.198	78.55	6.87	5.69 1.27
†Winfrede.....	Mingo, 1 mi. n. e. of Chattooy.....	Buffalo.....	5.45	32.80	50.03	11.72	1.02	12.233	78.55	6.87	5.69 1.27
†Winfrede.....	Mingo, 1.8 mi. s. e. of Maher.....	Deskins.....	1.30	41.41	51.63	5.66	0.71	12.233	78.55	6.87	5.69 1.27
†Winfrede.....	Raleigh, 1 mi. s. e. of Dorothy.....	Four States.....	1.07	35.03	58.25	5.65	0.50	12.233	78.55	6.87	5.69 1.27

*Bullington Bureau of Mines. †State Geological Survey Reports.

COAL CATALOG

BIG BOTTOM COAL COMPANY

Charleston National Bank Building
CHARLESTON. W. VA.

Miners of

KANAWHA COAL

BIG BOTTOM COAL COMPANY



CHARLESTON, WEST VIRGINIA

Seam Mined and Location

The Big Bottom mine is located at Tad, Kanawha county, W. Va., the opening being in the widely known Stockton-Lewiston or Belmont seam.

This seam is one of the earliest mined in the Kanawha field and did much to establish the splint coals in the Middle West, where they soon built up a reputation as fine steam and domestic coals.

Coal from the Big Bottom mine is in every way qualified to sustain the high regard for Belmont coal. With an output of 200 tons daily we are prepared to supply all demands along the following commercial lines:

STEAM COAL

Big Bottom run-of-mine coal is excellent for steam purposes, being high in heat value and low in ash. The ash is non-fusible and makes little or no clinker. It is mined clean and shipped clean and will give satisfaction at all times whether used for hand firing or with stokers.

PRODUCER GAS

No coal surpasses good Belmont coal for producer gas purposes, one reason being that it is not as strongly caking as many other bituminous coals. Our coal will satisfy the most exacting requirements.

DOMESTIC COAL

Big Bottom coal mines in solid oblong blocks, about 70 per cent. of the production being lump coal. The coal deteriorates but slightly in shipping, stands handling in yards, burns freely and leaves but little ash. It is especially desirable as a combination steam and domestic coal susceptible to separation in the coal yard and being made into two grades of prepared coal at a nominal expense.

EXPORT COAL

Big Bottom mine is in Pool No. 6, by many coal experts regarded as the pool which supplies the best steam coal for export use.

METALLURGICAL COAL

Where coal is used in its raw state for metallurgical purposes, Big Bottom coal, with a high heat value and low sulphur content, will be found well fitted for use.

Analysis

Moisture	2.38
Volatile Matter	32.62
Fixed Carbon	57.68
Ash	7.32
	<hr/>
	100.00
Sulphur	0.78
B.t.u.	13,952

BOTTOM CREEK COAL & COKE CO

VIVIAN, McDOWELL CO., WEST VIRGINIA, U. S. A.

Miners of

"BOTTOM CREEK" POCAHONTAS COAL

BOTTOM CREEK coal is a Low Volatile Smokeless coal mined from the celebrated Pocahontas No. 3 seam at VIVIAN, West Virginia, on the main line of the Norfolk & Western Railway.

Pocahontas Coal is recognized the world over as having no superior as a steam coal.

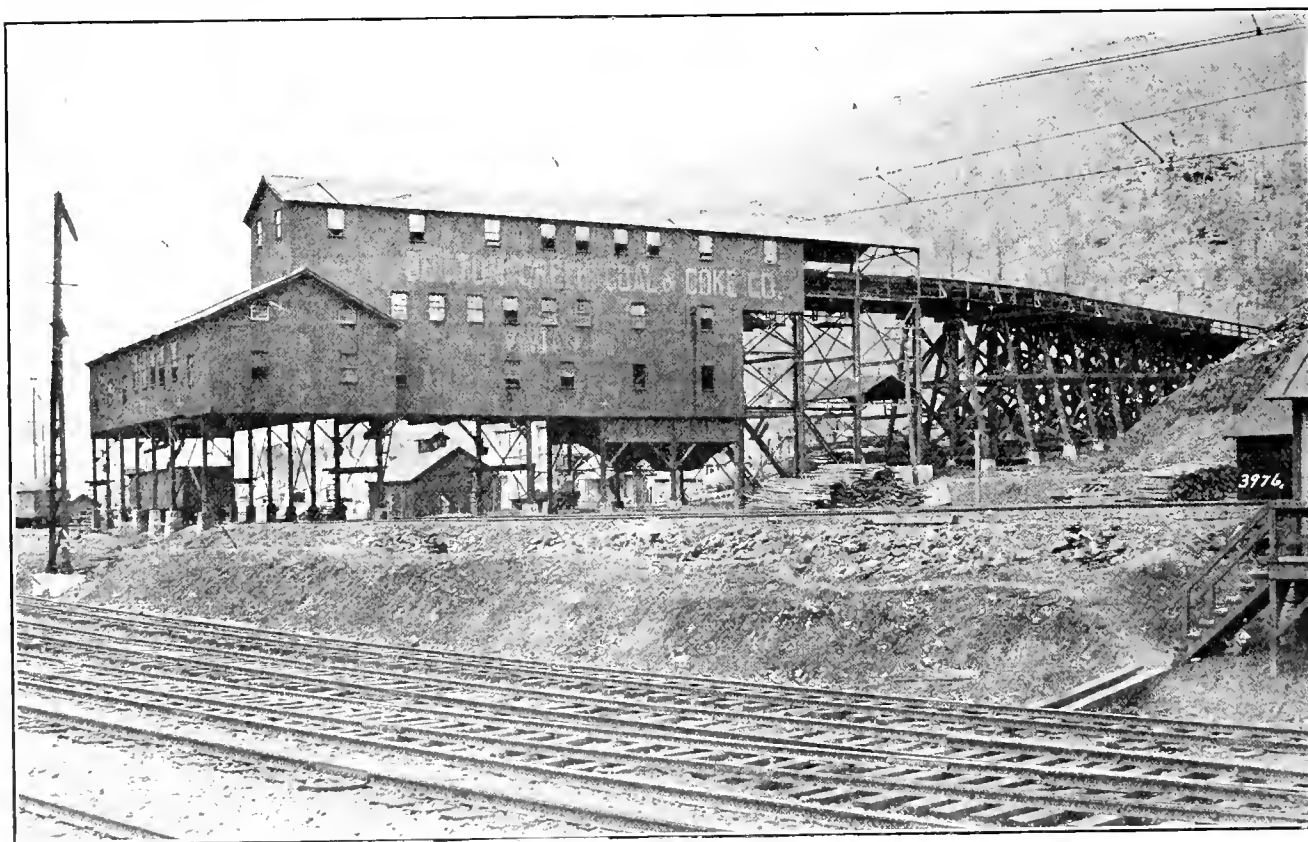
BOTTOM CREEK coal is recognized as being of the highest grade of Pocahontas coal by reason of SUPERIOR PREPARATION in a large modern steel tippie. It is in POOL 1, U. S. Navy Acceptable List.

BOTTOM CREEK "Run of Mine" coal is screened over shaker screens, separated into sizes, hand picked, and reassembled.

It is used for steam purposes, for smithing, for general domestic use, for heating homes, apartment houses and hotels especially in cities requiring the use of a smokeless coal.

BOTTOM CREEK "Prepared Sizes" are used for general domestic use in competition with anthracite coal.

BOTTOM CREEK Stoker and Slack is used for steam, for making high grade coke in bee hive and by-product coke ovens.



Steel Tippie at Bottom Creek Mine. Note Overhead Power Lines of Norfolk and Western Railroad.

BRADY COAL CORPORATION

General Offices

206 Deveny Building, FAIRMONT, W. VA.

Producers and Shippers

Exceptional Coals for Locomotive Fuel, Export and Factory Use

OSAGE FAIRMONT GAS AND STEAM COAL MONON FAIRMONT GAS AND STEAM COAL
ABRAMS CREEK LOW VOLATILE SMOKELESS COAL

Sales Agents

PRODUCERS FUEL COMPANY

Executive Office:

Henry W. Oliver Building
Pittsburgh, Pa.

Branch Offices:

1023 Singer Bldg., New York City
304 Perry Bldg., Philadelphia, Pa.

Osage Fairmont High Volatile Coal

Osage Fairmont Gas and Steam Coal is produced at Osage Mine No. 1 and Osage Mine No. 2 located at Osage, Monongalia County, West Virginia, on the Morgantown and Wheeling Railway. Osage Mine No. 1 operates in the Pittsburgh seam of coal. Osage Mine No. 2 operates in the Sewickley seam of coal.

Osage Mines are counted among the best equipped in the Fairmont region and have ample facilities for screening and preparing their output for market. Their capacity is 2,000 tons daily.

Particular attention is paid by the Osage Coal Company to the comfort of its employees and housing and living conditions are as good as can be found anywhere.

Shipments from Osage Mines take the Fairmont rate of freight.

Monon Fairmont High Volatile Coal

Monon Fairmont Gas and Steam Coal is produced at Monon Mine No. 1 and Monon Mine No. 2 located at Monon, Monongalia County, West Virginia, on the Monongahela Railway. Monon Mine No. 1 operates in the Pittsburgh seam of coal. Monon No. 2 operates in the Sewickley seam of coal.

The capacity of Monon Mines is 2,000 tons daily and they are equipped to furnish the trade regularly with any size coal desired. Particular attention is paid to preparation and the Company is proud of its reputation for furnishing clean coal to the trade.

Shipments from Monon Mines take the Fairmont rate of freight.

Abrams Creek Low Volatile Coal

Abrams Creek Low Volatile Smokeless Coal is produced at Abrams Creek Mine No. 1, located on the Elk Garden branch of the Western Maryland Railway at Oakmont, Mineral County, West Virginia. This mine operates in the Upper Freeport vein, producing a high grade "Smokeless" coal. The coal is machine mined, well prepared and contains a large percentage of lumps.

The capacity of Abrams Creek Mine is 1,000 tons per day.

Shipments from Abrams Creek Mine take the Piedmont freight rate.

BUFFALO-THACKER COAL CO.

HUNTINGTON, W. VA.

Miners of
Buffalo White Ash and Big Eagle Gas Coal

BUFFALO COAL AND EXPORT COMPANY, Eastern Sales Agents
 Huntington, W. Va. 32 Broadway, New York

The retail coal dealer is today, more than ever before, interested in handling a good domestic coal.

One reason for this interest is that customers are insisting on a fuel that is free burning, one that gives a high heat without the production of an excessive amount of ash or the formation of troublesome clinker.

But there are other reasons. The retailer is obliged to carry coal in storage in order to take care of excessive demands during the cold spells. Storage with some coals means rapid disintegration, and the fine coal so produced has a lesser value than the lump coal from which it came, hence all fines produced during stocking mean just so much loss to the dealer. Even in the ordinary unloading at the yards and the reloading into trucks, the matter of breakage is an important one.

BUFFALO WHITE ASH Coal solves all the dealer's problems and removes all difficulties with the household trade. It is a coal that makes and retains a favorable impression with everybody. Its hard texture insures that it will be delivered almost free from slack and that it will stock like iron. The readiness with which it may be burned and its cleanliness invariably please the customer. Its excellent quality and its careful preparation make for continuous satisfaction between producer and retailer and retailer and consumer. And more than that, it insures a constant demand and a **steady profit to the retailer.**

BUFFALO WHITE ASH Coal is mined at Chattaroy, Mingo county, from the Winifrede seam, which yields one of the premier steam and domestic coals of the country. The mine is moderately equipped throughout and has all of the necessary devices on the tippie, such as shaker screens, revolving screens, picking tables and loading booms, for the preparation and sizing of its product.

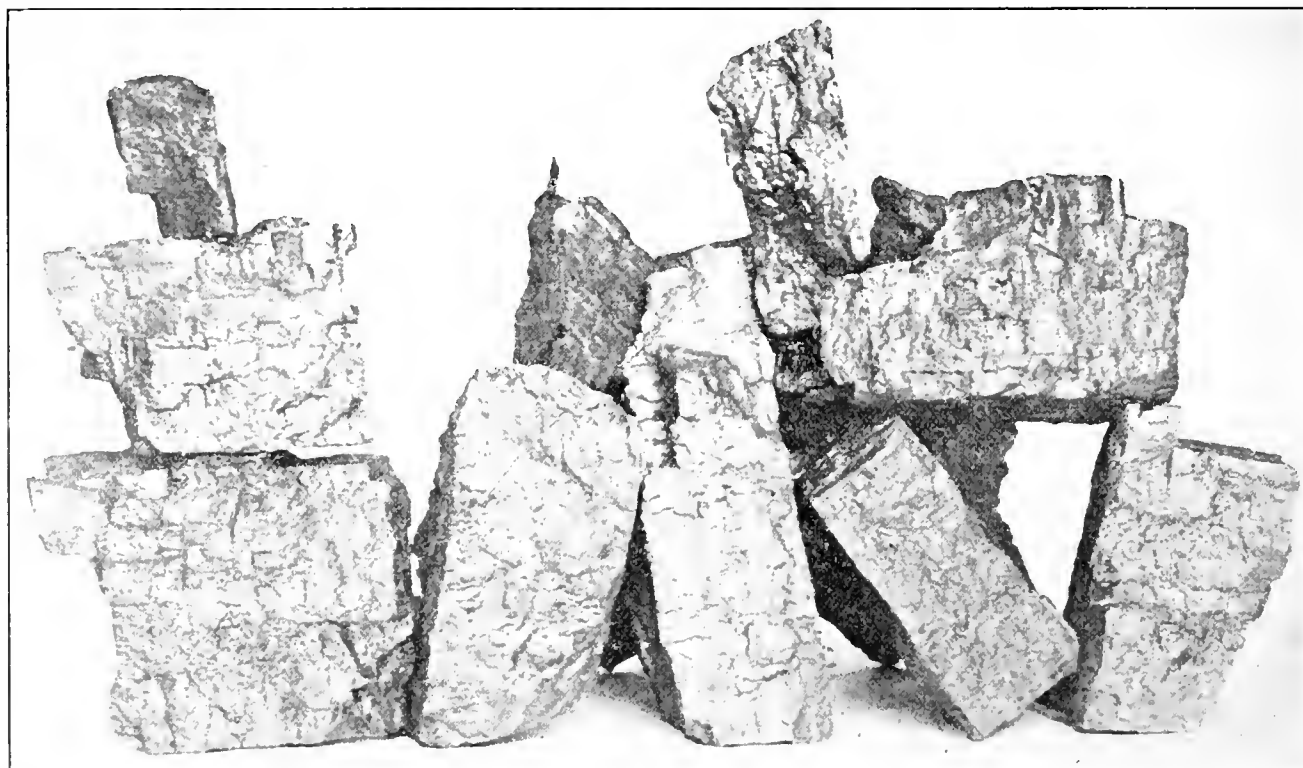
With a daily capacity close to 800 tons, we stand ready to meet your requirements.

Shipments on Norfolk and Western Railway.

ANALYSIS*

Moisture	2.18
Volatile Matter	40.77
Fixed Carbon	53.89
Ash	3.16
	<hr/>
	100.00
Sulphur .....	.71
B. t. u.	14,200

*George C. Davis, Chemist, Philadelphia, Pa.



Could a Coal Like This Fail to Please Either the Steam or Domestic User?



Tippie at Ottawa No. 2 Mine



Picking Table and Loading Boom

BIG EAGLE GAS COAL

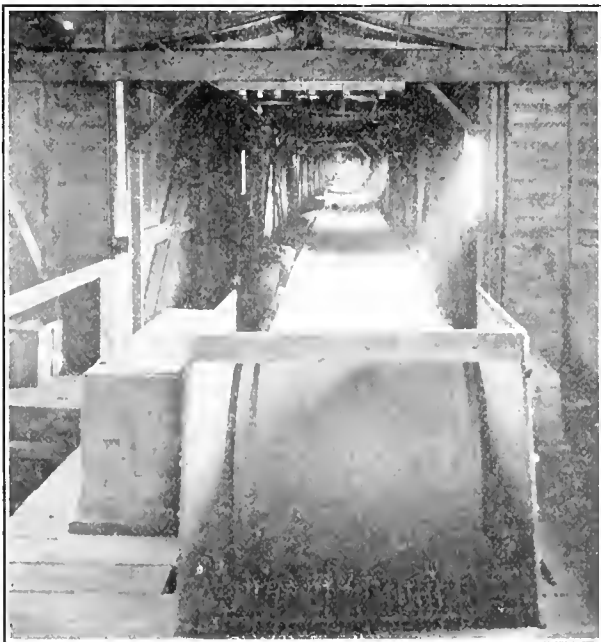
The Eagle seam is one of West Virginia's best known gas coals. In accordance with the general characteristic of the West Virginia gas coals, it is a softer coal than the Winifrede, referred to on the opposite page, and in this respect bears some resemblance to the New River coals.

The Buffalo-Thacker Coal Company has three mines working in this seam, all located at Ottawa, Boone county, in the Coal River field. Each mine has its own tippie so that any interruption to output due to mishaps with tippie machinery, lack of cars, etc., is confined to one operation.

Beaded flight picking tables are features of the tippie installations. Before reaching these, the coal is passed over gravity screens so that the fine coal is separated from the egg and lump, thus enabling the pickers to locate at once any impurities on the table. At the end of the picking table the lump and nut and slack are united as formerly, constituting hand-picked mine run coal, or it may be loaded as lump, or nut and slack, as desired.

The three Big Eagle Gas mines have tributary to them 3,000 acres of Eagle coal. Mining conditions are excellent. The seam measures from five and one-half to six feet of absolutely clean coal and has a sandstone roof, with little or no irregularities. The best types of electrical machinery are installed throughout. Annual capacity of these mines is 600,000 tons.

BIG EAGLE GAS Coal is low in sulphur and ash, and high in heat units. It is one of the best by-product coals in the world and is also well suited for the manufacture of illuminating gas, for metallurgical purposes, for the burning of fancy porcelain or tile and general steam purposes.



Belt Conveyor Used in Bringing Coal from Ottawa No. 3 Mine to Tippie

Its analysis is as follows:*

Moisture	1.26
Volatile Matter	38.94
Fixed Carbon	55.47
Ash	4.33
	<hr/>
	100.00
Sulphur	1.02
B. t. u. per pound.....	14,550

*George C. Davis, Chemist, Philadelphia, Pa.

ROBERT Y. BROWN

Grand Central Terminal, NEW YORK CITY

Telephone: Vanderbilt 4566

434 Oliver Bldg.
PITTSBURGH, PA.
Phone Grant 2950

105 Medea Bldg.
JOHNSTOWN, PA.
Phone Bell 220

1016 Hippodrome Bldg.
CLEVELAND, OHIO
Phone Main 130

Sales Agent for

CAMBRIA COAL COMPANY

Operating

Cambria, Wertz and Gatch Mines

Mine Office
504 Union Bank Building
CLARKSBURG, W. VA.
Phone Bell 2525

LOCATION

Harrison and Barbour Counties, West Virginia.

RAILROAD

Baltimore & Ohio Railroad. Taking Fairmont rates of freight East, North and West.

CAPACITY

Present production 1,000,000 tons annually. Proposed development 2,000,000 tons annually.

QUALITY

Pittsburgh Seam—High grade Gas, Steam and Domestic. Particularly adapted for Railroad Fuel and Cement Burning.

PREPARATION

Mine Run size, carefully prepared from Cambria and Wertz mines. Most modern tippie at Gatch mine, under construction, for preparing and sizing coal into Lump, Nut and Slack.

CARTER COAL COMPANY

General Office

COALWOOD, McDOWELL COUNTY, WEST VIRGINIA

Sales Office

Dixie Terminal Building, CINCINNATI, OHIO

Producers and Exporters

POCAHONTAS

EASTERN KENTUCKY AND VIRGINIA COALS

Location of Mines and Shipping Facilities

The Pocahontas Mines of Carter Coal Company are located in McDowell county, West Virginia, on a 16,000-acre fee property, one of the largest Pocahontas properties owned in fee by any operating company. Mines are served by the Norfolk & Western Railroad.

The Virginia Mines are on a 10,000-acre property owned in fee by Carter Coal Company and located in Tazewell county, Virginia, and served by the Norfolk & Western Railroad.

The Kentucky Mines are on a 12,000-acre property, largely owned in fee by Carter Coal Company and lying in Knox and Bell counties, and served by the Cumberland Railroad, connecting with the Louisville & Nashville Railroad.

Capacity of Mines

Our 10 mines (5 in Pocahontas field) ship about 1,000,000 tons per year.

Sizes Produced and Preparation

All commercial sizes of our different varieties of coal are produced: Run-of-Mine, Lump, Egg, Nut, Slack, and Nut and Slack. The tipples at the mines are equipped with shaking screens, picking tables and loading booms for loading the larger sizes of prepared coal in railroad cars.

Usages

We furnish from our own mines coals for bunkering and export both at lake and tidewater piers. United States Navy has been a large user of coal from our mines for a number of years.

We furnish coals suitable and desirable for bee-hive and by-product coking, cement burning, steam plants, locomotive fuel, metallurgical uses, smithing, and domestic trade.

Analyses

An average of 23 analyses made by the United States Government of coal taken from the Pocahontas Mines of Carter Coal Company from cargoes and barges furnished the Navy is as follows:

	Dry Basis
Moisture	18.3
Volatile	75.9
Fixed Carbon	5.8
Ash	0.79
Sulphur	14,795
B. t. u.	

An average of 26 analyses made by the United States Government of coal from the Pocahontas Mines of Carter Coal Company from standard face samples is as follows:

Moisture	0.57
Volatile	18.24
Fixed Carbon	77.33
Ash	4.47
Sulphur	0.82
B. t. u., Dry Basis.....	14,961

An average analysis of our Pocahontas slack coal made by Crowell & Murray, Chemists and Metallurgists, of Cleveland, is as follows:

Moisture (as received).....	0.40
Volatile	16.70
Fixed Carbon	77.05
Ash	6.25
Sulphur	0.77
B. t. u., Dry Basis.....	14,696

An average of 3 analyses of our Kentucky coal made by Charles Catlett, Geologist and Chemist, is as follows:

Moisture	2.52
Volatile	37.91
Fixed Carbon	55.12
Ash	4.38
Sulphur	0.70
B. t. u.	14,016

THE CENTRAL FUEL COMPANY

President:
B. Lee Hutchinson

DETROIT OFFICE:
Penobscot Building.



Cable Address
"CENTFUELCO"
All Codes

Main Office

Union Central Bldg., CINCINNATI, OHIO

The Central Fuel Company are distributors of over a millions tons of coal yearly.

This tonnage comes from two classes of mines, first, those which are owned and controlled by us, and, second, from mines for which we are the Sales Agents.

This arrangement gives us the advantage of large reserve quantities on which we can draw in all cases of need, thereby enabling us to serve our customers to their advantage. The fact that we have a number of mines, producing a variety of coals, has the further advantage of permitting us to select the coal best fitted to the usage intended.

Our specialty is WEST VIRGINIA HIGH VOLATILE COALS.

Hugheston Coal

The Empire Fuel Company, operating the Hugheston mine at Hugheston, W. Va., is one of the allied interests of the Central Fuel Company. This mine is in the Kanawha district and makes shipments on the Kanawha & Michigan Railroad and the Kanawha River.

The Hugheston mine has a capacity of 1,000 tons daily, all of this being mined from the No. 2 Gas seam. It is an excellent steam and locomotive fuel coal.

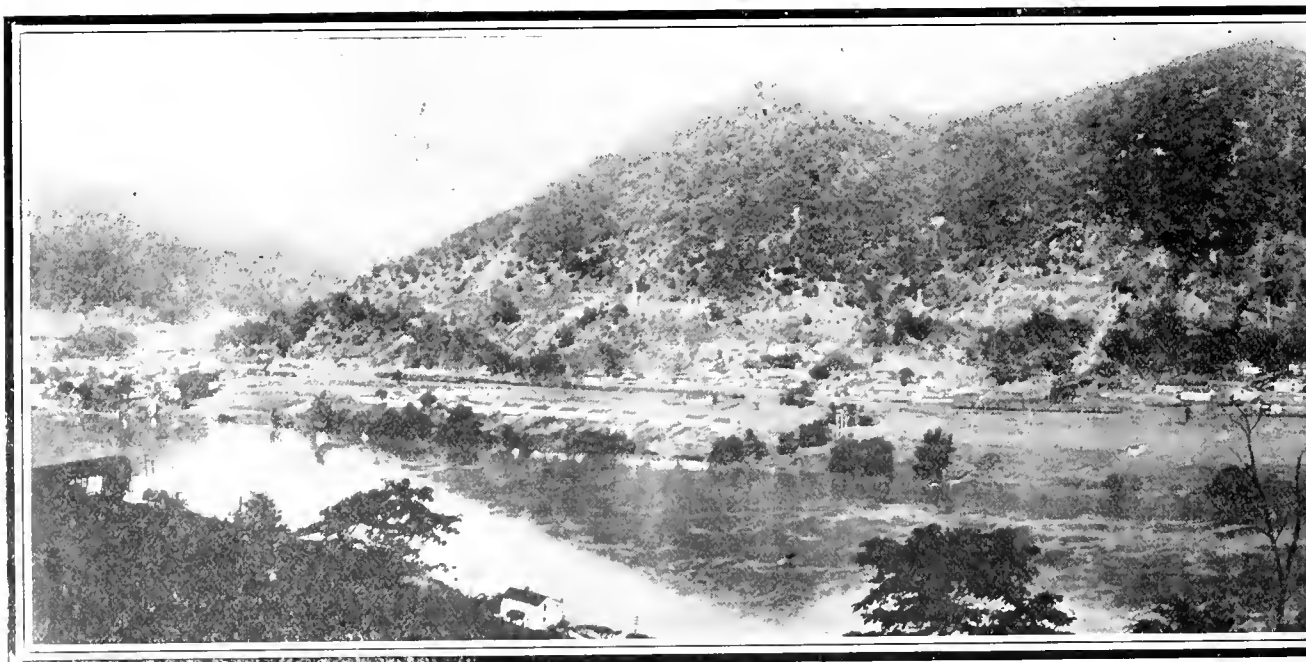
Analysis Hugheston No. 2 Gas Coal*

Moisture	1.43
Volatile Matter	35.04
Fixed Carbon	60.15
Ash	3.38
Sulphur	0.59
B. t. u. (as received)	14,489
B. t. u. (dry basis)	14,699

Kanawha Gas Coal

This coal comes from the Oakland and Crescent mines of the Oakland Coal Company, also one of the allied interests of the Central Fuel Company. Both mines are located at Smithers, in the Kanawha region, and have a combined daily capacity of 800 tons.

*Analysis made on mine samples by Smith, Rudy & Co.



Kanawha Gas Coal (Continued)

Mine-run coal only is loaded from these mines, and its principal markets lie with the steam trade. Its low-ash and high-heat content fits for every use for which a high quality steam coal is advisable.

Analysis Oakland Eagle Coal*

Moisture	1.43
Volatile Matter	37.69
Fixed Carbon	56.11
Ash	4.77
Sulphur	1.65
B. t. u. (as received)	14,463
B. t. u. (dry basis)	14,673

Analysis Crescent Eagle Coal*

Moisture	1.60
Volatile Matter	31.29
Fixed Carbon	60.46
Ash	3.65
Sulphur	0.81
B. t. u. (as received)	14,506
B. t. u. (dry basis)	14,742

Glen Ferris Steam

Glen Ferris steam coal is produced by the Oakland Coal Company from their Nos. 1 and 2 mines at Smithers, W. Va. The entire output of these mines, amounting to about 500 tons daily, is disposed of through the Central Fuel Company, who control the sales through property ownership.

The No. 2 Gas is the seam mined at both openings and is a splendid steam coal, running very low in impurities and high in heat value.

Analysis Glen Ferris Steam Coal*

Moisture	1.26
Volatile Matter	36.89
Fixed Carbon	58.83
Ash	3.02
Sulphur	0.68
B. t. u. (as received)	14,813
B. t. u. (dry basis)	15,002

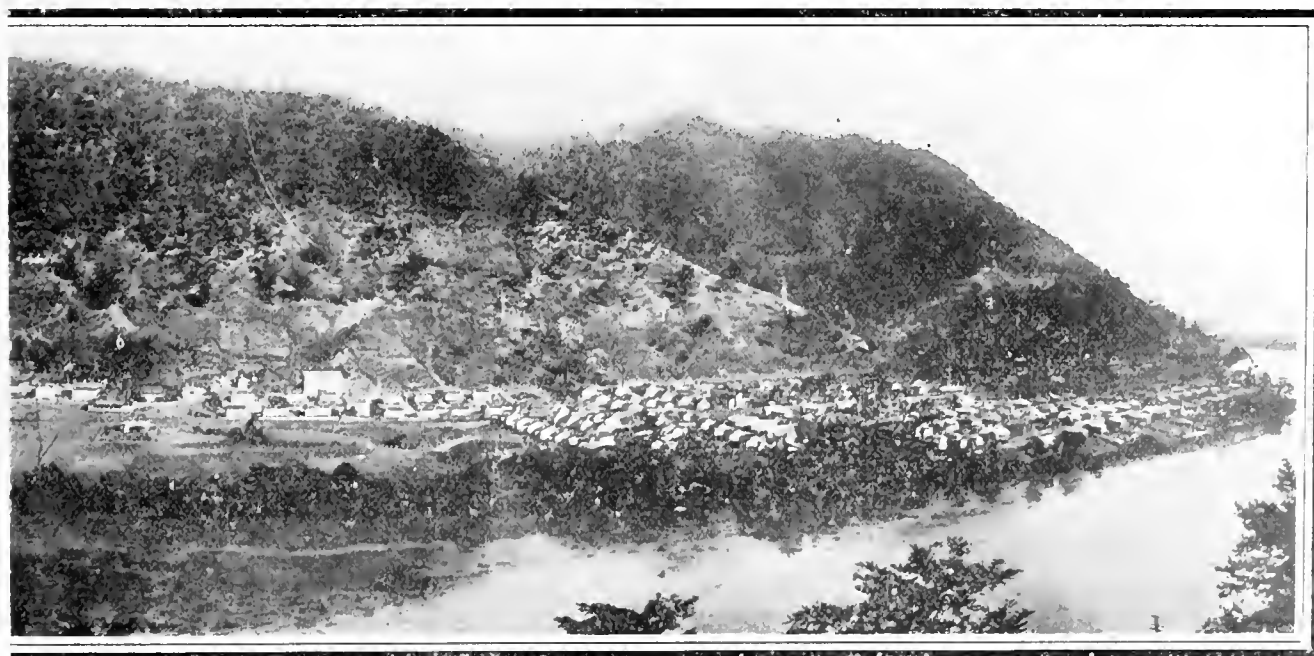
Island Creek Coal

For steam and fine domestic trade we offer coal from the Island Creek seam in Logan County by the Man Mining Company. This mine is presently in the process of development and will shortly have reached a 600-ton daily output. It mines in large blocky pieces and stands weathering and transportation without excessive breakage.

Other Tonnages

The Central Fuel Company is sales agent for a number of West Virginia mines, four of these being in the Logan field. We will be glad to receive your inquiries for coals for any and all purposes.

*All analyses made on mine samples by Smith, Rudy & Co.



CENTRAL POCAHONTAS COAL CO.

Main Office
WELCH, WEST VIRGINIA

Branches

NEW YORK CITY
32 Broadway

CINCINNATI, OHIO
Union Central Building

NORFOLK, VA.
Flat Iron Building

BLUEFIELD, W. VA.
Coal & Coke Building

Miners, Shippers, Exporters and Bunker Suppliers of

Number Three Seam Navy Accepted Pocahontas and Crystal Block Coals

Pocahontas Mines

This company owns and operates five fully equipped and up-to-date mines in the heart of the Pocahontas Coal Fields, operating in the famous No. 3 seam. No expense has been spared to provide the latest and most efficient types of conveying apparatus, rotary dumps, shaker screens and loading booms, thereby insuring a uniform preparation and a faultless product. As it will take more than seventy-five years to mine all the coal from these properties, an investment in the above proportions can well be afforded.

Crystal Coals

Are mined by the Crystal Block Coal & Coke Company and the Crystal Block Mining Company, associate companies of the Central Pocahontas Coal Company. The Crystal mines operate in the Winifrede seam of Mingo county, West Virginia, from which is produced the unrivalled CRYSTAL BLOCK, GENUINE WHITE ASH, SPLINT COALS, which have for years enjoyed such an undisputed reputation throughout Ohio, Indiana, Michigan, Illinois, Virginia, North Carolina and as far west as Minnesota and Iowa. As with the Central Pocahontas Coal Company, no expense has

been spared to make CRYSTAL BLOCK preparation unquestionably the best in the United States. As an illustration, they have gone to considerable expense installing the longest, single rope, disc conveyor in the world, which brings CRYSTAL BLOCK down hill a distance of 900 feet in practically the same shape as when mined. They have also the latest and most up-to-date conveying apparatus, rotary dumps, shaker screens and loading booms. CRYSTAL BLOCK 4" and up moves exclusively to the domestic household trade, the CRYSTAL 2½"x4" EGG is used almost exclusively in the ceramic industries, while CRYSTAL 1½"x2½" STOVE is an exceptional coal for cook stoves and annealing. The following analysis made by the West Virginia Geological Survey shows the high quality of CRYSTAL COALS:

Moisture	1.76
Volatile Matter	38.92
Fixed Carbon	55.22
Ash	4.10
	<hr/>
	100.00
Sulphur .....	.585
B.t.u. (average)	14,825



View of Tipple at Crystal Block No. 1 Mine

Rawl By-Product Gas Coal

Is mined by the Crystal Block Coal & Coke Company at their Nos. 2 and 3 mines, located at Sprigg and Rawl, Mingo county, West Virginia. This coal, although primarily a by-product gas coal, also makes an exceptional fuel for furnace and steam plants. The detailed analysis following, which was made by the Pittsburgh Testing Laboratory from samples collected by their field representatives, shows its exceptional qualities:

Analysis

Moisture	1.48
Volatile Matter	34.74
Fixed Carbon	60.81
Ash	2.97
	<hr/> 100.00
Sulphur .....	.67
Phosphorus .....	.005
B.t.u. per lb. dry coal.....	14,579
Fusion point of ash	2,602° F.

Gas Test

Hydrogen Sulphide in gas (grains per 100 cu. ft.) ...	132
Coke yield (per cent.).....	66.6
Tar yield (per cent.).....	9.3
Tar per ton	19.6 Gals.
Ammonia (NH ₃) (per cent.)..	.275
Ammonium Sulphate per ton..	21.4 lbs.
Gas per ton at 60° F., 30"	
mercury and saturated.....	9100 cu. ft.
B.t.u. of gas per cu. ft.....	627
Candle power of gas	14.2
B.t.u. in gas per lb. coal.....	2853

Analysis of Gas (Purified from H₂S)

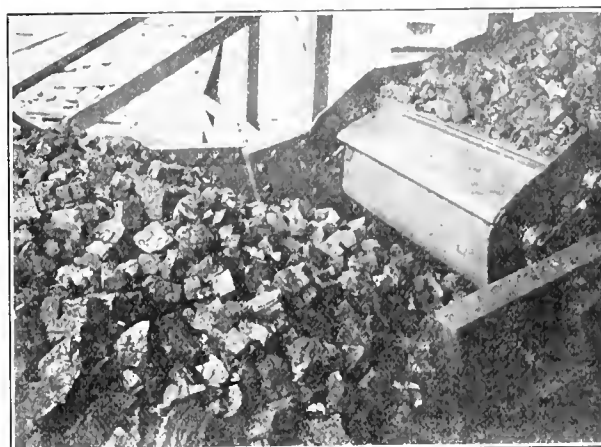
Carbon Dioxide	2.44%
Illuminants	4.87%
Oxygen .....	.20%
Carbon Monoxide	6.90%
Methane	35.12%
Hydrogen	47.20%
Nitrogen	3.27%
	<hr/> 100.00%

Analysis of Coke

Ash	5.03%
Sulphur .....	.60%



Crystal Block Coal on Loading Boom



Crystal Egg Coal on Car

WHATEVER YOUR FUEL REQUIREMENTS MAY BE, THE CENTRAL POCAHONTAS COAL
COMPANY CAN SUPPLY THEM

WM. MATHER, President

M. M. DUNCAN, Vice President

C. G. HEER, Treasurer

THE CLEVELAND-CLIFFS IRON CO.

Ethel Coal Mines

Ethel, Logan County, West Virginia

MINING THE CHILTON SEAM COAL

Sales Office: Kirby Building, Cleveland, Ohio

A. D. Carlton, Coal Sales Agent



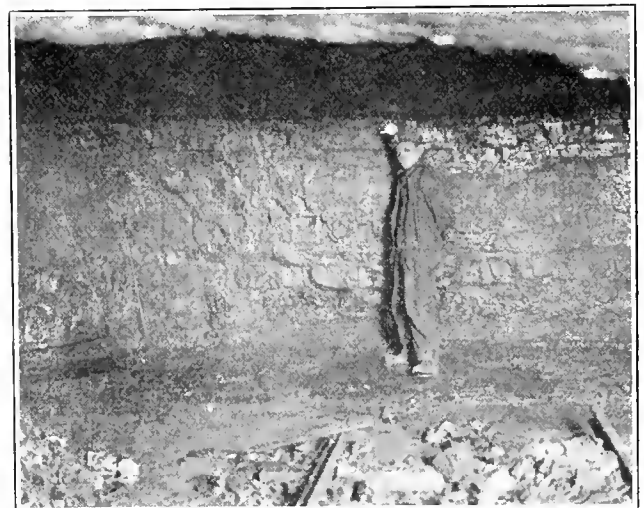
Village of Ethel, W. Va., one of the most attractive spots in the Logan field. The houses are modern, comfortable and of pleasing design.

Location of Mines

The three West Virginia coal operations of The Cleveland-Cliffs Iron Company are located at Ethel, Logan County, in the heart of the celebrated Logan mining district. Their combined capacity is 3,000 tons daily. The seam worked at each of the three mines is the Chilton, with a thickness ranging from five to six feet.

The Chilton Seam

Of all the excellent coals mined in West Virginia, none surpass the Chilton for general all-around utility. The purity of the coal is one of its remarkable features. Ethel-Chilton coal, as will be seen from the analysis, carries less than four per cent ash and two per cent of moisture. Approximately 95 per cent of every ton is combustible, and this insures the purchaser a maximum of heat



Six feet of clean Chilton seam coal, with almost ideal conditions for mining.



An interior view showing lump condition of the coal after shooting.

units and a minimum of non-combustibles for every dollar expended for fuel. A third noteworthy feature of this coal is the low percentage of sulphur, thus fitting it for all usages where an excess of this element is objectionable.

The Cleveland-Cliffs Iron Company has 4,000 acres of superior Chilton coal tributary to its three Ethel mines.

Analysis

The following analysis* is typical of the quality of our coal:

Moisture	1.60
Volatile Matter	32.92
Fixed Carbon	64.40
Ash	3.68
Sulphur	0.49
B.t.u.	14,584
Fusion point of ash.....	2815 deg. F.

*Analysis made by Crowell & Murray, Cleveland, O.

Usages of ETHEL-CHILTON Coal

Coal from our mines at the present time is partly used to fill the exacting requirements of the By-product and Illuminating Gas Industries. The egg size, 2" x 4", which usually consists of the softer portion of the seam and runs high in by-products and gas, enjoys a wide reputation among coking and gas producing interests. The yield of by-products and gases is high, and the resulting coke has proved entirely satisfactory for every requirement.

Ethel-Chilton coal is in demand among dealers who cater to a fine domestic trade. We recommend two sizes for household use, our 4" lump coal, which receives particular care and attention in the course of preparation, and the 2" x 4" egg coal, all of which passes over shaker screens and picking tables preliminary to loading. Either size is free burning and because of the high fusion point of the ash there is a total absence of clinkers. A trial order of Ethel coal in a household always results in a confirmed user.

A considerable portion of our yearly output is used for steam purposes, this because of the high thermal value of the coal, its low ash, and the fact that Ethel-Chilton coal will not clinker in ordinary steam usage. The high fusion point of ash, 2815 deg. F., is an outstanding guarantee of freedom from cinder formations. The nut and slack sizes are especially adapted for stoker use. A combination of the egg mixed with the nut and slack has proved to be very desirable for hand-fired steam plants.

Ethel coal, because of its composition and purity, is also particularly qualified for use in metallurgical processes, and in the burning of tile, pottery and fine ceramic ware.

Preparation

The equipment for coal preparation at our three plants is identically the same and consists of shaker screens, picking tables and loading booms. Every facility is provided to insure thorough sizing and cleaning. The sizes of coal shipped are 2" Nut and Slack, 2" x 4" Egg, and 4" Lump. Each of these sizes are well known throughout the territories which they serve, under the trade name of ETHEL Coal.



View of Picking Table.

THE MYERS COAL & COKE COMPANY

306 The Arcade, CLEVELAND, OHIO
Branch Office—Kingsbury Bldg., Sandusky, Ohio

West Virginia's
Most Excellent



THREE MINES
DAILY CAPACITY, 3,000 TONS

X-L-N-T Coal is one of West Virginia's Best Domestic Fuels. It is mined at Ethel, Logan County, and is prepared on shaker screens and picking tables.

An analysis and description of X-L-N-T Coal will be found on the two preceding pages.

The following letters from Retail Coal Dealers show the high regard in which this coal is held by the trade.

Have used X-L-N-T Coal for the past two years in considerable quantities. Have no trouble in securing repeat orders. Many customers prefer it to Pocahontas. Is low in ash and a very clean burning coal.
1-31-21.

THE CUYAHOGA COAL CO., Cleveland, Ohio.

Just received car of West Virginia 4 in. Lump. Please trace three cars enroute to me. This coal is named right—it is X-L-N-T coal.
7-22-20.

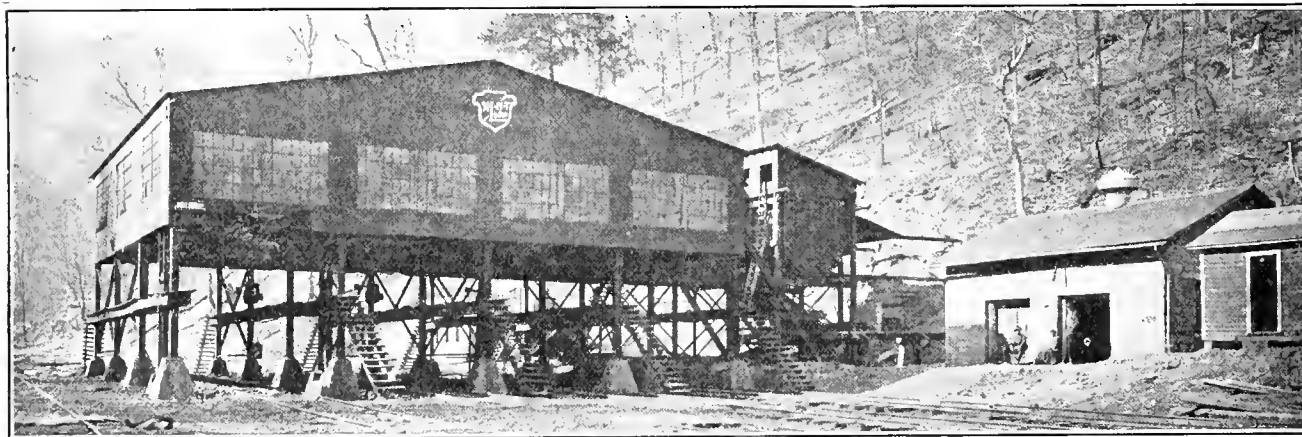
F. J. PENNEY, Lorain, Ohio.

We can use four cars X-L-N-T West Virginia Egg during January. You can recommend this coal to anyone as every load we have delivered has given X-L-N-T satisfaction.
12-28-20.

E. J. RYAN, Bellevue, Ohio.

We have used your West Virginia Lump one and one-half years with best results, and wish to increase our order to ten cars per month. Ship 2 in. Lump when you cannot ship 4 in. Lump, but we prefer 4 in. Lump because it only runs one bushel of slack per car.
10-15-20.

WHITTLE-MILES COAL CO., Cleveland.



Coal for Tipple at No. 2 Mine is Elevated from the Pit Mouth at Right of Tipple. Modernly Equipped Throughout.



The Way in Which the Coal is Lowered to the Tipple Enables the Highest Quality of Preparation.

The Myers Coal and Coke Company Also Invite Your Inquiries On—

Ohio Steam and Domestic Coals Pen-Mar Smokeless (16 Per Cent Volatile) Standard Blossburg Smithing
Pittsburgh and Pittsburgh No. 8 Gas House, Connellsville and By-Product Coke

COALFIELD FUEL CO. WEST VA. EAGLE COAL CO. THOMAS SMOKELESS COAL CO.

Main Office: BONCAR, W. VA.

J. R. CHARLTON, Sec.-Treas. and Manager

Tidewater Agents, Inglesby-Patterson & Co., 11 Broadway, New York;

Board of Trade Bldg., Norfolk, Va.

Michigan and Northern Ohio Representatives, The Walbolt Coal Co., Nicholas Bldg., Toledo, Ohio

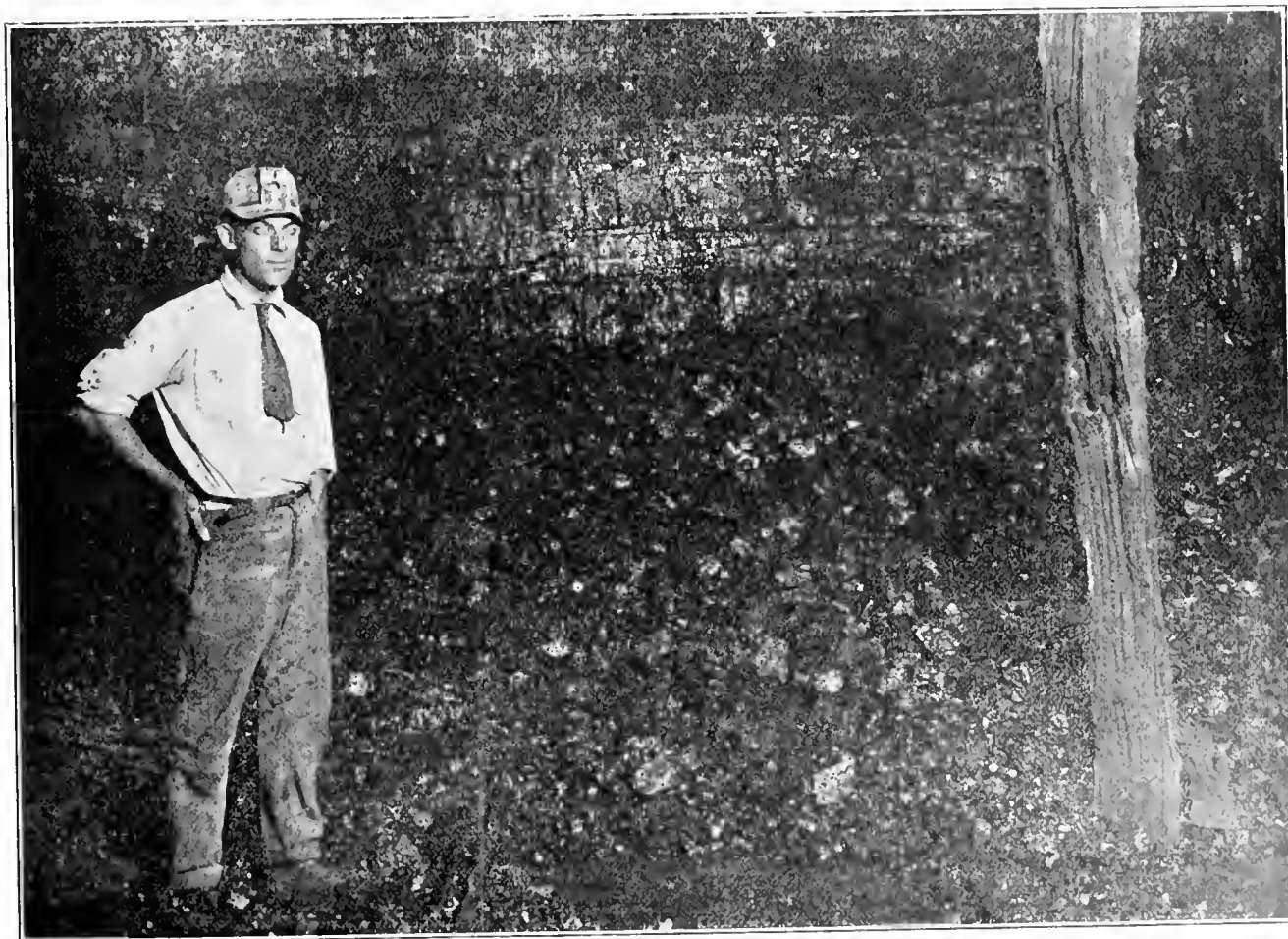
Miners and Shippers from the following seams: Number Three Pocahontas, Sewell, Eagle, Number Two Gas, Number Five Block and Coalburg.

Mines located on the main lines of the C. & O. and K. & M. Railroads, taking Kanawha and New River rates both East and West.

Analyses

	Smokeless	Eagle	No. 2 Gas	Splint
Moisture .....	.75	1.01 Dry	1.07 Dry	1.65
Volatile Matter	19.90	33.63	36.16	32.90
Fixed Carbon	76.15	62.49	59.50	57.65
Ash	3.20	3.88	4.34	7.80
	100.00	100.00	100.00	100.00
Sulphur .....	.80	.65	.90	.80
B.t.u. ...	15,130	15,038	14,400	13,390

STEAM, BY-PRODUCT AND DOMESTIC COALS DIRECT TO CONSUMER



Interior of Mine No. 1, West Virginia Eagle Coal Co., Boncar, W. Va. Over Eight Feet of Eagle Coal.

COPEN GAS COAL MINES, Inc.

General Offices
BOWER, WEST VIRGINIA

W. J. JEGEN, Vice Pres. & Gen. Mgr.

Executive Offices
11 Moore Street
NEW YORK CITY

Miners and Shippers of Celebrated "COPEN" Splint Coal

Location of Mines

The Vanwith mine of the Copen Gas Coal Mines, Inc., operates in the Pittsburgh No. 8 seam at a point between Bower and Gilmer stations in Braxton county, W. Va., on the Baltimore & Ohio Railroad, Charleston Division. Coal from this mine takes the usual Fairmont rate.

Coal Mined

The Pittsburgh No. 8 seam at Vanwith mine has a splendid development with an average thickness of 84 inches. Throughout this entire field there is a total absence of partings, so that the coal, as it comes to the tipple, is naturally in a very clean condition.

Analysis

The following analysis of Copen Splint Coal was made at West Virginia University, Morgantown, W. Va.:

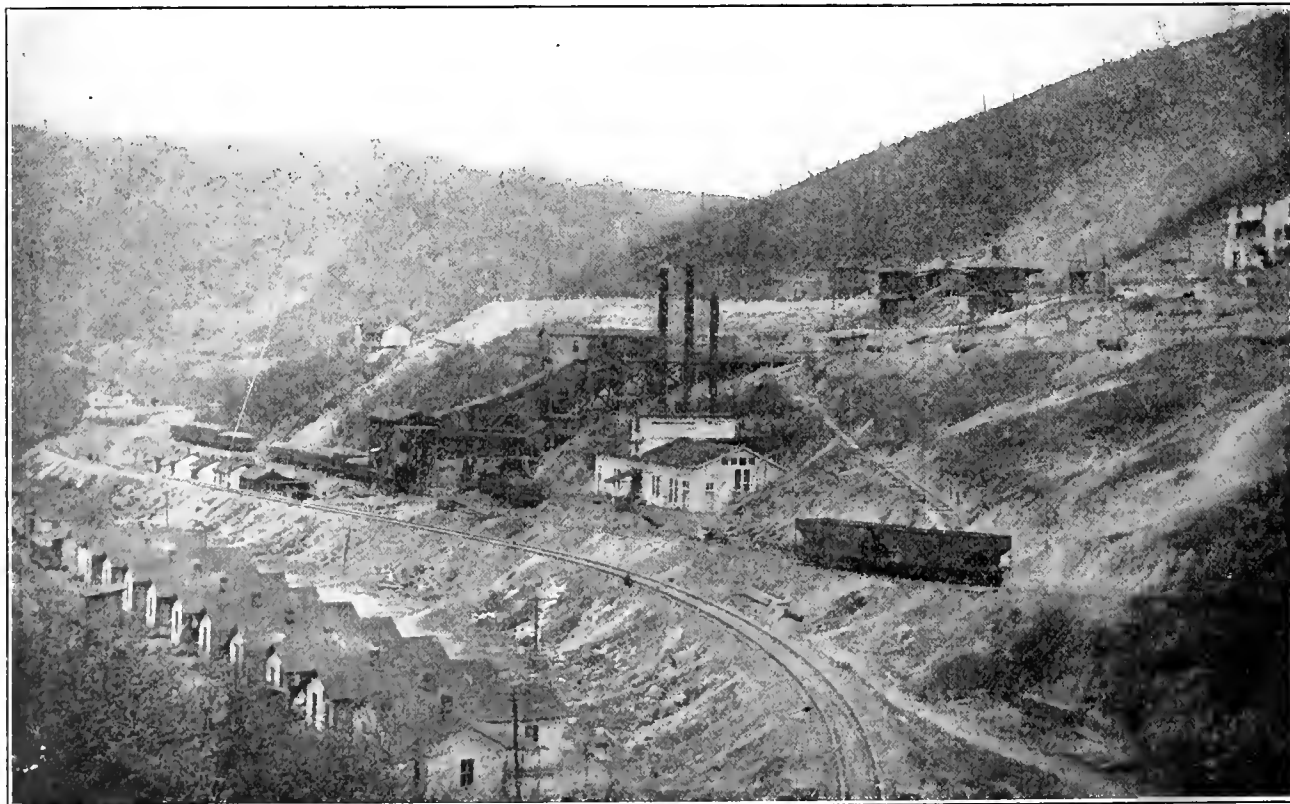
Moisture	1.76
Volatile Matter	40.22
Fixed Carbon	52.25
Ash	5.77
	<hr/>
	100.00
Sulphur	2.09
Phosphorus .....	.004
B. t. u.	13,896
Fusion Point of Ash.....	2354° F.

Mining Methods

Coal at the Vanwith mine is undercut by electric chain machines and is shot down in coarse sizes, making it especially fitted for domestic and producer gas purposes. It is also an excellent fuel to export and for cement manufacture.

Sizes of Coal

Most of this coal is shipped west, to Ohio, Indiana, Illinois, and Michigan, and has found high favor wherever used. The following sizes can be made: $\frac{3}{4}$ ", 2" and 3" Lump, Egg, Nut, Slack and Run of Mine.



Plant of Copen Gas Coal Mines, Inc., Bower, W. Va.

R. M. DAVIS COAL COMPANY

General Office
Monongahela Building, Morgantown, W. Va.

Philadelphia Branch
525 Widener Building

Miners and Shippers of

Morgantown Gas and West Virginia Steam Coals

Shipping Facilities 5,000 Tons Daily

Scope of Activities

The R. M. Davis Coal Company is actively engaged in the mining and shipping circles of the Morgantown section of the Fairmont field, handling coal from six different seams.

The region in which this Company operates is one of the most promising in the State of West Virginia. Lying north and west of Morgantown is the famous Pittsburgh Seam of coal, which here reaches a fine development, having a thickness of from 10 to 12 feet.

The Scott's Run mines are but five miles distant. On starting up the run, the Pittsburgh Seam is noted high in the hills, with the Redstone lying about 40 feet and the Sewickley about 90 feet above.

All three seams pass below water level in a distance of not over three miles up the Run. At a point where the Sewickley passes under the stream, the Waynesburg Seam can be noted high in the hill. Thus, it happens that in a short space of travel up this stream, one encounters four fine seams of coal, all of which are available to the consumer, through the R. M. Davis Coal Company.

The Upper Freeport, Lower Freeport and Bakerstown Seams, representing the Allegheny Series, are found to the east of Morgantown along the Morgantown & Kingwood branch of the B. & O. Railroad. These coals are noted for their fine domestic and steam properties, while the Upper Freeport has earned a wide reputation as a by-product coal.

Davis Block Coal

This coal comes from the Sewickley Seam in Scott's Run, and although it has only been on the market for three years, it has made a wonderful reputation as a steam coal, and in particular, for railroad service.



A Car of Davis Block Coal

WE PRIDE OURSELVES ON BEING ABLE TO GIVE YOU SPLENDID COALS AND
SPLENDID SERVICE

Most of the output of this splendid bed of coal goes to the New England States and has proved itself satisfactory in all respects as a dependable steamer.

Davis Block Coal is now selling to brick manufacturers, cement mills, steel mills, and other industries, where a quick steaming coal of high heating value is desirable.

Analysis*

Moisture	92%
Volatile Matter	39.00%
Fixed Carbon	52.08%
Ash	8.00%
	100.00%
Sulphur	1.68%
B. T. U. per pound.....	14,379
Fusing temperature of Ash.....	2,600° F.

*Analysis made by U. S. Fuel Administration.

Almina Mine

The R. M. Davis Coal Company controls and operates the Almina mine of the South Pittsburgh Coal Company, located on the Monongahela Railroad near Morgantown, W. Va.

The coal mined is from the Pittsburgh Seam, furnishing an excellent by-product coal, of which the following is a typical analysis:*

Moisture	1.05%
Volatile Matter	35.71%
Fixed Carbon	56.24%
Ash	7.00%
	100.00%
Sulphur	1.25%
B. T. U. per pound.....	13,750
Fusing temperature of Ash.....	2,600° F.

*Analysis made by U. S. Fuel Administration.

Sizes Shipped

All commercial sizes of coal can be furnished, including Run of Mine, Nut, $\frac{3}{4}$ " Lump, and Slack.

Shipping Facilities and Rates

Shipments can be made over the Baltimore & Ohio Railroad, New York Central and Pennsylvania Railroad to all points east and west.

All eastern points take the Westmoreland Group 8 freight rate; all western points take the Morgantown freight rate.

W. E. DEEGANS COAL COMPANY

Exclusive Sales Agents for
THE W. E. DEEGANS INTERESTS

BRANCH OFFICES

CINCINNATI, OHIO
TOLEDO, OHIO
LANSING, MICH.

General Office, Huntington, W. Va.
Miners of West Virginia Coals

BRANCH OFFICES

CHARLESTON, W. VA.
CHICAGO, ILL.

Export Agency: Deegans Export Coal Agency, Inc., 1401 National Association Bldg., New York

Cable Address: Deegancoal

The W. E. Deegans Interests operate mines in the Logan County, Coal River, Pocahontas, Winding Gulf and Greenbrier fields. These mines are working in both the high volatile and the low volatile seams and produce a variety of coals adapted for every commercial usage.

Our total yearly output is around 2,000,000 tons, exclusive of mines now being opened. Shipment for this quantity of coal is provided by the Chesapeake & Ohio Railroad, Norfolk & Western Railroad and the Virginian Railway. Every car of coal leaving the mines is under the supervision of our traffic department, which makes it a point to see that customers receive good delivery service. Our mines being located on three of the best coal carrying railroads in the country assures a good car supply and enables us to take care of all contracts.

Coal mining with us is a business. We know the wants of the trade and we stand ready to supply them. One of the things wanted, we know, is clean coal. Deegan coals are prepared to satisfy the user, whether it be for the home, the mill or the factory. In order that some idea may be had of the kinds of coal mined by the W. E. Deegans Interests, location of mines, etc., the following summary of operations is given:

LOGAN COUNTY FIELD

Cub Fork Coal Company

Mine No. 1, located at Yolyn, Logan county, in the Chilton seam, has a daily capacity of 600 tons

of coal suitable for by-product, steam, illuminating gas, domestic and malleable uses. Tipple has all the equipment required for the loading of a clean product.

Paragon Collieries Company, Mines No. 1 and 2

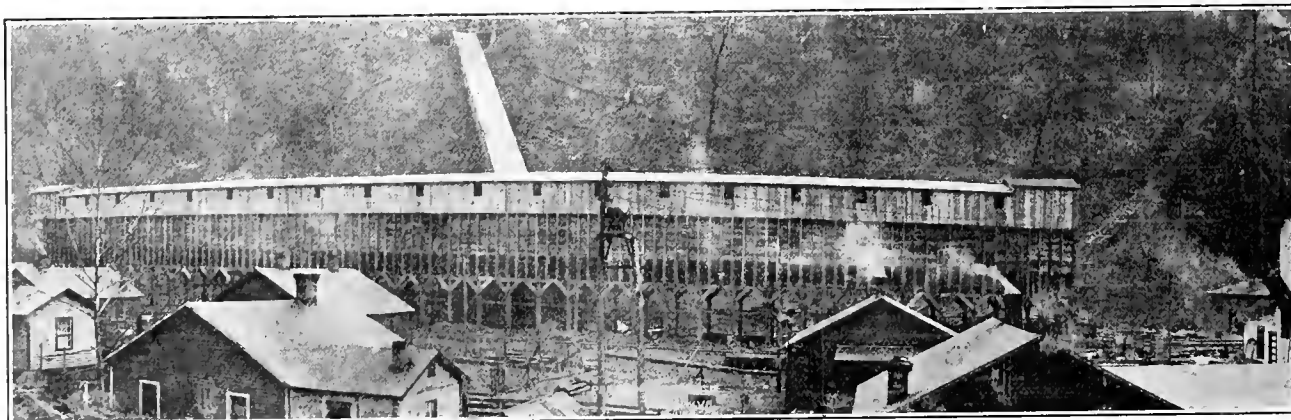
Both mines are located at Yolyn, operate in the Chilton seam, and have a combined capacity of 1,400 tons daily. The uses of this coal are similar to those given above for the Cub Fork mine. The tipples at each mine are supplied with shaker screens, picking tables and loading booms, making it possible to load 1", 2" and 4" lump, 2x4 egg, and run-of-mine. A large storage bin, shown in the panoramic view at the bottom of this page, provides storage for 30 cars of coal. Analysis of this coal is:

	As Received	Dry
Moisture	0.93	.....
Volatile Matter	34.95	35.28
Fixed Carbon	58.65	59.20
Ash	5.47	5.52
Sulphur	0.47	0.47
B.t.u.	14,229	14,363

Orrville Coal Company

This mine is also located at Yolyn, but is working in the Island Creek seam and produces a fine grade of domestic, steam and gas coal. The analysis of this coal is:

	As Received	Dry
Moisture	1.05	.....
Volatile Matter	36.82	37.21
Fixed Carbon	56.20	56.80
Ash	5.93	5.99
Sulphur	0.41	0.42
B.t.u.	14,302	14,454



Storage Bin at Yolyn, With Capacity for 30 Railroad Cars.

Guyan Valley Coal Company

Mine is located at Crown, Logan county, with opening in the Eagle seam. The analysis of this coal will be found given under the Deegans Eagle Coal Company which follows, and its low moisture, ash and sulphur content will be noted. This coal ranks as one of the best by-product coals in the United States.

Deegans Eagle Coal Company, Mines No. 1 and 2

These mines are situated at Accoville, Logan county, and mine the Eagle and the Island Creek seams. Their combined capacity is 900 tons daily. Both tipples are modernly equipped and prepare 2", 3", 4" and 6" lump sizes. This coal is in constant demand for the finer uses, such as by-product, gas and malleable purposes. It also has an established trade among steam and domestic users. Its analysis is:

	As Received	Dry
Moisture	1.95	.....
Volatile Matter	31.86	32.49
Fixed Carbon	60.08	61.28
Ash	6.11	6.23
Sulphur	0.61	0.62
B.t.u.	14,162	14,444

Faulkner Coal Company

This company operates in the Island Creek seam at Mallory, Logan county. Because of the high fusion point of ash, 2720° F., it is a favorite steam coal.

COAL RIVER FIELD**Royal Block Coal Company**

The mine, at Dodson, Boone county, is opened in the No. 5 Block coal. This is a superior domestic coal and mines in large blocky pieces. It stands both shipping and storage and is a profitable coal for the dealer. Shipments can be made in 1", 2", 4" and 6" lump sizes.

The control of a large tonnage in a wide variety of coals, mined on the principal coal carrying roads, enables us to serve all customers with satisfactory grades of coal at all times—and especially during temporary traffic difficulties.

POCAHONTAS FIELD**Miller Pocahontas Coal Company, Mines No. 1 and 2**

These mines are working in the Pocahontas No. 3 seam at Corinne, Wyoming county, on the main line of the Virginian Railway, thus giving quick access to tidewater, as well as to points inland, East and South. This coal shares in all the good qualities for which Pocahontas coal is noted. Its analysis is:

	As Received	Dry
Moisture	0.58	.....
Volatile Matter	16.85	16.95
Fixed Carbon	76.77	77.22
Ash	5.80	5.83
Sulphur	0.40	0.40
B.t.u.	14,638	14,723

New Pocahontas Coal Company

This mine is located at Deegans, McDowell county, on the main line of the Norfolk & Western Railroad, and is in the Pocahontas No. 6 seam. Coal from this mine is unexcelled for smithing purposes and is sold under the name of Pando Smithing coal. Its analysis is:

	As Received	Dry
Moisture	0.55*	.....
Volatile Matter	18.75	18.88
Fixed Carbon	73.71	74.12
Ash	6.99	7.03
Sulphur	0.62	0.62
B.t.u.	14,508	14,586

Other Properties

The Margaretta Coal Company is opening up two mines on a 2,600-acre tract of Sewell coal at Rainelle, Greenbrier county. These operations will produce a considerable quantity of coal during 1922, all of it a superior New River steam coal.

The Marietta Coal Company has a productive capacity of 400 tons daily mined from the Pond Creek seam at Pinson Fork, Ky. It is a splendid coal for by-product, gas and domestic purposes.

Complete analysis showing Gas and By-Product yields will be furnished upon request.

*All analyses on these pages made by Commercial Testing & Eng. Co.



A view of the General Offices of the W. E. Deegans Coal Interests. Here are housed the Executive and Accounting Offices of the Operating and Sales Departments in the largest single office in the state.

EASTERN FUEL COMPANY

Main Office

Frick Building, PITTSBURGH PA.

Branch Office

302 Broadway, NEW YORK, N. Y.

Branch Office

Elder-Fishbone Bldg., ALTOONA, PA.

Miners and Shippers of

**Pennsylvania, Ohio, Maryland and West Virginia Steam,
Gas, By-Product and Coking Coals**

CONNELLSVILLE COKE

Furnace, Foundry, Smelting

The Eastern Fuel Company are shippers of coal from the following mines:

Newton	Hillside	Delmar No. 1	Helen
Eleanor	Jackson Nos. 1 and 2	Delmar No. 2	Robert
Commercial No. 6	Barton	Delmar No. 3	Hilltop
Schoenberger	Davis	Delmar No. 4	Hughes
Dominion	Barry	Ruth	Clauson

Present annual capacity is 3,750,000 tons. Developed annual capacity 4,500,000.

West Virginia Mines

The West Virginia mines whose output is distributed by the Eastern Fuel Company are located in the Fairmont region. They are high in volatile matter and heat value and partake of all the superior qualities which have made Fairmont coal so highly regarded in the industrial centers of the East for brick manufacturing, cement burning, locomotive fuel, producer gas, domestic and general steam purposes.

Barry Mine

Pittsburgh Seam
Shipping point: Flemington
B. & O. R. R.

Helen Mine

Pittsburgh Seam
Shipping point: Lumberport
B. & O. R. R.

Davis Mine

Pittsburgh Seam
Shipping point: Flemington
B. & O. R. R.

Delmar No. 1 Mine

Pittsburgh Seam
Shipping point: Flemington
B. & O. R. R.

Delmar No. 2 Mine

Pittsburgh Seam
Shipping point: Flemington
B. & O. R. R.

Delmar No. 3 Mine

Pittsburgh Seam
Shipping point: Flemington
B. & O. R. R.

Delmar No. 4 Mine

Pittsburgh Seam
Shipping point: Rosemont
B. & O. R. R.

Clauson Mine

Pittsburgh Seam
Shipping point: Lumberport
B. & O. R. R.

Robert Mine

Pittsburgh Seam
Shipping point: Shinnston
B. & O. R. R.

Ruth Mine

Pittsburgh Seam
Shipping point: Hildebrand
Monongahela R. R.

Hughes Mine

Pittsburgh Seam
Shipping point: Fairmont
Monongahela R. R.

Hill Top Mine

Sewickley Seam
Shipping point: Almina
Monongahela R. R.

All Commercial Sizes Screened

With the output of this large number of mines, in addition to those mentioned on page 722, at our disposal, we are in position to supply all orders at short notice, whether the quantity called for be in carload lots or by the trainload.

SHIPMENTS BY THE CAR OR TRAINLOAD

EPHRAIM CREEK COAL & COKE CO.

Executive Office
11 BROADWAY, NEW YORK

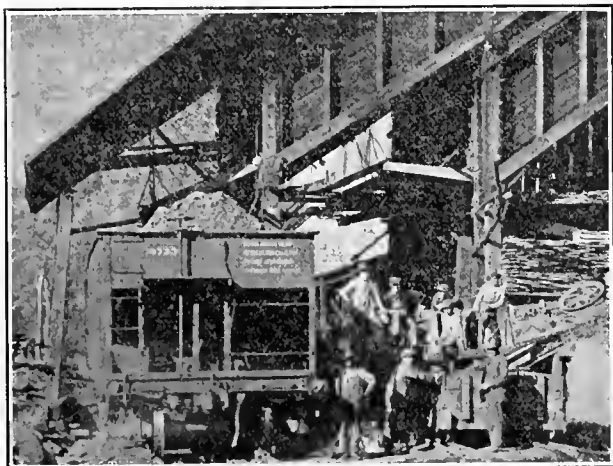
Mine Office
THAYER, FAYETTE COUNTY, WEST VIRGINIA

New River Coal

Location and Acreage

The property consists of approximately seven thousand acres in one tract, located in Fayette County, West Virginia. It is in the New River District of the smokeless fields, long and well known as producing the highest grade coal procurable of this character.

It is located on the main line of the Chesapeake & Ohio R. R., conveniently and favorably situated for shipments to Tidewater and inland markets both East and West.



More Than 15,000 B. t. u. in Every Pound

Quality

This Company mines the Fire Creek Seam which is noted for its cleanliness, thus eliminating artificial methods of preparation.

An idea of the uniformity of this coal may be gained from the fact that, as a result of investigation by The U. S. Government, it has for a number of years been on the U. S. Navy Acceptable List and is rated as Pool No. 1 in Tidewater Classification.

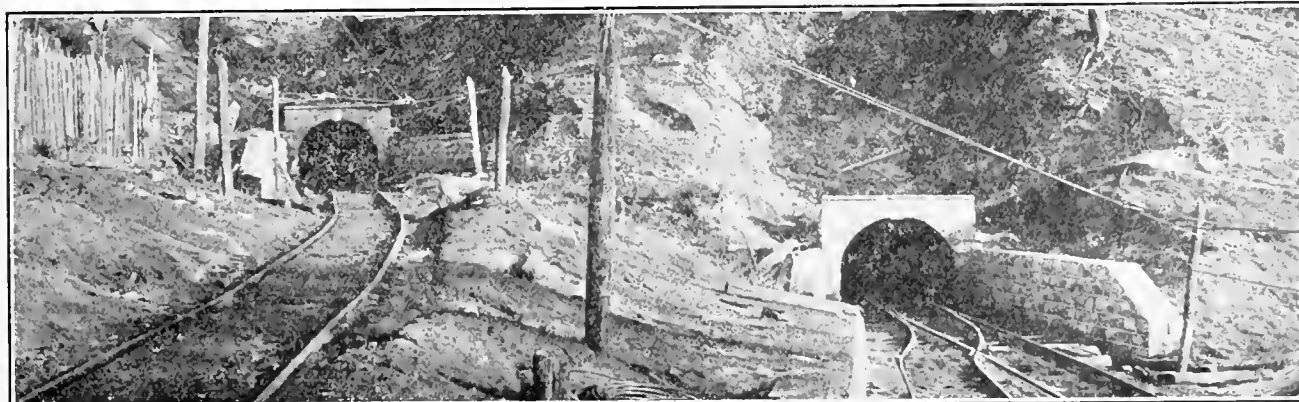
Analysis

Moisture .....	.45
Volatile	21.43
Fixed Carbon	74.20
Ash	3.92
	<hr/>
	100.00
Sulphur .....	.55
B.t.u.	15,147

The above analysis of the Ephraim Creek coal, as made by the West Virginia Geological Survey, is a matter of record.

Capacity and Equipment

The mine has a daily capacity of 1,200 tons and is fully equipped with modern machinery.



Masonry Mine Portals

Fairmont and Cleveland Coal Company

FAIRMONT, W. VA.

W. E. WATSON, General Manager

ORGANIZED 1913

E. A. RUSSELL, Secretary

High Volatile Fairmont Steam Coal

The operations of the Fairmont and Cleveland Coal Company are confined to the Sewickley seam. The Parker Run mine, located on the Monongahela River a few miles north of Fairmont, lies in the heart of a 1,500-acre tract of superior Sewickley coal, all of which is particularly adapted for general steam purposes.

The Sewickley coal, geologically, occurs above the Pittsburgh seam, and, in general, is quite similar to the latter. One point of difference is that there is present in Sewickley coal thin layers of charcoal which make it quick burning, a feature especially appreciated by its domestic users. It is a hard blocky coal, stands shipment and stocking, and when properly fired is non-clinkering.

The annual output of our Parker Run mine has been about 300,000 tons, but improvements and extensions have been made this year which have raised the daily mine capacity to 3,500 tons. Principal of these is a new steel tipple completely equipped with shaker screens, picking tables and loading booms, thereby enabling us to give our coal unexcelled preparation. Fifty new houses have been erected to care for an increased number of employees; the capacity of our sub-station has been doubled to provide ample power for the increased mechanical equipment; gathering motors have replaced animals; the total number of mine cars has been increased to 700, all of the roller-bearing type; and other necessary equipment has been installed to bring the capacity of all branches up to the daily capacity of 3,500 tons.

Parker Run coal is well suited to any use where a high volatile steam coal is applicable, but its chief fame rests upon its splendid record amongst railroads for locomotive use. It is a rapid burning high heat fuel and is, therefore, a favorite for engine use; moreover, it has sufficient body or weight to keep from wasting through the stack. Cement works, canneries and brick burners will find our coal equal to all requirements, as it gives a long flame in burning. For all-around steam purposes Parker Run will give general satisfaction.

As already stated, our tipple facilities are modern in every respect and all coal leaving our tracks moves away with the assurance of having received careful preparation. The following sizes are shipped: $1\frac{1}{4}$ " lump; $\frac{3}{4}$ " lump; run-of-mine; nut; nut, pea and slack; and slack. We have recently constructed $1\frac{1}{4}$ miles of railroad side tracks, which enables us to take care of a large car supply.

Shipments are made over the Baltimore & Ohio, Pennsylvania Lines and New York Central Lines, with the Fairmont freight rate to all points.

PARKER RUN SEWICKLEY COAL WILL PLEASE YOU

FORT CLARK COAL COMPANY

CLARKSBURG, W. VA.

Miners and Shippers of

PITTSBURGH COAL

The Fort Clark Coal Company owns and operates two mines located in Harrison county, West Virginia. Coal from both mines take the Fairmont freight rate. A brief description of each mine and its output is given below.

CARPER MINE

Carper Mine is located near Byron, W. Va., on the West Virginia & Pittsburgh branch of the Baltimore & Ohio Railroad, and produces coal from the Pittsburgh No. 8 seam. This is a high-grade High-Volatile coal and is especially adapted for LOCOMOTIVE FUEL and CEMENT BURNING.

This seam has an average thickness of 66 inches and the quality is consistent throughout the mine, the output being on an average of 300 net tons per day.

Mining is by the hand method and the haulage by Gasoline Locomotives, and the gathering by mules.

Sizes

Run of Mine only is shipped from this mine.

Analysis*

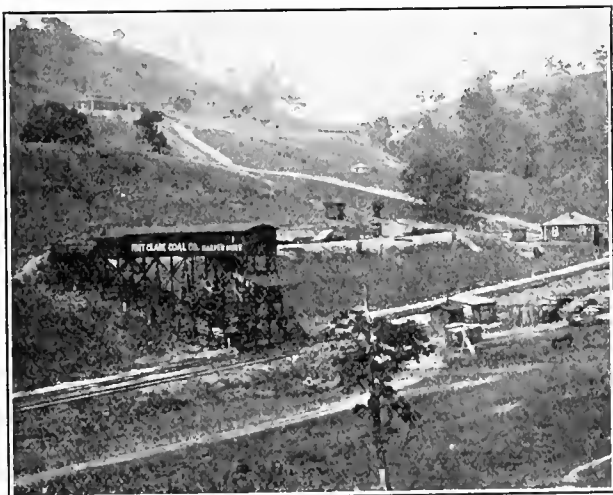
Coal from the CARPER mine shows the following analysis:

Moisture .....	.74
Volatile Matter	39.80
Fixed Carbon	53.79
Ash	5.67

100.00

Sulphur	3.43
B. t. u. per pound.....	14067
Fusion point of ash.....	2534° F.

*Analysis made by Pittsburgh Testing Laboratory, Pittsburgh, Pa.



Carper Mine of Fort Clark Coal Company.

WILSONBURG MINE

The Wilsonburg Mine is located at Wilsonburg, W. Va., on the Parkersburg branch, or Main Line, of the Baltimore & Ohio Railroad, and produces coal from the Pittsburgh No. 8 seam. This is a high-grade, High-Volatile coal and is also especially adapted for LOCOMOTIVE FUEL and CEMENT BURNING.

This seam has an average thickness of 72 inches and the quality is very good and uniform throughout. The coal is extremely clean and requires very little preparation. The Wilsonburg mine has an average output of 400 net tons per day.

Mining is by Electric Chain Machines of the Breast type. Haulage is by Electric Locomotives.

Sizes Made

This mine makes Run of Mine, Slack and Lump.

Analysis*

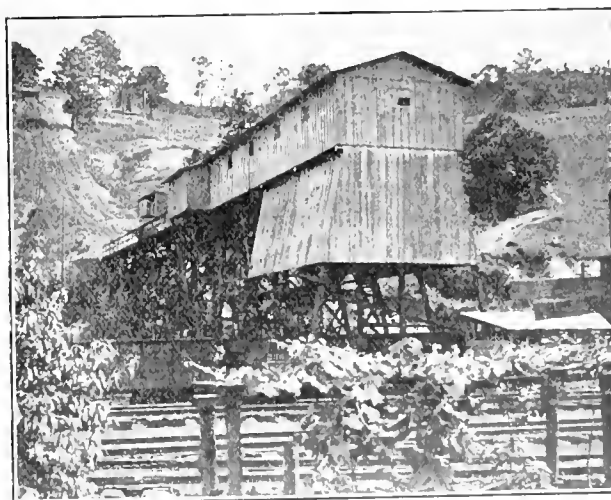
Coal from the Wilsonburg mine shows the following analysis:

Moisture .....	.90
Volatile Matter	38.98
Fixed Carbon	52.20
Ash	7.92

100.00

Sulphur	3.01
B. t. u. per pound.....	13,680
Fusion point of ash.....	2426° F.

*Analysis made by Pittsburgh Testing Laboratory, Pittsburgh, Pa.



Wilsonburg Mine of Fort Clark Coal Company.

Usages

Coal from either the Carper or Wilsonburg mine is High-Volatile and of high heating value. It is in particular favor as a Steam coal and is in constant use on the railroads for firing locomotives. It ranks high, also, with the Cement industry, our coal being used for years in the burning of the clinker.

FORT DEARBORN COAL COMPANY

General Offices: CHICAGO, ILL.

Branch Offices

NEW YORK

NORFOLK

BLUEFIELD

CHARLESTON

CINCINNATI

We Are Exclusive Sales Agents For

GREEN VALLEY STANDARD POCAHONTAS COALS

Produced by the Following Mines With an Annual Capacity of ONE MILLION TONS

YUKON POCAHONTAS COAL COMPANY—Mine No. 1 and No. 2 at Yukon, McDowell County, West Virginia—mining the famous Beckley seam of Standard Pocahontas coal. The coal from this mine and district is lower in volatile than any other Pocahontas or New River Smokeless coal. It is extremely free from Sulphur and other foreign matters; therefore it will absolutely not clinker. The coal in this particular group of mines is harder and a better stocker than most of the Pocahontas-New River Smokeless coals; hence when prepared over the most modern shaker screens and conveyed to the car by boom loaders the preparation of the Lump, Egg and Nut coal is without exception the very best on the market. It goes without saying that this is the best business-builder and the most profitable prepared Pocahontas coal for the dealer trade.

SAYERS POCAHONTAS COAL COMPANY—Mine in McDowell County, near Yukon, West Virginia—produces Mine Run only from the NO. 3 VEIN Pocahontas coal. Coal from this mine is especially high in heat units and is a splendid coal for the home and steam plant where a low volatile, splendid coking, high-grade Pocahontas coal is necessary. It is extremely pure and free from sulphur and other impurities, making a splendid hot and lasting fire; consequently this coal is not only very efficient but the greenish cast and coarse preparation make it very attractive.

BUCHANAN COAL COMPANY—Mine at McDowell County, Buchanan, West Virginia—is the same coal as Sayers. This is a twin mine and puts us in position to make prompt and heavy shipments regularly of this particular grade of coal.

JOHN'S BRANCH COAL COMPANY—Mine near Yukon, McDowell County, West Virginia—produces the famous Beckley seam, suitable for Domestic, Steam, Producer Gas and Smithing uses. This coal is very pure and at the same time extremely firm. It runs like coal from the Yukon mines. It is extremely low in volatile and very free from sulphur and other impurities, making it therefore a very coarse, clean and extremely hot coal, especially suitable for the steam plant or home use where a coarser coal is desired. It burns to a fluffy red ash, also makes a very firm coke. Mine Run only is produced at this mine at the present time. Once used, this coal gains very rapidly in favor with the consumer.

WAR CREEK COAL CO.—Mine near Yukon, McDowell County, West Virginia—producing the same Beckley coal as is being produced at the Yukon group of mines. This mine promises to be a twin producer of high-grade Pocahontas coal to the John's Branch mine. It is also very coarse and of good appearance and the splendid results obtained and subsequent demand will soon make this mine one of the largest in the field.

IF YOU WANT THE BEST POCAHONTAS COAL — READ THE ABOVE CAREFULLY

FORT DEARBORN COAL COMPANY

General Offices: CHICAGO, ILL.

Branch Offices

NEW YORK

NORFOLK

BLUEFIELD

CHARLESTON

CINCINNATI

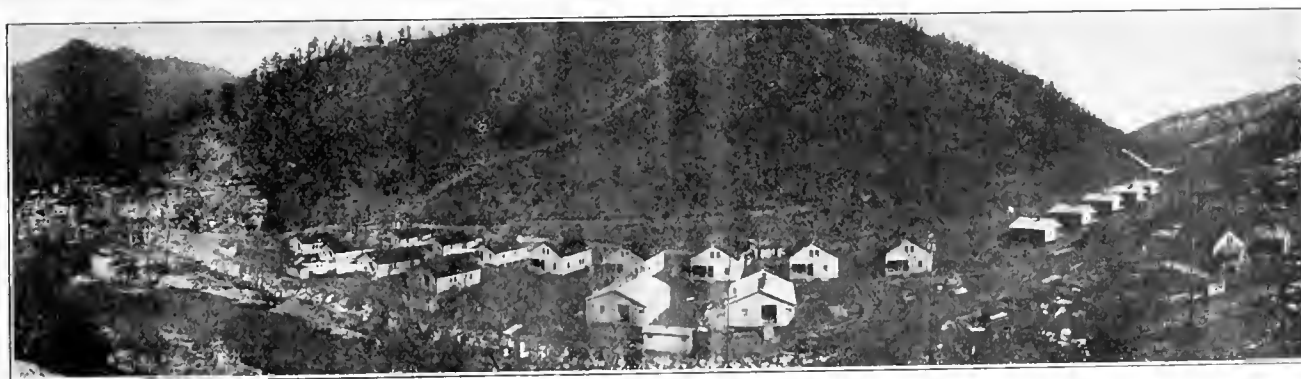
We are Exclusive Sales Agents for the output
of the following mines

AMERICAN EAGLE COLLIERY, Ameagle, Raleigh County, West Virginia, on the Chesapeake & Ohio Railway, mining the Eagle seam. The coal with the requiremens for By-Product, Smithing, Domestic, and Steam purposes, sold under the trade name of "AMEAGLE SEMI-SMOKELESS." The best substitute for Smokeless coal obtainable—prepared over Marcus Shaker Screens with picking tables and loading booms.

LEEVALE COAL COMPANY, Leevale, Raleigh County, West Virginia, on the Chesapeake & Ohio Railway, mining the Dorothy seam. The highest quality of Splint coal, which is particularly suitable for Domestic, Malleable, Brick, Tile and other industries requiring a long flame, free burning, low sulphur coal. Prepared over Shaker Screens and picking tables and boom loaded. Heat is the Soul of Leevale coal.

HOPKINS FORK COAL COMPANY, Walburn, Boone County, West Virginia, on the Chesapeake & Ohio Railway. Developing the Cedar Grove seam, which averages forty-eight inches of commercially clean coal. The qualities for steaming and a fuel coal are exceptionally high, as well as the qualities for furnaces and gas producers. No deterioration in storage, ready ignition, carrying a long flame. Equipped to prepare the coal over a bar screen.

WOOD COAL COMPANY, Ethel, Logan County, West Virginia, on the Chesapeake & Ohio Railway, mining the Chilton seam from three different openings. Prepared in Lump and Egg sizes over the most modern shaker screens, picking tables, and loading booms. The management of the mines exercises great care in the preparation of this coal, and with the quality of the different elements contained therein, it is one of the most efficient products for the purposes most adaptable, such as Domestic, Gas Producers, By-Products, Malleable, Pottery and Tile, and cannot be excelled for Steam.



View of Camp at Ameagle, American Eagle Colliery

General Office

ANSTED, WEST VIRGINIA

Sales Office

523-524 American National Bank Building, Richmond, Virginia.

E. Vawter, Sales Mgr.

Miners and Shippers of

Gauley Mountain Gas Coal

Mines Located on the Chesapeake & Ohio Railroad in Fayette County, West Virginia

For Coastwise and Export movement this coal carries the New River rate of freight to the loading piers at Newport News, Virginia—the minimum freight rate of coal to the East.

For thirty years The Gauley Mountain Coal Company has mined and marketed this low Sulphur, low Ash coal. This fuel is being successfully used for the following purposes:

The manufacture of Illuminating Gas
In Bee-Hive Coke Ovens
Manufacture of Producer Gas
Manufacture of White Cement
For High Pressure Steaming
As Powdered Fuel

- In Railroad Locomotives
- In By-Product Coking
- Kiln Firing
- Tile and Pottery Burning
- Melting
- Domestic Use and Threshing

This coal is mined from the No. 2 Gas, or Ansted Seam, as it is locally known. The Company's holdings consist of 12,000 acres owned in fee simple. Six modernly equipped mines are located in this property, whose developed capacity aggregates 500,000 tons annually.

This coal is carefully prepared over modern equipment into Lump, Nut, Run-of-Mine and Slack grades.

The character of Gauley Mountain Coal can be accurately determined from the following representative analyses:

Composite Sample of Channel Samples Collected from the Various Working Faces.		Car Sample Taken and Analysis Made by a Customer.		Typical Ultimate Analysis.	
	%		%		%
Volatile Matter	33.19	Moisture	1.00	Carbon	82.63
Fixed Carbon	62.69	Volatile Matter	34.60	Hydrogen	5.80
Ash	4.12	Fixed Carbon	60.18	Oxygen	5.36
		Ash	4.22	Nitrogen	1.80
	100.00			Sulphur	0.79
Sulphur	0.69		100.00	Ash	3.62
Phosphorus	0.008	Iron Oxide in Coal . . . .	.27		
					100.00
				B.t.u.'s per 1 lb. dry coal	14,855

Practical Yields Per Net Ton of Coal.			Typical Analysis of Ash.	
Tar	Gal...	12.1	% Silica (SiO ₂)	51.97
Ammonium Sulphate	Lbs..	25.9	% Aluminum Oxide (Al ₂ O ₃)	32.68
Gas (Incl. CO, H S at 15° C, 760 mm, Hg. Sat.)	Cu. Ft..	11,450	% Iron Oxide (Fe ₂ O ₃)	8.83
Coke	% of Coal..	70.4	% Calcium Oxide (CaO)	2.30
Light Oil	Gal..	5.06	% Magnesium Oxide (MgO)	0.78
			% Manganese (Mn ₃ O ₄)	0.027
			% Phosphoric Acid (P ₂ O ₅)	0.114
			Fusing Point of Ash	2728° F.

H. C. JONES, President

J. G. PETTIT, Vice-President

A. P. KILBURN, Sec.-Treas.

GROSVENOR COAL SALES COMPANY

Miners and Shippers of High Grade

West Virginia Coals

Union Building, CHARLESTON, W. VA.

The Grosvenor Coal Sales Company is an organization whose purpose it is to supply good coal to the consuming public. A good coal for one purpose is not necessarily a good coal for another purpose. The best results and the highest economy are always obtained when the coal is well adapted, both chemically and physically, to the work at hand.

With operating control of three properties, plus sales connections with other mines, we are constantly in position to supply a coal fitted to your needs, however varied they may be. Our three operations are located in different mining fields and are working different high volatile seams, all of them of the highest grade, so that we are enabled to supply an excellent coal for every purpose for which a high volatile coal is required. These three operations are as follows:

Jones-Winifrede Coal Company

This company operates two mines on a 500-acre tract at Hartland, Clay County, West Virginia, on the B. & O. R. R. One of these mines is in the No. 5 Block seam, and the other in the Coalburg seam. The analyses of each coal are:

No. 5 Block

ANALYSIS*

	Dry Basis
Volatile Matter	37.80
Fixed Carbon	55.68
Ash	6.52
Sulphur	0.61
B. t. u.	13,900
Fusion point of Ash.....	2660° F.

Coalburg

ANALYSIS*

Moisture	1.29
Volatile Matter	33.78
Fixed Carbon	56.56
Ash	8.37
Sulphur	0.75
B. t. u.	13,839

The coal from these mines is highly regarded for domestic purposes, being clean, large and blocky. It invariably pleases the retailer, because it is well prepared in sizes running from 1-inch to 6-inch lump and stands transportation without excessive breakage.

Jones Coal & Land Company

Isabel No. 1 and No. 2 mines belonging to this company are located at Stollings, Logan County, West Virginia, and make shipments on the C. & O.

R. R. The property consists of 2,200 acres of Chilton seam coal, than which there is none superior in the state. An analysis of this coal is here given:

ANALYSIS*

Moisture	0.98
Volatile Matter	35.90
Fixed Carbon	59.36
Ash	4.76
Sulphur	0.77
B. t. u.	14,780
Fusion point of Ash.....	2890° F.

This coal is just as good as its analysis indicates. There is none better for by-product, illuminating gas, fine ceramic uses, and it will meet every requirement for metallurgical, domestic and steam purposes.

Brush Creek Coal Company

This property, consisting of 2,300 acres of No. 2 Gas, coal, is located in the Coal River field on the C. & O. R. R. The mine has a capacity of 1,000 tons per day, which may be graded in sizes from 1-inch to 6-inch lump. The analysis of this coal is:

ANALYSIS†

Moisture	0.90
Volatile Matter	35.30
Fixed Carbon	59.62
Ash	4.18
Sulphur	0.73
B. t. u.	14,780

The No. 2 Gas coal is credited with being the most valuable seam in this field. As a by-product coal it holds front rank and is in constant demand. It is also unsurpassed for gas, tile and pottery burning, and malleable purposes. In the larger size it makes a fine domestic product.

Smokeless Coals

Through trade connections we are at all times able to supply low volatile steam and smithing coals from mines in the New River and Pocahontas districts.

Export Coals

The tonnage from our own mines, in addition to that procurable through our various connections, enables us to assemble cargo shipments quickly.

*Coal sampled and analyzed by Peabody Coal Company, Chicago, Ill.

†Clark & Krebs, Charleston, W. Va.

HALL BROS. & CO., Inc.

General Offices

Continental Building, BALTIMORE, MD.

PHILADELPHIA
Stock Exchange Bldg.

JOHNSTOWN
Swank Bldg.

CLARKSBURG
Union Bank Bldg.

NORFOLK
• Law Bldg.

Sales Agents for

W. Va. Fairmont Gas

Penna.—High Grade Steam

GORDON LUMP
FRANKLIN GAS
HARRISON
WEST FORK

STAUFFER No. 1 and No. 3
CAMBRIA No. 1 and No. 2
PURO
LILLY SMITHING

Also Pocahontas, New River and Kanawha Gas

GORDON LUMP is mined at Meadowbrook, W. Va., by the Lauretta Coal Mining Company. This Company has 9 to 13 ft. of pure Pittsburgh Seam coal—no binder—and at this point sulphur content is very low—making the coal well adapted to any purpose for which a high volatile and low sulphur coal is needed. The coal will run over 14,000 B. t. u.

FRANKLIN GAS — HARRISON — WEST FORK. These mines are located at Byron and Rosemont, W. Va., and are mining the Pittsburgh Seam, which shows 8 to 9 ft. in height. These mines have modern tipples and are shipping well prepared coal suitable for steel, cement, and brick plants; also locomotive use; in fact, for all purposes where a strong long flame gas coal is desired.

STAUFFER Nos. 1 and 3 are mined at Listie, Pa., on the B. & O. R. R., and are mining the Upper

and Lower Freeport Seams, respectively. The coal is carefully prepared by modern methods, having installed picking table for the purpose, and is shipped exceptionally free from impurities. Coal is well adapted for bunkering or any other purpose where a high grade, low ash and low sulphur steam coal is used.

CAMBRIA Nos. 1 and 2 are located at Hope-well, Pa., on the H. B. & T. M. R. R., taking favorable Clearfield rate of freight east and into New England. The coal runs 60% to 70% lump, is carefully prepared and a splendid domestic as well as steam fuel.

PURO mine is located at Rockwood, Pa., on the W. Md. R. R., is very low in sulphur and ash—does not contain much lump, but well adapted for automatic stoking where a high grade low volatile coal is used.

HALL BROS. & CO., INC., is one of the pioneer coal firms of the Atlantic Seaboard. Founded in 1868, it naturally has been through various periods of depression and good times in the coal trade, and today ranks among the leading shippers of the East. The large tonnage handled by this concern has been built up by good business methods, in fair dealing with both the operators and consumers. In addition to handling a large tonnage of Bituminous coals, they are also Sales Agents for several leading independent Anthracite operators shipping domestic and steam sizes.

HOOPER-MANKIN FUEL COMPANY

General Office
HUNTINGTON, WEST VIRGINIA
High and Low Volatile Coals

Sales Agents for

Buffalo Eagle Colliery Company
Hazy Eagle Collieries Company
Manbar Coal Company

•McConnell Coal Company
Southern States Coal Company
Sterling Block Coal Company

New River Export Smokeless Coal Company

SOUTHERN STATES COAL COMPANY

The mine belonging to this company is located at Orange, Boone County, West Virginia, on the Chesapeake & Ohio Railroad. The seam worked is the Cedar Grove bed, lying between a sandstone roof and a hard slate bottom.

Coal from this operation partakes of all the superior qualities for which the Cedar Grove seam is noted. In addition to being an excellent steam, domestic and malleable fuel, it is particularly well adapted for use in by-product ovens. The percentages of ash and sulphur are low with a correspondingly high B. t. u. value.

The fusion temperature of 2750° F. shows this coal to be excellent for all usages where a high heat is required, and that the coal will withstand considerable poking and stirring where it must be forced in order to maintain high efficiency in the furnace.

A test on this coal made by the Commercial Testing & Eng. Co. gave the following results:

Prominate Analysis	Ultimate Analysis
Moisture 1.47	Moisture 1.47
Volatile Matter 36.31	Carbon 78.91
Fixed Carbon 55.71	Hydrogen 4.94
Ash 6.51	Nitrogen 1.55
	Oxygen 5.86
Sulphur 0.76	Sulphur 0.76
B. t. u. 14,120	Ash 6.51
Fusion Temp. of Ash, 2750° F.	

BY-PRODUCT INVESTIGATION

Maximum Temperature in Retort: 2120° F.
Coke Yield = 62.5% of coal charged = 1250 lbs. per ton of coal.
Gas Yield = 10,620 cu. ft. at 60° F. and 30" mercury, and saturated with water vapor per ton of coal = 5.31 cu. ft. per lb.
Ammonia Yield = 5.95 lbs. ammonia (NH₃) per ton of coal.
Tar Yield = 219.5 lbs. per ton = 24.1 gallons per ton.
Calc. heat value of gas = 543.1 B. t. u. per cu. ft.

From the above it will be seen that the coke, gas, ammonia and tar yields are very fair. The B. t. u. value of the gas is higher than found in some cities. The percentage of illuminants is favorable, quality of coke good, and distillation of tar fair in every respect.

HAZY EAGLE COLLIERIES COMPANY

The mines of this company are located at Edwight, Raleigh County, West Virginia, on the Chesapeake & Ohio Railroad.

Two seams are worked, the Eagle and the No. 2 Gas, the former being slightly the lower in volatile matter, though both seams may be classed as medium volatile coals.

The mines working in these two seams are of recent opening, but conditions have been found so favorable and development work carried along so

successfully that they already have a capacity of about 150,000 tons yearly. The equipment used is of the most modern design and electrically driven. The tippie is supplied with screens and picking tables, which, together with care in underground loading, assures a clean product.

Eagle Seam

The Eagle seam has a wide reputation for excellence as a by-product coal, sometimes for use by itself and sometimes for mixing with other high volatile coals. Tests made on this coal show that the coke, gas and ammonia yields are very fair. The amount of tar, as would be expected in a medium volatile coal, is lower than with the high volatile coals, but its other qualities are of such a high order as to make it well adapted for use in mixing with other bituminous coals in order to act as a strengthener to the coke structure. In this respect it might well be used to replace Pocahontas coal.

Eagle coal is also much used for smithing, having been adopted as a standard for this use by some of the largest industries in the country. It is also in high standing as a steam coal.

No. 2 Gas Coal

The No. 2 Gas coal on this property has also been tested for its by-product values, and has given a very good account of itself. In comparison with the Eagle coal, it shows almost the same results in coke, gas and ammonia yields, but the yield of tar is about 20% higher. This coal could be used profitably for mixing with higher volatile coals previous to placing in retorts.

As will be seen by referring to its analysis, the No. 2 Gas coal is low in impurities and high in heat value. It is, in fact, a splendid steam or domestic coal and gives satisfaction wherever tried.

Analyses of these coals are as follows:*

Eagle	No. 2 Gas
Moisture 1.05	Moisture 1.44
Volatile Matter 29.19	Volatile Matter 31.08
Fixed Carbon 62.62	Fixed Carbon 63.69
Ash 7.14	Ash 3.79
Sulphur 0.96	Sulphur 0.68
B. t. u. 14,268	B. t. u. 14,481

BY-PRODUCT INVESTIGATION

Eagle	No. 2 Gas
Coke yield = 69.14%	Coke yield = 66.41%
Gas yield = 11,888 cu.ft.	Gas yield = 11,384 cu.ft.
Ammonia = 6.32 lbs.	Ammonia = 6.44 lbs.
Dry tar = 152.8 lbs.	Dry tar = 180.8 lbs.

Further details on By-Product results supplied on request.

*Commercial Testing & Eng. Co.

BUFFALO EAGLE COLLIERY CO.

HOOPER-MANKIN FUEL COMPANY, Sales Agents

The mines of the Buffalo Eagle Colliery Company, three in number, are located at Braeholm, Logan County, West Virginia, on the Chesapeake & Ohio Railroad.

No. 1 mine operates in the Eagle seam; No. 2 mine in the Island Creek seam; No. 3 mine in the Chilton seam. The combined tonnage of these openings is in the neighborhood of 500,000 tons annually. The mines are electrically equipped and have their own power plant. Shaker screens, picking tables and loading booms are provided for the preparation of coal.

Braeholm is a delightful type of miners' village and the entire community enjoys living conditions which are unexcelled. Most of the miners' houses are provided with hot and cold water and baths, and labor conditions are as pleasant as they can be made.

One of the features of the equipment used underground is a coal loading machine shown in the illustration. This machine is the invention of Mr. P. J. Riley, President of the Buffalo Eagle Colliery Company, and during the several months during which it has been in service, has demonstrated that it is a practical and successful device for the purpose intended.

The three seams mined by this company may, as a result of extended investigation and tests made, be classified as by-product, illuminating gas and producer gas coals. As steam, domestic and metallurgical fuel their value is widely known, having been in use for these purposes for many years. The Chilton and the Eagle coals, in particular, are splendid gas and by-product coals, and when bought in the prepared sizes are equally attractive as domestic coals. The fusion points of ash for all three coals is high and indicates that for steam purposes this coal will stand considerable abuse without clinkering when fired under a boiler where it has to be forced.

ANALYSES*

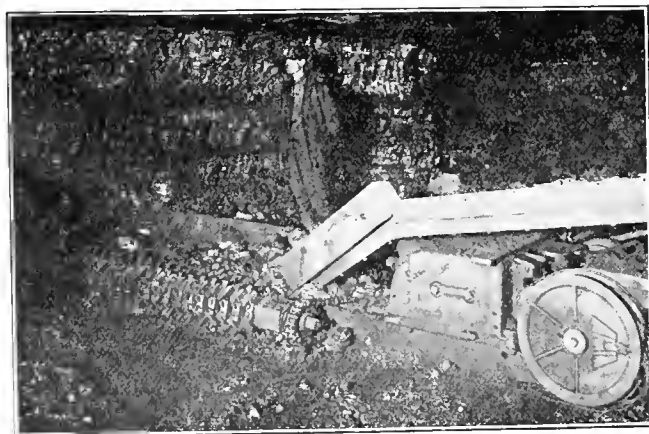
Eagle Seam		Chilton Seam		Island Creek Seam	
Moisture	2.11	Moisture	0.91	Moisture	0.86
Volatile Matter	31.66	Volatile Matter	34.80	Volatile Matter	35.26
Fixed Carbon	61.11	Fixed Carbon	57.55	Fixed Carbon	57.38
Ash	5.12	Ash	6.74	Ash	6.50
Sulphur	0.72	Sulphur	0.67	Sulphur	1.03
B. t. u.	14,278	B. t. u.	14,166	B. t. u.	14,229
Fusion point of ash....	2700° F.	Fusion point of ash....	2730° F.	Fusion point of ash....	2700° F.

BY-PRODUCT INVESTIGATION

Eagle Seam		Chilton Seam		Island Creek Seam	
Coke yield =	67.97%	Coke yield =	67.58%	Coke yield =	65.63%
Gas yield =	11,200 cu. ft.	Gas yield =	10,960 cu. ft.	Gas yield =	10,900 cu. ft.
Ammonia =	4.49 lbs.	Ammonia =	4.80 lbs.	Ammonia =	5.97 lbs.
Tar yield =	171.5 lbs.	Tar yield =	208.2 lbs.	Tar yield =	215.3 lbs.
B. t. u of gas =	544.5	B. t. u of gas =	537.6	B. t. u of gas =	545.2

Further details on By-Product results supplied on request.

*Commercial Testing & Engineering Company.



American Loading Machine at Work in Mine of Buffalo-Eagle Collieries Company



Tipple at Braeholm, W. Va.

New River Export Smokeless Coal Company

HOOVER-MANKIN FUEL COMPANY, Sales Agents

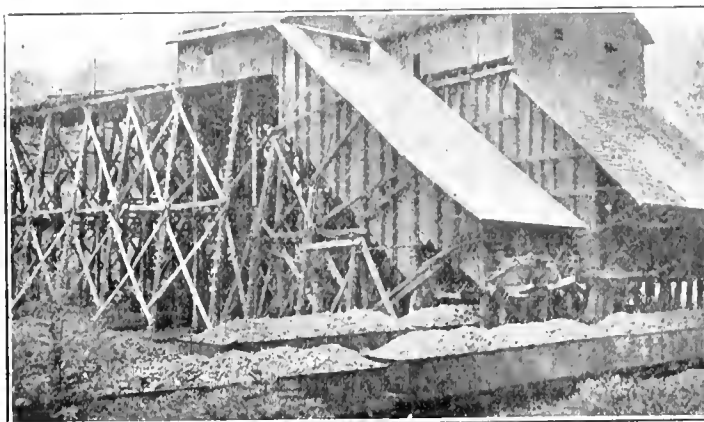
New River Export Smokeless Coal Company

The Lookout and Blume mines belonging to the New River Export Smokeless Coal Company are located at Lookout, Fayette County, West Virginia, on Keeney's Creek branch of the Chesapeake & Ohio Railroad. The village of Lookout is appropriately named, as it is situated 2,160 feet above sea level.

Both mines are working in the Sewell seam, a fine clean coal running from 36 to 40 inches in thickness. The excellence of this coal for steam purposes and for all uses in cities where ordinances require a smokeless coal, is too well known to require extended description. The analysis is as follows:

Moisture	0.59
Volatile Matter	22.25
Fixed Carbon	75.44
Ash	1.72
	<hr/>
	100.00

Sulphur	0.42
---------------	------

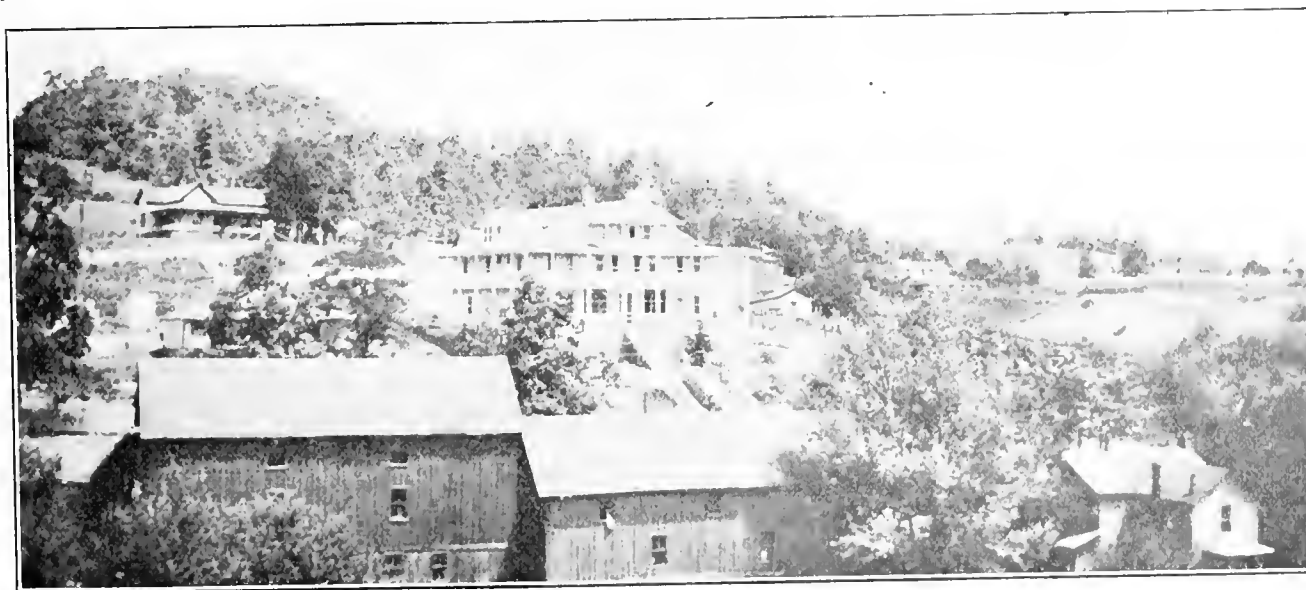


Coal Storage Bin at Blume Mine

These mines are electrically equipped throughout and generate their own power. The tipples are modern in every respect and use shaker screens and loading booms in the sizing and loading of run-of-mine, lump, egg, and slack and nut coal.

Labor Conditions

Labor conditions have so great an influence on the ability of a company to fulfill its contracts that they must be given due consideration. The mines of the New River Export Smokeless Coal Company, although located in the New River Union field, are nevertheless not operated by Union labor. While we are situated in the midst of a Union community, our employees have no desire to become affiliated with the Union. Our relations with all our workmen are amicable and pleasant, as will be apparent from the statement that the Blume mine has been running for a period of 25 years and has never had a strike, nor has the Lookout mine, which has been in operation 15 years. Living conditions are made attractive. The large three-story "Mountain View" hotel, shown on this page, is used largely by the miners. It is a modern building in every respect, with provisions made for reading, and pool rooms and gymnasium in the basement.



"Mountain View" Hotel at Lookout

THE CLYDE H. HOYT COMPANY

1211 Nicholas Building
TOLEDO, OHIO

Exclusive Distributers

COAL

BARREN CREEK
Operating Company
Barren Creek Colliery Co.

QUEEN SHOALS
Operating Company
Rex Colliery Company

Locations of Mines

Both of above mines are located about 27 miles up Elk River from Charleston, West Virginia, on the Coal and Coke Division of the Baltimore and Ohio Railway in Kanawha and Clay Counties. Through rates East, West and North.

Coal Mined

Both mines are operating in the Upper Kittanning, known locally as the Queen seam. This coal will average about four feet in thickness and is almost a clean strip from top to bottom. It is an excellent fuel for steam, domestic, malleable iron and by-product purposes. The Nut and Slack is clean and of unusual quality for steam purposes.

ANALYSIS

Moisture	1.09
Volatile Matter	37.14
Fixed Carbon	55.83
Ash	5.89
	<hr/>
	100.00
Sulphur	0.93
B. t. u. Value	13.853

Capacity of Mines

The two mines this year will attain a production of 200,000 tons.

Preparation

Shaker Screens, Loading Booms, and other improvements are under construction.

The sizes shipped consists of Run-of-Mine, Lump, Oversized Egg, and Nut and Slack.

The Clyde H. Hoyt Company find a personal satisfaction in being able to supply you with this high grade coal. We invite your inquiries.

HUDSON COAL CO. - THE LEWIS MINE

Main Office, WOLF SUMMIT, W. VA.

WENTZ COMPANY - SALES AGENTS

General Office

1727 Land Title Bldg., PHILADELPHIA, PA.

Dime Bank Building, Detroit, Mich.

90 West Street, New York City

(See Page 1243)

Location and Holdings

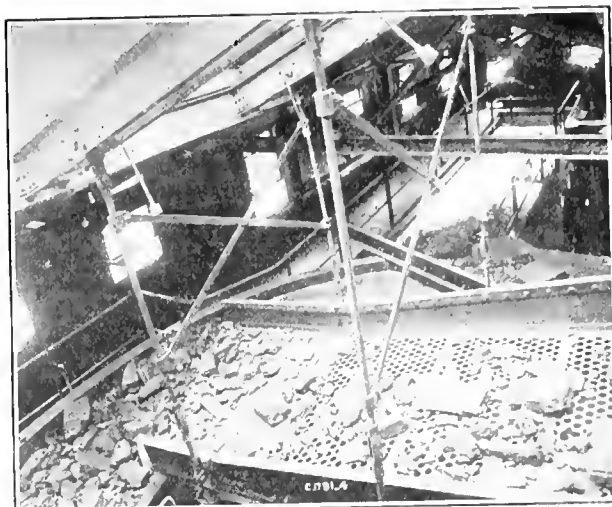
The Lewis Mine is, without doubt, the most up-to-date operation in Northern West Virginia. The property at Wolf Summit, West Virginia, consists of 1,030 acres of eight-foot Pittsburgh Seam. The seam is particularly free from slate partings and other impurities, and is noted for the blocky fracture in which it mines. It stands transportation well and is particularly desirable for domestic fuel, steam coal and gas producing.

Preparation

The preparation at the Lewis Mine is excellent. The coal passes over screens to the circular picking table, thence to the adjustable loading boom, and is delivered to the car with minimum breakage. The modern Heyl & Patterson Tipple can deliver 2" Lump, $\frac{3}{4}$ " Lump, 2"x $\frac{3}{4}$ " Nut, and Run of Mine.

Output

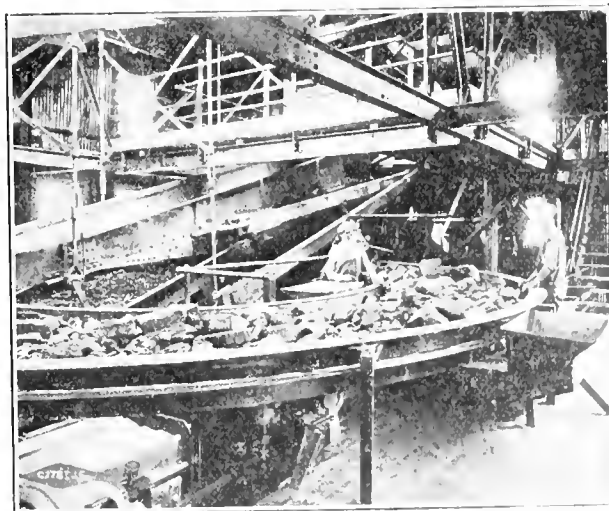
The present output is 1,500 tons per day. However, the mine and tipple have a maximum capacity of 3,000 tons per day.



Shaker Screen and Circular Picking Table with Loading Boom in Background



Run of Mine Passing from Circular Picking Table to Loading Boom



Circular Picking Table in Operation

Shipping Facilities

The Lewis Mine is on the Main Line of the Baltimore & Ohio Railroad, with direct connections East and West.

COLCORD COAL CO.

Hernshaw
Analysis
Moist 0.75
Vol 36.88
Fix Car 59.22
Ash 3.15
Sul 0.78
BTU 15090

Coal-97"
Coolburg?

Elev.
1620

L. Hernshaw

Coal-11"
Slate-2½"

Coal-18"
1600

Marine
Fossils
1430

Cedar Grove

Coal-27"

1390 Winifrede?

Peerless

Coal-10"
Slate-½"

Coal-17"

Slate-10"

Coal-8½" Dorothy
1320

Analysis
Moist 1.27
Vol. 33.39
Fix Car. 59.76
Ash 5.58
Sul 0.62
BTU 14485

No. 2 Gas

Analysis
Moist 2.33
Vol. 29.61
Fix Car 69.59
Ash 3.47
Sul 0.69
B.T.U. 14053

Coal-31"

Slate-2½"

Coal-18"

Slate-2½"

Coal-12"

1290

Powellton

U Chilton

Coal-20"

1245

Eagle

Analysis
Moist. 0.50
Vol. 31.05
Fix Car 63.60
Ash 4.85
Sul. 0.62
BTU 14807

Coal 10" Chilton

Slate-2"

Coal-27"

1760

Slate-2"

Coal-15" U Hernshaw

1140

Coal-61"
(Dirty)

Slate 4

Coal-53"
(Dirty)

Elev
2065

Coal-4½"

Slate-14½"

Coal-19½"

Slate-1"

Coal-9½"

1960

Coal-10"

Slate-2"

Coal-60"

1940

Coal ?

1850

Marine
Fossils
1780

Coal 19½"

1770

Coal-25½"

Coal ?

1650

SALES OFFICES

KANAWHA NATIONAL BANK BLDG.
CHARLESTON, W. VA.

Coalburg?

Winifrede?

Dorothy

Upper Chilton
Chilton

Upper Hernshaw
Hernshaw

Lower Hernshaw

Cedar Grove

Peerless

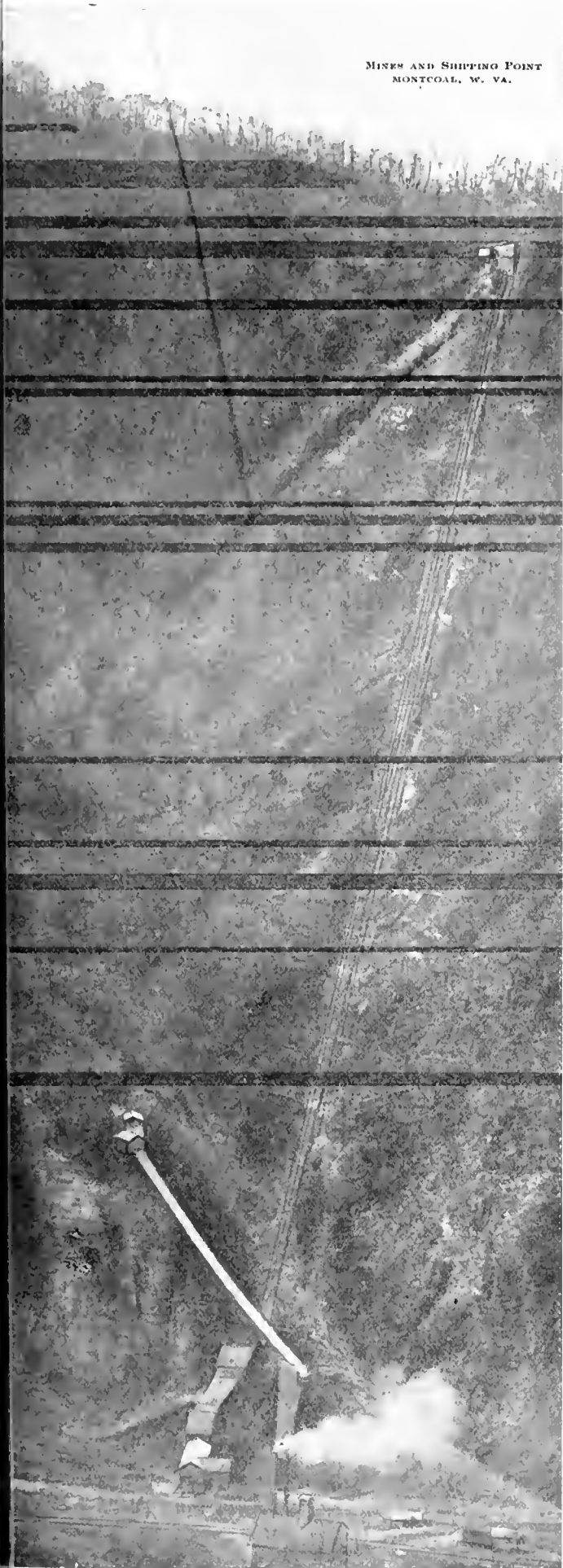
No. 2 Gas

Powellton

Eagle

New Shipping from Dorothy, No. 5 Block and Eagle Seams

MINERS AND SHIPPERS WEST VIRGINIA

MINES AND SHIPPING POINT
MONTCOAL, W. VA.

M Kittanning

Coal-96"

Elev.
2365

L Kittanning

Coal-36"

2355

No. 5 Block

Analysis
 Moist. 2.23
 Vol. 36.16
 Fix. Car 55.63
 Ash 5.98
 Sul. 0.76
 B.T.U. 13700

U Kittanning

Coal 74"

Coal-7½"

Slate-22"

Coal-16"

Slate-14"

Slate 15"

Coal-22"

2290

Coal-78"

Stockton

Coal-8"

Slate-1"

Coal-15"

2175

Elev.
2400

Sections of Coal Seams at Montcoal Raleigh County, W. Va.
 on property of Colcord Coal Company

COLCORD COAL CO.

HUTCHINSON COAL COMPANY LOGAN MINING COMPANY RICH CREEK COAL COMPANY

MAIN OFFICE: FAIRMONT, W. VA.

Address Nearest Sales Office

Rockefeller Building
CLEVELAND, OHIO

Stock Exchange Building
PHILADELPHIA, PA.

Union Central Building
CINCINNATI, OHIO

High Grade West Virginia Coals For All Purposes

HUTCHINSON COAL COMPANY

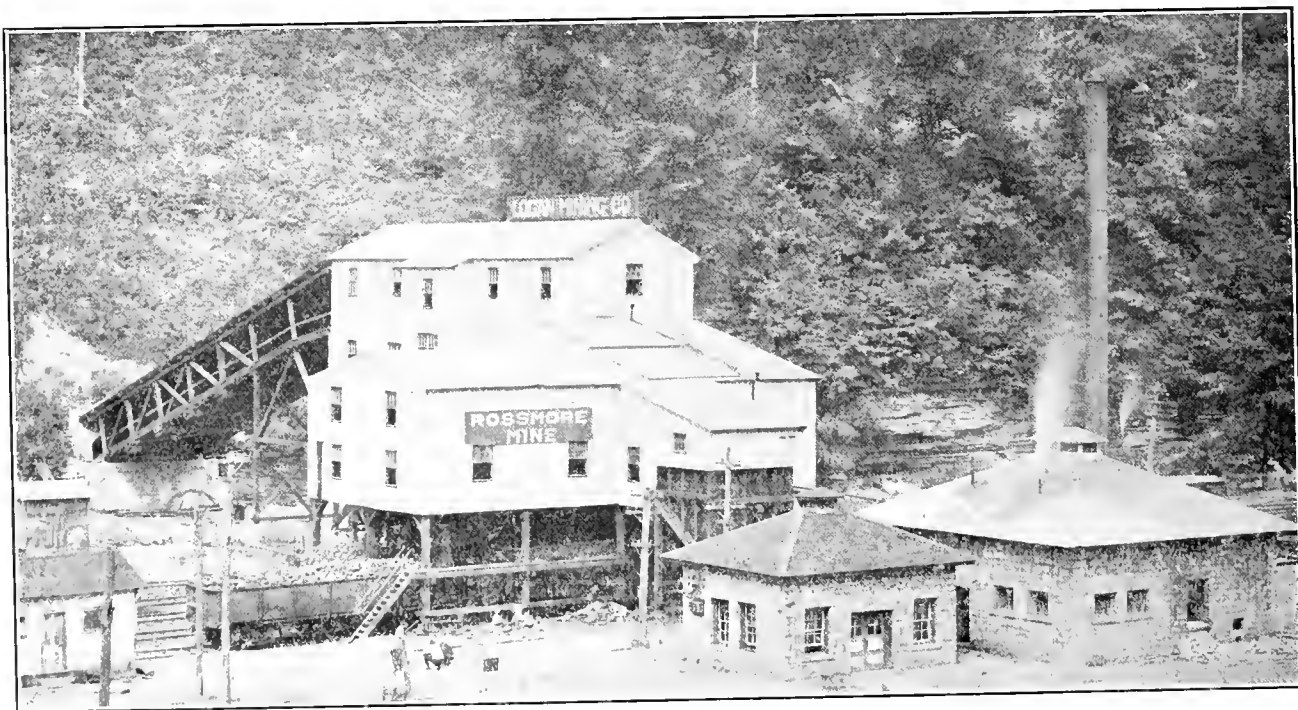
The Hutchinson Coal Company has been for many years, one of the largest producers of coal in West Virginia. At the present time this company operates twenty-one mines, the location and railroad connections of each mine being shown in the table below. The mines in the Logan field are operated by the Logan Mining Company and the Rich Creek Coal Company.

Mine	District	State	Seam	Railroad
Hutchinson No. 1....	Fairmont.....	W. Va....	Pittsburgh.....	B. & O.
Hutchinson No. 2....	Fairmont.....	W. Va....	Pittsburgh.....	B. & O.
Erie No. 1.....	Fairmont.....	W. Va....	Pittsburgh.....	B. & O.
Erie No. 2.....	Fairmont.....	W. Va....	Pittsburgh.....	B. & O.
McCandlish No. 1....	Fairmont.....	W. Va....	Pittsburgh.....	B. & O.
McCandlish No. 2....	Fairmont.....	W. Va....	Pittsburgh.....	B. & O.
Girard.....	Fairmont.....	W. Va....	Pittsburgh.....	B. & O.
Delta.....	Fairmont.....	W. Va....	Pittsburgh.....	B. & O.
York.....	Fairmont.....	W. Va....	Pittsburgh.....	B. & O.
Laura Lee.....	Fairmont.....	W. Va....	Pittsburgh.....	B. & O.
Roby.....	Fairmont.....	W. Va....	Pittsburgh.....	B. & O.
Haymond.....	Fairmont.....	W. Va....	Pittsburgh.....	B. & O.
Landen.....	Mason County....	W. Va....	Pittsburgh.....	B. & O.
Mona.....	Logan.....	W. Va....	Island Creek....	C. & O.
Rossmore.....	Logan.....	W. Va....	Island Creek....	C. & O.
Wanda.....	Logan.....	W. Va....	Chilton.....	C. & O.
Manitoba.....	Logan.....	W. Va....	Chilton.....	C. & O.
Earling.....	Logan.....	W. Va....	No 2 Gas.....	C. & O.
Wilburn.....	Logan.....	W. Va....	Eagle.....	C. & O.
Lyburn.....	Logan.....	W. Va....	Eagle.....	C. & O.
Kirkwood.....	No. 8.....	Ohio.....	Pittsburgh.....	B. & O.

Fairmont Field

Operations in the Fairmont field are conducted under the name of the Hutchinson Coal Company.

The coal mined is all from the celebrated Pittsburgh seam, which on the various properties of this company ranges from 6½ ft to 8½ ft. in thickness. It mines in large, hard lumps which stand transportation well. The coarse grades are especially well adapted for general steam, lake, tide-water and railroad purposes, while the fine grade is the best-known coal for cement burning in rotary kilns, being high in volatile matter, flashy and free burning. Fairmont slack is also especially recommended for use with stokers.



Tipple and Power House Rossmore Mine, Logan Mining Co.

HUTCHINSON COAL COMPANY

Analysis Fairmont Coal*

Moisture	1.30
Volatile matter.....	37.92
Fixed carbon.....	54.80
Ash	5.98
Sulphur	2.30
B. t. u.....	14,233

*Analysis by Smith, Rudy & Co.

The tonnage from the mines in the Fairmont districts about 1,500,000 annually. The Baltimore & Ohio railroad affords a direct route to all markets East and West.

Belmont-Pittsburgh No. 8 Field

The Hutchinson Coal Company operates the Kirkwood mine in the No. 8 district of Ohio. The Pittsburgh seam, with a thickness of 5½ feet, is worked.

This seam in Ohio ranks high as a steam, domestic and railroad fuel. It is also suitable for cement burning and for the manufacture of producer gas.

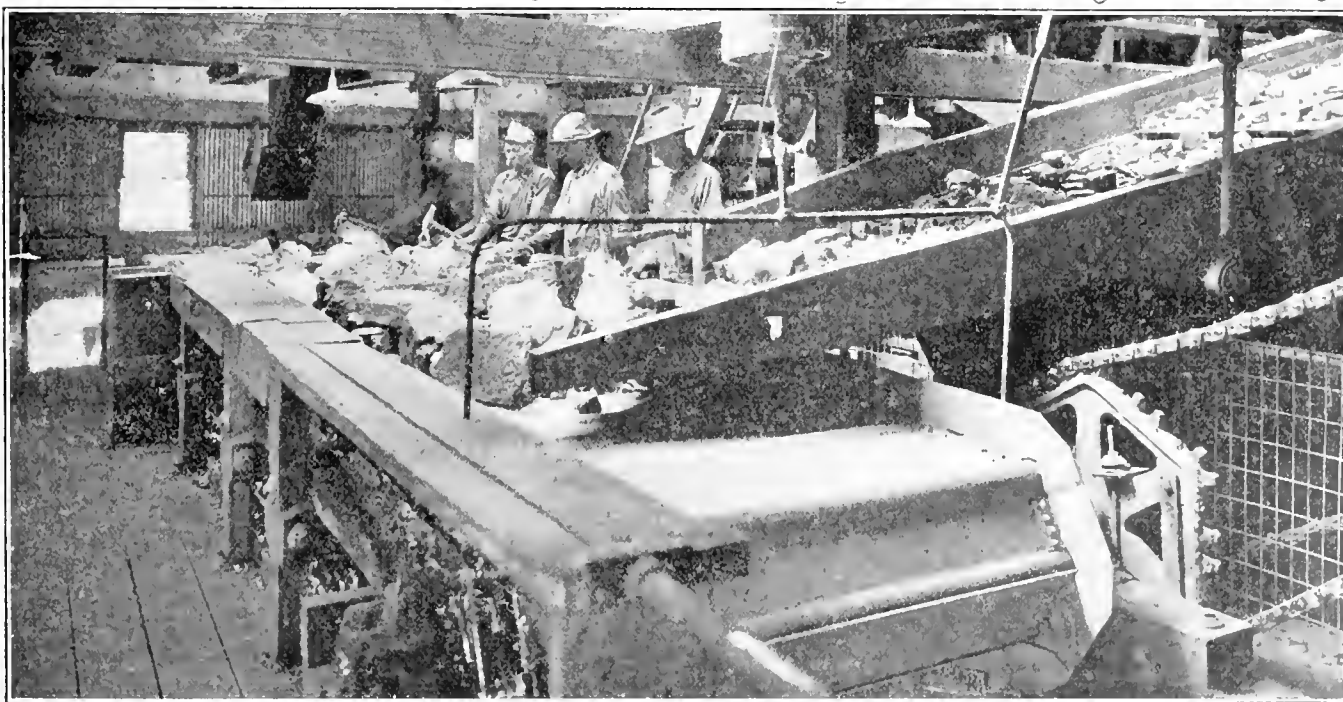
This mine is served by the Baltimore & Ohio Railroad, giving it excellent shipping facilities.

Sales Service

Coal from all of the operations enumerated and described on the four pages here grouped is sold through the Hutchinson Coal Company, whose general and sales offices are given at the top of the opposite page. The Philadelphia office is in charge of Lindsay McCandlish, Vice-President, the Cincinnati office is in the keeping of B. Lee Hutchinson, Manager; while the Cleveland office is in charge of J. G. Wolfe, Western Manager. Tide-water shipments are handled from the Philadelphia office and Lake shipments through the Cleveland office.

The Hutchinson Coal Company distributes annually, to the general markets of the world, approximately 2,500,000 tons of coal. All coal is carefully prepared before leaving the tipple and the number of mines available guarantee regularity of shipments. In fact, the reputation of this company is firmly established in the coal trade, due to its promptness and ability to look after the interests of coal users.

SHIPMENTS VIA ALL-RAIL, LAKE AND TIDEWATER



Typical View of Equipment Used for Preparing Hutchinson Coal.

LOGAN MINING COMPANY RICH CREEK COAL COMPANY

Under the name of the Logan Mining Company and Rich Creek Coal Company, the Hutchinson interests operate seven mines in the Logan field of West Virginia. Although operations were begun here in 1910, both companies incorporated two years later and during the past decade have greatly extended their developments.

Logan Field

The Logan field, from the standpoint of high quality coal, is one of Nature's most favored producing centers. All of its coals are widely known for their remarkable purity and high heat value. The Logan Mining Company has operations in the Island Creek, Chilton and No. 2 Gas seams and the Rich Creek Coal Company in the Eagle seam. They are, therefore, at all times in position to supply a fuel adaptable to every requirement in so far as high volatile coals are concerned.

Island Creek Seam

Two mines, Mona and Rossmore, on Main Island Creek, in the very best section of the famous Island Creek seam, produce the coal we sell under the name of "Mona" Main Island Creek Coal. This coal is hard, mines in large blocky pieces and will stand transportation and stocking exceedingly well.

The Block, Lump and Egg grades are especially adapted to Domestic and Gas Producing purposes, while the other sizes are unexcelled for steam and pottery burning purposes. All sizes are given a most careful preparation over shaker screens, picking tables and adjustable loading booms.

Analysis—Island Creek Seam*

Mona and Rossmore Mines

Moisture	0.63
Volatile matter.....	37.42
Fixed carbon.....	57.78
Ash	4.11
Sulphur	0.81
B. t. u.....	14,540

*Analysis by Smith, Rudy & Co.

Chilton Seam

Wanda and Manitoba mines are the sources of an excellent splint coal which mines in large chunks, is hard and a good stocker. We recommend "Wanda" 4-inch Block and Egg sizes for the domestic trade. It is a free burning coal, clean, and throws a long flame. "Manitoba" is a strong steam coal, low in sulphur, with an unusually long flame with intense heat, making it particularly well adapted to malleable iron purposes. It is also much used for gas producing and makes an ideal railroad fuel.

Analysis "Wanda" Coal*

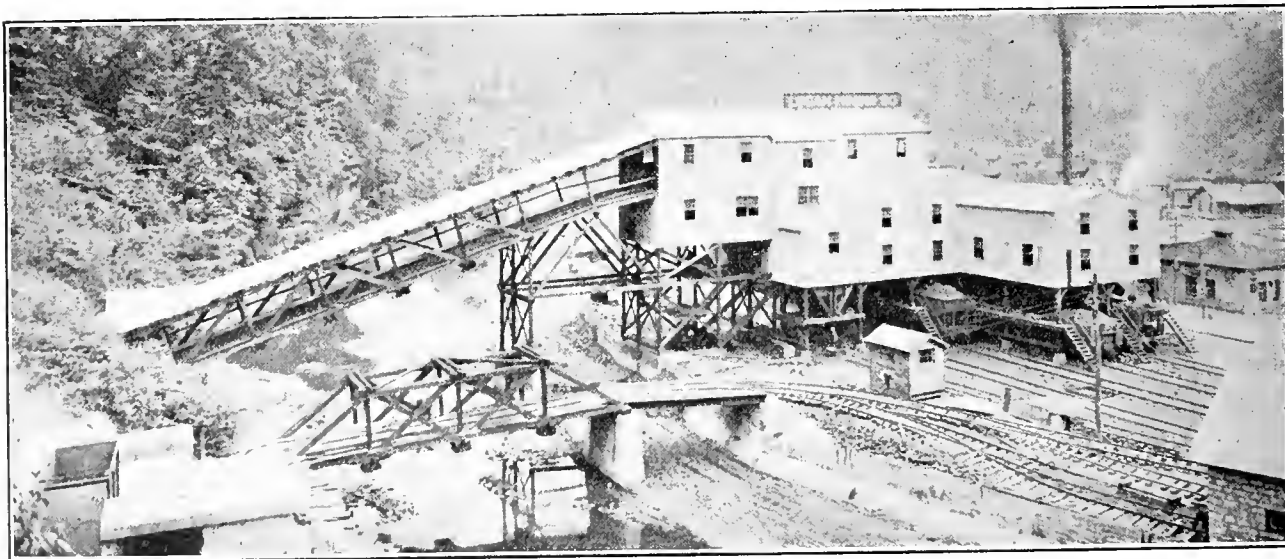
Moisture	1.65
Volatile matter.....	34.40
Fixed carbon.....	57.19
Ash	6.76
Sulphur	0.74
B. t. u.....	14,268

*Analysis by Smith, Rudy & Co.

Analysis "Manitoba" Coal*

Moisture	0.68
Volatile matter.....	37.82
Fixed carbon.....	56.52
Ash	4.98
Sulphur	0.73
B. t. u.....	14,470

*Analysis by Smith, Rudy & Co.



Tipple at Rossmore Mine, Logan Mining Company.

LOGAN MINING COMPANY RICH CREEK COAL COMPANY

No. 2 Gas Seam

"Earling" No. 2 Gas coal is the equal of any for By-Product purposes, making a superior metallurgical, as well as a high-grade domestic coke, with a rich yield of by-products. Coke made from "Earling" coal is of a strong structure, low in sulphur, ash and phosphorus, and high in carbon.

Its high fusion point of ash (2875 deg. F.) makes it an exceptionally good coal for steam purposes, owing to its standing high temperatures without clinkering. Its low ash and low oxygen content make it a strong high-heat-unit coal.

Produced in all sizes from 6-inch Lump down—for any purpose.

Analysis "Earling" Coal*

Moisture	0.88
Volatile matter.....	33.04
Fixed carbon.....	61.53
Ash	4.55

Sulphur	0.74
B. t. u.....	14,650

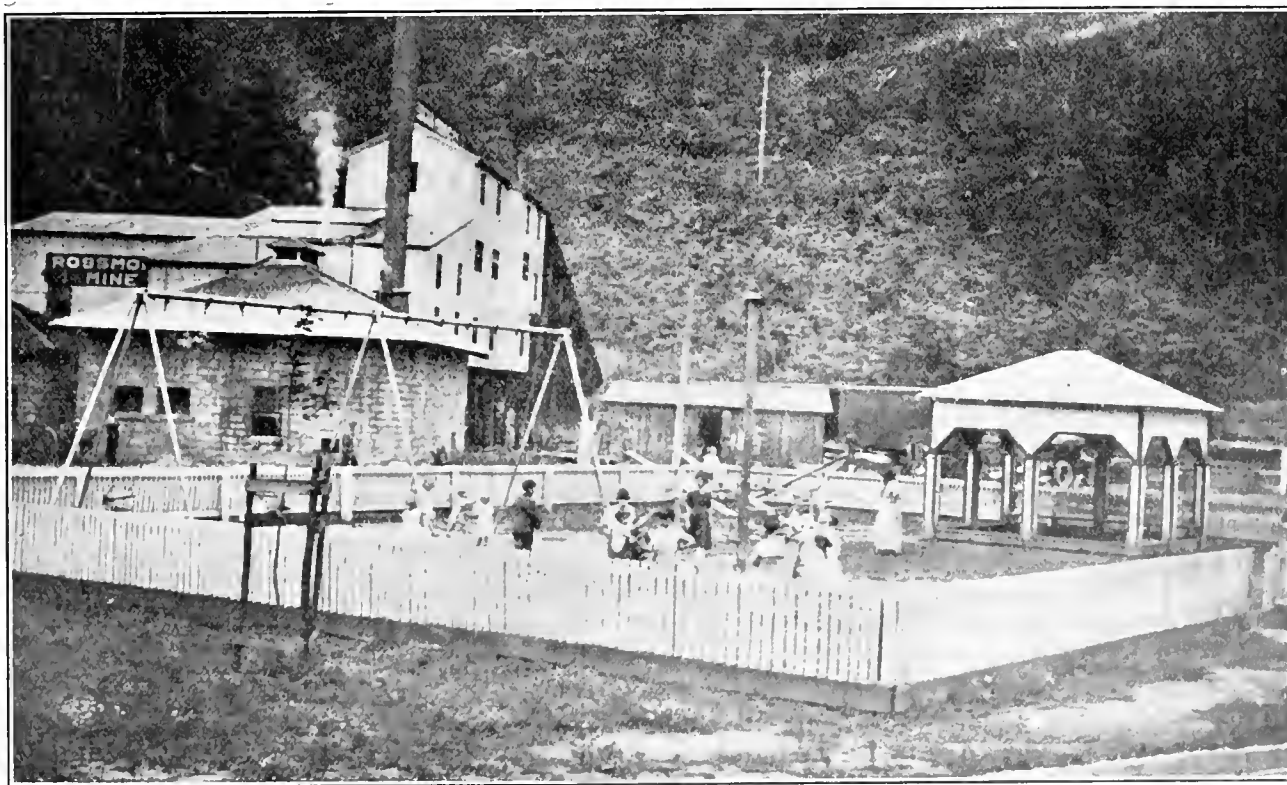
*Analysis by Smith, Rudy & Co.

Eagle Seam

Two mines, the Wilburn and Lyburn, are operated in this seam by the Rich Creek Coal Company, with the production of an excellent coal for gas and by-product purposes. The Eagle seam, in fact, is the premier gas coal of the district and is one of the big factors in establishing the Logan field reputation as a producer of high-grade gas coal for illuminating gas plants, by-product plants and malleable iron works.

At both mines will be found the most modern facilities for preparing and sizing coal. The picking tables are three-compartment affairs, in which the lump, egg, and nut and slack are run separately, a methods by which the run-of-mine grade can be properly cleaned and reassembled for loading.

On these four pages we have given a brief description of the various operations whose coal is sold through the Hutchinson Coal Company. These coals have exception qualifications for every purpose for which high-volatile coals are fitted. Our sales office, nearest to you, will be glad to supply any additional information on our products.



Close-up View of Playgrounds—Rossmore Mine.

HUNTINGTON COAL & MINING CO.

INCORPORATED

General and Sales Office

601 1/2 Ninth Street, HUNTINGTON, W. VA.

CHAS. N. MORRISON
President

FRED RIFFE
Vice-President

J. M. HALL
Secretary-Treasurer

MINE OPERATIONS

The Huntington Coal & Mining Company operates mines in the Coalburg and Cedar Grove seams near Belle, in Kanawha county, about one mile up Reynolds Branch on the Kanawha & Michigan Railroad. In addition to the Coalburg and Cedar Grove seams, there are present the Winifrede, Lewiston, No. 5 Block and the No. 2 Gas, the six seams having a combined area of over 800 acres, with 4,000,000 available tons of coal.

Analysis

The analysis of the Coalburg coal on this property is as follows:

Moisture	1.58
Volatile Matter	38.01
Fixed Carbon	55.54
Ash	4.87
	<hr/> 100.00
Sulphur	0.84
B.t.u.	14,080

*Sampled and analyzed by Clark & Krebs.

Mining Features

Our mines are modernly equipped and operated. A new three-track tippie has just been contracted for with three shaker screens, so that we are able to meet all the demands of steam and domestic users. In addition to railroad shipments, we make shipments by river. This gives us a considerable advantage over mines less fortunately situated, as we can operate our mines steadily the whole year around, and this enables us to hold a better than average grade of labor. Another favorable circumstance is our nearness to Charleston (16 miles) and the ready means of travel either by steam or electric roads. Employees at our mines may live at Charleston or along the transportation lines and thus enjoy all the advantages of city schools and churches.

FUTURE DEVELOPMENTS

The Huntington Coal & Mining Company owns and controls other coal properties, development of which will be started in the near future.

Wayne County, West Virginia

At Ferguson this company owns in fee 760 acres carrying two good workable seams. A sample taken thirty feet in from the outcrop shows total combustibles equal to 92.88 per cent., and a heat value of 13,657 B.t.u., both of these being computed on the moisture free basis. There is a splendid opportunity for a fine plant here and it is the purpose of this company to begin opening the property and constructing a tippie with a daily capacity of 1,500 tons.

Floyd County, Kentucky

Six miles east of Prestonburg we hold by lease a tract of 1,035 acres of Elkhorn coal. This tract contains six workable beds ranging in thickness from 36 to 102 inches, and having a yield of over 17,000,000 tons, or the equivalent of a single seam having an area of 4,500 acres. A sample taken about 300 feet in from the outcrop shows total combustibles equal to about 93 per cent. and a B. t. u. value of 13,640, both of these being computed on the moisture-free basis. It is planned to develop this property during the present year, using a modern tippie having a capacity of 2,000 tons daily.

JAMISON COAL & COKE COMPANY

Suite 1504-1510 Oliver Bldg., Pittsburgh, Pa.

Producers of

Jamison Standard Coke Greensburg Steam and Domestic Coal Jamison Farmington Gas Coal

Mines and Ovens in Westmoreland County, Pa., and Marion County, W. Va.

The Jamison Coal & Coke Company is one of the pioneer operating companies in the Greensburg Basin, Westmoreland County, Pennsylvania, where it has 6 mines operating in the Pittsburgh seam of coal, and a reserve of 4,500 acres of unmined coal.

This coal produces the standard Connellsville Coke, recognized as the premier metallurgical fuel of America.

Mines Operating

Three of the mines—Jamison Nos. 1, 2 and 4—have a total of 1,400 coke ovens, while Jamison Nos. 3, 5 and 6 ship all coal mined. These 6 mines produce annually about 2,500,000 tons of coal.

Greensburg Steam and Domestic Coal

Pittsburgh coal from the Greensburg Basin has been in constant use by industries throughout the East as a steam coal through a long period of time. From the very beginning of its mining history it has been used as a locomotive fuel and is regarded as one of the standard coals for this purpose. Because of its high heat value and blocky nature it is also much sought after as a domestic coal.

Jamison Standard Coke

Is produced from 1,400 coke ovens, assuring the trade a continual supply. Jamison furnace and foundry coke is low in Sulphur and has that hard structure required in the furnace or cupola.

Before the coal goes to the ovens, it is passed through washeries containing modern equipment, and where the percentage of both Sulphur and Ash are brought down to and below the limits required for furnace use.

Analyses

GREENSBURG COAL†	JAMISON COKE*
Moisture 1.50	Moisture ..... .70
Volatile Matter..... 32.53	Volatile Matter..... 1.25
Fixed Carbon..... 58.63	Fixed Carbon..... 87.90
Ash 7.34	Ash 10.15
Sulphur 100.00	Sulphur 100.00
B. T. U. per pound... 14,253	Phosphorus ..... .032

*Analysis made by Bureau of Mines of coke from Jamison No. 2 Mine.

†Analysis made by Pennsylvania Railroad.

Properties

The Jamison Coal & Coke Company operates mines in both Pennsylvania and West Virginia.

The West Virginia properties are in the Fairmont region, and consist of 8,000 acres of unmined Pittsburgh coal, the major portion of which lies in the low-sulphur basin, which has supplied the eastern markets with gas coal for many years.

Mines in Operation

A total of 3 mines are in operation. Jamison Nos. 8 and 9 mines are on the Wheeling division of the Baltimore & Ohio Railroad, while Jamison No. 11 is on the Monongahela Railroad. The combined annual capacity of these mines is 1,000,000 tons.

Jamison Farmington Gas Coal

This well known coal is produced by the Jamison Nos. 8 and 9 mines. The coal here averages from 7 to 9 feet in thickness, is hard and comes down in large and blocky pieces.

Working faces are first undercut with modern types of undercutters and the coal is carefully shot and loaded.

All Jamison tipples are provided with shaker screens, picking tables and loading booms, so that the coal as it reaches its destination is not only clean, but is also well sized and free from fines.

Jamison Farmington Gas Coal is low in Sulphur, and for many years has been coked at No. 8 Mine, where there is a battery of 115 bee-hive ovens. It has been in continual use in Eastern cities as a gas coal for many years, and, in fact, is adapted to any purpose for which a high volatile and low sulphur coal is needed.

Analysis

The analysis of this coal is as follows:*

Moisture	1.27
Volatile Matter	35.55
Fixed Carbon	57.68
Ash	5.50
Sulphur	100.00
B.t.u. per pound	13,960

*Analysis made by West Virginia Geological Survey.

Equipment

Special attention has been given to providing each mine with attractive surroundings. All construction work is of a durable nature, consisting of stone, brick, cement and steel.

Modern machinery is found in the power house, engine house and in all departments.

IMPERIAL COAL SALES COMPANY

General Offices: LYNCHBURG, VA.

General Sales Agents

IVY WHITE ASH COAL COMPANY

IMPERIAL COLLIERY COMPANY

Exclusive Inland Eastern Agents

IMPERIAL SMOKELESS COAL COMPANY

THE IMPERIAL COAL SALES COMPANY, THROUGH THE SALE OF THE COAL FROM THE MINES DESCRIBED BELOW, IS IN POSITION TO SUPPLY YOUR REQUIREMENTS WITH COAL OF THE BEST QUALITY THAT CAN BE PRODUCED

IMPERIAL COLLIERY COMPANY

Location

The mines of this Company are located at Burnwell, Kanawha County, West Virginia, on the Paint Creek Branch of the Chesapeake & Ohio Railroad, the Post Office being located at the same point.

Coal Mined and Capacity of Mines

The coal mined is from the Eagle seam and the No. 2 Gas seam, the mines having a daily output of 1,100 tons of Eagle coal and 600 tons of No. 2 Gas coal.

Preparation and Quality of Coal Mined

The Eagle coal is handled by retarding conveyors from the mine to the tippie, thence over picking tables and loading booms into the railroad cars. This care reduces the amount of slack to a minimum.

The quality and preparation of Imperial Eagle Coals enables us to make as specials "Imperial Smithing" and "Semi-Smokeless Domestic" coals, which are explained in our page in the display section.

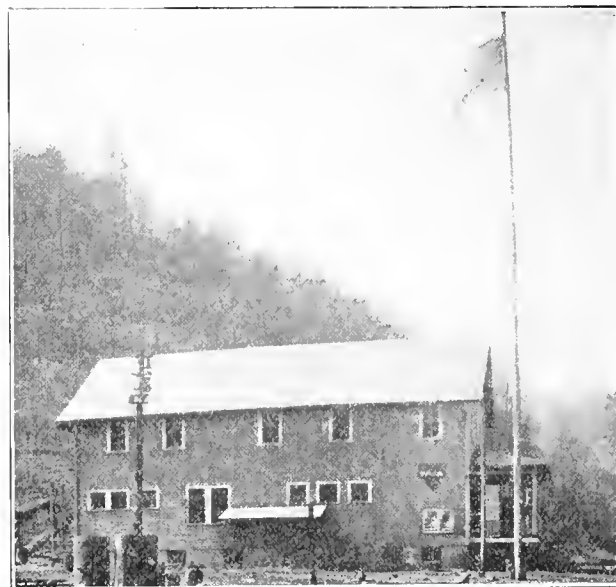
Analysis

The following analysis was made by the Milwaukee Coke & Gas Company from samples taken from cars by their representatives:

Volatile Matter	30.98
Fixed Carbon	63.40
Ash	5.62
	100.00
Sulphur .....	.78
B. t. u. per pound.....	14,575
Fusing Point of Ash.....	2,950° F.

Living Conditions for Labor

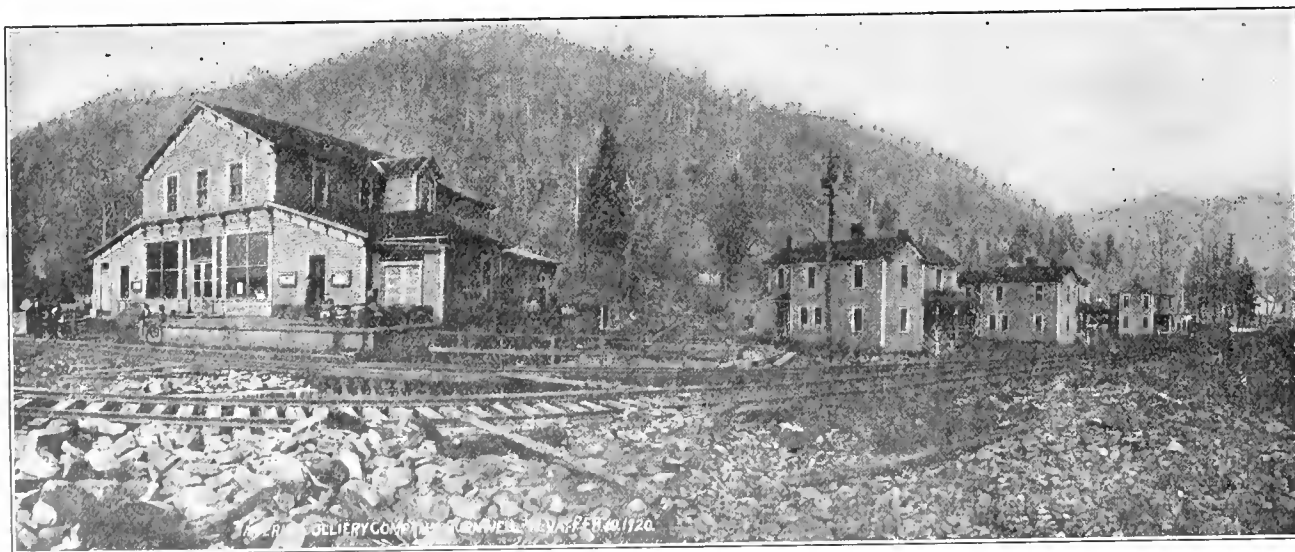
As an inducement to labor we have built and maintain a modern Y. M. C. A., equipped with baths,



Y. M. C. A. Building at Imperial Colliery, Burnwell, W. Va

pool room, bowling alley and refreshment counter, together with a barber shop and moving picture theatre.

The morale of the mining camp is supported by a modern school, which is conveniently located, and the advantages afforded by a general welfare worker supported by the Company. There are also churches of all denominations.



Store and Portion of Village, Imperial Colliery, Burnwell, W. Va.

IVY WHITE ASH COAL COMPANY

IMPERIAL COAL SALES COMPANY, Exclusive Sales Agents

Location

The property is located at Ivaton, in Lincoln County, West Virginia, on the Coal River Branch of the Chesapeake & Ohio Railway.

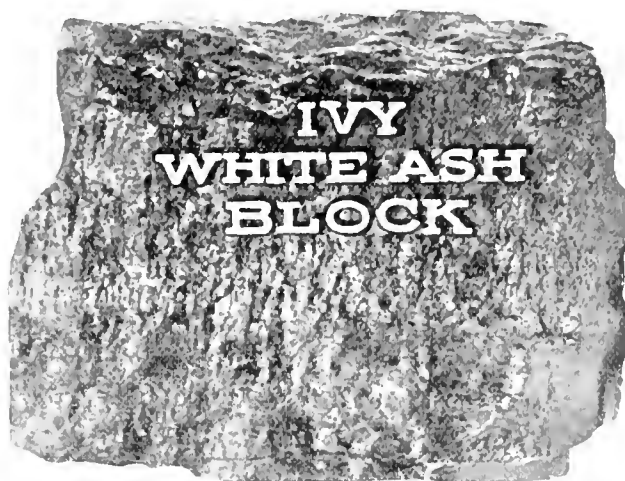
Seam Mined—Preparation and Quality

The Company has two mines operating a 1,350-acre lease of the celebrated NUMBER FIVE BLOCK COAL. These mines have a capacity of 1,500 tons per day and are modernly equipped throughout.

The coal, as its name implies, is very large and blocky, hard in structure and will not disintegrate in shipping. It is also an excellent fuel for stocking purposes. It is prepared and cleaned over shaker screens and picking tables, and makes an ideal domestic fuel. It is also suitable for steam, brick burning, etc.

Analysis

Moisture	1.49
Volatile Matter	34.72
Fixed Carbon	56.27
Ash	7.52
	<hr/>
	100.00
Sulphur .....	.83
B. t. u. per pound.....	13,750
Fusing Point of Ash.....	2,750° F.



IMPERIAL SMOKELESS COAL COMPANY

IMPERIAL COAL SALES COMPANY, Exclusive Inland Eastern Agents

Location

This operation is located near Quinwood, Greenbrier County, West Virginia, on the Sewell Valley Railroad, connecting with the Chesapeake & Ohio Railway main line at Meadow Creek, which is just west of Hinton, W. Va.

Seam Mined

This lease of over 1,000 acres contains two seams of the best NEW RIVER SMOKELESS COAL. At the present time operations are confined to development of the Sewell seam, an analysis of which is given below, which shows the excellent quality of this coal. The mine has been equipped with most modern equipment for a large production.

Analysis

Moisture	1.42
Volatile Matter	22.04
Fixed Carbon	72.78
Ash	3.76
	<hr/>
	100.00
Sulphur .....	.93
Phosphorous .....	.016
B. t. u. per 1 lb. dry coal.....	15,062

INDIAN RUN COLLIERIES COMPANY



INDIAN RUN COAL CO., Sales Agents

CHARLESTON, W. VA.

Location

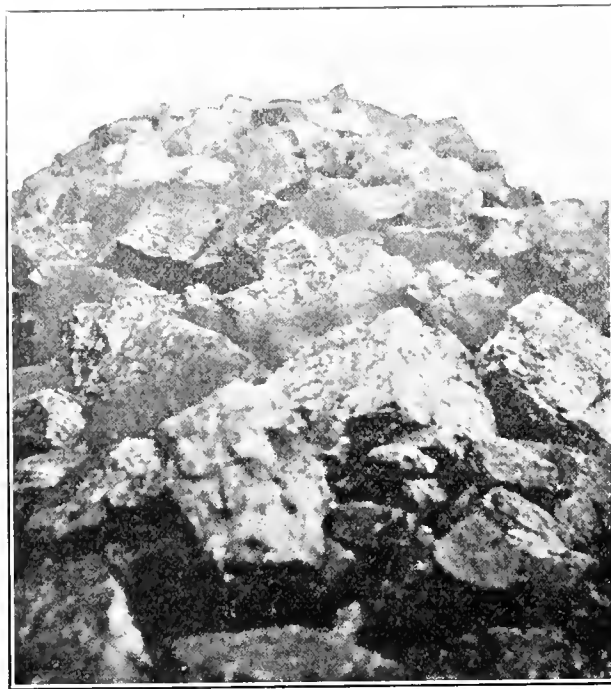
Mines are located on Armstrong Creek, Powellton Branch of the Chesapeake & Ohio Ry.—Operating Office Kimberly, Fayette County, West Virginia.

Operations and Capacity

Five mines operating with a combined capacity of approximately 2,500 tons daily, with capacity increasing.

Coal Mined

From three of our mines we produce the famous POWELLTON Coal; from another the No. 2 GAS and from the other our INDIAN RUN BLOCK, an exceptionally high grade splint coal.



"Indian Run" Block

Indian Run Block

A premium splint coal from our Columbia Mine; mines larger than any competitor we know of; a domestic coal with little competition because of its exceptional quality and firmness—mines equipped with modern type shaker screens, equipped to make Lump, Egg, Nut and Slack—see photograph below:

Powellton Coal

This seam on these properties averages from 5 to 6½ feet in thickness; for By-Product, Coking, Gas or Steam it is the most valuable coal found in the Kanawha Series. It may be used 100% in by-product work; that is, the usual mixture of low volatile may be avoided with almost identical results; the coke resulting is exceptionally high grade and may be used for metallurgical purposes as well as domestic. The gas yield is very rich as the analysis indicates. The ash and sulphur are exceptionally low and the B. t. u. extraordinarily high, averaging from Car Samples, as follows:

Moisture .....	.99
Ash	4.97
Sulphur .....	.60
B. t. u.	14,494
Fusion of Ash.....	2700 Deg. F.

Analysis—Powellton Seam, 6' 2"

Much may be said on the subject of analysis of coal. Analyses from face samples taken inside the mine from a strip of the seam mean nothing to the buyer who pays for the coal plus the freight bill. The analyses quoted below are car samples, containing such impurities as pass our inspectors under the tipples; in other words, these analyses represent the coal as you place it under your boilers.

Car Samples taken and analyzed by the Commercial Testing & Engineering Co., Chicago, Ill.

	Lab. 26749	Lab. 26752	Lab. 26753	Lab. 26771	Lab. 26775	Average
Commercial as Rec'd.....	26749	26752	26753	26771	26775	
Moisture .....	.92	1.05	1.02	1.00	.95	.99
Ash	4.52	4.50	5.89	4.99	4.98	4.97
Volatile Matter	34.23	33.92	34.15	35.32	34.96	34.51
Fixed Carbon	60.33	60.53	58.94	58.69	59.11	59.52
B. t. u.	14606	14618	14362	14472	14412	14494
Sulphur .....	.48	.47	.61	.66	.79	.60

"POWELLTON"—THE COAL WITHOUT A PEER

INDIAN RUN COAL COMPANY

General Offices

Kanawha Banking & Trust Bldg., CHARLESTON, W. VA.

Pioneers in

WEST VIRGINIA COAL



Powellton

More fully described on opposite page. The highest grade By-Product, Gas and Steam coal found in the Kanawha Series; a premium coal. Special attention is called to the fact that this coal is entirely void of phosphorus. It is exceptionally economical in annealing ovens where the powdered process is used.

ANALYSIS	
Moisture .....	.99
Volatile Matter	34.51
Fixed Carbon	59.53
Ash	4.97
Sulphur .....	.60
B. t. u.	14,494

No. 2 Gas

An excellent By-Product, Gas and Steam coal, low in ash and sulphur, high in heat units.

ANALYSIS	
Moisture .....	.95
Volatile Matter	34.96
Fixed Carbon	59.11
Ash	4.98
Sulphur .....	.79
B. t. u.	14,412

Black Band

A Domestic coal known for its firm structure, mines in large blocks and the quantity is limited.

ANALYSIS	
Moisture	1.00
Volatile Matter	35.50
Fixed Carbon	57.00
Ash	6.50
Sulphur	1.05
B. t. u.	14,000

Cedar Grove

A coal for every purpose; may be used with satisfaction for Domestic, Gas, Steam, By-Product or Malleable.

ANALYSIS	
Moisture	1.02
Volatile Matter	35.59
Fixed Carbon	57.66
Ash	5.69
Sulphur .....	.74
B. t. u.	14,220

Kanawha No. 5 (Blakeley Splint)

One of the most popular coals for Malleable work because of its firm structure, uniformity, low sulphur.

ANALYSIS	
Moisture .....	.98
Volatile Matter	37.00
Fixed Carbon	56.45
Ash	6.55
Sulphur .....	.70
B. t. u.	14,275

Eagle

Particularly adapted to By-Product and Steam uses. The quantity in this field is limited. A premium coal.

ANALYSIS	
Moisture	1.14
Volatile Matter	31.73
Fixed Carbon	62.31
Ash	4.82
Sulphur	1.03
B. t. u.	14,740

Chilton

An all-purpose coal. Excellent for Domestic, Steam, By-Product. It is noted for uniformity in performance.

ANALYSIS	
Moisture	1.47
Volatile Matter	38.50
Fixed Carbon	53.44
Ash	6.59
Sulphur .....	.67
B. t. u.	14,030

Dorothy (Indian Run Block)

A Domestic coal in a class by itself; shaker screened and prepared for the most particular. This coal is limited in quantity in West Virginia.

ANALYSIS	
Moisture	1.42
Volatile Matter	34.27
Fixed Carbon	59.49
Ash	4.82
Sulphur .....	.74
B. t. u.	14,006

Black Betsey

The Domestic coal with a history. Only one mine producing the genuine Black Betsey Lump; a stream of steady customers pleased with years of good service and always the same good coal.

ANALYSIS	
Moisture	2.77
Volatile Matter	33.84
Fixed Carbon	57.41
Ash	5.98
Sulphur	1.21
B. t. u.	13,546

KANAWHA SPLINT AND GAS

EASTERN KENTUCKY

NEW RIVER SMOKELESS

POCAHONTAS

SMOKELESS BY-PRODUCT MALLEABLE DOMESTIC STEAM GAS

ALL-RAIL LAKES EXPORT

LAKE & EXPORT COAL CORPORATION

Miners of
Industrial and
Domestic Coals



Exporters
Steamship Agents
Bunkerers

General Offices: HUNTINGTON, W. VA.

Export Division: 32 Broadway, New York City
London Norfolk Paris

Twenty-seven Bituminous Coal Mines in West Virginia and Kentucky Fields—Annual Capacity 3,400,000 Tons

A Surprising Record

Lake & Export Coal Corporation, in its comparatively brief history, has set a record for achievements which few believed could be maintained or expanded. Yet Lecco continues to grow and achieve.

Originally organized to specialize in exporting, Lecco soon expanded its efforts to inland shipments.

Now it includes a complete inland, as well as exporting organization. A few Lecco achievements, recited on this page, give an idea of the resourcefulness and SPIRIT of this company.

The Man-Power Behind

Men of wide coal experience, both in the mining and distribution of coal, compose the Lecco man-power. Mining and shipping coal on a basis of efficiency and service, briefly, is the Lecco policy.

The Lecco-Ideal

Coal is a vital, basic commodity. Lecco likes to feel that it helps run railroads, turn the wheels of great industries, heat the homes of multitudes, light cities, help create the most delicate musical instruments and the most alluring perfumes; aids in preparing inviting cereals and preserving foodstuffs—for Lecco coal has a part in doing all these things.

To do its work most efficiently and most economically is the aim of Lecco.

A Few Lecco Facts

There are 27 Lecco mines in the preferred fields of West Virginia and Kentucky. These mines are advantageously located as to railroads and labor conditions. They produce high and low volatile coals adapted to a wide variety of industrial uses as well as domestic.

High volatile mines are in Logan, Boone and Fayette counties, West Virginia, operating the

Island Creek (Cedar Grove), Eagle, No. 2 Gas, Chilton and Draper seams.

Low volatile (smokeless) mines are in Fayette and Raleigh counties, West Virginia, and operate the No. 3 Pocahontas, Sewell, Beckley and Fire Creek seams.

In Eastern Kentucky, Lecco mines are in the Big Sandy district, and operate the Elkhorn seam. Other mines are in the Hazard field.

On the next page is a summarized list of the leading Lecco operations.

These mines are modernly equipped to prepare the various sizes of coal and thoroughly clean and carefully handle them.

Consumer Protected

Lecco's tremendous tonnage capacity from mines it controls, with tonnage from groups of operations with which it has direct distribution connections, assures the consumer a constant source of supply—and uniform quality coal of known origin. This is a factor much appreciated by the consumer—both industrial and domestic dealer.

Aracoma Mines Nos. 1, 2, 4 and 5

Aracoma mines are among the best known in the famous Logan county field. They are on the C. & O. Railroad; shipping point, Logan, W. Va.

They operate the Island Creek, the Eagle and the Draper seams. Much of the tonnage of these operations go to the C. & O. Railroad and to the Virginian Power Company for fuel, a tribute to Aracoma's product.

Modernly equipped, Aracoma mines load perfectly prepared 4-inch lump; 1¾-inch lump; egg and mine run.

Important glass plants, potteries, brick and tile plants, cement mills, open hearth steel plants, gas plants, as well as steam coal users, are finding Aracoma coals efficient and economical.

Stirring Achievements

LECCO, through its aggressive spirit and resourcefulness has helped make coal history:

Lecco sent trainloads of coal into Ohio and Michigan during the switchmen's strike—when it "couldn't be done."

Lecco saved cities like Boston, Cincinnati, Detroit and Milwaukee from distress.

Lecco kept war industries moving—like Detroit-Edison, Steel & Tube of America, Westinghouse and others.

Lecco, on government appeal, put the first cargo of American coal into Germany after the war.

Lecco aided Netherlands with nearly 1,000,000 tons of American coal.

And Lecco has grown; has increased its power to serve.

Lecco Coal *ok*REFERENCE LIST OF LEADING
LECCO MINES

HIGH VOLATILE—WEST VIRGINIA

Mines	Location	Railroad	Seam—Operated	Capacity Tons
Aracoma Nos. 1, 2, 4, 5	Logan County, W. Va.	C. & O.	Island Creek; Eagle	300,000
Sunbeam	Logan County, W. Va.	C. & O.	Chilton	125,000
Standard Eagle	Boone County, W. Va.	C. & O.	Eagle	125,000
McCall	Logan County, W. Va.	C. & O.	Island Creek	125,000
Haleon	Boone County, W. Va.	C. & O.	Eagle	80,000
Donald	Fayette County, W. Va.	C. & O.	Draper	50,000
Lickfork	Fayette County, W. Va.	Virginian	Eagle	100,000
Pasley	Boone County, W. Va.	C. & O.	No. 2 Gas	100,000
Red Campbell	Logan County, W. Va.	C. & O.	Chilton	75,000

LOW VOLATILE—WEST VIRGINIA

Sugar Creek	Fayette County, W. Va.	C. & O.-Virg.	Sewell	110,000
Beckley	Raleigh County, W. Va.	C. & O.-Virg.	Beckley	135,000
DeWitt	Fayette County, W. Va.	C. & O.	Sewell	50,000
Clyde	Raleigh County, W. Va.	C. & O.-Virg.	No. 3 Pocahontas	75,000
Dorkent	Fayette County, W. Va.	C. & O.	No. 3 Pocahontas	135,000

EASTERN KENTUCKY

Standard Elkhorn	Floyd County, Ky.	C. & O.	Elkhorn	135,000
Huntington By-Product	Letcher County, Ky.	C. & O.	Elkhorn	80,000

Sunbeam Mine

Sunbeam Mine is located in Logan county, on the C. & O. Railroad; shipping point, Fort Branch, W. Va. It is thoroughly equipped to produce various preparations of coal. It operates in the Chilton seam. This low sulphur, free-burning, long-flame and high heat unit coal is favored by leading malleable plants, as well as for general steam, gas and domestic uses.

These mines are typical of other Lecco mines in the high volatile fields of West Virginia. The coals of each mine have been widely tested and classified as to their adaptability to various uses and under various conditions.

Low Volatile (Smokeless) Mines

Lecco's group of low volatile operations produce coals classified in Pools 1 and 2, Navy Standard, the first quality classification.

Sugar Creek Mine, Fayette county, shipping point Mt. Hope, is on the C. & O. and Virginian Railroads. It operates the Sewell seam. Nature has favored Sugar Creek—its coal is far above the average smokeless mine run in percentage of lump. This makes it a preferred smokeless mine run coal for domestic dealers. This also applies to DeWitt Mine, another Sewell seam operation.

Beckley (Besoco) Mine

This is another widely known low volatile mine, operating the Beckley seam at Besoco, Raleigh county, West Virginia. It has the advantage of joint connection with the C. & O. and the Virginian Railroads.

Clyde Mine, operating No. 3 Pocahontas seam; Dorkent Mine, operating Sewell seam, and other mines are included in the Lecco "smokeless" group.

Kentucky Mines

The Standard Elkhorn mine, Garrett, Ky., on the C. & O. Railroad, produces one of the most popular steam and by-product coals—Elkhorn mine run. This coal is in successful use by some of the largest glass plants, brick and tile burners, by-product plants and for general steam use.

A peculiar gift of nature enriches this coal, increasing its gas yield and intensifying its heat properties. A long list of careful consumers, who analyze the cost of each pound of steam or foot of gas, laud Lecco-Elkhorn. One of the largest steel plants in the country is securing 11½ pounds of evaporation per pound of this Lecco-Elkhorn.

Several other mines operating the Elkhorn seam in the Big Sandy district are included in the Lecco group.

Black Velvet Cannel

Lecco's cannel mine at Garrett, Ky., produces the popular Black Velvet Cannel. A stratum of 18 to 24 inches of pure cannel makes possible a large blocky, impressive coal which appeals to domestic dealers.

Exporting Facilities

Lecco maintains a complete exporting and bunkering division.

Export headquarters are at 32 Broadway, New York City. Tidewater branches are at Norfolk, Newport News and Charleston, S. C. Foreign offices at 21 Cullum Street, London, England, and at 19 Av. del' Opera, Paris, France.

Lecco can place 75,000 tons of Pool 1 and 2 coal at tidewater monthly; and can ship for export as much as 250,000 tons monthly from the various pools. A constant, large tonnage is always to Lecco's credit at the pools for immediate demand.

No tonnage requirement is beyond Lecco's facilities or resources.

Expert bunkerers and steamship agents handle all details of ships in Atlantic ports.

Special Lecco Service

Without obligation to the recipient, Lecco places its experience and facilities at the command of coal consumers. Engineering advice, freight rate and other traffic information, advertising help to dealers and other details possible to a complete mining and shipping organization are offered cheerfully.

COAL
LECCO
COAL

LECKIE COAL COMPANY, Inc.

Main Office

Hartman Bldg., COLUMBUS, OHIO

Tidewater Office

Seaboard Bank Bldg., NORFOLK, VA.

Exclusive Sales Agents for

LATHROP COAL CO.
PANTHER COAL CO.
DOUGLAS COAL CO.

LECKIE FIRE CREEK COAL CO.
INDIAN POCAHONTAS COAL CO.
LOGAN-CHILTON COAL CO.

LECKIE COLLIERIES CO.

Leckie Pocahontas Coal

Our Pocahontas coal is mined from the celebrated No. 3 seam at Leckie, in McDowell County, West Virginia. It is a naturally clean coal, loaded in run-of-mine size only, and is the equal of any Pocahontas coal for steam, domestic or by-product purposes. Shipments on N. & W. Railroad.

Leckie New River Coal

"Leckie New River" coal comes from the mines of the Douglas Coal Company and Leckie Fire Creek Coal Company at Fireco, Raleigh County, West Virginia. The total acreage tributary to both openings is 3,200 acres underlaid with the Fire Creek and Sewall seams. Particular care is taken in the preparation of the run-of-mine coal loaded at both tipples and all equipment provided is of the latest and best design. Analyses made by the U. S. Navy are as follows:

Douglas Coal Company	
Moisture	1.70
Volatile Matter	16.70
Fixed Carbon	76.50
Ash	5.10

Sulphur	0.83
B. t. u.	14,461

Leckie Fire Creek Coal Company	
Moisture	2.90
Volatile Matter	17.20
Fixed Carbon	75.40
Ash	4.50

Sulphur	0.72
B. t. u.	14,647

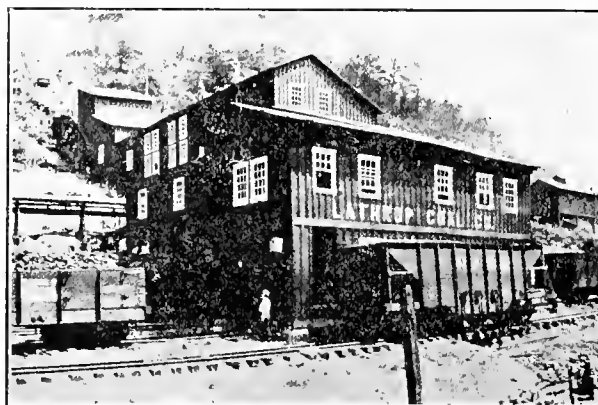
Daily capacity of mines 2,000 tons. Shipments on Virginian Ry.

Panther Domestic

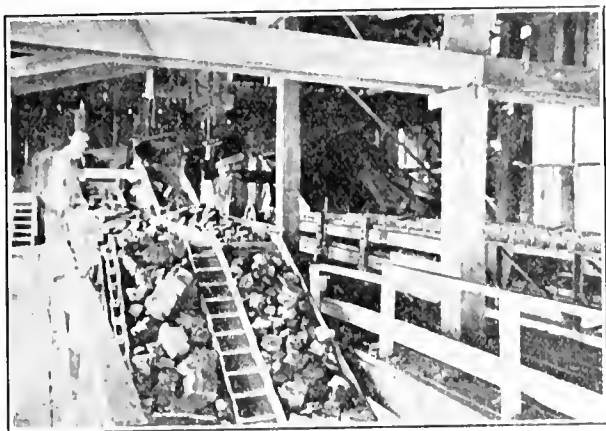
This well known brand of fuel is mined by the Lathrop Coal Company and the Panther Coal Company at Panther, McDowell County, West Virginia, where a fine tract of 2,100 acres of coal is under development. These mines are on the Norfolk & Western Railroad, and produce daily 1,500 tons of highest grade coal for steam and domestic uses. Coal from both mines has nearly the same analyses, a composite analysis being as follows:

Moisture	0.93
Volatile Matter	30.38
Fixed Carbon	63.29
Ash	5.40

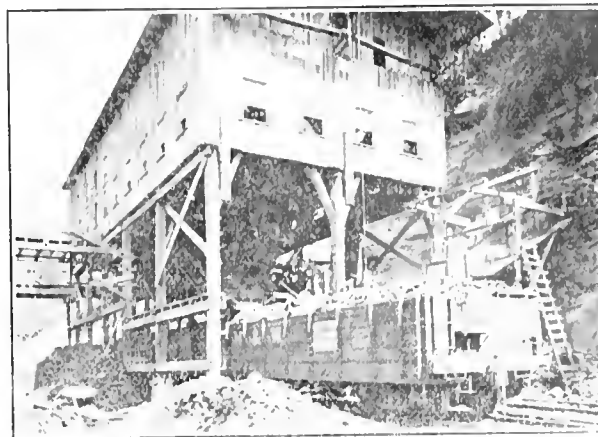
Sulphur	0.80
B. t. u.	14,527



Tipple of Lathrop Coal Company



No. 1 Thacker Tipple of Leckie Coal Company



Loading Pond Creek Coal at Tipple of Leckie Coal Company

Leckie Thacker

The Leckie Collieries Company, with mines at Aflex, Pike County, Kentucky, is the producer of Leckie Thacker coal. This is a superior steam and domestic coal which comes into the market via the N. & W. Railroad in lump, egg, nut and slack sizes, after first having gone through a process of sizing on shaker screens and of preparation on picking tables. Loading booms insure a minimum of breakage in dropping the coal into the car. With an acreage of 2,100 acres to draw upon and a daily capacity of 1,200 tons, we are in position to supply the trade with their requirements. A channel sample analysis made by the Norfolk Testing Laboratory shows the following:

Moisture	1.48
Volatile Matter	35.72
Fixed Carbon	57.92
Ash	4.88
Sulphur	0.87
B. t. u.	14,324

Leckie White Ash

This coal is produced by the same company as produces "Leckie Thacker," the distinction being that the "Leckie White Ash" is mined from the Winifrede seam. It is a domestic coal of wonderful purity, is hard and blocky, stands rough handling and is a prime favorite with the retail coal trade. It is a free-and-easy-burning coal, makes a cheery fire and burns to a fine white ash with no clinkers. Sizes produced—Lump, Egg, Nut, Slack and Run of Mine.

Leckie Gas

"Leckie Gas" coal is supplied by the Leckie Collieries Company, mining the Pond Creek seam at Aflex, Ky., and by the Logan-Chilton Coal Company, mining the Alma and Chilton seams at Henlawson, Logan County, West Virginia. The coal from both operations is low in sulphur and ash and, in addition to its exceptional fitness for gas making, is also unsurpassed for use as a by-product, malleable and pottery burning coal. "Leckie Gas" coal is well prepared and loaded in various lump sizes. It is a splendid coal for household use and also for general steam purposes. Shipments on the Norfolk & Western and Chesapeake & Ohio Railroads.

Analysis Pond Creek

Moisture	1.13
Volatile Matter	37.23
Fixed Carbon	59.17
Ash	2.47
Sulphur	0.65
B. t. u.	14,700

Analysis Logan County

Moisture	1.44
Volatile Matter	37.38
Fixed Carbon	57.42
Ash	3.76
Sulphur	1.06
B. t. u.	14,738

Leckie Service

From the foregoing descriptions and analyses it will be seen that the Leckie Coal Company, Inc., is able to supply coal of the highest quality from operations whose output it commands. Any coal sold you through our organization is selected to meet your needs. A trial of Leckie coal with Leckie service will dispel all your fuel troubles.

THE LORAIN COAL & DOCK CO.

Huntington Bank Building, Columbus Ohio

Producers of

"LORADO" COAL

The holdings of The Lorain Coal & Dock Company in the Cedar Grove Seam, sometimes called the Island Creek Seam, are about nineteen miles southeast of Logan in Logan County, W. Va., on the Guyan Division of the Chesapeake and Ohio Railroad. Locally, the seam is known as the "LORADO" Seam, the name being taken from the town where the two mines of the Company are located.

The coal in the LORADO Seam averages from six to seven feet in thickness and at some places reaches the extreme thickness of eight feet. The structure of the coal is clean, the partings being very small and easily removed from the coal; the roof and bottom conditions are of the best.

The Lorain Coal & Dock Company is operating at Lorado two large mines.



View of Tipple at Lorado No. 2 Mine

Equipment and Preparation

The tipples at both mines are of permanent steel construction and of size to permit the greatest possible development. Both tipples have ample picking tables.

The screens are shaker screens of the "Marcus" and "Webster" types.

Loading booms which may be lowered to the bottom of the car, let the coal down into the car with a minimum of breakage.

The equipment of the tipples at both mines is such that clean, well prepared and carefully sized coal is delivered to the customer.



Shortwall Machine Cutting Across Face

Analysis of Coal

Moisture .....	.96
Volatile Matter	34.00
Fixed Carbon	60.54
Ash	4.50
	<hr/>
	100.00
Sulphur .....	.67
B. T. U.	14,798

Uses of Lorado Coal

LORADO coal is a most efficient steam and domestic coal. It is especially suited for by-product, gas and malleable purposes. In the manufacture of clay products, such as brick, tile and all grades of porcelain, it is now demonstrating that it is without a peer.

Sizes Prepared

At both mines the prepared sizes are rescreened over shaker screens and the following sizes are made:

4" Lump	2" Nut and Slack
2" Lump	1" Slack
2x4" Egg	Straight Mine Run
1x2" Nut	4" Mine Run

LOST CREEK COAL COMPANY, Inc.

Goff Building
CLARKSBURG, WEST VIRGINIA

Miners and Shippers of
Pittsburgh Seam High Volatile Coal

The Lost Creek Coal Company are producers of high-grade high-volatile coal, especially suited to such industrial uses as for Locomotive Fuel, Steam Plants, Cement Burning, Pulverized Fuel and Brick Burning.

It is also uniformly satisfactory as a Domestic Coal.

Our coal mines clean and requires very little preparation. While loading, however, men are stationed at the tipple whose duty it is to remove any slate or other impurity that may have found its way into the coal.

Analysis

An analysis made by the Pittsburgh Testing Laboratory on a sample taken by their representative at our mine on August 11, 1920, shows the following:

Moisture	1.43
Volatile Matter	37.17
Fixed Carbon	53.95
Ash	7.45
	<hr/>
	100.00
 Sulphur	 3.11
B.t.u.	13,973
 Fusion Point of Ash	 2426 deg. F.

The present output of 250 tons run-of-mine coal will be gradually increased to 500 tons as development proceeds. All shipments take the Fairmont-Clarksburg freight rate.

LUNDALE COAL COMPANY 3--FORKS COAL COMPANY

LUNDALE, LOGAN COUNTY, WEST VIRGINIA

Producers of

QUALITY COALS

Resources and Location

The holdings of these companies comprise about twelve thousand acres, situated in Logan County, West Virginia, on the Guyan Valley Division of the Chesapeake & Ohio Railroad.

Coal Seams Mined

Cedar Grove—Averaging about seven feet in thickness.

Winifrede—Running from five feet six inches to six feet in thickness.

Mining Equipment

Cutting—Arcwall and Shortwall machines.

Haulage—Electric trolley pole type locomotives.

Preparation—Steel tipples, equipped with retarding conveyors, shaker screens, picking tables, loading booms and box car loaders.

Labor Conditions

These mines are operated on the "American Open Shop Plan." The Logan County Field has never had any labor disturbances of any kind in its twenty years' history, and our mines have never lost a single day's time on account of labor trouble. These conditions assure constant and uninterrupted production.

Classification of Coals

The coals mined by these companies are especially adapted to the following uses:

By-Product-Coking, Gas, Steam and Metallurgical purposes.

Representative Analyses

Moisture	1.20
Volatile Matter	34.05
Fixed Carbon	60.40
Ash	5.55
Sulphur .....	.81
B. t. u.	14,250

Coke Analyses—(30% to 70% Mixture)

Volatile Matter	1.09
Fixed Carbon	90.72
Ash	7.25
Sulphur .....	.67
Phosphorus .....	.010

Coke Yield, 77.33%. Loss in burning, 20.33%.
Shatter Test, 75.00%.

Freight Rates

These mines take the regular Kanawha freight rates both East and West and are classified under groups 3 and 4 in C. & O. Railroad Tariffs.

Service

Our Sales and Traffic Departments are prepared to give special service in the way of advice as to the coal best suited to each particular need and to expedite delivery after shipment has been made.

AMHERST FUEL COMPANY

SELLING AGENTS

Union Central Bldg., Cincinnati, O.

Philadelphia

Lundale, W. Va.

C. H. MEAD COAL COMPANY

Executive and Sales Offices
BECKLEY, WEST VIRGINIA

Miners and Shippers of
Winding Gulf Smokeless Coal

The C. H. Mead Coal Company property is located at East Gulf, Raleigh county, on the Stone Coal division of the Winding Gulf district.

This property is divided naturally into two splendid tracts for mining purposes. Tract No. 1 was originally opened by the East Gulf Coal Company in 1916, and it is from this tract that we are now getting our present output, operating in the Beckley Seam only.

Tract No. 2 is at the present time being developed, with workings also in the Beckley Seam, and the construction work on tipple, mine opening, side tracks, shops, houses, etc., is being rushed to completion.

When the development work on Tract No. 2 is finished, this property will be easily capable of producing 20,000 to 25,000 tons per month.

There are 800 acres of Beckley Seam coal on this lease, averaging about $4\frac{3}{4}$ feet in thickness, and 2,250 acres of No. 3 Pocahontas Seam, averaging 4 feet of clean coal. The Beckley coal lies 350 feet above water level, coal being brought down the mountain by monitors on an incline 700 feet in length. The Pocahontas coal is about 20 feet below water level and may easily be reached by a short slope.

The Beckley coal is so well known and so highly regarded for steam, smithing and all purposes where a smokeless coal is desired that it does not need description. Coal from our mine is classified as Pool No. 1, Navy Standard, and analyses as follows:

	Dry Basis
Volatile Matter	17.87
Fixed Carbon	79.93
Ash	2.20
	<hr/>
	100.00
B.t.u.	15,254

Labor and living conditions are made as attractive as possible. The town consists of 94 thoroughly modern miners' houses, equipped with electric lights, a water system over all streets, town well lighted, and a large and permanent store building. The comforts provided enable us to enjoy the very best class of labor.

Our mines have a joint track connection with both the Chesapeake & Ohio and the Virginian railroads, thus giving our operation the services of two roads.

MAIN ISLAND CREEK COAL CO.

HUNTINGTON, WEST VIRGINIA

Exclusive Miners of

MAIN



ISLAND

DETROIT, MICH.
2235 Dime Bank Bldg.,
E. S. Van Hart, Mgr.

INDIANAPOLIS, IND.
1510 Merchants Bank Bldg.,
E. E. Longstreth, Mgr.

CINCINNATI, O.
907 Union Central Bldg.,
G. W. Swain, Representative.

General Interest

History of the Company

The Main Island Creek Coal Company, one of the largest and most progressive coal companies in the development of the coal measures of the Logan Field of West Virginia, has been operating for less than seven years. Commencing development in 1913, it inaugurated shipments in 1914, and within four years had directed its development so energetically and successfully, that for the year 1918, out of a total production in the Logan Field of 10,211,390 tons, over one-tenth, or 1,145,178 tons, came from the collieries of this company.

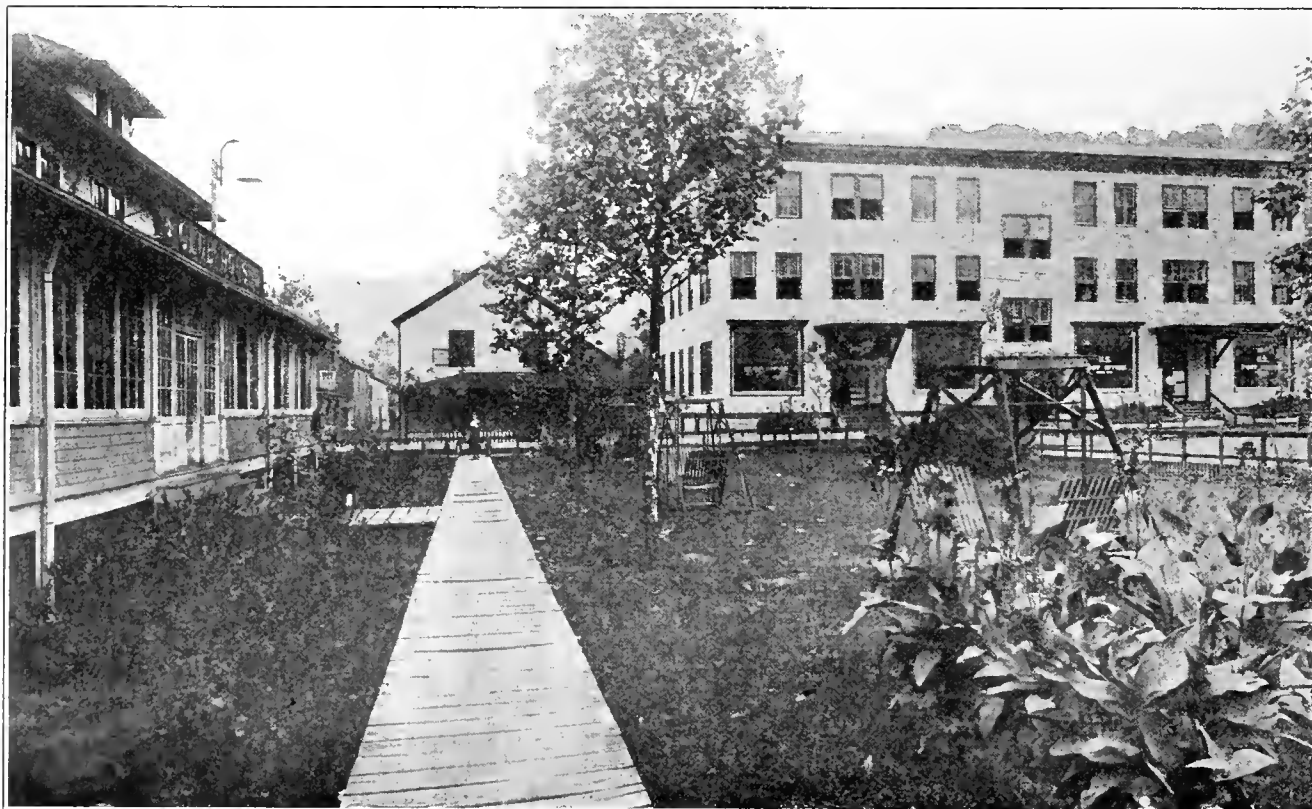
From the very beginning of this enterprise all expenditures, whether for acreage, buildings or equipment have been made with a view to creating an institution rather than a coal company. Located, as Omar is, in a section bountifully provided by Nature with both scenic and natural resources, the Main Island Creek Coal Company has labored to preserve, and even to increase, the attractiveness of its mining camps. It shall be our purpose on the pages which follow to briefly relate the story of this institution and the coal which it mines.

Location of the Mines

The Main Island Creek Group of mines is located in Logan County, West Virginia, on the lines of the Chesapeake and Ohio Railroad, and embraces those of the Main Island Creek Coal Company, on Island Creek, with a total acreage of 30,000; Omar Coal Company, with 85 acres; Middle Fork Mining Company of 341 acres, the latter property having been acquired by purchase in October, 1919, as it adjoins and is practically surrounded by the balance of the 30,000 acre lease.

On Buffalo Creek, the group embraces the property of the Proctor Coal Company, 2,980 acres; Proctor Eagle Coal Company with 1,424 acres in its lease, and the Madne Coal Company of 70 acres.

Others of the Main Island Creek group of mines are located on Coal River and comprise the Madison Coal Company with 245 acres; Superior Eagle Coal Company, 115 acres; No. 5 Block Coal Company with 330 acres, making a grand total of 35,590 acres of coal land, on which the company has twenty-eight mines dumping over twenty-five tipples.



View of Company Office, Post Office Building and Club House Lawn

Developed Capacity of 5,000,000 Tons

These operations with the present machinery and development have a potential capacity of 5,000,000 tons annually and it is the intention of the management to increase this to at least 6,000,000 tons with the improvements already planned or under way. To attain this result, Nature has assisted in many ways and few districts are more favored in geological and topographical features than this portion of West Virginia, known as the Logan Field.

The famous Main Island coal outcrops throughout the company's extensive holdings at tippie height or a slight elevation above that, in which case it is lowered over the hill in mine cars, by monitors, or by retarding conveyors. Since its inception, it has been the policy of the Main Island Creek Coal Company to equip its plants with the best type of mining machinery and no expense has been spared to make its collieries amongst the best equipped in a field that is noted for the highest class of installations.

Business Administration

Officials of the Company

The organizer and president of the Main Island Creek Coal Company, A. J. Dalton, has been an active factor in the West Virginia mining fields for over a quarter of a century. Like his associate, John A. Kelly, secretary and treasurer, he was formerly identified with the Pocahontas fields. Henry D. Hatfield, formerly Governor of the State, is vice-president; G. M. Angell is general sales manager, and C. C. Campbell is chief accountant. All of these officials have their headquarters at Huntington. The operating end of the business is in charge of W. T. Jones, general superintendent, with headquarters at Omar.

Sales Organization

The general sales offices, in charge of G. M. Angell, are maintained in the Robson-Pritchard Building at Huntington. This city has in the past five years grown into the strategical coal center of West Virginia, and practically all shipments made from the central and southern parts of the state to western cities either pass through or by its door. A second advantage which Huntington possesses is its closeness to the Logan field. By having its general offices at this point the sales department is enabled to keep in close and constant touch with the operating department and at the same time remains in easy communication with the trade.

The company's branch offices are well located to cover the vast territory to which the major portion of its output is shipped.

Branch Sales Offices

The branch offices are established as follows:

DETROIT:

2235 Dime Bank Building,
In charge of
E. S. Van Hart, Resident Manager.

INDIANAPOLIS:

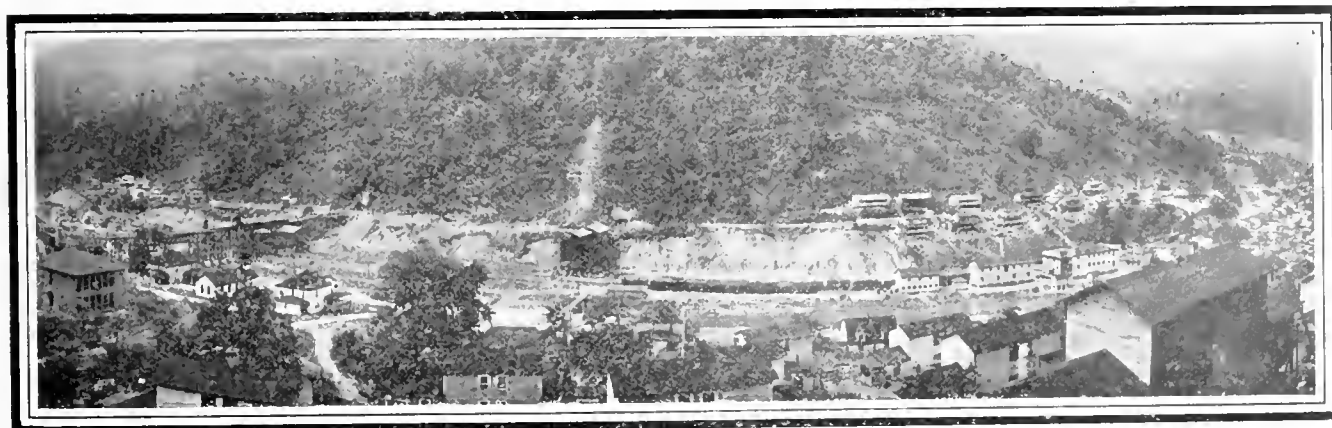
1510 Merchants Bank Building,
In charge of
E. E. Longstreth, Resident Manager.

CINCINNATI:

907 Union Central Building,
In charge of
G. W. Swain, Representative.

Traffic Department

The Traffic Department, with headquarters at Huntington, is closely allied with the Sales Department and is prepared to handle all traffic difficulties. When advised by a customer that shipment has not been received, immediate action is taken to have the cars rushed by the railroads. In addition to this service, the Cincinnati office keeps a close check on all cars passing through the Cincinnati Gateway, and is in a position at all times to render efficient and valuable service in facilitating deliveries.

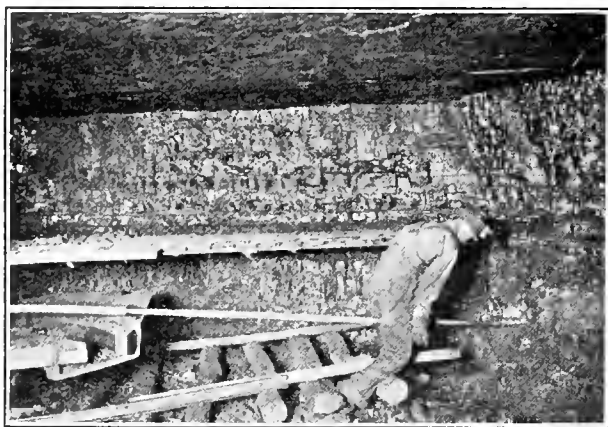


Micco No. 2 Mine

Mechanical Equipment of Mines

Main Haulage Motors and Gathering Motors

The motors utilized on the main haulage tracks at the company's 28 mines vary from a Goodman 13 ton to a Mancha storage battery motor for gathering. In all, the management has a total of more than 100 haulage motors ranging from 5 to 15 tons; all of the latest type and of proven efficiency. The majority of the motors in use are of the Jeffrey make.



Making Ready a Middle Cut

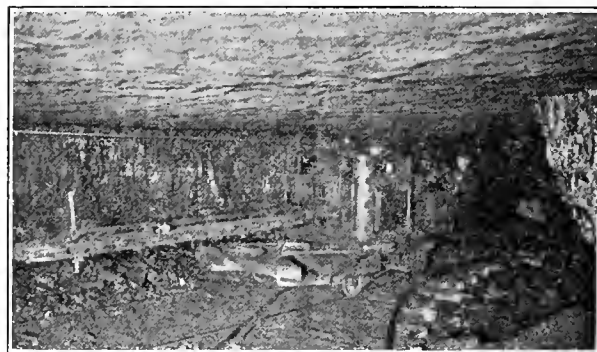
Other Electrical Equipment

The 44 electrically driven fans installed provide adequate and systematic ventilation at every working place, and no expense has been spared to insure the installation of a ventilation system that makes the mining of Main Island Creek coal so attractive that the labor problem has been reduced to a minimum. Miners appreciate the advantages and safety of working in collieries so well provided with every mechanical device that is calculated to further their comfort and safety.

The balance of the electrical equipment consists of 22 pumps, 40 drilling machines and 15 substations. In the installation of these substations the management foresaw the necessity and advisability of connecting each mine with two stations, and it is through this double connection that the loss of electrical power is provided for at any and all of the mines.

Fifty-one Electrically Operated Cutting Machines

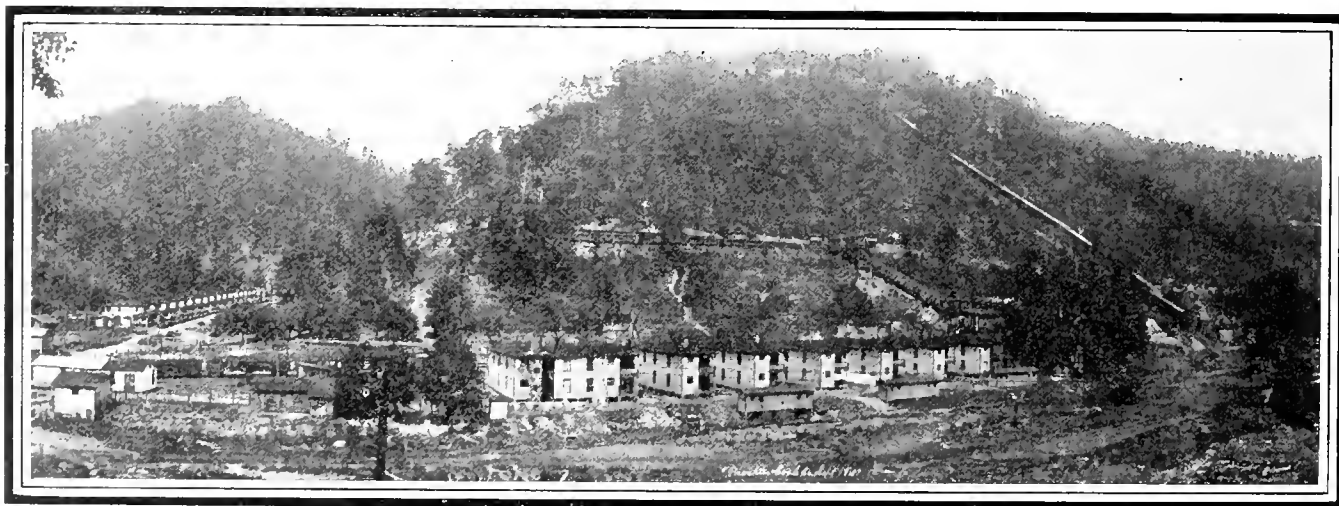
In accordance with its long established policy of providing every facility for the economical and efficient operation of its collieries, the management has installed a total of 51 electrical mining machines with an average cutting capacity of 3 tons per minute to the machine, or a total daily capacity of more than 40,000 tons.



Turret Mounted Coal Cutter

Labor Supply

In the lower mountainous part of Logan county on the enormous Main Island Creek lease, there are thousands of local inhabitants who have become expert in mining. In addition to these, large Greek and other foreign colonies have sprung up.



Proctor Mine

Preparation of Coal

System of Inspection of Main Island Coal

Careful preparation of coal at the collieries of the Main Island Creek Coal Company is one of the necessary requisites for holding one's job on the payroll. An inspector makes daily rounds of the various mines, visiting the working face and checking up on the methods employed by the loaders. The one unpardonable sin at Omar is loading dirty coal.

So close is the system of inspection that the reputation the management has established for its careful preparation is zealously maintained.



Tippie at No. 4 Mine

Best Type of Tippie Equipment

The latest type of tippie equipment has been installed by the Main Island Creek Coal Company and special attention is paid to careful preparation of "Main Island" coal.

The equipment at Mines Nos. 2, 3, 4, 5, 6, 7, 16, 17, 21 and 22, Proctor and No. 5 Block is such as enables the shipment of a carefully prepared and closely sized coal for steam and domestic use. The tippies are electrically equipped with conveyors, shaker screens, and picking tables with adjustable loading booms that can be dropped close to the bottom of the railroad cars and thus reduce breakage to a minimum.

Main Island Mine No. 4

It was over the fine, modern steel tippie of

Mine No. 4 that the Main Island Creek Coal Company made its first shipment of coal on the 5th of May, 1913, and it is this tippie that made the district record, and the West Virginia record for that matter, for loading 3,500 tons of coal in one day's run, every car coming direct from the working face of the tippie.

Scheme of Operation at No. 5 and No. 6 Tippie

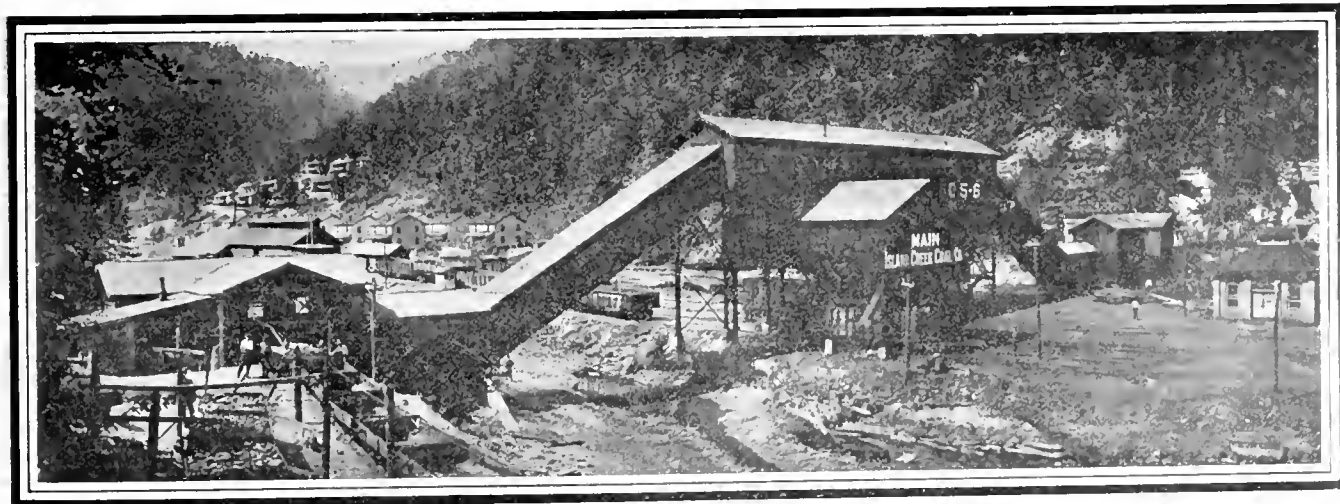
The double tippie that serves mines No. 5 and No. 6 is of steel construction and is one of the finest equipped in the district, having a guaranteed capacity of 5,000 tons daily.

As may be seen from the accompanying illustration, it is provided with four loading tracks and enjoys the distinction of having the highest car allotment of any tippie on the C. & O. system.

Run of mine coal is dumped from the mine cars into a steel and concrete receiving hopper, from which it is fed by an apron feeder over a short section of bar screen onto the 75 foot apron conveyors, which carry it to the picking tables. The slack coal passes through the bars to the conveyor, while the lump coal, passing over the bars, loads on top of the slack coal as it moves along the picking tables, which are formed by a section 30 feet in length of the discharge end of each conveyor. Excellent light is provided for the men at the picking tables and the most careful inspection is given for all impurities.

The coal is discharged from the conveyor to a set of tippie shaker screens, electrically operated, which separates the coal into slack, nut, egg and lump. Special adjustable loading booms are installed for loading the lump and egg onto the railroad cars, and three men are stationed on each car of egg to finally inspect and clean the coal and trim the cars. The nut and slack is usually combined at this tippie, making a high grade steam coal for mechanical stokers that is eagerly sought.

A refuse conveyor is installed for handling the impurities removed at the picking tables, while, if the occasion requires, this conveyor can be utilized for conveying egg coal to the bins from which the company's wagons supply the miners' homes and local demands.



Double Tippie at Mines Nos. 5 and 6

The apron conveyors move at a speed of 45 feet per minute, and at that speed can handle 150 tons of coal per hour, the two conveyors giving the plant ample equipment to handle the entire output of the mines as developed. Each conveyor is driven by a 20 H. P. motor through one belt and two spur gear transmissions, and drives being duplicates. The motors are controlled by automatic elevator control and provision is made for either stopping or start-

ing each conveyor separately from the picking floor or the car tender's platform.

Shaker Screens Installed

The shaker screens at the No. 5 and No. 6 tipple consist of two chute sections, each section being 6 feet wide and 24 feet long, provided with lower decks. The upper deck of the first chute is provided with a $\frac{3}{8}$ inch stepped screen plate having $1\frac{1}{4}$ inch and $1\frac{1}{2}$ inch holes, while the lower deck is plain with flys for passing the slack to the hopper. The second chute is provided with $\frac{3}{8}$ inch stepped screen plate having 3 inch and $3\frac{1}{4}$ inch holes, and a lower deck for egg coal. Special ends are provided for passing lump and egg to the loading booms.

The two chutes are counterbalanced and the reciprocating motion is imparted by 20 H. P. motors through one belt transmission to an eccentric shaft, and thence by eccentric rods and eccentrics to the screen chutes. The motor is a duplicate of the two which drive the apron conveyors, and is controlled by the automatic elevator control, provision being made for stopping or starting the screens from either the picking table or the car tender's platform.

Six electric motors are installed for supplying the power necessary to operate this modernly equipped and electrically operated double tipple; they comprise three 20 H. P. motors; two $3\frac{1}{2}$ H. P. and one $7\frac{1}{2}$ H. P. Westinghouse Type S. K. motors wound for 250 volts D. C. This furnishes a combined horse power equal to 74 H. P. for the operation of the tipple, although the requirements of the machinery actually demand but 56 H. P. for its successful operation.

Capacity Loads—Careful Trimming.

Tipple foremen at the 25 tipples owned and operated by the Main Island Creek Coal Company take more than customary pride in loading railroad cars to capacity and trimming them so that a "Main Island" car is easily distinguishable in a coal train from its less carefully loaded and trimmed associates. When one gets a 50 ton steel car from this colliery company one gets 50 tons of clean coal.



Block Coal Passing Over Picking Table



Lump Coal Passing Over Shaker Screen



View Showing No. 5 Operation.

Uses and Analysis of Main Island Coal

Seam Mined and Its Usages

The coal mined by the Main Island Creek Coal Company is from the Cedar Grove bed, known in the Logan field as the Island Creek seam. Coal from our mines is known to the trade as "Main Island Coal." It is a hard coal of excellent quality, as will be seen from its analysis.

The seam averages seven feet in thickness. This seam is practically free of slate and all kinds of impurities and foreign matter. Therefore, the run of mine coal is clean and pure, and is used extensively for steam and domestic purposes. The four-inch lump is unsurpassed as a domestic coal and enjoys a wide market in many states. The lumps are large and of strong structure, and do not break in handling. This grade is also well adapted to use in malleable foundries. The egg size is used especially by illuminating gas plants. Splendid results are obtained, because the coal is low in sulphur and ash, permitting a good yield of both gas and coke. The Egg coal, as well as the Run of Mine, is particularly adapted to use in glass plants, and a strong and growing demand in this respect is especially noticeable. The Nut and Slack coal, likewise, is free of impurities, and has a high B.t.u., and for these reasons excels as a stoker coal for manufacturing and other steam plants. The Cannel coal from the No. 3 mine is a fancy domestic coal especially pleasing to the fastidious. The Eagle coal, from the Proctor Eagle and Superior Eagle mines, is one of the best by-

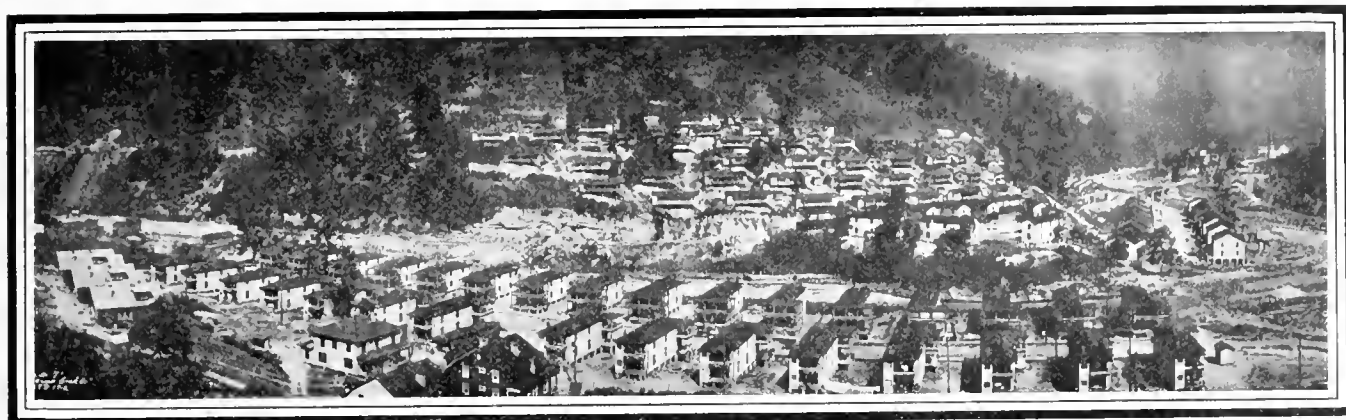
product coals obtainable, and is eagerly sought by plants developing the by-products of coal.

Most of the company's large production goes to markets in Ohio, Indiana, Michigan, and up the lakes. A considerable and increasing demand is had, however, in Virginia and the Carolinas, where the domestic grades are used. During the past year a great deal of this coal has been sold abroad, either through number five pool at Newport News, which calls for a high-volatile gas and by-product coal, or through pool number six, which calls for high-volatile steam coal. In addition to these pools, Main Island has a private pool at Newport News in which MAIN ISLAND coal can be assembled and loaded on vessels without losing its identity or being mixed with other coal.

Analysis of Main Island Coal

The average of nine analyses of Main Island Coal, as made by Froehling & Robertson, chemists, of Richmond, Va., is as follows:

	Per Cent.
Moisture .....	.99
Volatile Matter	36.88
Fixed Carbon	57.06
Ash	5.07
	100.00
Sulphur	1.009
B.t.u. (per pound of dry coal)	14,524
B.t.u. (per pound of coal as received) ..	14,384



Village at No. 7 Mine

Omar—A Model Mining Community

Houses of Pleasing Design and Substantial Construction

Contrary to the prevailing belief, miners' homes in the Logan Field, and especially at the properties of the Main Island Creek Coal Company, are not mere cabins, which one reads of in the yellow journals, but, on the contrary, are substantial, well painted, plastered houses of attractive designs and pleasing appearance. All are electrically lighted and a number are near enough to the central heating plant to be provided with steam heat. Open fireplaces are in every house and more than 100 have baths, hot and cold water, and modern sanitary plumbing. Sixty new dwellings have recently been completed, all having a stucco-exterior finish and modern conveniences throughout.

The houses vary from the two and three-room cottage to the more commodious four and six-room structures, all renting for \$2.00 a room per month, so the average monthly rental comes to \$8.00. Coal is furnished all residences at \$1.00 per month, with a charge of 50 cents a load for delivery. The water supply at each community is absolutely pure filtered, the company having the chemical analysis of each well and sinking many to a depth of 60 to 90 feet through the solid rock.

At Omar a 100,000 gallon steel tank is located at an elevation of 150 feet on the hillside, providing water to the entire community, as well as affording ample pressure for fire protection.

Omar, Its Location and Facilities

Omar, headquarters of the Main Island Creek Coal Company, is beautifully located among the heavily wooded hills of southern West Virginia, and gives one more the impression of an attractive mountain resort rather than a hustling coal mining camp. The officials of the Company have made generous expenditures in building a community that will cater to the comfort and contentment of its many employees, and Omar now boasts a population in excess of 5,000.

A well arranged club house with accommodations for single employees and transient guests is another desirable feature of Omar, while a Y. M. C. A. building is completely furnished with pool and billiard tables, refreshment stands, a well conducted restaurant open at practically all hours, barber shops, reading and writing rooms and other attractions.

Incidentally, the facilities for the entertainment of colored employees and their families are equal to those provided for the white employees.

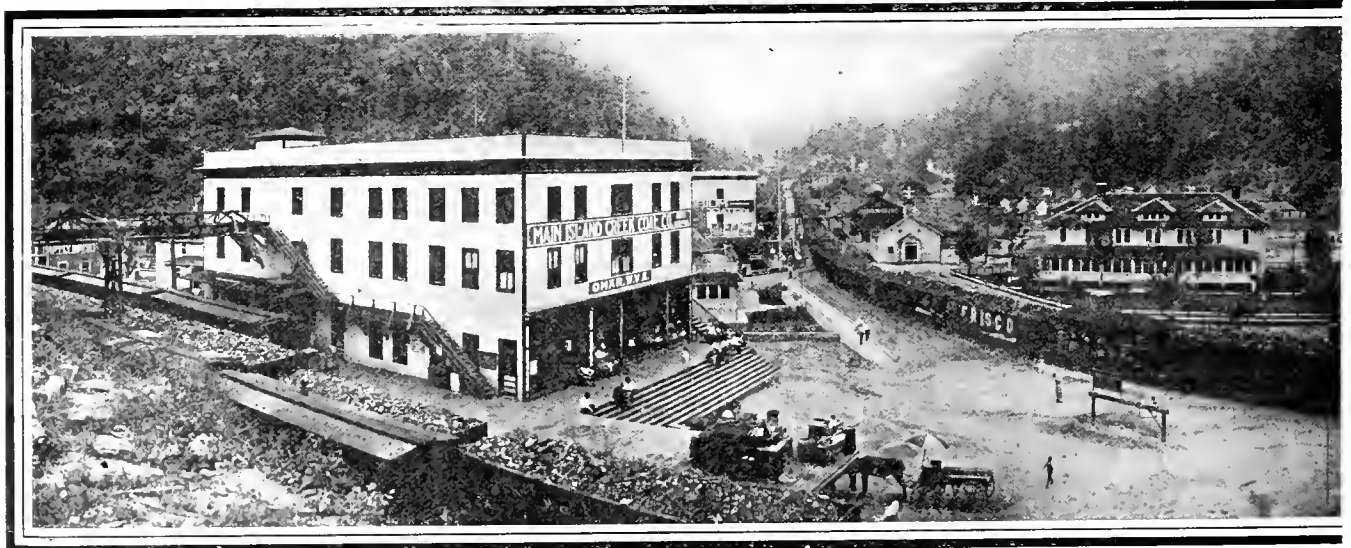


Part of Omar Public School System

Among the many unusual and pleasing features of this progressive community is a spacious auditorium and motion picture theatre, with seating arrangements for 600. Nightly motion picture shows are given at 6:45 and 8:30 o'clock, and it is interesting to note that the best films and film-land's greatest stars appear here.

Resident Physicians and Trained Nurses in Attendance

Dr. K. J. Heatherman, the Resident Physician at Omar, has two assistants, as well as four trained graduate nurses, and his duties include a general supervision over the health of the community and its sanitation.

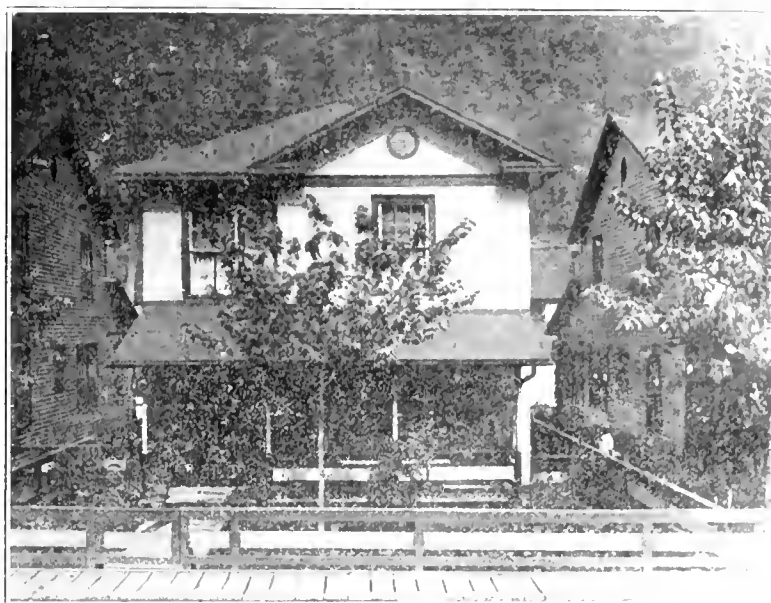


Omar, W. Va., Showing Store, Auditorium, Church and Y. M. C. A. Building

Five Churches. All Well Attended

Omar boasts of three church buildings, one Catholic, one Protestant and one colored, while Micco and Stirrett also have colored churches. The ministers are engaged by the United Community Welfare Organization, the purpose of which is to take care of the spiritual, as well as the charitable, work of the different communities established by the Company.

To properly house the 1,800 employees and their families required the erection of 676 dwellings, which make up the five different mining towns of Omar, Barnabas, Stirrett, Micco and Chauncey, covering a distance of six miles or more along the banks of Main Island Creek.

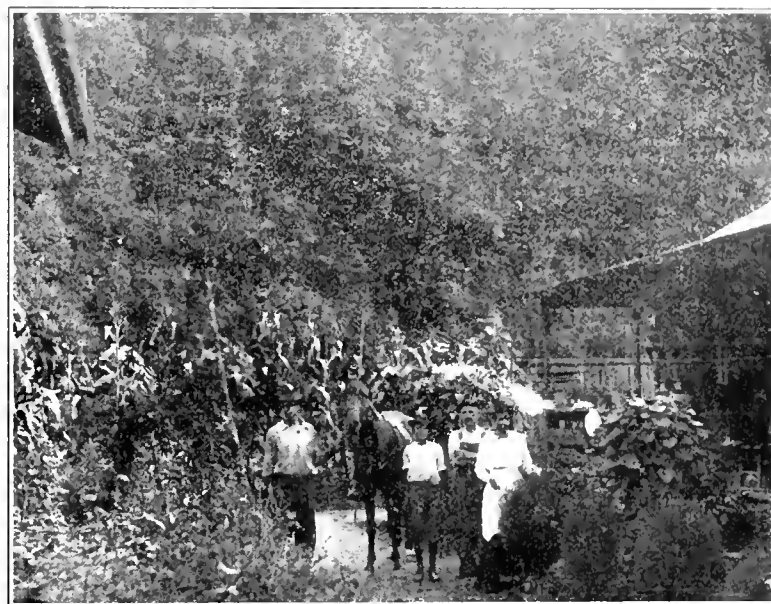


Micco House for Miners

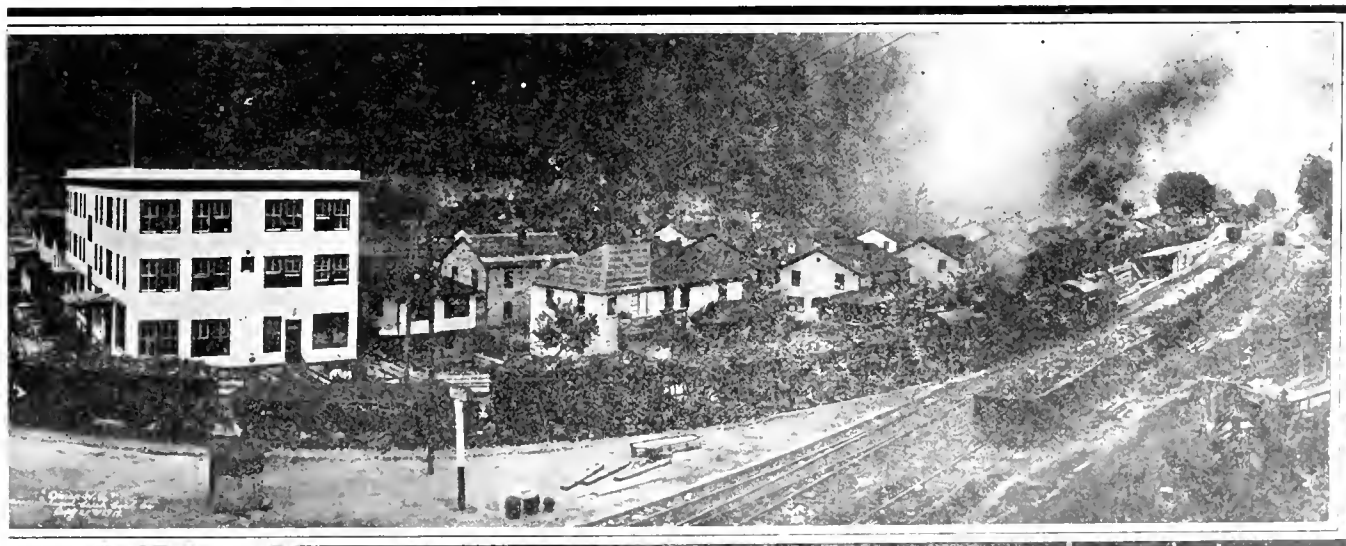
Well Stocked Stores of General Merchandise

To cater to the wants of the 5,000 residents of its various communities the Main Island Creek Coal Company maintains handsomely appointed and well stocked stores in each of its towns, the newest of which is that located at Barnabas, one mile from Omar. This spacious building houses, not only the store, but the recreation department, as well, and in appointments and fixtures ranks with the best in West Virginia.

The stores are conducted for the convenience and protection of the employees and goods are sold at a price that compares favorably with those prevailing in the metropolitan cities of the country. The management has no desire to make these money making enterprises, merely requiring them to pay their way.



Garden at Plant 5 and 6



Omar, W. Va., Showing Office Building, and Portion of Village

MARYLAND NEW RIVER COAL CO.

General Offices

Stephen Girard Building, PHILADELPHIA, PA.

Miners of

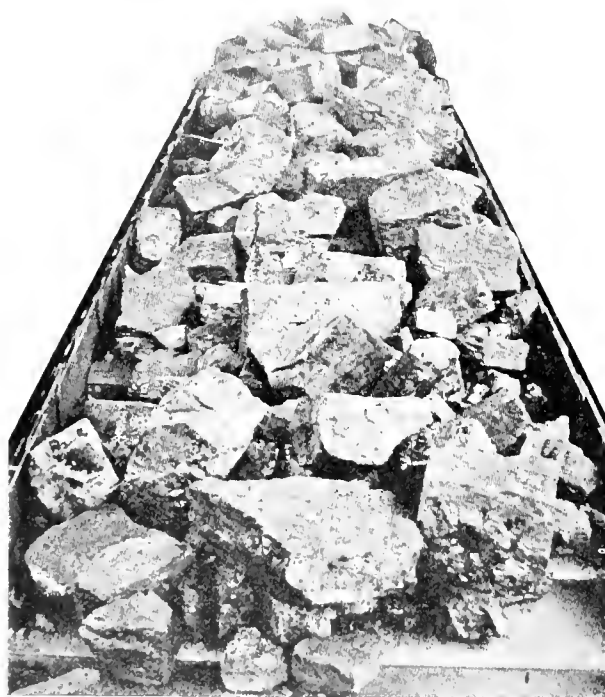
"MARYLAND NEW RIVER" COAL

Exclusive Sales Agents

MARYLAND COAL & COKE COMPANY, PHILADELPHIA, PA.

Mines

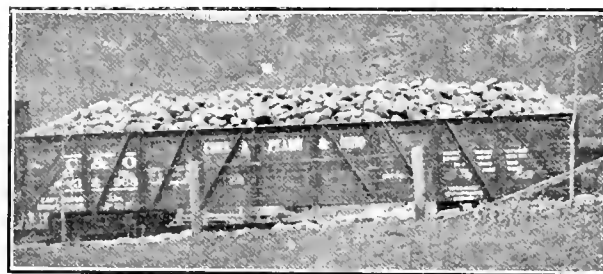
The properties of this Company are located in Fayette County, West Virginia, on the Keeney's Creek Branch of the Chesapeake & Ohio Railroad, and comprise four mines, with a present capacity of 1,500 tons per day. The operations are in the Sewell seam, which has no superior in quality in the New River field. The four mines, known as Smokeless, Boone, Dubree and Rosedale, operate in adjacent territories, and are all located at Winona, West Virginia, and under the management and supervision of Mr. M. L. Garvey, General Manager, with headquarters at Winona, Fayette County, West Virginia. The plants are modern in every respect—are all electrically equipped.



Loading Boom in Operation

Quality

The Sewell seam in this section is unique for its purity and high grade quality, and is coal of strong structure that mines lumpy and carries well. The following figures show the analyses of the coal from these different mines as reported to us by the Engineering Bureau of the Navy Department, whose representatives personally visited these mines in July, 1921, and took channel samples at all four mines, with the following results:



Car of Maryland New River Lump Coal

Smokeless Mine

Ash	2.1 %
Sulphur .....	.48%
B. t. u.'s.....	15,117

Dubree Mine

Ash	1.6 %
Sulphur .....	.52%
B. t. u.'s.....	15,335

Boone Mine

Ash	1.6 %
Sulphur .....	.45%
B. t. u.'s.....	15,230

Rosedale Mine

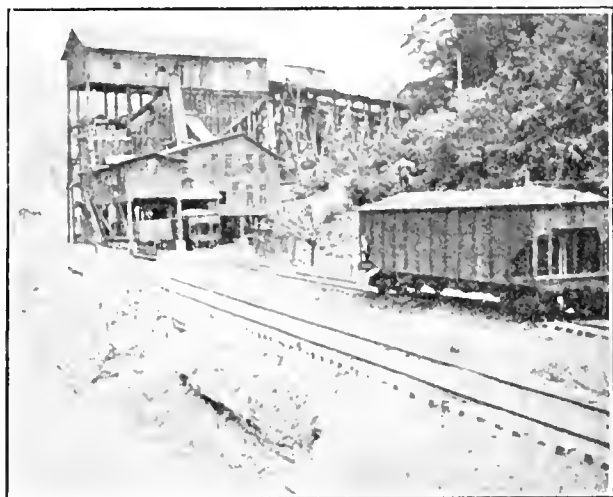
Ash	2.4 %
Sulphur .....	.59%
B. t. u.'s.....	15,175

The original reports are dated July 15, 1921, and are on file in the Company's office at Philadelphia.

Preparation

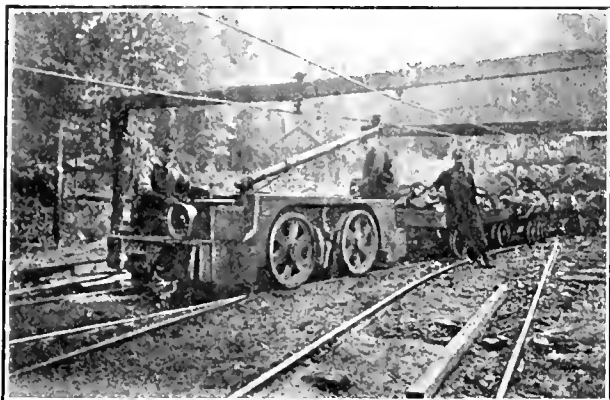
All four of the plants are equipped with modern and efficient screening apparatus, consisting of shaker screens and loading booms. The coal is loaded in four sizes. The Lump coal passes over 4" mesh shaker screen, and the Egg coal passing through 4" and over a 1½" mesh shaker screen, the Nut coal passing through a 1½" and over a 7/8" mesh screen, and the Slack representing the coal that passes through the 7/8" mesh.

The prepared coal is handled over a loading boom let down into the body of the railroad car, thus insuring very careful handling and minimum breakage. The Company further maintains a rigid inspection department in charge of competent inspectors, who supervise the preparation and loading of every car that leaves the operations, and are thus able to guarantee a very high standard of preparation.

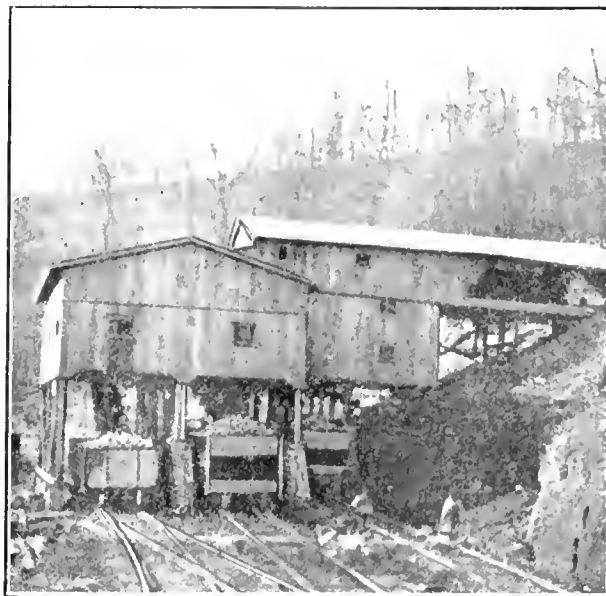


Smokeless Mine Tiptle

The fine coal, passing through the fine mesh screen, makes a most excellent fuel for smithing purposes. A considerable tonnage is loaded in box



Motor With Trip From Boone Mine, Winona, W. Va.



Rosedale Mine Tiptle, Winona, W. Va.

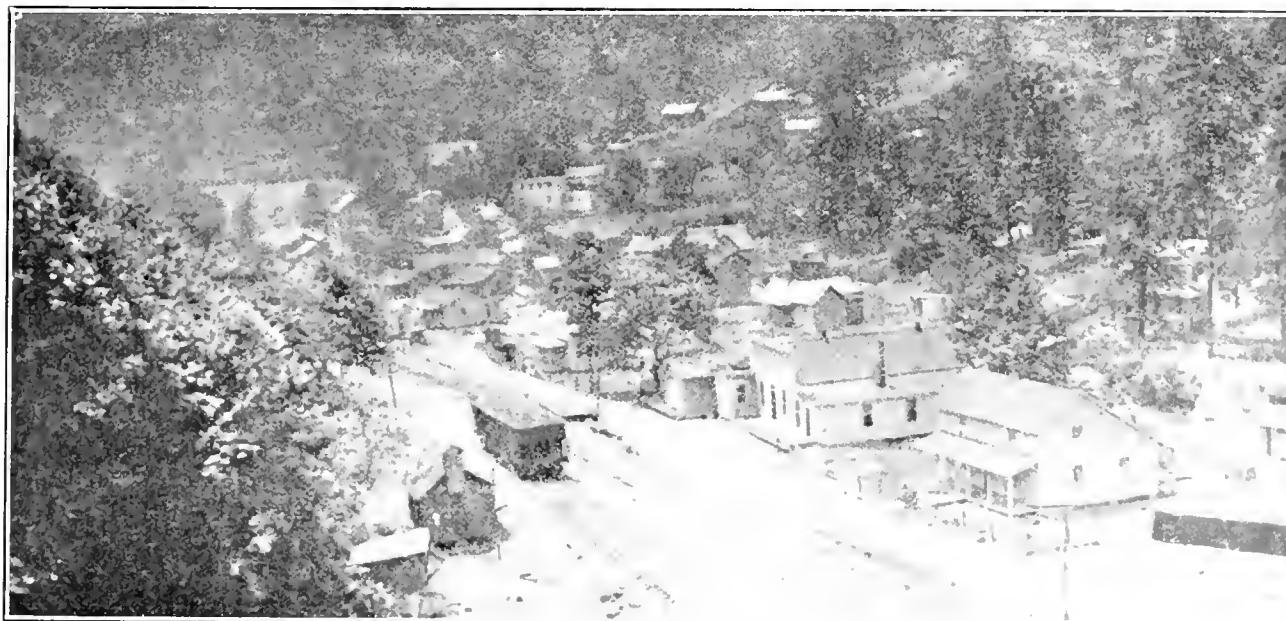
sulphur—in addition to which it has a considerable reputation as a high class steaming coal in many Eastern plants that are equipped with automatic stokers, and can thereby use the fine coal to advantage.

This coal takes the regular New River rates of freight East and West.

Correspondence and inquiries for "Maryland New River" Lump, Egg and Stoker coal should be addressed to the exclusive selling agents: Maryland Coal & Coke Company, Stephen Girard Building, Philadelphia, Pa.

Tidewater Office: Powell Building, Newport News, Va.

"WE CAN'T SELL IT ALL, SO WE SELL THE BEST"

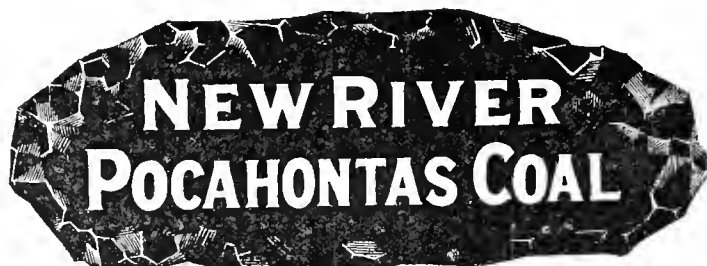


Birdseye View of Winona, W. Va., Showing Commissary and Company Houses

E. C. MINTER COAL COMPANY

BECKLEY, W. VA.

Miners of



Pocahontas No. 3 Seam is one of the standard American steam coals, and, in comparison with foreign coals, takes equal rank with the best Welsh fuels. It is a seam of remarkable purity, running low in both moisture and ash and standing in the first rank with respect to its heat value. The percentage of volatile matter in Pocahontas coal has been found through practical use to be just about the proper amount to assure its complete combustion, which accounts for its greater heating powers than with high volatile coals where much of the volatile gases escape unconsumed.

Francis mine of the E. C. Minter Coal Company in Raleigh County is working in the Pocahontas No. 3 seam, and produces a coal which for high quality measures up to every standard for which this seam is so widely known. An analysis of car sample taken at the instance of the Sewalls Point Coal Exchange shows the following results:

ANALYSIS MINTER COAL

Moisture	1.65
Volatile matter	16.20
Fixed carbon	75.71
Ash	6.44
Sulphur	0.73
B. t. u.....	14,660

The Francis mine is electrically equipped. The coal is brought by electric locomotives to a dump at the foot of an eight degree slope, and from here conveyed to compartment picking tables on the tippie where the coal is thoroughly cleaned and prepared for entering the market as an excellent steam and domestic coal.

SALES AGENCY

Francis mine is located on the Virginian and Chesapeake & Ohio Railroads, shipments taking the Winding Gulf and New River rates.

The MINTER FUEL COMPANY, Beckley, W. Va., are distributors of coal from this mine and will be pleased to quote prices and answer all inquiries relating thereto.

MOHAWK COAL & COKE COMPANY

POWHATAN, WEST VIRGINIA

Miners and Shippers of

The Celebrated Mohawk Seam

SALES AGENTS

LAURENCE E. TIERNEY FUEL COMPANY
Powhatan, West Virginia

Location of Mines

The mines of the Mohawk Coal and Coke Company are located at Mohawk, McDowell County, W. Va., and are served by the Norfolk & Western Railroad, affording a direct shipping route to tide-water and all distributing points for the western and southern markets.

Officials of the Company

The officials of the Mohawk Coal and Coke Company are Laurence E. Tierney, President, and J. J. Tierney, Vice-President, both of whom are so well known in the coal industry of West Virginia as to need no further introduction here.

Capacity of Mine

The Mohawk mine now has an annual capacity of 200,000 tons. A new and strictly modern tippie and conveyor line was last year completed, and with other improvements these new features give Mohawk Coal and Coke Co. unsurpassed mining and shipping facilities.

Coal Mined

The coal mined at the Mohawk mine is from the Mohawk (Eagle) bed, a very important bed from an economic standpoint. This bed averages from 5 to 7 feet in thickness and yields a high grade fuel for both steam and domestic purposes. It is low in sulphur and ash, making it a splendid coal for by-product purposes. Its high heating value makes it excellent for locomotive fuel, general steam purposes and as a domestic fuel.

As evidence of its value as a locomotive fuel, Mohawk coal has been used for 17 years by one railroad continuously.

In addition to being an excellent fuel for the purposes mentioned above, Mohawk coal is recommended for smithing and by-product coking.

Analysis*

From the following analysis of Mohawk coal, its excellent qualities will be readily seen:

Moisture .....	.74
Volatile Matter	29.76
Fixed Carbon	66.20
Ash	3.30
	<hr/>
	100.00
Sulphur .....	.84
B. T. U. per pound dry coal..	14,731

*Analysis made by Pittsburgh Testing Laboratory, Pittsburgh, Pa.

Mohawk Little Seam

The Mohawk Coal and Coke Company also mines the Mohawk Little Seam, a bed of the celebrated "smokeless" variety of coal lying considerably below the Mohawk Big Seam. Coal from this seam is held in the highest regard by general steam users, as the sulphur and ash contents are low and the heating value high, making it very desirable for general steam purposes.

Analysis*

The following is an analysis of coal from the Mohawk Little Seam:

Moisture.....	.62
Volatile Matter	20.62
Fixed Carbon	73.36
Ash	5.40
	<hr/>
	100.00
Sulphur .....	.87
B. T. U. per pound dry coal..	14,521

*Analysis made by Pittsburgh Testing Laboratory, Pittsburgh, Pa.

Preparation and Grade of Coal

The new tippie equipment consists of picking tables and shaker screens, which enables the Company to ship a well prepared coal, free from slate and other impurities. The prepared sizes are loaded into railroad cars by separate loading booms, which insure minimum breakage.

MOORE & HETZEL

Union Trust Building, CHARLESTON, W. VA.

Producers

Dana Coal Company
Pen-Mar Coal Company

H.M.J. Coal Company
March Coal Company

Wholesalers of

**New River and Pocahontas; Kanawha By-Product, Gas,
Domestic, Malleable, Producer Gas and Cannel Coals**

SHIPMENTS BY RAIL OR BY RIVER

Dana Coal—A Domestic Wonder

This coal is mined at Dana, Kanawha county, West Virginia, on the Campbells Creek Railway. Connections are now being made for direct loading on the Kanawha & Michigan Railway, and also for shipping by barges on the Kanawha River.

The seam from which DANA COAL is mined is composed of three distinct strata; the bottom stratum is hard, very bright, and has a mottled fracture; the middle stratum is a gaseous coal with an even fracture; the top stratum is an even fractured splint, and the combined characteristics of its three sections make it a coal that is a DOMESTIC WONDER; in fact there are only three coals in West Virginia that equal it in quality for domestic use.

DANA COAL is mined from a 1,500-acre tract of land which is underlaid by the well known Campbell's Creek Seam. The following analysis was made by the Pittsburgh Testing Laboratory on coal previous to its being cleaned:

Moisture	1.73
Volatile Matter	36.75
Fixed Carbon	55.50
Ash	6.02
Sulphur	0.72
Phosphorus .....	.008
B.t.u.	13,936
Fusion Point of Ash.....	3110° F.

Gas Yield.....5.22 cu. ft. per lb.

Fusion Point

Special attention is called to the extremely high fusion point of the ash, which stands as a guarantee against the formation of clinkers, and makes DANA COAL worth a premium for malleable, producer gas and steam purposes.

In addition to our own tonnage, we have close connections with mines producing the better grades of New River and Pocahontas coals. We solicit your inquiries, pledging ourselves in advance to furnish dependable coals, and an efficient service.

Sizes Shipped

DANA COAL is prepared in sizes as follows: 4" block, 2" block, 4" steam, nut and slack, and straight mine run.

Those responsible for the successful operation of BY-PRODUCT, ILLUMINATING and PRODUCER GAS plants need only glance at the analysis to realize the value of DANA COAL for their use.

Pen-Mar Coal (Coalburg Seam)

Pen-Mar coal is mined at Bream, Kanawha county, West Virginia, on the Charleston division of the B. & O. Railroad. This coal is splendid for steam, domestic, malleable and producer gas purposes. Its high volatile and low ash content also fit it for fine ceramic uses. Its analysis is as follows:

*Moisture	1.09
Volatile Matter	38.14
Fixed Carbon	54.88
Ash	5.89
Sulphur	0.93
B.t.u.	14,100

*From West Virginia Geological Survey report; sampled by C. E. Krebs.

March Coal Company

Coal from the operation of this company, which is in the Stockton-Lewiston seam, is a high grade splint and well adapted for steam and domestic purposes.

H. M. J. Coal Company

This company is developing mines at Hansford, W. Va., in the Stockton-Lewiston seam, 9 feet thick, and the Coalburg seam, 4 feet thick. Both seams show exceptionally clean coal. Both Dana and Pen-Mar Mines are electrically equipped and have modernly equipped tipples.

MT. CLARE COLLIERY COMPANY

Offices

702 Union Bank Bldg., CLARKSBURG, W. VA

J. H. CALLAHAN, Vice President and General Manager

Miners and Shippers of

Celebrated "ALTHEA" Gas Coal

Catering to Inland and Export Trade

Location of Mine

The Althea Mine of the Mt. Clare Colliery Company operates in the Pittsburgh Seam at Byron, Harrison County, West Virginia, on the Baltimore & Ohio Railroad, West Virginia and Pittsburgh Branch. Coal from this mine takes the usual Fairmont freight rate.

Coal Mined

The Pittsburgh Seam at the Althea mine has a splendid development with an average thickness of 84 inches. Throughout the entire field there is a



Loading Coal at Althea Mine

total absence of partings, so that the coal, as it comes to the tipple, is naturally in a very clean condition. Most of the sulphur, peculiar to the Pittsburgh Seam, is found in the form of large balls or lenses, which are easily distinguished and eliminated by the miner, and in the process of loading.

Althea Gas Coal is high in volatile matter, as will be seen from the analysis listed herein. The long flame produced in burning gives it high favor as a coal suited to cement and brick burning. The ash content being very low makes it a coal which is particularly well adapted for producer gas purposes, and much of the output of the Althea mine

is at the present time sold for this purpose. Because of our splendid tipple facilities, whereby the coal can be well cleaned and perfectly sized, Althea Gas Coal has been fulfilling all the requirements of a critical producer gas trade.

Analysis

The following analysis of Althea Gas Coal was made by The Manufacturers' Equipment Co., Engineers, Founders and Machinists, Dayton, Ohio, the sample being dried before analysis.

Volatile Matter	35.80
Fixed Carbon	60.00
Ash	4.20
	<hr/>
	100.00
Sulphur	1.97
B. T. U. per pound	15,128

Mining Methods

Coal at the Althea Mine is undercut by electric chain machines and shot down in coarse sizes, making it especially desirable for domestic and producer gas purposes.

Sizes of Coal

As will be seen from the above analysis Althea Gas Coal is splendidly fitted for general steam and domestic purposes, because of its high heat content. Much of this coal has been recently exported and has found high favor wherever used. The following sizes can be made: $\frac{3}{4}$ " Lump, 1" Lump, $1\frac{1}{2}$ " Lump, 2" Lump, 3" Lump, Nut, Pea, Slack and Run of Mine.

Export Business

In addition to our own tonnage, the Mt. Clare Colliery Company is prepared to secure large tonnages of coal similar to Althea Gas Coal, so that large shipments can be made in short order to Inland and Export Trade.

Labor Conditions

The Althea Mine is favorably located with respect to the retention of a high grade of labor. An interurban trolley line connects it with Clarksburg, W. Va., on a twenty-minute service. At present at the Althea mining camp there are two churches and a graded school. These advantages operate in a way that cause a small amount of labor turnover, and this, in turn, insures a high grade product with uninterrupted service.

THOS. HAGGERTY, Gen. Mgr.

J. G. FRASER, Supt.

W. S. JOHNSON, Sec.-Treas.

THE NEW EXPORT COAL CO.

General Office
CHARLESTON, W. VA.

Shipping Point: Dana, W. Va., K. & M. R. R., Campbell's Creek R. R.
Mines at Perryville, W. Va.

HIGH GRADE BITUMINOUS Steam, Gas, Domestic, and By-Product Coals

Location

The mines of The New Export Coal Company are located at Perryville, Kanawha County, West Virginia, on the Campbell's Creek Railroad, which connects with the Kanawha & Michigan Railroad at Dana.

The company has been operating since the fall of 1916 on a property of 811 acres, 600 acres of which are owned in fee and 211 acres under lease.

No. 2 Gas Coal

The celebrated No. 2 Gas seam is being worked, and on this property ranges from 4½ to 8½ feet in thickness. It is a clean coal with no partings, and is widely noted for its freedom from impurities of all sorts.

The unusually high quality of our No. 2 Gas coal is shown by the low percentage of sulphur and ash in the analysis.

Although the No. 2 Gas seam is the only one now working, there are present on this property the Lewiston seam, averaging 8 feet in thickness; the Kanawha No. 5 Block seam, averaging from 4 to 5 feet in thickness; and the Coalburgh seam, averaging from 3 to 4 feet of clean coal. These

four seams are all capable of commercial development and give an estimated holding of 2,500 acres of high grade coal.

Production

The average monthly production of No. 2 Gas coal is 12,000 tons, but with the completion of improvements now under way this will be increased to 15,000 tons.

Quality of Coal

The quality of No. 2 Gas coal is too well known to need any extended comment, but for the information of industries, by-product plants, sales agencies and retail dealers, we cite an analysis made by the Whittaker-Glessner Steel Company on coal shipped to their Portsmouth, O., plant. The sample was taken by Clark & Krebs, Mining Engineers, Charleston, W. Va.

Analysis

Moisture	1.40
Volatile Matter	39.20
Fixed Carbon	57.75
Ash	1.65
	<hr/>
	100.00
Sulphur	0.66
B.t.u.	14,866

SHIPMENTS: OUR COAL GOES TO THE LAKES, WEST AND NORTHWEST,
AND TAKES THE KANAWHA FREIGHT RATE

New England Fuel & Transportation Co.

Miners and Shippers of
Federal Gas Coal

NEW ENGLAND COAL & COKE CO., SALES AGENTS

General Offices

111 Devonshire Street, Boston, Mass.

Branch Offices

Citizens Bank Building
NORFOLK, VA.

542 Cunard Building
NEW YORK, N. Y.

1305 Continental Building
BALTIMORE, MD.

123 Market Street, JOHNSTOWN, PA.

Mines

The Federal Mines are located in West Virginia, one group at Grant Town, Marion county, on the Baltimore & Ohio Railroad, and the other at Everettville, Monongalia county, on the Monongahela Railroad (New York Central and Pennsylvania Lines).

Both mines produce coal from the celebrated Pittsburgh Seam, having an output at this time of about 1,500,000 tons annually. New properties have recently been opened up, which will result in an annual production of 2,000,000 tons in the near future.

Shipments

Federal Coal may be shipped via all-rail to both Inland Eastern and Western markets, also to the Tidewater loading piers at Baltimore, Philadelphia and New York, under what is known as the Fairmont or Westmoreland rate.

Preparation

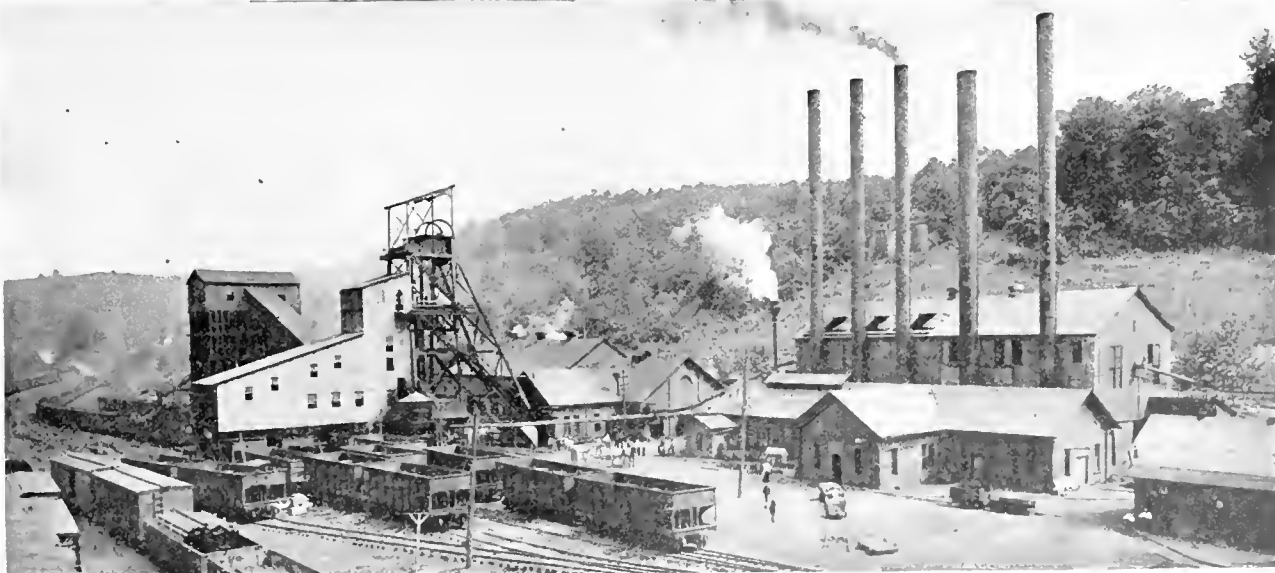
Modern Screens enable the Company to furnish screened $\frac{3}{4}$ size or slack to suit the requirements of the trade, as well as Run-of-Mine.

Analysis

The analysis of Federal Coal from the three-quarter grade will show approximately as follows:

Ash	7.50
Fixed Carbon	54.50
Volatile Matter	38.00
Total	100.00
Sulphur	1.25
B. t. u.'s	14,300

Federal Coal is suitable for the manufacture of illuminating gas, for use in by-product ovens, steel, cement, and brick plants, and for locomotive use; in fact, for all purposes where a strong long flame gas coal is desired.



New England Fuel & Transportation Company Federal Mine No. 1, Grant Town, West Virginia

THE NEW RIVER COLLIERIES CO.

General Offices: 120 Broadway, New York

Miners of

"Admiralty" New River Smokeless Coal

Mines at

SUN, WEST VA.

ECCLES, WEST VA.

Tonnage Produced

The New River Collieries Company is the producer of approximately 1,000,000 tons annually of the celebrated "Admiralty" New River Smokeless coal at its 4 mines located at Sun and Eccles, West Virginia, in the heart of the famous New River coal field.

Seams Mined

Sun and Eccles No. 6 mines of this company are operating in the Sewell seam, and Eccles Nos. 3 and 5 in the Beckley seam, full particulars and description of which may be found elsewhere in this publication.

Car Supply

All of the mines of this company are served jointly by the Chesapeake & Ohio and the Virginian railroads, the coal moving via these roads to Newport News and Norfolk, Virginia, where it is dumped over modern steel loading piers operated by the railroad companies and where prompt despatch is given vessels.

Analysis

The following dry analysis is an average of samples from 17 consecutive dumpings for

account of the United States Navy at Hampton Roads during October, 1918, taken by their Inspectors from actual shipments and not hand picked at the mines:

Moisture (as received).....	1.7%
Volatile Matter (Dry).....	19.1
Fixed Carbon	76.6
Ash	4.3
	<hr/>
	100.00
Sulphur .....	.76
British Thermal Units.....	15,053

Marketing of Coal

The entire output of these mines is marketed through The Chesapeake & Ohio Coal & Coke Company (see their page), which has introduced this coal in the export and bunker trade through its various foreign agencies throughout the world, and in which trades it has met with general approval, successfully competing with the best grades of Welsh coal.

The coal is also sold in the domestic trade inland in the South and Middle West, where it is in great favor as a steam producer.



Top Works at No. 3 Mine, Eccles—This is a Typical Plant of the New River Collieries Company

OHIO & MICHIGAN COAL COMPANY

DETROIT, MICH.



MINERS AND SHIPPERS



LONE STAR COAL

Mines in Logan County, West Virginia.

Coal River Division C. & O. R. R.

Guaranteed for By-Product, Gas and Producer Gas Plants.

Low Sulphur, High Volatile, Low Ash.

Reduce your costs by buying pure coal. Don't pay the prevailing freight rates on the high ash, less efficient grades.

Hard Structure, No Clinkers, High B. t. u.

Unequalled for general steam purposes, and for brick or tile burning, 20 to 25% more efficient than ordinary Bituminous.

We ship 4", 2" and 3/4" Lump, 4"x2" Egg, Mine Run, N P & S and Slack.



BLUE STAR COAL

Mines in Raleigh and Boone Counties, West Virginia.

Cabin Creek Branch C. & O. R. R.

Holds fire like Anthracite. Clean, hard structure. Stocks like wood—no slacking. Better than Pocahontas, and much cleaner. After ignition, only a very light brown smoke.

No Soot, No Clinkers, Intense Heat.

Ignites quickly, requires good draught only at start, then shut off draught and there remains a hot bed of coals—pure carbon—making almost no smoke. It will hold fire and heat for a long period. To replenish fire use coal very sparingly.

A Hard Variety of Soft Coal.

Free Burning, Little Ash, Economical.

Requires less attention in firing than anything except Pennsylvania Anthracite.

We ship 4" Block and 4"x2" Egg.

SALES AGENTS FOR

BLACK HAWK COLLIERY CO.

BIG CREEK COAL CO.

Mines at Big Creek, Logan County, West Virginia.

Guyan Valley Division C. & O. R. R.

Guaranteed Steam Coal

ANALYSIS*

	Black Hawk	Big Creek
Volatile Matter...	41.14	41.37
Fixed Carbon...	52.28	52.09
Ash	6.58	6.54
	100.00	100.00
B. t. u.	14,016	14,004

*Commercial Testing & Engineering Co.

JOHN L. LAWLER & SON.

Famous No. 4 Ohio Coal.

Mines at Minerton, Ohio.

Hocking Valley Ry.

High Quality

Free Burning

Domestic

Steam

WE SHIP LUMP, RUN OF MINE,
NUT, PEA AND SLACK

WE ALSO SHIP

Genuine Plymouth Anthracite

Pocahontas, Mt. Pelee Hocking Coke

Kentucky Queen Smithing

PRESTON COUNTY COKE COMPANY

MORGANTOWN, W. VA.

Mines in Preston, Monongalia
and Barbour Counties, W. Va.

Phone: Morgantown 791

COAL AND COKE

The Preston County Coke Corporation is one of the pioneer organizations of the Morgantown district, having for many years operated the Cascade mine and coke ovens, located at Cascade, Preston county, on the Morgantown & Kingwood (now Baltimore & Ohio) Railroad. During the past few years new mines have been opened, controlling interests have been obtained in other properties and a Sales Department has been instituted whose purpose it is to offer the trade a service and a quality of fuel that shall be uniformly satisfactory.

COAL—UPPER FREEPORT

Our Cascade, Murphy and Hawley mines are all located at Cascade and operate in the Upper Freeport seam. Coal from the first mentioned mine is practically all converted into coke, but the other two properties are sufficiently developed at this time to produce about 800 tons of coal daily. The Upper Freeport coal, as mined here, is especially adapted for steam purposes where automatic stokers are used. It can be shipped either as run-of-mine or as crushed coal, crushers being provided on each tippie for this purpose.

In addition to the above tonnage we control the output of the Green Ridge Coal Company, also operating in the Upper Freeport seam. This mine produces a straight run-of-mine coal of the same high quality as the Murphy and Hawley mines. Shipments originate on B. & O. R. R.

COAL—PITTSBURGH AND SEWICKLEY (MORGANTOWN GAS)

Through sales arrangements we offer the output of the Shriver Coal Company, whose mine has a capacity of 600 tons daily, produced from the Pittsburgh and Sewickley seams. This coal runs higher in volatile matter than the Upper Freeport and is known to the trade as Morgantown Gas coal. It is a good steam coal and is especially adapted for domestic use and cement manufacture. The tippie is well equipped and shipments can be made in lump, run-of-mine or slack sizes. Shipments originate on Pennsylvania Railroad.

PRESTON COUNTY COKE

At the Cascade mine, already referred to, are located 194 beehive ovens which for a long period of years have supplied Eastern trade with an exceptional quality of coke. It is made in both Foundry and Furnace grade and is equal to that made in the Connellsville district. In fact, due to its hard cellular structure, it has been reported as being able to carry the burden in the furnace or cupola better than most of the Connellsville coke. Preston County Coke is also very low in sulphur.

FREIGHT RATES

For coke shipments we have the advantage of a 20-cent freight differential to Eastern points as compared with the Connellsville district, with the same rate to Western points.

On coal shipments Fairmont and Cumberland-Piedmont rates prevail.

Through sales arrangements we offer the output of the Marteny Coal Company with mines at Boulder, W. Va., with an output of 300 tons daily produced from the Kittanning seam. This coal runs high in Volatile and low in Sulphur and Ash and is an excellent coal for by-product coking.

ROSEDALE COAL COMPANY

General Office: MORGANTOWN, W. VA.

Miners of

"Rosedale" High Volatile Coals

BLUE FLAME FUEL COMPANY, Morgantown, W. Va., Exclusive Agents

New York Office, 143 Liberty Street

Organization

The Rosedale Coal Company was organized in 1917 and at once began the development of a large acreage of Pittsburgh coal at a point on the Monongahela River, a few miles below Morgantown. In addition to the Pittsburgh seam, there are also available on this property the Sewickley and Redstone beds, the three seams making one of the finest tracts of steam coal possible to find.

Following close after this original enterprise, Rosedale No. 2 mine was opened. This mine is located at Poland, Greene County, Pennsylvania, just across the West Virginia state line, and is working in the Sewickley seam, with a thickness of 59 inches.

"Rosedale" Coal

"Rosedale" coal is a free-burning high volatile product and from the very beginning has been readily accepted by the trade as a steam coal of exceptional quality. This coal is particularly adapted for locomotive fuel use, as will be attested by the statement that the demand from railroads during the past four years has been so steady that we have been able to operate our mines without stoppage. Being a high-volatile high-heat coal, it may also be used to advantage by cement mills, canneries and for stokers. In a pulverized form it is well fitted for steam generation by means of atomized fuel.

Analyses

Two analyses are here given, one made by the Commercial Testing & Engineering Company on a car sample taken at the mine by their representative, and the other by a customer on a car sample taken at destination.

Car Sample at Mine

Moisture .....	.90
Volatile Matter	34.65
Fixed Carbon	59.35
Ash	5.10
	<hr/>
	100.00
Sulphur	2.10
B. t. u.	14,100
Fusion point of Ash.....	2300 to 2400° F.

Car Sample at Destination

Moisture .....	.92
Volatile Matter	34.75
Fixed Carbon	58.83
Ash	5.50
	<hr/>
	100.00
Sulphur	2.30
B. t. u.	14,240

Sizes and Preparation

Run-of-mine, $\frac{3}{4}$ " lump and slack are the three sizes of coal shipped. Clean coal is the rule at all times and our cars are subject to the most rigid inspection.

Sales Connections

The daily capacity of the Rosedale mines, amounting to 1,500 tons, is sold through the Blue Flame Fuel Company, Morgantown, W. Va. With one union and one non-union mine, we can always supply the trade in times of peace or strike. Shipments made promptly. Both mines are located on the Monongahela Railroad and shipments are made by way of the Pennsylvania Lines and the New York Central Railroad.

RALEIGH-WYOMING COAL COMPANY

209 Professional Bldg.
CHARLESTON, W. VA.

MINE NO. 1

Edwight, W. Va., C. & O. R. R.

Rite Coal—Eagle Seam

RITE COAL

MINE NO. 2

Glen Rogers, W. Va., Virginian Ry.

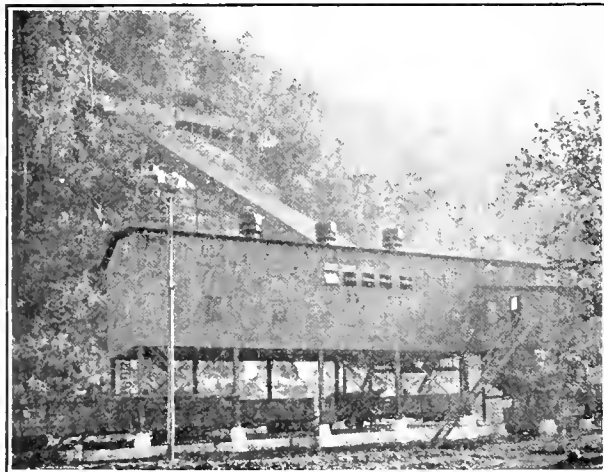
Beckley Seam reached by
700 ft. shaft

Since we cannot take every reader of this book to Edwight to have him examine this mine, where an unusual seam of Eagle coal exists and is mined by the most modern equipment, we endeavor by the accompanying pictures to show our plant where Rite coal is produced.

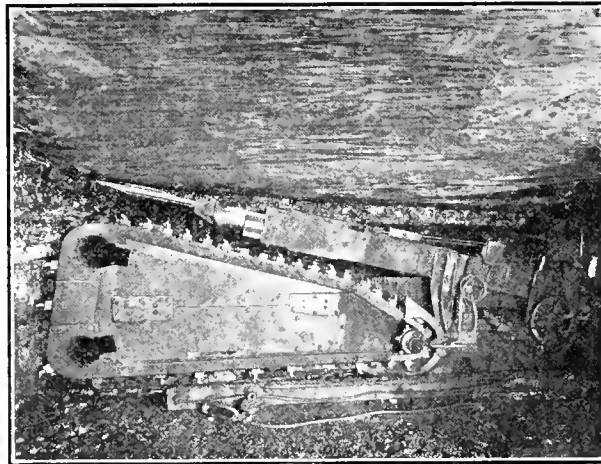
The analysis of a vein sample made by Messrs. Andrew S. McCreath & Son of Harrisburg, Pa., shows the following results:

Moisture	2.050
Volatile Matter	28.749
Fixed Carbon	65.596
Ash	3.605
	100.000
Sulphur .....	.616
Phosphorus .....	.003
Fusing point ash.....	2525 F.
B.t.u. (dry)	15,086

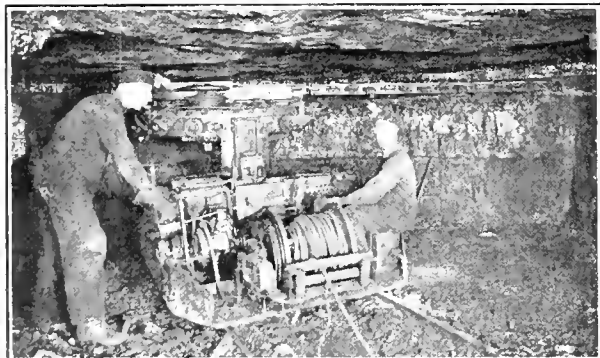
Next year we will present the views of our No. 2 Mine, which will have hoisting equipment to handle 1,000 tons per hour from a shaft nearly 700 feet deep.



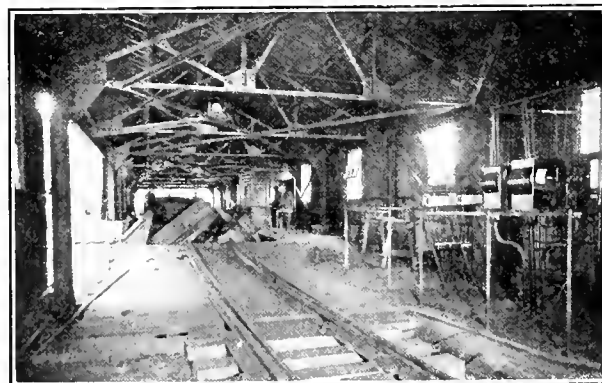
General view of plant, showing head house containing a rotary dump, the flight conveyor of 4,000 tons daily capacity, and three-track tipples equipped with picking tables and loading tucks.



Entry driver, which mines and loads coal without the use of explosives, insuring desirably large lumps for domestic use.



A wall machine cutting immediately above slate parting, which is removed before shots are fired with the view of decreasing ash.



Head house, showing rotary dump.



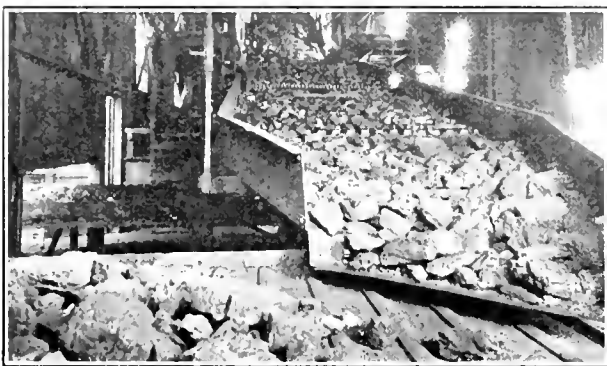
Mine car built for loading with least breakage, carrying 5½ tons of coal.



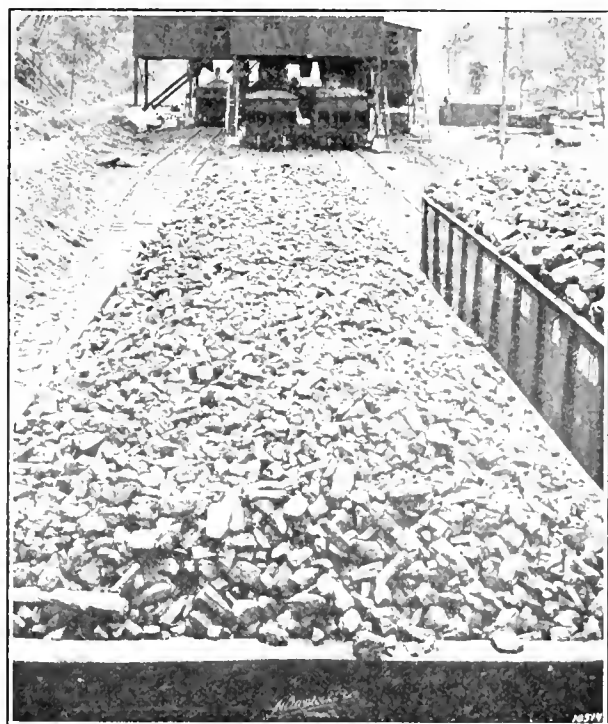
Standard lump made over 3"x8" step screen.



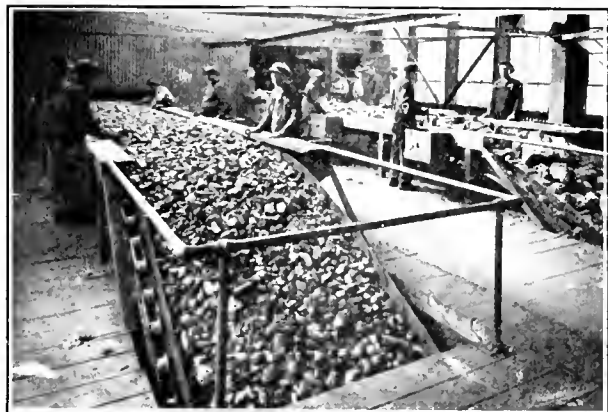
Coal discharging from inspection table on flight conveyor of 4,000 tons daily capacity. Note coarse character of coal.



Foot of flight conveyor with shaker screen and picking tables.



Standard egg free from slack and impurities.



Picking room with lump table on right and egg table on left.



All slack shipped is sampled and analyzed daily to keep the management informed on ash content of coal sold.

JUSTUS COLLINS, VICE PRES.
CHARLESTON, W. VA.

GEO. P. DANIELS, Vice Pres. & Genl Mgr
NEW YORK

GEO. R. COLLINS, Vice Pres. Secy. & Treas.
CHARLESTON, W. VA.

Smokeless Fuel Company.

MINERS & SHIPPERS

NEW RIVER & POCAHONTAS

SMOKELESS COAL

KANAWHA BANKING & TRUST BUILDING

Charleston, W. Va.

SHIPPING WHARVES
NEWPORT NEWS, VA
LAMBERTS POINT, VA
SEWALLS POINT, VA

NEW YORK
CHARLESTON, W. VA.
CHICAGO
NORFOLK, VA
LONDON, ENG.

H. D. EVERETT, SALES MGR
CHARLESTON, W. VA.
LEWIS LITTLEPAGE, EASTERN MGR
NORFOLK, VIRGINIA

CABLE ADDRESS: "MILTRENA, NEW YORK"
A B C CODE 5TH EDITION
SCOTTS CODE 10TH EDITION

"MILTRENA" COALS

Probably the best known mines in the original Pocahontas field are the Greenbrier and Louisville Collieries, located at McDowell and Goodwill—these operations producing a very considerable annual tonnage, from the genuine No. 3 Vein, strictly Navy Standard, Pool No. 1 Coal. Equipped with modern tipples, washeries, shaker screens, picking tables and loading booms, the prepared sizes of Lump, Egg and Nut command a large following in the Domestic market, and seldom does the supply equal the demand.

Our Superior Pocahontas Collieries Nos. 1, 2 and 4 at Davy, W. Va., also produce Navy Standard Coal, moving largely to the U. S. and foreign Governments through Hampton Roads, and to by-product plants in the West, where only the purest coal, showing the lowest Volatile, Ash and Sulphur content, will be used for the mixture in the by-product ovens of the large steel, gas and chemical plants.

At Winding Gulf, W. Va., we ship coal on two railroads, the Virginian and C. & O., to the extent of half a million tons annually. Here the Beckley seam is mined, and all mines are known as Navy Standard operations. These mines are right at the top of the list in point of production, being among the largest in the Winding Gulf district. At No. 2 mine, on the C. & O., all sizes are produced, and every facility is had for properly preparing the coal for Domestic trade.

While this company is known primarily as miners and shippers of "Miltrena" Smokeless coals from the Pocahontas and New River fields, it acts as exclusive Sales Agents for selected mines in the Kanawha and Logan County High Volatile district, providing ample tonnage of gas, by-product, steam and domestic coal for Inland and Export markets.

We are also exclusive agents for "Delparen" Anthracite and "Delparen" Briquets, produced at Parrott, Pulaski county, Virginia. The Anthracite sizes are in large demand throughout the Southern Atlantic States, and the Briquets, being manufactured from pure, fresh mined coal, have been favorably received East, South and West, where there is now a ready market for this high-class product.

The Virginia & Pittsburgh Coal & Coke Co.

General Office, FAIRMONT, W. VA.

Producers and Shippers of

"LINCOLN COAL AND COKE"

Mines Operated

The Virginia & Pittsburgh Coal & Coke Company operates the Kingmont and Morgan mines, both operations being in the Pittsburgh seam of coal and in the Fairmont region of West Virginia.

Kingmont Mine

The Kingmont mine, located on the Baltimore & Ohio Railroad, produces the widely known "Lincoln" coal and coke. This mine was opened in 1891, and although in continuous operation for almost 30 years, there remains sufficient coal to insure another score of years to the life of the property.

"Lincoln" coal gained its prominence in coal circles by virtue of its high volatile and low sulphur contents. As a gas coal, it has been long used in large Eastern cities and by its uniformity in quality has more than held its own against all competition.

Because of its purity, it is also recommended for use in metallurgical processes, for by-product coking, and in the burning of fine pottery ware.

"Lincoln" coal makes a fine brand of coke, suited for blast furnaces and general purposes. There are 67 bee-hive coke ovens at the plant, which produce a high grade of coke, well up to the standard of the Connellsville district of Pennsylvania.

Preparation of Coal

Careful preparation at all times assists in maintaining the reputation of "Lincoln" coal. Shipments are made of the following sizes:

Run of Mine; 1½" Lump; ¾" Lump; Slack and Nut.

Analysis

The analysis of "Lincoln" coal, as given in Bulletin No. 22 of the Bureau of Mines, is:

Moisture	1.75
Volatile Matter	36.77
Fixed Carbon	55.14
Ash	6.34

Sulphur	100.00
B. T. U. per pound .....	.90
	14,197

Morgan Mine

The Morgan mine is located on both the Baltimore & Ohio and the Monongahela Railroads. It taps a fine field of approximately 1,000 acres of 8 foot Pittsburgh coal. This coal is known under the trade name of "Morgan Gas Coal" (Pools 63 and 64), and is an excellent coal for steam, domestic, potteries, brick burning, cement works, gas and by-product uses. The mine is equipped with electric haulage and mining machines and has a daily capacity of 1,500 tons.

Analysis

The following is an analysis of coal from the Morgan mine, as reported by the West Virginia Geological Survey, Report of 1913:

Moisture	1.91
Volatile Matter	36.68
Fixed Carbon	55.81
Ash	5.60

Sulphur	100.00
B. T. U. per pound	1.54
	14,190

Sizes Shipped

The Morgan mine produces Run of Mine, 2" Lump, 3" Lump, ¾" Lump, Slack or Nut, and Slack mixed.



VIRGINIA FUEL COMPANY

INCORPORATED

Miners and Shippers

Mine Offices:

D. H. Pritchard,
Manager of Sales

Gas, Steam and Domestic Coals

Huntington, W. Va.
Bramwell, W. Va.

Union Central Bldg., CINCINNATI, OHIO

The Virginia Fuel Company, Inc., was organized by the Pritchard Companies of Huntington, W. Va., to serve as the distributing agency for their various operations in West Virginia and Kentucky.

The advantages to the consumer, who contracts or buys according to his current needs, from a Sales Agency having connections through ownership in coal properties, is apparent in that there is but a single responsibility. When, as in our case, the output of a number of mines is at our disposal an additional advantage appears in that there is a certainty to promised deliveries of coal—an assurance that is appreciated by both large and small consumers.

In order to make possible quick shipments of large tonnages, and for the further and all-important reason of providing regularity of employment, we have at several of our mines storage bins with large capacities. These reserve supplies not only permit us better to serve the industries and railroads, but are of particular value in enabling us to assemble coal from our properties for shipment to various tide-water points, as Hampton Roads, Charleston and Jacksonville, and also for Lake points.

Our West Virginia mines are located on the Norfolk & Western and Chesapeake & Ohio Railroads, and our Kentucky mines on the Louisville & Nashville Railroad. Opportunities for car service and shipments afforded by three of the leading carriers of the country have been of much assistance in our satisfactory dealings with the trade.

WEST VIRGINIA MINES

Burnwell Coal & Coke Company

Although the Burnwell mine is located in Pike County, Kentucky, all coal is brought to the West Virginia side over the covered bridge shown in the illustration on opposite page. The Pond Creek and Alma seams are mined and produce an excellent By-Product and Steam coal. As a By-Product coal it has stood the test for over 7 years, being used by the Semet-Solvay and Milwaukee Coke & Gas companies. Its high fusion point of ash, 2775° F., stands as a guarantee against clinkering under all ordinary conditions. Classified in Pools 5 and 7 for Export.

Analysis "Burnwell" Coal*

Moisture	1.29
Volatile Matter	34.55
Fixed Carbon	60.42
Ash	3.74
Sulphur	0.62
B. t. u.	14,618

*F. C. Brohman, Analyst.

Long Flame Coal Company

The Long Flame mine is located in Logan County, West Virginia, and mines the Eagle seam. This is a coal of remarkable purity and is well qualified for such uses as burning fine ceramic ware, malleable, by-product coking and manufacture of illuminating gas. It is used by several of the well known by-product coking plants and in a large number of gas producing stations.

Analysis "Long Flame" Coal*

	Dry Basis
Volatile Matter	35.23
Fixed Carbon	61.30
Ash	3.47
Sulphur	0.70
Moisture	0.80

*Analysis reported by New England Coal & Coke Company.

"Long Flame" coal is shipped in all sizes and given a thorough preparation by means of shaker screens, picking tables and loading booms.

KENTUCKY COALS

Algoma Block Coal Company

The No. 7 seam is mined by this company at Lothair, Perry County. A large blocky coal is produced, hard in texture and fully able to stand shipment and stocking without much breakage. Retailers are partial to "Algoma Block" coal because of the small amount of wastage in small sizes. It is also a splendid coal for general steam usage.

A 1,200-ton storage bin, located 150 feet from the tipple, is a feature of this plant. Coal from the bin is carried by conveyors to the picking tables on the tipple, where all refuse is cast out prior to loading into the cars.

Analysis "Algoma Block" Coal*

Moisture	Dry Basis
Volatile Matter	40.17
Fixed Carbon	56.14
Ash	3.69

Sulphur	0.45
B. t. u.	14,639

*Commercial Testing & Eng. Co.

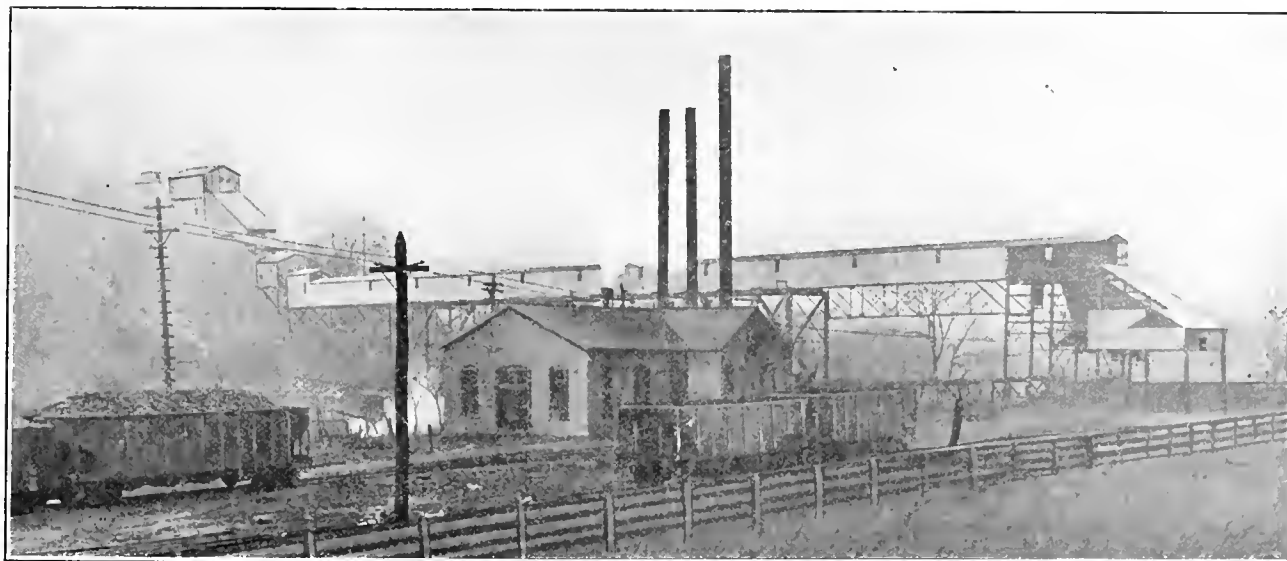
Superior Harlan Coal Company

The Kellioka mine of this company produces a fine by-product, gas, steam and domestic coal, mining being done in the Kellioka seam. All coal is sized and prepared with modern equipment. The sizes shipped are 4" block, 2" x 4" egg, 2" lump and mine run. A storage bin with capacity of 800 tons is a part of the tipple equipment.

Analysis "Superior Harlan" Coal

Moisture	1.44
Volatile Matter	38.04
Fixed Carbon	55.68
Ash	4.84

Sulphur	0.75
B. t. u.	14,338



Tipple and Power House, Burnwell Coal & Coke Company

WINIFREDE COAL COMPANY

Mine Office
Winifrede,
Kanawha County,
W. Va.

General Office
First National Bank Bldg.
CINCINNATI, OHIO
FRANK B. STEWART, President

Branch Sales Offices
Chicago
Philadelphia
Norfolk

TRADE "WINIFREDE COAL" MARK

Organization

The Winifrede Coal Company was organized in 1882 for the purchase and operation of a tract of coal and timber land, consisting of 15,000 acres in Kanawha and Boone counties and lying in the heart of the high volatile Splint Coal District of West Virginia.

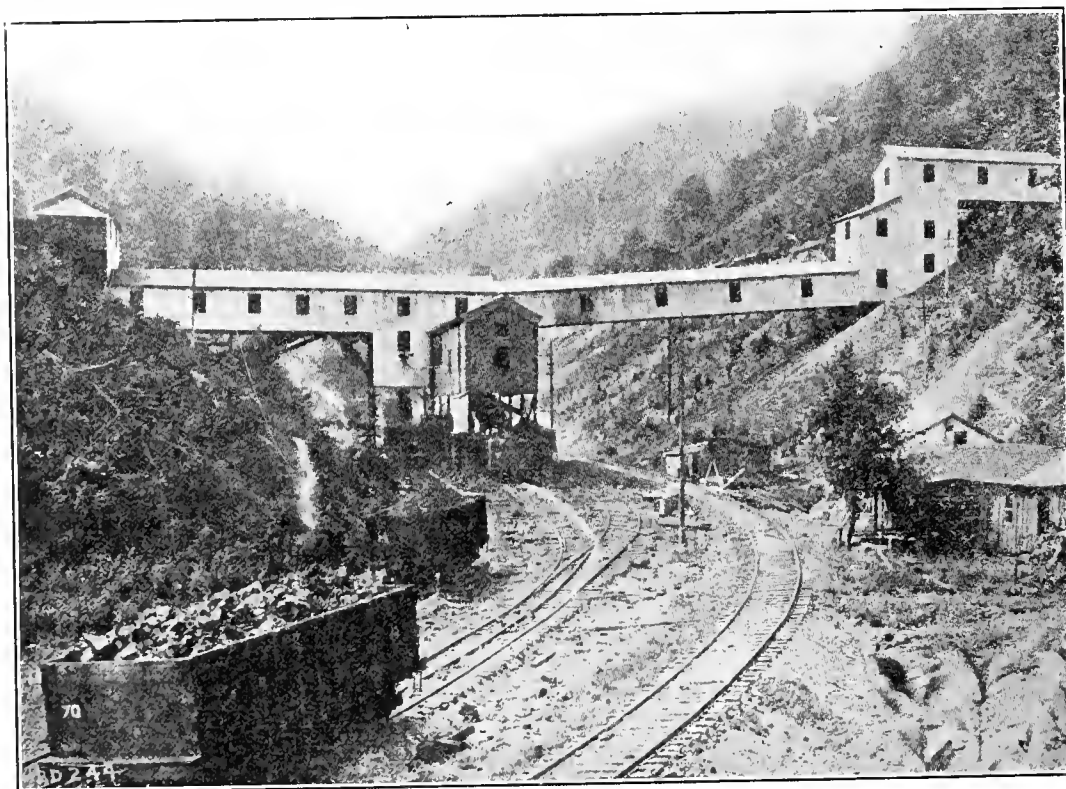
Underlying the property are five seams of coal, ranging from three to six feet in height, and with an estimated recovery of 150,000,000 tons of coal of exceptional quality. In a period of almost 40 years, during which shipments have been made from this property, "Winifrede Coal" has demonstrated its utility in a variety of usages, and has become the acknowledged standard of all West Virginia splint coals, both in quality and in preparation.

Preparation of Coal

Every attention is given to producing a clean and well sized quality of coal, ranging in size from washed pea to the largest lump.

Inspection of coal begins inside the mine, and follows it through the successive stages of dumping, screening and picking. Shaker screens are used for sizing, and picking tables make possible a separation of such refuse as may have escaped the vigilance of the loader inside the mine. Loading booms are a part of the equipment and serve to lay the coal in the cars with a minimum of breakage.

The screenings are carried to the washeries, located on the banks of the Kanawha river, where a final separation of impurities is made, and the coal sized into Egg, Nut and Pea.



The New Steel, Three Track, Double Tippel of the Winifrede Coal Company. This Tippel Serves Two Mines and Its Mechanical Equipment is Complete. Capacity 300 Tons Per Hour.

Mines Operated

Six mines are operated at Winifrede as well as a thoroughly equipped new modern all-steel Washery Plant, erected at a cost of over \$100,000. In addition to this we own and control the operations of the Belmont Coal Company, at Crown Hill, W. Va., producing the well known Coalburg, and Lewiston Coals. Combined capacity of mines, 600,000 tons annually.

As evidence of the superior quality of Winifrede Coal, we quote from the report of Mr. I. C. White, State Geologist of West Virginia:

"The coal mined from the Winifrede Seam has won for itself a reputation for purity and effectiveness as a steam producer as well as a good domestic fuel that is second to none in the country. The mixture of pure Splint and richly bituminous coal in this bed is such that it furnishes an ideal fuel."

Domestic Coal

Winifrede coal was originally marketed as a domestic fuel and still retains its high reputation in circles where a hard blocky coal is wanted. In general characteristics it resembles anthracite, in that in addition to its hardness, it holds fire over night and stocks with a minimum amount of degradation.

WINIFREDE LUMP is big and blocky and stocks like cannel.

WINIFREDE WASHED EGG is shaker screened, washed and sprayed. It is an ideal fuel for cook stoves and ranges.

BELMONT LUMP is especially prepared, hard and chunky, stocks well and holds fire over night.

Steam Coal

Winifrede coal contains over 93 per cent. and Belmont coal over 95 per cent. of combustible matter, and the heat value ranges from 14,500 to 15,000 B. T. U.'s per pound of coal.

Moreover, it burns to a fine ash and does not form clinker, or in any wise obstruct the flow of air through the grate bars. The fusion point, as will be noted from the analyses, is safely beyond the temperature at which slagging of ash takes place.

WINIFREDE WASHED PEA is unequalled for the generation of steam, and is particularly well adapted for underfeed furnaces and automatic stokers.

BELMONT MINE RUN, containing less than 1 per cent of Sulphur, is a good steam producer.

Analyses of Winifrede and Belmont Coal*

	Winifrede	Belmont
Moisture	0.97	1.02
Volatile Matter...	38.96	40.70
Fixed Carbon.....	54.35	54.64
Ash	5.72	3.64
	100.00	100.00
Sulphur	0.48	0.57
B. T. U.	14,571	14,879
Fus. Point of Ash	2714° F.	2894° F.

*Analyses made by Pierce & Tolman, Charleston, W. Va.

Gas Coal

Winifrede gas coal, from the Winifrede and the Peerless seams, has long been recognized as having exceptional quality, due to its high thermal value and the low percentage of Sulphur and Ash.

One long ton of Winifrede coal should produce the following: 10,750 feet of coal gas, having a thermal value of 699 B. T. U.'s per cubic foot of gas, or 15,032 B. T. U.'s per pound of coal.

As a by-product coal, the indicated recoveries are 1,412 pounds of coke, 218 pounds of coal tar, and 147 pounds of Ammoniacal Liquor per ton.

Coal from the Arbuckle mine, operating in the Winifrede and Peerless seams, shows the following analysis:*

Moisture	1.63
Volatile Matter	42.24
Fixed Carbon	54.29
Ash	1.84
	100.00
Sulphur	0.85
B. T. U.	15,032

One ton of Arbuckle coal should produce: Coke, 1,412 lbs.; Coal Tar, 218 lbs.; Ammoniacal Liquor, 147 lbs.; Coal Gas, 10,750 cubic feet.

B. T. U.'s per cubic foot of gas, 699.

Producer Gas Coal

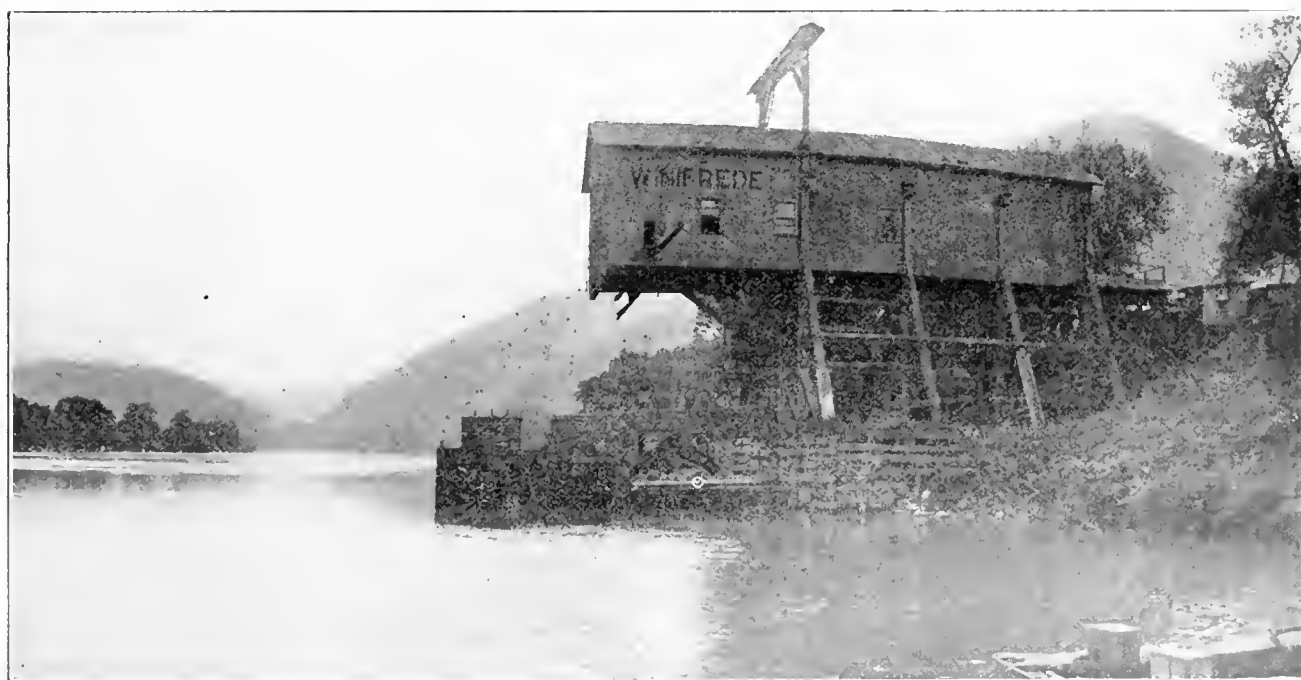
For the manufacture of producer gas, we recommend our WINIFREDE WASHED EGG and BELMONT Mine Run. Mine and Winifrede No. 2 as well adapted for all kinds of forging.

Smithing Coal

Because of its high heat value, low sulphur and its moderate coking tendency, we specify coal from our No. 5 Block Shipments

Shipments from the mines of the Winifrede Coal Company are made by rail on the Chesapeake & Ohio Railroad, and by water on the Kanawha River.

For this latter purpose, we maintain a fleet of coal barges, as well as pump boats, dry docks and other miscellaneous equipment incident to the operation of the river business. For the building and repairing of barges and other river equipment, there is an elaborate construction and maintenance plant.



The River Tipple of the Winifrede Coal Company, on the Kanawha River, a Few Miles Above Charleston. The Company Operates Its Own River Fleet of Barges and Towboats and Reaches All the River Markets From Charleston to New Orleans.

WINCHESTER COAL COMPANY

Elk Bridge Building,
CLARKSBURG, WEST VIRGINIA

Miners of

High Volatile Pittsburgh Seam Coal
Medium Volatile Freeport Seam Coal

The Winchester Coal Company markets the output of its own mines operating in two of the best-known seams in northern West Virginia.

WINCHESTER MINE

The Winchester mine is located at Enterprise in Harrison County with openings in the Pittsburgh seam, which at this point has a thickness of from 7 to 9 feet. The mine is electrically equipped and all coal undercut by machines. This, in conjunction with the great thickness of the bed, assures a maximum of lump in every car shipped.

The output of this mine is a high-grade high-volatile coal that is especially adapted for all steam purposes. Because of its volatile content being above the average, it is in high favor for railroad fuel, canneries, brick burning and all usages where a quick-burning high-heat coal is required.

VIRGINIA MINE

Virginia mine operates in the Upper Freeport seam at Arden in Barbour county. The coal, which is of medium volatile rank, ranges from 4½ to 6 feet in thickness and partakes of all the good qualities for which this seam is noted. All shipments are made over the Baltimore & Ohio Railroad.

Winchester-Freeport coal is an excellent fuel for railroad and general steam purposes. With a volatile content slightly less than 30 per cent, it makes a fuel which is easy to handle and has a reputation for giving full satisfaction wherever tried.

When in the market, write our Clarksburg office and we will be glad to make you our best prices.

WHITE OAK COAL COMPANY

General Offices, Macdonald, West Virginia

Exclusive Miners and Shippers of



"White Oak" New River
Smokeless Coal



15 MINES—PRODUCING 3,000,000 TONS ANNUALLY

SHIPMENTS VIA BOTH CHESAPEAKE & OHIO AND VIRGINIAN RAILWAYS

Location of Mines

The smokeless coal fields of West Virginia cover a very restricted area in the southwestern part of the state and the mines of this Company are located in the heart of the famous New River Smokeless Coal Field, being situated in Fayette and Raleigh counties. All mines produce coal from the



General Office Building at MacDonald, W. Va.

famous "Sewell" Seam, which coal has been recognized for forty years as being the premier high carbon, low ash, low volatile fuel of the United States as measured by efficiency and quality. Eleven of the mines are served jointly by the Chesapeake & Ohio and Virginian Railways, four are served by the Chesapeake & Ohio alone. The Company has 25,000 acres of this coal developed, producing 3,000,000 tons annually and has 30,000 acres of undeveloped coal land in reserve in this district. The favorable location of these mines permits tidewater shipments to be made either to Sewalls Point Piers on the Virginian Railway or Newport News Piers on the Chesapeake & Ohio, and also assures a better car supply to these mines.

Quality of Coal

The United States Government in Bulletin 76, Department of the Interior, says: "Some of the New River coals show heating values of 15,000 b. t.

u. and 3.5 ash, but that the average grade is about as follows:

Moisture	2.50
(Dry Basis)	
Volatile Matter	19.00
Fixed Carbon	76.00
Ash	5.00
	100.00
Sulphur .....	.55
B. T. U.	14,900

During the war the trade learned and realized the superiority of New River coal over all other kinds of fuel, and a great many dealers and consumers handling "White Oak" have established a feeling of reliability in their trade due to the superiority of White Oak over other New River coals on the market. Being superior to any other smokeless coal it naturally commands the preference in the steam and domestic markets. The excellent quality of this coal is due to the careful supervision and inspection given the mining and preparing of this coal for market. This supervision



Inspecting Coal as it Comes From Loading Rooms

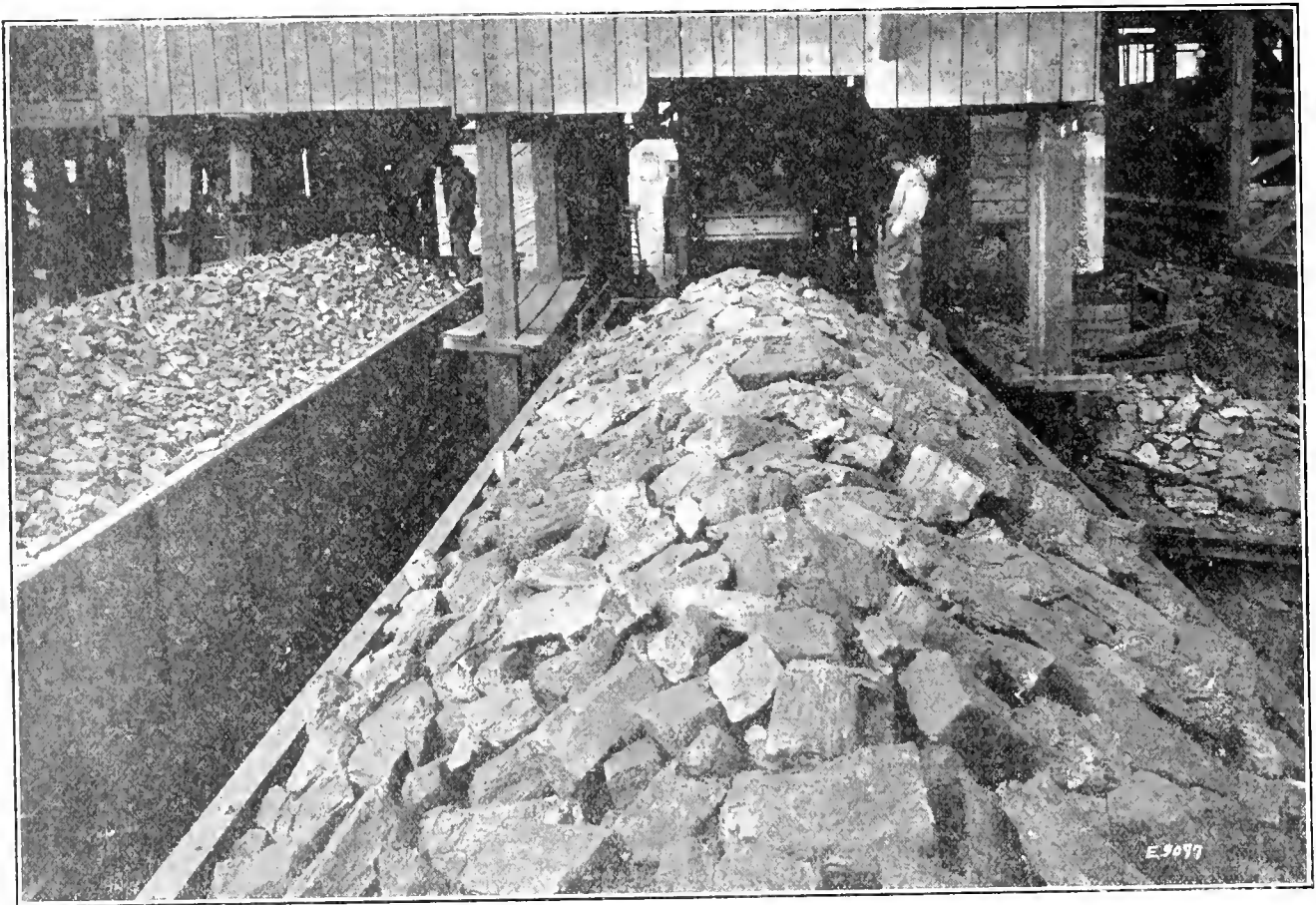
begins with the actual mining of the coal—selecting the proper type of cutters, selecting the most suitable explosives, the employment of shot firers, and continues until the coal has been screened, properly sized and passed by the inspector who sees that all impurities are removed, and the car reported to the Shipping Department for billing.

Preparation

"White Oak" coal has an established reputation for uniform preparation and quality won only through the inauguration and maintenance of a system of inspection that begins at the working face and ends with the billing of the car to the customer. A chief inspector in addition to an inspector at each mine takes care of the preparation and renders a report covering the loading of each and every car shipped. This system of inspection, together with the installation of the most modern type tippie machinery, such as reciprocating feeders; shaker screens for screening and sizing the coal; loading booms and adjustable chutes for placing the coal in the cars with a minimum of breakage insures the customer of a perfectly prepared grade of coal.

Service

The White Oak Coal Company mines and sells its own coal exclusively; the general operating sales and executive offices are located in a splendid office building at the mines and are connected by private exchange and telephone lines with all the mines. This feature permits them to exercise a very close supervision over the output; take care of the demands of the trade, and render prompt and efficient service. The volume of its production, in addition to the joint service of the two railroads, enables the White Oak Coal Company to take care of the largest contracts and make regular shipments. The trade name "White Oak" is known all over the Western Hemisphere. This coal has been shipped to Mexico, East and West Indies, both east and



Care Taken in Preparation and Loading of Lump and Egg Coal

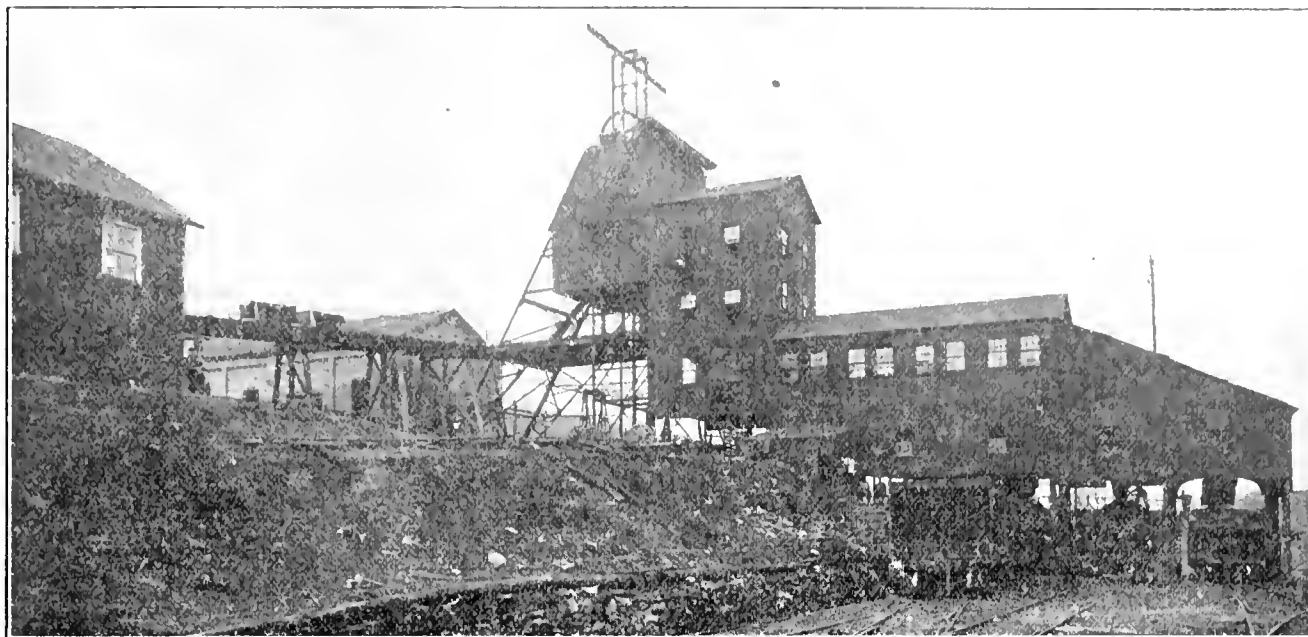
"White Oak" coal is prepared as Mine Run and Lump or Egg for the domestic market; Mine Run or Nut and Slack for the steam or by-product trade, and a very superior grade of smithing coal is specially prepared and loaded in box cars for the general blacksmithing trade. All cars are carefully cleaned before loading and the inspector in addition to removing all impurities has charge of the loading and trimming of the cars. Each car is fully and evenly loaded to its utmost capacity and carefully trimmed so as to prevent loss in transit. This feature is so noticeable that "White Oak" coal can be easily recognized in trains on the Chesapeake & Ohio or Virginian Railways.

west coast of South America; Africa and practically all Mediterranean ports. This Company takes a very keen interest in the export and bunker trade and has maintained an office in London, England, for a number of years. The high standard of quality together with judicious advertising has made the trade mark well known throughout the entire territory where this coal is available.

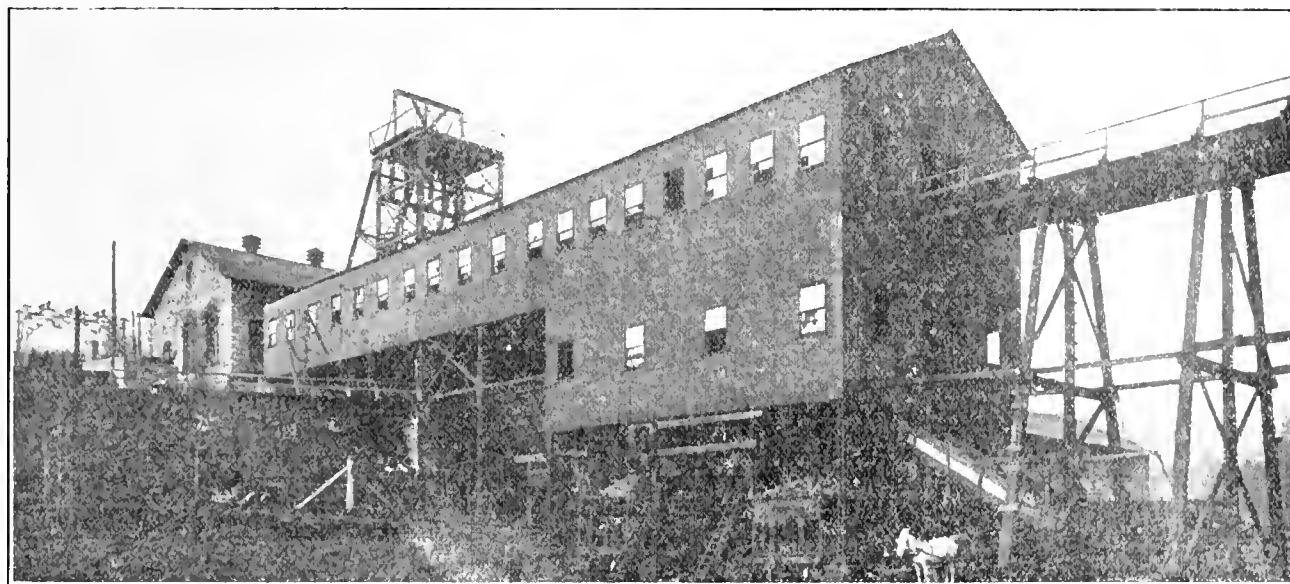
It has established itself a wide and varied market for steam ship bunkering and railroad fuel both at home and in foreign countries; power plants in the New England States and in the cotton mill district of the South. It is used in all domestic markets

reached on competitive freight rates, and is extensively used by the U. S. Navy. White Oak is equally well known in the great Northwest, being shipped to the docks via the Great Lakes from the Toledo

piers of the Hocking Valley or Baltimore & Ohio. The large production of the White Oak Coal Company enables it to assemble lake or export cargoes on short notice.



View of Tipple at Scarbro Mine



View of Tipple at Whipple Mine

All Inquiries for "White Oak" Coal Should be Addressed to Your Nearest Office

C. B. EBBERT, Manager of Sales
2 RECTOR STREET NEW YORK

Boston, Mass.....85 Devonshire St.
New York, N. Y.....2 Rector St.
Newport News, Va.....319 Hogshire Bldg.
Norfolk, Va.....610 Bankers Trust Bldg.
Indianapolis, Ind.....707 Merchants Bldg.
Chicago, Ill.....1948 Peoples Gas Bldg.
Richmond, Va.....204 Moore Bldg.

TIDEWATER OFFICE
610 Bankers Trust Building
Norfolk, Va.

FOREIGN OFFICE
Moore and Fletcher
101 Leadenhall St., London E.C. 3

List of Mines By Seams, Including Name of Company, General Office Address
County, Railroad and Shipping Point

WEST VIRGINIA

ALMA SEAM (Known also as PEERLESS SEAM)

Mined in Kanawha, Logan and Thacker districts. Bituminous rank. Suitable for Beehive Coking, By-Product Coking, Tile and Pottery Burning, Cement Burning, Illuminating Gas, Producer Gas, Locomotive Fuel, Melting, Domestic, Steam, Export and Powdered uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Aracoma Coal Co.	Logan, W. Va.	Aracoma	Logan	C. & O.	Logan, W. Va.
Beeley-Jane Coal Co.	Charleston, W. Va.	Beeley-Jane	Kanawha	C. & O.	Winifrede Jet., W. Va.
Big Creek Coal Co.	Detroit, Mich.	Lincoln	Logan	C. & O.	Big Creek, W. Va.
Chaffin-Jones-Hathorn Coal Co.	Omar, W. Va.	Chaffin-Jones-Hathorn	Logan	C. & O.	Peach Creek, W. Va.
Daisey Coal Co.	Winifrede, W. Va.	Daisey	Logan	C. & O.	Big Creek, W. Va.
Dayton Coal Mining Co.	Charleston, W. Va.	Dayton	Kanawha	C. & O.	Winifrede, W. Va.
Dayton Coal Mining Co.	Charleston, W. Va.	Dayton	Kanawha	C. & O.	Winifrede, W. Va.
Dayton Coal Mining Co.	Charleston, W. Va.	Dayton	Kanawha	C. & O.	Winifrede, W. Va.
Deep Hollow Coal Co.	Coalburg, W. Va.	Deep Hollow	Kanawha	C. & O.	Cabin Creek Jet., W. Va.
Dry Branch Coal Co.	Dry Branch, W. Va.	Dry Branch	Kanawha	C. & O.	Dry Branch, W. Va.
Ekanaw Coal Co.	Charleston, W. Va.	P. & C. Line	Kanawha	C. & O.	Winifrede, W. Va.
Guyandotte Coal Co.	Kitchin, W. Va.	Guyandotte	Logan	C. & G.	Kitchin, W. Va.
Haleon Coal Co.	Huntington, W. Va.	Lalton	Boone	C. & O.	Powell Creek, W. Va.
Johnson, E. R. Coal Mining Co.	Logan, W. Va.	Johnson	Logan	C. & O.	Peach Creek, W. Va.
Kendrick Coal Co.	Madison, W. Va.	Kendrick	Boone	C. & O.	Madison, W. Va.
Lewis Coal & Coke Co.	Big Creek, W. Va.	Lewis	Kanawha	C. & O.	Calvin Creek Jet., W. Va.
Lillybranch Coal Co.	Omar, W. Va.	Lillybranch	Logan	C. & O.	Big Creek, W. Va.
Madison Coal Co.	Winifrede, W. Va.	Madison	Boone	C. & O.	Hidalton, W. Va.
Nelson, H. R. Coal Co.	Winifrede, W. Va.	H. R. Nelson	Kanawha	Winifrede	Winifrede, W. Va.
New Howard Coal Co.	Matwan, W. Va.	New Howard No. 1	Mingo	N. & W.	Matwan, W. Va.
New Howard Coal Co.	Matwan, W. Va.	New Howard No. 2	Mingo	N. & W.	Matwan, W. Va.
North Matewan Coal Co.	Matwan, W. Va.	North Matewan	Mingo	N. & W.	Matewan, W. Va.
Peach Creek Coal Co.	Foghty, W. Va.	Peach Creek	Logan	C. & O.	Peach Creek, W. Va.
Peerless Smokeless Smelting Coal Co.	Morgantown, W. Va.	Waynes	Webster	B. & O.	Halo, W. Va.
Peerless Smokeless Smelting Coal Co.	Morgantown, W. Va.	Waynes	Webster	B. & O.	Halo, W. Va.
Peerless Smokeless Smelting Coal Co.	Morgantown, W. Va.	Waynes	Webster	B. & O.	Halo, W. Va.
Red Jacket Consol. Coal & Coke Co., Inc.	Red Jacket, W. Va.	Grane Vine	Mingo	N. & W.	Delorme, W. Va.
Seabrook Coal & Coke Co.	N. Wark, N. J.	Wesherill	Webster	B. & O.	Prestonia, W. Va.
Seabrook Coal & Coke Co.	N. Wark, N. J.	Waynes	Webster	B. & O.	Prestonia, W. Va.
Seabrook Coal & Coke Co.	N. Wark, N. J.	Waynes	Webster	B. & O.	Prestonia, W. Va.
Shenandoah Coal Co.	Logan, W. Va.	Litz-Smith No. 1	Logan	C. & O.	Shamrock, W. Va.
Smith-Pond Creek Coal Co.	Macdonald, W. Va.	Smith-Pond Creek	Mingo	N. & W.	Sprigg, W. Va.
Stone Branch Coal Co.	Huntington, W. Va.	Litz-Smith No. 5	Logan	C. & O.	Stone Branch, W. Va.
Stone Mountain Coal Corp.	Petersburg, Va.	Marylin	Mingo	N. & W.	Matewan, W. Va.
Thompson's By-Product Coal Co.	Huntington, W. Va.	Thompson's No. 1	Logan	C. & O.	Chapmanville, W. Va.
Wet Branch Mining Co.	Charleston, W. Va.	Wet Branch No. 1	Kanawha	C. & O.	Dry Branch, W. Va.

BAKERSTOWN SEAM

Mined in Upper Potomac district. Bituminous rank. Suitable for Cement Burning, Domestic, Steam, Producer Gas, Locomotive Fuel and Powdered uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Bakertown Coal Co.	Emoryville, W. Va.	Bakertown	Mineral	W. Md.	Emoryville, W. Va.
Big Five Coal Co.	Piedmont, W. Va.	Albright	Preston	M. & K.	Albright, W. Va.
Big Vein Coal Co. of W. Va.	Lafayette, Md.	Shaw	Mineral	W. Md.	Shaw, W. Va.
Cheat River Coal Co.	Kingwood, W. Va.	Troubridge	Preston	M. & W.	Troubridge, W. Va.
Clise Bros. Coal Co.	Emoryville, W. Va.	Pakerstown	Mineral	W. Md.	Emoryville, W. Va.
Deep Run Big Vein Coal Co.	Elk Garden, W. Va.	No. 1	Mineral	W. Md.	Shaw, W. Va.
Deep Run Big Vein Coal Co.	Elk Garden, W. Va.	No. 2	Mineral	W. Md.	Shaw, W. Va.
Deep Run Big Vein Coal Co.	Elk Garden, W. Va.	No. 3	Mineral	W. Md.	Shaw, W. Va.
Deep Run Big Vein Coal Co.	Elk Garden, W. Va.	No. 4	Mineral	W. Md.	Shaw, W. Va.
Deep Run Big Vein Coal Co.	Elk Garden, W. Va.	No. 5	Mineral	W. Md.	Shaw, W. Va.
Fr. dock Coal Co.	Piedmont, W. Va.	Fr. dock	Preston	M. & K.	Albright, W. Va.
Heather Run Coal Co.	Kingwood, W. Va.	Heather	Preston	M. & K.	Kingwood, W. Va.
Hoffa Bros. Coal Co.	Piedmont, W. Va.	Totomac Little Vein	Mineral	C. & P.	Barton, Md.
Hoffman Coal Mining Co.	715 Widmer Bldg., Philadelphia, Pa.	Elkbridge	Preston	B. & O.	Kingwood, W. Va.
Jolly Coal Mining Co.	Gardn, W. Va.	Gally	Mineral	W. Md.	Shaw, W. Va.
Kalbaugh Coal Co.	Cumhland, Md.	Kalbaugh	Mineral	W. Md.	Barnum, W. Va.
Lick Run Collieries Co.	Kingwood, W. Va.	Lick Run	Preston	M. & K.	Kingwood, W. Va.
Low Coal Co.	Emoryville, W. Va.	Low	Mineral	W. Md.	Emoryville, W. Va.
Low Volatile Collieries Co.	Fort Natl. Bk. Bldg., Piedmont, W. Va.	Low Volatile No. 1	Mineral	W. Md.	Elk Garden, W. Va.
Mapleville Coal Co., The	Elk Garden, W. Va.	Mapleville	Mineral	W. Md.	Mapleville, W. Va.
Masteller Coal Co.	Keyser, W. Va.	Hamshire No. 5	Mineral	W. Md.	Hamshire, W. Va.
Masteller Coal Co.	Keyser, W. Va.	Hamshire No. 4	Mineral	W. Md.	Hamshire, W. Va.
Morgan Run Coal Co.	Johnstown, Pa.	Morgan Run	Preston	W. Va., Northern	Kingwood, W. Va.
New Cumberland Coal Co.	Pittsburgh, Pa.	Margaret	Brooke	P. C. & St. L.	Collier, W. Va.
Nordlaw Coal Co.	Charlottesville, W. Va.	Nordlaw No. 1	Barbour	B. & O.	Hall, W. Va.
P. N. & R. W. Coal Co.	Albright, W. Va.	P. N. & R. W.	Preston	M. & K.	Albright, W. Va.
Pitts Brothers Coal Co.	Emoryville, W. Va.	Pitts	Mineral	W. Md.	Emoryville, W. Va.
Shenandoah Coal Co.	Kingwood, W. Va.	Shenandoah	Preston	M. L. J.	Caddeff, W. Va.
Willoughby Coal Co.	Elkins, W. Va.	Will No. 1	Barbour	B. & O.	Hall, W. Va.

BECKLEY SEAM (Known also as WAR CREEK in Tug River District)

Mined in New River and Tug River Districts. Semibituminous rank. Suitable for Bee-hive Coking, Bunkering, Export, Locomotive Fuel, Melting, Domestic, Steam, Producer Gas and Smithing uses. Trade name, Smokeless Coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Alpha Pocahontas Coal Co.	Alpova, W. Va.	Alpha	Wyoming	Virginian	Alpova, W. Va.
Balfey Wood Coal Co.	Glenn Jan, W. Va.	Balfey Wood	Raleigh	Virginian	Woodbay, W. Va.
Beckley Smokeless Coal Co.	Pemberton, W. Va.	Beckley No. 1	Raleigh	C & O	M. V. V. W. Va.
Beckley Filtered Coal Co.	Sullivan, W. Va.	Beckley	Raleigh	C & O Virginian	Sullivan, W. Va.
Beckley Pocahontas Coal Co.	Huntington, W. Va.	Beckley	Raleigh	C & O Virginian	Beckley, W. Va.
Beckley Pocahontas Coal Co.	Huntington, W. Va.	Chade	Raleigh	C & O Virginian	Beckley, W. Va.
Blue Jay Lumber Co.	Blue Jay, W. Va.	Blue Jay No. 5	Raleigh	C & O	Beckley, W. Va.
Boone Smokeless Coal Co.	Nuttallburg, W. Va.	Boone Smokeless	Raleigh	Virginian	Alpova, W. Va.
Carter Coal Co.	Cordwood, W. Va.	Carter No. 1	McDowell	N & W	Susanna, W. Va.
Christian Coal Co.	War, W. Va.	Christian	McDowell	N & W	War, W. Va.
Cooksey J. W. Coal Co.	War, W. Va.	Cooksey	McDowell	N & W	War, W. Va.
Dry Fork Colliery Co.	Bluefield, W. Va.	Dry Fork	McDowell	N & W	Loma, W. Va.
East Gulf Coal Co.	Mt. Hope, W. Va.	East Gulf No. 5	Raleigh	C & O Virginian	Helen, W. Va.
East Gulf Coal Co.	Mt. Hope, W. Va.	East Gulf No. 4	Raleigh	C & O Virginian	Helen, W. Va.
East Gulf Coal Co.	Mt. Hope, W. Va.	East Gulf No. 3	Raleigh	C & O Virginian	Helen, W. Va.
Elkhorn Piney Coal Mining Co.	Milwaukee, Wis.	Piney No. 1	Raleigh	C & O	Standard, W. Va.
Elkhorn Piney Coal Mining Co.	Milwaukee, Wis.	Piney No. 2	Raleigh	C & O	Standard, W. Va.
Excelsior Pocahontas Coal Co.	Excelsior, W. Va.	Excelsior No. 1	McDowell	N & W	Excelsior, W. Va.
Excelsior Pocahontas Coal Co.	Excelsior, W. Va.	Excelsior No. 2	McDowell	N & W	Excelsior, W. Va.
Flanagan Coal Co.	Pittsboro, Pa.	Flanagan No. 1	McDowell	N & W	Radford, W. Va.
Flanagan Coal Co.	Pittsboro, Pa.	Flanagan No. 2	McDowell	N & W	Radford, W. Va.
Flat Top Coal Mining Co.	Bramwell, W. Va.	Thames	McDowell	N & W	English, W. Va.
Four Corn Coal Co.	Beckley, W. Va.	Four Corn	Raleigh	C & O	Lantham, W. Va.
Gulf Coal Co.	Tams, W. Va.	Hotrod	Raleigh	Virginian, C & O	Hotrod, W. Va.
Gulf Smokeless Coal Co.	Tams, W. Va.	Tams No. 1	Raleigh	Virginian, C & O	Tam, W. Va.
Gulf Smokeless Coal Co.	Tams, W. Va.	Tams No. 2	Raleigh	Virginian, C & O	Tam, W. Va.
Gulf Smokeless Coal Co.	Tams, W. Va.	Tams No. 3	Raleigh	Virginian, C & O	Tam, W. Va.
Gulf Smokeless Coal Co.	Tams, W. Va.	Tams No. 4	Raleigh	Virginian, C & O	Tam, W. Va.
Hon-Hon Coal Co.	Goodwill, W. Va.	Hon-Hon	Raleigh	C & O	Lester, W. Va.
John Branch Coal Co.	Yukon, W. Va.	No. 2	McDowell	N & W	W. V. Va.
Lynwin Coal Co.	Blue Jay, W. Va.	Lynwin	Raleigh	Virginian	Madison, W. Va.
MacAlpin Coal Co.	Cambleton, W. Va.	MacAlpin	Raleigh	C & O	MacAlpin, W. Va.
Margue & Comm. Pocahontas Corp.	New York, N. Y.	No. 2	McDowell	N & W	Radford, W. Va.
Mead, C. H. Coal Co.	Beckley, W. Va.	Killam	Raleigh	Va. C & O	Beckley, W. Va.
Mead Teller Coal Co.	Beckley, W. Va.	Killam	Raleigh	Virginian	Beckley, W. Va.
Montpelier Smokeless Coal Co.	Apaca, W. Va.	Montpelier	Wyoming	Virginian	Montpelier, W. Va.
New River Collieries Co.	New York, N. Y.	Beckley No. 3	Raleigh	C & O and Virginian	Admiralty or Beckley, W. Va.
New River Collieries Co.	New York, N. Y.	Beckley No. 5	Raleigh	C & O and Virginian	Beckley, W. Va.
Pemberton Coal & Coke Co.	Affinity, W. Va.	Affinity	Raleigh	Virginian	Beckley, W. Va.
Pemberton Coal & Coke Co.	Affinity, W. Va.	Big Stick	Raleigh	Virginian	Affinity, W. Va.
Pemberton Coal & Coke Co.	Affinity, W. Va.	Mat-Wise	Raleigh	Virginian, C & O	Affinity, W. Va.
Pemberton Coal & Coke Co.	Affinity, W. Va.	Phillips	Raleigh	Virginian, C & O	Affinity, W. Va.
Pemberton Fuel Co.	Pemberton, W. Va.	Pemberton	Raleigh	C & O	Beckley, W. Va.
Pickshin Coal Co.	Traders, W. Va.	Pickshin	Raleigh	Virginian	Pickshin, W. Va.
Piney Creek Coal Co.	Huntington, W. Va.	Piney Creek No. 1	Raleigh	Virginian	Pinley, W. Va.
Pocahontas Domestic Coal Co.	Cleveland, O.	No. 2	McDowell	N & W	Susanna, W. Va.
Pocahontas Domestic Coal Co.	Cleveland, O.	No. 1	McDowell	N & W	War, W. Va.
Prime-Wick Coal Co.	Mount Hope, W. Va.	Prime-Wick	Raleigh	Virginian	Prime-Wick, Pa.
Ragland Coal Co.	Beckley, W. Va.	Ragland	Raleigh	Virginian	Pemberton, W. Va.
Raleigh Coal & Coke Co.	Raleigh, W. Va.	No. 3	Raleigh	C & O	Raleigh, W. Va.
Raleigh Coal & Coke Co.	Raleigh, W. Va.	No. 4	Raleigh	C & O	Raleigh, W. Va.
Raleigh Coal & Coke Co.	Raleigh, W. Va.	No. 5	Raleigh	C & O	Raleigh, W. Va.
Raleigh Coal & Coke Co.	Raleigh, W. Va.	No. 6	Raleigh	C & O	Raleigh, W. Va.
Raleigh Coal & Coke Co.	Raleigh, W. Va.	No. 7	Raleigh	C & O	Raleigh, W. Va.
Raleigh Wyoming Coal Co.	Cherleston, W. Va.	Glen Rogers No. 2	Wyoming	C & L, Virginian	Glen Rogers, W. Va.
Rhod H Coal Co.	Huntington, W. Va.	No. 2	Raleigh	Virginian, C & O	Rhodell, W. Va.
Royal Coal Co.	Royal, W. Va.	Royal	Raleigh	C & O	Royal, W. Va.
Sadon Collieries Corp.	Cisco, W. Va.	Sadon	Wyoming	Virginian	Otsego, W. Va.
Slab Fork Coal Co.	Slab Fork, W. Va.	Slab Fork	Raleigh	Virginian	Slab Fork, W. Va.
Sullivan Coal & Coke Co.	Princeton, W. Va.	Sullivan	Raleigh	C & O and Virginian	Sullivan, W. Va.
Thermo Pocahontas Coal Co.	Logan, W. Va.	Thermo-Pocahontas	Wyoming	Virginian	End, W. Va.
Vary Top Seam Coal Co., The	Beckley, W. Va.	Vary Top Seam	Raleigh	C & O	Raleigh, W. Va.
War Creek Coal Co.	Yukon, W. Va.	War Creek	McDowell	N & W	War, W. Va.
Warrior Coal Co.	War, W. Va.	Warrior	McDowell	N & W	War, W. Va.
White, E. E. Coal Co.	Glen White, W. Va.	Glen White No. 1	Raleigh	C & O	Glen White & Lester, W. Va.
White, E. E. Coal Co.	Glen White, W. Va.	Glen White No. 2	Raleigh	C & O	Glen White & Lester, W. Va.
White, E. E. Coal Co.	Glen White, W. Va.	Stodshury	Raleigh	C & O	Stodshury, W. Va.
Williams Pocahontas Coal Co.	Bluefield, W. Va.	Howard	McDowell	N & W	War, W. Va.
Winding Gulf Colliery Co.	Winding Gulf, W. Va.	Winding Gulf No. 1	Raleigh	Virginian	Winding Gulf, W. Va.
Winding Gulf Colliery Co.	Winding Gulf, W. Va.	Winding Gulf No. 3	Raleigh	Virginian	Winding Gulf, W. Va.
Winding Gulf Colliery Co.	Winding Gulf, W. Va.	Winding Gulf No. 2	Raleigh	C & O	Winding Gulf, W. Va.
Wood Peck Coal Co.	Sullivan, W. Va.	Wood Peck	Raleigh	C & O	Sullivan, W. Va.
Wood Sullivan Coal Co.	Traders, W. Va.	Wood Sullivan	Raleigh	Virginian	Woodward, W. Va.
Yukon Pocahontas Coal Co.	Yukon, W. Va.	No. 1	McDowell	N & W	Susanna, W. Va.
Yukon Pocahontas Coal Co.	Yukon, W. Va.	No. 2	McDowell	N & W	Susanna, W. Va.

CEDAR GROVE SEAM (Known also as THACKER SEAM in the Thacker District; Island Creek in Logan County)

Mined in Kanawha, Kenova, Logan and Thacker districts. Bituminous rank, with some cannel coal. Suitable for Tile and Pottery Burning, Cement Burning, Domestic, Illuminating Gas, Producer Gas, Locomotive, Fuel, Melting, Steam, Beehive Coking, By-Product Coking and Powdered uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Araoma Coal Co.	Logan, W. Va.	Araoma No. 1	Logan	C & O	Logan, W. Va.
Ashford Coal & Coke Co.	Cherleston, W. Va.	Ashford	Boone	C & O	Cherleston, W. Va.
Bradley Mining Co.	Madison, W. Va.	Bradley	Boone	C & O	Broston, W. Va.
Carter Coal & Mining Co.	Belle, W. Va.	Carter	Kanawha	K & M	Belle, W. Va.
Coal Mountain Mining Co.	Huntington, W. Va.	Coal Mountain	Boone	P. P. & E. K.	Pond, W. Va.
Coleman Coal Co.	Pratt, W. Va.	Old man	Kanawha	K & M	Riverside, W. Va.
Commonwealth Power, Ray & Light Co.	Switzer, W. Va.	Switzer No. 1	Logan	C & O	Switzer, W. Va.
Commonwealth Power, Ray & Light Co.	Switzer, W. Va.	Switzer No. 2	Logan	C & O	Switzer, W. Va.
Dolphos & West Virginia Coal Co.	Van Wert, Ohio	Twiler	Mingo	N & W	Irland, W. Va.
East Bank Mining Co.	East Bank, W. Va.	East Bank	Kanawha	C & O	East Bank, W. Va.
Gay Coal & Coke Co., The	Mount Gay, W. Va.	Gay No. 1	Logan	C & O	Logan, W. Va.
Gay Coal & Coke Co., The	Mount Gay, W. Va.	Gay No. 2	Logan	C & O	Logan, W. Va.
Gay Collieries Corp.	Tams, W. Va.	No. 1	Mingo	C & O	Gilbert, W. Va.

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CEDAR GROVE SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Logan Fork Coal Co.	Charleston, W. Va.	Hopkins Fork	Boone	B. & O.	Kieth, W. Va.
Hunt-Ford Coal Co.	Ashland, Ky.	Hunt-Ford	Mingo	Norfolk & Western	Williamson, W. Va.
Logan Fork Coal & Mining Co.	Huntington, W. Va.	Black	Kanawha	K. & M.	Bell, W. Va.
King Fu 1 Co., The	Logan, W. Va.	King Fu 1 No. 1	Logan	C. & O.	Wyle, W. Va.
Logan Fork Coal Co.	Marmet, W. Va.	Logan Fork	Kanawha	C. & O.	Marmet, W. Va.
Landon Rock Coal Co.	Charleston, W. Va.	Er d.	Boone	C. & O.	Stith, W. Va.
Logan Mining Co.	Fairmont, W. Va.	Rossmore	Logan	C. & O.	Rossmore, W. Va.
Lorain Coal & Dock Co.	Columbus, O.	Lorado No. 1	Logan	C. & O.	Lorado, W. Va.
Lorain Coal & Dock Co.	Lory, W. Va.	Lorado No. 2	Logan	C. & O.	Lorado, W. Va.
Lorain Coal & Dock Co.	Huntington, W. Va.	Lory	Boone	C. & O.	Lory, W. Va.
Lundale Coal Co.	Aeneid, W. Va.	Lundale	Logan	C. & O.	Lundale, W. Va.
M-Connell Coal Co.	Cincinnati, O.	McConnell	Logan	C. & O.	McConnell, W. Va.
Marmet, Edwin	Cincinnati, O.	L. ns Creek	Kanawha	C. & O., K. & M.	Marmet, Monarch, W. Va.
Marmet, Edwin	Cincinnati, O.	Winifrede	Kanawha	C. & O., K. & M.	Marmet, Monarch, W. Va.
Marmet, Edwin	Cincinnati, O.	Cedar Grove	Kanawha	C. & O., K. & M.	Marmet, Monarch, W. Va.
Marmet, Edwin	Cincinnati, O.	Black Band	Kanawha	C. & O., K. & M.	Marmet, Monarch, W. Va.
Marmet-Oliver Coal Co.	Shrewsbury, W. Va.	Shrewsbury	Kanawha	K. & M.	Shrewsbury, W. Va.
Miami Coal & Coke Co.	Moundsville, W. Va.	Miami	Kanawha	C. & O.	Miami, W. Va.
Pond Creek By-Products Coal Co.	Blue-Id, W. Va.	Pond Creek	Pike, Ky.	N. & W.	Williamson, W. Va.
Rock Bottom Coal Co.	Rock Bottom, W. Va.	Rock Creek	Boone	C. & O.	Rock Creek, W. Va.
Smith, O. P., Coal Co.	Plus, W. Va.	No. 1	Kanawha	K. & M.	Leri, W. Va.
Southern States Coal Co.	St. Albans, W. Va.	No. 1	Boone	C. & O.	Darby, W. Va.
Standard Thacker Coal Co.	Williamson, W. Va.	No. 1	Mingo	N. & W.	Chatteroy, W. Va.
Tone Mountain Coal Corp.	Rossmore, Va.	Marvin	Mingo	N. & W.	McGowan, W. Va.
Switzer Collieries	Huntington, W. Va.	Switzer	Logan	C. & O.	Switzer, W. Va.
West Virginia By-Product Coal Co.	Williamson, W. Va.	No. 1	Mingo	N. & W.	Locksville, Ky.

CHILTON SEAM

Mined in Logan district. Bituminous rank. Suitable for Tile and Pottery Burning, Cement Burning, Illuminating Gas, Producer Gas, Melting, Locomotive Fuel, Export, Domestic, Steam, Bee-hive Coking, By-Product Coking and Powdered uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Amherst Coal Co.	Amherstdale, W. Va.	Amherst No. 1	Logan	C. & O.	Amherstdale, W. Va.
Argyle Coal Co.	Logan, W. Va.	Argyle No. 1	Logan	C. & O.	Yolyn, W. Va.
Argyle Coal Co.	Logan, W. Va.	Argyle No. 2	Logan	C. & O.	Ethel, W. Va.
Boone County Coal Corp.	Sharples, W. Va.	No. 1	Boone	C. & O.	Chatteroy, W. Va.
Boone County Coal Corp.	Sharples, W. Va.	No. 2	Logan	C. & O.	Monclo, W. Va.
Boone County Coal Corp.	Sharples, W. Va.	No. 3	Logan	C. & O.	Monclo, W. Va.
Boone County Coal Corp.	Sharples, W. Va.	No. 6	Logan	C. & O.	Sharples, W. Va.
Boone County Coal Corp.	Sharples, W. Va.	No. 10	Logan	C. & O.	Dobra, W. Va.
Boone County Coal Corp.	Sharples, W. Va.	Boone No. 12	Logan	C. & O.	Blair, W. Va.
Buffalo Eagle Coal Co.	Bracholm, W. Va.	No. 3	Logan	C. & O.	Beeco, W. Va.
Cleveland Cliffs Iron Co., The	Cleveland, O.	Ethel No. 1	Logan	C. & O.	Ethel, W. Va.
Cleveland Cliffs Iron Co., The	Cleveland, O.	Ethel No. 2	Logan	C. & O.	Ethel, W. Va.
Cleveland Cliffs Iron Co., The	Cleveland, O.	Ethel No. 3	Logan	C. & O.	Keyes, W. Va.
Crarin, A. D., Coal Co.	Accoville, W. Va.	Ruffer	Logan	C. & O.	Accoville, W. Va.
Cub Fork Coal Co.	Cub Fork, W. Va.	Cub Fork	Logan	C. & O.	Yolyn, W. Va.
Fort Branch Coal Corp.	Richmond, Va.	Fort Branch	Logan	C. & O.	Fort Branch, W. Va.
George's Creek Coal Co.	Cumberland, Md.	George's Creek	Logan	C. & O.	Ethel, W. Va.
Holdred Collieries of W. Va.	Blair, W. Va.	Holdred Collieries	Logan	C. & O.	Blair, W. Va.
Illinois Commercial & Mining Co.	Aurora, Ill.	R x No. 1	Logan	C. & O.	Ethel, W. Va.
Illinois Commercial & Mining Co.	Aurora, Ill.	R x No. 2	Logan	C. & O.	Ethel, W. Va.
Johnson, E. R. Coal Mining Co.	Logan, W. Va.	Johnson	Logan	C. & O.	Pach Creek, W. Va.
Jones Coal Land Co.	Charleston, W. Va.	Isabella No. 1	Logan	C. & O.	Stollings, W. Va.
Jones Coal Land Co.	Charleston, W. Va.	Isabella No. 2	Logan	C. & O.	Stollings, W. Va.
Logan Eagle Coal Co.	Latrobe, W. Va.	Logan Eagle No. 2	Logan	C. & O.	Crites, W. Va.
Logan Mining Co.	Fairmont, W. Va.	Manitoba	Logan	C. & O.	Ethel, W. Va.
Logan Mining Co.	Fairmont, W. Va.	Wanda	Logan	C. & O.	Wanda, W. Va.
McGregor Coal Co.	Charleston, W. Va.	McGregor No. 1	Logan	B. & O., Rum Ck. Br.	Slagle, W. Va.
McGregor Coal Co.	Charleston, W. Va.	McGregor No. 3	Logan	B. & O., Rum Ck. Br.	Slagle, W. Va.
McGregor Coal Co.	Charleston, W. Va.	McGregor No. 4	Logan	B. & O., Rum Ck. Br.	Slagle, W. Va.
Opperman Coal Co.	Blair, W. Va.	Opperman	Logan	C. & O.	Blair, W. Va.
Paragon Colliery Co.	Huntington, W. Va.	Paragon	Logan	C. & O.	Yolyn, W. Va.
Rd Campbell Coal Co.	Fort Branch, W. Va.	Rd Campbell	Logan	C. & O.	Fort Branch, W. Va.
South Madine Coal Co.	Amberstdale, W. Va.	South Madine	Logan	C. & O.	Amberstdale, W. Va.
Sunbeam Coal Co.	Logan, W. Va.	Sunbeam	Logan	C. & O.	Fort Branch, W. Va.
Wood Coal Co.	Charleston, W. Va.	Wood No. 1	Logan	C. & O.	Ethel, W. Va.
Wood Coal Co.	Charleston, W. Va.	Wood No. 2	Logan	C. & O.	Ethel, W. Va.

COALBURG SEAM (Known also as BUFFALO CREEK SEAM)

Mined in Kanawha, Thacker, Coal and Coke, and Kenova districts. Bituminous rank. Suitable for Tile and Pottery Burning, Cement Burning, Domestic, Producer Gas, Melting, Steam, Locomotive Fuel, Export and Powdered uses. Trade name, Splint Coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Big Rock Coal Co.	Argentown, W. Va.	Clone	Clay	Coal & Coke (C. & C.)	Elkhurst, W. Va.
Birch Fork Coal Co.	Birchton, W. Va.	Birchton	Raleigh	C. & O.	Birch, W. Va.
Blue Band Coal Co.	Charleston, W. Va.	Blue Band No. 1	Kanawha	K. & M.	Coco, W. Va.
Buffalo-Kanawha Coal Corp.	219 Elliott Square, Buffalo, N. Y.	Buffalo-Kanawha	Kanawha	C. & C.	Nin-Mile, W. Va.
Buffalo-Thacker Coal Co.	Chattaroy, W. Va.	Buffalo	Mingo	N. & W.	Chattaroy, W. Va.
Cabin Creek Consolidated Coal Co.	Kayford, W. Va.	Unit d No. 2	Kanawha	C. & O.	Unit d, W. Va.
Cabin Creek Consolidated Coal Co.	Kayford, W. Va.	Amp	Kanawha	C. & O.	Amp, W. Va.
Cabin Creek Consolidated Coal Co.	Kayford, W. Va.	Raceoon No. 2	Kanawha	C. & O.	Kayford, W. Va.
Cabin Creek Consolidated Coal Co.	Kayford, W. Va.	Rose	Kanawha	C. & O.	Kayford, W. Va.
Cabin Creek Consolidated Coal Co.	Kayford, W. Va.	Ruby	Kanawha	C. & O.	Decota, W. Va.
Carbon Fuel Co.	Carbon, W. Va.	No. 3	Kanawha	C. & O.	South Carbon, W. Va.
Carbon Fuel Co.	Carbon, W. Va.	No. 5	Kanawha	C. & O.	Republic, W. Va.
Carbon Fuel Co.	Carbon, W. Va.	No. 11	Kanawha	C. & O.	W. Va. No. 2, W. Va.
Carter Coal & Mining Co.	Blie, W. Va.	Carter	Kanawha	K. & M.	Relle, W. Va.
Carver Fork Colliery Co.	Clay, W. Va.	Leatherwood	Clay	B. & O.	Clay, W. Va.
Christiana Coal Co.	Toledo, O.	Christiana No. 2	Clay	H. & O.	Rickmore, W. Va.
Climax Coal Co.	Charleston, W. Va.	Climax	Kanawha	K. & M.	Witcher, W. Va.
Coalhill Coal Co.	Pittsburgh, Pa.	Dunbar	Nicholas	C. & O.	Bentree, W. Va.
Coalhill Coal Co.	Pittsburgh, Pa.	Evans	Clay	C. & O.	Bentree, W. Va.

(Continued on Next Page)

COALBURG SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Coalhill Coal Co.	Pittsburgh, Pa.	Tri	Nichols	C & O	Bontres, W. Va.
Coalhill Colliery Co.	Charleston, W. Va.	Ronda	Kanawha	C & O	Ronda, W. Va.
Coalburg Kanawha Mining Co.	Coalburg, W. Va.	A	Kanawha	C & O	Coalburg, W. Va.
Coalburg Kanawha Mining Co.	Coalburg, W. Va.	R	Kanawha	C & O	Coalburg, W. Va.
Crown Hill Coal Co.	Richmond, Va.	No. 8	Kanawha	C & O	Crown Hill, W. Va.
Davenport Coal Co.	219 Elliott Square, Buffalo, N. Y.	Davenport	Kanawha	K. & W. Va.	Clyde, W. Va.
Deberry & Leonard Coal Co.	Clay, W. Va.	D. B. rry	Clay	B. & O.	Clyde, W. Va.
Dry Branch Coal Co.	Dry Branch, W. Va.	Dry Branch	Kanawha	C & O	Dry Branch, W. Va.
Elliott Spillit Coal Co.	Clay, W. Va.	York No. 1	Clay	B. & O.	Clay, W. Va.
Elkland Coal Mining Co.	New York, N. Y.	Rand	Clay	B. & O.	Elkhurst, W. Va.
Fox Spillit Coal Co.	Buckhamton, W. Va.	Fox	Clay	B. & O.	Dartler, W. Va.
French Concord Coal Co.	Pinocast, W. Va.	French No. 1	Clay	B. & O.	Hartland, W. Va.
Gauky Concord Coal Co.	Charleston, W. Va.	Gauky Concord	Nicholas	C & O	Greenade, W. Va.
H. C. Coal & Coke Co.	Charleston, W. Va.	Ulen	Kanawha	Cambell Creek, K. & M.	Spring Fork, W. Va.
Haldsted Coal Co.	Charleston, W. Va.	Bernshaw	Kanawha	C & O	Marmet, W. Va.
Howard Collieries	Chattahoo, W. Va.	U. delick	Mingo	N. & W.	Chattahoo, W. Va.
Howard Collieries	Chattahoo, W. Va.	Junior	Mingo	N. & W.	Chattahoo, W. Va.
Howard Collieries	Chattahoo, W. Va.	Howard	Mingo	N. & W.	Chattahoo, W. Va.
Huntington Coal & Mining Co.	Huntington, W. Va.	P. H.	Kanawha	K. & M.	Belle, W. Va.
Jones Winifrede Coal Co.	Charleston, W. Va.	Stield	Clay	Hartland via B. & O.	Clay, W. Va.
Kanawha & Hocking Coal & Coke Co.	Cleveland, O.	No. 101	Kanawha	K. & M.	Coal Grove, W. Va.
Kanawha & Hocking Coal & Coke Co.	Cleveland, O.	No. 105	Kanawha	K. & M.	Mammoth, W. Va.
Kanawha & Hocking Coal & Coke Co.	Cleveland, O.	No. 108	Kanawha	K. & M.	Mammoth, W. Va.
Kanawha Collieries Co.	Charleston, W. Va.	Little Elk No. 1	Nicholas	K. & M.	Little Elk, W. Va.
Kanawha Collieries Co.	Charleston, W. Va.	Little Elk No. 2	Nicholas	K. & M.	Swiss, W. Va.
Kelly's Creek Colliery Co.	Charleston, W. Va.	No. 1	Kanawha	K. & M.	Coal Grove, W. Va.
Kelly's Creek Colliery Co.	Charleston, W. Va.	No. 2	Kanawha	K. & M.	Coal Grove, W. Va.
Kelly's Creek Colliery Co.	Charleston, W. Va.	No. 3	Kanawha	K. & M.	Coal Grove, W. Va.
Kelly's Creek Colliery Co.	Charleston, W. Va.	No. 4	Kanawha	K. & M.	Coal Grove, W. Va.
Laurie Coal Co.	Charleston, W. Va.	Laurie	Nicholas	C & O	Greendale, W. Va.
Marmet Oliver Coal Co.	Shrewsbury, W. Va.	Shrewsbury	Kanawha	K. & M.	Shrewsbury, Pa.
Marshall Fuel Co.	Pittsburgh, Pa.	Sara-Jane	Kanawha	K. & M.	Dana, W. Va.
Marshall Fuel Co.	Hunt, W. Va.	Muttie Co. Operative	Mingo	M. & W.	Alex, W. Va.
Marmet Coal & Coke Co.	Moundsville, W. Va.	Marmet	Kanawha	C & O	Miam, W. Va.
Midlothian Jewel Coal Co.	Hartland, W. Va.	Midlothian	Clay	C. & C.	Hartland, W. Va.
Milligan Coal Co.	Clay, W. Va.	Middle Creek	Clay	B. & O.	Hartland, W. Va.
Naugatuck Coal Co., The	Cincinnati, O.	Naugatuck	Mingo	N. & W.	Broton, W. Va.
Paint Creek Coal Mining Co.	Cleveland, O.	Paint Creek	Kanawha	C & O	Gallagher, W. Va.
Paint Creek Coal Mining Co.	Cleveland, O.	Seranton	Kanawha	C & O	Gallagher, W. Va.
Paint Creek Coal Mining Co.	Cleveland, O.	Standard	Kanawha	C & O	Standard, W. Va.
Paint Creek Coal Mining Co.	Cleveland, O.	Warona	Kanawha	C & O	Thurstone, W. Va.
Pen Mar Coal Co.	Charleston, W. Va.	Pen Mar	Kanawha	B. & O.	Broom, W. Va.
Point Lick Coal Co.	Charleston, W. Va.	Point Lick No. 1	Kanawha	K. & M.	Pointlick, W. Va.
Point Lick Coal Co.	Charleston, W. Va.	Point Lick No. 2	Kanawha	K. & M.	Pointlick, W. Va.
Southwestern Spillit Fuel Co.	Grafton, W. Va.	Black Cat	Kanawha	C & O	East Bank, W. Va.
Spillit-Orgas Coal Co.	Charleston, W. Va.	Spillit Orgas	Boone	C & O	Orgas, W. Va.
Swiss-Bi-Product Coal Co.	Charleston, W. Va.	Swiss	Nicholas	K. & M.	Swiss, W. Va.
Tiger Coal Co.	Huntington, W. Va.	Tiger No. 1	Clay	B. & O.	Hartland, W. Va.
Tiger Coal Co.	Huntington, W. Va.	Tiger No. 2	Clay	B. & O.	Hartland, W. Va.
Thompson Block Coal Co.	Dorfer, W. Va.	Dorfer No. 1	Clay	B. & O.	Dorfer, W. Va.
Thompson Block Coal Co.	Dorfer, W. Va.	Dorfer No. 2	Clay	B. & O.	Dorfer, W. Va.
W. B. Coal Mining Co.	Cincinnati, O.	Webb	Boone	C & O	F. Enche, W. Va.
W. B. Branch Mining Co.	Charleston, W. Va.	W. B. Branch	Kanawha	C & O	Dry Branch, W. Va.
Williamson Fuel Co.	Norfolk, Va.	Williamson	Mingo	N. & W.	Williamson, W. Va.
Wyatt Coal Co.	Charleston, W. Va.	Wyatt	Kanawha	C & O	Crown Hill, W. Va.
Wyatt Coal Co.	Charleston, W. Va.	Horton No. 1	Kanawha	C & O	Sharon, W. Va.
Wyatt Coal Co.	Charleston, W. Va.	Horton No. 2	Kanawha	C & O	Sharon, W. Va.
Wyatt Coal Co.	Charleston, W. Va.	Horton No. 3	Kanawha	C & O	Sharon, W. Va.
Wyatt Coal Co.	Charleston, W. Va.	Horton No. 4	Kanawha	C & O	Sharon, W. Va.

EAGLE SEAM (Known also as NO. 1 GAS and MIDDLE WAR EAGLE SEAMS)

Mined in Kanawha, Logan and Thacker districts. Bituminous rank. Suitable for Beehive Coking, Tile and Pottery Burning, By-Product Coking, Cement Burning, Smithing, Melting, Producer Gas, Export, Illuminating Gas, Domestic, Locomotive Fuel, Steam and Powdered use.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
American Eagle Colliery Co.	Amesbury, W. Va.	Amer. Eagle Colliery	Robtigh	C & O	Amesbury, W. Va.
Amherst Coal Co.	Amherst, W. Va.	Amherst No. 1	Logan	C & O	Amherst, W. Va.
Amherst Coal Co.	Amherst, W. Va.	Amherst No. 2	Logan	C & O	Amherst, W. Va.
Aracoma Coal Co.	Logan, W. Va.	Aracoma	Logan	C & O	Logan, W. Va.
Beck Glenn Coal Co.	Beck Glenn, W. Va.	Beck Glenn	Fayette	K. & M.	Beck Glenn, W. Va.
Bengal Coal Co.	Huntington, W. Va.	Bengal	Logan	C & O	Kistler, W. Va.
Black Hawk Colliery Co.	Detroit, Mich.	Black Hawk	Logan	C & O	Big Creek, W. Va.
Boomer Coal & Coke Co.	Cleveland, O.	South No. 2	Fayette	K. & M.	Boomer, W. Va.
Boomer Coal & Coke Co.	Cleveland, O.	North No. 2	Fayette	K. & M.	Boomer, W. Va.
Buffalo Eagle Colliery Co.	Bracholm, W. Va.	No. 1	Logan	C & O	Bracholm, W. Va.
Buffalo Thacker Coal Co.	Huntington, W. Va.	Monte No. 1	Boone	C & O	Ottawa, W. Va.
Buffalo Thacker Coal Co.	Huntington, W. Va.	Monte No. 2	Boone	C & O	Ottawa, W. Va.
Buffalo Thacker Coal Co.	Huntington, W. Va.	Monte No. 3	Boone	C & O	Ottawa, W. Va.
Cannelton Coal & Coke Co.	Cannelton, W. Va.	No. 1	Fayette	K. & M.	Cannelton, W. Va.
Carbon Fuel Co.	Carbon, W. Va.	No. 1	Kanawha	C & O	Nabob, W. Va.
Christian Colliery Co.	Milwaukee, Wis.	Christian	Fayette	C & O	Mahan, W. Va.
Colcord Coal Co.	Montreal, W. Va.	Montreal No. 2	Robtigh	C & O	Montreal, W. Va.
Colcord Coal Co.	Montreal, W. Va.	Mill Hollow	Kabugh	C & O	Montreal, W. Va.
Cronin, A. D. Coal Co.	Aspen, W. Va.	Ruff	Logan	C & O	Aspen, W. Va.
Cunningham, Miller & Enslow	Huntington, W. Va.	Sky	Logan	C & O	Kistler, W. Va.
Deegans Eagle Coal Co.	Huntington, W. Va.	Deegans Eagle	Logan	C & O	Aspen, W. Va.
Draper Coal & Coke Co.	Logan, W. Va.	Draper No. 1	Logan	C & O	Logan, W. Va.
Draper Coal & Coke Co.	Logan, W. Va.	Draper No. 2	Logan	C & O	Logan, W. Va.
Eagle By-Product Collieries Co.	Baltimore, Md.	Kebs No. 1	Fayette	C & O	Krebs, W. Va.
Eagle Coal Co.	Montgomery, W. Va.	Eagle	Fayette	C & O	Montgomery, W. Va.
Elkhorn Pit & Coal Mining Co.	Milwaukee, Wis.	Eagle No. 4	Fayette	C & O	Elkhorn, W. Va.
Elkhorn Mountain Coal Co.	Arstead, W. Va.	Elkhorn No. 3	Fayette	C & O	Elkhorn, W. Va.
Glogora Coal Co.	Huntington, W. Va.	Starkley No. 10	Robtigh	C & O	Starkley, W. Va.
Guyan Mining Co.	Detroit, Mich.	Rita	Logan	C & O	Wilder, W. Va.
Guyan Valley Coal Co.	Huntington, W. Va.	Guyan Valley	Logan	C & O	Wilder, W. Va.
Hazy Eagle Coal Co.	Edwight, W. Va.	Hazy Eagle	Robtigh	C & O	Edwight, W. Va.
Imperial Colliery Co.	Burnwell, W. Va.	Imperial No. 1	Kanawha	C & O	Burnwell, W. Va.
Imperial Colliery Co.	Burnwell, W. Va.	Imperial No. 2	Kanawha	C & O	Burnwell, W. Va.
Imperial Colliery Co.	Burnwell, W. Va.	Imperial No. 3	Kanawha	C & O	Burnwell, W. Va.
Ingram Branch Coal Co.	Burnwell, W. Va.	Ingram Branch	Fayette	Virginia	Pige, W. Va.

(Continued on Next Page)

EAGLE SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Kanawha & Hocking Coal & Coke Co.	Cleveland, O.	No. 113.	Fayette.	K. & M.	Longacre, W. Va.
Kanawha & Hocking Coal & Coke Co.	Cleveland, O.	No. 116.	Fayette.	K. & M.	Boomer, W. Va.
Lick Fork Colliery Co.	Huntington, W. Va.	Lick Fork No. 1.	Fayette.	Virginian.	Lick Fork, W. Va.
Lick Fork Colliery Co.	Huntington, W. Va.	Lick Fork No. 2.	Fayette.	Virginian.	Lick Fork, W. Va.
Litz-Smith Coal Co.	Accoville, W. Va.	Litz-Smith No. 3.	Logan.	C. & O.	Accoville, W. Va.
Logan-Eagle Mining Co.	Latrobe, W. Va.	Logan Eagle No. 1.	Logan.	C. & O.	Crites, W. Va.
Long Branch Coal Co.	Mt. Hope, W. Va.	Long Branch.	Fayette.	Virginian.	Par, W. Va.
Loup Creek Colliery Co.	Page, W. Va.	Loup Creek No. 1.	Fayette.	Virginian.	Page, W. Va.
Low Ash Coal Co., Inc.	Huntington, W. Va.	Low Ash.	Logan.	C. & O.	Accoville, W. Va.
Macbeth Coal Co.	Macbeth, W. Va.	Macbeth.	Logan.	C. & O.	Macbeth Siding, W. Va.
Madne Coal Co.	1st Natl. Bk. Bldg., Huntington, W. Va.	North & South.	Logan.	C. & O.	Robinette, W. Va.
Milburn By-Product Coal Co.	Milburn, W. Va.	Milburn No. 1.	Fayette.	C. & O.	Milburn, W. Va.
Oakland Coal Co.	Fairmont, W. Va.	Crisp nt.	Fayette.	C. & O.	Smithers, W. Va.
Oakland Coal Co.	Fairmont, W. Va.	Glen Falls.	Fayette.	K. & M.	Glen Ferris, W. Va.
Oakland Coal Co.	Fairmont, W. Va.	Oakland.	Fayette.	K. & M.	Smithers, W. Va.
Paint Creek Coal Mining Co.	Cleveland, O.	Gross.	Kanawha.	C. & O.	Whittaker, W. Va.
Paint Creek Coal Mining Co.	Cleveland, O.	Hickory Camp.	Fayette.	C. & O.	Collinsdale, W. Va.
Prockter Eagle Coal Co.	Huntington, W. Va.	Prockter Eagle.	Logan.	C. & O.	Robinette, W. Va.
Prockter-Winifrede Coal Co.	Huntington, W. Va.	Prockter.	Logan.	C. & O.	Amberstide, W. Va.
Raleigh Wyoming Coal Co.	Charlston, W. Va.	Edwight No. 1.	Raleigh.	C. & L., Virginian.	Eowight, W. Va.
Rich Creek Coal Co.	Fairmont, W. Va.	Lyburn No. 1.	Logan.	C. & O.	Lyburn, W. Va.
Rum Creek Collieries & By-Products Co.	Dehue, W. Va.	Rum No. 1.	Logan.	C. & O.	Dehue, W. Va.
St. Clair Coal Mining Co.	Milwaukee, Wis.	Eagle.	Fayette.	C. & O.	Eagle, W. Va.
Solvay Collieries Co.	Syracuse, N. Y.	Kingston No. 1.	Fayette.	C. & O.	Kingston, W. Va.
Solvay Collieries Co.	Syracuse, N. Y.	Kingston No. 3.	Fayette.	C. & O.	Kingston, W. Va.
Solvay Collieries Co.	Syracuse, N. Y.	Kingston No. 4.	Fayette.	C. & O.	Kingston, W. Va.
Solvay Collieries Co.	Syracuse, N. Y.	Kingston No. 5.	Fayette.	C. & O.	Kingston, W. Va.
Solvay Collieries Co.	Syracuse, N. Y.	West rly.	Fayette.	C. & O.	West rly, W. Va.
Spruce River Coal Co., The.	Massillon, O.	Ramage No. 2.	Boone.	C. & O.	Ramage, W. Va.
Spruce River Coal Co., The.	Massillon, O.	Ramage No. 3.	Boone.	C. & O.	Ramage, W. Va.
Standard Eagle Coal Co.	Huntington, W. Va.	Standard Eagle.	Boone.	C. & O.	Secol, W. Va.
Standard Island Creek Coal Co.	Cleveland, O.	Loma.	Logan.	C. & O.	Taplin, W. Va.
Steel & Tube Co. of America, The.	Chicago, Ill.	No. 1.	Logan.	C. & O.	Dehue, W. Va.
Steel & Tube Co. of America, The.	Chicago, Ill.	No. 5.	Logan.	C. & O.	Dehue, W. Va.
Superior Eagle Coal Co.	Huntington, W. Va.	Superior Eagle.	Boone.	C. & O.	Jeffrey, W. Va.
Thurmond Coal Co.	Logan, W. Va.	Thurmond.	Logan.	C. & O.	Dalney, W. Va.
Two-Seam Coal Co.	Winding Gulf, W. Va.	No. 1.	Fayette.	K. & M.	Boomer, W. Va.
Two-Seam Coal Co.	Winding Gulf, W. Va.	No. 3.	Fayette.	K. & M.	Boomer, W. Va.
Two-Seam Coal Co.	Winding Gulf, W. Va.	No. 3.	Fayette.	K. & M.	Boomer, W. Va.
Valco Coal Co.	Charlston, W. Va.	Valco.	Lincoln.	C. & O.	Greenview, W. Va.
Walnut Hill Fuel Co.	Vaughan, W. Va.	Walnut Hill.	Nicholas.	C. & O.	Vaughan, W. Va.
W. Va. Eagle Coal Co.	Charleston, W. Va.	No. 2.	Fayette.	K. & M.	Boncar, W. Va.

FIRE CREEK SEAM (Known also as QUINNIMONT SEAM)

Mined in New River District. Semibituminous rank. Suitable for Bee-hive Coking, Bunkering, Export, Locomotive Fuel, Melting, Steam, By-Product Coking, Domestic, Producer Gas and Smithing uses. Trade name, Smokeless Coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Batoff Coal Co.	Stonewall, W. Va.	Stonewall.	Raleigh.	Chapapeake & Ohio.	Stonewall, W. Va.
Bechwood Coal & Coke Co.	Claramont, W. Va.	No. 1.	Fayette.	C. & O.	Claramont, W. Va.
Bechwood Coal & Coke Co.	Claramont, W. Va.	No. 2.	Fayette.	C. & O.	Claramont, W. Va.
Big Bend Coal Co.	Dimmock, W. Va.	Big Bend.	Fayette.	C. & O.	Dimmock, W. Va.
Rowyer Smokeless Coal Co.	Whitby, W. Va.	Rowyer.	Raleigh.	Virginian.	Pacontown, W. Va.
Cook & Cart r Coal Co.	Terry, W. Va.	Cook & Cart r.	Raleigh.	C. & O.	McCreery, W. Va.
Douglas Coal Co.	Weich, W. Va.	Douglas.	Raleigh.	Virginian.	Fireco, W. Va.
Ephraim Creek Coal & Coke Co.	11 Broadway, New York City, N. Y.	Buffalo.	Fayette.	C. & O.	Thayer, W. Va.
Ephraim Creek Coal & Coke Co.	11 Broadway, New York City, N. Y.	Slat r.	Fayette.	C. & O.	Thayer, W. Va.
Export Coal Co.	Export, W. Va.	Export.	Fayette.	C. & O.	Export, W. Va.
Fire Creek Coal & Coke Co.	Staunton, Va.	Fire Creek.	Fayette.	C. & O.	Fire Creek, W. Va.
Fire Creek Smokeless Fuel Co.	Lgo, W. Va.	Lgo.	Raleigh.	Virginian, C. & O.	Besoco, W. Va.
Four Vein Coal Co.	Reckley, W. Va.	Four Vein.	Raleigh.	C. & O.	Lanark, W. Va.
Greenwood Coal Co.	Lawton, W. Va.	Greenwood.	Fayette.	C. & O.	Brownwood, W. Va.
Himlock Hollow Coal & Coke Co.	Lawton, W. Va.	Himlock Hollow.	Fayette.	C. & O.	Layland, W. Va.
Hump Mountain Smokeless Coal Co.	Humoco, W. Va.	Hump Mountain.	Summers.	Swell Valley.	Clapgood, W. Va.
Laurel Creek Coal Co.	Charlston, W. Va.	Laurel.	Fayette.	C. & O.	Laurel, W. Va.
Lockie Fire Creek Coal Co.	Welch, W. Va.	Lockie.	Raleigh.	Virginian.	Fireco, W. Va.
Lillybrook Coal Co.	Lillybrook, W. Va.	Lillybrook No. 1.	Raleigh.	Virginian.	Lillybrook, W. Va.
Lillybrook Coal Co.	Lillybrook, W. Va.	Lillybrook No. 2.	Raleigh.	Virginian.	Fire co, W. Va.
Low Volatile Consolidated Coal Co.	Reckley, W. Va.	Concho.	Fayette.	C. & O.	Thurmond, W. Va.
Mountain State Coal Corp.	Huntington, W. Va.	Paton.	Mellonwell.	N. & W.	Kitter, W. Va.
Mountain State Coal Corp.	Huntington, W. Va.	Gertrin.	Mellonwell.	N. & W.	Kitter, W. Va.
New River & Pocahontas Consol. Coal Co.	Philadelphia, Pa.	Layland.	Fayette.	C. & O.	Layland, W. Va.
Newlyn Coal Co.	Newlyn, W. Va.	N. wlyn.	Fayette.	C. & O.	Newlyn, W. Va.
Phoenix Coal Co.	Charlston, W. Va.	Phoenix.	Fayette.	C. & O.	Thayer, W. Va.
Quinnimont Coal Co.	Quinnimont, W. Va.	Big O.	Fayette.	C. & O.	Big O, W. Va.
Raleigh Fire Creek Coal Co.	Tracee, W. Va.	Battleship.	Raleigh.	Virginian.	Bacontown, W. Va.
Royal Coal Co.	Royal, W. Va.	Royal.	Raleigh.	C. & O.	Royal, W. Va.
Scotia Coal & Coke Co.	Charlston, W. Va.	Rush Run.	Fayette.	C. & O.	South Rush Run, W. Va.
Wewin Coal Co.	N. wlyn, W. Va.	Wewin.	Fayette.	C. & O.	Thurmond, W. Va.
West Virginia Coal Co., The.	Richmond, Va.	Stone Cliff.	Fayette.	C. & O.	Stone Cliff, W. Va.
Williams-Combs Coal Co.	Reckley, W. Va.	Williams-Combs.	Fayette.	C. & O.	Himlock Hollow, W. Va.
Wilton Smokeless Coal Co.	Tracee, W. Va.	Wilton.	Raleigh.	Virginian.	John n, W. Va.
Wright Coal & Coke Co.	New York, N. Y.	No. 1.	Raleigh.	C. & O.	Wright, W. Va.
Wright Coal & Coke Co.	New York, N. Y.	No. 2.	Raleigh.	C. & O.	Wright, W. Va.

FREEPORT, LOWER SEAM

Mined in Upper Potomac and Randolph-Barbour districts. Bituminous rank. Suitable for Tile and Pottery Burning, Cement Burning, Producer Gas, Melting, Domestic, Steam, Locomotive Fuel and Powdered uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Diamond Fuel Co.	New York, N. Y.	Diamond No. 1.	Barbour.	R. & O.	Arden, W. Va.
Liberty Mining Co.	Grafton, W. Va.	Banner.	Marion.	R. & O.	Powell, W. Va.
Ridgely & Somerville Coal Co.	Ridgely, W. Va.	No. 1.	Barbour.	B. & O.	Arden, W. Va.
Salkeld Coal Co.	519 Oliver Bldg., Pittsburgh, Pa.	Empire.	Barbour.	B. & O.	Ridgely, W. Va.
Southern Coal Co., The.	Fairmont, W. Va.	Edwards.	Barbour.	B. & O.	Volga, W. Va.
Triad Coal Co.	Reedsville, W. Va.	Triad.	Preston.	N. & K.	Leons, W. Va.

FREEPORT, UPPER SEAM

Mined in Elk Garden, Upper Potomac and Fairmont districts. Bituminous and Semibituminous ranks. Suitable for Beehive Coking, By-Product Coking, Cement Burning, Producer Gas, Steam, Domestic, Railway, Export, Powdered and Smithing uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Albright Coal & Coke Co.	Pittsburgh, Pa.	Dunison No. 1	Monongalia	B. & O.	Little Falls, W. Va.
Albright Smokeless Coal Co.	Richmond, Pa.	Baker	Preston	W. V. N.	Tunnelton, W. Va.
Atlantic Coal & Coke Co.	727 Land Title Bldg., Philadelphia, Pa.	Atlantic No. 1	Preston	W. V. N.	Tunnelton, W. Va.
Austen Coal & Coke Co.	Austen, W. Va.	Austen No. 1	Preston	B. & O.	Austen, W. Va.
Austen Coal & Coke Co.	Austen, W. Va.	Austen No. 2	Preston	B. & O.	Austen, W. Va.
Austen Coal & Coke Co.	Austen, W. Va.	Austen No. 3	Preston	B. & O.	Austen, W. Va.
Barford Coal Co.	Kingwood, W. Va.	Morral	Barbour	B. & O.	Phillippi, W. Va.
Bethlehem Mines Corp.	Bethlehem, Pa.	Sara	Preston	W. Va. N.	Kingwood, W. Va.
Bethlehem Mines Corp.	Bethlehem, Pa.	Bratz No. 22	Preston	M. & K.	Bratz, W. Va.
Bethlehem Mines Corp.	Bethlehem, Pa.	Bratz No. 27	Preston	M. & K.	Taylor, W. Va.
Bethlehem Mines Corp.	Bethlehem, Pa.	Masontown No. 26	Preston	M. & K.	Masontown, W. Va.
Bethlehem Mines Corp.	Bethlehem, Pa.	Richard No. 21	Monongalia	M. & K.	Richard, W. Va.
Bethlehem Mines Corp.	Bethlehem, Pa.	Richard No. 23	Monongalia	M. & K.	Dellslow, W. Va.
Bethlehem Mines Corp.	Bethlehem, Pa.	Kingwood No. 24	Preston	M. & K.	Kingwood, W. Va.
Bonfield Coal Co.	Tunnelton, W. Va.	Louder	Preston	B. & O., W. Va. North.	Tunnelton, W. Va.
Borgman Coal Co.	Tunnelton, W. Va.	Borgman No. 1	Preston	W. V. N.	Tunnelton, W. Va.
Borgman Coal Co.	Tunnelton, W. Va.	Borgman No. 2	Preston	W. V. N.	Tunnelton, W. Va.
Borgman Coal Co.	Tunnelton, W. Va.	Borgman No. 3	Preston	W. V. N.	Tunnelton, W. Va.
Brady Coal Corp.	Piedmont, W. Va.	Abrams Creek No. 1	Mineral	W. M.	Oakmont, W. Va.
Buchannon River Coal Co.	Uniontown, Pa.	Adrian	Upshur	B. & O.	Adrian, W. Va.
Buchannon River Coal Co.	Uniontown, Pa.	Fluence	Upshur	B. & O.	Adrian, W. Va.
Callish Coal Co.	Albright, W. Va.	Callish No. 1	Preston	M. & K.	Albright, W. Va.
Car-Duff Smokeless Coal Co.	Fairmont, W. Va.	Kennel	Preston	B. & O.	Tunnelton, W. Va.
Carlton Mining & Power Co.	Kingwood, W. Va.	Carlton	Preston	W. V. N.	Tunnelton, W. Va.
Carroll Cross Coal Co.	Piedmont, W. Va.	Cross	Mineral	W. M.	Emoryville, W. Va.
Carroll Cross Coal Co.	Piedmont, W. Va.	Imperial	Mineral	W. M.	Emoryville, W. Va.
Castle Falls Coal Co.	Clarksburg, W. Va.	Nancy No. 1	Preston	B. & O.	Hardman, W. Va.
Castle Falls Coal Co.	Clarksburg, W. Va.	Nancy No. 2	Preston	B. & O.	Hardman, W. Va.
Charr Coal Co.	Philadelphia, Pa.	Madowale	Barbour	B. & O.	Madowale, W. Va.
Connellsville Basin Coke Co.	Harrisburg, Pa.	Rock Forge No. 1	Monongalia	M. & K.	Rock Forge, W. Va.
Connellsville Basin Coke Co.	Harrisburg, Pa.	Rock Forge No. 2	Monongalia	M. & K.	Rock Forge, W. Va.
Connellsville Basin Coke Co.	Harrisburg, Pa.	Rock Forge No. 3	Monongalia	M. & K.	Rock Forge, W. Va.
Craig Coal Mining Co.	Kingwood, W. Va.	Howesville	Preston	W. Va. N.	Howesville, W. Va.
Davis Coal & Coke Co.	Baltimore, Md.	Bombush No. 26	Tucker	W. Md.	Bombush, W. Va.
Davis Coal & Coke Co.	Baltimore, Md.	Bombush No. 28	Tucker	W. Md.	Bombush, W. Va.
Davis Coal & Coke Co.	Baltimore, Md.	Coketon No. 24	Tucker	W. Md.	Thomas, W. Va.
Davis Coal & Coke Co.	Baltimore, Md.	Herry No. 22	Grant	W. Md.	Herry, W. Va.
Davis Coal & Coke Co.	Baltimore, Md.	Thomas No. 23	Tucker	W. Md.	Thomas, W. Va.
Davis Coal & Coke Co.	Baltimore, Md.	Thomas No. 25	Tucker	W. Md.	Thomas, W. Va.
Davis Coal & Coke Co.	Baltimore, Md.	Thomas No. 29	Tucker	W. Md.	Davis, W. Va.
Davis Coal & Coke Co.	Baltimore, Md.	Thomas No. 29 1/2	Tucker	W. Md.	Davis, W. Va.
Deaker Coal Corp.	Everett Bldg., Akron, O.	Deaker	Preston	W. Va. North, B. & O.	Irona, W. Va.
Deaker Coal Corp.	Everett Bldg., Akron, O.	Fluence	Preston	W. Va. North, B. & O.	Irona, W. Va.
Dean Coal Co.	Elk Garden, W. Va.	Dean No. 1	Mineral	W. M.	Elk Garden, W. Va.
Dean Coal Co.	Elk Garden, W. Va.	Dean No. 2	Mineral	W. M.	Elk Garden, W. Va.
Dean Coal Co.	Elk Garden, W. Va.	Dean No. 3	Mineral	W. M.	Elk Garden, W. Va.
Deep Run Big Vein Coal Co.	Elk Garden, W. Va.	No. 1	Mineral	W. Md.	Shaw, W. Va.
Deep Run Big Vein Coal Co.	Elk Garden, W. Va.	No. 2	Mineral	W. Md.	Shaw, W. Va.
Deep Run Big Vein Coal Co.	Elk Garden, W. Va.	No. 3	Mineral	W. Md.	Shaw, W. Va.
Deep Run Big Vein Coal Co.	Elk Garden, W. Va.	No. 4	Mineral	W. Md.	Shaw, W. Va.
Deep Run Big Vein Coal Co.	Elk Garden, W. Va.	No. 5	Mineral	W. Md.	Shaw, W. Va.
Dellslow Coal Co.	Morgantown, W. Va.	Atta	Monongalia	M. & K., B. & O.	Dellslow, W. Va.
Enterprise Coal Co.	Morgantown, W. Va.	Masontown	Preston	M. & K.	Masontown, W. Va.
Estella Coal Mining Co.	Phillippi, W. Va.	Estella No. 1	Barbour	B. & O.	Phillippi, W. Va.
Fairmont & Boulder Coal Co.	Fairmont, W. Va.	Chas. E. Hawkes	Barbour	B. & O.	Boulder, W. Va.
Fairmont-Masontown Coal Co.	Fairmont, W. Va.	Dale	Upshur	B. & O.	Adrian, W. Va.
Ferdell Coal Co.	Fairmont, W. Va.	Rotland	Barbour	B. & O.	Adrian, W. Va.
Green Ridge Coal Co.	Morgantown, W. Va.	Green Ridge	Preston	M. & K.	Sutherland, W. Va.
Green, W. H. Coal Co.	Elkins, W. Va.	Vende	Upshur	B. & O.	Adrian, W. Va.
Greymont Coal Co.	Connellsville, Pa.	Boulder	Barbour	B. & O.	Boulder, W. Va.
H. D. W. Coal Co.	Tunnelton, W. Va.	Freeport	Preston	W. V. N.	Tunnelton, W. Va.
Hamill Coal & Coke Co.	Blaine, W. Va.	Freeport	Garrett, Md.	W. Md.	Blaine, W. Va.
Hamill Coal & Coke Co.	Blaine, W. Va.	Hamill No. 3	Garrett, Md.	W. Md.	Blaine, W. Va.
Hamill Coal & Coke Co.	Blaine, W. Va.	Hamill No. 4	Garrett, Md.	W. Md.	Blaine, W. Va.
Hice Coal Co.	696-710 Jamaica Ave., Brooklyn, N. Y.	Hice	Monongalia	P. B. & O., M. & K.	Dellslow, W. Va.
Hiorra Coal Co.	Uniontown, Pa.	Vulcan	Preston	B. & O.	Hiorra, W. Va.
Horchler Coal Mining Co.	Xaburg, W. Va.	Fredrick No. 1	Preston	B. & O.	Newburg, W. Va.
Honck-Ridder Bros. Coal Mng. Co.	Austen, W. Va.	Honck-Ridder	Preston	B. & O.	Austen, W. Va.
Irona Coal Co.	727 Land Title Bldg., Philadelphia, Pa.	Irona No. 1	Preston	W. Va. Northern	Irona, W. Va.
Irona Coal Co.	727 Land Title Bldg., Philadelphia, Pa.	Irona No. 2	Preston	W. Va. Northern	Irona, W. Va.
Jordan, S. H. Coal Co.	Kaysville, W. Va.	No. 1	Grant	W. Md.	Jordan, Md.
Jordan, S. H. Coal Co.	Kaysville, W. Va.	No. 2	Grant	W. Md.	Jordan, Md.
Kane Creek Coal Co.	Fairmont, W. Va.	Iona	Preston	M. & K.	Kanes Cr. Sta., W. Va.
Kiddy Coal Co.	Buckhannon, W. Va.	Deal	Upshur	B. & O.	Buckhannon, W. Va.
Kildow Coal Co.	Crofton, W. Va.	Kildow	Preston	Preston, B. & O.	Putton, W. Va.
LaRue By-Product Colliery Co.	Kingwood, W. Va.	Gibson	Preston	W. Va. North, B. & O.	Tunnelton, W. Va.
Lee Colliery Co.	Phillippi, W. Va.	Edith	Barbour	B. & O.	Adrian, W. Va.
Lucky Jack Mining Co.	Kingwood, W. Va.	Lucky Jack	Preston	W. Va. N.	Kingwood, W. Va.
McClellan Coal Co.	Uniontown, Pa.	Winona	Taylor	B. & O.	Colman, W. Va.
McKawig Coal Co.	Phillipsburg, W. Va.	N. thorn	Garratt	W. Md.	Bayard, W. Va.
Merchants Coal Corp.	First Natl. Bank Bldg., Pittsburgh, Pa.	Tunnelton	Preston	B. & O.	Tunnelton, W. Va.
Merrill, W. A. & Co.	Buck, W. Va.	Sirk	Clay	B. & O.	Villa Nova, W. Va.
Miller Coal Co.	Fayette City, Pa.	Elia	Upshur	Coal & Coke	Adrian, W. Va.
Miller Joseph	Morgantown, W. Va.	Miller No. 1	Preston	M. & K.	Bratz, W. Va.
Miller Joseph	Morgantown, W. Va.	Miller No. 2	Preston	M. & K.	Bratz, W. Va.
Mineral Coal Mining Co.	Adrian, W. Va.	Mineral	Upshur	Coal & Coke	Adrian, W. Va.
Moon Lumber Co.	Weston, W. Va.	Moon No. 1	Braxton	B. & O.	Centralia, W. Va.
Morgan Coal Co.	Redsville, W. Va.	Lyons	Preston	M. & K.	Lyons, W. Va.
Nordlaw Coal Co.	Clarksburg, W. Va.	Nordlaw No. 1	Barbour	B. & O.	Pull, W. Va.
Potomac Valley Coal Co.	Philadelphia, Pa.	Perless	Mineral	W. Md.	Perless, W. Va.
Preston County Coke Co.	Cascade, W. Va.	Cascade	Preston	M. & K.	Cascade, W. Va.
Preston County Coke Co.	Cascade, W. Va.	Hawley	Preston	M. & K.	Hawley Siding, W. Va.
Preston County Coke Co.	Cascade, W. Va.	Murphy	Preston	M. & K.	Murphy Siding, W. Va.
R. B. & R. C. Coal Co.	Imperial, W. Va.	R. B. & R. C.	Upshur	B. & O.	Tom Mbl., W. Va.
Reed Run Coal Co.	Masontown, W. Va.	Reed Run	Monongalia	M. & K.	Dellslow, W. Va.
Reedsville Coal Co.	Reedsville, W. Va.	Richardson	Preston	M. & K.	Kane Creek, W. Va.
Reilly, W. J. Coal & Coke Co.	Uniontown, Pa.	Winona	Taylor	B. & O.	Colman, W. Va.
Seneca Colliery Co.	Elkins, W. Va.	Orin	Barbour	B. & O.	Crim Siding, W. Va.
Smith Coal Co.	Kingwood, W. Va.	Miller	Preston	M. & K.	Kingwood, W. Va.
Smith Coal Co., The	Adrian, W. Va.	Smith	Upshur	Coal & Coke	Adrian, W. Va.
Spirit Coal & Coke Co.	Connellsville, Pa.	Gibbith	Upshur	C. & C.	Adrian, W. Va.
Spirit Coal & Coke Co.	Connellsville, Pa.	Ross	Upshur	C. & C.	Adrian, W. Va.
Sterling Coal Co., Ltd.	Cleveland, O.	Cecil	Taylor	B. & O.	Cecil, W. Va.

(Continued on Next Page)

FREEPORT, UPPER SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Suddarth Coal Co.	Grafton, W. Va.	Cutright	Upshur	B. & O.	Sago, W. Va.
Tunnelton-Freeport Coal Co.	Tunnelton, W. Va.	Blas-r	Preston	B. & O.	Tunnelton, W. Va.
Tayford Coal Co.	Radsville, W. Va.	Tayford	Pr ston	B. & O.	Radsville, W. Va.
United States Coal & Coke Co.	Pittsburgh, Pa.	No. 40	Barbour	B. & O.	Boylon, W. Va.
Victory Coal Co., The	Wooster, O.	Victory	Preston	W. Va. Northern	Tunnelton, W. Va.
Waddell Coal Co.	Philippi, W. Va.	Humphreys No. 1	Barbour	B. & O.	Philippi, W. Va.
Willuquison Coal Co.	Elkins, W. Va.	Vib. No. 2	Barbour	B. & O.	Half, W. Va.
Wilmoth Coal Co.	Corn Lisle, Pa.	Vivian	Pr ston	W. Va. Northern	Kingwood, W. Va.
Winchester Coal Co.	Clarksburg, W. Va.	Virginia	Barbour	B. & O.	Arden, W. Va.
Zinn-Richardson Coal Co.	Masonstown, W. Va.	Zinn	Preston	B. & O.	Bretz, W. Va.

IAEGER SEAM

Mined in Tug River district. Bituminous rank. Suitable for Producer Gas, Domestic, Steam and Locomotive Fuel uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Castle Coal Co.	Iaeger, W. Va.	Castle	McDowell	N. & W.	Iaeger, W. Va.
Cline Coal Co.	Iaeger, W. Va.	Cline	McDowell	N. & W.	Iaeger, W. Va.
Iaeger Pocahontas Coal Co.	Iaeger, W. Va.	Anville	McDowell	N. & W.	Iaeger, W. Va.
Red Ash Coal Co.	Iaeger, W. Va.	Red Ash	McDowell	N. & W.	Iaeger, W. Va.
Van Wert Coal Co., The	Van Wert, O.	Lone Jack	McDowell	N. & W.	Iaeger, W. Va.
Ward Pocahontas Coal Co.	Iaeger, W. Va.	Ward Pocahontas	McDowell	N. & W.	Iaeger, W. Va.

KITTANNING, LOWER SEAM (Known also as NO. 5 BLOCK in Kanawha district)

Mined in Elk Garden, Upper Potomac and Randolph-Barbour districts. Bituminous and Semibituminous ranks. Suitable, by part sections or all sections for Beehive Coking, Tile and Pottery Burning, Cement Burning, Illuminating Gas, Producer Gas, Melting, Smithing, Steam, Domestic, Railway and Powdered uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Barbour Fuel Co.	Belington, W. Va.	Wilmoth	Barbour	B. & O.	Belington, W. Va.
Beaver Creek Coal Co.	Weaver, W. Va.	Beaver Crk. No. 2	Kandolph	W. Md.	Weaver, W. Va.
Bons Run Coal Co.	Hyer, W. Va.	Hy r	Praxton	B. & O.	Chilesie, W. Va.
Big Chief Coal Co.	Junior, W. Va.	Pig Chief	Barbour	B. & O.	Junior, W. Va.
Blackwater Coal Co.	Thomas, W. Va.	Blackwater	Tucker	W. Md.	Davis, W. Va.
Blaine Mining Co.	1 Broadway, New York City, N. Y.	Potomac Manor No. 1	Garrett, Md.	W. Md.	Blaine, W. Va.
Blaine Mining Co.	1 Broadway, New York City, N. Y.	Potomac Manor No. 2	Garrett, Md.	W. Md.	Blaine, W. Va.
Blue Ridge Fuel Co., Inc.	Charleston, W. Va.	Blue Ridge	Clay	B. & O.	Groves, W. Va.
Boulder Coal Co.	Philippi, W. Va.	Boulder	Barbour	B. & O.	Boulder, W. Va.
Brady, A. Spates	Elkins, W. Va.	Brady	Randolph	B. & O.	Mabie, W. Va.
Cam Coal Co.	Clarksburg, W. Va.	River	Barbour	B. & O.	Volga, W. Va.
Clermont Coal Mining Co.	Cumberland, Md.	Clermont No. 1	Preston	B. & O.	Hutton, Md.
Colonial Operating & Development Co.	Palmer, W. Va.	Holly No. 1	Praxton	W. V. M., B. & O.	Holly Jet, W. Va.
Crawford, H. M. Coal Co.	Philippi, W. Va.	Black Jo	Barbour	B. & O.	Chumants, W. Va.
Crawford, H. M. Coal Co.	Philippi, W. Va.	Luella	Barbour	B. & O.	Arden, W. Va.
Crown Coal Co.	Sand Run, W. Va.	Crown	Upshur	B. & O.	Sand Run, W. Va.
Cumberland Coal Co.	Baltimore, Md.	Douglas	Tucker	W. Md.	Douglas, W. Va.
Davis Coal & Coke Co.	Baltimore, Md.	Benbush No. 38	Tucker	W. Md.	Benbush, W. Va.
Davis Coal & Coke Co.	Baltimore, Md.	Coketon No. 36	Tucker	W. Md.	Thomas, W. Va.
Davis Coal & Coke Co.	Baltimore, Md.	Coketon No. 37	Tucker	W. Md.	Thomas, W. Va.
Davis Coal & Coke Co.	Baltimore, Md.	Coketon No. 35	Tucker	W. Md.	Thomas, W. Va.
Davis Coal & Coke Co.	Baltimore, Md.	Dartmoor No. 4	Barbour	W. Md.	Dartmoor, W. Va.
Davis Coal & Coke Co.	Baltimore, Md.	Kempton No. 42	Preston	W. Md.	Kempton, W. Va.
Davis Coal & Coke Co.	Baltimore, Md.	Weaver No. 8	Barbour	W. Md.	Weaver, W. Va.
Davis Coal & Coke Co.	Baltimore, Md.	Pierce No. 39	Tucker	W. Md.	Pierce, W. Va.
Davis Coal & Coke Co.	Baltimore, Md.	Pierce No. 40	Tucker	W. Md.	Pierce, W. Va.
Davis Coal & Coke Co.	Baltimore, Md.	Pierce No. 43	Tucker	W. Md.	Pierce, W. Va.
Davis Coal & Coke Co.	Baltimore, Md.	Thomas No. 34	Tucker	W. Md.	Thomas, W. Va.
Davis Coal & Coke Co.	Baltimore, Md.	Weaver No. 2	Randolph	W. Md.	Weaver, W. Va.
Davis Coal & Coke Co.	Baltimore, Md.	Weaver No. 7	Barbour	W. Md.	Weaver, W. Va.
Dean Coal Co.	Elk Garden, W. Va.	Dean No. 1	Mineral	W. M.	Elk Garden, W. Va.
Dean Coal Co.	Elk Garden, W. Va.	Dean No. 2	Mineral	W. M.	Elk Garden, W. Va.
Dean Coal Co.	Elk Garden, W. Va.	Dean No. 3	Mineral	W. M.	Elk Garden, W. Va.
Diamond Operating Co.	N. Y. N. Y.	Diamond No. 4	Barbour	B. & O.	Arden, W. Va.
Diamond Operating Co.	N. Y. N. Y.	Diamond No. 6	Barbour	B. & O.	Arden, W. Va.
East Grafton Coal Mining Co.	Cleveland, O.	East Grafton	Taylor	B. & O.	Thornton, W. Va.
Eddy Coal Co.	Ockmont, W. Va.	Eddy	Mineral	W. M.	Harrison, W. Va.
Emmons Coal Mining Co., Inc.	Philadelphia, Pa.	Culpepper	Grant	W. Md.	Bavard, W. Va.
Fairmont Kittanning Coal Co.	Fairmont, W. Va.	Byrer	Barbour	B. & O.	Tygart Jet, W. Va.
Freeport Coal Co.	Oakland, Md.	Crane	Preston	Kendall to B. & O.	Hutton, Md.
Freeport Coal Co.	Oakland, Md.	Kerns	Preston	Preston	Hutton, Md.
Gage Coal & Coke Co.	Pittsburgh, Pa.	Gage No. 1	Barbour	W. M.	Gage, W. Va.
Gage Coal & Coke Co.	Pittsburgh, Pa.	Gage No. 2	Barbour	B. & O.	Junior, W. Va.
Glade Run Coal & Coke Co.	Bloomington, Md.	Florence	Mineral	W. Md.	Florence, W. Va.
Gleason Coal & Coke Co.	Frostburg, Md.	Gleason No. 1	Mineral	W. Md.	Gleason, W. Va.
Gleason Coal & Coke Co.	Frostburg, Md.	Gleason No. 2	Mineral	W. Md.	Gleason, W. Va.
Greenmar Coal Co.	Elkins, W. Va.	Strader	Upshur	B. & O.	Strader, W. Va.
Hamill Coal & Coke Co.	Blaine, W. Va.	Freeport	Garrett, Md.	W. M.	Blaine, W. Va.
Hamill Coal & Coke Co.	Blaine, W. Va.	Hamill Nos. 1 & 2	Garrett, Md.	W. Md.	Blaine, W. Va.
Hamill Coal & Coke Co.	Blaine, W. Va.	Hamill No. 3	Garrett, Md.	W. M.	Blaine, W. Va.
Hamill Coal & Coke Co.	Blaine, W. Va.	Hamill No. 4	Garrett, Md.	W. M.	Blaine, W. Va.
H. Milton & Lutz	Sago, W. Va.	Lutz	Upshur	B. & O.	Sago, W. Va.
Hardman Fuel Co.	Grafton, W. Va.	Mary Belle No. 1	Taylor	B. & O.	Hardman, W. Va.
Hendricks Coal Co.	Hendricks, W. Va.	Lehigh No. 1	Barbour	W. M.	Belington, W. Va.
Hesper Coal & Coke Co.	Philadelphia, Pa.	Kesper	Upshur	B. & O.	Belington, W. Va.
Hocking Valley Coal Co.	11 Blippi, W. Va.	Hocking Valley	Barbour	B. & O.	Philippi, W. Va.
Hubbard Coal Mining Co.	904 American Bldg., Baltimore, Md.	Hubbard	Mineral	West rd Maryland	West rd, W. Va.
Ida May Coal Co.	Pittsburgh, Pa.	Elizabeth	Barbour	W. M.	Dartmoor, W. Va.
Imperial Coal Co.	Elkins, W. Va.	Indian	Upshur	B. & O.	Imperial, W. Va.
Jordan, S. H.	Keyser, W. Va.	No. 1	Grant	W. Md.	Jordan, Md.
Jordan, S. H.	Keyser, W. Va.	No. 2	Grant	W. Md.	Jordan, Md.
Loop Coal Co.	Elkins, W. Va.	Loop	Randolph	Coal & Coke	Loop, W. Va.
Masteller Coal Co.	Keyser, W. Va.	N. W. Creek	Mineral	W. Md.	Hampshire, W. Va.
Meriden Smokeless Coal Co.	Meriden, W. Va.	Meriden	Barbour	B. & O.	Meriden, W. Va.
Middle Creek Coal Co.	Charleston, W. Va.	Middle Creek	Clay	B. & O.	Hartland, W. Va.
Mildred Coal Co.	Junior, W. Va.	Mildred	Barbour	B. & O.	Junior, W. Va.
Monroe Coal Mining Co.	Bethlehem, Pa.	Elk Run No. L	Garrett, Md.	W. Md.	Barnum, W. Va.
Mountain Eagle Collieries Co.	Charleston, W. Va.	Lacey-Ray-Jefferson	Kanawha	B. & O.	Turner, W. Va.
Ours Mill Coal Co.	Sago, W. Va.	Ours Mill	Upshur	B. & O.	Sago, W. Va.
Potomac Valley Coal Co.	Philadelphia, Pa.	Louise	Mineral	W. Md.	Chaffee, W. Va.

(Continued on Next Page)

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Pyramid Coal Co.	Independence, W. Va.	Pyramid No. 1.	Taylor.	B. & O.	Hardman, W. Va.
Pyramid Coal Co.	Independence, W. Va.	Pyramid No. 2.	Taylor.	B. & O.	Hoodman, W. Va.
Randolph Colliery Co.	Elkins, W. Va.	Randolph.	Randolph.	W. Md.	Norton, W. Va.
Red Jacket Consol. Coal & Coke Co., Inc.	Red Jacket, W. Va.	Mitchell.	Mingo.	N. & W.	Mat wan, W. Va.
Red Jacket Consol. Coal & Coke Co., Inc.	Red Jacket, W. Va.	No. 52.	Mingo.	N. & W.	Mat wan, W. Va.
Red Jacket, Jr., Coal Co.	Red Jacket, W. Va.	Junior.	Mingo.	N. & W.	Mat wan, W. Va.
Ridgell Coal Mining Co.	Buckhannon, W. Va.	Buckridge No. 3.	Upshur.	B. & O.	Ten Mile, W. Va.
Robinson Coal & Coke Co., The.	Palmer, W. Va.	Elbanor No. 1.	Braxton.	B. & O.	Booby Jet, W. Va.
Robinson Coal & Coke Co., The.	Palmer, W. Va.	Elbanor No. 2.	Braxton.	B. & O.	Holly Jet, W. Va.
Sandridge, D. M. Coal Co.	Junior, W. Va.	City Grove.	Barbour.	W. Md.	Junior, W. Va.
Semeca Colliery Co.	Elkins, W. Va.	Crim.	Barbour.	B. & O.	Crim Siding, W. Va.
St. Cloud Coal Mining Co.	Cumbland, Md.	St. Cloud No. 1.	Mineral.	W. M.	Flume, W. Va.
St. Cloud Coal Mining Co.	Cumbland, Md.	St. Cloud No. 2.	Mineral.	W. M.	Flume, W. Va.
Talbott-McHale Coal Co.	Philippi, W. Va.	Talbott-McHale.	Barbour.	B. & O.	Crim Mine Siding, W. Va.
Tioga Coal Co.	Tioga, W. Va.	Red Eagle.	Nicholas.	B. & O.	Attingham, W. Va.
Twin Mountain Coal Co.	Piedmont, W. Va.	Foley.	Mineral.	B. & O.	Piedmont, W. Va.
Valley Falls Fuel Co.	N. W. York, N. Y.	Valley Falls.	Taylor.	B. & O.	Coffman, W. Va.
Valley Fuel Co.	Piedmont, W. Va.	Mt. Royal.	Barbour.	P. N., W. M. B. & O.	Belington, W. Va.
Watson, Alex. R.	Fairmont, W. Va.	Volga.	Barbour.	M. & O.	Volga, W. Va.
West Junior Coal Co.	Junior, W. Va.	West Junior.	Barbour.	W. M.	Junior, W. Va.
West Virginia Coal & Coke Co.	Elkins, W. Va.	Coalton No. 1.	Randolph.	B. & O.	Coalton, W. Va.
West Virginia Coal & Coke Co.	Elkins, W. Va.	Norton No. 2.	Randolph.	B. & O.	Norton, W. Va.
West Virginia Coal & Coke Co.	Elkins, W. Va.	Harding No. 3.	Randolph.	W. Md.	Norton, W. Va.
West Virginia Coal & Coke Co.	Elkins, W. Va.	Junior No. 4.	Barbour.	W. Md.	Junior, W. Va.
West Virginia Coal & Coke Co.	Elkins, W. Va.	Coal Station No. 5.	Randolph.	B. & O.	Norton, W. Va.
West Virginia Coal & Coke Co.	Elkins, W. Va.	Madie No. 6.	Randolph.	Randolph.	Coalton, W. Va.
West Virginia Coal & Coke Co.	Elkins, W. Va.	Arland No. 7.	Randolph.	B. & O.	Coalton, W. Va.
Wythe Block Coal Co.	Huntington, W. Va.	Sutton.	Webster.	B. & O.	Erbacon, W. Va.

Mined in Kanawha, Coal and Coke, Logan, Thacker and Kenova districts. Bituminous rank. Suitable for
 Tile and Pottery Burning, Cement Burning, Illuminating Gas, Producer Gas, Melting, Domestic,
 Locomotive Fuel, Powdered and Steam Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Barren Creek Colliery Co.	Charleston, W. Va.	Barren Creek	Kanawha	B. & O.	Barren Creek, W. Va.
Bartram Fork Coal Co.	P. O., East Lynn, W. Va.	Bartram	Wayne	N. & W.	East Lynn, W. Va.
Blue Band Coal Co.	Charleston, W. Va.	Blue Band No. 1	Kanawha	K. & M.	Coco, W. Va.
Blue Creek Coal & Land Co.	Blakeley, W. Va.	Blakeley No. 2	Kanawha	K. & W. Va.	Blakeley, W. Va.
Blue Creek Coal & Land Co.	Blakeley, W. Va.	Blakeley No. 4	Kanawha	K. & W. Va.	Blakeley, W. Va.
Blue Creek Coal & Land Co.	Blakeley, W. Va.	Blakeley No. 5	Kanawha	K. & W. Va.	Blakeley, W. Va.
Blue Creek Fuel Co.	Coco, W. Va.	No. 1	Kanawha	K. & W. Va.	Pontarve, W. Va.
Boone Block Mining Co.	Huntington, W. Va.	Boone Block	Boone	C. & O.	Silush, W. Va.
Boone County Coal Corp.	Sharp's, W. Va.	No. 1	Logan	C. & O.	Antrossam, W. Va.
Boone County Coal Corp.	Sharples, W. Va.	No. 5	Logan	C. & O.	Antrossam, W. Va.
Campbell Coal & Coke Co.	Cannifton, W. Va.	No. 6	Kanawha	K. & M.	Cannifton, W. Va.
Campbell's Creek Coal Co.	Cincinnati, O.	No. 1	Kanawha	K. & M.	Putney, W. Va.
Campbell's Creek Coal Co.	Cincinnati, O.	No. 3	Kanawha	K. & M.	Putney, W. Va.
Carver Fork Colliery Co.	Clay, W. Va.	Leathwood	Clay	B. & O.	Clay, W. Va.
Central By-Product Coal Co.	Box 168, Charleston, W. Va.	Central By-Product	Kanawha	Coal & Coke	Turner, W. Va.
Chesapeake Mining Co.	Handley, W. Va.	Chesapeake	Kanawha	C. & O.	Handley, W. Va.
Coal River Collieries Co.	Huntington, W. Va.	Coal River Collieries	Boone	C. & O.	Seth, W. Va.
Colcord Coal Co.	Montreal, W. Va.	Montreal No. 3	Raleigh	C. & O.	Montreal, W. Va.
Colonial Operating & Development Co.	Palmer, W. Va.	Holly No. 1	Braxton	W. Va. Mid. B. & O.	Holly Jet, W. Va.
Cronin, A. D., Coal Co.	Accordville, W. Va.	Franklin	Loone	C. & O.	Altman, W. Va.
Davis Creek Land & Coal Co.	Charleston, W. Va.	David Creek	Kanawha	Kanawha	Spring Hill, W. Va.
Deitz Colliery Co.	Venetta, W. Va.	Deitz	Kanawha	C. & O.	Wyndal, W. Va.
Dampster, William, Coal Co.	Bay City, Mich.	Dampster	Kanawha	K. & M.	Shrader, W. Va.
Dorelen By-Products Coal Co.	Charleston, W. Va.	Max No. 1	Kanawha	K. & M.	Point Lick, W. Va.
Dorelen By-Products Coal Co.	Charleston, W. Va.	Max No. 2	Kanawha	K. & M.	Point Lick, W. Va.
East Lynn Coal Co.	East Lynn, W. Va.	Dixie Lynn	Wayne	N. & W.	East Lynn, W. Va.
Elk River Coal & Lumber Co.	Bundon, W. Va.	Rich Run	Clay	B. C. & G. B. & O.	Wilden & Dundon, W. Va.
Empire Coal Mines Co.	70 Wall St., New York, N. Y.	Empire	Kanawha	B. & O.	Big Chimney, W. Va.
Eureka Coal Co.	Athens, O.	Eureka No. 2	Kanawha	C. & O.	Montgomery, W. Va.
Eureka Coal Co.	Athens, O.	Eureka No. 5	Kanawha	C. & O.	Montgomery, W. Va.
Guyan River Coal Co.	Branchland, W. Va.	Guyan River	Lincoln	C. & O.	Hubball, W. Va.
Hackett Coal Co.	Cedar Grove, W. Va.	Hackett No. 1	Kanawha	K. & M.	Cedar Grove, W. Va.
Horse Creek Block Coal Co.	Columbus, O.	No. 1	Boone	C. & O.	Morrisvale, W. Va.
Indian Run Collieries Co.	Charleston, W. Va.	No. 5	Fayette	C. & O.	Mr. Carbon, W. Va.
Ivy Branch Coal Co.	Charleston, W. Va.	Ivy Branch	Lincoln	C. & O.	Ivaton, W. Va.
Ivy White Ash Coal Co.	Ivaton, W. Va.	Ivy White Ash No. 1	Lincoln	C. & O.	Ivaton, W. Va.
Ivy White Ash Coal Co.	Ivaton, W. Va.	Ivy White Ash No. 2	Lincoln	C. & O.	Ivaton, W. Va.
Johnson, T. L., Coal Co.	Charleston, W. Va.	Ira No. 25	Clay	B. & O.	Groves, W. Va.
Jones-Winfrede Coal Co.	Charleston, W. Va.	Petitt	Clay	Hartland, via B. & O.	Clay, W. Va.
Kanawha Standard Coal Co., Inc.	Clay, W. Va.	Jones	B. & O.	Claywood, W. Va.	Claywood, W. Va.
Lincoln Coal & Coke Co.	Charleston, W. Va.	Maeco	Lincoln	C. & O.	Maeco, W. Va.
Lynchburg Colliery Co.	Vanetta, W. Va.	Lynchburg	Fayette	C. & O.	Vanetta, W. Va.
Malleable Coal Co.	Charleston, W. Va.	Malleable	Lincoln	C. & O.	McCorkle, W. Va.
Mamit Mining Co.	Charleston, W. Va.	Mamit No. 2	Kanawha	K. & W.	Big Chimney, W. Va.
Middle Fork Block Coal Co.	Charleston, W. Va.	Middle Fork Block	Kanawha	K. & W. Va.	Middle Fork, W. Va.
Midvale Colliery Co.	Garnoca, W. Va.	Midvale	Fayette	C. & O.	Garnoca, W. Va.
Morrisvale Coal Co.	Columbus, O.	Morrisvale	Boone	C. & O.	Morrisvale, W. Va.
Number Five Block Coal Co.	Huntington, W. Va.	Number Five Block	Logan	C. & O.	Blair, W. Va.
Peter Cave Coal Co.	Huntington, W. Va.	No. 1	Lincoln	C. & O.	Alford & Altman, W. Va.
Quincy Coal Co.	Quincy, W. Va.	No. 2	Kanawha	K. & M.	Dickinson, W. Va.
Ray-Burdett Coal Co.	Big Chimney, W. Va.	Burton	Kanawha	B. & O.	Wilbiken, W. Va.
Red Jacket Consol. Coal & Coke Co., Inc.	Red Jacket, W. Va.	Rutherford	Mingo	N. & W.	Minesan, W. Va.
Rich Block Coal Co.	Huntington, W. Va.	Rich Block	Boone	C. & O.	Altman, W. Va.
Right Fork Mining Co.	Ivaton, W. Va.	Right Fork	Lincoln	C. & O.	Ivaton, W. Va.
Royal Block Coal Co.	Huntington, W. Va.	Royal Block	Boone	C. & O.	Dixie, W. Va.
Royal White Ash Coal Co.	Alkol, W. Va.	Royal	Lincoln	C. & O.	Alkol, W. Va.
St. Clair Coal Mining Co.	Milwaukee, Wis.	Archer	Fayette	C. & O.	Eagle, W. Va.
Sanderson Mining Co.	Finance Bldg., Greensburg, Pa.	Sanderson	Kanawha	K. & W. Va.	Sanderson, W. Va.
Sanford Coal Co.	Huntington, W. Va.	Sanford No. 1	Wayne	N. & W.	East Lynn, W. Va.
Sanford Coal Co.	Huntington, W. Va.	Sanford No. 2	Wayne	N. & W.	East Lynn, W. Va.
Silush Coal Co.	Charleston, W. Va.	Red Star	Boone	C. & O.	Silush, W. Va.
Slack Branch Coal Co.	Charleston, W. Va.	Slack Branch	Kanawha	K. & W. Va.	Quick, W. Va.
Standard Kanawha Coal Mining Co.	808 Peoples Bk. Bldg., Scranton, Pa.	Coalridge No. 1	Kanawha	K. & W. Va.	Coalridge, W. Va.
Standard Kanawha Coal Mining Co.	808 Peoples Bk. Bldg., Scranton, Pa.	Coalridge No. 2	Kanawha	K. & W. Va.	Coalridge, W. Va.
Stango-Elliott Coal Co.	Charleston, W. Va.	Hilton	Kanawha	K. & W. Va.	Blakeley, W. Va.
Sterling Block Coal Co.	St. Albans, W. Va.	Sterling Block No. 1	Boone	C. & O.	Altman, W. Va.
Sterling Block Coal Co.	St. Albans, W. Va.	Sterling Block No. 2	Boone	C. & O.	Altman, W. Va.
Stonewall Block Coal Co.	Wayne, W. Va.	No. 1	Wayne	N. & W.	East Lynn, W. Va.
Stottlenmyer Coal Co.	Gassaway, W. Va.	Stottlenmyer	Clay	B. & O.	Groves, W. Va.
Tioga Coal Co.	Tioga, W. Va.	Boaver	Nicholas	B. & O.	Allingdale, W. Va.
Vanhail Coal Co.	Silush, W. Va.	Vanhail No. 1	Boone	C. & O.	Silush, W. Va.
Vanhail Coal Co.	Silush, W. Va.	Vanhail No. 2	Boone	C. & O.	Silush, W. Va.

NO. 2 GAS SEAM (Known also as CAMPBELL CREEK SEAM; BURNWELL, RAWL, UPPER WAR EAGLE, FREEBURN and WARFIELD SEAMS in Thacker district)

Mined in Kanawha, Kenova, Logan and Thacker districts. Bituminous rank. Suitable for Beehive Coking, Tile and Pottery Burning, By-Product Coking, Cement Burning, Domestic, Illuminating Gas, Producer Gas, Locomotive Fuel, Melting, Powdered, Export and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
American Rolling Mills Co.	Middletown, O.	Martins	Fayette	K. & M.	Martins, W. Va.
Amherst Coal Co.	Amherst, W. Va.	Amherst No. 1	Logan	C. & O.	Amherst, W. Va.
Ashford Coal & Coke Co.	Charleston, W. Va.	Ashford	Boone	C. & O.	Charleston, W. Va.
Beech Glen Coal Co.	Beech Glen, W. Va.	Beech Glen	Fayette	K. & M.	Bella, W. Va.
Boomer Coal & Coke Co.	Cleveland, O.	No. 3	Fayette	K. & M.	Boomer, W. Va.
Boomer Coal & Coke Co.	Cleveland, O.	No. 4	Fayette	K. & M.	Boomer, W. Va.
Boomer Coal & Coke Co.	Cleveland, O.	No. 5	Fayette	K. & M.	Boomer, W. Va.
Bradley Mining Co.	Madison, W. Va.	Bradley	Boone	C. & O.	Brushton, W. Va.
Buffalo Eagle Coal Co.	Braehom, W. Va.	No. 2	Logan	C. & O.	Beeco, W. Va.
Brush Creek Coal Co.	Charleston, W. Va.	Brush Creek	Boone	C. & O.	Brush Creek, W. Va.
Burning Creek Coal Co.	Williamson, W. Va.	Burning Creek	Mingo	N. & W.	Kermit, W. Va.
Cabin Creek Consolidated Coal Co.	Kayford, W. Va.	Bellare	Kanawha	C. & O.	Decota, W. Va.
Cabin Creek Consolidated Coal Co.	Kayford, W. Va.	Buckeye	Kanawha	C. & O.	Ame, W. Va.
Cabin Creek Consolidated Coal Co.	Kayford, W. Va.	Black Tulip	Kanawha	C. & O.	Ame, W. Va.
Cabin Creek Consolidated Coal Co.	Kayford, W. Va.	Empire	Kanawha	C. & O.	Ame, W. Va.
Cabin Creek Consolidated Coal Co.	Kayford, W. Va.	Cherokee	Kanawha	C. & O.	Cherokee, W. Va.
Cabin Creek Consolidated Coal Co.	Kayford, W. Va.	Holly	Kanawha	C. & O.	Holly, W. Va.
Cabin Creek Consolidated Coal Co.	Kayford, W. Va.	Quarrier	Kanawha	C. & O.	Quarrier, W. Va.
Cabin Creek Consolidated Coal Co.	Kayford, W. Va.	Kayford No. 1	Kanawha	C. & O.	Kayford, W. Va.
Cabin Creek Consolidated Coal Co.	Kayford, W. Va.	Kayford No. 2	Kanawha	C. & O.	Kayford, W. Va.
Cabin Creek Consolidated Coal Co.	Kayford, W. Va.	Ravoon No. 1	Kanawha	C. & O.	Kayford, W. Va.
Cabin Creek Consolidated Coal Co.	Kayford, W. Va.	Shamrock	Kanawha	C. & O.	Kayford, W. Va.
Cabin Creek Consolidated Coal Co.	Kayford, W. Va.	Thistle	Kanawha	C. & O.	Kayford, W. Va.
Cabin Creek Consolidated Coal Co.	Kayford, W. Va.	Rd Warrior	Kanawha	C. & O.	Rd Warrior, W. Va.
Cabin Creek Consolidated Coal Co.	Kayford, W. Va.	United No. 1	Kanawha	C. & O.	United, W. Va.
Callan Coal Co.	Charleston, W. Va.	Callan	Kanawha	K. & M.	Charleston, W. Va.
Kenova Coal Co.	Maxine, W. Va.	Cameva	Boone	C. & O.	Maxine, W. Va.
Cannelton Coal & Coke Co.	Cannelton, W. Va.	No. 1	Fayette	K. & M.	Cannelton, W. Va.
Cannelton Coal & Coke Co.	Cannelton, W. Va.	No. 2	Fayette	K. & M.	Cannelton, W. Va.
Cannelton Coal & Coke Co.	Cannelton, W. Va.	No. 4	Fayette	K. & M.	Cannelton, W. Va.
Cannelton Coal & Coke Co.	Cannelton, W. Va.	No. 5	Fayette	K. & M.	Cannelton, W. Va.
Carbon Fuel Co.	Carbon, W. Va.	No. 2	Kanawha	C. & O.	South Carbon, W. Va.
Carbon Fuel Co.	Carbon, W. Va.	No. 4	Kanawha	C. & O.	R public, W. Va.
Carbon Fuel Co.	Carbon, W. Va.	No. 7	Kanawha	C. & O.	W. Va. No. 1, W. Va.
Carbon Fuel Co.	Carbon, W. Va.	No. 9	Kanawha	C. & O.	Notomine, W. Va.
Columbia Coal Co.	Charleston, W. Va.	Columbia	Kanawha	Campbell Creek	Dana, W. Va.
Commonwealth Power, Ray, & Light Co.	Switzer, W. Va.	Alumina	Logan	C. & O.	Switzer, W. Va.
Cooper, J. M. Coal Co.	Lewiston, W. Va.	Cooper	Kanawha	C. & O.	Winifrede Jet., W. Va.
Cronin, A. D. Coal Co.	Acroville, W. Va.	Ruffer	Logan	C. & O.	Acroville, W. Va.
Cunningham, Miller & Emslow	Huntington, W. Va.	S. Kay	Logan	C. & O.	Kistler, W. Va.
Dana Coal Co.	Charleston, W. Va.	Dana	Kanawha	Campbell Creek	Dana, W. Va.
Dartmouth Coal Co.	Mc Hope, W. Va.	Dartmouth	Boone	C. & O.	Brownland, W. Va.
Degans Eagle Coal Co.	Huntington, W. Va.	Degans Eagle	Logan	C. & O.	Acroville, W. Va.
Deitz Colliery Co.	Vanetta, W. Va.	Deitz	Fayette	C. & O.	Wyndal, W. Va.
Dempsey Coal Co.	Armor, W. Va.	Dempsey	Mingo	N. & W.	Gray Eagle, W. Va.
Don Coal Co.	Huntington, W. Va.	Don No. 2	Kanawha	C. & O.	Eskdale, W. Va.
Don Coal Co.	Huntington, W. Va.	Don No. 4	Kanawha	C. & O.	Eskdale, W. Va.
Don Coal Co.	Huntington, W. Va.	Don No. 5	Kanawha	C. & O.	Eskdale, W. Va.
Eagle Island Coal Co.	Huntington, W. Va.	No. 1	Logan	C. & O.	Kistler, W. Va.
Eagle Island Coal Co.	Huntington, W. Va.	No. 2	Logan	C. & O.	Lax, W. Va.
Empire Fuel Co.	Fairmont, W. Va.	No. 1	Kanawha	K. & M.	Hughston, W. Va.
Empire Fuel Co.	Fairmont, W. Va.	No. 2	Kanawha	K. & M.	Hughston, W. Va.
Eureka Coal Co.	Athens, O.	Eureka No. 1	Kanawha	C. & O.	Montgomery, W. Va.
Eureka Coal Co.	Athens, O.	Eureka No. 6	Kanawha	C. & O.	Montgomery, W. Va.
Fayette Kanawha Coal Co.	Montgomery, W. Va.	No. 1	Fayette	C. & O.	Montgomery, W. Va.
Fayette Kanawha Coal Co.	Montgomery, W. Va.	No. 2	Fayette	C. & O.	Montgomery, W. Va.
Gauley Mountain Coal Co., The	Ansted, W. Va.	Rich Creek No. 2	Fayette	C. & O.	Bryce, W. Va.
Gauley Mountain Coal Co., The	Ansted, W. Va.	Ansted	Fayette	C. & O.	Ansted, W. Va.
Gauley Mountain Coal Co., The	Ansted, W. Va.	Buck Run No. 1	Fayette	C. & O.	Bryce, W. Va.
George's Creek Coal Corp.	Charleston, W. Va.	Malden	Kanawha	K. & M.	Malden, W. Va.
Gray Eagle Coal Co.	Cincinnati, O.	Gray Eagle No. 1	Mingo	N. & W.	Gray Eagle, W. Va.
Gray Eagle Coal Co.	Cincinnati, O.	Gray Eagle No. 2	Mingo	N. & W.	Gray Eagle, W. Va.
Gray Eagle Coal Co.	Cincinnati, O.	Gray Eagle No. 3	Mingo	N. & W.	Gray Eagle, W. Va.
Hackett Coal Co.	Cedar Grove, W. Va.	Hackett No. 4	Kanawha	K. & M.	Cedar Grove, W. Va.
Hazy Eagle Coal Co.	Lewistown, W. Va.	Hazy Eagle	Logan	C. & O.	Edwight, W. Va.
Holt Fuel Co.	Pratt, W. Va.	Holt	Kanawha	C. & O.	Pratt, W. Va.
Huntington Coal & Mining Co.	Huntington, W. Va.	Bellare	Kanawha	K. & M.	Bella, W. Va.
Imperial Colliery Co.	Burnwell, W. Va.	Imperial No. 4	Kanawha	C. & O.	Burnwell, W. Va.
Island Creek Coal Co.	Holden, W. Va.	No. 1	Logan	C. & O.	Holden, W. Va.
Island Creek Coal Co.	Holden, W. Va.	No. 2	Logan	C. & O.	Holden, W. Va.
Island Creek Coal Co.	Holden, W. Va.	No. 3	Logan	C. & O.	Holden, W. Va.
Island Creek Coal Co.	Holden, W. Va.	No. 4	Logan	C. & O.	Holden, W. Va.
Island Creek Coal Co.	Holden, W. Va.	No. 5	Logan	C. & O.	Holden, W. Va.
Island Creek Coal Co.	Holden, W. Va.	No. 6	Logan	C. & O.	Holden, W. Va.
Island Creek Coal Co.	Holden, W. Va.	No. 7	Logan	C. & O.	Holden, W. Va.
Island Creek Coal Co.	Holden, W. Va.	No. 8	Logan	C. & O.	Holden, W. Va.
Island Creek Coal Co.	Holden, W. Va.	No. 9	Logan	C. & O.	Holden, W. Va.
Island Creek Coal Co.	Holden, W. Va.	No. 10	Logan	C. & O.	Holden, W. Va.
Island Creek Coal Co.	Holden, W. Va.	No. 11	Logan	C. & O.	Holden, W. Va.
Island Creek Coal Co.	Holden, W. Va.	No. 12	Logan	C. & O.	Holden, W. Va.
Island Creek Coal Co.	Holden, W. Va.	No. 13	Logan	C. & O.	Holden, W. Va.
Island Creek Coal Co.	Holden, W. Va.	No. 14	Logan	C. & O.	Holden, W. Va.
Island Creek Coal Co.	Holden, W. Va.	No. 15	Logan	C. & O.	Holden, W. Va.
Island Creek Coal Co.	Holden, W. Va.	No. 16	Logan	C. & O.	Holden, W. Va.
Island Creek Coal Co.	Holden, W. Va.	No. 17	Logan	C. & O.	Holden, W. Va.
Island Creek Coal Co.	Holden, W. Va.	No. 18	Logan	C. & O.	Holden, W. Va.
Island Creek Coal Co.	Holden, W. Va.	No. 19	Logan	C. & O.	Holden, W. Va.
Indian Run Collieries Co.	Charleston, W. Va.	No. 4	Fayette	C. & O.	Charleston, W. Va.
Kanawha & Hoeking Coal & Coke Co.	Cleveland, O.	No. 111	Fayette	K. & M.	Carbondale, W. Va.
Kanawha & Hoeking Coal & Coke Co.	Cleveland, O.	No. 112	Fayette	K. & M.	Carbondale, W. Va.
Kanawha & Hoeking Coal & Coke Co.	Cleveland, O.	No. 114	Fayette	K. & M.	Longacre, W. Va.
Kanawha City Coal Co.	Charleston, W. Va.	Kanawha City	Kanawha	C. & O.	Charleston, W. Va.
Kanawha Consolidated Coal Co.	Charleston, W. Va.	Sterling	Boone	C. & O.	Sterling, W. Va.
Kanawha Bon Ste Coal Co.	1201 2 Union Bldg., Charleston, W. Va.	Fry	Kanawha	K. & M.	Hughston or London, W. Va.
Lathrop Coal Co.	Welch, W. Va.	Lathrop	McDowell	N. & W.	Panther, W. Va.
Laurel Branch Coal Co.	Charleston, W. Va.	Laurel Branch	Boone	C. & O.	Johns, W. Va.
Lick Fork Colliery Co.	Huntington, W. Va.	Lick Fork No. 1	Fayette	Virginian	Lick Fork, W. Va.
Lick Fork Colliery Co.	Huntington, W. Va.	Lick Fork No. 2	Fayette	Virginian	Lick Fork, W. Va.
Lilly Coal Co.	Acroville, W. Va.	Lilly	Webster	C. & O.	Acroville, W. Va.
Litz Smith Island Creek Coal Co.	Huntington, W. Va.	Litz Smith No. 4	Logan	C. & O.	Chauncey, W. Va.
Logan Mining Co.	Fairmont, W. Va.	Earling	Logan	C. & O.	Earling, W. Va.
Logan Mining Co.	Fairmont, W. Va.	Mona	Logan	C. & O.	Monaville, W. Va.
Logan Thin V in Coal Co.	Logan, W. Va.	Logan Thin Vein	Logan	C. & O.	Logan, W. Va.

(Continued on Next Page)

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Long Branch Coal Co.	Mt. Hope, W. Va.	Long Branch	Fayette	Virginian	Pax, W. Va.
Long Plains Coal Co.	Huntington, W. Va.	Long Plains	Fayette	C. & O.	Cameron, W. Va.
Loop Creek Colliery Co.	Page, W. Va.	Barbours Fork	Fayette	Virginian	Robinson-Bards-Fork, W. Va.
Loop Creek Colliery Co.	Page, W. Va.	Loop Creek No. 2	Fayette	Virginian	Page, W. Va.
Lundal Coal Co.	Huntington, W. Va.	Latrobe	Logan	C. & O.	Latrobe, W. Va.
Lynchburg Colliery Co.	Vaughan, W. Va.	Lynchburg	Fayette	C. & O.	Tin Can, W. Va.
M. Call Coal Co.	Logan, W. Va.	McCall	Logan	C. & O.	Christian, W. Va.
Mable Coal Co.	Huntington, W. Va.	McCall	Logan	C. & O.	Holtville, W. Va.
Main Island Creek Coal Co.	Huntington, W. Va.	No. 2	Logan	C. & O.	Mason, W. Va.
Main Island Creek Coal Co.	Huntington, W. Va.	No. 3	Logan	C. & O.	Mason, W. Va.
Main Island Creek Coal Co.	Huntington, W. Va.	No. 4	Logan	C. & O.	Mar, W. Va.
Main Island Creek Coal Co.	Huntington, W. Va.	No. 5	Logan	C. & O.	Mar, W. Va.
Main Island Creek Coal Co.	Huntington, W. Va.	No. 6	Logan	C. & O.	Mar, W. Va.
Main Island Creek Coal Co.	Huntington, W. Va.	No. 7	Logan	C. & O.	Mar, W. Va.
Main Island Creek Coal Co.	Huntington, W. Va.	No. 8	Logan	C. & O.	Mar, W. Va.
Main Island Creek Coal Co.	Huntington, W. Va.	No. 9	Logan	C. & O.	Mar, W. Va.
Main Island Creek Coal Co.	Huntington, W. Va.	No. 10	Logan	C. & O.	Mar, W. Va.
Main Island Creek Coal Co.	Huntington, W. Va.	No. 11	Logan	C. & O.	Mar, W. Va.
Main Island Creek Coal Co.	Huntington, W. Va.	No. 12	Logan	C. & O.	Mar, W. Va.
Main Island Creek Coal Co.	Huntington, W. Va.	No. 13	Logan	C. & O.	Mar, W. Va.
Main Island Creek Coal Co.	Huntington, W. Va.	No. 14	Logan	C. & O.	Mar, W. Va.
Main Island Creek Coal Co.	Huntington, W. Va.	No. 15	Logan	C. & O.	Mar, W. Va.
Main Island Creek Coal Co.	Huntington, W. Va.	No. 16	Logan	C. & O.	Mar, W. Va.
Main Island Creek Coal Co.	Huntington, W. Va.	No. 17	Logan	C. & O.	Mar, W. Va.
Main Island Creek Coal Co.	Huntington, W. Va.	No. 18	Logan	C. & O.	Mar, W. Va.
Main Island Creek Coal Co.	Huntington, W. Va.	No. 19	Logan	C. & O.	Mar, W. Va.
Main Island Creek Coal Co.	Huntington, W. Va.	No. 20	Logan	C. & O.	Mar, W. Va.
Main Island Creek Coal Co.	Huntington, W. Va.	No. 21	Logan	C. & O.	Mar, W. Va.
Main Island Creek Coal Co.	Huntington, W. Va.	No. 22	Logan	C. & O.	Mar, W. Va.
Mallory Coal Co.	Mallory, W. Va.	Mallory No. 1	Logan	C. & O.	Mar, W. Va.
Mallory Coal Co.	Mallory, W. Va.	Mallory No. 2	Logan	C. & O.	Mar, W. Va.
Man Mining Co.	Man, W. Va.	No. 1	Logan	C. & O.	Man, W. Va.
Manbar Coal Co.	Manbar, W. Va.	Manbar	Logan	C. & O.	Manbar, W. Va.
Marshall Fuel Co.	Potomac, Pa.	Mary Elizabeth	Kanawha	K. & M.	Danco, W. Va.
Maxine Coal Co.	Huntington, W. Va.	Maxine	Logan	C. & O.	Maxine, W. Va.
Merrill Coal Min. & Inc.	Huntington, W. Va.	Merrill	Logan	C. & O.	H. Mason, W. Va.
Middle Fork Mining Co.	Huntington, W. Va.	Middle Fork No. 1	Logan	C. & O.	Chambers, W. Va.
Middle Fork Mining Co.	Huntington, W. Va.	Middle Fork No. 2	Logan	C. & O.	Chambers, W. Va.
Monitor Coal & Coke Co.	Wilkinson, W. Va.	Monitor No. 1	Logan	C. & O.	Monitor Mines, W. Va.
Monitor Coal & Coke Co.	Wilkinson, W. Va.	Monitor No. 2	Logan	C. & O.	Monitor Mines, W. Va.
Monitor Coal & Coke Co.	Wilkinson, W. Va.	Monitor No. 3	Logan	C. & O.	Monitor Mines, W. Va.
Monitor Coal & Coke Co.	Wilkinson, W. Va.	Monitor No. 4	Logan	C. & O.	Monitor Mines, W. Va.
Monawick Coal & Coke Co.	Powhatan, W. Va.	Monawick	Mcdowell	N. & W.	Monawick, W. Va.
Morton, S. A., Coal Co.	Erkman, W. Va.	S. A.	Webster	B. & O.	Wainville, W. Va.
Mount Morris Mining Co.	Mount Morris, W. Va.	Mount Morris	Kanawha	C. & O.	Montgomery, W. Va.
New Export Coal Co.	Charleston, W. Va.	New Export	Kanawha	K. & M.	Perryville, W. Va.
No. 2 Gas Coal Co.	Charleston, W. Va.	No. 2 Gas	Kanawha	K. & M.	Dana, W. Va.
Omni Coal Co.	Huntington, W. Va.	Omni	Logan	C. & O.	Omni, W. Va.
Orville Coal Co., The	Huntington, W. Va.	Orville	Logan	C. & O.	Yolyn, W. Va.
Palet Creek Coal Mining Co.	Clayland, O.	Grubbiar	Kanawha	C. & O.	Whittaker, W. Va.
Pax Mining Co.	Crane, W. Va.	Trinity	Kanawha	C. & O.	Grippe, W. Va.
Panther Coal Co.	Wich, W. Va.	Panther	Mcdowell	N. & W.	Panther, W. Va.
Peytona Mining Co.	Peytona, W. Va.	Peytona No. 1	Boone	C. & O.	Peytona, W. Va.
Peytona Mining Co.	Peytona, W. Va.	Peytona No. 2	Boone	C. & O.	Peytona, W. Va.
Pinnacle Coal & Coke Co.	508 Easton Trust Bldg., Easton, Pa.	Pinnacle	Kanawha	K. & M.	Dana, W. Va.
Procter Coal Co.	Huntington, W. Va.	Procter	Logan	C. & O.	Amberstide, W. Va.
Ranger Coal Co.	Huntington, W. Va.	Ranger	Logan	C. & O.	Ranger, W. Va.
Rich Creek Coal Co.	Farmont, W. Va.	Whitburn	Logan	C. & O.	Whitburn, W. Va.
Rum Creek Collieries & By-Products Co.	Delmar, W. Va.	Rum No. 2	Logan	C. & O.	Rum, W. Va.
Rum Creek Collieries & By-Products Co.	Delmar, W. Va.	Rum No. 3	Logan	C. & O.	Rum, W. Va.
Sandberg Coal & Land Co.	Charleston, W. Va.	Larkin	Kanawha	C. & O.	South Maiden, W. Va.
Shamrock Coal Co.	Logan, W. Va.	Litz-Smith No. 2	Logan	C. & O.	Shamrock, W. Va.
Sharlow Gas Coal Co.	Huntington, W. Va.	Sharlow No. 1	Boone	C. & O.	Sharlow, W. Va.
Sharlow Gas Coal Co.	Huntington, W. Va.	Sharlow No. 2	Boone		

Mined in Fairmont, Panhandle and Elk Garden districts. Bituminous rank. Suitable for Domestic, Cement Burning, Locomotive Fuel, Steam, Bee-hive Coking, Tile and Pottery Burning, By-Product Coking, Export, Illuminating Gas, Producer Gas, Melting and Powdered uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Adolph Portland Co.	Grafton, W. Va.	Eastlet	Taylor	R. & O.	Flamingo, W. Va.
Alpha Portland Cement Co.	Easton, Pa.	Phoenix	Harrison	R. & O.	Wolf Summit, W. Va.
American Gas Coal Co.	Morgantown, W. Va.	Liberty No. 1	Monongalia	Mon.	Richwood, W. Va.
American Sewer Pipe Co.	Altoona, Pa.	Coal No. 22	Penn.	N. C.	New Cumberland, W. Va.
American Slovak Coal & Coke Co.	1215 Union Bank Bldg., Pittsburgh, Pa.	Leith	Braxton	Coal & Coke	Gauley, W. Va.
Antler Coal Co.	Fairmont, W. Va.	Grand	Monongalia	R. & O.	Round Bottom, W. Va.
Antler Coal Co.	Fairmont, W. Va.	Katharine	Harrison	R. & O.	Lumberport, W. Va.
Antler Coal Co.	Fairmont, W. Va.	Sutton	Braxton	R. & O.	D. L. W. Va.
Apex Coal Co.	Clarksburg, W. Va.	Apex	Lewis	R. & O.	Wolf Summit, W. Va.
Astor Coal Co.	Clarksburg, W. Va.	Astor No. 1	Taylor	R. & O.	Elmington, W. Va.
Auto Coal Co.	Woodstock, Wheeling, W. Va.	Auto	Ohio	Penn.	Whiting, W. Va.
Balkan Coal Co.	1000 Liberty Bldg., Philadelphia, Pa.	Balkan	Harrison	R. & O.	Dola, W. Va.
Beech Grove Coal Co.	Mason, W. Va.	Beech Grove	Mason	R. & O.	Mason City, W. Va.
Beechwood Coal Mining Co.	Connellsville, Pa.	Beechwood	Monongalia	R. & O.	Richwood, W. Va.
Ben Franklin Coal Co. of W. Va.	712 Park Bldg., Pittsburgh, Pa.	Pennam	Marshall	R. & O.	Mountsille, W. Va.
Berryburg Coal Co.	Berryburg, W. Va.	Berryburg No. 1	Barbour	R. & O.	Seelysiding, W. Va.

COAL CATALOG

PITTSBURGH SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Bethlehem Coal Co.	Fairmont, W. Va.	P.oria	Harrison	W. Md.	Shinnston, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Scott No. 1	Harrison	B. & O.	Shinnston, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Scott No. 2	Harrison	B. & O.	Shinnston, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	No. 41	Marion	B. & O.	Farrackville, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	No. 42	Marion	M. & K.	Fairmont, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Sabraton No. 25	Monongalia	B. & O.	Sabraton, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Eagle	Marion	B. & O.	Erie, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Big Run No. 1	Barbour	B. & O.	Century, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Big Run No. 2	Barbour	B. & O.	Century, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Bies	Harrison	W. Md.	R. F. D. Shinnston, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Black Betsy	Putnam	K. & M.	Black Betsy, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Star	Monongalia	Monongahela	Morgantown, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Bogges	Harrison	B. & O.	Lumberport, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Monon No. 1	Monongalia	Monon	Monon, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Orange No. 1	Monongalia	M. & W.	Star City, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	H-finer	Braxton	C. & C.	Gilmer, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Corona	Harrison	B. & O.	Clarksburg, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Buckhannon-Pittsburgh	Upshur	B. & O.	Buckhannon, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Thorton	Taylor	B. & O.	Grafton, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Elizabeth	Monongalia	B. & O.	Beechwood, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Byrne Gas	Monongalia	Monon	Louisville, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Calif.	Harrison	B. & O.	Lost Creek, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Jan	Ohio	B. & O.	Elm Grove, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Cambria	Harrison	B. & O.	Lumberport, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Cameron	Marshall	B. & O.	Cameron, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Canyon	Monongalia	B. & O.	Cheat Haven, Pa.
Bethlehem Coal Co.	Fairmont, W. Va.	Cap Run	Lewis	B. & O.	Emmatt, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Goldie	Brook	P. & W. Va.	Wellsburg, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Isabel	Harrison	B. & O.	Meadowbrook, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Cedar Creek	Braxton	C. & C.	Exchange, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Carter	Harrison	B. & O.	Clarksburg, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Wife	Monongalia	B. & O.	Morgantown, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	McRee	Monongalia	M. & K.	Morgantown, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	No. 1	Monongalia	M. & W.	Osage, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	No. 2	Monongalia	M. & W.	Osage, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Clifton No. 1	Mason	B. & O.	Clifton, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Clifton	Monongalia	Monongahela	Randall, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Norton No. 2	Monongalia	C. H. & B.	Point Marion, Pa.
Bethlehem Coal Co.	Fairmont, W. Va.	Norton No. 4	Monongalia	C. H. & B.	Point Marion, Pa.
Bethlehem Coal Co.	Fairmont, W. Va.	Norton No. 5	Monongalia	C. H. & B.	Point Marion, Pa.
Bethlehem Coal Co.	Fairmont, W. Va.	Connellsville No. 1	Monongalia	Monon	Barker, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Hygrade	Harrison	B. & O.	Jane Lew, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Francis No. 1	Marshall	B. & O.	Cresaps, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 22	Marion	B. & O.	Monongah, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 21	Harrison	B. & O.	Consolidation No. 21, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 24	Marion	B. & O.	Consolidation No. 24, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 25	Harrison	B. & O.	Consolidation No. 25, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 26	Marion	B. & O.	Consolidation No. 26, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 27	Harrison	B. & O.	Consolidation No. 27, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 29	Harrison	B. & O.	Consolidation No. 29, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 32	Harrison	B. & O.	Consolidation No. 32, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 36	Marion	B. & O.	Consolidation No. 36, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 37	Barbour	B. & O.	Consolidation No. 37, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 38	Marion	B. & O.	Consolidation No. 38, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 40	Harrison	B. & O.	Consolidation No. 40, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 43	Marion	B. & O.	Monongah, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 45	Marion	B. & O.	Consolidation No. 45, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 47	Marion	B. & O.	Consolidation No. 47, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 48	Harrison	B. & O.	Consolidation No. 48, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 50	Harrison	B. & O.	Consolidation No. 50, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 51	Harrison	B. & O.	Consolidation No. 51, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 53	Marion	B. & O.	Monongah, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 54	Harrison	B. & O.	Consolidation No. 54, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 55	Harrison	B. & O.	Consolidation No. 55, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 57	Marion	Monongahela	Consol. No. 57, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 62	Harrison	B. & O.	Consolidation No. 62, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 63	Marion	B. & O.	Monongah, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 66	Harrison	B. & O.	Consolidation No. 66, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 68	Marion	B. & O.	Consolidation No. 68, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 84	Marion	B. & O.	Consolidation No. 84, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 86	Marion	W. Md.	Consolidation No. 86, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 87	Marion	W. Md.	Consolidation No. 87, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 88	Harrison	W. Md.	Wyatt, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 89	Harrison	W. Md.	Wyatt, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 90	Harrison	W. Md.	Wyatt, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 91	Harrison	B. & O.	Consol. No. 91, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 91	Harrison	B. & O.	Consolidation No. 91, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 92	Marion	W. Md.	Consolidation No. 92, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 93	Marion	Monongahela	Consolidation No. 93, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Consolidation No. 94	Harrison	B. & O.	Consol. No. 94, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Louise	Brooke	Pgh. & W. Va.	Louise, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Eureka	Monongalia	Monongahela	Randall, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Rachel	Marion	B. & O.	Downs, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Vanwith	Braxton	B. & O.	Bower, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Corona	Harrison	B. & O.	Erie, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Cunningham	Harrison	B. & O.	Lumberport, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Cortright	Harrison	B. & O.	Clarksburg, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Warwood	Ohio	Fenna	Warwood, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Ramsey	Marshall	B. & O.	Wheeling, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Arnold No. 3	Brooke	P. & W. Va.	Wellsburg, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Albert	Harrison	B. & O.	Clarksburg, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Jennie B.	Harrison	B. & O.	Meadowbrook, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Darby No. 1	Taylor	B. & O.	Darby & Rosemont, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Pavis	Marion	B. & O.	Monongah, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Virginia No. 10	Mineral	W. Md.	Windom, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Fairfax No. 60	Tucker	W. Md.	Fairfax, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Fairfax No. 61	Tucker	W. Md.	Fairfax, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Jontel	Gilmer	B. & O. C. & C.	Gilmer, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Dawson	Harrison	B. & O.	Dawson Mine, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	No. 5	Mineral	W. Md.	Shaw, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	No. 4	Mineral	W. Md.	Shaw, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	No. 3	Mineral	W. Md.	Shaw, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	No. 2	Mineral	W. Md.	Shaw, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	No. 1	Mineral	W. Md.	Shaw, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	No. 1	Taylor	B. & O.	Flemington, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Delmar No. 3	Taylor	B. & O.	Flemington, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Delmar No. 4	Taylor	B. & O.	Flemington, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Buth	Monongalia	Monon	Morgantown, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Despard	Harrison	B. & O.	Clarksburg, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Dodge	Harrison	B. & O.	Mt. Clare, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Douglass	Harrison	B. & O.	Meadowbrook, W. Va.
Bethlehem Coal Co.	Fairmont, W. Va.	Righter	Harrison	B. & O.	Lost Creek, W. Va.

(Continued on Next Page)

PITTSBURGH SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Echo Coal Co.	Wheeling, W. Va.	View Street	Ohio	B & O	Edgewood, Wheeling, W. Va.
Edlington Coal Co.	Elm Grove, W. Va.	Edlington	Ohio	B & O	Elm Grove, W. Va.
Elk Gard n Bldg. V. in Co.	Maryland Bldg., Baltimore, Md.	Dixon	Min. tal	W. Md.	Elk Gard n, W. Va.
Elk Horn Coal Corp.	New York, N. Y.	Interstate No. 44	Harrison	B & O	Interstate, W. Va.
Elk Horn Coal Corp.	New York, N. Y.	Interstate No. 52	Harrison	B & O	Interstate, W. Va.
Elk Horn Coal Corp.	New York, N. Y.	Interstate No. 64	Harrison	B & O	Interstate, W. Va.
Elm Grove Mining Co.	Cleveland, O.	Loyd	Ohio	B & O	Triadelphia, W. Va.
Elm Grove Mining Co.	Cleveland, O.	arlswright	Ohio	B & O	Elm Grove, W. Va.
Elm Grove Mining Co.	Cleveland, O.	Skillern or No. 2	Ohio	B & O	Triadelphia, W. Va.
Everett Coal Co.	Haywood, W. Va.	Martin	Harrison	B & O	Haywood, W. Va.
Fabry Coal Co.	Simpson, W. Va.	Fabry No. 2	Taylor	B & O	Simpson, W. Va.
Fairmont & Baltimore Coal & Coke Co.	Adamstown, W. Va.	Fairmont	Harrison	B & O	Adamstown, W. Va.
Fairmont Bldg. V. in Coal Co.	Clarksburg, W. Va.	Fairmont No. 1	Harrison	B & O	Two Lick, W. Va.
Fairmont Bldg. V. in Coal Co.	Clarksburg, W. Va.	Fairmont No. 2	Harrison	B & O	Two Lick, W. Va.
Fairmont Mining Co.	Fairmont, W. Va.	Trainer	Harrison	B & O	Everson, W. Va.
Fairmont Reynoldsville Collieries Co.	Clarksburg, W. Va.	Gr. ta	Harrison	B & O	Wilsonburg, W. Va.
Farmington Coal Co.	Clarksburg, W. Va.	Farmington	Harrison	B & O	Farmington, W. Va.
Fairly W. Coal Co.	Copon, W. Va.	Fairview	Braxton	C & C	Copon, W. Va.
Fleming & Crane	Interstate, W. Va.	Fleming	Harrison	B & O	Enterprise, W. Va.
Follinsberger Coal Co.	Wellburg, W. Va.	Arnold No. 2	I. rooke	P & W. Va.	Wellburg, W. Va.
Fort Clark Coal Co.	Clarksburg, W. Va.	Carper	Harrison	B & O	Byron, W. Va.
Fort Clark Coal Co.	Clarksburg, W. Va.	Wilsonburg	Harrison	B & O	Wilsonburg, W. Va.
Fort Pitt Coal Co.	Clarksburg, W. Va.	Fort Pitt	Harrison	B & O	Wilsonburg, W. Va.
Fortray Coal Co.	Shinnston, W. Va.	Fortray	Harrison	W. M.	Enterprise, W. Va.
Four States Coal Co.	Wabash Bldg., Pittsburgh, Pa.	Annabelle	Marion	B & O	Worthington, W. Va.
Francis, T. J. Coal Co.	Clarksburg, W. Va.	Lock	Harrison	B & O	Clarksburg, W. Va.
Francis Coal Co.	Clarksburg, W. Va.	Norwood No. 1	Harrison	B & O	Clarksburg, W. Va.
Francis Coal Co.	Clarksburg, W. Va.	Norwood No. 2	Harrison	B & O	Clarksburg, W. Va.
Franklin Gas Coal Co.	Somerset, Pa.	Franklin	Harrison	B & O	Byron, W. Va.
Freemont Coal Co.	Clarksburg, W. Va.	Ebby	Harrison	B & O	Clarksburg, W. Va.
Fulton Gas Coal Co.	Uniontown, Pa.	Florence	Harrison	B & O	Mt. Clare, W. Va.
Gab. Fork Coal Co.	Grafton, W. Va.	Half Way	Taylor	B & O	Uniontown, W. Va.
Gat s Coal Co.	Berryburg, W. Va.	Gat s	Barbour	B & O	Berryburg, W. Va.
Ghost Hill Coal Co.	Flemington, W. Va.	Ghost	Taylor	B & O	Flemington, W. Va.
Gilbert Davis Coal Co.	Morgantown, W. Va.	South Pittsburgh	Monongalia	Monon.	Almira, W. Va.
Gilmer Fuel Co.	Glenville, W. Va.	Gilmer	Marshall	C & C	Gilmer, W. Va.
Glenale Gas Coal Co.	Cleveland, O.	Glendale	Marshall	B & O	Moundsville, W. Va.
Glenale Gas Coal Co.	Cleveland, O.	Security	Ohio	B & O	Elm Grove, W. Va.
Glenova Coal Co.	Warwood, W. Va.	Glenns Run	Ohio	Penna.	Warwood, W. Va.
Grafton Coal & Coke Co.	Grafton, W. Va.	Sand Lick	Taylor	B & O	Simpson, W. Va.
Granville Coal Co.	Morgantown, W. Va.	Dent	Monongalia	Monongahela	Morgantown, W. Va.
Greater Fairmont Investment Co.	Fairmont, W. Va.	Aurora	Marion	B & O	Fairmont, W. Va.
Harrison Coal Co.	Meyersdale, Pa.	Harrison	Taylor	B & O	Rosmont, W. Va.
Harry B. Coal Co.	Fairmont, W. Va.	Junior	Marion	B & O	Monongah, W. Va.
Harry B. Coal & Coke Co.	Fairmont, W. Va.	Pittsairn	Harrison	B & O	Clarksburg, W. Va.
Haywood Coal Mining Co.	Shinnston, W. Va.	Monroe	Harrison	B & O	Shinnston, W. Va.
Hess Coal & Coke Co.	Morgantown, W. Va.	Hess No. 1	Monongalia	Monon.	Morgantown, W. Va.
High Point Coal Co.	Clarksburg, W. Va.	High Point	Harrison	B & O	Clarksburg, W. Va.
Hitchman Coal & Coke Co.	Wheeling, W. Va.	Hitchman	Marshall	B & O	B. wood, W. Va.
Hoffa Bros. Coal Co.	Pittmont, W. Va.	Potomac	Mineral	C & P	Barlow, Md.
Hood Coal Co.	Shinnston, W. Va.	Pond	Harrison	B & O	Shinnston, W. Va.
Hough, H. N. Coal Co.	Lumberport, W. Va.	Padeb	Harrison	B & O	Lumberport, W. Va.
Howard & Quinn	Clarksburg, W. Va.	Fairmont No. 4	Harrison	B & O	McWhorter, W. Va.
Howard Guthery & Co.	Clarksburg, W. Va.	Snake Hill	Harrison	B & O	Clarksburg, W. Va.
Hudson Coal Co.	Clarksburg, W. Va.	Lewis	Harrison	B & O	Wolf Summit, W. Va.
Hudson Coal Co.	Clarksburg, W. Va.	Miller No. 1	Harrison	B & O	Wilsonburg, W. Va.
Hutchinson Coal Co.	Fairmont, W. Va.	Girard	Harrison	B & O	Dola, W. Va.
Hutchinson Coal Co.	Fairmont, W. Va.	Erls	Harrison	B & O	Erie Mine, W. Va.
Hutchinson Coal Co.	Fairmont, W. Va.	Hutchinson	Harrison	B & O	Byron, W. Va.
Hutchinson Coal Co.	Fairmont, W. Va.	Lauralee	Harrison	B & O	Lauralee, W. Va.
Hutchinson Coal Co.	Fairmont, W. Va.	Lind n	Mason	B & O	Lind n Mine, W. Va.
Hutchinson Coal Co.	Fairmont, W. Va.	McAndish	Harrison	B & O	Meadowbrook, W. Va.
Hutchinson Coal Co.	Fairmont, W. Va.	Robey	Harrison	B & O	Robey, W. Va.
Hutchinson Coal Co.	Fairmont, W. Va.	York	Harrison	B & O	Reynoldsville, W. Va.
Ironhow, J. F.	Mason, W. Va.	Teenhower	Mason	B & O	Mason, W. Va.
Intersta. Fuel Co.	Clarksburg, W. Va.	Stout	Harrison	B & O	Mt. Clare, W. Va.
Jackson Coal & Mining Co., Th.	Hartford, W. Va.	Jackson	Mason	B & O	Hartford, W. Va.
Jamison Coal & Coke Co.	Greensburg, Pa.	Jamison No. 8	Marion	B & O	Undrwood, W. Va.
Jamison Coal & Coke Co.	Greensburg, Pa.	Jamison No. 9	Marion	B & O	Undrwood, W. Va.
Jamison Coal & Coke Co.	Greensburg, Pa.	Jamison No. 11	Monongalia	Monon.	Monon, W. Va.
Jenkins Coal Corp.	Grafton, W. Va.	Jenkins No. 1	Unshur	B & O	Fishing Camp, W. Va.
Jerry Run Coal Co.	Grafton, W. Va.	Jerry Run	Taylor	B & O	Rosmont, W. Va.
La Belle Iron Works	Wheeling, W. Va.	Wheeling	Ohio	B & O	Wheeling, W. Va.
Lambert Run Coal Co.	Fairmont, W. Va.	Clanson	Harrison	B & O	Meadowbrook, W. Va.
Laurtta Coal Co.	Clarksburg, W. Va.	Gordon No. 1	Harrison	B & O	Meadowbrook, W. Va.
Leson Coal Co.	Fairmont, W. Va.	Amos	Marion	B & O	Fairmont, W. Va.
Lewis Coal Co.	Clarksburg, W. Va.	Grass He No. 3	Harrison	B & O	Clarksburg, W. Va.
Long Coal Mining Co.	New York, N. Y.	Florida No. 1	Harrison	B & O	Wolf Summit, W. Va.
Long Coal Mining Co.	New York, N. Y.	Florida No. 2	Harrison	B & O	Wolf Summit, W. Va.
Long Coal Mining Co.	New York, N. Y.	Glady's No. 1	Harrison	B & O	Wolf Summit, W. Va.
Long Coal Mining Co.	New York, N. Y.	Glady's No. 2	Harrison	B & O	Wolf Summit, W. Va.
Long Fuel Co.	Clarksburg, W. Va.	Kester	Harrison	B & O	Clarksburg, W. Va.
Long, J. E., Coal Mining Co.	Clarksburg, W. Va.	Burke	Harrison	B & O	Clarksburg, W. Va.
Lost Creek Coal Co.	Clarksburg, W. Va.	Whitman	Harrison	B & O	Clarksburg, W. Va.
McCoy Coal Co.	Fairmont, W. Va.	McCoy	Marion	B & O	Fairmont, W. Va.
McKeeley Coal Co. of W. Va.	Pittsburgh, Pa.	McKeeley	Marshall	B & O	McMillan, W. Va.
MacDonald, J. M. Coal Mining Co., Th.	Cincinnati, O.	Gilbert	Harrison	B & O	Rosbud, W. Va.
MacDonald, J. M. Coal Mining Co., Th.	Cincinnati, O.	Rosbud No. 1	Harrison	B & O	Rosbud, W. Va.
MacDonald, J. M. Coal Mining Co., Th.	Cincinnati, O.	Rosbud No. 2	Harrison	B & O	Rosbud, W. Va.
Mad-Ira-Hill-Clark Coal Co.	Philad. lphia, Pa.	Waldo No. 1	Harrison	B & O	Wilsonburg, W. Va.
Mad-Ira-Hill-Clark Coal Co.	Philad. lphia, Pa.	Waldo No. 2	Harrison	B & O	Wilsonburg, W. Va.
Mad-Ira-Hill-Clark Coal Co.	Philad. lphia, Pa.	Waldo No. 3	Harrison	B & O	Wilsonburg, W. Va.
Mad-Ira-Hill-Clark Coal Co.	Philad. lphia, Pa.	Waldo No. 4	Harrison	B & O	Wilsonburg, W. Va.
Maine Collieries Co.	Morgantown, W. Va.	Maine Collieries	Barbour	B & O	Flemington, W. Va.
Marbelle Coal Mining Co.	1 Broadway, New York, N. Y.	Marion	Harrison	B & O	Wolf Summit, W. Va.
Marcoal Coal Co.	Cleveland, O.	No. 1	Monro	Penna.	Wheeland, W. Va.
Marion Gas Coal Co.	Greensburg, Pa.	Gingamon	Marion	B & O	Worthington, W. Va.
Marion Gas Coal Co.	Greensburg, Pa.	Portney	Marion	W. M.	Worthington, W. Va.
Marshall Coal Co.	733 Land Title Bldg., Philad. lphia, Pa.	Marshall	Harrison	B & O	Byron, W. Va.
Marshall Coal Co. of W. Va.	1 Broadway, New York City, N. Y.	Wend 1 No. 1	Taylor	B & O	Simpson, W. Va.
Maryland Coal Co. of W. Va.	1 Broadway, New York City, N. Y.	Wend 1 No. 2	Taylor	B & O	Simpson, W. Va.
Mason & Mason	Clarksburg, W. Va.	Ganner No. 1	Harrison	B & O	Clarksburg, W. Va.
Mason Coal & Chemical Co.	New York, N. Y.	Siding Hill	Mason	B & O	Hartford, W. Va.
Mineral State Coal Co.	Baltimore, Md.	Piers Run	Marshall	B & O	Moundsville, W. Va.
Monarch Coal Co.	Clarksburg, W. Va.	Fairmont No. 3	Harrison	B & O	McWhorter, W. Va.
Monongah Fuel Co., Th.	Fairmont, W. Va.	Galline No. 1	Harrison	B & O	Enterprise, W. Va.
Monongah Fuel Co., Th.	Fairmont, W. Va.	Galline No. 2	Harrison	B & O	Enterprise, W. Va.
Monongahela Valley Traction Co.	Fairmont, W. Va.	Stafford	Marion	B & O	Baxter, W. Va.
Monongahela Valley Traction Co.	Fairmont, W. Va.	Traction No. 2	Marion	B & O	Roscolle, W. Va.
Montfair Gas Coal Co.	902 Finance Bldg., Philadelphia, Pa.	Francis	Marion	B & O	Enterprise, W. Va.
Mt. Clare Colliery Co.	Clarksburg, W. Va.	Althea	Harrison	B & O	Byron, W. Va.
Mudlick Coal Co.	Shinnston, W. Va.	Mudlick	Harrison	B & O	Shinnston, W. Va.

(Continued on Next Page)

PITTSBURGH SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
National Coal Mining Co.	Pittsburgh, Pa.	Polar No. 2.	Lewis	B. & O.	McWhorter, W. Va.
National Fuel Co.	Morgantown, W. Va.	No. 1.	Monongalia	M. R.	National, W. Va.
National Fuel Co.	Morgantown, W. Va.	No. 2.	Preston	M. & K.	Caddell, W. Va.
Nellie Coal & Coke Co.	Connellsville, Pa.	Aldon.	Monongalia	B. & O.	Heard, W. Va.
Nethken Coal Mining Co.	N-wburg, W. Va.	Scotch Hill.	Preston	B. & O.	Newburg, W. Va.
New England Fuel & Transportation Co.	111 Devonshire St., Boston, Mass.	Fed. ral No. 1.	Marion	B. & O.	Grant Town, W. Va.
New England Fuel & Transportation Co.	111 Devonshire St., Boston, Mass.	Fed. ral No. 3.	Monongalia	Monongahela	Lowsville, W. Va.
New Sup.rior Coal & Coke Co.	Fairmont, W. Va.	Rob. rt.	Harrison	B. & O.	Shingstoo, W. Va.
North American Coal Co.	Morgantown, W. Va.	Maidsville.	Monongalia	Monongahela	Maidsville, W. Va.
Nuzum Coal Co.	Fairmont, W. Va.	Nuzum.	Marion	B. & O.	Fairmont, W. Va.
Oak Forest Coal Co.	Point Pleasant, W. Va.	Oak Forest.	Putnam	K. & M.	R. d House, W. Va.
Ohio River Salt Co.	Mason, W. Va.	Dixie.	Mason	B. & O.	Mason City, W. Va.
Old Foundation Coal Co.	809 Finance Bldg., Philadelphia, Pa.	Old Foundation.	Braxton	B. & O.	Gassaway, W. Va.
Otto Marmet Coal & Mining Co.	Raymond City, W. Va.	Big Otto No. 3.	Putnam	K. & M.	Raymond City, W. Va.
Otto Marmet Coal & Mining Co.	Raymond City, W. Va.	Big Otto No. 4.	Putnam	K. & M.	Raymond City, W. Va.
Otto Marmet Coal & Mining Co.	Raymond City, W. Va.	Big Otto No. 7.	Putnam	K. & M.	Raymond City, W. Va.
Otto Marmet Coal & Mining Co.	Raymond City, W. Va.	Big Otto No. 9.	Putnam	K. & M.	Raymond City, W. Va.
Panhandle Block Coal Co.	R. public, Pa.	Henrietta.	Penna.	Brooke	Colliers, W. Va.
Pan-Handle Fuel Co.	Wh. eling, W. Va.	Maison.	Brooke	Penna.	Wellsburg, W. Va.
Park Coal Co.	Morgantown, W. Va.	Park.	Monongalia	B. & O.	Morgantown, W. Va.
Peacock Coal Co.	Clarksburg, W. Va.	Louise.	Harrison	B. & O.	Clarksburg, W. Va.
Penn Coal Co.	Connellsville, Pa.	Penn.	Harrison	B. & O.	Byron, W. Va.
Penneco Coal Co.	McWhorter, W. Va.	McWhorter.	Harrison	B. & O.	McWhorter, W. Va.
Penna. & W. Va. Coal Co.	1011 Chestnut St., Philadelphia, Pa.	Bridge Sdg. No. 47.	Gilmer	B. & O.	Gilmer, W. Va.
Peora Coal Co.	Shinnston, W. Va.	Lerise.	Harrison	W. M.	Shinnston, W. Va.
Peora Coal Co.	Shinnston, W. Va.	Goldie.	Harrison	W. M.	Shinnston, W. Va.
Phillips Coal Co.	Fairmont, W. Va.	Phillips.	Marion	B. & O.	Bentons Ferry, W. Va.
Philmont Coal Co.	Philadelphia, Pa.	Pittsburgh No. 1.	Upshur	B. & O.	Teter, W. Va.
Philmont Coal Co.	Philadelphia, Pa.	Pittsburgh No. 2.	Upshur	B. & O.	Teter, W. Va.
Philmont Coal Co.	Philadelphia, Pa.	Pittsburgh No. 4.	Upshur	B. & O.	Teter, W. Va.
Pine Bluff Coal Co.	Fairmont, W. Va.	Pine Bluff.	Marion	W. Md.	Shinnston, W. Va.
Pittsburgh Summit Coal Co.	Braxton, W. Va.	Salem No. 3.	Braxton	B. & O.	Cutlip, W. Va.
Pittsburgh-Wheeling Coal Co.	Box 559, Wheeling, W. Va.	Edg. wood.	Ohio	B. & O.	Wheeling, W. Va.
Pittsmtont Coal Co.	Connellsville, Pa.	Pittsmtont No. 1.	Monongalia	Monongahela	Flaggy Meadow, W. Va.
Pittsmtont Coal Co.	Connellsville, Pa.	Pittsmtont No. 2.	Monongalia	Monongahela	Flaggy Meadow, W. Va.
Plymouth Coal & Mining Co.	Plymouth, W. Va.	Plymouth.	Putnam	K. & M.	Plymouth, W. Va.
Pursglove Coal Mining Co.	Cleveland, O.	Pursglove.	Monongalia	M. & W.	Osage, W. Va.
P. V. & K. Coal Co.	Follansbee, W. Va.	Jornd.	Brooke	Penna.	Follansbee, W. Va.
Randall Coal Co.	Morgantown, W. Va.	Randall No. 1.	Monongalia	Monongahela	Morgantown, W. Va.
Raybert Coal Co.	Clarksburg, W. Va.	Rayb. rt.	Harrison	B. & O.	Dola, W. Va.
R. lly Coal Co.	Uniontown, Pa.	Hallwood.	Mason	B. & O.	Hallwood, W. Va.
Reynolds Coal Co.	Grafton, W. Va.	Snider.	Taylor	B. & O.	Grafton, W. Va.
Richland Coal Co.	Wheeling, W. Va.	Mound.	Marshall	B. & O.	Jacksonville, W. Va.
Richland Coal Co.	Wheeling, W. Va.	Richland.	Ohio	P. C. C. & St. L.	Wheeling, W. Va.
Richland Coal Co.	Wheeling, W. Va.	Standard No. 1.	Brooke	P. C. C. & St. L.	Wellsburg, W. Va.
Richland Coal Co.	Wheeling, W. Va.	Standard No. 2.	Brooke	P. C. C. & St. L.	Wellsburg, W. Va.
Richland-Marshall Coal Co.	Wheeling, W. Va.	Mound.	Marshall	B. & O.	Moundsville, W. Va.
Richland-Marshall Coal Co.	Wheeling, W. Va.	Mound Slope.	Marshall	B. & O.	Moundsville, W. Va.
Riley Coal Co.	Shinnston, W. Va.	Lorain.	Harrison	B. & O.	Shinnston, W. Va.
River Seam Coal Co.	Pittsburgh, Pa.	Booth.	Monongalia	Monon.	Hilderbrand, W. Va.
Robinson & Hardesty Coal Co.	Shinnston, W. Va.	Blackburn.	Harrison	B. & O.	Shinnston, W. Va.
Robinson Coal Co.	Fairmont, W. Va.	Davis.	Taylor	B. & O.	Flemington, W. Va.
Rosedale Coal Co.	Morgantown, W. Va.	Rosedale No. 1.	Monongalia	Monongahela	West Van Voorhis, W. Va.
Rosemont Coal Co.	Land Title Bldg., Philadelphia, Pa.	Rosemont.	Taylor	B. & O.	Rosemont, W. Va.
R. S. Coal Co.	Clarksburg, W. Va.	R. S. No. 1.	Harrison	B. & O.	Byron, W. Va.
Ryan Coal Co.	Clarksburg, W. Va.	Haymond.	Harrison	B. & O.	Clarksburg, W. Va.
Saxaria Coal Co.	Mt. Clare, W. Va.	Bonay.	Harrison	B. & O.	Byron, W. Va.
Seminol. Gas Coal Co.	Clarksburg, W. Va.	Seminole.	Harrison	B. & O.	Gypsy, W. Va.
Seminol. Gas Coal Co.	Morgantown, W. Va.	Seminole No. 1.	Monongalia	Penna. P. & L. E.	Randall, W. Va.
Simpson Creek Coal Co.	New York, N. Y.	Galloway No. 1.	Taylor	R. & O.	Simpson, W. Va.
Simpson Creek Coal Co.	New York, N. Y.	Galloway No. 2.	Taylor	B. & O.	Simpson, W. Va.
Simpson Creek Coal Co.	New York, N. Y.	Galloway No. 3.	Faylor	R. & O.	Simpson, W. Va.
Smith Brothers Coal Co.	Meyersdale, Pa.	Adamson No. 1.	Harrison	B. & O.	Lumberport, W. Va.
Somersville Coal Co.	Grafton, W. Va.	Somersville.	Monongalia	B. & O.	Opeliska, W. Va.
South Pittsburgh Coal Co.	Fairmont, W. Va.	Almina.	Monongalia	Monongahela	Morgantown, W. Va.
Standard Coal Co., The	Cop n, W. Va.	Standard.	Braxton	Coal & Coke	Copen, W. Va.
Standard Lime & Stone Co.	Cop n, W. Va.	Lake.	Braxton	B. & O.	Copen, W. Va.
Starford Gas Coal Co.	Grafton, W. Va.	Big Four.	Taylor	R. & O.	Gravan, W. Va.
State Hill Coal Co.	Morgantown, W. Va.	Meeks.	Monongalia	P. & O.	Morgantown, W. Va.
Stout Coal Co.	Clarksburg, W. Va.	Scout No. 1.	Harrison	B. & O.	Clarksburg, W. Va.
Stork Coal Mining Co.	Philadelphia, Pa.	Agnes.	Upshur	B. & O.	Buckhannon, W. Va.
Superba Coal Co.	Connellsville, Pa.	Fola.	Harrison	B. & O.	Dola, W. Va.
Superior Connellsville Coal Co.	Greensburg, Pa.	Opeliska.	Monongalia	B. & O.	Opeliska, W. Va.
Taylor, J. C. Coal Co.	Flemington, W. Va.	Taylor No. 1.	Taylor	B. & O.	Flemington, W. Va.
Thermal Coal Co.	125 Guff Bldg., Clarksburg, W. Va.	Swisher.	Harrison	B. & O.	Lost Creek, W. Va.
Thomas Love Coal & Coke Co.	Fairmont, W. Va.	Nora.	Harrison	B. & O.	Worthington, W. Va.
Tropf Coal Co.	Morgantown, W. Va.	Great Scott No. 1.	Monongalia	P. & O. Penna. P. & L. E.	Star City, Randall, W. Va.
Tropf Coal Co.	Morgantown, W. Va.	Great Scott No. 2.	Monongalia	P. & O. Penna. P. & L. E.	Star City, Randall, W. Va.
United Coal Co.	Philadelphia, Pa.	Brackett.	Gilmer	Coal & Coke	Bower, W. Va.
United Coal Co.	Philadelphia, Pa.	Darnall.	Gilmer	Coal & Coke	Bower, W. Va.
United Coal Co.	Philadelphia, Pa.	Fatherine.	Gilmer	Coal & Coke	Bower, W. Va.
Vance Coal Co.	Morgantown, W. Va.	Vinson.	Braxton	R. & O.	Exchange, W. Va.
Vann-Black Coal Co.	Morgantown, W. Va.	Vann-Black.	Monongalia	M. & K.	Sabraton, W. Va.
Verona Coal Co.	Wellsburg, W. Va.	No. 1 Anna.	Brooke	P. W. Va., P. R. B.	Wellsburg, W. Va.
Verona Coal Co.	Wellsburg, W. Va.	No. 2 Jean.	Brooke	P. W. Va., P. R. B.	Wellsburg, W. Va.
Virginia & Pittsburgh Coal & Coke Co.	Fairmont, W. Va.	Kingmont.	Marion	B. & O.	Kingmont, W. Va.
Virginia & Pittsburgh Coal & Coke Co.	Fairmont, W. Va.	Morgan.	Marion	B. & O.	Riverside, W. Va.
Virginia-Maryland Coal Corp.	Adamston, W. Va.	Willard No. 1.	Harrison	B. & O.	Shinnston, W. Va.
Virginia-Maryland Coal Corp.	Adamston, W. Va.	Willard No. 4.	Harrison	B. & O.	Shinnston, W. Va.
Virginia-Maryland Coal Corp.	Adamston, W. Va.	Willard No. 3.	Harrison	B. & O.	Shinnston, W. Va.
Virginia-Maryland Coal Corp.	Adamston, W. Va.	Willard No. 5.	Harrison	B. & O.	Shinnston, W. Va.
Warner Collieries Co.	Cleveland, O.	Xina.	Monongalia	Monon.	Maidsville, W. Va.
Washington Pike Coal Co.	Wellsburg, W. Va.	Washington Pike.	Brooke	Penna.	Wellsburg, W. Va.
West Fork Coal Co.	Fairmont, W. Va.	Central.	Marion	B. & O.	Monongah, W. Va.
West Pittsburgh Coal Co.	Box 1082, Charleston, W. Va.	Braxton.	Braxton	B. & O.	Cutlip, W. Va.
West Virginia Coal & Coke Co.	Elkins, W. Va.	Copen No. 11.	Braxton	B. & O.	Bower, W. Va.
West Virginia Coal & Coke Co.	Elkins, W. Va.	Bower No. 10.	Braxton	C. & C.	Bower, W. Va.
West Virginia Coal & Coke Co.	Elkins, W. Va.	Drummen No. 12.	Braxton	B. & O.	Bower, W. Va.
West Virginia-Pittsburgh Coal Co.	Cleveland, O.	Gilchrist No. 3.	Brooke	P. W. K.	Wellsburg, W. Va.
West Virginia-Pittsburgh Coal Co.	Cleveland, O.	La Belle.	Brooke	P. W. K.	Wellsburg, W. Va.
West Virginia-Pittsburgh Coal Co.	Cleveland, O.	Locust Grove No. 1.	Brooke	P. C. C. & St. L.	Colliers, W. Va.
Wheeling Quality Coal Co.	Wheeling, W. Va.	"Country Club".	Ohio	B. & O.	Wheeling, W. Va.
Wheeling Steel & Iron Co.	Wheeling, W. Va.	B-wood Mill.	Marshall	E. & O. P. C. C. & St. L.	Benwood, W. Va.
Whitaker-Glessner Co.	Wheeling, W. Va.	Carter.	Ohio	Penna. B. & O.	Wheeling, W. Va.
White Horse Coal Co.	Flemington, W. Va.	White Horse.	Taylor	B. & O.	Flemington, W. Va.
Wilmar Coal Co.	Shinnston, W. Va.	Wilmar.	Harrison	W. M.	Shinnston, W. Va.
Winchester Coal Co.	Clarksburg, W. Va.	Winchester.	Harrison	B. & O.	Entersise, W. Va.
Windsor Coal Co.	Pittsburgh, Pa.	Bereh Bottom.	Brooke	Penna.	Wellsburg, W. Va.
Wolf Summit Coal Co.	Wolf Summit, W. Va.	Summit.	Harrison	B. & O.	Wolf Summit, W. Va.
Woodland Coal Co.	Scottsdale, Pa.	Woodland.	Marshall	R. & O.	Whittaker, W. Va.
Wright-Bingamon Coal Co.	Greensburg, Pa.	Josephine.	Marion	B. & O.	Whittington, W. Va.
Young Coal Co.	Nutter Fort, W. Va.	Southern.	Harrison	B. & O.	Clarksburg, W. Va.

POCAHONTAS NO. 6

Mined in Pocahontas district. Semibituminous rank. Suitable for Bunkering, By-Product Coking, Export, Locomotive Fuel, Melting, Steam, Domestic, Producer Gas and Smithing uses. Trade name, Smokeless Coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Amigo Coal Co.	Amigo, W. Va.	Amigo.	Raleigh.	Virginian.	Amigo, W. Va.
Beckley Knob Coal Co.	Cleveland, O.	Beckley Knob.	Fayette.	Swell Valley.	Meadow Bridge, W. Va.
Buckeye Coal & Coke Co.	Freeman, W. Va.	Buckeye No. 1.	Mercer.	N. & W.	Coon, W. Va.
Buckeye Coal & Coke Co.	Freeman, W. Va.	Buckeye No. 2.	Mercer.	N. & W.	Coon, W. Va.
Central Pocahontas Coal Co.	Welch, W. Va.	No. 4.	McDowell.	N. & W.	Humphill, W. Va.
Central Pocahontas Coal Co.	Welch, W. Va.	No. 5.	McDowell.	N. & W.	Caldes, W. Va.
Flat Top Pocahontas Coal Co.	Herndon, W. Va.	Flat Top.	Wyoming.	Virginian.	Herndon, W. Va.
New Pocahontas Coal Co.	Deegans, W. Va.	No. 1.	McDowell.	N. & W.	Deegans, W. Va.
Swell Valley Coal Co.	Seema, W. Va.	Peurytown.	Summers.	S. V. C. & O.	Meadow Creek, W. Va.

POCAHONTAS NO. 5

Mined in Pocahontas district. Semibituminous rank. Suitable for Bunkering, By-Product Coking, Export, Locomotive Fuel, Melting, Steam, Domestic, Producer Gas and Smithing uses. Trade name, Smokeless Coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Premier Pocahontas Collieries Co.	Premier, W. Va.	Premier Poca. No. 1.	McDowell.	N. & W.	Premier, W. Va.
Premier Pocahontas Collieries Co.	Premier, W. Va.	Premier Poca. No. 2.	McDowell.	N. & W.	Premier, W. Va.
Premier Pocahontas Collieries Co.	Premier, W. Va.	Premier Poca. No. 3.	McDowell.	N. & W.	Premier, W. Va.
Premier Pocahontas Collieries Co.	Premier, W. Va.	Premier Poca. No. 4.	McDowell.	N. & W.	Premier, W. Va.

POCAHONTAS NO. 4

Mined in Pocahontas and Tug River districts. Semibituminous rank. Suitable for Bunkering, By-Product Coking, Export, Locomotive Fuel, Melting, Steam, Domestic, Producer Gas and Smithing uses. Trade name, Smokeless Coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Black Wolf Coal & Coke Co.	Bearing, W. Va.	Black Wolf.	McDowell.	N. & W.	Black Wolf, W. Va.
Carlor Coal Co.	Coalwood, W. Va.	Olga No. 3.	McDowell.	N. & W.	Coalwood, W. Va.
Houston Collieries Co.	1522 Union Trust Bldg., Cincinnati, O.	Maitland.	McDowell.	N. & W.	Maitland, W. Va.
Lake Superior Coal Co.	Cincinnati, W. Va.	No. 2.	McDowell.	N. & W.	Superior, W. Va.
Oakland Coal Co.	Fairmont, W. Va.	Crescent.	Fayette.	C. & O.	Smithers, W. Va.
Oakland Coal Co.	Syracuse, N. Y.	Glen Falls.	Fayette.	K. & M.	Glen Ferris, W. Va.
Solvay Collieries Co.	Syracuse, N. Y.	Exeter.	McDowell.	N. & W.	Humphill, W. Va.
United States Coal & Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	No. 2.	McDowell.	N. & W.	Alphens, W. Va.
United States Coal & Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	No. 3.	McDowell.	N. & W.	Gary, W. Va.
United States Coal & Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	No. 6.	McDowell.	N. & W.	Ream, W. Va.
United States Coal & Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	No. 7.	McDowell.	N. & W.	Elbert, W. Va.
United States Coal & Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	No. 8.	McDowell.	N. & W.	Elbert, W. Va.
United States Coal & Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	No. 9.	McDowell.	N. & W.	Filbert, W. Va.
United States Coal & Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	No. 10.	McDowell.	N. & W.	Venus, W. Va.
United States Coal & Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	No. 11.	McDowell.	N. & W.	Thorpe, W. Va.

POCAHONTAS NO. 3 (Known also as THICK VEIN POCAHONTAS)

Mined in Pocahontas district. Semibituminous rank. Suitable for Bunkering, By-Product Coking, Export, Locomotive Fuel, Melting, Steam, Domestic, Producer Gas and Smithing uses. Trade name, Smokeless Coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Algoma Coal & Coke Co.	Algoma, W. Va.	Algoma.	McDowell.	N. & W.	Northfork, W. Va.
Algonquin Coal Co.	Watoaka, W. Va.	Algonquin.	Mercer.	N. & W.	Algonquin, W. Va.
American Coal Co.	No. 1 Broadway, New York.	Crane Creek.	Mercer.	N. & W.	McComas, W. Va.
American Coal Co.	No. 1 Broadway, New York.	Piedmont.	Mercer.	N. & W.	Widemouth, W. Va.
American Coal Co.	No. 1 Broadway, New York.	Pinnacle.	Mercer.	N. & W.	McComas, W. Va.
Amigo Coal Co.	Amigo, W. Va.	Amigo.	Raleigh.	Virginian.	Amigo, W. Va.
Ashland Coal & Coke Co.	Ashland, W. Va.	Ashland.	McDowell.	N. & W.	Northfork, W. Va.
Ashland Coal & Coke Co.	Ashland, W. Va.	Grach.	McDowell.	N. & W.	Northfork, W. Va.
Barkers Creek Coal Co.	Trailee, W. Va.	Barkers Creek.	Wyoming.	Virginian.	Trailee, W. Va.
Beckley-Pocahontas Coal Co.	Huntington, W. Va.	Beckley.	Raleigh.	C. & O. Virginian.	Besoco, W. Va.
Beckley-Pocahontas Coal Co.	Huntington, W. Va.	Clyde.	Raleigh.	C. & O. Virginian.	Besoco, W. Va.
Beech Fork Coal Co.	Bluefield, W. Va.	Beech Fork.	McDowell.	N. & W.	Beech Fork, W. Va.
Black Wolf Coal & Coke Co.	Deering, W. Va.	Black Wolf.	McDowell.	N. & W.	Black Wolf, W. Va.
Booth-Bowen Coal & Coke Co.	Freeman, W. Va.	Booth-Bowen.	Mercer.	N. & W.	Coon, W. Va.
Bottom Creek Coal & Coke Co.	Vivian, W. Va.	Bottom Creek No. 1.	McDowell.	N. & W.	East Vivian, W. Va.
Bradshaw Coal Co., Inc.	Ivan, W. Va.	Bradshaw.	McDowell.	N. & W.	Bradshaw, W. Va.
Euchanan Coal Co.	Yukon, W. Va.	Euchanan.	McDowell.	N. & W.	Lemas, W. Va.
Buckeye Coal & Coke Co.	Freeman, W. Va.	Buckeye No. 1.	Mercer.	N. & W.	Freeman, W. Va.
Buckeye Coal & Coke Co.	Freeman, W. Va.	Buckeye No. 2.	Mercer.	N. & W.	Freeman, W. Va.
By-Products Pocahontas Co.	Terre Haute, Ind.	By-Product No. 1.	McDowell.	N. & W.	Big Four, W. Va.
Central Pocahontas Coal Co.	Welch, W. Va.	No. 1.	McDowell.	N. & W.	Jeanette, W. Va.
Central Pocahontas Coal Co.	Welch, W. Va.	No. 2.	McDowell.	N. & W.	O'Toole, W. Va.
Central Pocahontas Coal Co.	Welch, W. Va.	No. 3.	McDowell.	N. & W.	Crodes, W. Va.
Colonial Pocahontas Coal Co., The	Columbus, O.	Colonial Pocahontas.	McDowell.	N. & W.	Ritter, W. Va.
Crozer Coal & Coke Co.	North American Bldg., Philadelphia, Pa.	No. 1.	McDowell.	N. & W.	Elkhorn, W. Va.
Crozer Coal & Coke Co.	North American Bldg., Philadelphia, Pa.	No. 2.	McDowell.	N. & W.	Elkhorn, W. Va.
Crystal Coal & Coke Co.	Bramwell, W. Va.	Crystal No. 1.	Mercer.	N. & W.	McComas, W. Va.
Crystal Coal & Coke Co.	Bramwell, W. Va.	Crystal No. 2.	Mercer.	N. & W.	McComas, W. Va.
Devils Fork Coal Co.	Huntington, W. Va.	Devils Fork.	Wyoming.	Virginian.	Devils Fork, W. Va.
Elkhorn Coal Co.	Huntington, W. Va.	B. Wood.	Fayette.	Swell Valley.	Bellwood, W. Va.
Elkhorn Coal & Coke Co.	Maybury, W. Va.	Elkhorn.	McDowell.	N. & W.	Maybury, W. Va.
Elk Ridge Coal & Coke Co.	Northfork, W. Va.	Elk Ridge.	McDowell.	N. & W.	Northfork, W. Va.
Empire Coal & Coke Co.	Landgraff, W. Va.	Empire.	McDowell.	N. & W.	Landgraff, W. Va.
Ennis Coal Co.	Hawatha, W. Va.	Hawatha.	Mercer.	N. & W.	Hawatha, W. Va.
Eureka Coal & Coke Co.	Eckman, W. Va.	Eureka.	McDowell.	N. & W.	Eckman, W. Va.
Flat Top Pocahontas Coal Co.	Herndon, W. Va.	Flat Top Pocahontas.	Wyoming.	Virginian.	Herndon, W. Va.
Gilliam Coal & Coke Co.	Gilliam, W. Va.	Gilliam.	McDowell.	N. & W.	Northfork, W. Va.
Greenbrier Coal & Coke Co.	Goodwill, W. Va.	Greenbrier.	McDowell.	N. & W.	Crumpler, W. Va.
Griffiths, W. E. Coal Co.	Morganette, W. Va.	Griffiths.	Fayette.	Swell Valley.	Hawley, W. Va.
Harty Coal Co.	Trailee, W. Va.	Harty.	Wyoming.	Virginian.	Trailee, W. Va.

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POCAHONTAS NO. 3 SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Houston Coal & Coke Co.	Union Trust Bldg., Cincinnati, O.	Houston	McDowell	N. & W.	Elkhorn, W. Va.
Houston Collieries Co.	1522 Union Trust Bldg., Cincinnati, O.	Carswell	McDowell	N. & W.	Kimball, W. Va.
Indian Pocahontas Coal Co.	Welch, W. Va.	Indian No. 1	McDowell	N. & W.	Leckie, W. Va.
Iroquois Coal & Coke Co.	Iroquois, W. Va.	Iroquois	Wyoming	Virginian	Iroquois, W. Va.
Iroquois Coal & Coke Co.	1522 Union Trust Bldg., Cincinnati, O.	Keystone	McDowell	N. & W.	Keystone, W. Va.
Keystone Coal & Coke Co.	Kimball, W. Va.	King	McDowell	N. & W.	Kimball, W. Va.
King Coal Co.	Cannelton, W. Va.	No. 1	McDowell	N. & W.	Superior, W. Va.
Lake Superior Coal Co.	Lego, W. Va.	Laurel Smokeless	Raleigh	C. & O., Virginian	B. soe, W. Va.
Laurel Smokeless Coal Co.	Huntington, W. Va.	Litz-Smith	McDowell	N. & W.	Newhall, W. Va.
Litz-Smith Pocahontas Coal Co.	Goodwill, W. Va.	Louisville	Mercer	N. & W.	Goodwill, W. Va.
Louisville Coal & Coke Co.	Kyle, W. Va.	Lynchburg	McDowell	N. & W.	Northfork, W. Va.
Lynchburg Coal & Coke Co.	McDowell, W. Va.	McDowell	McDowell	N. & W.	Crumpler, W. Va.
McDowell Coal & Coke Co.	Trace, W. Va.	Mead	Wyoming	Virginian	Mullens, W. Va.
Mead Pocahontas Coal Co.	Bramwell, W. Va.	Coaldale	Mercer	N. & W.	Coaldale, W. Va.
Mill Creek Coal & Coke Co.	Bramwell, W. Va.	Mill Creek	Mercer	N. & W.	Coonors, W. Va.
Mill Creek Coal & Coke Co.	Huntington, W. Va.	Miller Pocahontas	Wyoming	Virginian	Corline, W. Va.
Miller Pocahontas Coal Co.	Huntington, W. Va.	Miner	Wyoming	Virginian	Corline, W. Va.
Miner, E. C., Coal Co.	Beckley, W. Va.	No. 1	Raleigh	Virginian	Frances, W. Va.
Morris Smokeless Coal Co.	Tams, W. Va.	Rorwind	Wyoming	Virginian	Herdon, W. Va.
New River & Pocahontas Consol. Coal Co.	Philadelphia, Pa.	Havaco	McDowell	N. & W.	Berwind, W. Va.
New River & Pocahontas Consol. Coal Co.	Philadelphia, Pa.	No. 1	McDowell	N. & W.	Havaco, W. Va.
Norwest Fuel Co.	Goodwill, W. Va.	Norwest	Mercer	N. & W.	Goodwill, W. Va.
Page Coal & Coke Co.	1503 North American Bldg., Philadelphia, Pa.	Page No. 1	McDowell	N. & W.	Page, W. Va.
Page Coal & Coke Co.	1503 North American Bldg., Philadelphia, Pa.	Page No. 2	McDowell	N. & W.	Page, W. Va.
Page Coal & Coke Co.	1503 North American Bldg., Philadelphia, Pa.	Page No. 3	McDowell	N. & W.	Page, W. Va.
Pawama Coal & Coke Co.	Matoaka, W. Va.	Pawama	Mercer	N. & W.	Matoaka & Glatto, W. Va.
Piney Pocahontas Coal Co.	Charleston, W. Va.	Pinpoca	Raleigh	C. & O.	Pinpoca, W. Va.
Pocahontas Fuel Co., Inc.	Pocahontas, Va.	Angle	McDowell	N. & W.	Angle, W. Va.
Pocahontas Fuel Co., Inc.	Pocahontas, Va.	Caswell Creek	Mercer	N. & W.	Freeman, W. Va.
Pocahontas Fuel Co., Inc.	Pocahontas, Va.	Cherokee	McDowell	N. & W.	Ashland, W. Va.
Pocahontas Fuel Co., Inc.	Pocahontas, Va.	Delta	McDowell	N. & W.	Lick Branch, W. Va.
Pocahontas Fuel Co., Inc.	Pocahontas, Va.	Lick Branch	McDowell	N. & W.	Lick Branch, W. Va.
Pocahontas Fuel Co., Inc.	Pocahontas, Va.	Norfolk	McDowell	N. & W.	Aogle, W. Va.
Pocahontas Fuel Co., Inc.	Pocahontas, Va.	Pocahontas No. 6	McDowell	N. & W.	Jenkinjones, W. Va.
Pocahontas Fuel Co., Inc.	Pocahontas, Va.	Pocahontas No. 7	McDowell	N. & W.	Jenkinjones, W. Va.
Pocahontas Fuel Co., Inc.	Pocahontas, Va.	Rolfe	McDowell	N. & W.	Northfork, W. Va.
Pocahontas Fuel Co., Inc.	Pocahontas, Va.	Sagamore	Mercer	N. & W.	McComas, W. Va.
Pocahontas Fuel Co., Inc.	Pocahontas, Va.	Shamokin	McDowell	N. & W.	Lick Branch, W. Va.
Pocahontas Fuel Co., Inc.	Pocahontas, Va.	Itmann	Wyoming	Virginian	Itmann, W. Va.
Pocahontas Fuel Co., Inc.	Pocahontas, Va.	Pocahontas No. 8	McDowell	N. & W.	Jenkinjones, W. Va.
Patterson, S. J. Pocahontas Coal Co.	Dayton, O.	Arista No. 1	Mercer	N. & W.	Springton, W. Va.
Patterson, S. J. Pocahontas Coal Co.	Dayton, O.	Arista No. 2	Mercer	N. & W.	Springton, W. Va.
Peerless Coal & Coke Co.	Pottsville, Pa.	Peerless No. 1	Vivian	N. & W.	Vivian, W. Va.
Peerless Coal & Coke Co.	Pottsville, Pa.	Peerless No. 2	Vivian	N. & W.	Vivian, W. Va.
Powhatan Coal & Coke Co.	Powhatan, W. Va.	Powhatan	McDowell	N. & W.	Elkhorn, W. Va.
Pulaski Iron Co.	Pulaski, Va.	Pulaski	McDowell	N. & W.	Eckman, W. Va.
Rhodell Coal Co.	Huntington, W. Va.	No. 1	Raleigh	Virginian	Rhodell, W. Va.
Rhodell Coal Co.	Huntington, W. Va.	No. 2	Raleigh	Virginian, C. & O.	Rhodell, W. Va.
Roanoke Coal & Coke Co.	Worth, W. Va.	Roanoke	McDowell	N. & W.	Roanoke, W. Va.
Rock Pocahontas Coal Co.	North Fork, W. Va.	Rock Pocahontas	McDowell	N. & W.	Jennett, W. Va.
Sabine Collieries Corp.	otts go, W. Va.	Sabine	Wyoming	Virginian	Susanna, W. Va.
Sayers Pocahontas Coal Co.	Yukon, W. Va.	Sayers	McDowell	N. & W.	Caloric, W. Va.
Shawnee Coal & Coke Co.	Eckman, W. Va.	Shawnee	McDowell	N. & W.	Caloric, W. Va.
Smith-Pocahontas Coal Co.	Trace, W. Va.	No. 1	Wyoming	Virginian	Hemphill, W. Va.
Smokeless Coal & Coke Co.	Hawatha, W. Va.	Smokeless	Mercer	N. & W.	Hemphill, W. Va.
Solvay Collieries Co.	Syracuse, N. Y.	Exeter	McDowell	N. & W.	McComas, W. Va.
Solvay Collieries Co.	Syracuse, N. Y.	Spring	Mercer	N. & W.	McComas, W. Va.
Thomas Coal Co.	Bramwell, W. Va.	Thomas No. 1	Mercer	N. & W.	McComas, W. Va.
Thomas Coal Co.	Bramwell, W. Va.	Thomas No. 2	Mercer	N. & W.	McComas, W. Va.
Trace Fork Coal Co.	Trace, W. Va.	Trace Fork No. 1	Wyoming	Virginian	Elkhorn, W. Va.
Turkey Gap Coal & Coke Co.	Bott, W. Va.	Joanna	McDowell	N. & W.	Elkhorn, W. Va.
Turkey Gap Coal & Coke Co.	Bott, W. Va.	Josephine	McDowell	N. & W.	Elkhorn, W. Va.
Turkey Gap Coal & Coke Co.	Bott, W. Va.	Modoc	Mercer	N. & W.	Springton, W. Va.
Turkey Gap Coal & Coke Co.	Bott, W. Va.	Wenonah No. 1	Mercer	N. & W.	Springton, W. Va.
Turkey Gap Coal & Coke Co.	Bott, W. Va.	Wenonah No. 2	Mercer	N. & W.	Springton, W. Va.
Turkey Gap Coal & Coke Co.	Bott, W. Va.	Wenonah No. 3	Mercer	N. & W.	Springton, W. Va.
United Pocahontas Coal Co.	Crumpler, W. Va.	Indian Ridge	McDowell	N. & W.	Crumpler, W. Va.
United Pocahontas Coal Co.	Crumpler, W. Va.	Wyoming No. 1	Wyoming	N. & W.	Crumpler, W. Va.
United Pocahontas Coal Co.	Crumpler, W. Va.	Wyoming No. 2	Wyoming	N. & W.	Crumpler, W. Va.
United Pocahontas Coal Co.	Crumpler, W. Va.	Zenith No. 1	McDowell	N. & W.	Crumpler, W. Va.
United Pocahontas Coal Co.	Crumpler, W. Va.	Zenith No. 2	McDowell	N. & W.	Crumpler, W. Va.
United States Coal & Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	No. 1	McDowell	N. & W.	Wilcoe, W. Va.
United States Coal & Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	No. 4	McDowell	N. & W.	Thorne, W. Va.
United States Coal & Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	No. 5	McDowell	N. & W.	Thorne, W. Va.
United States Coal & Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	No. 10	McDowell	N. & W.	Venus, W. Va.
United States Coal & Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	No. 11	McDowell	N. & W.	Thorne, W. Va.
United States Coal & Coke Co.	Carnegie Bldg., Pittsburgh, Pa.	No. 12	McDowell	N. & W.	Anawalt, W. Va.
Upland Coal & Coke Co.	Elkhorn, W. Va.	Upland No. 1	McDowell	N. & W.	Elkhorn, W. Va.
Virginia Smokeless Coal Co.	Huntington, W. Va.	No. 1	Wyoming	Virginian	Newest, W. Va.
West Virginia Pocahontas Coal Co.	Welch, W. Va.	Leckie No. 1	McDowell	N. & W.	Leckie, W. Va.
West Virginia Pocahontas Coal Co.	Welch, W. Va.	Leckie No. 2	McDowell	N. & W.	Leckie, W. Va.
Wyanoke Coal & Coke Co.	Dayton, O.	Wyanoke	Mercer	Virginian	Wyanoke, W. Va.
Wright Mining Co.	Matoaka, W. Va.	Wagon	Mercer	N. & W.	Matoaka, W. Va.
Wyoming Coal Co.	Tams, W. Va.	Wyoming	Wyoming	Virginian	Wyco, W. Va.

POWELLTON SEAM.

Mined in the Kanawha district. Bituminous rank. Suitable for Bee-hive Coking, By-Product Coking, Tile and Pottery Burning, Cement Burning, Producer Gas, Melting, Domestic, Steam, Railway, Export, Illuminating Gas and Powdered uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Carbon Fuel Co.	Carbon, W. Va.	No. 6	Kanawha	C. & O.	Joelin, W. Va.
Coal Mountain Mining Co.	Huntington, W. Va.	Coal Mountain	Roane	P. F. & R. K.	Pond, W. Va.
Donald Coal Co.	Logan, W. Va.	Donald	Logan	C. & O.	Logan, W. Va.
Elkhorn Piney Coal Mining Co.	Milwaukee, Wis.	N. w South No. 3	Fayette	C. & O.	Powellton, W. Va.
Elkhorn Piney Coal Mining Co.	Milwaukee, Wis.	No. 5	Fayette	C. & O.	Powellton, W. Va.
Elkhorn Piney Coal Mining Co.	Milwaukee, Wis.	Vulcan No. 1	Fayette	C. & O.	Powellton, W. Va.
Indian Run Collieries Co.	Charlesston, W. Va.	No. 2	Fayette	C. & O.	Mt. Carbon, W. Va.
Indian Run Collieries Co.	Charlesston, W. Va.	No. 3	Fayette	C. & O.	Mt. Carbon, W. Va.
Lillybranch Coal Co.	Big Creek, W. Va.	Lillybranch	Logan	C. & O.	Big Creek, W. Va.
Milburn By-Products Coal Co.	Milburn, W. Va.	Milburn No. 2	Fayette	C. & O.	Milburn, W. Va.
Solvay Collieries Co.	Syracuse, N. Y.	Kingston No. 1	Fayette	C. & O.	Kingston, W. Va.
Solvay Collieries Co.	Syracuse, N. Y.	Kingston No. 3	Fayette	C. & O.	Kingston, W. Va.
Solvay Collieries Co.	Syracuse, N. Y.	Kingston No. 4	Fayette	C. & O.	Kingston, W. Va.
Solvay Collieries Co.	Syracuse, N. Y.	Kingston No. 5	Fayette	C. & O.	Kingston, W. Va.
Solvay Collieries Co.	Syracuse, N. Y.	West rly	Fayette	C. & O.	West rly, W. Va.

REDSTONE SEAM

Mined in Fairmont district. Bituminous rank. Suitable for Cement Burning, Locomotive Fuel, Steam, Producer Gas and Domestic uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Apex Coal Co.	Clarksburg, W. Va.	Apex	Lewis	B. & O.	Wolf Summit, W. Va.
Barbour Upshur Coal Co.	Clarksburg, W. Va.	Maple	Upshur	B. & O.	Picks Run, W. Va.
Baltimore Coal Co.	Buckhannon, W. Va.	Boyer	Upshur	B. & O.	Lorentz, W. Va.
Beveridge Laughlin Coal Mining Co.	Buckhannon, W. Va.	Madison	Upshur	B. & O.	Lorentz, W. Va.
Big Run Coal Co.	Baltimore, Md.	Big Run No. 1	Barbour	B. & O.	Century, W. Va.
Big Run Coal Co.	Baltimore, Md.	Big Run No. 2	Barbour	B. & O.	Century, W. Va.
Brewer-Harrison Coal Co.	Edlington, W. Va.	Brewer-Harrison	Lewis	B. & O.	Belington, W. Va.
Buckeye & West Virginia Coal Co.	Cleveland, O.	Upshur	Upshur	B. & O.	Lorentz, W. Va.
Calif. Coal Co.	Lost Creek, W. Va.	Calif.	Harrison	B. & O.	Lost Creek, W. Va.
Century Coal Co. of West Virginia	10 South St., Baltimore, Md.	Century No. 1	Barbour	B. & O.	Century, W. Va.
Century Coal Co. of West Virginia	10 South St., Baltimore, Md.	Century No. 2	Barbour	B. & O.	Century, W. Va.
Champion Collieries Co., The	Pittsburgh, Pa.	Carter	Harrison	B. & O.	Clarksburg, W. Va.
Cornellville-Hygrade Coal Co.	Cornellville, Pa.	Hygrade	Harrison	B. & O.	Janet-Low, W. Va.
Darby Coal Co.	Fairmont, W. Va.	Darby No. 2	Taylor	B. & O.	Rosmond & Darby, W. Va.
Edmond Operating Co.	New York, N. Y.	Diamond No. 1	Lewis	B. & O.	Weston, W. Va.
Eastern Utilities Coal Co.	Lost Creek, W. Va.	Righter	Harrison	B. & O.	Lost Creek, W. Va.
Florence Coal Mining Co.	Lorentz, W. Va.	Sarah No. 1	Upshur	B. & O.	Lorentz, W. Va.
Ford Lyon Coal Co.	McWhorter, W. Va.	Blanco	Lewis	B. & O.	Janet-Low, W. Va.
Iris Coal Co., Inc.	Buckhannon, W. Va.	Summit No. 1	Lewis	B. & O.	Fisher Summit, W. Va.
Jarvis Coal Co.	Morgantown, W. Va.	Jarvis No. 1	Monongalia	M. & W.	Randall, W. Va.
Laurel Coal & Mining Co.	Buckhannon, W. Va.	Laurel	Upshur	B. & O.	Rampton, W. Va.
Lynch, P. C. Coal Co., The	Carston, W. Va.	No. 1	Lewis	B. & O.	Granton, W. Va.
National Coal Mining Co.	Pittsburgh, Pa.	Polar No. 1	Lewis	B. & O.	Janet-Low, W. Va.
North American Coal Co.	Morgantown, W. Va.	Maldville	Monongalia	Monongalia	Maldville, W. Va.
Peck's Run Coal Co.	Hall, W. Va.	Kalm	Upshur	B. & O.	Peck's Run, W. Va.
Peerless Coal Mining Co.	Baltimore, Md.	Red Rock	Upshur	B. & O.	Red Rock, W. Va.
Penneco Coal Co.	McWhorter, W. Va.	McWhorter	Harrison	B. & O.	McWhorter, W. Va.
Summit Coal Co.	Morgantown, W. Va.	Summit No. 1	Monongalia	Penn. P. & L. E.	Randall, W. Va.
Stone Lick Coal Co.	Weston, W. Va.	Stone Lick	Lewis	B. & O.	Weston, W. Va.
Thermal Coal Co.	425 Goff Bldg., Clarksburg, W. Va.	Swisher	Harrison	B. & O.	Lost Creek, W. Va.
Vanderbilt, W. F.	P. O. Box 1501, Pittsburgh, Pa.	Ad. States	Lewis	B. & O.	Horner, W. Va.
West Virginia & Penna. Coal & Coke Co.	Buckhannon, W. Va.	Adam Post	Upshur	B. & O.	Picks Run, W. Va.
West Virginia & Penna. Coal & Coke Co.	Buckhannon, W. Va.	Iris	Upshur	B. & O.	Picks Run, W. Va.
Weston Fuel Co.	Fairmont, W. Va.	Home	Lewis	B. & O.	Weston, W. Va.

SEWELL SEAM (Known also as DAVY SEAM and THIN VEIN POCAHONTAS in Tug River District)

Mined in New River and Tug River Districts. Semibituminous rank. Suitable for Bunkering, By-Product Coking, Export, Locomotive Fuel, Melting, Steam, Domestic, Producer Gas and Smithing uses. Trade name, Smokeless Coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Ajax Coal Co.	Pittsburgh, Pa.	Ajax	Fayette	C. & O.	Fayette, W. Va.
Atlantic Coal & Iron Co.	Philadelphia, Pa.	Atlantic No. 1	Fayette	C. & O.	Rachman, W. Va.
Atlantic Coal & Iron Co.	Philadelphia, Pa.	Atlantic No. 2	Fayette	C. & O.	Whitney, W. Va.
Atlantic Smokeless Coal Co.	Asex, W. Va.	Atlantic	Mellows	N. & W.	Davy, W. Va.
Babcock Coal & Coke Co.	Pittsburgh, Pa.	Cliff Top No. 4	Fayette	C. & O., B. C. & C.	Sewell, W. Va.
Babcock Coal & Coke Co.	Pittsburgh, Pa.	Cliff Top No. 6	Fayette	C. & O.	Sewell, W. Va.
Ballingr Coal Co.	Winona, W. Va.	Ballingr No. 1	Fayette	C. & O.	Ballingr, W. Va.
Boury Bros. Coal & Coke Co.	Boury, W. Va.	Echo	Fayette	C. & O.	Boury, W. Va.
Branch Coal & Coke Co.	Charleston, W. Va.	Elvertin	Fayette	C. & O.	Elvertin, W. Va.
Cadle Ridge Coal Co.	Thurmond, W. Va.	Cadle Ridge No. 1	Fayette	C. & O.	Cadle & Thurmond, W. Va.
Cadle Ridge Coal Co.	Thurmond, W. Va.	Cadle Ridge No. 2	Fayette	C. & O.	Cadle & Thurmond, W. Va.
Cadle Ridge Coal Co.	Thurmond, W. Va.	Cadle Ridge No. 3	Fayette	C. & O.	Cadle & Thurmond, W. Va.
Callaway Coal Co.	Glen Jean, W. Va.	Callaway	Fayette	K. G. J. & E.	McDonald, W. Va.
Calloway, C. P.	Glen Jean, W. Va.	Cope	Raleigh	C. & O.	Oswald, W. Va.
Carter Coal Co.	Coalwood, W. Va.	Nora No. 8	McDowell	N. & W.	Coalwood, W. Va.
Carter Coal Co.	Coalwood, W. Va.	Thelma	McDowell	N. & W.	Coalwood, W. Va.
City Coal Co.	Mr. Hope, W. Va.	City	Raleigh	C. & O.	Reckly, W. Va.
Coal Run Coal Co.	Charl. Hope, W. Va.	Coal Run	Fayette	C. & O.	Ft. Chinnard, W. Va.
Crab Orchard Fuel Co.	Crab Orchard, W. Va.	Crab Orchard	Raleigh	C. & O., Virginian	Malscott, W. Va.
DeWitt Fuel Co.	Tippler, W. Va.	DeWitt	Fayette	C. & O.	Tippler, W. Va.
Dexear Pocahontas Coal Co.	New York, N. Y.	No. 1	McDowell	N. & W.	Twin Branch, W. Va.
Dexear Pocahontas Coal Co.	New York, N. Y.	No. 2	McDowell	N. & W.	Twin Branch, W. Va.
Dexear Pocahontas Coal Co.	New York, N. Y.	No. 3	McDowell	N. & W.	Twin Branch, W. Va.
Dexear Pocahontas Coal Co.	New York, N. Y.	No. 4	McDowell	N. & W.	Twin Branch, W. Va.
Dexear Pocahontas Coal Co.	New York, N. Y.	No. 5	McDowell	N. & W.	Twin Branch, W. Va.
Dexear Pocahontas Coal Co.	New York, N. Y.	No. 6	McDowell	N. & W.	Twin Branch, W. Va.
Dry Fork Colliery Co.	Phelps, Id. W. Va.	Dry Fork	McDowell	N. & W.	Lomax, W. Va.
Elk Lick Coal Co.	Spranton, Pa.	Spruce Knob	Nicholas	B. & O.	Richwood, W. Va.
Elkhorn Piney Coal Mining Co.	Milwaukee, Wis.	Piney No. 3	Raleigh	C. & O.	Stamford, W. Va.
Elkhorn Piney Coal Mining Co.	Milwaukee, Wis.	No. 6	Raleigh	C. & O.	Skelton, W. Va.
Elmo Mining Co., The	Cincinnati, O.	Elmo	Fayette	C. & O.	Elmo, W. Va.
Full River Poca. Collieries Co.	Maybourn, W. Va.	Full River	McDowell	N. & W.	Redfield, W. Va.
Fay-Rail Coal Co.	Glen Jean, W. Va.	Fay-Rail	Fayette	C. & O.	Glen Jean, W. Va.
Fayette Sewell Coal Co.	Fayette, W. Va.	Fayette	Fayette	C. & O.	Fayette, W. Va.
Flanagan Coal Co.	Pottsville, Pa.	Flanagan No. 1	McDowell	N. & W.	Erin, W. Va.
Flanagan Coal Co.	Pottsville, Pa.	Flanagan No. 2	McDowell	N. & W.	Erin, W. Va.
Four Vein Coal Co.	Beckley, W. Va.	Four Vein	Raleigh	C. & O.	Lanark, W. Va.
Gaymont Coal & Coke Co.	Laxton, W. Va.	Gaymont	Fayette	C. & O.	Hawks Nest, W. Va.
Hampton Road Collieries Co., Inc.	Norfolk, Va.	Hampton	McDowell	N. & W.	Big Sandy, W. Va.
Hubbard Coal Co.	Lex, W. Va.	Hubbard No. 85	McDowell	N. & W.	Gluck, W. Va.
Imperial Smokeless Coal Co.	Quinwood, W. Va.	Quinwood	Greenbrier	C. & O.	Quinwood, W. Va.
Lee Coal Co.	Glen Jean, W. Va.	Lee No. 2	Fayette	K. G. J. & E.	Macdonald, W. Va.
Low Moor Iron Co. of Va.	Low Moor, Va.	Kay Moor No. 1	Fayette	C. & O.	Kay Moor, W. Va.
Low Moor Iron Co. of Va.	Low Moor, Va.	Kay Moor No. 2	Fayette	C. & O.	South Fayette, W. Va.
Low Volatile Consolidated Coal Co.	Beckley, W. Va.	Beckley	Fayette	C. & O.	Thurmond, W. Va.
McKell Coal & Coke Co.	Glen Jean, W. Va.	Derrydale	Fayette	K. G. J. & E.	Derrydale, W. Va.
McKell Coal & Coke Co.	Glen Jean, W. Va.	Kilsyth	Fayette	K. G. J. & E.	Kilsyth, W. Va.
McKell Coal & Coke Co.	Glen Jean, W. Va.	Oswald	Raleigh	K. G. J. & E.	Oswald, W. Va.
McKell Coal & Coke Co.	Glen Jean, W. Va.	Tamroy	Raleigh	K. G. J. & E.	Tamroy, W. Va.
Marine Smokeless Coal Co.	Norfolk, Va.	Ocean	McDowell	N. & W.	Marine, W. Va.
Marine & Commerce Pocahontas Corp.	New York, N. Y.	No. 1	McDowell	N. & W.	Redfield, W. Va.
Mary Elizabeth Coal Co.	Linton, W. Va.	Mary Elizabeth	Virginian	Virginian	Huntington, W. Va.
Maryland New River Coal Co.	Philadelphia, Pa.	Roome	Fayette	C. & O.	Master, W. Va.
Maryland New River Coal Co.	Philadelphia, Pa.	Quincy	Fayette	C. & O.	Philadelphia, Pa.
Maryland New River Coal Co.	Philadelphia, Pa.	Rosdale	Fayette	C. & O.	Master, W. Va.
Maryland New River Coal Co.	Philadelphia, Pa.	Smokeless	Fayette	C. & O.	Master, W. Va.
Meadow Fork Fuel Co.	Wicklow, W. Va.	Meadow Fork	Fayette	C. & O.	Meadow Fork, W. Va.
Meadow River Smokeless Coal Co.	Bosco, W. Va.	Dwyer	Greenbrier	Swell Valley	Dwyer, W. Va.
Mill Creek Colliery Co.	Ansted, W. Va.	Mill Creek	Fayette	C. & O.	Ansted, W. Va.
Neal Coal Co.	Bramwell, W. Va.	Neal	Raleigh	Virginian	Lester, W. Va.
New River Export Smokeless Coal Co.	Lookout, W. Va.	Rhine	Fayette	C. & O.	Rhine, W. Va.
New River Export Smokeless Coal Co.	Lookout, W. Va.	Lookout	Fayette	C. & O.	Lookout, W. Va.
New River Export Smokeless Coal Co.	Lookout, W. Va.	Michigan	Fayette	C. & O.	Fayette, W. Va.
New River Co.	Macdonald, W. Va.	Beckley	Raleigh	C. & O., Virginian	Bickel, W. Va.
New River Co.	Macdonald, W. Va.	Collins	Fayette	C. & O.	Glen Jean, W. Va.
New River Co.	Macdonald, W. Va.	Cranberry No. 3	Raleigh	C. & O., Virginian	Sprague, W. Va.

(Continued on Next Page)

COAL CATALOG

SEWELL SEAM—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
New River Coal Co.	Macdonald, W. Va.	Cranberry No. 2.	Raleigh	C. & O., Virginian	Skilton, W. Va.
New River Coal Co.	Macdonald, W. Va.	Cranberry No. 1.	Raleigh	C. & O., Virginian	Prosperity, W. Va.
New River Coal Co.	Macdonald, W. Va.	Dan Loop.	Fayette	C. & O.	Dunn Loop, W. Va.
New River Coal Co.	Macdonald, W. Va.	Harvey.	Fayette	C. & O.	Harvey, W. Va.
New River Coal Co.	Macdonald, W. Va.	Loebgilly.	Fayette	C. & O., Virginian	Loebgilly, W. Va.
New River Coal Co.	Macdonald, W. Va.	Summerlee.	Fayette	C. & O., Virginian	Summerlee, W. Va.
New River Coal Co.	Macdonald, W. Va.	Whipple.	Fayette	C. & O.	Scarbro, W. Va.
New River Coal Co.	Macdonald, W. Va.	Mahsott.	Raleigh	C. & O., Virginian	Mahsott, W. Va.
New River Coal Co.	Macdonald, W. Va.	Macdonald.	Fayette	C. & O.	Macdonald, W. Va.
New River Coal Co.	Macdonald, W. Va.	Oakwood.	Fayette	C. & O.	Carlisle, W. Va.
New River Coal Co.	Macdonald, W. Va.	Prudence.	Fayette	C. & O., Virginian	Prudence, W. Va.
New River Coal Co.	Macdonald, W. Va.	Scarbro.	Fayette	C. & O., Virginian	Scarbro, W. Va.
New River Coal Co.	Macdonald, W. Va.	Macdonald.	Raleigh	Virginian	Eccles, W. Va.
New River Collieries Co.	New York, N. Y.	Eccles No. 6.	Fayette	C. & O.	Sun, W. Va.
New River Collieries Co.	New York, N. Y.	Sun No. 1.	Fayette	C. & O.	Sun, W. Va.
New River Collieries Co.	New York, N. Y.	Sun No. 2.	Fayette	C. & O.	Sun, W. Va.
New River & Pocahontas Consol. Coal Co.	Philadelphia, Pa.	Minden.	Fayette	C. & O.	Minden, W. Va.
New River & Pocahontas Consol. Coal Co.	Philadelphia, Pa.	Weirwood.	Fayette	Virginian, C. & O.	Weirwood, W. Va.
Nichol Colliery Co.	Glen Jean, W. Va.	Nichol.	Fayette	C. & O., Virginian	Glen Jean, W. Va.
Nuttallburg Smokeless Fuel Co.	Charleston, W. Va.	Nuttallburg.	Fayette	C. & O.	Nuttall, W. Va.
Pardue & Curtin Lumber Co.	Curtin, W. Va.	Panther.	Nicholas	C. & H.	Curtin, W. Va.
Pardue & Curtin Lumber Co.	Curtin, W. Va.	Ganley.	Nicholas	C. & H.	Curtin, W. Va.
Price Hill Colliery Co.	Price Hill, W. Va.	Price Hill.	Raleigh	C. & O.	Macdonald, W. Va.
Saxman Coal & Coke Co.	Philadelphia, Pa.	No. 1.	Nicholas	B. & O.	Fenwick & Richmond, W. Va.
Saxman Coal & Coke Co.	Philadelphia, Pa.	No. 3.	Nicholas	B. & O.	Fenwick & Richmond, W. Va.
Saxman Coal & Coke Co.	Philadelphia, Pa.	No. 4.	Nicholas	B. & O.	Fenwick & Richmond, W. Va.
Scotia Coal & Coke Co.	Charleston, W. Va.	Brooklyn.	Fayette	C. & O.	Broomlyn, W. Va.
Sewell Smokeless Coal Co.	Olive Ridge, Pittsburgh, Pa.	Sewell.	Fayette	C. & O.	Capriton, W. Va.
Solvay Collieries Co.	Syracuse, N. Y.	Big Sandy.	McDowell	N. & W.	Big Sandy, W. Va.
Solvay Collieries Co.	Syracuse, N. Y.	Harvard.	McDowell	N. & W.	Welch, W. Va.
Solvay Collieries Co.	Syracuse, N. Y.	Marytown.	McDowell	N. & W.	Marytown, W. Va.
Solvay Collieries Co.	Syracuse, N. Y.	Warwick.	McDowell	N. & W.	Welch, W. Va.
South Side Co.	Charleston, W. Va.	Brooklyn.	Fayette	C. & O.	Brooklyn, W. Va.
Star Coal & Coke Co.	Edstar, W. Va.	Star.	Fayette	C. & O.	Edstar, W. Va.
Stover Coal Co.	Chicago, Ill.	Stover.	Fayette	C. & O.	South Nuttall, W. Va.
Sugar Creek Coal & Coke Co.	Huntington, W. Va.	Sugar Creek.	Fayette	C. & O.	Macdonald, W. Va.
Summit Coal Co.	Berkley, W. Va.	Summit.	Raleigh	Virginian, C. & O.	Mt. Dalton, W. Va.
Suns L. Mining Co.	Sun, W. Va.	Sunset.	Fayette	Virginian, C. & O.	Sun, W. Va.
Superior Pocahontas Coal Co.	Davy, W. Va.	No. 2 Davy Crockett.	McDowell	N. & W.	Davy, W. Va.
Superior Pocahontas Coal Co.	Davy, W. Va.	No. 3 H. J. na.	McDowell	N. & W.	Davy, W. Va.
Superior Pocahontas Coal Co.	Davy, W. Va.	No. 4 Cletus.	McDowell	N. & W.	Davy, W. Va.
Three Fork Coal Co.	Ellamore, W. Va.	Three Fork.	Randolph	B. & O.	Mt. Dale, W. Va.
Tidewater Coal & Coke Co.	Vivian, W. Va.	Tidewater No. 1.	McDowell	N. & W.	Vivian, W. Va.
Tidewater Coal & Coke Co.	Vivian, W. Va.	Tidewater No. 4.	McDowell	N. & W.	Vivian, W. Va.
Tony Pocahontas Coal Co., Inc.	Avondale, W. Va.	Tony.	McDowell	N. & W.	Mill Branch, W. Va.
Turkey Knob Coal Co.	Charleston, W. Va.	Turkey Knob.	Fayette	C. & O.	Turkey Knob, W. Va.
Van Wert Coal Co., The.	Van Wert, O.	Lone Jack.	McDowell	N. & W.	Jaeger, W. Va.
Veazey, V. S., Coal Co.	Mt. Hope, W. Va.	Hi Top.	Fayette	Virginian	Derryhale, W. Va.
Veazey, V. S., Coal Co.	Mt. Hope, W. Va.	Sweetwood.	Fayette	C. & O.	Derryhale, W. Va.
Viccova Smokeless Fuel Co.	Berkley, W. Va.	Viccova.	Raleigh	C. & O.	Viccova, W. Va.
Wilmore-Pocahontas Coal Co.	Wilmore, W. Va.	Wilmore.	McDowell	N. & W.	Wilmore, W. Va.

SEWICKLEY SEAM (Known also as MAPLETOWN SEAM)

Mined in Fairmont district. Bituminous rank. Suitable for Cement Burning, Locomotive Fuel, Steam, Domestic and Producer Gas uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
American Gas Coal Co.	Morgantown, W. Va.	Krohn.	Monongalia	Monon.	Bechtelwood, W. Va.
Arford Coal Mining Co.	Uniontown, Pa.	Arford.	Monongalia	B. & O.	Murray, W. Va.
Baldwin Coal Co.	Fairmont, W. Va.	Neway.	Marion	B. & O.	Fairmont, W. Va.
Baldwin Coal Co.	Fairmont, W. Va.	Baldwin No. 1.	Marion	W. Md.	Worthington, W. Va.
Baldwin Coal Co.	Fairmont, W. Va.	Baldwin No. 3.	Marion	W. Md.	Worthington, W. Va.
Blair Coal Co.	Morgantown, W. Va.	Blair.	Monongalia	Monon.	Randall, W. Va.
Brady Coal Corp.	Fairmont, W. Va.	Monon No. 2.	Monongalia	Monon.	Yonon, W. Va.
Brady Coal Corp.	Fairmont, W. Va.	Osage No. 2.	Monongalia	M. & W.	Star City, W. Va.
Lunker Coal Co.	Pittsburgh, Pa.	Scott's Run.	Monongalia	Monon.	Morgantown, W. Va.
Chaplin Collieries Co.	Morgantown, W. Va.	Louis.	Monongalia	M. & W.	Randall, W. Va.
Chaplin Collieries Co.	Morgantown, W. Va.	Virginia.	Monongalia	M. & W.	Randall, W. Va.
Cleopatra Coal Co.	B. H. H. O.	Cleopatra.	Marion	B. & O.	Barra-Ksville, W. Va.
Corn Hillville-Fairmont Coal Co.	Corn Hillville, Pa.	Corn Hillville-Fairmont.	Marion	B. & O.	Worthington, W. Va.
Cox, J. C. Coal Co.	Fairmont, W. Va.	Cox.	Monongalia	Monon.	Lowsville, W. Va.
Dawson-Corn Hillville Collieries Co.	Dawson, Pa.	Tarr.	Marion	B. & O.	Fairmont, W. Va.
Diamond Coal Co.	Fairmont, W. Va.	Liberty.	Monongalia	M. R. R., Penna., N.Y.C.	Star City, W. Va.
E. L. & W. Coal Co.	Fairmont, W. Va.	No. 1.	Monongalia	Monongalia	Flaggy Meadow, W. Va.
Fair-Mar Coal Co.	Morgantown, W. Va.	White Rock.	Marion	B. & O.	Fairmont, W. Va.
Fairmont & Cleveland Coal Co.	Fairmont, W. Va.	Parker Run.	Marion	B. & O., Monongalia.	So. Riversville, W. Va.
Fairmont-Lowsville Coal Co.	Fairmont, W. Va.	John Y.	Monongalia	M. R. R., Penna., N.Y.C.	Lowsville, W. Va.
Fair Grand Coal Co.	Fairmont, W. Va.	Fort Grand.	Monongalia	I. C. & N.	Lowsville, W. Va.
Francis Coal Co.	Clarksburg, W. Va.	Anna May.	Monongalia	Monongalia	Lowsville, W. Va.
Gilbert Davis Coal Co.	Morgantown, W. Va.	Anchor.	Monongalia	M. & W.	Barker, W. Va.
Gilbert Davis Coal Co.	Morgantown, W. Va.	Gilbert Davis No. 1.	Monongalia	M. & W.	Kennedy, W. Va.
Gilbert Davis Coal Co.	Morgantown, W. Va.	Gilbert Davis No. 2.	Monongalia	M. & W.	Kennedy, W. Va.
Gilbert Davis Coal Co.	Morgantown, W. Va.	Gilbert Davis No. 3.	Monongalia	M. & W.	Kennedy, W. Va.
Gilbert Davis Coal Co.	Morgantown, W. Va.	South Penn.	Monongalia	M. & W.	Morgantown, W. Va.
Glasscock Collieries Co.	Morgantown, W. Va.	Glasscock Collieries.	Monongalia	M. & W.	Cassville, W. Va.
Greenmont Fuel Co.	Morgantown, W. Va.	Greenmont.	Monongalia	M. & W.	Morgantown, W. Va.
Guston Run Coal Co., Inc.	Morgantown, W. Va.	Guston Run.	Monongalia	M. & W.	Morgantown, W. Va.
Hess Coal & Coke Co.	Morgantown, W. Va.	Hess No. 2.	Monongalia	Yonon.	Morgantown, W. Va.
Hickman Miller Coal Co.	Morgantown, W. Va.	Loeb.	Monongalia	M. & W.	Randall, W. Va.
Hindson Coal Co.	Clarksburg, W. Va.	Tucker.	Marion	B. & O.	Tucker, W. Va.
Jervis Coal Co.	Morgantown, W. Va.	Jervis No. 1.	Monongalia	M. & W.	Randall, W. Va.
La-Mar Coal Co.	Fairmont, W. Va.	La-Mar No. 1.	Marion	B. & O.	Barra-Ksville, W. Va.
Lee, R. Coal Co.	Morgantown, W. Va.	Lee.	Monongalia	M. & W., Monon.	Randall, W. Va.
Monongalia Powder Co.	Fairmont, W. Va.	Riverside.	Marion	B. & O.	Montana, W. Va.
Monongalia Powder Co.	Fairmont, W. Va.	Rita.	Marion	B. & O.	Montana, W. Va.
Mt. Morris Coal Co.	Morgantown, W. Va.	Mt. Morris.	Monongalia	M. & W.	Randall, W. Va.
North American Coal Co.	Morgantown, W. Va.	Maidsville.	Monongalia	Monongalia	Maidsville, W. Va.
Osage Coal Co.	Pittsburgh, Pa.	Prison.	Prison	I. & O.	Independence, W. Va.
Riversville Coal Co.	Fairmont, W. Va.	Hook.	Marion	B. & O.	Riversville, W. Va.
Salvatore Coal Co.	Fairmont, W. Va.	Grady.	Marion	W. Md.	Worthington, W. Va.
Sammie Coal Co.	Morgantown, W. Va.	Sammie No. 1.	Monongalia	Jenna, P. & L. E.	Randall, W. Va.
Shamrock Fuel Co.	Morgantown, W. Va.	Shamrock.	Marion	B. & O.	Hout, W. Va.
Shriver Coal Co.	Morgantown, W. Va.	Shriver.	Monongalia	M. & W.	Randall, W. Va.
Sop & Mitchell Coal Co.	Morgantown, W. Va.	Berry.	Monongalia	M. & W.	Randall, W. Va.
Sop & Mitchell Coal Co.	Morgantown, W. Va.	Brook.	Monongalia	M. & W.	Randall, W. Va.
Sop & Mitchell Coal Co.	Morgantown, W. Va.	Mammoth.	Monongalia	M. & W.	Randall, W. Va.
South Penn Coal Co.	Fairmont, W. Va.	South Penn.	Monongalia	M. & W.	Morgantown, W. Va.
Tait Brothers Coal Co.	Morgantown, W. Va.	Tait.	Monongalia	Monongalia	Randall, W. Va.
Talbot, Robert.	Fairmont, W. Va.	Agnes.	Monongalia	Yonon.	Lowsville, W. Va.
Virana Coal Co.	Cleveland, O.	Virana.	Monongalia	M. & W.	Osage, W. Va.
Winfield Coal Co.	Fairmont, W. Va.	Riverside.	Marion	B. & O.	Montana, W. Va.

STOCKTON-LEWISTON SEAM (Known also as BELMONT SEAM)

Mined in Kanawha and Thacker districts. Bituminous rank, with some cannel coal. Suitable for Tile and Pottery Burning, Cement Burning, Domestic, Export, Producer Gas, Melting, Steam, Locomotive Fuel and Powdered uses. Trade name, Splint Coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Big Bottom Coal Co.	Charleston, W. Va.	Big Bottom	Kanawha	K & M	Big Bottom Siding, W. Va.
Blue Creek Coal & Land Co.	Blakeley, W. Va.	Lowiston No. 6	Kanawha	K & W Va.	Blakeley, W. Va.
Cabin Creek Consolidated Coal Co.	Kayford, W. Va.	Davis	Kanawha	C & O	Ohley, W. Va.
Coalburgh Kanawha Mining Co.	Coalburg, W. Va.	A.	Kanawha	C & O	Coalburgh, W. Va.
Coalburgh-Kanawha Mining Co.	Coalburg, W. Va.	P.	Kanawha	C & O	Coalburgh, W. Va.
Coalfork Coal Co.	Charleston, W. Va.	Coalfork	Kanawha	C & O	Coal, W. Va.
Dayton Coal Mining Co.	Charleston, W. Va.	Dahl	Kanawha	C & O	Winifrede, W. Va.
Dayton Coal Mining Co.	Charleston, W. Va.	Eur ka	Kanawha	C & O	Winifrede, W. Va.
Dayton Coal Mining Co.	Charleston, W. Va.	Perlis	Kanawha	C & O	Winifrede, W. Va.
Dorelen By-Products Coal Co.	Charleston, W. Va.	Max No. 1	Kanawha	K & M	Point Lick, W. Va.
Dorelen By-Products Coal Co.	Charleston, W. Va.	Max No. 2	Kanawha	K & M	Point Lick, W. Va.
Guyan River Coal Co.	Branchland, W. Va.	Branchland	Lincoln	C & O	Branchland, W. Va.
Puddledston, E. F.	Charleston, W. Va.	Puddledston	Kanawha	C & O	Charleston, W. Va.
Kanawha-Eikhorn Collieries, Inc.	Buffalo, N. Y.	Buffalo No. 1	Mingo	K & M	Palmy, W. Va.
Kanawha-Eikhorn Collieries, Inc.	Buffalo, N. Y.	Buffalo No. 2	Mingo	K & M	Palmy, W. Va.
Lewiston Block Coal Co.	Charleston, W. Va.	Lewiston	Kanawha	C & O	Winifrede Jet, W. Va.
Narich Coal Co.	Charleston, W. Va.	Merch.	Kanawha	Complish Creek	Eight Mile, W. Va.
Point Lick Coal Co.	Charleston, W. Va.	Point Lick No. 1	Kanawha	K & M	Point Lick, W. Va.
Point Lick Coal Co.	Charleston, W. Va.	Point Lick No. 2	Kanawha	K & M	Point Lick, W. Va.
Quincy Coal Co.	Charleston, W. Va.	No. 1	Kanawha	K & M	Dickinson, W. Va.
Quincy Coal Co.	Charleston, W. Va.	No. 3	Kanawha	K & M	Dickinson, W. Va.
River View Coal Co.	Ajstead, W. Va.	River View	Kanawha	K & M	Charleston, W. Va.
Sand Run Mining Co.	Finane Bldg., Gr.ensburg, Pa.	Sanderson	Kanawha	K & W Va.	Sanderson, W. Va.
West Branch Mining Co.	Charleston, W. Va.	West Branch No. 2	Kanawha	C & O	Dry Branch, W. Va.
West Coal Co.	Charleston, W. Va.	Oakley	Kanawha	C & O	Gil's & Fairfield, W. Va.

THACKER SEAM (Known also as CEDAR GROVE SEAM)

Mined in Thacker district. Bituminous rank. Suitable for Tile and Pottery Burning, Cement Burning, Domestic, Illuminating Gas, Producer, Gas, Locomotive Fuel, Melting, Steam, Beehive and By-Product Coking and Powdered Uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Bailly Thacker Coal Co.	Williamson, W. Va.	Bailly Thacker	Mingo	N & W	Williamson, W. Va.
Camp Creek Coal Co.	Charleston, W. Va.	Camp Creek	Wayne	N & W	East Lynn, W. Va.
Coalton Coal Corp.	Christiansburg, Va.	Coalton	Mingo	N & W	Williamson, W. Va.
Fall Branch Coal Co.	Bluefield, W. Va.	Fall Branch	Pike, Ky.	N & W	Chattanooga, W. Va.
Franklin Coal Co.	Thacker, W. Va.	Franklin	Mingo	N & W	Thacker, W. Va.
Glen Alum Coal Co.	Glenalum, W. Va.	No. 1	Mingo	N & W	Light, W. Va.
Glen Alum Coal Co.	Glenalum, W. Va.	No. 2	Mingo	N & W	Light, W. Va.
Glen Alum Coal Co.	Glenalum, W. Va.	No. 3	Mingo	N & W	Light, W. Va.
Glen Alum Coal Co.	Glenalum, W. Va.	No. 4	Mingo	N & W	Light, W. Va.
Knox Creek Coal Co.	Williamson, W. Va.	Knox Creek	Mingo	N & W	Devon, W. Va.
Lynn Coal & Coke Co.	McCarr, Ky.	Thacker	Mingo	N & W	Lynn Siding, W. Va.
North Matewan Coal Co.	Matewan, W. Va.	North Matewan	Mingo	N & W	Matewan, W. Va.
Pond Creek By-Products Colliery Co.	Bluefield, W. Va.	Pond Creek	Pike, Ky.	N & W	Williamson, W. Va.
Smith Pond Creek Coal Co.	Macdonald, W. Va.	Smith Pond Creek	Mingo	N & W	Sprigg, W. Va.
Thacker Coal & Coke Co.	Cincinnati, O.	Thacker No. 2	Mingo	N & W	Thacker, W. Va.
Thacker Coal & Coke Co.	Cincinnati, O.	No. 11	Mingo	N & W	Thacker, W. Va.
Thacker Coal & Coke Co.	Cincinnati, O.	Thacker No. 18	Mingo	N & W	Thacker, W. Va.
Vernon Coal Co., Inc.	Williamson, W. Va.	Thacker	Mingo	N & W	Naugatuck, W. Va.
Vulcan Colliery	Bluefield, W. Va.	Vulcan	Pike, Ky.	N & W	Vulcan, W. Va.
West Williamson Coal Co.	Williamson, W. Va.	Tunnel	Mingo	N & W	Williamson, W. Va.
Wigard Mining Co.	Williamson, W. Va.	Wigard	Mingo	N & W	Goodman, W. Va.
Wilhelmina Coal Co.	Williamson, W. Va.	Wilhelmina	Mingo	N & W	Williamson, W. Va.

WAYNESBURG SEAM

Mined in Fairmont district. Bituminous rank. Suitable for Steam, Railway, Domestic and Railway uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Barbara Mining Co.	Pittsburgh, Pa.	Barbara No. 1	Monongalia	M & W	Cassville, W. Va.
Barrackville Collieries Co., The	Professional Bldg., Fairmont, W. Va.	Salt Hill Id.	Marion	R & O	Fairmont, W. Va.
Cass Hill Coal Co.	Cumberland, Md.	Cass Hill	Monongalia	M & W	Morgantown, W. Va.
Forest Coal Co.	Fairmont, W. Va.	Forest	Monongalia	M & W	Star City, W. Va.
Gilbert Fuel Co.	Morgantown, W. Va.	Gilbert	Monongalia	M & W	Morgantown, W. Va.
Higgins Coal Co.	Morgantown, W. Va.	Higgins	Monongalia	M & W	Morgantown, W. Va.
Monongalia Fuel Co.	Mt. Morris, Pa.	Martin	Monongalia	M & W	Cassville, W. Va.
Oak Hill Coal Co.	Morgantown, W. Va.	Cashill	Monongalia	M & W	Morgantown, W. Va.
Woods Run Coal Co.	Pittsburgh, Pa.	Woods Run	Marion	R & O	Fairmont, W. Va.

WELCH SEAM (Known also as TUG RIVER SEAM; THIN VEIN POCAHONTAS SEAM)

Mined in Tug River district. Semibituminous rank. Suitable for Bunkering, By-Product Coking, Steam, Domestic, Producer Gas, Railway, Export and Smithing uses. Trade name, Smokeless Coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
F-Hess Pocahontas Coal Co.	Aurora, Ill.	Elips-Poca. No. 2	McDowell	N & W	Bradshaw, W. Va.
Flat Top Coal Mining Co.	Branch, W. Va.	Thomas	McDowell	N & W	English, W. Va.
Ferman Pocahontas Coal Co.	War, W. Va.	Ferman Pocahontas	McDowell	N & W	Garland, W. Va.
Garland Pocahontas Coal Co.	Avondale, W. Va.	Garland No. 1	McDowell	N & W	Garland, W. Va.
Garland Pocahontas Coal Co.	Avondale, W. Va.	Garland No. 2	McDowell	N & W	Garland, W. Va.
Gem Pocahontas Coal Co.	Welch, W. Va.	Gem	McDowell	N & W	Robley, W. Va.
Junior Pocahontas Coal Co.	Welch, W. Va.	Junior Pocahontas	McDowell	N & W	Welch, W. Va.
Marine Smokeless Coal Co.	Norfolk, Va.	Marine	McDowell	N & W	Marine, W. Va.
Parkins Coal Co.	Lex, W. Va.	Parkins	McDowell	N & W	Gluck, W. Va.
Premier Pocahontas Collieries Co.	Pr. m. r., W. Va.	Premier No. 1	McDowell	N & W	Premier, W. Va.
Premier Pocahontas Collieries Co.	Pr. m. r., W. Va.	Pr. m. r. No. 2	McDowell	N & W	Premier, W. Va.
Premier Pocahontas Collieries Co.	Pr. m. r., W. Va.	Pr. m. r. No. 3	McDowell	N & W	Premier, W. Va.
Premier Pocahontas Collieries Co.	Pr. m. r., W. Va.	Pr. m. r. No. 4	McDowell	N & W	Premier, W. Va.
Purity-Pocahontas Coal Co.	Br. n. f., W. Va.	Purity Pocahontas	McDowell	N & W	Gluck, W. Va.
Schoen Collieries Co.	Schenectady, N. Y.	Oakley	McDowell	N & W	Hemphill, W. Va.

WINIFREDE SEAM (Known also as BLACK BAND SEAM)

Mined in Kanawha, Thacker, Logan and Kenova districts. Bituminous rank. Suitable for Tile and Pottery Burning, Cement Burning, Domestic, Illuminating Gas, Producer Gas, Melting, Steam, Railway, Export and Powdered uses. Trade name, Splint Coal.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
American Collieries Co.	Charleston, W. Va.	Snow Hill.	Kanawha.	K. & M.	Charleston, W. Va.
Anchor Coal Co.	Cleveland, O.	Anchor No. 1.	Boone.	C. & O.	Highcoal, W. Va.
Anchor Coal Co.	Cleveland, O.	Anchor No. 2.	Boone.	C. & O.	Highcoal, W. Va.
Black Band Cons. Coal Co.	Oleott, W. Va.	No. 1.	Kanawha.	C. & O.	Brounland, W. Va.
Black Band Cons. Coal Co.	Oleott, W. Va.	No. 2.	Kanawha.	C. & O.	Brounland, W. Va.
Black Band Cons. Coal Co.	Oleott, W. Va.	No. 5.	Kanawha.	C. & O.	Brounland, W. Va.
Black Band Cons. Coal Co.	Oleott, W. Va.	Knickerbocker.	Kanawha.	C. & O.	Brounland, W. Va.
Borderland Coal Corp.	Borderland, W. Va.	No. 1.	Mingo.	N. & W.	Borderland, W. Va.
Borderland Coal Corp.	Borderland, W. Va.	No. 2.	Mingo.	N. & W.	Armen, W. Va.
Buffalo-Thacker Coal Co.	Huntington, W. Va.	Buffalo.	Mingo.	N. & W.	Chattaroy, W. Va.
C. & O. Railway Fuel Dept.	Richmond, Va.	Dorothy.	Raleigh.	C. & O.	Dorothy, W. Va.
C. & O. Railway Fuel Dept.	Piedmont, Va.	Empire.	Raleigh.	C. & O.	Empire, W. Va.
C. & O. Railway Fuel Dept.	Richmond, Va.	Empire.	Raleigh.	C. & O.	Dorothy, W. Va.
Chattaroy Coal Co.	Richmond, Va.	Sarita.	Mingo.	Norfolk & Western.	Nolan, W. Va.
Charleston Co-operative Coal Co.	Hath Id, W. Va.	Mary Hill.	Kanawha.	K. & M.	Charleston, W. Va.
Clay Gas Coal Co.	Charleston, W. Va.	Black Hawk.	Clay.	B. & O.	Hartland, W. Va.
Coal Mountain Mining Co.	Hartland, W. Va.	Coal Mountain.	Boone.	P. F. & B. K.	Pond, W. Va.
Colcord Coal Co.	Punnett, W. Va.	Monteal No. 1.	Raleigh.	C. & O.	Monteal, W. Va.
Crystal Block Coal & Coke Co.	Welch, W. Va.	No. 1.	Mingo.	N. & W.	Rawl, W. Va.
Crystal Block Coal & Coke Co.	Welch, W. Va.	No. 2.	Mingo.	N. & W.	Sprigg, W. Va.
Crystal Block Coal & Coke Co.	Welch, W. Va.	No. 3.	Mingo.	N. & W.	Rawl, W. Va.
Crystal Block Mining Co.	Welch, W. Va.	Gates.	Mingo.	N. & W.	Lavey, W. Va.
Cub Mountain Coal & Coke Co., The.	Nolan, W. Va.	Cub Mountain No. 2.	Martin.	N. & W.	Nolan, W. Va.
Fall Branch Coal Co.	Bluff, W. Va.	Fall Branch.	Pike, Ky.	N. & W.	Chattaroy, W. Va.
Fineberg Coal Co.	Bluff, W. Va.	Fineberg.	Kanawha.	C. & O.	Charleston, W. Va.
Fayette Kanawha Coal Co.	Charleston, W. Va.	No. 1.	Fayette.	C. & O.	Montgomery, W. Va.
Fayette Kanawha Coal Co.	Montgomery, W. Va.	No. 2.	Fayette.	C. & O.	Montgomery, W. Va.
Howard Collieries.	Montgomery, W. Va.	Frederick.	Mingo.	N. & W.	Chattaroy, W. Va.
Howard Collieries.	Chattaroy, W. Va.	Howard Jr.	Mingo.	N. & W.	Chattaroy, W. Va.
Howard Collieries.	Chattaroy, W. Va.	Howard Colliery.	Mingo.	N. & W.	Chattaroy, W. Va.
Kanawha Black Band Coal Co.	Oleott, W. Va.	Black Diamond.	Kanawha.	C. & O.	Brounland, W. Va.
Kenawha Standard Coal Co., Inc.	Clay, W. Va.	Jones.	Clay.	B. & O.	Upwood, W. Va.
Leevale Coal Co.	Clay, W. Va.	Leevale.	Raleigh.	C. & O.	Upwood, W. Va.
Lima Coal Co., The.	Amesgle, W. Va.	Goetschius.	Clay.	L. & O.	Clay, W. Va.
Logan Black Band Coal Co.	Lima, O.	Logan Black Band.	Lincoln.	G. V.	Branchland, W. Va.
Marsh Fork Coal Co.	Marion, W. Va.	Marsh Fork.	Raleigh.	C. & O.	Marion, W. Va.
Marsh Fork Coal Co.	Marion, W. Va.	Marsh Fork No. 2.	Raleigh.	C. & O.	Marion, W. Va.
Marsh Fork Coal Co.	Marion, W. Va.	Thacker.	Raleigh.	C. & O.	Hartland, W. Va.
Meadow Lick Coal Co.	Oleott, W. Va.	Meadow Lick.	Kanawha.	C. & O.	Marion, W. Va.
Mid-Lothian Jewell Coal Co.	Hartland, W. Va.	Mid-Lothian.	Clay.	C. & C.	Marion, W. Va.
Mordue Collieries Co.	Mordue, W. Va.	No. 1 Splint.	Boone.	C. & O.	Mordue, W. Va.
Mordue Collieries Co.	Mordue, W. Va.	No. 2 Splint.	Boone.	C. & O.	Mordue, W. Va.
Seag Creek Coal Co.	Whitesville, W. Va.	Song Creek.	Boone.	C. & O.	Whitesville, W. Va.
Snow Hill Coal Co.	Charleston, W. Va.	Snow Hill.	Kanawha.	K. & M.	Charleston, W. Va.
Sycamore Coal Co.	Virvan, W. Va.	Cinderella.	Mingo.	N. & W.	Cinderella, W. Va.
Three Forks Coal Co.	Lundale, W. Va.	Three Forks.	Logan.	C. & O.	Three Forks, W. Va.
Toney Fork Coal Co.	Lundale, W. Va.	Toney Fork.	Logan.	C. & O.	Lundale, W. Va.
Tunnell Coal Co.	Dingess, W. Va.	Tunnell.	Mingo.	N. & W.	Dingess, W. Va.
White Ash Coal Co.	Lexington, Va.	White Ash.	Fayette.	N. & W.	Ferguson, W. Va.
Wigarb Mining Co.	Williamson, W. Va.	Wigarb.	Mingo.	N. & W.	Goodman, W. Va.
Winifrede Coal Co.	Winifrede, W. Va.	North.	Kanawha.	C. & O.	Winifrede Jet., W. Va.
Winifrede Coal Co.	Winifrede, W. Va.	South.	Kanawha.	C. & O.	Winifrede Jet., W. Va.
Winifrede Coal Co.	Winifrede, W. Va.	West.	Kanawha.	C. & O.	Winifrede Jet., W. Va.
Winifrede Coal Co.	Winifrede, W. Va.	Stewart No. 2.	Kanawha.	C. & O.	Winifrede Jet., W. Va.
Winifrede-Thacker Coal Co.	Nolan, W. Va.	Winifrede Thacker.	Mingo.	N. & M.	Nolan, W. Va.

MISCELLANEOUS SEAMS

Bituminous and Semibituminous ranks.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	SEAM	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Adrian Hampton Coal Co.	Sago, W. Va.		Mosser No. 1.	Upshur.	B. & O.	Sago, W. Va.
Aldredge Coal Co.	A. acid, W. Va.		Aldredge.	Logan.	C. & O.	Arnold, W. Va.
Alexander By-Product Coal Co.	Charleston, W. Va.		Jefferson.	Kanawha.	B. & O.	Turner, W. Va.
Alexander, E. A.	Hughes, W. Va.		Alexander.	Kanawha.	K. & M.	Hughes, W. Va.
Alexander Coal Co.	Belva, W. Va.		Alexander.	Nicholas.	C. & O.	Belva, W. Va.
Alind Coal Co.	Fairmont, W. Va.		Allied No. 1.	Harrison.	E. & O.	Willard, W. Va.
Altman Coal Co.	Altman, W. Va.		Altman.	Boone.	C. & O.	Altman, W. Va.
Andrew Coal Co.	Uniontown, Pa.		Andrew.	Monongalia.	B. & O.	Morgantown, W. Va.
Ann's Run Coal Co.	Fairview, W. Va.		Ann's Run.	Marion.	M. V. T. B. & O.	Fairmont, W. Va.
Aquilla Coal Co.	Prestonia, W. Va.	Upper Kittanning.	Aquilla.	Webster.	E. & O.	Prestonia, W. Va.
Ariel Coal Co.	Ivaton, W. Va.		Ariel.	Lincoln.	C. & O.	Ivaton, W. Va.
Arlington Coal Co.	Porter, W. Va.		Mountain State.	Lewis.	B. & O.	Porter, W. Va.
Ashton, B. L. Coal Co.	Chesapeake, W. Va.		Ashton.	Kanawha.	C. & O.	Chesapeake, W. Va.
Avis Coal Co.	Stollings, W. Va.		Avis.	Logan.	C. & O.	Stollings, W. Va.
Bahopen Coal Co.	Hutton, Md.		R. hopen.	Preston.	N. & W.	Independence, W. Va.
Baile's Coal Co.	Matoaka, W. Va.		Bailey.	Mercer.	S. & W.	Matoaka, W. Va.
Bear Run Coal Co.	Toga, W. Va.		Bear Run.	Nicholas.	S. C. & M.	Alldendale, W. Va.
Bennan Coal Co.	Tad, W. Va.		Long Rope.	Kanawha.	C. & O.	Tad, W. Va.
Berkley Coal Co.	Henlawson, W. Va.		Berkley.	Logan.	C. & O.	Henlawson, W. Va.
Biddison, E. G. & Co.	Rock Bottom, W. Va.		Rock Bottom.	Boone.	C. & O.	Pock Bottom, W. Va.
Braxton County Coal Co.	Chicago, Ill.	Upper Kittanning.	Braxton County.	Braxton.	C. & C.	Sutton, W. Va.
Bregle Coal Co.	Dana, W. Va.		Bregle.	Kanawha.	Campbell's Creek.	Dana, W. Va.
Buckhammon Valley Coal Co.	Buckhammon, W. Va.		Sago.	Upshur.	B. & O.	Buckhammon, W. Va.
Buffalo & Elkhorn Coal Corp.	Punnett, W. Va.		Buffalo.	Kanawha.	C. C.	Putney, W. Va.
Pull Creek Mining Co.	Javins, W. Va.		Bull Creek.	Raleigh.	C. & O.	Javins, W. Va.
Purning Springs Coal Co.	Plus, W. Va.		Purning Springs.	Kanawha.	K. & M.	Plus, W. Va.
Butcher Coal Co.	Fairmont, W. Va.		Jackson No. 1.	Marion.	B. & O.	Fairmont, W. Va.
By-Product Coal Co.	Fairmont, W. Va.		By-Products No. 1.	Monongalia.	Monon.	Randall, W. Va.
Carper, W. S. Coal Co.	Morgantown, W. Va.		Carper.	Monongalia.	B. & O.	Morgantown, W. Va.
Cava Coal Co.	Stinson, W. Va.		Cava.	Harrison.	B. & O.	Enterprise, W. Va.
Cheat Mountain Coal Co.	Kingwood, W. Va.		Cheat Mountain.	Preston.	W. V. N.	Kingwood, W. Va.
Cheat Road Coal Co.	Morgantown, W. Va.		Cheat Road.	Monongalia.	E. & O.	Morgantown, W. Va.
Chilton Eagle Coal Co.	Logan, W. Va.		Chilton Eagle.	Logan.	C. & O.	Logan, W. Va.
Clay Coal Co.	Clay, W. Va.		Clay.	Clay.	B. & O.	Clay, W. Va.
Clearwater Coal Co.	Connellsville, Pa.		Clearwater.	Marion.	B. & O.	Fairmont, W. Va.
Coal Mountain Mining Co.	Punnett, W. Va.	Hernshaw.	Coal Mountain.	Boone.	P. F. & B. K.	Pond, W. Va.
Cobb, G. H. Coal Co.	Landscape, W. Va.		Cobb.	Jackson.	B. & O.	Loop, W. Va.
Consolidated By-Products Coal Co.	Eagle, W. Va.		Edgewater.	Fayette.	C. & O.	Eagle, W. Va.

MISCELLANEOUS SEAMS—Continued

NAME OF COMPANY	GENERAL OFFICE ADDRESS	SEAM	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Cavel Smokeless Coal Co.	Marco, W. Va.		Marco No. 1.	Wyoming	N & W	Marco, W. Va.
Cavel Smokeless Coal Co.	Marco, W. Va.		Marco No. 2.	Wyoming	N & W	Marco, W. Va.
Coon Skin Coal Co.	Dana, W. Va.		Couskin.	Kanawha	C & C	Dana, W. Va.
Cross Coal Co.	Morgantown, W. Va.		Cross.	Monongalia	B & O	Morgantown, W. Va.
Crown Coal Co.	Sand Run, W. Va.		Crown.	Upshur	E & O	Sand Run, W. Va.
D. T. & L. Coal Co.	Mannington, W. Va.		Thorn No. 1.	Marion	E & O	Mannington, W. Va.
D. T. & L. Coal Co.	Mannington, W. Va.		Thorn No. 2.	Marion	B & O	Mannington, W. Va.
Delta Coal Co.	Clarksburg, W. Va.		Albert.	Harrison	B & O	Pymouth, W. Va.
Don Coal Co.	Huntington, W. Va.		Don No. 2.	Kanawha	C & O	Esksdale, W. Va.
Don Coal Co.	Huntington, W. Va.		Don No. 1.	Kanawha	C & O	Esksdale, W. Va.
Don Coal Co.	Huntington, W. Va.		Don No. 5.	Kanawha	C & O	Esksdale, W. Va.
Easley Coal Co.	Costa, W. Va.		Easley No. 1.	Boone	C & O	Costa, W. Va.
Easley Coal Co.	Costa, W. Va.		Easley No. 2.	Boone	C & O	Costa, W. Va.
Easley Coal Co.	Costa, W. Va.		Easley No. 3.	Boone	C & O	Costa, W. Va.
Easton Coal Co.	Morgantown, W. Va.		Morris.	Monongalia	E & O	Morgantown, W. Va.
East Side Utility Co.	Fairmont, W. Va.		Hughes.	Marion	E & O	Fairmont, W. Va.
East Wheeling Coal Co.	Wheeling, W. Va.		East Wheeling.	Ohio	E & O	Valley Grove, W. Va.
Eclipse Pocahontas Coal Co.	Aurora, Ill.		Eclipse-Poca. No. 1.	Mellows	N & W	Bradshaw, W. Va.
Eddy Coal Co.	Kanawha, W. Va.		Eddy.	Mineral	W. Md.	Parrison, W. Va.
Evans Coal Co.	Dan, W. Va.		Evans.	McDowell	N & W	Dan, W. Va.
Fairmont & Fairview Coal Co.	Fairview, W. Va.		Fairview No. 1.	Marion	E & O	Fairview, W. Va.
Fairmont & Pgh. Coal Mining Co.	Morgantown, W. Va.		Glenn.	Monongalia	B & O	Morgantown, W. Va.
Fairmont Fuel Co.	Fairmont, W. Va.		Hilltop.	Monongalia	Monon.	Almina Works, W. Va.
Faulkner Coal Co.	Three Mile, W. Va.		Faulkner.	Kanawha	C & O	Mallory, W. Va.
Fayette Fuel Co.	Morgantown, W. Va.		Fayette.	Monongalia	B & O	Morgantown, W. Va.
Fermer & Gaffin Coal Co.	Radnor, W. Va.		No. 1.	Wayne	N & W	Radnor, W. Va.
Life Coal Co.	Morgantown, W. Va.		Fife.	Monongalia	B & O	Morgantown, W. Va.
Flow Mining Co.	Kermit, W. Va.		Flow.	Narlin, Ky.	N & W	Kermit, W. Va.
Freer Coal Co., The.	Birch Run, W. Va.		Freer Coal.	Clay	E & O	Birch Run, W. Va.
French Creek Fuel Co.	Bovery, W. Va.		Arch.	Upshur	B & O	Sago, W. Va.
Gleason Coal & Coke Co.	Frostburg, Md.		Gleason No. 3.	Mineral	W. Md.	Gleason, W. Va.
Glen Coal Co.	Mt. Hope, W. Va.		Glenco.	Fayette	Virginian	Page, W. Va.
Glen Falls Fuel Co.	Glen Ferris, W. Va.		Glen Falls No. 1.	Fayette	K & M	Glen Ferris, W. Va.
Glen Falls Fuel Co.	Glen Ferris, W. Va.		Glen Falls No. 2.	Fayette	K & M	Glen Ferris, W. Va.
Glen Ferris Fuel Co.	Glen Ferris, W. Va.		Glen Ferris.	Fayette	K & M	Glen Ferris, W. Va.
Godby By-Product Coal Co.	Chapmanville, W. Va.		Godby Branch.	Logan	C & O	Chapmanville, W. Va.
Granny Branch Coal Co.	New York, N. Y.		Empire No. 2.	Kanawha	B & O	Big Chimney, W. Va.
Grass Hill Chemical Co.	Meadowbrook, W. Va.		No. 1.	Harrison	P & O	Meadowbrook, W. Va.
Gress Geo. H.	Mason, W. Va.		Gress.	Mason	P & O	Mason, W. Va.
Hall Coal Co.	Morgantown, W. Va.		Barbe.	Monongalia	P & O	Morgantown, W. Va.
Harmon, W. S., Coal Co.	Springdale, W. Va.		Springdale.	Fayette	Swell Valley	Springdale, W. Va.
Hawley Coal Co.	Meadow Bridge, W. Va.		Bawley.	Fayette	B & O	Meadow Bridge, W. Va.
Herd List Coal & Coke Co.	Connellsville, Pa.		Herd List.	Braxton	E & O	Holly Jet, W. Va.
Howard Collieries.	Bluefield, W. Va.		Howard.	Mingo	N & W	Chattanooga, W. Va.
Hubbard Coal Mining Co.	Baltimore, Md.		Hubbard.	Mineral	W. Md.	Hubbard, W. Va.
Hughes Coal Co.	Hughes, W. Va.		Hughes.	Harrison	B & O	Gypsy, W. Va.
Humbreys, A. N., Coal Co.	Phillipi, W. Va.		Mouser.	Barbour	B & O	Phillipi, W. Va.
Huntington Coal & Mining Co.	Huntington, W. Va.		No. 2.	Wayne	N & W	Ferguson, W. Va.
Hurricane Branch Coal Co.	Genoa, W. Va.		Hurricane Branch.	Wayne	N & W	Woolley Siding, W. Va.
Knox Creek Coal Co.	V. Williamson, W. Va.		Knox Creek.	Mingo	N & W	Devon, W. Va.
Late Kouzer Coal Co.	Newburg, W. Va.		Redstone No. 1.	Lewis	E & O	Wilson Siding, W. Va.
Laurel Creek Fuel Co.	Seth, W. Va.		Laurel Creek.	Boone	C & O	Seth, W. Va.
Laurel Run Coal Co.	Crellin, Md.		Laurel Run.	Preston	B & O	Hutton, Md.
Leatherwood Creek Fuel Co.	Clarksburg, W. Va.		Upwood.	Clay	B & O	Upwood, W. Va.
Lewis County Colliery Co.	Cincinnati, O.		Horner.	Lewis	B & O	Horner, W. Va.
Maek Coal Co.	Shinnston, W. Va.		Maek.	Harrison	E & O	Vraps, W. Va.
Mandt Mining Co.	Charleston, W. Va.		Mandt No. 1.	Kanawha	K & W	Big Chimney, W. Va.
M. D. Rose Coal Co.	Fairmont, W. Va.		Enterprise.	Harrison	E & O	Enterprise, W. Va.
Milligan Coal Co.	Clay, W. Va.		Middle Creek.	Clay	B & O	Hartland, W. Va.
Monitor Coal & Coke Co.	Wilkinson, W. Va.		Monitor No. 1.	Logan	C & O	Monitor Mines, W. Va.
Monitor Coal & Coke Co.	Wilkinson, W. Va.		Monitor No. 4.	Logan	C & O	Monitor Mines, W. Va.
Mutual Coal Co.	Kingwood, W. Va.		Maiden.	Monongalia	Monon.	Maiden, W. Va.
Nellis Coal Co.	Costa, W. Va.		Nellis.	Boone	C & O	Costa, W. Va.
Nicholas Coal Co.	Belva, W. Va.		Greenbrier.	Nicholas	C & O	Belva, W. Va.
Northland Coal Co.	East Lynn, W. Va.		Northland No. 1.	Wayne	N & W	East Lynn, W. Va.
Oak Point Coal Co.	Fairmont, W. Va.		Shady Brook.	Marion	B & O	Hutchinson, W. Va.
Ogden Coal Co.	Fairmont, W. Va.		Ogden.	Marion	B & O	Fairmont, W. Va.
Packs Branch Coal Co.	Beckley, W. Va.		Packs Branch.	Fayette	Virginian	Veazey Siding, W. Va.
Pan Coal Co.	Avondale, W. Va.		Pan No. 1.	McDowell	N & W	Avondale, W. Va.
Pan Coal Co.	Avondale, W. Va.		Pan No. 2.	McDowell	N & W	Avondale, W. Va.
Parsons & Stokes.	Bramwell, W. Va.		Parsons.	Mercer	N & W	Bramwell, W. Va.
Penn Coal & Realty Co.	Queen Shoals, W. Va.		Queen Shoals.	Clay	B & O	Queen Shoals, W. Va.
Pershing Coal Co.	Clarksburg, W. Va.		Pershing.	Braxton	B & O	Palmer, W. Va.
Phillips Mining Co.	Chapmanville, W. Va.		Phillips.	Logan	C & O	Chapmanville, W. Va.
Puritan Coal Corp.	Burch, W. Va.		Thacker.	Mingo	N & W	Burch, W. Va.
Pyramid Coal Co.	Independence, W. Va.		Pyramid No. 1.	Taylor	P & O	Hardman, W. Va.
Pyramid Coal Co.	Independence, W. Va.		Pyramid No. 2.	Taylor	P & O	Hardman, W. Va.
Ray, D. E. Coal Co.	Hartland, W. Va.		Likridge.	Clay	B & O	Hartland, W. Va.
Rerve Gas Co.	Weston, W. Va.		Fennedy.	Lewis	B & O	Weston, W. Va.
R. x Colliery Co.	Queen Shoals, W. Va.		Queen Shoals.	Clay	B & O	Queen Shoals, W. Va.
Riverside Coal Co.	McMechen, W. Va.		Riverview.	Marshall	P & O	McMechen, W. Va.
Safety Pocahontas Coal Co.	Kimball, W. Va.		Safety Pocahontas.	McDowell	N & W	Kimball, W. Va.
Seabrook Coal & Coke Co.	Newark, N. J.		Areadia.	Webster	B & O	Prestonia, W. Va.
Seabrook Coal & Coke Co.	Newark, N. J.		Lyneh.	Webster	B & O	Prestonia, W. Va.
Seabrook Coal & Coke Co.	Newark, N. J.		Weserill.	Webster	E & O	Prestonia, W. Va.
Schapper & Hannigan Coal Co.	Vaughan, W. Va.		S. & H.	Nicholas	C & O	Vaughan, W. Va.
Scott Coal Co.	Silush, W. Va.		Scott No. 4.	Poone	C & O	Silush, W. Va.
Shrewsbury Coal Co.	Shrewsbury, W. Va.		Franklin.	Kanawha	K & M	Shrewsbury, W. Va.
Silver Coal Co.	Beryl, W. Va.		H. Hampshire No. 11.	Mineral	B & O	Beryl, W. Va.
Simpson & Coon.	Boomer, W. Va.		Riverview No. 2.	Fayette	K & M	Boomer, W. Va.
Sloan Lure Coal Co.	Meadowbrook, W. Va.		Jenny B.	Harrison	E & O	Meadowbrook, W. Va.
Smith Coal Mining Co.	Horner, W. Va.		Horner.	Lewis	E & O	Horner, W. Va.
Smith, Otto, Co.	Belva, W. Va.		Otto Smith.	Nicholas	C & O	Belva, W. Va.
Stone, Bruce E., Coal Co.	Silica, W. Va.		Quality.	Randolph	E & O	Silica, W. Va.
Sutton Chemical Co., The.	New York, N. Y.		Sutton No. 3.	Braxton	B & O	Sutton, W. Va.
Tennant Coal Co.	Morgantown, W. Va.		Tennant.	Monongalia	M & K	Morgantown, W. Va.
Thomas Smokeless Coal Co.	Boncar, W. Va.		No. 1.	Fayette	Swell Valley	Meadow Bridge, W. Va.
Thomas Smokeless Coal Co.	Boncar, W. Va.		No. 2.	Fayette	Swell Valley	Meadow Bridge, W. Va.
Thornton Fire Brick Co.	Clarksburg, W. Va.		Thornton.	Taylor	B & O	Thornton, W. Va.
Troll Coal Co.	Clarksburg, W. Va.		Vineen.	Marion	B & O	Helen Run, W. Va.
Turner Douglas Coal Co.	Clarksburg, W. Va.		Banner No. 1.	Preston	B & O	Hutton, Md.
Tygart River Coal Co.	Phillipi, W. Va.		Westford No. 1.	Barbour	B & O	Lillian, W. Va.
Tygart River Coal Co.	Phillipi, W. Va.		Westford No. 2.	Barbour	B & O	Lillian, W. Va.
Valley Falls Fuel Co.	New York, N. Y.		Valley Falls.	Taylor	B & O	Coffman, W. Va.
Vera Pocahontas Coal Co., The.	Laeger, W. Va.		Vera Pocahontas.	McDowell	N & W	Laeger, W. Va.
Warnick Coal Co.	Earnum, W. Va.		Warnick.	Mineral	W. Md.	Barium, W. Va.
Weirich, J. H., Coal Co.	Elngwood, W. Va.		Weirich.	Preston	W. Va. N	Kingwood, W. Va.
Willis Branch Coal Co.	Glen Jean, W. Va.		Willis Branch.	Fayette	Virginian	Willis Branch, W. Va.
Wilson, H. T., Coal Co.	Detroit, Mich.		Wilson No. 1.	Logan	C & O	Logan, W. Va.
Wilson, H. T., Coal Co.	Detroit, Mich.		Wilson No. 2.	Logan	C & O	Logan, W. Va.

WEST VIRGINIA

Alphabetical Directory of Coal Mines. Giving Complete Detailed
Information Covering Each Mine

For List of Abbreviations See Page 13.

ABCO COAL & COKE COMPANY

General Office, 909 Union Arcade, Pittsburgh, Pa.
PR—J. L. Aronson, Pittsburgh, Pa.
TR—Harvey M. Aronson, Pittsburgh, Pa.
GM—J. W. Dennison, Little Falls, W. Va.
GS—J. W. Dennison, Little Falls, W. Va.
PA—J. W. Dennison, Little Falls, W. Va.
SA—J. W. Dennison, Little Falls, W. Va.; and Southern Fuel Co., Morgantown, W. Va.
SA—Davis & Gilbert, Morgantown, W. Va.

Dennison No. 1 Mine; Slope; Freeport Seam; 44 inches thick.
PO—Little Falls, W. Va.; SP—Same; CTY—Monongalia; RR—B. & O.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
EMP—18. Last years tonnage 10,280.
SIZES SHIPT.—Run of Mine.
NOTE—Formerly operated by the Little Falls Fuel Co.

ABRAMS CREEK COAL AND COKE CO.

New part of Brady Coal Corp.

ADELAIDE COAL COMPANY.

General Office, Grafton, W. Va.
PR—N. P. Kendall, Grafton, W. Va.
VP—Adelaide Samples, Grafton, W. Va.
TR—W. P. Samples, Grafton, W. Va.
GM—W. P. Samples, Grafton, W. Va.
CE—Horner Bros., Clarksburg, W. Va.

Barthelt Mine; Drift; Pittsburgh Seam, 96 in. thick.
PO—Grafton, W. Va.; SP—Flemington, W. Va.; CTY—Taylor; RR—B. & O.
SIZES SHIPT.—Run of Mine.

ADRIAN HAMPTON COAL CO.

Sago, W. Va.
Mossr No. 1 Mine; CTY—Upshur.
NB report.

AERIAL COAL COMPANY

General Office, Lynchburg, Va.
PR—H. P. Adams, Lynchburg, Va.
VP—B. E. Adams, Lynchburg, Va.
TR—F. E. Turner, Jr., Lynchburg, Va.
GM—H. P. Adams, Iatton, W. Va.
GS—H. P. Adams, Iatton, W. Va.
PA—H. P. Adams, Iatton, W. Va.
EM—H. M. Eaton, Charleston, W. Va.
ET—H. A. Jones, Iatton, W. Va.
SA—Imperial Coal Sales Co., Lynchburg, Va.

Aerial Mine; Drift; No. 5 Block Seam, 58 inches thick.
PO—Charleston, W. Va.; SP—Same; CTY—Kanawha; RR—C. & O.
S of H—Mules, main and tail rope. Track gage 44 inches.
S of M—1 shortwall mach.
PP—Power purchased, 2200-275 volts A. C., M. G. Sets, 250 volts D. C., 6 pumps.
EMP—160. Last years tonnage 114,600.
SIZES SHIPT.—Run of Mine.

AILEEN COAL CO.

Keeney's Creek Mine; CTY—Fayette.
No report.

AJAX COAL CO.

General Office, Pittsburgh, Pa.
PR—S. M. Dunbar, Pittsburgh, Pa.
VP—J. G. Farquhar, Pittsburgh, Pa.
TR—S. M. Dunbar, Pittsburgh, Pa.
GM—J. G. Farquhar, Pittsburgh, Pa.
GS—Adron Carter, Fayette, W. Va.
PA—J. G. Farquhar, Pittsburgh, Pa.
EM—B. M. Owen, Charleston, W. Va.
EE—O. L. Kitchin, Lansing, W. Va.
SCD—Address the Company, Buyer, R. O. Kent, Fayette, W. Va.
SA—Bob Lo Coal & Sales Corp., Pittsburgh, Pa.

Ajax Mine; Drift; Sewell Seam, 36 in. thick.
PO—Fayette, W. Va.; SP—Same; CTY—Fayette; RR—C. & O.
S of H—Trolley pole type locos. Track gage, 40 in.
S of M—20 overhead cutter machs.
PP—2 fire tube boilers, 150 H. P., 160 K. W. gen. units, 250 volts D. C., 4 pumps.
EMP—70. Last years tonnage 33,000.
SIZES SHIPT.—Run of Mine.

AKER COAL COMPANY

Out of Business.

ALBRIGHT SMOKELESS COAL CO.

General Office, Bethlehem, Pa.
PR—F. R. Ormsby, Akron, O.
VP—T. M. Dodson, Bethlehem, Pa.
TR—G. R. Radford, Bethlehem, Pa.
GM—W. H. Gibson, Dodson, Md.
PA—J. B. Connell, Bethlehem, Pa.
EE—W. A. Thomas, Scranton, Pa.
SCD—Sterling Store Co., Tunnelton, W. Va.; Buyer, J. B. Connell, Bethlehem, Pa.
Sales Agency, Weston Dodson & Co., Inc., Bethlehem, Pa.

Baker Mine; Drift; Upper Freeport Seam, 64 in. thick.
PO—Tunnelton, W. Va.; SP—Same; CTY—Preston; RR—W. V. N.
MS—C. N. Morgan, Tunnelton, W. Va.
SM—Robert E. Hunt, Tunnelton, W. Va.
S of H—Mules and 2 trolley pole locos. Track gage 42 inches.
S of M—2 chain breast type and 1 shortwall machs.
PP—2 return tubular boilers total 300 H. P., 1-150 K. W. gen. unit, 250 volts D. C., 2 pumps.
EMP—52. Daily tonnage 300.
SIZES SHIPT.—Run of Mine.

ALDREDGE COAL CO.

Aeneid, W. Va.
Aldredge Mine; CTY—Logan.
No report.

ALEMMA COAL COMPANY

Switzer, W. Va.
Alemma Mine.
PO—Switzer, W. Va.; CTY—Logan; RR—C. & O.
No report.

ALEXANDER BY-PRODUCT COAL CO.

General Office, Charleston, W. Va.
GS—W. A. Alexander, Charleston, W. Va.
Jefferson Mine; Drift.
PO—Heatherman, W. Va.; SP—Turner; CTY—Kanawha; RR—B. & O.
S of H—Mules.
S of M—Hand.
EMP—20. Daily output, 50 tons.
NOTE—Formerly operated by McEwen Coal Co.
Old information.

ALEXANDER COAL CO.

General Office, Belva, W. Va.
Alexander Mine.
PO—Belva, W. Va.; CTY—Nicholas; RR—C. & O.
No report.

ALEXANDER, E. A.

Hughes, W. Va.
Alexander Mine; CTY—Kanawha.
No report.

ALCOMA COAL & COKE CO.

General Office, Algoma, W. Va.
PR—Wm J. Beury, 1604 Alleghany Ave., Philadelphia, Pa.
VP—C. C. Beury, Charleston, W. Va.
TR—Jas. P. Beury, 3427 N. 17th St., Philadelphia, Pa.
GM—Wm J. Beury, Philadelphia, Pa.
CS—J. J. Huddleston, Algoma, W. Va.
PA—S. G. Wygal, Algoma, W. Va.
EM—C. H. Wilcox, Kyle, W. Va.
EE—S. C. Greene, Algoma, W. Va.
SCD—Address the Company; Buyer, A. F. Thornton, Algoma, W. Va.
SA—Castner, Curran & Bullitt, Bluefield, W. Va.

Algoma Mine; Drift; Pocahontas Seam No. 3; 62 to 84 in. thick.
PO—Algoma, W. Va.; SP—Northfork, W. Va.; CTY—McDowell; RR—N. & W.
MS—J. F. Logan, Algoma, W. Va.
S of H—Mules and trolley pole type locos.
S of M—3 shortwall machs.
PP—Power purchased, rotary converters, 250 volts D. C., 2 pumps.
EMP—165. Coke ovens, 28 Bee Hive.
SIZES SHIPT.—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT.—Shaker Screens.

ALCONQUIN COAL COMPANY.

General Office, Matoaka, W. Va.
PR—Robert T. Woodruff, New York, N. Y.
VP—M. E. Kinsley, New York, N. Y.
TR—A. Holmes, New York, N. Y.
GM—Roy T. Wright, Matoaka, W. Va.

GS—C. B. Wright, Alconquin, W. Va.
EM—W. P. Farrow, Alconquin, W. Va.
SCD—Address the Company, Buyer, W. C. Hale, Alconquin, W. Va.
SA—Kingsley Steamship Lines, Inc., 17 Battery Place, New York, N. Y.

Alconquin Mine; Drift; No. 3 Pocahontas Seam, 48 to 72 in. thick.
PO—Alconquin, W. Va.; SP—Same; CTY—Mercer; RR—N. & W.
MS—J. H. Fanguharson, Alconquin, W. Va.
S of H—Mules and 4 elec. locos. Track gage 48 in.
S of M—3 elec. machs.
PP—250 volts D. C., 3 pumps. Purchase Power, Appalachian Power Co.
EMP—60. Last fiscal year output 89,000 tons.
PREP. EQUIPT.—Loading Room, Bar Screen.

ALLIED COAL CO.

General Office, Fairmont, W. Va.
Allied No. 1 Mine.
PO—Willard, W. Va.; CTY—Harrison; RR—B. & O.
No report.

ALPHA-POCAHONTAS COAL CO.

General Office, Alpoca, W. Va.
PR—F. M. Lee, Alpoca, W. Va.
VP—S. P. Halsey, Lynchburg, Va.
GM—F. M. Lee, Alpoca, W. Va.
TR—G. H. Wilkins, Lynchburg, Va.
PA—F. M. Lee, Alpoca, W. Va.
EM—E. M. Merrill, Beckley, W. Va.
SCD—Address the Company, Buyer, C. R. Thrasher, Alpoca, W. Va.
SA—Jewett, Bigelow & Brooks Company, Norfolk, Va.

Alpha Mine; Drift; Beckley Seam, 51 to 72 in. thick.
PO—Alpoca, W. Va.; SP—Same; CTY—W. Va.; RR—Virginian.
MS—E. J. Miller, Alpoca, W. Va.
S of H—Trolley pole type locos. Track gage 44 in.
S of M—3 arcwall machs.
PP—Power purchased, Transformer 2200-275 volts A. C., M. G. Sets, 250 volts D. C., 6 pumps.
EMP—160. Last years tonnage 114,600.
SIZES SHIPT.—Run of Mine.

ALPHA PORTLAND CEMENT COMPANY

General Office, First Natl. Bank Bldg., Easton, Pa.
PR—G. S. Brown, Easton, Pa.
VP—F. G. McKelvey, Easton, Pa.
TR—J. J. Matthews, Easton, Pa.
GM—F. G. McKelvey, Easton, Pa.
GS—N. D. Colburn, Easton, Pa.
PA—H. T. Wetzel, Easton, Pa.
EM—J. P. Magee, Easton, Pa.
EE—J. F. Siegfried, Easton, Pa.

Phoenix Mine; Slope; Pittsburgh Seam, 72 to 84 in. thick.
PO—Wolf Summit, W. Va.; SP—Same; CTY—Harrison; RR—B. & O.
MS—E. P. McOlvin, Reynoldsville, W. Va.
S of H—Mules, main and tail rope and 2 trolley pole type locos.
S of M—2 shortwall machs.
PP—Power purchased, 11,000-220 volts A. C., rotary converters, 250 volts D. C., 4 pumps.
SIZES SHIPT.—Run of Mine.

ALTMAN COAL CO.

General Office, Altman, W. Va.
Altman Mine.
PO—Altman, W. Va.; CTY—Boone; RR—C. & O.
No report.

AMERICAN COAL CO. OF ALLEGANY CO.

General Office, No. 1 Broadway, New York.
PR—Wm. C. Atwater, New York, N. Y.
VP—Chas. F. Hutchins, Boston, Mass.
TR—James A. McQuail, McComas, W. Va.
GM—E. J. McQuail, McComas, W. Va.
GS—H. D. Smith, McComas, W. Va.
EM—H. W. Saunders, McComas, W. Va.
EE—E. M. Reigher, Bluefield, W. Va.
SCD—Pinnacle, Crane Creek & Piedmont Stores, McComas, W. Va.
SA—The Wm. C. Atwater & Co., 1 Broadway, N. Y.

Pinnacle Mine; Drift; No. 3 Pocahontas Seam, 42 inches thick.
PO—McComas, W. Va. SP—Same. CTY—Mercer. RR—N. & W., Crane Creek Br.

SM—W. R. Sheets, McComas, W. Va.
S of H—Mules and 7 elec. locos. Track gage 48 in.
S of M—Hand and 6 shortwall machs.
PP—4 return tubular boilers, total 600 H. P., 10 pumps. Purchase power, 500 volts D. C.

EMP—350. Last fiscal year output, 300,000 tons. Coke Ovens, 100 Bee Hive.
SIZES SHIPT.—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT.—Bar and Revolving Screens, Picking Tables, Loading Booms, Washeries.

Crane Creek Mine, Drift No. 3, Pocahontas Seam, 4 ft. 8 inches thick.

PO—McComas, W. Va.; SP—Same; CTY—Mercer; RR—N. & W.
SM—W. R. Sheets, McComas, W. Va.
S of H—3 elec. locos, mules. Track gage 44 in.

S of M—Hand, and 5 elec. machines.
PP—14 pumps. Power purchased, 500 volts D. C.

EMP—350. Last fiscal year output 300,000 tons. Coke Ovens, 200 Bee Hive.

SIZES SHIPT.—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT.—Bar and Revolving Screens, Picking Tables, Loading Booms, Washeries.

Piedmont Mine, Drift, No. 3 Pocahontas Seam, 4 ft. 6 in. thick.

PO—Widemouth, W. Va.; SP—Same; CTY—Mercer; RR—N. & W.

SM—W. R. Sheets, McComas, W. Va.
S of H—Mules and 6 elec. locos. Track gage 56 1/2 in.

S of M—5 shortwall machs.
PP—Buy power, 8 pumps, 250 volts D. C.

EMP—175. Last fiscal year output 150,000 tons.

SIZES SHIPT.—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT.—Bar and Revolving Screens, Picking Tables, Loading Booms.

AMERICAN COLLIERIES COMPANY

General Office, Charleston, W. Va.
PR—E. V. Davis, Madison, N. J.
TR—H. O. Schunder, Madison, N. J.
GM—Wm. R. Roney, Charleston, W. Va.
GS—Wm. R. Roney, Charleston, W. Va.
PA—Wm. R. Roney, Charleston, W. Va.
EM—Clark & Krebs, Charleston, W. Va.
ET—William R. Roney, Charleston, W. Va.
Additional Information on Page 999

Snow Hill Mine; Drift; Wiofrede Seam, 56 in. thick.

PO—Charleston, W. Va.; SP—Same; CTY—Kanawha; RR—K. & M.

S of H—1 loco. Track gage 42 in.
S of M—1 shortwall mach.

PP—Purchase power, Transformer 44,000 to 2,300 volts, gen. units, 250 volts A. C. and D. C., 2 pumps.

EMP—50. Daily tonnage 500.

SIZES SHIPT.—Run of Mine.

PREP. EQUIPT.—Bar Screens.

AMERICAN EAGLE COLLIERY.

General Office, Aemagle, W. Va.
PR—W. S. Wood, Charleston, W. Va.
VP—H. P. Adams, Lynchburg, Va.
TR—W. S. Wood, Charleston, W. Va.
GM—D. H. Morton, Aemagle, W. Va.
PA—D. H. Morton, Aemagle, W. Va.
EM—R. B. Whitaker, Burnsville, W. Va.
SA—Wood-Martin Fuel Co., Charleston, W. Va.

American Eagle Colliery Mine; Drift; Eagle Seam; 60 inches thick.

PO—Aemagle, W. Va.; SP—Same; CTY—Raleigh; RR—C. & O.

S of H—3 trolley pole type and 2 battery locos. Track gage 44 in.

S of M—2 shortwall machs. and 1 arcwall mach.

PP—Power purchased, transformer 44,000-2300 volts A. C., rotary converters, 250 volts D. C.

EMP—100.

SIZES SHIPT.—Run of Mine, Slack, Egg, Lump.

PREP. EQUIPT.—Screens, Loading Booms

AMERICAN GAS COAL COMPANY

General Office, Morgantown, W. Va.
PR—W. E. Arnett, Morgantown, W. Va.
VP—W. C. Miller, Morgantown, W. Va.
TR—G. C. Casto, Morgantown, W. Va.

(Continued on Next Page)

Arkwright Coal Company—Cont.

PP—Power purchased. Transformer 22,000 to 6,400 volts A. C., rotary converters, 250 volts D. C.
 EMP—120. Last years tonnage 500.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Bar Screens.
 Note—Formerly operated by the Norway Coal Company.

ARLINGTON COAL CO.

Horne, W. Va.
 Mountain State Mine; CTY—Lewis
 No report.

ASHFORD COAL & COKE COMPANY

General Office, Charleston, W. Va.
 PR—G. O. Cochran, Charleston, W. Va.
 VP—J. L. Johnson, Charleston, W. Va.
 TR—Geo. D. Cochran, Charleston, W. Va.
 GM—W. S. Holmes, Charleston, W. Va.
 GS—W. S. Holmes, Charleston, W. Va.
 PA—W. S. Holmes, Charleston, W. Va.
 EM—Clark & Krebs, Charleston, W. Va.

Ashford Mine; Drift; Cedar Grove and No. 2 Gas Seam; 48 inches thick.
 PO—Charleston, W. Va.; SP—Same; CTY—Horne; RR—C. & O.
 S of H—Mules.
 S of M—Hand.
 PP—Power purchased.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Bar Screens.
 Old information.

ASHLAND COAL & COKE CO.

General Office, Ashland, W. Va.
 PR—W. A. Phillips, Mount Carmel, Pa.
 VP—Edw. Brozman, Shamokin, Pa.
 TR—G. C. Graeber, Shamokin, Pa.
 GM—A. J. Stewart, Bluefield, W. Va.
 GS—T. C. Weeks, Ashland, W. Va.
 PA—T. C. Weeks, Ashland, W. Va.
 EM—C. A. Brown, Ashland, W. Va.
 EE—M. G. Curry, Ashland, W. Va.
 SCO—Address the Company; Buyer, W. Greer, Ashland, W. Va.
 Sales Agency—Castner, Curran & Bullitt, 1 Broadway, New York, N. Y.

Ashland and Graeber Mines, Drifts; Pocahontas No. 3 Seam, 56 in. thick.
 PO—Ashland, W. Va.; SP—Northfork & Crumpler, W. Va.; CTY—McDowell; RR—N. & W.
 S of H—Mules and trolley pole type loco. Track gage, 48 in.
 S of M—6 chain breast mchs.
 PP—1 fire tube boiler, 150 H. P., 4 water tube boilers, 528 H. P., gen. units, 250 K. W., 550 volts D. C., 6 pumps.
 EMP—325. Last years tonnage 325,000.
 Coke Ovens, 410 Bee Hive.
 SIZES SHIPT—Run of Mine, Slack.
 PREP. EQUIPT—Gravity Screens, Picking Tables, Washeries.

ASHTON, R. L. & CO.

Chesapeake, W. Va.
 Ashton Mine; CTY—Kanawha.
 No report.

ASTOR COAL COMPANY

General Office, Clarksburg, W. Va.
 PR—S. A. Pratt, Kingwood, W. Va.
 VP—E. Booth, Clarksburg, W. Va.
 TR—E. E. Guck, Clarksburg, W. Va.
 GM—Jas. A. Haislip, Clarksburg, W. Va.
 PA—Jas. A. Haislip, Clarksburg, W. Va.
 SA—Jas. A. Haislip, Clarksburg, W. Va.

Aster No. 1 Mine; Drift; Pittsburgh Seam, 90 inches thick.
 PO—Flemington, W. Va.; SP—Same; CTY—Taylor; RR—B. & O.
 MS—Jas. Nisbet, Flemington, W. Va.
 S of H—Mules. Track gage 42 inches.
 S of M—Hand.
 EMP—35. Daily tonnage 150.
 SIZES SHIPT—Run of Mine.

ATLANTIC COAL & COKE COMPANY

General Office, 731 Land Title Bldg., Philadelphia, Pa.
 PR—J. H. Weaver, Philadelphia, Pa.
 TR—J. E. Wilkinson, Philadelphia, Pa.
 PA—J. J. Matheson, Philadelphia, Pa.
 GM—C. E. Sharpless, Elvansburg, Pa.
 GS—C. E. Sharpless, " "
 CE—C. E. Sharpless, " "
 EM—F. M. McDaniel, Clarksburg, W. Va.
 SCO—Mildred Supply Co.

Atlantic No. 1 Mine; Drift; Upper Freeport Seam, 48 in. thick.
 PO—Tunnelton, W. Va.; SP—Same; CTY—Preston; RR—W. V. N.
 S of H—Mules and 1 elec. loco. Track gage 42 in.
 S of M—Hand.
 PP—4 fire tube boilers, total 400 H. P., 1 air comp and 2 pumps, 1 gen. unit, 500 volts D. C.
 NOTE—Mine idle.

ATLANTIC COAL & IRON CO.

General Office, Land Title Bldg., Philadelphia, Pa.
 PR—Wm. H. Blyden, Philadelphia, Pa.
 TR—Chas. Gesing, Jr., Philadelphia, Pa.

GM—Wm. C. Yerkes, Philadelphia, Pa.
 ASST GM—D. M. Livingston, Bachman, W. Va.
 DIST. GM—Frank D. Enney, Charleston, W. Va.
 PA—D. M. Livingston, Bachman, W. Va.
 CE—Clark & Krebs, Charleston, W. Va.
 EE—West Virginia Engineering Co., Charleston, W. Va.
 SCO—Address the Company, Buyer, D. M. Livingston, Bachman, W. Va.
 SA—Wm. Corp. Mann George Corp., 26 Beaver St., New York, N. Y.

Atlantic Mine; No. 1; Drift; Sewell Seam, 42 to 52 in. thick.
 PO—Bachman, W. Va.; SP—Same; CTY—Fayette; RR—C. & O.
 MS—Geo. T. Farrow, Bachman, W. Va.
 SM—Chas. K. Cregar, Bachman, W. Va.
 S of H—Mules and 2 trolley pole type locos. Track gage 42 in.
 S of M—4 chain breast type and 3 short-wall mchs.
 PP—1—150 H. P. fire tube boiler, 1—250 K. W. gen. unit, 500 volts D. C., 1 pump.
 EMP—150. Daily tonnage 450.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

Atlantic Mine No. 2; Drift; Sewell Seam, 42 to 60 in. thick.
 PO—Bachman, W. Va.; SP—Whitney, W. Va.; CTY—Fayette; RR—C. & O.
 MS—Geo. T. Farrow, Bachman, W. Va.
 SM—Carl Lykens, Bachman, W. Va.
 S of H—Mules, 2 trolley pole type and 1 storage battery loco. Track gage 42 in.
 S of M—1 chain breast and 4 shortwall mchs.
 PP—1—150 H. P. fire tube boiler, 1—150 K. W. M. G. S-Is, 250 volts D. C., 2 pumps.
 EMP—96. Daily tonnage 400.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

ATLANTIC SMOKELESS COAL COMPANY

General Office, Asco, W. Va.
 PR—Geo. Wolfe, Beckley, W. Va.
 VP—J. Howard Anderson, Martown, W. Va.
 TR—Geo. Wolfe, Beckley, W. Va.
 GM—Geo. Wolfe, Beckley, W. Va.
 GS—Geo. Wolfe, Beckley, W. Va.
 PA—R. E. Brockman, Asco, W. Va.
 EM—C. C. Bailey, Asco, W. Va.
 EE—West Virginia Mining Engineering Co., Charleston, W. Va.
 SCO—Address the Company, Buyer, R. E. Brockman, Asco, W. Va.
 SA—Raleigh Smokeless Co., Beckley, W. Va.

Atlantic Mine; Drift; Davy-Sewell Seam, 36 in. thick.
 PO—Asco, W. Va.; SP—Davy, W. Va.; CTY—McDowell; RR—N. & W.
 MS—R. E. Brockman, Asco, W. Va.
 S of H—2 6-ton and 1 10-ton gathering mchs.
 S of M—2 shortwall mchs.
 PP—Power purchased, gen. units, 150 K. W. rotary converters, 250 volts D. C.
 Daily tonnage 150.
 SIZES SHIPT—Run of Mine.

AUSTEN COAL & COKE COMPANY

General Office, Austen, W. Va.
 PR—C. H. Zahnder, 120 Broadway, New York City
 VP—F. J. Herman, New York, N. Y.
 TR—Wm. J. Wilson, 40 Wall St., New York City
 GS—E. Y. Leith, Austen, W. Va.
 PA—F. J. Herman, 71 Broadway, New York, N. Y.
 EE—Jas. J. Fisher, Austen, W. Va.
 SCO—Address the Company; Buyer, E. Y. Leith, Austen, W. Va.
 SA—Pilling & Crane, 71 Broadway, New York, N. Y.

Austen Nos. 1, 2 and 3 Mines; Slope; Upper Freeport Seam, 52 in. thick.
 PO—Austen, W. Va.; SP—Same; CTY—Preston; RR—B. & O., Cumberland Div.
 S of H—Mules, rope, trolley pole type and storage battery locos. Track gage, 36-42 in.
 S of M—4 chain breast type and 3 short-wall mchs.
 PP—2 fire tube boilers, total 450 H. P. gen. units, 550 volts D. C., 10 pumps.
 EMP—250. Last years tonnage 150,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity and Revolving Screens.

AUTO COAL COMPANY

General Office, Wooddale, Wheeling, W. Va.
 PR—Frank Leslie, 501 Center St., Wheeling, W. Va.
 Auto Mine; Drift; Pittsburgh No. 8 Seam, 60 in. thick.
 PO—Wooddale, Wheeling, W. Va.; SP—Wheeling, W. Va.; CTY—Ohio; RR—P. R. R.

S of H—Mules. Track gage 34 in.
 S of M—Shortwall mchs.
 PP—Power purchased. Transformer 1,100 to 220 volts A. C., 220 volts D. C.
 EMP—12. Last years tonnage 8,000.
 SIZES SHIPT—Run of Mine, Slack, Pen, Nut, Lump.
 PREP. EQUIPT—Revolving Screens.

AVIS COAL CO.

Stollings, W. Va.
 Avis Mine; CTY—Logan.
 No report.

BABCOCK COAL & COKE CO.

General Office, Frick Bldg., Pittsburgh, Pa.
 PR—E. V. Babcock, Pittsburgh, Pa.
 VP—O. H. Babcock, Pittsburgh, Pa.
 TR—F. R. Babcock, Pittsburgh, Pa.
 GM—George Beane, Sewell, W. Va.
 GS—C. L. Hensley, Cliff Top, W. Va.
 PA—C. W. Huff, Pittsburgh, Pa.
 EM—E. B. Roeser, Kanawha Falls, W. Va.
 EE—G. V. Behan, Sewell, W. Va.
 SCO—Address the company. Buyer, G. T. Myles, Cliff Top, W. Va.
 SA—Rogers, Brown & Co., Cincinnati, O.

Cliff Top No. 4, Drift, Sewell Seam, 36 in. thick.
 PO—Cliff Top, W. Va. SP—Sewell, W. Va. CTY—Fayette. RR—C. & O., B. & C. & R. Y. Co.
 MS—C. C. Meeks, Cliff Top, W. Va.
 SM—J. Adam Amick, Cliff Top, W. Va.
 S of H—Mules and elec. motors. Track gage 40 in.
 S of M—2 shortwall mchs.
 PP—Fire tube boilers, 150 H. P., 100 K. W. gen. unit, 550 volts D. C., 1 pump.
 EMP—65. Last years tonnage 60,000.
 Coke Ovens, 197 Bee Hive.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

Cliff Top No. 6 Mine; Drift, Sewell Seam, 36 in. thick.
 PO—Cliff Top, W. Va.; SP—Sewell, W. Va.; CTY—Fayette; RR—C. & O.
 MS—C. C. Meeks, Cliff Top, W. Va.
 SM—J. Adam Amick, Cliff Top, W. Va.
 S of H—Mules. Track gage, 40 in.
 S of M—Hand.
 EMP—20. Daily output, 50 tons.
 SIZES SHIPT—Run of Mine.

BABCOCK COAL CO.

General Office, Hutton, Md.
 PR—F. P. Baker, Hutton, Md.
 VP—L. R. Horton, Hutton, Md.
 TR—W. R. Pendergast, Hutton, Md.
 GM—W. R. Pendergast, Hutton, Md.

Bahoven Mine; Drift; Scotchhill Seam, 108 in. thick.
 PO—Independence, W. Va.; SP—Same; CTY—Preston; RR—B. & O.
 MS—S. J. Smith, Independence, W. Va.
 S of H—Mules.
 S of M—Hand.

BAILEY COAL CO.

Matoaka, W. Va.
 Bailey Mine; CTY—Mercer.
 No report.

BAILEY THACKER COAL COMPANY

General Office, Williamson, W. Va.
 PR—R. G. Bailey, Williamson, W. Va.
 VP—P. A. West, Williamson, W. Va.
 TR—W. J. Bailey, Williamson, W. Va.
 GM—B. G. Bailey, Williamson, W. Va.
 GS—R. G. Bailey, Williamson, W. Va.
 PA—R. G. Bailey, Williamson, W. Va.
 EM—M. P. Keadie, Williamson, W. Va.
 EE—Chas. Morrison, Williamson, W. Va.
 SA—Tug Valley Fuel Co., Williamson, W. Va.

Drift; Thacker Seam, 60 inches thick.
 PO—Williamson, W. Va.; SP—Same; CTY—Mingo; RR—N. & W.
 MS—Kenney McCoy, Williamson, W. Va.
 S of H—Electric locos. Track gage 48 inches.
 EMP—75. Last years tonnage 10,920.
 SIZES SHIPT—Run of Mine, Lump.
 PREP. EQUIPT—Bar Screens.
 Note—Formerly operated by the Superior Thacker Coal Co.

BAILEY-WOOD COAL CO.

General Office, Glen Jean, W. Va.
 PR—C. H. Mead, Beckley, W. Va.
 VP—C. S. Mead, Beckley, W. Va.
 TR—J. P. Nowlin, Beckley, W. Va.
 GM—C. H. Mead, Beckley, W. Va.
 GS—W. B. Parks, Beckley, W. Va.
 PA—W. B. Parks, Beckley, W. Va.
 CE—J. C. Mabe, Beckley, W. Va.
 EE—P. C. Miller, Beckley, W. Va.

Bailey Wood mine, Drift, Beckley Seam, 4 1/2 to 6 ft. thick.
 PO—MacAlpin, W. Va.; SP—Woodbay, W. Va.; CTY—Raleigh; RR—Virginian.
 MS—L. C. Deem, MacAlpin, W. Va.
 S of H—Trolley pole type locos. Track gage, 44 in.
 S of M—Shortwall mach.

PP—3 fire tube boilers, 450 H. P., 200 K. W. gen. units, 250 volts D. C., 5 pumps.
 EMP—150. Last years tonnage 118,000.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

BAKERSTOWN FUEL COMPANY

Out of business.

BAKERSTOWN COAL COMPANY.

Now Clise Bros. Coal Co.

BALKAN COAL COMPANY

General Office, 1000 Liberty Bldg., Philadelphia, Pa.
 PR—David E. Williams, Jr., Philadelphia, Pa.
 TR—William A. Smith, Philadelphia, Pa.
 GM—A. M. Riddell, Altoona, Pa.
 PA—D. E. Williams, Jr., Philadelphia, Pa.
 EM—Horne Bros., Philadelphia, Pa.
 Sales Agency—David E. Williams & Co., 1000 Liberty Bldg., Philadelphia, Pa.

Balkan Mine; Drift; Pittsburgh Seam; 90 to 96 in. thick.
 PO—Dola, W. Va.; SP—Same; CTY—Harrison; RR—B. & O.
 MS—Wm. Roadheaver, Dola, W. Va.
 S of H—Mules and 2 gasoline locos. Track gage 42 in.
 S of M—6 compressed air machines.
 PP—1 water tube boiler, total 150 H. P., 1 air compressor, 3 pumps.
 EMP—40. Last local year output, 39,821 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.

BALLINGER COAL COMPANY

General Office, Winona, W. Va.
 PR—Geo. Holland, Winona, W. Va.
 VP—S. Holland, Winona, W. Va.
 TR—W. H. Holland, Jr., Winona, W. Va.
 GM—Geo. Holland, Winona, W. Va.
 GS—George Holland, Winona, W. Va.
 PA—W. H. Holland, Jr., Winona, W. Va.
 EM—E. B. Kaiser, Kanawha Falls, W. Va.
 EE—Jno. Cooper, Winona, W. Va.
 SCO—Address the company. Buyer, H. M. Tully, Winona, W. Va.
 SA—C. & O. Coal Agency Co., Boston, Mass.

Ballinger Mine; Drift; Sewell Seam; 36 to 48 inches thick.
 PO—Winona, W. Va.; SP—Ballinger, W. Va.; CT—Fayette; RR—C. & O.
 MS—J. M. Nelson, Winona, W. Va.
 SM—Sol. Holland, Winona, W. Va.
 S of H—Mules, locos and motors. Track gage, 42 inches.
 S of M—Hand. shortwall mchs.
 PP—Power purchased. Transformer 2,500 to 250 volts A. C., M. G. sets, 250 volts D. C., 1 fire tube boiler, 50 H. P.
 EMP—70. Last years tonnage 32,000.
 SIZES SHIPT—Run of Mine.

BARBARA MINING COMPANY

General Office, 240 Oliver Bldg., Pittsburgh, Pa.
 PR—W. W. Woodruff, Oliver Bldg., Pittsburgh, Pa.
 TR—A. M. Davis, Pittsburgh, Pa.
 GM—W. W. Woodruff, Pittsburgh, Pa.
 GS—C. E. Craig, Cassville, W. Va.
 PA—J. J. Phillips, Pittsburgh, Pa.
 CE—Jno. Worthing, Morgantown, W. Va.
 EM—H. W. Craig, Cassville, W. Va.
 EE—Glenn Fleming, Cassville, W. Va.
 SA—Woodruff Coal & Iron Co., 244 Oliver Bldg., Pittsburgh, Pa.

Barbara No. 1 Mine; Drift; Waynesburg Seam, 60 to 108 in. thick.
 PO—Cassville, W. Va.; SP—Same; CTY—Monongalia; RR—Morgantown & Wheeling.
 S of H—Mules and 2 trolley pole type locos. Track gage 42 inches.
 S of M—3 chain breast and 2 overhead cutting mchs.
 PP—1—175 K. W. generator, 1—250 H. P. gas engine, 250 volts D. C., 8 pumps.
 EMP—50. Daily tonnage 300.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
 PREP. EQUIPT—Screens Picking Tables, Loading Rooms.

BARRE COAL COMPANY

Now being operated by the Dodge Coal Company.

BARBOUR COAL COMPANY

Now the Ida May Coal Co.

BARBOUR FUEL COMPANY

General Office, Belington, W. Va.
 PR—Stephen Grass Homestead, Pa.
 VP—Thomas Barnes, Homestead, Pa.
 TR—Charles Norsley, Minhall, Pa.
 GM—Geo. T. Hill, Belington, W. Va.
 GS—Geo. T. Hill, Belington, W. Va.
 PA—Geo. T. Hill, Belington, W. Va.
 EM—Thomas Wilson, Belington, W. Va.
 SA—Geo. T. Hill, Belington, W. Va.

(Continued on Next Page)

Barbour Fuel Company—Cont.

Wilmuth Mine; Drift; Kittanning Seam, 60 in. thick.
PO—Bellingham, W. Va.; SP—Same; CTY—Barbour; RR—R. & O.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
EMP—25 Daily tonnage 200.
SIZES SHIPT—Run of Mine.

BARDON OPHOR COAL COMPANY.

General Office, Clarksburg, W. Va.
PR—Clyde M. Cliss, Clarksburg, W. Va.
VP—H. H. Dawson, Clarksburg, W. Va.
TR—C. P. Sutter, Clarksburg, W. Va.
GM—F. V. Hornor, Buckhannon, W. Va.
GS—F. V. Hornor, Buckhannon, W. Va.
PA—F. V. Hornor, Buckhannon, W. Va.
SC—Address the Company; Buyer, F. V. Hornor, Buckhannon, W. Va.
SA—F. V. Hornor, Buckhannon, W. Va.

Marple Mine; Drift; Redstone Seam, 66 in. thick.
PO—Buckhannon, W. Va.; SP—Picks Run, W. Va.; CTY—Tishur; RR—R. & O., Tygart's Valley R.
MS—Hugh Hinkle, Hall, W. Va.
SM—W. A. E. Cartright, Buckhannon, W. Va.
S of H—Mules and rope. Track gage, 42 in.
S of M—Hand.
EMP—2 pumps.
EMP—30. Last years tonnage 32,000
SIZES SHIPT—Run of Mine.
Old information.

BAD-JAY COAL COMPANY

General Office, Waldo Bldg., Clarksburg, W. Va.
PR—Geo. H. Austin, Philippi, W. Va.
VP—Walter Earl, Hopkush, W. Va.
TR—Jos. Jay, Clarksburg, W. Va.
GM—Geo. H. Austin, Philippi, W. Va.
GS—Geo. H. Austin, Philippi, W. Va.
PA—Joseph Jay, Clarksburg, W. Va.
CE—M. Mann, Philippi, W. Va.
EM—Leslie Mann, Philippi, W. Va.
SA—Moreland & Co., Pittsburgh, Pa.; Davis Coal Mining Co., Grafton, W. Va.

Morral Mine; Drift; Upper Freeport Seam, 64 in. thick.
PO—Philippi, W. Va.; SP—Same; CTY—Barbour; RR—R. & O., Grafton & Bellingham Branch.
S of H—Mules, gasoline locos. Track gage 42 inches.
S of M—2 chain breast type and 1 short-wall machs.
PP—2 water tube boilers, 150 H. P. gen. units, 1—150 K. W., 250 volts D. C.
EMP—110. Last years tonnage 140,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIP—Bar Screens.
Old information.

BARKERS CREEK COAL COMPANY.

General Office, Tralee, W. Va.
PR—J. C. Sullivan, Tralee, W. Va.
TR—J. C. Sullivan, Tralee, W. Va.
GM—J. C. Sullivan, Tralee, W. Va.
PA—C. R. Helwig, Tralee, W. Va.
EE—J. P. Barksdale, Tralee, W. Va.
SC—Address the Company Buyer, B. C. Scott, Tralee, W. Va.
SA—Chesapeake & Ohio Coal Agency Co., Boston, Mass.; Wyoming Coal Sales Co., Bluefield, W. Va.

Barkers Creek Mine; Drift; Pocahontas No. 3 Seam, 60 to 72 in. thick.
PO—Tralee, W. Va.; SP—Same; CTY—Wyoming; RR—Virginian.
S of H—2 elec. and 1 storage battery locos. Track gage 44 in.
S of M—4 elec. machs.
PP—250 volts D. C., 2 pumps. Purchase power.
SIZES SHIPT—Run of Mine.
PREP. EQUIP—Picking Tables.

BARNARD COAL COMPANY

General Office, Kingwood, W. Va.
PR—W. O. Barnard, Morgantown, W. Va.
VP—P. P. Reiner, Morgantown, W. Va.
TR—C. W. Craig, Kingwood, W. Va.
GM—W. O. Barnard, Morgantown, W. Va.
EM—Barrett Bros., Morgantown, W. Va.

Sara Mine; Slope and Shaft; Upper Freeport Seam, 60 inches thick.
PO—Kingwood, W. Va.; SP—Same; CTY—Preston; RR—W. Va. N.
MS—Earl Raley, Kingwood, W. Va.
S of H—Mules and rope. Track gage 42 inches.
S of M—Hand.
PP—Power purchased. 2—80 H. P. fire tube boilers.
EMP—36.
SIZES SHIPT—Run of Mine, Lump.

BARRACKVILLE COLLIERIES CO. THE

General Office, Professional Bldg., Fairmont, W. Va.
PR—J. W. Preston, Fairmont, W. Va.
GM—J. W. Preston, Fairmont, W. Va.
GS—J. W. Preston, Fairmont, W. Va.
SA—J. W. Preston, Fairmont, W. Va.

Satterfield Mine; Drift; Sand Stone Seam, 56 inches thick.
PO—Fairmont, W. Va.; SP—Same; CTY—Marion; RR—R. & O.
S of H—Mules. Track gage 42 inches.
S of M—1 chain breast type mach.
PP—Power purchased, 250 volts D. C., 1 pump.
EMP—15. Daily tonnage 100.
SIZES SHIPT—Run of Mine.
Note—Successors to Quality Coal Co. Old information.

BARREN CREEK COAL COMPANY.

General Office, Charleston, W. Va.
PR—J. R. Hart, Charleston, W. Va.
VP—R. E. McCabe, Charleston, W. Va.
TR—Edward Hart, Charleston, W. Va.
GM—J. R. Hart, Charleston, W. Va.
GS—R. S. Walters, Charleston, W. Va.
PA—Edward Hart, Charleston, W. Va.
CE—R. S. Walters, Charleston, W. Va.
EE—W. Va. Eng. Co., Charleston, W. Va.
SC—P. W. Snyder, Barren Creek, W. Va.
SA—Clyde H. Hoyt Co., Toledo, O.
Additional Information on Page 1006

Barren Creek Mine; Drift; No. 5 Seam; 50 inches thick.
PO—Barren Creek, W. Va.; SP—Same; CTY—Kanawha; RR—R. & O.
S of H—Electric locos.
S of M—Shortwall machs.
PP—1 fire tube boiler, 150 H. P., 1 1250 K. W. gen. unit, 220 volts D. C.
EMP—40. Daily output, 250 tons.
PREP. EQUIP—Bar Screens.
Note—Formerly operated by Barren Creek Coal Co.

BARTMAN FORK COAL COMPANY

PR—A. K. Kessler, Huntington, W. Va.
TR—S. H. Bowman, " "
GM—S. D. Smith, " "
GS—S. D. Smith, " "
CE—E. O. Young, " "
Sales Agency, Chesapeake & Virginian Coal Co., Huntington, W. Va.

Bartman Mine; Drift; 60 to 78 in. thick.
PO—East Lynn, W. Va.; SP—Same; CTY—Wayne; RR—N. & W.
MS—A. J. Pruitt, East Lynn, W. Va.
SIZES SHIPT—Run of Mine.
Old information.

BATOFF COAL CO.

Stonewall, W. Va.
Stonewall No. 2 and 4 Mines; CTY—Raleigh.
No report.

BATTLESHIP COAL COMPANY

Now Raleigh Fire Creek Coal Co.

BAUSERMAN COAL COMPANY.

General Office, Peoples Bank Bldg., Buckhannon, W. Va.
GM—W. P. Barlow, Buckhannon, W. Va.
GS—G. W. Bauserman, Lorentz, W. Va.
EM—Hornor Bros., Clarksburg, W. Va.
SA—Barlow Fuel Company, Buckhannon, W. Va.

Rger Mine; Drift; Redstone Seam, 55 in. thick.
PO—Lorentz, W. Va.; SP—Same; CTY—Upsburg; RR—R. & O.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—1 pump.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIP—Bar Screens.
NOTE—Formerly operated by the Marietta Coal Company.

BEAR COAL COMPANY

Out of Business.

BEAR RUN COAL COMPANY

PR—H. G. Carskadon, Richwood, W. Va.
TR—W. S. McQueen, Fairmont, W. Va.
GM—H. G. Carskadon, Richwood, W. Va.
GS—Frank Miller, Toga, W. Va.
EM—Hornor Bros., Clarksburg, W. Va.

Bear Run Mine; Drift; 42 to 60 in. thick.
PO—Toga, W. Va.; SP—Allingdale, W. Va.; CTY—Nicholas; RR—S. C. & M.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
EMP—12
SIZES SHIPT—Run of Mine.

BEARD SMOKELESS COAL COMPANY

General Office, Pemberton, W. Va.
PR—Prince E. Lilly, Lillybrook, W. Va.
TR—R. C. Hornbrook, Lillybrook, W. Va.
GM—Frank Beard, Pemberton, W. Va.
GS—Frank Beard, Pemberton, W. Va.
PA—Frank Beard, Pemberton, W. Va.
CE—John Hornbrook, Lillybrook, W. Va.
EM—Fred Wilfong, Beckley, W. Va.
SC—Address the Company Buyer J. C. Cook, Pemberton, W. Va.
SA—Raleigh Smokeless Coal Co., Beckley, W. Va.

Beard No. 1 Mine; Drift; Beeky Seam, 60 in. thick.
PO—Pemberton, W. Va.; SP—McVey, W. Va.; CTY—Raleigh, RR—R. & O. and V. G. C.
S of H—Rope and elec. loco. Track gage 44 in.
S of M—Electric mach.
PP—Gen. units, 150 K. W., 2 pumps.
EMP—25. Daily tonnage 100.
SIZES SHIPT—Run of Mine.

BEAVER CREEK COAL COMPANY

General Office, Weaver, W. Va.
PR—W. W. Brewer, Bellington, W. Va.
GM—W. W. Brewer, Bellington, W. Va.
GS—Ernie Davis, Bellington, W. Va.
SA—Wm. S. Harmon, Columbus, O.
Beaver Creek No. 2 Seam; Drift; Lower Kittanning Seam; 81 inches thick.
PO—Weaver, W. Va.; SP—Same; CTY—Randolph; RR—Western Maryland.
MS—Ervin Right Weaver, W. Va.
S of H—Mules and 1 steam loco. Track gage 36 inches.
S of M—Hand.
EMP—27. Daily tonnage 150.

BECKLEY COAL MINING CO.

General Office, Clarksburg, W. Va.
PR—J. P. Keely, Clarksburg, W. Va.
TR—Percy Byrd, Clarksburg, W. Va.
GM—H. G. Schumard, Meadow Bridge, W. Va.
PA—H. G. Schumard, Meadow Bridge, W. Va.

Keely Mine; Drift; Pocahontas No. 1 Seam, 60 inches thick.
PO—Meadow Bridge, W. Va.; SP—Same; CTY—Fayette; RR—S. Wall Valley.
S of H—Mules and 1 storage battery loco. Track gage 44 inches.
S of M—1 shortwall mach.
PP—Power purchased, 1 pump.
EMP—30. Daily tonnage 400.
SIZES SHIPT—Run of Mine.
PREP. EQUIP—Picking Tables.

BECKLEY FIRECREEK COAL CO.

General Office, Sullivan, W. Va.
PR—P. E. Lilly, Lillybrook, W. Va.
TR—R. C. Hornbrook, Lillybrook, W. Va.
GM—P. E. Lilly, Lillybrook, W. Va.
GS—P. E. Lilly, Lillybrook, W. Va.
PA—John R. Hornbrook, Lillybrook, W. Va.
CE—John R. Hornbrook, Lillybrook, W. Va.
SC—Address the Company Buyer, Ed. Hornbrook, Lillybrook, W. Va.
SA—Raleigh Smokeless Fuel Co., Beckley, W. Va.

Sullivan Mine; Drift; Beckley Seam, 50 in. thick.
PO—Sullivan, W. Va.; SP—Same (Prepav station); CTY—Raleigh; RR—C. & O. and Virginian.

S of H—Mules, treadle pole type and steam locos. Track gage 42 in.
S of M—1 chain breast type mach.
PP—3 water tube boilers, total 450 H. P., 2 gen. units, 250 K. W., 250 D. C., 7 pumps.
EMP—60. Last years tonnage 50,600.
SIZES SHIPT—Run of Mine.
PREP. EQUIP—Picking Tables.
NOTE—Formerly operated by the Sullivan Coal & Coke Company.

BECKLEY-POCAHONTAS COAL CO.

General Office, Box 508, Huntington, W. Va.
PR—A. E. King, Huntington, W. Va.
TR—F. E. King, Huntington, W. Va.
GM—M. A. Maxwell, Huntington, W. Va.
GS—John S. Clapperton, Huntington, W. Va.
PA—A. C. King, Huntington, W. Va.
CE—M. L. Jarrett, Huntington, W. Va.
EE—M. A. Maxwell, Huntington, W. Va.
SC—Address the Company Buyer, Claude Jarrett, Huntington, W. Va.
SA—Lake & Export Coal Corp., Huntington, W. Va.
Additional Information on Pages 1020, 1021

Beckley & Clyde Mines; Drift; Beckley & Pocahontas Seams 48 39 in. thick.
PO—Pocahontas, W. Va.; SP—Same; CTY—Raleigh; RR—C. & O. and Virginian.
MS—J. W. Johnson, Besoco, W. Va.
S of H—Elec. and storage battery locos. Track gage 48 in.
S of M—Hand and shortwall machs.
PP—Power purchased, 2300 volts A. C., rotary converters, 260-270 volts D. C., 2 pumps.
EMP—150. Last years tonnage 120,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIP—Picking Tables.
NOTE—Formerly operated by the Beckley Smokeless Coal Co. and the Clyde Pocahontas Coal Co.

BECKLEY SMOKELESS COAL CO.

Now operated by the Beckley-Pocahontas Coal Company

BECKY-JANE COAL COMPANY

General Office, Charleston, W. Va.
PR—T. M. Boggs, Charleston, W. Va.
TR—T. M. Boggs, Charleston, W. Va.
PA—T. M. Boggs, Charleston, W. Va.
EM—Walter C. Crichton, Charleston, W. Va.

Becky Jane Mine; Drift; Pocahontas Seam, 36 in. thick.
PO—Lawston, W. Va.; SP—Winthrope Junction, W. Va.; CTY—Kanawha; RR—R. & O. Winthrope R.
S of H—Mules. Track gage, 42 in.
S of M—Hand.
EMP—12. Daily output, 50 tons.
SIZES SHIPT—Run of Mine.
Old information.

BECH FORK COAL CO.

General Office, Bluefield, W. Va.
PR—J. R. Gilderleeve, English, W. Va.
VP—S. S. Gilderleeve, English, W. Va.
TR—S. H. Mannakee, Bluefield, W. Va.
GM—S. H. Mannakee, Bluefield, W. Va.
SC—Address the Company Buyer, C. S. Smith, Bech Fork, W. Va.
SA—Fort Dearborn Coal & Export Co., Fisher Bldg., Chicago, Ill.

Bech Fork Mine; Drift; No. 3 Pocahontas Seam; 16 to 54 in. thick.
PO—Bech Fork, W. Va.; SP—Same; W. Va.; CTY—McDowell; RR—N. & W., Dry Fork R.
MS—A. F. Lawson, Bech Fork, W. Va.
S of H—Rope gravity and 1 gasoline loco. Track gage 44 in.
S of M—1 mining mach.
PP—Power purchased, M. G. set, 100 K. W., 250 volts D. C., 1 pump.
EMP—35. Last years tonnage 20,000.
SIZES SHIPT—Run of Mine.

BECH GLENN COAL COMPANY

General Office, Bech Glenn, W. Va.
PR—G. A. Porter, Charleston, W. Va.
TR—Henry Fry, Charleston, W. Va.
GM—J. E. Thayer, Charleston, W. Va.
GS—H. K. Griffith, Bech Glenn, W. Va.
PA—H. K. Griffith, Bech Glenn, W. Va.
CE—June Moore, Charleston, W. Va.
EM—Philip Konrad, Kanawha Falls, W. Va.
SC—Address the Company Buyer, H. K. Griffith, Joder, W. Va.

Bech Glenn Mine; Drift; Big Eagle and No. 2 Seams, 72 in. thick.
PO—Bech Glenn, W. Va.; SP—Beleva, W. Va.; CTY—Nicholas; RR—K. & M.
S of H—Mules. Track gage 44 in.
S of M—Shortwall mach.
PP—150 H. P. boiler, 110 K. W. gen. unit, 250 volts D. C.
EMP—50. Daily tonnage 300.
SIZES SHIPT—Run of Mine.

BECH GROVE COAL CO.

GM—J. F. Icenhaver, Mason, W. Va.
GS—J. F. Icenhaver, Mason, W. Va.
PA—J. F. Icenhaver, Mason, W. Va.
EM—S. J. Blazewicz, Pomeroy, O.

Bech Grove Mine; Slope; Pittsburgh No. 8 Seam; 60 to 66 in. thick.
PO—Mason, W. Va.; SP—Mason City, W. Va.; CTY—Mason; RR—B. & O.
S of H—Mules. Track gage, 39 in.
S of M—Hand.
PP—1 water tube boiler, 2 pumps.
EMP—14. Daily output, 40 tons.
SIZES SHIPT—Run of Mine.

BEECHWOOD COAL & COKE CO.

General Office, Charleston, W. Va.
PR—C. C. Beury, Charleston, W. Va.
GM—C. C. Beury, " "
GS—C. Garvin, Claremont, W. Va.
PA—C. Garvin, " "
EM—Harold E. Wilson, Prince, W. Va.
SC—Address the company Buyer, S. T. Coleman, Claremont, W. Va.
SA—Flat Top Fuel Co., Bluefield, W. Va.

Beechwood No. 1 Mine; Drift; Fire Creek Seam, 42 in. thick.
PO—Claremont, W. Va.; SP—Same; CTY—Fayette; RR—C. & O.
S of H—Elec. locos. Track gage 41 in.
S of M—Hand.
PP—3 water tube boilers, 150 H. P.
EMP—75. Last years tonnage 37,500.
SIZES SHIPT—Run of Mine.

Beechwood No. 2 Mine; Drift; Fire Creek Seam, 42 in. thick.
PO—Claremont, W. Va.; SP—Same; CTY—Fayette; RR—C. & O.
S of H—Elec. locos. Track gage 41 in.
PP—3 water tube boilers, 150 H. P.
EMP—50. Last years tonnage 22,500.
SIZES SHIPT—Run of Mine.

BEECHWOOD COAL MINING CO

General Office, Connelsville, Pa.
PR—J. J. Buttermore, Connelsville, Pa.
TR—S. F. George S. Connell, Connelsville, Pa.
GS—J. R. Buttermore, Beechwood, W. Va.

Beechwood Mine; Drift; Pittsburgh Seam, 84 in. thick.
PO—Beechwood, W. Va.; SP—Same; CTY—Monongalia; RR—R. & O.
S of H—Mules. Track gage, 42 in.
S of M—Hand.
EMP—25. Daily output, 200 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIP—Gravity Screens.
Old information.

BEELICK KNOB COAL COMPANY

General Office, 1140 Leader New Bldg.,

Cleveland, O.

PR—George Harlow, Cleveland, O.

VP—P. F. Wilson, Cleveland, O.

TR—G. A. Paine, Cleveland, O.

GM—P. B. Thompson, Meadow Bridge, W. Va.

PA—F. B. Thompson, Meadow Bridge, W. Va.

EM—W. A. Garrett, Meadow Bridge, W. Va.

S of H—Knob Mine; Drift; Pocahontas No. 6 Seam, 66 inches thick.

PO—Meadow Bridge, W. Va.; SP—Same; CTY—Fayette; RR—Sewell Valley.

MS—P. B. Thompson, Meadow Bridge, W. Va.

S of H—Trolley pole type, storage battery and combination locos. Track gage, 44 inches.

S of M—2 shortwall machs.

PP—Power purchased, Transformer 2300 to 250 volts A. C., M. G. Sets, 250 volts D. C., 1 pump.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Tippie, Picking Tables.

BELMAR COAL COMPANY, THE

New Glendale Gas Coal Company

Belva, W. Va.

Greenview Mine.

PO—Belva, W. Va.; CTY—Nicholas; RR—C. & O.

No report.

BELVA COAL COMPANY

Belva, W. Va.

Greenview Mine.

PO—Belva, W. Va.; CTY—Nicholas; RR—C. & O.

No report.

BEN BRANKLIN COAL CO. OF W. VA.

General Office, 712 Park Bldg., Pitts-

burgh, Pa.

PR—M. J. McQuade, Pittsburgh, Pa.

GM—M. J. McQuade, Pittsburgh, Pa.

GS—J. E. Hamilton, Moundsville, W. Va.

PA—M. J. McQuade, Pittsburgh, Pa.

EM—Alex Purdy, Moundsville, W. Va.

Panama Mine; Shaft; Pittsburgh No. 8 Seam, 63 in. thick.

PO—Moundsville, W. Va.; SP—Same; CTY—Marshall; RR—B. & O.

MS—John E. McQuade, Moundsville, W. Va.

S of H—5 trolley pole type locos. Track gage, 44 in.

S of M—2 chain breast type machs.

PP—3 water tube boilers, 450 H. P., 2 150 K. W., gen. units, 250 volts D. C., 3 pumps.

EMP—215. Daily output, 1,000 tons.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.

BENGAL COAL COMPANY.

General Office, Huntington, W. Va.

PR—J. S. Cunningham, Charleston, W. Va.

VP—Frank Enslow, Huntington, W. Va.

TR—W. H. Cunningham, Huntington, W. Va.

GM—C. W. Strickland, Huntington, W. Va.

GS—C. C. Morgan, Kistler, W. Va.

PA—C. C. Morgan, Kistler, W. Va.

EM—Ralph Lamb, Huntington, W. Va.

SCD—Address the Company, Buyer, F. G. Harlow, Kistler, W. Va.

SA—Twin States Fuel Co., Kistler, W. Va.

Bengal Mine; Drift; Eagle Seam, 84 in. thick.

PO—Kistler, W. Va.; SP—Same; CTY—Logan; RR—C. & O., Guyan Valley Br.

S of H—Electric and gathering locos.

PP—Power purchased, M. G. Set, 1—150 K. W., gen. unit, 250 volts D. C., 2 r turn tubular boilers, total 300 H. P., 4 pumps.

EMP—100. Last years tonnage 100,000.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Picking Tables, Shaker Screens.

BENS RUN COAL COMPANY

General Office, Iker, W. Va.

PR—J. E. McDowell, Williamsport, Pa.

VP—J. P. Korns, Clarksburg, Pa.

TR—J. P. Korns, Clarksburg, Pa.

GS—J. E. Cutchall, Iker, W. Va.

PA—J. E. Cutchall, Iker, W. Va.

SA—Sales Agent—J. P. Korns, Harris-

burg, Pa.

Iker Mine; Drift; Kittanning Seam, 58 in. thick.

PO—Iker, W. Va.; SP—Gillespie, W. Va.; CTY—Braxton; RR—B. & O.

S of H—Mules.

S of M—Hand.

EMP—18. Last years tonnage 4,760.

SIZES SHIPT—Run of Mine.

BERKLEY COAL CO.

Now Logan, Clifton Coal Co.

BERRYBURG COAL COMPANY

PR—Enoch Bellis, Buckhannon, W. Va.

VP—John E. Evans, Elensburg, Pa.

GM—Enoch Bellis, Buckhannon, W. Va.

GS—Enoch Bellis, Buckhannon, W. Va.

PA—Enoch Bellis, Buckhannon, W. Va.

EM—Enoch Bellis, Buckhannon, W. Va.

Berryburg No. 1 Mine; Drift; Pittsburgh Seam, 84 in. thick.

PO—Berryburg, W. Va.; SP—Scale Sid-

ing, W. Va.; CTY—Barbour; RR—B. & O., Berryburg Jet.

S of H—Trolley pole type locos. Track gage, 42 in.

S of M—2 shortwall machs.

PP—Power purchased, transformer 22,000 to 275 volts A. C., M. G. set, 100 K. W., 275 volts D. C., 2 pumps.

EMP—35. Last years tonnage 38,093.

SIZES SHIPT—Run of Mine.

BETHLEHEM COAL CO.

General Office, Fairmont, W. Va.

PR—J. E. Watson, Fairmont, W. Va.

VP—G. E. Peddicord, Fairmont, W. Va.

GM—L. C. Weeks, Fairmont, W. Va.

PA—J. E. Watson, Jr., Fairmont, W. Va.

EM—J. I. Snoderly, Fairmont, W. Va.

Scott No. 1 Mine; Drift; Pittsburgh Seam, 96 to 102 in. thick.

PO—Shinnston, W. Va.; SP—Same; CTY—Harrison; RR—B. & O., Mud-

lick Br.

MS—M. H. Raymond, Shinnston, W. Va.

SM—W. R. Robey, Shinnston, W. Va.

S of H—Trolley pole type loco. Track gage, 42 in.

S of M—3 chain breast type machs.

PP—Purchase power, 250 volts D. C.

EMP—10. Daily tonnage 500.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Gravity Screens.

Scott No. 2 Mine; Drift; Pittsburgh Seam, 96 to 102 in. thick.

PO—Shinnston, W. Va.; SP—Same; CTY—Harrison; RR—B. & O., Mud-

lick Br.

MS—M. H. Raymond, Shinnston, W. Va.

SM—W. R. Robey, Shinnston, W. Va.

S of H—Trolley pole type loco. Track gage, 42 in.

S of M—2 chain breast type machs.

PP—Power purchased, 250 volts D. C.

EMP—20. Daily tonnage 600.

SIZES SHIPT—Run of Mine.

Peoria Mine; Drift; Pittsburgh Seam, 96 to 102 in. thick.

PO—Shinnston, W. Va.; SP—Same; CTY—Harrison; RR—W. M., F. & B. Branch.

MS—H. R. Hatfield, Shinnston, W. Va.

SM—H. R. Hatfield, Shinnston, W. Va.

S of H—Trolley pole type loco. Track gage, 42 in.

S of M—4 chain breast machs.

PP—Purchase power, 1 gen. unit, 250 volts D. C.

EMP—25. Daily output, 100 tons.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

Bethlehem No. 1 Mine; Drift; Sewickley Seam, 72 in. thick.

PO—Helens Run, W. Va.; SP—Worth-

ington, W. Va.; CTY—Marion; RR—W. Md.

SM—E. G. Linn, Helens Run, W. Va.

S of H—Trolley pole type locos. Track gage, 42 in.

S of M—6 chain breast type machs.

PP—Power purchased, D. C., 3 pumps.

EMP—20. Daily tonnage 600.

SIZES SHIPT—Run of Mine.

Bethlehem No. 3 Mine; Drift; Sewickley Seam, 72 in. thick.

PO—Helens Run, W. Va.; SP—Worth-

ington, W. Va.; CTY—Marion; RR—W. Md.

SM—E. G. Linn, Helens Run, W. Va.

S of H—Trolley pole type locos. Track gage, 42 in.

S of M—6 chain breast type machs.

PP—Power purchased, D. C., 3 pumps.

EMP—20. Daily output, 900 tons.

SIZES SHIPT—Run of Mine.

BETHLEHEM MINES CORPORATION

General Office, Bethlehem, Pa.

PR—C. A. Buck, Bethlehem, Pa.

TR—E. R. Hill, Bethlehem, Pa.

GM—T. R. Johns, Reidsville, W. Va.

PA—Wm. Tobias, Bethlehem, Pa.

CE—W. S. Bourlier, Bethlehem, Pa.

EM—C. S. Hagenbach, Reidsville, W. Va.

SCD—Service, Sours Corp., Buyer, L. S. Meredith, Reidsville, W. Va.

SA—Bethlehem Steel Co., Bethlehem, Pa.

No. 21 Richard Mine; Drift; Upper Free-

port Seam, 48 inches thick.

PO—Richard, W. Va.; SP—Same; CTY—Monongalia; RR—M. & K.

MS—O. T. Barnard, Richard, W. Va.

PP—Power purchased.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Picking Tables, Loading Booms.

No. 23 Richard Mine; Slope; Upper Free-

port Seam, 48 inches thick.

PO—Richard, W. Va.; SP—Same; CTY—Monongalia; RR—M. & K.

MS—O. T. Barnard, Richard, W. Va.

PP—Power purchased.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Picking Tables, Loading Booms.

No. 24 Kingwood Mine; Slope; Upper Free-

port Seam, 48 inches thick.

PO—Kingwood, W. Va.; SP—Same; CTY—Preston; RR—M. & K.

MS—H. G. Schaeffer, Kingwood, W. Va.

SM—J. E. Hayes, Kingwood, W. Va.

S of H—Mules, 3—10-ton trolley pole type locos and 2—5-ton gathering locos. Track gage 44 in.

S of M—1 chain breast and 6 shortwall machs.

PP—2 fire tube boilers, total 300 H. P., gen. unit, 200 K. W., 250 volts D. C., 2 pumps.

EMP—58. Last years tonnage 66,009.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Gravity Screens.

No. 25 Sabraton Mine; Slope; Pittsburgh Seam, 96 inches thick.

PO—R. F. D. Morgantown, W. Va.; SP—Sabraton, W. Va.; CTY—Monongalia; RR—M. & K.

MS—W. H. Coburn, Sabraton, W. Va.

SM—J. C. McGee, Morgantown, W. Va.

S of H—1 10-ton, 1 20-ton and 3 5-ton trolley pole type locos. Track gage 44 inches.

S of M—4 chain breast type machs.

PP—Power purchased, Transformer 13,200 to 2,200 volts A. C., M. G. set, 250 volts D. C., 2 pumps.

EMP—71. Last years tonnage 32,457.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Gravity Screens.

No. 26 Masontown Mine; Slope; Upper Free-

port Seam, 48 inches thick.

PO—Masontown, W. Va.; SP—Same; CTY—Preston; RR—M. & K.

MS—Chas. S. Werner, Masontown, W. Va.

SV—Porter Jenkins, Masontown, W. Va.

S of H—5—10-ton and 3—5-ton trolley pole type locos and 2—5-ton gathering locos. Track gage 44 in.

S of M—4 shortwall machs.

PP—Power purchased, Transformer 13,200 to 2,200 volts A. C., M. G. set, 250 volts D. C., 2 pumps.

EMP—71. Last years tonnage 32,457.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Gravity Screens.

No. 27 Burk Mine; Slope; Upper Free-

port Seam, 48 inches thick.

PO—Taylor, W. Va.; SP—Same; CTY—Preston; RR—M. & K.

MS—Ira Fluck, Taylor, W. Va.

SM—Edward Howard, Taylor, W. Va.

S of H—2—10-ton and 1—5-ton trolley pole type locos and 2—5-ton gathering locos. Track gage 44 in.

S of M—3 shortwall machs.

PP—Power purchased, Transformer 13,200 to 2,200 volts A. C., 250 volts D. C.

EMP—39. Last years tonnage 23,610.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Gravity Screens.

Note—Successors to Elkins Coal & Coke Co.

MARION DIVISION

DIV. Supt.—J. P. McCune, Barrackville, W. Va.

EE—O. R. Ely, Barrackville, W. Va.

No. 41 Mine; Shaft; Pittsburgh Seam, 96 in. thick.

PO—Barrackville, W. Va.; SP—Same; CTY—Marion; RR—B. & O.

MS—M. B. Mitchell, Barrackville, W. Va.

SM—J. J. Bartlett, Barrackville, W. Va.

S of H—Mules and trolley pole type locos. Track gage 44 in.

S of M—15 comp. air punchers.

S of H—Mules, 4 10-ton trolley pole

type locos, 2 5-ton gathering locos.

Track gage, 44 in.

S of M—2 shortwall machs.

PP—Power purchased, Transformer 13,200 to 2,200 volts A. C., M. G. set, 250 volts D. C., 3 pumps.

EMP—60. Last years tonnage 11,890.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Gravity Screens.

No. 22 Bretz Mine; Slope; Upper Free-

port Seam, 48 inches thick.

PO—Bretz, W. Va.; SP—Same; CTY—Preston; RR—M. & K.

MS—Weston Dodge, Bretz, W. Va.

SM—L. M. Stempel, Bretz, W. Va.

S of H—G trolley pole type locos, 5 gathering locos. Track gage 44 in.

S of M—5 shortwall machs.

PP—Power purchased, Transformer 13,200 to 2,200 volts A. C., M. G. set, 250 volts D. C., 4 pumps.

EMP—97. Last years tonnage 35,316.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Picking Tables, Loading Booms.

No. 23 Richard Mine; Slope; Upper Free-

port Seam, 48 inches thick.

PO—Richard, W. Va.; SP—Same; CTY—Monongalia; RR—M. & K.

MS—O. T. Barnard, Richard, W. Va.

PP—Power purchased.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Picking Tables, Loading Booms.

No. 24 Kingwood Mine; Slope; Upper Free-

port Seam, 48 inches thick.

PO—Kingwood, W. Va.; SP—Same; CTY—Preston; RR—M. & K.

MS—H. G. Schaeffer, Kingwood, W. Va.

SM—J. E. Hayes, Kingwood, W. Va.

S of H—Mules, 3—10-ton trolley pole type locos and 2—5-ton gathering locos. Track gage 44 in.

S of M—1 chain breast and 6 shortwall machs.

PP—2 fire tube boilers, total 300 H. P., gen. unit, 200 K. W., 250 volts D. C., 2 pumps.

EMP—58. Last years tonnage 66,009.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Gravity Screens.

No. 25 Sabraton Mine; Slope; Pittsburgh Seam, 96 inches thick.

PO—R. F. D. Morgantown, W. Va.; SP—Sabraton, W. Va.; CTY—Monongalia; RR—M. & K.

MS—W. H. Coburn, Sabraton, W. Va.

SM—J. C. McGee, Morgantown, W. Va.

S of H—1 10-ton, 1 20-ton and 3 5-ton trolley pole type locos. Track gage 44 inches.

S of M—4 chain breast type machs.

PP—Power purchased, Transformer 13,200 to 2,200 volts A. C., M. G. set, 250 volts D. C., 2 pumps.

EMP—71. Last years tonnage 3

Big Ben Coal Co.—Cont.

Big Bend Mine; Drift; Fire Creek Seam, 42 in. thick.
 PO—Dimmock, W. Va.; SP—Same; CTY—Fayette; RR—C. & O.
 MS—C. L. Echols, Dimmock, W. Va.
 S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 EMP—10. Last fiscal year output, 8,000 tons.
 SIZES SHIPT—Run of Mine, Lump.
 PREP. EQUIPT—Gravity Screens.
 Old information.

BIG BLOCK COAL COMPANY

General Office, Morgantown, W. Va.
 PR—N. C. Burdett, Morgantown, W. Va.
 GM—N. C. Burdett, Morgantown, W. Va.
 PA—N. C. Burdett, Morgantown, W. Va.
 SCO—Address the Company, Buyer, S. J. Morris, Elkhurst, W. Va.
 SA—United Fuel & Iron Co., Pittsburgh, Pa.

Clone Mine; Drift; Coalburg Seam, 53 in. thick.
 PO—Elkhurst, W. Va.; SP—Same; CTY—Clay; RR—B. & O.
 MS—C. W. McElwain, Elkhurst, W. Va.
 S of H—Mules and 1 storage battery loco. Track gage 42 in.
 S of M—1 shortwall mach.
 PP—Power purchased. Transformer 13,500 to 250 volts A. C., M. G. set, 250 volts D. C.
 EMP—50. Daily tonnage 150.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.
 Old information.

BIG BOTTOM COAL COMPANY

General Office, Charleston, W. Va., P. O. 1585.
 PR—J. M. Ralston, Charleston, W. Va.
 TR—Geo. N. Hancock, Charleston, W. Va.
 GM—J. M. Ralston, Charleston, W. Va.
 PA—Geo. N. Hancock, Charleston, W. Va.
 EM—W. G. Creighton, Charleston, W. Va.
 Additional Information on Page 975

Big Bottom Mine; Drift; Belmont Seam, 129 in. thick.
 PO—Tad, W. Va.; SP—Big Bottom Sidling, W. Va.; CTY—Kanawha; RR—K. & M. Campbell Creek Branch.
 MS—James Ralston, Tad, W. Va.
 S of H—Mules. Track gage 44 inches.
 S of M—Shortwall mach.
 PP—Power purchased. Transformer 40,000 to 2,200 volts A. C., 1—100 K. W. M. G. set, 250 volts D. C.
 EMP—34. Last years tonnage 30,000.
 SIZES SHIPT—Run of Mine.

BIG CHIEF COAL COMPANY

General Office, Junior, W. Va.
 PR—C. W. Sandridge, Junior, W. Va.
 VP—C. W. Shomo, Junior, W. Va.
 TR—Ed. Everhart, Elkins, W. Va.
 GM—C. W. Sandridge, Junior, W. Va.
 GS—C. W. Sandridge, Junior, W. Va.

Big Chief Mine; Drift; Kittanning Seam, 66 inches thick.
 PO—Junior, W. Va.; SP—Same; CTY—Barbour; RR—B. & O.
 S of H—Mules. Track gage 42 inches.
 S of M—Hand.
 EMP—50. Daily tonnage 500.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Loading Booms.

BIG CREEK COAL COMPANY

General Office, 1748 Pensacola Bldg., Detroit, Mich.
 PR—James P. Cumiskey, Detroit, Mich.
 VP—Charles E. Sandberg, Charleston, W. Va.
 TR—Matthew Shish, Mt. Clemens, Mich.
 GM—Charles E. Sandberg, Charleston, W. Va.
 GS—L. J. Manor, Big Creek, W. Va.
 PA—L. J. Manor, Big Creek, W. Va.
 EM—J. P. West, Charleston, W. Va.
 EE—Wm. McKenny, Big Creek, W. Va.
 SCO—Address the Company, Buyer, L. J. Manor, Big Creek, W. Va.
 SA—Ohio & Michigan Coal Co., Detroit, Mich.
 Additional Information on Page 1045

Lincoln Mine; Drift; Alma Seam; 44 to 48 inches thick.
 PO—Big Creek, W. Va.; SP—Same; CTY—Logan; RR—C. & O., Goyan Valley Branch.
 S of H—Electric loco. Track gage 44 inches.
 S of M—Shortwall mach.
 PP—Power purchased. 2 fire tube boilers 150 H. P., 250 volts D. C.
 EMP—25. Last years tonnage 17,603.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Shaker Screens.

BIG FIVE COAL COMPANY

General Office, Piedmont, W. Va.
 PR—J. C. Mullan, Piedmont, W. Va.
 VP—J. C. Mullan, Westernport, Md.
 TR—S. K. Fike, Piedmont, W. Va.
 GM—J. C. Mullan, Piedmont, W. Va.
 PA—S. K. Fike, Piedmont, W. Va.

Albright Mine; Drift; Bakerstown Seam, 38 in. thick.
 PO—Albright, W. Va.; SP—Same; CTY—Fayette; RR—M. & K.
 MS—J. C. Mullan, Piedmont, W. Va.
 S of H—Mules.
 S of M—Hand.
 PP—1 80 H. P. fire tube boiler, 1 pump.
 EMP—10. Daily tonnage 50.
 SIZES SHIPT—Run of Mine.

BIG FOUR COAL CO.

General Office, Fairmont, W. Va.
 PR—C. E. Smith, Fairmont, W. Va.
 VP—H. B. Clark, Fairmont, W. Va.
 TR—Walton Miller, Fairmont, W. Va.
 GM—H. B. Clark, Fairmont, W. Va.
 GS—J. A. Clark, Jr., Fairmont, W. Va.
 PA—J. A. Clark, Jr., Fairmont, W. Va.
 EM—H. R. Stevens, Fairmont, W. Va.
 SA—Blair Park Coal & Coke Co., Real Estate Trust Bldg., Philadelphia, Pa.

Eagle Mine; Drift; Pittsburgh Seam, 108 inches thick.
 PO—Hopzibah, W. Va.; SP—Erie, W. Va.; CTY—Marion; RR—B. & O.
 MS—V. A. Miller, Hopzibah, W. Va.
 S of H—Erie loco. Track gage 42 in.
 S of M—Shortwall mach.
 PP—Power purchased. Transformer 22,000 to 250 volts A. C., rotary converters, 250 volts D. C.
 EMP—100. Last years tonnage 5,000.
 SIZES SHIPT—Run of Mine, Slack, Pea, Not, Egg, Lump.
 PREP. EQUIPT—Bar Screens.

BIG SIX COAL COMPANY

Charleston, W. Va.
 PR—Six Min.
 PO—Coal Fork, W. Va.; CTY—Kanawha; RR—C. & O.
 No report.

BIG RUN COAL COMPANY

General Office, 15 South St., Baltimore, Md.
 PR—Harry D. Harey, Baltimore, Md.
 VP—Henry Zoller, Jr., Baltimore, Md.
 TR—James M. Shu, Baltimore, Md.
 GS—J. G. Phillips, Century, W. Va.
 PA—James M. Shea, Baltimore, Md.

Big Run Nos. 1 and 2 Mines; Drifts; Redstone and Pittsburgh Seams, 66 to 96 in. thick.
 PO—Century, W. Va.; SP—Same; CTY—Barbour; RR—B. & O., Grafton & Bechtelung R.
 S of H—Mules and 1 trolley pole type loco. Track gage 42 inches.
 S of M—2 shortwall machs.
 PP—2 water tube boilers, 150 H. P., 100 K. W. gen. unit, 250 volts D. C., 2 pumps.
 EMP—50. Last years tonnage 75,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

BIG VEIN COAL COMPANY OF WEST VIRGINIA

General Office, Baltimore, Md.
 PR—Frank J. Taylor, Baltimore, Md.
 VP—R. C. Lorraine, Baltimore, Md.
 TR—John C. Wolf, Baltimore, Md.
 GM—R. C. Lorraine, Baltimore, Md.
 GS—S. S. Harey, Shaw, W. Va.
 PA—R. C. Lorraine, Baltimore, Md.

Shaw Mine; Drift; Bakerstown and Big Vein Seams.
 PO—Shaw, W. Va.; SP—Same; CTY—Mineral; RR—W. M.
 S of H—Mules and locons.
 S of M—Hand.
 PP—1 fire tube boiler 50 H. P., 1 pump.
 EMP—50.
 SIZES SHIPT—Run of Mine, Lump.

BINGAMON VALLEY COAL COMPANY

General Office, Box 180 Fairmont, W. Va.
 PR—G. R. Henshaw, Uniontown, Pa.
 VP—Wm. Henshaw, Uniontown, Pa.
 TR—J. S. Henshaw, Fairmont, W. Va.
 GM—J. S. Henshaw, Fairmont, W. Va.
 GS—J. S. Henshaw, Fairmont, W. Va.
 PA—J. S. Henshaw, Fairmont, W. Va.
 EM—Fletcher-Davis Fuel Co., Morgantown, W. Va.
 SCO—Address the Company, Buyer, J. S. Henshaw, Fairmont, W. Va.
 SA—Morgantown Coal Co., Morgantown, W. Va.

Bice Mine; Slope; Pittsburgh Seam; 100 inch s. thick.
 PO—Shinnston, W. Va.; R. F. D.; SP—Same; CTY—Harrison; RR—Western Maryland.
 MS—C. D. Jones, Shinnston, W. Va.
 SM—C. D. Jones, Shinnston, W. Va.
 S of H—Mules and rope. Track gage 42 inches.
 S of M—Mach.
 PP—Power purchased. Transformer 220 volts D. C., 2 pumps.
 EMP—23. Daily tonnage 150.
 SIZES SHIPT—Run of Mine.
 Old information.

BIRCH FORK COAL CO.

General Office, Birtchen, W. Va.
 PR—T. E. B. Siler, Charleston, W. Va.

VP—G. C. Hubbard, Charleston, W. Va.
 TR—T. D. Siler, Charleston, W. Va.
 GM—Floyd H. Hicatt, Birtchen, W. Va.
 GS—John J. Johnson, Birtchen, W. Va.
 PA—F. H. Hicatt, Birtchen, W. Va.
 CE—C. C. Humley, Birtchen, W. Va.
 EE—Mason, Birtchen, Birtchen, W. Va.

SCO—Address the Company, Buyer, Ray K. Carter, Charleston, W. Va.
 SA—Siler & Siler, Charleston, W. Va.
 Birtchen Mine; Drift; Coalburg Seam, 60 in. thick.
 PO—Birtchen, W. Va.; SP—Ft. Birch, W. Va.; CTY—Raleigh; RR—C. & O.
 S of H—Rope and trolley pole loco. Track gage, 44 in.
 S of M—3 shortwall machs.
 PP—Power purchased. Transformer 2,300 250 volts A. C., rotary converters, 150 K. W. gen. units, 250 volts D. C.
 EMP—125. Last years tonnage 65,000.
 SIZES SHIPT—Run of Mine, Slack, Not, Egg, Lump, Slack.
 PREP. EQUIPT—Shaker Screens, Pickling Tables, Loading Booms.

BLACK A L COAL COMPANY

General Office, Morgantown, W. Va.
 PR—Ben Green, Morgantown, W. Va.
 VP—Ben Oppenheimer, Morgantown, W. Va.
 TR—Max De Leon, Morgantown, W. Va.
 GM—A. L. Black, Morgantown, W. Va.
 GS—A. L. Black, Morgantown, W. Va.
 EM—McDonald & Bartell, Morgantown, W. Va.
 SA—Stuck End Co., Uniontown, Pa.

Star Mine; Drift; Pittsburgh Seam, 71 in. thick.
 PO—Morgantown, W. Va.; SP—Same; CTY—Monongalia; RR—Monongalia.
 S of H—Mules and electric loco.
 S of M—2 shortwall and 1 chain breast mach.
 PP—Power purchased. M. G. set, 150 K. W., 250 volts D. C., 4 pumps.
 EMP—60. Last years tonnage 100,000.
 SIZES SHIPT—Run of Mine.
 Note: Successors to Scrip Coal Co.
 Old information.

BLACK BAND CONS. COAL CO.

General Office, Olcott, W. Va.
 PR—J. Edw. Horn, Phillipsburg, Pa.
 TR—J. Edward Horn, Phillipsburg, Pa.
 GM—R. S. Walters, Charleston, W. Va.
 GS—R. S. Walters, Charleston, W. Va.
 PA—R. S. Walters, Charleston, W. Va.
 EM—Pumby-Walters Engr. Co., Charleston, W. Va.
 EE—W. Va. Engineering Co., Charleston, W. Va.
 SCO—Address the company, Buyer, E. G. Kent, Olcott, W. Va.

Nos. 1 & 2, Reynold No. 5 and Kulek erberker Mines; Drift; Black Band (Winfield) Seam, 41 inches thick.
 PO—Olcott, W. Va.; SP—Branland, W. Va.; CTY—Kanawha; RR—C. & O.
 S of H—Mules, elec. storage battery and steam loco. Track gage 42 inches.
 S of M—Shortwall mach.
 PP—Gen. units, 2—300 K. W., 2—175 K. W., 1—20 K. W., 250 volts D. C., 6—150 H. P. boilers, 2 pumps.
 EMP—200. Last years tonnage 125,000.
 SIZES SHIPT—Run of Mine, Slack, Pea, Not, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Bar Screens, Pickling Tables.
 NOTE—Furnish operated by the Black Band Fuel Co. and Brier Creek Coal Company.

BLACK BAND FUEL CO.

Out of business.

BLACK BETSEY CONSOLIDATED COAL CO

General Office, Black Betsey, W. Va.
 PR—Mrs. Emma T. O'Connor, Providence, R. I.
 TR—Alfred S. Clarke, Esq., Providence, R. I.
 GM—Thos. W. Woodward, Black Betsey, W. Va.
 GS—Chas. R. Santrock, Black Betsey, W. Va.
 PA—Thos. W. Woodward, Black Betsey, W. Va.
 EM—Clark & Kreh, Charleston, W. Va.
 EE—Frank Davidson, Black Betsey, W. Va.
 SCO—Black Betsey Cons. Coal Co.; Buyer, Everett Scholz, Black Betsey, W. Va.
 SA—Indian Run Coal Co., Charleston, W. Va.

Black Betsey Mine; Drift; Pittsburgh No. 8 Seam, 66 in. thick.
 PO—Black Betsey, W. Va.; SP—Same; CTY—Putman; RR—K. & M.
 S of H—Mules and 5 trolley pole type locons. Track gage, 42 in.
 S of M—Hand.
 PP—2 fire tube boilers, 300 H. P., 1—100 K. W., 1—125 K. W. gen. units, 250 volts D. C., 2 pumps.
 EMP—250. Last years tonnage 150,000.

SIZES SHIPT—Run of Mine, Slack, Not, Pea, Lump.
 PREP. EQUIPT—Gravity Screens.

BLACK DIAMOND BI-PRODUCTS COAL CO.

See R. G. Bailey, Ky.

BLACK HAWK COLLIERY COMPANY

General Office, 1748 Pensacola Bldg., Detroit, Mich.
 PR—J. P. Cumiskey, Detroit, Mich.
 TR—F. G. Morhous, Detroit, Mich.
 GM—Charles L. Sandberg, Charleston, W. Va.
 GS—T. J. Manor, Big Creek, W. Va.
 PA—T. J. Manor, Big Creek, W. Va.
 EM—J. P. West, Charleston, W. Va.
 EE—Wm. McKenny, Big Creek, W. Va.
 SA—Ohio & Michigan Coal Co., Detroit, Mich.

Additional Information on Page 1045

Black Hawk Mine; Drift; Eagle Seam, 18 in. thick.
 PO—Big Creek, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
 S of H—Trolley pole type loco. Track gage 44 in.
 S of M—3 shortwall mach.
 PP—Return tubular boilers, total 250 H. P., gen. units, 4 pumps.
 EMP—50. Last years tonnage 31,450.
 SIZES SHIPT—Run of Mine.

BLACK WOLF COAL & COKE CO

PR—Jas. R. Gilliam, Jr., Lynchburg, Va.
 VP—J. C. Copely, Aurora, Ill.
 TR—L. H. O'Mara, Aurora, Ill.
 GM—W. M. Willett, Aurora, Ill.
 GS—W. M. Gay, Ethel, W. Va.
 PA—S. J. Ryker, Aurora, Ill.
 EM—C. C. Boardman, Aurora, Ill.
 EM—F. J. Kyle, Welch, W. Va.
 SCO—Address the Company, Buyer, W. E. Fixmer, Ethel, W. Va.

Black Wolf Mine; Drift; Nos. 3 and 4 Potomac Seams, 40 to 54 in. thick.
 PO—Bearing, W. Va.; SP—Black Wolf, W. Va.; CTY—McDowell; RR—N. & W.
 S of H—1 elec. loco. Track gage 44 in.
 S of M—1 elec. mach.
 PP—2 boilers, 400 H. P., 1 gen. unit, 500 volts D. C.
 EMP—225.

SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Shaker Screens, Pickling Tables.

BLACKWATER COAL COMPANY

General Office, Thomas, W. Va.
 PR—A. L. Helmick, Thomas, W. Va.
 VP—R. P. Milroy, Thomas, W. Va.
 TR—H. F. Helmick, Thomas, W. Va.
 GM—A. L. Helmick, Thomas, W. Va.
 GS—A. R. Close, Davis, W. Va.
 PA—H. F. Helmick, Thomas, W. Va.
 EM—L. B. Davis, Thomas, W. Va.
 Sales Agent, H. F. Helmick, Thomas, W. Va.

Blackwater Mine; Drift; Kittanning Seam, 72 in. thick.
 PO—Davis, W. Va.; SP—Same; CTY—Tucker; RR—W. Md., Doris Br.
 S of H—Mules. Track gage 35 in.
 S of M—Hand.
 PP—2 gas pumps.
 EMP—40. Last years tonnage 33,000.
 SIZES SHIPT—Run of Mine.

BLAINE MINING CO

General Office No. 1 Broadway, New York, N. Y.
 PR—T. B. Davis, New York, N. Y.
 VP—J. E. Davis, New York, N. Y.
 TR—J. E. Maher, New York, N. Y.
 GM—Jas. G. Boyd, Potomac Manor, W. Va.
 GS—Geo. Boyd, Potomac Manor, W. Va.
 PA—Geo. Boyd, Potomac Manor, W. Va.
 EM—George Boyd, Potomac Manor, W. Va.
 EE—Lafe O'Haver, Potomac Manor, W. Va.
 SCO—Potomac Manor Supply Co., Buyer, N. W. Buzzard, Potomac Manor, W. Va.
 SA—R. A. Davidson, No. 1 Broadway, New York, N. Y.

Potomac Manor Nos. 1 and 2 Mines; Drift; Lower Kittanning Seam, 72 in. thick.
 PO—Potomac Manor, W. Va.; SP—Blaine, W. Va.; CTY—Garrett, Md.; RR—W. M.
 S of H—Mules. Track gage 36 in.
 S of M—Hand.
 PP—2 Return tubular boilers, total 200 H. P., 1 Gen. unit 500 volts D. C.
 EMP—150. Last fiscal year output, 125,596 tons.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Pickling Tables.

BLAKE, N. S.

Blake Mine.
 PO—Mr. Hop, W. Va.; CTY—Fayette; RR—C. & O.
 No report.

BLUE BAND COAL COMPANY

General Office, Charleston, W. Va.
 PR—A. G. Thompson, Charleston, W. Va.
 VP—C. C. Condit, Charleston, W. Va.
 TR—Harry Eastwood, Charleston, W. Va.
 GM—C. C. Condit, Charleston, W. Va.
 CE—G. S. Phibbs, Charleston, W. Va.
 SA—The Mountaineer Fuel Co., Charleston, W. Va.

Blue Band No. 1 Mine; Drift; No. 5 Block and Coalberg Seams, 54 in. thick.

PO—Coco, W. Va.; SP—Same; CTY—Kanawha; RR—Kanawha & Mich.

MS—A. J. Cottrell, Coco, W. Va.
 S of H—Mules. Track gage 42 in.

S of M—Hand.
 EMP—9. Last years tonnage 50.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Bar Screens.

BLUE CREEK COAL AND LAND CO.

General Office, Blakeley, W. Va.
 PR—Edward S. Jones, Scranton, Pa.
 VP—C. N. Jones, Scranton, Pa.
 TR—Chas. R. Lengler, Scranton, Pa.
 GS—Fred J. Bailey, Blakeley, W. Va.
 PA—Fred J. Bailey, Blakeley, W. Va.
 LE—Joseph P. Elswick, Blakeley, W. Va.
 SCO—Forest Store Company, Buyer, O. A. Dunbar, Blakeley, W. Va.
 SA—Indian Run Coal Company, Charleston, W. Va.

Blakeley No. 2 Mine; Drift; Kanawha No. 5 Seam, 60 to 66 in. thick.

PO—Blakeley, W. Va.; SP—Same; CTY—Kanawha; RR—K. & W. Va.

MF—Sydney Brangham, Blakeley, W. Va.
 S of H—Mules and elec. locos.

S of M—2 shortwall machs.
 PP—3 water tube boilers, 2—150 K. W. gen. units, 250 volts D. C. 1 pump.

EMP—200. Last years tonnage 67,489.

SIZES SHIPT—Run of Mine, Slack, Egg, Nut, Lump, Block.

PREP. EQUIPT—Gravity Screens.

Blakeley No. 4 Mine; Drift; Kanawha No. 5 Seam, 60 in. thick.

PO—Blakeley, W. Va.; SP—Same; CTY—Kanawha; RR—K. & W. Va.

MS—Sydney Brangham, Blakeley, W. Va.
 S of H—Mules and elec. loco.

S of M—1 shortwall mach.
 PP—3 water tube boilers, 2—150 K. W. gen. units, 250 volts D. C.

EMP—200. Last years tonnage 67,489.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.

PREP. EQUIPT—Gravity Screens.

Blakeley No. 5 Mine; Drift; Kanawha No. 5 Seam, 60 to 68 in. thick.

PO—Blakeley, W. Va.; SP—Same; CTY—Kanawha; RR—K. & W. Va. of K. M.

S of H—3 gathering locos. Track gage 42 in.

S of M—3 shortwall machs.
 PP—3 water tube boilers, 2—150 K. W. gen. units, 250 volts D. C.

EMP—200. Last years tonnage 67,489.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.

PREP. EQUIPT—Gravity Screens.

BLUE CREEK FUEL COMPANY

General Office, Coco, W. Va.
 PR—John Massing, Coco, W. Va.
 TR—J. R. Aliff, Coco, W. Va.
 GM—John Massing, Coco, W. Va.
 PA—J. W. Massing, Coco, W. Va.

No. 1 Mine; Drift; No. 5 Block Seam; 48 inches thick.

PO—Coco, W. Va.; SP—Pontaere, W. Va.; CTY—Kanawha; RR—Kanawha & W. Va.

S of H—Mules. Track gage 36 inches.

S of M—1 shortwall mach.
 PP—1—150 K. W. gen. units, 1—100 K. W. gen. units.

EMP—40. Last years tonnage 12,500.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.

PREP. EQUIPT—Bar Screens, Picking Tables.

Formerly operated by Phillips Blue Creek Coal Co.

BLUE JAY LUMBER CO.

General Office, Blue Jay, W. Va.
 PR—C. L. Goodwin, Greensburg, Pa.
 VP—P. P. Griffith, Lock Haven, Pa.
 GM—P. C. Lynch, Blue Jay, W. Va.
 TR—P. C. Lynch, " "
 PA—J. D. McDonough, Blue Jay, W. Va.
 EM—S. T. Farley, Beckley, W. Va.

SCO—Blue Jay Stone; Buyer, John Oles, Blue Jay, W. Va.
 Sales Agents—Eastern Coal and Export Corp., Richmond, Va.

Blue Jay No. 5 Drift; Beckley Seam, 48 to 60 in. thick.

PO—Blue Jay, W. Va.; SP—Raleigh, W. Va.; CTY—Raleigh; RR—C. & O., Piney Br.

MS—Pat McQuade,
 S of H—Mules, trolley pole type, 2 elec. 1 battery, 1 steam loco. Track gage 42 in.

S of M—Hand, 1 cutting mach.

PP—Gen. units, 250 volts D. C. 3 pumps.

EMP—87. Last fiscal year output, 100,000 tons.

SIZES SHIPT—Run of Mine.

BLUE RIDGE FUEL CO., INC.

General Office, 1205 Union Bldg., Charleston, W. Va.
 PR—Arthur R. Miller, Charleston, W. Va.
 VP—J. W. Moore, Pittsburgh, Pa.
 TR—L. H. Hamilton, McKees Rocks, Pa.
 GM—Arthur R. Miller, Charleston, W. Va.
 PA—Arthur R. Miller, Charleston, W. Va.
 EM—Arthur R. Miller, Charleston, W. Va.

Blue Ridge Mine; Drift; Lower Kittanning Seam, 60 in. thick.

PO—Ira, W. Va.; SP—Groves, W. Va.; CTY—Clay; RR—K. & O., Coal & Coke Br.

S of H—1 storage battery loco. Track gage 42 in.

S of M—1 arewall mach.

PP—1 water tube boiler, 150 H. P. gen. units, 1 100 K. W., 250 volts D. C., 2 pumps.

EMP—40. Daily tonnage 150.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Shaker Screens, Picking Tables.

Old information.

BLUME COAL AND COKE COMPANY.

Now a part of the New River Export Smokeless Coal Co.

BONAFIELD COAL CO.

General Office, Tunnelton, W. Va.
 TR—John J. McKone, Jr., Tunnelton, W. Va.
 GM—Guy M. Bonafield, Tunnelton, W. Va.

GS—Guy M. Bonafield, Tunnelton, W. Va.
 PA—Guy M. Bonafield, Tunnelton, W. Va.
 EM—H. G. La Rue, Independence, W. Va.
 SA—Guy M. Bonafield, Tunnelton, W. Va.

Loubert Mine; Drift; Upper Freeport Seam, 60 in. thick.

PO—Tunnelton, W. Va.; SP—Same; CTY—Preston; RR—West Va. Northern.

S of H—Mules and 1 steam loco. Track gage 36 in.

S of M—Hand.
 PP—1 fire tube boiler, 55 H. P.

EMP—90. Last years tonnage 80,215.

SIZES SHIPT—Run of Mine.

BOOMER COAL & COKE CO.

General Office, Cleveland, O.
 PR—M. Andreas, Cleveland, O.
 VP—Wm. Collins, Cleveland, O.
 TR—Sam W. Faison, Cleveland, O.
 GM—M. Gallagher, Cleveland, O.
 GS—John Whalen, Jr., Cleveland, O.
 SA—M. A. Hanna & Co., Cleveland, O.

No. 2 North Mine; Drift; Eagle Seam, 60 in. thick.

PO—Boomer, W. Va.; SP—Same; CTY—Fayette; RR—K. & M.

S of H—Mules and trolley pole type locos. Track gage, 42 in.

S of M—Hand.

PREP. EQUIPT—Shaker Screens, Picking Tables.

No. 2 South Mine; Drift; Eagle Seam, 60 in. thick.

PO—Boomer, W. Va.; SP—Same; CTY—Fayette; RR—K. & M.

S of H—Mules and trolley pole type locos.

S of M—Hand.

PREP. EQUIPT—Shaker Screens, Picking Tables.

No. 4 Mine; Drift; Gas Seam, 54 in. thick.

PO—Boomer, W. Va.; SP—Same; CTY—Fayette; RR—K. & M.

S of H—Mules and trolley pole type locos.

S of M—Hand.

PREP. EQUIPT—Shaker Screens, Picking Tables.

No. 5 Mine; Drift; Gas Seam, 54 in. thick.

PO—Boomer, W. Va.; SP—Same; CTY—Fayette; RR—K. & M.

S of H—Mules and trolley pole type locos.

S of M—Hand.

PP—Power purchased, transformers 6000-250 volts, rotary converters, 250 volts D. C., 2 pumps.

PREP. EQUIPT—Shaker Screens, Picking Tables.

BOONE BLOCK MINING COMPANY

General Office, Huntington, W. Va.
 PR—J. M. Moore, Huntington, W. Va.
 VP—J. H. LeBlanc, Huntington, W. Va.
 TR—R. P. Aleshure, Huntington, W. Va.
 GM—J. M. Moore, Huntington, W. Va.
 SA—Logan & Kanawha Coal Co., Cincinnati, O.

Boone Block Mine; Drift; No. 5 Block and Thacker Seams, 72-96 in. thick.

PO—Silush, W. Va.; SP—Same; CTY—Boone; RR—Chesapeake & Ohio.

S of H—6 mules, 1 storage battery loco. Track gage 42 in.

S of M—2 shortwall machs.

PP—Power purchased, 250 volts D. C. EMP—40. Last years tonnage 30,000.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Bar Screens.

BOONE COUNTY COAL CORPORATION.

General Office, Sharples, W. Va.
 PR—Wm. J. Clothier, Philadelphia, Pa.
 TR—H. E. Marlor, Philadelphia, Pa.
 GM—W. M. Wiley, Sharples, W. Va.
 GS—T. W. Guy, Sharples, W. Va.
 PA—R. E. Isner, Sharples, W. Va.
 CE—W. V. Weld, 66 Broadway, New York, N. Y.

EM—R. H. Pembroke, Sharples, W. Va.

EE—C. H. Tyler, Sharples, W. Va.

SCO—Address the company, Buyer, L. T. Kellam, Sharples, W. Va.

SA—R. E. Isner, Sharples, W. Va.

Boone No. 1 Mine; Drift; Chilton Seam, 48-60 in. thick.

PO—Clothier, W. Va.; SP—Same; CTY—Boone; RR—C. & O.

MS—M. M. Lilly, Sharples, W. Va.

SM—W. C. Proctor, Clothier, W. Va.

S of H—4 trolley pole type locos. Track gage 44 in.

S of M—2 shortwall and 1 arewall mach.

PP—Power purchased, transformers 2200-250 volts, rotary converters, 250 volts D. C., 3 pumps.

EMP—78. Last years tonnage 53,076.

SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.

PREP. EQUIPT—Shaker Screens.

Boone No. 2 Mine; Drift; Chilton Seam, 66 in. thick.

PO—Monclo, W. Va.; SP—Same; CTY—Logan; RR—C. & O.

MS—Sam Graham, Sharples, W. Va.

SM—E. E. White, Monclo, W. Va.

S of H—8 trolley pole type locos. Track gage 44 in.

S of M—2 shortwall and 3 arewall machs.

PP—Power purchased, transformers 2200-250 volts, M. G. sets, 250 volts D. C., 9 pumps.

EMP—150. Last years tonnage 146,954.

SIZES SHIPT—Run of Mine, Slack, Egg, Lump.

Boone No. 3 Mine; Drift; Chilton Seam, 54 in. thick.

PO—Monclo, W. Va.; SP—Same; CTY—Logan; RR—C. & O.

MS—Sam Graham, Sharples, W. Va.

SM—E. E. White, Monclo, W. Va.

S of H—3 trolley pole type locos. Track gage 44 in.

S of M—2 shortwall machs.

PP—Power purchased, transformers 6000-250 volts, rotary converters, 250 volts D. C., 1 pump.

EMP—55. Last years tonnage 43,641.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.

Boone No. 4 Mine; Drift; No. 5 Block Seam, 60 in. thick.

PO—Androssan, W. Va.; SP—Same; CTY—Logan; RR—C. & O.

MS—Sam Graham, Sharples, W. Va.

SM—G. W. Akers, Androssan, W. Va.

S of H—Mules, 2 trolley pole type locos. Track gage 44 in.

S of M—2 shortwall machs.

PP—Power purchased, transformers 6000-250 volts, rotary converters, 250 volts D. C., 1 pump.

EMP—55. Last years tonnage 43,641.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.

Boone No. 5 Mine; Drift; No. 5 Block Seam, 60 in. thick.

PO—Androssan, W. Va.; SP—Same; CTY—Logan; RR—C. & O.

MS—Sam Graham, Sharples, W. Va.

SM—G. W. Akers, Androssan, W. Va.

S of H—Mules, 2 trolley pole type locos. Track gage 44 in.

S of M—2 shortwall machs.

PP—Power purchased, transformers 6000-250 volts, rotary converters, 250 volts D. C., 1 pump.

EMP—55. Last years tonnage 43,641.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.

PP—Power purchased, transformers 6000-250 volts, rotary converters, 250 volts D. C., 2 pumps.

EMP—90. Last years tonnage 81,316.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.

Boone No. 6 Mine; Drift; Chilton Seam, 54 in. thick.

PO—Sharples, W. Va.; SP—Same; CTY—Logan; RR—C. & O.

MS—Sam Graham, Sharples, W. Va.

SM—E. Goddard, Sharples, W. Va.

S of H—1 trolley pole type loco. Track gage 42 in.

S of M—3 shortwall machs.

PP—Power purchased, transformer 2200-250 volts, M. G. sets, 250 volts D. C., 2 pumps.

EMP—75. Daily output, 200 tons.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.

PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

Boone Nos. 7, 8 and 9 Mines abandoned.

Boone No. 10 Mine; Drift; Chilton Seam, 60 in. thick.

PO—Sharples, W. Va.; SP—Dobra, W. Va.; CTY—Logan; RR—C. & O.

MS—M. M. Lilly, Sharples, W. Va.

SM—O. H. Carson, Sharples, W. Va.

S of H—6 trolley pole type locos. Track gage 44 in.

S of M—4 shortwall machs.

PP—Power purchased, transformer 2200-250 volts, M. G. sets, 250 volts D. C., 3 pumps.

EMP—100. Last years tonnage 61,430.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Shaker Screens.

Boone No. 11 Mine abandoned.

Boone No. 12 Mine; Drift; Seam, 78 in. thick.

PO—Blair, W. Va.; SP—Same; CTY—Logan; RR—C. & O.

MS—H. E. Fisher, Blair, W. Va.

S of H—Mules and 2 trolley pole type locos. Track gage 44 in.

S of M—2 arewall machs.

PP—Power purchased, transformer 2200-500, M. G. sets, 500 volts D. C., 3 pumps.

EMP—120. Last years tonnage 81,771.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.

PREP. EQUIPT—Shaker Screens.

BOONE SMOKELESS COAL COMPANY

General Office, Nuttallburg, W. Va.
 PR—J. A. Boone, Nuttallburg, W. Va.
 VP—Thomas Boone, Nuttallburg, W. Va.
 TR—J. A. Boone, Nuttallburg, W. Va.
 GM—Daniel Boone, Abney, W. Va.
 GS—Daniel Boone, Abney, W. Va.
 PA—Daniel Boone, Abney, W. Va.
 CE—Clark & Krebs, Charleston, W. Va.
 EM—George Darlington, Nuttallburg, W. Va.

SCO—Address the company, Buyer, E. C. Burr, Abney, W. Va.

Sales Agents—West Virginia Coal Co., Richmond, Va.

Boone Smokeless Mine; Drift; Seam 42 in. thick.

PO—Abney, W. Va.; SP—Same; CTY—Raleigh; RR—Virginian.

S of H—Mules, 2 trolley pole type locos. Track gage 44 inches.

S of M—2 shortwall machs.

PP—Power purchased, Transformer 13-000-2300 volts A. C. M. G. sets, 250 volts D. C., 1 pump.

BORDERLAND COAL CORP.

General Office, Borderland, W. Va.
PR—James P. Woods, . . . Roanoke, Va.
TR—E. R. Fishburn.
MGR—L. E. Armentrout.
Borderland, W. Va.
GS—C. A. Jones, Borderland, W. Va.
EM—G. C. Goff, Borderland, W. Va.
SCO—Address the Company, Buyer, J. R. White, Borderland, W. Va.
Sales Agent—Borderland Coal Sales Co., 703-4-5 Fourth National Bank Bldg., Cincinnati, O.

No. 1 Mine; Drift; Winifrede Seam, 48 to 96 in. thick. Operate washery.
PO—Borderland, W. Va.; SP—Same (prepay); CTY—Mingo; RR—N. & W.
MS—J. L. Blevins, Borderland, W. Va.
S of H—8 elec., 2 steam, 3 storage battery locos. Track gage 48 in.
S of M—7 elec. machs.

PP—3-150 H. P. return tubular boilers, 2 gen. units, 250 volts D. C., 7 pumps.
EMP—150. Last years tonnage 61,538.
SIZES SHIPT—Slack, Pea, Nut, 24g. Lump, Block.
PREP. EQUIPT—Shaker Screens, Loading Boom, Picking Tables.

No. 2 Mine; Drift; Winifrede Seam, 48 to 81 in. thick.
PO—Borderland, W. Va.; SP—Armen, W. Va. (prepay); CTY—Mingo; RR—N. & W.
MS—A. Mooney, Borderland, W. Va.
S of H—8 elec., 3 storage battery locos. Track gage 48 in.

S of M—7 elec. machs.
PP—3 return tubular boilers, total 450 H. P., 2 gen. units, 250 volts D. C., 8 pumps.
EMP—150. Last years tonnage 58,015.
SIZES SHIPT—Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screen, Loading Booms, Picking Tables, Washeries.

BORGMAN COAL CO.

General Office, Tunnelton, W. Va.
PR—F. W. Borgman, Tunnelton, W. Va.
GM—F. W. Borgman, Tunnelton, W. Va.
GS—F. W. Borgman, Tunnelton, W. Va.
PA—F. W. Borgman, Tunnelton, W. Va.
EM—L. H. Borgman, Tunnelton, W. Va.
SCO—Address the Company, Buyer, James W. Borgman, Tunnelton, W. Va.
SA—F. W. Borgman, Tunnelton, W. Va.

Borgman No. 1 Mine; Drift; Upper Freeport Seam, 58 in. thick.
PO—Tunnelton, R. D. 2, W. Va.; SP—Same; CTY—Preston; RR—W.V.N.
S of H—Mules and main rope. Track gage, 36 in.
S of M—Hand.
PP—1 fire tube boiler, 80 H. P., 1 pump.
SIZES SHIPT—Run of Mine.

Borgman No. 2 Mine; Drift; Upper Freeport Seam, 58 in. thick.
PO—Tunnelton, R. D. 2, W. Va.; SP—Same; CTY—Preston; RR—W.V.N.
S of H—Mules and main rope. Track gage, 36 in.
S of M—Hand.
PP—1 fire tube boiler, 80 H. P.
SIZES SHIPT—Run of Mine.

Borgman No. 3 Mine; Drift; Upper Freeport Seam, 58 in. thick.
PO—Tunnelton, R. D. 2, W. Va.; SP—Same; CTY—Preston; RR—W.V.N.
S of H—Mules and main rope. Track gage, 36 in.
PP—1 fire tube boiler, 80 H. P.
EMP—20. Last years tonnage 45,000.
SIZES SHIPT—Run of Mine.

BOTTOM CREEK COAL & COKE CO.

General Office, Vivian, W. Va.
PR—S. W. Patterson, . . . Vivian, W. Va.
VP—Elmer H. Lawall, Wilkes-Barre, Pa.
TR—G. S. Patterson, Vivian, W. Va.
GM—S. W. Patterson, Vivian, W. Va.
GS—G. S. Patterson, Vivian, W. Va.
PA—G. S. Patterson, Vivian, W. Va.
EM—Chas. A. Hamill, Vivian, W. Va.
EE—J. W. Lindsey, . . . Vivian, W. Va.
SCO—Bottom Creek Store, Buyer, L. McFadden, Vivian, W. Va.

Bottom Creek No. 1 Mine; Drift; Pocahontas No. 3 Seam, 62-72 inches thick.
PO—Vivian, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
MS—C. W. Dillard, Vivian, W. Va.
SM—Harry McFadden, Vivian, W. Va.
S of H—Mules, 6 trolley pole type and 1 storage battery loco. Track gage, 44 in.

S of M—3 chain breast type and 6 long-wall machs.
PP—3 return tubular boilers, total 450 H. P., 2 gen. units, 175 K. W. and 200 K. W., 250 volts D. C., 9 pumps.
EMP—220. Last years tonnage 167,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

BOULDER COAL COMPANY.

General Office, Philippi, W. Va.
PR—H. S. Halber, Philippi, W. Va.
TR—H. J. Poling, Philippi, W. Va.
GM—H. J. Poling, Philippi, W. Va.
SA—H. J. Poling, Philippi, W. Va.

Boulder Mine; Drift; Kittanning Seam, 66 in. thick.
PO—Philippi, W. Va.; SP—Boulder, W. Va.; CTY—Harbour; RR—B. & O.
S of H—Electric loco.
PP—Generates power 125 K. W., 2 pumps.
EMP—201. Daily tonnage 300.
SIZES SHIPT—Run of Mine.

BOWERS COAL COMPANY

General Office, Lumberport, W. Va.
PR—Jas. H. Bowers, Lumberport, W. Va.
VP—G. C. Michael, Lumberport, W. Va.
GM—Jas. H. Bowers, Lumberport, W. Va.
PA—Jas. H. Bowers, Lumberport, W. Va.
EM—Horner Bros., Clarksburg, W. Va.

Boggs Mine; Drift; Pittsburgh Seam, 92 in. thick.
PO—Lumberport, W. Va.; SP—Same; CTY—Harrison; RR—B. & O.
MS—Jas. Bowers, Jr., Lumberport, W. Va.
S of H—Mules. Track gage 36 in.
S of M—Hand.
EMP—10. Last years tonnage 12,060.
SIZES SHIPT—Run of Mine.

BOWERY COAL COMPANY.

Out of business.

BOWYER SMOKELESS COAL CO.

General Office, Whitby, W. Va.
PR—J. L. Bumgarther, Berkeley, W. Va.
VP—C. R. Stahl, Steshbury, W. Va.
TR—R. F. Ruth, Glen White, W. Va.
GS—J. E. Virgin, Whitby, W. Va.
PA—J. E. Virgin, Whitby, W. Va.
EM—E. M. Merrell Eng. Co., Beckley, W. Va.

EE—J. E. Weldnsall Whitby, W. Va.
SCO—Address the Company, Buyer, R. S. Malcom, Whitby, W. Va.
SA—Wyatt Coal Co., Charleston, W. Va.
Bowyer Mine; Drift; Fire Creek Seam, 56 in. thick.
PO—Whitby, W. Va.; SP—Bacownton, W. Va.; CTY—Baleigh; RR—Virginian.

MS—M. G. Moore, Whitby, W. Va.
S of H—Electric locos. Track gage 42 in.
S of M—1 shortwall mach.
PP—Power purchased, transformer 2200 to 440 volts A. C., M. G. Set, 250 volts D. C.
PA—S. E. Bradley, Madison, W. Va.
EMP—150. Last years tonnage 40,000.
SIZES SHIPT—Run of Mine.

BRALEY MINING COMPANY.

General Office, Madison, W. Va.
PR—S. E. Bradley, Madison, W. Va.
VP—Henry Keadle, Jeffrey, W. Va.
TR—O. C. Chambers, Madison, W. Va.
GM—S. E. Bradley, Madison, W. Va.
GS—W. W. Bradley, Costa, W. Va.
PA—S. E. Bradley, Madison, W. Va.
EM—S. E. Bradley, Madison, W. Va.
EE—L. T. Long, Costa, W. Va.

Bradley Mine; Drift; No. 2 Gas, and Cedar Grove Seam, 39 in. thick.
PO—Costa, W. Va.; SP—Brushton, W. Va.; CTY—Roone; RR—C. & O., Big Coal Div.
S of H—Mules, Track gage 42 in.
S of M—Room and pillar, shortwall machine.
PP—1 boiler, 150 H. P. gen. unit, 100 K. W. 1—Eng., 139 H. P.
EMP—25. Daily tonnage 100.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

BRADSHAW COAL COMPANY, INC.

General Office, Dan, W. Va.
PR—Edwin Mann, Bluefield, W. Va.
VP—Robert J. Hancock, Lynchburg, W. Va.
TR—Geo. S. Strader, Bluefield, W. Va.
GM—H. G. Happersett, Dan, W. Va.
GS—H. G. Happersett, Dan, W. Va.
PA—H. G. Happersett, Dan, W. Va.
CE—A. A. Osborn, Welch, W. Va.
EM—H. A. Kiser, War, W. Va.
SCO—Address the Company, Buyer, A. R. Reane, Dan, W. Va.
SA—Bluefield Coal & Coke Co., Bluefield, W. Va.

Bradshaw Mine; Drift; Bradshaw Seam, 48 in. thick.
PO—Dan, W. Va.; SP—Bradshaw, W. Va.; CTY—McDowell; RR—Norfolk & Western.
S of H—3 5-ton and 1 10 ton trolley pole type locos. Track gage 48 in.
S of M—3 shortwall machs.
PP—Power purchased, transformer 13,000 to 450 volts A. C., M. G. Set, 250 volts D. C.
EMP—80. Last years tonnage 54,000.
SIZES SHIPT—Run of Mine.
Successors to Bradshaw Pocahontas Coal Co.

BRAOSHAW POCAHONTAS COAL CO.

Now Bradshaw Coal Co.

BRADY, A. SPATES

General Office, Elkins, W. Va.
OWNERS—A. Spates Brady, Elkins, W. Va.
SR—Brady Spates, Buyer, R. R. McElwee Mable, W. Va.
SA—C. W. Abagast, Elkins, W. Va.

Brady Mine; Drift; Lower Kittanning Seam, 81 in. thick.
PO—Mable, W. Va.; SP—Same; CTY—Randolph; RR—B. & O.
MS—J. G. Whit, Mable, W. Va.
S of H—2 gasoline locos. Track gage 42 inches.
S of M—Hand.
PP—3 pumps.
EMP—145. Last years tonnage 74,000.
SIZES SHIPT—Run of Mine.

BRADY COAL CORPORATION

General Office, Fairmont, W. Va.
PR—Samuel D. Brady, Fairmont, W. Va.
VP—A. P. Brady, Fairmont, W. Va.
TR—Samuel D. Brady, Jr., Fairmont, W. Va.
GM—Samuel D. Brady, Fairmont, W. Va.
PA—A. P. Brady, Fairmont, W. Va.
CE—Samuel D. Brady, Fairmont, W. Va.
EM—Paul Billingslea, Fairmont, W. Va.
EE—Claird McIntyre, Oakmont, W. Va.
SCO—Adams Creek Coal Co., Oakmont, W. Va.; Osage Coal Company, R. F. D. No. 7 Morgantown, W. Va.; Buyers, W. S. Simpson, Oakmont, W. Va., and E. A. Patterson, R. F. D. No. 7, Morgantown, W. Va.
SA—Producers Fuel Company, Philadelphia, Pa. and Pittsburgh, Pa.

Abrams Creek No. 1 Mine; Drift; Freeport Seam, 60 in. thick.
PO—Oakmont, W. Va.; SP—Same; CTY—Mineral; RR—W. M.
S of H—Mules, 2 trolley pole type and 1 storage battery loco. Track gage 42 in.
S of M—3 shortwall and 1 arewall mach.
PP—2 water tube boilers, 150 H. P. each, 1—100 K. W. gen. unit and 1—200 K. W., M. G. Set, 250 volts D. C., 7 pumps.
EMP—150. Daily tonnage 500.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.
NOTE—Formerly operated by the Adams Creek Coal & Coke Company.

Monon No. 1 Mine; Slope; Pittsburgh Seam, 96 in. thick.
PO—Beekwood, W. Va.; SP—Monon, W. Va.; CTY—Monongalia; RR—Monon.
S of H—1 storage battery loco. Track gage 42 in.
S of M—1 shortwall mach.
PP—Power purchased Transformer 22000-250 volts A. C., 3 pumps.
EMP—50. Daily tonnage 200.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

Monon No. 2 Mine; Drift; Sawickley Seam, 72 in. thick.
PO—Beekwood, W. Va.; SP—Monon, W. Va.; CTY—Monongalia; RR—Monon.
S of H—2 trolley pole type and 5 storage battery locos. Track gage 42 in.
S of M—6 chain breast machs.
PP—Power purchased Transformer 22000-250 volts, rotary converters, 250 volt D. C., 9 pumps.
EMP—100. Daily tonnage 500.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.
NOTE—Formerly operated by the Monongalia Coal Company.

Osage No. 1 Mine; Drift; Pittsburgh Seam, 96 in. thick.
PO—Morgantown, W. Va.; SP—Star City, W. Va.; CTY—Monongalia; RR—M. & W.

MS—J. C. Messenger, Morgantown, W. Va.
S of H—1 trolley pole type and 2 storage battery locos. Track gage 42 in.
S of M—2 shortwall machs.
PP—Power purchased Transformer, 6600-250 volts A. C., rotary converters, 250 volts D. C., 4 pumps.
EMP—50. Daily tonnage 500.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

Osage No. 2 Mine; Drift; Sawickley Seam, 60 in. thick.
PO—R. F. No. 7, Morgantown, W. Va.; SP—Star City, W. Va.; CTY—Monongalia; RR—M. & W.

MS—J. C. Messenger, Morgantown, W. Va.
S of H—2 trolley pole type and 2 storage battery locos. Track gage 42 in.
S of M—3 shortwall machs.
PP—Power purchased Transformer 6600-250 volts A. C., rotary converters, 250 volts D. C., 2 pumps.
EMP—75. Daily tonnage 500.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.
NOTE—Formerly operated by the Osage Coal Company.

BRANCH COAL & COKE COMPANY

General Office, Charleston, W. Va.
PR—C. G. Reary, Charleston, W. Va.
VP—Gen. Lavston, Quinnimont, W. Va.
TR—J. H. Boyd, Charleston, W. Va.
GM—C. C. Reary, Charleston, W. Va.
GS—J. H. Allen, Elverton, W. Va.
PA—J. H. Allen, Elverton, W. Va.
EM—Arnold Ollson, Quinnimont, W. Va.
EE—West Va. Engr. Co., Charleston, W. Va.
SCO—Address the company, Buyer, G. A. Frautz, Elverton, W. Va.
SA—Flat Top Fuel Co., Bluefield, W. Va.

Elverton Mine; Drift; Sewell Seam, 48 inches thick.
PO—Elverton, W. Va.; SP—Same; CTY—Fayette; RR—C. & O.
S of H—Mules and 7 trolley pole type locos. Track gage 44 inches.
S of M—2 chain breast type and 1 short-wall machs.
PP—Power purchased, Transformer 44,000 to 2,300 volts A. C., rotary converters, 250 volts D. C., 6 pumps.
EMP—125. Last fiscal year output, 77,872 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Revolving and Shaker Screens.

BRAXTON COUNTY COAL COMPANY

General Office, 200 E. Erie St., Chicago, Ill.
PR—W. S. Shaw, Chicago, Ill.
VP—A. Cameron, Chicago, Ill.
GM—G. G. Saunders, Chicago, Ill.
GS—G. G. Saunders, Chicago, Ill.
PA—G. G. Saunders, Chicago, Ill.

Braxton County Mine; Drift; Upper Kittanning Seam, 42 inches thick.
PO—Sutton, W. Va.; SP—Same; CTY—Braxton; RR—C. & C.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—10.
SIZES SHIPT—Run of Mine.

BRAXTON-PITTSBURGH COAL COMPANY

General Office, Greensburg, Pa.
PR—M. L. Painter, Greensburg, Pa.
VP—C. H. Fogg, Greensburg, Pa.
TR—H. S. Scheibler, Greensburg, Pa.
GM—H. S. Scheibler, Greensburg, Pa.
GS—A. A. Allan, Cheat Haven, Pa.
PA—H. S. Scheibler, Greensburg, Pa.
CE—C. H. Fogg, Greensburg, Pa.
EM—B. M. Green, Charleston, W. Va.
SCO—Superior-Mercantile Co., Gilmer, W. Va., Store No. 3, Buyer, A. S. Johnson, Gilmer, W. Va.
SA—Cambria Westmoreland Coal & Coke Co., Greensburg, Pa.

Hefner Mine; Drift; Pittsburgh Seam, 72 in. thick.
PO—Gilmer, W. Va.; SP—Same; CTY—Braxton; RR—C. & C., W. Va. Branch of B. & O.
MS—K. Ernce, Adams, Gilmer, W. Va.
S of H—Main and tail rope, 1 6-ton elec. motor Track gage 42 in.
S of M—2 chain breast type and 2 shortwall machs.
PP—Generate power.
EMP—50. Daily tonnage 300.
SIZES SHIPT—Run of Mine.

BRAZELL COAL CO.

General Office, Fairmont, W. Va.
PR—Samuel D. Brady, Fairmont, W. Va.
VP—E. Z. Brady, Fairmont, W. Va.
TR—A. P. Brady, Fairmont, W. Va.
PA—A. P. Brady, Fairmont, W. Va.
CE—Samuel D. Brady, Fairmont, W. Va.
NOTE—Property not yet developed and mine not in operation.

BREGLE COAL CO.

General Office, Dana, W. Va.
Bregle Mine.
PO—Dana, W. Va.; CTY—Kanawha; RR—Campbells Creek.
No report.

BRENNAN COAL CO.

Tad, W. Va.
Long Rope Mine; CTY—Kanawha.
No report.

BREWER-HARRISON COAL COMPANY

General Office, Belington, W. Va.
PR—W. W. Brewer, Belington, W. Va.
VP—H. H. Harrison, Pierce, W. Va.
TR—W. H. Young, Cloverlick, W. Va.
GM—W. W. Brewer, Belington, W. Va.
SA—Wm. S. Harman, Columbus, O.

Brewer Harrison Mine; Drift; R. J. Stone Seam, 60 inches thick.
PO—Belington, W. Va.; SP—Same; CTY—Lewis; RR—B. & O.
MS—Geo. Westfall, Weston, W. Va.
S of H—Mules, Track gage 42 inches.
S of M—Hand.
SIZES SHIPT—Run of Mine.

BRIAR CREEK COAL COMPANY.

Now operated by the Black Band Consolidated Coal Co.

BRIDGE COAL CO.
Fairmont, W. Va.
Bridge Mine; CTY—Marion. No report.

BRITT, HORNER & CRAIG
General Office, Clarksburg, W. Va.
GM—Benj. R. Britt, Clarksburg, W. Va.
Corona Mine; Drift; Pittsburgh Seam, 102 inches thick.
PO—H. J. Britt, W. Va.; SP—Clarksburg, W. Va.; CTY—Harrison; RR—B. & O.
MS—J. E. Clingan, Hepzibah, W. Va.
S of H—Mules and gasoline loco.
S of M—Shortwall mach.
PP—Power purchased.
EMP—150. Daily tonnage 1,000.
SIZES SHIPT—Run of Mine.

BRITTON J M COAL CO
Lewiston, W. Va.
Peerless Mine.
PO—Winifrede, W. Va.; CTY—Kanawha; RR—Winifrede. No report.

BROWN COAL CO.
Now Stover Coal Company.

BRUSH CREEK COAL COMPANY
General Office, 611 Union Bldg., Charleston, W. Va.
PR—H. C. Jones, Charleston, W. Va.
VP—A. S. Jones, Huntington, W. Va.
TR—J. G. Pettit, Charleston, W. Va.
GM—H. C. Jones, Charleston, W. Va.
GS—W. D. Dunsford, Brush Creek, W. Va.
PA—J. G. Pettit, Charleston, W. Va.
EM—Hugh Eaton, Charleston, W. Va.
SCO—Address the company. Buyer, J. G. Pettit, Charleston, W. Va.
SA—Grosvenor Coal Sales Co., 611 Union Bldg., Charleston, W. Va.
Additional Information on Page 1001
Brush Creek Mine; Drift; No. 2 Gas Seam, 60 inches thick.
PO—Brush Creek, W. Va.; SP—Same; CTY—Boone; RR—C. & O.
SM—B. O. Tredway, Brush Creek, W. Va.
S of H—Mules, elec. locos. Track gage 48 inches.
S of M—Hand and elec. mach.
PP—Power purchased, 1—150 K. W., 1—100 K. W., M. G. Sets, 250 volts D. C., 2 pumps.
EMP—250. Daily tonnage 700.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

BYRDON, H. P. & BRO., INC.
Now Big Vein Coal Co. of W. Va.

BUCHANAN COAL COMPANY.
General Office, Yukon, W. Va.
PR—W. F. Harman, Tazewell, Va.
TR—W. T. Gillespie, Tazewell, Va.
GM—H. E. Harman, Tazewell, Va.
GS—Wm. M. White, Yukon, W. Va.
PA—J. L. Jennings, Yukon, W. Va.
EM—H. A. Kiser, War, W. Va.
SCO—Address the company. Buyer, J. L. Jennings, Yukon, W. Va.
Additional Information on Page 998
Buchanan Mine; Drift; Pocahontas No. 3 Seam, 44 inches thick.
PO—Yukon, W. Va.; SP—Lomax, W. Va.; CTY—McDowell; RR—N. & W.
S of H—Trolley pole type and storage battery locos. Track gage, 48 in.
S of M—3 shortwall machs.
PP—Power purchased, transformers 13000—23000 volts A. C., M. G. Sets, 250 volts D. C., 2 pumps.
EMP—75. Daily tonnage 400.
SIZES SHIPT—Run of Mine.

BUCHANON RIVER COAL COMPANY.
General Office, Uniontown, Pa.
PR—T. S. Lackey, Uniontown, Pa.
VP—J. P. Bate, Connelville, Pa.
TR—J. G. Burns, Uniontown, Pa.
GM—J. G. Burns, Uniontown, Pa.
GS—C. T. Grimm, Adrian, W. Va.
PA—J. G. Burns, Uniontown, Pa.
EM—C. T. Grimm, Adrian, W. Va.
EE—A. B. Burton, Adrian, W. Va.
SCO—Adrian Supply Co. Buyer, Thomas Greene, Adrian, W. Va.
Adrian Mine; Drift; Upper Freeport Seam, 70 in. thick.
PO—Adrian, W. Va.; SP—Same; CTY—Upshur; RR—B. & O.
S of H—Mules, rope and trolley pole type locos. Track gage, 42 in.
S of M—6 shortwall machs.
PP—3 125 H. P. water tube boilers, 3 gen. units, 450 K. W., 250 volts D. C., 9 pumps.
EMP—200. Daily output, 700 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Gravity Screens.
Florence Mine; Drift; Upper Freeport Seam, 70 in. thick.
PO—Adrian, W. Va.; SP—Same; CTY—Upshur; RR—B. & O.
S of H—Mules and 1 trolley pole type loco. Track gage, 42 in.
S of M—2 shortwall machs.
PP—Get power from Adrian mine, 1 pump.
EMP—50. Daily output, 400 tons.
SIZES SHIPT—Run of Mine.

BUCK COAL MINING COMPANY
Now Bevedge-Laughlin Coal Mining Co.

BUCKEYE & WEST VIRGINIA COAL CO., THE
General Office, 423 Kirby Bldg., Cleveland, O.
PR—W. Randall, Cleveland, O.
VP—E. C. Foote, South Euclid, O.
TR—H. A. Ford, Cleveland, O.
GM—Robt. P. Millard, Cleveland, O.
GS—Harry Marson, Lorain, W. Va.
CE—Robt. Millard, Cleveland, O.
SA—Weston & Hudson Co., Bethlehem, Pa.
Penco Mine; Slope; Redstone Seam; 48 inches thick.
PO—Lorentz, W. Va.; SP—Same; CTY—Upshur; RR—B. & O.
S of H—Mules and storage battery locos. Track gage 42 in.
S of M—2 shortwall machs.
PP—1 fire tube boiler, 125 H. P., 1—150 K. W. gen. unit, 250 volts D. C., 2 pumps.
EMP—20. Daily tonnage 50.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

BUCKEYE COAL AND COKE COMPANY.
General Office, Freeman, W. Va.
PR—W. C. Stephenson, Roanoke, Va.
TR—W. C. Stephenson, " "
VP—Richard Hewitt, Bramwell, W. Va.
GM—J. C. Pack, " "
PA—J. C. Pack, " "
EM—D. C. Jones, " "
SCO—Buckeye Store Co., Buyer, Andrew Davis, Freeman, W. Va.
SA—Custner, Burran & Bulfinch, Inc., 1 Broadway, New York, N. Y.
Buckeye Nos. 1 and 2 Mines; Drifts; Pocahontas No. 3 and No. 6 Seams; 36 to 66 in. thick.
PO—Freeman, W. Va.; SP—Exp. Same; Frit. Coon, W. Va.; CTY—Merritt; RR—N. & W.
MS—F. R. Hewitt, Freeman, W. Va.
S of H—Mules, storage battery and steam locos. Track gage, 44 in.
S of M—Hand.
PP—Power purchased, M. G. set, 1 pump.
EMP—130. Last fiscal year output, 150,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Gravity and Shaker Screens, Picking Tables.

BUCKHANNON-PITTSBURGH COAL CO.
General Office, Buckhannon, W. Va.
PR—E. H. Kelly, Buckhannon, W. Va.
TR—G. E. Drummond, " "
GM—H. S. Rippet, " "
GS—H. S. Rippet, " "
Buckhannon-Pittsburgh Mine; Drift; Pittsburgh Seam, 48 in. thick.
FO—Buckhannon, W. Va.; SP—Same; CTY—Upshur; RR—B. & O.
Tegarts Valley Branch.
S of H—Mules. Track gage 42 in.
S of M—Hand.
SIZES SHIPT—Run of Mine.

BUCKHANNON VALLEY COAL CO.
Buckhannon, W. Va.
Sage Mine; CTY—Upshur
No report.

BUFFALO & ELKHORN COAL CORP.
Now Kanawha-Elkhorn Collieries.

BUFFALO EAGLE COAL COMPANY.
General Office, Braeholm, W. Va.
PR—P. J. Riley, Braeholm, W. Va.
VP—Robt. Mankin, Oak Hill, W. Va.
TR—J. H. Ford, Braeholm, W. Va.
GM—P. J. Riley, Braeholm, W. Va.
GS—J. H. Ford, Braeholm, W. Va.
PA—J. H. Ford, Braeholm, W. Va.
CE—J. S. Bond, Charleston, W. Va.
EM—W. C. McCall, Logan, W. Va.
EE—Geo. R. Wood, Charleston, W. Va.
SA—Hoover Mankin Fuel Co., Huntington, W. Va.
Additional Information on Page 1004
No. 1, 2 and 3 Mines; Drift; Eagle, Island Creek and Chilton Seams, CO-0 84 in. thick.
PO—Braeholm, W. Va.; SP—Frit., Bee-co, W. Va.; Exp., Braeholm, W. Va.; CTY—Logan; RR—C. & O.
S of H—Trolley pole type locos. Track gage 44 in.
S of M—13 shortwall machs.
PP—Power purchased, 2—500 H. P. water tube boilers, 2—500 K. W. turbines, 5 pumps.
EMP—225. Last years tonnage 208,600.
SIZES SHIPT—Run of Mine, Pea, Lump.
PREP. EQUIPT—Gravity Screens.

BUFFALO-KANAWHA COAL CORP
Now Kanawha-Elkhorn Collieries.

BUFFALO-THACKER COAL COMPANY.
General Office, Huntington, W. Va.
PR—L. R. Reese, Huntington, W. Va.
TR—S. T. Bousman, Huntington, W. Va.

GM—L. R. Reese, Huntington, W. Va.
CE—W. P. Melring, Williamson, W. Va.
EE—H. M. Williamson, Chattaroy, W. Va.
SCO—Address the Company. Buyer, J. W. Brown, Ottawa, W. Va.
Additional Information on Pages 978, 979

Buffalo Mine; Drift; Winifrede Coalburg Seam, 52 in. thick.
PO—Chattaroy, W. Va. SP—Same, CTY—Mingo. RR—N. & W.
MS—L. W. Helms, Chattaroy, W. Va.
S of H—7 trolley pole type and 2 storage battery locos. Track gage, 48 inches.
S of M—3 comp. air punchers and 3 shortwall machs.
PP—3 water tube boilers, 150 H. P., gen. units, 250 volts D. C., 7 pumps.
EMP—90. Last years tonnage 90,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Revolving and Shaker Screens, Picking Tables, Loading Booms, Washeries.
Monte No. 1 Mine; Drift; Big Eagle Seam, 60 in. thick.
PO—Ottawa, W. Va.; SP—Same; CTY—Boone; RR—C. & O.
MS—E. R. Dunsford, Ottawa, W. Va.
S of H—Trolley pole type locos. Track gage 44 in.
S of M—3 longwall machs.
PP—Fire tube boilers, 250 H. P., motor generator set, 1—175 K. W. gen. unit, 250 volts D. C., 3 pumps.
EMP—115. Daily tonnage 600.
SIZES SHIPT—Run of Mine.

Monte No. 2 Mine; Shaft; Big Eagle Seam, 60 in. thick.
PO—Ottawa, W. Va.; SP—Same; CTY—Boone; RR—C. & O.
MS—E. R. Dunsford, Ottawa, W. Va.
S of H—Trolley pole type locos. Track gage 44 in.
PP—250 volts D. C., 2 pumps.
EMP—40. Daily tonnage 325.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.
Monte No. 3 Mine; Drift; Big Eagle Seam, 60 in. thick.
PO—Ottawa, W. Va. SP—Same; CTY—Boone; RR—C. & O.
MS—E. R. Dunsford, Ottawa, W. Va.
S of H—Trolley pole type locos. Track gage 44 in.
S of M—3 longwall machs.
PP—Power purchased, 250 volts D. C.
EMP—95. Daily tonnage 600.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.
Note—Formerly operated by the Monte Coal Co.

BULL COAL MINING CO.
Javins W. Va.

Bull Creek Mine; CTY—Raleigh
No report.

BUNKER COAL COMPANY
General Office, 605 1st National Bank Bldg., Pittsburgh, Pa.
PR—W. B. Atwood, Pittsburgh, Pa.
TR—W. C. Kilpatrick, Pittsburgh, Pa.
GM—W. C. Maratta, Morgantown, W. Va.
GS—W. C. Maratta, Morgantown, W. Va.
SA—F. B. Sankey, 1022-1023 Park Bldg., Pittsburgh, Pa.

Scott's Run Mine; Slope; Sewickly Seam, 75 in. thick.
PO—Cassville, W. Va.; SP—Morgantown, W. Va.; CTY—Monongalia; RR—M. & W. M. R. R.
S of H—Mules. Track gage 42 in.
S of M—Mining machs.
PP—Power purchased. Transformers 440 volts A. C., 2 pumps.
EMP—50. Daily tonnage 500.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Rotary car dump and Chutes.

BURNING CREEK COAL COMPANY
General Office, Williamson, W. Va.
PR—G. R. C. Wiles, Charleston, W. Va.
TR—J. L. Dunn, Williamson, W. Va.
GM—L. G. Bray, Williamson, W. Va.
GS—J. L. Dunn, Williamson, W. Va.
PA—J. L. Dunn, Williamson, W. Va.
EM—M. G. Good, Williamson, W. Va.
SA—Williamson Pond Creek Coal Salse Co., Williamson, W. Va.
Burning Creek Mine; Drift; No. 2 Gas Seam, 56 in. thick.
PO—Kormit, W. Va.; SP—Same; CTY—Mingo; RR—N. & W.
S of H—Mules. Track gage 48 in.
S of M—Hand.
EMP—20. Last years tonnage 4,780.
SIZES SHIPT—Run of Mine.

BURNING SPRINGS COAL CO.
Plus, W. Va.
Burning Springs Mine; CTY—Kanawha.
No report.

BUSH & PAINTER COAL CO.
Grafton, W. Va.

Thornton Mine; CTY—Taylor.
No report.

BUTCHER COAL COMPANY.
General Office, Fairmont, W. Va.

Jackson No. 1 Mine.
PO—Fairmont, W. Va.; CTY—Marion; RR—B. & O.
No report.

BUTTERMORE, J. J. COAL CO.
General Office, Connellsville, Pa.
PR—J. J. Buttermore, Connellsville, Pa.
TR—Geo. S. Connell, " "
GM—Geo. S. Connell, Connellsville, Pa.
CE—Straight & McClure, Fairmont, W. Va.
SCO—Beechwood Store Co. Buyer, A. G. Goodwin, Beechwood, W. Va.

Elizabeth Mine; Drift; Pittsburgh and Sewickly Seams, 72 to 108 in. thick.
PO—Beechwood, W. Va.; SP—Same; CTY—Monongalia; RR—B. & O.
S of H—Mules; track gauge 42 in.
S of M—Hand.
EMP—50. Daily tonnage 200.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.
Old information.

BY-PRODUCT COAL CO.
General Office, Fairmont, W. Va.
By-Product No. 1 Mine.
PO—Randall, W. Va.; CTY—Monongalia; RR—Monon.
No report.

BY-PRODUCTS POCAHONTAS COMPANY
General Office, Terre Haute, Ind.
PR—D. C. Botting, Sullivan, Ind.
VP—W. S. Blauvelt, Terre Haute, Ind.
TR—Leon Stern, Terre Haute, Ind.
GM—D. C. Botting, Sullivan, Ind.
PA—W. C. Stewart, Sullivan, Ind.
CE—E. B. Raiguel, Huntington, W. Va.
EM—Harold P. Dyer, Terre Haute, Ind.
EE—Brooks Scarberry, Big Four, W. Va.
SCO—Address the Company. Buyer, A. Sayers, Big Four, W. Va.
SA—Ogle Coal Company, Indianapolis, Ind.

By-Product No. 1 Mine; Slope; No. 3 Pocahontas Seam, 66 in. thick.
PO—Big Four, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
MS—Frank Moore, Big Four, W. Va.
S of H—Mules, electric and storage battery locos. Track gage 44 in.
S of M—2 chain breast type and 2 shortwall machs.
PP—Power purchased, Transformer 6,600 to 440-220 volts A. C., M. G. set, 250 volts D. C., 5 pumps.
EMP—105. Daily tonnage 500.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.
Note—Formerly operated by the Kimball Pocahontas Coal Co. and Cirrus Coal & Coke Co.

BYRNE COAL COMPANY
Now Fairmont-Kittanning Coal Co.

BYRNE GAS COAL COMPANY.
General Office, Scottsdale, Pa.
PR—J. R. Byrne, Scottsdale, Pa.
TR—F. W. Byrne, " "
GM—E. A. Byrne, Scottsdale, Pa.
PA—F. W. Byrne, Scottsdale, Pa.
EM—H. L. Burchinal, Uniontown, Pa.
SA—J. R. Byrne, Scottsdale, Pa.

Byrne Gas Mine; Drift; Pittsburgh Seam; 108 in. thick.
PO—Scottsdale, W. Va.; SP—Louisville, W. Va.; CTY—Monongalia and Marion; RR—Monongalia.
MS—E. A. Byrne, Scottsdale, Pa.
S of H—Mules and 1 trolley pole type loco. Track gage 42 inches.
S of M—2 chainbreast and 2 shortwall machs.
PP—Power purchased, Transformer 22,000 to 220 volts A. C., 4 pumps.
EMP—38. Last fiscal year output, 21,389 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

C. & O. RAILWAY FUEL DEPT.
General Office, First Natl. Bank Bldg., Richmond, Va.
PR—H. R. Harahan, Richmond, Va.
VP—E. W. Grier, Richmond, Va.
TR—A. Trevett, 61 Broadway, New York, N. Y.
GM—Ira P. Davis, Dorothy, W. Va.
PA—Ira P. Davis, Dorothy, W. Va.
EM—H. E. Husband, Dorothy, W. Va.
EE—Frank Buckley, Dorothy, W. Va.
SCO—Address the Company. Buyer, O. T. Collins, Dorothy, W. Va.

Dorothy Mine; Drift; Dorothy Seam, 126 in. thick.
PO—Dorothy, W. Va.; SP—Same; CTY—Raleigh; RR—C. & O.
(Continued on Next Page)

C. & O. Railway Fuel Dept.—Cont.

MS—C. H. Via, Dorothy, W. Va.
S of H—2 15-ton, 9 6-ton gathering
locos. Track gage 42 in.
S of M—11 chain breast type machs.
PP—Power purchased, Transformer 44000
to 220 volts, M. G. Sets, 250
volts D. C., 3 pumps.
EMP—300. Last years tonnage 265,000
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.
Sarita Mine; Drift; Dorothy Seam, 126
in. thick.
PO—Dorothy W. Va.; SP—Same; CTY—
Radlight; RR—C. & O.
MS—James A. Webb, Dorothy, W. Va.
S of H—9 trolley pole type locos. Track
gage 42 in.
S of M—8 chain breast type machs.
PP—Power purchased, Transformer 44000
to 220 volts A. C., M. G. Sets,
250 volts D. C., 2 pumps.
EMP—206. Last years tonnage 260,166.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.
Eunice Mine; Drift; Dorothy Seam, 68
in. thick.
PO—Birehon, W. Va.; SP—Eunice, W.
Va.; CTY—Radlight; RR—C. & O.
MS—R. C. Confer, Birehon, W. Va.
SM—J. G. Peters, Birehon, W. Va.
S of H—4 trolley pole type locos. Track
gage 42 in.
S of M—3 chain breast type machs.
PP—Power purchased, Transformer 14000
to 220 volts A. C., M. G. Sets,
250 volts D. C., 1 pump.
EMP—91. Last years tonnage 100,504
SIZES SHIPT—Slack.
NOTE—Formerly operated by the Western
Peachmont & Fuel Co.

CADIN CREEK CONSOLIDATED COAL CO.

General Office, Kayford, W. Va.
PR—W. M. Puckett, Charleston, W. Va.
GM—Josiah Keely, Kayford, W. Va.
PA—Josiah Keely, Kayford, W. Va.
EM—J. S. Jenkins, Kayford, W. Va.
EE—E. D. Knight, Kayford, W. Va.
SCU—Address the Company; Bayer, A.
J. Baker, Kayford, W. Va.
SA—Address the Company, Charleston,
W. Va.

Belleaire Mine; Drift; No. 2 Gas Seam,
PO—Decota, W. Va.; SP—Same; CTY—
Kanawha; RR—C. & O.
MS—J. A. Cole, Decota, W. Va.
SM—H. W. Wilson, Decota, W. Va.
S of H—Mules and 1 trolley pole type
loco. Track gage, 44 in.
S of M—2 chain breast type machs.
PP—Power purchased, Transformer 2,200
to 220 volts, rotary converters, 300
volts D. C., 1 pump.
Last years tonnage 23,483.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

Black Tulip Mine; Drift; No. 2 Gas
Seam.
PO—Ame, W. Va.; SP—Same; CTY—
Kanawha; RR—C. & O.
SM—S. W. Johnson, Ame, W. Va.
S of H—Mules and 1 trolley pole type
loco. Track gage, 42 in.
S of M—3 chain breast type machs.
PP—Power purchased, motor generator
sets, 300 volts D. C., 1 pump.
Last years tonnage 43,157.
SIZES SHIPT—Run of Mine.

Buckeye Mine; Drift; No. 2 Gas Seam,
50-68 in. thick.
PO—Ame, W. Va.; SP—Same; CTY—
Kanawha; RR—C. & O.
SM—S. W. Johnson, Ame, W. Va.
S of H—1 trolley pole type loco. Track
gage, 42 in.
S of M—2 chain breast type machs.
PP—Power purchased, transformer 2200-
200 volts, rotary converters, 300
volts D. C., 1 pump.
Last years tonnage 20,584.
SIZES SHIPT—Run of Mine.

Empire Mine; Drift; No. 2 Gas Seam,
68 in. thick.
PO—Ame, W. Va.; SP—Same; CTY—
Kanawha; RR—C. & O.
SM—S. W. Johnson, Ame, W. Va.
S of H—Mules, 1 trolley pole type and
1 storage battery locos. Track
gage 42 in.
S of M—4 chain breast type machs and
1 shortwall mach.
PP—Power purchased, Transformer 2,200
to 200 volts, rotary converters, 300
volts D. C.
Last years tonnage 15,052.
SIZES SHIPT—Run of Mine.

Kayford Nos. 1 and 2; Drifts; No. 2
Seam, 59 to 84 in. thick.
PO—Kayford, W. Va.; SP—Same; CTY—
Kanawha; RR—C. & O.
MS—W. H. Morris, Kayford, W. Va.
SM—S. H. Baker, Kayford, W. Va.
S of H—Mules and 2 trolley pole type
loco. Track gage 44 in.
S of M—2 chain breast type machs

PP—Power purchased, Transformer 2,200
to 220 volts, rotary converters, 300
volts D. C., 2 boilers, 100 H. P.,
3 pumps.
Last years tonnage 18,135.
SIZES SHIPT—Run of Mine.

Ruby Mine; Drift; Coalburg Seam, 56
in. thick.
PO—Decota, W. Va.; SP—Same; CTY—
Kanawha; RR—C. & O.
MS—J. A. Cole, Decota, W. Va.
SM—H. W. Wilson, Decota, W. Va.
S of H—Mules and 2 trolley pole type
loco. Track gage 44 in.
S of M—6 chain breast type machs.
PP—Power purchased, Transformer 2,200
to 220 volts, rotary converters, 300
volts D. C., 3 pumps.
Last years tonnage 36,167.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

Thistle Mine; Drift; No. 2 Gas Seam,
59 to 72 in. thick.
PO—Kayford, W. Va.; SP—Same; CTY—
Kanawha; RR—C. & O., Cabin
Creek Br.
MS—W. H. Morris, Kayford, W. Va.
SM—S. H. Baker.
S of H—Mules and 1 trolley pole type
loco. Track gage, 44 in.
S of M—2 chain breast type machs.
PP—Power purchased, transformer 2200
to 200 volts A. C., rotary convert-
ers, 300 volts D. C., 1 pump.
Last years tonnage 47,016.
SIZES SHIPT—Run of Mine.

Shamrock Mine; Drift; No. 2 Gas Seam,
59 to 72 in. thick.
PO—Kayford, W. Va.; SP—Same; CTY—
Kanawha; RR—C. & O., Cabin
Creek Br.
MS—W. H. Morris, Kayford, W. Va.
SM—S. H. Baker.
S of H—2 trolley pole type locos. Track
gage 44 in.
S of M—4 chain breast type and 1 short-
wall mach.
PP—Power purchased, transformer 2200
to 220 volts A. C., rotary convert-
ers, 300 volts D. C., 2 pumps.
Last years tonnage 50,810.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

Raccoon No. 1, Drift, No. 2 Gas
Seam, 3 ft 10 in. to 5 ft. 10
in. thick.
PO—Kayford, W. Va.; SP—Same; CTY—
Kanawha; RR—C. & O., Cabin
Creek Branch.
MS—W. H. Morris, Kayford, W. Va.
SM—S. H. Baker, Kayford, W. Va.
S of H—Mules and 2 trolley pole type
loco. Track gage, 44 in.
S of M—2 chain breast type machs.
PP—Power purchased, transformer 2200
to 220 volts A. C., rotary convert-
ers, 300 volts D. C., 8 pumps.
Last years tonnage 43,721.
SIZES SHIPT—Run of Mine, Slack, Lump.

Raccoon No. 2 East and Raccoon No. 2
West, Drifts, Coalburg Seam 5 1/2
to 7 1/2 ft. thick.
PO—Kayford, W. Va.; SP—Same.
CTY—Kanawha; RR—C. & O.,
Cabin Creek Br.

MS—W. H. Morris, Kayford, W. Va.
SM—S. H. Baker, Kayford, W. Va.
S of H—Gravity, mules and 2 trolley pole
type locos. Track gage, 44 in.
S of M—5 chain breast type and 3 short-
wall machs.
PP—Power purchased, Transformer 2,200
to 220 volts A. C., rotary con-
verters, 300 volts D. C., 3 pumps.
Last years tonnage 64,147.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Shaker Screens, Pickling
Tables, Loading Booms.

Rose Mine, Drift, Coalburg Seam, 5 1/2
to 6 ft 9 in. thick.
PO—Kayford, W. Va.; SP—Same.
CTY—Kanawha; RR—C. & O.,
Cabin Creek Br.
MS—W. H. Morris, Kayford, W. Va.
SM—S. H. Baker, Kayford, W. Va.
S of H—Gravity, mules and 1 trolley pole
type loco. Track gage, 44 in.
S of M—Hand and 1 chain breast machs.
PP—Power purchased, Transformer 2,200
to 220 volts A. C., rotary con-
verters, 300 volts D. C., 4 pumps.
Last years tonnage 23,159.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Shaker Screens, Pickling
Tables, Loading Booms.

Ame No. 2 Mine; Drift; Coalburg Seam,
68 in. thick.
PO—Ame, W. Va.; SP—Same; CTY—
Kanawha; RR—C. & O.
MS—W. A. Hovey, Ame, W. Va.
SM—S. W. Johnson, Ame, W. Va.
S of H—2 storage battery locos. Track
gage 42 in.
S of M—1 shortwall mach.
PP—Power purchased, 1 165 K. W.
M. G. Set, 300 volts D. C., 2
pumps.

LMP 125. Last years tonnage 16,881.
SIZES SHIPT—Run of Mine, Slack, No.
Lump.
PREP. EQUIPT—Shaker Screens, Load-
ing Booms, Pickling Tables.

Red Warrior Mine; Drift, No. 2 Gas
Seam, 42 to 72 in. thick.
PO—Warrior, W. Va.; SP—Red Warrior,
W. Va.; CTY—Kanawha; RR—C. &
O., Cabin Creek Br.
MS—Chas. Stennette, Leewood, W. Va.
SM—J. L. Rotton, Marion, W. Va.
S of H—Mules and 1 trolley pole type
loco. Track gage, 48 in.
S of M—3 chain breast type machs.
PP—Power purchased, M. G. sets, 300
volts D. C., 1 pump.
Last years tonnage 16,845.
SIZES SHIPT—Run of Mine.

Cherokee Mine; Drift, No. 2 Gas Seam,
42 to 5 ft. 3 in. to 5 ft. 3 in. thick.
PO—Warrior, W. Va.; SP—Cherokee, W.
Va.; CTY—Kanawha; RR—C. & O.,
Cabin Creek Br.
MS—Chas. Stennette, Leewood, W. Va.
SM—Mike Smika.
S of H—Mules and 1 trolley pole type
loco. Track gage, 44 in.
S of M—3 chain breast type and 1 short-
wall machs.
PP—Power purchased, M. G. sets, 300
volts D. C.
Last years tonnage 58,175.
SIZES SHIPT—Run of Mine, Slack,
Lump.

Davis Mine; Drift; Lewiston Seam, 4 ft
5 in. to 6 ft. 3 in. thick.
PO—Obley, W. Va.; SP—Same, CTY—
Kanawha; RR—C. & O., Cabin
Creek Branch.
MS—J. L. LeNeuer, Obley, W. Va.
SM—F. R. Payne, Obley, W. Va.
S of H—Gravity, mules and 1 trolley pole
type loco. Track gage, 44 in.
S of M—3 chain breast type machs.
PP—Power purchased, M. G. sets, 300
volts D. C.
Last years tonnage 29,270.
SIZES SHIPT—Run of Mine.

Holly Mine, Drift, No. 2 Gas Seam, 4
ft. 5 in. to 5 ft. 3 in. thick.
PO—Leewood, W. Va.; SP—Holly, W.
Va.; CTY—Kanawha; RR—C. & O.,
Cabin Creek Br.
MS—Chas. Stennette, Leewood, W. Va.
SM—B. H. Jorsey.
S of H—Mules and 1 trolley pole type
loco. Track gage, 44 in.
S of M—3 chain breast type and 1 short-
wall machs.
PP—Power purchased, transformer 2200
to 220 volts A. C., rotary convert-
ers, 300 volts D. C.
Last years tonnage 24,256.
SIZES SHIPT—Run of Mine.

Reynolds Mine; Drift, No. 2 Gas Seam,
55 to 74 in. thick.
PO—Wake Forest, W. Va.; SP—Quarter,
W. Va.; CTY—Kanawha; RR—C. &
O., Cabin Creek Br.
MS—M. E. Eddy, Wake Forest, W. Va.
S of H—Mules, 2 trolley pole type and
1 storage battery loco. Track gage
44 in.
S of M—2 chain breast type and 2 short-
wall machs.
PP—Power purchased, transformer 2200
to 220 volts A. C., rotary convert-
ers, 300 volts D. C., 2 pumps.
Last years tonnage 59,928.
SIZES SHIPT—Run of Mine.

United No. 1 and No. 2 Mines, Drifts.
United No. 1, No. 2 Gas Seam,
1 ft. 10 in. to 5 ft. 3 in.
thick. United No. 2, Coalburg
Seam, 4 1/2 to 6 1/2 ft. thick.
PO—Weavon, W. Va.; SP—United, W.
Va.; CTY—Kanawha; RR—C. & O.,
Cabin Creek Br.
MS—P. L. Rose, Weavon, W. Va.
SM—E. S. Baker, Weavon, W. Va.
S of H—Gravity, mules and 1 trolley pole
type loco. Track gage 42 in.
S of M—7 chain breast type and 3 short-
wall machs.
PP—1 100 K. W. rotary converter, M.
G. S. S., 300 volts D. C., 5 pumps.
Last years tonnage 100,107.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Shaker Screens, Pickling
Tables, Loading Booms.

CADLE RIDGE COAL CO.
General Office, Thurmond, W. Va.
PR—O. M. McVey, Thurmond, W. Va.
TR—O. M. McVey, Glen Jean, W. Va.
GM—J. M. McVey, Thurmond, W. Va.
GS—Harold E. Wilson, Thurmond, W. Va.
PA—Harold E. Wilson, Thurmond, W. Va.
EM—Harold E. Wilson, Thurmond, W. Va.
SA—C. G. Blake, Cincinnati, O.
Cadle Ridge No. 1, No. 2 Gas Seam,
D. C. Second Seam, 4 ft. 3 in. to 5 ft. 3 in.
thick.
PO—Thurmond, W. Va.; SP—Cadle Ridge,
W. Va.; and Thurmond W. Va.; CTY—
Kanawha; RR—C. & O.

S of H—Mules and 2 trolley pole type
loco. Track gage 44 in.
S of M—Hand and shortwall mach.
PP—Power purchased, transformer 2200
to 110 volts A. C., 250 volts D. C.
LMP 75. Daily tonnage 125.
SIZES SHIPT—Run of Mine.

CAFLISH LUMBER & COAL COMPANY

General Office, Albright, W. Va.
PR—A. L. Caffish, Union City, Pa.
AP—Ford J. Mauser, Union City, Pa.
TR—J. C. Caffish, Union City, Pa.
GM—E. G. Caffish, Albright, W. Va.
GS—E. G. Caffish, Albright, W. Va.
PA—S. A. Gustafson, Albright, W. Va.
EM—H. G. La Rue, Kingwood, W. Va.
SCU—Caffish Lumber Co., Buyer, S. A.
Gustafson, Albright, W. Va.
SA—H. T. Lincoln, Kingwood, W. Va.

Caffish No. 1 Mine; Drift; Freeport
Seam, 81 in. thick.
PO—Albright, W. Va.; SP—Same; CTY—
Preston; RR—M. & K.
MS—J. C. Gibson, Kingwood, W. Va.
S of H—Rope, 3 gasoline and 1 steam
loco. Track gage 36 in.
S of M—Hand.
PP—1 25 H. P. tube boiler, 1
pump.
EMP—20. Daily tonnage 200.
SIZES SHIPT—Run of Mine.

CALIF COAL COMPANY

General Office, Lost Creek, W. Va.
GS—Thos. Grady, Lost Creek, W. Va.
SCU—Address the Company, Buyer, L.
C. Jackson, Lost Creek, W. Va.
SA—Whitney & Krummelt, 143 Liberty
St., New York, N. Y.

Calif Mine; Drift; Red Stone and Pitts-
burgh Seam, 64 to 90 in. thick.
PO—Lost Creek, W. Va.; SP—Same, CTY—
Harrison; RR—B. & O.
MS—W. T. Ross II, Lost Creek, W. Va.
S of H—Mules, 1 6-ton elec. loco. Track
gage 36 in.
S of M—Hand.
PP—Power purchased, transformer 550
volts A. C., 3 pumps.
LMP 48. Daily tonnage 150.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.
Old information.

CALLAN COAL COMPANY

General Office, Charleston, W. Va.
PR—A. D. Callahan, Crown, W. Va.
VP—P. E. Gallagher, Huntington, W. Va.
TR—A. D. Callahan, Crown, W. Va.
GM—Geo. L. Moran, Charleston, W. Va.
GS—Geo. L. Moran, Charleston, W. Va.
PA—Geo. L. Moran, Charleston, W. Va.
CTY—Clark & Kiebs, Charleston, W. Va.
EE—K. L. Puckett, Hanna, W. Va.

Callan Mine; Slip No. 2 Gas Seam.
PO—Charleston, W. Va.; SP—Same; CTY—
Kanawha; RR—K. & M.
S of H—Trolley pole type and steam
loco. Track gage 42 in.
S of M—2 longwall machs.
PP—2 50 H. P. tube boilers, gen.
set, 210 volts D. C., 2 pumps.
Daily tonnage 200.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

CALLAWAY COAL COMPANY

PR—S. J. Jaspert, Glen Jean, W. Va.
CM—C. P. Callaway, " "
GS—C. P. Callaway, Glen Jean, W. Va.
PA—C. P. Callaway, Glen Jean, W. Va.
EE—N. P. Rhoads, Mt Hope, W. Va.
SA—C. G. Blake Co., Cincinnati, O.

Callaway Mine; Drift; Sewell Seam, 48
to 72 in. thick.
PO—Glen Jean, W. Va.; SP—McDonado,
W. Va.; CTY—Fayette, RR—K. G.
J. & I.
S of H—Mules, Track gage, 44 in.
S of M—Hand.
LMP 20. Last fiscal year prod.
20,000 tons.
SIZES SHIPT—Run of Mine.
Old information.

CALLOWAY, C. P.

General Office, Glen Jean, W. Va.
GM—C. P. Calloway, Glen Jean, W. Va.
EM—N. P. Rhoads, Mt Hope, W. Va.
SCU—Address the Company, Buyer, R. H.
Gorman, Glen Jean, W. Va.
SA—C. G. Blake Co., Cincinnati, O.

Calloway Mine; Slip No. 2 Gas Seam,
48 to 72 in. thick.
PO—Glen Jean, W. Va.; SP—O. J. W.
Va.; CTY—Radlight, RR—K. G. J.
& I. C. & O., Va.
MS—J. H. Jones, S. M. Hill, W.
Va.
S of H—Mules, locos, Track gage, 44 in.
S of M—2 chain breast type machs.
PP—Power purchased, transformer 2200
to 200 volts A. C., rotary converters,
300 volts D. C., 5 pumps.
LMP 5. Daily tonnage 20.
SIZES SHIPT—Run of Mine.

CALORIC COAL CO. THE

General Office, Elm Grove, W. Va.
 PR—John H. Anderson, Elm Grove, W. Va.
 VP—James T. Roney, Elm Grove, W. Va.
 FR—J. D. Nichol, Elm Grove, W. Va.
 GM—D. H. Thomas, Elm Grove, W. Va.
 GS—D. H. Thomas, Elm Grove, W. Va.
 PA—D. H. Thomas, Elm Grove, W. Va.
 CM—A. C. Smith, Elm Grove, W. Va.

Jan Mine; Slope; Pittsburgh No. 8 Seam, 60 in. thick.
 PO—Elm Grove, W. Va.; SP—Same; CTY—Ohio; RR—B. & O.
 S of H—Mules, rope, elec. loco. Track gage 42 in.
 S of M—Shortwall machs.
 PP—Power purchased.
 EMP—20.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Bar Screens

CAM COAL COMPANY

General Office, Clarksburg, W. Va.
 PR—J. S. Klimefelter, Clarksburg, W. Va.
 TR—Paul E. Rutter, Clarksburg, W. Va.
 GS—W. G. Davidson, Volga, W. Va.
 VE—Hornor Bros., Clarksburg, W. Va.
 PA—The J. E. Long Coal Co., Clarksburg, W. Va.

River Mine; Drift; Kittanning Seam; 66 inches thick.
 PO—Volga, W. Va.; SP—Same; CTY—Barbour; RR—B. & O.
 S of H—Mules.
 S of M—Hand.
 EMP—40. Daily output, 200 tons.
 SIZES SHIPT—Run of Mine.
 Formerly operated by Montrose Coal Co. old information.

CAMBRIA COAL COMPANY

General Office, Cleveland, O.
 PR—E. S. Wertz, Cleveland, O.
 VP—Wm. Harris, Cleveland, O.
 TR—F. K. Gitch, Cleveland, O.
 GM—H. B. Pappard, Cleveland, O.
 GS—Carl Horner, Clarksburg, W. Va.
 PA—C. F. Stone, Cleveland, O.
 VE—Horner & Horner, Clarksburg, W. Va.
 SCQ—The Cambria Supply Co.; Buyer R. B. Satterfield, Lumberport, W. Va.

Additional information on Page 980

Cambria Mine; Drift; Pittsburgh Seam, 109 in. thick.
 PO—Lumberport, W. Va.; SP—Same; CTY—Harrison; RR—B. & O.
 MS—L. T. Sturm, Lumberport, W. Va.
 S of H—Mules, main and tail rope, trolley pole type loco. Track gage, 42 inches.
 S of M—5 chain breast type and 2 shortwall machs.
 PP—Power purchased, transformer 22,000-220 volts A. C., rotary converters, 250 volts D. C., 1 pump.
 EMP—175. Last years tonnage 200,000.
 SIZES SHIPT—Run of Mine.

CAMERON MINING & DEVELOPMENT CO.

General Office, Cameron, W. Va.
 PR—Geo. E. Myers, Cameron, W. Va.
 VP—James Danahue, Cameron, W. Va.
 TR—H. L. Chambers, Cameron, W. Va.
 GM—Geo. E. Myers, Cameron, W. Va.
 CM—Geo. W. Allison, Cameron, W. Va.

Shaft; Pittsburgh Seam.
 PO—Cameron, W. Va.; SP—Same; CTY—Marshall; RR—B. & O.
 S of H—Electric locs.
 S of M—Electric punchers.
 PP—Generate power.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables.

CAMEVA COAL COMPANY

General Office, Maxine, W. Va.
 PR—F. W. Barger, Room 1, Masonic Temple, Charleston, W. Va.
 TR—Frank Meadows, Charleston, W. Va.
 GM—W. J. Campbell, Charleston, W. Va.
 GS—J. W. Vandergrift, Charleston, W. Va.
 PA—J. W. Vandergrift, Charleston, W. Va.
 CM—J. W. Vandergrift, Charleston, W. Va.

Cameva Mine; Drift; Campbells Creek No. 2 Gas Seam; 42 inches thick.
 PO—Maxine, W. Va.; SP—Same; CTY—Boone; RR—C. & O.
 S of H—Mules. Track gage 44 inches.
 S of M—Hand.
 PP—Power purchased, transformer 33,000 to 250 volts A. C., M. G. sets, 250 volts D. C.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables.

CAMP CREEK COAL CO.

General Office, Charleston, W. Va.
 TR—L. C. Messey, Charleston, W. Va.

Camp Creek Mine; Drift; Thacker Seam, 72 in. thick.
 PO—Thacker, W. Va.; SP—Same; CTY—Wayne; RR—N. & W.
 S of H—Mules and electric locs. Track gage, 48 in.

S of M—Shortwall machs.

PP—Generate power.
 SIZES SHIPT—Nut, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables.
 Old information.

CAMPBELLS CREEK COAL CO. (THE)

General Office, Cincinnati, O.
 PR—E. O. Dana, Cincinnati, O.
 TR—E. O. Dana, Cincinnati, O.
 GM—R. P. Gilham, Cincinnati, O.
 GS—W. V. Rensford, Dana, W. V.
 CE—West Virginia Eng. Co., Charleston, W. Va.
 EM—W. W. Venable, Charleston, W. Va.
 EE—George Krantz, Putney, W. Va.
 SCQ—Address the Company, Buyer, W. E. Snidow, Putney, W. Va.
 SA—Campbells Creek Coal Co., Cincinnati, Ohio.

No. 1 Mine; Drift; No. 5 Seam, 60 in. thick.
 PO—Putney, W. Va.; SP—Same; CTY—Kanawha; RR—Kanawha & Mich.
 MS—A. Calderwood, Putney, W. Va.
 SM—T. N. Scott, Dana, W. Va.
 S of H—Mules and 7 trolley pole type locs. Track gage, 59 1/2 in.
 S of M—8 shortwall machs.
 PP—Power purchased, transformer 2200-250 volts A. C., motor gen. sets, 250 volts D. C., 1 fire tube boiler, 100 H. P., 4 pumps.
 EMP—250. Last fiscal year output, 253,283 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms, Washeries.

No. 3 Mine; Drift; No. 5 Seam, 60 in. thick.
 PO—Putney, W. Va.; SP—Same; CTY—Kanawha; RR—Kanawha & Mich.
 MS—A. Calderwood, Putney, W. Va.
 SM—T. N. Scott, Dana, W. Va.
 S of H—4 trolley pole type locs. Track gage, 44 in.
 S of M—2 chain breast type and 2 shortwall machs.
 PP—Power purchased, transformer 2200-250 volts A. C., M. G. sets, 250 volts D. C., 2 pumps.
 EMP—160. Last fiscal year output, 67,923 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Washeries.

CANNELTON COAL AND COKE CO.

General Office, Cannelton, W. Va.
 PR—W. C. Franz, Sault Ste. Marie, Ont.
 VP—Jas. Dawson, Sault Ste. Marie, Ont., Can.
 TR—E. W. Shell, Sault Ste. Marie, Ont., Can.
 GM—F. O. Harris, Cannelton, W. Va.
 GS—Ben Davis, Cannelton, W. Va.
 PA—F. O. Harris, Cannelton, W. Va.
 CE—E. B. Farrand, Cannelton, W. Va.
 SCQ—Address the Company, Buyer, F. Morgan, Cannelton, W. Va.

No. 1 Mine; Drift; No. 2 Gas Seam, 72 to 84 in. thick.
 PO—Cannelton, W. Va.; SP—Same; CTY—Fayette; RR—K. & M.
 S of H—Mules and 2 trolley pole type locs. Track gage, 39 in.
 S of M—1 chain breast type and 4 shortwall machs.
 PP—Power purchased, 12 pumps.
 EMP—206. Last years tonnage 149,304.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

No. 2 Mine; Drift; No. 2 Gas Seam, 72 to 84 in. thick.
 PO—Cannelton, W. Va.; SP—Same; CTY—Fayette; RR—K. & M.
 S of H—Mules and 5 trolley pole type locs. Track gage, 39 in.
 S of M—3 chain breast type and 6 shortwall machs.
 PP—Power purchased, transformer 44,000 to 2200 volts A. C., M. G. set, 250 volts D. C., 8 pumps.
 EMP—277. Last years tonnage 157,687.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

No. 3 Mine; Drift; Eagle Seam, 50 in. thick.
 PO—Cannelton, W. Va.; SP—Same; CTY—Fayette; RR—K. & M.
 S of H—5 trolley pole type and 1 storage battery locs. Track gage 39 in.
 S of M—4 shortwall machs.
 PP—Power purchased, transformer 44,000 to 2200 volts A. C., M. G. set, 250 volts D. C., 3 pumps.
 EMP—87. Last years tonnage 43,185.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

No. 4 Mine; Drift; No. 2 Gas Seam, 54 to 72 in. thick.
 PO—Cannelton, W. Va.; SP—Same; CTY—Fayette; RR—K. & M.

S of H—Mules and 1 trolley pole type loco. Track gage, 39 in.
 S of M—2 chain breast type machs.
 PP—Power purchased, transformer 44,000 to 2,200 volts A. C., M. G. sets, 250 volts D. C., 2 pumps.
 EMP—33. Last years tonnage 20,563.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

No. 5 Mine; Drift; No. 2 Gas Seam, 48 to 72 in. thick.
 PO—Cannelton, W. Va.; SP—Same; CTY—Fayette; RR—K. & M.
 S of H—5 trolley pole type and 2 storage battery locs. Track gage, 39 inches.
 S of M—2 chain breast type and 2 shortwall machs.
 PP—Power purchased, transformer 44,000 to 2,200 volts A. C., M. G. set, 250 volts D. C., 3 pumps.
 EMP—104. Last years tonnage 92,246.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

No. 6 Mine; Drift; No. 5 Block Seam, 58 in. thick.
 PO—Cannelton, W. Va.; SP—Same; CTY—Kanawha; RR—K. & M.
 S of H—1 storage battery loco. Track gage 39 in.
 S of M—2 shortwall machs.
 PP—Power purchased, transformer 44,000 to 2,200 volts A. C., M. G. set, 250 volts D. C., 2 pumps.
 EMP—22. Last years tonnage 11,151.
 SIZES SHIPT—Run of Mine, Slack.

CANYON COAL & COKE COMPANY

General Office, 300 Fayette Title & Trust Bldg., Uniontown, Pa.
 PR—W. E. Crow, Uniontown, Pa.
 VP—E. L. Stoner, Scottsdale, Pa.
 TR—D. M. Higinbotham, Uniontown, Pa.
 GM—W. M. Strawn, Morgantown, W. Va., R. D. 4.
 GS—W. M. Strawn, Morgantown, W. Va., R. D. 4.
 PA—W. M. Strawn, Morgantown, W. Va., R. D. 4.
 EM—South Penn Engr. Co., Uniontown, Pa.
 EE—F. W. C. Bailly, Columbus, O.
 SCQ—Kidge Supply Company, Buyer, W. M. Strawn, R. F. D. No. 4, Morgantown, W. Va.

Canyon Mines; Drift; Pittsburgh Seam, 84 in. thick.
 PO—R. D. No. 4, Morgantown, W. Va.; SP—Frit, Cheat Haven, Pa.; Exp., Morgantown, W. Va.; CTY—Monongah; RR—B. & O.
 S of H—Mules, elec. loco. Track gage 42 in.
 S of M—2 shortwall machs.
 PP—Power purchased, transformer, 150 K. W. gen. unit, 550 volts D. C., 2 pumps.
 EMP—80. Last years tonnage 1,000.
 SIZES SHIPT—Run of Mine.
 Note—Mine under development.

CAP RUN COAL COMPANY

General Office, Box 1388, Charleston, W. Va.
 PR—F. S. McComas, Charleston, W. Va.
 VP—M. C. Jennings, Charleston, W. Va.
 TR—F. S. McComas, Charleston, W. Va.
 GM—J. E. Staton, Charleston, W. Va.
 GS—J. E. Staton, Charleston, W. Va.
 EM—Burnell & Wilson, Charleston, W. Va.
 SA—Indian Run Coal Co., Charleston, W. Va.

Cap Run Mine; Drift; Pittsburgh Seam, 70 in. thick.
 PO—Walkersville, W. Va.; SP—Eumart, W. Va.; CTY—Lewis; RR—B. & O.
 S of H—Mules. Track gage 44 in.
 S of M—Hand.
 PP—Generate power, 250 volts D. C.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.
 Old information.

CARRON FUEL COMPANY

General Office, Carbon, W. Va.
 PR—J. R. Thomas, Charleston, W. Va.
 VP—C. A. Cabell, Carbon, W. Va.
 TR—W. J. Magee, Cincinnati, Ohio.
 AUDITOR—E. C. Hannon, Carbon, W. Va.
 GM—C. A. Cabell, Carbon, W. Va.
 GS—K. D. Quarrier, Carbon, W. Va.
 PA—Max T. Price, Carbon, W. Va.
 EM—N. W. Chapman, Carbon, W. Va.
 EE—L. C. McAllister, Carbon, W. Va.
 SCQ—Address the company—Buyer, G. K. Cabell, Weavco, W. Va.
 SA—Carbon Fuel Co., Cincinnati, O.

No. 1 Mine; Drift; Kanawha No. 1 Eagle Seam, 54 in. thick.
 PO—Naboh, W. Va.; SP—Same; CTY—Kanawha; RR—C. & O., Cabin Creek Branch.
 MS—E. B. Pearce, Carbon, W. Va.
 SM—Geo. Skellie, Naboh, W. Va.
 S of H—Mules, 1 trolley pole type and 2 storage battery locs. Track gage, 42 in.

S of M—1 chain breast type and 1 shortwall machs.
 PP—Power purchased, transformer 44,000 to 2,300 volts A. C., M. G. set, 175 K. W., 250 volts D. C., 1 pump.
 EMP—50. Last years tonnage 24,883.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Picking Tables.

No. 2 Mine; Drift; Kanawha No. 2 Gas Seam, 60 in. thick.
 PO—Carbon, W. Va.; SP—South Carbon, W. Va.; CTY—Kanawha; RR—C. & O., Cabin Creek Br.
 MS—E. B. Pearce, Carbon, W. Va.
 SM—G. C. Long, Carbon, W. Va.
 S of H—Mules and 3 trolley pole type locs. Track gage, 42 in. thick.
 S of M—2 chain breast type machs.
 PP—Power purchased, transformer 44,000 to 2,300 volts A. C., M. G. set, 175 K. W., 250 volts D. C., 1 pump.
 EMP—45. Last years tonnage 28,588.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Picking Tables.

No. 3 Mine; Drift; Coalburg Seam, 72 in. thick.
 PO—Carbon, W. Va.; SP—South Carbon, W. Va.; CTY—Kanawha; RR—C. & O., Cabin Creek Br.
 MS—E. B. Pearce, Carbon, W. Va.
 SM—G. C. Long, Carbon, W. Va.
 S of H—Mules, 3 trolley pole type and 3 storage battery locs. Track gage, 42 in.
 S of M—2 chain breast type and 2 shortwall machs.
 PP—Power purchased, transformer 44,000 to 2,300 volts A. C., M. G. set, 175 K. W., 250 volts D. C., 2 pumps.
 EMP—90. Last years tonnage 70,661.
 SIZES SHIPT—Run of Mine, Slack, Egg, Nut, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

No. 4 Mine; Drift; Kanawha No. 2 Gas Seam, 66 in. thick.
 PO—Jochin, W. Va.; SP—Republic, W. Va.; CTY—Kanawha; RR—C. & O., Cabin Creek Br.
 MS—C. A. Pearce, Jochin, W. Va.
 SM—E. S. Wendell, Jochin, W. Va.
 S of H—Mules and 1 trolley pole type loco. Track gage, 42 in.
 S of M—1 chain breast type mach.
 PP—Power purchased, transformer 44,000 to 2,300 volts A. C., M. G. set, 175 K. W., 250 volts D. C., 1 pump.
 EMP—50. Last years tonnage 32,751.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Gravity Screens.

No. 5 Mine; Drift; Coalburg Seam, 78 in. thick.
 PO—Jochin, W. Va.; SP—Republic, W. Va.; CTY—Kanawha; RR—C. & O., Cabin Creek Br.
 MS—C. A. Pearce, Jochin, W. Va.
 SM—E. S. Wendell, Jochin, W. Va.
 S of H—Mules, 2 trolley pole type and 1 combination locs. Track gage, 42 in.
 S of M—1 shortwall mach.
 PP—Power purchased, transformer 44,000 to 2,300 volts A. C., rotary converters, 150 K. W., 250 volts D. C., 1 pump.
 EMP—60. Last years tonnage 56,921.
 SIZES SHIPT—Run of Mine, Slack, Egg, Nut, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

No. 6 Mine; Drift; Powellton Seam, 72 in. thick.
 PO—Jochin, W. Va.; SP—Same; CTY—Kanawha; RR—C. & O.
 MS—C. A. Pearce, Jochin, W. Va.
 SM—E. S. Wendell, Jochin, W. Va.
 S of H—Mules, 2 trolley pole type and 2 combination locs. Track gage, 42 in.
 S of M—2 chain breast type and 1 overhead cutter machs.
 PP—Power purchased, transformer 44,000 to 2,300 volts A. C., M. G. set, 150 K. W., 250 volts D. C., 1 pump.
 EMP—60. Last years tonnage 72,631.
 PREP. EQUIPT—Gravity Screens, Picking Tables.

No. 7 Mine; Drift; Kanawha No. 2 Gas Seam, 60 in. thick.
 PO—Weavco, W. Va.; SP—W. Va. No. 1 W. Va. CTY—Kanawha; RR—C. & O., Cabin Creek Br.
 SM—G. K. Cabell, Weavco, W. Va.
 MS—Gordon Kyle, Weavco, W. Va.
 S of H—Mules and 1 trolley pole type loco. Track gage, 44 in.
 S of M—1 chain breast type mach.
 PP—Power purchased, transformer 44,000 to 2,300 volts A. C., M. G. set, 150 K. W., 250 volts D. C., 1 pump.
 EMP—40. Last years tonnage 18,816.
 SIZES SHIPT—Run of Mine.

(Continued on Next Page)

Carbon Fuel Company—Cont.

No. 9 Mine; Drift; Kanawha No. 2 Gas Seam, 60 in. thick.
MS—Gordon Kyle, Wevaco, W. Va.
PO—Notomine, W. Va. SP—W. Va. No. 2, W. Va. CTY—Kanawha, RR—C & O, Cabin Creek Br.
S of H—Mules, 2 trolley pole type and 2 combination locos. Track gage, 44 in.
S of M—2 chain breast type and 2 short wall machs.
PP—Power purchased, transformer 11,000 to 2300 volts A. C., M. G. set, 175 K. W., 250 volts D. C., 2 pumps.
EMP—80. Last years tonnage 72,919.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.
No. 11 Mine; Drift; Coalburg Split Seam, 77 in. thick.
PO—Notomine, W. Va. SP—W. Va. No. 2, W. Va. CTY—Kanawha.
MS—Gordon Kyle, Wevaco, W. Va.
SM—J. S. Knight, Wevaco, W. Va.
S of H—Mules, 2 trolley pole type and 2 combination locos. Track gage, 44 in.
S of M—3 chain breast type and 1 short wall machs.
PP—Power purchased, transformer 44,000 to 2300 volts A. C., M. G. set, 175 K. W., 250 volts D. C.
EMP—90. Last years tonnage 77,175.
SIZES SHIPT—Run of Mine, Slack, Lump, Block.
PREP. EQUIPT—Gravity Screens.

CARBON HILL COLLIERIES COMPANY.
Now part of A. D. Cronin Coal Co.

CAR-OFF SMOKELESS COAL COMPANY.
General Office, Fairmont, W. Va.
PR—J. A. Clark, Fairmont, W. Va.
VP—C. H. Dittendroff, Philadelphia, Pa.
TR—T. F. Robey, Fairmont, W. Va.
GM—H. B. Clark, Fairmont, W. Va.
GS—J. A. Clark, Fairmont, W. Va.
PA—Robert O'Hart, Tunnelton, W. Va.
EM—Roy Stevens, Fairmont, W. Va.
EE—Homer Palmer, Box 649, Clarksburg, W. Va.
SA—Blair Parke Coal & Coke Co., Philadelphia, Pa.

Kenna Mine; Drift; Upper Freeport Seam, 62 in. thick.
PO—Tunnelton, W. Va.; SP—Same; CTY—Preston; RR—B. & O.
MS—Robert O'Hart, Tunnelton, W. Va.
S of H—1 8-ton elec. motor. Track gage 42 in.
S of M—Hand.
PP—2 170 H. P. boilers, gen. unit, 250 volts D. C., 4 pumps.
EMP—65. Last years tonnage 50,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens, Crusher.

CARLTON MINING & POWER COMPANY
General Office, Kingwood, W. Va.
PR—C. C. Pierce, Kingwood, W. Va.
GS—L. B. Bowermaster, Kingwood, W. Va.
Carlton Mine; Freeport Seam, 56 in. thick.
PO—Kingwood, W. Va.; SP—Tunnelton, W. Va.; CTY—Preston; RR—W. Va. Northern.
S of H—Mules. Track gage 42 in.
S of M—Hand.
SIZES SHIPT—Run of Mine.

CARNEGIE-WELLSBURG COAL CO.
General Office, Carnegie, Pa.
PR—Jacob York, Carnegie, Pa.
VP—J. J. Goldsmith, 922 Erie Bldg., Pittsburgh, Pa.
GM—D. Raskin, Carnegie, Pa.
GS—D. Raskin, Carnegie, Pa.
PA—D. Raskin, Carnegie, Pa.

Goldie Mine; Drift; Pittsburgh No. 8 Seam, 58 inches thick.
PO—Wellsburg, W. Va.; SP—Same; CTY—Brook; RR—Pgh & W. Va.
MS—R. Macdonald, Wellsburg, W. Va.
S of H—Elec. loco.
S of M—1 shortwall mach.
PP—Power purchased, M. G. Set, 100 K. W., 250 volts D. C., 1 pump.
EMP—40. Last years tonnage 15,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

CARPER, W. S. COAL CO.
Morgantown, W. Va.
Carper Mine; CTY—Monongalia.
No report.

CARR & HALL COAL COMPANY
Out of business.

CARROLL-CROSS COAL COMPANY.
General Office, Piedmont, W. Va.
PR—Carroll Pattison, Bloomington, Md.
TR—Earle C. Coleman.
Emoryville, W. Va.
GM—Howard Cross, Cumberland, Md.
EM—Bernard H. Cross, Emoryville, W. Va.
SCO—Address the Company, Buyer, Edward James, Emoryville, W. Va.
Sales Agent, Carroll Pattison, Piedmont, W. Va.

Cross and Imperial Mines; Drift; Freeport Seam, 52 in. thick.
PO—Emoryville, W. Va. SP—Same. CTY—Mineral, RR—W. Md., Elk Garden Branch.
MS—R. H. Cross, Emoryville, W. Va.
S of H—Mules. Track gauge, 36 in.
S of M—Hand.
PP—1 25 H. P. fire tube boiler, 2 pumps.
EMP—65. Last years tonnage 33,428.
SIZES SHIPT—Run of Mine.
Old information.

CARTER COAL COMPANY
General Office, Coalwood, W. Va.
PR—Geo. L. Carter, Coalwood, W. Va.
TR—C. A. Hall, Coalwood, W. Va.
GM—J. W. Carter, Coalwood, W. Va.
PA—M. M. King, Coalwood, W. Va.
Chief Eng.—H. H. Hall, Coalwood, W. Va.
EE—W. E. Searles, Coalwood, W. Va.
SCO—Buyer, M. M. King, Coalwood, W. Va.

Additional Information on Page 981

Olga Mine; Shaft; Pocahontas No. 4 Seam, 78 inches thick.
PO—Coalwood, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
MS—T. J. Robinson, Coalwood, W. Va.
S of H—Mules and 3 trolley pole type locos. Track gage, 48 in.
S of M—Hand.
PP—Power purchased, Transformer 11,000-2,300-440 volts A. C., M. G. sets, 250 volts D. C., 4 150 H. P. fire tube boilers, 7 pumps.

EMP—150. Daily output, 400 tons.
SIZES SHIPT—Run of Mine.
Nora No. 8 Mine; Drift; Sewell Seam, 42 in. thick.
PO—Coalwood, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
MS—James S. Gilley, Coalwood, W. Va.
S of H—7 trolley pole type locos. Track gage, 48 in.
S of M—4 shortwall machs.
PP—Power purchased, transformer 14,000-2300-440 volts, rotary converters, 250 volts D. C., 5 pumps.
EMP—100. Daily output, 325 tons.
SIZES SHIPT—Run of Mine.

Thelma No. 6 Mine; Drift; Sewell Seam, 42 in. thick.
PO—Six, W. Va.; SP—Coalwood, W. Va.; CTY—McDowell; RR—N. & W.
MS—J. R. Bailey, Six, W. Va.
SM—C. J. Anderson, Six, W. Va.
S of H—11 trolley pole type locos.
S of M—5 shortwall machs.
PP—Power purchased, transformer 14,000-2300-440 volts, rotary converters, 250 volts D. C., 9 pumps.
EMP—185. Daily output, 600 tons.
SIZES SHIPT—Run of Mine.

Caretta No. 5 Mine; Drift; War Creek Seam, 57 in. thick.
PO—Caretta, W. Va.; SP—Susanna, W. Va.; CTY—McDowell; RR—N. & W.
MS—Wm. A. Laird, Caretta, W. Va.
SM—J. L. Martin, Caretta, W. Va.
S of H—10 trolley pole locos.
S of M—6 shortwall machs.
PP—Power purchased, transformer 14,000-2300-440 volts, 10 pumps.
EMP—225. Daily output, 750 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.

CARTER COAL AND MINING COMPANY.
General Office, Belle, W. Va.
PR—O. Jones Dorsey, Belle, W. Va.
TR—B. G. Ashbrook, 212 Schultz Bldg., Columbus, O.
TR—E. M. Cox, Charleston, W. Va.
GM—O. Jones Dorsey, Belle, W. Va.
PA—O. Jones Dorsey, Belle, W. Va.
EE—P. J. Crensey.
SCO—Address the Company, Buyer, J. C. Slack, Belle, W. Va.

Carter Mine; Drift; Cedar Grove and Coalburg Seams, 46-53 in. thick.
PO—Belle, W. Va.; SP—Same; CTY—Kanawha; RR—K & M.
MS—Walter Kirby, Belle, W. Va.
S of H—1 steam loco. Track gage 42 in.
S of M—2 elec. machs.
PP—1 water tube boiler, total 90 H. P., 1 gen. unit, 250 volts D. C.
EMP—25. Last years tonnage 20,000.
SIZES SHIPT—Run of Mine, Lump.
Old information.

CARVER FORK COLLIER CO.
General Office, Clay, W. Va.
PR—Imes Road, Clay, W. Va.
VP—M. Fekula, Pittsburgh, Pa.
TR—Joseph Flowsay, Clay, W. Va.
GM—E. R. Reed, Clay, W. Va.
PA—R. B. Wheeler, Clifton Forge, Va.
CE—G. B. Wheeler, Cressmont, Ky.
SCO—Carver Fork Store Co., Buyer, E. R. Reed, Clay, W. Va.
SA—Address the company, Clay, W. Va.
Leatherwood Mine; Drift; Coalburg & No. 5 Seams, 72 inches thick.
PO—Clay, W. Va.; SP—Same; CTY—Clay; RR—B. & O.

MS—J. P. Jeffries, Bickmore, W. Va.
S of H—Mules. Track gage 42 inches.
S of M—Shortwall mach.
PP—Power purchased, M. G. Set, 250 volts D. C.
EMP—25. Daily tonnage 100.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

CASS HILL COAL COMPANY
PR—Wm. F. Cook, Cumberland, Md.
PA—W. C. Miller, Morgantown, W. Va.
CE—W. C. Miller, Morgantown, W. Va.

Cass Hill Mine; Drift; Waynesburg Seam, 84 inches thick.
PO—Cassville, W. Va.; SP—Morgantown, W. Va.; CTY—Monongalia; RR—M & W.
S of H—Mules.
S of M—Hand.
Old information.

CASTLE COAL CO
Lager, W. Va.
Castle Mine; CTY—McDowell.
No report.

CASTLE FALLS COAL COMPANY
General Office, Goff Bldg., Clarksburg, W. Va.
PR—J. Edgar Long, Clarksburg, W. Va.
TR—J. Edgar Long, Clarksburg, W. Va.
GM—J. H. Irving, Independence, W. Va.
GS—A. V. Morgan, Nutter Fort, W. Va.
PA—J. Edgar Long, Clarksburg, W. Va.
CE—Hornor Bros., Clarksburg, W. Va.
SA—J. E. Long Coal Co., Clarksburg, W. Va.

Nancy Nos. 1 and 2 Mines; Drift; Freeport Seam, 48 inches thick.
PO—Independence, W. Va.; SP—Hardman, W. Va.; CTY—Preston; RR—B. & O.
S of H—Mules.
S of M—Hand.
Daily tonnage 200.
SIZES SHIPT—Run of Mine.

CATHERINE COAL COMPANY
General Office, 1328 Broadway, New York, N. Y.
PR—E. R. Long, New York, N. Y.
VP—C. Waldron, Jr., Wolf Summit, W. Va.
TR—H. R. Tansley, New York, N. Y.
GM—H. Van Fleet, Reynoldsville, W. Va.
PA—H. Van Fleet, Wolf Summit, W. Va.
CE—Carl L. Horner, Clarksburg, W. Va.

Isabel Mine; Drift; Pittsburgh Seam, 108 in. thick.
PO—Madisonbrook, W. Va.; SP—Same; CTY—Harrison; RR—B. & O.
MS—R. Shavhan, Meadow Brook, W. Va.
S of H—Gasoline loco. Track gage 12 inches.
S of M—2 shortwall machs.
PP—Power purchased, 440 volts D. C., 2 pumps.
EMP—25. Last years tonnage 60,000.
SIZES SHIPT—Run of Mine, Slack, Lump.

CAVA COAL CO.
General Office, Shinnston, W. Va.
Cava Mine.
PO—Enterprise, W. Va.; CTY—Harrison; RR—B. & O. No report.

CEDAR CREEK COAL & COKE COMPANY
General Office, Connellsville, Pa.
PR—P. E. Markell, Connellsville, Pa.
VP—Robt. Norris, Connellsville, Pa.
TR—P. W. Wright, Connellsville, Pa.
GM—J. L. Schick, Connellsville, Pa.
PA—J. L. Schick, Connellsville, Pa.
SCO—Grawig & Sons, Exchange, W. Va.

Cedar Creek Mine; Drift; Pittsburgh Seam, 72 in. thick.
PO—Exchange, W. Va.; SP—Same; CTY—Baxton; RR—Coal & Coke.
S of H—Storage battery locos.
S of M—2 mining machs.
EMP—20. Last years tonnage 30,000.
SIZES SHIPT—Run of Mine.

CENTRAL BY-PRODUCT COAL COMPANY
General Office, Box 168, Charleston, W. Va.
PR—H. T. Smart, Charleston, W. Va.
VP—Chas. C. Gressang, Charleston, W. Va.
TR—Chas. C. Gressang, Charleston, W. Va.
GM—Chas. C. Gressang, Charleston, W. Va.
PA—Chas. C. Gressang, Charleston, W. Va.
S of M—Turner Store, Buyer, H. A. Noel, Heatherman, W. Va.

Central By Product Mine; Drift; No. 5 Block Seam, 48 inch thick.
PO—Heatherman, W. Va.; SP—Turner, W. Va.; CTY—Kanawha; RR—Coal & Coke.
S of H—Mules and electric loco. Track gage 42 inches.
S of M—Chain breast and shortwall machs.
PP—2 fire tube boilers, 100 H. P., 1 150 K. W., gen. unit, 500 volts D. C.
EMP—60. Last fiscal year output 75,000 tons.
SIZES SHIPT—Run of Mine, Slack, No. 1 Lump, Block.
PREP. EQUIPT—Bar Screens.

CENTRAL FAIRMONT COAL CO
Now being operated by the H. and G. Co., Company.

CENTRAL POCAHONTAS COAL CO
General Office, Welch, W. Va.
PR—L. J. Woods, Welch, W. Va.
VP—W. C. O'Toole, Welch, W. Va.
TR—J. H. Barker, Welch, W. Va.
GM—H. T. Graham, Anawalt, W. Va.
PA—H. G. Pirnie, Welch, W. Va.
SCO—Address the Company, Buyer, R. M. McNeer, Sprigg, W. Va.
SA—Central Pocahontas Coal Co., Welch, W. Va.

Additional Information on Page 984

No. 1 Mine; Drift; Pocahontas No. 1 Seam, 78 in. thick.
PO—Anawalt, W. Va.; SP—Jeanette, W. Va.; CTY—McDowell; RR—Norfolk & Western.
MS—G. B. Sadler, Anawalt, W. Va.
S of H—10 mules and 1 steam loco. Track gage 48 in.
S of M—2 shortwall machs.
PP—Power purchased, transformer 2300-250 volts A. C., 1 pump.
EMP—80. Daily tonnage 500.
SIZES SHIPT—Run of Mine.

No. 2 Mine; Drift; Pocahontas No. 3 Seam, 78 in. thick.
PO—Anawalt, W. Va.; SP—O'Toole, W. Va.; CTY—McDowell; RR—Norfolk & Western.
MS—G. B. Sadler, Anawalt, W. Va.
S of H—15 mules and 3 trolley pole type locos. Track gage 48 in.
S of M—5 shortwall machs.
PP—Power purchased, transformer 2300-250 volts A. C., rotary converters, 250 volts D. C., 3 pumps.
EMP—200. Daily tonnage 1,500.
SIZES SHIPT—Run of Mine, Slack, No. 1 Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

No. 3 Mine; Shaft; Pocahontas No. 1 Seam, 72 in. thick.
PO—Caples, W. Va.; SP—Same; CTY—McDowell; RR—Norfolk & Western.
MS—J. L. Mullen, Caples, W. Va.
SM—C. S. Neel, Caples, W. Va.
S of H—Mules, 4 trolley pole type and 5 storage battery locos. Track gage 48 in.
S of M—6 shortwall machs.
PP—Power purchased, Transformer 2300-250 volts A. C., rotary converters, 250 volts D. C., 7 pumps.
EMP—250. Daily tonnage 1,500.
SIZES SHIPT—Run of Mine, Slack, No. 1 Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

No. 4 Mine; Drift; Pocahontas No. 6 Seam, 42 in. thick.
PO—Hemphill, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
MS—R. L. Lee, Hemphill, W. Va.
SM—T. N. Altzer, Hemphill, W. Va.
S of H—Mules and 2 storage battery locos. Track gage 48 in.
S of M—Hand.
PP—Power purchased, Transformer 2300-250 volts A. C., 2 pumps.
EMP—80. Last years tonnage 500.
SIZES SHIPT—Run of Mine.

No. 5 Mine; Drift; Pocahontas No. 6 Seam, 42 in. thick.
PO—Caples, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
MS—J. L. Mullen, Caples, W. Va.
SM—C. S. Neel, Caples, W. Va.
S of H—Mules and 1 trolley pole type loco. Track gage 48 in.
S of M—1 shortwall machs.
PP—Power purchased, Transformer 2300-250 volts A. C., 2 pumps.
EMP—80. Daily tonnage 500.
SIZES SHIPT—Run of Mine.

CENTURY COAL CO. OF WEST VIRGINIA
General Office, 10 South St., Baltimore, Md.
PR—John K. Shaw, Baltimore, Md.
VP—W. L. Cooney, 10 South St., Baltimore, Md.
TR—W. J. McBridge, Baltimore, Md.
GM—Boat, Baltimore, Md.
SUPT—John Phillips, Century, W. Va.
EM—F. A. Green, Century, W. Va.
SCO—Address the Company, Buyer, L. F. Shall, Century, W. Va.

Century No. 1 and 2 Mines; Shaft and Drift; Red Stone Seam, 66 in. thick.
PO—Century, W. Va.; SP—Same; CTY—Barbour; RR—B. & O., Century Branch.
S of H—6 elec. locos and mules. Track gage 44 in.
S of M—Pick and 22 mining machs.
PP—Power purchased, Transformer 2100-275 volts A. C., 5 fire tube boilers, 150 H. P. each.
EMP—100. Last years tonnage 1,06,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Screens.

CHAFIN JONES-HEATHERMAN COAL CO.

General Office, Omar, W. Va.
 VP—W. T. Jones, Omar, W. Va.
 TR—K. J. Heatherman, Omar, W. Va.
 GM—K. J. Heatherman, Omar, W. Va.
 GS—R. J. Heatherman, Omar, W. Va.
 PA—K. J. Heatherman, Omar, W. Va.
 EM—K. J. Heatherman, Omar, W. Va.
 CT—J. B. McKelvey, Logan, W. Va.

Notes: In Heatherman Mine; Drift; 60 in. thick.
 PO—Buck Creek, W. Va.; SP—Same, Monongalia; CTY—Logan; RR—C. & O.

S of H—Electric loco. Track gage 48 in. S of M—Elec. punchers and overcut mach.
 PP—Power purchased. Transformer 6600-250 volts A. C., rotary converter, 250 volts D. C.

EMP—40.
 SIZES SHIPT—Run of Mine. Slack, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Loading Rooms.

CHAMPION COLLIERIES CO., THE

General Office, 1106 Bessmer Bldg., Pittsburgh, Pa.

PR—Geo. D. Rowland, Pittsburgh, Pa.
 VP—D. J. Carter, Wheeling, W. Va.
 TR—R. S. Price, Pittsburgh, Pa.
 GM—Geo. D. Rowland, Pittsburgh, Pa.
 PA—Geo. D. Rowland, Pittsburgh, Pa.
 EM—W. J. Denman, Lost Creek, W. Va.
 BE—Walter Withers, Charleston, W. Va.

SA—Lake Erie Coal Co., Pittsburgh, Pa.

Carter Mine; Drift; Pittsburgh & Redstone Seams, 72 in. thick.
 PO—Lost Creek, W. Va.; SP—Clarksburg, W. Va.; CTY—Harrison; RR—B. & O.

MS—R. E. Garrett, Lost Creek, W. Va. S of H—Mules. Track gage 42 in. S of M—2 shortwall and 1 overhead cut-ter machs.

PP—Power purchased.
 EMP—100.
 SIZES SHIPT—Run of Mine.

CHAPLIN COLLIERIES COMPANY.

General Office, Morgantown, W. Va.

PR—Jos. L. Keener, Morgantown, W. Va.
 TR—Percy J. Beaumont, Morgantown, W. Va.

GM—B. M. Chaplin, Morgantown, W. Va.
 GS—Jas. C. Christopher, Morgantown, W. Va.

PA—David E. Adams, Morgantown, W. Va.

EM—M. L. O'Neal, Morgantown, W. Va.

SA—Producers Fuel Co., Pittsburgh, Pa.

Louise and Virginia Mines; Drift; Sewickley Seam, 60 in. thick.

PO—Osage, W. Va.; SP—Randall, W. Va.; CTY—Monongalia; RR—M. & W.

MS—Jos. A. Christopher, Morgantown, W. Va.

S of H—2 trolley pole type and 6 storage battery locos. Track gage 42 in.

S of M—2 chain breast type and 4 short-wall machs.

PP—Power purchased. Transformer 2,300 to 250 volts A. C., 100 K. W. gen. unit, 250 volts D. C.

EMP—130.
 SIZES SHIPT—Run of Mine. Slack, Nut, Lump.

PREP. EQUIPT—Gravity Screens.

CHARLESTON CO-OPERATIVE COAL CO.

General Office, Box 1430 Charleston, W. Va.

PR—H. J. Ferlmer, Charleston, W. Va.
 VP—Max Moyes, Charleston, W. Va.

TR—Sol Kwass, Charleston, W. Va.
 EE—G. W. Wiley, Charleston, W. Va.

Black Hawk Mine; Drift; Winifrede Seam; 66 inches thick.

PO—Charleston, W. Va.; SP—Same; CTY—Kanawha; RR—K. & W.

S of H—Mules and trolley pole type loco. Track gage, 42 in.

S of M—2 shortwall and 1 chain breast mach.

PP—1-200 H. P. and 1-150 H. P. fire tube boiler, gen. unit, 250 volts D. C., 2 pumps.

EMP—75. Daily tonnage 250.

SIZES SHIPT—Run of Mine. Slack, Lump.

PREP. EQUIPT—Bar Screens, 33 Loading Rooms.

CHATTAROY COAL COMPANY

General Office, Hatfield, W. Va.

PR—J. J. Morrison, Lynchburg, Va.
 VP—Walker Pettijohn, Lynchburg, Va.

TR—G. E. Vaughan, Lynchburg, Va.
 GM—J. C. Baker, Hatfield, W. Va.

GS—J. C. Baker, Hatfield, W. Va.
 PA—J. C. Baker, Hatfield, W. Va.

EM—W. P. Merring, Williams, W. Va.
 EK—C. T. Sink, Hatfield, W. Va.

SCU—Address the Company, Buyer, S. S. Stepp, Hatfield, W. Va.

Mary Helen Mine; Drift; Winifrede Thacker Seam; 54 inches thick.

PO—Hatfield, W. Va.; SP—Nolan, W. Va.; CTY—Mingo; RR—N. & W.

MS—C. T. Sink, Hatfield, W. Va.
 S of H—Electric. Track gage 48 inches.
 S of M—Shortwall machs.
 PP—Power purchased. 2-100 K. W. M. G. Sets, 250 volts D. C.

EMP—90. Last fiscal year output, 75,000 tons.

SIZES SHIPT—Run of Mine. Slack, Pea Nut, Egg, Lump, Block.

PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms, Washeries.

CHEAT CANYON COAL COMPANY.

PR—W. G. Frankelberger, Morgantown, W. Va.

TR—Angeline Pollock, Morgantown, W. Va.

GM—Robert H. Pollock, Sr., Morgantown, W. Va.

GS—Robert H. Pollock, Sr., Morgantown, W. Va.

PA—Robert H. Pollock, Sr., Morgantown, W. Va.

EM—Baratell & Morris, Morgantown, W. Va.

Fife Mine; Drift; Pittsburgh Seam, 102 in. thick.

PO—Morgantown, W. Va. SP—Same. CTY—Monongalia. RR—B. & O. M. R.

MS—Robert H. Pollock, Jr., Morgantown, W. Va.

S of H—Mules.
 S of M—Hand.

SIZES SHIPT—Run of Mine.
 Old information.

CHEAT RIVER COAL CO.

General Office, Kingwood, W. Va.

PR—C. C. Pierce, Kingwood, W. Va.
 GM—I. B. Bowermaster, Kingwood, W. Va.

SCU—Trowbridge Supply Co. Buyer, Geo. Whetsell, Kingwood, W. Va.

Trowbridge Mine; Drift; Bakerstown Seam, 36 in. thick.

PO—Kingwood, W. Va.; SP—Trowbridge, W. Va.; CTY—Preston; RR—M. & K.

S of H—Mules. Track gage 42 in.

S of M—Hand.

SIZES SHIPT—Run of Mine.
 EMP—18.

CHEAT MOUNTAIN COAL CO.

General Office, Kingwood, W. Va.

Cheat Mountain Mine.
 PO—Kingwood, W. Va.; CTY—Preston; RR—W. Va. Northern.

No report.

CHEAT ROAD COAL CO.

Morgantown, W. Va.

Cheat Road Mine; CTY—Monongalia.
 No report.

CHESAPEAKE COAL COMPANY

General Office, Bellaire, O.

PR—T. H. Johnson, Bellaire, O.
 VP—John Crook, Fairmont, W. Va.

TR—C. H. Eberts, Warwood, W. Va.
 GM—T. H. Johnson, Bellaire, O.

PA—T. H. Johnson, Bellaire, O.
 EM—D. Fred Talbot, Fairmont, W. Va.

SA—Wholesale Coal Co., Pittsburgh, Pa.

Chesapeake Mine; Slope; Sewickley Seam, 72-80 in. thick.

PO—Barracksville, W. Va.; SP—Same; CTY—Marion; RR—B. & O.

MS—John Crook, Fairmont, W. Va.

S of H—Mules, 2 trolley pole type locos, elevating conveyor. Track gage 42 in.

S of M—3 shortwall machs.

PP—Power purchased. Transformers 2200 volts A. C., M. G. Set 250 volts D. C., 2 pumps.

EMP—50. Daily tonnage 500.

SIZES SHIPT—Run of Mine. Slack, Lump.

CHESAPEAKE MINING COMPANY.

PR—J. L. Dickinson, Charleston, W. Va.

TR—J. L. Dickinson, Charleston, W. Va.

GM—J. H. Fletcher, Quincy, W. Va.

GS—Jas. Hummings, Handley, W. Va.

PA—H. H. Fletcher, Quincy, W. Va.

EM—J. H. Jackson Eng. Co., Montgomery, W. Va.

SCU—Address the Company, Buyer, H. B. Young, Quincy, W. Va.

SA—Dickinson Fuel Co., Charleston, W. Va.

Chesapeake Mine; Drift; Kanawha Seam, 54 in. thick.

PO—Handley, W. Va.; SP—Same; CTY—Kanawha; RR—C. & O., Kan. River.

S of H—Mules, rope and trolley pole type locos. Track gage, 42 in.

S of M—Hand.

PP—Power purchased. transformer 2300 volts A. C., rotary converters, 250 volts D. C., 1-200 K. W. M. G. Set.

EMP—100. Last fiscal year output, 75,000 tons.

SIZES SHIPT—Egg, Lump, Block.

PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

CHILTON EAGLE COAL CO.

Logan, W. Va.

Chilton Eagle Mine; CTY—Logan.

No report.

CHITNUM COAL COMPANY

PR—O. S. Chittum, Morgantown, W. Va.

GM—O. S. Chittum, Morgantown, W. Va.

PA—O. S. Chittum, Morgantown, W. Va.

EM—Baratell Bros., Morgantown, W. Va.

McBee Mine; Shaft; Pittsburgh Seam, 84 inches thick.

PO—Morgantown, W. Va.; SP—Same; CTY—Monongalia; RR—M. & K.

MS—L. S. Walker, Morgantown, W. Va.

S of H—Mules. Track gage 36 inches.

S of M—Hand.

PP—Power purchased. Transformer 6,000 to 250 volts D. C.

EMP—25. Last years tonnage 35,000.

SIZES SHIPT—Run of Mine.

CHRISTIAN COAL COMPANY.

General Office, War, W. Va.

PR—A. C. Christian, Raredon, O.

VP—W. A. Jamison, Bramwell, W. Va.

TR—O. E. Linkous, War, W. Va.

GM—O. E. Linkous, War, W. Va.

GS—O. E. Linkous, War, W. Va.

PA—O. E. Linkous, War, W. Va.

EM—Tony Pinkard, Gerwind, W. Va.

Sales Agency, Wm. C. Atwater & Co., Bluefield, W. Va.

Christian Mine; Drift; War Creek Seam, 39 in. thick.

PO—War, W. Va. SP—Same. CTY—McDowell. RR—N. & W., Dry Fork Br.

S of H—Mules. Track gage 48 in.

S of M—Hand.

EMP—20.
 SIZES SHIPT—Run of Mine.

CHRISTIAN COLLIERY CO.

General Office, P. O. Box 1582, Milwaukee, Wis.

GM—D. R. Phillips, Huntington, W. Va.

GS—Lew. Hoach, Mahan, W. Va.

PA—J. P. McGowan, Milwaukee, Wis.

SCU—Mahan Commissary, Buyer, J. B. Bailey, Huntington, W. Va.

Christian Mine No. 1; Drift; Big Eagle Seam 48 to 72 in. thick.

PO—Mahan, W. Va.; SP—Same, CTY—Fayette. RR—C. & O., Palot Creek Branch.

SM—M. F. Forgey, Mahan, W. Va.

S of H—8 elec. locos. Track gage 44 in.

S of M—2 return tubular boilers, total 300 H. P., 1 gen. unit, 250 volts D. C., 4 pumps.

EMP—175. Daily output, 900 tons.

SIZES SHIPT—Run of Mine.

CHRISTINIA COAL COMPANY

General Office, 1124 True St., Toledo, O.

PR—E. Fellabaum, Toledo, O.

VP—Clyde Fellabaum, Toledo, O.

TR—Edith Fellabaum, Toledo, O.

GM—C. N. Dewitt, 1411 Third Ave., Charleston, W. Va.

GS—A. W. Dewitt, Bickmore, W. Va.

EM—A. W. Dewitt, Bickmore, W. Va.

SCU—J. H. Osborne & Co., Store Mgr., J. H. Osborne, Bickmore, W. Va.

SA—E. Fellabaum & Co., Toledo, O.

Christiana No. 2 Mine; Drift; Coalburgh Seam; 56 inches thick.

PO—Bickmore, W. Va.; SP—Same; CTY—Clay; RR—B. & O.

S of H—Mules. Track gage 42 inches.

S of M—1 chain breast type mach.

PP—Power purchased. Transformer 23,000 to 2,300 volts A. C., M. G. set, 250 volts D. C., 2 pumps.

EMP—18. Daily tonnage 100.

SIZES SHIPT—Run of Mine. Slack, Lump.

PREP. EQUIPT—Gravity Screens.

CITY COAL COMPANY

General Office, Mt. Hope, W. Va.

PR—L. S. Tully, Mt. Hope, W. Va.

VP—E. M. Tutwiler, McDonald, W. Va.

TR—A. H. McIntire, Mt. Hope, W. Va.

GM—A. H. McIntire, Mt. Hope, W. Va.

GS—A. L. Coleman, Beckley, W. Va.

PA—A. L. Coleman, Beckley, W. Va.

EM—Mr. Rinehart, Mt. Hope, W. Va.

EE—J. Evans, Beckley, W. Va.

SA—White Oak Coal Company, Mac-

Donald, W. Va.

City Mine; Drift; Sewell Seam, 36 to 48 in. thick.

PO—Beckley, W. Va.; SP—Same; CTY—Raleigh; RR—C. & O., Piney Br.

MS—D. J. Moore, Beckley, W. Va.

S of H—Mules and rope. Track gage, 34 in.

S of M—Hand.

PP—Power purchased, transformer, 220 to 110 volts A. C., 1 pump.

EMP—18. Daily output, 30 tons.

SIZES SHIPT—Run of Mine.
 Old information.

CLAIR COAL COMPANY

General Office, Finance Bldg., Philadel-

phia, Pa.

PR—V. H. Burtner, Osceola Mills, Pa.

VP—H. B. Burtner, Philadelphia, Pa.

TR—C. P. Burtner, Finance Bldg., Phila-

delphia, Pa.

GM—V. H. Burtner, Osceola Mills, Pa.

GS—V. H. Burtner, Osceola Mills, Pa.

PA—C. E. Conder, Philippi, W. Va.

SCU—Penn. Supply Co. Buyer, L. A. Johnson, Arden, W. Va.

SA—Burtner Coal Co., Finance Bldg., Philadelphia, Pa.

Meadowdale Mine; Drift; Upper Freeport Seam, 60 inches thick.

PO—Arden, W. Va.; SP—Meadowdale, W. Va.; CTY—Barbour; RR—B. & O.

MS—Fred L. Ritter, Maysville, W. Va.

S of H—Mules. Track gage 42 inches.

S of M—Hand.

EMP—65. Last fiscal year output, 78,000 tons.

SIZES SHIPT—Run of Mine.

NOTE—Formerly operated by the Meadowdale Coal Co.

CLARKSBURG INDUSTRIAL COAL CO.

Out of business.

CLAY COUNTY FUEL COMPANY

New Jones-Winfrede Coal Company.

CLAY GAS COAL CO., THE

General Office, Hartland, W. Va.

PR—A. P. Bennett, Philippi, W. Va.

VP—H. J. Wilcox, Philippi, W. Va.

Conlfork Map; Draft, Low Water Base

FO Sam, 54 lb (100%);
 COloro, W Va., SP, coal, W Va.,
 CTY Kanawha, RR C & O
 MS L. H. Hixley, 14 days, W. Va.
 S of H = 3 chee, focus, Track gage 12 in.
 S of M = 3 shortwall and 2 breast machines
 PP Power purchased Transformer 2500
 volts, M G S, 150 K W, 250
 volts D. C.

DATE	30. Last years tonnage 28,000
SIZES	SHIP 6 in. of 300. 2000

TABLE 1
BIOLOGICAL AND CHEMICAL DATA FROM THE 1990-1991 SURVEY

Table 1. List of 121 Subjects

PP Power purchased

PREP EQUIPT Shaker Screens, Picking
Tables

COBB, G. B., COAL CO
General Office, Landscaper, W. Va

Cobb Mine
PO—loop W Va ; CTY Jackson; RR
R & O.
No report.

COLCORD COAL COMPANY
General Office, Montcoal, W. Va.
PR. W. H. Pettus, Montcoal, W. Va.

VP—John Rutherford, Monteval, W. Va
TR—E. C. Colecord, Monteval, W. Va
GM—E. C. Colecord, Monteval, W. Va
PA—E. C. Colecord, Monteval, W. Va
EM—H. C. Colecord, Monteval, W. Va

EM—L. L. Colcord, Montreal, W. Va.
EE—J. F. Blisard, Montreal, W. Va.
SF—McClung-Morgan Stores Co. Buyer,
C. A. McClung, Montreal, W. Va.
SA—Colcord Coal Co., Kenocho National

Additional Information on Pages 1008, 1009

Montreal No. 1 Mine, Draft, Winifrede Seam, 66 m. thick.

MS—Juv. Rutherford Montreal W. Va

MS—Jno. Rutherford, Monteval, W. Va.
S of H 1 6-ton trolley pole type and
1 5-ton storage battery locom. Track
gauge 42" in.

8 of M-3 shortwall machines and 1 overhead cutter

PP—3 fire tube boilers, 150 H. P., 2—
200 K. W., gen. units, 250 volts
D. C., 2 pumps,
FMP—110, 1st stage, 162 H.P.

D. C., 2 pumps,
 EMP—110 Last years Tonnage 162,231
 SIZES SHIPT Run of Mine, Nut, Egg,
 Lamp, Block
 BULKY, LUMBER, Stacks, Scales, Buckles

Lamp, Block
PRIP Light, Shaker Screens, Pickling
Tables

Montreal No. 2 Mine; Drift; Eagle
Seam, 60 in thick
FO—Montreal, W Va., SP Same; CTY

PO—Monteal, W. Va., SP—Same; CTY—
—Raleigh; BR—C. & O.
MS—Jno. Rutherford, Monteal, W. Va
S of H—1 6 ton trolley pole type loco

EMP--30 Last years tonnage 21,619

Montreal No. 3 Mine: Drift: No. 5

Montreal No. 3 Mine; Drift; No. 5
Block Seam, 84 in. thick
Pt—Montreal, W. Va.; SP—Same; UTY
—Raleigh; RR—C. & O.

MS—Jno. Rutherford, Montreal, W. Va.
S of H—2 6 ton trolley pole type locus
S of M—1 shortleaf, much

S of H — 2 6 ton trolley pole type locus
S of M — 1 shortwall mach.
PP — Power from Nu 1 mine.
EMP — 30 Last years tonnage 25,560.
STATUS — SHIPPED. Port of Moss, Slack, Not

EMP 30 Last years Tonnage 25,560.
SIZES SHIPP--Run of Mine, Slack, Nut,
Egg, Lump, Block
PRIP Tol DPT--Shaker Screens, Pickling
w/ HCL

Mill Hollow Mine; Drift; Eagle Seam,

Mill Hollow Mine; Drift; Eagle Seam,
6½ inches thick
PO--Montreal, W Va; SP--Same; CTY
B. Leigh; RR C. & O.

S of H 1 6 ton truck, pole type loco.
Track gage 42 inches.
S of M 1 shortwall mach.

8 of M-1 shortwall machine.
PP Power from No. 1 Mine.
EMP '32 Last Years tonnage 15,619
SIZES SHIP: Run of Mine.

COLEMAN COAL CO.
General Office: Pratt, W. Va.

General Office, Pratt, W. Va.
PR C. B. Colman, Pratt, W. Va.
VP—I R. Melton, Charleston, W. Va.
TB E. L. Machie, Hugheston, W. Va.

6S- I J. Snare, Ward, W. Va.

(Continued on Next Page)

COAL CATALOG

Coleman Coal Co.—Cont.

Colman Mine, Drift, 100 ft. Grove Seam, 30 in. thick.
 PO—Kingsdale, W. Va.; SP—Same; CTY—Kanawha, RR—K. & M.
 MS—Allen Reicher, Riverside, W. Va.
 S of H—Mules. Track gage, 32 in.
 S of M—Hand.
 EMP—14. Last years tonnage 9,000.
 SIZES SHIPT—Run of Mine.

COLONIAL OPERATING & DEVELOPMENT COMPANY

General Office, Palmer, W. Va.
 PR—W. J. Robinson, Palmer, W. Va.
 VP—H. L. Robinson, Jr., Sutton, W. Va.
 TR—J. L. Robinson, Uniontown, Pa.
 GM—W. J. Robinson, Palmer, W. Va.
 GS—W. J. Robinson, Palmer, W. Va.
 PA—W. J. Robinson, Palmer, W. Va.
 EM—H. L. Robinson, Jr., Sutton, W. Va.
 SC—Colonial Supply Co., Buyer, R. B. Lynn, Palmer, W. Va.
 SA—H. L. Berry, Masters, W. Va., and W. J. Robinson Co., Sutton, W. Va.

Bully No. 1 Mine; Drift; No. 5 Block and Kittanning Seams, 48-60 in. thick.

PO—Palmer, W. Va.; SP—Bully Junction, W. Va.; CTY—Braxton; RR—W. Va. Midland, B. & O.

S of H—Mules. Track gage 24 in.

S of M—Hand.

PP—1 pump.

EMP—25. Daily tonnage 50.

SIZES SHIPT—Run of Mine, Slack, Lump.

COLONIAL POCAHONTAS COAL CO., THE

General Office, Columbus, O.
 PR—P. W. Barwicklow, Columbus, O.
 VP—H. S. Barwicklow, Avondale, W. Va.
 TR—P. W. Barwicklow, Columbus, O.
 GM—D. B. Barwicklow, Avondale, W. Va.
 GS—D. B. Barwicklow, Avondale, W. Va.
 PA—D. B. Barwicklow, Avondale, W. Va.
 EM—J. Coleman, Iaeger, W. Va.
 SC—A. W. Clarkson, Avondale, W. Va.
 SA—Address the Company, Avondale, W. Va.
 SA—Colonial Coal & Supply Co., Columbus, O.

Colonial Pocahontas Mine; Drift; Red Ash

Seam, 30 in. thick.

PO—Avondale, W. Va.; SP—Ritter, W. Va.; CTY—McDowell; RR—N. & W.

MS—A. W. Clarkson, Avondale, W. Va.

SM—L. T. Myers, Avondale, W. Va.

S of H—2 elec. motor battery, 1 gasoline loco. Track gage 48 in.

S of M—2 shortwall machs.

PP—1—80 H. P. water tube boiler, 1—75 K. W. gen. unit, 250 volts D. C.

3 pumps.

EMP—50. Last years tonnage 30,000.

SIZES SHIPT—Run of Mine.

COLONIAL TIMBER & COAL CORP.

Out of Business.

COLUMBIA COAL CO.

General Office, 302 Kanawha Natl. Bank Bldg., Charleston, W. Va.
 PR—C. A. Smith, Charleston, O.
 VP—R. W. Condit, Spencer, O.
 TR—S. G. Smith, Columbus, O.
 GM—H. Hart Hannigan, Charleston, W. Va.
 GS—J. W. Stephens, Cinco, W. Va.
 PA—J. W. Stephens, Cinco, W. Va.
 CE—Walter Oriehton, Charleston, W. Va.
 EM—Wm. Schaefer, Charleston, W. Va.
 SC—Address the Company, Buyer, J. W. Stephens, Cinco, W. Va.
 SA—Kanawha Ohio Coal Company, Columbus, O.

Columbia Mine; Shaft; No. 2 Gas Seam, 56 in. thick.

PO—Cinco, W. Va.; SP—Frt. Dana, W. Va.; Exp. Perryville, W. Va.; CTY—Kanawha; RR—Campbell Creek.

S of H—Mules. Track gage 42 in.

S of M—1 shortwall and 1 longwall machs.

PP—2 150 H. P. water tube boilers, gen. units, 250 volts D. C., 4 pumps.

EMP—54. Last years tonnage 14,385.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.

COMMONWEALTH POWER, RY. & LIGHT COMPANY

TR—E. J. King, Huntington, W. Va.
 GS—A. E. Morgan, Switzer, W. Va.
 SC—Address the Company, Buyer, G. S. Murray, Huntington, W. Va.

Switzer Nos. 1 and 2 Mines; Drift; Cedar

Grove Seam, 81 in. thick.

PO—Switzer, W. Va. SP—Same. CTY—Logan. RR—C. & O., G. V. Div.

S of H—Mules and trolley pole type loco. Track gage, 48 in.

S of M—4 longwall machs.

PP—Power purchased, transformer 33-

000-2300 volts A. C., rotary converters, 250 volts D. C.

EMP—80. Last fiscal year output 160,000 tons.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Shaker Screens.

Alcama Mine; Drift.

PO—Switzer, W. Va.; SP—Same; CTY—Logan, RR—C. & O.

S of H—Mules and trolley pole type loco.

Track gage, 48 in.

S of M—1 shortwall mach.

PP—Power purchased, transformer 33-

000-2300 volts A. C., rotary converters, 250 volts D. C.

Last years tonnage 37,000.

SIZES SHIPT—Run of Mine.

COMMUNITY COAL CO. (THE).

Now Southern Coal Company.

CONNELLSVILLE BASIN COKE CO.

General Office, Harrisburg, Pa.

PR—Francis J. Hall, Harrisburg, Pa.

TR—L. D. Perry.

CS—James K. Sloan, Morgantown, W. Va.

PA—W. H. Driekwater, Harrisburg, Pa.

SC—Deekers Creek Supply Co., Rock Forge, W. Va.

SA—Harrisburg Pennsylvania Company, Harrisburg, Pa.

Rock Forge 1, 2, 3 Mine; 2 Drifts, 1

share; Freeport Seam, 53 in. thick.

PO—Morgantown, W. Va.; SP—Rock

Forge, W. Va.; CTY—Monongalia, RR

—M. & K.

SM—N. P. Weaver, Morgantown, W. Va.

S of H—Mules and gathering loco. Track

gage 44 in.

S of M—11 shortwall machs.

PP—3 return tubular boilers, total 450

H. P., 1 gen. unit, 250 volts D. C., 1

air compressor and 1 pump.

EMP—150. Last years tonnage 200,000.

Coke ovens, Bee Hive, 250.

SIZES SHIPT—Run of Mine.

CONNELLSVILLE BIG VEIN COAL CO.

General Office, Point Marion, Pa.

PR—D. H. Horton, Connellsville, Pa.

TR—J. L. Kendall, Pittsburgh, Pa.

GM—D. H. Horton, Connellsville, Pa.

GS—A. C. Stagle, Point Marion, Pa.

PA—A. A. Arison, Point Marion, Pa.

Horton No. 2 Mine; Drift; Pittsburgh

Seam, 84 inches thick.

PO—Point Marion, Pa.; SP—Same; CTY

—Monongalia, W. Va.; RR—C. H. & B.

S of H—Mules. Track gage 42 inches.

S of M—Hand.

PP—2 pumps.

Last fiscal year output, 8,208 tons.

SIZES SHIPT—Run of Mine.

Norton Nos. 4 and 5 Mines; Drift;

Pittsburgh Seam, 84 in. thick.

PO—Point Marion, Pa.; SP—Same; CTY

—Monongalia, W. Va.; RR—C. H. & B.

S of H—Mules. Track gage 42 inches.

S of M—Hand.

PP—6 pumps.

Last fiscal year output, 23,432 tons.

CONNELLSVILLE BY-PRODUCT COAL CO.

General Office, Morgantown, W. Va.

PR—Jas. A. Paisly, Cleveland, O.

TR—F. W. Eriser, Cleveland, O.

GM—Stephen Arkwright, Fairmont, W. Va.

GS—Jas. Crockett, Morgantown, W. Va.

PA—Stephen Arkwright, Fairmont, W. Va.

CE—Loran H. Meredith, Morgantown, W. Va.

EM—L. S. Meredith, Morgantown, W. Va.

SA—Valley Camp Coal Co., 319 Kirby

Bldg., Cleveland, O.

Connellsville No. 1 Mine; Slope; Pitts-

burgh Seam, 96 inches thick.

PO—Barker, W. Va.; SP—Same; CTY—

Monongalia; RR—Monongalia.

S of H—Elec. locos. Track gage 44 in.

S of M—Shortwall mach.

PP—Power purchased, Transformer 2200-

250 volts A. C. G. n. units, 150

K. W. M. G. Set, 250 volts, D. C.

EMP—25. Daily tonnage 150.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Bar Screens, Picking

Tables, Loading Rooms.

CONNELLSVILLE-FAIRMONT COAL CO.

General Office, Connellsville, Pa.

PR—K. K. Kramer, Connellsville, Pa.

TR—J. M. Greer, " "

GM—K. K. Kramer, " "

GS—C. E. Burke, Worthington, W. Va.

PA—K. K. Kramer, Connellsville, Pa.

EM—J. H. Henshaw, Connellsville, Pa.

SA—Iron Trade Products Co., Pittsburgh,

Pa.

Connellsville-Fairmont Mine; Drift; Se-

rickley Seam, 78 in. thick.

PO—Fairmont, W. Va.; SP—Worthing-

ton, W. Va.; CTY—Marion; RR—

R. & O., Annabell Br.

S of H—1 elec. loco.

S of M—1 chain breast and 1 shortwall

mach.

SIZES SHIPT—Run of Mine, Slack, Lump.

CONNELLSVILLE HY-GRADE COAL CO.

General Office, Connellsville, Pa.

PR—Charles Wilson, Connellsville, Pa.

TR—C. W. Downs, Connellsville, Pa.

GM—C. W. Downs, Connellsville, Pa.

GS—C. W. Downs, Connellsville, Pa.

PA—C. W. Downs, Connellsville, Pa.

CE—Hornor Bros., Clarksburg, W. Va.

EM—Harry Street, Clarksburg, W. Va.

SA—C. W. Downs, Connellsville, Pa.

Hygrade Mine; Drift; Redstone and Pitts-

burgh Seams; 66 to 84 inches thick.

PO—McWhorter, W. Va.; SP—Jaune Lew,

W. Va.; CTY—Harrison; RR—B. & O.

MS—W. W. Morris, McWhorter, W. Va.

S of H—Mules. Track gage 42 inches.

S of M—Hand.

PP—Power purchased, Transformer 22,-

000 to 250 volts A. C., 1 pump.

EMP—40. Daily tonnage 300.

SIZES SHIPT—Run of Mine, Slack, Lump.

CONSOLIDATED BY-PRODUCTS COAL CO., INC.

Eagle, W. Va.

Edgewater Mine; CTY—Fayette.

No report.

CONSOLIDATED FUEL COMPANY

General Office, 1203 Chamber of Com-

merce Bldg., Pittsburgh, Pa.

PR—J. J. Jenkins, Pittsburgh, Pa.

VP—J. E. Stewart, Pittsburgh, Pa.

TR—S. Jones, Pittsburgh, Pa.

GM—J. E. Stewart, Pittsburgh, Pa.

GS—H. H. Kallaway, Pittsburgh, Pa.

PA—N. A. Barnhart, Pittsburgh, Pa.

CE—M. D. Gibson, Pittsburgh, Pa.

SC—Four States Supply Company, Buyer,

J. Lloyd Grimm, Pittsburgh, Pa.

SA—Bertha Coal Co., Pittsburgh, Pa.

Francis No. 1 Mine; Shaft; Pittsburgh

Seam, 66 in. thick.

PO—Capina, W. Va.; SP—Cresaps, W.

Va.; CTY—Marshall; RR—B. & O.

MS—Thos. J. Gleason, Capina, W. Va.

SM—S. F. Miller, Capina, W. Va.

S of H—Storage battery loco. Track gage

42 in.

S of M—Shortwall machs.

PP—2 water tube boilers, 440 H. P.,

gen. units, 250 volts D. C., 3

pumps.

EMP—75.

SIZES SHIPT—Run of Mine, Slack, Egg,

Lump, Block.

PREP. EQUIPT—Shaker Screens, Picking

Tables, Loading Rooms.

CONSOLIDATION COAL COMPANY

General Office, Munson Bldg., 67 Wall

St., New York, N. Y.

100 Mines in Maryland, West Virginia,

Pennsylvania and Kentucky.

PR—C. W. Watson, New York, N. Y.

ASST. TO PR—Brooks Fleming, Jr., Fair-

mont, W. Va.

VP—S. D. Camden, New York, N. Y.

VP—Arthur Hale, Continental Bldg.,

Baltimore, Md.

VP (Operating)—F. R. Lyon, Fairmont,

W. Va.

VP (Transportation)—W. L. Andrews,

Continental Bldg., Baltimore, Md.

VP (Eastern Sales)—F. W. Wilshire,

New York, N. Y.

VP (Western Sales)—E. M. Mancourt,

Home Bank Bldg., Detroit, Mich.

GEN. AUDITOR—A. K. Bowles, New York,

N. Y.

ASST. GEN. AUDITOR—H. H. Snoderly,

New York, N. Y.

TR—S. L. Watson, Fairmont, W. Va.

ASST. TR—T. K. Stuart, Baltimore, Md.

ASST. TR—Walter Miller, Fairmont, W.

Va.

ASST. TR—D. P. Carey, New York, N. Y.

SECY—T. K. Stuart, Baltimore, Md.

ASST. SECY & ASST. TR—H. H. War-

field, New York, N. Y.

REAL ESTATE AGENT—C. H. Bradfield,

New York, N. Y.

PA (General)—A. T. Watson, Fairmont,

Consolidation Coal Company—Cont.

MS—Dana I. Davis, Middleton, W. Va.
SM—J. M. Weekly, Middleton, W. Va.
S of H—Mules and 2 electric locos. Track gauge, 42 in.
S of M—Hand and 9 elec. machs.
PP—1 150 K. W. rotary converter, 3 phase, 60 cycles, 2 pumps. Power from Central Station.
EMP—143. Last years tonnage 107,569.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Screens.

Consolidation No. 47 Mine; Drift; Pittsburg Seam, 74 to 98 in. thick.
PO—Middleton, W. Va.; SP—Consolidation No. 47, W. Va.; CTY—Marion; RR—B. & O.

MS—Dana I. Davis, Middleton, W. Va.
SM—J. M. Weekly, Middleton, W. Va.
S of H—Mules and 2 elec. locos. Track gauge 44 inches.

S of M—Hand and 9 electric machs.
PP—2 return tubular boilers, total 200 H. P., 2—150 K. W. rotary converters, 250 volts D. C., 6 phase, 60 cycles, 1 pump. Power from central station.
EMP—103. Last years tonnage 51,250.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Screens.

Consolidation No. 28 Mine.
Consolidation No. 67 Mine.
Not operating June 1, 1921.

Consolidation No. 84 Mine; Slope; Pittsburg Seam, 84 to 90 in. thick.
PO—Hutchinson, W. Va.; SP—Consolidation No. 84, W. Va.; CTY—Marion; RR—B. & O.

GM—H. P. Pigott, Hutchinson, W. Va.
MS—L. M. Murray, Hutchinson, W. Va.
S of H—Mules and 2 elec. locos. Track gauge, 42 inches.

S of M—Hand and 10 electric machs.
PP—2 return tubular boilers, total 200 H. P., 2—150 K. W. rotary, 3 phase, 60 cycles, 250 volts D. C., 2 pumps. Power from Central Station.
EMP—181. Last years tonnage 161,251.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Screens.

Consolidation No. 49 Mine;
Not operating June 1, 1921.

Consolidation No. 40 Mine; Drift; Pittsburg Seam, 89 to 102 in. thick.
PO—Viropia, W. Va.; SP—Consolidation No. 40, W. Va.; CTY—Harrison; RR—B. & O.
MS—C. H. Higginbotham, Viropia, W. Va.
SM—W. O. Rice.
S of H—Mules and 2 Elec. locos; track gauge 42 in.

S of M—Hand and 12 elec. machs.
PP—1 150 K. W. rotary converter, 3 phase, 60 cycles, 250 volts D. C., power from central plant.
EMP—110. Last years tonnage 135,332.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Screens.

Consolidation No. 32 Mine; Drift; Pittsburg Seam, 72 to 101 in. thick.
PO—Owings, W. Va.; SP—Consolidation No. 32, W. Va.; CTY—Harrison; RR—B. & O.
MS—E. B. Courtney, Owings, W. Va.
SM—J. D. Warfield, Owings, W. Va.
S of M—Hand and 11 electric machs.

PP—2 return tubular boilers, total 200 H. P., 2—150 K. W. rotaries 3 phase, 60 cycles, 250 volts D. C., 2 pumps. Power from central plant.
EMP—191. Last years tonnage 183,083.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Screens.

Consolidation No. 66 Mine; Drift; Pittsburg Seam, 92 to 103 in. thick.
PO—Shinnston, W. Va.; SP—Consolidation No. 66, W. Va.; CTY—Harrison; RR—B. & O.

MS—C. H. Higginbotham, Shinnston, W. Va.
SM—A. D. Siskafouse, Shinnston, W. Va.
S of H—Mules and 1 elec. loco. Track gauge 42 in.
S of M—Hand and 2 elec. machs.
PP—2 return tubular boilers, total 200 H. P., 1—100 K. W., 250 volts D. C., 2 pumps.
EMP—76. Last years tonnage 48,841.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Screens.

Consolidation No. 12 Mine;
Not operating June 1, 1921.

Consolidation No. 51 Mine; Drift; Pittsburg Seam, 93 to 100 in. thick.
PO—Shinnston, W. Va.; SP—Consolidation No. 51, W. Va.; CTY—Harrison; RR—B. & O.

MS—C. H. Higginbotham, Shinnston, W. Va.
SM—M. W. Hall,

S of H—Mules, rope and 2 elec. loco. Track gauge 42 in.
S of M—Hand and 9 elec. machs.
PP—2 return tubular boilers, total 120 H. P., 2—150 K. W. rotary converters, 250 volts D. C., 1 pump. Power from mine 65.
EMP—122. Last years tonnage 82,388.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Screens.

Consolidation No. 65 Mine;
Not operating June 1, 1921.

Consolidation No. 21 Mine; Drift; Pittsburg Seam, 87 to 108 in. thick.
PO—Gypsy, W. Va.; SP—Consolidation No. 21, W. Va.; CTY—Harrison; RR—B. & O.

MS—J. H. Nazum, Gypsy, W. Va.
SM—A. T. Collins, Gypsy, W. Va.
S of H—Mules, rope and 2 Elec. loco; track gauge 48 in.

S of M—Hand and 11 elec. machs.
PP—6 return tubular boilers, total 750 H. P., 2—150 K. W. generators, 250 volts D. C., 2 pumps.
EMP—217. Last years tonnage 414,039.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Screens.

Consolidation No. 55 Mine; Drift; Pittsburg Seam, 96 to 101 in. thick.
PO—Meadowbrook, W. Va.; SP—Consolidation No. 55, W. Va.; CTY—Harrison; RR—B. & O.

MS—T. H. McDonald, Meadow Brook, W. Va.
SM—J. Earl Hinstead, Meadow Brook, W. Va.

S of H—Mules and 2 electric locos. Track gauge, 42 in.

S of M—Hand and 5 elec. machs.
PP—2 return tubular boilers, total 300 H. P., 1—150 K. W. gen. units, 250 volts D. C.
EMP—111. Last years tonnage 101,178.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Screens.

Consolidation No. 27 Mine; Drift; Pittsburg Seam, 87 to 103 in. thick.
PO—Glen Falls, W. Va.; SP—Consolidation No. 27, W. Va.; CTY—Harrison; RR—B. & O.

MS—Henry O'Neill, Glen Falls, W. Va.
SM—John King, Glen Falls, W. Va.
S of H—Mules and 1 Elec. loco; track gauge 42 in.

S of M—Hand and 5 elec. machs.
PP—2 150 K. W. Rotaries 6 phase, 60 cycles, 250 volts D. C.
EMP—58. Last years tonnage 43,505.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Screens.

Consolidation No. 48 Mine; Drift; Pittsburg Seam, 88 to 100 in. thick.
PO—Glen Falls, W. Va.; SP—Consolidation No. 48, W. Va.; CTY—Harrison; RR—B. & O.

MS—Henry O'Neill, Glen Falls, W. Va.
SM—John King, Glen Falls, W. Va.
S of H—Mules and 1 Elec. loco; track gauge, 42 in.

S of M—Hand and 5 elec. machs.
PP—250 volts D. C. Power from Central Power Plant.
EMP—50. Last years tonnage 45,562.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Screens.

Consolidation No. 25 Mine; Slope; Pittsburg Seam, 81 to 120 in. thick.
PO—Box 616, Clarksburg, W. Va.; SP—Consolidation No. 25, W. Va.; CTY—Harrison; RR—B. & O.

MS—B. G. Ash, Box 616, Clarksburg, W. Va.
SM—J. S. Price, Box 616, Clarksburg, W. Va.

PP—2 Hart, 1 Jeffery, and 1 Erie City return tubular boilers, total 175 H. P., 250 volts D. C., 1 pump. Central Station.
EMP—217. Last years tonnage 194,611.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Screens.

Consolidation No. 29 Mine; Drift; Pittsburg Seam, 91 to 104 in. thick.
PO—R. F. D. No. 3, Clarksburg, W. Va.; SP—Consolidation No. 29, W. Va.; CTY—Harrison; RR—B. & O.

MS—T. F. D. McGee, Jr., R. F. D. No. 3, Clarksburg, W. Va.
SM—H. R. Sayre, R. F. D. 3, Clarksburg, W. Va.

S of H—1 elec. loco. Track gauge, 42 in.
S of M—Hand and 7 elec. machs.
PP—1 150 K. W. rotary, 6 phase, 60 cycles, 250 volts D. C., 2 pumps. Power from Central Station.
EMP—129. Last years tonnage 102,280.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Screens.

Consolidation No. 52 Mine;
Leased to Elkhorn Coal Corporation.

Consolidation No. 41 Mine;
Consolidation No. 64 Mine;
Leased to Elkhorn Coal Corporation

Consolidation No. 37 Mine; Drift; Pittsburg Seam, 81 to 102 in. thick.
PO—Berryburg, W. Va.; SP—Consolidation No. 37, W. Va.; CTY—Harrison; RR—B. & O.

MS—R. H. Kann, Berryburg, W. Va.
SM—W. F. Reger, Berryburg, W. Va.
S of H—Mules and 1 Elec. loco; track gauge 42 in.

S of M—Hand and 11 elec. machs.
PP—3 return tubular boilers, total 900 H. P., 2—150 K. W. generators, 250 volts D. C.
EMP—107. Last years tonnage 112,846.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Screens.

Consolidation No. 50 Mine; Drift; Pittsburg Seam, 75 to 100 in. thick.
PO—Academy, W. Va.; SP—Consolidation No. 50, W. Va.; CTY—Harrison; RR—B. & O.

MS—R. E. Alexander, Adamston, W. Va.
SM—G. H. Lyon, Adamston, W. Va.
S of H—Mules and 1 elec. loco. Track gauge 44 in.

S of M—Hand, 2 elec. machs.
PP—3 return tubular boilers, total 450 H. P., 2—100 K. W. generator, 250 volts D. C., 2 pumps.
EMP—41. Last years tonnage 32,002.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Screens.

Consolidation No. 62 Mine; Drift; Pittsburg Seam, 84 to 88 in. thick.
PO—Adamston, W. Va.; SP—Consolidation No. 62, W. Va.; CTY—Harrison; RR—B. & O.

MS—R. E. Alexander, Adamston, W. Va.
SM—G. H. Lyon, Adamston, W. Va.
S of H—Mules and gravity; track gauge 44 in.

S of M—Hand and 2 elec. machs.
PP—250 volts D. C. Power from Central Power Plant.
EMP—12. Last years tonnage 25,835.
SIZES SHIPT—Run of Mine.

Consolidation No. 54 Mine; Drift; Pittsburg Seam, 71 to 96 in. thick.
PO—Haywood, W. Va.; SP—Consolidation No. 54, W. Va.; CTY—Harrison; RR—B. & O.

MS—P. E. Harrison, Haywood, W. Va.
SM—H. L. Nixon, Haywood, W. Va.
S of H—Mules, rope and 1 elec. loco. Track gauge 44 in.

S of M—Hand and 6 elec. machs.
PP—2 return tubular boilers, total 300 H. P., 1—100 K. W. generator, 250 volts D. C.
EMP—63. Last years tonnage 19,073.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Screens.

Consolidation No. 42 Mine;
Not operating June 1, 1921.

Consolidation No. 86 Mine; Shaft; Pittsburg Seam, 96 in. thick.
PO—Carolina, W. Va.; SP—Consolidation No. 86, W. Va.; CTY—Marion; RR—W. Md.

MS—P. H. Brooks, Carolina, W. Va.
SM—W. G. Rutledge, Carolina, W. Va.
S of H—2 elec. and 12 storage battery locos.

S of M—Hand and 14 elec. machs.
PP—3 return tubular boilers, total 300 H. P., 1—100 K. W. rotary, 3 phase, 60 cycles, 275 volts D. C., Central power plant.
EMP—235. Last years tonnage 271,304.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Screens.

Consolidation No. 87 Mine; Shaft; Pittsburg Seam, 84 in. thick.
PO—Idamay, W. Va.; SP—Consolidation No. 87, W. Va.; CTY—Marion; RR—W. Md.

MS—W. J. Wolf, Idamay, W. Va.
SM—H. J. McLain, Idamay, W. Va.
S of H—2 electric and 12 storage battery locos. Track gauge 42 in.

S of M—Hand and 15 elec. machs.
PP—3 return tubular boilers, total 300 H. P., 2—100 K. W. rotary, 3 phase, 60 cycles, 275 volts D. C.
EMP—286. Last years tonnage 248,188.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Screens.

Consolidation Nos. 88, 89 and 90 Mines; Drifts; Pittsburg Seam, 96 in. thick.

PO—Weatt, W. Va.; SP—Same; CTY—Harrison; RR—W. Md.

MS—W. D. Thomas, Weatt, W. Va.
SM—A. H. Weatt, Weatt, W. Va.

S of H—Mules and 2 elec. locos. Track gauge 42 in.

S of M—45 elec. machs.
PP—2 return tubular boilers, total 700 H. P., 2—150 K. W. rotary converter, 250 volts D. C. Power from central station.
EMP—204. Last years tonnage 291,195.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Screens.

Consolidation No. 91 Mine; Drift; Pittsburg Seam, 87 to 108 in. thick.
PO—Gypsy, W. Va.; SP—Consolidation No. 91, W. Va.; CTY—Harrison; RR—B. & O.

MS—J. H. Nazum, Gypsy, W. Va.
SM—A. T. Collins, Gypsy, W. Va.
S of H—Mules and 1 elec. loco. Track gauge, 42 in.

S of M—Hand and 3 elec. machs.
PP—Power from Mine No. 21.
EMP—67. Last years tonnage 63,291.
SIZES SHIPT—Run of Mine.

Consolidation No. 92 Mine; Drift; Pittsburg Seam, 90 to 96 in. thick.
PO—Middleton, W. Va.; SP—Consolidation No. 92, W. Va.; CTY—Marion; RR—W. Md.

MS—Dana I. Davis, Middleton, W. Va.
SM—J. M. Weekly, Middleton, W. Va.
S of H—Mules, 1 elec. loco.

S of M—Hand and 5 elec. machs.
PP—1 return tubular boiler, total 125 H. P.

EMP—60. Last years tonnage 62,196.
SIZES SHIPT—Run of Mine.

Consolidation No. 93 Mine; Drift; Pittsburg Seam, 81 to 103 in. thick.
PO—Scottdale, W. Va.; SP—Consolidation No. 93, W. Va.; CTY—Marion; RR—Monongahela.

MS—W. H. Hesse, Scottdale, W. Va.
SM—M. P. Gill, Scottdale, W. Va.
S of H—Mules and 1 elec. loco.

S of M—Hand and 2 elec. machs.
PP—1 150 K. W. rotary converter, Power from central plant.

EMP—11. Last years tonnage 36,662.
SIZES SHIPT—Run of Mine.

Consolidation No. 94 Mine; Drift; Pittsburg Seam, 75 to 100 in. thick.

PO—Adamston, W. Va.; SP—Consolidation No. 94, W. Va.; CTY—Harrison; RR—B. & O.

MS—R. E. Alexander, Adamston, W. Va.
SM—G. H. Lyon, Adamston, W. Va.
S of H—Mules, 1 elec. loco. Track gauge 44 inches.

S of M—Hand and 4 elec. machs.
PP—Power from Mine No. 50.
EMP—34. Last years tonnage 20,106.
SIZES SHIPT—Run of Mine.

Consolidation No. 57 Mine; Drift; Pittsburg Seam, 75 to 108 in. thick.
PO—Fairmont, W. Va.; SP—Consolidation No. 57, W. Va.; CTY—Marion; RR—Monongahela.

MS—J. C. Higgins, Fairmont, W. Va.
SM—C. H. Bartlett, Fairmont, W. Va.
S of H—Mules and 1 elec. loco. Track gauge 42 inches.

S of M—Hand and 1 elec. mach.
PP—1 return tubular boiler 150 H. P., 1—150 K. W. generator, 250 volts D. C.

EMP—35. Last years tonnage 48,398.
SIZES SHIPT—Run of Mine.

Consolidation No. 57 Mine; Drift; Pittsburg Seam, 75 to 108 in. thick.

PO—Fairmont, W. Va.; SP—Consolidation No. 57, W. Va.; CTY—Marion; RR—Monongahela.

MS—J. C. Higgins, Fairmont, W. Va.
SM—C. H. Bartlett, Fairmont, W. Va.
S of H—Mules and 1 elec. loco. Track gauge 42 inches.

S of M—Hand and 1 elec. mach.
PP—1 return tubular boiler 150 H. P., 1—150 K. W. generator, 250 volts D. C.

EMP—35. Last years tonnage 48,398.
SIZES SHIPT—Run of Mine.

Consolidation No. 57 Mine; Drift; Pittsburg Seam, 75 to 108 in. thick.

PO—Fairmont, W. Va.; SP—Consolidation No. 57, W. Va.; CTY—Marion; RR—Monongahela.

MS—J. C. Higgins, Fairmont, W. Va.
SM—C. H. Bartlett, Fairmont, W. Va.
S of H—Mules and 1 elec. loco. Track gauge 42 inches.

S of M—Hand and 1 elec. mach.
PP—1 return tubular boiler 150 H. P., 1—150 K. W. generator, 250 volts D. C.

EMP—35. Last years tonnage 48,398.
SIZES SHIPT—Run of Mine.

Consolidation No. 57 Mine; Drift; Pittsburg Seam, 75 to 108 in. thick.

PO—Fairmont, W. Va.; SP—Consolidation No. 57, W. Va.; CTY—Marion; RR—Monongahela.

MS—J. C. Higgins, Fairmont, W. Va.
SM—C. H. Bartlett, Fairmont, W. Va.
S of H—Mules and 1 elec. loco. Track gauge 42 inches.

S of M—Hand and 1 elec. mach.
PP—1 return tubular boiler 150 H. P., 1—150 K. W. generator, 250 volts D. C.

EMP—35. Last years tonnage 48,398.
SIZES SHIPT—Run of Mine.

Consumers Fuel Company—Cont.

MS—J. C. Edwards, Brookfield, W. Va.
 SM—J. C. Edwards, Brookfield, W. Va.
 S of H—6 mules and 6 storage battery
 locos. Track gage, 42 in.
 S of M—8 electric mining machs.
 PP—2—200 K W. M. G. Sets, and 1
 100 K W. M. G. Set
 EMP—250. Last fiscal year output,
 366,728 tons.
 SIZES SHIPT—Run of Mine, Slack, Pea,
 Nut, Egg, Lump, Block

COOK & CARTER COAL COMPANY

General Office, Terry, W. Va.
 PR—R. E. Carter, Beckley, W. Va.
 TR—W. H. Rardin, Beckley, W. Va.
 GM—F. M. Cook, Terry, W. Va.
 GS—F. M. Cook, Terry, W. Va.
 PA—F. M. Cook, Terry, W. Va.
 EM—H. F. Wilfong, Beckley, W. Va.
 SCO—Address the Company, Buyer, L. C.
 C. McHugh, Terry, W. Va.
 SA—Milwaukee Coke & Gas Co., Milwaukee, Wis.

Nos. 1 and 2 Mines; Drift; Fire Creek
 Seam, 44 in. thick.
 PO—Terry, W. Va.; SP—McCreery, W. Va.
 VA—CTY—Raleigh; RR—C. & O.
 S of H—Mules and trolley pole type locos.
 Track gage 44 in.
 S of M—Hand.
 PP—2—150 H. P. ore tube boilers,
 1—100 K W. gen. unit, 250 volts
 D. C.
 EMP—78. Daily tonnage 300.
 SIZES SHIPT—Run of Mine,
 old information

COOKSEY, J. W., COAL CO

War W. Va.
 Cooksey Mine; CTY—McDowell.
 No report

COON RUN COAL COMPANY.

Now Fairmont Mining Co.

COON SKIN COAL CO.

Dana, W. Va.
 Coonskin Mine; CTY—Kanawha
 No report

COOPER, J. M. COAL COMPANY.

General Office, Lewiston, W. Va.
 PR—J. M. Cooper, Lewiston, W. Va.
 Cooper Mine; Drift; No. 2 Gas Seam,
 72 inches thick.
 PO—Lewiston, W. Va.; SP—Winifrede
 Jer., W. Va.; CTY—Kanawha; RR—
 C. & O.
 MS—J. M. Cooper, Lewiston, W. Va.
 S of H—Mules. Track gage 40 in.
 S of M—Hand.
 SIZES SHIPT—Run of Mine.

COPEN CREEK COAL CO., TRE.

Now Copen Gas Coal Mins. Inc.

COPEN GAS COAL MINES, INC.

General Office, 1 Broadway, New York,
 N. Y.
 PR—W. H. Davidson, New York, N. Y.
 VP—W. J. Jean, New York, N. Y.
 GS—J. Clifford, Bower, W. Va.
 PA—John Clifford, Bower, W. Va.
 CE—R. H. Green, Charleston, W. Va.
 SA—W. H. Jean, New York, N. Y.
 Additional Information on Page 990
 Vanwith Mine; Drift; Pittsburgh Seam,
 84 in. thick.
 PO—Bower, W. Va.; SP—Same; CTY—
 Braxton; RR—B. & O.
 S of H—Mules, electric loco. Track gage
 36 in.
 S of M—Hand, shortwall machs.
 PP—Power purchased, 2—300 H. P.
 low tub. boilers, 250 volts D. C.,
 1 pump.
 EMP—100
 SIZES SHIPT—Run of Mine, Slack Egg,
 Lump
 PREP. EQUIPT—Shaker Screen, Picking
 Tables

CORONA COAL COMPANY

General Office, Clarksburg, W. Va.
 PR—D. B. Britt, Clarksburg, W. Va.
 VP—Geo. F. Graig, Clarksburg, W. Va.
 TR—B. R. Britt, " "
 GM—B. R. Britt, " "
 GS—J. E. Chingan, " "

Corona Mine; Pittsburgh Seam, 96 in.
 thick.
 PO—Hephzibah, W. Va.; SP—Erie, W.
 Va.; CTY—Harrison; RR—B. & O.
 S of H—Mules
 S of M—3 elec. machs.
 SIZES SHIPT—Run of Mine.

CORRADO FAIRMONT COAL CO.

General Office, Connellsville, Pa.
 PR—G. Corrado, Connellsville, Pa.
 VP—John P. Kephart, Philadelphia, Pa.
 TR—H. M. Kephart, Connellsville, Pa.
 GM—G. Corrado, Connellsville, Pa.
 GS—H. E. Cunningham, Connellsville, Pa.
 PA—F. B. Yoder, Connellsville, Pa.
 CE—W. B. Barnhart, Connellsville, Pa.
 SA—G. Corrado Coal & Coke Co., Con-
 nellsville, Pa.; G. Corrado Coal &
 Coke Co., Philadelphia, Pa.

Cunningham Mine; Drift; Pittsburgh
 Seam, 96 inches thick.
 PO—Lumberport, W. Va.; SP—Same;
 CTY—Harrison; RR—B. & O.
 S of H—Elec. locos. Track gage 44 in.
 S of M—Overcutter mach.
 PP—Power purchased
 EMP—200. Daily tonnage 1,000.
 SIZES SHIPT—Run of Mine, Slack,
 Lump.
 PREP. EQUIPT—Bar, Revolving and
 Shaker Screens

CORTRIGHT-CORNOG COLLIERIES CO.

General Office, Pennsylvania Bldg., Phila-
 delphia, Pa.
 PR—H. B. Cornog, Philadelphia, Pa.
 VP—H. K. Cortright, Philadelphia, Pa.
 TR—J. G. Eby, Portage, Pa.
 GM—H. M. Sipe, Clarksburg, W. Va.
 GS—H. M. Sipe, Clarksburg, W. Va.
 PA—H. M. Sipe, Clarksburg, W. Va.
 SA—Cortright Coal Co., Pennsylvania
 Bldg., Philadelphia, Pa.

Cortright Mine; Drift; Pittsburgh Seam,
 81 inches thick.
 PO—Box 551, Clarksburg, W. Va.; SP—
 Same; CTY—Harrison; RR—B. & O.
 S of H—Mules, 1 6-ton trolley pole loco.
 Track gage 42 inches.
 S of M—5 breast machs.
 PP—Power purchased. Transformer 22-
 000 to 2200 volts A. C., 1—150
 K W., M. G. sets, 250 volts D. C.
 EMP—80. Last years tonnage 80,000.
 SIZES SHIPT—Run of Mine, Slack, Nut,
 Lump
 PREP. EQUIPT—Gravity Screens, Loading
 Booms

COSTANZA, FRANK

General Office, 5th and Main Sts., War-
 wood, W. Va.
 OWNER—Frank Costanza, Warwood, W.
 Va.
 EM—Orion Koller, Wheeling, W. Va.

Warwood Mine; Drift; No. 8 Seam, 60
 in. thick.
 PO—Warwood, W. Va.; SP—Same; CTY—
 Ohio; RR—Penna.
 S of H—Mules. Track gage 34 in.
 S of M—17 mining machs.
 PP—1 35 H. P. boiler, 1—40 K. W.
 gen. unit, 500 volts D. C., 2
 pumps
 Daily tonnage 50.
 SIZES SHIPT—Run of Mine, Slack,
 old information

COTTS, R. J.

General Office, Wheeling, W. Va.

Ramsey Mine; Drift; Pittsburgh No. 8
 Seam, 72 in. thick.
 PO—Wheeling, W. Va.; SP—Same; CTY—
 Marshall
 S of H—Mules. Track gage 34 in.
 S of M—Hand.
 PP—Power purchased. Transformer 4000
 to 220 volts A. C.
 Last years tonnage 44,560.
 SIZES SHIPT—Run of Mine.

COVEL SMOKELESS COAL COMPANY

PR—W. P. Tams, Jr., Tams, W. Va.
 VP—W. P. Tams, Tams, W. Va.
 TR—H. R. Tribou, Tams, W. Va.
 GM—W. P. Tams, Tams, W. Va.
 GS—Kinsley McWhorter, Covell, W. Va.
 PA—Kinsley McWhorter, Covell, W. Va.
 EM—J. T. Tobin, Covell, W. Va.
 EE—J. L. Gault, Covell, W. Va.
 SCO—Address the company, Buyer, R. W.
 Wells, Covell, W. Va.
 SA—W. P. Tams, Jr., Tams, W. Va.

Covell Nos. 1 and 2 Mine; Drift; No. 3
 Pocahontas Seam, 52 inches thick.
 PO—Covell, W. Va.; SP—Herndon, W.
 Va.; CTY—Weoming; RR—Virginian
 S of H—Trolley pole type locos. Track
 gage 44 in.
 S of M—2 overhead cutters
 PP—Power purchased. Transformer 13000-
 2200 volts A. C., relay converters,
 250 volts D. C.
 EMP—90. Daily tonnage 500.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens, Picking
 Tables.

COX, JOE, COAL CO.

General Office, 16-17 American Bldg.,
 Fairmont, W. Va.
 PR—W. D. Reed, Fairmont, W. Va.
 TR & SECY—Dora Lee Cox, Fairmont,
 W. Va.
 GM—J. B. Cox, Louisville, W. Va.
 PA—J. B. Cox, Louisville, W. Va.
 CE—S. A. Shuttlesworth, Fairmont, W. Va.

Cox Mine; Drift; Sewell Seam
 Louisville, W. Va.; SP—Same; CTY—
 Monongalia; RR—Monon.

CRAB ORCHARD FUEL COMPANY

PR—Prince F. Lilly, Lillybrook, W. Va.
 TR—Jon B. Hornbrook, Lillybrook, W. Va.
 GM—Prince F. Lilly, Lillybrook, W. Va.
 GS—Prince F. Lilly, Lillybrook, W. Va.
 PA—Prince F. Lilly, Lillybrook, W. Va.
 EM—John B. Hornbrook, Lillybrook, W.
 Va.

SCO—Address the Company, Buyer, D.
 S. Lilly, Crab Orchard, W. Va.
 SA—Raleigh Smokeless Fuel Co., Beckley,
 W. Va.

Crab Orchard Mine; Drift; Sewell Seam,
 48 in. thick.
 PO—Crab Orchard, W. Va.; SP—Mab-
 scott, W. Va.; CTY—Raleigh; RR—
 C. & O., Virginian.
 MS—C. L. Cummings, Crab Orchard, W.
 Va.
 S of H—Electric locos. Track gage 36
 inch s
 S of M—Mining machs.
 PP—Water tube boiler, 125 H. P., gen.
 units.
 EMP—50. Daily tonnage 200.
 SIZES SHIPT—Run of Mine.

CRAIG COAL MINING COMPANY

General Office, Kingwood, W. Va.
 PR—W. K. Arnett, Morgantown, W. Va.
 TR—H. G. Hodges, Morgantown, W. Va.
 GM—C. W. Craig, Kingwood, W. Va.
 PA—C. W. Craig, Kingwood, W. Va.
 EM—Barrett Bros., Morgantown, W. Va.

Howesville Mine; Drift; Upper Freeport
 Seam, 60 in. thick.
 PO—Howesville, W. Va.; SP—Same; CTY—
 Preston; RR—W. Va. Northern.
 MS—Issue Conn, Howesville, W. Va.
 S of H—Mules, rope and comp. air locos.
 Track gage 42 in.
 S of M—Comp. air punchers.
 PP—2 100 H. P. water tube boilers,
 2 pumps.
 EMP—35. Daily tonnage 200.
 SIZES SHIPT—Run of Mine.
 Note—Successors to Kingwood Coal Co.

CRAWFORD, H. M. COAL COMPANY.

General Office, Philippi, W. Va.
 PR—H. M. Crawford, Philippi, W. Va.
 VP—J. H. Robinson, Arden, W. Va.
 TR—L. Owen Smith, Philippi, W. Va.
 GM—H. M. Crawford, Philippi, W. Va.
 GS—L. Owen Smith, Philippi, W. Va.
 PA—H. M. Crawford, Philippi, W. Va.

Lucila Mine; Drift; Kittanning Seam, 72
 in. thick.
 PO—Arden, W. Va.; SP—Same; CTY—
 Barbours; RR—B. & O.
 MS—J. H. Robinson, Arden, W. Va.
 SM—L. E. Sturm, Philippi, W. Va.
 S of H—Mules. Track gage, 42 in.
 S of M—Hand.
 SIZES SHIPT—Run of Mine, Slack,
 Lump.

Black Jo Mine; Drift; Kittanning Seam,
 90 in. thick.
 PO—Belington, W. Va.; SP—Clements,
 W. Va.; CTY—Barbours; RR—
 B. & O.
 MS—E. L. Shaffer, Belington, W. Va.
 S of H—Mules and gasoline locos. Track
 gage 42 in.
 S of M—Hand.
 PP—1 pump.
 EMP—50.

CRESS COAL COMPANY

Morgantown, W. Va.

Cress Mine; CTY—Monongalia
 No report

CRITES, H. M. COAL COMPANY.

Now being operated by the Ray-Burdett
 Coal Company.

CRONIN, A. O., COAL COMPANY.

General Office, Acoville, W. Va.
 OWNER—A. D. Cronin, Acoville, W.
 Va.

Ruffe Mine; Drift; Eagle Island Creek
 Chilton Seam 48 to 72 in. thick.
 PO—Acoville, W. Va.; SP—Same; CTY—
 Logan; RR—C. & O.
 MS—Thos Quinn, Acoville, W. Va.
 SM—M. S. Herman, Acoville, W. Va.
 S of H—Trolley pole type, storage bat-
 tery and combination locos. Track
 gage 44 in.

S of M—3 shortwall machs.
 PP—Power purchased. Transformer 44000
 to 2200 volts gen. units, 200 K. W.,
 250 volts D. C., 3 pumps
 EMP—125. Last years tonnage 100,000.
 SIZES SHIPT—Run of Mine.
 NOTE—Formerly operated by the Carhon
 Hill Collieries Company

Franklin Mine; Drift; No. 5 Block Seam,
 51 in. thick.
 PO—Altman, W. Va.; SP—Same; CTY—
 Boone; RR—C. & O.
 MS—R. S. Quinn, Altman, W. Va.
 S of H—Trolley pole type and storage
 batt ry locos. Track gage 44 in.
 S of M—1 shortwall mach.
 PP—Power purchased. Transformer 88000
 to 2200 volts gen. units, 150 K. W.,
 250 volts D. C.
 EMP—40. Last years tonnage 20,000.
 SIZES SHIPT—Run of Mine.

CROSS CREEK COAL COMPANY

General Office, Wellsburg, W. Va.
 VP—L. J. Arnold, Wellsburg, W. Va.
 VP—G. S. Irish, Follansbee, W. Va.

TR—John S. Liggett, Wellsburg, W. Va.
 GM—J. J. Arnold, Wellsburg, W. Va.
 GS—John Rue, Follansbee, W. Va.
 PA—J. J. Arnold, Wellsburg, W. Va.
 CE—C. C. Smith, Wheeling, W. Va.
 EM—Sidney Smith, Wheeling, W. Va.
 SA—J. J. Arnold, 922 Frick Bldg.,
 Pittsburgh, Pa.; Johnston Bros.,
 Wellsburg, W. Va.

Arnold No. 3 Mine; Drift; Pittsburgh
 Seam; 58 inches thick.
 PO—Wellsburg, W. Va.; SP—Same; CTY—
 Brooke; RR—Pgh. & W. Va.
 MS—G. R. Waddell, Wellsburg, W. Va.
 S of H—Elec. locos. Track gage 42
 inches.
 S of M—Elec. punchers, shortwall machs.
 PP—Power purchased. Transformer 2200
 to 220 volts A. C., M. G. Sets,
 250 volts D. C.
 EMP—35. Daily output, 150 tons.
 SIZES SHIPT—Run of Mine, Slack,
 Lump.
 PREP. EQUIPT—Bar Screens.

CROWN COAL COMPANY

General Office, Sand Run, W. Va.
 PR—A. J. Christolm, Blaine, W. Va.
 VP—G. E. Burgess, Sand Run, W. Va.
 TR—A. J. Christolm, Blaine, W. Va.
 MGR—A. J. Christolm, Blaine, W. Va.
 GS—G. E. Burgess, Sand Run, W. Va.
 PA—A. J. Christolm, Blaine, W. Va.
 EM—C. W. McCutcheon & Co., Morgan-
 town, W. Va.

Crown Mine; Drift; Upper and Lower Kit-
 tanning Seams, 54-72 in. thick.
 PO—Sand Run, W. Va.; SP—Frt., Same;
 Ex., Midvale, W. Va.; CTY—Up-
 shur; RR—B. & O.
 S of H—Mules. Track gage 42 inches.
 S of M—Hand.
 EMP—10.
 SIZES SHIPT—Run of Mine.

CROWN HILL COAL COMPANY.

General Office, Richmond, Va.
 VP—Norman Call, Richmond, Va.
 TR—D. K. Kellogg, Richmond, Va.
 GM—Norman Call, Richmond, Va.
 GS—W. A. Nugent, Crown Hill, W. Va.
 PA—C. F. McConihay, Crown Hill, W.
 Va.
 CE—C. E. Krebs, Charleston, W. Va.
 SCO—Crown Hill Mercantile Co.; Buyer,
 W. E. Wentz, Crown Hill, W. Va.

No. 8 Mine; Drift; Coalburg Seam, 60
 in. thick.
 PO—Crown Hill, W. Va.; SP—Same;
 CTY—Kanawha; RR—C. & O.
 S of H—Mules, 4 elec. locos. Track gage
 40 in.
 S of M—3 chain breast type, 5 short-
 wall machs.
 PP—Power purchased, M. G. sets, 250
 volts A. C., 4 pumps.
 EMP—175. Last years tonnage 120,000.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Bar Screens.

CROW COAL & COKE CO.

General Office, North American Bldg.,
 Philadelphia, Pa.

PR—John P. Crozer, Philadelphia, Pa.
 VP—Louis R. Page, Philadelphia, Pa.
 TR Asst—L. Rodman Page, Jr.,
 Philadelphia, Pa.

SECY—Edward C. Page, Philadelphia, Pa.

GM—John J. Lincoln, Elkhorn, W. Va.
 ASST GM—R. A. Ruff, Elkhorn, W. Va.
 GS—R. A. Ruff, Elkhorn, W. Va.
 PA—J. H. Newton, Elkhorn, W. Va.
 EM—Robert A. Nowlin, Elkhorn, W. Va.
 EE—Allen Raup, "
 SCO—Address the Company, Buyer, D.
 R. Whitaker, Elkhorn, W. Va.
 Sales Agency, Crozer—Pocahontas Co.,
 North American Bldg., Phila., Pa.

Nos. 1 and 2 Mines; Drift; No. 3,
 Pocahontas Seam, 90 to 114 in.
 thick.

PO—Elkhorn, W. Va.; SP—Same.
 CTY—McDowell; RR—N. & W.,
 Main Line
 S of H—Mules, 6 elec., 6 storage battery
 locos. Track gage 44 in.
 S of M—6 elec. machs. and hand.
 PP—6 Return tubular boilers, tota-
 900 H. P., 3 gen units 500
 volts D. C., 3 pumps delivering
 water to surface
 EMP—300. Last years tonnage 387,000.
 SIZES SHIPT—Run of Mine, Slack, Pea,
 Nut, Egg, Lump.

CRYSTAL BLOCK COAL AND COKE CO

General Office, Welch, W. Va.
 PR—L. E. Woods, Welch, W. Va.
 VP—W. L. O'Toole, Welch, W. Va.
 TR—J. H. Barker, Welch, W. Va.
 GS—J. M. Tulley, Sprigg, W. Va.
 PA—H. A. Perrine, Welch, W. Va.
 SCO—Crystal Supply Co., Buyer, R.
 M. McNeer, Sprigg, W. Va.
 SA—Central Pocahontas Coal Co., Welch
 W. Va., New York, N. Y., Cincin-
 nati, O., Norfolk, Va.

(Continued on Next Page)

Crystal Block Coal & Coke Co.—Cont.

No. 1 Mine; Drift; Winifred Seam, 72 in. thick.
PO—Rawl, W. Va.; **SP**—Same; **CTY**—Mingo; **RR**—N. & W.
MS—C. A. Tully, Rawl, W. Va.
SM—R. C. Spangler, Rawl, W. Va.
S of H—Mules and gravity, 4 trolley pole type locos. Track gage 48 in.
S of M—1 shortwall machs.
PP—Power purchased. Transformer 2300 to 250 volts D. C., M. G. Sets, 2 pumps.
EMP—100 Daily tonnage 500.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

Crystal Block Coal and Coke Co. No. 2 Mine; Drift; Rawl or Pond Creek Seam, 48 to 66 in. thick.
PO—Spring, W. Va.; **SP**—Same; **CTY**—Mingo; **RR**—N. & W.
SM—Wm Hagan, Rawl, W. Va.
S of H—Mules, 2 trolley pole type locos. Track gage 48 in.
S of M—2 shortwall machs.
PP—Power purchased. Transformer 2300 to 250 volts A. C., M. G. Sets, 2 pumps.
EMP—50 Daily tonnage 300.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Loading Rooms, Picking Tables.

No. 3 Mine; Drift; Rawl Seam, 44 to 66 inches thick.
PO—Rawl, W. Va.; **SP**—Same; **CTY**—Mingo; **RR**—N. & W.
MS—D. E. Brown, Rawl, W. Va.
SM—R. C. Spangler, Rawl, W. Va.
S of H—Mules and 3 trolley pole type locos. Track gage 48 in.
S of M—3 shortwall machs.
PP—Power purchased. Transformer 2,300 to 250 volts A. C., rotary converters, 250 volts D. C., 2 pumps.
EMP—100 Daily tonnage 500.
SIZES SHIPT—Run of Mine.

CRYSTAL BLOCK MINING CO.
 General Office, Welch, W. Va.
PR—J. E. Woods, Welch, W. Va.
VP—J. W. O'Toole, Welch, W. Va.
TR—J. H. Barker, Welch, W. Va.
GS—J. M. Tully, Sprigg, W. Va.
PA—H. G. Perrine, Welch, W. Va.
SCO—Crystal Supply Co., Buyer R. M. McNeer, Sprigg, W. Va.
SA—Central Pocahontas Coal Co., Welch, W. Va., New York, N. Y., Cincinnati, O., and Norfolk, Va.
 Additional information on Pages 984, 985

Gates Mine; Drift; Winifrede Seam, 72 in. thick.
PO—Labato, W. Va.; **SP**—Laxey, W. Va.; **CTY**—Mingo; **RR**—N. & W.
MS—W. R. Johnston, Labato, W. Va.
MP—J. R. Brewer, Labato, W. Va.
S of H—Mules and 4 trolley pole type locos. Track gage 48 in.
S of M—6 shortwall machs.
PP—Power purchased. Transformer 2300 to 250 volts A. C., M. G. S. 4 250 volts D. C., 3 pumps.
EMP—150 Daily tonnage 1000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

CRYSTAL COAL & COKE CO.
 General Office, Bramwell, W. Va.
PR—George H. Patten, Chattanooga, Tenn.
VP—Edward Cooper, Bramwell, W. Va.
TR—Newton T. Roberts, Bramwell, W. Va.
GM—Eugene Powell, Crystal, W. Va.
GS—Eugene Powell, Crystal, W. Va.
PA—Eugene Powell, Crystal, W. Va.
EM—James G. Baldwin, Crystal, W. Va.
EE—O. M. Sizemore, Crystal, W. Va.
S of M—Address the Company, Buyer, Newton T. Roberts, Bramwell, W. Va.
Sales Agency, Flat Top Fuel Co., Bluefield, W. Va.
 Additional information on Pages 984, 985

Crystal Nos. 1 and 2 Mines; Drift; Pocahontas No. 3 Seam, 4½ ft. thick; washery.
PO—Crystal, W. Va.; **SP**—McComas, W. Va.; **CTY**—Mercer; **RR**—N. & W.
SM—Ralph Weikel, Crystal, W. Va.
S of H—Mules and trolley pole type loco. Track gage, 48 in.
S of M—Hand.
PP—Power purchased, transformer 13,000-170 volts A. C., rotary converters, 300 K. W., 250 volts D. C., 3 pumps.
EMP—200 Last years tonnage 112,000
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Washer, Picking Tables.

FOUR FORK COAL CO.
 General Office, Huntington, W. Va.
PR—W. E. Deegans, Huntington, W. Va.
VP—John Faulkner, Huntington, W. Va.
TR—J. Frank Gelmet, Huntington, W. Va.
GM—W. E. Deegans
GS—O. C. Hoffman, Huntington, W. Va.

PA—John Faulkner, Huntington, W. Va.
EM—Morris Hansford
Sales Agents—W. E. Deegans Coal Co., Huntington, W. Va.

Cub Fork Mine; Drift; Chilton Seam, 38 in. thick.
PO—Yolyn, W. Va.; **SP**—Same; **CTY**—Logan; **RR**—C. & O., Run Creek Br.
MS—Hugh Anderson, Yolyn, W. Va.
S of H—5 mules, 1 trolley pole type and 3 storage battery locos. Track gage 44 in.
S of M—2 chain breast type and 2 shortwall machs.
PP—Power purchased, transformer, 2300 to 250 volts A. C., rotary converters, 250 volts D. C.
EMP—65 Last fiscal year output, 55,476 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

COO MOUNTAIN COAL & COKE CO., THE
 General Office, Nolan, W. Va.
PR—H. W. McGinnis, Nolan, W. Va.
VP—S. P. Harris, Springfield, O.
GM—H. W. McGinnis, Nolan, W. Va.
PA—H. W. McGinnis, Nolan, W. Va.
SA—Harris & Co., Springfield, O.

Cub Mountain No. 2 Mine; Drift; Taylor Seam, 47 in. thick.
PO—Nolan, W. Va.; **SP**—Same; **CTY**—Martin, Ky.; **RR**—Norfolk & West
MS—James Brooks, Nolan, W. Va.
S of H—Mules. Track gage, 48 in.
S of M—Hand.
PP—2 pumps.
EMP—25 Last fiscal year output, 10,000 tons.
SIZES SHIPT—Run of Mine, Lump, Block.

CUMBERLAND COAL CO.
 General Office, Baltimore, Md.
PR—Douglas Gorman, Baltimore, Md.
VP—J. W. McMillan, Baltimore, Md.
TR—J. W. McMillan, Baltimore, Md.
PA—R. G. Brumme, Baltimore, Md.
GS—Jas. J. Dobbie, Baltimore, Md.
EM—J. A. Smith, Baltimore, Md.
EF—Fred Hartman, Baltimore, Md.
SCO—The Douglas Co., Buyer, Geo. Littman, Albert, W. Va.

Douglas Mine; Drift; Lower Kittanning Seam, 4 to 8 ft. thick.
PO—Albert, W. Va.; **SP**—Douglas, W. Va.; **CTY**—Tucker; **RR**—West Va., Dir., Western Maryland
S of H—Mules, planes, 4 trolley pole type and 3 steam locos. Track gage, 40 in.
S of M—Hand.
PP—1 return tubular boilers, total 150 H. P., 1—150 K. W., 1—200 K. W. gen. units, 500 volts D. C., 5 pumps.
EMP—200 Last years tonnage 129,096.
SIZES SHIPT—Run of Mine, Slack.
PREP. EQUIPT—Gravity Screens.

CUMMINGS & BOWERS COAL CO.
 Charleston, W. Va.
 Albert Mine; **CTY**—Harrison.
 No report.

CUNNINGHAM, MILLER & ENSLOW
 General Office, Huntington, W. Va.
PR—Frank Enslow, Huntington, W. Va.
TR—W. H. Cunningham, Huntington, W. Va.
GM—C. W. Strickland, Huntington, W. Va.
GS—C. C. Morgan, Kistler, W. Va.
PA—C. C. Morgan, Kistler, W. Va.
CE—W. H. Cunningham, Huntington, W. Va.
SCO—Bergal Coal Co., Buyer, Walter Engles, Kistler, W. Va.
SA—Twin State Fuel Co., Huntington, W. Va.

Sekav Mine; Slope; Eagle & Island Creek Seams, 84-18 in. thick.
PO—Kistler, W. Va.; **SP**—Same (Pre-mine); **CTY**—Logan; **RR**—C. & O.
S of H—Mules and electric locos. Track gage, 44 in.
S of M—Shortwall machs.
PP—Power purchased. Transformer 2300 to 250 volts A. C.
EMP—75 Last years tonnage 5000.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by Sekav Coal Company.

D. T. S. COAL COMPANY
 General Office, Manning, W. Va.
PR—J. B. Dodge, Manning, W. Va.
VP—O. E. Thorne, Manning, W. Va.
TR—J. S. Shlap, Manning, W. Va.
GM—O. E. Thorne, Manning, W. Va.
GS—Ed. Rothel-barger, Manning, W. Va.
CE—Carl Horner, Clarksburg, W. Va.
SA—Jesse Shime, Manning, W. Va.

Thorn Nos. 1 and 2 Mine.
PO—Manning, W. Va.; **SP**—Same; **CTY**—Monon; **RR**—E. & O.
S of H—Mules.
S of M—Hand.

DAISY COAL COMPANY
 General Office, Henlawson, W. Va.
OPERATOR—C. W. Jones, Henlawson, W. Va.
CE—W. C. McCall, Logan, W. Va.
LE—W. H. McHenry, Big Creek, W. Va.
SCO—Address the Company, Buyer, C. W. Jones, Henlawson, W. Va.
SA—Producers Coal Co., Cincinnati, O.
 Daisy Mine; Drift; Alma Seam, 46 in. thick.
PO—Big Creek, W. Va.; **SP**—Same; **CTY**—Logan; **RR**—C. & O., G. V. Br.
S of H—Trolley pole type locos. Track gage 44 in.
S of M—2 chain breast type and 2 shortwall machs.
PP—150 H. P. fire tube boiler, gen. unit, 250 volts D. C., 5 pumps.
EMP—10 Daily tonnage 150.
SIZES SHIPT—Slack, Lump.
PREP. EQUIPT—Gravity Screens.

DALE COAL COMPANY
 General Office, Haywood, W. Va.
PR—J. D. Lane, Monessen, Pa.
VP—E. L. Sloan, Pittsburgh, Pa.
TR—A. W. Martin, Haywood, W. Va.
GM—L. H. Martin, Haywood, W. Va.
PA—L. H. Martin, Haywood, W. Va.
EM—Hornor Bros., Clarkburg, W. Va.

Jennie B. Mine; Drift; Pittsburgh Seam, 36 inches thick.
PO—Meadowbrook, W. Va.; **SP**—Same; **CTY**—Harrison; **RR**—B. & O.
MS—J. L. Lince, Meadowbrook, W. Va.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
PP—Purchase power. Transformer 22,000 to 440 volts A. C.
EMP—20.
SIZES SHIPT—Run of Mine.

DANA COAL COMPANY
 General Office, 1201-2 Union Bldg. Charleston, W. Va.
PR—C. H. Hetzel, Charleston, W. Va.
TR—M. E. Moore, Charleston, W. Va.
GM—H. A. Jepson, Charleston, W. Va.
GS—H. A. Jepson, Charleston, W. Va.
PA—M. E. Moore, Charleston, W. Va.
Additional Information on Page 1010

Dana Mine; Slope; No. 2 Gas Seam, 72 in. thick.
PO—Dana, W. Va.; **SP**—Same; **CTY**—Kanawha; **RR**—Campbells Creek.
MS—Allen Brown, Dana, W. Va.
S of H—Mules, trolley pole type and storage battery locos. Track gage 42 inches.
S of M—3 shortwall machs.
PP—Purchase power, transformer 44,000 to 2,200, M. G. sets, 250 volts D. C.
EMP—100 Daily output, 300 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

DARBY COAL COMPANY
 General Office, Fairmont, W. Va.
PR—S. D. Brady, Fairmont, W. Va.
VP—S. D. Brady, Jr., Fairmont, W. Va.
TR—A. P. Brady, Fairmont, W. Va.
PA—A. P. Brady, Fairmont, W. Va.
CE—S. D. Brady, Fairmont, W. Va.
EM—Paul Billingslea, Fairmont, W. Va.

Darby No. 1 and 2 Mines; Drift; Pittsburgh and Redstone Seams, 72-60 in. thick.
PO—Rosemont, W. Va.; **SP**—Same and Darby, W. Va.; **CTY**—Taylor; **RR**—B. & O.
S of H—Mules and gasoline loco. Track gage, 42 in.
S of M—Hand.
PP—2 pumps.
EMP—75 Last years tonnage 33,122.
SIZES SHIPT—Run of Mine.

DARTMOUTH COAL COMPANY.
 General Office, Mt. Hope, W. Va.
PR—S. T. Bailey, Mt. Hope, W. Va.
VP—Clay: B. Johnson, Charleston, W. Va.
TR—W. H. Boone, Mt. Hope, W. Va.
GM—S. T. Bailey, Mt. Hope, W. Va.
GS—S. T. Bailey, Mt. Hope, W. Va.
PA—S. T. Bailey, Mt. Hope, W. Va.
EM—N. P. Rhinehart, Mt. Hope, W. Va.
SCO—Address the Company, Buyer, John L. Wood, Javins, W. Va.
SA—West Virginia Coal Co., Huntington, W. Va.

Dartmouth Mine; Drift; No. 2 Gas Seam, 52 in. thick.
PO—Javins, W. Va.; **SP**—Brownland, W. Va.; **CTY**—Boone; **RR**—C. & O.
MS—L. C. Bibb, Javins, W. Va.
S of H—Mules and storage battery locos. Track gage, 42 in.
S of M—3 shortwall machs.
PP—1 fire tube boiler, 150 H. P., 100 K. W. gen. units, 250 volts D. C., 3 pumps.
Last years tonnage 58,000
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

DAVENPORT COAL COMPANY
 General Office, 219 Elbert Square, Buffalo, N. Y.
PR—W. H. H. Davenport, Buffalo, N. Y.
TR—W. H. H. Davenport, Buffalo, N. Y.
GM—M. H. Blandford, Big Chimney, W. Va.
GS—S. G. Hoge, Big Chimney, W. Va.
PA—M. H. Blandford, Big Chimney, W. Va.
CE—W. G. Wrighton, Charleston, W. Va.
SCO—Address the Company, Buyer, M. H. Blandford, Big Chimney, W. Va.
SA—The Davenport Coal Company, 2312 Union Central Bldg., Cincinnati, O.

Davenport Mine; Drift; C. Albright Seam, 60 in. thick.
PO—Big Chimney, W. Va.; **SP**—Clyde, W. Va.; **CTY**—Kanawha; **RR**—Kanawha & W. Va.
S of H—Mules and 1 tubular loco. Track gage, 36 in.
S of M—1 chain breast and 2 shortwall machs.
PP—1 150 H. P. water tube boiler, 1—100 K. W. gen. unit, 250 volts D. C., 1 pump.
EMP—10 Daily tonnage 250.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Gravity Screens.

DAVIS & MANLEY COAL CO.
 Rt. No. 1, Monongah, W. Va.
 Davis Mine; **CTY**—Marion.
 No report.

DAVIS COAL & COKE COMPANY
 General Office, Baltimore, Md.
PR—A. W. Caloway, Baltimore, Md.
VP—A. B. Stewart, Baltimore, Md.
TR—R. P. Mahoney, Cumberland, Md.
GM—W. I. Kennedy, Baltimore, Md.
GS—S. B. J. J. Thomas, W. Va.
PA—P. W. Traynor, Baltimore, Md.
ASST. TR.—M. G. George, Baltimore, Md.
GEN. COUNSEL—A. B. Stewart, Baltimore, Md.

GM (In Charge of Operation) R. P. Mahoney, Cumberland, Md.
GS—Geo. Roberts, Cumberland, Md.
PA—K. L. Greubst, Cumberland, Md.
CE—R. W. Robinson, Cumberland, Md.
EM—S. B. J. J. Thomas, W. Va.
EE—P. W. Traynor, Baltimore, Md.
SCO—The Boston & Landstreet Co., Buyer, W. S. Davenport, Thomas, W. Va.
Sales Mgr.—C. C. Knobloch, Baltimore, Md.

Weaver No. 8 Mine; Slope; Lower Kittanning Seam, 51 in. thick.
PO—Weaver, W. Va.; **SP**—Same; **CTY**—Barbour; **RR**—W. M.
MS—G. A. Blakeslee, Weaver, W. Va.
S of H—Mules. Track gage 42 in.
S of M—Hand.
PP—1 fire tube boiler, 100 H. P., 2 pumps.
SIZES SHIPT—Run of Mine.

Benbush No. 26 Mine; Drift; Upper Freeport; 48 to 54 in. thick.
PO—Benbush, W. Va.; **SP**—Same; **CTY**—Tucker; **RR**—Western Maryland, Benbush branch.
MS—Lewis Thomas, Benbush, W. Va.
S of H—Mules. Track gage 42 in.
S of M—Hand.
EMP—14 Last years tonnage 6,353.
SIZES SHIPT—Run of Mine.

Benbush No. 28 Mine; Drift; Upper Freeport Seam, 48 to 54 in. thick.
PO—Benbush, W. Va.; **SP**—Same; **CTY**—Tucker; **RR**—Western Maryland, Benbush branch.
MS—Lewis Thomas, Benbush, W. Va.
S of H—Mules and 6 trolley pole type locos. Track gage, 42 in.
S of M—Hand.
EMP—6 Last years tonnage 2,470.
SIZES SHIPT—Run of Mine.

Benbush No. 28 Mine; Shaft; Kittanning Seam, 54-66 in. thick.
PO—Benbush, W. Va.; **SP**—Same; **CTY**—Tucker; **RR**—Western Maryland, Benbush branch.
MS—Lewis Thomas, Benbush, W. Va.
S of H—Mules and 6 trolley pole type locos. Track gage, 42 in.
S of M—Hand.
PP—2 return tubular boilers, total 300 H. P., transformer 6,000 to 550 volts A. C., rotary converters, 550 volts D. C., 6 pumps. Generate power at Thomas central power station.
EMP—120 Last years tonnage 102,066
SIZES SHIPT—Run of Mine.

Colston No. 24 Mine; Drift; Upper Freeport Seam, 48 to 60 in. thick.
PO—Colston, W. Va.; **SP**—Thomas, W. Va.; **CTY**—Tucker; **RR**—W. Md.
MS—A. H. Boone, Thomas, W. Va.
S of H—Mules and 2 trolley pole type locos. Track gage, 42 in.
S of M—Hand.
PP—550 volts D. C. Receive power from central station.
EMP—77 Last years tonnage 22,747
SIZES SHIPT—Run of Mine.

(Continued on Next Page)

Davies Coal & Coke Company—Cont

Coketon No. 36 Mine; Drift; Kittanning Seam, 36 to 54 in. thick.
PO—Coketon, W. Va.; SP—Thomas, W. Va.; CTY—Tucker, RR—W. Md.

MS—W. H. Noone, Thomas, W. Va.
S of H—Mules and 1 trolley pole type locos. Track gage, 42 in.

S of M—Hand.
PP—Power generated at Thomas central power station, transformer 6600 to 550 volts, rotary converters, 550 volts D. C., 1 pump.

EMP—16 Last years tonnage 13,019.
SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.

Coketon No. 37 Mine; Drift; Kittanning Seam, 48-60 in. thick.
PO—Coketon, W. Va.; SP—Thomas, W. Va.; CTY—Tucker, RR—W. Md.

MS—W. H. Noone, Thomas, W. Va.
S of H—8 trolley pole type locos. Track gage, 42 in.

S of M—Hand.
PP—Power generated at Thomas central power station, transformer 6600 to 550 volts, rotary converters, 550 volts D. C., 1 pump.

EMP—156 Last years tonnage 179,821.
SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.

Dartmoor No. 4 Mine; Slope; Lower Kittanning Seam, 48 to 60 in. thick.
PO—Dartmoor, W. Va.; SP—Same; CTY—Tucker, RR—Western Maryland.

MS—C. A. Blakeslee, Weaver, W. Va.
S of H—Mules, type and 5 6 ton trolley pole type locos. Track gage, 42 in.

S of M—Hand.
PP—2 Phoenix return tubular boilers total 300 H. P., 2 250 K. W. gen. units, 500 volts D. C., 4 pumps.

EMP—129 Last years tonnage 135,598.
SIZES SHIPT—Run of Mine.

Thomas No. 29 Mine; Drift; Upper Freeport Seam, 63 in. thick.
PO—Davis, W. Va.; SP—Same; CTY—Tucker, RR—W. Md.

MS—Geo. Yeager, Davis, W. Va.
S of H—1 15 ton and 2 6 ton trolley pole type locos. Track gage, 42 inches.

S of M—Hand.
PP—Power generated at Thomas central power station, transformer 6600 to 550 volts, rotary converters, 550 volts A. C. and D. C., 7 pumps.

EMP—60 Last years tonnage 47,096.
SIZES SHIPT—Run of Mine.

Thomas No. 20 1/2 Mine; Drift; Upper Freeport Seam, 63 in. thick.
PO—Davis, W. Va.; SP—Same; CTY—Tucker, RR—W. Md.

MS—Geo. Yeager, Davis, W. Va.
S of H—1 6 ton trolley pole type loco. Track gage, 42 in.

S of M—Hand.
PP—Power generated at Thomas central power station, transformer 6600 to 550 volts, rotary converters, 550 volts A. C. and D. C., 2 pumps.

EMP—12 Last years tonnage 17,958.
SIZES SHIPT—Run of Mine.

Elk Garden No. 6 Mine now being operated by Dean Coal Co., Elk Garden, W. Va.

Fairfax Nos. 60 and 61 Mines; Drift; Little Pittsburgh Seam, 36 in. thick.
PO—Kempton, W. Va.; SP—Fairfax, W. Va.; CTY—Tucker, RR—W. Md.

MS—J. R. Hubbs, Kempton, W. Va.
S of H—Mules. Track gage 42 in.

S of M—Hand.
SIZES SHIPT—Run of Mine.

Henry No. 22 Mine; Shaft; Upper Freeport Seam, 36 to 54 in. thick.
PO—Henry, W. Va.; SP—Same; CTY—Grant, RR—Western Maryland.

MS—J. R. Hubbs, Henry, W. Va.
S of H—Mules and 6 trolley pole type locos. Track gage, 42 in.

S of M—Hand.
PP—4 return tubular boilers, total 600 H. P., transformers 22000-550 volts rotary converters, 550 volts D. C., 9 pumps. Power generated at Thomas central power station.

EMP—140 Last years tonnage 119,070.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Shaker Screens, Picking Tables.

Kempton No. 42 Mine; Shaft; Kittanning Seam, 54-56 in. thick.
PO—Kempton, W. Va.; SP—Same; CTY—Preston, RR—Western Maryland.

MS—Walter Lman, Kempton, W. Va.
S of H—6 trolley pole type locos. Track gage, 42 in.

S of M—Hand 3 shortwall, 1 lidding mach.

PP—Power generated at Thomas central power station, transformer 22,000 to 550 volts, rotary converters, 550 volts D. C., 7 pumps.

EMP—195 Last years tonnage 172,535.
SIZES SHIPT—Run of Mine.

Kittanning No. 14 Mine; Drift; Lower Kittanning Seam, 48 in. thick.
Note—Mine abandoned.

Lower Potomac No. 19 Mine now operated by the Silver Coal Co., Cumberland, Md.

Lower Potomac Nos. 50 and 51 Mines now operated by the Silver Coal Co., Cumberland, Md.

Weaver No. 5 Mine abandoned.

Elk Garden No. 20 Mine now operated by the Dean Coal Co., Elk Garden, W. Va.

Pierce No. 39 Mine; Shaft; Kittanning Seam, 54-56 in. thick.
PO—Pierce, W. Va.; SP—Same; CTY—Tucker, RR—Western Maryland.

MS—H. H. Harrison, Pierce, W. Va.
S of H—8 trolley pole type locos. Track gage, 42 in.

S of M—Hand.
PP—2 return tubular boilers, total 300 H. P., Transformer 6600-550 volts A. C., 7 pumps. Power generated at Thomas central power station.

EMP—153 Last years tonnage 127,886.
SIZES SHIPT—Run of Mine.

Pierce No. 40 Mine; Shaft; Kittanning Seam, 54-56 in. thick.
PO—Pierce, W. Va.; SP—Same; CTY—Tucker, RR—Western Maryland.

MS—H. H. Harrison, Pierce, W. Va.
S of H—Mules and 6 trolley pole type locos. Track gage, 42 in.

S of M—Hand.
PP—2 return tubular boilers total 300 H. P., transformer, 6600-550 volts rotary converters 550 volts D. C., 6 pumps. Power generated at Thomas central power station.

EMP—128 Last years tonnage 128,260.
SIZES SHIPT—Run of Mine, Slack.

Pierce No. 43 Mine; Slope; Kittanning Seam, 51-56 in. thick.
PO—Pierce, W. Va.; SP—Same; CTY—Tucker, RR—Western Maryland.

MS—H. H. Harrison, Pierce, W. Va.
S of H—Rope and 5 trolley pole type locos. Track gage, 42 in.

S of M—Hand.
PP—Power generated at Thomas central power station, transformer 22,000 to 550 volts, rotary converters, 550 volts D. C., 4 pumps.

EMP—112 Last years tonnage 100,043.
SIZES SHIPT—Run of Mine.

Thomas No. 23 Mine; Drift; Upper Freeport Seam, 48 to 60 in. thick.
PO—Thomas, W. Va.; SP—Same; CTY—Tucker, RR—Western Maryland.

MS—J. H. Davis, Thomas, W. Va.
S of H—Mules and 7 trolley pole type locos. Track gage, 42 in.

S of M—Hand.
PP—Power generated at Thomas central power station, 5 pumps.

EMP—124 Last years tonnage 125,650.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

Thomas No. 25 Mine; Drift; Upper Freeport Seam, 48 to 60 in. thick.
PO—Thomas, W. Va.; SP—Same; CTY—Tucker, RR—Western Maryland.

MS—J. H. Davis, Thomas, W. Va.
S of H—Mules and 1 10 ton trolley pole type loco. Track gage, 42 in.

S of M—Hand.
PP—Power generated at Thomas central power station, 6 pumps.

EMP—50 Last years tonnage 55,197.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

Thomas No. 24 Mine; Shaft; Kittanning Seam, 42-54 in. thick.
PO—Thomas, W. Va.; SP—Same; CTY—Tucker, RR—Western Maryland.

MS—J. H. Davis, Thomas, W. Va.
S of H—Mules and 2 6 ton trolley pole type locos. Track gage, 42 in.

S of M—Hand.
PP—Power generated at Thomas central power station, 6 pumps.

EMP—85 Last years tonnage 87,298.
SIZES SHIPT—Run of Mine.

PP—Central Power Station at Thomas, W. Va., has the following equipment:

One 2500 K. W. turbo-generator two 1000 K. W. turbo-generators two 300 K. W. rotary converters with transformers, three 400 K. V. A. 600-22000 volt transformers, six 400 K. V. A. 600-6600 volt transformers, five 400 H. P. & 4 water tube boilers with Jones Fuel & Fuel Automatic Stokers, two 500 H. P. Kewler water tube boilers with Jones Under-Fired Stokers.

Virginia No. 10 Mine; Drift; Pittsburgh Seam, 144 in. thick.
PO—Elk Garden, W. Va.; SP—Windom, W. Va.; CTY—Mineral; RR—W. Md.

SM—Robert Grant, Elk Garden, W. Va.
S of H—Mules. Track gage 42 in.

EMP—24 Last years tonnage 24,287.
SIZES SHIPT—Run of Mine.

Weaver No. 1 Mine abandoned.

Weaver No. 2 Mine; Drift; Lower Kittanning Seam, 60 to 72 in. thick.
PO—Weaver, W. Va.; SP—Same; CTY—Randolph, RR—Western Maryland.

MS—C. A. Blakeslee, Weaver, W. Va.
S of H—Mules and rope. Track gage 42 in.

S of M—Hand.
PP—1 return tubular boiler, total 125 H. P., 1 pump.

EMP—42 Last years tonnage 40,086.
SIZES SHIPT—Run of Mine.

Weaver No. 7 Mine; Drift; Lower Kittanning Seam, 60 in. thick.
PO—Weaver, W. Va.; SP—Same; CTY—Barbour, RR—W. Md., Weaver Br.

MS—C. A. Blakeslee, Weaver, W. Va.
S of H—Mules and rope. Track gage 42 in.

S of M—Hand.
PP—1 line tube boiler, 20 H. P., 1 pump.

SIZES SHIPT—Run of Mine.

Lower Potomac No. 52 Mine abandoned.

Coketon No. 41 Mine abandoned.

Coketon No. 35 Mine; Drift; Lower Kittanning Seam, 54-66 in. thick.
PO—Coketon, W. Va.; SP—Thomas, W. Va.; CTY—Tucker, RR—W. Md.

S of H—Mules.
S of M—Hand.

SIZES SHIPT—Run of Mine.
Note—New mine.

DAVIS COLLIERY CO.
General Office, Elkins, W. Va.

PR—J. T. Davis, Elkins, W. Va.
MS—R. Cross, Elkins, W. Va.

GS—A. C. Finley, Gilmer, W. Va.
PA—T. E. Cross, Elkins, W. Va.

CE—R. J. Tilton, Buckhannon, W. Va.
EM—K. J. Tilton, Buckhannon, W. Va.

EE—Oscar Flanagan, Gilmer, W. Va.
SCO—Davis Colliery Co. Buyer, W. O. Self, Gilmer, W. Va.

Jonlee Mine; Drift; Pittsburgh Seam, 80 in. thick.
PO—Gilmer, W. Va.; SP—Same; CTY—Gilmer, RR—B. & O., Coal & Coke Div.

MS—A. C. Finley, Gilmer, W. Va.
S of H—1 haulage and 4 gathering locos. Track gage 44 in.

S of M—6 longwall machs.
PP—2 water tube boilers, 300 H. P., 1—250 K. W. gen. unit, 250 volts D. C., 8 pumps.

EMP—110 Daily tonnage 650.
SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Shaker Screens, Loading Rooms.

DAVIS CREEK LAND & COAL CO.
General Office, Charleston, W. Va.

PR—H. C. Jones, Logan, W. Va.
VP—Samuel Edwards, Charleston, W. Va.

TR—L. L. Martin, Charleston, W. Va.
GM—L. L. Martin, Charleston, W. Va.

GS—L. L. Martin, Charleston, W. Va.
PA—L. L. Martin, Charleston, W. Va.

EM—B. M. Green, Charleston, W. Va.
EE—Frank Saunders, R. F. D. No. 2, Box 114, Charleston, W. Va.

SA—Smokeless Fuel Co., Charleston, W. Va.

David Creek Mine; Drift; No. 5 Block Seam; 42 inches thick.
PO—Charleston, W. Va.; SP—Sprong Hill, W. Va.; CTY—Kanawha; RR—Kanawha.

S of H—Mules. Track gage 42 inches.
S of M—Hand, chain breast type and shortwall machs.

PP—1 water tube boiler, 150 H. P., 150 K. W. gen. unit, 250 volts D. C.

EMP—65 Last fiscal year output, 36,000 tons.
SIZES SHIPT—Run of Mine.

DAVLEE COAL MINING COMPANY.
General Office, P. O. Box 1176, Charleston, W. Va.

TR—T. L. Lewis, Charleston, W. Va.
GM—T. L. Lewis, Charleston, W. Va.

GS—R. L. Ashton, Chesapeake, W. Va.

Dayton & Peerless, Eureka Mines; Drift; Peerless, Lewistown, Belmont Seams, 36-54 in. thick.

PO—Chesapeake, W. Va.; SP—Winifrede, W. Va.; CTY—Kanawha; RR—C & O.

S of H—Mules.
S of M—Hand.

Daily tonnage 400.
SIZES SHIPT—Run of Mine Slack, Pea, Nut, Lump, Block.

PREP. EQUIPT—Bar Screens.

DAVY-POCAHONTAS COAL CO.
Now Marline & Commerce Pocahontas Corp.

DAWSON COAL COMPANY.
General Office, Land Title Bldg., Philadelphia, Pa.

PR—J. H. Weaver, Philadelphia, Pa.
TR—Charles C. Crouse, Philadelphia, Pa.

GM—C. E. Sharpless, Ebensburg, Pa.
GS—Jas. A. Jenkins, 618 Dale Ave., Clarksburg, W. Va.

MM—Walter J. Lind, Clarksburg, W. Va.
PA—J. J. Matheson, Philadelphia, Pa.

CE—C. E. Sharpless, Ebensburg, Pa.
EM—F. M. McDaniel, 630 Dale Ave., Clarksburg, W. Va.

EE—Walter J. Lind, Clarksburg, W. Va.
SCO—Marson Supply Co., Store No. 2, Buyer, A. M. Ridenour, Clarksburg, W. Va.

Sales Agency—J. H. Weaver & Co., Philadelphia, Pa.

Dawson Mine; Drift; Pittsburgh Seam, 84 to 96 in. thick.
PO—Dawson, W. Va.; SP—Dawson Mine, W. Va.; CTY—Harrison, RR—B. & O.

MP—Marsh A. Haley, Hepzibah, W. Va.
S of H—7 horses, 9 mules, 3 elec. trolley and 1 storage battery locos. Track gage 42 in.

S of M—11 elec. cutting machs.
PP—Sub-Station, reducing Monongahela Valley Traction Co.'s power from 22,000 to 550 volts. Purchase power.

EMP—210.
SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Loading Booms, Picking Tables.

DAWSON-CONNELLSVILLE COLLIERIES CO.
General Office, Dawson, Pa.

PR—F. A. Tarr, Dawson, Pa.
VP—Homer Washforth, Dawson, Pa.

TR—R. D. Henry, Dawson, Pa.
GM—Frank A. Tarr, Dawson, Pa.

GS—Riley Martin, Fairmont, W. Va.
PA—Frank A. Tarr, Dawson, Pa.

EM—Fairmont Engineering Co., Fairmont, W. Va.

SA—Yough Coal & Coke Co., Pittsburgh, Pa.

Tarr Mine; Drift; Sewickley Seam, 72 in. thick.
PO—Fairmont, W. Va.; SP—Same; CTY—Marion, RR—B. & O.

S of H—Mules. Track gage 42 inches.
S of M—1 shortwall and 1 chain breast mach.

PP—Power purchased. Transformer 6,600 to 2,200 volts A. C. to M. G. set, 100 K. W., 250 volts D. C.

EMP—20 Last years tonnage 15,000.
SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Bar Screen.

DEAKER CORP., THE.
General Office, Everett Bldg., Akron, O.

PR—A. T. Carnahan, Akron, O.
VP—Hal G. Knight, Akron, O.

TR—M. R. Schieb, Akron, O.
GM—A. T. Carnahan, Akron, O.

GS—A. T. Carnahan, Akron, O.
PA—A. T. Carnahan, Akron, O.

CE—H. E. Wilhelm, Kingwood, W. Va.
SCO—Deaker Supply Store, Kingwood, W. Va.

Deaker & Florence Mine; Drift; Upper Freeport Seam, 52 in. thick.
PO—Kingwood, W. Va.; SP—Exp., Kingwood, W. Va.; Frl., Irona, W. Va.; CTY—Preston; RR—W. Va. Northern.

S of H—1 storage battery loco. Track gage 36 in.

S of M—Hand.
Daily tonnage 400.

SIZES SHIPT—Run of Mine.

DEAKER HILL COAL CO.
Now Deaker Corporation.

DEAN COAL COMPANY.
General Office, Elk Garden, W. Va.

OPERATOR—R. Marsh Dean, Elk Garden, W. Va.

SECY—F. M. Dean, Elk Garden, W. Va.
SA—R. Marsh Dean, Elk Garden, W. Va.

Dean Nos. 1, 2 and 3 Mines; Drifts; Upper Freeport, Kittanning and Big Vein Georges Creek Seams, 48-48-124 in. thick.

PO—Elk Garden, W. Va.; SP—Same; CTY—Mineral; RR—W. Md.

S of H—Mules and gasoline loco. Track gage, 42 in.

S of M—Hand.
PP—2 water tube boilers, 75 H. P. each.

EMP—75. Daily tonnage 250.
SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Picking Tables.

DEBERRY & LEONARD COAL COMPANY.
General Office, Clay, W. Va.

GM—Parley DeBerry, Clay, W. Va.
GS—Parley DeBerry, Clay, W. Va.

PA—Parley DeBerry, Clay, W. Va.
EM—J. H. Chase, Clay, W. Va.

SA—Tidewater Coal Co., Pittsburgh, Pa.
DeBerry Mine; Drift; Coalburg Seam, 102 in. thick.
PO—Clay, W. Va.; SP—Same; CTY—Clay; RR—B. & O.

(Continued on Next Page)

DeBerry & Leonard Coal Company—Cont.

MS—W. T. West, Clay, W. Va.
S of H—Rope and mules. Track gage 42 in.
S of M—Hand.
PP—1 return tubular boiler, total 35 H P., 2 pumps.
EMP—25. Last years tonnage 7,130
SIZES SHIPT—Run of Mine
Note—Successors to Summers Coal Co

DEEGANS EAGLE COAL COMPANY

General Office, American Bank & Trust Bldg., Huntington, W. Va.
PR—W. E. Deegans, Huntington, W. Va.
VP—J. M. Turner, Huntington, W. Va.
SECY—J. Frank Grimet, Huntington, W. Va.
TR—J. Frank Grimet, Huntington, W. Va.
GM—W. E. Deegans, Huntington, W. Va.
GS—O. C. Huffman, Huntington, W. Va.
PA—John Fankhauser, Huntington, W. Va.
EM—Morris Hanford, Huntington, W. Va.
SCO—Address the Company, Buyer, T. E. Miller, Accoville, W. Va.
Sales Agent—The W. E. Deegans Coal Co., Huntington, W. Va.
Additional Information on Pages 992, 993

Deegans Eagle Mine; Drift, Eagle and No. 2 Gas Seams, 55-68 in. thick.
PO—Accoville, W. Va.; SP—Same; CTY—Logan; RR—C. & O., Guyan Valley Branch.
MS—M. Harrison, Accoville, W. Va.
S of H—18 miles, 1 trolley pole type and 2 storage battery locos.
S of M—6 chain breast type and 3 short-wall machs.
PP—Power purchased, transformer 2309 to 250 volts A. C., rotary converters, 250 volts D. C., 2 pumps.
EMP—75. Last years tonnage 97,269.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Housos.

DEEP HOLLOW COAL COMPANY

General Office, Coalburg, W. Va.
PR—R. K. McKorin, Coalburg, W. Va.
VP—W. C. Mitchell, Coalburg, W. Va.
TR—J. A. Willis, Coalburg, W. Va.
GM—J. A. Willis, Coalburg, W. Va.
GS—J. A. Willis, Coalburg, W. Va.
PA—J. A. Willis, Coalburg, W. Va.
CE—J. T. Dawson, Huntington, W. Va.
Deep Hollow Mine; Drift; Peerless Seam, 30 in. thick.
PO—Coalburg, W. Va.; SP—Cabin Creek Junction; CTY—Kanawha; RR—C. & O.
S of H—Mules. Track gage 42 in.
S of M—Shortwall machs.
PP—Power purchased, Transformer 2,300 to 220 volts A. C.
EMP—10. Last years tonnage 2,100.
SIZES SHIPT—Run of Mine.

DEEP RUN BIG VEIN COAL COMPANY

General Office, Elk Garden, W. Va.
PR—Chas. H. Lantz, Piedmont, W. Va.
TR—Jos. Lantz, Cumberland, Md.
GM—W. R. Nethken, Cumberland, Md.
GS—Robert Grant, Cumberland, Md.
PA—Howard Kight, Northen, W. Va.
CE—Robert Grant, Cumberland, Md.
EM—Howard Kight, Northen, W. Va.
SALES MGR—C. H. Lantz, Piedmont, W. Va.

Mines Nos. 1, 2, 3, 4, 5; Drifts; Freeport, Babertown, George's Creek Big Vein, 144 in. to 228 in. thick.
PO—Elk Garden, W. Va.; SP—Shaw, W. Va.; CTY—Mineral; RR—Western Maryland.
S of H—Horses and 1 storage battery loco.
S of M—Hand.
EMP—75. Daily output 300 tons.

DEITZ COLLIERY COMPANY.

General Office, Vanetta, W. Va.
PR—J. T. Noell, Jr., Lynchburg, Va.
TR—T. A. Deitz, Vanetta, W. Va.
GM—T. A. Deitz, Vanetta, W. Va.
GS—T. A. Deitz, Vanetta, W. Va.
PA—T. A. Deitz, Vanetta, W. Va.
SCO—Address the Company, Buyer, J. B. Walker, Wyndal, W. Va.

Deitz Mine; Drift; No. 2 Gas and No. 5 Split Seams, 48 and 60 in. thick.
PO—Wyndal, W. Va.; SP—Same; CTY—Fayette; RR—C. & O., Gandy Br.
S of H—Mules and trolley pole type locos. Track gage, 40 in.
S of M—3 shortwall machs.
PP—Power purchased, transformer 2300 to 200 volts A. C., rotary converters, 250 volts D. C., 2 pumps.
EMP—75. Last years tonnage 41,075.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens

DELLSLOW COAL COMPANY

General Office, Morgantown, W. Va.
PR—J. M. Wood, Morgantown, W. Va.
VP—Nick Patt, Morgantown, W. Va.
TR—Jas. H. McGrew, Morgantown, W. Va.

GM—F. E. Sapp, Morgantown, W. Va.
GS—F. E. Sapp, Morgantown, W. Va.
PA—Frank P. Corbin, Morgantown, W. Va.
EM—Thos. J. Watring, Morgantown, W. Va.

Anla Mine; Drift; Upper Freeport Seam; 56 inches thick.
PO—D.Hslow, W. Va.; SP—Same; CTY—Monongalia; RR—M. & K.; B. & O.
S of H—Mules, rope and steam. Track gage 42 inches.
S of M—Hand.
PP—Power purchased, Transformer 2,200 to 220 volts A. C.
EMP—15.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.
Old information.

DILLMAN COAL CO

General Office, Flemington, W. Va.
PR—John E. Phillips, Flemington, W. Va.
TR—Hugh P. Smith, Flemington, W. Va.
GM—C. P. Robinson, Flemington, W. Va.
GS—Dorsey Pope, Fairmont, W. Va.
PA—H. P. Robinson, Flemington, W. Va.
EM—D. D. Simon, Flemington, W. Va.
SA—Eastern Fuel Co., 408 Frick Bldg., Pittsburgh, Pa.; 502 Broadway, New York, N. Y.

Barry Mine; Drift; Pittsburgh Seam, 120 inches thick.
PO—Flemington, W. Va.; SP—Same; CTY—Taylor; RR—B. & O.
S of H—Elec. locos. Track gage 42 in.
S of M—Elec. machs.
PP—Purchase power.
Daily tonnage, 1200.
SIZES SHIPT—Run of Mine.

Delmar 1, 3 and 1 Mines; Drift; Pittsburgh Seam, 120 in. thick.
PO—Flemington, W. Va.; SP—Same; CTY—Taylor; RR—B. & O.
S of H—7 trolley pole type locos. Track gage 42 in.

S of M—14 chain breast type, 1 short wall machs, 1 overhead cutter.
PP—Power purchased, Transformer 22000 to 250 volts, rotary converters, 250 volts D. C., 15 pumps.
EMP—1,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.
NOTE—Formerly operated by the Pitts-vein Coal Co

Ruth Mine; Drift; Pittsburgh Seam, 120 in. thick.
PO—Morgantown, W. Va.; SP—Same; CTY—Monongalia; RR—Monon.
S of H—7 trolley pole type locos. Track gage 42 in.
S of M—Chain breast type, shortwall machs and overhead cutters.
PP—Power purchased, Transformer 22000 to 250 volts, rotary converters, 250 volts D. C.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens

DELPHOS & WEST VIRGINIA COAL CO., INC.

Now Lake Henry Coal Co.

DELTA COAL CO

General Office, Clarksburg, W. Va.
Albert Mine.
PO—Ryndelsville, W. Va.; CTY—Harrison; RR—B. & O.
No report.

DEMPSEY COAL COMPANY

General Office, Armor, W. Va.
PR—L. Dempsey, Inez, Ky.
VP—E. B. Cliech, Cincinnati, O.
TR—T. A. Shewey, Gray Eagle, W. Va.
GM—T. A. Shewey, Gray Eagle, W. Va.
GS—T. A. Shewey, Gray Eagle, W. Va.
PA—T. A. Shewey, Gray Eagle, W. Va.
EM—W. P. Mering, Williamson, W. Va.
Sales Agency—Blue Ash Coal Co., Cincinnati, O.

Dempsey Mine; Shaft; No. 2 Gas Seam, 48 in. thick.
PO—Armor, W. Va.; SP—Gray Eagle, W. Va.; CTY—Martin, Ky.; RR—N. & W.
S of H—Mules. Track gage 48 inches.
S of M—Hand.
PP—1 water tube boiler, 40 H P.
EMP—15. Daily output, 100 tons.
SIZES SHIPT—Run of Mine, Slack, Lump, Block.

DEMPSEY, WILLIAM, COAL CO.

General Office, C/O Bateson Bros., Bay City, Mich.
PR—Wm. Dempster, Bay City, Mich.
VP—Frank Bateson, Bay City, Mich.
TR—Frank Bateson, Bay City, Mich.

Dempster Mine; Drift; No. 5 Split Seam, 54 inches thick.
PO—Shirador, W. Va.; SP—Same; CTY—Kanawha; RR—K. & M.
MS—James Reid Shirador, W. Va.
S of H—Mules. Track gage 36 in.
PP—Generator units, 250 K W

SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.
S of M—Chain breast and shortwall machs.

DESPARD FUEL COMPANY

General Office, Fairmont, W. Va.
PR—Geo. De Bolt, Fairmont, W. Va.
TR—Geo. De Bolt, Fairmont, W. Va.
GM—Geo. De Bolt, Jr., Clarksburg, W. Va.
GS—Geo. De Bolt, Jr., Clarksburg, W. Va.
PA—Geo. De Bolt, Jr., Clarksburg, W. Va.
Despard Mine; Drift; Pittsburgh Seam, 90 in. thick.
PO—Box 110, Clarksburg, W. Va.; SP—Same; CTY—Harrison; RR—B. & O.
S of H—Mules and trolley pole type locos. Track gage 42 in.
S of M—3 chain breast type machs.
PP—Power purchased, Transformer 2,200 to 250 volts A. C., M. G. sets, 275 volts D. C.
EMP—Daily tonnage 350.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

DEVILS FORK COAL CO

General Office, Huntington, W. Va.
PR—Frank R. Hewitt, Bramwell, W. Va.
TR—J. S. Hewitt, Bramwell, W. Va.
GM—Richard H. Hewitt, Devils Fork, W. Va.
PA—Richard H. Hewitt, " "
EM—O. L. Culler, Mullens, W. Va.
SCO—Address the Company, Buyer, R. P. Beverly, Devils Fork, W. Va.
SA—Rhefield Coal & Coke Co., Rhefield, W. Va.

Devils Fork Mine; Drift; No. 3 Peach-blossom Seam; 45 to 54 in. thick.
PO—Devils Fork, W. Va.; SP—Same; CTY—Wyoming; RR—Virginian.
Winding Gulf branch.
MS—R. Hewitt, Devils Fork, W. Va.
S of H—Trolley pole type and storage battery locos. Track gage 41 in.
S of M—Shortwall machs.
PP—Power purchased, Transformer 13,000 to 2,200 volts A. C., M. G. sets, 275 volts D. C.
EMP—75. Last years tonnage 50,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Shaker Screens, Picking Tables.

DEWITT FUEL COMPANY

Tippler, W. Va.
Dewitt Mine; CTY—Fayette.
No report.

DEXCAR POCAHONTAS COAL COMPANY.

General Office, 12 Broadway, New York, N. Y.
PR—Geo. M. Dexter, New York, N. Y.
TR—Wm. H. Carpenter, New York, N. Y.
GM—Frank E. Pratt, Altoona, Pa.
GS—H. A. McCoy, Twin Branch, W. Va.
PA—F. E. Pratt, Altoona, Pa.
CE—F. E. Pratt, Altoona, Pa.
EM—C. W. Cockill, Twin Branch, W. Va.
EE—R. C. Spraker, Twin Branch, W. Va.
SCO—Address the Company, Buyer, R. S. Schumate, Twin Branch, W. Va.
SA—Dexter & Carpenter, Inc., 12 Broadway, New York, N. Y.

Nos. 1, 2, 3, 4 & 5 Mines; Drift; Day-Sewall Seam, 40 in. thick.
PO—Twin Branch, W. Va.; SP—Same; CTY—Middletown; RR—N. & W.
S of H—12 trolley pole type locos. Track gage 48 in.
S of M—12 chain breast type machs.
PP—Power purchased, Transformer 23000 to 2200-275 volts, rotary converters, 550 volts D. C., 23 pumps.
EMP—400. Last years tonnage 238,748.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
NOTE—Formerly operated by the J. B. B. Mining Company.

DIAMOND COAL COMPANY

General Office, Fairmont, W. Va.
PR—H. W. Showalter, Fairmont, W. Va.
VP—Samuel D. Brady, Fairmont, W. Va.
TR—A. P. Brady, Fairmont, W. Va.
GM—H. W. Showalter, Fairmont, W. Va.
GS—Frank Christopher, Morgantown, W. Va.
PA—A. P. Brady, Fairmont, W. Va.
CE—S. D. Brady, Fairmont, W. Va.
EM—Paul Billingson, Fairmont, W. Va.

Liberty Mine; Drift; Sewdkey Seam, 72 in. thick.
PO—Morgantown, R. F. D. No. 7, W. Va.; SP—Star City, W. Va.; CTY—Monongalia; RR—M. R. R. Pocahontas, N. Y. C.
S of H—2 storage battery locos. Track gage 42 in.
S of M—3 shortwall machs.
PP—Power purchased, transformer 2200 to 250 volts A. C., 1 pump.
EMP—75. Daily tonnage 700.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

DIAMOND FUEL CO.

General Office, 25 W. 23rd St., New York, N. Y.
Diamond No. 1 Mine.
PO—Arden, W. Va.; CTY—Barbour; RR—B. & O.
No report.

DIAMOND OPERATING COMPANY

General Office, New York, N. Y.
PR—H. P. Boge, New York, N. Y.
VP—Alva R. Watson, Fairmont, W. Va.
GM—Alva R. Watson, Fairmont, W. Va.
EM—J. B. Mann, Philippi, W. Va.
SCO—Address the Company, Buyer, R. D. Parraek, Arden, W. Va.
SA—Diamond Fuel Co., 25 West 43rd St., New York, N. Y.

Diamond No. 1 Mine, Drift; Redstone Seam, 10 in. thick.
PO—Arden, W. Va.; SP—Same; CTY—Lowis; RR—B. & O.
MS—Wm. Moore, Arden, W. Va.
S of H—Mules, trolley pole type locos. Track gage 42 in.
S of M—2 chain breast type machs.
PP—Power purchased, 250 volts D. C.
SIZES SHIPT—Run of Mine, Slack, Lump.

Diamond No. 1 and Diamond No. 4 Mines; Drifts; Kittanning Seam, 68 in. thick.
PO—Arden, W. Va.; SP—Same; CTY—Barbour; RR—B. & O.
MS—George Buey, Arden, W. Va.
S of H—Mules, electric loco. Track gage 36 inches.
S of M—Hand, compressed air and elec. punchers, 1 shortwall and 2 chain breast machs.
PP—2 fire tube boilers, total 275 H. P., 110 K. W. g. u. mlt, 250 volts D. C.
EMP—76. Daily tonnage 500.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Bar Screens.
Old information.

DODGE COAL COMPANY

General Office, Clarksburg, W. Va.
PR—S. W. Garrett, Clarksburg, W. Va.
VP—J. W. R. Road, Clarksburg, W. Va.
TR—F. K. McClure, Clarksburg, W. Va.
GM—H. B. Mason, Clarksburg, W. Va.
GS—D. B. Mason, Clarksburg, W. Va.
PA—F. K. McClure, Clarksburg, W. Va.
EM—Chas. Litton, Clarksburg, W. Va.
SA—Daniel Howard, Clarksburg, W. Va.
Dodge Mine; Drift; Pittsburgh Seam, 78 inches thick.
PO—Mt. Clair, W. Va.; SP—Same; CTY—Harrison; RR—B. & O.
S of H—Mules. Track gage 10 in.
S of M—Hand.
EMP—15. Last years tonnage 7,000.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by the Barbe Coal Co.

DOON COAL COMPANY

General Office, Huntington, W. Va.
PR—Frank Enslow, Huntington, W. Va.
VP—G. D. Miller, Huntington, W. Va.
TR—W. H. Cunningham, " "
GM—C. W. Strickland, " "
GS—Stanley Spoor, Eskdale, W. Va.
PA—Stanley Spoor, Eskdale, W. Va.
EM—W. H. Cunningham, Huntington, W. Va.

EE—John Foster, Eskdale, W. Va.
SCO—Address the Company, Buyer, S. M. Boblitt, Eskdale, W. Va.
SA—Tenn. States Fuel Co., Huntington, W. Va., and R. J. Foley, Sales Agr., Huntington, W. Va.
Don No. 2, 4, 5 Mines; Drifts; No. 2 Gas-Lawton and Allen Seams.
PO—Eskdale, W. Va.; SP—Same; CTY—Kanawha; RR—C. & O., Cabdr Cr. & Br.
S of H—Mules, 8 elec. locos. Track gage 44 in.
S of M—10 elec. machs.
PP—4 return tubular boilers, total 600 H. P., 3 gen. units, 250 volts D. C., 3 pumps.
EMP—250. Last years tonnage 100,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
PREP. EQUIPT—Screens.

DONALD COAL COMPANY

General Office, Logan, W. Va.
PR—A. D. Callahan, Crown, W. Va.
GM—W. H. Weaver, Accoville, W. Va.
EM—W. C. McFall, Logan, W. Va.
SA—Lake and Export Coal Corp., Huntington, W. Va.

Donald Mine; Slope, Peachtree Seam, 60 in. thick.
PO—Stollings, SP—Logan; CTY—Logan; RR—C. & O.
MS—Walter Hornby, Stollings, W. Va.
S of H—Mules. Track gage 44 in. in. S of M—1 shortwall mach.
PP—Power purchased, Transformer 2200 to 250 volts A. C., M. G. sets, 220-250 volts D. C., 1 pump.
EMP—75. Last years tonnage 26,000.
SIZES SHIPT—Run of Mine.

DUREN BY-PRODUCTS COAL COMPANY
General Office, 216 Gray St., Charleston, W. Va.
PR—J. G. Fisher, 285 Ft. Washington Ave., New York City, N. Y.
VP—L. Fisher, 214 West 26th St., New York City, N. Y.
TR—L. Schwartz, New York, N. Y.
GM—Max Kragle, Charleston, W. Va.
PA—Max Kragle, Charleston, W. Va.
SA—Clark & Krebs, Charleston, W. Va.
SA—Scranton Coal Sales Co., New York, N. Y.

Max Nos. 1 and 2 Mines; Drift; Leavitt Kanawha Block Seam, 48-60 in. thick.
PO—Charleston, W. Va.; SP—Point Lick, W. Va.; CTY—Kanawha; RR—Campbell Creek, K. & M.
S of H—Mules. Track gage 42 in.
S of M—Shortwall machs.
PP—Power purchased, M. G. sets, 250 volts D. C.
EMP—50. Daily tonnage 225.
SIZES SHIPT—Run of Mine, Slack, Lump, Block.
PREP. EQUIPT—Bar Screens.

DORKENT COAL CO.

General Office, Huntington, W. Va.
PA—A. J. King, Huntington, W. Va.
VP—I. B. Early, Huntington, W. Va.
TR—P. E. King, Huntington, W. Va.
GM—A. J. King, Huntington, W. Va.
PA—A. J. King, Huntington, W. Va.
SA—E. B. Rouser, Kanawha Falls, W. Va.
EE—R. E. Small, Bellwood, W. Va.
SCO—Address the Company, Buyer, L. H. Harless, Bellwood, W. Va.
SA—Lake & Export Coal Corp., Huntington, W. Va.

Additional Information on Pages 1020, 1021

Bellwood Mine; Drift; Pocahontas No. 3 Seam, 54 in. thick.
PO—Bellwood, W. Va.; SP—Same; CTY—Fayette; RR—Swell Valley.
MS—W. I. McPheters, Bellwood, W. Va.
S of H—Mules and elec. locos. Track gage 44 in.
S of M—Hand, 2 shortwall machs.
PP—Power purchased, 250 volts, 1 pump.
EMP—125.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Table.
NOTE—Successors to the Greenbrier Colliery Company.

DORSEY-STEPHENSON COAL COMPANY

Now operated by the Bowers Coal Co.

DOUGLAS COAL COMPANY.

General Office, Welch, W. Va.
PR—A. F. Leckie, Welch, W. Va.
TR—A. E. Jennings, Welch, W. Va.
VP—W. B. Beale, Fireco, W. Va.
GM—A. F. Leckie, Welch, W. Va.
GS—W. B. Beale, Fireco, W. Va.
PA—W. B. Beale, Fireco, W. Va.
EM—Geo. W. Leckie, Welch, W. Va.
SCO—Address the Company, Buyer, Harvey Plummer, Fireco, W. Va.
Sales Agency—Leckie Coal Co., Columbus, O.

Additional Information on Page 1022

Douglas Mine; Drift; Fire Creek Seam, 54 in. thick.
PO—Fireco, W. Va.; SP—Same; CTY—Baleigh; RR—Virginian.
S of H—5 trolley pole type locos. Track gage 48 in.
S of M—2 shortwall machs.
PP—Power purchased, transformer 44,000 to 2200 volts A. C., 2 rotary converters, 250 volts D. C.
EMP—100. Last years tonnage 125,100.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

DOUGLASS COAL CO.

General Office, 908 Goff Bldg., Clarksburg, W. Va.
PR—George Paull, 443 Oliver Bldg., Pittsburgh, Pa.
TR—J. P. Fife, Pittsburgh, Pa.
GM—S. F. Douglass, Clarksburg, W. Va.
SA—Commonwealth Fuel Co., 443 Oliver Bldg., Pittsburgh, Pa.

Douglass Mine; Stripping; Pittsburgh Seam, 84 in. thick.
PO—Meadowbrook, W. Va.; SP—Same; CTY—Harrison; RR—B. & O.
MS—S. F. Douglass, Clarksburg, W. Va.
S of H—Steam locos. Track gage 42 in.
S of M—Hand.
EMP—20. Daily tonnage 400.
SIZES SHIPT—Run of Mine.

DRAPER EAGLE COAL CO.

General Office, Logan, W. Va.
PR—J. H. Vaughan, Boone, Va.
VP—J. H. Wright, Boone, Va.
TR—J. B. Vaughan, Huntington, W. Va.

GM—J. R. Vaughan, Logan, W. Va.
GS—J. R. Vaughan, Logan, W. Va.
PA—J. R. Vaughan, Logan, W. Va.
CE—Bedlow & McKelvie, Logan, W. Va.
EE—Noah Carter, Logan, W. Va.
SCO—Address the Company, Buyer, T. E. Vaughan, Logan, W. Va.
SA—Kanawha Valley Coal Co., Charleston, W. Va.

Draper Nos. 1 and 2 Mines; Drifts; Eagle Seam, 48 to 70 in. thick.
PO—Logan, W. Va.; SP—Same; CTY—Logan; RR—C. & O., Guyan River Br.
S of H—4 locos. Track gage 44 in.
S of M—6 elec. machs.
PP—2 boilers, 400 H. P., 1 g.e. unit, 250 volts D. C.
EMP—75. Last years tonnage 50,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

DREYFUS COAL COMPANY

Now Ridge-run Coal Mining Co.

DRY BRANCH COAL CO.

PR—C. C. Dickinson, Malden, W. Va.
TR—C. C. Dickinson, " "
GM—C. C. Dickinson, " "
GS—H. L. Fletcher, Dry Branch, W. Va.
EM—R. A. Green, Charleston, W. Va.
SCO—Address the Company, Buyer, F. S. Fletcher, Dry Branch, W. Va.
Sales Agents—Dickinson Fuel Co., Charleston, W. Va.

Dry Branch Mine; Drift; Coalburg and Peerless Seams, 60-44 inches thick.
PO—Dry Branch, W. Va.; SP—Same; CTY—Kanawha; RR—C. & O., Cab-T. Creek Branch.
S of H—Mules and 2 elec. locos. Track gage 42 in.
S of M—8 elec. machs.
PP—Power purchased, 200 K. W. gen. unit, rotary converters, 250 volts D. C., 3 pumps.
EMP—150.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Bar and Marcus Screens.

DRY FORK COLLIERY CO.

General Office, Bluefield, W. Va.
PR—W. T. Williams, Bluefield, W. Va.
TR—J. T. Wilson, " "
GM—W. T. Williams, " "
GS—T. H. Perdue, Yukon, W. Va.
EM—H. J. Brook, Welch, W. Va.
SCO—Address the Company, Buyer, W. D. Goode, Yukon, W. Va.
SA—Norfolk & Chesapeake Coal Co., Detroit, Mich.

Dry Fork Mine; Slope; Drift; War Creek & Sewell Seams, 28 to 80 in. thick.
PO—Yukon, W. Va.; SP—Lomax, W. Va.; CTY—M. D. Doherty; RR—N. & W.
S of H—Mules, 4 trolley pole type locos. Track gage 48 in.
S of M—2 electric machs.
PP—Power purchased, Transformer, 150 K. W., M. G. Set, 440 volts D. C., 4 pumps.
EMP—50. Last years tonnage 26,465.
SIZES SHIPT—Run of Mine, Slack.
PREP. EQUIPT—Bar Screens, Picking Tables.

EAGLE BY-PRODUCTS COAL COMPANY.

Now operated by the Eagle By-Products Collieries Co.

EAGLE BY-PRODUCTS COLLIERIES CO.

General Office, 829 Equitable Bldg., Baltimore, Md.
PR—G. R. Curtis, Baltimore, Md.
TR—C. W. Mortons, Baltimore, Md.
GS—C. C. Gressang, Charleston, W. Va.

Krebs No. 1 Mine; Drift; Eagle Seam, 54-66 inches thick.
PO—Krebs, W. Va.; SP—Same; CTY—Fayette; RR—C. & O.
MS—J. T. Shearer, Krebs, W. Va.
S of H—Elec. and storage battery locos.
S of M—Shortwall machs.
PP—Power purchased.
Daily tonnage 300.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by the Eagle By-Products Coal Co.

EAGLE COAL COMPANY

General Office, Monticome, W. Va.
PR—A. McKinney, Monticome, W. Va.
TR—Matthew Boster, " "
GM—Matthew Boster, " "
GS—A. McKinney, " "
PA—Matthew Boster, " "
CE—J. H. Jackson, Monticome, W. Va.
SA—Logan & Kanawha Coal Co., Cincinnati, O.

Eagle Coal Co. Mine; Drift; Eagle Seam, 44 to 48 in. thick.
PO—Box 156, Monticome, W. Va.; SP—Same; CTY—Fayette; RR—C. & O.
S of H—Mules
S of M—Shortwall machs.
PP—Power purchased, 2 pumps.
EMP—28. Daily tonnage 200.
SIZES SHIPT—Run of Mine.

EAGLE GAS COAL CO.

Now New Eagle Gas Coal Company.

EAGLE ISLAND COAL CO.

General Office, Huntington, W. Va.
PR—A. J. King, Huntington, W. Va.
GM—A. J. King, " "
VP—H. P. Adams, Lynchburg, Va.
TR—Clinton DeWitt, Jr., Lynchburg, Va.
GS—R. H. Heyser, Kistler, W. Va.
PA—A. C. King, Huntington, W. Va.
CE—A. J. King, Huntington, W. Va.
EM—M. L. Jarratt, Huntington, W. Va.
EE—M. A. Maxwell, Huntington, W. Va.
SCO—Address the Company, Buyer, G. S. Lottis, Kistler, W. Va.
SA—Chesapeake & Virginia Coal Co., Lynchburg, Va., and Huntington, W. Va.

No. 1 Mine; Drift; Island Creek Seam, 48 to 60 in. thick.
PO—Kistler, W. Va.; SP—Same; CTY—Logan; RR—C. & O., G. V. Div.
S of H—Mules and trolley pole type loco. Track gage 44 in.
S of M—3 shortwall machs.
PP—Power purchased, 250 volts D. C.
EMP—100. Last fiscal year output, 100,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

No. 2 Mine; Drift; Island Creek Seam, 52 in. thick.
PO—Kistler, W. Va.; SP—Lax, W. Va.; CTY—Logan; RR—C. & O.
S of H—Mules and trolley pole type locos. Track gage 44 in.
S of M—3 shortwall machs.
PP—Power purchased, 250 volts D. C.
EMP—100. Last fiscal year output, 100,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

EASLEY COAL CO.

Costa, W. Va.

Easley Nos. 1, 2, and 3 Mines. CTY—Boone.
No report.

EAST BANK MINING CO.

OPERATOR—A. M. Howery, East Bank, W. Va.
Sales Agents—Logan & Kanawha Coal Co., Cincinnati, O.

East Bank Mine; Drift; "Cedar Grove" Seam, 34 to 40 in. thick.
PO—East Bank, W. Va.; SP—Same; CTY—Kanawha; RR—C. & O.
S of H—Mules, track gage 3 ft.
S of M—1 chain breast type, 1 shortwall mach.
PP—1 boiler, 125 H. P., 1 gen. unit, 250 volts D. C.
EMP—18. Daily output, 50 tons.
SIZES SHIPT—Run of Mine.

EAST GRAFTON COAL MINING CO. THE

General Office, 937 Society for Savings Bldg., Cleveland, Ohio.
PR—Chas. W. Scrimshaw, Cleveland, O.
TR—Joseph J. Rice, Cleveland, O.
ASST TR—Wm. E. Knight, Cleveland, O.
SE Y—Wm. E. Knight, Cleveland, O.
GM—Chas. W. Scrimshaw, Cleveland, O.
GS—P. R. Boyd, Thornton, W. Va.
PA—Chas. W. Scrimshaw, Cleveland, O.
CE—P. R. Boyd, Thornton, W. Va.

East Grafton Mine; Shaft; Lower Kittingham Seam, 62 inches thick.
PO—Thornton, W. Va.; SP—Same; CTY—Taylor; RR—B. & O.

S of H—Mules.
S of M—Hand.
PP—5 pumps.
EMP—25.

EAST GULF COAL COMPANY

General Office, Mt. Hope, W. Va.
PR—P. M. Snyder, Mt. Hope, W. Va.
VP—J. L. Bumgardner, Beckley, W. Va.
TR—L. S. Tully, Mt. Hope, W. Va.
GM—P. M. Snyder, Mt. Hope, W. Va.
ASST GM—P. C. Thomas, Helen, W. Va.
EM—C. E. Bergendahl, Helen, W. Va.
SCO—Address the Company, Buyer, Geo. Burnett, Helen, W. Va.
SA—Fayette Smokeless Fuel Co., Mt. Hope, W. Va.

East Gulf 3, 4, 5 Mines; Drift; Beckley Seam, 58 in. thick.
PO—Helen, W. Va.; SP—Same; CTY—Raleigh; RR—C. & O. and Vgn.
S of H—Trolley pole type loco. Track gage 48 in.
S of M—Continuous cutters, Shortwall machs.
PP—Power purchased, Gen. units, 4—150 K. W., M. G. Sets, 250 volts D. C.
Last years tonnage 258,900.
PREP. EQUIPT—Picking Tables.

EAST LYNN COAL CO.

General Office, East Lynn, W. Va.
PR—A. J. Perry, East Lynn, W. Va.
TR—J. L. Arthur, East Lynn, W. Va.
GM—A. J. Perry, East Lynn, W. Va.

GS—P. S. Richards, East Lynn, W. Va.
PA—J. L. Arthur, " "
EM—J. A. Boss, Huntington, W. Va.
EE—Jonah Adkins, East Lynn, W. Va.
SCO—Address the Company, Buyer, J. L. Arthur, East Lynn, W. Va.
Sales Agent—Cate-Churchman Coal Co., 2312-13 Dime Bank Bldg., Detroit, Mich.

Dixie Lynn Mine; Drift; Seam 45 to 60 in. thick.
PO—East Lynn, W. Va.; SP—Same; CTY—Wayne; RR—N. & W.
S of H—Mules and trolley pole type loco. Track gage, 42 in.
S of M—4 shortwall machs.
PP—1 water tube boiler, 150 H. P., 1 gen. unit, 100 K. W., 250 volts D. C., 5 pumps.
EMP—66. Last years tonnage 29,046.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screen, Picking Table.

EAST SIDE UTILITY COMPANY

General Office, Fairmont, W. Va.
PR—P. B. Swearingen, Fairmont, W. Va.
VP—J. D. Robinson, Fairmont, W. Va.
TR—Hugh F. Smith, Fairmont, W. Va.
GM—C. D. Robinson, Fairmont, W. Va.
GS—Dorsey Pople, Fairmont, W. Va.
PA—H. P. Robinson, Fairmont, W. Va.
EM—D. D. Simon, Fairmont, W. Va.
SA—Eastern Fuel Co., 408 Frick Bldg., Pittsburgh, Pa.; 302 Broadway, New York, N. Y.

Hughes Mine; Drift; Pittsburgh Seam, 96 inches thick.
PO—Fairmont, W. Va.; SP—Same; CTY—Marion; RR—Monon.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
EMP—30. Daily tonnage 250.
SIZES SHIPT—Run of Mine.

EAST WHEELING COAL COMPANY

General Office, Wheeling, W. Va.
PR—B. W. Peterson, Wheeling, W. Va.
VP—David H. Thomas, Elm Grove, W. Va.
TR—H. C. Ogden, Wheeling, W. Va.
PA—H. F. Carter, Elm Grove, W. Va.

East Wheeling Mine; Shaft; Seam 60-96 in. thick.
PO—Elm Grove, W. Va.; SP—Valley Grove, W. Va.; CTY—Ohio; RR—B. & O., Pgh. Div.
S of H—Mules.
S of M—Hand.
PP—Power purchased.
SIZES SHIPT—Run of Mine.

EASTERN UTILITIES COAL COMPANY.

General Office, Lost Creek, W. Va.
PR—E. M. Gilbert, Reading, Pa.
VP—J. D. Whittemore, Wheeling, W. Va.
TR—Wm. Buchsbaum, 50 Pine St., New York, N. Y.
GM—J. D. Whittemore, Lost Creek, W. Va.
GS—A. C. Hunt, Lost Creek, W. Va.
PA—C. D. Parkhill, Jr., Lost Creek, W. Va.

EM—D. D. Britt, Clarksburg, W. Va.
SCO—Address the Company, Buyer, L. Mackall, Lost Creek, W. Va.
Righter Mine; Drift; Redstone & Pittsburgh Seams, 84 and 60 in. thick.
PO—Lost Creek, W. Va.; SP—Same; CTY—Harrison; RR—B. & O.
S of H—Mules, 3 trolley pole type locos. Track gage 42 in.
S of M—Hand, 1 arcwall and 1 chain breast mach.
PP—Power purchased, Transformer 22000-2200 volts, M. G. Sets, 75 K. W., 250-500 volts D. C., 4 pumps.
EMP—145. Last years tonnage 90,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Gravity Screens.

EASTON COAL COMPANY.

Morgantown, W. Va.

Morris and Pixler Mine; CTY—Monongalia.
No report.

ECHO COAL COMPANY

General Office, 31 View St., Edgewood, Wheeling, W. Va.
PR—Fred L. Selby, Martins Ferry, O.
VP—E. K. Delaney, Martins Ferry, O.
TR—Louis H. Helling, Martins Ferry, O.
GM—W. E. Sample, West Alexander, Pa.
GS—Geo. W. McIntosh, Wheeling, W. Va.
EM—C. C. Smith, Wheeling, W. Va.
SA—Louis H. Helling, Wheeling, W. Va.

View Street Mine; Drift; Pittsburgh No. 8 Seam, 60 in. thick.
PO—31 View St., Edgewood, Wheeling, W. Va.; SP—Same; CTY—Ohio.
S of H—Mules. Track gage 36 inches.
S of M—1 chain breast, 1 shortwall and cutting machs.
PP—Power purchased, Transformer 2,300 to 220 volts A. C.
EMP—30. Last years tonnage 29,904.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

ECLIPSE POCAHONTAS COAL COMPANY.

General Office, Aurora, Ill.
PR—C. C. Copley, Aurora, Ill.
VP—C. B. Strohn, Aurora, Ill.
TR—E. H. O'Meara, Aurora, Ill.
GM—W. M. Willitt, Aurora, Ill.
GS—Wm. Gay, Ethel, W. Va.
PA—S. J. Rickor, Aurora, Ill.
CE—C. C. Boardman, Aurora, Ill.
SCO—Address the Company Buyer, W. E. Fixmer, Ethel, W. Va.

Eclipse Pocahontas No. 1 Mine; Drift; Douglas Seam, 38 to 12 in. thick.
PO—Dan, W. Va.; SP—Rendshaw, W. Va.; CTY—McDowell; RR—N. & W.; Dry Fork Br.
S of H—Trolley pole type and storage battery locos; Track gage, 48 in.
S of M—2 shortwall machs.
PP—1 fire tube boiler, 75 H. P., gen. units, 75 K. W., 220 volts D. C.
EMP—15 Last years tonnage 50,000
SIZES SHIPT—Run of Mine.

Eclipse Pocahontas No. 2 Mine; Drift; Welch Seam, 34-12 in. thick.
PO—Dan, W. Va.; SP—Rendshaw, W. Va.; CTY—McDowell; RR—N. & W.; S of H—Mules. Track gage, 48 in.
S of M—Hand.
PP—Gen. units, 220 volts D. C.
EMP—10. Daily tonnage 100.
SIZES SHIPT—Run of Mine.

EDDY COAL COMPANY

General Office, Oakmont, W. Va.
PR—Wm. H. Strickler, Westport, Md.
VP—Frank Strickler, Kingwood, W. Va.
TR—Eddy Cross, Cumberland, Md.
GM—Howard Cross, Cumberland, Md.
GS—Howard Cross, Cumberland, Md.
PA—Howard Cross, Cumberland, Md.
SCO—Strickler Supply Company, Buyer, Mrs. T. G. H. Westport, Md.
SA—Cross Fuel Co., Cumberland, Md.

Eddy Mine; Drift; Upper and Lower Kittingham Seams, 48-72 inches thick.
PO—Oakmont, W. Va.; SP—Harrison, W. Va.; CTY—Mineral; RR—W. Md.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
LAMP—35. Daily tonnage 125.
SIZES SHIPT—Run of Mine.

EDDY, LAWLER & WORKMAN COAL CO.

New E. L. & W. Coal Co.

EDINGTON COAL COMPANY.

General Office, Elm Grove, W. Va.
PR—H. W. Dorman, Wheeling, W. Va.
VP—Harry H. McDonald, West Alexander, Pa.
TR—Harvey H. McDonald, Elm Grove, W. Va.
GS—Harvey H. McDonald, Elm Grove, W. Va.
CE—C. C. Smith, Wheeling, W. Va.

Edington Mine; Slope; Pittsburgh No. 8 Seam, 54 in. thick.
PO—Elm Grove, W. Va.; SP—Same; CTY—Ohio; RR—Wheeling.
S of H—Mules. Track gage, 42 in.
S of M—2 chain breast type machs and 2 electric coal cutting machs.
PP—Purchase power, 550 volts D. C., 1 pump.
EMP—55. Daily tonnage 300.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

E. L. & W. COAL CO.

General Office, Fairmont, W. Va.
PR—W. A. Lawler, Fairmont, W. Va.
VP—Thos. Workman, Fairmont, W. Va.
TR—E. Eddy, Fairmont, W. Va.
GM—W. A. Lawler, Fairmont, W. Va.
GS—W. A. Lawler, Fairmont, W. Va.
PA—W. A. Lawler, Fairmont, W. Va.
EM—Talbot & Bailey, Fairmont, W. Va.

E. L. & W. No. 1 Mine; Drift; Sewickley Seam, 72 in. thick.
PO—Morgantown, RR No. 2, W. Va.; SP—Flaggy Meadow, W. Va.; CTY—Monongalia; RR—Monon.
S of H—Mules. Track gage, 44 in.
S of M—2 shortwall machs.
PP—Power purchased, transformer 22000-220 volts A. C., 2 pumps.
EMP—50. Last years tonnage 37,450.
SIZES SHIPT—Run of Mine.

ELK GARDEN BIG VEIN COMPANY

General Office, Maryland Bldg., Baltimore, Md.
PR—John J. Sheehan, Baltimore, Md.
VP—S. A. Dixon, Baltimore, Md.
TR—R. Glenn King, Baltimore, Md.
GM—Howard E. Cross, Baltimore, Md.
GS—J. R. Stephenson, Baltimore, Md.

Dixon Mine; Drift and Stripping; Elk Garden Big Vein Seam; 120 inches thick.
PO—Elk Garden, W. Va.; SP—Same; CTY—Mineral; RR—W. Md.
MS—Chas. Huley, Elk Garden, W. Va.
S of H—Mules.
S of M—Hand.
EMP—25. Last years tonnage 14,000.
Gtd information.

ELK HORN COAL CORPORATION.

General Office, 67 Wall St., New York, N. Y.
PR—G. W. Fleming, New York, N. Y.
VP—J. F. Clonfield, New York, N. Y.
TR—J. F. Clonfield, New York, N. Y.
GM—T. S. Haymond, Wheeling, Ky.
PA—G. W. Kinzer, Wheeling, Ky.
EM—George Post, Wheeling, Ky.
EE—R. R. Schellinger, Wayland, Ky.
SCO—Address the Company; Buyer, G. S. Kinzer, Wheeling, Ky.

Interstate No. 44, 61 and 52 Mines; Drift; Pittsburgh No. 8 Seam, 60 to 78 in. thick.
PO—Interstate, W. Va. SP—Same. CTY—Harrison, RR—B. & O., W. Va. and Pittsburgh Br.
MS—H. B. Crane, Interstate, W. Va.
SM—C. M. Linger, Interstate, W. Va.
S of H—6 elec. locos. Track gage, 42 in.
S of M—10 elec. machs.
PP—1 gen. unit, 250 volts D. C., 1 pump. Purchase power.
EMP—450.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.

ELK LICK COAL CO

General Office, Scranton, Pa.
GM—F. L. Spore, Scranton, Pa.
PA—John I. Hamill, Penna. Bldg., Philadelphia, Pa.

Spruce Knob Mine, Drift.
PO—Richmond, W. Va.; SP—Same. CTY—Nicholas, RR—B. & O.
MF—C. H. Rindge, Richmond, W. Va.
SM—Richmond Stone Co., Mer. T. M. Richards, Richmond, W. Va.
S of H—Mules, 1 trolley pole loco, 1 storage battery loco, Track gage 42 in.
S of M—1 shortwall mach.
PP—Power purchased, 250 volts D. C.
EMP—40.
Note—Mine for own use only.

ELK RIDGE COAL & COKE CO

General Office, Northfork, W. Va.
PR—Isaac T. Mann, Bramwell, W. Va.
VP—E. F. Bramwell, New York, N. Y.
TR—E. F. Tierney, Poughat, N. Y.
GM—E. F. Tierney, Poughat, N. Y.
PA—A. K. Parker, Northfork, W. Va.
EM—G. H. Wilcox, Kyle, W. Va.
EE—A. F. Dwyer, Poughat, W. Va.
SCO—Address the Company, Buyer, C. L. Austin, Northfork, W. Va.
SA—Pocahontas Fuel Co., 1 Broadway, New York, N. Y.

Elk Ridge Mine; Drift; Pocahontas Nos. 3 & 9 Seams, 84 and 38 in. thick.
PO—Northfork, W. Va.; SP—Same; CTY—McDowell; RR—N. & W., North Fork Br.
MS—E. C. Harris, Northfork, W. Va.
S of H—3 steam locos, Track gage 44 in.
S of M—Hand, 2 shortwall machs.
PP—Power purchased, M. G. S. S., 250 volts D. C., 3 pumps.
EMP—124. Last years tonnage 69,822.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Gravity and Shaker Screens, Loading Rooms.

ELK RIVER COAL & LUMBER CO

General Office, Dundon, W. Va.
PR—J. G. Bradley, Dundon, W. Va.
VP—J. G. Bradley, Dundon, W. Va.
GM—J. G. Bradley, Dundon, W. Va.
GS—J. G. Bradley, Dundon, W. Va.
PA—R. T. Price, Widen, W. Va.
CE—Bird Huberstadt, Pottsville, Pa.
EE—W. C. Markler, Widen, W. Va.
SCO—Address the Company, Buyer, Peter Bottinger, Widen, W. Va.
SA—C. M. Anderson, Columbus, O.
E. Law & Co., Philadelphia, Pa.

Rich Run Mine; Drift; No. 5 Block Seam, 72 in. thick.
PO—Widen, W. Va.; SP—Exp. Same; RR—Dundon, W. V.; CTY—Clay; RR—B. C. & G. B. & O.
MS—J. A. Cosgrove, Widen, W. Va.
S of H—Trolley pole type, storage battery and combination locos. Track gage, 42 in.
S of M—11 shortwall machs.
PP—4 return tubular boilers, total 600 H. P., M. G. S. S., rotary converters, turbines, 500 K. W., 350 K. W., 250 volts D. C., 7 pumps.
EMP—500. Last years tonnage 400,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Egg, Block.
PREP. EQUIPT—Shaker Screens, Loading Rooms, Picking Tables.

ELKANAW COAL CO

General Office, Charleston, W. Va.

Rocky Jane Mine.
PO—Winifrede, W. Va.; CTY—Kanawha. No report.

ELKHORN COAL & COKE.

General Office, Mayberry, W. Va.
PR—Wm. C. Atwater, 1 Broadway, N. Y.
VP—C. B. Smith, Mayberry, W. Va.
TR—Chas. F. Hutchin, 50 Elm grove, Boston, Mass.

GM—C. B. Smith, Mayberry, W. Va.
GS—D. H. Atwater, Mayberry, W. Va.
PA—R. J. Cox, " "
EM—C. A. Graham, " "
EE—John Wolf, Mayberry, W. Va.
SCO—Address the Company, Buyer, J. A. Cecil, Mayberry, W. Va.
Sales agents, Wm. C. Atwater & Co., New York, N. Y.

Elkhorn Mine; Drift; Pocahontas No. 3 Seam, 8 ft. to 10 ft. 6 in. thick.
PO—Mayberry, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
MS—J. G. Heship, Mayberry, W. Va.
S of H—Mules, 2 steam locos. Track gage, 44 in.
S of M—Hand.
PP—Power purchased, transformer 2200-220 volts A. C., 10 pumps.
EMP—275. Last years tonnage 200,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

ELKHORN PINEY COAL MINING CO

General Office, Milwaukee, Wis.
PR—A. A. Schlessinger, Milwaukee, Wis.
VP—C. D. Weeks, Milwaukee, Wis.
TR—D. T. MacLeod, Milwaukee, Wis.
GM—D. R. Phillips, Huntington, W. Va.
GS—J. H. Mundt, Stanaford, W. Va.
GD—D. D. Davis, Powelton, W. Va.
PA—J. P. McGowan, Milwaukee, Wis.
EM—J. J. Clark, Huntington, W. Va.
EE—J. H. Edwards, Huntington, W. Va.
SCO—Address the Company, Buyer, J. B. Dailey, Huntington, W. Va.

No. 1 Mine; Drift; Beckley Seam, 60 in. thick.
PO—Stanford, W. Va.; SP—Same; CTY—Ridgely; RR—C. & O.
MS—W. F. Venters, Stanaford, W. Va.
MF—F. L. Ogile, Stanaford, W. Va.
S of H—Mules and 14 trolley pole type locos. Track gage 44 in.
S of M—6 shortwall machs.
PP—Power purchased, 250 volts D. C.
Last years tonnage 136,429.
SIZES SHIPT—Run of Mine.

No. 3 Mine; Drift; Sewell Seam, 40-64 in. thick.
PO—Riley, W. Va.; SP—Stanaford, W. Va.; CTY—Ridgely; RR—C. & O.
MS—W. F. Venters, Stanaford, W. Va.
MF—John Richmond, Stanaford, W. Va.
S of H—3 trolley pole type, 7 combination locos.

S of M—4 shortwall machs.
PP—Power purchased, 250 volts D. C.
Last years tonnage 77,634.
SIZES SHIPT—Run of Mine.

No. 4 Mine; Drift; Beckley Seam.
PO—Riley, W. Va.; SP—Stanaford, W. Va.; CTY—Ridgely; RR—C. & O.
MS—W. F. Venters, Stanaford, W. Va.
MF—Wm. Mackie, Stanaford, W. Va.
S of H—3 trolley pole type and 3 storage battery locos.
S of M—3 shortwall machs.
PP—Power purchased, 250 volts.
Last years tonnage 60,004.
SIZES SHIPT—Run of Mine.

Vulcan No. 1 Mine; Drift; Powelton Seam, 66 in. thick.
PO—Powelton, W. Va.; SP—Same. CTY—Fayette; RR—C. & O.
MF—A. F. Garhart, Powelton, W. Va.
S of H—4 trolley pole type locos. Track gage, 42 in.
S of M—6 shortwall machs.
PP—Power purchased, 275 volts D. C., 2 gen. units, return tubular boilers, 500 H. P., 2 pumps.
Last years tonnage 87,064.

New South No. 3 Mine; Drift; Powelton Seam, 66-72 in. thick.
PO—Powelton, W. Va.; SP—Same. CTY—Fayette; RR—C. & O.
MF—A. F. Garhart, Powelton, W. Va.
S of H—4 trolley pole type locos. Track gage, 42 in.
S of M—4 shortwall machs.
PP—Power purchased, 275 volts D. C.
Last years tonnage 81,001.

Eagle No. 4 Mine; Drift; Eagle Seam, 36-44 in. thick.
PO—Powelton, W. Va.; SP—Same; CTY—Fayette; RR—C. & O.
S of M—1 shortwall machs.
S of H—1 trolley pole type loco. Track gage, 42 in.
PP—Power purchased, 275 volts D. C., 1 electric driven air compressor.

No. 5 Mine; Drift.
PO—Powelton, W. Va.; SP—Same; CTY—Fayette; RR—C. & O.
MF—A. F. Garhart, Powelton, W. Va.
S of H—1 combination loco.
S of M—2 shortwall machs.

No. 6 Mine; Slope; Sewell Seam.
PO—Riley, W. Va.; SP—Stanford, W. Va.; CTY—Ridgely; RR—C. & O.
MS—W. F. Venters, Stanaford, W. Va.
S of H—Mules.
S of M—Hand.
PP—Power purchased, 250 volts D. C.

ELKINS COAL & COKE COMPANY.

New Penn Mary Coal Co.
New Virginia Coal Company.

ELKINS STONE COAL COMPANY.

General Office, 2710 Grand Central Terminal, New York, N. Y.
PR—J. W. Peale, New York, N. Y.
VP—C. L. Voglesang, Clay, W. Va.
TR—Alx Morphy, New York, N. Y.
GM—C. L. Voglesang, Clay, W. Va.
PA—C. L. Voglesang, Clay, W. Va.
EM—Clark & Krebs, Charleston, W. Va.
SA—J. W. Peale, New York, N. Y.

Hardie Mine; Drift; Coalburg Seam; 60 to 72 inches thick.
PO—Elkhurst, W. Va.; SP—Same; CTY—Clay, RR—B. & O.
MS—George Ellis, Elkhurst, W. Va.
S of H—Mules, storage battery locos. Track gage 42 inches.
S of M—Shortwall machs.
PP—Power purchased, Transformer 13-200 to 2,200-220 volts A. C., M. G. S. S., 250 volts D. C., 1 pump.
EMP—10. Last years tonnage 18,965.
SIZES SHIPT—Run of Mine.

ELKRIE COAL MINING CO.

Out of business.

ELLIOTT SPILNT COAL CO

General Office, Clay, W. Va.
PR—R. Englis, Cleveland, O.
VP—H. L. Warner, Cleveland, O.
TR—L. E. Rabston, Cleveland, O.
GM—H. L. Warner, Cleveland, O.
PA—B. C. Barber, Clay, W. Va.
EM—Clark & Krebs, Charleston, W. Va.
EE—W. Walker, Clay, W. Va.
SCO—Address the company—Buyer, B. C. Barber, Clay, W. Va.
SA—W. H. Warner & Co., Cleveland, O.

York No. 1 Mine; Drift; Coalburg Seam, 60 to 77 in. thick.
PO—Clay, W. Va.; SP—Same; CTY—Clay; RR—B. & O.
MS—B. C. Barber, Clay, W. Va.
S of H—1 elec. loco, Track gage 42 in.
S of M—3 Elec. mach.
PP—2 fire tube boilers, 150 H. P., 1 150 K. W. generator units, M. G. S. S., 250 volts D. C., 2 pumps.
EMP—100. Last years tonnage 40,000.
SIZES SHIPT—Run of Mine, Slack, Gas, Lump.
PREP. EQUIPT—Bar Screens, Picking Tables.

ELM GROVE MINING COMPANY.

General Office, 319 Rockefeller Bldg., Cleveland, O.
PR—James A. Pidsley, Cleveland, O.
VP—James A. Playfair, Midland, Ont., Can.
TR—Joseph Arkwright, Elm Grove, W. Va.
GS—Thomas Skillern, Elm Grove, W. Va.
PA—Harry Glitsch, Elm Grove, W. Va.
EM—J. C. Boyd, Elm Grove, W. Va.
EE—John Fraser, Triadelphia, W. Va.
SCO—Elm Grove Store Co., Buyer, Chas. Green, Second Natl. Bank Bldg., Pittsburgh, Pa.
SA—Valley Camp Coal Co., Cleveland, O.

Arkwright Mine; Slope; Pittsburgh No. 8 Seam, 60 in. thick.
PO—Elm Grove, W. Va.; SP—Same; CTY—Ohio; RR—B. & O.
MS—Jos. Arkwright, Elm Grove, W. Va.
SM—W. J. Anawalt, Elm Grove, W. Va.
S of H—Mules and 5 trolley pole type locos. Track gage 36 in.
S of M—6 chain breast type and 5 shortwall machs.
PP—Power purchased, 500 volts D. C., 2 pumps.
EMP—150. Last years tonnage 410,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

Boyd Mine; No. 3; Shaft; Pittsburgh Seam, 60 in. thick.
PO—Triadelphia, W. Va.; SP—Same; CTY—Ohio; RR—B. & O.
MS—Thos. Skillern, Elm Grove, W. Va.
S of H—Mules and 4 trolley pole type locos. Track gage 42 in.
S of M—5 chain breast type and 6 shortwall machs.
PP—1 fire tube boilers, total 600 H. P., 1 150 K. W. and 1-200 K. W. gen. units, 250 volts D. C.
Last years tonnage 90,000.
SIZES SHIPT—Run of Mine, Slack, Lump, Nut.
PREP. EQUIPT—Bar Screens.

Skillern or No. 2 Mine; Slope; Pittsburgh Seam, 60 in. thick.
PO—Triadelphia, W. Va.; SP—Same; CTY—Ohio; RR—B. & O.
MS—J. S. Wade, Triadelphia, W. Va.
SM—W. J. Anawalt, Elm Grove, W. Va.
S of H—4 8-ton and 1 6-ton W. Va. house motors, 8 mules. Track gage 42 in.
S of M—10 shortwall, 10 chain breast type machs.

(Continued on Next Page)

Elm Grove Mining Company—Cont.

PP—Power purchased, 144,000 kwh. 2,200 volts A. C., 1 phase, 60 cycles, 2 1/2 inch A. G. sets, 200 K. W., 250 volt D. C., 3 pumps.
 EMP—200 Last years tonnage 400,000.
 SIZES SHIPT—Run of Mine, Slack, Egg, Nut, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

ELMO MINING CO. (INC.)

General Office, 1804 First National Bank Bldg., Cincinnati, O.
 PR—Richard M. Lambert, Cincinnati, O.
 TR—Robert M. Green, Cincinnati, O.
 GM—Robert M. Green, Cincinnati, O.
 GS—Daniel K. Flynn, Elmo, W. Va.
 PA—Daniel K. Flynn, Elmo, W. Va.
 CL—Clark & Krebs, Charleston, W. Va.
 SCO—Address the Company, Buyer, Alex. R. Neal, Elmo, W. Va.
 SA—The Mathew Addy Co., Cincinnati, O.

Elmo Mine; Drift; Sewell Seam, 32 in. thick.
 PO—Elmo, W. Va.; SP—Same; CTY—Fayette; RR—C. & O.
 S of H—Mules, 2 trolley pole type, 1 gathering loco.
 S of M—3 shortwall machs.
 PP—4 Water tube boilers, total 500 H. P., 1 150 K. W. gen. unit, 250 volts D. C., 1 pump.
 EMP—30. Last years tonnage 18,645
 SIZES SHIPT—Run of Mine.

EMMONS COAL MINING CO. OF W. VA., THE

General Office, Philadelphia, Pa.
 PR—L. C. Emons, Philadelphia, Pa.
 VP—J. A. Emons, Philadelphia, Pa.
 TR—J. G. Emons, Philadelphia, Pa.
 GM—C. E. McCarty, Philadelphia, Pa.
 PA—G. C. McIntyre, Philadelphia, Pa.
 SCO—Supplier Supply Co. Buyer, A. C. Shaffer, Bayard, W. Va.
 Sales Agents, Emons Coal Mining Co., Philadelphia, Pa.

Culpeper No. 1 Mine; Slope; Lower Kitzington Seam, 96 in. thick.
 PO—Bayard, W. Va.; SP—Same; CTY—Grant; RR—Western Maryland.
 MS—Jas. S. Strachan, Bayard, W. Va.
 S of H—4 elec. 2 trolley, G battery locos. Track gage 42 in.
 S of M—6 shortwall, 1 air wall mach.
 PP—2 water tube boilers, total 600 H. P., 2 gen. units, 250 volts D. C., 3 pumps.
 EMP—500. Last fiscal year output, 200,000 tons.
 SIZES SHIPT—Run of Mine.

EMORY RUN COAL COMPANY

New Pitts Brothers Coal Co.

EMPIRE COAL & COKE CO.

General Office, Landgraf, W. Va.
 PR—Wm. D. Ord, Landgraf, W. Va.
 VP—W. N. Cummins, Red Jacket, W. Va.
 TR—Thos. E. Stofflet, Landgraf, W. Va.
 GM—Wm. D. Ord, Landgraf, W. Va.
 GS—Thos. E. Stofflet, Landgraf, W. Va.
 PA—J. H. Scholtz, Landgraf, W. Va.
 EM—C. E. Smith, Landgraf, W. Va.
 PA—W. N. Cummins, Landgraf, W. Va.
 SCO—Address the Company, Buyer, Harry George, Landgraf, W. Va.
 Sales Agent, Wm. C. Atwater & Co., Broadway, N. Y.

Empire Mine, Drift, No. 3 Pocahontas Seam, 6 ft. thick.
 PO—Landgraf, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
 MS—Harry Barrett, Landgraf, W. Va.
 S of H—Mules and trolley pole type loco. Track gage, 44 in.
 S of M—1 electric puncher and 2 shortwall machs.
 PP—Power purchased, transformer 110 volts A. C., rotary converters, 250 volts D. C., 7 pumps.
 EMP—100. Daily output, 1,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Revolving and Shaker Screens, Picking Tables, Loading Booms.

EMPIRE COAL MINES CO.

General Office, 70 Wall St., New York N. Y.
 PR—F. R. de Ligne, New York, N. Y.
 TR—James Marshall, New York, N. Y.
 GM—E. B. de Ligne, New York, N. Y.
 GS—Reine Bonnet, Big Chimney, W. Va.
 PA—Reine Bonnet, Big Chimney, W. Va.
 EM—Clark & Krebs, Charleston, W. Va.
 PA—A. W. Schoelcraft, Charleston, W. Va.
 SCO—Address the Company, Buyer, Jacob Housholder, Big Chimney, W. Va.
 SA—Egan Pocahontas Coal Co., Charleston, W. Va.

Empire No. 1 Mine; Drift; No. 5 Block Seam, 60 in. thick.
 PO—Big Chimney, W. Va.; SP—Same; CTY—Kanawha; RR—B. & O.
 S of H—Trolley pole type, storage battery loco. Track gage 42 in.

S of M—2 shortwall and 1 arewall mach.
 PP—2—150 H. P. water tube boilers, 1—250 K. W. gen. units, 250 volts D. C., 4 pumps.
 EMP—80. Last years tonnage 22,602.
 SIZES SHIPT—Run of Mine, Slack, Lump, Block.
 PREP. EQUIPT—Gravely Screens.

EMPIRE FUEL COMPANY.

General Office, Fairmont, W. Va.
 PR—Bucks S. Hutchison, Fairmont, W. Va.
 VP—C. E. Hutchinson, Fairmont, W. Va.
 TR—G. C. Arnold, Rockham, W. Va.
 GM—B. Lee Hutchison, Cincinnati, O.
 GS—E. L. Michie, Hughston, W. Va.
 PA—L. L. Michie, Hughston, W. Va.
 CE—Ray Long, Hughston, W. Va.
 EM—John Justice, Lynchburg, W. Va.
 SCO—Address the Company, Norman Corbett, Hughston, W. Va.
 SA—Hutchinson Coal Co., Fairmont, W. Va.

Additional Information on Page 982

Nos. 1 & 2 Mines; Drift; No. 2 Gas Seam, 48 to 60 in. thick.
 PO—Hughston, W. Va.; SP—Same; CTY—Kanawha; RR—K. & M.
 MS—Walter Bowen, Hughston, W. Va.
 S of H—8 elec. locos. Track gage 42 in.
 S of M—Shortwall machs.
 PP—1 gen. unit, 250 volts D. C., 1 pump. Purchase power.
 EMP—135. Last years tonnage 150,000
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Screens.

ENNIS COAL COMPANY.

General Office, Hiawatha, W. Va.
 PR—Edw. J. McQuail, Bluefield, W. Va.
 TR—W. H. McQuail, Jr., Hiawatha, W. Va.
 GM—Jas. A. McQuail, Hiawatha, W. Va.
 GS—J. P. Johnson, Hiawatha, W. Va.
 PA—Jas. A. McQuail, Hiawatha, W. Va.
 EM—H. J. Jarritt, Hiawatha, W. Va.
 MM—C. F. Phalen, Hiawatha, W. Va.
 EE—P. M. Rigg, Bluefield, W. Va.
 SCO—Address the company—Buyer, J. B. Harry, Hiawatha, W. Va.
 Sales Agency—William C. Atwater & Co., No. 1 Broadway, New York, N. Y.

Hiawatha Mine; Drift; Pocahontas Seam, 48 to 60 in. thick.
 PO—Hiawatha, W. Va.; SP—Same; CTY—Mercer; RR—N. & W.
 S of H—5 elec. locos. Track gage 56 1/2 in.
 S of M—5 elec. machs.
 PP—3 return tubular boilers, 450 H. P., 1 200 K. W. rotary converter, 250 volts D. C., 7 pumps.
 EMP—105. Last years tonnage 110,000
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Picking Tables, Shaker Screens.

ENTERPRISE COAL COMPANY

General Office, Morgantown, W. Va.
 Masontown Mine; Drift; Upper Freeport Seam, 54 inches thick.
 PO—Masontown, W. Va.; SP—Same; CTY—Preston; RR—M. & K.
 MS—Wm. Penberthy, Masontown, W. Va.
 S of H—Mules. Track gage 42 inches.
 S of M—Hand.
 PP—Purchase power. Transformer 2,200 to 110 volts A. C.
 EMP—12. Last years tonnage 11,478.
 SIZES SHIPT—Run of Mine.

EPHRAIM CREEK COAL & COKE CO.

General Office, 11 Broadway, New York, N. Y.
 PR—A. A. Houghton, New York, N. Y.
 VP—A. R. Houghton, New York, N. Y.
 TR—M. C. Jones, New York, N. Y.
 GM—M. C. Jones, New York, N. Y.
 GS—C. E. Rollison, New York, N. Y.
 PA—M. C. Jones, New York, N. Y.
 EM—E. R. Rosser, New York, N. Y.
 SCO—Ephraim Creek Coal & Coke Co., buyer, P. V. Twobig, Thayer, W. Va.
 Sales Agency, East Chesapeake & Ohio Coal Agency Co., Boston, Mass.

Additional Information on Page 995

Buffalo and Slater Mines, Drifts.
 Fire Creek Seam, 3 1/2 to 4 ft. thick.
 PO—Thayer, W. Va.; SP—Same; CTY—Fayette; RR—C. & O., Main line.
 S of H—Trolley pole type locos. Track gage, 44 in.
 S of M—5 chain breast type machs.
 PP—Power purchased 3—200 K. W. M. G. Sols, 500 volts D. C., fans on 220 volts A. C.
 EMP—185. Last years tonnage 115,000
 SIZES SHIPT—Run of Mine, Slack.
 PREP. EQUIPT—Bar Screens.

ERNEST COAL COMPANY

Dot of Business.

ESTELLA COAL MINING COMPANY

General Office, Philippi, W. Va.
 PR—H. J. O'Brien, Snow Shoe, Pa.
 VP—A. J. Peterson, Grashat, Pa.
 TR—Arthur Barraclough, Philippi, W. Va.

GM—Arthur Barraclough, Philippi, W. Va.
 GS—Arthur Barraclough, Philippi, W. Va.
 PA—Arthur Barraclough, Philippi, W. Va.
 Estella No. 1 Mine; Drift; Freeport Seam, 40 in. thick.
 PO—Philippi, W. Va.; SP—Same; CTY—Kanawha; RR—B. & O.
 S of H—Mules.
 S of M—Hand.
 PP—Power purchased.
 Daily tonnage 100.
 SIZES SHIPT—Run of Mine.

EUREKA COAL & COKE CO.

PR—L. E. Tierney, Powhatan, W. Va.
 VP—R. J. Hancock, Lynchburg, Va.
 TR—R. H. T. Adams, Jr., Lynchburg, Va.
 GM—L. E. Tierney, Powhatan, W. Va.
 GS—T. W. Chambers, Eckman, W. Va.
 PA—T. W. Chambers, Eckman, W. Va.
 EM—G. H. Wilcox, Kyle, W. Va.
 SCO—Address the company—Buyer, P. B. Sheet, Powhatan, W. Va.
 SA—Claver Pocahontas Co., Philadelphia, Pa.

Eureka Mine, Drift, Pocahontas No. 3 Seam, 7 to 8 ft. thick.
 PO—Eckman, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
 MS—F. R. Simcox, Eckman, W. Va.
 SM—C. W. Spruce, Eckman, W. Va.
 S of H—Mules and 2 steam locos. Track gage, 44 in.
 S of M—Hand.
 PP—3 return tubular boilers, total 300 H. P., 5 pumps.
 EMP—240. Last fiscal year output, 175,000 tons. Coke ovens, 200 Bee Hive.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Bar and Revolving Screens.
 Old information.

EUREKA COAL COMPANY.

General Office, Athens Natl. Bank Bldg., Athens, O.
 PR—C. D. Hopkins, Athens, O.
 VP—C. L. Hamilton, Columbus, O.
 TR—R. C. Hopkins, Athens, O.
 GS—W. Arnold, Donwood, W. Va.
 PA—C. D. Hopkins, Athens, O.
 EM—J. H. Jackson, Montgomery, W. Va.
 SCO—Address the Company, Buyer, H. L. Bass, Donwood, W. Va.

Eureka No. 1 Mine; Drift; No. 2 Gas Seam, 48 to 96 in. thick.
 PO—Donwood, W. Va.; SP—Montgomery, W. Va.; CTY—Kanawha; RR—C. & O., Morris Creek Rr.
 S of H—2 elec. locos. Track gage 42 in.
 S of M—2 elec. machs.
 PP—3 return tubular boilers, total 450 H. P., 3 gen. units, 250 volts D. C., 2 pumps.
 EMP—45. Last fiscal year output 32,598 tons.
 SIZES SHIPT—Run of Mine.
 Eureka No. 2 Mine; Drift; No. 5 Block Seam, 72-96 in. thick.
 PO—Donwood, W. Va.; SP—Montgomery, W. Va.; CTY—Kanawha; RR—C. & O., Morris Creek Rr.

S of H—Mules.
 S of M—Hand.
 PP—3 return tubular boilers, total 450 H. P., 3 gen. units, 250 volts D. C., 2 pumps.
 EMP—30. Last fiscal year output 15,908 tons.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.

Eureka No. 5 Mine; Drift; No. 5 Split Seam, 60 to 108 in. thick.
 PO—Donwood, W. Va.; SP—Montgomery, W. Va.; CTY—Kanawha; RR—C. & O., Morris Creek Rr.
 S of H—Mules and 2 elec. locos. Track gage 42 in.
 S of M—3 elec. machs.
 PP—3 Atlas return tubular boilers, total 450 H. P., 3 gen. units, 250 volts D. C., 2 pumps.
 EMP—30. Last fiscal year output 37,381 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Rescreened.

Eureka No. 6 Mine; Drift; No. 2 Gas Seam, 48 to 84 in. thick.
 PO—Donwood, W. Va.; SP—Montgomery, W. Va.; CTY—Kanawha; RR—C. & O., Morris Creek Rr.
 S of H—2 elec. locos. Track gage 42 in.
 S of M—2 elec. machs.
 PP—3 Atlas return tubular boilers, total 450 H. P., 3 gen. units, 250 volts D. C., 2 pumps.
 EMP—30. Last fiscal year output 29,828 tons.
 SIZES SHIPT—Run of Mine.

EVANS COAL CO.

Don, W. Va.
 Evans Mine; CTY—McDowell.
 No report.

EVERETT COAL COMPANY

General Office, Haywood, W. Va.
 PR—L. H. Martin, Haywood, W. Va.
 TR—A. W. Martin, Haywood, W. Va.
 SCO—Martin Bros. Co. Buyer, H. E. Wells Haywood, W. Va.
 Martin Mine; Drift; Pittsburgh Seam; 96 inches thick.
 PO—Haywood, W. Va.; SP—Same; CTY—Harrison; RR—B. & O.
 MS—V. L. Drummond, Haywood, W. Va.
 S of H—Mules.
 S of M—Hand.
 PP—1 pump.
 EMP—30. Daily tonnage 200.
 SIZES SHIPT—Run of Mine.

EXCELSIOR POCAHONTAS COAL CO.

General Office, Excelsior, W. Va.
 PR—J. A. Huddleston, Excelsior, W. Va.
 GM—J. A. Huddleston, " "
 PA—J. A. Huddleston, " "
 GS—P. P. Kerr, " "
 TR—W. W. Whyte, Welch, W. Va.
 EE—Lee Hess, Excelsior, W. Va.
 SCO—Excelsior Pocahontas Store Co. Buyer, A. P. Holmes, Excelsior, W. Va.
 SA—W. W. Whyte, Welch, W. Va.

Excelsior No. 1 Mine; Drift; War Creek Seam, 48 in. thick.
 PO—Excelsior, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
 S of H—Trolley pole type locos. Track gage, 44 in.
 S of M—Chain breast type and shortwall machs.
 PP—Power purchased, transformers 2700-200 volts, M. G. sets, 250 volts D. C., 3 fire tube boilers, 150 H. P.
 EMP—250. Last fiscal year output, 190,000 tons.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Loading Booms.

Excelsior No. 2 Mine; Drift; War Creek Seam, 56 in. thick.
 PO—Excelsior, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
 S of H—Trolley pole type locos. Track gage, 44 in.
 S of M—Shortwall and chain breast type machs.
 PP—Power purchased, transformers 275-250, M. G. sets, 250 volts D. C., 3 water tube boilers, 150 H. P.
 EMP—420. Last fiscal year output, 496,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

EXPORT COAL CO.

General Office, Export, W. Va.
 PR—A. O. B. Hogue, Export, W. Va.
 VP—Wm. P. Hogue, Export, W. Va.
 TR—C. J. Cunningham, Export, W. Va.
 GM—A. O. B. Hogue, Export, W. Va.
 GS—Wm. Farrell, Export, W. Va.
 PA—C. J. Cunningham, Export, W. Va.
 EM—A. O. B. Hogue, Export, W. Va.
 SCO—Address the Company, Buyer, E. P. Carver, Export, W. Va.

Export Mine; Drift; Fire Creek Seam, 46 in. thick.
 PO—Export, W. Va.; SP—Same; CTY—Fayette; RR—C. & O.
 S of H—Mules, electric locos. Track gage 44 inches.
 S of M—Hand, shortwall machs.
 PP—1 water tube boiler, 100 H. P., gen. units, 1—100 K. W., 500 volts D. C.
 EMP—40. Daily tonnage 100.
 SIZES SHIPT—Run of Mine.

FAHEY COAL COMPANY.

General Office, Simpson, W. Va.
 GM—G. E. Bailey, Flemington, W. Va.
 GS—G. E. Bailey, Flemington, W. Va.
 PA—G. E. Bailey, Flemington, W. Va.
 Fahey No. 2 Mine; Drift; Pittsburgh Seam, 78 in. thick.
 PO—Simpson, W. Va.; SP—Same; CTY—Taylor; RR—B. & O.
 S of H—Mules. Track gage, 42 in.
 S of M—Hand.
 PP—1 pump.
 EMP—30. Daily output, 150 tons.
 SIZES SHIPT—Run of Mine.

FAIRMONT & BALTIMORE COAL & COKE COMPANY.

General Office, Adamstown, W. Va.
 PR—A. P. Adams, Baltimore, Md.
 VP—Howard Adams, Baltimore, Md.
 TR—Irving Adams, Baltimore, Md.
 GM—A. Lisle White, Adamstown, W. Va.
 GS—A. Lisle White, Adamstown, W. Va.
 PA—A. Lisle White, Adamstown, W. Va.
 EM—Horner Bros., Clarksburg, W. Va.
 EE—George Lamb, Adamstown, W. Va.
 SCO—Address the Company, Buyer, W. C. Sullivan, Adamstown, W. Va.
 Sales Agent—S. M. Hamilton Coal Co., 104 Marine Bank Bldg., Baltimore, Md.

(Continued on Next Page)

Fairmont & Baltimore Coal & Coke Company

General Office, Baltimore, Md.; Pittsburgh Seam 69 to 96 in. thick.
 Fu Adamston, W. Va.; SP—Frt Same.
 Exp. Clarksburg, W. Va.; CTY—Harrison, RR—B. & O.
 S of H—Mules, 1 steam engine, Track gage 42 in.
 S of M—2 chain breast type mch.
 PP—Power purchased, 550 volts D. C.
 1 fire tube boiler, 100 H. P., 2 pumps.
 EMP—65. Daily tonnage 450.
 SIZES SHIPT—Run of Mine, Slack Lump.
 PREP. EQUIPT—Gravity Screens

FAIRMONT & BOULDER COAL CO.

General Office, American Bldg., Fairmont, W. Va.
 PR—Seymour McIntire, Fairmont, W. Va.
 VP—Chas. E. Hawkes, Fairmont, W. Va.
 TR—W. D. Reed, Fairmont, W. Va.
 EM—S. A. Shultsworth, Fairmont, W. Va.
 SA—W. D. Reed, Fairmont, W. Va.

Chas. E. Hawkes Mine; Drift; Freeport Seam, 72 inches thick.
 PO—Boulder, W. Va.; SP—Same; CTY—Barbour; RR—B. & O.
 S of H—Mules, Track gage 42 inches.
 S of M—Hand.
 SIZES SHIPT—Run of Mine.

FAIRMONT & CLEVELAND COAL CO.

General Office, Fairmont, W. Va.
 PR—W. E. Watson, Fairmont, W. Va.
 VP—E. F. Harbey, Fairmont, W. Va.
 TR—M. A. Pfelecher, Fairmont, W. Va.
 GM—W. E. Watson, Fairmont, W. Va.
 PA—R. P. Hines, Fairmont, W. Va.
 CL—W. B. Harlan, Cleveland, W. Va.
 FM—11 Southside, Fairmont, W. Va.
 Additional information on Page 996

Parker Run Mine; Drift; S-wickley Seam, 72 inches thick.
 PO—Riversville, W. Va.; SP—Frt. South Riversville, W. Va.; Exp. Montauk, W. Va.; CTY—Marion; RR—B. & O., Monongahela Br.
 MS—C. E. Gaskill, Fairmont, W. Va.
 S of H—Mules, 3 10-ton, 2 6-ton, 4 5-ton trolley pole type and 1 8-ton storage battery locos. Track gage 42 in.
 S of M—15 chain breast and 3 shortwall mch.
 PP—Power purchased, Transformer 22000—440 volts A. C., 2 M. G. Sets, 150 K. W. each, 250 volts D. C., 3 pumps.
 EMP—296. Last years tonnage 302,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Picking Tables, Shaker Screens, Loading Booms.

FAIRMONT & FAIRVIEW COAL CO.

Fairview, W. Va.
 Fairview No. 1 Mine; CTY—Marion.
 No report.

FAIRMONT & PITTSBURGH COAL MINING CO.

Morgantown, W. Va.
 Gilmer Mine; CTY—Monongalia.
 No report.

FAIRMONT & WESTON COAL COMPANY

Out of Business.

FAIRMONT BIG VEIN COAL COMPANY.

General Office, 10th floor, Union Bank Bldg., Clarksburg, W. Va.
 PR—D. Howard, Clarksburg, W. Va.
 VP—Olanthus West, Clarksburg, W. Va.
 TR—Isabelle M. Quinn, Clarksburg, W. Va.
 GM—D. Howard, Clarksburg, W. Va.
 GS—Fred. Howard, Clarksburg, W. Va.
 PA—J. Ray Quinn, Clarksburg, W. Va.
 SA—Daniel Howard & Co., Clarksburg, W. Va.

Fairmont No. 1 Mine; Drift; Pittsburgh No. 8 Seam, 122 in. thick.
 PO—Two Lick, W. Va.; SP—Lynch Mine, W. Va.; CTY—Harrison; RR—B. & O.
 MS—M. A. Higgins, Two Lick, W. Va.
 S of H—Mules, trolley pole type and gas-oline locos. Track gage 42 in.
 S of M—1 chain breast type and 1 longwall mach.
 PP—Gen. units, 250 volts A. C. Purchase power.
 EMP—100. Daily tonnage 400.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

Fairmont No. 2 Mine; Drift; Pittsburgh No. 8 Seam, 108 in. thick.
 PO—Two Lick, W. Va.; SP—Same; CTY—Harrison; RR—B. & O.
 MS—M. A. Higgins, Two Lick, W. Va.
 S of H—Mules, trolley pole type and gas-oline locos. Track gage 42 in.
 S of M—2 chain breast type and 1 long-wall mach.
 PP—Gen. unit, 250 volts A. C. Purchase power.
 EMP—250. Daily tonnage 1000

SIZES SHIPT Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Gravity Screens

FAIRMONT FUEL COMPANY

General Office, Fairmont, W. Va.
 PR—E. D. Clark, Fairmont, W. Va.
 VP—C. D. Robinson, Fairmont, W. Va.
 TR—C. D. Robinson, Fairmont, W. Va.
 GM—C. D. Robinson, Fairmont, W. Va.
 GS—Dorsey Peple, Fairmont, W. Va.
 PA—H. P. Robinson, Fairmont, W. Va.
 EM—D. D. Simon, Fairmont, W. Va.
 SA—Eastern Fuel Co., 108 Frick Bldg., Pittsburgh, Pa.; 302 Broadway, New York, N. Y.

Hill Top Mine; Drift; S-wickley Seam, 60 inches thick.
 PO—Albama, W. Va.; SP—Same; CTY—Monongalia; RR—Monon.
 S of H—Trolley pole type locos. Track gage 42 in.
 S of M—2 chain breast type mch.
 PP—Power purchased, Transformer 2200—220 volts A. C., 3 pumps.
 EMP—50. Daily tonnage 200.
 SIZES SHIPT—Run of Mine

FAIRMONT KITTANNING COAL CO.

General Office, 111-115 Devery Bldg., Fairmont, W. Va.
 PR—J. E. Gaskill, Fairmont, W. Va.
 TR—H. M. Hill, Fairmont, W. Va.
 GM—A. J. Salzer, Fairmont, W. Va.
 PA—H. M. Hill, Fairmont, W. Va.
 CE—C. E. Gaskill, Fairmont, W. Va.
 SA—South Mt. Coal Corp., 315 Devery Bldg., Fairmont, W. Va.

Byrer Mine; Drift; Kittanning Seam, 60 inches thick.
 PO—Volga, W. Va.; RR—No. 2; SP—Tegart Jet., W. Va.; CTY—Barbour; RR—B. & O.
 S of H—Mules, Track gage 42 inches.
 S of M—Comp. air punches.
 PP—Power purchased, Fire tube boiler, 440 A. C., rotary converter 250 volts D. C.
 EMP—30. Daily tonnage 200.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Picking Tables.
 Formerly operated by Byrer Coal Co.

FAIRMONT-LOWSVILLE COAL COMPANY

General Office, 201 Professional Bldg., Fairmont, W. Va.
 PR—Jno. Y. Hite, Fairmont, W. Va.
 TR—Jno. Y. Hite, Fairmont, W. Va.
 GM—John Lagg Hite, Fairmont, W. Va.
 GS—A. L. Cough, Lowsville, W. Va.
 PA—John Lagg Hite, Fairmont, W. Va.
 CE—Talbot & Bailey, Fairmont, W. Va.
 SA—Address the Company, Byer D. W. Barto, Lowsville, W. Va.

John Y Mine; Drift; S-wickley Seam, 84 in. thick.
 PO—Lowsville, W. Va.; SP—Same; CTY—Monongalia; RR—Penna. and N. Y. P.
 S of H—Mules and electric locos. Track gage 42 inches.
 S of M—3 shortwall mch.
 PP—Power purchased, Transformer 22000—2200 M. G. Sets, 250 volts D. C., 1 pump.
 EMP—150. Last years tonnage 100,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.
 Note: Successors to Robert Talbott.

FAIRMONT MASONTOWN COAL COMPANY.

General Office, Fairmont, W. Va.
 PR—C. H. Hughes, Morgantown, W. Va.
 VP—W. T. Hughes, Morgantown, W. Va.
 TR—W. T. Hughes, Morgantown, W. Va.
 GM—F. D. Reed, Fairmont, W. Va.
 GS—John Comby, Adrian, W. Va.
 PA—W. D. Reed, Fairmont, W. Va.
 CE—S. A. Shultsworth, Fairmont, W. Va.
 EM—J. D. Scott, Elkins, W. Va.
 SA—W. H. Green Coal Co., Elkins, W. Va.

Dale Mine; Drift; Upper Freeport Seam, 72 in. thick.
 PO—Adrian, W. Va.; SP—Same; CTY—Upshur; RR—B. & O.
 S of H—Mules, Track gage, 42 in.
 S of M—1 longwall mach.
 PP—1 water tube boiler, 200 H. P., gen. units, 250 volts D. C.
 EMP—25. Last years tonnage 12,000.
 SIZES SHIPT—Run of Mine.

FAIRMONT MINING COMPANY

General Office, Fairmont, W. Va.
 PR—F. J. Patton, Fairmont, W. Va.
 TR—A. W. Patton, Fairmont, W. Va.
 PA—F. J. Patton, Fairmont, W. Va.
 SA—F. J. Patton, Fairmont, W. Va.

Trainer Mine; Drift; Pittsburgh Seam, 84 in. thick.
 PO—R. P. D. No. 4 Monongah, W. Va.; SP—Everson, W. Va.; CTY—Harrison; RR—B. & O.
 S of H—Mules, Track gage 42 in.
 S of M—1 shortwall mach.
 PP—Power purchased.
 EMP—25. Last years tonnage 202,645.
 SIZES SHIPT—Run of Mine.
 Note—Formerly operated by Conn Run Coal Co.

FAIRMONT-REYNOLDSVILLE COLLIERIES COMPANY

General Office, Clarksburg, W. Va.
 PR—Daniel Howard, Clarksburg, W. Va.
 VP—N. E. Raker, Clarksburg, W. Va.
 TR—Isabelle M. Quinn, Clarksburg, W. Va.
 GM—H. C. Morrison, Clarksburg, W. Va.
 PA—H. C. Morrison, Clarksburg, W. Va.
 CE—N. E. Raker, Clarksburg, W. Va.
 SA—Daniel Howard & Co., Clarksburg, W. Va.

Octa Mine; Drift; Pittsburgh No. 8 Seam, 127 in. thick.
 PO—Wilsonburg, W. Va.; SP—Same; CTY—Harrison; RR—B. & O.
 S of H—Mules, Track gage 42 in.
 EMP—15. Daily tonnage 250.
 SIZES SHIPT—Run of Mine, Slack Lump.
 PREP. EQUIPT—Bar Screens

FAIR-MOR COAL COMPANY

General Office, Morgantown, W. Va.
 VP—A. Benvenuto, Morgantown, W. Va.
 TR—Geo. P. Connonizas, Morgantown, W. Va.
 GM—W. E. Naeft, Morgantown, W. Va.
 LM—Monongahela Valley Lng. Co., Morgantown, W. Va.
 SA—Morgantown Coal company, Morgantown, W. Va.

White Rock Mine; Drift; S-wickley Seam, 72 in. thick.
 PO—R. P. D. Fairmont, W. Va.; SP—Same; CTY—Marion, RR—B. & O., Mon. Br.
 S of H—Mules, Track gage 42 in.
 S of M—2 shortwall mch.
 PP—Power purchased, Transformer 220—220 volts A. C.
 EMP—25.
 SIZES SHIPT—Run of Mine

FAIRVIEW COAL CO.

Copn, W. Va.
 Fairview Mine, CTY—Baxton.
 No report.

FALL BRANCH COAL CO.

General Office, Bluefield, W. Va.
 PR—O. C. Jenkins, Bluefield, W. Va.
 TR—Geo. S. Seabolt, Bluefield, W. Va.
 GM—J. L. Rhodengie, Chattanooga, W. Va.
 GS—C. W. Wray, Chattanooga, W. Va.
 PA—T. L. Rhodengie, Chattanooga, W. Va.
 CE—J. Harvey Williams, Welch, W. Va.
 EM—J. P. Mearns, Williamson, W. Va.
 EE—West Virginia Eng. Co., Williamson, W. Va.
 SC—Falls Branch Coal Co. Byer, G. C. Wray, Chattanooga, W. Va.
 SA—Address the Company, Chattanooga, W. Va.

Fall Branch Mine; Drift; Thacker, Taylor and Winifrede Seams, 18 7/8 in. thick.
 PO—Chattanooga, W. Va.; SP—Same; CTY—Pike, Ky.; RR—Norfolk & West.
 S of H—Trolley pole type locos. Track gage, 44 in.
 S of M—2 shortwall mch.
 PP—Power purchased, Transformer 22000—2200 volts A. C., M. G. Sets, 250 volts D. C.
 EMP—110.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

FALL RIVER POCA COLLIERIES CO.

General Office, Mayberry, W. Va.
 PR—Wm. C. Atwater, New York, N. Y.
 TR—Geo. H. Lambright, " "
 GM—C. R. Smith, Mayberry, W. Va.
 GS—J. R. Little, Rodersfield, W. Va.
 MM—W. S. Jones, Rodersfield, W. Va.
 PA—J. R. Little, " "
 EM—C. R. Bailey, " "
 EE—W. S. Jones, " "
 SC—Address the Company, Byer, C. L. Woody, Rodersfield, W. Va.
 Sales Agents, Wm. C. Atwater & Co., New York, N. Y.

Fall River Mine; Drift; S-wickley No. 7 Seam, 42 to 48 in. thick.
 PO—Rodersfield, W. Va.; SP—Same; CTY—Mellows; RR—N. & W.
 S of H—Mules, 3 elec., 4 storage battery locos, Track gage 48 in.
 S of M—Hand and 4 elec. mch.
 PP—250 volts D. C., 2 pumps. Purchase power.
 EMP—150. Last years tonnage 80,000.
 SIZES SHIPT—Run of Mine, Egg, Lump, Stoker.

FARNON COAL COMPANY

General Office, Clarksburg, W. Va.
 GM—Edgar T. Brown, Clarksburg, W. Va.
 Farnon Mine; Drift; Pittsburgh Seam, 91 in. thick.
 PO—Box 717, Clarksburg, W. Va.; SP—Everson, W. Va.; CTY—Harrison; RR—B. & O.
 S of H—Mules, Track gage 42 in.
 S of M—Hand.
 SIZES SHIPT—Run of Mine.

FAULKNER COAL CO.

General Office, Three Mile, W. Va.
 Faulkner Mine
 PO—Mallory, W. Va.; CTY—Kanawha; RR—C. & O.
 No report.

FAYETTE FUEL CO.

Morgantown, W. Va.
 Fayette Mine, CTY—Monongalia.
 No report.

FAYETTE KANAWHA COAL CO.

General Office, Monongah, W. Va.
 PR—J. F. Howell, Georgetown, Ky.
 VP—W. C. Mitchell, Portsmouth, W. Va.
 TR—J. A. White, Coalburg, W. Va.
 GM—J. A. White, Coalburg, W. Va.
 GS—J. A. White, Coalburg, W. Va.
 CL—J. F. Dawson, Huntington, W. Va.
 EM—J. H. Jackson, Montgomery, W. Va.
 SA—Address the Company, Beaver, Je. Koonde, Huntington, W. Va.
 SA—Brammer Coal & Coke Co., Wheeling, Ohio.

Nos. 1 and 2 Mines; Drifts; Winifrede and No. 2 Gas Seam, 66 inches thick.
 PO—Morgantown, W. Va.; SP—Same; CTY—Fayette, RR—C. & O.
 MS—J. P. McGordon, Montgomery, W. Va.
 S of H—Mules and elec. locos. Track gage 39 inches.
 S of M—Shortwall and chain breast type mch.
 PP—Power purchased, 1 150 K. W. M. G. Set, 275 volts D. C., 1 pump.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.
 Note—Formerly operated by the Montgomery Coal Co.

FAYETTE SWELL COAL CO.

Fayette, W. Va.
 Fayette Mine; CTY—Fayette.
 No report.

FAY-BAL COAL COMPANY

General Office, Glen Jean, W. Va.
 PR—Eugene Burg, Glen Jean, W. Va.
 TR—Chas. Wilburn, Glen Jean, W. Va.
 GM—C. P. Callaway, Glen Jean, W. Va.
 EM—N. P. Rhinhardt, Mt. Hope, W. Va.
 SA—C. G. Blake, Meigsfield, W. Va.

Fay-Bal Mine; Slope; Sewall Seam, 54 inches thick.
 PO—Kinsy, W. Va.; SP—MacDonald, W. Va.; CTY—Fayette; RR—K. G. & E.
 S of H—Mules, Track gage 44 inches.
 S of M—Hand.
 PP—Power purchased, Transformer 1300—220 volts A. C.
 EMP—10.
 SIZES SHIPT—Run of Mine

FERGUSON & BUTCHER COAL COMPANY

Out of Business.

FERGUSON COAL & COKE CO.

Now operated by the Salkeld Coal Co.

FERIMER & CAFFIN COAL CO.

Kohler, W. Va.
 No. 1 Mine; CTY—Wayne.
 No report.

FERNOELL COAL COMPANY

General Office, Fairmont, W. Va.
 PR—S. B. Brooks, Fairmont, W. Va.
 VP—Henry O. Ross, Fairmont, W. Va.
 TR—Ray L. Pepper, Fairmont, W. Va.
 GS—S. B. Brooks, Fairmont, W. Va.
 PA—Henry O. Ross, Fairmont, W. Va.

Rutherford Mine; Drift; Freeport Seam, 60 7/2 inches thick.
 PO—Burlington, W. Va.; SP—Adrian, W. Va.; CTY—Barbour; RR—B. & O.
 S of H—Mules, Track gage 42 inches.
 S of M—Hand.
 EMP—20. Daily tonnage 200.
 SIZES SHIPT—Run of Mine, Slack.
 Note—Formerly operated by the Rutherford Coal Co.

FIFE COAL CO.

Morgantown, W. Va.
 Fife Mine; CTY—Monongalia.
 No report.

FINCHES RUN COAL CO.

Barnesville, W. Va.
 Lizzie Mine; CTY—Marion.
 No report.

FINEBERG COAL CO.

Clarksburg, W. Va.
 Fineberg Mine, CTY—Kanawha.
 No report.

FIRE CREEK COAL & COKE CO.

General Office, Stanton, Va.
 PR—H. R. Spradlin, Stanton, V.
 TR—A. Leskne Miller, Stanton, V.
 GM—Gilbert Smith, Fire Creek, W. Va.
 GS—Gilbert Smith, Fire Creek, W. Va.
 PA—Gilbert Smith, Fire Creek, W. Va.
 EM—Gilbert Smith, Fire Creek, W. Va.
 SA—Fire Creek Stone & Lumber, Fire Creek, W. Va.
 200. Fire Creek Stone & Lumber, Fire Creek, W. Va.

(Continued on Next Page)

Fire Creek Coal & Coke Co.—Cont.

Fire Creek Mine; Drift; Quinnimont Seam, 36 to 42 in. thick.
 PO—Fire Creek, W. Va.; SP—Same; CTY—Fayette, RR—C. & O.
 MS—Tom Lake, Fire Creek, W. Va.
 S of H—Mules and 2 trolley pole type locos. Track gage, 44 in.
 S of M—Hand.
 PP—Power purchased, transformer 2200-500 volts A. C., rotary converters, 500 volts D. C., 4 pumps.
 EMP—70. Last fiscal year output, 32,274 tons. Coke ovens, 72 Bee Hive.
 SIZES SHIPT—Nut, Slack, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

FIRE CREEK SMOKELESS FUEL CO.

General Office, Lego, W. Va.
 PR—John B. Steinberger, New York, N. Y.
 VP—Chas. P. Hutchins, New York, N. Y.
 SECY—John J. Atwater, New York, N. Y.
 GM—D. H. Frazier, Lego, W. Va.
 EM—Fred Wilfong, Beckley, W. Va.
 EE—W. V. Engineering Co., Charleston, W. Va.
 SCO—Address the Company, Buyer, B. P. Rittler, Lego, W. Va.
 SA—Wm. C. Atwater & Co., New York, N. Y.

Lego Mine; Drift; Fire Creek Seam, 46 inches thick.
 PO—Lego, W. Va.; SP—Beeson, W. Va.; CTY—Raleigh; RR—Virginian, C. & O.
 MS—M. P. Campbell, Lego, W. Va.
 S of H—3 storage battery, 1 combination, 1 elec. loco. Track gage 44 in.
 S of M—1 arowall, 1 shortwall machs.
 PP—Power purchased, transformer 2200-500 V. M. G. sets, 250 volts D. C., 3 pumps.
 EMP—102. Last years tonnage 71,255.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

FLANAGAN COAL CO.

General Office, Pottsville, Pa.
 PR—J. P. Flanagan, . . . Welch, W. Va.
 VP—C. D. Rishel, Pottsville, Pa.
 TR—J. P. Crosby, . . . Pottsville, Pa.
 GM—J. P. Flanagan, . . . Welch, W. Va.
 GS—Thos. J. Flanagan, Roderfield, W. Va.
 PA—C. D. Rishel, Pottsville, Pa.
 EM—L. A. Odgers, Welch, W. Va.
 SCO—Address the Company, Buyer, Thos. J. Flanagan, Roderfield, W. Va.
 SA—Flanagan Coal Sales Co., Inc., Welch, W. Va.

Flanagan Nos. 1 and 2 Mines; Drift; Seams 48-72 in. thick.
 PO—Roderfield, W. Va.; SP—Erin, W. Va.; CTY—McDowell; RR—N. & W.
 SM—John Hamilton, Roderfield, W. Va.
 S of H—Mules and 5 elec. locos. Track gage 48 in.
 S of M—2 cutting, 1 elec. mach.
 PP—Power purchased, 250 volts D. C., 1 pump.
 EMP—98. Last years tonnage 65,000.
 SIZES SHIPT—Run of Mine, Lump.
 PREP. EQUIPT—Gravity Screens.

FLAT TOP COAL MINING COMPANY.

General Office, Bramwell, W. Va.
 PR—George H. Patten, Chattanooga, Tenn.
 VP—W. I. Pittchard, Bramwell, W. Va.
 TR—Newton T. Roberts, Bramwell, W. Va.
 GM—James Grainger, English, W. Va.
 GS—James Grainger, . . . English, W. Va.
 EM—J. H. Brock, Huntington, W. Va.
 SCO—Address the company, Buyer, Alex. McDermott, English, W. Va.
 Sales Agency, Flat Top Fuel Co., Bluefield, W. Va.

Thomas Mine; Slope and Drift; War Creek and Welch Seams, 30 to 36 inches thick.

PO—English, W. Va.; SP—Same; CTY—McDowell; RR—N. & W., Dry Fork R.
 S of H—Mules, 1 trolley pole type and 1 storage battery locos. Track gage, 48 in.
 S of M—Hand.
 PP—Power purchased, transformer 13,000-170 volts A. C., rotary converters, 250 volts D. C., 5 pumps.
 EMP—53. Last years tonnage 33,758.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

FLAT TOP POCANTONAS COAL CO.

General Office, Herndon, W. Va.
 PR—Joseph Kays, Washington, D. C.
 VP—J. D. White, Herndon, W. Va.
 TR—T. O. Deanner, Herndon, W. Va.
 GM—T. O. Deanner, Herndon, W. Va.
 PA—T. O. Deanner, Herndon, W. Va.
 EM—O. L. Collier, Mullins, W. Va.
 Sales Agent—Bluefield Coal and Coke Co., Bluefield, W. Va.

Flat Top Pocantonas Mine; Drift; Nos. 3 and 6 Pocantonas Seams, 48 in. thick.

PO—Herndon, W. Va.; SP—Same; CTY—Wyoming; RR—Virginian.
 S of H—1 6-ton trolley loco. 4 storage battery locos. Track gage 44 in.
 S of M—2 shortwall machs.
 PP—Power purchased, transformer 2300-250 volts A. C., rotary converters, 250 volts D. C., 2 pumps.
 EMP—65. Last years tonnage 52,000.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Picking Tables.

FLEMING & CRANE

General Office, Interstate, W. Va.
 PR—Boyd S. Fleming, Interstate, W. Va.
 TR—Harry B. Crane, Interstate, W. Va.
 GM—Harry B. Crane, Interstate, W. Va.
 GS—Jesse Richard, Interstate, W. Va.
 SA—Patton Coal Co., Fairmont, W. Va.

Fleming Mine; Drift; Pittsburgh Seam, 96 in. thick.
 PO—K. F. D. No. 1, Monongah, W. Va.; SP—Enterprise, W. Va.; CTY—Harrison; RR—B. & O.
 S of H—Mules. Track gage 42 in.
 S of M—Hand.
 EMP—25. Last years tonnage 11,197.
 SIZES SHIPT—Run of Mine.

FLORENCE COAL MINING COMPANY

PR—B. M. Carpenter, Pittsburgh, Pa.
 VP—E. A. Morris, Pittsburgh, Pa.
 TR—George C. Stewart, Pittsburgh, Pa.
 GS—Rudolph Valduga, Lorentz, W. Va.
 PA—Rudolph Valduga, Lorentz, W. Va.
 EM—Homer Boos, Clarkburg, W. Va.
 SCO—Sarah Store, Buyer, Domestic Pala, Lorentz, W. Va.
 SA—Penn-York Coal & Coke Co., Pittsburgh, Pa.

Sarah No. 1 Mine; Drift; Red Stone Seam, 48 inches thick.
 PO—Lorentz, W. Va.; SP—Same; CTY—Tipton; RR—B. & O.
 S of H—Mules, main and tail rope. Track gage 42 inches.
 S of M—Hand.
 PP—1 35 H. P. die tube boiler, 3 pumps.
 EMP—20. Last years tonnage 12,000.
 SIZES SHIPT—Run of Mine.
 Old information.

FLOW MINING COMPANY

General Office, Kermitt, W. Va.
 PR—H. W. Fargherhson, Kermitt, W. Va.
 VP—P. M. Fargherhson, Kermitt, W. Va.
 TR—John R. Fargherhson, Kermitt, W. Va.
 GM—D. W. Fargherhson, Kermitt, W. Va.
 GS—P. M. Fargherhson, Kermitt, W. Va.
 EM—John R. Fargherhson, Kermitt, W. Va.
 SA—Tildesley Coal Co., Cincinnati, O.

Flow Mine; Drift-Slope; Pond Creek Seam, 57 inches thick.
 PO—Kermitt, W. Va.; S—Same; CTY—Martin; RR—N. & W.
 S of H—Mules, rope, gasoline and steam loco. Track gage 36 inches.
 S of M—Hand and shortwall machs.
 PP—1 35 H. P. die tube boiler, rotary converter, 250 volts D. C.
 EMP—17. Last years tonnage 6,000.
 SIZES SHIPT—Run of Mine, Nut, Slack, Egg, Lump.
 PREP. EQUIPT—Bar Screens.

FLYNN-HAISLIP COAL CO.

Now Red Campbell Coal Co.

FOLLANSBEE GAS COAL CO., INC.

General Office, Wellsburg, W. Va.
 PR—J. L. Arnold, Wellsburg, W. Va.
 VP—Gale B. White, Taylorstown, Pa.
 TR—J. J. Walker, Follansbee, W. Va.
 GM—J. J. Arnold, Wellsburg, W. Va.
 GS—John Rie, Follansbee, W. Va.
 PA—J. J. Arnold, Wellsburg, W. Va.
 CE—C. C. Smith, Wheeling, W. Va.
 EM—Sidney Smith, Wheeling, W. Va.
 SA—J. J. Arnold, 922 Erie Bldg., Pittsburgh, Pa.; Johnston Bros., Wellsburg, W. Va.

Arnold No. 2 Mine; Drift; Pittsburgh Seam, 58 inches thick.
 PO—Wellsburg, W. Va.; SP—Same; CTY—Brook; RR—Poh. & W. Va.
 MS—G. R. Waddell, Wellsburg, W. Va.
 S of H—Elec. locos. Track gage 42 inches.
 S of M—Shortwall and elec. punchers.
 PP—Power purchased, transformer 2200-220 volts A. C., 1 100 K. W. M. G. sets, 250 volts D. C.
 EMP—75. Daily output, 350 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.

FORO-LYON COAL CO.

General Office, McWhorter, W. Va.
 PR—Cornelius Aizpurn, Clarkburg, W. Va.
 VP—W. H. Brown, Clarkburg, W. Va.
 TR—F. B. Lyons, Clarkburg, W. Va.
 GM—Cornelius Aizpurn, Clarkburg, W. Va.
 GS—H. L. Ford, McWhorter, W. Va.
 PA—H. L. Ford, McWhorter, W. Va.
 CE—D. D. Britt, Clarkburg, W. Va.
 SA—Cornelius Aizpurn, Clarkburg, W. Va.

"Blanca" Mine; Drift; Red Stone and Pittsburgh Seams, 72-52 in. thick.

PO—McWhorter, W. Va.; SP—Jamelea, W. Va.; CTY—Lewis; RR—B. & O.
 S of H—Mules and incline gravity. Track gage, 42 in.
 S of M—Hand.
 PP—2 pumps.
 EMP—25. Daily tonnage 100.
 SIZES SHIPT—Run of Mine.

FOREST COAL COMPANY

General Office, Fairmont, W. Va.
 PR—H. W. Showalter, Fairmont, W. Va.
 VP—S. D. Brady, Fairmont, W. Va.
 TR—A. P. Brady, Fairmont, W. Va.
 GM—H. W. Showalter, Fairmont, W. Va.
 GS—F. E. Christopher, Cassville, W. Va.
 PA—A. P. Brady, Fairmont, W. Va.
 CE—S. D. Brady, Fairmont, W. Va.
 EM—Paul Billingham, Fairmont, W. Va.
 EE—W. H. Ellis, Fairmont, W. Va.

Forest Mine; Drift; Waynesburg Seam, 96 in. thick.
 PO—Cassville, W. Va.; SP—Star City, W. Va.; CTY—Monongalia; RR—N. & W.
 S of H—3 trolley motors. Track gage 42 in.
 S of M—3 shortwall machs.
 PP—Purchase power, motor generator sets, 220 volts D. C.
 Daily tonnage 600.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.

FORMAN POCANTONAS COAL CO., INC.

PR—Gus Forman, War, W. Va.
 VP—M. M. Perkins, Dan, W. Va.
 TR—Gus Forman, War, W. Va.
 GM—H. W. Perkins, Dan, W. Va.
 GS—H. W. Perkins, Dan, W. Va.
 PA—H. W. Perkins, Dan, W. Va.
 CE—J. C. Cooper, Welch, W. Va.
 EM—J. C. Cooper, Welch, W. Va.

Forman Pocantonas Mine; Drift; Welch Seam, 36 inches thick.
 PO—War, W. Va.; SP—Garland, W. Va.; CTY—McDowell; RR—N. & W.
 S of H—Mules.
 S of M—Hand.
 Daily tonnage 100.
 SIZES SHIPT—Run of Mine.

FORT BRANCH COAL CORP.

General Office, Richmond, Va.
 PR—John W. Williams, Richmond, Va.
 VP—Frederick E. Nolting, Richmond, Va.
 TR—Geo. M. Reid, . . . Richmond, Va.
 GM—Geo. M. Reid, Richmond, Va.
 GS—C. G. Dickinson, Fort Branch, W. Va.
 PA—Geo. M. Reid, Richmond, Va.
 EM—W. C. McCah, . . . Logan, W. Va.
 SCO—Address the Company, Buyer, M. Ellis, Fort Branch, W. Va.

Fort Branch Mine; Drift; Chilton Seam, 48 to 72 in. thick.
 PO—Fort Branch, W. Va. SP—Same.
 CTY—Lozano; RR—C. & O., Guyan Valley Branch.
 SM—C. G. Dickinson, Fort Branch, W. Va.
 S of H—3 trolley pole type locos. Track gage 44 in.
 S of M—3 shortwall machs.
 PP—Power purchased, transformer 2300-250 volts D. C., 2 pumps.
 EMP—50. Last years tonnage 75,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables.

FORT CLARK COAL CO.

General Office, Clarkburg, W. Va.
 PR—T. J. Parrish, Clarkburg, W. Va.
 VP—L. Grove, Clarkburg, W. Va.
 TR—Raymer Parrish, Clarkburg, W. Va.
 GM—T. J. Parrish, Clarkburg, W. Va.
 GS—T. J. Parrish, Clarkburg, W. Va.
 PA—T. J. Parrish, Clarkburg, W. Va.
 EM—Hornor Brothers, Clarkburg, W. Va.
 EE—E. M. Call & Co., Clarkburg, W. Va.
 SA—F. R. Long & Co., New York City, N. Y.

Additional Information on Page 997

Wilson Mine; Drift; Pittsburgh No. 8 Seam, 72 in. thick.
 PO—Wilsonburg, W. Va.; SP—Same; CTY—Harrison; RR—B. & O.
 MS—Wm. Reid, Wilsonburg, W. Va.
 S of H—Mules and elec. loco. Track gage 42 in.
 S of M—Hand.
 EMP—50. Daily tonnage 300.
 SIZES SHIPT—Run of Mine.
 Wilsonburg Mine; Drift; Pittsburgh No. 8 Seam, 72 in. thick.
 PO—Wilsonburg, W. Va.; SP—Same; CTY—Harrison; RR—B. & O.
 MS—Wm. Reid, Wilsonburg, W. Va.
 S of H—Mules and elec. loco. Track gage 42 in.
 S of M—Chain breast type machs.
 PP—Power purchased, transformers 22,000 to 2200 volts A. C., M. G. sets, 250 volts D. C.

EMP—50. Daily tonnage 400.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

FORT DEFIANCE COAL & COKE CO.

Out of Business.

FORT GRANO COAL CO.

General Office, Fairmont, W. Va.
 PR—W. T. Hughes, Morgantown, W. Va.
 VP—P. S. Suddarth, Grafton, W. Va.
 TR—W. D. Reed, Fairmont, W. Va.
 GM—W. T. Hughes, Morgantown, W. Va.
 PA—W. D. Reed, Fairmont, W. Va.
 EM—S. A. Shuttlesworth, Fairmont, W. Va.

Fort Grand Mine; Slope; Sewickley Seam, 72 inches thick.
 PO—Lowesville, W. Va.; SP—Same; CTY—Monongalia; RR—Indian Creek & Northern.
 S of H—Mules and elec. locos. Track gage 42 inches.
 S of M—Shortwall machs.
 PP—Power purchased, Transformer 22,000 to 220 volts A. C.; 3—37½ K. W. M. G. Sets.
 SIZES SHIPT—Run of Mine.

FORT PITT COAL COMPANY

General Office, Clarksburg, W. Va.
 PR—John P. Keely, Clarksburg, W. Va.
 TR—Percy Byrd, Clarksburg, W. Va.
 GS—Richard Scott, Clarksburg, W. Va.
 PA—Percy Byrd, Clarksburg, W. Va.
 EM—Richard Scott, Clarksburg, W. Va.

Fort Pitt Mine; Drift; Pittsburgh Seam; 102 inches thick.
 PO—Clarksburg, W. Va.; SP—Wilsonburg, W. Va.; CTY—Harrison; RR—B. & O., Parkersburg Branch.
 S of H—Mules.
 S of M—Hand.
 SIZES SHIPT—Run of Mine, Slack, Lump.

FORTRAY COAL COMPANY

General Office, Shinnston, W. Va.
 PR—H. L. Martin, Enterprise, W. Va.
 VP—Ray E. Sturm, Shinnston, W. Va.
 TR—F. L. Sturm, Viropo, W. Va.
 GM—H. L. Martin, Enterprise, W. Va.
 GS—H. L. Martin, Enterprise, W. Va.
 PA—F. L. Sturm, Viropo, W. Va.

Fortray Mine; Drift; Pittsburgh Seam, 102 inches thick.
 PO—Viropo, W. Va.; SP—Enterprise, W. Va.; CTY—Harrison; RR—W. M.
 S of H—Mules, rope and gasoline loco. Track gage 44 inches.
 S of M—Hand.
 EMP—12. Daily tonnage 100.
 SIZES SHIPT—Run of Mine.

FORTUNE HUNTER COAL CO.

Operations exhausted.
FOUR STATES COAL COMPANY.
 General Office, Wabash Bldg., Pittsburgh, Pa.
 PR—J. D. Ayres, . . . Pittsburgh, Pa.
 TR—J. D. Ayres, . . .
 GM—W. W. Keefer, . . .
 PA—E. F. Younger, . . . Pittsburgh, Pa.
 SCO—Four States Mercantile Co. Buyer, H. W. Netken, Pittsburgh, Pa.

Annabelle Mine; Shaft; Pittsburgh or River Seam, 96 in. thick.
 PO—Worthington, W. Va.; SP—Same; CTY—Marion; RR—B. & O., Monon. River Div.

MS—A. C. Beeson, Worthington, W. Va.
 S of H—14 comp. air. locos.
 S of M—23 comp. air. machs.
 PP—Water tube boilers, total 2500 H. P., 2 low and 2 high comp.
 EMP—300. Last fiscal year output, 290,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Bar Screens, Box Car Loader.

Dorothy and Sarita Mines now operated by Western Pocantonas Fuel Co.

FOUR VEIN COAL CO.

General Office, Beckley, W. Va.
 PR—C. M. Lilly, Beckley, W. Va.
 VP—C. L. Calloway, Beckley, W. Va.
 TR—Herbert Silsbury, Beckley, W. Va.
 GM—C. M. Lilly, Beckley, W. Va.
 GS—R. A. Heddon, Lanark, W. Va.
 PA—Harvey Bailey, Lanark, W. Va.
 EM—R. A. Heddon, Lanark, W. Va.
 SCO—Address the Company, Buyer, Harvey Bailey, Lanark, W. Va.
 SA—Raleigh Smokeless Fuel Co., Beckley, W. Va.

Four Vein Mine; Drift; Sewell, Beckley and Fire Creek Seams, 54-36-48 in. thick.
 PO—Lanark, W. Va.; SP—Same; CTY—Raleigh; RR—C. & O.
 S of H—Mules and trolley type locos. Track gage 44 in.
 S of M—Hand, 1 shortwall mach.
 PP—2 return tubular boilers, 250 H. P., 1—150 K. W. gen. units, 550 volts D. C., 2 pumps.
 EMP—95.
 SIZES SHIPT—Run of Mine.

FOY SPLIT COAL COMPANY

General Office, Buckhannon, W. Va.
PR—F. E. Williams, Buckhannon, W. Va.
VP—J. J. Conley, Brownsville, Pa.
TR—E. J. Foye, Brownsville, Pa.
GM—F. E. Williams, Buckhannon, W. Va.
GS—F. E. Williams, Buckhannon, W. Va.
PA—F. E. Williams, Buckhannon, W. Va.
EM—F. E. Williams, Buckhannon, W. Va.
SA—F. J. Foye, Brownsville, Pa.

Foy Mine; Drift; Coalburg Seam, 51 inches thick.
PO—Dorsey, W. Va.; SP—Same; CTY—Clay; RR—R. & O.
S of H—Mules. Track gage 42 inches.
S of M—Hand and shortwall mch.
PP—Purchase power. Transformer 2,200 to 250 volts A. C., 50 H. P. water tube boiler.
EMP—50. Daily tonnage 160.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
PREP. EQUIPT.—Shaker Screens, Picking Tables, Loading Booms.

FRANCES MINING COMPANY

Out of Business.

FRANCIS, T. J. COAL CO.

General Office, Clarksburg, W. Va.

Park Mine.
PO—Clarksburg, W. Va.; CTY—Harrison; RR—R. & O.
No report.

FRANCOIS COAL COMPANY

PR—E. L. Spraker, Clarksburg, W. Va.
VP—E. J. Franck, 605 Stephen Girard Bldg., Philadelphia, Pa.
TR—A. E. Goeke, Clarksburg, W. Va.
GM—V. E. Goeke, Clarksburg, W. Va.
PA—V. E. Goeke, Clarksburg, W. Va.
EM—L. R. Collins, Clarksburg, W. Va.
SA—Address the Company, Buyer, H. R. Jackson, Nutter Fort, W. Va.
SCA—E. L. Spraker, Clarksburg, W. Va.

Norwood Nos. 1 and 2 Mines. Drifts, Pittsburgh Seam, 78 to 92 in. thick.
PO—Nutter Fort, W. Va.; SP—Clarksburg, W. Va.; CTY—Harrison; RR—R. & O.
MS—R. E. Garrett, Clarksburg, W. Va.
S of H—Mules, 3 gasoline and 1 steam locos. Track gage 42 inches.
S of M—2 chain breast mch.
PP—Power purchased, transformer 22,000 to 550 volts A. C., 3 pumps.
EMP—192. Last years tonnage 150,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT.—Bar Screens.

Vincent Mine sold to the Trol Coal Co.

Anna May Mine; Drift; Sawchick Seam.
PO—Clarksburg, W. Va.; SP—Lousville, W. Va.; CTY—Monongalia; RR—Monongalia.
MS—Chas. E. Goeke, Fairmont, W. Va.
SM—Helen Rice, Fairmont, W. Va.
S of H—Mules and steam loco. Track gage 42 inches.
S of M—Chain breast two-mch.
PP—Power purchased, 410 volts A. C.
EMP—60. Last fiscal year output, 60,000 tons.
SIZES SHIPT—Run of Mine.

FRANKLIN COAL COMPANY

General Office, Thacker Mines, W. Va.
PR—N. H. Franklin, Cincinnati, O.
TR—Frank E. Houston, Cincinnati, O.
GM—W. A. Wilson, Thacker Mines, W. Va.
PA—Benjamin Lewis, Elk Horn, W. Va.
EM—N. H. Franklin, Cincinnati, O.
SCA—George Wright, Cincinnati, O.
EP—John M. Lewis, Cincinnati, O.
SA—Houston Coal Co., Cincinnati, Ohio.

Franklin Mine; Drift; Thacker Seam, 72 in. thick.
PO—Thacker Mines, W. Va.; SP—Thacker, W. Va.; CTY—Mingo; RR—N. & W.
MS—W. A. Wilson, Thacker Mines, W. Va.
S of H—Mules and gasoline loco. Track gage 44 in.
PP—Power purchased.
SIZES SHIPT—Run of Mine.

FRANKLIN GAS COAL COMPANY

General Office, Somerset, Pa.
PR—J. H. Bereris, Somerset, Pa.
VP—R. E. Bereris, Somerset, Pa.
TR—A. G. Smith, Meyersdale, Pa.
GM—A. G. Smith, Meyersdale, Pa.
GS—H. G. Smith, Clarksburg, W. Va.

Franklin Mine; Drift; Pittsburgh Gas Seam, 96 in. thick.
PO—Clarksburg, W. Va.; SP—Byron, W. Va.; CTY—Harrison; RR—R. & O.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine.

FREEDOCK COAL COMPANY

General Office, Piedmont, W. Va.
VP—L. W. Adams, Westport, W. Va.
TR—P. L. Freedock, Piedmont, W. Va.

GM—P. L. Freedock, Piedmont, W. Va.
GS—P. L. Freedock, Piedmont, W. Va.
PA—P. L. Freedock, Piedmont, W. Va.
EM—A. E. Wilhelm, Kingswood, W. Va.
SA—Campbell Coal Co., Piedmont, W. Va.

Freedock Mine; Drift; Bakertown Seam, 38 inches thick.
PO—Aldright, W. Va.; SP—Same; CTY—Preston; RR—M. & K.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
EMP—17. Daily output, 60 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.

FREEMONT COAL COMPANY

General Office, Clarksburg, W. Va.
PR—Dudley D. Britt, Clarksburg, W. Va.
TR—Benj. E. Britt, Clarksburg, W. Va.
GM—Benj. E. Britt, Clarksburg, W. Va.

Ethyl Mine; Drift; Pittsburgh Seam.
PO—Clarksburg, W. Va.; SP—Same; CTY—Harrison; RR—R. & O.
MS—Wayne Riddle, Clarksburg, W. Va.
S of H—Mules. Track gage 42 in.
S of M—Hand.
EMP—30.
SIZES SHIPT—Run of Mine.

FRENCH COAL MINING COMPANY

New French Collieries Co.

FREEMONT COAL COMPANY

General Office, Oakland, Md.
PR—T. D. Campbell, Piedmont, W. Va.
TR—F. A. Thayer, Oakland, Md.
GM—T. D. Campbell, Piedmont, W. Va.
GS—R. T. Thayer, Oakland, Md.
PA—R. T. Thayer, Oakland, Md.
EM—R. T. Thayer, Oakland, Md.
SCA—Crane Supply Co., Buyer, Ray Nordeck, Terra Alta, W. Va.
SA—Campbell Coal Co., Piedmont, W. Va.

Kerns Mine; Drift; Kittanning Seam, 84 in. thick.
PO—R. E. D., Terra Alta, W. Va.; SP—Hutton, Md.; CTY—Preston; RR—Preston.
S of H—Mules. Track gage 42 in.
S of M—Hand.
EMP—12. Daily tonnage 50.
SIZES SHIPT—Run of Mine.

Crane Mine; Drift; Kittanning Seam, 84 in. thick.
PO—R. E. D., Terra Alta, W. Va.; SP—Hutton, Md.; CTY—Preston; RR—Kendall, E. & O.
S of H—Mules. Track gage 42 in.
S of M—Hand.
EMP—100. Daily tonnage 500. Last years tonnage 100,000.
SIZES SHIPT—Run of Mine.

FREER COAL CO., THE

General Office, Birch Run, W. Va.
PR—Gen. C. Bauer, Birch Run, W. Va.
VP—Henry W. Bauer, Birch Run, W. Va.
TR—P. A. Freer, Nelsonville, O.
GM—P. A. Freer, Birch Run, W. Va.
PA—P. A. Freer, Nelsonville, Ohio.
EM—Henry W. Bauer, Birch Run, W. Va.
SA—P. A. Freer, Nelsonville, O.

Freer Coal Mine; Drift; Seam, 66 in. thick.
PO—Birch Run, W. Va.; SP—Same; CTY—Clay; RR—R. & O.
S of H—Mules. Track gage 42 in.
S of M—Shortwall and chain breast type mch.
Power purchased Gen. units, 45 and 100 K. W., 220 volts D. C.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT.—Shaker Screens, Picking Tables, Loading Booms.

FRENCH COLLIERIES COMPANY

General Office, Pancoast, W. Va.
PR—R. M. French, Pancoast, W. Va.
VP—Leo Gross, New York, N. Y.
TR—S. A. McKown, New York, N. Y.
GM—R. M. French, Pancoast, W. Va.
GS—R. M. French, Pancoast, W. Va.
PA—R. M. French, Pancoast, W. Va.
SA—Kanawha Valley Coal Co., Clarksburg, W. Va.

French Nos. 1 and 2 Mines; Drift; Coalburg and Middle Kittanning Seams, 56-75 in. thick.
PO—Pancoast, W. Va.; SP—Hartland, W. Va.; CTY—Clay; RR—R. & O.
MS—Harry Charles, Pancoast, W. Va.
S of H—Mules. Track gage 42 inches.
S of M—2 shortwall mch.
PP—Power purchased, Transformer 2,300 to 220 volts A. C.
EMP—70. Last years tonnage 12,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
PREP. EQUIPT.—Gravity Screens.
Note—Successors to French Coal Mining Co.

FRENCH CREEK FUEL CO.

General Office, Beverly, W. Va.

Arch Mine.
PO—Sage, W. Va.; CTY—Uphor; RR—R. & O.
No report.

FULTON GAS COAL COMPANY

General Office, Uniontown, Pa.
PR—Wm. C. Black, Uniontown, Pa.
VP—G. Carl Areford, Uniontown, Pa.
TR—E. J. Rhymer, Uniontown, Pa.
GM—Robert Shaw, Uniontown, Pa.
GS—Clarence Campbell, Mt. Clare, W. Va.
PA—Clarence Campbell, Mt. Clare, W. Va.
EM—Homer Bros., Clarksburg, W. Va.
SA—Mitchell Fuel Co., Uniontown, Pa.

Florence Mine; Drift; Pittsburgh Seam, 78-81 inches thick.
PO—Mt. Clare, W. Va.; SP—Same; CTY—Harrison; RR—R. & O.
S of H—Mules and trolley pole type locos. Track gage 42 inches.
S of M—4 chain breast type mch.
PP—Purchase power, 1 pump.
EMP—70. Last years tonnage 8,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT.—Gravity Screens.

GABE FORK COAL CO.

General Office, Grafton, W. Va.
PR—John L. Robinson, Grafton, W. Va.
VP—G. H. A. Kunst, R. T. D. 5 or 7, Grafton, W. Va.
TR—Earl E. Jenkins, Grafton, W. Va.
GS—G. H. A. Kunst, R. T. D. 5 or 7, Grafton, W. Va.
PA—Geo. R. W. Johnson, Flemington, W. Va.
EM—Homer Bros., Clarksburg, W. Va.

Half Way Mine; Drift; Pittsburgh Seam, 81 in. thick.
PO—Flemington, W. Va.; SP—Same; CTY—Taylor; RR—R. & O.
MS—Geo. R. W. Johnson, Flemington, W. Va.
S of H—Mules. Track gage, 42 in.
S of M—Hand.
EMP—32. Daily output, 200 tons.
SIZES SHIPT—Run of Mine.

GAGE COAL AND COKE COMPANY

General Office, Pittsburgh, Pa.
PR—D. F. Henry, Hotel Henry, Pittsburgh, Pa.
VP—F. P. Hanna, Hotel Henry, Pittsburgh, Pa.
TR—Geo. S. Lehner, Hotel Henry, Pittsburgh, Pa.
GS—A. B. Spencer, Junior, W. Va.
EM—A. B. Spencer, Junior, W. Va.
PA—Frank Tiano, Junior, W. Va.
SCA—Address the Company, Buyer, A. L. Mearns, Junior, W. Va.

Gage No. 1 Mine; Drift; Kittanning Seam, 60 in. thick.
PO—Junior, W. Va.; SP—Gage, W. Va.; CTY—Barbour; RR—W. Md.
S of H—Mules and 1 elec. loco.
S of M—2 elec. mch.
PP—3 return tubular boilers, total 300 H. P., 2 gen. units, 250 volts D. C., 1 pump.
EMP—100. Last years tonnage 60,000.
Coke Ovens, 60 Bee Hive.
SIZES SHIPT—Run of Mine, Slack, Lump.

Gage No. 2 Mine; Drift; Kittanning Seam, 60 inch a thick.
PO—Junior, W. Va.; SP—Same; CTY—Barbour; RR—R. & O., Edlington Branch.
S of H—Mules. Track gage 42 in.
S of M—Hand.
EMP—20. Daily tonnage 100.
SIZES SHIPT—Run of Mine.

GAINERS RUN COAL COMPANY

New Mason & Mason.

GARLAND POCAHONTAS COAL CO.

General Office, Avondale, W. Va.
PR—W. A. Thornhill, Bluefield, W. Va.
TR—R. E. Baldwin, Gratham, Va.
GM—J. W. Baldwin, Avondale, W. Va.
GS—J. W. Baldwin, Avondale, W. Va.
PA—J. W. Baldwin, Avondale, W. Va.
EM—H. A. Kiser, War, W. Va.
SCA—Address the Company, Buyer, J. E. Proctor, Avondale, W. Va.

Garland Nos. 1 and 2 Mines; Drift; Welch Seam, 26 in. thick.
PO—Avondale, W. Va.; SP—Garland, W. Va.; CTY—McDowell; RR—N. & W., Dry Fork Br.
S of H—Mules. Track gage, 48 in.
S of M—Hand.
PP—1 pump.
EMP—40. Last years tonnage 36,000.
SIZES SHIPT—Run of Mine.

GATES COAL COMPANY

General Office, Berryburg, W. Va.
PR—W. T. Gates, Berryburg, W. Va.
TR—W. T. Gates, Berryburg, W. Va.
GM—W. T. Gates, Berryburg, W. Va.
PA—W. T. Gates, Berryburg, W. Va.

Gates Mine; Drift; Pittsburgh Seam, 96 in. thick.
PO—Berryburg, W. Va. SP—Same, CTY—Barbour, RR—R. & O., G & B Branch.
S of H—Mules.
S of M—Hand.
Daily output, 125 tons.
SIZES SHIPT—Run of Mine.

GAULEY-CONCORD COAL CO.

General Office, Charleston, W. Va.
PR—H. D. Rummel, Charleston, W. Va.
TR—P. M. Wattles, New York, N. Y.
GM—C. W. Rhodes, Charleston, W. Va.
PA—J. L. Dugan, Charleston, W. Va.
EM—C. W. Rhodes, Charleston, W. Va.
SCA—Address the company, Buyer, C. A. Neal, Rhodes, W. Va.
SA—Interstate Coal & Dock Co., Charleston, W. Va.

Ganley-Concord Mine; Drift; Coalhoo, Seam.
PO—Vaughan, W. Va.; SP—Gendule, W. Va.; CTY—Nicholas, RR—C. & O.
MS—E. L. Hall, Vaughan, W. Va.
S of H—Mules and elec. loco.
S of M—Shortwall mch.
PP—2 250 H. P. tube boilers, 1 150 K. W. and 1 100 K. W. gen. units, 250 volts D. C.
EMP—61. Last years tonnage 41,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT.—Bar Screens.
NOTE—Formerly operated by the Concord Coal Co.

GAULEY MOUNTAIN COAL CO., THE

General Office, Ansted, W. Va.
PR—George R. Agnew, New York, N. Y.
VP—Charles F. Hewitt, and Walter P. Bliss, 50 Church St., New York, N. Y.
TR—Charles E. Hewitt, New York, N. Y.

GM—R. H. Morris, Ansted, W. Va.
PA—G. M. Sutton, Ansted, W. Va.
CE—W. N. Page, Washington, D. C.
EM—Charles E. Vawter, Ansted, W. Va.
LL—George Taylor, Ansted, W. Va.
SCA—Address the Company, Buyer, J. E. Vawter, Ansted, W. Va.
SA—E. Vawter, 522 American National Bank Bldg., Richmond, Va.
Additional Information on Pages 136 & 1000.

Ansted Mine; Drift; No. 2 Gas Seam, 48 in. thick.
PO—Ansted, W. Va. SP—Same, CTY—Fayette, RR—C. & O.
MS—R. H. Massey, Ansted, W. Va.
S of H—10 trolley pole type locos. Track gage, 30 in.
S of M—5 shortwall mch., and 12 dust-lass mch.
PP—Power purchased, Transformer 2,300 to 375 volts A. C., M. G. sets, 500 volts D. C., 10 pumps.
EMP—226. Last years tonnage 128,453.
Coke Ovens, 152 Bee Hive.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT.—Shaker Screens.

Bock Run No. 1 Mine; Drift; No. 2 Gas Seam, 48 in. thick.
PO—Jodie, W. Va. SP—Bryce, W. Va. CTY—Fayette, RR—C. & O.
MS—R. R. Kirkpatrick, Jodie, W. Va.
SM—J. C. Keith, Jodie, W. Va.
S of H—Mules, 5 trolley pole type locos. Track gage, 44 in.
S of M—6 shortwall mch.
PP—2 water tube boilers, total 500 H. P., 1-300 K. W. and 1-200 K. W. gen. sets, 500 volts D. C., 3 pumps.
EMP—98. Last years tonnage 55,260.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT.—Picking Tables.

Rich Creek No. 2 Mine; Drift; No. 2 Gas Seam, 48 in. thick.
PO—Jodie, W. Va. SP—Bryce, W. Va. CTY—Fayette, RR—C. & O.
MS—R. R. Kirkpatrick, Jodie, W. Va.
SM—J. C. Keith, Jodie, W. Va.
S of H—5 trolley pole type locos. Track gage, 44 in.
S of M—4 shortwall mch.
PP—Power received from Buck No. 1 power plant, 3 pumps.
EMP—81. Last years tonnage 52,126.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT.—Gravity Screens, Picking Tables.

Rich Creek No. 3 Mine; Drift; Big Eagle Seam, 60 in. thick.
PO—Jodie, W. Va.; SP—Bryce, W. Va.; CTY—Fayette; RR—C. & O.
MS—R. R. Kirkpatrick, Jodie, W. Va.
SM—J. C. Keith, Jodie, W. Va.
S of H—1 trolley pole type loco. Track gage 44 in.
S of M—1 shortwall mch.
PP—Power received from Buck Run No. 1 Mine; 1 pump.
EMP—15.

SIZES SHIPT—Run of Mine, Slack, Nut.
PREP. EQUIPT.—Stationary Screens.

GAY COAL & COKE CO., THE

General Office, Mount Gay, W. Va.
PR—G. W. Robertson, Shamokin, Pa.
VP—S. C. Gay, Baltimore, Md.
TR—C. K. Robertson, Shamokin, Pa.
GM—H. S. Gay, Baltimore, Md.
GS—H. S. Gay, Jr., Mount Gay, W. Va.
PA—H. S. Gay, Jr., Mount Gay, W. Va.
EM—W. C. Mettall, Logan, W. Va.
SCA—Address the company, Buyer, S. L. Gartin, Logan, W. Va.

(Continued on Next Page)

Gay Coal & Coke Co., The—Cont.

Gay Nos. 1 and 2 Mines; Drift; Cedar Grove Seam, 72 in. thick.
 PO—Mason, Gay, W. Va.; SP—Logan, W. Va.; CTY—Logan, RR—C. & O.
 S of H—5 elec. locos. Track gage 32 inches.
 S of M—2 chain breast type and 4 shortwall machs.
 PP—Power purchased, transformer 2300 volts A. C., rotary converters, 275 volts D. C., 2 pumps.
 EMP—125.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Gravity Screens, Picking Tables.

GAYMONT COAL & COKE COMPANY
General Office, Laeton, W. Va.

Gaymont Mine; Drift; Sewell Seam, 36 in. thick.
 PO—Hawks Nest, W. Va.; SP—Same; CTY—Fayette; RR—C. & O.
 S of M—Hand.
 PP—Power purchased, 500 volts D. C., 1 pump.
 EMP—20 Last years tonnage 5,280
 SIZES SHIPT—Run of Mine.
 Old information.

GEM POCAHONTAS COAL COMPANY

General Office, Welch, W. Va.
 PR—Jas. P. Flanagan, Welch, W. Va.
 TR—Jas. A. H. Hinchey, Welch, W. Va.
 VP—Maunroe H. Hinchey, Welch, W. Va.
 GM—Jas. P. Flanagan, Welch, W. Va.
 GS—Jas. A. H. Hinchey, Welch, W. Va.
 PA—Jas. H. Hinchey, Welch, W. Va.
 EM—Guy J. Cooper, Welch, W. Va.
 SCO—Address the Company, Buyer, A. L. Godfrey, Lev, W. Va.
 SA—Flanagan Coal Sales Co., Welch, W. Va.

Gem Mine; Drift; Bradshaw Seam, 42 in. thick.
 PO—Lex, W. Va.; SP—Robley, W. Va.; CTY—Mellows; RR—N. & W., Dry Fork Br.
 S of H—Mules. Track gage 48 in.
 S of M—Hand.
 EMP—20 Last years tonnage 7,000.
 SIZES SHIPT—Run of Mine.

GEORGES CREEK COAL CO.

General Office, Cumberland, Md.
 PR—Harry E. W. Wer, Cumberland, Md.
 TR—Robert L. Stallings, " "
 GM—W. F. Coale, " "
 GS—John R. Hamilton, Locomong, Md.
 PA—John R. Hamilton, " "
 EM—G. S. Phillips, Ethel, W. Va.

George Creek Mine; Drift; Chilton Seam, 52-110 in. thick.
 PO—Ethel, W. Va.; SP—Same; CTY—Logan; RR—C. & O., Guyan Valley Br.
 SM—Chas. Hall, Ethel, W. Va.
 MS—G. S. Phillips, Ethel, W. Va.
 S of H—2 elec. locos., 1 storage battery loco. and mules. Track gage 44 in.
 S of M—7 elec. machs.
 PP—Purchase power, 300 K. W. M. G. set.
 EMP—100 Last years tonnage 70,000
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Screens, Picking Table

GEORGES CREEK COAL CORPORATION

General Office, Charleston, W. Va.
 PR—L. Harris, Bay City, Mich.
 VP—L. D. Harris, Bay City, Mich.
 TR—L. M. Harris, Charleston, W. Va.
 GM—L. Harris, Bay City, Mich.
 GS—L. M. Harris, Charleston, W. Va.
 PA—C. S. Munro, Charleston, W. Va.
 EM—Clark & Krebs, Charleston, W. Va.

Malden Mine; Drift; No. 2 Gas Seam, 76 in. thick.
 PO—Charleston, W. Va.; SP—Malden, W. Va.; CTY—Kanawha; RR—K. & M.
 S of H—Mules. Track gage 38 in.
 S of M—Hand.
 EMP—50
 SIZES SHIPT—Run of Mine
 Note—Formerly operated by Malden Coal Company.

GHOST HILL COAL COMPANY

General Office, Flemington, W. Va.
 TR—B. S. Bailey, Flemington, W. Va.
 GS—John M. Traxler, Flemington, W. Va.

Ghost Mine; Drift; Pittsburgh Seam, 90 inches thick.
 PO—Flemington, W. Va.; SP—Same; CTY—Taylor; RR—B. & O.
 S of H—Mules. Track gage 36 inches
 S of M—Hand.
 EMP—10 Last years tonnage 2,000
 SIZES SHIPT—Run of Mine.

GILBERT-DAVIS COAL CO.

General Office, Morgantown, W. Va.
 PR—E. H. Gilbert, Morgantown, W. Va.
 TR—E. H. Gilbert, Morgantown, W. Va.
 GM—R. M. Davis, Morgantown, W. Va.

GS—J. E. Coberly, Morgantown, W. Va.
 PA—R. M. Davis, Morgantown, W. Va.
 EM—D. M. Hammond, Morgantown, W. Va.
 EE—Mr. Fletcher, Morgantown, W. Va.
 SA—R. M. Davis Coal Co., Morgantown, W. Va.
 Gilbert-Davis No. 1 Mine; Drift; Sewickley Seam, 60 in. thick.
 PO—Morgantown, W. Va.; SP—Kennedy, W. Va.; CTY—Monongalia; RR—M. & W.
 SM—E. Foltz, Morgantown, W. Va.
 S of H—Trolley pole type and storage battery locos. Track gage 42 inches.
 S of M—4 longwall machs.
 PP—3 pumps.
 EMP—85 Last years tonnage 100,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.

Gilbert-Davis No. 2 Mine; Drift; Sewickley Seam, 60 in. thick.
 PO—Morgantown, W. Va.; SP—Kennedy, W. Va.; CTY—Monongalia; RR—M. & W.
 SM—E. Foltz, Morgantown, W. Va.
 S of H—Storage battery loco. Track gage 42 in.
 S of M—2 longwall machs.
 PP—2 pumps.
 EMP—45 Last years tonnage 50,000
 SIZES SHIPT—Run of Mine.

Gilbert-Davis No. 3 Mine; Drift; Sewickley Seam, 60 in. thick.
 PO—Morgantown, W. Va.; SP—Kennedy, W. Va.; CTY—Monongalia; RR—M. & W.
 SM—E. Foltz, Morgantown, W. Va.
 S of H—Storage battery loco. Track gage 42 in.
 S of M—Longwall mach.
 PP—2 pumps.
 EMP—28 Last years tonnage 10,000
 SIZES SHIPT—Run of Mine.

Anchor Mine; Drift; Sewickley Seam, 60 in. thick.
 PO—Morgantown, W. Va.; SP—Barker, W. Va.; CTY—Monongalia; RR—M. & W.
 SM—E. Foltz, Morgantown, W. Va.
 S of H—Storage battery loco. Track gage 42 in.
 S of M—2 longwall machs.
 PP—2 pumps.
 EMP—60 Last years tonnage 60,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.

South Penn Mine; Drift; Sewickley Seam, 60 in. thick.
 PO—Morgantown, W. Va.; SP—Same; CTY—Monongalia; RR—M. & W.
 MS—C. D. Bean, Morgantown, W. Va.
 S of H—Storage battery loco. Track gage 42 in.
 S of M—Hand.
 PP—Power purchased, 1 pump.
 EMP—20 Last years tonnage 20,000
 SIZES SHIPT—Run of Mine.

South Pittsburgh Mine; Drift; Pittsburgh Seam, 120 in. thick.
 PO—Alumina, W. Va.; SP—Same; CTY—Monongalia; RR—M. & W.
 S of H—Storage battery loco. Track gage 42 in.
 S of M—3 longwall machs.
 PP—3 pumps.
 EMP—60 Last years tonnage 85,000
 SIZES SHIPT—Run of Mine.

GILBERT FUEL COMPANY.

General Office, Morgantown, W. Va.
 PR—E. H. Gilbert, Morgantown, W. Va.
 TR—E. H. Gilbert, Morgantown, W. Va.
 GM—R. M. Davis, Morgantown, W. Va.
 GS—J. E. Coberly, Morgantown, W. Va.
 PA—R. M. Davis, Morgantown, W. Va.
 EM—D. M. Hammond, Morgantown, W. Va.
 EE—W. Forney, Morgantown, W. Va.
 SA—Davis Coal Co., Morgantown, W. Va.

Gilbert Mine; Drift; Waynesburg Seam, 90 in. thick.
 PO—Morgantown, R. F. D., W. Va.; SP—Same; CTY—Monongalia; RR—M. & W.
 S of H—Mules. Track gage, 42 in.
 S of M—Hand.
 PP—2 pumps.
 EMP—18 Last years tonnage 15,000
 SIZES SHIPT—Run of Mine.

GILLIAM COAL & COKE CO.

PR—Jas. R. Gilliam, Jr., Lynchburg, Va.
 TR—J. A. Payne, " "
 GM—Morris Watts, Lohman, W. Va.
 EE—A. S. Buchanan, Gilliam, W. Va.

Gillian Mine; Drift; No. 3 Pocahontas Seam, 6 ft. thick.
 PO—Gilliam, W. Va.; SP—Northfork, W. Va.; CTY—McDonnell; RR—N. & W., Northfork Branch.
 SM—C. W. Jones, Gilliam, W. Va.
 S of H—4 Elec. loco.
 S of M—1 Elec. mach.
 EMP—270 Coal ovens, 217 Bee Hives.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Picking Tables.

GILMER FUEL CO., INC.

General Office, Glenview, W. Va.
 PR—Geo. E. Work, Parkersburg, W. Va.
 VP—S. A. Hays, Parkersburg, W. Va.
 TR—Jno. E. Arbuckle, Glenview, W. Va.
 GM—Joe Steinbeck, Weston, W. Va.
 GS—W. H. Mathews, Weston, W. Va.
 PA—Joe Steinbeck, Weston, W. Va.
 CE—B. M. Green, Charleston, W. Va.
 SCO—Address the Company, Buyer, J. M. Garrett, Gilmer, W. Va.
 SA—Kroger-Gayle Coal Co., Cincinnati, O.

Gilmer Mine; Drift; Pittsburgh Seam; 72 inches thick.
 PO—Gilmer, W. Va.; SP—Same; CTY—Gilmer; RR—B. & O.
 S of H—Mules, gasoline motor. Track gage 42 inches.
 S of M—Hand.
 PP—2 fire tube boilers, 150 H. P.
 EMP—50 Last fiscal year output, 32,654 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Bar Screens.
 Old information.

GILMER PITTSBURGH COAL COMPANY
Now Pennsylvania & West Virginia Coal Company.

GLADE RUN COAL & COKE COMPANY
General Office, Bloomington, Md.
 PR—Carroll Pattison, Bloomington, Md.
 TR—Charles H. Quigley, " "
 VP—Stephen Girard Bldg., Phila., Pa.
 GM—Carroll Pattison, Bloomington, Md.
 PA—Carroll Pattison, Bloomington, Md.
 Sales Agents—Hite & Rafferty, Stephen Girard Bldg., Philadelphia, Pa.

Florence Mine; Drift; Kittanning Seam, 42 to 48 in. thick.
 PO—Schell, W. Va.; SP—Florence, W. Va.; CTY—Mineral; RR—W. M.
 MS—N. R. Woods, Schell, W. Va.
 S of H—Mules.
 S of M—Hand.
 EMP—35 Last fiscal year output 35,000 tons.
 SIZES SHIPT—Run of Mine.
 Old information.

GLASSCOCK COLLIERIES CO.

General Office, Morgantown, W. Va.
 PR—W. E. Glasscock, Morgantown, W. Va.
 VP—H. C. Gilmore, Morgantown, W. Va.
 TR—E. D. Tumlis, Morgantown, W. Va.
 EM—H. Tiffany, Morgantown, W. Va.

Glasscock Collieries Mine; Shaft; Sewickley Seam, 72 in. thick.
 PO—Cassville, W. Va.; SP—Same; CTY—Monongalia; RR—Morgantown & Wheeling.
 S of H—Electric and storage battery locos.
 S of M—Hand.
 PP—Power purchased.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.

GLEASON COAL & COKE COMPANY

General Office, Frostburg, Md.
 PR—Philip Brown, Frostburg, Md.
 TR—James A. Brown, " "
 GM—Philip Brown, " "
 GS—Philip Brown, " "
 PA—Jam. A. Brown, Frostburg, Md.
 EM—William Harvey, " "
 EE—John Oberly, " "
 SCO—Gleason Supply Co., Buyer, A. P. Brown, Gleason, W. Va.

Gleason Nos. 1 and 2 Mines; Drift; Lower Kittanning Seam, 72 in. thick.
 PO—Gleason, W. Va.; SP—Same; CTY—Mineral; RR—W. Md.
 MS—Charles H. Jones, Gleason, W. Va.
 S of H—Mules and 2 elec. locos. Track gage 42 in.
 S of M—2 shortwall machs.
 PP—2 return tubular boilers, total 250 H. P., 2 gen. units, 250 volts D. C., 2 pumps.
 EMP—125 Last fiscal year output, 80,000 tons.
 SIZES SHIPT—Run of Mine.

Gleason No. 3 Mine; Drift; Upper Kittanning Seam, 50 in. thick.
 PO—Gleason, W. Va.; SP—Same; CTY—Mineral; RR—W. Md.
 MS—Charles H. Jones, Gleason, W. Va.
 S of H—1 elec. loco. Track gage 42 in.
 S of M—Hand.
 EMP—20 Last fiscal year output, 2,000 tons. New Mine.
 Old information.

GLEEN ALUM COAL CO.

PR—J. R. Gilliam, Jr., Lynchburg, Va.
 TR—J. A. Payne, " "
 GM—Morris Watts, Lohman, W. Va.
 EM—F. J. Kelle, " "
 PA—T. A. McGuire, Glenalum, W. Va.
 MM—D. L. Lawrence, Glenalum, W. Va.
 SCO—Address the company, Buyer, L. H. Barbary, Glenalum, W. Va.
 Sales Agent—Glen Alum Fuel Co., Cincinnati, O.

Mines 1, 2, 3 and 4; Drifts; Cedar Grove Seam, 60-84 in. thick.
 PO—Glenalum, W. Va.; SP—Light, W. Va.; (P-pays); CTY—Mingo; RR—N. & W.
 MS—J. W. Yost, Glenalum, W. Va.
 S of H—15 elec. locos. Track gage, 36 in.
 S of M—Hand.
 PP—5 boilers, total 900 H. P., 3 gen. units, 250 volts D. C., 3 phase, 60 cycles.
 EMP—325.

SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

GLEN FALLS FUEL CO.

Glen Ferris, W. Va.
 Glen Falls Nos. 1 and 2, Powellton, Mine; CTY—Fayette.
 No report.

GLEN FERRIS FUEL CO.

General Office, Glen Ferris, W. Va.
 Glen Ferris Mine.
 PO—Glen Ferris, W. Va.; CTY—Fayette; RR—Kanawha & Mich.
 No report.

GLENCOE COAL COMPANY

General Office, Mt. Hope, W. Va.
 PR—P. M. Snyder, Mt. Hope, W. Va.
 TR—Ronald Snyder, Mt. Hope, W. Va.
 GM—T. H. Snyder, Mt. Hope, W. Va.
 GS—K. K. Warden, Page, W. Va.
 EM—N. P. Rinehart, Mt. Hope, W. Va.

Glencoe Mine; Drift; 54 in. thick.
 PO—Page, W. Va.; SP—Same; CTY—Fayette; RR—Virginian.
 S of H—Electric trolley and cable motors. Track gage 44 in.
 PP—Generates power, 250 volts.
 SIZES SHIPT—Run of Mine.

GLENDALE COAL CO.

Now Glendale Gas Coal Co.

GLENDALE GAS COAL COMPANY

General Office, 319 Kirby Bldg., Cleveland, O.
 PR—J. A. Paisley, Cleveland, O.
 VP—James Playfair, Midland, Ont.
 TR—Joseph Arkwright, Elm Grove, W. Va.
 SCO—Address the Company, Buyer, W. J. Anawalt, Elm Grove, W. Va.
 SA—Elm Grove Mining Co., Cleveland, O.

Glendale Mine; Shaft; Pittsburgh No. 8 Seam, 60 in. thick.
 PO—Glendale, W. Va.; SP—Mountsville, W. Va.; CTY—Marshall; RR—B. & O.
 MS—Jos. Arkwright, Elm Grove, W. Va.
 S of H—Mules and 2 trolley pole type locos. Track gage 36 in.
 S of M—5 chain breast type machs.
 PP—3 fire tube boilers, total 450 H. P., 3-100 K. W. gen. units, 250 volts D. C., 4 pumps.
 EMP—110 Last years tonnage 34,866.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.
 Note—Formerly operated by the Glendale Coal Co.

Security Mine; Slope; Pittsburgh No. 8 Seam, 60 in. thick.
 PO—Elm Grove, W. Va.; SP—Same; CTY—Ohio; RR—B. & O.
 MS—Jos. Arkwright, Elm Grove, W. Va.
 S of H—Mules, 3 elec. locos. Track gage 42 in.
 S of M—3 chain breast machs. and 4 shortwall machs.
 PP—Power purchased, 500 volts D. C., 1 pump.
 EMP—105 Last years tonnage 58,964.
 SIZES SHIPT—Run of Mine.
 Note—Formerly operated by the Belmar Coal Co.

GLENNDAVA COAL COMPANY

General Office, Warwood, W. Va.
 PR—T. H. Johnson, Bellaire, O.
 TR—C. H. Eberts, Warwood, W. Va.
 GM—T. H. Johnson, Bellaire, O.
 PA—H. W. Eberts, Bellaire, O.
 EM—Conrad & Pugh, Wheeling, W. Va.

Gleams Run Mine; Drift; Pittsburgh No. 8 Seam, 60 in. thick.
 PO—Warwood, W. Va.; SP—Same; CTY—Ohio; RR—Penn.
 MS—J. A. Wilkes, Warwood, W. Va.
 S of H—Mules. Track gage 36 in.
 S of M—2 shortwall machs.
 PP—Power purchased, 1 M G set, 250 volts D. C.
 EMP—25 Daily tonnage 150
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

GLOGORA COAL COMPANY

General Office, 701-5-6 First National Bank Bldg., Huntington, W. Va.
PR—Richard Williams, Huntington, W. Va.
TR—Richard Williams, Huntington, W. Va.
GM—C. H. Beldemiller, Huntington, W. Va.
PA—C. H. Beldemiller, Huntington, W. Va.
EM—J. W. Preston, Stickney, W. Va.
EE—W. Va. Engineering Co., Charleston, W. Va.
SA—Middle West Coal Co., First National Bank Bldg., Cincinnati, O.

Stickney No. 10 Mine; Drift; Eagle Seam, 54-72 inches thick.
PO—Stickney, W. Va.; SP—Same; CTY—Raleigh; RR—C. & O.
MS—Wm. F. Proch Stickney, W. Va.
SM—H. E. Preston, Stickney, W. Va.
S of H—2 trolley pole type locos. Track gage 42 inches.
S of M—2 shortwall elec. undercutting machs.
PP—Power purchased. Transformer 2300-250-275 volts A. C., M. G. Set, 250 volts D. C., 2 pumps.
EMP—60. Daily tonnage 20.
SIZES SHIPT—Run of Mine.

GOODY BY-PRODUCT COAL CO.

General Office, Chapmanville, W. Va.
Goldby Branch Mine.
PO—Chapmanville, W. Va.; CTY—Logan; RR—C. & O.
No report.

GORMAN COAL & COKE CO.

Now operated by Honck-Reidler Bros. Coal Mining Co.

GRAFTON COAL & COKE CO.

General Office, Grafton, W. Va.
Sand Lick Mine.
PO—Simpson, W. Va.; CTY—Taylor; RR—B. & O.
No report.

GRANNY BRANCH COAL COMPANY

General Office, 70 Wall St., New York, N. Y.
PR—E. B. Deligny, 70 Wall St., New York, N. Y.
VP—Rene Brunet, Big Chimney, W. Va.
TR—Jas. Marshall, 70 Wall St., New York, N. Y.
GM—Ernest B. Deligny, New York, N. Y.
GS—Rene Brunet, Big Chimney, W. Va.
PA—Rene Brunet, Big Chimney, W. Va.
CE—Clark & Krebs, Charleston, W. Va.
SCO—Address the Company, Buyer, Jacob Housholder, Big Chimney, W. Va.
SA—Logan Pocahontas Fuel Company, Charleston, W. Va.

Empire No. 2 Mine; Drift; Four Foot Seam, 42 in. thick.
PO—Big Chimney, W. Va.; SP—Same; CTY—Kanawha; RR—B. & O.
S of H—Mules. Track gage 38 inches.
S of M—1 shortwall mach.
PP—Power purchased, 250 volts D. C.
EMP—24. Last years tonnage 6,448.
SIZES SHIPT—Run of Mine.

GRANVILLE COAL CO.

Property inactive.

GRASSELLI CHEMICAL CO.

Meadowbrook, W. Va.
Grasselli-Meadowbrook No. 1 Mine; CTY—Harrison.
No report.

GREAT LAKES COAL COMPANY

Lory, W. Va.
Great Lakes Mine.
PO—Lory, W. Va.; CTY—Boone; RR—C. & O.
No report.

GREATER FAIRMONT INVESTMENT CO.

General Office, Fairmont, W. Va.
PR—C. D. Robinson, Fairmont, W. Va.
VP—H. L. Hintz, Fairmont, W. Va.
TR—E. T. Cunningham, Fairmont, W. Va.
GM—F. D. Ferguson, Fairmont, W. Va.
GS—Dorsey Pople, Fairmont, W. Va.
PA—Robinson Coal Co., Fairmont, W. Va.
EM—Robinson Coal Co., Fairmont, W. Va.
SA—Robinson Coal Co., Fairmont, W. Va.
Aurora Mine; Drift; Pittsburgh Seam; 72 inches thick.
PO—Houtt, W. Va.; SP—Fairmont, W. Va.; CTY—Marion; RR—B. & O.
MS—N. G. Doolittle, Houtt, W. Va.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
EMP—13. Last years tonnage 10,200.
SIZES SHIPT—Run of Mine.

GREEN, W. H. COAL CO.

General Office, Elkins, W. Va.
PR—W. H. Green, Elkins, W. Va.
VP—R. B. Isner, Sharples, W. Va.
TR—H. E. Martin, Elkins, W. Va.
GM—W. H. Green, Elkins, W. Va.

GS—W. H. Green, Elkins, W. Va.
PA—W. H. Green, Elkins, W. Va.
SA—H. E. Martin, Elkins, W. Va.

Vender Mine; Drift; Freeport Seam, 60 in. thick.
PO—Adrian, W. Va.; SP—Same; CTY—Upshur; RR—B. & O.
S of H—Mules and trolley pole type loco. Track gage, 42 in.
S of M—2 longwall and 1 overhead cutter machs.
PP—1 water tube boiler, 125 H. P., 100 K. W. gen. unit, 250 volts D. C., 3 pumps.
EMP—85. Last years tonnage 85,000.
SIZES SHIPT—Run of Mine.

GREENBRIER COAL & COKE CO.

General Office, Goodall, W. Va.
PR—Jesse T. Mann, Bramwell, W. Va.
VP—Justin Collins, Charleston, W. Va.
TR—Jarius Collins, Bramwell, W. Va.
GM—Jarius Collins, " "
PA—Jarius Collins, " "
EM—T. A. Koneitz, Goodall, W. Va.
EE—C. L. Logan, Goodall, W. Va.
SA—Smokeless Fuel Co., Charleston, W. Va.

Additional Information on Page 1050

Greenbrier Mine; Drift; Pocahontas Seam, 66 in. thick.
PO—McDowell, W. Va.; SP—Frt. Crump, W. Va.; Prepay; Exp., Northfork, W. Va.; Prepay; RR—N. & W.
MS—A. G. Johnson, McDowell, W. Va.
S of H—Mules, trolley pole type min. storage battery loco. Track gage 44 in.
S of M—2 shortwall machs.
PP—Power purchased, M. G. sets, 250 volts D. C., 3 pumps.
EMP—250. Last years tonnage 121,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Washeries.

GREENBRIER COLLIERY COMPANY

Now Dorcent Coal Co.

GREENBRIER SMOKELESS COAL CO.

Reilburn, W. Va.
Greenbrier Smokeless Mine; CTY—Greenbrier.
No report.

GREENMAR COAL COMPANY

General Office, Elkins, W. Va.
PR—W. H. Green, Elkins, W. Va.
VP—H. B. Martin, Elkins, W. Va.
TR—H. B. Martin, Elkins, W. Va.
GM—J. C. Green, Talmansville, W. Va.
GS—J. C. Green, Talmansville, W. Va.
PA—J. C. Green, Talmansville, W. Va.
SA—W. H. Green Coal Co., Elkins, W. Va.

Strader Mine; Drift; Kittanning Seam; 48 inches thick.
PO—Talmansville, W. Va.; SP—Strader, W. Va.; CTY—Upshur; RR—B. & O.
S of H—Mules. Track gage 36 in.
S of M—1 shortwall mach.
PP—2-150 H. P. water tube boilers. Transformer, 250 volts D. C., 1-100 K. W. gen. unit, 1 pump.
EMP—50. Last years tonnage 28,000.
SIZES SHIPT—Run of Mine.

GREENMONT FUEL COMPANY.

General Office, Morgantown, W. Va.
PR—J. K. Buchanan, Morgantown, W. Va.
VP—R. M. Davis, Morgantown, W. Va.
TR—E. H. Gilbert, Morgantown, W. Va.
GM—R. M. Davis, Morgantown, W. Va.
GS—J. F. Coherly, Morgantown, W. Va.
PA—R. M. Davis, Morgantown, W. Va.
EM—D. M. Hammond, Morgantown, W. Va.
EE—W. Fortney, Morgantown, W. Va.
SA—Davis Coal Co., Morgantown, W. Va.

Greenmont Mine; Drift; Sewickley Seam, 60 in. thick.
PO—Morgantown, W. Va.; SP—Same; CTY—Monongalia; RR—M. & W.
S of H—Mules. Track gage, 42 in.
S of M—1 chain breast type and 1 short-wall machs.
PP—Power purchased. Transformer 13500-220 volts A. C., 1 pump.
EMP—75. Last years tonnage 30,000.
SIZES SHIPT—Run of Mine.

GREEN RIDGE COAL COMPANY

General Office, Morgantown, W. Va.
PR—J. A. Adams, Morgantown, W. Va.
VP—W. W. Mayfield, Morgantown, W. Va.
TR—A. W. Hawley, Morgantown, W. Va.
GM—E. Blerer, Morgantown, W. Va.
GS—J. E. Schront, Kingwood, W. Va.
PA—A. W. Hawley, Morgantown, W. Va.
EM—McCabe Engr. Co., Morgantown, W. Va.
SC0—Green Ridge Supply Co. Buyer, J. E. Schront, Kingwood, W. Va.
SA—A. W. Hawley, Morgantown, W. Va.

Green Ridge Mine; Drift; Upper Freeport Seam, 54 in. thick.
PO—Kingwood, W. Va.; SP—Sutherland, W. Va.; CTY—Preston; RR—M. & K.

S of H—Mules and rope. Track gage 36 in.
S of M—Hand.
EMP—10. Daily tonnage 200.
SIZES SHIPT—Run of Mine.

GREENWOOD COAL CO.

General Office, Lawton, W. Va.
PR—C. C. Lawton, Lawton, W. Va.
VP—P. H. Brown, Meadow Creek, W. Va.
TR—Geo. Lawton, Meadow Creek, W. Va.
GS—A. D. Lawton, Lawton, W. Va.
PA—A. D. Lawton, Lawton, W. Va.
GM—M. Wilcox, Lawton, W. Va.
EE—J. W. Merritt, Lawton, W. Va.
SC0—Address the Company; Buyer, F. S. Biggers, Lawton, W. Va.
Sales Agent, New River Coal Co., Charleston, W. Va.

Greenwood Mine; Drift; Fire Creek Seam, 18 in. thick.
PO—Lawton, W. Va.; SP—Brananwood, W. Va.; CTY—Fayette; RR—C. & O., Land Creek Br.
S of H—6 elec. and 2 steam locos. Track gage 44 in.
S of M—2 elec. machs.
PP—Power purchased.
EMP—175. Last fiscal year output 110,000 tons. Coke ovens, 50 H. P. Hives.
SIZES SHIPT—Run of Mine, Slack, Pea Nut, Egg, Lump.
PREP. EQUIPT—Screens.
Old information.

GRESH, GEO. H.

Mason, W. Va.
Gresh Mine; CTY—Mason.
No report.

GREY EAGLE COAL COMPANY.

General Office, Cincinnati, O.
PR—H. W. Shields, Bramwell, W. Va.
TR—T. H. Claggett, Elmfield, W. Va.
GS—T. A. Shewey, Grey Eagle, W. Va.
PA—T. A. Shewey, Grey Eagle, W. Va.
EM—D. M. Good, Williamson, W. Va.
EE—Herbert Parker, Grey Eagle, W. Va.
Sales Agency—Blue Ash Coal Co., 1820 First Nat. Bank Bldg., Cincinnati, O.

Grey Eagle Nos. 1, 2 and 3 Mines; Shaft, Drift and Slope; No. 2 Gas Seam, 40 to 60 in. thick.
PO—Grey Eagle, W. Va.; SP—Same; CTY—Mingo; RR—N. & W.
S of H—Mules, 4 elec. locos. Track gage 48 in.
S of M—4 elec. machs.
PP—2 return tubular boilers, 300 H. P., 1 gen. unit, 250 volts D. C., 4 pumps.
EMP—175. Last fiscal year output, 75,000 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

GREYMONT COAL COMPANY.

General Office, Connellsville, Pa.
PR—J. M. Grey, Connellsville, Pa.
VP—John M. Young, Buckhannon, W. Va.
TR—C. W. Dugas, Connellsville, Pa.
SCFY—K. K. Kramer, Connellsville, Pa.
GM—J. H. Henderson, Clarksburg, W. Va.
GS—John M. Young, Buckhannon, W. Va.
S of H—Mules 14 trolley pole type locos. Track gage 44 in.

Greyont Mine; Drift; Freeport Seam, 72 in. thick.
PO—Rangoon, W. Va.; SP—Boulder, W. Va.; CTY—Barbour; RR—B. & O.
S of H—Mules.
S of M—Hand.
PP—1 pump.
EMP—18. Daily tonnage 100.
SIZES SHIPT—Run of Mine.

GRIFFITHS, W. E. COAL CO.

General Office, Morgantown, W. Va.
PR—T. R. Ragland, Beckley, W. Va.
VP—W. A. Stapley, Beckley, W. Va.
TR—W. E. Griffiths, Beckley, W. Va.
GM—W. E. Griffiths, Beckley, W. Va.
GS—W. E. Griffiths, Beckley, W. Va.
PA—W. E. Griffiths, Beckley, W. Va.
SC0—W. E. Griffiths Co. Store, Buyer, M. K. Hoke, Morgantown, W. Va.
Griffiths Mine; Drift; Pocahontas No. 3 Seam, 60 in. thick.
PO—Morgantown, W. Va.; SP—Hawley, W. Va.; CTY—Fayette; RR—Sewell Valley.
S of H—Mules, electric and storage battery locos. Track gage 44 in.
S of M—Chain breast type mach.
PP—Power purchased. Transformer 2300-250 volts A. C., M. G. Set, 250 volts D. C.
EMP—48. Last years tonnage 21,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.

GULF COAL COMPANY

General Office, Tams, W. Va.
PR—James O. Watts, Lynchburg, Va.
TR—James O. Watts, " "
VP—W. P. Tams, Jr., Tams, W. Va.
GM—W. P. Tams, Tams, W. Va.
PA—W. P. Tams, Tams, W. Va.

EM—V. L. Vaughan Tams, W. Va.
EE—P. Vandevoght, Tams, W. Va.
SC0—Address the Company, Buyer, J. P. Kelley, Tams, W. Va.

Holcoal Mine; Drift; Beckley Seam, 54 in. thick.
PO—Holcoal, W. Va.; SP—Same; CTY—Raleigh; RR—Virginia and C. & O.
MS—W. S. Spencer, Holcoal, W. Va.
SM—J. R. Ruchon, Hol Coal, W. Va.
S of H—2 trolley pole type locos. Track gage, 44 in.
S of M—2 hotwall and 1 arcwall machs.
PP—Power purchased. Transformer 44,000-2200 volts, A. C., 1 trolley converter, 200 K. W., 250 volts D. C., 1 fire tube boiler, 100 H. P., 8 pumps.
EMP—100. Daily tonnage 500.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables, Loading Rooms.

GULF SMOKELESS COAL COMPANY.

General Office, Tams, W. Va.
PR—W. P. Tams, Jr., Tams, W. Va.
TR—J. T. Watts, Jr., Lynchburg, Va.
TR—James O. Watts, Lynchburg, Va.
GM—W. P. Tams, Tams, W. Va.
GS—W. P. Tams, Tams, W. Va.
PA—W. P. Tams, Tams, W. Va.
EM—V. L. Vaughan, Tams, W. Va.
EE—P. Van der Volgen, Tams, W. Va.
SC0—Address the Company, Buyer, J. P. Kelley, Tams, W. Va.

Tams Nos. 1, 2, 3 and 4 Mines; Drift; Beckley Seam, 72 in. thick.
PO—Tams, W. Va.; SP—Same; CTY—Raleigh; RR—C. & O. and Virginia.
PA—John M. Young, Buckhannon, W. Va.
S of M—4 shortwall, 2 arcwall machs.
PP—5 fire tube boilers, 750 H. P., 1 300 K. W., 1 200 K. W., 1 150 K. W. gen. units, 250 volts D. C., 13 pumps.
EMP—250. Daily output, 1,500 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

GUSTON RUN COAL COMPANY INC.

General Office, Morgantown, W. Va.
PR—E. H. Gilbert, Morgantown, W. Va.
TR—D. E. Gasto, Morgantown, W. Va.
GM—R. M. Davis, Morgantown, W. Va.
GS—J. F. Coherly, Morgantown, W. Va.
PA—R. M. Davis, Morgantown, W. Va.
CE—Monongahela Valley Engineering Co., Morgantown, W. Va.
EM—D. M. Hammond, Morgantown, W. Va.
EE—W. Fortney, Morgantown, W. Va.
SA—R. M. Davis Coal Company, Morgantown, W. Va.

Gaston Run Mine; Drift; Sewickley Seam; 60 to 72 inches thick.
PO—Morgantown, W. Va.; SP—Same; CTY—Monongalia; RR—M. & W.
SM—E. Foltz, Morgantown, W. Va.
S of H—Hoist & mules.
S of M—Room and Pillard Method, 1 shortwall mach.
PP—Power purchased. Transformer, 2,200 to 220 volts.
EMP—30. Last years tonnage 17,000.
SIZES SHIPT—Run of Mine.

GUAYN COLLIERIES CORPORATION

General Office, Tams, W. Va.
PR—W. P. Tams, Jr., Tams, W. Va.
VP—J. B. Gifton, Beckley, W. Va.
TR—O. R. Telton, Tams, W. Va.
GM—E. C. Taylor, Tamefil, W. Va.
PA—D. T. Saunders, Jr., Tamefil, W. Va.
EM—J. A. Wittenberg, Tamefil, W. Va.
EE—West Virginia Engineering Co., Charleston, W. Va.
SA—Raleigh Smokeless, Beckley, W. Va.

No. 1 Mine; Drift and Slope; Cedar Grove Seam, 60 in. thick.
PO—Gilbert, W. Va.; SP—Same; CTY—Mingo; RR—C. & O.
S of H—Elec. loco. Track gage 44 inches.
S of M—Shortwall and overcutting machs.
PP—2 fire tube boilers, 200 H. P., 150 K. W. gen. unit, 250 volts D. C.
EMP—86.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

GUAYN-ISLAND CREEK COAL CO.

Out of Business.

GUAYN MINING COMPANY.

General Office, Detroit, Mich.
PR—E. H. Jewett, Detroit, Mich.
VP—E. L. Dangles, Cincinnati, Ohio.
VP—J. H. Stone, New York, N. Y.
TR—W. Brooks, Pondusess Bldg., Detroit, Mich.
GM—E. A. Starling, Nankar, W. Va.
GENERAL PA—Geo. L. Washburn, Cincinnati, O.
CE—F. P. Rayless, Cincinnati, O.
EM—Geo. M. Cooper, Nankar, W. Va.

(Continued on Next Page)

Guyana Mining Company—Cont.

SCO—J. B. Scott, Co. Buyer, Geo. M. Cooper, Monrovia, W. Va.
SA—J. B. Scott, Co. Buyer, Geo. M. Cooper, Monrovia, W. Va.
R—M. J. Drift, Eagle Seam, 60 in. thick.
PO—M. J. Drift, W. Va.; SP—Wilber, W. Va.; CTY—Logan; RR—C. & O., Guyana Valley Br.
MS—E. A. Starling, Manbar, W. Va.
S of H—2 storage battery and 2 trolley pole type locos. Track gage, 44 inches.
S of M—3 longwall machines.
PP—Power purchased, transformer, 2300 volts, rotary converters, 200 volts D. C.
EMP—75. Daily output, 200 tons.
PREP. EQUIPT—Gravity Screens.

GUYANA RIVER COAL COMPANY.

General Office, Branchland, W. Va.
PR—Jas. R. Branch, Branchland, W. Va.
GM—Jas. R. Branch, " "
PA—Jas. R. Branch, " "
SCO—Address the company—Buyer, D. K. Geiger, Branchland, W. Va.
Sales Agents, Kanawha Valley Coal Co., Charleston, W. Va.; Kentonia Coal Sales Co., Cincinnati, Ohio.

Branchland Mine; Drift; Stockton Belmont Seam, 84 to 96 in. thick.
PO—Branchland, W. Va.; SP—Same; CTY—Lincoln; RR—C. & O., Guyana Valley Br.
MS—Joseph Johnson, Branchland, W. Va.
S of H—Mules and gasoline loco. Track gage, 44 in.
S of M—4 comp. air mchs.
PP—1 boiler, total 150 H. P., 1 air compressor, 3 pumps.
EMP—50. Last fiscal year output, 25,000 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

Guyana River Mine; Drift; No. 5 Block Seam, 48 in. thick.
PO—Hubball, W. Va.; SP—Same; CTY—Lincoln; RR—C. & O., Guyana Valley Br.
S of H—Mules. Track gage 44 in.
S of M—2 comp. air mchs.
PP—Rive power from Branchland Mine.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Bar Screens.
old information.

GUYANA VALLEY COAL COMPANY.

General Office, Huntington, W. Va.
PR—W. E. Deegans, Huntington, W. Va.
TR—J. Frank Grimet, Huntington, W. Va.
GM—W. E. Deegans, Huntington, W. Va.
GS—O. C. Huffman, Huntington, W. Va.
PA—John Fankner, Huntington, W. Va.
EM—M. Hansford, Huntington, W. Va.
EE—Earnst Hornsby, Crown, W. Va.
SA—W. E. Deegans Coal Co., Huntington, W. Va.

Guyana Valley Mine; Drift; Eagle Seam, 77 in. thick.
PO—Crown, W. Va. SP—Accoville, W. Va. CTY—Logan. RR—C. & O., Logan Division.
MS—A. D. Callihan, Crown, W. Va.
S of H—Mules. Track gage 44 in.
S of M—2 chain breast type and 1 short-wall mach.
PP—Power purchased, 250 volts A. C., 220 volts D. C., 1 pump.
EMP—50. Last years tonnage 45,071
SIZES SHIPT—Run of Mine.

GUYANDOTTE COAL CO.

General Office, Kitchen, W. Va.
PR—R. C. Scott, Jr., Kitchen, W. Va.
VP—H. P. Adams, Lynchburg, Va.
TR—Richard Hancock, Lynchburg, Va.
GM—Richard Hancock, Lynchburg, Va.
GS—R. C. Scott, Jr., Kitchen, W. Va.
PA—R. C. Scott, Jr., Kitchen, W. Va.
EM—Hugh M. Eaton, Charleston, W. Va.
S of H—Address the company. Buyer, C. E. Hankins, Kitchen, W. Va.
SA—Charles McKee & Virginian Coal Co., Lynchburg, Va.

Guyandotte Mine; Drift; Alma Seam, 47 in. thick.
PO—Kitchen, W. Va.; SP—Same; CTY—Logan; RR—Chesapeake & Ohio.
MS—Geo. Hill, Kitchen, W. Va.
S of H—Mules and trolley pole type locos. Track gage, 48 in.
S of M—4 shortwall machines.
PP—Power purchased, 250 volts D. C.
EMP—60. Last years tonnage 56,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

H. C. COAL & COKE COMPANY.

General Office, 712 Kanawha Natl Bank Bldg., Charleston, W. Va.
PR—A. S. Davis, Pittsburgh, Pa.
GM—H. M. Peck, 83 Vandegrift Bldg., Pittsburgh, Pa.
GS—C. F. Williams, Charleston, W. Va.
PA—C. F. Williams, Charleston, W. Va.
CT—Clark & Krebs, Charleston, W. Va.

Helen Mine; Drift; Coalburg Seam, 50 in. thick.
PO—Dana, W. Va.; SP—Spring Fork, W. Va.; CTY—Kanawha; RR—Campbells Creek, K & M.
S of H—3 shortwall machines.
S of M—2 shortwall machines.
PP—Power purchased, Transformer 2,300 in. 240 volts A. C.
EMP—70. Daily tonnage 300.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

HACKETT COAL COMPANY.

General Office, Cedar Grove, W. Va.
PR—Samuel Hackett, Cedar Grove, W. Va.
VP—Otto P. Glasser, Monongahela, Pa.
TR—Samuel Hackett, Cedar Grove, W. Va.
GM—Samuel Hackett, " "
GS—Floyd Hackett, " "
PA—Floyd Hackett, " "
EM—Plumley & Walter, Charleston, W. Va.

SCO—Address the company; Buyer, Floyd Hackett, Cedar Grove, W. Va.
Hackett No. 1 Mine; Drift; No. 5 Block Seam, 54 to 75 in. thick.
PO—Cedar Grove, W. Va.; SP—Same; CTY—Kanawha; RR—K. & M.
S of H—Mules. Track gage 36 in.
S of M—Hand.
Daily output, 300 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

Hackett No. 4 Mine; Shaft & Slope; No. 2 Seam, 42 to 50 in. thick.
PO—Cedar Grove, W. Va.; SP—Same; CTY—Kanawha; RR—K. & M.
S of H—Mules and rope. Track gage 36 in.
S of M—Hand.
PP—1—20 H. P. and 1 40 H. P. boiler, 1 pump.
EMP—29. Last years tonnage 840.
SIZES SHIPT—Run of Mine, Lump, Slack.
PREP. EQUIPT—Gravity Screens.

HALCON COAL COMPANY.

General Office, Huntington, W. Va.
PR—A. J. King, Huntington, W. Va.
VP—Ira E. Early, Logan, W. Va.
TR—F. E. King, Huntington, W. Va.
GS—J. G. Biggs, Huntington, W. Va.
PA—A. C. King, Huntington, W. Va.
CE—A. J. King, Huntington, W. Va.
EM—M. L. Jarret, Huntington, W. Va.
SCO—Address the company. Buyer, E. J. Ediburn, Coal Bloom, W. Va.
SA—Lake & Export Coal Corp., Huntington, W. Va.

Additional Information on Pages 1020, 1021

Halcon Mine; Drift; Alma Seam, 60 in. thick.
PO—Coal Bloom, W. Va.; SP—Powell Creek, W. Va.; CTY—Bonne; RR—C. & O., Coal River Br.
MS—I. L. H. Jane, Coal Bloom, W. Va.
S of H—Trolley pole type and storage battery locos. Track gage 44 inches.
S of M—Shortwall machines.
PP—Power purchased, Transformer 2300 to 220 volts A. C., M. G. sets, 250 volts D. C., 4 pumps.
EMP—110. Last years tonnage 65,000.
SIZES SHIPT—Run of Mine.

HALL COAL CO.

Morgantown, W. Va.

Earle Mine; CTY—Monongahela. No report.

HALSTEAD COAL CO.

General Office, Charleston, W. Va.
PR—S. T. Halstead, St. Albans, W. Va.
VP—Lon G. Marks, Charleston, W. Va.
TR—S. T. Halstead, St. Albans, W. Va.
GM—S. T. Halstead, St. Albans, W. Va.
GS—S. T. Halstead, St. Albans, W. Va.
PA—S. T. Halstead, St. Albans, W. Va.

Hernshaw Mine; Drift; Coalburg Seam, 4 ft. thick.
PO—Hernshaw, W. Va.; SP—Marshall, W. Va.; CTY—Kanawha; RR—Chas. & Ohio Ry. Co.
MS—W. W. Price, Hernshaw, W. Va.
S of H—Mules. Track gage 40 in.
S of M—Hand.
PP—Purchase power, Transformer, 250 volts A. C., 60 units, 100 K. W., 250 volts D. C.
EMP—20. Last years tonnage 5,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

HAMILL COAL & COKE CO.

General Office, Blaine, W. Va.
PR—R. A. Smith, Blaine, W. Va.
VP—P. G. Trout, Blaine, W. Va.
TR—R. A. Smith, Blaine, W. Va.
GM—R. A. Smith, Blaine, W. Va.
ASST. GM—C. N. Smith, Blaine, W. Va.
GS—R. A. Smith, Blaine, W. Va.
PA—F. G. Trout, Blaine, W. Va.
EM—C. N. Smith, Blaine, W. Va.
SCO—Address the company. Buyer, F. G. Trout, Blaine, W. Va.
Sales Agent, Maryland Coal & Coke Co., Philadelphia, Pa.

Hamill Nos. 1, 2, 3, 4 and Freeport Mines; Drift; Kittanning and Freeport Seams, 48-60 inches thick.
PO—Blaine, W. Va.; SP—Same; CTY—Garrett, Md.; RR—Western Md.
S of H—Mules and gasoline loco. Track gage 42 in.
S of M—Hand.
PP—1 gasoline pump.
EMP—150. Last years tonnage 80,352.
SIZES SHIPT—Run of Mine.

HAMILTON & LUTZ.

OPERATOR—Jno. Hamilton, Buckhannon, W. Va.
TR—John Hamilton, Buckhannon, W. Va.
GM—John Hamilton, Buckhannon, W. Va.
GS—John Hamilton, Buckhannon, W. Va.
PA—John Hamilton, Buckhannon, W. Va.
EM—R. T. Trison, Buckhannon, W. Va.
SA—Jno. Hamilton, Buckhannon, W. Va.

Lutz Mine; Drift; Kittanning Seam, 78 in. thick.
PO—Sago, W. Va.; SP—Same; CTY—Upshur; RR—B. & O.
S of H—Mules. Track gage 42 in.
S of M—Hand.
EMP—14. Last years tonnage 3,600.
SIZES SHIPT—Run of Mine.

HAMPSHIRE BIG VEIN COAL CO.

Out of business.

HAMPTON ROAD COLLIERIES CO., INC.

General Office, Norfolk, Va.
PR—G. Benson Ferebee, Norfolk, Va.
TR—O. B. Ferebee, Norfolk, Va.
PA—Thos. J. Rees, Welch, W. Va.
GM—Thos. J. Rees, Welch, W. Va.
GS—Thos. J. Rees, Welch, W. Va.
EM—J. Harvey Williams, Welch, W. Va.
SCO—Address the company. Buyer, J. W. Overton, Big Sandy, W. Va.
SA—Nottingham & Wrenn Co., Norfolk, W. Va.

Hampton Road No. 1 Mine; Drift; Sewell Seam, 38 in. thick.
PO—Big Sandy, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
S of H—Mules, 1 steam loco. Track gage 48 in.
S of M—Hand.
PP—1 fire tube boiler, 30 H. P., 1—40 K. W. gen. unit, 220 volts D. C.
EMP—70. Last years tonnage 45,000.
SIZES SHIPT—Run of Mine.

HARDMAN FUEL COMPANY.

General Office, Grafton, W. Va.
PR—G. E. Bailey, R. No. 1, Flemington, W. Va.
VP—W. W. Starcher, Grafton, W. Va.
TR—Wm. Morgan, Grafton, W. Va.
GM—Alfred Morgan, Grafton, W. Va.
GS—Alfred Morgan, Grafton, W. Va.
PA—Alfred Morgan, Grafton, W. Va.
CE—F. R. Boyd, Flemington, W. Va.
SA—Morgan & Company, Grafton, W. Va.

Mary Belle No. 1 Mine; Drift; Upper and Lower Kittanning Seam, 40 to 52 in. thick.
PO—Independence, W. Va.; SP—Hardman, W. Va.; CTY—Taylor; RR—B. & O.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
PP—1 water tube boiler, 120 H. P., 2 pumps.
EMP—45. Daily tonnage 300.
SIZES SHIPT—Run of Mine, Slack.

HAR-MAR COAL CO.

Now Warner Collieries Co.

HARMON, W. S., COAL CO.

General Office, Springdale, W. Va.

Springdale Mine.
PO—Springdale, W. Va.; CTY—Fayette; RR—S. Well Valley.
No report.

HARRISON COAL COMPANY.

General Office, Meyersdale, Pa.
PR—A. G. Smith, Meyersdale, Pa.
TR—R. H. Philson, Meyersdale, Pa.
GM—H. G. Smith, Clarksburg, W. Va.
SCO—Smith & Son, Buyer, H. G. Smith, Clarksburg, W. Va.

Harrison Mine; Drift; Pittsburgh Seam, 50 in. thick.
PO—Rosemont, W. Va.; SP—Same; CTY—Taylor; RR—B. & O.
S of H—Mules and rope. Track gage 42 in.
S of M—Hand.
EMP—50.
SIZES SHIPT—Run of Mine, Slack, Lump.

HARRY R. COAL COMPANY.

General Office, Home Savins Bank Bldg., Box 422, Fairmont, W. Va.
PR—Harry R. Clark, Fairmont, W. Va.
VP—J. A. Clark, Fairmont, W. Va.
TR—C. H. Waggoner, Fairmont, W. Va.
GM—Harry R. Clark, " "
GS—J. A. Clark, Jr., " "
PA—J. A. Clark, Jr., Fairmont, W. Va.
EM—Roy Stevens, Fairmont, W. Va.
EE—Homer Palmer, Fairmont, W. Va.

SCO—Everson Supply Co. Buyer, J. Ward Mason, R. F. D. No. 4, Monongah, W. Va.

Sales Agency—Blair-Parke Coal and Coke Co., Real Estate Trust Bldg., Philadelphia, Pa.

Junior Mine; Drift; Pittsburgh Seam, 84 in. thick.
PO—R. F. D. No. 4, Monongah, W. Va.; SP—Monongah, W. Va.; CTY—Marion; RR—B. & O.
MS—C. S. Dean, R. F. D. No. 4, Monongah, W. Va.
S of H—Gasoline motor and horses. Track gage 42 in.
S of M—Hand.
PP—250 volts D. C. Purchase power, EMP—50. Last years tonnage 40,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
PREP. EQUIPT—Gravity Screens.

HARRY B. COAL AND COKE COMPANY.

PR—F. H. Duffenderfer, Real Estate Trust Bldg., Philadelphia, Pa.
TR—J. A. Clark, Fairmont, W. Va.
GM—Harry B. Clark, " "
GS—J. A. Clark, Jr., " "
PA—J. A. Clark, Jr., " "
CE—C. S. Dean, " "
EM—H. R. Stevens, " "
EE—Homer Palmer, Clarksburg, W. Va.
SCO—Address the company. Buyer, J. F. Strother, Clarksburg, W. Va.
Sales Agency—Blair-Parke Coal and Coke Co., Real Estate Trust Bldg., Philadelphia, Pa.

Pitcairn Mine; Drift; Pittsburgh Seam, 78 in. thick.
PO—Box 649, Clarksburg, W. Va.; SP—Same; CTY—Harrison; RR—B. & O.
MS—Lawrence Thompson, Clarksburg, W. Va.
S of H—1 13-ton, 1 7-ton and 1 10-ton elec. locos. Track gage 42 in.
S of M—7 breast machines.
PP—Power purchased, 1—150 K. W. and 1—100 K. W. M. G. sets, 250 volts D. C., 2—100 H. P. boilers, 12 pumps.
EMP—200. Last years tonnage 180,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
PREP. EQUIPT—Bar Screens, Loading Booms, Crusher.

HART COAL COMPANY.

Out of business.

HARTMAN BROS. COAL CO.

Now H-D-W Coal Company.

HARTY COAL COMPANY.

General Office, Traile, W. Va.
PR—J. A. Wood, Traile, W. Va.
TR—J. C. Sullivan, Traile, W. Va.
GM—J. C. Sullivan, " "
GS—C. B. H. W. Traile, W. Va.
PA—J. P. Barksdale, Traile, W. Va.
SCO—Address the company. Buyer, R. G. Scott, Traile, W. Va.
SA—C. & O. Coal Agency Co., Boston, Mass.; Wyoming Coal Sales Co., Bluefield, W. Va.

Harty Mine; Drift; Pocahontas No. 3 Seam, 48 to 72 in. thick.
PO—Traile, W. Va.; SP—Same; CTY—Wyoming; RR—Virginian.
S of H—4 elec. locos. Track gage 44 in.
S of M—5 elec. mchs.
PP—250 volts D. C., 3 pumps. Purchase power.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

HAWLEY COAL COMPANY.

General Office, Beckley, W. Va.
PR—C. A. Hawley, Beckley, W. Va.
TR—Mrs. Anna Combs, Beckley, W. Va.
GM—C. A. Hawley, Beckley, W. Va.
GS—Chas. Mandt, Morgantown, W. Va.
PA—Chas. Mandt, Morgantown, W. Va.
SCO—Address the company. Buyer, Chas. Mandt, Morgantown, W. Va.
SA—Raleigh Smokeless Fuel Co., Beckley, W. Va.

"Hawley" Mine Drift; Pocahontas No. 6 Seam, 72 inches thick.
PO—Morgantown, W. Va.; SP—Meadow Bridge, W. Va.; CTY—Fayette; RR—C. & O.
S of H—Mules, 1 trolley pole type and 1 storage battery locos. Track gage 43 inches.
S of M—1 chain breast type and 1 short-wall mach.
PP—Power purchased, Transformer 2300-110 volts A. C., M. G. Sets, 250 volts D. C., 1 pump.
EMP—52. Daily tonnage 250.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.

HAYWOOD COAL MINING CO.

General Office, Shinnston, W. Va.
PR—G. H. Wiser, Shinnston, W. Va.
PA—G. H. Wiser, Shinnston, W. Va.
TR—C. H. Wiser, McKeesport, Pa.
GM—C. H. Wiser, " "
GS—G. H. Wiser, Shinnston, W. Va.

(Continued on Next Page)

Haywood Coal Mining Co.—Cont.

EM—D. F. Talbott, Fairmont, W. Va.
SCD—Mentor Mine Supply Co. Buyer,
Geo. H. Wesser, Shinnston, W. Va.
SA—C. H. Wesser, McKeesport, Pa.

Monroe Mine; Drift; Pittsburgh Seam,
101 to 108 in. thick.
PO—Shinnston, W. Va.; SP—Same;
CTY—Harrison; RR—B & O.
S of H—Mules and 1 gasoline motor.
Track gage, 42 in.
S of M—1 chain breast type mch.
PP—Power purchased, 500 volts A. C.,
3 pumps.
EMP—15.
SIZES SHIPT—Run of Mine, Slack, Lump,
PREP. EQUIPT—Gravity Screens.

HAZY EAGLE COAL COMPANY

General Office, Edwight, W. Va.
PR—P. W. Tinscott, Cleveland, O.
VP—Rohd, Main, Huntington, W. Va.
TR—W. Henry Johnson, Edwight, W. Va.
SICV—W. Henry Johnson, Edwight, W. Va.
PA—W. Henry Johnson, Edwight, W. Va.
EM—J. M. Clark, Edwight, W. Va.
SCD—Hazy Stores Co. Buyer, L. R.
Browning, Edwight, W. Va.
Additional Information on Page 1003

Hazy Eagle Mine; Drift; Eagle and No. 2
Gas Seams, 56 to 66 in. thick.
PO—Edwight, W. Va.; SP—Same; CTY—
—Raleigh; RR—C & O.
MS—W. Henry Johnson, Edwight, W. Va.
S of H—Battery and trolley motors. Track
gage, 44 in.
S of M—Shortwall mch.
PP—1—150 K. W. generator.
EMP—50. Last years tonnage 8,500
SIZES SHIPT—Run of Mine.

H-D-W COAL COMPANY

General Office, Tunnell, W. Va.
PR—Gordon B. Late, Newburg, W. Va.
VP—W. E. Cordr, Volga, W. Va.
GM—F. Y. Hornor, Fairmont, W. Va.
GS—F. Y. Hornor, Fairmont, W. Va.
PA—F. Y. Hornor, Fairmont, W. Va.
SA—F. Y. Hornor, 823 Emerson St.,
Fairmont, W. Va.

Freeport Mine; Drift; Freeport Seam, 60
inches thick.
PO—Tunnell, W. Va.; SP—Same; CTY—
—Preston; RR—W. Va. Northern.
S of H—Mules and dinky engine. Track
gage 36 inches.
S of M—Hand.
EMP—60. Last years tonnage 15,000.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by the Hart
man Bros. Coal Co.

HEATHER RUN COAL COMPANY

General Office, Kingwood, W. Va.
PR—S. H. Sleeper, Mohall, N. D.
VP—C. D. Schwab, St. Cloud, Minn.
TR—Chas. S. Rummel, St. Cloud, Minn.
GM—J. A. Arbogast, Kingwood, W. Va.
GS—J. A. Arbogast, Kingwood, W. Va.
PA—J. A. Arbogast, Kingwood, W. Va.
SCD—Address the Company. Buyer, J.
A. Arbogast, Kingwood, W. Va.

Heather Mine; Drift; Bakerstown Seam,
40 in. thick.
PO—Kingwood, W. Va.; SP—Same; CTY—
—Preston; RR—M. & K.
S of H—Mules. Track gage 36 in.
S of M—Hand.
EMP—60. Last years tonnage 20,000
SIZES SHIPT—Run of Mine.

HEMLOCK HOLLOW COAL & COKE CO

PR—A. S. Guthrie, Charleston, W. Va.
TR—A. S. Guthrie, " "
GM—J. H. Dempsey, Lawton, W. Va.
GS—J. H. Dempsey, " "
PA—J. H. Dempsey, " "
EM—E. B. Koeser, Kanawha Falls, W. Va.
SCD—Address the Company. Buyer, E. B.
Baker, Lawton, W. Va.
SA—Eastern Coal & Export Corp., Rich-
mond, Va.

Hemlock Hollow Mine. Drift. Fire
Creek seam, 3 ft. 10 in. thick.
PO—Lawton, W. Va. SP—Lawton, W. Va.
CTY—Pawtlet; RR—C. & O.
Largest Creek Branch.
S of H—6 Elec. loco. Track 24 1/2
44 in.
S of M—Hand and 3 elec. mchs.
PP—Power purchased, 250 volts A. C.,
4 pumps.
EMP—60. Last fiscal year output 54,
740 tons.
SIZES SHIPT—Run of Mine.

HENDRICKS COAL COMPANY

General Office, Hendricks, W. Va.
PR—L. E. Poling, Hendricks, W. Va.
VP—A. C. Minear, Hendricks, W. Va.
TR—A. S. Lindsey, Hendricks, W. Va.
GM—A. S. Lindsey, Hendricks, W. Va.
SA—Prudential Coal Co., Philadelphia,
Pa.

Lehigh No. 1 Mine; Drift; Kittanning
Seam, 48 inches thick.
PO—Belington, W. Va.; SP—Same; CTY—
—Barbour; RR—W. M.

MS—Samuel Jennings, Belington, W. Va.
S of H—Mules. Track gage 36 inches
S of M—Hand.
EMP—25. Last years tonnage 15,000.
SIZES SHIPT—Run of Mine.

HENRY, JAKE COAL COMPANY

General Office, Ireland, W. Va.
PR—Jake Henry, Ireland, W. Va.
VP—W. E. Toney, Huntington, W. Va.
TR—Frank, rum, Ireland, W. Va.
GM—Jake Henry, Ireland, W. Va.
GS—H. G. Mounts, Ireland, W. Va.
PA—Frank Crum, Ireland, W. Va.
SCD—Address the company. Buyer, Frank
Crum, Ireland, W. Va.
SA—The Tidley Coal Co., Cheltonall, O.

Jake Henry Mine; Drift; Cedar Seam, 12
inches thick.
PO—Ireland, W. Va.; SP—Cedar, W. Va.;
CTY—Mingo; RR—N. & W.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
EMP—110. Last years tonnage 250,000
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.
NOTE—Formerly operated by Delphes &
West Virginia Coal Co.

HERD-LIST COAL & COKE COMPANY

General Office, Connellsville, Pa.
PR—W. Herd, Connellsville, Pa.
VP—W. J. Robinson, Palmer, W. Va.
TR—James A. List, Connellsville, Pa.
GM—Wm. E. Herd, Palmer, W. Va.
GS—Wm. E. Herd, Palmer, W. Va.
PA—Wm. E. Herd, Palmer, W. Va.
SCD—Colonial Supply Co. Buyer, W.
J. Robinson, Palmer, W. Va.

Herd-List Mine; Drift.
PO—Palmer, W. Va.; SP—Holly Junction,
W. Va.; CTY—Braxton; RR—B.
& O.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine.

HERNOON COAL COMPANY

Now a part of the New River Export
Smokeless Coal Co.

HESPER COAL & COKE COMPANY

General Office, Commercial Trust Bldg.,
Philadelphia, Pa.
PR—L. O. Knipp, Clarksburg, W. Va.
TR—G. H. Grone, Philadelphia, Pa.
GM—L. O. Knipp, Clarksburg, W. Va.
GS—G. E. Dixon, Buckhannon, W. Va.
PA—L. O. Knipp, Clarksburg, W. Va.
CE—Hornor Bros., Clarksburg, W. Va.
EM—H. G. Syrum, Buckhannon, W. Va.
SA—Philmont Coal Co., Philadelphia, Pa.
and Clarksburg, W. Va.

Hesper Mine; Drift; Kittanning Seam, 60
in. thick.
PO—R. P. D. No. 6, Buckhannon, W. Va.;
SP—Hesper, W. Va.; CTY—
—Upshur; RR—B. & O.
S of H—Mules and electric loco. Track
gage, 42 in.
PP—2—150 H. P. fire tube boilers, gen.
units, 1—150 K. W., 250 volts
D. C., 4 pumps.
EMP—75. Daily tonnage 500.
SIZES SHIPT—Run of Mine.

HESS COAL & COKE COMPANY

General Office, Morgantown, W. Va.
PR—F. B. Hess, Uniontown, Pa.
VP—J. P. Baird, Brownsville, Pa.
TR—W. W. Green, Morgantown, W. Va.
GS—W. A. Gadd, Morgantown, W. Va.
GM—A. Q. Davis, Uniontown, Pa.
PA—A. Q. Davis.

EM—Fayette Engineering Co., Uniontown,
Pa.
SA—Mon-Scott Fuel Co., Morgantown, W. Va.

Hess Nos. 1 and 2 Mines; Drift; Pitts-
burgh and S-wichley Seams, 108 and
56 inches thick.

PO—Mona, W. Va.; SP—Morgantown,
W. Va.; CTY—Monongalia; RR—
Monongahela.
S of H—Mules and 2 elec. locs. Track
gage 42 inches.
S of M—2 shortwall mchs.
PP—Power purchased, 2200 volts A. C.,
M. G. Sets, 220 volts D. C., 3
pumps.
EMP—50. Last years tonnage 90,000
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Incline Screens.

HICE COAL COMPANY

General Office, 636 to 710 Jamaica Av.,
Brooklyn, N. Y.
PR—C. S. Hice, Brooklyn, N. Y.
VP—J. P. Wilson, Manor, Pa.
TR—S. B. M. Neill, Brooklyn, N. Y.
GM—R. L. Lamon, Delshon, W. Va.
GS—R. L. Lamon, Delshon, W. Va.
SA—G. S. Hice, Brooklyn, N. Y.
Hice Mine; Drift; Upper Freeport Seam;
48 inches thick.
PO—Delshon, W. Va.; SP—Same; CTY—
Monongalia; RR—Penna. B. & O.,
M. & K.
S of H—Mules. Track gage 32 in.
S of M—Hand.
EMP—10. Last fiscal year output,
59,500 tons.

SIZES SHIPT—Run of Mine
and Information.

HICKMAN-MILLER COAL COMPANY

General Office, Morgantown, W. Va.
PR—Frank E. Duff, Uniontown, Pa.
VP—R. O. Miller, Morgantown, W. Va.
TR—P. B. Hickman, Uniontown, Pa.
GM—E. B. Beebe, Fairmont, W. Va.

Boby Mine; Drift; Sewickley Seam, 51
in. thick.
PO—Morgantown, W. Va.; SP—Randall,
W. Va.; CTY—Monongalia; RR—
M. & W.
MS—R. O. Miller, Morgantown, W. Va.
S of H—Mules, rope and storage battery
locom. Track gage 48 in.
S of M—Shortwall mchs.
PP—Power purchased, Transformer 2,200
to 220 volts A. C.
EMP—30. Daily tonnage 250.
SIZES SHIPT—Run of Mine.

HIGGINS COAL CO

General Office, Morgantown, W. Va.
PR—J. M. Stroess, Morgantown, W. Va.
VP—John M. Lough, Jr., Morgantown,
W. Va.
TR—W. R. Higgins, Morgantown, W. Va.
GM—John M. Lough, Jr., Morgantown,
W. Va.
PA—John M. Lough, Jr., Morgantown,
W. Va.
CE—Ravitt Bros., Morgantown, W. Va.
SA—J. M. Stroess, Morgantown, W. Va.

Higgins Mine; Drift; Waynesburg Seam,
96 in. thick.
PO—Morgantown, W. Va.; SP—Same;
CTY—Monongalia; RR—M. & W.,
Monon.
MS—John M. Lough, Jr., Morgantown,
W. Va.
S of H—Mules. Track gage, 42 in.
S of M—Hand.
PP—4 pumps.
EMP—32. Daily tonnage 300.
SIZES SHIPT—Run of Mine.

HIGH POINT COAL COMPANY

General Office, Clarksburg, W. Va.
PR—G. B. Parr, Clarksburg, W. Va.
VP—C. E. Parr, Clarksburg, W. Va.
TR—C. E. Parr, Clarksburg, W. Va.
GS—C. E. Parr, Clarksburg, W. Va.
PA—C. E. Parr, Clarksburg, W. Va.
SA—C. E. Parr, Clarksburg, W. Va.

High Point Mine; Drift and Slope; Pitts-
burgh Seam, 96 in. thick.
PO—Clarksburg, W. Va.; SP—Same;
CTY—Harrison; RR—B & O.
S of H—Mules and electric loco. Track
gage, 36 inches.
S of M—Hand.
SIZES SHIPT—Run of Mine.

HIMLER COAL COMPANY

See Kentucky data.

HINSON COAL COMPANY.

Operations exhausted.

HIORRA COKE CO.

General Office, Uniontown, Pa.
PR—W. A. Stone, Uniontown, Pa.
GM—W. A. Stone, " "
TR—Geo. H. Bortz, " "
PA—Geo. H. Bortz, " "
SCD—Hiorra Supply Co. Buyer, G. I.
Humphreys, Hiorra, W. Va.
SA—W. A. Stone & Co., Uniontown, Pa.

Vulcan Mine, Drift, Upper Freeport
Seam, 52 inches thick.
PO—Hiorra, W. Va.; SP—Same; CTY—
—Preston; RR—B. & O.
MS—Geo. H. Humphreys, Hiorra, W. Va.
S of H—Mules and 1 elec. loco. Track
gage 42 in.
S of M—Hand and 6 comp. air mch.
PP—1 Return tubular 150 H. P. P.
boiler, 1 air comp., also low elec.
power, 100 Hie five role avers.
SIZES SHIPT—Run of Mine.

HITCHMAN COAL & COKE CO

General Office, Wheeling, W. Va.
PR—E. T. Hitchman, Wheeling, W. Va.
TR—W. H. Koch, " "
GM—W. H. Koch, Wheeling, W. Va.
GS—Thomas I. Thomas, Wheeling, W. Va.
PA—W. H. Koch, Wheeling, W. Va.

Hitchman Mine, Slope, Pittsburgh No. 8
Seam, 5 ft. 8 in. thick.
PO—Wheeling, W. Va.; SP—Bentwood,
W. Va.; CTY—Marshall; RR—
B. & O.
S of H—Mules and endless rope, 6 foot
ley pole type locs. Track gage, 40
inches.
S of M—10 chain breast type and 1
shortwall mchs.
PP—2 fire tube boilers, 100 H. P., 2
water tube boilers, 150 H. P., 2
250 K. W. gen. units, 1 pump.
EMP—100. Daily tonnage 1,500
SIZES SHIPT—Run of Mine, Slack, Lump
PREP. EQUIPT—Gravity Screens.

HITE COAL COMPANY

Now Montfair Gas Coal Company

H. M. J. COAL CO.

General Office, 1202 Union Trust Bldg.,
Charleston, W. Va.
PR—F. E. Hoskin, Charleston, W. Va.
VP—Wm. Johnson, Hanford, W. Va.
TR—M. E. Moore, Charleston, W. Va.
Additional Information on Page 1040

H. M. J. Mine, Drift; Coniburg and
Lewiston Seams, 50 to 8 in. thick.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
SIZES SHIPT—Run of Mine, Slack
Lump, Block
PREP. EQUIPT—Bar Screens

HOCKING VALLEY COAL CO

General Office, Philippi, W. Va.
Hocking Valley Mine,
PO—Philippi, W. Va.; CTY—Barlow,
RR—B. & O.
No report.

HOFFA BROS. COAL CO.

General Office, Piedmont, W. Va.
PR—T. D. Campbell, Bartons, Md.
PA—T. D. Campbell, " "
TR—A. P. Hoffa, " "
GM—A. P. Hoffa, " "
GS—A. P. Hoffa, " "
MM—M. E. Hoffa, " "

Potomac Mine; Drift; Pittsburgh Big
Vein, 120 to 180 in. thick.
PO—Piedmont, W. Va.; SP—Barton,
Md.; CTY—Mineral; RR—C. & P.
MS—William Hyde, Piedmont, W. Va.
S of H—Mules and 1 steam loco.
S of M—Hand.
EMP—125. Last fiscal year output,
110,000 tons.
SIZES SHIPT—Run of Mine.

Potomac Little Vein Mine; Drift; Baker-
town Seam, 26 to 30 in. thick.
PO—Piedmont, W. Va.; SP—Barton,
Md.; CTY—Mineral; RR—C. & P.
MS—H. Berry, Barton, Md.
S of H—Mules.
S of M—Hand.
EMP—20. Last fiscal year output, 10,
000 tons.
SIZES SHIPT—Run of Mine.

HOFFMAN COAL MINING COMPANY

General Office, 515 Widener Bldg., Phila-
delphia, Pa.
PR—Oscar O. Hoffman, 515 Widener
Bldg., Philadelphia, Pa.
VP—Oscar O. Hoffman, Philadelphia, Pa.
TR—Oscar O. Hoffman, Philadelphia, Pa.
GS—E. W. Jones, Kingwood, W. Va.
PA—E. W. Jones, Kingwood, W. Va.
EM—L. E. Williams, Kingwood, W. Va.
EE—Bruce Bakerlaw, Kingwood, W. Va.

Elbridge Mine; Drift; Bakerstown Seam;
40 in. thick.
PO—Kingwood, W. Va.; SP—Same; CTY—
—Preston; RR—B. & O.
S of H—Mules and rope. Track gage,
42 in.
S of M—2 overhead cutler mchs.
PP—1—60 H. P. water tube boiler, gen.
units, 250 volts D. C., 1 pump.
EMP—40. Daily tonnage 125.
SIZES SHIPT—Run of Mine.

HOLOREO COLLIERIES OF W. VA.

General Office, Blair, W. Va.
PR—Sir Herbert S. Holt, Montreal,
Quebec, Canada.
VP—J. S. Morris, Montreal, Quebec,
Canada.
TR—C. S. Bagg, Montreal, Quebec, Can.
SECV—C. S. Bagg, Montreal, Quebec,
Canada.
GM—D. O. Wing, Blair, W. Va.
GS—D. O. Wing, Blair, W. Va.
PA—D. O. Wing, Blair, W. Va.
CL—Clark & Krebs, Union Trust Bldg.,
Charleston, W. Va.
EE—L. G. Cline, Blair, W. Va.
SCD—Address the Company. Buyer, L. G.
Cline, Blair, W. Va.
SA—R. C. Morton, Blair, W. Va.

Holoreo Collieries Mine; Drift, Chilton
Seam, 60 to 8 in. thick.
PO—Blair, W. Va.; SP—Same; CTY—
—Loran; RR—C. & O. Coal River
Branch.
MS—A. Altz, Blair, W. Va.
S of H—1 electric loco, 1 elec. loco, 4
7 tonage battery locs.
S of M—2 cutting mch.
PP—Power purchased, 250 volts D. C., 2
pumps.
EMP—50. Last fiscal year output,
100,000 tons.
SIZES SHIPT—Run of Mine.
Note: Screens to Spruce, Va., Coal
Company.

HOLSTED COAL COMPANY

General Office, W. Va.
PR—Oscar A. N., W. Va.; CTY—K. & O.
RR—C. & O.
No report.

HOLT FUEL COMPANY

PR—E. D. Cunningham, Charleston, W. Va.
 VP—W. E. Dickinson, Brent Vista, Va.
 TR—L. H. Rink, Charleston, W. Va.
 GM—J. R. Cunningham, Charleston, W. Va.
 SA—T. L. White, Pratt, W. Va.
 PA—J. R. Cunningham, Charleston, W. Va.
 LM—O. A. Veazey, Pratt, W. Va.
 SA—Smokeless Fuel Co., Charleston, W. Va.

Holt Mine; Drift; No. 2 Gas Seam, 42 to 44 in. thick.
 PO—Pratt, W. Va.; SP—Same; CTY—Kanawha; RR—C. & O.
 S of H—Mules. Track gage, 40 in.
 S of M—Hand.
 EMP—15.
 SIZES SHIPT—Run of Mine.
 Old information.

HOME COAL COMPANY

Now P. V. K. Coal Co.

HOO HOO COAL COMPANY.

Out of business.

HOOD COAL CO

General Office, Shinnston, W. Va.
 Hood Mine.
 PO—Shinnston, W. Va.; CTY—Harrison;
 RR—B. & O.
 No report.

HOPKE & MARSH

Charlottesville, W. Va.
 Successors to Usula Coal Co.
 No report.

HOPKINS FORK COAL COMPANY

General Office, Charleston, W. Va.
 PR—W. S. Wood, Charleston, W. Va.
 VP—S. Davis, Charleston, W. Va.
 TR—W. S. Wood, Charleston, W. Va.
 GM—Geo. T. Wall, Charleston, W. Va.
 PA—Geo. T. Wall, Charleston, W. Va.
 EM—Robt. B. Whitaker, Charleston, W. Va.
 SA—Address the company, Buyer, R. L. Flint, Charleston, W. Va.
 SC0—Wood-Morton Fuel Co., Charleston, W. Va.
 Additional Information on Page 999

Hopkins Fork Mine; Drift; Cedar Grove Seam, 58 inches thick.
 PO—Walburn, W. Va.; SP—Kieth, W. Va.; CTY—Boone; RR—C. & O.
 MS—E. A. Poe, Walburn, W. Va.
 S of H—Elec. looms.
 S of M—Elec. puncher mauls.
 PP—3 water tube boilers.
 EMP—85.
 TRUCKS—Steam, Domestic.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Loading Rooms.

HORCHLER COAL MINING COMPANY

General Office, Newburg, W. Va.
 OPERATOR—F. W. Horchler, Newburg, W. Va.
 Sales Agent—A. C. McFarland, Real Estate Trust Bldg., Philadelphia, Pa.

Frederick No. 1 Mine; Drift; Upper Freeport Seam, 54 in. thick.
 PO—Newburg, W. Va.; SP—Same; CTY—Preston; RR—B. & O., Raccoon Valley R.
 MS—F. W. Horchler, Jr., Newburg, W. Va.
 S of H—Mules. Track gage 42 in.
 S of M—Hand and 5 comp. air mauls.
 PP—Power purchased, 550 volts D. C., 1 the tube boiler, 150 H. P.
 EMP—15.
 SIZES SHIPT—Run of Mine.

HORSE CREEK BLOCK COAL CO.

General Office, 8 East Broad St., Columbus, O.
 PR—L. D. Lammman, Columbus, O.
 TR—Edwin F. McManis, Columbus, O.
 GM—P. C. Morris, Nelsonville, O.
 GS—P. C. Morris, " "
 EM—J. L. Murphy, " "
 PA—P. B. Verity, Nelsonville, O.
 EE—P. B. Verity, Nelsonville, O.
 SC0—Manhattan Stores Co. Buyer, P. L. Woodward, Morrisville, W. Va.
 Sales Agency, New York Coal Co., Columbus, O.

No. 1 Mine; Drift; Kanawha No. 5 Seam, 52 to 56 in. thick.
 PO—Morrisville, W. Va.; SP—Same; CTY—Boone; RR—C. & O., Coal River branch.
 MS—Chas. L. Milligan, Morrisville, W. Va.
 S of H—2 elec. looms. Track gage 42 in.
 S of M—2 shortwall mauls.
 PP—1 R turn tubular boilers, total 150 H. P., 2 gen. units, 250 volts D. C., 2 pumps.
 EMP—80.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables.

HOUEK-REIDLER BROS. COAL MNG. CO.

General Office, Austen, W. Va.
 PR—W. O. Houek, Austen, W. Va.
 VP—R. K. Houek, Austen, W. Va.
 SEY—C. E. Reidler, Austen, W. Va.
 GM—G. W. Reidler, Austen, W. Va.
 GS—G. C. Houek, Austen, W. Va.
 PA—G. C. Houek, Austen, W. Va.
 SC0—West End Supply Co. Buyer, Ross

Houek Reidler Mine; Drift; Upper Freeport Seam, 18-72 in. thick.
 PO—Austen, W. Va.; SP—Same; CTY—Preston; RR—B. & O.
 MS—G. W. Reidler, Austen, W. Va.
 S of H—Mules, rope and steam loco. Track gage 42 inches.
 S of M—Hand.
 EMP—100. Daily tonnage 400.
 SIZES SHIPT—Run of Mine, Slack.
 PREP. EQUIPT—Bar Screens, Picking Tables.
 NOTE—Formerly operated by the Gorman Coal & Coke Co.

HOUGH, H. N. COAL COMPANY

General Office, Lumberport, W. Va.
 PR—V. L. Horner, Lumberport, W. Va.
 VP—J. L. Horner, Lumberport, W. Va.
 TR—V. L. Horner, Lumberport, W. Va.
 GM—H. N. Hough, Lumberport, W. Va.
 PA—H. N. Hough, Lumberport, W. Va.

Pale Mine; Drift; Pittsburgh Seam, 102 in. thick.
 PO—Lumberport, W. Va.; SP—Same; CTY—Harrison; RR—B. & O. Short Line.
 S of H—Mules. Track gage 42 in.
 S of M—Hand.
 EMP—40. Daily tonnage 300.
 SIZES SHIPT—Run of Mine.
 Note—Successors to Pale Coal Co.

HOUSTON COAL & COKE CO

General Office, 1522 Union Trust Bldg., Cincinnati, O.
 PR—T. E. Houston, Cincinnati, O.
 TR—T. E. Houston, Cincinnati, O.
 GM—N. H. Franklin, Cincinnati, O.
 GS—Benjamin Lewis, Elkhorn, W. Va.
 EE—J. C. Newman, Cincinnati, O.
 PA—N. H. Franklin, Cincinnati, O.
 CE—G. A. Wright, Cincinnati, O.
 EM—John M. Lewis, Cincinnati, O.
 SC0—Address the Company Buyer, E. W. O'Brien, Elkhorn, W. Va.
 Sales Agency, Houston Coal Co., 1522 Union Trust Bldg., Cincinnati, Ohio.

Houston Mine; Drift; Pocahontas No. 3 Seam, 60 to 84 in. thick.
 PO—Elkhorn, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
 MS—Frank E. Houston, Elkhorn, W. Va.
 S of H—Mules 3 elec. and 2 storage battery looms. Track gage 44 in.
 S of M—Hand.
 PP—3 water tube boilers, total 1,200 H. P., 2 gen. units, 250 volts D. C., 8 pumps.
 EMP—310. 210 coke ovens.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Screens.

HOUSTON COLLIERIES COMPANY

General Office, 1522 Union Trust Bldg., Cincinnati, O.
 PR—T. E. Houston, Cincinnati, O.
 TR—N. H. Franklin, Cincinnati, O.
 GM—N. H. Franklin, Cincinnati, O.
 GS—Ben Lewis, Maitland, W. Va.
 PA—N. H. Franklin, Cincinnati, O.
 CE—G. A. Wright, Cincinnati, O.
 EM—John M. Lewis, Cincinnati, O.
 EE—J. C. Newman, Maitland, W. Va.
 SC0—Address the Company Buyer, T. C. Stafford, Maitland, W. Va.
 SA—Houston Coal Co. Gen. Mgr., Kopper Hood, 1522 Union Trust Bldg., Cincinnati, O.

Maitland Mine; Shaft; Pocahontas Seam, 72 in. thick.
 PO—Maitland, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
 MS—J. O. Smith, Maitland, W. Va.
 S of H—11 trolley pole type and 2 storage battery looms. Track gage 52 inches.
 PP—3 water tube boilers, total 1,200 H. P., 2 gen. units, 12 pumps.
 EMP—250. Coke ovens, 160 Bee Hive.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

Carswell Mine; Shaft; Pocahontas Seam, 60 in. thick.
 PO—Crowsell, W. Va.; SP—Kimball, W. Va.; CTY—McDowell; RR—N. & W.
 MS—F. L. Stafford, Carswell, W. Va.
 EM—V. W. Hash, Carswell, W. Va.
 S of H—4 elec. and 2 storage battery looms. Track gage 44 in.
 S of M—6 elec. mauls.
 PP—8 return tubular boilers, total 1800 H. P., 2 gen. units, 250 volts D. C.
 EMP—250.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Screens, Picking Tables, Loading Rooms.

HOWARD & QUINN

General Office, Clarksburg, W. Va.
 GM—D. T. Quinn, Clarksburg, W. Va.
 GS—W. H. McWhorter, McWhorter, W. Va.
 PA—J. Ray Quinn, Clarksburg, W. Va.
 SA—Daniel Howard & Co., Clarksburg, W. Va.

Fairmont No. 4 Mine; Drift; Pittsburgh No. 8 Seam, 46 in. thick.
 PO—McWhorter, W. Va.; SP—Same; CTY—Harrison; RR—B. & O.
 S of H—Mules. Track gage 42 in.
 EMP—35. Daily tonnage 150.
 SIZES SHIPT—Run of Mine.

HOWARD COLLIERIES.

GM—George Douglass, Jr., Bluefield, W. Va.
 GS—H. A. Ingham, Chatteray, W. Va.
 PA—H. A. Ingham, Chatteray, W. Va.
 EM—J. H. Dickerson, Chatteray, W. Va.
 EE—J. F. Williams, Chatteray, W. Va.
 SC0—Howard Store; Buyer, M. M. Strong, Chatteray, W. Va.

Howard Mine; Drift; Winifrede, Coalburg, Freeport Seams, 66, 60 and 48 in. thick.
 PO—Chatteray, W. Va.; SP—Same; CTY—Mingo; RR—N. & W.
 S of H—Mules, 2 trolley pole type, 3 storage battery and 1 comb. looms. Track gage 48 in.
 S of M—3 comp. air punchers and 3 shortwall mauls.
 PP—Purchase power, transformer 33,000 volts to 2200 volts, rotary converters, 250 volts D. C., 6 pumps.
 EMP—105. Daily tonnage 500.
 SIZES SHIPT—Run of Mine, Slack.
 PREP. EQUIPT—Picking Tables.

Frederick Mine; Drift; Winifrede and Coalburg Seams, 60-66 in. thick.
 PO—Chatteray, W. Va.; SP—Same; CTY—Mingo; RR—N. & W.
 S of H—Mules, 2 trolley pole type and 2 comb. looms. Track gage 48 inches.
 S of M—3 shortwall mauls.
 PP—Purchase power, transformer 33,000 volts to 2200 volts, rotary converters, 250 volts D. C., 2 pumps.
 EMP—121. Daily tonnage 500.
 SIZES SHIPT—Run of Mine, Slack.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

Junder Mine; Drift; Winifrede, Coalburg, Freeport Seams, 66, 60 and 54 in. thick.
 PO—Chatteray, W. Va.; SP—Same; CTY—Mingo; RR—N. & W.
 S of H—Mules, 2 trolley pole type, 2 storage battery and 1 combination looms. Track gage 48 in.
 S of M—1 electric and 1 comp. air punchers and 4 shortwall mauls.
 PP—Purchase power, transformer 33,000 volts to 2200 volts, rotary converters, 250 volts D. C., 4 pumps.
 EMP—109. Daily tonnage 500.
 SIZES SHIPT—Run of Mine, Slack.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

HOWARD CUTHERY & CO.

General Office, Clarksburg, W. Va.
 MGR—D. Howard, Clarksburg, W. Va.
 SC0—Daniel Howard & Co., Clarksburg, W. Va.

Snake Hill Mine; Drift; Pittsburgh No. 8 Seam, 132 in. thick.
 PO—Clarksburg, W. Va.; SP—Same; CTY—Harrison; RR—B. & O.
 MS—Fred Howard, Clarksburg, W. Va.
 S of H—Mules and gasoline looms. Track gage 42 in.
 S of M—Chain breast type and longwall mauls.
 PP—Purchase power, 550 volts D. C.
 EMP—100. Daily tonnage 1,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.
 Note—Formerly operated by the Central Fairmont Coal Co.

HUBBARD COAL COMPANY

General Office, Lex, W. Va.
 PR—Wm. Hubbard, Welch, W. Va.
 VP—Almer Coe, Chicago, Ill.
 TR—R. O. Swone, Welch, W. Va.
 GM—Wm. Hubbard, Welch, W. Va.
 GS—E. D. Walters, Lex, W. Va.
 PA—Wm. Hubbard, Welch, W. Va.
 EM—H. J. Brooks, Welch, W. Va.
 SA—Wm. Catwater & Co., New York, N.Y.

Hubbard No. 85 Mine; Drift; Sewell Seam, 39 inches thick.
 SIZES SHIPT—Run of Mine.
 Old information.

HUBBARD COAL MINING CO.

General Office, 904 American Bldg., Baltimore, Md.
 PR—E. Clay Timmons, Baltimore, Md.
 GS—P. J. Brennan, Hubbard, W. Va.
 PA—P. J. Brennan, Hubbard, W. Va.
 SC0—Hubbard Supply Co. Buyer, P. J. Brennan, Hubbard, W. Va.
 SA—E. H. Ray, Baltimore, Md.

Hubbard Mine; Drift; Seam, 39 inches thick.
 PO—Hubbard, W. Va.; SP—Same; CTY—Mineral; RR—W. Md.
 S of H—Mules and trolley pole type loco.
 S of M—2 shortwall mauls.
 PP—2 fire tube boilers, 300 H. P., 1—150 K. W. gen. unit, 250 volts D. C., 4 pumps.
 SIZES SHIPT—Run of Mine.

HUDDLESTON, E. F.

General Office, Charleston, W. Va.
 PR—E. F. Huddleston, Charleston, W. Va.
 Huddleston Mine; Drift; Lewiston Seam, 44 in. thick.
 PO—Charleston, W. Va.; SP—Same; CTY—Kanawha; RR—C. & O.
 MS—Lewis Kirk, Charleston, W. Va.
 S of H—Mules.
 S of M—Hand.
 EMP—25. Daily tonnage 60.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Picking Tables.

HUDSON COAL CO.

General Office, Clarksburg, W. Va.
 PR—H. H. Robb, Clarksburg, W. Va.
 VP—J. M. Orr, Clarksburg, W. Va.
 TR—E. M. Pendergast, Clarksburg, W. Va.
 GM—James M. Orr, Clarksburg, W. Va.
 PA—J. G. Kidwell, Clarksburg, W. Va.
 EM—E. V. Selby, Clarksburg, W. Va.
 SA—Wentz Company, Philadelphia, Pa.
 Additional Information on Page 1007

Miller Mine; Drift; Pittsburgh Seam, 90 in. thick.
 PO—Wilsonburg, W. Va.; SP—Same; CTY—Harrison; RR—B. & O.
 MS—James Cummings, Wilsonburg, W. Va.
 S of H—Mules, 1 storage battery, 1 steam loco. Track gage 42 in.
 S of M—3 chain breast, 1 shortwall maul.
 PP—Power purchased, 550 volts D. C., 2 pumps.
 EMP—85. Daily tonnage 600.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

Tucker Mine; Drift; Sewickley Seam, 76 inches thick.
 PO—R. F. O. No. 1, Fairmont, W. Va.; SP—Frt., Tucker, W. Va., Exp., Monongah, W. Va.; CTY—Marion; RR—B. & O.
 MS—John E. Ford, Fairmont, W. Va.
 S of H—Mules, 2 storage battery looms. Track gage 42 in.
 S of M—1 chain breast and 2 shortwall mauls.
 PP—Power purchased, Transformer 22,000 to 440 volts A. C., 2 pumps.
 EMP—75. Daily tonnage 600.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

Lewis Mine; Stone; Pittsburgh Seam, 96 inches thick.
 PO—Wolf Summit, W. Va.; SP—Same; CTY—Harrison; RR—B. & O.
 MS—John Wickenhofer, Wolf Summit, W. Va.
 S of H—5 combination looms. Track gage 42 in.
 S of M—1 chain breast and 3 overhead cutting mauls.
 PP—Power purchased, Transformer 22000 to 440 volts A. C., 8 pumps.
 EMP—150. Daily tonnage 1,500.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

HUGHES COAL COMPANY

General Office, Fairmont, W. Va.
 PR—C. D. Robinson, Fairmont, W. Va.
 VP—H. R. Robinson, Fairmont, W. Va.
 TR—C. D. Robinson, Fairmont, W. Va.
 GM—C. D. Robinson, Fairmont, W. Va.
 GS—Borsey Pepp, Fairmont, W. Va.
 PA—H. R. Robinson, Fairmont, W. Va.
 EM—D. D. Simon, Fairmont, W. Va.
 SA—Eastern Fuel Co., 408 Frick Bldg. Pittsburgh, Pa.; 202 Broadway, New York, N. Y.

Helen Mine; Drift; Pittsburgh Seam 96 inches thick.
 PO—Shinnston, W. Va.; SP—Gypsy, W. Va.; CTY—Harrison; RR—B. & O.
 MS—John T. Barry, Shinnston, W. Va.
 S of H—Trolley pole type looms. Track gage 44 inches.
 S of M—3 chain breast type and 2 shortwall mauls.
 PP—Power purchased Transformer 550 volts A. C., 6 pumps.
 EMP—150. Daily tonnage 1600.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

HUGHSTON COAL CO.

Out of business.

HUMP MOUNTAIN SMOKELESS COAL CO.

General Office, Humen, W. Va.
 PR—W. J. Harvi, Huntington, W. Va.
 VP—W. H. Evans, Amstead, W. Va.
 (Continued on Next Page)

Hump Mountain Smokeless Coal Co.—Cont.

TH—Jos. L. Osler, Humoco, W. Va.
GM—Jos. L. Osler, Humoco, W. Va.
GS—Jos. L. Osler, Humoco, W. Va.
PA—E. C. Roeser, Humoco, W. Va.
EM—E. C. Roeser, Kanawha Falls, W. Va.
SCO—Address the Company, Buyer, I. C. Saville, Humoco, W. Va.
SA—C. G. Blake Co., Cincinnati, O.

Hump Mountain Mine; Drift; Fire Creek Seam; 48 inches thick.
PO—Humoco, W. Va.; SP—Claypool, W. Va.; CTY—Summers; RR—S. V. R.
S of H—Mules, battery motor, steam loco. Track gage 44 in.
S of M—Hand and shortwall mach.
PP—2-125 H. P. return tubular boilers, 1-150 K. W., 1-200 K. W., M. G. Sets, 5 pumps.
EMP—100. Last years tonnage 30,000.
SIZES SHIPT—Run of Mine, Slack.
PREP. EQUIPT—Bar Screens.

HUMPHREYS, A. N. COAL COMPANY
OWNER—A. N. Humphreys, Philippi, W. Va.
EM—Basel Mann, Philippi, W. Va.
SA—Patton Coal Co., Baltimore, Md., and Fairmont, W. Va.

Monser Mine; Drift; Mahoning Seam, 48 in. thick.
PO—Philippi, W. Va.; SP—Same; CTY—Barbour; RR—B. & O.
MS—A. N. Humphreys, Philippi, W. Va.
S of H—Mules, Track gage 36 in.
S of M—Hand.
EMP—20.
SIZES SHIPT—Run of Mine.

HUNT-FORBES COAL COMPANY.
General Office, Ashland, Ky.
PR—M. I. Forbes, Huntington, W. Va.
VP—Geo. Hunt, Ashland, Ky.
TR—J. W. Bosley, Ashland, Ky.
GM—George Hunt, Ashland, Ky.
GS—S. S. Runyon, Williamson, W. Va.
PA—George Hunt, Ashland, Ky.
EM—L. C. Linkous, Williamson, W. Va.
EE—W. Va. Eng. Co.
SCO—Address the Company, Buyer, G. O. Hunt, Ashland, Ky.
SA—Ashland Coal Sales Co., Ashland, Ky.

Hunt-Forbes Mine; Drift; Thacker Seam, 50 in. thick.
PO—Williamson, W. Va. SP—Same. CTY—Mingo RR—Norfolk & Western.
MS—S. S. Runyon, Williamson, W. Va.
S of H—Motor Track gage 41 in.
S of M—Mining mach.
EMP—36. Last years tonnage 25,000.
SIZES SHIPT—Run of Mine.

HUNTINGTON COAL & MINING CO.
General Office, Huntington, W. Va.
PR—C. N. Morrison, Huntington, W. Va.
VP—F. W. Riffe, Hurricane, W. Va.
TR—J. M. Hall, Huntington, W. Va.
GM—J. M. Hall, Huntington, W. Va.
GS—J. M. Hall, Huntington, W. Va.
PA—J. M. Hall, Huntington, W. Va.
EM—F. R. Eaton, Huntington, W. Va.
SCO—Additional Information on Page 1014

Belle Mine; Drift; Coalburg, Cedar Grove and No. 2 Seams, 50 inches thick.
PO—Belle, W. Va.; SP—Same; CTY—Kanawha; RR—K. & M.
MS—C. E. Bruce, Huntington, W. Va.
SM—J. K. Nelson, Huntington, W. Va.
S of H—Trolley pole type locos.
PP—Power purchased, M. G. Sets.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

No. 2 Mine; Drift; Holden Seam, 50 in. thick.
PO—Ferguson, W. Va.; SP—Same; CTY—Wayne; RR—N. & W.
MS—W. M. Elswick, Huntington, W. Va.
S of H—Trolley pole type locos.
PP—Power purchased.
SIZES SHIPT—Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

HURRICANE BRANCH COAL COMPANY.
General Office, Genoa, W. Va.
PR—E. M. Ramey, Genoa, W. Va.
GM—E. M. Ramey, Genoa, W. Va.
GS—E. M. Ramey, Genoa, W. Va.
PA—E. M. Ramey, Genoa, W. Va.
TR—A. Colliworth, Genoa, W. Va.
EM—A. A. Dass, Genoa, W. Va.
SA—Agent, E. M. Ramey, Genoa, W. Va.

Hurricane Branch Mine; Drift; Lower Darners Seam, 42 in. thick.
PO—Genoa, W. Va. SP—Wooley Siding, W. Va. CTY—Wayne, RR—N. & W.
S of H—8 mules. Track gage 36 in.
S of M—Hand.
PP—2 pumps.
EMP—7.
SIZES SHIPT—Run of Mine.
Old information

HUTCHINSON COAL CO
General Office, Fairmont, W. Va.
8 miles in West Virginia, 1 Mine in Ohio.
PR—A. I. Hutchinson, Fairmont, W. Va.
VP—C. E. Hutchinson, Fairmont, W. Va.

TR—C. H. Jenkins, " "
GS—C. J. Ryan, Hepzibah, W. Va.
PA—M. C. Lough, Fairmont, W. Va.
EM—G. T. Leachman, Hepzibah, W. Va.
EE—W. W. Shushan, Hepzibah, W. Va.
SCO—Address the company—Buyer, W. G. Crawford, Mt. Clare, W. Va.
Sales Managers, C. H. Jenkins, Fairmont, W. Va.; Lindsay McCandlish, Phila., Pa.; J. G. Wolfe, Cleveland, Ohio.
Additional Information on Page 1011

Lauralee Mine; Drift; Pittsburgh Seam, 90 in. thick.
PO—Lumberport, W. Va.; SP—Lauralee, W. Va.; CTY—Harrison; RR—B. & O.
MS—G. H. Musgrove, Lumberport, W. Va.
SM—G. M. Frazier.
S of H—Mules, elec. loco. Track gage 42 in.
S of M—Hand.
PP—250 volts D. C.

Robey Mine; Drift; Pittsburgh Seam, 90 in. thick.
PO—Lumberport, W. Va.; SP—Robey, W. Va.; CTY—Harrison; RR—B. & O.
MS—W. P. Ash, Lumberport, W. Va.
SM—W. D. Koley, Lumberport, W. Va.
S of H—Mules, 2 elec. locos.
S of M—Hand, 3 elec. machs.
PP—Power purchased, 250 volts D. C.

Hutchinson Mine, Drift, Pittsburgh Seam 7 to 7 1/2 ft. thick.
PO—Mt. Clare, W. Va.; SP—Byron, W. Va.; CTY—Harrison, RR—B. & O., W. Va. & Egh. R.
MS—Walter Miller, Mt. Clare, W. Va.
SM—W. G. H. Crawford.
S of H—Mules, 2 elec. locos, Track gage 42 in.
S of M—Hand, 4 elec. machs.
PP—Power purchased, 250 volts D. C., 6 pumps.

Erie Mine, Drift, Pittsburgh Seam, 6 to 8 1/2 ft. thick.
PO—Hepzibah, W. Va. SP—Erie Mine, W. Va.; CTY—Harrison, RR—B. & O., W. Va. Short Line.
MS—P. P. Cogar, Hepzibah, W. Va.
SM—Jos. E. Jividen, Hepzibah, W. Va.
S of H—Mules, 2 elec. locos, Track gage 42 in.
S of M—Hand, 7 elec. machs.
PP—Power purchased, 250 volts D. C.

Linden Mine, Drift, Pittsburgh Seam, 1 1/2 to 5 ft. thick.
PO—Mason, W. Va.; SP—Linden Mine, W. Va.; CTY—Mason, RR—B. & O., Ohio River Div.
MS—Jacob Phillips, Mason, W. Va.
S of H—Mules, 2 elec. locos, Track gage 38 1/2 in.
S of M—4 Elec. machines.
PP—2 return tubular boilers, total 300 H. P., gen. units, 250 volts D. C., 7 pumps.

McCandlish Mine, Drift, Pittsburgh Seam 6 to 8 1/2 ft. thick.
PO—Meadowbrook, W. Va.; SP—Same, CTY—Harrison, RR—B. & O., M. R. Div.
MS—W. H. Myers, Meadowbrook, W. Va.
SM—J. H. McGee.
S of H—Mules, 2 elec. locos, Track gage 42 in.
S of M—6 Elec. machines.
PP—3 return tubular boilers, total 450 H. P., 250 volts D. C., 7 pumps.

Glarad Mine, Drift, Pittsburgh Seam, 6 1/2 to 8 1/2 ft. thick.
PO—Dola, W. Va.; SP—Same, CTY—Harrison, RR—B. & O., W. Va. Short Line.
MS—C. H. Touchman, Dola, W. Va.
S of H—Mules, Track gage 42 in.
S of M—Hand, 1 elec. mach.
PP—Power purchased, 250 volts D. C.

York Mine; Drift; Pittsburgh Seam; 66 to 90 inches thick.
PO—Reynoldsville, W. Va.; SP—Same, CTY—Harrison, RR—B. & O., Parkersburg Branch.
MS—Chas. S. Stewart, Reynoldsville, W. Va.
S of H—Mules, 1 trolley pole type loco. Track gage 42 in.
S of M—Hand, 1 elec. mach.
PP—Power purchased, 500 volts D. C.
Total output of all mines, 1,000,000 tons.

Delta Mine abandoned.

Harold Mine sold to Marble Coal Mine and Co.

IAECER POCAHONTAS COAL COMPANY
General Office, Iager, W. Va.
PR—D. L. Hatcher, Iager, W. Va.
GM—M. E. Anville, Iager, W. Va.
SCO—Address the Company, Buyer, M. F. Anville, Iager, W. Va.

Anville Mine.
PO—Iager, W. Va.; SP—Same; CTY—McDowell.
S of H—Mules.

S of M—Hand.
EMP—10. Daily output, 50 tons.
SIZES SHIPT—Run of Mine.
(Old Information)

ICENHOWER, J. F.
General Office, Mason, W. Va.
Leachman Mine; Slope; Pittsburgh Seam 66 in. thick.
PO—Mason, W. Va.; SP—Same; CTY—Mason.
MS—C. P. Leachman, Mason, W. Va.
S of H—Mules, Track gage 39 in.
S of M—Hand.
PP—1 wat. tube boiler.
EMP—17. Daily tonnage 50.
SIZES SHIPT—Run of Mine.

IDA MAY COAL COMPANY
General Office, 305 Schmitt Bldg., Pittsburgh, Pa.
PR—W. J. Flanagan, Pittsburgh, Pa.
TR—Louis Napelton, Pittsburgh, Pa.
GM—W. J. Flanagan, Pittsburgh, Pa.
GS—E. L. Sanford, Belington, W. Va.
PA—W. J. Flanagan, Pittsburgh, Pa.
EM—Mr. Wilson, Belington, W. Va.
SA—W. J. Flanagan, Pittsburgh, Pa.

Elizabeth Mine; Slope; Lower Kittanning Seam, 60 in. thick.
PO—Belington, W. Va.; SP—Dartmoor, W. Va.; CTY—Barbour; RR—West of Maryland.
S of H—Rope and steam engine, Track gage 42 in.
S of M—Hand.
PP—2 7 1/2 H. P. water tube boilers.
EMP—31. Last years tonnage 10,000.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by the Row Coal Co.

ILLINI COAL COMPANY
Office, W. Va.
Illini Mine.
PO—Oiley, W. Va.; CTY—Kanawha; RR—C. & O.
No report.

ILLINOIS COMMERCIAL & MINING CO.
General Office, Aurora, Ill.
PR—C. B. Strohn, Aurora, Ill.
TR—E. H. O'Meara, Aurora, Ill.
GM—W. M. Willett, Aurora, Ill.

Rex No. 1 Mine; Drift; Chilton Seam, 51 in. thick.
PO—Ethel, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
MS—Wm. Gus, Ethel, W. Va.
S of H—Mules, 4 elec. locos, Track gage 44 in.
S of M—4 chain breast type and 3 short-wall machs.
PP—Power purchased, 250 volts D. C., 4 pumps.
EMP—120. Daily tonnage 500.
PREP. EQUIPT—Picking Tables.

Rex No. 2 Mine; Drift; Chilton Seam, 50 in. thick.
PO—Ethel, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
MS—Wm. Gus, Ethel, W. Va.
S of M—1 Aerial and 1 chain breast mach.
PP—Power purchased, 250 volts D. C., 2 pumps.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.
Old information.

IMPERIAL COAL COMPANY.
General Office, Elkins, W. Va.
OWNERS—R. J. Leader, Elkins, W. Va., and N. G. Scott, Elkins, W. Va.
TR—Ross J. Leader, Elkins, W. Va.
GM—N. G. Scott, Elkins, W. Va.
EM—Huston Brumback, Elkins, W. Va.
SA—W. H. Green Coal Co., Elkins, W. Va.

Indian Mine; Drift; Kittanning Seam, 60 in. thick.
PO—Imperial, W. Va.; SP—Same; CTY—Upshur; RR—B. & O.
S of H—Mules, Track gage, 42 in.
S of M—Hand.
PP—1 pump.
EMP—24. Daily tonnage 100 to 125.
SIZES SHIPT—Run of Mine.

IMPERIAL COLLIERIE COMPANY.
General Office, Burnell, W. Va.
PR—Judge F. P. Christian, Lynchburg, Va.
VP—J. T. Jennings, Lynchburg, Va.
TR—F. P. Christian, Lynchburg, Va.
STPT—M. D. Bouldin, Burnell, W. Va.
GS—M. D. Bouldin, Burnell, W. Va.
EM—R. B. Whitaker, Charleston, W. Va.
EE—A. E. Hudson, Burnell, W. Va.
SCO—Address the company, Buyer, E. C. Stille, Burnell, W. Va.

SA—Imperial Coal Sales Co., Lynchburg, Va.
Additional Information on Page 1016

Imperial No. 1 Mine; Drift; Eagle or Kanawha No. 1 Seam, 66 to 78 in. thick.
PO—Burnell, W. Va.; SP—Same; CTY—Kanawha; RR—C. & O., Paint Creek Br.
MS—P. B. Williams, Burnell, W. Va.

S of H—Mules and 2 trolley pole type locos. Track gage, 48 in.
S of M—2 shortwall machs.
PP—Power purchased. Transformer 44, 000 to 2300 to 220 volts A. C., M. G. sets, 250 volts D. C., 1 elec. pump.
EMP—60. Last years tonnage 49,500.
SIZES SHIPT—Run of Mine, Nut, Slack, Lump.
PREP. EQUIPT—Gravity Screens.
Imperial No. 2 Mine; Drift; Eagle Seam, 18 in. thick.
PO—Burnell, W. Va.
Note—Mine not in operation.

Imperial No. 3 Mine; Drift; Eagle Seam, 48 to 78 in. thick.
PO—Burnell, W. Va.; SP—Same; CTY—Kanawha; RR—C. & O., Paint Creek Br.

MS—P. B. Williams, Burnell, W. Va.
S of H—Mules and 2 trolley pole type locos. Track gage, 44 in.
S of M—2 chain breast type and 2 short-wall machs.
PP—Power purchased. Transformer 44, 000 to 2300 to 220 volts A. C., rotary converters, 250 volts D. C., 1 elec. pump.
EMP—70. Last years tonnage 62,189.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Egg.

PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.
Imperial No. 4 Mine; Drift; Kanawha No. 2 Seam, 60 to 72 in. thick.
PO—Burnell, W. Va.; SP—Same; CTY—Kanawha; RR—C. & O., Paint Creek Br.

MS—P. B. Williams, Burnell, W. Va.
S of H—1 trolley pole type and 2 comb locos. Track gage, 44 in.
S of M—2 shortwall machs.
PP—Power furnished from No. 3 plant.
EMP—70. Last years tonnage 62,377.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

IMPERIAL SMOKELESS COAL COMPANY
General Office, Quinwood, W. Va.
PR—A. W. S. Wood, Charleston, W. Va.
VP—H. H. Blackburn, Edinburg, W. Va.
TR—W. S. Wood, Charleston, W. Va.
GM—J. Wade Bell, Quinwood, W. Va.
GS—J. Wade Bell, Quinwood, W. Va.
PA—J. Wade Bell, Quinwood, W. Va.
EM—Hall M. Scott, Beckley, W. Va.
SCO—Address the Company, Buyer, A. A. Sumner, Quinwood, W. Va.
SA—Fort Heathon Coal Co., Chicago, Ill.
Additional Information on Page 1016

Quinwood Mine; Drift; Sewell Seam, 72 in. thick.
PO—Quinwood, W. Va.; SP—Same; CTY—Greenbrier; RR—Greenbrier & Eastern.
S of H—Mules and trolley pole type and storage battery loco. Track gage 44 in.
S of M—Hand.
PP—Power purchased. Transformer 44, 000 to 2,300 volts A. C., M. G. sets, 250 volts D. C.
EMP—300. Daily tonnage 1,500.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Shaker Screens, Loading Rooms.

INDEPENDENCE COAL COMPANY
Operations abandoned.

INDIAN POCAHONTAS COAL COMPANY
General Office, Welch, W. Va.
PR—A. F. Leekin, Welch, W. Va.
VP—J. Harey Williams, Welch, W. Va.
TR—G. H. Galloway, Welch, W. Va.
GM—G. H. Galloway, Welch, W. Va.
PA—R. H. Whitaker, Leekin, W. Va.
CE—J. Harey Williams, Welch, W. Va.
SCO—Address the Company, Buyer, R. H. Whitaker, Leekin, W. Va.
SA—Indian Fuel Co., Welch, W. Va.
Additional Information on Page 1022

Indian No. 1 Mine; Drift; Pocahontas No. 3 Seam; 100 inches thick.
PO—Leekin, W. Va.; SP—Same; CTY—McDowell; RR—Norfolk & Western.
MS—R. H. Whitaker, Leekin, W. Va.
S of H—Mules and rope. Track gage 36 inches.
S of M—Hand, shortwall mach.
PP—Power purchased. Volts D. C.
EMP—50. Daily output, 400 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Bar Screens.

INDIAN RUN COLLIERIES CO
General Office, Charleston, W. Va.
PR—W. E. Wright, Charleston, W. Va.
VP—F. O. Harris, Kimberly, W. Va.
TR—S. G. Smith, Charleston, W. Va.
GM—F. O. Harris, Kimberly, W. Va.
GS—W. H. Deem, Kimberly, W. Va.
EM—C. F. Block, Kimberly, W. Va.
SA—Indian Run Coal Co., Charleston, W. Va.
Additional Information on Pages 1018-1019

(Continued on Next Page)

Indian Run Collieries Co.—Cont.

Elkridge No. 1 Mine; Drift; Powellton Seam, 72 in. thick.
 PO—Elk Ridge, W. Va.; SP—Mt. Carbon, W. Va.; CTY—Fayette; RR—C. & O.
 MS—W. M. Humphries, Elk Ridge, W. Va.
 SM—F. D. Brannen, Elk Ridge, W. Va.
 S of H—1 trolley pole type loco. Track gage 44½ in.
 PP—Power purchased. Transformer 14,000-2,300 volts A. C., rotary converter 500 volts D. C.
 EMP—25. Last years tonnage 25,000.
 SIZES SHIPT—Run of Mine.

No. 21 Mine; Drift; Powellton Seam, 72 in. thick.
 PO—Elk Ridge, W. Va.; SP—Mt. Carbon, W. Va.; CTY—Fayette; RR—C. & O.
 MS—W. M. Humphries, Elk Ridge, W. Va.
 SM—F. D. Brannen, Elk Ridge, W. Va.
 S of H—Mules, 2 trolley pole type and 3 storage battery locos. Track gage 44 in.
 S of M—3 shortwall mchls.
 PP—Power purchased. Transformer 41,000-2,300 volts A. C., 1 rotary converter, 500 volts D. C.
 EMP—115. Last years tonnage 275,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

No. 3 Mine; Drift; Powellton Seam, 72 in. thick.
 PO—Elk Ridge, W. Va.; SP—Mt. Carbon, W. Va.; CTY—Fayette; RR—C. & O.
 MS—W. M. Humphries, Elk Ridge, W. Va.
 SM—F. D. Brannen, Elk Ridge, W. Va.
 S of H—1 trolley pole type and 2 storage battery locos. Track gage 44 in.
 S of M—2 shortwall mchls.
 PP—Power purchased. Transformer 41,000-2,300 volts A. C., 1 rotary converter, 500 volts D. C.
 EMP—75. Last years tonnage 60,000.
 SIZES SHIPT—Run of Mine.

No. 4 Mine; Drift; No. 2 Gas Seam, 56 in. thick.
 PO—Kimberly, W. Va.; SP—Mt. Carbon, W. Va.; CTY—Fayette; RR—C. & O.
 MS—W. M. Humphries, Elk Ridge, W. Va.
 SM—F. D. Brannen, Elk Ridge, W. Va.
 S of H—1 trolley pole type and 4 storage battery locos. Track gage 44 in.
 S of M—4 shortwall mchls.
 PP—Power purchased. Transformer 44,000-2,300 volts A. C., 2 generator sets, 250 volts D. C., 2 pumps.
 EMP—84. Last years tonnage 110,000.
 SIZES SHIPT—Run of Mine.

No. 5 Mine; Drift; No. 5 Block Seam, 66 in. thick.
 PO—Kimberly, W. Va.; SP—Mt. Carbon, W. Va.; CTY—Fayette; RR—C. & O.
 MS—W. M. Humphries, Elk Ridge, W. Va.
 SM—F. D. Brannen, Elk Ridge, W. Va.
 S of H—Mules and 1 trolley pole type loco.
 S of M—1 chain breast type mach.
 PP—Power purchased. Transformer 44,000-2,300 volts A. C., 2 M. G. Sets, 250 volts D. C.
 EMP—40. Last years tonnage 20,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
 PREP. EQUIPT—Shaker Screens.
 NOTE—Formerly operated by Block Betsey Consolidated Coal Co.

INGRAM BRANCH COAL COMPANY

General Office, Beckley, W. Va.
 PR—Chas. H. Mead, Beckley, W. Va.
 VP—L. E. Lichtford, Lynchburg, Va.
 TR—J. P. Nixson, Beckley, W. Va.
 GM—Chas. H. Mead, Beckley, W. Va.
 GS—John W. Smith, Ingram Branch, W. Va.
 PA—John W. Smith, Ingram Branch, W. Va.
 CE—J. C. Mabe, Beckley, W. Va.
 EE—P. C. Miller, Beckley, W. Va.
 SCO—Address the Company Buyer, W. J. Sisson, Ingram Branch, W. Va.
 SA—Interstate Coal & Duck Co., Chicago, Ill.

Ingram Branch Mine; Drift; Eagle and Gas Seams; 60 to 74 inches thick.
 PO—Ingram Branch, W. Va.; SP—Page, W. Va.; CTY—Fayette; RR—Virginian.
 MS—T. P. Smith, Ingram Branch, W. Va.
 S of H—2 trolley pole type and 5 comb locos. Track gage, 44 in.
 S of M—3 longwall mchls.
 PP—Power purchased. Transformer 23,000-1,300 volts M. G. Sets, 250 volts D. C., 1 pump.
 EMP—200. Last years tonnage 130,000.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Screens, Picking Tables, Loading Booms.

INTERSTATE FUEL COMPANY

PR—J. Edgar Long, Clarksburg, W. Va.
 TR—J. Edgar Long, Clarksburg, W. Va.
 GM—J. Edgar Long, Clarksburg, W. Va.
 GS—A. V. Morgan, Clarksburg, W. Va.
 PA—J. Edgar Long, Clarksburg, W. Va.
 CE—Horne Bros., Clarksburg, W. Va.
 SA—The J. F. Long Coal Co., Clarksburg, W. Va.

Stout Mine; Drift; Pittsburgh Seam, 66 in. thick.
 PO—Clarksburg, W. Va.; SP—Mt. Clare, W. Va.; CTY—Harrison; RR—B. & O.
 S of H—Mules. Track gage 42 in.
 S of M—Hand.
 EMP—42. Last years tonnage 24,000.
 SIZES SHIPT—Run of Mine.
 Note—Formerly operated by Ross F. Stout & Bros.

IRIS COAL COMPANY, INC.

General Office, Buckhannon, W. Va.
 PR—Frank E. Williams, Buckhannon, W. Va.
 VP—H. Ellis, Buckhannon, W. Va.
 TR—Lunch Ellis, Buckhannon, W. Va.
 GM—F. E. Williams, Buckhannon, W. Va.
 GS—F. E. Williams, Buckhannon, W. Va.
 PA—F. E. Williams, Buckhannon, W. Va.
 CE—Carl Horner, Buckhannon, W. Va.

Summit No. 1 Mine; Drift; Red Stone Seam, 10 in. thick.
 PO—Fisher Summit, W. Va.; SP—Same; CTY—Lewis; RR—B. & O.
 MS—Mr. Ford, Fisher Summit, W. Va.
 S of H—Mules. Track gage 42 in.
 S of M—Hand.
 SIZES SHIPT—Run of Mine.

IRONA COAL COMPANY.

General Office, 727 Land Title Bldg., Philadelphia, Pa.
 PR—J. H. Weaver, Philadelphia, Pa.
 TR—J. E. Wilkinson, Philadelphia, Pa.
 PA—J. J. Matheson, Philadelphia, Pa.
 GM—C. E. Sharpless, Ebensburg, Pa.
 EM—C. E. Sharpless.
 SCO—Rosemont Coal Co., Store No. 2, Kingwood, W. Va.
 SA—J. H. Weaver & Co., 727 Land Title Bldg., Philadelphia, Pa.

Irona Mines Nos. 1 and 2; Drifts; Upper Freeport Seam, 50 to 56 in. thick.
 PO—Invermore, W. Va.; SP—Irona, W. Va.; CTY—Preston; RR—W. Va. & Northern.
 MS—D. J. Williams, Kingwood, W. Va.
 S of H—Kopes and steam Track gage 42 in.
 S of M—Hand.
 PP—2 return tubular bolers, total 300 H. P., 1 pump.
 EMP—77.
 SIZES SHIPT—Run of Mine.

IROQUOIS COAL COMPANY.

General Office, Iroquois, W. Va.
 PR—A. W. Reynolds, Princeton, W. Va.
 VP—Harry Brown, Princeton, W. Va.
 TR—C. C. Pack, Princeton, W. Va.
 GS—J. C. Pack, Princeton, W. Va.
 PA—J. C. Hindsley, Iroquois, W. Va.
 EM—J. C. Hindsley, Iroquois, W. Va.
 EE—E. H. Javins, Iroquois, W. Va.
 SCO—Address the Company; Buyer, F. P. Hancock, Iroquois, W. Va.
 Sales Agency—Flat Top Fuel Co., Bluefield, W. Va.

Iroquois Mine; Drift; Pocahontas No. 3 Seam, 36 to 45 in. thick.
 PO—Iroquois, W. Va.; SP—Same; CTY—Iroquois, W. Va.; RR—Virginia, Windling Gulf Br.
 S of H—2 storage battery and 3 trolley pole type locos. Track gage 48 in.
 S of M—4 shortwall mchls.
 PP—Power purchased, rotary converters, 250 volts D. C., 3 pumps.
 EMP—80. Last fiscal year output, 50,489 tons.
 SIZES SHIPT—Run of Mine, Slack.
 PREP. EQUIPT—Shaker Screens, Picking Tables.

ISLAND CREEK COAL COMPANY

General Office, Holden, W. Va.
 PR—T. E. Davis, 1 Broadway, New York, N. Y.
 VP—R. S. McVeygh, Union Central Bldg., Cincinnati, O.
 TR—E. W. Batchelder, 55 Congress St., Boston, Mass.
 GM—A. R. Reisel, Huntington, W. Va.
 GS—W. O. Percival, Holden, W. Va.
 ASST. GS—W. L. Davis, Holden, W. Va.
 PA—W. T. Smythe, Huntington, W. Va.
 EM—W. R. Dudley, Holden, W. Va.
 EE—H. L. Bradshaw, Holden, W. Va.
 SCO—Island Creek Stores Co., Buyer, W. T. Crutcher, Holden, W. Va.
 SA—Island Creek Coal Co., Union Central Bldg., Cincinnati, O.
 SALES MGR.—H. S. Roberts, 1 Broadway, New York, N. Y.

No. 1 Mine; Island Creek Seam, 72-90 in. thick.
 PO—Holden, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
 MS—R. A. Herbert, Holden, W. Va.
 S of H—10 trolley pole type locos, Track gage 44½ in.
 S of M—9 chain breast type and 3 short-wall mchls.
 PP—Power from central power plant, 6 water tube boilers, total 2,300 H. P., 1—1,000 K. W., 2—500 K.

W. and 1—300 K. W. gen. units, 550 volts A. C. and D. C., 10 pumps.
 EMP—155. Last years tonnage 282,164.
 SIZES SHIPT—Run of Mine, Slack, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables and Loading Booms.

No. 2 Mine; Slope; Island Creek Seam, 72-84 in. thick.
 PO—Holden, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
 MS—W. R. Carpenter, Holden, W. Va.
 S of H—Mules and 4 trolley pole type locos. Track gage 44½ in. thick.
 S of M—2 chain breast type and 1 short-wall mchls.
 PP—Power from central power plant, water tube boiler, gen. unit, 550 volts A. C. and D. C., 3 pumps.
 EMP—192. Last years tonnage 102,586.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
 PREP. EQUIPT—Shaker Screens.

No. 3 Mine; Drift; Island Creek Seam, 78-84 in. thick.
 PO—Whitman, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
 MS—Major Curry, Whitman, W. Va.
 SM—C. R. Wilbur, Whitman, W. Va.
 S of H—6 trolley pole type locos, Track gage 44½ in.
 S of M—2 chain breast type and 3 short-wall mchls.
 PP—Power from central power plant, water tube boiler, gen. unit, 550 volts A. C. and D. C., 5 pumps.
 EMP—126. Last years tonnage 167,823.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

No. 4 Mine; Drift; Island Creek Seam, 78-84 in. thick.
 PO—Whitman, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
 MS—Major Curry, Whitman, W. Va.
 SM—C. R. Wilbur, Whitman, W. Va.
 S of H—9 trolley pole type locos, Track gage 44½ in.
 S of M—6 chain breast type mchls.
 PP—Power from central plant, water tube boiler, gen. units, 550 volts A. C. and D. C., 12 pumps.
 EMP—125. Last years tonnage 175,527.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables.

Nos. 5 and 6 Mines; Drift; Island Creek Seam, 78-84 in. thick.
 PO—Holden, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
 MS—Charles Adkins, Holden, W. Va.
 SM—T. J. Perce, Holden, W. Va.
 S of H—6 trolley pole type locos, Track gage 44½ in.
 S of M—2 chain breast type and 3 short-wall mchls.
 PP—Power from central power plant, water tube boiler, gen. units, 550 volts A. C. and D. C., 2 pumps.
 EMP—117. Last years tonnage 178,135.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

No. 7 Mine; Slope; Island Creek Seam, 78-84 in. thick.
 PO—Holden, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
 MS—W. S. Parsons, Holden, W. Va.
 SM—C. T. Swink, Holden, W. Va.
 S of H—6 trolley pole type locos. Track gage 44½ in.
 S of M—5 chain breast type and 1 short-wall mchls.
 PP—Power from central power plant, water tube boiler, gen. units, 550 volts A. C. and D. C., 6 pumps.
 EMP—108. Last years tonnage 227,853.
 SIZES SHIPT—Run of Mine, Pea, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

No. 8 Mine; Slope; Island Creek Seam, 78-84 in. thick.
 PO—Holden, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
 MS—W. S. Parsons, Holden, W. Va.
 SM—C. T. Swink, Holden, W. Va.
 S of H—7 trolley pole type locos. Track gage 44½ in.
 S of M—3 chain breast type and 2 short-wall mchls.
 PP—Power from central power plant, water tube boiler, gen. units, 550 volts A. C. and D. C., 6 pumps.
 EMP—100. Last years tonnage 210,977.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

Nos. 9 and 10 Mines; Drift; Island Creek Seam, 78-84 in. thick.
 PO—Holden, W. Va.; SP—Same; CTY—Logan; RR—C. & O.

MS—George Urso, Holden, W. Va.
 SM—T. J. Pierce, Holden, W. Va.
 S of H—1 trolley pole type loco. Track gage 44½ in.
 S of M—1 chain breast type and 1 short-wall mchls.
 PP—Power from central power plant, water tube boiler, gen. units, 550 volts A. C. and D. C., 2 pumps.
 EMP—25. Last years tonnage 57,983.
 SIZES SHIPT—Run of Mine.

No. 11 Mine; Slope; Island Creek Seam, 78-84 in. thick.
 PO—Monaville, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
 MS—J. T. Lindley, Monaville, W. Va.
 SM—E. M. Martin, Monaville, W. Va.
 S of H—5 trolley pole type locos, Track gage 44½ in.
 S of M—4 chain breast type and 1 short-wall mchls.
 PP—Power from central power plant, water tube boiler, gen. units, 250 volts A. C. and D. C., 4 pumps.
 EMP—111. Last years tonnage 156,478.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

No. 12 Mine; Slope; Island Creek Seam, 78-84 in. thick.
 PO—Monaville, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
 MS—J. T. Lindley, Monaville, W. Va.
 SM—E. M. Martin, Monaville, W. Va.
 S of H—6 trolley pole type locos, Track gage 44½ in.
 S of M—1 chain breast type and 2 short-wall mchls.
 PP—Power from central power plant, water tube boiler, gen. units, 250 volts A. C. and D. C., 3 pumps.
 EMP—101. Last years tonnage 180,704.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

No. 13 Mine; Drift; Island Creek Seam, 78-90 in. thick.
 PO—Switzer, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
 MS—J. T. Lindley, Monaville, W. Va.
 SM—E. M. Martin, Monaville, W. Va.
 S of H—2 trolley pole type locos. Track gage 44½ in. thick.
 S of M—2 chain breast type mchls.
 PP—Power from central power plant, Transformer 6,600-110 volts A. C., rotary converters, 250 volts D. C., 1 pump.
 EMP—43. Last years tonnage 41,180.
 SIZES SHIPT—Run of Mine.

No. 14 Mine; Slope; Island Creek Seam, 78-84 in. thick.
 PO—Whitman, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
 MS—Major Curry, Whitman, W. Va.
 SM—C. R. Wilbur, Whitman, W. Va.
 S of H—Trolley pole type locos. Track gage 44½ in.
 S of M—Hand.
 PP—Power from central power plant, gen. units, 250 volts A. C. and D. C.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

No. 15 Mine; Drift; Island Creek Seam, 78-84 in. thick.
 PO—Holden, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
 MS—H. L. Butler, Holden, W. Va.
 SM—W. B. Payne, Holden, W. Va.
 S of H—1 trolley pole type loco. Track gage 44½ in.
 S of M—1 chain breast type and 1 short-wall mchls.
 PP—Power purchased. Transformer 6,600 to 110 volts A. C., rotary converters, 250 volts D. C.
 EMP—25.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

No. 16 Mine; Drift; Island Creek Seam, 78-84 in. thick.
 PO—Holden, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
 MS—H. L. Butler, Holden, W. Va.
 SM—W. B. Payne, Holden, W. Va.
 S of H—1 trolley pole type loco. Track gage 44½ in.
 S of M—1 chain breast type and 1 short-wall mchls.
 PP—Power purchased. Transformer 6,600 to 110 volts A. C., rotary converters, 250 volts D. C.
 EMP—25.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

No. 17 Mine; Drift; Island Creek Seam, 78-84 in. thick.
 PO—Holden, W. Va.; SP—Same; CTY—Logan; RR—C. & O.

(Continued on Next Page)

No. of H Mules and muley ; 5 type

S of H Mules and trolley cable type
 S of M 1 electric puncher and roller
 wall machs.
 PE 6-in. mills, 250 vials D.C.
 EXP 75 tons fluid 3000 output,
 47 000 tons
 SIZES SHIPP Run of Mine, Stock Sd.,
 Pea, Egg, Lump.
 PREP. EQUIPE Shaker Screens,
 Old Information

JOHNSON, T. L., COAL CO
General Office, 500 Kanawha Natl. Bldg.
Bldg., Charleston, W. Va.
FR T L Johnson, Charleston, W. Va.
VP W C DeLaney, Ia., W. Va.
TR C J Van Fleet, Charleston, W. Va.
GM F L Johnson, Charleston, W. Va.
GS T L Johnson, Charleston, W. Va.
PA T L Johnson, Charleston, W. Va.

Ira No. 25 Mine; Drift; No. 5 Block
 Sam. 72 in. thick
 PO Loc. W. Va., SP. Groves W. Va.
 CTY. Clay; RR B. & O.
 S of H. Mules.
 S of M. Hand.
 LAF 15 Daily tonnage 75
 SIZES SHIRT Run of Mine
 PREP LIFT Bar Screens.
 -
 OHNSON, W. R., COAL COMPANY
 Now the Oakland Coal Co.

ONES COAL LAND CO
General Office, 611 Union Bldg., Char-
leston, W. Va.
PR H C Jones, Charleston, W. Va.
YR H C Jones, Charleston, W. Va.
TR—J C. Pettit, Charleston, W. Va.
GM H C C. Jones, Charleston, W. Va.
CS H C Jones, Charleston, W. Va.
PA J C. Pettit, Charleston, W. Va.
EM—J B. M. Finkle, Logan, W. Va.
SFO Southern and Northern, Mr. South-
erland, Mr. Stallings, W. Va.
SA Governor Coal Sales Co., 611
Union Bldg., Charleston, W. Va.
Additional Information on Page 1001

Isabella Noe 1 and 2 Mine; Drift; Chilton Seam 52 inches thick.
PO - Stollings W Va.; SP Same; C1 Logan, BR C & O
S of H Mules and cler. lincs. Tracks
grade 48 inches
S of M Shortwall mchs
PP Power purchased 250 volts D C
EMP 75 per year tonnage 95,600
SIZES SHUTT Run of Mine, Slack Lump
DEEP EQUIP- Bar Screens

ONES GUYAN COAL CO.
Hubball, W Va
Rues J Min
PO Hubball, W Va : CTY Lincoln RR
C & O No report

JONES KOBILIGARD COAL CO.
 General Office, Clarksburg, W. Va.
 PR R M Jones 2228 Land Title
 Bldg., Philad Iphn., Pa.
 VP John Kobilgard, Jr., Clarksburg, W
 Va.
 TR John Kobilgard, Jr., Clarksburg, W
 Va.
 NOTE Mine developing.

DONES-WINFREDE COAL COMPANY
General Office: 631 Union Bldg., Charleston, W. Va.

PR—H. C. Jones, Charleston, W. Va.
VP—H. C. Jones, Charleston, W. Va.
TR—G. Pettit, Charleston, W. Va.
CM—H. C. Jones, Charleston, W. Va.
GS—W. S. Jones, Hartland, W. Va.
PA—J. G. Pettit, Charleston, W. Va.
FM—Hugh Estlin, Charleston, W. Va.
EK—E. Evans, Hartland, W. Va.
SCO—Hartland Store Co., Hartland, W. Va.
Buyer: J. G. Pettit, Charleston, W. Va.

SA—Grossinger Fuel Sales Co., Charleston, W. Va.

Additional Information on Page 1001
 Solid Mine; Drift; Coalbing Seam, 51
 inches thick
 PD Hartland W Va.; SP—Clav, W
 Va.; CTY—Clav; RR—Hartland RR
 Va R. & O.
 MS M Red, Hartland, W Va
 S of H—Moles and storage battery lines
 Track gauge 42 inches.
 S of M Shortwall mach-
 PP—Power purchased, Transformer 23,
 000 volts A C, 250 volts D C,
 2 motors
 EMP 15 Last years tourage 15,000,
 SIZES SHIPT Run of Mine Slag,
 1000000 cu. ft. B. L.
 PREP SHIPT Gravity Stoa
 NAPP Formally operated 1 1/2, 1 1/2, 1 1/2
 End Co.
 Plant Mine; Drift; N. S. R. 1 1/2 on 72
 inches thick
 PD Hilltop W Va.; SP—Clav, W
 Va.; CTY—Clav, RR—Hartland RR
 Va R. & O.
 S of H Molt, Drift, 200 1/2 inches
 S of M Shortwall mach
 PP Power purchased 1 Transformer 23,
 000 volts A C, 250 volts D C, 1 pump
 EMP 15 1/2, 1/2, 1/2, 1/2, 1/2
 SIZES SHIPT Run of Mine

JORDAN, S. H.

General Office, Keyser, W. Va.
 GM—S. H. Jordan, Keyser, W. Va.
 GS—J. T. Jordan, Germania, W. Va.
 PA—S. H. Jordan, Keyser, W. Va.
 EM—Wm. Harvey, Freeport, Md.

No. 1 and 2 Mines; Drifts; Kittanning and Freeport Seams.
 PO—Germania, W. Va. SP—Jordan, Md. CTY—Grant, RR—W. M.
 S of H—Mules and gasoline loco. Track gage 42 in.
 S of M—Hand.
 PP—150 H. P. boiler, 100 K. W. gen. unit, 250 volts D. C., 2 pumps.
 EMP—25.
 SIZES SHIPT—Run of Mine.

JULIAN COAL COMPANY

Julian, W. Va.

Julian Mine.
 PO—Julian, W. Va.; CTY—Boone; RR—C & O.
 No report.

JUNIOR COAL CO.

Blaine, W. Va.

Barrek Mine; CTY—Mineral.
 No report.

JUNIOR POCAHONTAS COAL CO.

General Office, Welch, W. Va.
 PR—N. H. Franklin, Cincinnati, O.
 TR—Frank E. Houston, Elkhorn, W. Va.
 GM—N. H. Franklin, Cincinnati, O.
 GS—Benjamin Lewis, Welch, W. Va.
 PA—N. H. Franklin, Cincinnati, O.
 CE—George Wright, Cincinnati, O.
 EM—John M. Lewis, Cincinnati, O.
 EE—John C. Newman, Welch, W. Va.
 SCO—Address the Company, Buyer, Jas. Peerman, Welch, W. Va.
 SA—Houston Coal Company, Cincinnati, O.

Junior Pocahontas Mine; Drift; Welch Seam, 54 in. thick.
 PO—Welch, W. Va.; SP—Same; CTY—McBee; RR—N. & W.
 MS—Harry Franklin, Welch, W. Va.
 S of H—Trolley pole type and storage battery locos. Track gage 44 in.
 S of M—Hand.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Picking Tables.

KALBAUGH COAL CO., INC., THE

General Office, Cumberland, Md.
 PR—Z. T. Kalbaugh, Piedmont, W. Va.
 VP—A. B. Kalbaugh, Westport, Md.
 TR—T. F. Shaffer, Cumberland, Md.
 GM—T. F. Shaffer, Cumberland, Md.
 GS—T. F. Shaffer, Cumberland, Md.
 PA—T. F. Shaffer, Cumberland, Md.
 EM—Leander Schadt, Cumberland, Md.
 SA—Theo. F. Shaffer, Cumberland, Md.

Kalbaugh Mine; Drift; Bakertown Seam, 36 inches thick.
 PO—Barum, W. Va.; SP—Same; CTY—Mineral; RR—W. M.
 MS—Thomas Walsh, Barum, W. Va.
 S of H—Mules, 2 combination gasoline locos. Track gage 42 in.
 S of M—Hand.
 PP—1 pump.
 EMP—50. Daily tonnage 200.
 SIZES SHIPT—Run of Mine, Lump.
 PREP. EQUIPT—Gravity Screens.

KANAWHA & FAYETTE MINING CO.

Smithers, W. Va.

Oakland Nos. 1 and 2 Mines; CTY—Fayette.
 No report.

KANAWHA & HOCKING COAL & COKE COMPANY

General Office, Cleveland, O.
 PR—Richard Inglis, Cleveland, O.
 TR—J. E. Ralston, " "
 GM—H. L. Warner, " "
 GS—John S. McKee, Longacre, W. Va.
 PA—J. S. McKee, Longacre, W. Va.
 CE—E. L. Throver, Cleveland, O.
 LE—Lon Lovel, Longacre, W. Va.
 SCO—Address the Company, Buyer, B. F. Backus, Carbondale, W. Va.
 Sales Agency—W. H. Warner & Co., Union National Bank Bldg., Cleveland, O.

No. 104 Mine; Drift; Coalburg Seam, 48 to 78 in. thick.
 PO—Cedar Grove, W. Va.; SP—Same; CTY—Kanawha; RR—K & M.
 DIV. SUPT.—W. F. Wolfe, Cedar Grove, W. Va.
 MF—R. L. Miller, Cedar Grove, W. Va.
 SM—C. G. Barker, " "
 S of H—Mules and 3 trolley pole type locos. Track gage, 42 in.
 S of M—5 chain breast type machs.
 PP—Purchase power, transformer 44,000 to 2200 volts, M. G. sets, 250 volts D. C., 2 pumps.
 EMP—178. Daily output, 500 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

No. 105 Mine; Drift; Coalburg Seam, 54 to 84 in. thick.
 PO—Mammoth, W. Va.; SP—Same; CTY—Kanawha; RR—K & M.

DIV. SUPT.—W. F. Wolfe, Cedar Grove, W. Va.
 MF—J. A. Martin, Mammoth, W. Va.
 SM—B. F. Watson, " "
 S of H—Mules and 4 trolley pole type locos. Track gage, 42 in.
 S of M—7 chain breast type machs.
 PP—Purchase power, transformer 44,000 to 2200 volts A. C., M. G. sets, 250 volts D. C., 4 pumps.

EMP—165. Daily tonnage 600.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaking Screens, Picking Tables, Loading Booms.

No. 108 Mine; Drift; Coalburg Seam, 48 to 66 in. thick.
 PO—Mammoth, W. Va.; SP—Same; CTY—Kanawha; RR—K & M.

DIV. SUPT.—W. F. Wolfe, Cedar Grove, W. Va.
 MF—John H. Martin, Mammoth, W. Va.
 SM—B. F. Watson, " "

S of H—Mules and 3 trolley pole type locos. Track gage, 42 in.
 S of M—8 chain breast type machs.
 PP—Power purchased, Transformer 44,000 to 22,000 volts A. C., M. G. s-ts, 250 volts D. C., 2 pumps.
 EMP—140. Daily tonnage 500.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

No. 111 Mine; Drift; No. 2 Gas Seam, 48 to 72 in. thick.
 PO—Carbondale, W. Va.; SP—Same; CTY—Fayette; RR—K & M.

DIV. SUPT.—W. T. Martin, Longacre, W. Va.

MS—Patrick Foye, Carbondale, W. Va.
 SM—D. M. Brown, Carbondale, W. Va.
 S of H—Mules, 5 trolley pole type and 2 storage battery locos. Track gage 42 inches.

S of M—7 chain breast type and 2 short-wall machs.

PP—Purchase power, transformer 44,000 to 2200 volts, M. G. sets, 250 volts D. C., 2 pumps.

SIZES SHIPT—Run of Mine, Slack, Lump, Block.

PREP. EQUIPT—Gravity Screens.

No. 112 Mine; Drift; No. 2 Gas Seam; 48 to 78 in. thick.
 PO—Carbondale, W. Va.; SP—Same; CTY—Fayette; RR—K & M.

DIV. SUPT.—W. T. Martin, Longacre, W. Va.

SM—D. M. Brown, Carbondale, W. Va.
 S of H—7 trolley pole type and 1 storage battery locus. Track gage, 42 inches.

S of M—5 chain breast type and 4 shortwall machs.

PP—Purchase power, transformer 44,000 to 2200 volts, M. G. sets, 250 volts D. C., 2 pumps.

EMP—120. Last years tonnage 500, Coke oven, 200 Bee Hive.

SIZES SHIPT—Run of Mine, Slack, Lump, Block.

PREP. EQUIPT—Gravity Screens.

No. 113 Mine; Drift; No. 1 Gas Seam, 48 to 60 in. thick.
 PO—Longacre, W. Va.; SP—Same; CTY—Fayette; RR—K & M.

DIV. SUPT.—W. T. Martin, Longacre, W. Va.

SM—J. J. Keller, " "
 S of H—Mules and 1 trolley pole type loco. Track gage, 42 in.

S of M—1 shortwall mach.
 PP—Power purchased, transformer 44,000 to 2200 volts, M. G. sets, 250 volts D. C., 1 pump.

EMP—15. Daily tonnage 100.
 SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Gravity Screens, Picking Tables.

No. 114 Mine; Drift; No. 2 Gas Seam, 48 to 84 in. thick.
 PO—Longacre, W. Va.; SP—Same; CTY—Fayette; RR—K & M.

MS—W. T. Martin, Longacre, W. Va.
 SM—J. J. Keller, " "
 S of H—Mules and 9 trolley pole type locos. Track gage, 42 in.

S of M—4 shortwall and 4 breast machs.
 PP—Power purchased, transformer 44,000 to 2200 volts, M. G. sets, 250 volts D. C., 4 pumps.

EMP—160. Daily tonnage 900.
 SIZES SHIPT—Run of Mine, Slack, Lump, Block.
 PREP. EQUIPT—Gravity Screens.

No. 116 Mine; Drift; No. 1 Gas Seam, 54 to 84 in. thick.
 PO—Longacre, W. Va.; SP—Same; CTY—Fayette; RR—K & M.

DIV. SUPT.—W. T. Martin, Longacre, W. Va.

PP—Purchase power, transformer 44,000 to 2200 volts, M. G. sets, 250 volts D. C., 2 pumps.

EMP—175. Daily tonnage 400.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens, Picking Tables.

KANAWHA BLACK BAND COAL CO.

General Office, Olcott, W. Va.
 PR—Wm. Brown, Portage, Pa.
 VP—F. K. Weaver, Olcott, W. Va.
 TR—Dr. J. P. Buzzard, Portage, Pa.
 GM—F. K. Weaver, Olcott, W. Va.
 GS—F. K. Weaver, Olcott, W. Va.
 PA—F. K. Weaver, Olcott, W. Va.
 EM—F. K. Weaver, Olcott, W. Va.
 SCO—Address the Company, Buyer, J. M. Price, Olcott, W. Va.

Black Diamond Mine; Drift; Black Band Seam, 48 in. thick.
 PO—Olcott, W. Va.; SP—Brounland, W. Va.; CTY—Kanawha; RR—C. & O.

MS—Geo. L. Miller, Olcott, W. Va.
 S of H—Mules and elec. locos. Track gage 42 inches.

S of M—Shortwall mach.
 PP—1 150 H. P. fire tube boiler, 100 K. W. M. G. Set, 250 volts D. C.

EMP—42. Daily tonnage 250.
 SIZES SHIPT—Run of Mine, Lump, Block.

PREP. EQUIPT—Gravity Screens.
 NOTE—Formerly operated by the Sequoi Coal Company.

KANAWHA CITY COAL COMPANY.

General Office, Charleston, W. Va.
 PR—F. D. Cunningham, Charleston, W. Va.
 TR—J. R. Cunningham, Charleston, W. Va.
 GM—J. R. Cunningham, Charleston, W. Va.
 GS—H. D. Layne, Garnett, W. Va.
 PA—J. R. Cunningham, Charleston, W. Va.
 EM—R. D. Bradley, Burnwell, W. Va.
 EE—C. A. Layne, Charleston, W. Va.
 SA—Old Dominion Coal Co., Charleston, W. Va.

Kanawha City Mine; Slope; No. 2 Gas Seam, 72 to 78 in. thick.
 PO—Charleston, W. Va.; SP—Same; CTY—Kanawha; RR—C. & O.

S of H—Mules and 1 trolley pole type locos. Track gage 42 in.

S of M—2 shortwall machs.
 PP—Power purchased Transformer 6,600 volts A. C., 250 volts D. C.

EMP—57.
 SIZES SHIPT—Run of Mine.
 Old information.

KANAWHA COLLIERIES CO.

General Office, Charleston, W. Va.
 PR—Wm. G. Conley, Charleston, W. Va.
 VP—Geo. H. Judd, Washington, D. C.
 TR—Harold P. Tompkins, Charleston, W. Va.
 GM—O. G. Schwant, Swiss, W. Va.
 SCO—Address the Company, Buyer, Stanley Legg, Swiss, W. Va.
 SA—Harold P. Tompkins, Charleston, W. Va.

Little Elk Nos. 1 and 2 Mines; Drift; Coalburg Seam, 50 in. thick.
 PO—Swiss, W. Va.; SP—Same; CTY—Nicholas; RR—K & M.

S of H—Mules and trolley pole type locos. Track gage, 42 in.

S of M—Shortwall machs.
 PP—2 boilers, 300 H. P., g.p. units, 1 200 K. W., 250 volts D. C., 1 pump.

EMP—75. Last years tonnage 18,000.
 SIZES SHIPT—Run of Mine, Slack, Lump, Block.

PREP. EQUIPT—Gravity Screens, Loading Booms.
 Old information.

KANAWHA CONSOLIDATED COAL CO.

General Office, 30 Capitol St., Charleston, W. Va.
 PR—John O'Hare, Charleston, W. Va.
 VP—E. Steen, Charleston, W. Va.
 TR—Donald Goshorn, Charleston, W. Va.
 GM—John O'Hare, Charleston, W. Va.
 GS—C. A. Purcell, Charleston, W. Va.
 PA—John O'Hare, Charleston, W. Va.
 EM—Charles Krebs, Charleston, W. Va.
 SCO—Address the Company, Buyer, Donald Goshorn, Sterling, W. Va.

Sterling Mine; Drift; No. 2 Gas Seam, 48 in. thick.
 PO—Sterling, W. Va.; SP—Same; CTY—Boone; RR—C. & O.

MS—G. W. Kilburn, Sterling, W. Va.
 S of H—Electric loco.

S of M—Shortwall mach.
 PP—3 water tube boilers, generate power.

Last years tonnage 27,784.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Shaker Screens, Loading Booms.

Old information.

KANAWHA DOMESTIC COAL COMPANY

General Office, 1201-2 Union Bldg., Charleston, W. Va.
 PR—M. E. Moore, Charleston, W. Va.

TR—F. S. Fisher, Charleston, W. Va.
 PA—M. E. Moore, Charleston, W. Va.

Frye Mine; Drift; No. 2 Gas Seam, 48 in. thick.

PO—Hugheston, W. Va.; SP—Same or London, W. Va.; CTY—Kanawha; RR—K & M.

S of H—Mules. Track gage, 42 in.
 S of M—Hand.
 EMP—10. Daily tonnage 50.

SIZES SHIPT—Run of Mine.

KANAWHA-ELKHORN COLLIERIES, INC.
 General Office, 219 Elliott Sq., Buffalo, N. Y.

PR—George J. Brendel, Buffalo, N. Y.
 VP—E. E. Johnston, Buffalo, N. Y.

TR—W. H. H. Davenport, Buffalo, N. Y.
 GM—W. H. H. Davenport, Buffalo, N. Y.
 PA—W. H. H. Davenport, Buffalo, N. Y.

Buffalo Nos. 1 and 2 Mines; Drift; Lewiston Seam.

PO—Davenport, via Charleston, W. Va.; SP—Putney or 8 Mile, via Charleston, W. Va.; CTY—Munroe; RR—K & M.

MS—S. T. Hoge, Davenport, W. Va.
 SM—Fred Owens, Davenport, W. Va.

S of H—Mules and 1 trolley pole type and 1 storage battery locos. Track gage 42 in.

S of M—1 shortwall mach.
 PP—Generate power.

EMP—50. Last years tonnage 50,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

Note—Formerly operated by the Buffalo-Kanawha Coal Corp.

KANAWHA RAIL & RIVER COAL CO.
 Eagle, W. Va.

Diamond, Edgewater & Mercer No. 2 Mines.

PO—Eagle, W. Va.; CTY—Fayette; RR—C & O.

No report.

KANAWHA STANDARD COAL CO., INC.
 General Office, Clay, W. Va.

PR—H. Haynes, Clarksburg, W. Va.
 VP—John A. Jones, Clay, W. Va.

TR—J. E. Long, Clarksburg, W. Va.
 GM—John A. Jones, Clay, W. Va.
 PA—John A. Jones, Clay, W. Va.

EM—M. W. Venable, Clay, W. Va.
 SCO—Upwood Store, " "

SA—John A. Jones, Clay, W. Va.

Jones Mine; Drift; Winifrede and No. 5 Seams, 60 inches thick.

PO—Clay, W. Va.; SP—1/2 wood, W. Va.; CTY—Clay; RR—B. & O.

MS—Louis Nargovics, Clay, W. Va.
 S of H—Mules. Track gage 42 inches.

S of M—1 shortwall mach.
 PP—Power purchased Transformer 2300 to 220 volts D. C., M. G. sets, 220 volts D. C.

EMP—34.
 SIZES SHIPT—Slack, Egg, Lump.

PREP. EQUIPT—Bar, Revolving and Shaker Screens.

KANE CREEK COAL COMPANY
 General Office, Fairmont, W. Va.

PR—Samuel Hale, Fairmont, W. Va.
 VP—Chas. W. Teter, Philippi, W. Va.

TR—Earl S. Fox, Fairmont, W. Va.
 GM—Samuel Hale, Fairmont, W. Va.
 PA—Samuel Hale, Fairmont, W. Va.

EM—Straight & McClure, Fairmont, W. Va.
 SA—Samuel Hale, Fairmont, W. Va.

Iona Mine; Drift; Freeport Seam, 52 in. thick.

PO—Route No. 2, Kingwood, W. Va.; SP—Kane's Creek Station, W. Va.; CTY—Preston; RR—M. & K.

MS—W. P. Bridge, Kingwood, W. Va. S of H—7 mules. Track gage 42 in.

S of M—Hand.

PP—1 pump.

EMP—35. Daily tonnage 150.

SIZES SHIPT—Run of Mine.

Old information.

KATONA COAL COMPANY
 GM—S. W. Perry, East Lynn, W. Va.

CE—D. M. Good, Williamson, W. Va.

EM—J. A. Doss, Huntington, W. Va.

Katona No. 1 Mine; Drift; Freeport Seam, 54 inches thick.

PO—East Lynn, W. Va.; SP—Same; CTY—Wayne; RR—N. & W.

MS—J. B. Perry, East Lynn, W. Va.

S of H—1 storage battery and 1 gasoline locus. Track gage 48 inches.

S of M—1 shortwall mach.

PP—75 H. P. gas engine, 50 K. W. g.p. unit, 230 volts D. C., 3 pumps.

EMP—25. Daily tonnage 150.

SIZES SHIPT—Crushed Stoker only.

PREP. EQUIPT—Revolving Screens, Picking Tables.

Entire output contracted to N. & W. R. R. Company.

KEATON & OOTHRETON

Larger, W. Va.
Red Ash & Keaton Mine; CTY—McDowell.
No report.

KEITH COAL CO.

Dora, W. Va.
Keith Mine; CTY—Gilmer.
No report.

KELLY'S CREEK COLLIERY COMPANY.

General Office, Charleston, W. Va.
PR—J. A. Palsley, Cleveland, O.
VP—James Playfair,
TR—Chas. S. Palsley, Charleston, W. Va.
GM—J. J. Soure, Ward, W. Va.
GS—H. L. Schweinberg, Ward, W. Va.
MM—no. J. Dodd, Ward, W. Va.
PA—J. J. Soure, Ward, W. Va.
EM—Pendleton Spruce,
EE—C. E. Hudrick,
SCO—Address the Company; Buyer, A. M. Cramer, Ward, W. Va.
SA—Chas. S. Palsley, Charleston, W. Va.

No. 1 Mine; Coalburg Seam, 60 to 72 in. thick.
PO—Ward, W. Va.; SP—Cedar Grove, W. Va.; CTY—Kanawha; RR—K. & M.
MS—H. L. Schweinberg, Ward, W. Va.
S of H—5 elec. locos. Track gauge 42 in.
S of M—6 elec. machs.
PP—3 pumps. Purchase power.
EMP—100. Last fiscal year output 120,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

No. 2 Mine; Drift; Coalburg Seam, 60 to 72 in. thick.
PO—Ward, W. Va.; SP—Cedar Grove, W. Va.; CTY—Kanawha; RR—K. & M.
MS—H. L. Schweinberg, Ward, W. Va.
S of H—7 elec. locos. Track gauge 42 in.
S of M—8 elec. machs.
PP—4 pumps. Purchase power.
EMP—50. Last fiscal year output 250,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

No. 3 Mine; Drift; Coalbur; Seam, 60 to 72 in. thick.
PO—Ward, W. Va.; SP—Cedar Grove, W. Va.; CTY—Kanawha; RR—K. & M.
MS—H. L. Schweinberg, Ward, W. Va.
S of H—1 elec. loco. Track gauge 42 in.
S of M—1 elec. mach.
PP—3 Atlas return tubular bolers, total 300 H. P., 2 gen. units, 250 volts D. C., 1 pump.
EMP—120. Last fiscal year output 115,000 tons.
SIZES SHIPT—Slack, Lump.

No. 4 Mine; Drift; Coalburg Seam, 60 to 72 in. thick.
PO—Ward, W. Va.; SP—Cedar Grove, W. Va.; CTY—Kanawha; RR—K. & M.
S of H—Electric locos. Track gauge, 42 inches.
S of M—Hand.
SIZES SHIPT—Slack and Lump.
Note—Just developing.

Nos. 5 and 6 Mines; Drift; Lewiston No. 5 Seam, 72-80 in. thick.
PO—Ward, W. Va.; SP—Cedar Grove, W. Va.; CTY—Kanawha; RR—K. & M.
S of H—Electric locos. Track gauge, 42 inches.
S of M—Hand.
SIZES SHIPT—Slack and Lump.

KENDRICK COAL COMPANY

General Office, Madison, W. Va.
VP—S. E. Bradley, Madison, W. Va.
TR—J. C. Thompson, Madison, W. Va.
GM—S. E. Bradley, Madison, W. Va.
PA—S. E. Bradley, Madison, W. Va.
EM—S. E. Bradley, Madison, W. Va.
Kendrick Mine; Drift; Alma Seam, 58 inches thick.
PO—Madison, W. Va.; SP—Same; CTY—Boone; RR—C. & O.
MS—Dell Kendrick, Madison, W. Va.
S of M—Electric locos. Track gauge 42 in.
S of M—Shortwall machs.
PP—Power purchased. 1-150 K. W. M. G. S-15 250 volts D. C.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.

KEYSTONE COAL AND COKE COMPANY.

General Office, 1522 Union Trust Bldg. Cincinnati, O.
PR—T. E. Houston, Cincinnati, O.
TR—T. E. Houston, Cincinnati, O.
GM—N. H. Franklin, Cincinnati, O.
GS—Benj. Lewis, Keystone, W. Va.
PA—N. H. Franklin, Cincinnati, O.
CE—G. O. Wright, Cincinnati, O.
EM—John M. Lewis, Cincinnati, O.
EE—J. P. Newman, Keystone, W. Va.
SCO—Address the Company Buyer, L. M. Rish, Keystone, W. Va.
SA—Houston Coal Company, Cincinnati, O.

Keystone Mine; Drift; Pocahontas Seam, 72 in. thick.
PO—Keystone, W. Va.; SP—Same; CTY—McDowell RR—N. & W.
MS—John Maurer, Keystone, W. Va.
S of H—Mules and trolley pole type locos. Track gauge 42 in.
S of M—2 elec. machs.
PP—3 water tube boilers, total 1,200 H. P., 3 gen. units, 500 volts D. C., 12 pumps.
EMP—375. Last fiscal year output 141,500 tons.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Bar and Shaker Screens, Picking Tables, Loading Booms.

KIDDOY COAL CO.

General Office, Buckhannon, W. Va.
Deal Mine.
PO—Buckhannon, W. Va.; CTY—Upshur; RR—E. & O.
No report.

KILDOW COAL CO.

General Office, Crellin, Md.
PR—Chas. W. Ream, Crellin, Md.
VP—P. L. Mersing, Crellin, Md.
TR—Michael Kildow, Crellin, Md.
GM—Chas. W. Ream, Crellin, Md.
GS—P. L. Mersing, Crellin, Md.
PA—Charence Mersing, Crellin, Md.
SA—Campbell Coal Co., Piedmont, W. Va., and Leckemman & Kendall, Washington, D. C.

Kildow Mine; Drift; Upper Freeport Seam, 56 in. thick.
PO—Crellin, Md.; SP—Hutton, Md.; CTY—Preston, W. Va.; RR—Preston, R. R. E. & O.
SM—Charence Mersing, Crellin, Md.
S of H—Mules. Track gauge, 36 in.
S of M—Hand.
EM—30 to 35. Daily tonnage 200.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

KIMBALL POCAHONTAS COAL COMPANY

General Office, Kimball, W. Va.
PR—W. B. Clifford, Cincinnati, O.
TR—G. N. Proctor, Kimball, W. Va.
GM—T. E. Houston, Cincinnati, O.
GS—Benj. Lewis, Kimball, W. Va.
PA—N. H. Franklin, Cincinnati, O.
CE—George Wright, Cincinnati, O.
EM—John M. Lewis, Cincinnati, O.
EE—John C. Newman, Kimball, W. Va.
SCO—Address the Company Buyer, R. F. Enrie, Kimball, W. Va.
SA—Houston Coal Co., Cincinnati, Ohio.

King Mine; Slope; Sewell Seam, 72 in. thick.
PO—Kimball, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
MS—Wm. Barlick, Kimball, W. Va.
S of H—Mules. Trolley pole and storage battery locos. Track gauge 44 in.
S of M—Hand.
PP—Power purchased.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

KING FUEL CO., THE

General Office, Logan, W. Va.
PR—A. J. King, Huntington, W. Va.
VP—W. Wallace, Pocahontas, Va.
TR—C. M. Galway, Pocahontas, Va.
GM—A. J. King, Huntington, W. Va.
GS—T. E. King, Huntington, W. Va.
PA—A. C. King, Huntington, W. Va.
EM—M. I. Jarrett, Huntington, W. Va.
EE—M. A. Maxwell, Huntington, W. Va.
SCO—Address the Company Buyer, Ira B. Early, Logan, W. Va.

King Fuel No. 1 Mine; Drift; Cedar Grove Seam, 72 in. thick.
PO—Harrison, W. Va.; SP—Walo, W. Va.; CTY—Logan; RR—C. & O.
MS—Jno. Ellardt, Christian, W. Va.
S of H—Mules.
S of M—Hand.
PP—Power purchased. Transformer 6600 volts A. C., M. G. Sets and rotary converters, 250 volts D. C.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

KINGWOOD COAL CO.

Now Craig Coal Mining Co.

KIRKLAND COAL CO.

Kirk, W. Va.
No. 1 Mine; CTY—Mingo.
No report.

KNOX COAL CO.

Now part of American Gas Coal Co.

KNOX CREEK COAL CO.

General Office, Williamson, W. Va.
PR—S. H. Goodloe, Edgewater, W. Va.
VP—E. L. Bailey, Edgewater, W. Va.
TR—C. E. Early, Williamson, W. Va.
GM—J. F. Jones, O'Keefe, W. Va.

GS—J. F. Jones, O'Keefe, W. Va.
PA—J. F. Jones, O'Keefe, W. Va.
EM—W. P. Moring, Williamson, W. Va.
Knox Creek Mine; Drift; Thacker & Pond Creek Seam, 54 in. thick.
PO—O'Keefe, W. Va.; SP—Deon, W. Va.; CTY—Mingo; RR—N. & W.
NOTE—Mine under development.

KRAILLITZ COAL CO.

Lager, W. Va.
Kraillitz Mine, CTY—McDowell.
No report.

LA BELLE IRON WORKS

General Office, Wheeling, W. Va.
PR—D. A. Burt, Wheeling, W. Va.
VP—H. B. Westfall, Wheeling, W. Va.
TR—H. B. Westfall, Wheeling, W. Va.
GM—G. B. Levan, Steubenville, O.
GS—R. W. McCandless, Steubenville, O.
PA—R. M. Rice, Wheeling, W. Va.
CE—H. H. Roberts, Steubenville, O.
EM—J. C. Gibson, Steubenville, O.
EL—Jas. Farrington, Steubenville, O.
SA—Luzerne Iron Co., Wheeling, W. Va.
SA—Wheeling Steel Products Co., Wheeling, W. Va.

Wheeling Mine; Drift; Pittsburgh No. 8 Seam.
PO—Wheeling, W. Va.; SP—Same; CTY—Ohio; RR—Panama, B. & O.
MS—Alex. Russell, Wheeling, W. Va.
S of H—Mules and trolley pole type locos. Track gauge 31½ in.
S of M—Hand.
PP—Power purchased, transformer 4000 to 220 volts A. C., M. G. set, 1 150 K. W., 275 volts D. C.
Last years tonnage 36,254.
SIZES SHIPT—Run of Mine.

LAKE SUPERIOR COAL COMPANY.

General Office, Canton, W. Va.
PR—W. C. Franz, Sault Ste. Marie, Ontario, Canada.
TR—E. W. Schell, Sault Ste. Marie, Ontario, Canada.
VP—Jas. Hanson, Sault Ste. Marie, Ontario, Canada.
GM—F. O. Harris, Cannelton, W. Va.
GS—E. C. Hylden, Superior, W. Va.
PA—F. O. Harris, Cannelton, W. Va.
CE—E. B. Farrant, Cannelton, W. Va.
EM—W. I. Hunter, Superior, W. Va.
EE—F. O. Harris, Superior, W. Va.
SCO—Address the Company Buyer, Fred Morgan, Superior, W. Va.
SA—F. O. Harris, Cannelton, W. Va.

No. 1 Mine; Shaft; Pocahontas No. 3 Seam, 42 to 72 in. thick.
PO—Superior, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
MS—B. C. Hylden, Superior, W. Va.
S of H—9 trolley pole type loco. Track gauge 48 in.
S of M—4 shortwall machs.
PP—6 return tubular bolers, total 900 H. P., 2-300 K. W. gen. units, 250 D. C., 1 air compressor and 7 pumps.
EMP—169. Last years tonnage 136,234.
SIZES SHIPT—Run of Mine.

No. 2 Mine; Shaft; Pocahontas No. 4 Seam, 42 to 72 in. thick.
PO—Superior, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
MS—B. C. Hylden, Superior, W. Va.
S of H—4 trolley pole type, 1 storage battery and 1 combination loco. Track gauge 48 in.
S of M—3 shortwall machs.
PP—2 fire tube boilers, 300 H. P. gen. unit, 250 volts D. C., 9 pumps.
EMP—112. Last years tonnage 99,639.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Loading Booms, Picking Tables.

LA-MAR COAL COMPANY

General Office, Fairmont, W. Va.
PR—L. W. Coburn, Morgantown, W. Va.
VP—John W. Maust, Morgantown, W. Va.
TR—L. A. Maust, Morgantown, W. Va.
GM—M. L. O'Neale, Morgantown, W. Va.
PA—M. L. O'Neale, Morgantown, W. Va.
EM—M. L. O'Neale, Morgantown, W. Va.
La-Mar No. 1 Mine; Shaft; Sewickley Seam, 74 inches thick.
PO—Fairmont, W. Va.; SP—La-Mar Siding, Barrecksville, W. Va.; CTY—Marion; RR—B. & O.
MS—L. A. Maust, Fairmont, W. Va.
S of H—Mules. Track gauge 42 inches.
S of M—Shortwall machs.
PP—Power purchased. Transformer 22,000-240 volts A. C., M. G. Set, 250 volts D. C.
SIZES SHIPT—Run of Mine.

LAMBERT RON COAL COMPANY

General Office, Fairmont, W. Va.
PR—C. O. Henry, Fairmont, W. Va.
VP—H. P. Robinson, Fairmont, W. Va.
TR—C. O. Henry, Fairmont, W. Va.
GM—C. O. Henry, Fairmont, W. Va.

GS—Dorsey Poble, Fairmont, W. Va.
PA—H. P. Robinson, Fairmont, W. Va.
EM—D. D. Simon, Fairmont, W. Va.
SA—Eastern Fuel Co., 108 Frick Bldg. Pittsburgh, Pa.; 202 Broadway, New York, N. Y.

Claudio Mine; Drift; Pittsburgh Seam, 96 inches thick.
PO—Meadow Brook, W. Va.; SP—Same; CTY—Harrison; RR—B. & O.
MS—Jno. Green, Meadow Brook, W. Va.
S of H—Trolley pole type loco. Track gauge 42 inches.
S of M—5 chain breast type machs.
PP—Power purchased. Transformer 750 volts A. C., 6 pump.
EMP—100. Daily tonnage 700.
SIZES SHIPT—Run of Mine.

LANARK COAL COMPANY

Now Fair V in Coal Co.

LAURE BY-PRODUCT COLLIERY COMPANY

General Office, Kingwood, W. Va.
TR—J. V. Gibson, Kingwood, W. Va.
GM—R. S. LaRue, Kingwood, W. Va.
GS—R. S. LaRue, Kingwood, W. Va.
PA—J. V. Gibson, Kingwood, W. Va.
EM—H. G. LaRue, Independence, W. Va.
SA—H. H. Limecoveer & Co., West End Trust Bldg., Philadelphia, Pa.

Gibson Mine; Drift; Upper Freeport Seam, 66 in. thick.
PO—Paucaiton, W. Va.; SP—Same; CTY—Fayette; RR—W. Va. Northern (B. & O. Br.).
S of H—Mules. Track gauge, 36 in.
S of M—Hand.
EMP—68. Last years tonnage 75,000.
SIZES SHIPT—Run of Mine.

LATE-KOOZER COAL COMPANY

General Office, Newburg, W. Va.
PR—Gordon B. Late, Newburg, W. Va.
VP—D. R. Koozer, Newburg, W. Va.
TR—J. Vinzand, Newburg, W. Va.
GM—D. R. Koozer, Newburg, W. Va.
SA—Gordon B. Late Coal Co., Newburg, W. Va.

Redstone No. 1 Mine; Drift; Seam 54-60 inches thick.
PO—Horne, W. Va.; SP—Wilson Siding, W. Va.; CTY—Lewis; RR—B. & O.
S of H—Mules. Track gauge 36 inches.
S of M—Hand.
PP—Power purchased.
EMP—25. Daily output, 150 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
NOTE—Formerly operated by the Redstone Coal Co.

LATHROP COAL CO.

General Office, Welch, W. Va.
PR—William Leskie, Welch, W. Va.
VP—W. R. Graham, Bluff, W. Va.
TR—A. E. Jennings, Welch, W. Va.
GM—William Leskie, Welch, W. Va.
GS—A. T. Leskie, Welch, W. Va.
PA—William Smith, Panther, W. Va.
EM—Geo. W. Leskie, Welch, W. Va.
SCO—Address the Company Buyer, Sam Hall, Panther, W. Va.
Sales Agency—Leskie Coal Co., Columbus, O.

Additional Information on Page 1022

Lathrop Mine; Drift; No. 2 Gas Seam, 70 in. thick.
PO—Panther, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
MS—Wm. Smith, Panther, W. Va.
SM—L. H. Phillips, Welch, W. Va.
S of H—7 trolley pole type locos. Track gauge 36 in.
S of M—4 shortwall machs.
PP—Power purchased, transformer 33,000 to 2200 volts A. C., M. G. set, 1 150 K. W., 250 volts D. C., 1 water tube boiler, 200 H. P., 6 pumps.
EMP—150. Last fiscal year output, 102,467 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms, Washeries.

LAUREL BRANCH COAL COMPANY.

General Office, Charleston, W. Va.
PR—Meredith Moore, Johns, W. Va.
TR—C. C. Moore, Charleston, W. Va.
GM—Meredith Moore, Johns, W. Va.
GS—Meredith Moore, Johns, W. Va.
PA—Meredith Moore, Johns, W. Va.
EM—Lark & Krebs, Charleston, W. Va.
SCO—Address the Company Buyer, W. Morris, Johns, W. Va.
SA—Logan Pocahontas Fuel Co., Charleston, W. Va.

Laurel Branch Mine; Drift; No. 2 Gas Seam, 48 in. thick.
PO—Johns, W. Va.; SP—Same; CTY—Boone; RR—C. & O.
S of H—Mules and electric locos. Track gauge 42 in.
S of M—Shortwall machs.
PP—1 150 H. P. fire tube boiler, 1 100 K. W. M. G. S, 250 volts D. C.
EMP—10. Last years tonnage 25,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

LAUREL COAL & MINING COMPANY

General Office, Buckhannon, W. Va.
 PR—Chas. Bruner, Clarksburg, W. Va.
 VP—C. Siebert, Clarksburg, W. Va.
 TR—J. J. Shick, Clarksburg, W. Va.
 GM—J. J. Shick, Clarksburg, W. Va.
 GS—J. J. Shick, Clarksburg, W. Va.
 PA—J. J. Shick, Clarksburg, W. Va.
 EM—J. J. Shick, Clarksburg, W. Va.
 S of H—Mules, Redstone Seam, 54 in. thick.
 S of M—Hand.
 PP—Power purchased, 250 volts D. C. EMP—15. Last years tonnage 1,500.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.
 Old information

LAUREL CREEK COAL CO.

PR—C. C. Rury, Charleston, W. Va.
 TR—Geo. Lawson, Quinnmont, W. Va.
 GM—Geo. Lawson, Quinnmont, W. Va.
 GS—W. E. Lawton, Laurel Creek, W. Va.
 PA—W. E. Lawton, Laurel Creek, W. Va.
 EM—H. E. Wilson, Thurmond, W. Va.
 S of H—Address the Company, Buyer, A. C. Alexander, Laurel Creek, W. Va.
 SA—Flat Top Fuel Co., Bluefield, W. Va.

Laurel Mine; Drift; New River Seam, 48 in. thick.
 PO—Laurel Creek, W. Va. SP—Laurel, W. Va. CTY—Fayette, RR—Ches. & Ohio, Laurel Creek Br.
 S of H—Mules and trolley pole type locos. Track gage 44 in.
 S of M—Shortwall mach.
 PP—Power purchased, Transformer 2300-250 volts A. C., M. G. Set, 250 volts D. C.
 EMP—90. Last years tonnage 43,636.
 SIZES SHIPT—Run of Mine.

LAUREL CREEK FUEL COMPANY

General Office, Seth, W. Va.
 PR—S. H. Kirby, Seth, W. Va.
 TR—W. H. Boone, Seth, W. Va.
 GM—C. H. Kirby, Seth, W. Va.
 EM—N. P. Rhinchart, Seth, W. Va.
 S of H—Mules; Drift; Seam 48-60 inches thick.
 PO—Seth, W. Va.; SP—Same; CTY—Boone, RR—C. & O.
 MS—Andy Chamber, Seth, W. Va.
 S of H—Eleve locs.
 S of M—Shortwall machs.
 NOTE—Mine under development

LAUREL HILL MINING COMPANY.

New Lilly Coal Company.

LAUREL RUN COAL COMPANY

General Office, Crellin, Md.
 Laurel Run Mine; Drift; Upper Kittanning Seam, 58 in. thick.
 PO—Crellin, Md.; SP—Hutton, Md.; CTY—Preston; RR—Preston & B. & O.
 MS—P. L. Mersing, Crellin, Md.
 S of H—Mules; Track gage 36 inches.
 S of M—Hand.
 EMP—24. Daily tonnage 150.
 SIZES SHIPT—Run of Mine.

LAUREL SMOKELESS COAL CO.

General Office, Lago, W. Va.
 PR—John L. Steinbugler, 1 Broadway, New York, N. Y.
 VP—Chas. P. Hutchins, 50 Congress St., Boston, Mass.
 TR—Geo. A. Dies, New York, N. Y.
 GM—D. H. Frazier, Lago, W. Va.
 EM—Chas. R. Smith, Mayberry, W. Va.
 SA—W. A. Curtis, Fairo, W. Va.
 SA—E. C. Hines, Princeton, W. Va.

Laurel Smokeless Mine; Drift; Pocahontas Seam, 42 inches thick.
 PO—Lago, W. Va.; SP—Same; CTY—Richigh; RR—C. & O. (Virginian Branch)
 MS—M. T. Campbell, Lago, W. Va.
 SM—E. P. Rathliffe, Lago, W. Va.
 S of H—3 storage battery and 1 trolley pole type locs. Track gage 44 in.
 S of M—2 shortwall machs.
 PP—Power purchased, Transformer 2300-220-440 volts A. C., 1 M. G. Set, 50 K. W., 220 volts D. C.
 EMP—60. Last years tonnage 51,500.
 SIZES SHIPT—Run of Mine.

LAURETTA COAL COMPANY

General Office, 704-5 Union Bank Bldg., Clarksburg, W. Va.
 PR—C. F. Kreiner, Baltimore, Md.
 VP—A. G. Smith, Mercersburg, Pa.
 TR—R. A. Matthews, Baltimore, Md.
 GM—Hugh G. Smith, Clarksburg, W. Va.
 PA—Hugh G. Smith, Clarksburg, W. Va.
 SA—Hull Bros. & Co., Inc., Baltimore, Md.
 Additional Information on Page 1002

London No. 1 Mine; Drift and Stripping; Pittsburgh Seam, 108-132 in. thick.
 PO—Meadowbrook, W. Va.; SP—Same; CTY—Harrison; RR—B. & O.
 MS—Thomas McLane, Meadowbrook, W. Va.
 S of H—Mules.
 PP—Power purchased.
 SIZES SHIPT—Run of Mine.

LAURIE COAL COMPANY.

General Office, Charleston, W. Va.
 PR—Herbert Hannigan, Charleston, W. Va.
 VP—Wm. Schaffer, Charleston, W. Va.
 TR—Leo Schaffer, Charleston, W. Va.
 GM—Herbert Hannigan, Charleston, W. Va.
 GS—C. M. Hannigan, Vaughan, W. Va.
 PA—Herbert Hannigan, Charleston, W. Va.
 EM—W. G. Crichton, Charleston, W. Va.
 SA—Kanawha & Ohio Coal Company, Columbus, O.

Laurie Mine; Drift; Coalburg Seam, 54 in. thick.
 PO—Vaughan, W. Va.; SP—Greendale, W. Va.; CTY—Nicholas; RR—C. & O.
 S of H—Mules.
 EMP—25. Last years tonnage 3,000.
 SIZES SHIPT—Run of Mine.

LEATHERWOOD CREEK FUEL CO

General Office, Clarksburg, W. Va.
 Epwood Mine
 PO—Epwood, W. Va.; CTY—Clay; RR—B. & O.
 No report.

LECKIE FIRE CREEK COAL COMPANY.

General Office, Welch, W. Va.
 PR—A. F. Leckie, Welch, W. Va.
 VP—W. B. Beale, Welch, W. Va.
 GM—A. F. Leckie, Welch, W. Va.
 TR—A. E. Jennings, Welch, W. Va.
 GS—W. B. Beale, Welch, W. Va.
 PA—H. P. Wilson, Fireco, W. Va.
 EM—H. K. Stairs, Beckly, W. Va.
 S of H—Address the Company, Buyer, H. D. Plumber, Fireco, W. Va.
 Sales Agency—Leckie Coal Co., Columbus, O.
 Additional Information on Page 1022

Leckie Mine; Drift; Fire Creek Seam, 50 in. thick.
 PO—Fireco, W. Va.; SP—Same; CTY—Raleigh; RR—Virginian.
 MS—Wm. McPherson, Fireco, W. Va.
 S of H—Eleve, and trolley pole type locos. Track gage 48 in.
 S of M—4 shortwall machs.
 PP—Power purchased, transformer 44-000-220 volts A. C., 4 rotary converters, 400 K. W., 250 volts D. C.
 EMP—200. Last years tonnage 130,000.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Shakers, Pickling Tables, Loading Booms.

LEE COAL COMPANY.

General Office, Glen Jean, W. Va.
 PR—C. B. Lee, Glen Jean, W. Va.
 TR—Thos. Nichol, Glen Jean, W. Va.
 GM—Thomas Nichol, Glen Jean, W. Va.
 PA—A. M. Fittro, Glen Jean, W. Va.
 EE—F. F. Pitt, Mount Hope, W. Va.
 S of H—Address the Company, Buyer, C. L. Wilson, Mount Hope, W. Va.
 Sales Agency—The C. G. Blake Co., Cincinnati, O.
 Lee No. 2 Mine; Drift; Sewell Seam, 66 in. thick.
 PO—Mt. Hope, W. Va.; SP—Macedonia, W. Va.; CTY—Fayette; RR—K. G. J. & E. Virginian.
 MS—F. F. Pitt, Mount Hope, W. Va.
 S of H—Mules, trolley pole type locos. Track gage 44 in.
 S of M—1 shortwall mach.
 PP—Transformer, 2200 volts A. C., 150 K. W. M. G. Set 250 volts D. C.
 SIZES SHIPT—Run of Mine.

LEE COLLIERIES CO

General Office, Philippi, W. Va.
 PR—E. L. Rogers, Philippi, W. Va.
 VP—G. R. Rogers, Mt. Clare, W. Va.
 TR—E. L. Rogers, Philippi, W. Va.
 GM—E. L. Rogers, Philippi, W. Va.
 PA—F. L. Rogers, Philippi, W. Va.
 EM—B. Mann, Philippi, W. Va.
 SA—J. F. Long Coal Co., Clarksburg, W. Va.; Crescent Fuel Co., Fairmont, W. Va., and Middle State Coal & Mining Co., McCormick Bldg., Chicago, Ill.

Edith Mine; Drift; Freeport Seam, 46 to 50 in. thick.
 PO—Philippi, W. Va.; SP—Arden, W. Va.; CTY—Barbour; RR—B. & O.
 MS—J. J. Murphy, Arden, W. Va.
 S of H—Mules. Track gage 42 in.
 S of M—Hand.
 PP—Power purchased, Transformer 22-000 to 250 volts A. C. rotary converters, 250 volts D. C.
 EMP—20. Daily tonnage 200.
 SIZES SHIPT—Run of Mine.

LEE R. COAL COMPANY

General Office, Morgantown, W. Va.
 PR—Wm. H. Soppr, Morgantown, W. Va.

VP—Walter R. Mitchell, Morgantown, W. Va.
 TR—Harold G. Hodges, Morgantown, W. Va.
 GS—Frank E. Darrab, Morgantown, W. Va.
 PA—Walter R. Mitchell, Morgantown, W. Va.
 EM—Frank Barriett, Morgantown, W. Va.
 EE—R. Paddock, Morgantown, W. Va.
 SA—Soppr-Mitchell Coal Co., Morgantown, W. Va.

Jere Mine; Slope; Sewickley Seam, 77 inches thick.
 PO—Morgantown, W. Va.; SP—Same; CTY—Monongalia; RR—M. & W., Mon.
 S of H—Trolley pole type and storage battery locos. Track gage 42 inches.
 S of M—5 shortwall machs.
 PP—Power purchased, Transformer 2200-220 volts A. C., motor gen. units.
 EMP—60.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

LEEVALE COAL COMPANY.

General Office, Amsag, W. Va.
 PR—W. S. Wood, Charleston, W. Va.
 TR—Quinn Morton, Charleston, W. Va.
 GM—D. H. Norton, Burnell, W. Va.
 GS—George T. Wall, Mahan, W. Va.
 EM—R. B. Whitaker, Burnell, W. Va.
 EE—Jos. Adkins, Jarrolds Valley, W. Va.
 S of H—Address the Company, Buyer, J. E. Ellis, Jarrolds Valley, W. Va.
 Additional Information on Page 999

Leevale Mine; Drift; Dorothy Seam, 78 in. thick.
 PO—Leevale, W. Va.; SP—Same; CTY—Raleigh; RR—B. & O.
 MS—R. V. Bronham, Leevale, W. Va.
 S of H—Mules and electric locos. Track gage 42 in.
 S of M—Shortwall machs.
 PP—Power purchased, rotary converters, 275 volts D. C.
 EMP—100. Last years tonnage 80,000.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Loading Booms.

LEFT FORK COAL CO

General Office, Marmat, W. Va.
 Left Fork Mine.
 PO—Marmat, W. Va.; CTY—Kanawha; RR—C. & O.
 No report.

LESON COAL COMPANY

General Office, Drawer 525, Fairmont, W. Va.
 OPERATOR—E. B. Beerbower, Drawer 525, Fairmont, W. Va.

Amos Mine; Drift; Pittsburgh Seam, 84 inches thick.
 PO—Fairmont, W. Va.; SP—Same; CTY—Marion; RR—Monon.
 S of H—Mules. Track gage 42 inches.
 S of M—Hand.
 PP—Purchase power, Transformer 2,200 to 250 volts A. C.
 EMP—15. Last years tonnage 21,000.
 SIZES SHIPT—Run of Mine.
 Note—Formerly operated by the Amos Coal Company.

LEVINE-GOODMAN COAL CO.

Nolan, W. Va.
 Levine-Goodman Mine; CTY—Mingo.
 No report.

LEWIS COAL & COKE CO.

Chelyan, W. Va.
 Lewis Nos. 2 and 5 Mines; CTY—Kanawha.
 No report.

LEWIS COAL COMPANY

General Office, 309 N. 4th St., Clarksburg, W. Va.
 OWNER—C. A. Lewis, Clarksburg, W. Va.
 EM—Hornor Bros., Clarksburg, W. Va.
 S of H—Lewis Dept. Store, Buyer A. Lewis, Clarksburg, W. Va.

Grassie No. 3 Mine; Pittsburgh Seam, 96-108 inches thick.
 PO—Clarksburg, W. Va.; SP—Same; CTY—Harrison; RR—B. & O.
 MS—C. A. Lewis, Clarksburg, W. Va.
 S of H—Mules, Track gage 30 inches.
 S of M—Hand.
 Daily tonnage 150.
 SIZES SHIPT—Run of Mine.

LEWIS COUNTY COLLIERY CO.

General Office, Union Central Bldg., Cincinnati, O.
 Horner Mine.
 PO—Horner, W. Va.; CTY—Lewis; RR—B. & O.
 No report.

LEWISTON BLOCK COAL COMPANY

General Office, Charleston, W. Va.
 PR—H. H. Weiske, Charleston, W. Va.
 VP—S. A. Lewis, Charleston, W. Va.
 TR—H. H. Weiske, " "

GM—H. H. Weiske, " "
 PA—H. H. Weiske, " "
 SA—Twin States Fuel Co., Huntington, W. Va.

Lewiston Mine; Drift; Lewiston-Belmont Seam, 42 to 72 in. thick.
 PO—Lewiston, W. Va.; SP—Whitford Junction; CTY—Kanawha; RR—C. & O.
 S of H—Mules. Track gage, 40 in.
 S of M—1 chain breast type and 1 shortwall mach.
 PP—Power purchased, transformer 2300-250 volts A. C.
 PREP. EQUIPT—Gravity Screens.

Fred Mine; Cedar Grove Seam, 54 in. thick.
 PO—Seth, W. Va.; SP—Same; CTY—Boone; RR—C. & O.
 S of H—Mules and storage battery locos. Track gage, 40 in.
 S of M—2 shortwall machs.
 PP—2 fire tube boilers, 500 H. P., gen. units.
 PREP. EQUIPT—Gravity Screens, Pickling Tables.
 Old information.

LIBERTY MINING COMPANY

General Office, Grafton, W. Va.
 PR—H. C. Peck, Grafton, W. Va.
 TR—D. L. Ross, Grafton, W. Va.
 GM—D. L. Ross, Grafton, W. Va.
 PA—D. L. Ross, Grafton, W. Va.
 SA—Davis Coal Mining Co., Grafton, W. Va.

Banner Mine; Drift; Lower Freeport Seam, 52 in. thick.
 PO—Hammond, W. Va.; SP—Powell, W. Va.; CTY—Marion; RR—B. & O. Wheeling Br.
 MS—H. A. Shaffer, Hammond, W. Va.
 S of H—Mules. Track gage, 42 in.
 S of M—Hand.
 EMP—30. Daily tonnage 150.
 SIZES SHIPT—Run of Mine.

LICK FORK COAL COMPANY

Now operated by the Lick Fork Collieries Co.

LICK FORK COLLIERY CO.

General Office, Huntington, W. Va.
 PR—A. J. King, Huntington, W. Va.
 TR—P. E. King, Huntington, W. Va.
 GM—A. J. King, Huntington, W. Va.
 GS—John Clapperton, Huntington, W. Va.
 PA—C. A. King, Huntington, W. Va.
 EM—N. P. Reinhardt, Mt. Hope, W. Va.
 S of H—Lick Fork Collieries Co., Buyer, P. H. Ford, Lick Fork, W. Va.
 SA—C. A. King, Huntington, W. Va.
 Additional Information on Pages 1020, 1021

Lick Fork 1 and 2 Mines; Drift; No. 2 Gas and Big Eagle Seams, 90-60 in. thick.
 PO—Lick Fork, W. Va.; SP—Same; CTY—Fayette; RR—Virginian.
 MS—Joseph Roncaglione, Lick Fork, W. Va.
 S of H—Mules and rope. Track gage 44 in.
 S of M—Hand and 2 shortwall machs.
 PP—Power purchased, Transformers, M. G. Set, 1 100 K. W., 250 volts D. C., 2 pumps.
 EMP—100. Last years tonnage 34,754.
 SIZES SHIPT—Run of Mine.
 NOTE—Successors to the Lick Fork Coal Company.

LICK RUN COLLIERIES COMPANY

PR—J. V. Gibson, Kingwood, W. Va.
 TR—H. T. Lincoln, Kingwood, W. Va.
 GM—H. G. LaRue, Independence, W. Va.
 GS—H. G. LaRue, Independence, W. Va.
 PA—H. T. Lincoln, Kingwood, W. Va.

Lick Run Mine; Drift; Bakertown Seam, 40 in. thick.
 PO—Kingwood, W. Va.; SP—Same; CTY—Preston; RR—M. & K.
 S of H—Mules. Track gage 42 in.
 S of M—1 overhead cutter mach.
 PP—2 fire tube boilers, 72 H. P. and 150 H. P., 1-100 K. W. gen. unit, 250 volts D. C., 1 pump.
 EMP—50. Last years tonnage 20,000.
 SIZES SHIPT—Run of Mine.

LILLY, C. M. COAL COMPANY

Now Wood-Peck Fuel Company.

LILLY COAL COMPANY

General Office, Areola, W. Va.
 PR—D. D. P. Kessler, Weston, W. Va.
 GM—A. L. Bouton, Areola, W. Va.
 GS—A. L. Bouton, Areola, W. Va.
 Lilly Mine; Drift; No. 2 Gas Seam, 30 inches thick.
 PO—Areola, W. Va.; SP—Same; CTY—Webster; RR—B. & O.
 S of H—5 mules. Track gage 36 inches.
 S of M—Hand.
 EMP—30. Last years tonnage 3,550.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.
 NOTE—Successors to the Laurel Hill Mining Company.

LILLY MINING COMPANY

General Office, W. Va.
Whorley No. 2 Mine.
PO—Whorley, W. Va.; CTY—Raleigh; RR—C. & O.
No report.

LILLYBRANCH COAL CO.

General Office, Big Creek, W. Va.
PR—Wm. M. Worjan, New York, N. Y.
VP—L. H. Humbley, Charleston, W. Va.
TR—Phillip Hager, Hamilton, W. Va.
GM—W. M. Worjan, New York, N. Y.
GS—L. H. Humbley, Charleston, W. Va.
PA—L. H. Humbley, Charleston, W. Va.
EM—L. H. Humbley, Charleston, W. Va.
EE—R. H. McKinney, Big Creek, W. Va.
SA—Gaylan Coal Co., Charleston, W. Va.

Lillybranch Mine; Drift; Alma-Powellton Seam, 48 in. thick.
PO—Big Creek, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
MS—W. S. Nally, Big Creek, W. Va.
S of H—Electric locus. Track gage 42 in.
S of M—Shortwall mch.
PP—Power purchased. M. G. Sets, 250 volts D. C.
EMP—75. Daily tonnage 100.
SIZES SHIPT—Slack, Lump.

LILLYGORG COAL COMPANY.

General Office, Lillybrook, W. Va.
PR—P. E. Lilly, Lillybrook, W. Va.
VP—W. W. Hume, Beckley, W. Va.
TR—Thos. H. Wickham, Beckley, W. Va.
GM—P. E. Lilly, Lillybrook, W. Va.
GS—J. R. Hornbrook, Lillybrook, W. Va.
PA—John R. Hornbrook, Lillybrook, W. Va.
CE—West Virginia Engineering Co., Charleston, W. Va.
EM—D. A. Simmons, Lillybrook, W. Va.
EE—John Brasley, Lillybrook, W. Va.
SCD—Royer, Ed. Hornbrook, Lillybrook, W. Va.
SA—Raleigh Smokeless Fuel Co., Beckley, W. Va.

Lillybrook No. 1 Mine; Drift; Fire Creek Seam, 48 in. thick.
PO—Lillybrook, W. Va.; SP—Same; CTY—Raleigh; RR—Virginian.
MS—J. M. Grace, Lillybrook, W. Va.
S of H—6 trolley pole type and 4 storage battery locs.
S of M—4 shortwall mch.
PP—Power purchased, transformer 2300 volts A. C., rotary converters, 250 volts D. C., 3 pumps.
EMP—60. Last years tonnage 106,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.
Lillybrook No. 2 Mine; Drift; Fire Creek Seam, 52 in. thick.
PO—Lillybrook, W. Va.; SP—Fireco, W. Va.; CTY—Raleigh; RR—Va.
MS—C. E. Lilly, Fireco, W. Va.
S of H—3 trolley pole type and 2 storage battery locs.
S of M—2 shortwall mch.
PP—Power purchased, transformer 2300 volts A. C., rotary converters, 250 volts D. C., 3 pumps.
EMP—40. Last years tonnage 78,500.
SIZES SHIPT—Run of Mine.

LIMA COAL COMPANY, THE

General Office, 320 Holland Bldg., Lima, O.
PR—Allen Patterson, Lima, O.
VP—Dr. E. A. Swan, Lima, O.
TR—Chas. F. Malzen, Lima, O.
PA—M. P. Goetschius, Lima, O.
EM—O. Kelly (Kelly & Kelly), Columbus, O.
EE—W. Va. Eng. Co., Charleston, W. Va.
SA—P. M. Goetschius, Lima, O.

Goetschius Mine; Drift; Winifrede Seam, 51 in. thick.
PO—Hartland, W. Va.; SP—Clay, W. Va.; CTY—Clay; RR—B. & O., C. & C. Div.
MS—Ed. Conley, Hartland, W. Va.
S of H—Mules. Track gage 42 in.
S of M—1 elec. puncher and shortwall mch.
PP—Power purchased. Transformer 1300-270 volts A. C., 1-150 K. W. M. G. Set, 240 volts D. C.
EMP—15. Last years tonnage 5,500.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

LINCOLN COAL & COKE COMPANY.

General Office, Charleston, W. Va.
PR—Otto J. Cox, Charleston, W. Va.
TR—E. M. Cox, Charleston, W. Va.
GM—E. M. Cox, Charleston, W. Va.
GS—J. H. Carter, Charleston, W. Va.
PA—E. M. Cox, Charleston, W. Va.
EM—Hassel Miller, Madison, W. Va.
SCD—Address the Company; Royer, E. M. Cox, Charleston, W. Va.
Sales agency, Kanawha Valley Coal Co., Charleston, W. Va.

Macco Mine; Drift; No. 5 Block Seam, 48 to 60 in. thick.
PO—McCorkle, W. Va.; SP—Macco, W. Va.; CTY—Lincoln; RR—C. & O.

SM—V. G. Dodd, McCorkle, W. Va.
S of H—Mules and storage battery locs.
S of M—2 shortwall mch.
PP—1 water tube boiler, 200 H. P., 150 K. W., 250 volts D. C.
EMP—35. Last years tonnage 18,000.
SIZES SHIPT—Run of Mine, Slack, Lump, Block.
PREP. EQUIPT—Gravity Screens.
Old information.

LINCOLN SMOKELESS COAL CO

General Office, 1 Mine; CTY—Greenbrier.
No report.

LITTLE FALLS FUEL COMPANY

Now Alcoa Coal & Coke Company.
LITTLE WAR CREEK COAL CO.
General Office, Traloe, W. Va.
PR—J. A. Wood, Pratt, W. Va.
VP—J. C. Sullivan, Traloe, W. Va.
GM—J. C. Sullivan, Traloe, W. Va.
PA—C. B. Helwig, Traloe, W. Va.
EE—J. P. Earsdale, Traloe, W. Va.
SCD—Address the Company; Royer, E. G. Scott, Traloe, W. Va.
SA—C. & O. Coal Agency Co., Boston, Mass. and Wyoming Coal Sales Co., Bluefield, W. Va.

LITZ-SMITH COAL COMPANY.

General Office, Acroville, W. Va.
PR—A. Z. Litz, Acroville, W. Va.
VP—R. R. Smith, Huntington, W. Va.
GM—R. R. Smith, Huntington, W. Va.
GS—Agency—Litz-Smith Fuel Co., Huntington, W. Va.
Litz-Smith No. 3 Mine; Drift; Eagle Seam, 78 to 88 in. thick.
PO—Acroville, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
MS—W. H. Glover, Acroville, W. Va.
S of H—2 elec. locs. Track gage 42 in.
S of M—2 elec. mch.
PP—250 volts D. C., 2 pumps. Purchase power.
EMP—51. Last fiscal year output 58,868 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
Old information.

LITZ SMITH ISLAND CREEK COAL CO.

General Office, 5th floor Thompson Bldg., Huntington, W. Va.
VP—A. Z. Litz, Tazewell, Va.
TR—W. P. Neckamp, Huntington, W. Va.
GM—R. R. Smith, Huntington, W. Va.
GS—J. C. Gilmore, Channey, W. Va.
PA—J. C. Gilmore, Channey, W. Va.
EM—W. C. McCall, Logan, W. Va.
EE—St. Clair Kyle, Channey, W. Va.
SCD—Address the Company; Royer, W. S. Morris, Channey, W. Va.
SA—Litz Smith Fuel Co., Huntington, W. Va.

Litz Smith No. 4 Mine; Drift; Island Creek Seam, 90 to 96 in. thick.
PO—Omur, W. Va.; SP—Exp., Same, Frit, Channey, W. Va.; CTY—Logan; RR—C. & O., Guyan Vly.
MS—W. A. Litz, Channey, W. Va.
SM—J. S. McGuire, Channey, W. Va.
S of H—Mules and 2 elec. locs. Track gage 48 in.
S of M—3 elec. mch.
PP—Power purchased, M. G. set, 1-150 K. W. gen. unit, 250 volts D. C., 1 pump.
EMP—90.
SIZES SHIPT—Run of Mine, Nut, Slack, Pea, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Loading Booms, Picking Tables.

LITZ-SMITH POCAHONTAS COAL CO.

General Office, Huntington, W. Va.
PR—A. Z. Litz, Tazewell, Va.
VP—R. R. Smith, Huntington, W. Va.
TR—J. F. Johnson, Huntington, W. Va.
GM—A. Z. Litz, Tazewell, Va.
GS—G. A. Koger, Cucumber, W. Va.
PA—G. A. Koger, Cucumber, W. Va.
EM—C. L. Picard, Berwind, W. Va.
SCD—Address the Company; Royer, H. P. Peery, Cucumber, W. Va.

Litz-Smith Mine; Drift; No. 3 Pocahontas Seam, 72 inches thick.
PO—Cucumber, W. Va.; SP—Frit, Newhall, W. Va.; Exp., Berwind, W. Va.; CTY—McIntosh; RR—N. & W.
S of H—Mules and 2 elec. locs. Track gage 44 inches.
S of M—2 shortwall mch.
PP—Power purchased, 250 volts D. C., 1 pump.
EMP—60. Daily tonnage 350.
SIZES SHIPT—Run of Mine.

LOCKVIEW COAL CO.

Out of business.

LOGAN BLACK BAND COAL COMPANY.

General Office, Hamlin, W. Va.
PR—A. F. Black, Hamlin, W. Va.
VP—C. C. May, Hamlin, W. Va.
TR—J. C. M. Singer, Sheridan, W. Va.
GM—A. F. Black, Hamlin, W. Va.
GS—J. C. Messenger, Sheridan, W. Va.
PA—A. F. Black, Hamlin, W. Va.

CE—G. W. Nelson, Hamlin, W. Va.
SA—A. F. Black, Hamlin, W. Va.
Logan Black Band Mine; Drift; Winifrede Seam, 62 in. thick.
PO—Smith, W. Va.; SP—Branchland, W. Va.; CTY—Lincoln; RR—G. V.
S of H—Electric and gasoline locs.
S of M—Electric puncher and shortwall mch.
EMP—50. Daily tonnage 500.
SIZES SHIPT—Nut, Egg, Lump, Block.
PREP. EQUIPT—Picking Tables.

LOGAN CHILTON COAL CO.

General Office, Fircro, W. Va.
PR—A. F. Leckie, Welch, W. Va.
VP—W. S. Leckie, Williamson, W. Va.
TR—W. R. Beale, Fircro, W. Va.
GM—W. R. Beale, Fircro, W. Va.
EM—H. K. Stairs, Fircro, W. Va.
SCD—Address the Company; Royer, J. H. Phillips, Panther, W. Va.
SA—Leckie Coal Co., Columbus, O.
Additional Information on Page 1022.

Logan Chilton Mine; Drift; Draper and Chilton Seams, 48 inches thick.
PO—Branchland, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
MS—E. R. Gibson, Branchland, W. Va.
SM—T. W. Hury, Branchland, W. Va.
S of H—2 trolley pole type locs. Track gage 18 inches.
S of M—2 shortwall mch.
PP—Power purchased. Transformer 6500-192 volts A. C., rotary converters, 150 K. W., 250 volts D. C.
EMP—50. Daily tonnage 200.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.
NOTE—Formerly operated by Berkley Coal Company.

LOGAN EAGLE COAL CO.

General Office, Latrobe, W. Va.
PR—A. H. Land, Logan, W. Va.
GM—C. H. Land, Latrobe, W. Va.
GS—S. S. Crowley, Latrobe, W. Va.
PA—C. H. Land, Latrobe, W. Va.
EM—W. C. McCall, Logan, W. Va.
EE—G. J. McTigue, Logan, W. Va.
SCD—Address the Company; Royer, C. H. Land, Latrobe, W. Va.
SA—Dickinson Fuel Co., Charleston, W. Va.

Logan-Eagle Nos. 1 and 2 Mines; Drift; Eagle and Chilton Seams, 48 to 60 in. thick.
PO—Latrobe, W. Va.; SP—Crites, W. Va.; CTY—Logan; RR—C. & O.
MS—Jos. H. Gnt, Latrobe, W. Va.
S of H—2 storage battery and 1 G-ton Jeffrey locs. Track gage 41 in.
S of M—3 shortwall mch.
PP—Power purchased, 220 volts A. C., 3 phase, 60 cycles, 1-100 K. W. Westinghouse M. G. set, 250 volts D. C., 1 pump.
EMP—75. Last years tonnage 50,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Stationary Screens.

LOGAN ELKHORN COAL CORP.

Malbury, W. Va.
Huff Creek Nos. 3 and 4 Mines; CTY—Logan.
No report.

LOGAN MINING COMPANY.

General Office, Fairmont, W. Va.
PR—C. E. Hutchinson, Fairmont, W. Va.
VP—M. L. Hutchinson, Fairmont, W. Va.
TR—E. C. Curry, Fairmont, W. Va.
GM—J. J. Ross, Fairmont, W. Va.
GS—H. A. McAllister, Logan, W. Va.
PA—M. C. Lough, Fairmont, W. Va.
EM—N. Chelmsford, Logan, W. Va.
EE—C. E. Rogers, Logan, W. Va.
SCD—Address the Company; Royer, E. M. Jeffrey, Logan, W. Va.
SA—Hutchinson Coal Co., Fairmont, W. Va.

Additional Information on Pages 1012, 1013.

Earling Mine; Drift; No. 2 Gas Seam, 60-65 in. thick.
PO—Manhar, W. Va.; SP—Earling, W. Va.; CTY—Logan; RR—C. & O.
MS—P. J. Lough, Manhar, W. Va.
SM—Wiley Agnew, Manhar, W. Va.
S of H—13 elec. locs. Track gage 44 in.
S of M—10 elec. mch.
PP—2-150 K. W. M. G. Sets, 250 volts D. C., 7 pumps.
EMP—250. Last years tonnage 185,429.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Picking Table, Bar Screen.

Mona Mine; Slope; Cedar Grove or Island Creek Seam, 76 to 84 in. thick.
PO—Monastille, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
MS—W. G. Whitman, Monastille, W. Va.
SM—S. B. Scott, Monastille, W. Va.
S of H—13 elec. locs. Track gage 41 in.
S of M—4 elec. mch.
PP—2-100 H. P. 1 g.n. unit, 250 volts D. C., 5 pumps.
EMP—90. Last years tonnage 108,473.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Loading Booms, Picking Tables.

Rossmore Mine; Slope; Cedar Grove or Island Creek Seam, 76 to 81 in. thick.
PO—Rossmore, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
MS—M. G. Hunter, Rossmore, W. Va.
SM—A. J. Burdette, Rossmore, W. Va.
S of H—8 elec. locs. Track gage 41 in.
S of M—Hand, 4 elec. mch.
PP—1 return tubular boiler, total 200 H. P., 2-150 K. W. rotary converters, 250 volts D. C., 8 pumps.
EMP—125. Last years tonnage 117,922.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Loading Booms, Picking Tables.

Manitoba Mine; Drift; Chilton Seam, 60 to 65 in. thick.
PO—Ethel, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
MS—R. B. Barlow, Ethel, W. Va.
SM—Mont Johnson, Ethel, W. Va.
S of H—2 elec. locs. Track gage 41 in.
S of M—5 elec. mch.
PP—250 volts D. C., 5 pumps. Purchase power.
EMP—80. Last years tonnage 52,145.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Har Screens.

Wanda Mine; Drift; Chilton Seam, 54 to 60 in. thick.
PO—Ethel, W. Va.; SP—Wanda, W. Va.; CTY—Logan; RR—C. & O.
MS—C. D. Hyton, Ethel, W. Va.
SM—William Perry, Ethel, W. Va.
S of H—1 elec. loco. Track gage 44 in.
S of M—5 elec. mch.
PP—250 volts D. C., 2 pumps. Purchase power.
EMP—80. Last years tonnage 56,245.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Bar Screens, Picking Tables.

LOGAN THIN VEIN COAL COMPANY

General Office, Logan, W. Va.
PR—C. S. Minter, Logan, W. Va.
VP—C. L. Raymond, Logan, W. Va.
TR—B. C. Harris, Logan, W. Va.
GM—J. E. Reed, Stollings, W. Va.
GS—J. E. Reed, Stollings, W. Va.
PA—J. E. Reed, Stollings, W. Va.
EM—W. C. McCall, Logan, W. Va.
SCD—Address the Company; Royer, Jones & Reed, Stollings, W. Va.
SA—Lake & Export Coal Corp., Huntington, W. Va.

Logan Thin Vein Mine; Shaft; Lower Branch and Island Creek Seams; 30 to 40 inches thick.
PO—Stollings, W. Va.; SP—Logan, W. Va.; CTY—Logan; RR—C. & O.
MS—J. E. Reed, Stollings, W. Va.
S of H—Mules.
S of M—Shortwall mch.
PP—Power purchased d. 250 volts A. C.
EMP—18. Daily output, 80 tons.
SIZES SHIPT—Run of Mine.
Old information.

LONDON GAS COAL CO.

London, W. Va.
London Mine; CTY—Kanawha.
No report.

LONG BRANCH COAL COMPANY.

General Office, Mt. Hope, W. Va.
PR—P. M. Snyder, Mt. Hope, W. Va.
VP—W. R. Gray, Mt. Hope, W. Va.
TR—W. P. Tynell, Mt. Hope, W. Va.
GM—P. M. Snyder, Mt. Hope, W. Va.
ASST. GM—J. W. Warden, Long Branch, W. Va.
MM—W. S. Kelly, Long Branch, W. Va.
EM—N. P. Rindhart, Mt. Hope, W. Va.
SCD—Address the company; Royer, W. P. Myers, Mt. Hope, W. Va.
Sales Agent, P. M. Snyder, Manager, Mt. Hope, W. Va., Spring Coal Co., Boston, Mass.; Fayette Smokeless Fuel Co., Mt. Hope, W. Va.

Long Branch Mine; Drift; No. 2 Gas and Eagle Seams, 72 in. thick.
PO—Long Branch, W. Va.; SP—Pay, W. Va.; CTY—Fayette; RR—Virginian.
MS—C. R. Turner, Long Branch, W. Va.
S of H—Mules and locs. Track gage 42 in.
S of M—Hand and mch.
PP—2 gen. units, 250 volts D. C., 1 pump. Purchase power.
EMP—100. Daily tonnage 1,100.
SIZES SHIPT—Run of Mine.

LONG COAL MINING COMPANY

General Office, 1328 Broadway, New York, N. Y.
PR—P. R. Long, New York, N. Y.
VP—H. R. Toward, New York, N. Y.
TR—H. R. Toward, New York, N. Y.
GM—H. Van Fleet, New York, N. Y.
GS—D. Pugh, Reynoldsville, W. Va.
PA—H. Van Fleet, New York, N. Y.
(Continued on Next Page)

Long Coal Mining Company—Cont.

CE—Hornor Bros., Clarksburg, W. Va.
EE—Fay Whitcomb, Wolf Summit, W. Va.
SC0—Gladys Store Co., Buyer, H. Van-
Belt, 1328 Broadway, New York, N.Y.
SA—P. R. Long Co., Inc., 1328 Broad-
way, New York, N.Y.

Lorado No. 1 Mine; Slope; Pittsburgh
Seam, 78 inches thick.
PO—Wolf Summit, W. Va.; SP—Same;
CTY—Harrison; RR—B & O.
MS—J. Wickenhofer, Wolf Summit, W. Va.
S of H—Mules and rope, gasoline and
steam locos. Track gage 42 inches.
S of M—8 comp. air machs.
PP—Purchase power, 2,200 volts, 3 re-
turn tubular boilers, 3 air compres-
sors, 1 elec. and 3 comp air
pumps.
EMP—5.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Bar Screens.

Florida No. 2 Mine; Shaft; Pittsburgh
Seam, 78 inches thick.
PO—Wolf Summit, W. Va.; SP—Same;
CTY—Harrison; RR—B & O.
MS—J. Wickenhofer, Wolf Summit, W. Va.
S of H—Mules, elec. hoist. Track gage
42 inches.
S of M—1 comp. air mach.
PP—Purchase power, 250 volts, 1 pump.
EMP—5.
SIZES SHIPT—Run of Mine.

Gladys No. 1 Mine; Drift; Pittsburgh
Seam, 78 inches thick.
PO—Wolf Summit, W. Va.; SP—Same;
CTY—Harrison; RR—B & O.
MS—J. Wickenhofer, Wolf Summit, W. Va.
S of H—Mules, elec. storage battery loco.
Track gage 42 inches.
S of M—5 shortwall machs.
PP—Purchase power, 440 volts, 2 pumps.
EMP—125.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Bar Screens, Picking
Tables and Crushers.

Gladys No. 2 Mine; Drift; Pittsburgh
Seam, 78 inches thick.
PO—Wolf Summit, W. Va.; SP—Same;
CTY—Harrison; RR—B & O.
MS—J. Wickenhofer, Wolf Summit, W. Va.
S of H—Mules. Track gage 42 inches.
S of M—Pick.
EMP—6.
SIZES SHIPT—Run of Mine.

LONG FLAME COAL COMPANY

General Office, Huntington, W. Va.
PR—W. J. Pritchard, Bramwell, W. Va.
VP—D. T. Pritchard, Huntington, W. Va.
TR—E. S. Baker, Bramwell, W. Va.
GM—W. E. Pritchard, Huntington, W. Va.
GS—R. C. Pritchard, Stow, W. Va.
CE—A. H. Snow, Charleston, W. Va.
EM—McCunkle & Godfrey, Logan, W. Va.
SA—Old Dominion Coal Co., Cincinnati, O.
Additional Information on Page 1052

Long Flame Mine; Drift; Island Creek
Seam, 84 in. thick.
PO—Lambdale, W. Va.; SP—Craneco, W.
Va.; CTY—Logan; RR—C. & O.
S of H—Trolley pole type loco and com-
bination loco. Track gage 48 in.
S of M—Chain breast type mach.
PP—Power purchased, Transformer 2,300
volts A. C., M. G. set, 250 volts
D. C., 2 pumps.
EMP—100. Last years tonnage 87,500.
SIZES SHIPT—Run of Mine, Slack,
Lump.
PREP. EQUIPT—Shaker Screens, Picking
Tables, Loading Booms.

LONG FUEL COMPANY

General Office, Goff Bldg., Clarksburg, W.
Va.
PR—J. Edgar Long, Clarksburg, W. Va.
VP—A. S. Long, Clarksburg, W. Va.
TR—J. Edgar Long, Clarksburg, W. Va.
GM—J. Edgar Long, Clarksburg, W. Va.
GS—A. V. Morgan, Nutter Port, W. Va.
PA—J. Edgar Long, Clarksburg, W. Va.
EM—Hornor Bros., Clarksburg, W. Va.
SA—Sales Agency—J. E. Long Coal Co.,
Clarksburg, W. Va.

Kester Mine; Drift; Pittsburgh Seam, 84
in. thick.
PO—Clarksburg, W. Va.; SP—Same and
Kester Mine Siding; CTY—Harrison;
RR—B. & O.
S of H—Mules. Track gage 42 in.
S of M—Hand.
EMP—67. Last years tonnage 62,460.
SIZES SHIPT—Run of Mine.

LONG, J. E. COAL MINING COMPANY

PR—J. Edgar Long, Clarksburg, W. Va.
VP—A. S. Long, Clarksburg, W. Va.
TR—J. Edgar Long, Clarksburg, W. Va.
GM—J. Edgar Long, Clarksburg, W. Va.
PA—J. Edgar Long, Clarksburg, W. Va.
EM—Hornor Bros., Clarksburg, W. Va.
GS—A. V. Morgan, Nutter Port, W. Va.
SA—Sales Agency—J. E. Long Coal Co.,
Clarksburg, W. Va.

Burke Mine; Drift; Pittsburgh Seam, 99
in. thick.
PO—Clarksburg, W. Va.; SP—Same and
Burke Siding; CTY—Harrison; RR—
B. & O.
S of H—Mules. Track gage 42 in.
S of M—Hand.
EMP—26. Last years tonnage 18,950.
SIZES SHIPT—Run of Mine.

LOOKOUT COAL & COKE CO.

Now a part of the New River Export
Smokeless Coal Company.

LOOP COAL COMPANY.

General Office, Elkins, W. Va.
PR—P. F. King, Elkins, W. Va.
VP—W. R. Cromwell, Elkins, W. Va.
TR—P. F. Tallman, Elkins, W. Va.
GM—P. F. King, Elkins, W. Va.
SC0—Loop Store, Buyer, P. F. King,
Elkins, W. Va.

Loop Mine; Drift; Kittanning Seam, 60
in. thick.
PO—Elkins, W. Va.; SP—Loop, W. Va.;
CTY—Randolph; RR—Coal & Coke.
S of H—Mules.
S of M—Hand.
Daily output, 400 tons.
SIZES SHIPT—Run of Mine.

LORAIN COAL AND COKE CO.

General Office, Columbus, O.
PR—F. W. Braggins, Columbus, O.
VP—R. L. Wildermuth, Columbus, O.
GM—R. L. Wildermuth, Columbus, O.
Chairman, Board of Directors—Edward
Johnson, Columbus, O.
PA—J. R. Johnson, Columbus, O.
CE—G. W. Wyss, Bridgeport, O.
EM—J. P. Somers, Lorado, W. Va.
SC0—Lorado Store, Mgr., T. R. Crum-
pler, Lorado, W. Va.
Additional Information on Page 1024

Lorado No. 1 Mine; Drift; Cedar Grove
Seam, 72 to 96 in. thick.
PO—Lorado, W. Va.; SP—Same; CTY—
Logan; RR—C. & O.
MS—J. W. Johnson, Lorado, W. Va.
S of H—7 trolley pole type locos.
S of M—5 chain breast type machs.
EMP—225. Last years tonnage 181,896.
SIZES SHIPT—Run of Mine, Slack, Nut,
Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking
Tables, Loading Booms.

Lorado No. 2 Mine; Drift; Cedar Grove
Seam, 72 to 96 in. thick.
PO—Lorado, W. Va.; SP—Same; CTY—
Logan; RR—C. & O.
MS—J. W. Johnson, Lorado, W. Va.
S of H—6 trolley pole type locos.
S of M—5 chain breast type machs.
EMP—200. Last years tonnage 156,769.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens, Picking
Tables, Loading Booms.

LORY COAL & COKE COMPANY

General Office, Lory, W. Va.
PR—Wm. A. Markill, Charleston, W. Va.
VP—B. S. Preston, Charleston, W. Va.
GM—W. R. Morris, Lory, W. Va.
CS—W. R. Morris, Lory, W. Va.
PA—W. R. Morris, Lory, W. Va.
CE—Hessell Miller, Madison, W. Va.
SA—Old Dominion Coal Corp.

Lory Mine; Drift; Cedar Grove Seam, 48
in. thick.
PO—Lory, W. Va.; SP—Same; CTY—
Roane; RR—C. & O.
MS—Ed. Forbes, Lory, W. Va.
S of H—Mules. Track gage 44 in.
S of M—1 shortwall mach.
PP—2 fire tube boilers, 100 H. P.,
1 100 K. W. gen. unit, 250 volts
D. C., 4 pumps.
EMP—20. Last years tonnage 12,356.
SIZES SHIPT—Run of Mine.

LOST CREEK COAL COMPANY

General Office, 615 Goff Bldg., Clarke-
burg, W. Va.
PR—Austin C. McIntire, Clarksburg, W. Va.
VP—G. W. Morris, Clarksburg, W. Va.
TR—W. M. Elliott, " "
GM—O. S. McIntire, " "
GS—O. S. McIntire, Clarksburg, W. Va.
PA—O. S. McIntire, Clarksburg, W. Va.
EM—O. S. McIntire, " "
Additional Information on Page 1025

Whiteman Mine; Drift; Pittsburgh Seam,
66 inches thick.
PO—Clarksburg, W. Va.; SP—Same;
CTY—Harrison; RR—B. & O.
MS—L. W. Keaster, Adamston, W. Va.
S of H—Mules, 1 gasoline loco. Track
gage 42 in.
S of M—Room and pillar, Ariswall machs
PP—Purchase power, Transformer 200
volts A. C.
EMP—40. Daily tonnage 250.
SIZES SHIPT—Run of Mine.

LOUISVILLE COAL & COKE CO.

General Office, Goodwill, W. Va.
PR—Justus Collins, Box 1321, Charles-
ton, W. Va.

VP—Robert C. Watts, Lynchburg, Va.
GM—Justus Collins, Bramwell, W. Va.
GS—L. Epperly, Bramwell, W. Va.
PA—L. Epperly, Bramwell, W. Va.
CE—W. Va. Engineering Co., Charleston,
W. Va.
EM—T. A. Knott, Goodwill, W. Va.
SC0—Address the Company, Buyer, H.
P. Willis, Goodwill, W. Va.
SA—Smokeless Fuel Co., Charleston, W.
Va.

Additional Information on Page 1050

Louisville Mine Drift; No. 3 Seam, 54
in. thick.
PO—Goodwill, W. Va.; SP—Same (pre-
pay), CTY—Mercer. RR—N. & W.
Bluestone Branch.
MS—S. S. Nunn, Goodwill, W. Va.
SM—J. M. Herndon, Goodwill, W. Va.
S of H—Mules, trolley pole type and
storage battery locos. Track gage,
44 in.
S of M—2 shortwall machs.
PP—Power purchased, Transformer 2,200
to 220 volts A. C., rotary con-
verters, 250 volts D. C., 5 pumps.
EMP—350. Last years tonnage 132,000.
SIZES SHIPT—Run of Mine, Slack, Nut,
Egg, Lump.
PREP. EQUIPT—Screens, Picking Tables,
Washeries.

LOUP CREEK COLLIERY COMPANY

General Office, Page, W. Va.
PR—C. H. Hix, Terminal Bldg., Nor-
folk, Va.
VP—C. W. Huntington, 60 Wall St.,
New York, N. Y.
TR—F. W. Russell, Terminal Bldg., Nor-
folk, Va.
GM—J. C. R. Taylor, Page, W. Va.
GS—J. C. R. Taylor, Page, W. Va.
PA—J. C. R. Taylor, Page, W. Va.
CE—West Virginia Engineering Co.,
Charleston, W. Va.
EE—West Virginia Engineering Co.,
Charleston, W. Va.
SC0—Address the Company, Buyer, J. P.
Twobleg, Page, W. Va.

Loup Creek No. 1 Mine; Drift; No. 1
Gas or Eagle Seam, 72 in. thick.
PO—Page, W. Va.; SP—Same; CTY—
Fayette; RR—Virginian.
MS—D. S. Donley, Page, W. Va.
S of H—4 trolley pole type locos. Track
gage, 44 in.
S of M—2 overhead cutter machs.
PP—Power purchased, transformer 44-
000 to 2200 volts A. C., 2 200
K. W. M. G. sets, 500 volts D.
C., 3 pumps.
EMP—75.
SIZES SHIPT—Run of Mine.

Loup Creek No. 2 Mine; Drift; No. 2
Gas or Kanawha Seam, 48 in.
thick.
PO—Page, W. Va.; SP—Same; CTY—
Fayette; RR—Virginian.
MS—D. S. Donley, Page, W. Va.
S of H—13 trolley pole type and 3 25
ton steam locos. Track gage 44 in.
S of M—6 shortwall and 1 overhead
mach.
PP—Power purchased, transformer 44-
000 to 2200 volts A. C., 2 200
K. W. M. G. sets, 500 volts D.
C., 2 50 H. P. fire tube boilers,
6 pumps.
EMP—225. Daily output, 850 tons.
SIZES SHIPT—Run of Mine.

Beards Fork Mine; Drift; No. 2 Gas
Seam, 48 inches thick.
PO—Beards Fork, W. Va.; SP—Same;
CTY—Fayette; RR—Virginian.
MS—W. E. James, Beards Fork, W. Va.
SM—P. H. Atkinson, Beards Fork, W. Va.
S of H—12 trolley pole type locos.
Track gage 44 in.
S of M—11 shortwall machs.
PP—Power purchased, Transformer 44000
-2200 volts A. C., 2—200 K. W.
rotary converters, 250 volts D. C.,
5 pumps.
EMP—150. Daily output, 1,000 tons.
SIZES SHIPT—Run of Mine, Slack.
PREP. EQUIPT—Gravity Screens.

LOVE COAL COMPANY

General Office, Emoryville, W. Va.
PR—James E. Cross, Keyser, W. Va.
VP—John Burdick, Elk Garden, W. Va.
TR—Ed. Atchison, Elk Garden, W. Va.
GM—P. H. Love, Emoryville, W. Va.
GS—P. H. Love, Emoryville, W. Va.
PA—F. H. Love, Emoryville, W. Va.
Love Mine Drift; Bakerstown Seam, 43
in. thick.
PO—Emoryville, W. Va.; SP—Same; CTY—
Mineral; RR—W. M.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
PP—1 pump.
EMP—15. Last years tonnage 2,407.
SIZES SHIPT—Run of Mine.

LOW ASH COAL COMPANY, INC.

General Office, 1121 10th St., Hunting-
ton, W. Va.
PR—J. Heatherman, Huntington, W.
Va.
VP—Jas. Heatherman, Huntington, W.
Va.

TR—J. Heatherman, Huntington, W. Va.
GM—Jas. Heatherman, Huntington,
W. Va.
GS—Jas. Heatherman, Huntington, W.
Va.
PA—Jas. Heatherman, Huntington, W. Va.
EM—Edlow McCoke, Logan, W. Va.
EE—H. E. Ross, Madison, W. Va.
SA—Twin State Fuel Co., Huntington,
W. Va.

Low Ash Mine; Drift; Eagle Seam, 84
in. thick.
PO—Crowe, W. Va.; SP—Accoville, W.
Va.; CTY—Logan; RR—C. & O.
S of H—Mules, storage battery and steam
locos. Track gage 44 in.
S of M—2 elec. punchers and 2 shortwall
and longwall machs.
PP—Power purchased, Transformer 2200-
220 volts A. C.
EMP—75. Last years tonnage 50,000.
SIZES SHIPT—Run of Mine.

LOW MOOR IRON CO. OF VA.

General Office, Low Moor, Va.
PR—Frank Lyman, 14 Wall St., New
York, N. Y.
VP—H. T. White, 14 Wall St., New
York, N. Y.
TR—H. A. Dalton, 14 Wall St., New
York, N. Y.
GM—Frank U. Humbert, Low Moor, Va.
GS—J. W. Montleth, Low Moor, Va.
PA—G. W. Lipscomb, Low Moor, Va.
CE—L. M. Hartack, Low Moor, Va.
EM—J. K. Rothrock, Kay Moor, W. Va.
SC0—Low Moor Stores, Kay Moor, W.
Va.; Buyer, H. N. Sanford, Low
Moor, Va.
SA—Walter Wallingford Coal Co., Cin-
cinnati, O.; Virginia Sales Agency,
Covington, Va.

Kay Moor No. 1 Mine; Drift; Sewell
Seam, 33 to 48 in. thick.
PO—Kay Moor, W. Va.; SP—Same; CTY—
Fayette; RR—C. & O., Main
Line.

MS—E. M. Cabell, Kay Moor, W. Va.
SM—B. B. Legg, Kay Moor, W. Va.
S of H—13 trolley pole type locos. Track
gage 44 in.
S of M—Shortwall mach.
PP—3 water tube boilers, 800 H. P.,
1—300 K. W., 1—350 K. W.,
1—150 K. W. rotary converters,
250 volts D. C., 12 pumps.
EMP—260. Daily tonnage 600. Coke
ovens, 202 Bee Hive.
SIZES SHIPT—Run of Mine, Slack, Egg,
Lump.
PREP. EQUIPT—Gravity Screens.

Kay Moor No. 2 Mine; Drift; Sewell
Seam, 33 to 44 in. thick.
PO—So. Fayette, W. Va.; SP—Same;
CTY—Fayette; RR—C. & O.

MS—A. L. Montleth, Fayette, W. Va.
SM—B. B. Legg, Kay Moor, W. Va.
S of H—3 trolley pole type locos. Track
gage 44 in.
S of M—2 shortwall machs.
PP—Power purchased, 3,300 to 220
transformers, M. G. sets, 250 volts
D. C., 2 pumps.
EMP—60. Daily tonnage 125.
SIZES SHIPT—Run of Mine.

LOW VOLATILE COLLIERIES COMPANY

General Office, First National Bank Bldg.,
Piedmont, W. Va.
PR—W. M. Strock, Hagerstown, Md.
VP—E. E. Strock, Hagerstown, Md.
GM—Geo. W. Strock, Hagerstown, Md.
GS—Geo. W. Strock, Hagerstown, Md.
PA—Geo. W. Strock, Hagerstown, Md.

Low Volatile No. 1 Mine; Drift; Bakers-
town Seam, 36 in. thick.
PO—Emoryville, W. Va.; SP—Harrison,
Va.; or Elk Garden, W. Va.; CTY—
Mineral; RR—W. Md.
S of H—Mules. Track gage 40 in.
S of M—Hand.
PP—1—30 H. P. fire tube boiler
EMP—30. Last years tonnage 13,451.
SIZES SHIPT—Run of Mine.

LOW VOLATILE CONSOLIDATED COAL CO.

General Office, Beckley, W. Va.
PR—C. H. Mead, Beckley, W. Va.
VP—H. D. Rummel, Charleston, W. Va.
TR—J. P. Nowlin, Beckley, W. Va.
GM—C. H. Mead, Beckley, W. Va.
GS—W. B. Parks, Beckley, W. Va.
PA—W. W. Woods, Minden, W. Va.
EM—J. C. Mabe, Beckley, W. Va.
EE—P. C. Miller, Beckley, W. Va.
SC0—Address the Company, Buyer, H.
M. Baber, Minden, W. Va.

Rock Lick Mine; Drift; Sewall Seam; 48
in. thick.
PO—Minden, W. Va.; SP—Thurmond, W.
Va.; CTY—Fayette; RR—C. & O.
MS—W. W. Woods, Minden, W. Va.
S of H—Elec. and storage battery locos.
Track gage 44 inches.
S of M—Shortwall machs.
PP—Purchase power, Transformer 2-
300-550 volts, M. G. sets.
EMP—157. Last years tonnage 123,245.
SIZES SHIPT—Run of Mine.

(Continued on Next Page)

Low Volatile Consolidated Coal Co.—Cont.
Concho Mine; Drift; Fire Creek Seam; 48 in. thick.
PO—Mindon, W. Va.; SP—Thurmond, W. Va.; CTY—Fayette; RR—C. & O.
S of H—Electric storage battery loco. Track gage 41 inches.
S of M—Machines.
Note—Formerly operated by the Rock Lick Coal Co.

LUCKY JACK MINING COMPANY
General Office, Kingswood, W. Va.
PR—Parker S. Sniffin, Kingswood, W. Va.
GM—C. J. Spencer, Kingswood, W. Va.
GS—C. J. Spencer, Kingswood, W. Va.
PA—C. J. Spencer, Kingswood, W. Va.
EM—Parker S. Sniffin, Kingswood, W. Va.
Lucky Jack Mine; Slope; Precipit Seam, 60 inches thick.
PO—Kingswood, W. Va.; SP—Same; CTY—Fayette; RR—W. Va. N.
S of H—Mules, rope and electric locos.
S of M—Hand, electric puncher and chain breast machs.
PP—2 fire tube boilers, 150 H. P., gen. units, 100 K. W., 250 volts D. C.
EMP—40. Daily tonnage 150.
SIZES SHIPT—Run of Mine.

LUNDAL COAL COMPANY
General Office, Huntington, W. Va.
PR—Geo. M. Jones, Lunda, W. Va.
VP—J. N. Schwartz, Lunda, W. Va.
TR—F. P. Chambers, Lunda, W. Va.
GM—T. F. Downing, Jr., Lunda, W. Va.
GS—W. W. P. drow, Lunda, W. Va.
PA—J. B. Kirkpatrick, Lunda, W. Va.
CE—H. F. Randolph, Pittsburgh, Pa.
EM—F. M. Herr, Lunda, W. Va.
LE—H. F. Randolph, Pittsburgh, Pa.
SCO—Address the Company, Buyer, J. B. Kirkpatrick, Lunda, W. Va.
SA—Vanderbilt Fuel Co., Lunda, W. Va.
Additional Information on Page 1026

Lunda Mine; Drift; Cedar Grove Seam, 38 in. thick.
PO—Lunda, W. Va.; SP—Same, Frt., Cranen, W. Va.; CTY—Logan; RR—C. & O.
MS—P. J. Stanton, Lunda, W. Va.
SM—R. B. Broadwater, Lunda, W. Va.
S of H—18 trolley pole type locos. Track gage 44 in.
S of M—2 chain breast type, 3 shortwall and 3 overhead cutler machs.
PP—Power purchased Transformer 41000—2200 volts A. C., M. G. Sets, 250 volts D. C.
EMP—300. Daily tonnage 2200.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

Latrobe Mine; Drift No. 2 Gas Seam, 54 in. thick.
PO—Latrobe, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
MS—P. J. Stanton, Lunda, W. Va.
SM—R. B. Broadwater, Lunda, W. Va.
S of H—3 trolley pole type elec. locos. Track gage 44 in.
S of M—2 shortwall machs.
PP—Power purchased Transformer 44000—2200 volts A. C., M. G. Sets, 250 volts D. C.
EMP—28. Last years tonnage 42,000.
SIZES SHIPT—Run of Mine.

LYNCH, P. C. COAL CO., THE
General Office, Weston, W. Va.
PR—C. L. Goodwin, Greensburg, Pa.
VP—P. P. Griffin, Lock Haven, Pa.
TR—P. C. Lynch, Blue Jay, W. Va.
GM—P. C. Lynch, Blue Jay, W. Va.
GS—S. T. Farley, Weston, W. Va.
PA—S. T. Farley, Weston, W. Va.
No. 1 Mine; Redstone Seam, 60 in. thick.
PO—Weston, W. Va.; SP—Grafton, W. Va.; CTY—Lewis; RR—B. & O.
S of H—Mules. Track gage 42 in.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Shaker Screens.

LYNCHBURG COAL & COKE CO.
PR—L. E. Tierney, Kyle, W. Va.
GM—L. E. Tierney,
TR—R. H. T. Adams, Jr., Lynchburg, Va.
PA—T. W. Chambers, Eckman, W. Va.
MM—R. H. Morris, Kyle, W. Va.
EM—G. H. Wilcox,
EE—C. F. Duver, Powhatan, W. Va.
SCO—Address the Company, Buyer, W. A. O'Brien, Kyle, W. Va.
Sales Agency, Crozer, Penobscot Co., Philadelphia, Pa., and W. J. Beals, Bluefield, W. Va.

Lynchburg Mine; Drift; Pocah. No. 3 Seam, 84 to 108 in. thick.
PO—Kyle, W. Va.; SP—Northfork, W. Va.; CTY—Melbourne; RR—N. & W.
S of H—2 elec. loco. Track gage 43½ in.
S of M—1 chain breast mach.
PP—5 Roman tubular boilers, total 575 H. P., 1 compressor, 6 pumps. Purchase power.
EMP—268.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
No information.

LYNCHBURG COLLIERY CO.
General Office, Vauetta, W. Va.
PR—J. T. Noth, Jr., Lynchburg, W. Va.
TR—T. A. Deitz, Vauetta, W. Va.
GM—T. A. Deitz,
PA—T. A. Deitz,
EM—E. B. Reiser, Kanawha Falls, W. Va.
SCO—Address the Company, Buyer, J. R. Harrah, Vauetta, W. Va.

Lynchburg Mine; Drift; No. 2 Gas and No. 5 Black Seams, 36 and 72 in. thick.
PO—Vauetta, W. Va.; SP—Same, CTY—Fayette; RR—C. & O.
MS—T. A. Deitz, Vauetta, W. Va.
S of H—Mules, trolley pole type and steam locos. Track gage, 40 in.
S of M—1 shortwall machs.
PP—Power purchased, Transformer 2300—250 volts A. C., 2 rotary converters, 250 volts D. C., 2 pumps.
EMP—75. Last years tonnage 19,180.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

LYNN COAL & COKE COMPANY
General Office, McCar, Ky.
PR—Frank P. Hamman, Washington, D. C.
VP—Everett McD. Hamman, Burch, W. Va.
TR—J. D. Tate, Chillsow, Va.
GM—Everett McD. Hamman, Burch, W. Va.
GS—J. D. Carden, McCar, Ky.
PA—J. D. Carden, McCar, Ky.
LE—J. D. Carden, McCar, Ky.
SCO—Address the Company, Buyer, S. Percy, McCar, Ky.
SA—Percy, McCar & Son, Philadelphia, Pa.

Thacker Mine; Drift; Thacker Seam, 52 in. thick.
PO—McCar, Ky.; SP—Exp., McCar, Ky.; Frt., Lynn Sliding, W. Va.; CTY—Mingo; RR—N. & W.
MS—W. J. Ferris, McCar, Ky.
S of H—2 trolley pole type and 2 storage battery locos. Track gage, 48 inches.
S of M—4 shortwall machs.
PP—Power purchased, transformer 33,000—2200 volts A. C., M. G. Sets, 275 volts D. C., 5 pumps.
EMP—150. Last years tonnage 150,000.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens.

LYNWIN COAL CO.
General Office, Blue Jay, W. Va.
PR—C. L. Goodwin, Greensburg, Pa.
VP—P. P. Griffin, Lock Haven, Pa.
TR—P. C. Lynch, Blue Jay, W. Va.
GM—P. C. Lynch,
GS—C. S. Lewis, Winding Gulf, W. Va.
PA—S. T. Farley,
EM—S. T. Farley,
SCO—Address the Company, Buyer, C. S. Lewis, Winding Gulf, W. Va.
Sales Agency—Eastern Coal and Export Corp., Richmond, Va.

Lynwin Mine; Drift; Beckley Seam, 50 to 70 in. thick.
PO—Winding Gulf, W. Va.; SP—Mistletoe, W. Va.; CTY—Raleigh; RR—Virginian.
S of H—12 mules, endless rope and trolley pole type locos. Track gage, 42 in.
S of M—2 shortwall machs.
PP—Power purchased.
EMP—78. Last fiscal year output, 65,000 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Table.

LYONS COAL COMPANY
Out of Business.

MACALPIN COAL CO.
General Office, Charleston, W. Va.
PR—John Laing, Charleston, W. Va.
VP—W. H. Warren, Richmond, Va.
TR—P. J. Robinson, Charleston, W. Va.
GM—A. W. Laine, MacAlpin, W. Va.
MM—R. A. Cunningham,
PA—E. O. Bird, Charleston, W. Va.
EM—Macrell Engineering Co., Beckley, W. Va.
SA—The Wyatt Coal Sales Co., Charleston, W. Va.

MacAlpin Mine; Drift; Beckley Seam, 54 to 72 in. thick.
PO—MacAlpin, W. Va.; SP—Same; CTY—Raleigh; RR—C. & O. and Virginian.
MS—W. P. Riley, MacAlpin, W. Va.
S of H—17 elec. locos. Track gage 48 inches.
S of M—12 elec. mach.
PP—Power purchased, 3—200 K. W. M. G. sets, 250 volts D. C., 3 pumps.
EMP—250. Last fiscal year output 275,000 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

McDOWDER COAL COMPANY
Now Alexander By Products Co.

McCALL COAL COMPANY
General Office, Logan, W. Va.
PR—W. C. McCall, Logan, W. Va.
VP—H. A. McCall, Logan, W. Va.
TR—J. R. Slack, Logan, W. Va.
GM—Fred Haislip, Logan, W. Va.
GS—H. M. Venable, Christian, W. Va.
PA—Fred Haislip, Logan, W. Va.
EM—W. C. McCall, Logan, W. Va.
SA—Lake Export Coal Corp., Huntington, W. Va.

Additional Information on Pages 1020, 1021.

McCall Mine; Drift; Island Creek Seam, 60 inches thick.
PO—Christian, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
MS—T. W. Gosney, Christian, W. Va.
S of H—Eler loco.
S of M—Shortwall mach.
PP—Power purchased, Transformer 2200 to 220 volts A. C., M. G. Sets, 220 volts D. C.
EMP—60. Daily tonnage 500.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Bar Screens.

McCANN, WARREN E. COAL CO.
Elerton, W. Va.
Nos. 1, 4, 6, 7 and 17 Mines; CTY—Mingo.
No report.

McCLENNAN COAL COMPANY
General Office, Uniontown, Pa.
PR—H. W. Semans, Uniontown, Pa.
TR—H. W. Semans,
GM—T. J. McClellan,
PA—T. J. McClellan,
EM—T. J. McClellan,

Winona Mine; Drift; Freeport Seam, 60 in. thick.
PO—R. D. No. 3, Grafton, W. Va.; SP—Coffman, W. Va.; CTY—Taylor; RR—B. & O.
S of H—2 elec. locos. Track gage 42 in.
S of M—4 elec. machs.
PP—3 water tube boilers, 2 gen. units, 150 and 250 volts D. C.
Daily output, 300 tons.

McCONNELL COAL COMPANY
General Office, Aeneid, W. Va.
PR—A. L. Hinchman, Aeneid, W. Va.
VP—W. L. Shipe, Aeneid, W. Va.
TR—G. E. Shipe, Aeneid, W. Va.
GM—G. E. Shipe, Aeneid, W. Va.
GS—L. E. Perry, Aeneid, W. Va.
PA—G. E. Shipe, Aeneid, W. Va.
CE—J. E. McTurk, Logan, W. Va.
SCO—Address the company, Buyer, G. E. Shipe, Aeneid, W. Va.
SA—Hogen-Minkin Fuel Co., Huntington, W. Va.

McConnell Mine; Slope; Cedar Grove; Seam 26 in. thick.
PO—Aeneid, W. Va.; SP—McConnell, W. Va.; CTY—Logan; RR—C. & O.
Gavan Valley Tr.
S of H—Mul. Track gage 44 inches.
S of M—1 shortwall mach.
PP—Power purchased Transformer 4400—220 volts A. C., 250 volts D. C., 3 pump.
EMP—18. Last years tonnage 6,000.
SIZES SHIPT—Run of Mine.

McCOY COAL CO.
General Office, Fairmont, W. Va.
PR—Ernest McCoy, Fairmont, W. Va.
VP—S. R. McCoy, Fairmont, W. Va.
TR—M. K. McCoy, Fairmont, W. Va.
GM—Ernest McCoy,
PA—Ernest McCoy,

McCoy Mine; Drift; Pittsburg Seam, 102 in. thick.
PO—Fairmont, W. Va.; SP—Same; CTY—Marion; RR—B. & O.
S of H—Mules and mule and tall rope. Track gage 44 in.
S of M—Hand.
PP—Power purchased Transformer 220 volts A. C., 1 pump.
EMP—9. Last years tonnage 5,127.
SIZES SHIPT—Run of Mine, Slack.

MacDONALD, J. M. COAL MNG. CO., THE
General Office 2009 Union Central Bldg., Cincinnati, Ohio.
PR—J. M. MacDonald, Cincinnati, O.
VP—M. D. MacDonald, Cincinnati, O.
TR—J. M. MacDonald, Cincinnati, O.
GM—P. G. Gaultier, Cincinnati, O.
GS—Jas. H. Haislip, Rosbud, W. Va.
PA—J. M. MacDonald, Cincinnati, O.
EM—Hornor Engineering Co., Charleston, W. Va.
LE—Fay Scott, Rosbud, W. Va.
SCO—J. M. MacDonald Coal Mining Co., Buyer, A. K. Smith, Cincinnati, O.
SA—J. M. MacDonald Coal Mining Co., Cincinnati, O.

Rosbud Nos. 1 and 2 and Gilbert Mine; Drift; Pittsburg Seam, 84 in. thick.
PO—Rosbud, W. Va.; SP—Same (Pre-nary); CTY—Harrison; RR—B. & O.
S of H—2 elec. locos. Track gage 42 in.
S of M—Room and pillar.

PT—1 fire tube boiler 150 H. P., 275 K. W. Generator 100,000 volts D. C., 9 pumps.
EMP—150. Last years tonnage 80,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

McDOWELL COAL & COKE CO.

PR—Edward Cooper, Bramwell, W. Va.
TR—The H. Cooper, Jr., Coopers, W. Va.
GM—H. W. Rawson, McDowell, W. Va.
ASST. GM—T. H. Cooper, Jr., Coopers, W. Va.
PA—H. W. Rawson, McDowell, W. Va.
EE—T. H. Cooper, Jr., McDowell, W. Va.
SCO—Address the Company, Buyer, H. L. Dutton, McDowell, W. Va.
Sales Agency, First Top Fuel Co., Bluefield, W. Va.

McDowell Mine; Drift; Pocah. No. 3 Seam, 60 to 72 in. thick.
PO—McDowell, W. Va.; SP—Crumpler, W. Va.; CTY—McDowell, RR—N. & W., North Fork Br.
MF—R. F. Cowan, McDowell, W. Va.
OF—J. H. Hancock,
S of H—Mules and 7 elec. loco. Track gage 41 in.
S of M—3 elec. machs.
PP—4 return tubular boilers, total 600 H. P., 2 gen. units, 500 volts D. C., 5 pumps.
EMP—200. Last fiscal year output, 238,282 tons. Coke ovens 100 Bee Hives.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Bar and Shaker Screens, Picking Tables.

McGREGOR COAL CO.

General Office, Charleston, W. Va.
PR—John Laing, Charleston, W. Va.
VP—James P. Prince, Prince, W. Va.
TR—T. J. Robinson, Charleston, W. Va.
GM—James Martin, Charleston, W. Va.
GS—W. A. Gilchrist, Slagle, W. Va.
PA—E. O. Byrd, Charleston, W. Va.
CE—R. E. Carson, Huntington, W. Va.
EM—R. M. Green, Charleston, W. Va.
SCO—Address the Company, Buyer, E. O. Byrd, Charleston, W. Va.
Sales agent, Wyatt Coal Co., Charleston, W. Va.

McGregor Nos. 1, 3 and 4 Mines; Drift, Chilton Seam, 38-81 in. thick.
PO—Slagle, W. Va.; SP—Same; CTY—Logan; RR—C. & O., Rom Creek Br.
S of H—Mules and 7 elec. locos. Track gage 48 in.
S of M—11 elec. mach.
PP—1 rotary. Buy power.
EMP—250. Last fiscal year output 202,982 tons.

McKANWIG COAL COMPANY.

General Office, Philipburg, Pa.
PR—E. L. Kantz, Philipburg, Pa.
TR—S. H. Wighton, Philipburg, Pa.
GS—David Longatt, Ravard, W. Va.
PA—S. H. Wighton, Philipburg, Pa.

Netiken Mine; Drift; Upper Freeport Seam, 46 in. thick.
PO—Bayard, W. Va.; SP—Same; CTY—Garrett; RR—Western Md.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
EMP—45. Last years tonnage 27,000.
SIZES SHIPT—Run of Mine.

McKEEFREY COAL CO. OF W. VA.

General Office, Pittsburgh, Pa.
PR—John McKee, Chillicothe, O.
VP—W. D. McKee, Lexington, O.
TR—N. J. McKee,
GM—W. D. McKee, Lexington, O.
GS—James H. Anderson, Uniontown, Pa.
SA—McKee & Co., Lexington, O.

Shaft; Pittsburgh Seam 6 foot thick.
PO—Monroeville, W. Va.; SP—McAlpin, W. Va.; CTY—Marshall; RR—B. & O.

McKELL COAL & COKE COMPANY

General Office, Glen Jean, W. Va.
PR—John D. McKell, Chillicothe, O.
TR—W. R. Ballard, Glen Jean, W. Va.
GM—Thomas Nichol, Glen Jean, W. Va.
GS—W. R. Ballard, Glen Jean, W. Va.
PA—W. R. Ballard, Glen Jean, W. Va.
CE—Monks & Johnson, Boston, Mass.
EM—V. S. Vazey, Fairclough, W. Va.
EE—C. P. Gilmore, Kilsyth, W. Va.
SCO—Address the Company, Buyer, J. B. Craver, Kilsyth, W. Va.
Sales Agent, C. G. Blake, Cincinnati, O.

Berrydale Mine; Drift; Sewell Seam, 68 in. thick.
PO—Berrydale, W. Va.; SP—Same; CTY—Fayette; RR—K. G. J. & E. C. & O.

MS—J. M. Rame, Berrydale, W. Va.
SM—P. C. Fieldon, Berrydale, W. Va.
S of H—Mules and 2 trolleys. 15 elec. locos. Track gage, 43 in.
S of M—1 shortwall mach.
PP—Power purchased—250 vol. D. C.
EMP—52. Last fiscal year output 68,300 tons.

(Continued on Next Page)

McKell Coal & Coke Company—Cont

Kilsyth Mine; Drift; Sewell Seam, 60 in. thick.

PO—Kilsyth, W. Va.; **SP**—Same; **CTY**—Fayette; **RR**—K. G. J. & E.
MS—C. B. W. J. Kilsyth, W. Va.
S of H—2 trolley pole type and 6 storage battery locos. Track gage, 44 in.

S of M—6 shortwall machs.
PP—1 500 K. W., 1 1000 K. W. gen. units, transformer 6600 to 250 volts A. C., rotary converters, 250 volts D. C., 6 pumps.
EMP—213. Last fiscal year output, 241,000 tons.
SIZES SHIPT—Run of Mine.

Oswald Mine; Drift; Sewell Seam, 52 in. thick.

PO—Oswald, W. Va.; **SP**—Same; **CTY**—Randolph; **RR**—K. G. J. & E.
MS—G. E. Smith, Oswald, W. Va.
S of H—7 trolley pole type locos. Track gage, 44 in.

S of M—6 shortwall machs.
PP—Power furnished by Kilsyth plant, rotary converters, 250 volts D. C.
EMP—120. Last fiscal year output, 95,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Loading Booms.

Tamroy Mine; Drift; Sewell Seam, 54 in. thick.

PO—Tamroy, W. Va.; **SP**—Same; **CTY**—Randolph; **RR**—K. G. J. & E.
MS—C. A. McKee, Tamroy, W. Va.
S of H—Trolley pole type loco. Track gage, 44 in.

S of M—6 shortwall machs.
PP—Power furnished by Kilsyth plant, 250 volts D. C.
EMP—102. Last fiscal year output, 95,900 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Loading Booms.

McMillan Coal Co.

Wheeling, W. Va.

McMillan Mine; CTY—Marshall.
No report.

McWhorter Coal Co.

McWhorter, W. Va.

Raven Mine; CTY—Harrison.
No report.

MABEL COAL CO.

General Office, Huntington, W. Va.
PR—W. E. Ferguson, Huntington, W. Va.
VP—L. M. Turner, Huntington, W. Va.
TR—J. Frank Grimes, Huntington, W. Va.
GM—J. M. Turner, Huntington, W. Va.
GS—C. H. Hoffman, Huntington, W. Va.
PA—John Faulkner, Huntington, W. Va.
CE—R. M. Wilson, Malloy, W. Va.
EM—Morris Hansford, Huntington, W. Va.
SCO—Faulkner Store, Buyer, R. C. Turner, Huntington, W. Va.
SA—W. E. Deagan Coal Co., Huntington, W. Va.

Faulkner Mine; Drift; Island Creek Seam, 54 in. thick.

PO—Malloy, W. Va.; **SP**—Hoffville, W. Va.; **CTY**—Logan; **RR**—G. Branch & O.

MS—W. D. Pety, Malloy, W. Va.
S of H—2 storage battery and 2 elec. locos. Track gage 44 inches.

S of M—2 shortwall machs.
PP—Power purchased, Transformer 2300-250 volts A. C., 250 volts D. C., 1-40 H. P. water tube boiler, 1 pump.

EMP—80. Daily tonnage 250.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

MABSCOTT COAL & COKE CO

Mabscott, W. Va.

Mabscott Mine; CTY—Randolph.
No report.

MACBETH COAL COMPANY

General Office, Charleston, W. Va.
PR—John Laing, Charleston, W. Va.
VP—A. W. Laing, MacAlpin, W. Va.
TR—T. J. Robson, Charleston, W. Va.
GM—John Laing, Charleston, W. Va.
GS—Lamson Martin, Charleston, W. Va.
PA—E. O. Bird, Charleston, W. Va.
CE—C. P. Carson, Huntington, W. Va.
SCO—Address the company, Buyer, E. O. Bird, Charleston, W. Va.
SA—The West Coal Sales Co., Charleston, W. Va.

Macbeth Mine; Slope and Shaft; Eagle Seam 66 in. thick.

PO—Forklog, W. Va.; **SP**—Macbeth Side; **CTY**—Logan; **RR**—C. & O.
MS—M. L. Richmond, Forklog, W. Va.
SM—M. L. Richmond, Forklog, W. Va.

S of H—3 trolley pole type, 1 storage battery loco. Track gage 44 inches.
S of M—2 chain breast type machs.
PP—Power purchased, Transformer 44-000 to 250 volts A. C., M. G. set, 250 volts D. C.
EMP—40. Last years tonnage 25,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Loading Booms.

MACDONALD COLLIERY CO

Now part of New River Co.

MACK COAL COMPANY

General Office, Shinnston, W. Va.

Mack Mine.
PO—Viropia, W. Va.; **CTY**—Harrison; **RR**—B. & O.
No report.

MADEIRA-HILL-CLARK COAL CO.

General Office, North American Bldg., Philadelphia, Pa.

PR—P. C. Madeira, North American Bldg., Philadelphia, Pa.
VP—R. C. Hill, New York, N. Y.
TR—L. C. Madeira, Philadelphia, Pa.
GM—ohn Gilbert, Philadelphia, Pa.
GS—J. Wm. Wetter, Philadelphia, Pa.
PA—R. A. Morgan, Wilsonburg, W. Va.
CE—H. L. Lenker, Wilsonburg, W. Va.
EE—W. J. Mildon, Philadelphia, Pa.
SCO—Standard Supply Co., Buyer, G. L. Pettrey, Wilsonburg, W. Va.
SA—Madeira, Hill & Co., Philadelphia, Pa.

Waldo No. 1 Mine; Drift; Pittsburgh Seam, 78 to 96 in. thick.

PO—Wilsonburg, W. Va.; **SP**—Same; **CTY**—Harrison; **RR**—B. & O.
S of H—Mules, endless rope and 1 motor trolley pole type loco. Track gage, 42 in.

S of M—Hand.
PP—Power purchased, 550 volts D. C., 2 pumps.
EMP—76. Last years tonnage 55,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

Waldo No. 2 Mine; Drift; Pittsburgh Seam, 78 to 96 in. thick.

PO—Wilsonburg, W. Va.; **SP**—Same; **CTY**—Harrison; **RR**—B. & O.
S of H—Mules and rope. Track gage, 42 in.

S of M—Hand.
EMP—14. Last years tonnage 15,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

Waldo No. 3 Mine; Drift; Pittsburgh Seam, 78 to 96 in. thick.

PO—Wilsonburg, W. Va.; **SP**—Same; **CTY**—Harrison; **RR**—B. & O.
S of H—Mules, 4 trolley pole type and 2 comb. locos. Track gage 42 in.

S of M—8 chain breast type, 2 shortwall and 2 overhead cutler machs.
PP—Power purchased, Transformer 2200-2200-440 volts A. C., 1 M. G. Set, 250 volts D. C., 5 pumps.
EMP—74. Last years tonnage 42,500.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

Waldo No. 4 Mine; Drift; Pittsburgh Seam, 78 to 96 in. thick.

PO—Wilsonburg, W. Va.; **SP**—Same; **CTY**—Harrison; **RR**—B. & O.
S of H—Mules, 4 trolley pole type and 2 combination locos. Track gage 42 in.

S of M—5 chain breast type machs.
PP—Power purchased, Transformer 2200-2200-430 volts A. C., 1 M. G. Set, 1 pump.
EMP—74. Last years tonnage 42,500.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

MADISON COAL CO.

General Office, Omar, W. Va.
PR—A. J. Dalton, Huntington, W. Va.
VP—J. A. Kelly, Huntington, W. Va.
TR—J. A. Kelly, Huntington, W. Va.
GM—W. J. Jones, Omar, W. Va.
GS—C. H. Perry, Hadadon, W. Va.
PA—J. A. Shepherd, Omar, W. Va.
CE—J. P. Healy, Omar, W. Va.
EE—John Ketter, Omar, W. Va.
SCO—Madison Coal Co., Buyer, T. H. Brooks, Omar, W. Va.
SA—Huntington Coal Sales Co., Huntington, W. Va.

Madison Mine; Drift; Alma Seam, 54 in. thick.

PO—Hadadon, W. Va.; **SP**—Same; **CTY**—Boone; **RR**—C. & O.
S of H—Mules and elec. locos. Track gage 48 in.

S of M—Acrewall machs.
PP—Purchase power, Transformer 2300-250 volts A. C. Rotary converters, 250 volts D. C. Fire tube and water tube boilers.

EMP—60. Last years tonnage 70,000.
SIZES SHIPT—Slack, Nut, Egg, Block.
PREP. EQUIPT—Bar Screens, Picking Tables, Loading Booms.

MAONE COAL COMPANY

General Office, Huntington, W. Va.
PR—A. J. Dalton, Huntington, W. Va.
VP—J. A. Kelly, Huntington, W. Va.
TR—J. A. Kelly, Huntington, W. Va.
GM—W. T. Jones, Omar, W. Va.
GS—G. C. Walker, Omar, W. Va.
PA—J. S. Shepherd, Omar, W. Va.
CE—J. P. Healey, Omar, W. Va.
EE—John Ketter, Omar, W. Va.
SA—Main Island Creek Coal Co., Omar, W. Va.

North & South Maone Mines; Drift; Eagle Seam, 52 in. thick.

PO—Robinet, W. Va.; **SP**—Same; **CTY**—Logan; **RR**—C. & O.

MS—W. H. Dower, Amherstdale, W. Va.
S of H—2 6 ton trolley pole type locos. Track gage, 48 in.

S of M—1 acrewall longwall mach.
PP—Power purchased, transformer, 44-000-2300 volts A. C., rotary converters, 250 volts D. C., 2 pumps.
Daily tonnage 250.
SIZES SHIPT—Run of Mine.

MAHER-PURSGLOVE MINING CO. (THE)

Now the Middle Fork Mining Co.

MAINE COLLIERIES CO.

General Office, Morgantown, W. Va.

Maine Collieries Mine; Drift; Pittsburgh Seam, 96 in. thick.

PO—Fleming, W. Va.; **SP**—Same; **CTY**—Barbour; **RR**—B. & O.
S of H—Electric locos.
S of M—Hand.
PP—Purchase power.
PREP. EQUIPT—Bar Screens.
NOTE—Mine under development.

MAIN ISLAND CREEK COAL COMPANY

General Office, Huntington, W. Va.
PR—A. J. Dalton, Huntington, W. Va.
VP—C. C. Hale, Huntington, W. Va.
TR—J. A. Kelly, Huntington, W. Va.
GM—W. T. Jones, Omar, W. Va.
GS—G. C. Walker, Omar, W. Va.
PA—J. S. Shepherd, Omar, W. Va.
CE—J. P. Healey, Omar, W. Va.
EE—John Ketter, Omar, W. Va.
SCO—Thos. H. Brooks, Omar, W. Va.
Sales Agency—Main Island Creek Coal Co. (Sales Dept.), Omar, W. Va.
Additional information on Pages 1028-1035.

Nos. 2 and 3 Mines; Drift; Main Island Creek No. 2 Gas Seams, 72 to 84 in. thick.

PO—Mico, W. Va.; **SP**—Same; **CTY**—Logan; **RR**—C. & O.

MS—George Davis, Mico, W. Va.
SM—W. N. Corlin, Mico, W. Va.
S of H—11 trolley pole type locos. Track gage 48 in.

S of M—10 shortwall machs.
PP—Power purchased, transformer, 2300 to 176 volts A. C.
EMP—200. Daily output, 1,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Cannel.

PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

No. 4 Mine; Drift; Main Island Creek No. 2 Gas Seam, 72 to 108 in. thick.

PO—Omar, W. Va.; **SP**—Same; **CTY**—Logan; **RR**—C. & O.
MS—Mark Sloan, Omar, W. Va.
S of H—Mules and trolley pole type and storage battery locos. Track gage, 48 in.

S of M—7 center cutler machs.
PP—Power purchased, transformer, 2300 to 176 volts A. C., 2 200 K. W. rotary converters, 275 to 250 volts D. C., 2 water tube boilers, 300 H. P., 5 pumps.

EMP—300. Daily output, 1,500 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

No. 5 Mine; Drift; Main Island Creek Seam, 96 in. thick.

PO—Omar, W. Va.; **SP**—Same; **CTY**—Logan; **RR**—C. & O.
MS—J. H. Stidell, Omar, W. Va.
S of H—Mules and trolley pole type locos. Track gage, 48 in.

S of M—1 shortwall and 1 acrewall mach.
PP—Power purchased, transformer, 2300 to 176 volts A. C., 2 200 K. W. rotary converters, 275 to 250 volts A. C., 3 pumps.

EMP—200. Daily output, 1,000 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

No. 6 Mine; Drift; Main Island Creek Seam, 96 in. thick.

PO—Omar, W. Va.; **SP**—Same; **CTY**—Logan; **RR**—C. & O.
MS—J. H. Stidell, Omar, W. Va.
S of H—10 trolley pole type locos.

S of M—7 center cutler machs.
PP—Power purchased, transformer, 2300 to 176 volts A. C., rotary con-

verters, 275 to 250 volts D. C., 6 pumps.
EMP—250. Daily output, 1,800 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

No. 7 Mine; Drift; Main Island Creek No. 2 Gas Seam, 72 to 108 in. thick.

PO—Barabas, W. Va.; **SP**—Same; **CTY**—Logan; **RR**—C. & O.
MS—J. J. Gilmour, Barabas, W. Va.
S of H—Mules, 5 trolley pole type locos. Track gage 48 in.

S of M—1 shortwall and 2 center cutler machs.
PP—Power purchased, transformer, 2300 to 176 volts A. C., 3 pumps.
EMP—150. Daily output, 800 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Gravity Screens.

No. 9 Mine; Drift; Main Island Creek No. 2 Gas Seam, 84 to 120 in. thick.

PO—Barabas, W. Va.; **SP**—Same; **CTY**—Logan; **RR**—C. & O.
MS—J. J. Gilmour, Barabas, W. Va.
S of H—2 trolley pole type locos. Track gage 48 in.

S of M—2 shortwall machs.
PP—Power purchased, transformer, 4400 to 206 volts A. C., 275 to 250 volts D. C., 1 pump.

EMP—80. Daily output, 300 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Gravity Screens.

No. 14 Mine; Drift; Main Island Creek No. 2 Gas Seam, 60 in. thick.

PO—Barabas, W. Va.; **SP**—Same; **CTY**—Logan; **RR**—C. & O.
MS—J. J. Gilmour, Barabas, W. Va.
S of H—4 trolley pole type locos. Track gage 48 in.

S of M—3 shortwall and 1 overhead cutler machs.
PP—Power purchased, transformer 6600 to 206 volts A. C., 2 pumps.
EMP—100. Daily output, 250 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Gravity Screens.

Nos. 16, 17, 18, 19, 20 and 22 Mines; Drifts; Main Island Creek Seam, 60 to 72 in. thick.

PO—Stirrat, W. Va.; **SP**—Same; **CTY**—Logan; **RR**—C. & O.
MS—Okey Brooks, Stirrat, W. Va.
S of H—6 storage battery locos. Track gage 48 in.

S of M—4 shortwall machs.
PP—Power purchased, transformer 6600 to 206 volts A. C.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Gravity Screens.

No. 20 Mine; Drift; Main Island Creek No. 2 Gas Seam, 60 to 66 in. thick.

PO—Stirrat, W. Va.; **SP**—Same; **CTY**—Logan; **RR**—C. & O.
MS—Okey Brooks, Stirrat, W. Va.
S of H—3 trolley pole type locos. Track gage 48 in.

S of M—4 shortwall machs.
PP—Power purchased, transformer 6600 to 206 volts A. C.
EMP—125. Daily output, 500 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens.

MAJESTIC COAL MINING COMPANY

Out of business.

MALDEN COAL COMPANY.

Now Georges Creek Coal Corporation.

MALLEABLE COAL COMPANY

General Office, Charleston, W. Va.
PR—Samuel Butler, Charleston, W. Va.
VP—Harrison B. Smith, Charleston, W. Va.
TR—J. C. Blair, Charleston, W. Va.
GM—G. D. Dillon, MacCorkle, W. Va.
GS—G. D. Dillon, MacCorkle, W. Va.
PA—G. D. Dillon, MacCorkle, W. Va.
CE—Philip Konrad, Kanawha Falls, W. Va.

EE—Gilmore Bowman, MacCorkle, W. Va.
SCO—Address the Company, Buyer, Howard Cochran, MacCorkle, W. Va.
Sales Agency—Eastern Coal & Exp. Corp.

Malleable Mine Drift; Kittanning Seam, 60 in. thick.

PO—MacCorkle, W. Va.; **SP**—Same; **CTY**—Lincoln; **RR**—C. & O.
S of H—Mules and trolley pole type locos. Track gage, 42 in.

S of M—2 shortwall machs.
PP—1 100 H. P. and 1 150 H. P. fire tube boiler, 1-40 K. W. gen. set, 1-150 K. W. gen. set, 250 volts D. C., 2 pumps.
EMP—10. Daily tonnage 125.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

PREP. EQUIPT—Gravity Screens, Picking Tables.
Old information

MALLOREY COAL CO.

General Office, Mallore, W. Va.
PR—E. R. Davis, New York, N. Y.
VP—J. D. Francis, Huntington, W. Va.
TR—A. H. Lund, Huntington, W. Va.
GS—John T. Sycamore, Mallore, W. Va.
PA—W. F. Smythe, Huntington, W. Va.
CE—A. R. Belsch, Huntington, W. Va.
EM—W. C. McCall, Logan, W. Va.
SCO—Address the Company, Buyer, W. G. Eldridge, Mallore, W. Va.
SA—Mallore Coal Co., Huntington, W. Va.

Mallore No. 1 Mine; Drift; Island Creek Seam, 60 in. thick.
PO—Mallore, W. Va.; SP—Man, W. Va.; CTY—Logan; RR—Chesapeake & Ohio.
S of H—Trolley pole type loco. Track gage, 44½ in.
S of M—Hand.
PP—Power purchased, 1 pump.
EMP—125.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

Mallore No. 2 Mine; Drift; Island Creek Seam, 60 in. thick.
PO—Man, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
MS—H. B. Morgan, Landville, W. Va.
S of H—Trolley pole type locos. Track gage, 44½ in.
S of M—Hand.
PP—Power purchased, 1 pump.
EMP—75.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

MAN COAL COMPANY
Now the Man Mining Company.

MAN MINING COMPANY
General Office, Man, W. Va.
PR—J. C. Miller, Huntington, W. Va.
TR—J. C. Miller, Jr., Beckley, W. Va.
GM—C. C. Cooke, Man, W. Va.
PA—C. H. McCarter, Man, W. Va.
Additional Information on Page 983

No. 1 Mine; Drift; Island Creek Seam, 48 in. thick.
PO—Man, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
MS—C. C. Cooke, Man, W. Va.
S of H—Trolley pole type loco. Track gage, 48 in.
S of M—1 longwall mach.
PP—Power purchased Transformer 2300 volts A. C., rotary converters, 250 volts D. C.
EMP—16. Daily tonnage 100.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

MANBAR COAL CO.

General Office, Manbar, W. Va.
PR—P. J. Riley, Bracholm, W. Va.
VP—G. S. Bord, Charleston, W. Va.
TR—J. E. Cox, Riley, W. Va.
GM—J. S. Riley, Manbar, W. Va.
GS—J. S. Riley, Manbar, W. Va.
PA—J. S. Riley, Manbar, W. Va.
EM—W. C. McCall, Logan, W. Va.
SCO—Address the company, Buyer, F. A. Ohlinger, Manbar, W. Va.

Manbar Mine; Drift; No. 2 Gas Seam, 60 to 66 in. thick.
PO—Manbar, W. Va.; SP—Frt. Same; Exp. Farling, W. Va.; CTY—Logan; RR—C. & O.
S of H—Mules and 1 storage battery locos. Track gage, 48 in.
S of M—1 shortwall mach.
PP—Power purchased, Transformer 2200 to 250 volts A. C., M. G. sets, 250 volts D. C., 2 pumps.
EMP—25. Last years tonnage 20,000.
SIZES SHIPT—Run of Mine.
Old information.

MANDT MINING COMPANY

General Office, Box 1446, Charleston, W. Va.
PR—T. W. Woodward, Charleston, W. Va.
VP—R. B. Cobb, Charleston, W. Va.
TR—S. G. Harmon, Charleston, W. Va.
GM—R. B. Cobb, Charleston, W. Va.
GS—R. B. Cobb, Charleston, W. Va.
PA—R. B. Cobb, Charleston, W. Va.
EM—W. G. Crighton, Charleston, W. Va.
Mandt No. 1 Mine; Drift; Peacock Seam, 32 inches thick.
PO—Big Chimney, W. Va.; SP—Same; CTY—Kanawha; RR—K. & W.
S of H—Mules. Track gage, 40 in.
S of M—Hand.
PP—2 pumps.
EMP—10. Daily tonnage 50.
SIZES SHIPT—Run of Mine.

Mandt No. 2 Mine; Drift; Kanawha No. 5 Seam, 60 inches thick.
PO—Big Chimney, W. Va.; SP—Same; CTY—Kanawha; RR—K. & W.
S of H—Mules. Track gage 40 inches.
S of M—Hand.
PP—1 fire tube boiler, 25 H. P., 2 pumps.
EMP—15. Daily tonnage 50.
SIZES SHIPT—Run of Mine.

MAPLEVILLE COAL COMPANY

PR—J. R. Norman, Elk Garden, W. Va.
VP—W. W. Harris, Elk Garden, W. Va.
TR—J. E. Norman, " "
GM—O. D. Harris, Elk Garden, W. Va.
GS—O. D. Harris, Elk Garden, W. Va.
PA—J. R. Norman, Elk Garden, W. Va.
SA—Coale & Co., Cumberland, Md.

Mapleville Mine; Drift; Bakertown Seam, 32 in. thick.
PO—Elk Garden, W. Va.; SP—Mapleville, W. Va.; CTY—Mineral; RR—W. Md.
S of H—Mules. Track gage, 36 in.
S of M—Hand.
EMP—15. Last fiscal year output, 5,532 tons.
SIZES SHIPT—Run of Mine.

MARBELLE COAL MINING COMPANY

General Office, I Broadway, New York, N. Y.
PR—F. R. Long, New York, N. Y.
VP—C. Waldron, Jr., Wolf Summit, W. Va.
TR—H. R. Townley, New York, N. Y.
GM—H. Van Fleet, Reynoldsville, W. Va.
GS—H. Van Fleet, Reynoldsville, W. Va.
EM—Carl Horner, Clarksburg, W. Va.
PA—Fay Whitehair, Wolf Summit, W. Va.
SCO—Gladys Store Co. Buyer, H. Van Fleet, Wolf Summit, W. Va.
SA—F. R. Long & Co., I Broadway, New York, N. Y.

Marion Mine; Drift; Pittsburgh Seam; 72 inches thick.
PO—Wolf Summit, W. Va.; SP—Same; CTY—Harrison; RR—R. & O.
MS—Gordon Dolan, Wolf Summit, W. Va.
S of H—Mules and elec. loco.
S of M—Shortwall mach.
PP—Power purchased.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Bar Screens.
Note—Formerly operated by Hutchinson Coal Co.

MARCH COAL COMPANY

General Office, 1203 Union Trust Bldg., Charleston, W. Va.
PR—C. H. Hetzel, 1201-2 Union Trust Bldg., Charleston, W. Va.
VP—C. C. Hennegon, Charleston, W. Va.
TR—M. E. Moore, Charleston, W. Va.
SECY—C. H. Hetzel, Charleston, W. Va.
PA—M. E. Moore, Charleston, W. Va.
SA—Moore & Hetzel, Charleston, W. Va.
Additional Information on Page 1040

March Mine; Drift; Lewiston Seam, 84 in. thick.
PO—Charleston, W. Va.; SP—Eight Mile, W. Va.; CTY—Kanawha; RR—Campbells Creek.
S of H—Mules and rope. Track gage 42 in.
S of M—Hand.
EMP—20. Daily tonnage 150.
SIZES SHIPT—Run of Mine.

MARCOAL COAL CO.

General Office, 225 Kirby Bldg., Cleveland, O.
PR—J. A. Maher, Cleveland, O.
VP—J. C. Heinlein, Bridgeport, O.
TR—J. V. Maher, Cleveland, O.
GM—W. J. Maher, Fort Henry Club, Wheeling, W. Va.
GS—H. F. Pollock, Bridgeport, O.
PA—W. G. Lewis, Cleveland, O.
CE—Allen & Garcia Co., Chicago, Ill.
SA—Maher Collieries Co., Cleveland, O.

No. 1 Mine; Shaft; Pittsburgh No. 8 Seam, 66 in. thick.
PO—Woodlands, W. Va.; SP—Same; CTY—Monroe; RR—Penna.
S of H—Electric loco. Track gage 42 in.
S of M—Shortwall mach.
PP—Power purchased, Rotary converters, 250 volts D. C., 2-10 H. P. water tube boilers.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

MARIELLA COAL COMPANY

Now The Bauserman Coal Company.

MARINE & COMMERCE POCAHONTAS CORP.

General Office, 32 Broadway, Marine and Commerce Bldg., New York, N. Y.

PR—Riccardo Gualino, New York, N. Y.
VP—Alvise Bragadin, New York, N. Y.
TR—C. Kahles, New York, N. Y.
GM—Sergio Ragnara, Roderfeld, W. Va.
CE—Sergio Ragnara, Roderfeld, W. Va.

No. 1 and 2 Mines; Drift; Sewell and War Creek Seams; 36 to 45 inches thick.
PO—Roderfeld, W. Va.; SP—Same; CTY—McDowell; RR—Norfolk & Western.
S of H—Electric. Track gage 48 inches.
S of M—Shortwall machs.
PP—Power purchased, Transformer 130,000-2,200 volts A. C., rotary converters, 250 volts D. C., 150 K. W. gen. units, 250-275 volts D. C.

EMP 150 Daily tonnage 100

SIZES SHIPT—Run of Mine
Note—Successors to Davy Pocahtontas Coal Company.

MARINE SMOKELESS COAL COMPANY

General Office, 914 National Bank of Commerce Bldg., Norfolk, Va.
PR—Chas. A. Snyder, Norfolk, Va.
VP—G. Benson Ferebee, Norfolk, Va.
TR—Oscar B. Ferebee, Norfolk, Va.
GM—Thos. J. Rees, Welch, W. Va.
GS—Thos. J. Rees, Welch, W. Va.
PA—Thos. J. Rees, Welch, W. Va.
EM—J. H. Williams, Welch, W. Va.
SCO—Address the Company, Buyer, O. K. Sysmore, Juverna, W. Va., and B. C. Wickline, Yerba, W. Va.
SA—Nottingham & Wrenn, Norfolk, Va.

Marine Mine; Drift; Welch Seam, 36 in. thick.
PO—Juverna, W. Va.; SP—Marine, W. Va.; CTY—McDowell; RR—N. & W.
MS—J. Woody, Juverna, W. Va.
MS—Ed Kinney, Juverna, W. Va.
S of H—Mules and elec. motor. Track gage 48 in.
S of M—2 shortwall machs.
PP—Power purchased, Transformer 18,000 to 220 volts A. C., 1-150 K. W. M. G. set, 250 volts D. C.
EMP—56. Last years tonnage 35,000.
SIZES SHIPT—Run of Mine.

Ocean Seam; Drift; Sewell Seam, 36 in. thick.
PO—Yerba, W. Va.; SP—Marine, W. Va.; CTY—McDowell; RR—N. & W.
MS—J. Dean, Yerba, W. Va.
S of H—3 motor storage battery locos. Track gage, 48 in.
S of M—2 shortwall machs.
PP—Power purchased, Transformer 13000-220 volts A. C., 1-150 K. W. M. G. Sets, 250 volts D. C.
EMP—100. Last years tonnage 50,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.

MARION GAS COAL CO.

General Office, Greensburg, Pa.
PR—R. H. Jamison, Greensburg, Pa.
VP—J. R. Brunot, Greensburg, Pa.
TR—J. R. Eisman, Greensburg, Pa.
GM—T. P. Latta, Greensburg, Pa.
GS—W. C. Dobbie, Fairmont, W. Va.
PA—A. Turney McConnell, Greensburg, Pa.
CE—C. E. Cowan, Greensburg, Pa.
EM—R. A. Ramsay, Greensburg, Pa.
EE—J. P. Berry Greensburg, Pa.
SCO—Address the Company, Buyer, C. H. Latta, Greensburg, Pa.
SA—Operators' Fuel Agency, Greensburg, Pa.

Gingamon Mine; Shaft; Pittsburgh Seam, 90 in. thick.
PO—Worthington, W. Va.; SP—Same; Marion; RR—B. & O.
MS—Chas. R. Martin, Worthington, W. Va.
SM—M. C. Tennant, Worthington, W. Va.
S of H—Mules and trolley pole type locos. Track gage, 42 in.
S of M—4 shortwall machs.
PP—Power purchased, Transformer 2200-250 volts, M. G. Sets, 250 volts D. C., 3 pumps.
EMP—15. Daily output, 500 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

Fortney Mine; Shaft; Pittsburgh Seam, 90 in. thick.
PO—Worthington, W. Va.; SP—Same; CTY—Marion; RR—Western Maryland.
MS—Chas. R. Martin, Worthington, W. Va.
S of H—Mules, trolley pole type locos. Track gage 42 in.
S of M—2 shortwall machs.
PP—Power purchased Transformer 2200 to 250 volts, M. G. Sets, 250 volts D. C., 1 pump.
EMP—50.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Picking Tables.

MARMET, EDWIN

General Office, Central Ave. and Water St., Cincinnati, O.
OPERATOR—Edwin Marmet, Cincinnati, O.

GS—Thomas Oliver, Marmet, W. Va., and Fred Young, Cedar Grove, W. Va.
EM—B. M. Green, Charleston, W. Va.
SCO—Address the Company, Buyer, Frank W. Carver, Marmet, W. Va.
SA—Indian Run Coal Co., Charleston, W. Va.

Black Band, Cedar Grove, Lens Creek and Winifrede Mines; Drift; Seam, 42 to 60 in. thick.
PO—Marmet, W. Va., and Cedar Grove, W. Va.; SP—Marmet, W. Va., and Monarch, W. Va.; CTY—Kanawha; RR—C. & O., K. & M.
S of H—Mules and electric locos. Track gage 42 in.

S of M—Shortwall and chain breast machs.

PP—3 boilers, total 450 H. P., 2 generators, 250 K. W., 220 volts D. C., 1 pump.
EMP—200. Last years tonnage 118,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

MARMET OLIVER COAL COMPANY

General Office, Shrewsbury, W. Va.
PR—Edwin Marmet, Shrewsbury, W. Va.
VP—V. L. Black, Charleston, W. Va.
TR—Edwin Marmet, Shrewsbury, W. Va.
GM—Thos. Oliver, Shrewsbury, W. Va.
GS—Robert Taylor, Shrewsbury, W. Va.
EM—B. M. Green, Charleston, W. Va.
EE—L. M. Moore, Shrewsbury, W. Va.
SCO—Address the Company, Buyer, Jas. Culeman, Cedar Grove, W. Va.
SA—Indian Run Coal Co., Charleston, W. Va.

Shrewsbury Mine; Drift; Coalburg and Cedar Grove Seams; 40 and 54 inches thick.
PO—Shrewsbury, W. Va.; SP—Same; CTY—Kanawha; RR—K. & M.
S of H—Mules. Track gage 40 inches.
S of M—Electric breast machs.
PP—1 water tube boiler, 150 H. P., gen. unit, 1-100 K. W., 250 volts D. C.
EMP—125. Daily tonnage 700.
SIZES SHIPT—Run of Mine, Slack, Lump, Block.
PREP. EQUIPT—Bar Screens.

Note—This mine was formerly operated by the Sunday Creek Co. and by the Kanawha & Hocking Coal & Coke Co.

MARRELL COAL MINES, INC.

Hendawson, W. Va.
Nos. 1A, 1B, 2A and 2B Mines; CTY—Logan.
No report.

MARSH FORK COAL COMPANY.

General Office, Marfork, W. Va.
PR—T. E. B. Siler, Charleston, W. Va.
VP—Matthew Slush, Detroit, Mich.
SECY & TR—J. L. Siler, Charleston, W. Va.
GM—A. O. Siler, Marfork, W. Va.
PA—J. W. Eldridge, Marfork, W. Va.
EM—J. W. Morgan, Marfork, W. Va.
EE—John Adkins, Marfork, W. Va.
SCO—Address the Company, Buyer, J. W. Eldridge, Marfork, W. Va.
SA—J. L. Siler, Charleston, W. Va.

Marsh Fork Mine; Drift; Dorothy Seam, 66 inches thick.
PO—Marfork, W. Va.; SP—Same; CTY— Raleigh; RR—C. & O.
MS—J. E. Shaffer, Marfork, W. Va.
S of H—5 trolley pole type locos. Track gage 42 inches.
S of M—4 shortwall machs.
PP—Power purchased, transformer 4400-2200 volts A. C., rotary converters, 250 volts D. C.
EMP—100. Last fiscal year output, 97,000 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screen.

Thacker Mine; Drift; Seam, 52 in. thick.
PO—Marfork, W. Va.; SP—Same; CTY— Raleigh; RR—C. & O.
MS—H. H. Carver, Marfork, W. Va.
S of H—3 trolley pole type loco. Track gage 42 inches.
S of M—2 shortwall machs.
PP—Power purchased, transformer 44,000-2200 volts, M. G. sets, 250 volts D. C.
EMP—100.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables.

Marsh Fork No. 2 Mine; Drift; Seam, 66-68 inches thick.
PO—Marfork, W. Va.; SP—Same; CTY— Raleigh; RR—C. & O.
MS—H. H. Carver, Marfork, W. Va.
S of H—4 trolley pole type locos. Track gage 42 in.
S of M—2 shortwall machs.
EMP—100.

MARSHALL COAL CO.

General Office, 733 Land Title Bldg., Philadelphia, Pa.
PR—G. D. Coleman, Philadelphia, Pa.
TR—Chas. C. Krouse, Philadelphia, Pa.
GM—G. D. Coleman, Philadelphia, Pa.
GS—J. A. Jenkins, Mt. Clare, W. Va.
PA—J. J. Matheson, Philadelphia, Pa.
CE—C. E. Sharpless, Ebsburg, Pa.
EM—F. M. McDaniel, Clarksburg, W. Va.
MM—C. L. Shaffer, Mt. Clare, W. Va.
SCO—Marsion Supply Co.; Buyer, A. M. Ridenour, Mt. Clare, W. Va.
Sales Agent—J. H. Weaver & Co., Land Title Bldg., Philadelphia, Pa.
(Continued on Next Page)

MERIDEN SMOKELESS COAL CO.

General Office, Meriden, W. Va.
PR—H. M. Feely, 83 Vandergrift Bldg., Pittsburgh, Pa.
VP—M. A. Osgood, Meriden, W. Va.
TR—A. S. Davis, 83 Vandergrift Bldg., Pittsburgh, Pa.
GM—Lee J. Sandridge, Meriden, W. Va.
GS—M. A. Osgood, Meriden, W. Va.
PA—Lee J. Sandridge, Meriden, W. Va.
EM—J. B. Mann, Philippi, W. Va.
EE—D. F. Boehm, Philippi, W. Va.
SCO—Lee J. Sandridge, Store, Buyer, A. H. Miller, Meriden, W. Va.

Meriden Mine; Drift; Kittanning Seam, 72 inches thick.
PO—Meriden, W. Va.; SP—Same; CTY—Barbour; RR—B. & O.
MS—H. D. Hurshman, Meriden, W. Va.
S of H—Elec. locos. Track gage 36-42 in.
S of M—10 shortwall machs.
PP—Power purchased, M. G. Sets, 250 K. W., gen. units, 200 K. W., 250 volts D. C.
EMP—225. Last years tonnage 200,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.
NOTE—Formerly operated by the Rock Island Coal & Coke Co.

MERRILL COAL MINES, INC.

General Office, Henlawson, W. Va.
PR—L. B. Conway, Jr., Danville, Va.
VP—C. W. Jones, Henlawson, W. Va.
TR—C. G. Holland, Danville, Va.
GM—C. W. Jones, Henlawson, W. Va.
GS—E. B. Truax, Henlawson, W. Va.
PA—C. W. Jones, Henlawson, W. Va.
EM—W. C. McCall, Logan, W. Va.
EE—W. C. Childers, Henlawson, W. Va.
SCO—Address the Company, Buyer, P. H. Akers, Henlawson, W. Va.
SA—Producers Coal Co., Cincinnati, O.

PO—Henlawson, W. Va.; SP—Same; CTY—Legan; RR—C. & O.
S of H—5 Jeffrey trolley pole type locos. Track gage 44 in.
S of M—4 arewall machs.
PP—Power purchased, Transformer 44,000 to 2,200 volts A. C., M. G. S. 4, 250 volts D. C.
EMP—125.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Shaker.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Bannos.

MERRILL, W. A. & CO.

General Office, Duck, W. Va.
PR—W. A. Merrill, Garrett, Pa.
VP—J. W. McCullough, Friendsville, Mich.
TR—Ed. Sirk, Duck, W. Va.
GM—E. F. Sirk, Duck, W. Va.
GS—E. F. Sirk, Duck, W. Va.
PA—E. F. Sirk, Duck, W. Va.
CE—J. A. Sirk, Duck, W. Va.
SCO—Ed. Sirk, Duck, W. Va.

Sirk Mine; Drift; Upper Freeport Seam, 60 in. thick.
PO—Duck, W. Va.; SP—Villa Nova, W. Va.; CTY—Clay; RR—B. & O.
S of H—Mules Track gage 42 in.
S of M—Hand.
EMP—25. Daily tonnage 100.
SIZES SHIPT—Run of Mine.

METROPOLITAN COAL CO.

Morgantown, W. Va.
No report.

METROPOLITAN COAL MINING CO., THE.

Now the Mary Coal Co.

MIAMI COAL CO.

Now Miami Coal & Coke Company.

MIAMI COAL & COKE COMPANY

General Office, Mercantile Banking & Trust Bldg., Moundsville, W. Va.
PR—Thos. Rogerson, Moundsville, W. Va.
VP—O. P. Wilson, Moundsville, W. Va.
TR—Chas. A. Shawacre, Moundsville, W. Va.
GM—Thos. Rogerson, Moundsville, W. Va.
GS—R. M. McSorley, Miami, W. Va.
EM—B. M. Green, Charleston, W. Va.
SA—John T. Hesser Coal Co., Cincinnati, O.

Miami Mine Platina & Drift Cedar Grove and Coalburg Seam, 26 to 48 in. thick.
PO—Miami, W. Va.; SP—Same; CTY—Kanawha; RR—C. & O.
S of H—Mules and 1 loco. Track gage 44 in.
S of M—1 shortwall mach.
PP—Power purchased, M. G. Sets, 250 volts D. C., 1 pump.
EMP—12. Daily tonnage 50.
SIZES SHIPT—Run of Mine.

MICAJAH POCAHONTAS COAL CO.

General Office, Micajah, W. Va.
PR—L. R. Taylor, Micajah, W. Va.
VP—L. J. Boxley, Roanoke, Va.
TR—H. E. DeJarnette, Princeton, W. Va.
GM—L. R. Taylor, Micajah, W. Va.
GS—R. C. Taylor, Micajah, W. Va.
CE—E. M. Merrell Engineering Co., Martinsburg, W. Va.
EE—West Virginia Engineering Co., Martinsburg, W. Va.

SCO—Address the company, Buyer, W. S. Kessinger, Micajah, W. Va.
SA—Wm. C. Atwater & Co., No. 1 Broadway, New York, N. Y. and Bluefield, W. Va.

Micajah Pocahontas Mine; Drift.
PO—Micajah, W. Va.; SP—Same; CTY—Wyoming and Mercer; RR—Virginian.
S of H—Mules and trolley pole type loco. Track gage 44 inches.
S of M—Hand.
PP—Power purchased, Transformer 2200 to 250 volts A. C.
EMP—100.
SIZES SHIPT—Run of Mine.

MICHAEL COAL CO.

Dula, W. Va.
Michael Mine; CTY—Harrison
No report.

MIDDLE CREEK COAL COMPANY.

General Office, Charleston, W. Va.
PR—V. L. Block, Charleston, W. Va.
VP—W. S. Wood, Charleston, W. Va.
TR—Williams Jones, " "
GM—W. S. Wood, " "
GS—Ed. Foster, Bickmore, W. Va.
PA—W. S. Wood, Charleston, W. Va.
EM—Clark & Krebs, Charleston, W. Va.
SCO—Address the Company, Buyer, A. G. Farr, Bickmore, W. Va.
SA—H. H. Lineweaver & Co., Philadelphia, Pa.

Middle Creek Mine; Drift; Kittanning Seam, 72 in. thick.
PO—Bickmore, W. Va. SP—Hartland, W. Va. CTY—Clay RR—B. & O.
S of H—Mules and trolley pole type loco. Track gage, 44 in.
S of M—2 electric punchers.
PP—Power purchased, transformer 2200 to 250 volts A. C., rotary converters, 250 volts D. C.
EMP—75. Last years tonnage 35,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

MIDDLE FORK BLOCK COAL COMPANY

General Office, Box 1503, Charleston, W. Va.
PR—S. V. Morris, Charleston, W. Va.
VP—C. O. Morris, Charleston, W. Va.
TR—D. E. Lloyd, Charleston, W. Va.
GM—S. V. Morris, Charleston, W. Va.
GS—S. V. Morris, Charleston, W. Va.
PA—D. E. Lloyd, Charleston, W. Va.
EM—C. S. Plumley, Charleston, W. Va.
SCO—Address the Company, Buyer, M. C. Allen, Charleston, W. Va.

Middle Fork Block Mine; Drift; No. 5 Block Seam; 55 in. thick.
PO—Middle Fork, W. Va.; SP—Same; CTY—Kanawha; RR—K. & W. Va.
MS—A. S. Lloyd, Charleston, W. Va.
S of H—Mules. Track gage 42 in.
S of M—Chain breast and shortwall machs.
PP—1 fire tube boiler, 150 H. P., gen. units, 100 K. W., volts D. C.
EMP—17.
SIZES SHIPT—Run of Mine, Nut, Lump, Block.
PREP. EQUIPT—Bar Screens.

MIDDLE FORK MINING COMPANY.

General Office, Huntington, W. Va.
PR—A. J. Dalton, Huntington, W. Va.
VP—J. A. Kelly, Huntington, W. Va.
TR—J. A. Kelly, Huntington, W. Va.
GM—W. T. Jones, Omar, W. Va.
GS—C. C. Walker, Omar, W. Va.
PA—J. S. Shepherd, Omar, W. Va.
EM—J. F. Healy, Omar, W. Va.
SCO—Address the Company, Chauncey, W. Va.
SA—Main Island Creek Coal Co., Sl. Dept., Huntington, W. Va.

Josephine Nos. 1 and 2 Mines Drift; Island Creek Seam, 66 in. thick.
PO—Chauncey, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
MS—J. H. Taylor, Chauncey, W. Va.
S of H—2 combination locos, 3 trolley pole type locos, 1 storage battery loco. Track gage 42 in.
S of M—4 shortwall machs.
PP—Power purchased, Transformers 500-250 volts A. C., rotary converters, 250 volts D. C.
Daily tonnage 1,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravety Screens.
NOTE—Successors to the Maher Purglove Mining Company.

MID-LOTHIAN JEWEL COAL COMPANY.

General Office, Hartland, W. Va.
PR—L. B. Allen, C. & C. R. R. offices, Huntington, W. Va.
VP—Jas. Clark, Huntington, W. Va.
TR—G. R. Keller, Huntington, W. Va.
GM—Jas. Clark, Huntington, W. Va.
GS—Jas. Clark, Huntington, W. Va.
PA—Jas. Clark, Huntington, W. Va.
SCO—Address the Company, Buyer, Jas. Clark, Huntington, W. Va.

Mid-Lothian Mine; Drift; Winifred & Coalburg Seams; 48 in. thick.
PO—Hartland, W. Va.; SP—Same; CTY—Clay; RR—C. & C., Hartland, W. Va.
MS—W. Stauff, Hartland, W. Va.
S of H—Mules. Track gage 42 in.
S of M—1 shortwall mach.
PP—Power purchased, Transformer 250-250 volts A. C., M. G. sets, 250 volts D. C., 1 pump.
EMP—25. Last years tonnage 1,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravety Screens.

MIDVALE COLLIERY CO.

General Office, Gamoca, W. Va.
PR—C. W. Hillon, Fayetteville, W. Va.
VP—U. G. Thomas, Charleston, W. Va.
TR—T. A. Dietz, Gamoca, W. Va.
GM—T. A. Dietz, Gamoca, W. Va.
GS—T. A. Dietz, Gamoca, W. Va.
PA—T. A. Dietz, Gamoca, W. Va.
EM—E. B. Roser, Kanawha Falls, W. Va.
SCO—Midvale Store, Buyer, R. O. Thomas, Gamoca, W. Va.

Midvale Mine, Drift, No. 5 Split Seam, 5 1/2 to 7 ft. thick.
PO—Gamoca, W. Va.; SP—Same; CTY—Fayette; RR—C. & O., Gaudy Branch.
S of H—Mules and trolley pole type loco. Track gage, 44 in.
S of M—Shortwall machs.
PP—Power purchased, transformer 2250 to 250 volts A. C., M. G. sets, 250 volts D. C.
EMP—120. Last fiscal year output, 95,000 tons.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Gravety Screens.

MIDWAY COAL CO.

Rockbottom, W. Va.
Rockbottom Mine; CTY—Boone.
No report.

MILBURN OY-PRODUCTS COAL CO.

General Office, Milburn, W. Va.
PR—J. D. Forrest, Majestic Bldg., Indianapolis, Ind.
TR—R. E. Gault, Majestic Bldg., Indianapolis, Ind.
GM—A. A. Gallagher, Milburn, W. Va.
GS—R. J. Moss, Milburn, W. Va.
PA—A. A. Gallagher, Milburn, W. Va.
EM—R. J. Moss, Milburn, W. Va.
EE—Walter Edwards, Milburn, W. Va.
SCO—Address the Company, Buyer, E. L. Roach, Milburn, W. Va.

Milburn No. 1 Mine; Drift; Eagle Seam, 72 in. thick.
PO—Milburn, W. Va.; SP—Same; CTY—Fayette; RR—C. & O.
S of H—Trolley pole type locos. Track gage, 44 in.
S of M—7 shortwall machs.
PP—Power purchased, 1 25 H. P. fire tube boiler, motor gen. sets, 250 volts D. C., 4 pumps.
EMP—250. Last years tonnage 198,000.
SIZES SHIPT—Run of Mine.

Milburn No. 2 Mine; Drift; Powellton Seam, 54 in. thick.
PO—Milburn, W. Va.; SP—Same; CTY—Fayette; RR—C. & O.
S of H—Trolley pole type locos. Track gage, 44 in.
S of M—2 shortwall machs.
PP—Power purchased, 250 volts A. C., 2 pumps.
EMP—50.
SIZES SHIPT—Run of Mine.

MILROED COAL COMPANY

General Office, Junior, W. Va.
PR—W. B. Malone, Philippi, W. Va.
VP—W. B. Malone, Junior, W. Va.
GS—M. R. Malone, Junior, W. Va.
EM—M. R. Malone, Junior, W. Va.

Mildred Mine; Drift; Kittanning Seam, 52 inches thick.
PO—Junior, W. Va.; SP—Same; CTY—Barbour; RR—B. & O.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
PP—Purchase power.
EMP—15. Daily tonnage 30.
SIZES SHIPT—Run of Mine.

MILE GRAD COAL CO.

Morgantown, W. Va.
McRee Mine; CTY—Monongalia.
No report.

MILL CREEK CANNEL MINING CO.

General Office, Electric Bldg., Cleveland, Ohio.
PR—J. L. Deegan, Cleveland, O.
VP—B. R. Taylor, Cleveland, O.
GM—J. L. Deegan, Cleveland, O.
NOTE—Operation at Villa, W. Va., destroyed by fire.

MILL CREEK COAL AND COKE CO.

PR—Edward Cooper, Jr., Bramwell, W. Va.
TR—Edward Cooper, Jr., Bramwell, W. Va.

SCO—Address the Company, Buyer, M. Kent, Cooper, C. V., Sales Agency—Flat Tap Fuel Co., B. A. Field, W. Va.

Mill Creek Mine; Drift; Pocahontas No. 3 Seam, 96 to 102 in. thick.
PO—Coopers, W. Va.; SP—Same; CTY—Mercer; RR—N. & W.
MS—J. W. Johnson, Coopers, W. Va.
S of H—4 elec. locos.
S of M—2 elec. machs.
PP—3 pumps.
EMP—250. Coke ovens, 60 Rec. Hve.
SIZES SHIPT—Run of Mine, Slack, Pan, Nut, Egg, Lump.

Coaldale Mine; Drift; Pocahontas No. 3 Mine, 96 to 102 in. thick.
PO—Coaldale, W. Va.; SP—Same; CTY—Mercer; RR—N. & W.
MS—J. W. Johnson, Coopers, W. Va.
S of H—1 elec. loco.
PP—1 pump.
EMP—250.
SIZES SHIPT—Run of Mine.

MILL CREEK COLLIERY COMPANY

General Office, Ansted, W. Va.
PR—W. H. Evans, Ansted, W. Va.
VP—W. H. Evans, Ansted, W. Va.
TR—W. L. Burruss, Ansted, W. Va.
GM—W. H. Evans, Ansted, W. Va.
GS—Evan Massey, Ansted, W. Va.
PA—Evan Massey, Ansted, W. Va.
EE—Evan Massey, Ansted, W. Va.
SCO—Croft & Evans Store, Buyer, S. H. Croft, Ansted, W. Va.
Sales Agency—Leckie Coal Co., Columbus, O.

Mill Creek Mine; Drift; Seawall Seam, 48 in. thick.
PO—Ansted, W. Va.; SP—Same; CTY—Fayette; RR—C. & O., Ansted B. Va.
MS—S. H. Summis, Ansted, W. Va.
SM—H. F. Hawer, Ansted, W. Va.
S of H—Mules and storage battery locos. Track gage, 34 in.
S of M—4 chain breast type and 2 short-wall machs.
PP—Power purchased, 2 M. G. Sets, 200 K. W., 250 volts D. C., 1 150 H. P. fire tube boiler, 2 pumps.
EMP—100. Last years tonnage 50,000.
SIZES SHIPT—Run of Mine, Egg, Lump.
PREP. EQUIPT—Gravety Screens.

MILLER COAL COMPANY

General Office, Fayette City, Pa.
PR—Geo. W. Miller, Fayette City, Pa.
VP—W. W. Metune, Fayette City, Pa.
TR—Robt. Williams, Fayette City, Pa.
GS—W. D. Howard, Adrian, W. Va.
PA—W. D. Howard, Adrian, W. Va.
EM—J. Tison, Adrian, W. Va.

Elia Mine; Drift; Upper Freeport Seam, 68 inches thick.
PO—Adrian, W. Va.; SP—Same; CTY—Upshur; RR—B. & O.
S of H—2 chain breast type machs.
S of M—Hand.
PP—200 volts, 1 pump.
EMP—40. Daily tonnage 400.
SIZES SHIPT—Run of Mine.

MILLER, JOSEPH.

TR—Joseph Miller, 505 Fifth Ave., New York, N. Y.
GM—Joseph Miller, 505 Fifth Ave., New York, N. Y.
GS—R. J. McDermott, Morgantown, W. Va.
PA—R. J. McDermott, Morgantown, W. Va.
EM—Barrett Bros., Morgantown, W. Va.
SA—Joseph Miller, 505 Fifth Ave., New York, N. Y.

Miller No. 1 Mine; Drift; Upper Freeport Seam, 52 in. thick.
PO—Bretz, W. Va.; SP—Same; CTY—Preston; RR—M. & K.
MS—Lloyd Huncy, Bretz, W. Va.
S of H—Mules. Track gage, 44 in.
S of M—Hand.
EMP—24. Last years tonnage 50,000.
SIZES SHIPT—Run of Mine.

Miller No. 2 Mine; Drift; Upper Freeport Seam, 52 in. thick.
PO—Bretz, W. Va.; SP—Same; CTY—Preston; RR—M. & K.
MS—Lloyd Huncy, Bretz, W. Va.
S of H—Mules. Track gage, 44 in.
S of M—Hand.
EMP—7. Last years tonnage 17,000.
SIZES SHIPT—Run of Mine.

MILLER POCAHONTAS COAL COMPANY

General Office, Huntington, W. Va.
PR—W. E. Deegan, Huntington, W. Va.
VP—L. S. Pratt, Huntington, W. Va.
TR—J. Frank, Gen'l, Huntington, W. Va.
GM—W. E. Deegan, Huntington, W. Va.
GS—O. C. H. Enon, Huntington, W. Va.
PA—John Paulner, Huntington, W. Va.
EM—Morris Hanford, Huntington, W. Va.
EE—Dan Ferguson, Corinne, W. Va.
SCO—Address the company, Buyer, G. S. Cook, Corinne, W. Va.
SA—W. E. Deegan Coal Co., Huntington, W. Va.

(Continued on Next Page)

Miller Pocahontas Coal Company—Cont.

Miller Pocahontas & Virginian; Drift; Pocahontas No. 3 Seam, 50 inches thick.
 PO—Corinne, W. Va.; SP—Same; CTY—Wyoming, RR—Virginian.
 MS—J. K. Hubbard, Corinne, W. Va.
 S of H—4 trolley pole types and 8 storage battery loco. Track gage 44 in.
 S of M—2 arc wall and 4 shortwall machs.
 PP—Power purchased, 1—75 K. W. gen. unit and 1—150 K. W. gen. unit, 250 volts D. C., 4 pumps.
 EMP—225. Last years tonnage 167,398
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Shaker Screens, Picking Tables.

MILLIGAN COAL COMPANY.

General Office, Clay, W. Va.
 PB—M. C. Jennings, Clay, W. Va.
 VP—C. L. Milligan, St. Albans, W. Va.
 TR—E. H. Eitel, St. Albans, W. Va.
 GM—J. W. Vandergrift, Pocaost, W. Va.
 GS—J. W. Vandergrift, Pocaost, W. Va.
 PA—M. C. Jennings, Clay, W. Va.
 EM—J. W. Vandergrift, Pocaost, W. Va.
 SCO—J. Westfall, Buyer, 1. Westfall, Pocaost, W. Va.

Middle Creek Mine; Drift; Coalburg & Upper Kittanning Seams, 60 in. thick.
 PO—Pocaost, W. Va.; SP—Hartland, W. Va.; CTY—Clay; RR—B. & O.
 S of H—Mules. Track gage 42 in.
 S of M—Shortwall machs.
 PP—Power purchased, 13,250 volts A. C.
 EMP—50. Last years tonnage 5,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Bar and Shaker Screens, Picking Tables, Loading Booms.

MINERAR COAL MINING COMPANY

General Office, Adrian, W. Va.
 PB—Albert C. Minerar, Parsons, W. Va.
 TB—C. W. Minerar, Hendricks, W. Va.
 GM—J. P. Minerar, Adrian, W. Va.
 GS—J. P. Minerar, Adrian, W. Va.
 PA—J. P. Minerar, Adrian, W. Va.
 EM—R. J. Tilton, Buckhannon, W. Va.
 SCO—Address the Company, Buyer, J. P. Minerar, Adrian, W. Va.
 Sales Agent—F. F. Chadwick & Co., Philadelphia, Pa.

Minear Mine; Drift; Freeport Seam, 72 in. thick.
 PO—Adrian, W. Va.; SP—Same; CTY—Upstarr; RR—B. & O.
 SM—D. C. Hornbeck, Adrian, W. Va.
 S of H—Mules and Plymouth gasoline motor. Track gage 42 in.
 S of M—Hand.
 EMP—25. Last years tonnage 40,000
 SIZES SHIPT—Run of Mine.

MINERAL STATE COAL COMPANY

General Office, Munsey Bldg., Baltimore, Md.
 PR—Thomas T. Boswell, Baltimore, Md.
 TR—Edw. T. Russell, Baltimore, Md.
 GS—Edw. T. Russell, Baltimore, Md.
 GM—J. C. Peddicord, Moundsville, W. Va.
 EE—E. Hildebrand, Moundsville, W. Va.
 Parris Run Mine, shaft; Pittsburgh No. 8 Seam; 66 to 84 in. thick.
 PO—Moundsville, W. Va.; SP—Same; CTY—Marshall; RR—B. & O.
 S of H—Mules, 4 trolley pole type and 1 storage battery loco. Track gage 42 in.
 S of M—9 shortwall machs.
 PP—3 150 H. P. boilers, M. G. set, 200 K. W., 250 volts D. C., 3 pumps.
 EMP—200. Daily tonnage 1,200.
 SIZES SHIPT—Run of Mine, Lump.
 PREP. EQUIPT—Bar Screens.

MINTER, E. C. COAL CO.

General Office, Beckley, W. Va.
 PB—E. C. Minter, Beckley, W. Va.
 VP—G. T. Thornhill, Bluefield, W. Va.
 TR—John Smith, Besoco, W. Va.
 GM—E. C. Minter, Beckley, W. Va.
 PA—A. K. Minter, Rhodell, W. Va.
 EM—A. K. Minter, Rhodell, W. Va.
 EE—Fred Wolfe, Rhodell, W. Va.
 SCO—Address the Company, Buyer, D. J. Jarrett, Rhodell, W. Va.
 SA—Minter Fuel Co., Beckley, W. Va.
 Additional Information on Page 1038
 Minter Mine; Slope; No. 3 Pocahontas Seam, 48 in. thick.
 PO—Rhodell, W. Va.; SP—Frances, W. Va.; CTY—Raleigh; RR—Virginian.
 S of H—Electric locos. Track gage 44 in.
 S of M—Shortwall machs.
 PP—Power purchased, Transformer 2300 to 206 volts A. C., rotary converters, 100 K. W., 250 volts D. C.
 Daily tonnage 100.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.

MOHAWK COAL & COKE CO

General Office, Powhatan, W. Va.
 PB—L. E. Tierney, Powhatan, W. Va.
 VP—J. J. Tierney, Philadelphia, Pa.
 GM—L. E. Tierney.
 TR—L. H. Clarke, Kyle, W. Va.

GS—J. L. Huddleston, . . . Mohawk, W. Va.
 PA—J. L. Huddleston, Dary, W. Va.
 EE—M. G. Thompson, Dary, W. Va.
 SCO—Mohawk Coal & Coke Co. Buyer, G. W. Matney, Mohawk, W. Va.
 SA—Lawrence E. Tierney Fuel Co., Powhatan, W. Va.

Additional Information on Page 1039

Mohawk Mine; Drift; Big Eagle Seam, 66 in. thick.
 PO—Mohawk, W. Va.; SP—Same (Prepay); CTY—McDowell; RR—N. & W.
 S of H—Mules and 1 trolley pole type loco. Track gage, 50½ in.
 S of M—3 shortwall machs.
 PP—Power purchased, Transformer 33000 -22000 volts A. C., M. G. Sets, 250 volts D. C., 7 pumps.
 EMP—100. Last years tonnage 37,961.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

MONARCH COAL COMPANY

General Office, Clarksburg, W. Va.
 PR—D. Howard, Clarksburg, W. Va.
 VP—D. T. Quino, Clarksburg, W. Va.
 TR—Isabelle M. Quinn, Clarksburg, W. Va.
 GM—D. T. Quinn, Clarksburg, W. Va.
 GS—W. H. McWhorter, McWhorter, W. Va.
 PA—J. Ray Quinn, Clarksburg, W. Va.
 EM—Horner Bros., Clarksburg, W. Va.
 SA—Daniel Howard & Co., Clarksburg, W. Va.

Fairmont No. 3 Mine; Drift; Pittsburgh No. 8 Seam, 108 in. thick.
 PO—McWhorter, W. Va.; SP—Same; CTY—Harrison; RR—B. & O.
 S of H—Mules. Track gage 42 in.
 S of M—Hand.
 EMP—35. Daily tonnage 150.
 SIZES SHIPT—Run of Mine.

MONITOR COAL & COKE CO.

General Office, Clarksburg, W. Va.
 PR—G. W. Robertson, . . . Shamokin, Pa.
 VP—A. B. Robertson, Shamokin, Pa.
 TR—C. K. Robertson,
 GM—T. F. Downing, Huntington, W. Va.
 GS—A. F. Marshall, Wilkinson, W. Va.
 PA—A. F. Marshall, Wilkinson, W. Va.
 EM—W. C. McCall, Logan, W. Va.
 EE—Ray Barnes, Logan, W. Va.
 SCO—Address the Company, Buyer, L. V. Kayser, Wilkinson, W. Va.
 SA—Monitor Coal & Coke Co., Huntington, W. Va., and T. F. Downing, Huntington, W. Va.

Monitor Nos 1 and 4 Mines; Drift; Island Creek and Draper Seams, 68-48 in. thick.
 PO—Wilkinson, W. Va.; SP—Monitor Mines, W. Va.; CTY—Logan; RR—C. & O.
 MS—A. Downing, Wilkinson, W. Va.
 S of H—Mules and 2 trolley pole type locos. Track gage 48 in.
 S of M—1 chain breast and 2 shortwall machs.
 PP—Power purchased, Transformer 44000 -2300 volts A. C., rotary converters, 250 volts D. C., 2 pumps.
 EMP—70. Daily tonnage 550.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

Monitor No. 2 Mine; Drift; Island Creek Seam, 68 in. thick.
 PO—Wilkinson, W. Va.; SP—Monitor Mines, W. Va.; CTY—Logan; RR—C. & O.
 MS—A. Downing, Wilkinson, W. Va.
 S of H—Mules, 1 trolley pole type loco. Track gage 48 in.
 S of M—Hand.
 PP—Power purchased, Transformer 44000 -2300 volts A. C., rotary converters, 250 volts D. C., 2 pumps.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

Monitor No. 3 Mine; Drift; Island Creek Seam, 69 in. thick.
 PO—Wilkinson, W. Va.; SP—Monitor Mines, W. Va.; CTY—Logan; RR—C. & O.
 MS—R. C. Thornburg, Wilkinson, W. Va.
 S of H—Mules, 6 trolley pole type and 1 storage battery locos. Track gage 48 in.
 S of M—1 chain breast type and 2 shortwall machs.
 PP—Power purchased, Transformer 44000 -2300 volts A. C., rotary converters, 250 volts D. C., 6 pumps.
 EMP—90. Last years tonnage 92,000.

MONONGAH FUEL COMPANY THE

General Office, Fairmont, W. Va.
 PR—David Victor, . . . Fairmont, W. Va.
 VP—J. P. Aikre, Monongah, W. Va.
 TB—Scott C. Lowe, Fairmont, W. Va.
 GM—David Victor,
 GS—Chas. King, Fairmont, W. Va.
 SCO—Address the Company, Buyer, D. O. Victor, Fairmont, W. Va.
 Sales Agency—Moreland Coke Company, Bessemer Bldg., Pittsburgh, Pa.

Gallihue Nos. 1 and 2 Mines; Drift; Pittsburgh Seam, 96 in. thick.
 PO—Monongah, W. Va.; SP—Enterprise, W. Va.; CTY—Harrison; RR—B. & O.
 S of H—Mules and gasoline loco. Track gage 42 in.
 S of M—2 chain breast machs.
 PP—Purchase power, transformer 2200 to 220 volts A. C.
 EMP—115. Last years tonnage 48,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

MONONGAHELA POWDER CO.

General Office, Fairmont, W. Va.
 PB—G. M. Alexander, Fairmont, W. Va.
 VP—C. D. Robinson, Fairmont, W. Va.
 TR—F. C. Davis, Fairmont, W. Va.
 GM—H. M. Smith, Fairmont, W. Va.
 PA—F. C. Davis, Fairmont, W. Va.
 SA—F. C. Davis, Fairmont, W. Va.

Riverside Mine; Drift; Sewickley Seam, 64 in. thick.
 PO—Fairmont, W. Va.; SP—Montana, W. Va.; CTY—Marion; RR—B. & O.
 S of H—Mules. Track gage, 42 in.
 S of M—2 chain breast type machs.
 PP—Power purchased, transformer 22,000 to 2200 and 220 volts A. C.
 EMP—30. Daily output, 100 tons.
 SIZES SHIPT—Run of Mine.

Bits Mine; Shaft; Sewickley Seam, 65 in. thick.
 PO—Fairmont, W. Va.; SP—Montana, W. Va.; CTY—Marion; RR—B. & O.
 S of H—Mules. Track gage, 42 in.
 S of M—1 chain breast type mach.
 PP—Power purchased, 220 A. C. for pumps, 250 D. C. for machs, fire tube boilers, 2 pumps.
 EMP—50. Daily tonnage 225.
 SIZES SHIPT—Run of Mine.

MONONGAHELA VALLEY TRACTION CO.

General Office, Fairmont, W. Va.
 PR—George M. Alexander, Fairmont, W. Va.
 VP—Smith Hood, Fairmont, W. Va.
 TR—Walter Miller, Fairmont, W. Va.
 GM—E. R. Moore, Fairmont, W. Va.
 PA—J. D. Alexander, Fairmont, W. Va.
 CE—J. C. Gaskill, Fairmont, W. Va.
 EM—W. C. Kline, Fairmont, W. Va.
 EE—R. W. Lamar, Baxter, W. Va.
 SCO—Address the Company, Buyer, J. D. Alexander, Fairmont, W. Va.
 SA—O. P. Lough, Fairmont, W. Va.

Stafford Mine; Shaft; Pittsburgh Seam.
 PO—Baxter, W. Va.; SP—Same; CTY—Marion; RR—B. & O.
 MS—C. E. Potter, Baxter, W. Va.
 SM—L. C. Babey, Baxter, W. Va.
 S of H—4 comp. air locos. Track gage, 42 in.
 S of M—17 comp. air punchers and 3 chain breast type machs.
 PP—Power purchased, transformer 22,000-2200 volts A. C., 4 fire tube boilers, 2 water tube boilers, 17 pumps.
 EMP—160. Last fiscal year output, 183,729 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

Traction No. 2 Mine; Shaft; Pittsburgh Seam, 102 in. thick.
 PO—Rivesville, W. Va.; SP—Same; CTY—Marion; RR—B. & O.
 MS—C. E. Potter, Baxter, W. Va.
 SM—B. U. Myers, Rivesville, W. Va.
 S of H—Mules. Track gage, 42 in.
 S of M—2 electric chain breast type machs.
 PP—Power purchased, rotary converters, 250 volts D. C., 3 pumps.
 EMP—35. Last fiscal year output, 14,347 tons.
 SIZES SHIPT—Run of Mine.

MONONGALIA COAL CO.

Now part of Brady Coal Corp.

MONONGALIA FUEL COMPANY

General Office, Mt. Morris, Pa.
 OWNER—Lem Martin, Mt. Morris, Pa.
 Martin Mine; Slope; Waynesburg Seam, 84 in. thick.
 PO—Cassville, W. Va.; SP—Same; CTY—Monongalia; RR—M. & W.
 S of H—Mules.
 S of M—Hand.
 SIZES SHIPT—Run of Mine.

MONROE COAL MINING CO.

General Office, Bethlehem, Pa.
 PR—T. M. Dodson, Bethlehem, Pa.
 VP—A. C. Dodson, Bethlehem, Pa.
 TR—G. R. Radford, Bethlehem, Pa.
 GM—J. M. Dodson, Bethlehem, Pa.
 GS—Wm. H. Gibson, Barnum, W. Va.
 PA—J. B. Connell, Bethlehem, Pa.
 SCO—Barnum Store; Buyer, J. R. Connell, Bethlehem, Pa.
 Sales Agent—Weston Dodson & Co., Inc., Bethlehem, Pa.

Elk Run Mine; Drift; Lower Kittanning Seam, 37-76 in. thick.
 PO—Barnum, W. Va.; SP—Same; CTY—Garrett, Md.; RR—Western Maryland.
 MS—M. N. Utterback, Barnum, W. Va.
 SM—Harry Kight, Barnum, W. Va.
 S of H—Mules and 2 gasoline locos. Track gage, 42 in.
 S of M—Hand.
 PP—2 fire tube boilers, 300 H. P., 2 pumps.
 EMP—33. Last fiscal year output, 21,772 tons.
 SIZES SHIPT—Run of Mine.

MONTE COAL COMPANY

Now part of Buffalo Thacker Coal Co.

MONTFAIR GAS COAL COMPANY

General Office, 902 Finance Bldg., Philadelphia, Pa.
 PR—George F. Leshner, New York, N. Y.
 TR—Charles H. Quigley, Philadelphia, Pa.
 GM—R. M. Hite, Fairmont, W. Va.
 GS—Harry Holt, Monongah, W. Va.
 PA—B. M. Hite, Fairmont, W. Va.
 EM—Straight & McClure, Fairmont, W. Va.
 SCO—Newbrough & Stark, Buyer, Chas. B. Stark, Monongah, W. Va., R. L. 4.
 SA—W. Va. & Penna. Coal Co.

Frances Mine; Drift; Pittsburgh Seam; 84 inches thick.
 PO—Fairmont, W. Va.; SP—Enterprise, W. Va.; CTY—Marion and Harrison; RR—B. & O.
 S of H—Mules, electric and storage battery locos. Track gage 42 inches.
 S of M—Hand, chain breast mach.
 PP—Power purchased, 22,000 volts, motor gen. units, 50 and 100 K. W., 250 volts.
 EMP—120. Last fiscal year output, 25,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Lump.
 PREP. EQUIPT—Bar Screens.

MONTGOMERY COAL CO.

Montgomery, W. Va.

Nos. 1 and 2 Mines; CTY—Kanawha. No report.

MONTICELLO SMOKELESS COAL CO.

General Office, Alpaca, W. Va.
 PR—F. M. Lee, Alpaca, W. Va.
 VP—Richard Hancock, Lynchburg, Va.
 TR—Jno. R. Morris, Charlottesville, Va.
 GM—F. M. Lee, Alpaca, W. Va.
 PA—F. M. Lee, Alpaca, W. Va.
 EM—E. M. Merrill, Beckley, W. Va.
 SA—Jewett, Bigelow & Brooks, Detroit, Mich.

Monte Carlo Mine; Drift; Beckley Seam, 72 in. thick.
 PO—Monte Carlo, W. Va.; SP—Same; CTY—Wyoming; RR—Vgn.
 MS—E. L. Knight, Monte Carlo, W. Va.
 S of H—Mules, electric loco.
 S of M—Electric punchers, overcutter machs.
 PP—Purchase power, Transformer 2200-250 volts A. C., M. G. Sets, 250 volts D. C.
 EMP—110. Daily tonnage 300.
 SIZES SHIPT—Run of Mine.

MONTROSE COAL COMPANY, INC.

Out of business.

MOON LUMBER CO.

General Office, Weston, W. Va.

Moon No 1 Mine.
 PO—Centralla, W. Va.; CTY—Braxton; RR—B. & O.
 No report.

MOORE-KEPPEL & CO.

Ellamore, W. Va.

Cassity Mine; CTY—Randolph. No report.

MORRUE COLLIERIES COMPANY

General Office, Mordue, W. Va.
 PR—C. M. Morderwell, McCormick Bldg., Chicago, Ill.
 VP—R. G. Hubbard, Charleston, W. Va.
 TR—E. M. Merrill, Beckley, W. Va.
 GM—C. L. Allen, Mordue, W. Va.
 CE—E. M. Merrill Engr. Co., Beckley, W. Va.
 SCO—Address the Company.

Nos. 1 and 2 Split Mines; Drifts; Dorathy Seam, 125 in. thick.
 PB—Mordue, W. Va.; SP—Same; CTY—Boone; RR—C. & O.
 MS—C. C. Lewis, Mordue, W. Va.
 SM—A. R. Bibby, Mordue, W. Va.
 S of H—7 locos. Track gage 44 in. Lump.
 PREP. EQUIPT—Gravity Screens.
 S of M—4 mining machs.
 PP—Power purchased, 2—200 K. W. M. G. Sets, 250 volts D. C., 3 pumps.
 EMP—150. Last years tonnage 76,000.
 SIZES SHIPT—Run of Mine, Slack, Egg.

MORGAN COAL COMPANY

General Office, Redsville, W. Va.
PR—W. H. Morgan, Morgantown, W. Va.
VP—D. S. Morgan, Uniontown, Pa.
TR—T. L. Morgan, Uniontown, Pa.
GM—T. L. Morgan, Uniontown, Pa.
PA—T. L. Morgan, Uniontown, Pa.
SA—McGormick & Bartlett, Morgantown, W. Va.
SCO—Morgan Supply Co., Buyer, W. H. Morgan, Redsville, W. Va.
SA—Morgan Coal Co., 46 E. Main St., Uniontown, Pa.

Lyons Mine; Drift; Upper Freeport Seam, 78 in. thick.
PO—Redsville, W. Va.; SP—Lyons, W. Va.; CTY—Preston; RR—M. & K.
MS—W. H. Morgan, Morgantown, W. Va.
S of H—Mules. Track gage 42 in.
S of M—Hand.
Daily tonnage 500.
SIZES SHIPT—Run of Mine.

MORGAN RUN COAL COMPANY

General Office, First National Bank Bldg., Johnstown, Pa.
PR—R. E. Keedy, Johnstown, Pa.
VP—W. E. Engle, Johnstown, Pa.
TR—W. E. Engle, Johnstown, Pa.
GM—W. E. Engle, Johnstown, Pa.
GS—H. O. Rehtine, Kingwood, W. Va.

Morgan Run Mine; Drift; Bakerstown Seam.
PO—Kingwood, W. Va.; SP—Same; CTY—Preston; RR—W. Va. Northern.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine.

MORRIS SMOKELESS COAL COMPANY

General Office, Tams, Jr., Tams, W. Va.
PR—W. F. Tams, Tams, W. Va.
VP—W. F. Tams, Tams, W. Va.
TR—H. R. Tribon, Tams, W. Va.
GM—W. F. Tams, Tams, W. Va.
GS—W. F. Tams, Tams, W. Va.
PA—W. F. Tams, Tams, W. Va.
EM—F. Van der Volgen, Tams, W. Va.
EM—V. E. Vaughan, Tams, W. Va.
SCO—Address the Company, Buyer, R. W. Wells, Moro, W. Va.
SA—W. P. Tams, Jr., Tams, W. Va.

No. 1 Mine; Drift; Pocahontas No. 3 Seam, 54 inches thick.
PO—Moro, W. Va.; SP—Herndon, W. Va.; CTY—Wyoming; RR—Virginian.
S of H—2 6 ton gathering locos.
S of M—1 arc wall machs.
PP—Power purchased, 200 K. W., rotary converters, 250 volts D. C.
EMP—50. Daily tonnage 100.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Screens, Picking Tables, Loading Booms.

MORRISVALE COAL COMPANY

General Office, 8 E. Broad St., Columbus, O.
PR—E. F. McManis, Columbus, O.
VP—R. B. Cuthbert, Columbus, O.
TR—E. H. Davis, Columbus, O.
GM—P. C. Morris, Nelsonville, O.
GS—C. L. Milligan, Morrisvale, W. Va.
PA—P. B. Verity, Nelsonville, O.
EM—J. L. Murphy, Nelsonville, O.
EE—P. B. Verity, Nelsonville, O.
SCO—Manhattan Stores Co., Buyer, F. L. Woodworth, Athens, O.
SA—New York Coal Co., Columbus, O.

Morrisvale Mine; Drift; No. 5 Block Seam; 58 in. thick.
PO—Morrisvale, W. Va.; SP—Same; CTY—Boone; RR—C. & O.
S of H—Electric storage battery loco. Track gage 42 in.
S of M—Shortwall machs.
PP—1 fire tube boiler, 150 H. P., generators power, 1—100 K. W. to 250 volts D. C.
EMP—50. Daily tonnage 250.
SIZES SHIPT—Run of Mine, Slack, Block, Lump.
PREP. EQUIPT—Bar Screens and Loading Booms.
Note—Formerly operated by the Warner Block Coal Co.

MORTON, S. A. COAL COMPANY

General Office, Erbacon, W. Va.
PR—S. A. Morton, Sutton, W. Va.
VP—J. B. Rich, Erbacon, W. Va.
TR—T. J. Thomas, Erbacon, W. Va.
PA—J. B. Rich, Erbacon, W. Va.
SCO—Thomas Bich & Co. Buyer, W. H. Frame, Erbacon, W. Va.

Sam Mine; Drift; No. 2 Gas Seam, 41 inches thick.
PO—Erbacon W. Va.; SP—Wainville, W. Va.; CTY—Webster; RR—B. & O.
MS—S. A. Morton, Sutton, W. Va.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
Daily tonnage 50.
SIZES SHIPT—Run of Mine.

MT. CLARE COLLIERY COMPANY

General Office, Room 701-2 Union Bank Bldg., Clarksburg, W. Va.
PR—Paul P. Gorman, Westernport, Md.
VP—J. H. Callahan, Clarksburg, W. Va.

TR—A. G. Martin, Fairmont, W. Va.
GM—John H. Callahan Clarksburg, W. Va.
GS—John H. Callahan
CE—Hornor Bros., Clarksburg, W. Va.
SA—J. H. Callahan, Clarksburg, W. Va.
Additional Information on Page 1011

Althoa Mine; Drift; Pittsburgh Seam; 84 in. thick.
PO—McClure, W. Va.; SP—Byron, W. Va.; CTY—Harrison; RR—B. & O.
W. Va. Pgh. Jr.
MS—M. D. Satterfield, Mt. Clare, W. Va.
S of H—Mules and 2 electric locos. Track gage, 42 in.
S of M—1 chain breast type machs.
PP—Power purchased, M. G. set, 550 volts D. C.
EMP—100. Last fiscal year output, 68,916 tons.
SIZES SHIPT—Run of Mine, Slack, Lump, Block.
PREP. EQUIPT—Gravity Screens.

MOUNT ROPE COAL & COKE CO.

Out of business.

MT. HOPE COAL LAND COMPANY

Mt. Hope, W. Va.
Minnie Bell Mine.
PO—Mt. Hope, W. Va.; CTY—Fayette; RR—C. & O.
No report.

MT. MORRIS COAL COMPANY

PR—M. B. Clovis, Morgantown, W. Va.
TR—Josie Demily, Morgantown, W. Va.
GM—J. L. Blacker, Morgantown, W. Va.
PA—J. L. Blacker, Morgantown, W. Va.
EM—James Morris, Morgantown, W. Va.

Mt. Morris Mine; Drift; Sewickley Seam, 60 in. thick.
PO—Morgantown, W. Va.; SP—Randall; CTY—Monongalia; RR—M. & W. M. & W. Branch.
MS—James Dennison, Morgantown, W. Va.
S of H—Mules.
S of M—Hand.
Old information.

MOUNT MORRIS MINING COMPANY

General Office, Montgomery, W. Va.
PR—E. P. Champe, Montgomery, W. Va.
VP—W. A. Hoodlet, Montgomery, W. Va.
TR—E. P. Champe, Montgomery, W. Va.
GM—W. A. Hoodlet, Montgomery, W. Va.
GS—W. A. Hoodlet, Montgomery, W. Va.
PA—E. P. Champe, Montgomery, W. Va.
CE—J. A. Jackson, Montgomery, W. Va.
SA—Old Dominion Coal Corp., Charleston, W. Va., and Logan & Kanawha Coal Co., Cincinnati, O.

Mount Morris Mine; Drift; No. 2 Gas Seam; 65 inches thick.
PO—Montgomery, W. Va.; SP—Same; CTY—Kanawha; RR—C. & O.
S of H—Mules. Track gage 42 in.
S of M—1 chain breast type and 1 shortwall machs.
PP—Power purchased, Transformer 2,200 volts A. C., 150 K. W. gen. unit, 250 volts D. C., 1 pump.
EMP—40. Daily tonnage 250.
SIZES SHIPT—Run of Mine.

MOUNTAIN EAGLE COLLIERIES CO.

General Office, Charleston, W. Va.
PR—Lee Stone, Charleston, W. Va.
TR—Lee Stone, Charleston, W. Va.
GS—R. V. Siders, Charleston, W. Va.
PA—Lee Stone, Charleston, W. Va.
EM—M. C. McCright, Charleston, W. Va.
SCO—Address the Company, Buyer, John Alexander, Heatherman, W. Va.
SA—Keorn Coal Co., Charleston, W. Va.

Lucay Ray-Jefferson Mine; Drift; Lower Kittanning Seam, 48 in. thick.
PO—Heatherman, W. Va.; SP—Turner, W. Va.; CTY—Kanawha; RR—B. & O.
S of H—Mules. Track gage 42 in.
S of M—Hand.
PP—Power purchased.
EMP—40. Daily tonnage 250.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.
Note—Formerly operated by the King Land Co.

MOUNTAIN STATE COAL CORP.

General Office, Huntington, W. Va.
PR—C. T. Benton, Huntington, W. Va.
VP—F. Livisay, Huntington, W. Va.
TR—B. R. Campbell, Huntington, W. Va.
GM—B. M. Long, Huntington, W. Va.
GS—G. E. Eary, Avondale, W. Va.
PA—B. M. Long, Avondale, W. Va.
SCO—Address the Company, Buyer, T. W. Still, Avondale, W. Va.
SA—Interstate Coal & Dock Co.

Gettlin & Benton Mine; Drift; Fire Creek Seam; 48 in. thick.
PO—Avondale, W. Va.; SP—Ritter, W. Va.; CTY—McDowell; RR—N. & W.
S of H—Mules and rope. Track gage 44 inches.
S of M—Hand and shortwall machs.
PP—1 200 H. P. fire tube boiler.
EMP—25.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.

MUDLICK COAL COMPANY

General Office, Shinnston, W. Va.
PR—Charles Long, Shinnston, W. Va.
TR—H. B. Long, Fairmont, W. Va.
GS—F. A. Baruch, Shinnston, W. Va.
GM—Charles Long, Shinnston, W. Va.
PA—Charles Long, Shinnston, W. Va.
CE—Hornor Brothers, Clarksburg, W. Va.
SA—H. B. Long, Fairmont, W. Va.

Mudlick Mine; Drift; Pittsburgh Seam 100 in. thick.
PO—Shinnston, W. Va.; SP—Same; CTY—Harrison; RR—B. & O., Monongalia.
S of H—Mules. Track gage 12 in.
S of M—Hand.
PP—2 pumps.
SIZES SHIPT—Run of Mine.

MULLENS SMOKELESS COAL CO

Out of business.

MUTUAL COAL COMPANY

Operations abandoned.

MUTUAL COAL CO.

General Office, Kingwood, W. Va.
Malden Mine.
PO—Malden, W. Va.; CTY—Monongalia; RR—Monongahela.
No report.

NATIONAL COAL MINING CO.

General Office, 614 Frick Bldg., Pittsburgh, Pa.
PR—C. E. Batty, Pittsburgh, Pa.
VP—L. H. Kelly, Pittsburgh, Pa.
TR—E. C. Helwig, Pittsburgh, Pa.
GM—J. B. Gibson, McWhorter, W. Va.
GS—J. B. Gibson, McWhorter, W. Va.
PA—J. B. Gibson, McWhorter, W. Va.
CE—G. B. Ross, Pittsburgh, Pa.
EM—C. B. Bacon, McWhorter, W. Va.
SCO—Address the Company, Buyer, S. S. Watson, McWhorter, W. Va.
SA—International Fuel & Iron Corp., 614 Frick Bldg., Pittsburgh, Pa.

Polar Nos. 1 and 2 Mines; Drift; Red stone and Pittsburgh Seams, 54 60 inches thick.
PO—McWhorter, W. Va.; SP—Frt., Same; Exp., Jane Lew, W. Va.; CTY—Lewis; RR—B. & O.
S of H—Mules, endless rope, 2 storage battery and 1 gasoline loco. Track gage 42 inches.
S of M—1 shortwall mach.
PP—Power purchased, Transformer 22,000—220 volts A. C., M. G. Sets, 220 volts D. C., 1 pump.
EMP—35. Daily tonnage 100.
SIZES SHIPT—Run of Mine.

NATIONAL FUEL COMPANY

General Office, Morgantown, W. Va.
PR—S. B. Elkins, 23-25 Beaver St., New York, N. Y.
VP—T. Frank Bank, Morgantown, W. Va.
TR—L. S. Meridith, Morgantown, W. Va.
GM—J. B. Hanford, Morgantown, W. Va.
GS—J. B. Hanford, Morgantown, W. Va.
PA—J. B. Hanford, Morgantown, W. Va.
EM—Barthel Bros., Morgantown, W. Va.
SA—S. B. Elkins, 25 Beaver St., New York, N. Y., and J. B. Hanford, Morgantown, W. Va.

National No. 1 Mine; Drift; Pittsburgh Seam, 102 in. thick.
PO—Reechwood, W. Va.; SP—National, W. Va.; CTY—Monongalia; RR—Monongahela.
MS—D. B. Malone, Reechwood, W. Va.
S of H—3 combination locos. Track gage 44 in.
S of M—2 chain breast type and 2 shortwall machs.
PP—Power purchased Transformers 13,500—2200 volts A. C., M. G. Set, 250 volts D. C., 2 pumps.
EMP—45. Last years tonnage 53,401.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.

National No. 1 Mine; Drift; Pittsburgh Seam, 108 in. thick.
PO—Kingwood, W. Va.; SP—Caddell, W. Va.; CTY—Preston; RR—Morgantown & Kingwood.
MS—John H. Fellers, Kingwood, W. Va.
S of H—1 steam loco. Track gage 44 in.
S of M—Hand.
EMP—26. Last years tonnage 20,087.
SIZES SHIPT—Run of Mine.

NAUGATUCK COAL CO., THE

General Office, Cincinnati, O.
PR—E. B. Ulrich, Cincinnati, O.
TR—C. Litkowski.
GM—H. A. Buick, Blocton, W. Va.
GS—H. A. Buick, Blocton, W. Va.
PA—H. A. Buick, Blocton, W. Va.
EM—D. M. Good, Williamson, W. Va.
MM—Chas. Morrison, Blocton, W. Va.
EE—Chas. Morrison.
Sales Agency, The Blue Ash Coal Co., Cincinnati, O.

Naugatuck Mine; Drift; Coalburg Seam, 42 to 60 in. thick. Operate wasbery.
PO—Blocton, W. Va.; SP—Same; CTY—Mingo; RR—N. & W.
S of H—2 elec. locos. Track gage 44 in.
S of M—4 elec. machs.

PP—4 return tubular boilers, 550 H. P., 2 gen. units, 250 volts D. C., 8 pumps.
EMP—150. Last years tonnage 16,000.
SIZES SHIPT—Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screen, Loading Booms.

NAY & HARDESTY

Operations worked out and abandoned.

NEAL COAL COMPANY

General Office, Bramwell, W. Va.
PR—E. A. Neal, Lester, W. Va.
VP—C. L. Bowling, Lester, W. Va.
TR—E. E. Hartsock, Bramwell, W. Va.
GM—E. A. Neal, Lester, W. Va.
PA—E. A. Neal, Lester, W. Va.
EM—T. L. Kauditz, Goodwell, W. Va.
SA—Smokeless Fuel Co., Charleston, W. Va.

Neal Mine; Slope; Sewall Seam, 66 inches thick.
PO—Lester, W. Va.; SP—Same; CTY—Raleigh; RR—Virginian.
S of H—Mules and rope. Track gage 41 inches.
S of M—Hand.
PP—1 25 H. P. water tube boiler, 1—125 K. W. gen. unit, 250 volts D. C.
EMP—30. Last years tonnage 15,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.

NELLIS COAL CO

General Office, Costa, W. Va.

Nellis Mine.
PO—Costa, W. Va.; CTY—Boone; RR—C. & O.
No report.

NELSON, H. R., COAL CO.

General Office, Winifrede, W. Va.
H. R. Nelson Mine.
PO—Winifrede, W. Va.; CTY—Kanawha; RR—Winifrede.
No report.

NETHEKON COAL MINING COMPANY

General Office, Newburg, W. Va.
PR—W. R. Nethekon, Cumberland, Md.
VP—C. H. Lantz, Piedmont, W. Va.
TR—N. H. Swayne, 215 S. 17th St., Philadelphia, Pa.
ASST. TR—H. C. Thomson, 215 S. 17th St., Philadelphia, Pa.
GS—T. K. Nethekon, Newburg, W. Va.
SA—Swayne & Co., Swayne Bldg., 215 S. 17th St., Philadelphia, Pa.

Scotch Hill Mine; Drift; Pittsburgh Seam, 122 in. thick.
PO—Newburg, W. Va.; SP—Same; CTY—Preston; RR—R. & O.
S of H—Mules and 1 steam loco. Track gage 12 in.
S of M—Hand.
EMP—70. Daily tonnage 400.
SIZES SHIPT—Run of Mine.
Note—Formerly operated by Virginia-Maryland Coal Corp.

NEW CUMBERLAND COAL CO

General Office, 529 Fulton Bldg., Pittsburgh, Pa.
PR—Mat D. Griffith, Pittsburgh, Pa.
VP—H. C. Miller, Pittsburgh, Pa.
TR—E. S. Wallace, Pittsburgh, Pa.
GM—Mat D. Griffith, Pittsburgh, Pa.
EM—C. E. Taylor, Pittsburgh, Pa.
SA—E. S. Wallace, Pittsburgh, Pa.

Margaret Mine; Drift; Bakerstown Seam, 48-52 in. thick.
PO—Collier, W. Va.; SP—Same; CTY—Brooke; RR—P. C. C. & St. L.
MS—Henry Ledger, Collier, W. Va.
S of H—Mules.
S of M—1 chain breast mach.
PP—1 return tubular boiler, gen. unit, 60 K. W., 250 volts D. C.
EMP—15. Daily tonnage 50.
SIZES SHIPT—Run of Mine.

NEW EAGLE GAS COAL COMPANY

Out of Business.

NEW ENGLAND FUEL & TRANSPORTATION CO.

General Office, 111 Devonshire St., Boston, Mass.
PR—B. Grant, Boston, Mass.
VP—E. Page, " "
TR—E. M. Richards, " "
GM—J. W. Devison, Grant Town, W. Va.
GS—J. W. Devison, Grant Town, W. Va.
ASST GS—J. M. McKenna, Grant Town, W. Va.
PA—T. J. Asher, Jr., Grant Town, W. Va.
CE—Howard N. Evanson, Grant Town, W. Va.
EM—Frank S. Follansbee, Grant Town, W. Va.
EE—E. D. Fortney, Grant Town, W. Va.
SCO—Address the Company, Buyer, C. H. Gould, Grant Town, W. Va.
SA—E. Page, 111 Devonshire St., Boston, Mass.

Additional Information on Page 10-13

(Continued on Next Page)

New England Fuel & Transportation Co.—Cont.

Federal No. 3 Mine; Shaft; Pittsburgh Seam; 96 to 108 inches thick.
 PO—Grant Town, W. Va.; SP—Same; CTY—Mingo; RR—C. & O.
 MS—J. P. McGraw, Grant Town, W. Va.
 S of H—Mules, 5 elec. motors and 12 elec. locos. Track gage 42 inches.
 PP—Power purchased, transformer 2200 to 2300 volts A. C., 6 pumps.
 EMP—125. Last fiscal year output, 127,345 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Shaker Screens.

Federal No. 3 Mine; Drift; Pittsburgh Seam; 90 in. thick.
 PO—Everettville, W. Va.; SP—Lowville, W. Va.; CTY—Monongalia; RR—Indian Creek & Northern R.
 MS—J. A. McKay, Everettville, W. Va.
 SM—J. D. Fultz, Everettville, W. Va.
 S of H—Mules, 2 trolley pole type and 6 storage battery locos. Track gage 42 in.
 S of M—11 chain breast type and 2 shortwall machs.
 PP—Power purchased, transformer 22000 to 2300 volts A. C., M. G. sets, 250 volts D. C., 5 pumps.
 EMP—150. Daily tonnage 2,000.
 PREP. EQUIPT—Gravity Screens.

NEW EXPORT COAL COMPANY, THE

General Office, Charleston, W. Va.
 PR—T. J. Davis, Montgomery, W. Va.
 VP—Thos. Haggerty, Perryville, W. Va.
 TR—W. S. Johnson, Charleston, W. Va.
 GM—J. G. Fraser, Cinco, W. Va.
 GS—J. G. Fraser, Cinco, W. Va.
 SM—Walter Crichton, Perryville, W. Va.
 SC0—Address the Company; Buyer, W. A. Edler, Cinco, W. Va.
 Additional Information on Page 1042

New Export Mine; Slope; No. 2 Gas Seam; 72 inches thick.
 PO—Cinco, W. Va.; SP—Perryville, W. Va.; CTY—Kanawha RR—M. K.
 S of H—Mules and trolley pole type locos. Track gage 42 in.
 S of M—Shortwall machs.
 PP—2 150 H. P. fire tube boilers, 1 gen. unit, 250 volts D. C., 9 pumps.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.
 Old information.

NEW HOWARD COAL CO.

General Office, Matewan, W. Va.
 PR—F. L. Schow, Huntington, W. Va.
 TR—Fred W. Schow, Huntington, W. Va.
 GM—Fred W. Schow, Huntington, W. Va.
 CE—F. E. Strohmeier, Matewan, W. Va.
 EM—F. E. Strohmeier, Matewan, W. Va.
 SC0—Address the Company; Buyer, A. W. Richardson, Matewan, W. Va.
 SA—New Howard Coal Co., 1100 First National Bank Bldg., Huntington, W. Va.

New Howard No. 1 Mine; Drift; Alma Seam, 44 in. thick.
 PO—Matewan, W. Va.; SP—Same; CTY—Mingo; RR—N. & W.
 MS—A. W. Richardson, Matewan, W. Va.
 S of H—Storage battery locos. Track gage, 48 in.
 S of M—4 shortwall machs.
 PP—Power purchased, transformer 23,000-2300 volts A. C., rotary converters, 250 volts D. C.
 EMP—40.
 SIZES SHIPT—Run of Mine.

New Howard No. 2 Mine; Drift; Alma Seam, 40 in. thick.
 PO—Matewan, W. Va.; SP—Same; CTY—Mingo; RR—N. & W.
 MS—A. W. Richardson, Matewan, W. Va.
 S of H—3 storage battery and 1 trolley pole type locos. Track gage 48 in.
 S of M—4 shortwall machs.
 PP—Power purchased, transformer 23,000-2300 volts A. C., rotary converters, 250 volts D. C.
 EMP—35. Last years tonnage 14,000.
 SIZES SHIPT—Run of Mine.

NEW POCAHONTAS COAL CO.

General Office, Huntington, W. Va.
 PR—W. E. Deegans, Huntington, W. Va.
 VP—Jno. Faulkner, Huntington, W. Va.
 TR—J. Frank Grimet, Huntington, W. Va.
 GM—W. E. Deegans, Huntington, W. Va.
 GS—O. C. Huffman, Huntington, W. Va.
 SM—Jno. Faulkner, Huntington, W. Va.
 EM—Morris Hanford, Huntington, W. Va.
 EE—J. B. Pannan, Deegans, W. Va.
 SC0—Address the Company; Buyer, T. A. Merrill, Deegans, W. Va.
 Sales Agency—W. E. Deegans Coal Co., Huntington, W. Va.

New Pocahontas No. 1 Mine; Drift; Pocahontas No. 6 Seam, 42 in. thick.
 PO—Deegans, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.

S of H—Mules, trolley pole type and 4 elec. locos. Track gage 42 in.
 S of M—Hand and machs.
 PP—Power purchased, transformer 2200 to 250 volts A. C., rotary converters, 250 volts D. C., 2 pumps.
 EMP—200. Last years tonnage 124,202.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

NEW RIVER CO.

General Office, Macdonald, W. Va.
 PR—K. H. Gross, 85 Devonshire St., Boston, Mass.
 VP—Henry N. Sweet, 60 Congress St., Boston, Mass.
 TR—F. B. Dowst, Macdonald, W. Va.
 GM—S. A. Scott, Macdonald, W. Va.
 GS—Edward Graff, Macdonald, W. Va.
 SM—Inspector—J. M. McCauley, Macdonald, W. Va.
 PA—M. C. Moore, Macdonald, W. Va.
 SUPT OF STORES—E. M. Tutwiler, Macdonald, W. Va.
 CE—H. F. Randolph, Pittsburgh, Pa.
 MGR OF MINES—Edw. Graff, Macdonald, W. Va.
 CE—H. T. Randolph, Oliver Bldg., Pittsburgh, Pa.
 EM—F. G. Watkins, Macdonald, W. Va.
 EE—M. A. Mann, Scarbro, W. Va.
 EE—C. C. Ballard, Sprague, W. Va.
 Sales Agency, White Oak Coal Co., Macdonald, W. Va.
 Additional Information on Pages 1057-1057

Cranberry No. 1 Mine; Shaft; Sewall Seam, 52 to 68 in. thick.
 PO—Cranberry, W. Va.; SP—Prosperity, W. Va.; CTY—Kaleigh; RR—C. & O. and Virginian.
 MS—W. H. Johnson, Cranberry, W. Va.
 SM—V. Moon.
 S of H—Mules and 7 trolley pole type locos. Track gage, 40 in.
 S of M—2 chain breast type and 6 shortwall machs.
 PP—Purchase power, 44,000 to 2300 volts, 2 150 K. W. M. G. sets, 600 volts D. C., 6 pumps.
 EMP—170. Last fiscal year output, 180,417 tons.
 SIZES SHIPT—Run of Mine, Lump, Egg, Nut, Slack.
 PREP. EQUIPT—Shaker Screens, Loading Rooms.

Cranberry No. 3 Mine; Slope; Sewall Seam, 48 in. thick.
 PO—Sprague, W. Va.; SP—Same; CTY—Kaleigh; RR—C. & O., Piney Br., and Virginian.
 MS—J. M. Bowman, Sprague, W. Va.
 SM—George Harvey, Sprague, W. Va.
 S of H—Mules, rope and 6 trolley pole type locos. Track gage, 40 in.
 S of M—2 chain breast type and 8 shortwall machs.
 PP—Purchase power, transformer 44,000 to 2300 volts, 2 150 K. W. M. G. sets, 600 volts D. C., 9 pumps.
 EMP—205. Last fiscal year output, 202,788 tons.
 SIZES SHIPT—Run of Mine.

Cranberry No. 2 Mine; Slope; Sewall Seam, 48 in. thick.
 PO—Skelton, W. Va.; SP—Same; CTY—Kaleigh; RR—C. & O. and Virginian, P. K. & P. C. Br., and Virginian.
 MS—G. H. Thomas, Skelton, W. Va.
 SM—J. P. McHugh, Skelton, W. Va.
 S of H—Mules, rope, 8 trolley pole type and storage battery locos. Track gage 40 inches.
 S of M—3 chain breast and 4 shortwall machs.
 PP—Purchase power, transformer 44,000 to 2300 volts, 1 150 K. W. M. G. set, 600 volts D. C., 9 pumps.
 EMP—110. Last fiscal year output, 101,242 tons.
 SIZES SHIPT—Run of Mine.

Lochelly Mine; Shaft; Sewall Seam 46 to 54 in. thick.
 PO—Lochelly, W. Va.; SP—Same; CTY—Fayette; RR—C. & O. and Virginian, White Oak Br.
 MS—J. H. R. Island, Lochelly, W. Va.
 SM—E. S. Anderson, Lochelly, W. Va.
 S of H—Mules and 8 trolley pole type locos. Track gage, 40 in.
 S of M—5 shortwall machs.
 PP—Purchase power, transformer 44,000 to 2300 volts, 2 150 K. W. M. G. sets, 600 volts D. C., 7 pumps.
 EMP—120. Last fiscal year output, 165,980 tons.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Loading Rooms.

Summerlee Mine; Shaft; Sewall Seam, 54 to 63 in. thick.
 PO—Summerlee, W. Va.; SP—Same; CTY—Fayette; RR—C. & O. and Virginian, White Oak Br.
 MS—John Mallabone, Summerlee, W. Va.
 SM—K. A. Atkinson, Summerlee, W. Va.
 S of H—10 trolley pole type locos. Track gage, 40 in.

S of M—Hand and 6 shortwall machs.
 PP—Purchase power, transformer 44,000 to 2300 volts, 2 150 K. W. M. G. sets, 600 volts D. C., 6 pumps.
 EMP—130. Last fiscal year output, 151,131 tons.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Re-Screens, Loading Booms.

Mabscott Mine; Drift; Sewall Seam, 50 to 60 in. thick.
 PO—Mabscott, W. Va.; SP—Same; CTY—Kaleigh; RR—C. & O. and Virginian, Piney Br.
 MS—L. C. Simpson, Mabscott, W. Va.
 SM—J. P. Peck, Mabscott, W. Va.
 S of H—Mules, 5 trolley pole type and 2 storage battery locos. Track gage, 42 in.
 S of M—1 chain breast and 4 shortwall machs.
 PP—Power from Beckley Mine, 600 volts D. C., 4 pumps.
 EMP—140. Last fiscal year output, 150,023 tons.
 SIZES SHIPT—Run of Mine.

Macdonald Mine; Drift; Sewall Seam; 49 to 67 in. thick.
 PO—Macdonald, W. Va.; SP—Same; CTY—Fayette; RR—C. & O., Loup Br.
 MS—B. W. Samples, Macdonald, W. Va.
 SM—Fred Shernberk, Macdonald, W. Va.
 S of H—Mules and 2 trolley pole type locos. Track gage, 44 in.
 S of M—Hand and 1 shortwall mach.
 PP—Purchase power, transformer 44,000 to 2300 volts, M. G. sets, 600 volts D. C., 1 pump.
 EMP—75. Last fiscal year output, 58,034 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

Harvey Mine; Drift; Sewall Seam, 48 to 60 in. thick.
 PO—Harvey, W. Va.; SP—Same; CTY—Fayette; RR—C. & O., Loup Creek Branch.
 MS—Wm. Ward, Harvey, W. Va.
 SM—C. B. Powell, Harvey, W. Va.
 S of H—Mules and 7 trolley pole locos. Track gage 44 inches.
 S of M—2 chain breast and 5 shortwall machs.
 PP—Purchase power, transformer 44,000 to 2300 volts A. C., M. G. sets, 250 volts D. C., 19 pumps.
 EMP—160. Last fiscal year output, 219,186 tons.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Loading Rooms.

Dunlop Mine; Drift; Sewall Seam, 65 in. thick.
 PO—Dunlop, W. Va.; SP—Same; RR—C. & O.
 MS—R. W. Samples, Dunlop, W. Va.
 SM—W. O. Nichols, Dunlop, W. Va.
 S of H—Mules and 8 trolley pole type locos. Track gage, 44 in.
 S of M—2 chain breast type and 1 shortwall machs.
 PP—Purchase power, transformer 44,000 to 2300 volts, 3 150 K. W. M. G. sets, 500 volts D. C., 5 pumps.
 EMP—130. Last fiscal year output, 183,759 tons.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Loading Rooms.

Collins Mine; Drift; Sewall Seam, 70 to 72 in. thick.
 PO—Glen Jean, W. Va.; SP—Same; CTY—Fayette; RR—C. & O., Loup Creek Br.
 MS—R. J. Holmes, Glen Jean, W. Va.
 SM—C. E. Graham, Glen Jean, W. Va.
 S of H—Mules and 3 trolley pole type locos. Track gage, 44 in.
 S of M—2 chain breast type and 4 shortwall machs.
 PP—Purchase power, transformer 44,000 to 2300 volts, 3 150 K. W. M. G. set, 300 volts D. C., 7 pumps.
 EMP—110. Last fiscal year output, 111,575 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

Beckley Mine; Slope; Sewall Seam; 46 to 64 in. thick.
 PO—Wickham, W. Va.; SP—Bickel, W. Va.; CTY—Kaleigh; RR—C. & O., Virginian.
 MS—H. L. Fink, Wickham, W. Va.
 SM—G. H. Mulford, Wickham, W. Va.
 S of H—Mules, rope and 11 trolley pole type locos. Track gage, 36 in.
 S of M—1 chain breast type and 6 shortwall machs.
 PP—Purchase power, transformer 44,000 to 2300 volts, 3 150 M. G. sets, 600 volts D. C., 10 pumps.
 EMP—140. Last fiscal year output, 161,509 tons.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.

Prudence Mine; Drift; Sewall Seam, 56 to 66 in. thick.
 PO—Prudence, W. Va.; SP—Same; CTY—Fayette; RR—C. & O., Loup Creek Br.
 MS—Wm. Ward, Prudence, W. Va.
 SM—P. Alderson, Prudence, W. Va.
 S of H—Mules and 5 trolley pole type locos. Track gage, 44 in.
 S of M—5 chain breast and 2 shortwall machs.
 PP—Purchase power, transformer 44,000 to 2300 volts, 3 150 K. W. M. G. sets, 300 volts D. C., 8 pumps.
 EMP—125. Last fiscal year output, 127,345 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

Oakwood Mine; Shaft; Sewall Seam, 42 to 60 in. thick.
 PO—Carlide, W. Va.; SP—Same; CTY—Fayette; RR—C. & O., White Oak Br., and Virginian.
 MS—Sam Pyro, Carlisle, W. Va.
 SM—O. W. Dixon, Carlisle, W. Va.
 S of H—Mules and 13 trolley pole type locos. Track gage, 40 in.
 S of M—1 chain breast and 6 shortwall machs.
 PP—Purchase power, transformer 44,000 to 2300 volts, 2 150 K. W. M. G. sets, 600 volts D. C.
 EMP—160. Last fiscal year output, 197,340 tons.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Loading Rooms.

Scarbro Mine; Shaft; Sewall Seam, 42 to 56 in. thick.
 PO—Scarbro, W. Va.; SP—Same; CTY—Fayette; RR—C. & O., White Oak Br., also Virginian R. R.
 MS—Edgar Blackwell, Scarbro, W. Va.
 SM—Clarence Bishop, Scarbro, W. Va.
 S of H—Mules and 15 trolley pole type locos. Track gage, 40 in.
 S of M—1 chain breast type and 8 shortwall machs.
 PP—Purchase power, transformer 44,000 to 2300 volts, 3 150 K. W. M. G. sets, 600 volts D. C., 25 pumps.
 EMP—225. Last fiscal year output, 216,995 tons.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

Whipple Mine; Shaft; Sewall Seam, 44 to 54 in. thick.
 PO—Whipple, W. Va.; SP—Scarbro, W. Va.; CTY—Fayette; RR—C. & O., White Oak Br., and Virginian.
 MS—Edward Malone, Whipple, W. Va.
 SM—E. W. McChung, Whipple, W. Va.
 S of H—1 chain breast and 7 shortwall machs.
 S of M—5 shortwall machs.
 PP—Power purchased, transformer, 44,000 to 2300 volts, 2 150 K. W. M. G. sets, 300 volts D. C., 10 pumps.
 EMP—115. Last fiscal year output, 140,094 tons.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Loading Rooms.

NEW RIVER COLLIERIES CO.

General Office, New York, N. Y.
 PR—J. K. MacGowan,
 120 Broadway, New York, N. Y.
 VP—E. L. Carpenter, New York, N. Y.
 TR—Philip Kennedy, New York, N. Y.
 PA—E. R. Reets,
 GM—C. P. Murch, Eccles, W. Va.
 CE—H. W. York,
 120 Broadway, New York, N. Y.
 EM—J. C. Lowry, Eccles, W. Va.
 EE—Geo. C. Donaldson, Eccles, W. Va.
 SC0—Address the Company; Buyer, P. Graves, Eccles, W. Va.
 Sales Agency—C. & O. Coal & Coke Co., 120 Broadway, New York, N. Y.
 Additional Information on Page 1044

Sun Nos. 1 and 2 Mines; Slope and Shaft; Sewall Seam, 36 to 72 in. thick.
 PO—Sun, W. Va.; SP—Same; CTY—Fayette; RR—C. & O., Loup Creek Br.
 MS—Thomas Dunabson, Sun, W. Va.
 SM—L. C. Bryant, Sun, W. Va.
 S of H—Mules and 9 elec. locos. Track gage 44 in.
 S of M—7 elec. machs.
 PP—4 water tube boilers, total 1200 H. P., 2 gen. units, 500 volts D. C., 17 pumps.
 EMP—380. Last fiscal year output 350,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.
 Eccles No. 3 Mine; Shaft; Beckley Seam, 72 to 132 in. thick.
 PO—Eccles, W. Va.; SP—Admiralty on C. & O. R. R. and Eccles on Virginian R. R.; CTY—Kaleigh.

(Continued on Next Page)

S of M—Hand.

S of M—Hand.
EMP -25. Daily tonnage 150.
SIZES SHIPT—Run of Mine.
Old information

NUMBER FIVE BLOCK COAL COMPANY
 General Office, Huntington, W. Va.
 PR J Dalton, Huntington, W. Va.
 VP C. C. Hale, Huntington, W. Va.
 TR J. A. Kirby, Huntington, W. Va.
 GM W. T. Jones, Omar, W. Va.
 GS G. C. Walker, Omar, W. Va.
 PA J. R. Sherbond, Omar, W. Va.
 EM J. F. Healey, Omar, W. Va.
 Lb John Kellar, Omar, W. Va.
 SFO Address, the Company Royer, T
 H Brooks, Omar, W. Va.
 Sales Agency Huntington Coal Sales Co.,
 Omar, W. Va.

Number Five Block Mine; Drift; Number
Five Block Seam, 72 in. thick.
FO—Maneuer, W. Va.; SP—Blair, W.
Va.; CTY—Logan, RB—C. & W.
Co.; R—River Bend, W. Va.
MS—C. H. Percy, Maneuer, W. Va.
SM—F. I. Caudl, Maneuer, W. Va.
S of H—2 tinley pole looms. Track gage
48 in.
S of M—3 shortwall machs.
PP—Power purchased, 250 volts D. C.,
1 100 K. W., rotary converter,
2 elec. pumps
EMP—80 Daily tonnage 1,000
SIZES SHIT—Run of Mine, Slack, Nut
Lump.
PRP, EQUIPT—Shaker Screens, Picking
Tables, Loading Rooms.

NO. 2 GAS COAL CO.
 General Offic., Box 1013, Charleston, W. Va.
 PR E. M. Spangler, Charleston, W. Va.
 VP C. M. Spangler, Peterstown, W. Va.
 TR L. J. Spangler, Charleston, W. Va.
 GM E. M. Spangler, Charleston, W. Va.
 PA E. M. Spangler, Charleston, W. Va.
 SA Kanawha Valley Coal Co., Charleston, W. Va.

No.	D.	Co.	Miles.	Stations.	No.	D.	Co.
1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9
10	10	10	10	10	10	10	10
11	11	11	11	11	11	11	11
12	12	12	12	12	12	12	12
13	13	13	13	13	13	13	13
14	14	14	14	14	14	14	14
15	15	15	15	15	15	15	15
16	16	16	16	16	16	16	16
17	17	17	17	17	17	17	17
18	18	18	18	18	18	18	18
19	19	19	19	19	19	19	19
20	20	20	20	20	20	20	20
21	21	21	21	21	21	21	21
22	22	22	22	22	22	22	22
23	23	23	23	23	23	23	23
24	24	24	24	24	24	24	24
25	25	25	25	25	25	25	25
26	26	26	26	26	26	26	26
27	27	27	27	27	27	27	27
28	28	28	28	28	28	28	28
29	29	29	29	29	29	29	29
30	30	30	30	30	30	30	30
31	31	31	31	31	31	31	31
32	32	32	32	32	32	32	32
33	33	33	33	33	33	33	33
34	34	34	34	34	34	34	34
35	35	35	35	35	35	35	35
36	36	36	36	36	36	36	36
37	37	37	37	37	37	37	37
38	38	38	38	38	38	38	38
39	39	39	39	39	39	39	39
40	40	40	40	40	40	40	40
41	41	41	41	41	41	41	41
42	42	42	42	42	42	42	42
43	43	43	43	43	43	43	43
44	44	44	44	44	44	44	44
45	45	45	45	45	45	45	45
46	46	46	46	46	46	46	46
47	47	47	47	47	47	47	47
48	48	48	48	48	48	48	48
49	49	49	49	49	49	49	49
50	50	50	50	50	50	50	50
51	51	51	51	51	51	51	51
52	52	52	52	52	52	52	52
53	53	53	53	53	53	53	53
54	54	54	54	54	54	54	54
55	55	55	55	55	55	55	55
56	56	56	56	56	56	56	56
57	57	57	57	57	57	57	57
58	58	58	58	58			

No. 2 643 3 Mmc; Super; No. 2 643
Seam, 66 in thick.
PO Charleston, W Va.; SP Kan., W
Va.; CTY Kanawha; RIR—K. M.
& C O
MS E. M. Spangler, Charleston, W Va
S of H Miles, Steam locus, Truck gag
40 in.
S of M—land
FP=1—150 H. P water tube boiler
EMP 20 Tons daily tonnage 160
SIZES SHUTT Run of Mine.

NUTTALLBURG SMOKELESS TUBE CO

NUTTALLBURG SMOKELESS FUEL CO
General Office, Nuttallburg, W. Va.
PR Esol Ford, Detroit, Mich.
YI W H Smith, Detroit, Mich.
GM - Amer Crumford, Kentenia, Ky
PS Amer, Crumford, K-entenia, Ky
GA C S Whit, Nuttallburg, W Va
CE C B Roeser Kanawha Falls, W
Va.
SCO - Address the Company, Buyer, I
E Mays, Nuttallburg, W Va.

Nuttallburg Mine; Drift; Sewell Seal
4 1/2 in. thick
FO—Nuttallburg W. Va., S²E 2¹/₂°
W. Va.; CTY Fayette; RR C &
MS—C. S. White, Nuttallburg, W. Va.
S of H. Mules and 9 elec. motors. Tra-
cage 42 inches
S of M. 4 shortwall machs., hand
PP—Power purchased. Transformer 220
to 550 volts A. C. M. G. Set
550 volts D. C., 2 pumps
EMP—S. S. Daily tonnage 225.
SIZES SHIP—Drift of Mine, Slack, Va.
Eq., Luml. Shaker Screens
PREP—Eq. Luml. Shaker Screens

NUZUM COAL COMPANY
General Office, Fairmont, W. Va.
GM Ernest McCoy, Fairmont, W. Va.
TR Sam R. Nuzum, Fairmont, W. Va.
PA Ernest McCoy, Fairmont, W. Va.

Nagayama, M. and T. Higuchi: Pittsburgh, Spring 1981.

Nuzum Mine; Drift; Pittsburg Seam, 1
 inches thick
 P0 -Fairmont, W Va.; SP - Same; CT
 --Marion; RR - B & O
 S of R- Mules,
 S of M- Hand
 EMP--122 Daily tonnage 150
 SIZES SHIPT Run of Mine,
 Old information

COAL CATALOG

OAK POINT COAL CO.

General Office, Fairmont, W. Va.

Shady Brook Min.
PO—Hutchinson, W. Va.; CTY—Marion;
RR—B. & O.
No report.

OAKHILL COAL COMPANY

General Office, Morgantown, W. Va.

PR—W. R. Higgins, Morgantown, W. Va.
VP—John Higgins, Morgantown, W. Va.
TR—W. R. Higgins, Morgantown, W. Va.
PA—W. R. Higgins, Morgantown, W. Va.
EM—McDermott & Bartells, Morgantown,
W. Va.

SA—F. P. Weaver, Morgantown, W. Va.

Oakhill Mine; Drift; Waynesburg Seam,

84 in. thick.

PO—Cassville, W. Va.; SP—Morgantown,

W. Va.; CTY—Monongalia; RR—

M. & W.

S of H—Mules. Track gage 42 in.

S of M—Hand.

SIZES SHIPT—Run of Mine.

OAKLAND COAL COMPANY

General Office, Fairmont, W. Va.

PR—Brooks S. Hutchinson, Fairmont, W.

Va.

VP—C. E. Hutchinson, Fairmont, W. Va.

TR—John C. Arnold, Buckhannon, W. Va.

GM—R. Lee Hutchinson, Cincinnati, O.

GS—E. L. Michie, Hugheson, W. Va.

PA—T. E. Hutchinson, Logan, W. Va.

EM—R. S. Long, Smithers, W. Va.

EE—J. L. Davenport, Smithers, W. Va.

SC0—Oak Coal Co., Smithers, W. Va.

Buyer, N. E. Claypole, Smithers,

W. Va.

SA—Hutchinson Coal Co., Cincinnati, O.

Additional Information on Pages 982, 983

Oakland Mine; Drift; Eagle Seam, 45½

inches thick.

PO—Smithers, W. Va.; SP—Same; CTY

—Fayette; RR—K. & M. Ry.

MS—H. Hutchinson, Smithers, W. Va.

S of H—Mule, trolley pole type loco.

Track gage 42 inches.

S of M—8 shortwall machs.

PP—Power purchased. Transformer 2200-

500 volts A. C. M. G. Sets, 500

volts D. C., 5 pumps.

EMP—150. Last years tonnage 40,430.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Gravity Screens, Picking

Tables.

Formerly operated by W. R. Johnson

Coal Company.

Crescent Mine; Drift; No. 1 and 4 Seams,

39 inches thick.

PO—Smithers, W. Va.; SP—Same; CTY

—Fayette; RR—C. & O. Ry.

MS—H. Hutchinson, Smithers, W. Va.

S of H—Mule, trolley pole type loco.

Track gage 42 inches.

S of M—1 shortwall machs.

PP—Power purchased. Transformer 2200-

500 volts A. C. M. G. Sets, 500

volts D. C., elec. pump.

EMP—75. Last years tonnage 32,189.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Gravity Screens.

Glen Falls Mine; Drift; No. 1 and 1

Seams, 46 inches thick.

PO—Glen Ferris, W. Va.; SP—Same; CTY

—Fayette; RR—K. & M. Ry.

SM—J. A. McAnille, Glen Ferris, W. Va.

S of H—Mule, trolley pole type loco.

Track gage 42 inches.

S of M—Shortwall mach.

PP—Power purchased. Transformer 2200-

250 volt A. C. M. G. Sets, 250

volts D. C., 2 pumps.

EMP—120. Last years tonnage 13,080.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Gravity Screens, Picking

Tables.

OCEAN COAL COMPANY

General Office, 1013 House Bldg., Pitts-

burgh, Pa.

PR—Julian Kennedy, Pittsburgh, Pa.

TR—J. O. Miller, Pittsburgh, Pa.

GM—R. C. Crawford, Pittsburgh, Pa.

GS—J. M. Crawford, Point Marion, Pa.

PA—R. C. Crawford, Pittsburgh, Pa.

CE—C. K. Knopp, Pittsburgh, Pa.

SA—Poland Coal Co., Pittsburgh, Pa.

Preston Mine; Shaft; Sewickley Seam, 72

inches thick.

PO—Independence, W. Va.; SP—Same;

CTY—Preston; RR—B. & O.

MS—Adam Kessler, Independence, W. Va.

S of H—Ponies and elec. loco.

S of M—Hand, chain breast and short-

wall machs.

PP—2 150 H. P. water tube boilers, 1—

150 K. W. gen. unit, 270 volts

D. C.

EMP—80.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Screens.

NOTE—Formerly operated by the Pres-

ton Coal Co.

OGDEN COAL CO.

Fairmont, W. Va.

Ogden Mine; CTY—Marion.

No report.

OHIO RIVER SALT COMPANY

General Office, Mason, W. Va.

PR—J. S. Spencer, Pt. Pleasant, W. Va.

VP—L. C. Somerville, Pt. Pleasant, W.

Va.

TR—M. G. Tyler, Mason, W. Va.

GM—M. G. Tyler, Mason, W. Va.

GS—Geo. Rae, Mason, W. Va.

PA—M. G. Tyler, Mason, W. Va.

Dixie Mine; Drift; Pittsburgh No. 8

Seam, 54 in. thick.

PO—Mason, W. Va.; SP—Mason City,

W. Va.; CTY—Mason; RR—B. & O.

O. R. Div.

S of H—1 storage battery loco.

S of M—Hand.

PP—1 return tubular boiler, 1 gen. unit,

250 volts D. C.

Last fiscal year output, 300,000 tons.

SIZES SHIPT—Run of Mine.

OLD FOUNDATION COAL COMPANY

General Office, 809 Finance Bldg., Phila-

delphia, Pa.

PR—John C. Reed, Philadelphia, Pa.

VP—H. T. Reed, Philadelphia, Pa.

TR—John C. Reed, Philadelphia, Pa.

GM—W. A. Rowland, Philadelphia, Pa.

GS—John Rowland, Philadelphia, Pa.

PA—J. C. Reed, 809 Finance Bldg.,

Philadelphia, Pa.

EM—H. O. Brown, Philadelphia, Pa.

SA—J. C. Reed & Co., Philadelphia, Pa.

Old Foundation Mine; Drift; Pittsburgh

No. 8 Seam; 84 to 108 inches thick.

PO—Braxton, W. Va.; SP—Same; CTY

—Krauxton; RR—B. & O.

S of H—Mules. Track gage 42 in.

S of M—Hand.

PP—1 pump.

EMP—30. Last years tonnage 30,000.

SIZES SHIPT—Run of Mine.

Note—Formerly operated by the Old

Foundation Coal Co.

OMAR COAL COMPANY

General Office, Huntington, W. Va.

PR—A. J. Dalton, Huntington, W. Va.

VP—J. A. Kelly, Huntington, W. Va.

TR—J. A. Kelly, Huntington, W. Va.

GM—W. T. Jones, Huntington, W. Va.

GS—G. C. Walker, Omar, W. Va.

PA—J. S. Shepard, Omar, W. Va.

CE—J. F. Healy, Omar, W. Va.

S O—Address the Company Buyer, T. H.

Brooks, Huntington, W. Va.

Sales Agents—Huntington Coal Sales Co.,

Huntington, W. Va.

Omar Mine; Drift; Island Creek Seam,

84 to 96 in. thick.

PO—Omar, W. Va.; SP—Same; CTY—

Logan; RR—C. & O.

MS—J. J. Gilmore, Omar, W. Va.

S of H—2 elec. locos, Track gage 48 in.

S of M—3 elec. machs.

PP—Power purchased.

EMP—170. Last years tonnage 150,000.

SIZES SHIPT—Run of Mine, Slack, Nut,

Lump.

OPPERMAN COAL COMPANY.

General Office, Blair, W. Va.

PR—J. H. Opperman, Cambridge, O.

VP—Thos. E. Richards, Blair, W. Va.

TR—J. H. Opperman, Cambridge, O.

GM—Thos. E. Richards, Blair, W. Va.

GS—H. M. Richards, Blair, W. Va.

EM—Clark & Krebs, Charleston, W. Va.

SC0—Address the Company; Buyer, G.

K. Compton, Blair, W. Va.

Opperman No. 2 Mine; Drift; Chilton

Seam, 72 in. thick.

PO—Blair, W. Va.; SP—Same; CTY—

Logan; RR—C. & O., Oak River Br.

S of H—Mules, 1 trolley pole type loco.

S of M—3 arcwall over cutter machs.

PP—Power purchased. Transformer 44-

000 to 2,300 volts A. C. M. G.

set, 250 volts D. C., 3 pumps.

SIZES SHIPT—Run of Mine, Slack, Pea,

Nut, Egg, Lump.

PREP. EQUIPT—Gravity and Bar Screens.

ORANGE GAS COAL COMPANY

Orange, W. Va.

Orange Mine.

PO—Orgas, W. Va.; CTY—Boone; RR—

C. & O.

No report.

ORVILLE COAL CO., THE

General Office, Box 910, Huntington, W.

Va.

PR—W. E. Deegans, Huntington, W. Va.

VP—J. M. Turner, Huntington, W. Va.

TR—J. Frank Grimet, Huntington, W. Va.

SECY—J. Frank Grimet, Huntington, W.

Va.

GM—W. E. Deegans, Huntington, W. Va.

GS—S. E. Scholl, Huntington, W. Va.

PA—John Faulkner, Huntington, W. Va.

EM—Morris Hansford, Huntington, W.

Va.

SC0—Address the Company, Buyer, Okey

Chambers, Ojay, W. Va.

Sales Agent—W. E. Deegans Coal Co.,

Huntington, W. Va.

Orville Mine; Drift; Island Creek Seam;

48 in. thick.

PO—Ojay, W. Va.; SP—Yoigny, W. Va.;

CTY—Logan; RR—C. & O.

MS—C. S. Becker Ojay, W. Va.

S of H—Mules and 5 storage battery

locos. Track gage 44 in.

S of M—4 shortwall machs.

PP—Power purchased. Transformer 2300

-250 volts A. C. M. G. Sets, 250

volts D. C., 3 pumps.

EMP—65. Last years tonnage 30,660.

SIZES SHIPT—Run of Mine.

OSAGE COAL CO.

Now part of Brady Coal Corp.

OTTO MARMET COAL AND MINING CO.

General Office, Raymond City, W. Va.

PR—Mrs. Sarah Marmet, Alms Hotel,

Cincinnati, O.

VP—Mrs. Lena Wolfe, Navarre Apart-

ments, Cincinnati, O.

TR—J. Wm. Wolfe, Cincinnati, O.

GM—Otto Reemelin, Raymond City, W. Va.

PA—Edward Usher, Raymond City, W. Va.

EE—Jos. Hutton, Raymond City, W. Va.

CE—Clark & Krebs, Charleston, W. Va.

SC0—Address the Company, Buyer,

Harry Keffer, Raymond City, W. Va.

Sales Agents—The Marmet-Halm Coal and

Coke Co., Cincinnati, O.

Big Otto Nos. 3, 4, 7 and 9 Mines;

Drift; Raymond Seam, 70 in. thick.

PO—Raymond City, W. Va.; SP—Same;

CTY—Putnam; RR—K. & M.

MS—Charles Cawley, Raymond City, W.

Va.

S of H—Mules, 5 trolley pole type and

1 steam loco. Track gage 42 in.

S of M—Hand.

PP—6 150 H. P. fire tube boilers, 2

150 K. W. gen. unit, 500 volts

D. C., 4 pumps.

EMP—375. Daily output, 850 tons.

SIZES SHIPT—Slack, Pea, Nut, Egg,

Lump.

PREP. EQUIPT—Gravity and Revolving

Screens, Picking Tables, Washers.

Old information.

OURS MILL COAL COMPANY.

General Office, Sago, W. Va.

PR—A. C. Minear, Parsons, W. Va.

VP—A. B. Bright, Sago, W. Va.

TR—A. C. Minear, Parsons, W. Va.

EM—R. J. Tilson, Buckhannon, W. Va.

Ours Mill Mine; Drift; Kittanning Seam,

66 in. thick.

PO—Sago, W. Va.; SP—Same; CTY—

Upshur; RR—B. & O.

MS—A. B. Bright, Sago, W. Va.

S of H—Mules. Track gage 42 in.

S of M—Hand.

EMP—10.

SIZES SHIPT—Run of Mine.

P. V. & K. COAL COMPANY

General Office, Follansbee, W. Va.

PR—A. K. Robinson, Wilkinsburg, Pa.

VP—J. J. Springer Robinson, Le Junior, Ky.

TR—R. H. Robinson, Monongahela, Pa.

GM—R. H. Robinson, Monongahela, Pa.

PA—Edward W. Hurland, Monongahela,

Pa.

EM—John C. Rue, Follansbee, W. Va.

Joanold Mine; Drift; Pittsburgh Seam,

54 inches thick.

PO—Follansbee, W. Va.; SP—Same;

CTY—Brook; RR—Penna.

MS—John C. Rue, Follansbee, W. Va.

S of H—2 storage battery and 1 gasoline

locos. Track gage 42 inches.

S of M—2 shortwall machs.

PP—Power purchased. Rotary converter,

PALEO COAL COMPANY.

Now Hough, H. N. Coal Co.

PAN COAL CO.

Amble, W. Va.
Pan Nos 1 and 2 Mts.; CTY Mc
Dowell.
No report.

PANHANDLE COCK COAL CO.

General Office, Republic, Pa.
PR—Anton Zink, Smock, Pa.
VP—Anton Havlicek, Smock, Pa.
TR—J. T. Davies, Endowment, Pa.
GM—Anton Zink, Smock, Pa.
EM—Wm. Andrews, Pittsburgh, Pa.

Henrietta Mine; Drift; Pittsburgh No. 8 Seam, 60 in. thick.
PO—Cutlers, W. Va.; SP—Same; CTY—Brooke; RR—P. H. Dug of Pa.
MS—Anton Zink, Smock, Pa.
S of H—Electric locos. Track gage 13 in.
S of M—Hand.
PP—M G Set, 250 volts D. C.
EMP—12.
SIZES SHIPT—Run of Mine.

PAN-HANDLE FUEL COMPANY.

General Office, Wheeling, W. Va.
PR—A. S. Burger, Wheeling, W. Va.
TR—H. B. Lockwood, Wheeling, W. Va.
GM—A. S. Burger, Wheeling, W. Va.
EM—P. C. Christy, Wheeling, W. Va.

Mason Mine; Drift; Pittsburgh Seam, 66 inches thick.
PO—Wheeling, W. Va.; SP—Wellsburg, W. Va.; CTY—Brooke; RR—Penn.
M—J. P. Leonard, Wheeling, W. Va.
S of H—Mules and electric locos. Track gage 38 inches.
S of M—Chain breast type mach.
PP—Power purchased, 500 volts D. C.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

PANTHER COAL COMPANY.

General Office, Welch, W. Va.
PR—A. F. Leckie, Welch, W. Va.
VP—W. R. Graham, Bluefield, W. Va.
TR—A. E. Jennings, Welch, W. Va.
GM—A. F. Leckie, Welch, W. Va.
EM—C. A. Williams, Arista, W. Va.
PA—Wm. Smith, Panther, W. Va.
GE—George Leckie, Welch, W. Va.
EE—W. R. Jones, Welch, W. Va.
SCO—Address the Company, Buyer, J. H. Phillips, Welch, W. Va.
Sales Agency—Leckie Coal Co., Columbus, O.

Additional Information on Page 1022

Panther Mine; Drift; No. 2 Gas Seam, 70 in. thick.

PO—Panther, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.

S of H—6 trolley pole type locos. Track gage, 36 in.

S of M—8 overhead cutter machs.

PP—Power purchased, transformer 13,000-2200 volts A. C., M. G. sets, 250 volts D. C.

EMP—155. Last years tonnage 98,945.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Shaker Screens, Loading Booms.

PARAGON COLLIERY COMPANY

General Office, Huntington, W. Va.
PR—W. E. Deegans, Huntington, W. Va.
TR—J. Frank Grimet, Huntington, W. Va.
GM—W. E. Deegans, Huntington, W. Va.
GS—O. C. Huntington, Huntington, W. Va.
PA—John Faulkner, Huntington, W. Va.
EM—Morris Hansford, Huntington, W. Va.
SCO—Address the Company, Buyer, N. D. Trent, Yolyo, W. Va.

Sales Agency—W. E. Deegans Coal Co., Huntington, W. Va.

Paragon Mine; Drift; Chilton Seam, 60 in. thick.

PO—Yolyo, W. Va.; SP—Same; CTY—Lacy; RR—C. & O.

S of H—22 mules, 3 trolley pole type and 4 storage battery locos. Track gage, 44 in.

S of M—4 chain breast type and 8 short-wall machs.

PP—Power purchased, transformer 2300 to 250 volts A. C., rotary converters, 250 volts D. C., 2 pumps.

EMP—200. Last years tonnage 156,972.

SIZES SHIPT—Lump, Egg, Nut, Slack, Run of Mine.

PREP. EQUIPT—Shaker Screens, Loading Booms, Picking Tables.

PARDEE & CURTIN LUMBER COMPANY

General Office, Curtin, W. Va.
PR—Barton Pardee, Atlantic City, N. J.
TR—H. B. Curtin, Curtin, W. Va.
GM—H. B. Curtin, Curtin, W. Va.
PA—H. B. Curtin, Curtin, W. Va.
CE—E. F. Curtin, Curtin, W. Va.
SCO—Address the Company, Buyer, Chas. Coleman, Curtin, W. Va.

Panther Mine; Drift; Sewell Seam, 48 in. thick.

PO—Curtin, W. Va.; SP—Same; CTY—Nicholas; RR—C. & H.

MS—A. W. Tolbert, Curtin, W. Va.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine.
Gaugley Mine; Drift; Sewell Seam, 48 in. thick.
PO—Curtin, W. Va.; SP—Same; CTY—Nicholas; RR—C. & H.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine.
Note—Entire output consumed by company's logging engines and company employees.

PARK COAL COMPANY.

General Office, Morgantown, W. Va.
PR—A. R. Albright, Morgantown, W. Va.
VP—Harry C. Williams, Morgantown, W. Va.
TR—John L. Dugan, Morgantown, W. Va.
GM—Harry C. Williams, Morgantown, W. Va.
GS—Harry C. Williams, Morgantown, W. Va.
PA—Harry C. Williams, Morgantown, W. Va.
CE—Bartell & McDermott, Morgantown, W. Va.
SA—John L. Dugan, Morgantown, W. Va.

Park Mine; Drift; Pittsburgh Seam, 108 in. thick.
PO—Morgantown, W. Va.; SP—Same; CTY—Monongalia; RR—B & O.
S of H—Mules. Track gage 32 in.
S of M—Hand.
Daily tonnage 200.
SIZES SHIPT—Run of Mine.

PARSONS & STOKES.

Bramwell, W. Va.
Parsons Mine; CTY—Merced.
No report.

PATTERSON, S. J.—POCAHONTAS COAL CO.

General Office, Dayton, O.
PR—R. D. Patterson, Lowe, W. Va.
VP—R. L. McKee, Chicago, Ill.
TR—H. J. Dreese, Dayton, O.
GM—R. D. Patterson, Lowe, W. Va.
GS—W. A. Craven, Arista, W. Va.
PA—W. A. Craven, Arista, W. Va.
EM—D. B. Crinkshank, Lowe, W. Va.
EE—C. A. Williams, Arista, W. Va.
SCO—Address the Company, Buyer, E. M. Hale, Arista, W. Va.
Sales Agency, S. J. Patterson Co., Dayton, O.

Arista Nos. 1 and 2 Mines; Drifts; Poca No. 3 Seam, 48 to 60 in. thick.

PO—Arista, W. Va.; SP—Springtown, W. Va.; CTY—Mercer; RR—N. & W., Wild-mouth Br.

S of H—7 trolley pole type locos. Track gage 56½ in.

S of M—4 shortwall machs.

PP—Power purchased, transformer 440 to 250-110 volts A. C., M. G. set, 250 volts D. C., 6 pumps.

EMP—164. Last fiscal year output, 130,000 tons.

SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

PAWAMA COAL & COKE CO.

General Office, Matoaka, W. Va.
PR—Robt. T. Woodruff, 17 Battery Pl., New York, N. Y.
VP—M. E. Kinsley, 17 Battery Place, New York, N. Y.
TR—A. J. Holmes, 17 Battery Place, New York, N. Y.
GM—Ray T. Wright, Matoaka, W. Va.
PA—W. P. Haller, Matoaka, W. Va.
EE—Walter Cecil, Matoaka, W. Va.
SCO—Address the Company, Buyer, F. J. Dye, Matoaka, W. Va.
SA—Kinsley Steamship Lines, 17 Battery Place, New York, N. Y.

Pawama Mine; Drift; No. 3 Pocahontas Seam, 54-58 in. thick.

PO—Matoaka, W. Va.; SP—Exp. Same; Frt. Giatto, W. Va.; CTY—Mercer; RR—N. & W.

MS—Roy T. Wright, Matoaka, W. Va.

S of H—Mules and 3 trolley pole type locos.

S of M—1 shortwall and 1 chain breast type machs.

PP—Power purchased, 250 volts D. C., water tube boilers, 5 pumps.

EMP—150. Last years tonnage 120,000.

SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Gravity Screens, Picking Tables.

PAX MINING COMPANY.

General Office, Grippe, W. Va.
PR—Bills Lively, Grippe, W. Va.
VP—H. H. O'Neal, St. Albans, W. Va.
TR—P. R. Cameron, Grippe, W. Va.
GM—Bills Lively, Grippe, W. Va.
PA—P. R. Cameron, Grippe, W. Va.
EM—N. P. Rhinehart, Mt. Hope, W. Va.
EE—C. E. Eskow, Grippe, W. Va.
SCO—Address the Company, Buyer, P. R. Cameron, Grippe, W. Va.
SA—Kanawha Fayette Coal Co., Grippe, W. Va.

Trinity Mine; Drift; No. 2 Gas Seam, 52 in. thick.
PO—Grippe, W. Va.; SP—Same; CTY—Kanawha; RR—C. & O.
MS—John Willis, Grippe, W. Va.
S of H—Storage; battery loco. Track gage 44 in.
S of M—Shortwall mach.
PP—150 H. P. fire tube boiler, 150 K. W., 150 K. W. 250 volts D. C.
EMP—50. Last years tonnage 23,000.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by the Trinity Coal Company.

PEACH CREEK COAL COMPANY.

General Office, Hughey, W. Va.
PR—E. C. James, Hughey, W. Va.
VP—E. H. Butts, Hughey, W. Va.
TR—E. C. James, Hughey, W. Va.
GM—J. A. McCallister, Yolyo, W. Va.
GS—E. F. McCallister, Hughey, W. Va.
CE—J. B. McCorkle, Logan, W. Va.
EM—McCorkle & Goffrey, Logan, W. Va.
SCO—Address the Company, Buyer, K. G. McCallister, Hughey, W. Va.
SA—Amberst Fuel Co., Lunedale, W. Va.

Peach Creek Mine; Drift; Alma Seam, 54 in. thick.
PO—Hughey, W. Va.; SP—Peach Creek, W. Va.; CTY—Logan; RR—C. & O.
S of H—1 trolley pole type and 2 storage battery locos.
S of M—4 chain breast type and 2 short-wall machs.
PP—Power purchased, Transformer 6,600 to 275 volts A. C., rotary converters, 275 volts D. C., 2 pumps.
EMP—40. Last years tonnage 30,000.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Bar Screens, Old information.

PEACOCK COAL COMPANY

General Office, Clarksburg, W. Va. Va.
PR—Orlando West, Clarksburg, W. Va.
VP—J. H. Hornor, Clarksburg, W. Va.
TR—Carl L. Hornor, Clarksburg, W. Va.
GM—Carl L. Hornor, Clarksburg, W. Va.
GS—C. S. Hornor, Clarksburg, W. Va.
PA—Carl L. Hornor, Clarksburg, W. Va.
EM—Hornor Bros., Clarksburg, W. Va.
SA—J. Lee Hornor, Clarksburg, W. Va.

Louise Mine; Slope; Seam 108 in. thick

PO—Clarksburg, W. Va.; SP—Same; CTY—Harrison; RR—B. & O.

S of H—Mules.

S of M—Hand.

SIZES SHIPT—Run of Mine.

PECK'S RUN COAL COMPANY.

General Office, Hall, W. Va.
PR—F. J. Foye, Brownsville, Pa.
VP—J. W. Devison, Grant Town, W. Va.
TR—F. E. Williams, Buckhannon, W. Va.
GM—F. E. Williams, Buckhannon, W. Va.
GS—F. E. Williams, Buckhannon, W. Va.
PA—F. E. Williams, Buckhannon, W. Va.
CE—J. W. Devison, Grant Town, W. Va.
SA—F. J. Foye, Brownsville, Pa.

Additional Information on Page 980

Kano Mine; Drift; Redstone Seam, 60 in. thick.

PO—Hall, W. Va.; SP—Pecks Run, W. Va.; CTY—Upshur; RR—B. & O.

S of H—1 elec. motor, Track gage 48 in.

S of M—1 shortwall machs.

PP—150 H. P. gas engine, 1-100 K. W. gen. unit, 250 volts D. C., 3 pumps.

EMP—40. Last years tonnage 42,537.

SIZES SHIPT—Run of Mine.

PEERLESS COAL & COKE CO.

General Office, Pottsville, Pa.
PR—E. C. Luther, Pottsville, Pa.
VP—E. J. Clausen, 41 Park Row, New York, N. Y.
TR—E. C. Luther, Pottsville, Pa.
GM—E. C. Luther, Pottsville, Pa.
GS—W. G. Williamson, Vivian, W. Va.
MM—E. W. Cook, Pottsville, Pa.
PA—W. G. Williamson, Pottsville, Pa.
EM—A. C. Adair, Vivian, W. Va.
EE—T. A. Martin, Pottsville, Pa.
SCO—Address the Company, Buyer, W. T. Noel, Vivian, W. Va.
Sales Agency, Crowder Pocahontas Coal Co. Philadelphia, Pa.

Peerless Nos. 1 and 2 Mines; Drifts; Pocahontas No. 3 Seam; 68 to 78 in. thick.

PO—Vivian, W. Va.; SP—Same; CTY—McDowell; RR—N. & W., Malo Line.

MS—F. L. Booth, Vivian, W. Va.

S of H—S elec. locos. and mules. Track gage 44 in.

S of M—Hand and 4 electric machs.

PP—5 return tubular boilers, total 750 H. P., 3 gen. units, 550 volts D. C., 7 pumps.

EMP—425. Coke Owens, 150 Bee Hive.

SIZES SHIPT—Run of Mine, Slack, Pva, Nut, Egg, Lump.

PREP. EQUIPT—Shaker Screens.

PEERLESS COAL MINING CO.

General Office, Munsey Bldg., Baltimore, Md.
PR—Thos. T. Roswell, Baltimore, Md.

VP—Eda. T. Roswell, Baltimore, Md.
TR—Eda. T. Roswell, Baltimore, Md.
GM—Eda. T. Roswell, Baltimore, Md.
GS—Wm. Reppert, Rd Rock, W. Va.
141 P. Zacharias, Rd Rock, W. Va.
SCO—Address the Company, Buyer, Oscar Jones, Rd Rock, W. Va.

Red Rock Mine; Drift; Redstone Seam, 60 in. thick.

PO—Rd Rock, W. Va.; SP—Same; CTY—Upshur; RR—B. & O.

S of H—5 trolley pole type locos. Track gage 42 in.

S of M—7 shortwall machs.

PP—2 fire tube boilers, total 300 H. P., 2 generators, 475 K. W., 250 volts D. C., 4 pumps.

EMP—100.

SIZES SHIPT—Run of Mine, Slack, Pva, Nut, Egg, Lump.

PREP. EQUIPT—Gravity Screens.

PEERLESS SMOKELESS SMITHING COAL COMPANY

General Office, Morgantown, W. Va.
PR—A. Dennis Williams, Morgantown, W. Va.
TR—Guy Ash, Morgantown, W. Va.
GS—W. L. Britton, Marcus, W. Va.
PA—A. D. Williams, Morgantown, W. Va.
CE—A. D. Williams, Morgantown, W. Va.
EM—J. E. Anderson, Cowen, W. Va.

Meyers, Peerless & Wayne Mines; Drift; Peerless Seam, 36 inches thick.

PO—Marcus, W. Va.; SP—Halo, W. Va.; CTY—Webster; RR—B. & O.

S of H—Mules. Track gage 36 inches.

S of M—Hand.

EMP—18. Daily tonnage 100.

SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.

PREP. EQUIPT—Bar Screens, Picking Tables.

PEMBERTON COAL & COKE CO.

General Office, Adinity, W. Va.
PR—W. A. Phillips, Mt. Carmel, Pa.
VP—Harry Hunter, Ashland, Pa.
TR—J. M. Watkins, Oxford Valley, Pa.
GM—J. A. Stewart, Bluefield, W. Va.
GS—W. G. Colborne, Adinity, W. Va.
PA—W. G. Colborne, Adinity, W. Va.
EM—Carl Meadows, Adinity, W. Va.
EE—P. E. Menz, Adinity, W. Va.
SCO—Address the Company, Buyer, C. M. Draper, Adinity, W. Va.

Affinity, Big Stick, Phillips and Wat-Whse Mines; 3 Drifts; 1 slope; Beckley Seam, 60 in. thick.

PO—Affinity, W. Va.; SP—Same; CTY—Raleigh; RR—Virginian, C. & O.

S of H—16 elec. locos. Track gage 44 in.

S of M—5 mining machs.

PP—Power purchased, 4-150 K. W. gen. units, rotary converters, 250 volts D. C., 6 150 H. P. water tube boilers, 18 pumps.

EMP—200. Last years tonnage 240,000.

SIZES SHIPT—Run of Mine.

PEMBERTON FUEL COMPANY.

General Office, Pemberton, W. Va.
PR—W. R. Gray, Mount Hope, W. Va.
VP—P. M. Snyder, Mount Hope, W. Va.
TR—W. R. Gray, Mount Hope, W. Va.
GM—W. R. Gray, Mount Hope, W. Va.
GS—E. L. Hawley, Pemberton, W. Va.
EM—N. P. Rinehart, Mount Hope, W. Va.
EE—Frank Adams, Pemberton, W. Va.
SCO—Address the Company, Buyer, H. P. Davis, Pemberton, W. Va.
Sales Agent—Fayette Smokeless Fuel Co., Mount Hope, W. Va.

Pemberton Mine; Drift; Beckley Seam, 54 to 72 in. thick.

PO—Pemberton, W. Va.; SP—Same; CTY—Raleigh; RR—C. & O., Virginian.

S of H—2 trolley pole type locos. Track gage, 42 in.

S of M—4 shortwall machs.

PP—Power purchased, rotary converters, 250 volts D. C., 3 pumps.

EMP—115. Last fiscal year output 120,000 tons.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Picking Tables.

PENN COAL & REALTY CO.

General Office, Clarksburg, W. Va.
PR—F. Lee, Queen Shoals, W. Va.
TR—L. Cunningham, Clarksburg, W. Va.
VP—A. Speer, Clarksburg, W. Va.
GM—C. P. Lee, Queen Shoals, W. Va.
EM—Phinly Walter Eng. Co., Charleston W. Va.
SA—C. P. Lee, Queen Shoals, W. Va.

Martha Mine; Drift; Seam, 48 inches thick.

PO—Queen Shoals, W. Va.; SP—Same; CTY—Tava; RR—B. & O.

MS—H. F. A. Queen Shoals, W. Va.

S of H—Mules. Track gage 42 inches.

S of M—Shortwall machs.

PP—15 H. P. fire tube boiler, Transformer 250 volts A. C., 1 100 K. W. G. unit, 250 volts D. C.

EMP—30. Daily tonnage 150.

SIZES SHIPT—Run of Mine.

PREP. EQUIPT—Shaker Screens.

PENN COAL COMPANY

General Office, Connellsville, Pa.
 PR—Henry A. Porter, Connellsville, Pa.
 TR—Wm. F. Brickman, Connellsville, Pa.
 GM—Wm. F. Brickman, Connellsville, Pa.
 GS—Wm. McAlvin, Clarksburg, W. Va.
 PA—Wm. F. Brickman, Connellsville, Pa.
 CE—Horn Bros., Clarksburg, W. Va.
 Penn Mine; Drift; Pittsburgh Seam; 90 in. thick.
 PO—Clarksburg, W. Va.; SP—Byron, W. Va.; CTY—Harrison; RR—B. & O.
 MS—William O. McAlvin, Clarksburg, W. Va.
 S of H—Mules. Track gage 44 inches.
 S of M—Hand.
 EMP—25. Daily tonnage 200.
 SIZES SHIPT—Run of Mine.

PEN MAR COAL CO.

General Office, 1201 Union Trust Bldg., Charleston, W. Va.
 PR—Jas M. Lively, Charleston, W. Va.
 TR—C. H. Hartzel, Charleston, W. Va.
 GM—J. E. Moore, Charleston, W. Va.
 GS—J. R. Fraser, Charleston, W. Va.
 PA—M. E. Moore, Charleston, W. Va.
 SA—Moore & Hartzel, Charleston, W. Va.
 Additional Information on Page 1040

Pen-Mar Mine; Drift; Coalburg Seam, 60 in. thick.
 PO—Big Chimney, W. Va.; SP—Bream, W. Va.; CTY—Kanawha; RR—B. & O.
 MS—W. W. Norman, Big Chimney, W. Va.
 S of H—Mules, trolley pole type loco. Track gage 42 in.
 S of M—1 chain breast type mach.
 PP—Purchase power, 250 volts D. C.
 EMP—50. Last years tonnage 35,000.
 SIZES SHIPT—Run of Mine, Slack, Lump, Block.
 PREP. EQUIPT—Gravity Screens

PENN MARY COAL COMPANY

Now B. & O. Min. S. Corporation.

PENNECO COAL COMPANY.

PR—William N. Beach, 131 East 46th St., New York, N. Y.
 TR—William J. Canary, 131 East 46th St., New York, N. Y.
 McWhorter Mine; Drift; Red Stone and Pittsburgh Seams, 60 to 84 in. thick.
 PR—McWhorter, W. Va.; SP—Same; CTY—Harrison; RR—B. & O., Weston, W. Va.
 S of H—Mules.
 S of M—Hand.

PENNSYLVANIA & WEST VIRGINIA COAL COMPANY

General Office, 1011 Chestnut St., Philadelphia, Pa.
 PR—J. H. D. Eagan, Philadelphia, Pa.
 TR—J. H. Thompson, Philadelphia, Pa.
 GM—J. H. D. Eagan, Philadelphia, Pa.
 GS—Jno. Clifford, Gilmer, W. Va.
 PA—H. D. Eagan, Philadelphia, Pa.
 EM—B. M. Green, Charleston, W. Va.
 Bridge Siding No. 47 Mine; Drift; Pittsburgh Seam; 60 inches thick.
 PO—Gilmer, W. Va.; SP—Same; CTY—Gilmer; RR—B. & O.
 S of H—Mules.
 S of M—Hand.
 PP—Power purchased.
 SIZES SHIPT—Run of Mine.
 Note—Successors to The Gilmer-Pittsburgh Coal Company.

PEORA COAL COMPANY.

General Office, R. S. No. 1, Shinnston, W. Va.
 PR—Thos. Love, Connellsville, Pa.
 VP—Otto Kochler, Connellsville, Pa.
 TR—H. T. Spiker, Shinnston, W. Va.
 GM—Thos. Love, Connellsville, Pa.
 GS—H. T. Spiker, Shinnston, W. Va.
 PA—H. T. Spiker, Shinnston, W. Va.
 Louise and Goldie Mine; Drift and Slope; Pittsburgh or No. 8 Seam, 96 in. thick.
 PO—Shinnston, W. Va.; SP—Same; CTY—Harrison; RR—W. M.
 S of H—Mules, rope, 1 storage battery loco. Track gage 42 in.
 S of M—2 shortwall machs.
 PP—Power purchased. Transformer 2200-220 volts A. C., 2 pumps.
 Daily tonnage 250.
 SIZES SHIPT—Run of Mine.
 NOTE—Formerly operated by the Stone & Scott Coal Company.

PERKINS COAL COMPANY

General Office, Lex, W. Va.
 PR—F. H. Evans, War, W. Va.
 VP—H. W. Perkins, Lex, W. Va.
 TR—V. T. Strickler, Lex, W. Va.
 GM—J. W. Strickler, War, W. Va.
 PA—V. T. Strickler, Lex, W. Va.
 EM—H. J. Brooks, Welch, W. Va.
 Perkins Mine; Drift; Welch Seam; 36 inches thick.
 PO—Lex, W. Va.; SP—Gluck, W. Va.; CTY—McDowell; RR—N. & W.
 Note—Now operation. Just developing. Old information.

PERSHING COAL CO.

General Office, Clarksburg, W. Va.
 Pershing Mine.
 PO—Palmer, W. Va.; CTY—Braxton; RR—B. & O.
 No report.

PETER CAVE COAL COMPANY.

General Office, Huntington, W. Va.
 PR—J. J. Harshbarger, Huntington, W. Va.
 VP—B. Tauber, Guyandotte, W. Va.
 TR—J. Broh, Huntington, W. Va.
 GM—Robert Gunning, Alkol, W. Va.
 GS—Robt. Gunning, Alkol, W. Va.
 PA—Robert Gunning, Alkol, W. Va.
 EM—Robt. Gunning, Alkol, W. Va.
 Carbell Mine; Drift; No. 5 Block Seam, 72 in. thick.
 PO—Alkol, W. Va.; SP—Alkol and Altman, W. Va.; CTY—Lincoln; RR—C. & O.
 S of H—Mules, 1 storage battery loco. Track gage 44 in.
 S of M—2 shortwall machs.
 PP—1—150 H. P. return tubular boiler.
 EMP—23. Last years tonnage 10,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.

PEYTONA MINING COMPANY.

General Office, Peytona, W. Va.
 PR—John O'Hare, Charleston, W. Va.
 VP—Jas. O'Hare, Philadelphia, Pa.
 TR—E. J. Stine, Charleston, W. Va.
 GM—E. B. Snider, Peytona, W. Va.
 GS—E. B. Snider, Peytona, W. Va.
 PA—C. W. Lewis, Peytona, W. Va.
 CE—G. S. Plumley, Charleston, W. Va.
 EM—R. S. Walters, Charleston, W. Va.
 EE—Chas. Schowen, Peytona, W. Va.
 SCO—Address the Company; Buyer, C. W. Lewis, Peytona, W. Va.
 SA—Consolidated Pocahontas Coal Co., Charleston, W. Va.

Peytona Nos. 1 & 2 Mines; Drifts; No. 2 Gas Seam, 40 inches thick.
 PO—Peytona, W. Va.; SP—Same, CTY—Boone; RR—C. & O.
 MS—Chas. P. Shown, Peytona, W. Va.
 S of H—Mules and rope. Track gage 42 inches.
 S of M—3 shortwall machs.
 PP—1—150 H. P. fire tube boiler, 100 K. W. gen. unit, 250 volts D. C., 2 pumps.
 EMP—50. Last year tonnage 25,856.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Shaker Screens.

PHILIPPI GAS COAL COMPANY

Now operated by the Seneca Colliery Co.

PHILLIPS COAL CO.

General Office, 516 Fifth St., Fairmont, W. Va.
 GM—James Phillips, Fairmont, W. Va.
 EM—Fred Talbot, Fairmont, W. Va.
 Phillips Mine; Slope; Pittsburgh Seam, 96 in. thick.
 PO—Fairmont, W. Va.; SP—Bentons Ferry, W. Va.; CTY—Marion; RR—B. & O.
 MS—James Phillips, Fairmont, W. Va.
 S of H—Mules. Track gage 42 in.
 S of M—Hand.
 PP—1—30 H. P. fire tube boiler.
 EMP—16. Last years tonnage 14,500.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Picking Tables.

PHILLIPS-BLUE CREEK COAL COMPANY

Now Blue Creek Fuel Company.

PHILLIPS MINING COMPANY

General Office, Chapmanville, W. Va.
 PR—R. C. Phillips, Chapmanville, W. Va.
 VP—D. R. Phillips, Sc., Huntington, W. Va.
 TR—E. J. Phillips, Chapmanville, W. Va.
 GM—R. C. Phillips, Chapmanville, W. Va.
 Phillips Mine; Drift; Draper Seam, 54 in. thick.
 PO—Chapmanville, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
 MS—R. C. Phillips, Chapmanville, W. Va.
 S of H—Mules and incline. Track gage 44 inches.
 S of M—Shortwall machs.
 PP—1—150 H. P. boiler, 165 H. P. engine, 1—100 K. W. gen. unit, 250 volts D. C., 2 pumps.
 EMP—25. Last years tonnage 6,400.
 SIZES SHIPT—Run of Mine.

PHILMONT COAL CO.

General Office, Commercial Trust Bldg., Philadelphia, Pa.
 PR—L. O. Knipp, Clarksburg, W. Va.
 TR—Geo. H. Grone, Philadelphia, Pa.
 GM—L. O. Knipp, Clarksburg, W. Va.
 PA—L. O. Knipp, Clarksburg, W. Va.
 EM—Hornor Bros., Clarksburg, W. Va.
 SA—Philmont Coal Co., Philadelphia, Pa., and Clarksburg, W. Va.
 Pittsburgh No. 1 Mine; Drift; Pittsburgh Seam, 84 in. thick.
 PO—Teter, W. Va.; SP—Same (Prepay); CTY—Upshur; RR—B. & O.
 MS—M. Hawkins, Teter, W. Va.

S of H—Mules. Track gage 42 in.
 S of M—Chain breast type and 1 short-wall machs.
 PP—1—125 H. P. fire tube boiler 1—100 K. W. gen. unit, 250 volts D. C., 1 pump.
 EMP—60. Daily tonnage 500.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

Pittsburgh No. 2 Mine; Drift; Pittsburgh Seam, 84 in. thick.
 PO—Teter, W. Va.; SP—Same; CTY—Upshur; RR—B. & O.
 MS—M. Hawkins, Teter, W. Va.
 S of H—Mules and main and tail rope. Track gage 42 in.
 S of M—1 shortwall mach.
 PP—1—50 H. P. fire tube boiler, 1—100 K. W. gen. unit, 250 volts D. C., 2 pumps.
 EMP—30. Daily tonnage 150.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens, Picking Tables.

Pittsburgh No. 4 Mine; Drift; Pittsburgh Seam, 84 in. thick.
 PO—Teter, W. Va.; SP—Same; CTY—Upshur; RR—B. & O.
 MS—M. Hawkins, Teter, W. Va.
 S of H—Mules. Track gage 42 in.
 S of M—1 chain breast type mach.
 PP—1—125 H. P. fire tube boiler, 1—100 K. W. gen. unit, 250 volts D. C., 2 pumps.
 EMP—20. Daily tonnage 200.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

PHOENIX COAL COMPANY

General Office, Charleston, W. Va.
 PR—Thos. C. Beury, Charleston, W. Va.
 TR—C. A. Brockman, Charleston, W. Va.
 GM—C. A. Brockman, Charleston, W. Va.
 GS—C. A. Brockman, Charleston, W. Va.
 PA—C. A. Brockman, Charleston, W. Va.
 CE—Clark & Krebs, Charleston, W. Va.
 EM—Philip Konrad, Kanawha Falls, W. Va.
 SCO—Address the Company. Buyer, S. Shirley, Thayer, W. Va.
 SA—The Matthew Addy Co., Cincinnati, O.

Phoenix Mine; Drift; Fire Creek Seam; 72 inches thick.
 PO—Thayer, W. Va.; SP—Same; CTY—MS—Joe Jones; Thayer, W. Va.
 Fayette; RR—Chesapeake & Ohio.
 MS—Joe Jones, Thayer, W. Va.
 S of H—Mules, steam loco. Track gage 44 inches.
 S of M—Hand.
 EMP—15. Last years tonnage 7,908.
 SIZES SHIPT—Run of Mine, Smithing

PICKSHIN COAL COMPANY.

General Office, Tralee, W. Va.
 PR—J. C. Sullivan, Tralee, W. Va.
 TR—J. C. Sullivan, Tralee, W. Va.
 GM—J. C. Sullivan, Tralee, W. Va.
 PA—C. R. Helwig, Tralee, W. Va.
 EP—J. P. Earksdale, Tralee, W. Va.
 SCO—Address the Company. Buyer, R. G. Scott, Tralee, W. Va.
 SA—C. & O. Coal Agency Co., Boston, Mass.; Wyoming Coal Sales Co., Bluefield, W. Va.

Pickshin Mine; Slope; Beckley Seam, 66 to 84 in. thick.
 PO—Tralee, W. Va.; SP—Pickshin, W. Va.; CTY—Raleigh; RR—Virginian, C. & O.
 S of H—Rope, 2 elec. and 1 storage battery locos. Track gage 44 in.
 S of M—3 elec. machs.
 PP—250 volts D. C., 2 pumps. Purchase power.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Picking Tables.

PIEDMONT COAL CORPORATION

Now Twin Mountain Coal Co.

PINE BLUFF COAL COMPANY.

General Office, Box 562, Fairmont, W. Va.
 PR—E. T. Kelley, Fairmont, W. Va.
 VP—Dr. L. D. Howard, Fairmont, W. Va.
 TR—Dr. L. D. Howard, Fairmont, W. Va.
 GM—E. T. Kelley, Fairmont, W. Va.
 PA—C. H. Garwood, 5512 Center Ave., Pittsburgh, Pa.
 CE—Straight & McClure, Fairmont, W. Va.
 EM—Fairmont Eng. Co., Fairmont, W. Va.
 SA—E. T. Kelley, Fairmont, W. Va.

Pine Bluff Mine; Drift; Pittsburgh Seam, 72-96 in. thick.
 PO—Fairmont, W. Va.; SP—Shinnston, W. Va.; CTY—Marion; RR—Western Maryland, Wyatt Br.
 MS—L. E. Henderson, R. E. D., Shinnston, W. Va.
 S of H—Mules.
 S of M—2 chain breast type machs.
 PP—Power purchased, 1 boiler.
 EMP—40. Daily tonnage 300.
 SIZES SHIPT—Run of Mine.
 Old information.

PINEY CREEK COAL CO.

General Office, Huntington, W. Va.
 PR—H. C. Duncan, Jr., Huntington, W. Va.
 VP—E. J. Adams, Huntington, W. Va.
 TR—G. J. Dickerson, Huntington, W. Va.
 GM—M. M. Tyree, Huntington, W. Va.
 PA—M. M. Tyree, Huntington, W. Va.
 SA—M. M. Tyree, Huntington, W. Va.

No. 1 Mine; Drift; Beckley Seam, 48 in. thick.
 PO—Sullivan, W. Va.; SP—Wiley, W. Va.; CTY—Raleigh; RR—Virginian.
 MS—T. N. Patton, Sullivan, W. Va.
 S of H—Mules.
 S of M—Hand.
 EMP—23. Last years tonnage 18,500.
 SIZES SHIPT—Run of Mine.

PINEY POCAHONTAS COAL CO.

General Office, Charleston, W. Va.
 PR—Otto J. Cox, Charleston, W. Va.
 TR—E. M. Cox, Charleston, W. Va.
 GM—E. M. Cox, Charleston, W. Va.
 PA—E. M. Cox, Charleston, W. Va.
 EM—S. H. Farley, Beckley, W. Va.
 SCO—Address the Company; Buyer, E. M. Cox, Charleston, W. Va.
 SA—Kanawha Valley Coal Co., Charleston, W. Va.

Pinepoca Mine; Drift; No. 3 Pocahontas Seam, 60 in. thick.
 PO—Beckley, W. Va.; SP—Pinepoca, W. Va.; CTY—Raleigh; RR—C. & O., Piney Branch.
 S of H—Mules. Track gage, 44 in.
 S of M—Hand.
 EMP—24. Last years tonnage 12,000.
 SIZES SHIPT—Run of Mine.
 Old information.

PINNACLE COAL & CUKE COMPANY

General Office, 508 Easton Trust Bldg., Easton, Pa.
 PR—S. B. Williams, Easton, Pa.
 VP—J. T. Williams, Easton, Pa.
 TR—Ed. Stumetz, Kangor, Pa.
 GM—J. T. Williams, Easton, Pa.
 GS—J. T. Williams, Easton, Pa.
 PA—J. T. Williams, Easton, Pa.
 EM—John S. Cole, Malden, W. Va.
 SA—Talbot Coal & Supply Co., 508 Easton Trust Bldg., Easton, Pa.

Drift and Slope; No. 2 Gas Seam.
 PO—Dana, W. Va.; SP—Spring Fork, W. Va.; CTY—Kanawha; RR—E. & N.
 MS—C. L. Williams, Hotel Fleetwood, Charleston, W. Va.
 S of H—Electric loco. Track gage 42 in.
 S of M—Electric mach.
 PP—Power purchased, 4 pumps.
 Daily tonnage 150.
 SIZES SHIPT—Run of Mine.

PITTSBURGH FRANKLIN COAL COMPANY

Now operated by the Braxton-Pittsburgh Coal Co.

PITTSBURGH SUMMIT COAL CO.

General Office, Braxton, W. Va.
 Salem No. 3 Mine.
 PO—Cutlips, W. Va.; CTY—Braxton; RR—B. & O.
 No report.

PITTSBURGH-WHEELING COAL COMPANY

PR—F. B. Parriott, Pittsburgh, Pa.
 VP—T. R. Cowell, Pittsburgh, Pa.
 TR—Geo. W. Work, Parkersburg, W. Va.
 GM—R. Y. McVey, Wheeling, W. Va.
 GS—R. Y. McVey, Wheeling, W. Va.
 PA—R. Y. McVey, Wheeling, W. Va.
 EM—Koller & Conrad, Wheeling, W. Va.
 SCO—Address the Company. Buyer, J. F. Gohbart, Wheeling, W. Va.
 Sales Agent, J. F. Gohbart, Wheeling, W. Va.

Edgwood Mine; Drift; Pittsburgh No. 8 Seam, 60 in. thick.
 PO—Edgwood, Wheeling, W. Va.; SP—Wheeling Terminal; CTY—Ohio; RR—B. & O., Penna.
 MS—Mathew Amerson, Edgwood, Wheeling, W. Va.

S of H—Mules. Track gage 42 in.
 S of M—2 shortwall machs.
 PP—Purchase power, 220 volts A. C.
 EMP—30. Daily output, 200 tons.
 SIZES SHIPT—Run of Mine, Slack, Lump.

PITTSBURGH COAL COMPANY.

General Office, Connellsville, Pa.
 PR—J. J. Buttermore, Connellsville, Pa.
 VP—E. T. Norton, Connellsville, Pa.
 TR—Geo. S. Connell, Connellsville, Pa.
 GM—Geo. S. Connell, Connellsville, Pa.
 GS—Jos. R. Buttermore, Beechwood, W. Va.
 PA—Geo. P. Connell, Connellsville, Pa.
 SCO—Beechwood Supply Co.; Buyer, Geo. S. Connell, Connellsville, Pa.

Pittsmtont Nos. 1 and 2 Mines; Drifts; Pittsburgh Seam; 108 in. thick.
 PO—Beechwood, W. Va.; SP—Flaggy Meadow, W. Va.; CTY—Monongahia; RR—Monon.
 S of H—Mules. Track gage, 42 in.
 S of M—Hand.
 EMP—50. Daily output, 300 tons.
 SIZES SHIPT—Run of Mine.
 Old information.

Murphy Mine; Drift: Upper Freeport
Scum, 54 in. thick
P0 Cascade, W. Va.; SP—Morphy Shale,
W. Va.; CTY—Preston; RR—
M. & K.
MS Wm. Penberthy, Cascade, W. Va.
S of H 2 gasoline line Track gap
41 in.
S of M—Hind.
PP—Power from Cascade plant, trans-
former 2200 to 220 volts A. C.
EMP —30. Last years tonnage 14,000.
SIZES SHUPE—Iron of Mine, Slack.

PRESTON COUNTY POWER COMPANY
Now Lick Run Collieries.**PRESTON EAGLE COAL CO.**
Logan, W. Va.

Preston Eagle Mine.
PO—Logan, W. Va.
No report

PRICE HILL COLLIERY CO.

General Office, Price Hill, W. Va.
PR—S. Dixon, Price Hill, W. Va.
VP—Borden Corel, Boston, Mass.
TR—Geo. A. Bateman, Boston, Mass.
GM—S. Dixon, Price Hill, W. Va.
GS—H. H. Pinkney, Price Hill, W. Va.
PA—S. Dixon, Price Hill, W. Va.
EE—Owen Gillespie, Price Hill, W. Va.
SCO—Address the Company, Buyer, G. B. Hutchinson, Price Hill, W. Va.

Price Hill Mine; Shaft; Sewell Seam, 42-54 in. thick.
PO—Price Hill, W. Va.; SP—Frt., Macdonald, W. Va.; Exp., Price Hill, W. Va.; CTY—Raleigh; RR—C. & O., Virginian.
S of H—S. trolley pole type, storage battery, and 2 combination locos. Track gage 40 in.
S of M—6 shortwall machs.
PP—Power purchased, Transformer 2,300 to 400 volts A. C., 300 K. W. gen. units, 250 volts D. C., 7 pumps.
EMP—156. Last years tonnage 98,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

PRINCE-WICK COAL COMPANY.

General Office, Mount Hope, W. Va.
PR—P. M. Snyder, Mt. Hope, W. Va.
TR—T. H. Snyder, Mt. Hope, W. Va.
GM—F. E. Walker, Prince-Wick, W. Va.
GS—F. E. Walker, Prince-Wick, W. Va.
PA—F. E. Walker, Prince-Wick, W. Va.
EM—H. F. Wilfong, Beckley, W. Va.
SA—Fayette S. P. Co., Mt. Hope, W. Va.

Prince-Wick Mine; Drift; Beckley Seam, 60 in. thick.
PO—Prince-Wick, W. Va.; SP—Same; CTY—Raleigh; RR—V.G.N.; C. & O.
S of H—Mules and elec locos. Track gage 44 in.
S of M—Overcutter machs.
PP—Power purchased, Transformer 2200 to 440 volts A. C., rotary converters, 250 volts D. C.
EMP—120. Daily tonnage 600.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens, Picking Tables.

PRITTS BROTHERS COAL CO.

PR—H. J. Pritts, Emoryville, W. Va.
VP—M. E. Pritts, Emoryville, W. Va.
TR—M. E. Pritts, Emoryville, W. Va.
GM—R. F. Pritts, Emoryville, W. Va.
PA—R. F. Pritts, Emoryville, W. Va.
EM—A. M. Wilson, Emoryville, W. Va.
SA—W. R. Nethken & Co., Cumberland, Md.

Pritts Mine; Drift; Bakerstown Seam, 36 in. thick.
PO—Emoryville, W. Va.; SP—Same; CTY—Mineral; RR—W. M.
S of H—Mules. Track gage 42 in.
S of M—Hand.
PP—1-30 H. P. fire tube boiler.
EMP—20. Last years tonnage 23,700.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.

PROCKTER COAL COMPANY.

PR—A. J. Dalton, Huntington, W. Va.
VP—J. A. Kelly, Huntington, W. Va.
TR—J. A. Kelly, Huntington, W. Va.
GM—W. T. Jones, Omar, W. Va.
GS—G. C. Walker, Omar, W. Va.
PA—J. S. Shepherd, Omar, W. Va.
CE—J. F. Healey, Omar, W. Va.
EE—John Kaffer, Omar, W. Va.
SA—Main Island Creek Coal Co., Omar, W. Va.

Procter Mine; Drift; Eagle Seam, 60 to 64 in. thick.
PO—Amherstdale, W. Va.; SP—Same; CTY—Logan; RR—C. & O., Buffalo Creek R.
MS—W. H. Dower, Amherstdale, W. Va.
SM—Joe Collison, Amherstdale, W. Va.
S of H—10 trolley pole, 1 storage battery and 1 gasoline locos. Track gage 48 in.
S of M—5 arewall machs.
PP—Purchase power, transformer 44,000 to 2300 volts A. C., rotary converter, 250 volts D. C.
EMP—80. Daily tonnage 1,200.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking

PROCKTER EAGLE COAL COMPANY.

General Office, Huntington, W. Va.
PR—A. J. Dalton, Huntington, W. Va.
VP—J. A. Kelly, Huntington, W. Va.
TR—J. A. Kelly, Huntington, W. Va.
GM—W. T. Jones, Omar, W. Va.
GS—G. C. Walker, Omar, W. Va.
PA—J. S. Shepherd, Omar, W. Va.
EM—J. F. Healey, Omar, W. Va.

EE—John Kaffer, Omar, W. Va.
SCO—Address the Company, Buyer, T. H. Brooks, Omar, W. Va.
SA—Huntington Coal Sales Co., Huntington, W. Va.

Prockter Eagle Mine; Drift; Eagle Seam, 48 in. thick.
PO—Robinette, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
MS—W. H. Dower, Amherstdale, W. Va.
SM—J. W. Collison, Robinette, W. Va.
S of H—Trolley pole type locos. Track gage 48 in.
S of M—Overhead cutter.
PP—Purchase power, 3 pumps.
EMP—25. Daily tonnage 260.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.

PROCKTER-WINFREDE COAL COMPANY

General Office, Huntington, W. Va.
PR—A. J. Dalton, Huntington, W. Va.
VP—J. A. Kelly, Huntington, W. Va.
TR—J. A. Kelly, Huntington, W. Va.
GM—W. T. Jones, Omar, W. Va.
GS—G. C. Walker, Omar, W. Va.
PA—J. S. Shepherd, Omar, W. Va.
CE—J. F. Healey, Omar, W. Va.
EM—Joe, E. Lee, Amherstdale, W. Va.
EE—John Kaffer, Omar, W. Va.
SA—Main Island Creek Mining Co., Omar, W. Va.

Procter Mine; Drift; Eagle Seam, 60 to 64 in. thick.
PO—Amherstdale, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
MS—W. H. Dower, Amherstdale, W. Va.
SM—Joe Collison, Amherstdale, W. Va.
S of H—Trolley pole type locos. Track gage 48 in.
S of M—Elec. punchers, overhead cutters.
PP—Purchase power, 2,300 volts A. C., rotary converters, 250 volts D. C., 2 pumps.
EMP—30.
SIZES SHIPT—Run of Mine.

PULASKI IRON COMPANY

General Office, Pulaski, Va.
PR—Percival Ohnson, Philadelphia, Pa.
VP—James Ellwood Jones, Pocahontas, Va.
TR—M. E. Bowman, Pulaski, Va.
GS—Floyd E. Cunningham, Eckman, W. Va.
EM—J. T. Watson, Eckman, W. Va.
EE—H. P. Chandler, Eckman, W. Va.
SCO—Address the Company, Buyer, G. S. Brown, Eckman, W. Va.
SA—Pocahontas Fuel Co., Inc., New York, N. Y.

Pulaski Mine; Drift; Poca. No. 3 Seam; 84 inches thick.
PO—Eckman, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
S of H—Mules, 9 trolley pole type and 1 storage battery locos. Track gage 44 in.
S of M—3 shortwall machs.
PP—1 fire tube boilers, 625 H. P., 1-225, 1-250, 1-100 K. W. gen. units, 250 volts D. C., 6 pumps.
EMP—550. Last years tonnage 260,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Picking Tables, Loading Booms, Shaker Screens.

PURITAN COAL CORP.

General Office, Burch, W. Va.
PR—Frank P. Harman, Washington, D. C.
VP—Arnold Gerstell, Philadelphia, Pa.
TR—E. McO. Harman, Burch, W. Va.
GM—Frank P. Harman, Washington, D. C.
GS—E. McO. Harman, Burch, W. Va.
EM—B. J. Calloway, Burch, W. Va.
EE—Elias Stepp, Burch, W. Va.
SCO—Address the company, Buyer, J. Max Dawson, Burch, W. Va.
SA—Percy Heilner & Son, Philadelphia, Pa.

Thacker Mine; Drift; Thacker Seam, 54 inches thick.
PO—Burch, W. Va.; SP—Adanae, W. Va.; CTY—Mingo; RR—N. & W.
MS—Geo. W. Whitten, Burch, W. Va.
S of H—2 trolley pole type locos. Track gage 44 inches.
S of M—2 shortwall machs.
PP—Power purchased, Transformer 33,000-2200 volts A. C., rotary converters, 250 volts D. C.
EMP—150.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Loading Booms.

Winifrede Mine; Drift; Winifrede Seam, 62 inches thick.
PO—Burch, W. Va.; SP—Adanae, W. Va.; CTY—Mingo; RR—N. & W.
MS—Geo. W. Whitten, Burch, W. Va.
S of H—2 trolley pole type locos. Track gage 44 inches.
S of M—2 shortwall machs.
PP—Power purchased, Transformer 33,000-2200 volts A. C., rotary converters, 250 volts D. C.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

PURITY-POCAHONTAS COAL COMPANY

General Office, Bluefield, W. Va.
PR—C. A. Clayborne, Bluefield, W. Va.
VP—J. Tracy Walker, Bluefield, W. Va.
TR—J. Tracy Walker, Bluefield, W. Va.
GM—J. Tracy Walker, Bluefield, W. Va.
PA—T. L. Boehling, Lex, W. Va.
CE—H. J. Brook, Williamson, W. Va.
SCO—Address the Company, Buyer, T. L. Boehling, Lex, W. Va.
SA—Kentonia Coal Co., Bluefield, W. Va.

Purity-Pocahontas Mine; Drift; Welch Pocahontas Seam; 36 in. thick.
PO—Lex, W. Va.; SP—Gluck, W. Va.; CTY—McDowell; RR—N. & W.
MS—J. S. Noell, Lex, W. Va.
S of H—Mules and 2 elec. machs. Track gage 44 in.
S of M—Hand and shortwall machs.
PP—Water tube boilers 150 H. P. gen. units, 250 volts D. C., 3 pumps.
EMP—40. Daily tonnage 100.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.
Note—Formerly operated by the Rocky Branch Pocahontas Coal Co.

PURSGLOVE COAL MINING CO.

General Office, 1414 Kirby Bldg., Cleveland, O.
PR—Jos. Pursglove, Cleveland, O.
VP—Thos. Pursglove, Cleveland, O.
TR—Samuel Pursglove, Cleveland, O.
GM—Samuel Pursglove, Cleveland, O.
PA—Jos. Stewart, Pursglove, W. Va.
ME—Jos. B. Benson Pursglove, W. Va.
EE—John Fox, Pursglove, W. Va.
SCO—Address the Company, Buyer, R. L. Crisswell, Pursglove, W. Va.

Pursglove Mine; Drift; Pittsburgh Seam, 120 in. thick.
PO—Pursglove, W. Va.; SP—Frt., Osage, W. Va.; Exp., Morgantown, W. Va.; CTY—Monongalia; RR—Morgantown & Wheeling.
MS—John Fox, Pursglove, W. Va.
S of H—Mules. Track gage 42 in.
S of M—Chain breast type mach.
PP—Power purchased, 200 K. W. M. G. Set, 500 volts D. C., 6 pumps.
EMP—500. Last years tonnage 1,000,000.
PREP. EQUIPT—Bar Screens.

PYRAMID COAL COMPANY

General Office, Independence, W. Va.
PR—W. L. Kearns, Independence, W. Va.
VP—D. G. Davies, Morgantown, W. Va.
TR—W. L. Kearns, Independence, W. Va.
GM—W. L. Kearns, Independence, W. Va.
GS—W. L. Kearns, Independence, W. Va.
EM—H. A. Larue, Independence, W. Va.

Pyramid Nos. 1 and 2 Mines; Drift and Slope; Upper and Lower Kittanning Seams, 42-66 in. thick.
PO—Independence, W. Va.; SP—Hardman, W. Va.; CTY—Taylor; RR—R. & O.
S of H—Mules and steam loco. Track gage 36 in.
S of M—Hand.
PP—1 60 H. P. water tube boiler, 75 K. W. gen. unit.
EMP—10. Last years tonnage 3,000.
SIZES SHIPT—Run of Mine.

QUAKER SPLINT COAL COMPANY.

Now United Coal Company.

QUALITY COAL & COKE COMPANY

Now Bruce B. Stone Coal Co.

QUALITY COAL COMPANY

Now Barrackville Collieries Co.

QUEEN COAL COMPANY

Now Rex Colliery Company.

QUINCY COAL COMPANY

PR—J. Q. Dickinson, Charleston, W. Va.
TR—J. L. Dickinson, Charleston, W. Va.
GM—J. L. Dickinson, Charleston, W. Va.
PA—H. H. Fletcher, Quincy, W. Va.
CE—H. H. Fletcher, Quincy, W. Va.
SCO—Address the Company, Buyer, H. R. Young, Quincy, W. Va.

Nos. 1, 2 and 3 Mines; Drifts; No. 5 Block and Lewiston Seams, 40 to 66 in. thick.
PO—Quincy, W. Va.; SP—Dickinson, W. Va.; CTY—Kanawha; RR—K. & M.
MS—H. H. Fletcher, Quincy, W. Va.
SM—H. R. Young, Quincy, W. Va.
S of H—Mules, 3 trolley pole type locos. Track gage 42 in.
S of M—4 chain breast type and 3 shortwall machs.
PP—250 volts D. C., 2 pumps. Purchase power.
EMP—115. Last fiscal year output, 75,387 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

QUINNIMONT COAL CO

General Office, Quinnimont, W. Va.
PR—Wm. Beury, Philadelphia, Pa.
VP—C. C. Beury, Charleston, W. Va.

TR—John C. Gallaudet, 2230 Tioga St., Philadelphia, Pa.
GM—John C. Gallaudet, 2230 Tioga St., Philadelphia, Pa.
PA—J. S. Davenport, Lawton, W. Va.
GS—J. S. Davenport, Lawton, W. Va.
EM—H. E. Wilson, Quinnimont, W. Va.
EE—William Sheaves, Lawton, W. Va.
SCO—Address the Company, Buyer, T. J. McGuire, Lawton, W. Va.
SA—Flat Top Fuel Company, Bluefield, W. Va.

Big Q Mine; Drift; Fire Creek Seam, 42 to 48 in. thick.
PO—Lawton, W. Va.; SP—Frt. Big Q, W. Va.; Exp., Layford, W. Va.; CTY—Fayette; RR—C. & O.
S of H—Mules and 3 elec. locos. Track gage 44 in.
S of M—2 electric machs.
PP—Power purchased, 250 volts D. C., 1 fire tube boiler, 1 pump.
EMP—78. Last years tonnage 29,330.
SIZES SHIPT—Run of Mine.

RAOCLIFF & SOMERVILLE COAL CO.

General Office, Ridgely, W. Va.
RR—W. W. Somerville, R. F. D. 2, Flushing, O.
YP—John C. Chase, Ridgely, W. Va.
TR—R. A. Radcliff, Ridgely, W. Va.
GM—Jonathan Radcliff, Ridgely, W. Va.
GS—Henry Byer, Arden, W. Va.

No. 10 Mine; Slope; Somer Freeport Seam, 72 in. thick.
PO—Arden, W. Va.; SP—Same; CTY—Barbour; RR—B. & O.
MS—O. F. Allen, Arden, W. Va.
S of H—Mules rope and steam engines. Track gage 40 in.
S of M—2 punching machs.
PP—3 boilers, total 35 H. P., 2 pumps.
EMP—16. Daily tonnage 75-100.
SIZES SHIPT—Run of Mine.

RAGLAND COAL COMPANY

General Office, Beckley, W. Va.
PR—C. H. Mead, Beckley, W. Va.
TR—J. P. Nowlin, Beckley, W. Va.
GM—G. H. Mead, Beckley, W. Va.
CS—W. B. Parks, Beckley, W. Va.
PA—William Yates, Pemberton, W. Va.
CE—P. C. Miller, Beckley, W. Va.
EM—P. C. Miller, Beckley, W. Va.
SCO—Address the Company, Buyer, Oakley Meadows, Pemberton, W. Va.
SA—Interstate Coal & Coke Co., West Virginia Coal Co., Raleigh Smokeless Coal Co., Beckley, W. Va.

Ragland Mine; Slope; Beckley Seam, 48 in. thick.
PO—Pemberton, W. Va.; SP—Same; CTY—Raleigh; RR—Virginian.
MS—William Yates, Pemberton, W. Va.
S of H—1 10-ton, 4 6-ton trolley pole type locos. Track gage 44 inches.
S of M—4 shortwall machs.
PP—Power purchased, Transformers 2200 volts A. C., 150 K. W. Gen. unit, 5 pumps.
EMP—84. Daily tonnage 350.
SIZES SHIPT—Run of Mine.

RALEIGH COAL & COKE CO.

General Office, Raleigh, W. Va.
PR—J. M. Wright, 1512 First National Bank Bldg., Cincinnati, O.
VP—Ernest Chilsom, Raleigh, W. Va.
TR—A. A. Liggett, 1512 First National Bank Bldg., Cincinnati, O.
GM—Ernest Chilsom, Raleigh, W. Va.
GS—J. P. White, Raleigh, W. Va.
PA—C. Miller, Raleigh, W. Va.
EM—Emmett Snod, Raleigh, W. Va.
EE—R. B. Holmes, Raleigh, W. Va.
SCO—Address the Company, Buyer, Walter Muir, Raleigh, W. Va.
Sales Agents, (Eastern) C. & O. Coal Co., Roston, Mass.; (Western) Raleigh Coal & Coke Co., First National Bank Bldg., Cincinnati, O.

Raleigh Nos. 3, 4, 6 and 7 Mines; Drift; Beckley Seam, 66-108 in. thick.
PO—Raleigh, W. Va.; SP—Same; CTY—Raleigh; RR—C. & O., Piney Br., Virginian.
MS—Edw. Zwilling, Raleigh, W. Va.
S of H—24 elec. locos. Track gage 44 in.
S of M—Hand, 4 elec. machs.
PP—Power purchased, 2-500 K. W. rotary converters, 500 volts D. C., 16 pumps.
EMP—500. Last years tonnage 450,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Loading Booms.

RALEIGH FIRE CREEK COAL COMPANY.

General Office, Tralee, W. Va.
PR—J. A. Wood, Pratt, W. Va.
TR—J. C. Sullivan, Tralee, W. Va.
GM—J. C. Sullivan, Tralee, W. Va.
GS—Phillip Konrod, Tralee, W. Va.
PA—J. E. McNeal, Tralee, W. Va.
EM—J. E. Deaton, Tralee, W. Va.
EE—J. P. Barksdale, Tralee, W. Va.
SCO—Address the Company, Buyer, B. G. Scott, Tralee, W. Va.

(Continued on Next Page)

Raleigh Fire Creek Coal Company—Cont.

BattleShip Mine; Slope; Fire Creek Seam, 54 60 in. thick.
 PO—Jonhson, W. Va.; SP—Raintown, W. Va.; CTY—Raleigh; RR—Virginian.
 MS—A. W. Perry, Jonhson, W. Va.
 SM—B. C. Mohr, Jonhson, W. Va.
 S of H—5 trolley pole type locos. Track gage 44 in.
 S of M—2 shortwall and 2 arcwall machs.
 PP—Power purchased. Transformer 13000 2200 volts A. C., gen. units 1—150 K. W., 1 250 K. W. rotary converters, 250 volts D. C., 6 pumps.
 EMP—100. Last years tonnage 84,000.
 SIZES SHIPT—Run of Mine.
 NOTE—Formerly operated by the Rattleship Coal Co.

RALEIGH WYOMING COAL COMPANY

General Office, Charleston, W. Va.
 PR—A. McDonald, Charleston, W. Va.
 VP—Carl Schulz, Charleston, W. Va.
 TR—G. T. Harris, Charleston, W. Va.
 GM—Carl Schulz, Charleston, W. Va.
 PA—G. T. Harris, Charleston, W. Va.
 EM—C. E. Portney, Manatus, W. Va.
 SCO—Address the Company, Buyer, J. G. Spangler, Charleston, W. Va.
 Additional information on Pages 1048, 1049

Glen Rogers No. 2 Mine; Shaft; Beckley Seam.
 PO—Glen Rogers, W. Va.; SP—Same; CTY—Wyoming; RR—Virginian.
 MS—E. R. Jones, Glen Rogers, W. Va.
 SM—W. S. Logan, Glen Rogers, W. Va.
 S of H—Electric and storage battery locos. Track gage 42 inches.
 S of M—Shortwall mach.
 SIZES SHIPT—Run of Mine, Slack, Pea Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.
 Edwight No. 1 Mine; Drift; Eagle Seam, 72 in. thick.
 PO—Edwight, W. Va.; SP—Same; CTY—Raleigh; RR—C. & O.
 MS—J. W. Powell, Edwight, W. Va.
 SM—C. P. Hundley, Edwight, W. Va.
 S of H—2 combination locos. Track gage 42 in.
 S of M—3 shortwall and 2 overhead enter machs.
 PP—3 water tube boilers, 450 H. P., transformer 2200-220-110 volts A. C., M. G. Set, 250 volts D. C., 1—350 K. W. Gen. unit, 250 volts D. C.
 EMP—175. Last years tonnage 19,000.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

RANDALL COAL CO.

General Office, Morgantown, W. Va.
 PR—J. L. Rush, Waynesburg, Pa.
 TR—H. Jarvis Eldred, Morgantown, W. Va.
 GM—H. Jarvis Eldred, Morgantown, W. Va.
 GS—H. Jarvis Eldred, Morgantown, W. Va.
 PA—H. Jarvis Eldred, Morgantown, W. Va.
 CE—Frank Rariltel, Morgantown, W. Va.
 SA—H. Jarvis Eldred, Morgantown, W. Va.

Randall No. 1 Mine; Drift; Pittsburgh Seam, 108-132 in. thick.
 PO—Morgantown, W. Va., R. D. No. 7; SP—Same; CTY—Monongalia; RR—Monongahela.
 MS—J. W. Williams, Morgantown, W. Va.
 S of H—Mules, 1 storage battery and 1 gasoline locos. Track gage, 42 in.
 S of M—2 shortwall machs.
 PP—Power purchased, transformer 2200-220 volts A. C., M. G. sets, 220 volts D. C., 3 pumps.
 EMP—80. Last years tonnage 100,000.
 SIZES SHIPT—Run of Mine.
 Old information.

RANDOLPH COAL COMPANY.
 Mine worked out and abandoned.

RANDOLPH COLLIERY COMPANY

General Office, Elkins, W. Va.
 PR—E. H. Arnold, Elkins, W. Va.
 VP—Phil Williams, Elkins, W. Va.
 TR—Phil Williams, Elkins, W. Va.
 GM—Phil Williams, Elkins, W. Va.

Randolph Mine; Drift; Kittanning Seam, 108 in. thick.
 PO—Elkins, W. Va.; SP—Norton, W. Va.; CTY—Randolph; RR—W. Md.
 S of H—Mules. Track gage 42 inches.
 S of M—Hand.
 EMP—40. Daily tonnage 250.
 SIZES SHIPT—Run of Mine.

RANCER COAL COMPANY

General Office, Huntington, W. Va.
 PR—Chas. S. Porter, Huntington, W. Va.
 VP—J. C. Miller, Huntington, W. Va.
 TR—Chas. S. Porter, Huntington, W. Va.
 GS—H. E. Gallian, Ranger, W. Va.
 PA—G. H. Rickard, Huntington, W. Va.
 EM—T. J. Borting, Huntington, W. Va.

Ranger Mine; Drift; Island Creek Seam; 65 in. thick.
 PO—Ranger, W. Va.; SP—Same; CTY—Lincoln; RR—C. & O.
 S of H—Electric and storage battery locos. Track gage 41 inches.
 EMP—100. Daily tonnage 500.
 SIZES SHIPT—Run of Mine, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables.

RAYBERT COAL CO

General Office, Clarksburg, W. Va.
 PR—H. H. Haynes, Clarksburg, W. Va.
 TR—S. H. Wells, Clarksburg, W. Va.
 GM—D. R. Rogers, Clarksburg, W. Va.
 GS—Omar T. Swiger, Dola, W. Va.
 PA—O. T. Swiger, Dola, W. Va.
 EM—Horner Bros., Clarksburg, W. Va.
 SA—J. E. Long Coal Co., Clarksburg, W. Va.

Raybert Mine; Drift; Pittsburgh Seam, 84 in. thick.
 PO—Dola, W. Va.; SP—Same; CTY—Harrison; RR—B. & O.
 S of H—Mules. Track gage, 42 in.
 S of M—Hand.
 PP—2 pumps.
 EMP—16. Daily output, 120 tons.
 SIZES SHIPT—Run of Mine.

RAY, D. E. COAL CO.

Hartland, W. Va.
 Elkridge Mine; CTY—Clay.
 No report.

RAY-BURDETT COAL COMPANY

General Office, Big Chimney, W. Va.
 PR—T. S. Ray, Big Chimney, W. Va.
 VP—C. A. Ray, Charleston, W. Va.
 TR—A. G. Burdett, 1553 Quarrier St., Charleston, W. Va.
 GM—T. S. Ray, Big Chimney, W. Va.
 GS—T. S. Ray, Big Chimney, W. Va.
 PA—A. G. Burdett, Charleston, W. Va.
 EM—S. Meyers, Charleston, W. Va.
 SA—Indian Run Coal Co., Charleston, W. Va.

Barton Mines; Drift; No. 5 Block Seam, 72 in. thick.
 PO—Big Chimney, W. Va.; SP—Milliken, W. Va.; CTY—Kanawha; RR—B. & O.
 S of H—Mules. Track gage 40 in.
 S of M—Hand.
 PP—1 pump.
 EMP—10. Daily tonnage 50.
 SIZES SHIPT—Run of Mine.
 Note—Formerly operated by H. M. Crites Coal Co.
 Old information.

R. B. & R. C. COAL CO.

General Office, Imperial, W. Va.
 PR—John Bottura, Imperial, W. Va.
 VP—Y. Ridolbi, Imperial, W. Va.
 TR—Y. Ridolbi, Imperial, W. Va.
 SA—John Bottura, Imperial, W. Va.

R. B. & R. C. Mine; Drift; Freeport Seam, 72-60 in. thick.
 PO—Imperial, W. Va.; SP—Ten Mile, W. Va.; CTY—Upshur; RR—B. & O.
 MS—Frank Benamati, Imperial, W. Va.
 S of H—Mules. Track gage 36 in.
 S of M—Hand.
 EMP—10.
 SIZES SHIPT—Slack, Nut, Egg, Lump, Block.

RED ASR COAL CO.

Jaeger, W. Va.
 Red Ash Mine; CTY—McDowell.
 No report.

RED CAMPBELL COAL COMPANY

PR—Wm. Brown, Fort Branch, W. Va.
 VP—A. D. Callahan, Crown, W. Va.
 TR—John Faulkner, Huntington, W. Va.
 GM—William Brown, Fort Branch, W. Va.
 GS—Walter Bland, Ft. Branch, W. Va.
 PA—David C. Brown, Fort Branch, W. Va.
 EM—W. C. McCall, Logan, W. Va.
 SA—Lake & Export Coal Corp., Huntington, W. Va.

Additional information on Pages 1020, 1021

Red Campbell Mine; Drift; Chilton Seam, 57 in. thick.
 PO—Fort Branch, W. Va.; SP—Same; CTY—Logan; RR—C. & O., Guyandotte Div.
 S of H—Mules and trolley pole type locos. Track gage, 44 in.
 S of M—2 shortwall machs.
 PP—Power purchased, transformer 250 volts A. C., rotary converters, 100 K. W., 250 volts D. C.
 EMP—58. Daily tonnage 350.
 SIZES SHIPT—Run of Mine, Slack.

RED JACKET CONSOLIDATED COAL & COKE CO., Inc.

General Office, Red Jacket, W. Va.
 PR—Isaac T. Mann, Ramwell, W. Va.
 VP—Wm. D. Ord, Landgraaf, W. Va.
 TR—C. A. Fischer, Red Jacket, W. Va.
 GS—Wm. N. Cummins, Red Jacket, W. Va.
 PA—Wm. N. Cummins, Red Jacket, W. Va.

EM—W. E. Cooke, Red Jacket, W. Va.
 EL—M. B. Flanagan, Red Jacket, W. Va.
 SCO—Mitchell Branch Store; Buyer, Bert Shannon, Red Jacket, W. Va.
 Sales Agency, Norfolk & Chesapeake Coal Co., Majestic Bldg., Detroit, Mich.

Mitchell Branch and Rutherford Mines; Drift; No. 5 Block Seam, 51 in. thick.
 PO—Red Jacket, W. Va.; SP—Matewan, W. Va.; CTY—Mingo; RR—N. & W.
 S of H—11 trolley pole type locos. Track gage, 48 in.
 S of M—8 shortwall machs.
 PP—2 water tube boilers, total 800 H. P., 1 500 K. W. gen. unit, 250 volts D. C., 9 pumps.
 EMP—350. Last fiscal year output, 127,595 tons.
 SIZES SHIPT—Run of Mine, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

Grape Vine Mine; Drift; Alma Seam, 60 in. thick.
 PO—Edgerton, W. Va.; SP—Deferme, W. Va.; CTY—Mingo; RR—Norfolk & Western, Main Line.
 MS—Tra. McElhlin, Edgerton, W. Va.
 S of H—Mules and 1 trolley pole type. Track gage, 46 in.
 S of M—2 chain breast type and 2 shortwall machs.
 PP—3 return tubular boilers, total 450 H. P., 2 150 K. W. gen. units, 250 volts D. C., 5 pumps.
 EMP—100. Last fiscal year output, 71,935 tons.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Shaker Screens, Picking Tables.

No. 32 Mine; Drift; No. 5 Block Seam, 48-66 in. thick.
 PO—Red Jacket, W. Va.; SP—Matewan, W. Va.; CTY—Mingo; RR—N. & W.
 MS—C. L. McKinnon, Red Jacket, W. Va.
 S of H—6 trolley pole type locos. Track gage, 48 in.
 S of M—4 shortwall machs.
 PP—Power from Mitchell mine.
 EMP—110. Last fiscal year output, 84,045 tons.
 SIZES SHIPT—Run of Mine, Nut, Egg, Lump, Slack.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

RED JACKET, JR. COAL CO.

General Office, Red Jacket, W. Va.
 PR—W. M. Ritter, Columbus, O.
 VP—William D. Ord, Landgraaf, W. Va.
 TR—C. A. Fischer, Red Jacket, W. Va.
 GM—William Dord, Landgraaf, W. Va.
 GS—William N. Cummins, Red Jacket, W. Va.
 PA—William N. Cummins, Red Jacket, W. Va.
 EM—W. E. Cooke, Red Jacket, W. Va.
 EE—M. B. Flanagan, Red Jacket, W. Va.
 SCO—Address the Company; Buyer, Bert Shannon, Red Jacket, W. Va.
 Sales Agency, Norfolk & Chesapeake Coal Co., Detroit, Mich.

Junior Mine; Drift; Kittanning Seam, 54 in. thick.
 PO—Red Jacket, W. Va.; SP—Matewan, W. Va.; CTY—Mingo; RR—N. & W.
 MS—C. L. McKinnon, Red Jacket, W. Va.
 S of H—8 trolley pole type locos. Track gage, 42 in.
 S of M—4 shortwall machs.
 PP—3 water tube boilers, 150 H. P., 1 250 K. W. gen. units, 250 volts D. C., 4 pumps.
 EMP—125. Last fiscal year output, 98,255 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

REDSTONE COAL COMPANY.

Now the Late-Konzer Coal Company.

REED RUN COAL CO.

General Office, Masontown, W. Va.
 PR—W. H. Post, Masontown, W. Va.
 VP—P. H. Cornelius, Masontown, W. Va.
 TR—P. R. Watson, Masontown, W. Va.
 GM—E. E. Williams, Masontown, W. Va.
 GS—E. E. Williams, Masontown, W. Va.
 PA—E. E. Williams, Masontown, W. Va.

Dellslow Mine; Drift; Upper Freeport Seam, 52 inches thick.
 PO—Masontown, W. Va.; SP—Dellslow, W. Va.; CTY—Monongalia; RR—M. & K.
 S of H—Mules, gasoline and steam locos. Track gage 44 in.
 S of M—Hand.
 PP—Power purchased. Transformer 220 volts A. C.
 EMP—30.
 SIZES SHIPT—Run of Mine.
 NOTE—Formerly operated by the Hice Coal Co.

REEDSVILLE COAL COMPANY

General Office, Reedsville, W. Va.
 PR—R. Zinn, Reedsville, W. Va.
 VP—J. E. Richardson, Reedsville, W. Va.
 TR—C. H. Zinn, Reedsville, W. Va.
 GS—J. E. Richardson, Reedsville, W. Va.
 EM—Geo. Bean, Reedsville, W. Va.

Richardson Mine; Drift; Upper Freeport Seam; 55 in. thick.
 PO—Reedsville, W. Va.; SP—Kabus Creek, W. Va.; CTY—Preston; RR—M. & K.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 PP—10 pumps.
 EMP—13. Daily tonnage 75.
 SIZES SHIPT—Run of Mine.
 Note—Formerly operated by the Crown Coal Co.

REILLY COAL COMPANY

General Office, Uniontown, Pa.
 PR—W. C. Black, Uniontown, Pa.
 VP—Jas. E. Cotton, Uniontown, Pa.
 TR—F. C. Newcomer, Uniontown, Pa.
 GM—S. M. Hall, Spilman, W. Va.
 GS—S. M. Hall, Spilman, W. Va.
 PA—S. M. Hall, Spilman, W. Va.
 EM—Patrick Riley, Spilman, W. Va.
 EE—Patrick Riley, Spilman, W. Va.
 SCO—Hallwood Store; Buyer, J. W. Nattross, Spilman, W. Va.
 SA—F. C. Newcomer, Uniontown, Pa.

Hallowood Mine; Drift; Pittsburgh No. 8 Seam, 48 in. thick.
 PO—Spilman, W. Va.; SP—Hallowood, W. Va.; CTY—Mason; RR—B. & O.
 S of H—Mules and trolley pole type loco. Track gage 39 in.
 S of M—2 arcwall and 5 chain breast machs.
 PP—1 500 H. P. fire tube boiler, 1 150 K. W. gen. unit, 250 volts D. C., 2 pumps.
 EMP—65. Last years tonnage 30,000.
 SIZES SHIPT—Run of Mine, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.
 Note—Formerly operated by West Virginia Rail & River Coal Co.

REILLY, W. J. COAL & COKE CO.

General Office, Uniontown, Pa.
 PR—W. J. Reilly, Uniontown, Pa.
 VP—W. J. Reilly, Uniontown, Pa.
 TR—W. J. Reilly, Uniontown, Pa.
 GM—W. J. Reilly, Uniontown, Pa.
 PA—R. E. Bliz, Uniontown, Pa.
 EM—Harry Blackford, Uniontown, Pa.
 EE—Wm. Mahaffey, Coffman, W. Va.
 SCO—Address the Company, Buyer, Philip Vilone, Coffman, W. Va.
 SA—W. J. Reilly Sales Co., Uniontown, Pa.

Winona Mine; Slope; Upper Freeport Seam, 60 in. thick.
 PO—Coffman, W. Va., and R. F. D. No. 3, Grafton, W. Va.; SP—Frt., Coffman, W. Va., Exp., Grafton, W. Va.; CTY—Taylor; RR—B. & O.
 MS—Jas. Moore, Coffman, W. Va.
 S of H—2 trolley pole type locos. Track gage 44 in.
 S of M—2 shortwall machs.
 EMP—80.
 SIZES SHIPT—Run of Mine.

RESERVE GAS COMPANY.

Weston, W. Va.
 Kennedy Mine; CTY—Lewis.
 No report.

REX COLLIERY COMPANY

General Office, Queen Shoals, W. Va.
 PR—David Armstrong, Jackson, O.
 VP—J. R. Ramage, Queen Shoals, W. Va.
 TR—J. R. Ramage, Queen Shoals, W. Va.
 GM—J. R. Ramage, Queen Shoals, W. Va.
 GS—J. R. Ramage, Queen Shoals, W. Va.
 PA—J. W. Humphries, Queen Shoals, W. Va.
 EM—R. E. Vambilder, Charleston, W. Va.
 SCO—Address the Company, Buyer, J. W. Humphries, Queen Shoals, W. Va.
 SA—Clyde H. Hoyt Co., Toledo, O.
 Additional information on Page 1006

Queen Shoals Mine; Drift; Upper Kittanning Seam, 46 in. thick.
 PO—Queen Shoals, W. Va.; SP—Same; CTY—Clay; RR—B. & O.
 S of H—Mules, storage battery and gasoline locos. Track gage 42 in.
 S of M—Hand.
 PP—1 150 H. P. water tube boiler, 2 250 K. W., 250 volts D. C.
 EMP—38. Last year, tonnage 13,000.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Gravity Screens.
 Note—Formerly operated by Queen Coal Company.

REYNOLDS COAL CO

Grafton, W. Va.
 Slader Mine; CTY—Taylor.
 No report.

RHOODELL COAL COMPANY

General Office, Box 370, Huntington, W. Va.

PR—A. Z. Lutz, Tazewell, W. Va.
VP—G. T. Harbitt, Bluefield, W. Va.
TR—N. H. Manakee, Bluefield, W. Va.
GM—L. E. Anderson, Rhodell, W. Va.
GS—N. H. Manakee, Bluefield, W. Va.
PA—L. E. Anderson, Rhodell, W. Va.
EM—L. M. Merrill Eng. Co., Mullens, W. Va.

SCO—Address the Company, Buyer, Jas. Sluss, Rhodell, W. Va.
SA—Litz-Smith Fuel Co., Huntington, W. Va.

Nos. 1 and 2 Mines; Drift; Pocahontas No. 3 and Beckley Seams, 48-72 in. thick.

PO—Rhodell, W. Va.; SP—Same; CTY—Kaleigh; RR—Virginia, C. & O.
MS—L. E. Anderson, Rhodell, W. Va.
S of H—2 elec. locos. Track gage 48 in.
S of M—1 shortwall mach.
PP—Purchase power, 1—150 K. W. M. G. Set, 1—75 K. W. rotary converter, 250 volts D. C., 3 pumps.
EMP—100. Daily tonnage 450.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Table.

RICH BLOCK COAL CO.

General Office, Ashland, Ky.

PR—J. W. Montgomery, Ashland, Ky.
VP—F. H. McClung, Ashland, Ky.
TR—W. H. Clay, Ashland, Ky.
GS—Sam Collier, Ashland, Ky.
PA—H. L. Brob, Huntington, W. Va.
EM—Clark & Krebs, Charleston, W. Va.
SCO—Address the Company, Ashland, Ky.

Rich Block Mine; Drift; No. 5 Block Seam, 64 in. thick.

PO—Morrisville, W. Va.; SP—Altman, W. Va.; CTY—Boone; RR—C. & O.
S of H—Trolley pole type and storage battery locos. Track gage, 42 in.
S of M—2 shortwall machs.
PP—3 boilers, gen. units, 250 volts D. C.
EMP—40. Daily tonnage 200.
SIZES SHIPT—Run of Mine, Slack, Block.
PREP. EQUIPT—Gravity Screens.

RICH CREEK COAL CO.

General Office, Fairmont, W. Va.

PR—Books S. Hutchinson, Fairmont, W. Va.
VP—C. E. Hutchinson, Fairmont, W. Va.
TR—J. F. Cole, Fairmont, W. Va.
GM—F. E. Hutchinson, Logan, W. Va.
GS—A. A. Hamilton, Jr., Lyburn, W. Va.
EM—J. E. Justice, Lyburn, W. Va.
SCO—Address the Company; Buyers, Geo. E. Yeager, Lyburn, W. Va.; C. E. Watkins, Manbar, W. Va.
SA—Hutchinson Coal Co., Fairmont, W. Va.

Additional Information on Page 1013

Lyburn Mine; Slope and Shaft; Eagle No. 2 Seam, 60 in. thick.
PO—Lyburn, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
S of H—6 elec. locos. Track gage 44 in.
S of M—2 shortwall machs.
PP—Power purchased. Transformer 44000—2300 volts A. C. M. G. Set, 250 volts D. C., 5 pumps.
EMP—30. Last years tonnage 73,000
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

Wilburn Mine; Drift; No. 2 Gas Seam, 63 in. thick.
PO—Manbar, W. Va.; SP—Wilburn, W. Va.; CTY—Logan; RR—C. & O.
MS—A. A. Hamilton, Jr., Lyburn, W. Va.
S of H—Mules and 4 trolley pole type locos. Track gage, 44 in.
S of M—3 shortwall machs.
PP—Power purchased, transformer 44,000—2300 volts A. C., rotary converters, 250 volts D. C., 3 pumps.
EMP—95. Last years tonnage 98,000.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.

RICHLAND COAL CO.

General Office, Wheeling, W. Va.

PR—J. C. McKinley, Wheeling, W. Va.
TR—H. B. Lockwood, Wheeling, W. Va.
GM—A. S. Buren, Wheeling, W. Va.
PA—A. S. Buren, Wheeling, W. Va.
EM—P. C. Christy, Wheeling, W. Va.
LE—J. C. Lilly, Wheeling, W. Va.

Richland Mine, Drift, 54 ft. thick.
PO—Wheeling, W. Va.; SP—Same; CTY—Ohio; RR—P. C. C. & St. L.
MS—W. H. Borling, Wheeling, W. Va.
S of H—9 elec. loco. Track gage 36 in.
S of M—13 elec. machines.
PP—500 volts D. C. Purchase power.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Bar Screens, Picking Tables.

Mound Mine; Shaft; Pittsburgh Seam,

64 in. thick.
PO—Moundsville, W. Va.; SP—Same; CTY—Marshall; RR—B. & O.

MS—Seth P. Stephens.
Moundsville, W. Va.
S of H—Mules and 2 electric locos. Track gage 36 in.
S of M—4 elec. machs.
PP—3 boilers, total 300 H. P., 2 gen. units, 250 volts D. C., 2 pumps.

Standard Nos. 1 and 2 Mines; Drift; Seam 72 in. thick.
PO—Wellsburg, W. Va.; SP—Same; CTY—Brooke; RR—P. C. C. & St. L.
MS—J. P. Leonard, Wellsburg, W. Va.
S of H—6 elec. locos. Track gauge 42 in.
S of M—12 elec. machs.
PP—500 volts D. C. Purchase power.

RICHLAND-MARSHALL COAL COMPANY

General Office, Wheeling, W. Va.

PR—J. C. McKinley, Wheeling, W. Va.
TR—H. B. Lockwood, Wheeling, W. Va.
GM—A. S. Burger, Wheeling, W. Va.
PA—A. S. Burger, Wheeling, W. Va.
EM—P. C. Christy, Wheeling, W. Va.

Mound Mine; Shaft; Pittsburgh No. 8 Seam, 66 inches thick.
PO—Moundsville, W. Va.; SP—Same; CTY—Marshall; RR—B. & O.
MS—H. M. Wassum, Moundsville, W. Va.
S of H—Mules, 3 trolley pole type locos. Track gage 36 inches.
S of M—6 chain breast type and 2 shortwall machs.
PP—2 fire tube boilers, 200 H. P., M. G. sets, 250 volts D. C., 4 pumps.
EMP—150. Daily tonnage 1,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens.

Mound Slope Mine; Slope; Pittsburgh No. 8 Seam, 66 inches thick.
PO—Moundsville, W. Va.; SP—Same; CTY—Marshall; RR—B. & O., Ohio River.

MS—H. M. Wassum, Moundsville, W. Va.
S of H—Mules, trolley pole type and storage battery locos. Track gage 36 inches.
S of M—Chain breast type and shortwall machs.
PP—Power purchased. M. G. sets, 250 volts D. C.
EMP—75. Daily tonnage 400.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Gravity Screens, Picking Tables.

RIOGELIN COAL MINING CO.

General Office, Buckhannon, W. Va.

PR—W. P. Beveridge, Buckhannon, W. Va.
VP—J. B. Clifton, Beckley, W. Va.
TR—M. J. Laughlin, Beckley, W. Va.
GM—W. P. Beveridge, Buckhannon, W. Va.
GS—D. C. Walls, Imperial, W. Va.
PA—W. P. Beveridge, Buckhannon, W. Va.
CE—C. P. Collins, Clarksburg, W. Va.
EE—B. L. Murphy, Buckhannon, W. Va.
SA—Raleigh Smokeless Fuel Co., Beckley, W. Va.

Beveridge No. 9 Mine; Drift; Kittanning Seam, 66 inches thick.
PO—Imperial, W. Va.; SP—Ten Mile, W. Va.; CTY—Upshur; RR—B. & O.
SM—M. J. Laughlin, Beckley, W. Va.
S of H—1 trolley pole type and 3 combination locos. Track gage 42 in.
S of M—2 shortwall machs.
PP—1—350 H. P. water tube boiler, gen. units, 250 K. W. M. G. Sets, 250 volts D. C., 1 pump.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

RIGHT FORK COAL CO.

Now operated by the Right Fork Mining Company.

RIGHT FORK MINING COMPANY

General Office, Iatton, W. Va.

PR—J. M. Moore, Huntington, W. Va.
TR—Fred Legg, Cincinnati, O.
GS—Jesse Stone, Iatton, W. Va.
PA—Jesse Stone, Iatton, W. Va.
SC—Right Fork Store, Buyer, Jesse Stone, Iatton, W. Va.
SA—Logan & Kanawha Coal Co., Cincinnati, O.

Right Fork Mine; Drift; No. 5 Block Seam; 50 in. thick.
PO—Iatton, W. Va.; SP—Same; CTY—Lincoln; RR—C. & O.
S of H—Mules and electric loco. Track gage 42 inches.
S of M—Shortwall mach.
PP—2 water tube boilers, total 250 H. P., gen. unit, 250 volts A. C.
EMP—55. Daily tonnage 225.
SIZES SHIPT—Run of Mine, Slack, Lump.

PREP. EQUIPT—Bar Screens, Picking Tables.

Note—Formerly operated by Right Fork Coal Co.

RILEY COAL COMPANY

General Office, Shinnston, W. Va.

GM—Leonard Riley, Shinnston, W. Va.
EM—J. P. McClintock, Shinnston, W. Va.
Lorain Mine; Slope Pittsburgh Seam, 108 inches thick.
PO—Shinnston, W. Va.; SP—Same; CTY—Harrison BB—B. & O., Willard Br.
S of H—Elec. loco. Track gage 42 inches.
S of M—Hand.
PP—Power purchased, 25 H. P. fire tube boiler.
EMP—8.
SIZES SHIPT—Run of Mine, Slack, Pea, Block.

RIVER SEAM COAL COMPANY.

General Office, 511 Wood St., Pittsburgh, Pa.

PR—T. R. Evans, Pittsburgh, Pa.
VP—H. J. Booth, Pittsburgh, Pa.
TR—A. H. Copeland, Pittsburgh, Pa.
GM—A. H. Copeland, Pittsburgh, Pa.
GS—John Campbell, Morgantown, W. Va.
PA—Andrew Miller, Pittsburgh, Pa.
CE—Baton & Editt, Pittsburgh, Pa.
SCO—Booth Supply Company, Morgantown, W. Va.

Booth Mine; Drift; Pittsburgh Seam, 108 in. thick.
PO—Morgantown, W. Va.; SP—Frt., Hilderbrand, W. Va.; Exp., Morgantown; CTY—Mooongala; RR—Monongahela.
S of H—Elec. locos. Track gage 42 in.
S of M—Shortwall machs.
PP—Power purchased. Transformer 22000—2200 volts A. C. M. G. Sets, 250 volts D. C.
EMP—200. Daily tonnage 2,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.
NOTE—Successors to the North Fairmont Coal Company.

RIVERVIEW COAL COMPANY

General Office, McMechen, W. Va.

PR—R. J. Cotta, McMechen, W. Va.
VP—R. J. Cotta, McMechen, W. Va.
TR—Wm. Leach, Benwood, W. Va.
GM—H. H. Cooper, McMechen, W. Va.
GS—H. H. Cooper, McMechen, W. Va.
PA—H. H. Cooper, McMechen, W. Va.
EM—H. H. Cooper, McMechen, W. Va.

Riverview Mine; Slope; Seam 60 in. thick.
PO—McMechen, W. Va.; SP—Same; CTY—Marshall; RR—B. & O.
S of H—Elec. hoist. Track gage 30 in.
S of M—Hand.
PP—Power purchased, 220 volts D. C., 1 pump.
EMP—14. Daily tonnage 35.
SIZES SHIPT—Run of Mine, Slack.

RIVERVIEW COAL COMPANY

General Office, Ansted, W. Va.

PR—W. L. Burns, Ansted, W. Va.
VP—Evan Massey, Ansted, W. Va.
TR—W. H. Evans, Ansted, W. Va.
GM—R. E. Willis, Ansted, W. Va.
PA—R. E. Willis, Ansted, W. Va.
SA—Old Dominion Coal Co., Charleston, W. Va.

Riverview Mine; Drift; Lewiston Seam, 34 in. thick.
PO—Ansted, W. Va.; SP—Charleston, W. Va.; CTY—Kanawha; RR—K. & M.
S of H—Mules. Track gage 36 in.
S of M—Hand.
PP—Power purchased, 250 volts A. C.
EMP—25. Daily tonnage 75 to 100.
SIZES SHIPT—Run of Mine.

RIVESVILLE COAL COMPANY

General Office, Fairmont, W. Va.

PR—R. A. Pollock, Fairmont, W. Va.
TR—R. A. Pollock, Fairmont, W. Va.
GM—P. D. Pollock, Fairmont, W. Va.
GS—J. H. Pollock, Fairmont, W. Va.
EM—J. I. Snoderly, Fairmont, W. Va.
SA—Fairmont-Cleveland Coal Co., Fairmont, W. Va.

Hook Mine; Drift; Sewickley Seam, 72 in. thick.
PO—Rivesville, W. Va.; SP—Same; CTY—Marion; RR—B. & O.
S of H—1 trolley pole and 1 storage battery locos. Track gage 42 in.
S of M—3 chain breast machs.
PP—Power purchased. Transformer, 2200 volts A. C., rotary converter, 250 volts D. C., 2 pumps.
EMP—50. Daily tonnage 300.
SIZES SHIPT—Run of Mine.

ROANOKE COAL & COKE CO.

General Office, Worth, W. Va.

PR—Isaac T. Mann, Bramwell, W. Va.
VP—W. D. Ord, Landgraf, W. Va.
TR—C. A. Fischer, Red Jacket, W. Va.
GM—William D. Ord, Landgraf, W. Va.
PA—H. L. Eaton, Worth, W. Va.

EM—C. A. Graham, Mayheury, W. Va.

SCO—Address the Company, Buyer, C. Gray, Worth, W. Va.
Sales Agency, Pocahontas Fuel Co., No. 1 Broadway, New York, N. Y.

Roanoke Mine, Drift, Pocahontas No. 3 Seam, 57 to 68 in. thick.
PO—Worth, W. Va.; SP—Frt. Crumpler, W. Va.; Exp. North Fork, W. Va.; CTY—McDowell; RR—N. & W.
S of H—Mules, rope and trolley pole type locos. Track gage 44 in.
S of M—1 chain breast type mach.
PP—2 water tube boilers, gen. units, 250 volts D. C., 1 pump.
EMP—150. Last years tonnage 113,647.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables.

ROBINSON & HARDESTY COAL CO.

General Office, Shinnston, W. Va.

Blackburn Mine.
PO—Shinnston, W. Va.; CTY—Harrison; BB—B. & O.
No report.

ROBINSON COAL & COKE CO., THE

General Office, Palmer, W. Va.

PR—L. H. Humbert, Uniontown, Pa.
VP—W. J. Robinson, Palmer, W. Va.
TR—J. M. Thomas, Uniontown, Pa.
GM—W. J. Robinson, Palmer, W. Va.
GS—W. J. Robinson, Palmer, W. Va.
PA—W. J. Robinson, Palmer, W. Va.
CE—H. L. Robinson Jr., Sutton, W. Va.
SCO—Colonial Supply Co. Buyer, W. J. Robinson, Palmer, W. Va.
SA—W. J. Robinson, Palmer, W. Va.

Eleanor Nos. 1 & 2 Mines; Drift; Kittanning Seam, 48-96 in. thick.
PO—Palmer, W. Va.; SP—Holly Jct., W. Va.; CTY—Braxton; RR—B. & O.
SM—R. B. Lynn, Palmer, W. Va.
S of H—Mules. Track gage 42 in.
EMP—40.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens.
NOTE—Mine being developed.

ROBINSON COAL COMPANY

General Office, Fairmont, W. Va.

OWNER—C. D. Robinson, Fairmont, W. Va.
GS—Dorsey Pople, Fairmont, W. Va.
PA—H. P. Robinson, Fairmont, W. Va.
EM—D. D. Simon, Fairmont, W. Va.
SA—Eastern Fuel Co., 408 Frick Bldg., Pittsburgh, Pa.; 302 Broadway, New York, N. Y.

Davis Mine; Drift; Pittsburgh Seam, 96 inches thick.
PO—Flemington, W. Va.; SP—Same; CTY—Taylor; RR—B. & O.
MS—Wm. Drainer, Flemington, W. Va.
S of H—Trolley pole type loco. Track gage 42 inches.
S of M—3 chain breast type and 1 shortwall mach.
PP—Power purchased. Transformer 2200—220 volt A. C., 4 pumps.
EMP—65. Daily tonnage 500.
SIZES SHIPT—Run of Mine, Slack, Lump.

ROBINSON, JOHN L.

See Gabe Fork Coal Company.

ROCK BOTTOM COAL COMPANY

PR—L. F. Lenham, Rock Bottom, W. Va.
VP—J. V. Legg, Rock Bottom, W. Va.
TR—Lee Kenny, Rock Bottom, W. Va.
PA—Lee Kenny, Rock Bottom, W. Va.
EM—H. M. Eaton, Charleston, W. Va.
EE—Tom Belcher, Rock Bottom, W. Va.

Rock Creek Mine; Drift; Cadargrove Seam, 40 in. thick.
PO—Rock Bottom, W. Va.; SP—Rock Creek; CTY—Boone; RR—C. & O.
MF—Jas. Bellamy, Rock Bottom, W. Va.
MS—C. C. Conley, Rock Bottom, W. Va.
S of H—Mules.
S of M—3 elec. machs.
PP—1 return tubular boiler, total 150 H. P., 1 gen. unit, 250 volts D. C.
EMP—30. Daily tonnage 150.
SIZES SHIPT—Run of Mine.

ROCK ISLAND COAL & COKE COMPANY

Now operated by the Meriden Smokeless Coal Company.

ROCK LICK COAL CO.

Now operated by the Low Volatile Consolidated Coal Co.

ROCK POCAHONTAS COAL COMPANY

General Office, Northfork, W. Va.

PR—A. J. Stewart, Bluefield, W. Va.
VP—A. J. Stewart, Bluefield, W. Va.
TR—Lester G. Tamy, Keystone, W. Va.
GM—A. J. Stewart, Bluefield, W. Va.

(Continued on Next Page)

Rock Pocahontas Coal Company—Cont.
Rock Pocahontas Mine; Drift; Pocahontas No. 3 Seam, 108 in. thick.
PO—Amawalt, W. Va.; SP—Jennett, W. Va.; CTY—McDowell; RR—N. & W. S of H—Mules. Track gage 44 in.
S of M—Hand.
SIZES SHIPT—Run of Mine.

ROCKY BRANCH POCAHONTAS COAL CO.
Now operated by Purdy-Pocahontas Coal Company.

ROESSING FUEL COMPANY
Out of Business.

ROSEDALE COAL COMPANY.
General Office, Morgantown, W. Va.
PR—John L. Hatfield, Morgantown, W. Va.
VP—Mr. Morton, Van Voorhis, W. Va.
TR—Aaron J. Garlow, Morgantown, W. Va.
GM—C. I. Lantz, Morgantown, W. Va.
GS—P. J. Gandy, Van Voorhis, W. Va.
EM—Monongahela Valley Eng. Co., Morgantown, W. Va.
SCU—Morton Supply Co., Van Voorhis, W. Va.
SA—Blue Flame Fuel Co., Morgantown, W. Va.
Additional Information on Page 1047

Rosedale No. 1 Mine; Drift; Pittsburgh Seam, 90 inches thick.
PO—Van Voorhis, W. Va.; SP—West Van Voorhis, W. Va.; CTY—Monongalia; RR—Monongahela.
S of H—Mules and 1 elec. loco. Track gage 42 in.
S of M—2 chain breast type and 4 short-wall machs.
PP—Power purchased. Transformer 22,000 to 2200 volts A. C., 250 volts D. C., 4 pumps.
EMP—110. Last fiscal year output, 120,000 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.

ROSEMONT COAL CO.
General Office, Land Title Bldg., Philadelphia, Pa.
PR—J. H. Weaver, Philadelphia, Pa.
TR—Chas. Crouse, Philadelphia, Pa.
GM—C. E. Sharpless, Philadelphia, Pa.
PA—J. J. Matheson, Philadelphia, Pa.
CE—C. E. Sharpless, Philadelphia, Pa.
EM—F. M. McDaniel.
EE—Thos. Hamrick, Rosemont, W. Va.
SCU—Rosemont Store Co. Buyer, M. A. Lynch, Rosemont, W. Va.
Sales Agency, J. H. Weaver & Co., Philadelphia, Pa.

Rosemont Mine; Drift; Pgh. Seam, 72 to 114 in. thick.
PO—Rosemont, W. Va.; SP—Same (prepay); CTY—Taylor; RR—B. & O., Main Line.
MS—A. L. Christiao, Rosemont, W. Va.
S of H—4 elec. loco.; track gage 42 in.
S of M—4 Elec. mach.
PP—2 water tube boilers, total 300 H. P., 2 gen. units, 250 volts D. C., 7 pumps.
EMP—150. Daily tonnage 400.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Bar Screens.

ROTHWELL COAL COMPANY.
Now Maryland New River Coal Co.

ROYAL BLOCK COAL COMPANY.
General Office, Huntington, W. Va.
PR—W. E. Deegans, Huntington, W. Va.
TR—J. Frank Grimet, Huntington, W. Va.
GS—O. C. Huffman, Huntington, W. Va.
PA—John Faulkner, Huntington, W. Va.
EM—Morris Hansford, Huntington, W. Va.
SCU—Address the Company. Buyer, H. C. Jackson Morrisvale, W. Va.
SA—W. E. Deegans Coal Co., Huntington, W. Va.

Royal Block Mine; Drift; No. 5 Block Seam, 54 inches thick.
PO—Morrisvale, W. Va.; SP—Dixie, W. Va.; CTY—Boone; RR—C. & O.
MS—J. J. McLaughlin, Morrisvale, W. Va.
S of H—Mules, 1 trolley pole type and 2 storage battery locos. Track gage, 44 in.
S of M—4 shortwall machs.
PP—1 water tube boiler, 100 H. P., 1—150 K. W. gen. unit, 250 volts D. C., 4 pumps.
Last years tonnage 61,188.
SIZES SHIPT—Run of Mine, Slack, Black.
PREP. EQUIPT—Gravity Screens.

ROYAL COAL COMPANY
General Office, Royal, W. Va.
PR—Kenneth W. McNeil, Bridgeport, Conn.
VP—Willis G. Townes, Port Chester, N. Y.
TR—Adam Hugo, Bridgeport, Conn.
GM—D. Evendoll, Royal, W. Va.
PA—Edward E. Huddleston, Royal, W. Va.

CE—W. A. Sullivan, Altoona Trust Bldg., Altoona, Pa.
EM—Harold B. Wilson, Thurmond, W. Va.
FE—James B. Sterrett, Royal, W. Va.
SCU—Address the Company. Buyer, R. L. Slack, Royal, W. Va.
SA—A. McNeil & Sons, Room 1106, Grand Central Palace, New York, N. Y.

Royal Nos. 1 and 2 Mines; Drift; Fire Creek and Beckley Seams, 36-48 in. thick.
PO—Royal, W. Va.; SP—Same; CTY—Raleigh; RR—C. & O.
MS—J. W. Persinger, Royal, W. Va.
S of H—2 5-ton elec. locos. Track gage 44 in.
S of M—Room and pillar, shortwall mach. PP—1—150 H. P., 1—125 H. P. water tube boilers, gen. units, 1—150 K. W., 250 volts D. C., 3 pumps.
EMP—75. Last years tonnage 16,314.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Gravity Screens.

ROYAL WHITE ASH COAL COMPANY
General Office, Alkol, W. Va.
PR—Vernon E. Hall, Alkol, W. Va.
VP—Frank J. Hall, Dayton, O.
TR—Fred J. Hall, Dayton, O.
GM—Vernon E. Hall, Alkol, W. Va.
GS—Edw. Brohary, Alkol, W. Va.
PA—A. H. O'Neal, Alkol, W. Va.
EE—Arnold Pauley, Alkol, W. Va.
SCU—Address the Company. Buyer, A. H. O'Neal, Alkol, W. Va.
SA—Jackson & West Virginia Fuel Co., Dayton, O.

Royal Mine; Drift; Kanawha No. 5 Block Seam, 54 in. thick.
PO—Alkol, W. Va.; SP—Same; CTY—Lincoln; RR—C. & O.
MS—Arnold Pauley, Alkol, W. Va.
S of H—2 storage battery locos. Track gage 42 in.
S of M—3 shortwall machs.
PP—2 water tube boilers, 150 H. P., gen. units.
EMP—50. Daily tonnage 200.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.
Note—Successors to West Virginia White Ash Coal Co.

R. S. COAL COMPANY
General Office, Clarksburg, W. Va.
PR—E. L. Rogers, Clarksburg, W. Va.
VP—G. R. Rogers, Mt. Clare, W. Va.
TR—E. L. Rogers, Clarksburg, W. Va.
GM—W. N. Malone, Grafton, W. Va.
EM—Hornor Bros., Clarksburg, W. Va.
R. S. No. 1 Mine; Drift; Pittsburgh Seam, 84-108 inches thick.
PO—Clarksburg, W. Va.; SP—Byron, W. Va.; CTY—Harrison; RR—B. & O.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
PP—Will purchase power. Transformer 220 to 110 volts A. C.
EMP—35. Daily tonnage 250.
SIZES SHIPT—Run of Mine.

RUM CREEK COLLIERIES AND BY-PRODUCTS COMPANY.
PR—J. M. Vest, Deluge, W. Va.
GM—J. M. Vest, Deluge, W. Va.
GS—E. A. Hatcher, Deluge, W. Va.
PA—J. M. Vest.
TR—Fred C. Pritchard, Huntington, W. Va.
SCU—Address the Company. Buyer, Scott Hyton, Deluge, W. Va.

Rum No. 1 Mine; Shaft; Eagle Seam, 60 to 76 in. thick.
PO—Deluge, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
MS—Edwin Jones, Deluge, W. Va.
S of H—1 elec. loco. Track gage 48 in.
S of M—1 elec. mach.
PP—Purchase power.
EMP—150.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

Rum No. 2 Mine; Drift; Island Creek Seam, 48 to 66 in. thick.
PO—Deluge, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
MS—Vince Hoper, Deluge, W. Va.
S of H—1 elec. loco. Track gage 48 in.
S of M—1 elec. mach.
PP—Purchase power.
EMP—75. New mine.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

Rum No. 3 Mine; Drift; Island Creek Seam, 48 to 66 in. thick.
PO—Deluge, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
S of H—4 elec. locos. Track gage 48 in.
S of M—4 elec. machs.
PP—Purchase power.
EMP—100. New mine.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.
Old information.

RYAN COAL COMPANY.
PR—M. L. Hutchinson, Fairmont, W. Va.
VP—C. E. Hutchinson, Fairmont, W. Va.
TR—C. H. Jenkins, Fairmont, W. Va.
GM—C. J. Ryan, Hazebach, W. Va.
GS—C. J. Ryan, Hazebach, W. Va.
PA—C. J. Ryan, Hazebach, W. Va.
EM—Carl Harmon, Fairmont, W. Va.
Sales Agents—Hutchinson Coal Co., Fairmont, W. Va.

Haymond Mine; Drift; Pittsburgh Seam, 90 inches thick.
PO—Clarksburg, W. Va.; SP—Same; CTY—Harrison; RR—B. & O.
MS—C. D. M. Kramer, Clarksburg, W. Va.
S of H—Mules and rope. Track gage, 42 in.
S of M—2 chain breast type machs.
PP—Power purchased. Transformer 2200 to 220 volts A. C., 1 pump.
EMP—60. Daily tonnage 300.
SIZES SHIPT—Run of Mine.

ST. CLAIR COAL MINING CO.
General Office, Milwaukee, Wis.
PR—E. G. Wilmer, Milwaukee, Wis.
VP—H. J. Schlesinger, Milwaukee, Wis.
TR—A. A. Schlesinger, Milwaukee, Wis.
GM—D. H. Phillips, Huntington, W. Va.
GS—Law Roach, Eagle, W. Va.
PA—L. P. McGowan, Milwaukee, Wis.
EE—E. J. Fluck, Huntington, W. Va.
EF—J. H. Edwards, Huntington, W. Va.
SCU—Address the Company. Buyer, J. B. Dailey, Huntington, W. Va.
SA—C. D. Weeks, V. P., Milwaukee, Wis.

Eagle Mine; Drift; Eagle No. 1 Gas Seam, 52 in. thick.
PO—Eagle, W. Va.; SP—Same; CTY—Payette; RR—C. & O.
MS—Fuest Grisy, Eagle, W. Va.
S of H—3 mules and 6 trolley pole type locos. Track gage 40 in.
S of M—3 shortwall machs.
PP—Power purchased, 250 volts D. C. Last years tonnage 74,852.
SIZES SHIPT—Run of Mine.
Archer Mine; Drift; No. 5 Splint Seam, 60 in. thick.
PO—Eagle, W. Va.; SP—Same; CTY—Payette; RR—C. & O.
MS—Law Roach, Eagle, W. Va.
PP—Power purchased.
SIZES SHIPT—Lump, Nut.

ST. CLAIR WINIFREDE COAL COMPANY
Now Delphos & West Virginia Coal Co.

ST. CLOUD COAL MINING COMPANY
General Office, Law Bldg., Cumberland, Md.
OWNERS—St. Cloud Ambrose, Cumberland, Md.; W. E. Ambrose, Cumberland, Md.
GM—W. E. Ambrose, Cumberland, Md.
GS—St. Cloud Ambrose, Cumberland, Md.
PA—W. E. Ambrose, Cumberland, Md.
CE—Wm. Harvey, Frostburg, Md.
SA—Jno. Wills, Inc., Philadelphia, Pa.

St. Cloud Nos. 1 and 2 Mines; Drift; Kittanning and Freeport Seams, 48-84 inches thick.
PO—Blaine, W. Va.; SP—Same; CTY—Mineral; RR—W. Md.
S of H—Mules and rope. Track gage 42 inches.
S of M—Hand.
EMP—70. Last years tonnage 16,000.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.
Note—Formerly operated by the Hamill Coal Company.

SABINE COLLIERIES CORPORATION
General Office, Otsego, W. Va.
PR—F. Sitterding, Richmond, Va.
VP—Geo. H. Taylor, New York, N. Y.
TR—O. Raymond Brown, Richmond, Va.
GM—E. J. F. Caugar, Otsego, W. Va.
GS—E. J. F. Caugar, Otsego, W. Va.
PA—E. J. F. Caugar, Otsego, W. Va.
EM—E. M. Merrill, Beckley, W. Va.
EE—G. C. Murray, Otsego, W. Va.

Sabine Mine; Drift; Beckley and No. 3 Seams, 54 42 in. thick.
PO—Otsego, W. Va.; SP—Same; CTY—Wyoming; RR—V. G. N.
S of H—Electric locos. Track gage 44 in.
S of M—Electric puncher and shortwall mach.
PP—Power purchased. Transformer 2300 to 250 volts A. C. M. G. Set, 250 volts D. C.
EMP—200. Last years tonnage 108,000.
SIZES SHIPT—Run of Mine.

SAFETY POCAHONTAS COAL CO.
Kimball, W. Va.
Safety Pocahontas Mine; CTY—McDowell.
No report.

SALKELD COAL COMPANY
General Office, 519 Oliver Bldg., Pittsburgh, Pa.
PR—John A. Reil, Pittsburgh, Pa.
VP—H. B. Salkeld, Pittsburgh, Pa.
TR—H. B. Salkeld, Pittsburgh, Pa.
GM—H. B. Salkeld, Pittsburgh, Pa.

EM—R. C. Salkeld, Carnegie, Pa.
SCU—Clement Mercantile & Land Co. Buyer, C. F. Emphrey, Belington, W. Va.
SA—H. B. Salkeld, Pittsburgh, Pa.

Empire Mine; Drift; Lower Freeport Seam, 84 inches thick.
PO—Belington, W. Va.; SP—Same; CTY—Barbour; RR—B. & O.
MS—Lee Pyle, Belington, W. Va.
S of H—Electric loco. Track gage 42 inches.
S of M—Shortwall mach.
PP—2 water tube boilers, total 560 H. P., gen. unit, 1—100 K. W., 1—250 K. W., 250 volts D. C.
EMP—50. Output from September to January 1st, 1920, 7,337 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.

SALVATORE COAL COMPANY
General Office, Fairmont, W. Va.
PR—F. M. Murphy, Fairmont, W. Va.
VP—J. A. Clark, Jr., Fairmont, W. Va.
TR—J. A. Clark, Jr., Fairmont, W. Va.
GS—J. A. Clark, Jr., Fairmont, W. Va.
PA—J. A. Clark, Jr., Fairmont, W. Va.
EM—Roy Stevens, Fairmont, W. Va.
EE—Homer Palmer, Box 649, Clarksburg, W. Va.
Sales Agency—Blair-Parke Coal & Coke Co., Real Estate Trust Co., Fairmont, W. Va.

Greig Mine; Drift; Sewickley Seam, 60 in. thick.
PO—Helens Run, W. Va.; SP—Worthington, W. Va.; CTY—Marlow; RR—W. Md.
MS—Donald Thompson, Helens Run, W. Va.
S of H—1 trolley pole type loco. Track gage 12 inches.
S of M—3 chain breast type machs.
PP—Power purchased, 550 volts D. C., 1 pump.
EMP—50. Last fiscal year output, 25,000 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Loading Booms.

SANDBERG COAL & LAND CO.
General Office, Charleston, W. Va.
PR—C. E. Sandberg, Charleston, W. Va.
VP—T. E. B. Siler, Charleston, W. Va.
TR—H. M. Shush, Whitesville, W. Va.
GM—Chas. E. Sandberg, Charleston, W. Va.
GS—C. E. Ellis, Chelyan, W. Va.
EM—John P. West, Charleston, W. Va.
SA—Siler & Siler, Charleston, W. Va.

Carlin Mine; Drift; No. 2 Gas Seam, 42 inches thick.
PO—Charleston, W. Va.; SP—South Maiden, W. Va.; CTY—Kanawha; RR—C. & O.
S of H—Elec. and storage battery loco. Track gage 42 inches.
S of M—Hand, elec. puncher and short-wall mach.
PP—Power purchased. Transformer 4400-2200 volts A. C., 250 volts D. C.
EMP—35. Daily tonnage 300.
PROBABLES—Steam, Domestic, By Product, Gas.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

SANDERSON MINING COMPANY
General Office, Finance Bldg., Greensburg, Pa.
PR—E. G. Smith, Greensburg, Pa.
TR—Geo. H. Harrison, Greensburg, Pa.
GM—E. G. Smith, Greensburg, Pa.
GS—J. C. Fruman, Sanderson, W. Va.
PA—George H. Harrison, Greensburg, Pa.
EM—Gardner S. Plumley, Greensburg, Pa.
EE—Gardner S. Plumley, Greensburg, Pa.
SCU—Franklin Supply Co. Buyer, Geo. H. Harrison, Greensburg, Pa.
SA—Harrison-Smith Co., Greensburg, Pa.

Sanderson Mine; Drift; No. 5 Block and Lewiston Seams, 54 to 60 in. thick.
PO—Sanderson, W. Va.; SP—Same; CTY—Kanawha; RR—K. & W. Va.
SM—R. G. Smith, Sanderson, W. Va.
S of H—Mules. Track gage 42 in.
S of M—Shortwall machs.
PP—2—150 H. P. dir. tube boilers 75 K. W. gen. unit, 250 volts D. C., 4 pumps.
EMP—30. Last years tonnage 10,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Gravity Screens.

SANDRIDGE, D. M. COAL COMPANY
General Office, Junior, W. Va.
OWNER—D. M. Sandridge, Junior, W. Va.
TR—D. M. Sandridge, Junior, W. Va.
GM—C. W. Sandridge, Junior, W. Va.
GS—C. W. Sandridge, Junior, W. Va.
PA—C. W. Sandridge, Junior, W. Va.
EM—G. R. Sett, Junior, W. Va.

City Grove Mine; Drift; Kittanning Seam, 60 in. thick.
PO—Junior, W. Va.; SP—Same; CTY—Barbour; RR—W. M., Belington Br.
S of H—Mules. Track gage 36 in.
S of M—Hand.
EMP—20. Daily tonnage 150.
SIZES SHIPT—Run of Mine.

SANFORD COAL COMPANY

General Office, Huntington, W. Va.
 PR—W. H. Sanford, East Lynn, W. Va.
 VP—G. W. Triplett, Huntington, W. Va.
 TR—J. Frank Griest, Huntington, W. Va.
 GM—W. H. Sanford, East Lynn, W. Va.
 GS—W. H. Sanford, East Lynn, W. Va.
 PA—W. H. Sanford, East Lynn, W. Va.
 SA—W. L. Deegans Coal Co., Huntington, W. Va.

Sanford No. 1 Mine; Drift; No. 5 Block Seam, 72 in. thick.
 PO—East Lynn, W. Va.; SP—Same; CTY—Wayne; RR—N. & W.
 S of H—Mules.
 S of M—Hand.
 Daily tonnage 100.

Sanford No. 2 Mine; Drift; No. 5 Block Seam, 72 in. thick.
 PO—East Lynn, W. Va.; SP—Same; CTY—Wayne; RR—N. & W.
 S of H—Mules.
 S of M—Hand.
 old information.

SAVARIA COAL COMPANY

General Office, Mt. Clare, W. Va.
 PR—Alexander Bonay, Mt. Clare, W. Va.
 VP—D. B. Barnum, Mt. Clare, W. Va.
 TR—B. J. Ronay, Mt. Clare, W. Va.
 GM—Alexander Bonay, Mt. Clare, W. Va.
 GS—Clyde Elder, Mt. Clare, W. Va.
 CE—Carl Hornor, Mt. Clare, W. Va.

Ronay Mine; Drift; Pittsburgh Seam, 90 inches thick.
 PO—Mt. Clare, W. Va.; SP—Byron, W. Va.; CTY—Harrison; RR—B. & O.
 MS—M. Wilburn, Mt. Clare, W. Va.
 S of H—Mules and storage battery locos.
 Track gage 42 inches.
 S of M—Shortwall machs.
 PP—Power purchased. Transformer 22,000 to 220 volts A. C.
 EMP—60. Daily tonnage 500.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.

SAXMAN COAL & COKE CO.

General Office, 1414 Commonwealth Bldg., Philadelphia, Pa.
 PR—E. F. Saxman, Phila., Pa.
 TR—S. T. Gano, Boston, Mass.
 GM—P. M. Saxman, Saxman, W. Va.
 GS—P. M. Saxman, Saxman, W. Va.
 PA—P. M. Saxman, Saxman, W. Va.
 EM—P. M. Saxman, Saxman, W. Va.
 SA—Saxman Store Co., " "
 SA—E. F. Saxman, 1414 Commonwealth Bldg., Philadelphia, Pa.

Nos. 1, 3 and 4 Mines; Drift; Sewall Seam, 48 in. thick.
 PO—Saxman, W. Va.; SP—Fenwick and Richmond, W. Va.; CTY—Nicholas; RR—B. & O.
 S of H—3 trolley pole type and 2 storage battery locos. Track gage 44 in.
 S of M—2 longwall machs.
 PP—3 return tubular boilers, total 400 H. P., 250 K. W. gen. units, 250 volts D. C., 12 pumps.
 EMP—150. Last years tonnage 100,000
 Coke Owens, 50 Bee Hive.
 SIZES SHIPT—Run of Mine.

SAXTON COAL COMPANY

Operations Exhausted.

SAVERS POCAHONTAS COAL CO.

General Office, Yukon, W. Va.
 PR—C. H. Harman, Tazewell, Va.
 TR—H. P. Brittain, Tazewell, Va.
 GM—C. H. Harman, Yukon, W. Va.
 GS—J. W. Gates, Yukon, W. Va.
 PA—C. H. Harman, Yukon, W. Va.
 EM—H. A. Kiser, War, W. Va.
 SA—Address the Company; Buyer, Grover Wade, Yukon, W. Va.

Additional Information on Page 998

Sayers Mine; Drift; Pocahontas No. 3 Seam, 48 inches thick.
 PO—Yukon, W. Va.; SP—Susanna, W. Va.; CTY—McDowell; RR—N. & W.
 S of H—Mules and 2 storage battery locos. Track gage 44 in.
 S of M—Hand.
 PP—Power purchased, transformer 13,000-220 volts A. C., M. G. set, 250 volts D. C., 2 pumps.
 EMP—60. Daily tonnage 250.
 SIZES SHIPT—Run of Mine.

SCARBORO COAL & COKE CO.

General Office, 207 Market St., Newark, N. J.
 PR—F. G. Kleinhenz, Prestonia, W. Va.
 VP—Jas. F. Hiss, New York, N. Y., and R. D. Compton, Washington, Pa.
 TR—Powell Young, Newark, N. J.
 GM—Powell Young, Newark, N. J.
 GS—T. F. Martin, Prestonia, W. Va.
 PA—Powell Young, Newark, N. J.
 CE—Fr. F. C. Woodward, Newark, N. J.
 EM—F. G. Kleinhenz, Prestonia, W. Va.
 SA—Martin & Kleinhenz, Prestonia, W. Va.

Wesherill, Lynch & Arcadia Mines; Drift; Upper Kittanning, Peerless Seams, 96 in. thick

PO—Prestonia, W. Va.; SP—Same; CTY—Webster and Braxton; RR—B. & O.
 S of H—Steam.
 Last years tonnage 100,000
 SIZES SHIPT—Run of Mine, Slack, Lump, Block.

SCHELL COAL COMPANY

Out of Business.

SCHAPPER & HANNIGAN COAL CO.

General Address, Vaughan, W. Va.

Schapper & Hannigan Mine.
 PO—Vaughan, W. Va.; CTY—Nicholas; RR—C. & O.
 No report.

SCHMITZ COAL COMPANY, The

Now Aquila Coal Co.

SCOTIA COAL AND COKE COMPANY.

General Office, Charleston, W. Va.

PR—G. H. Caperton, Charleston, W. Va.
 VP—W. G. Caperton, Slab Fork, W. Va.
 TR—W. N. Jasper, Thurmond, W. Va.
 GM—G. H. Carpenter, Jr., Rush Run, W. Va.
 CE—Jas. Halstead, Beckley, W. Va.
 EM—W. E. S. McCormick, Rush Run, W. Va.
 SA—Address the Company. Buyer, R. A. Wailes, Rush Run, W. Va.
 Sales Agency—New River Coal Co., Charleston, W. Va.

Bush Run Mine; Drift; Fire Creek Seam, 42 to 84 in. thick.
 PO—Rush Run, W. Va.; SP—South Bush Run, W. Va.; CTY—Fayette; RR—C. & O. South Side Br.
 MS—G. H. Carpenter, Jr., Rush Run, W. Va.
 S of H—5 trolley pole type locos. Track gage, 44 in.
 S of M—2 shortwall machs.
 PP—Power purchased, transformer 44,000 to 2200 volts A. C., 1 rotary converter, 550 volts D. C., 7 pumps.
 EMP—70. Last fiscal year output, 56,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Gravity Screens.

Brooklyn Mine; Drift; Sewell Seam, 46 to 54 in. thick.
 PO—Ft. Low, W. Va.; SP—Brooklyn, W. Va.; CTY—Fayette; RR—C. & O. South Side Br.

MS—H. A. Meseler, Ft. Low, W. Va.
 S of H—7 trolley pole type locos. Track gage, 48 in.
 S of M—3 shortwall machs.
 PP—Power purchased, transformer 44,000 to 2200 volts A. C., 1 rotary converter, 550 volts, 5 pumps.
 EMP—80. Last fiscal year output, 56,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Loading Booms, Shaking Screens.

SCOTT COAL CO.

Silush, W. Va.
 Scott No. 4 Mine; CTY—Boone.
 No report.

SCOTT RUN COAL CO.

Now part of Cleveland & Morgantown Coal Company.

SEKAY COAL COMPANY.

Now being operated by Cunningham, Miller, Enslow.

SEMINOLE GAS COAL COMPANY.

General Office, Detroit, Mich.
 PR—E. H. Jewett, Detroit, Mich.
 VP—E. H. Douglass, Cincinnati, O.
 GM—E. H. Douglass, Cincinnati, O.
 GS—L. L. Shivers, Clarksburg, W. Va.
 PA—G. L. Washburne, Cincinnati, O.
 CE—D. D. Brett, Clarksburg, W. Va.
 EM—A. D. Carr, Cincinnati, O.
 SA—J. B. Stores Co. Buyer, G. L. Washburne, Cincinnati, O.
 SA—Jewett, Bigelow and Brooks, Detroit, Mich.

Seminole Mine; Drift; Pittsburgh Seam, 108 in. thick.
 PO—Gypsy, W. Va.; SP—Same; CTY—Harrison; RR—B. & O.
 S of H—Mules and storage battery locos. Track gage 44 in.
 S of M—Shortwall machs. and overcutter.
 PP—Power purchased, Transformer 6500-270 volts A. C.
 EMP—50
 SIZES SHIPT—Run of Mine, Slack, Block and Lump.

PREP. EQUIPT—Revolving Screens, Picking Tables, Loading Rooms.

SEMI-SMOKELESS COAL COMPANY

Now part of United States Coal & Coke Corp.

SENECA COLLIERY COMPANY

General Office, Elkins, W. Va.
 PR—G. H. Neale, Elkins, W. Va.
 VP—H. G. Keems, Elkins, W. Va.
 TR—L. J. Smith, Elkins, W. Va.

GM—L. J. Smith, Elkins, W. Va.
 GS—L. J. Smith, Elkins, W. Va.
 PA—L. J. Smith, Elkins, W. Va.
 SA—Address the Company. Buyer, L. J. Smith, Elkins, W. Va.

Crim Mine; Drift; Upper Freeport and Kittanning Seams; 72 and 48 in. thick.

PO—R. F. D. 3, Philippi, W. Va.; SP—Crim Siding, W. Va.; CTY—Barbour; RR—B. & O.
 S of H—Mules and rope. Track gage 42 inches.
 S of M—Hand.
 EMP—25. Daily tonnage 200.
 SIZES SHIPT—Run of Mine.
 Note—Formerly operated by the Philippi Gas Coal Co.

SENG CREEK COAL CO.

General Office, Whitesville, W. Va.
 PR—T. E. B. Siler, Charleston, W. Va.
 VP—Mathew Slush, 1748 Penobscot Bldg., Detroit, Mich.
 TR—M. H. Slush, Whitesville, W. Va.
 GM—H. M. Slush, Whitesville, W. Va.
 GS—H. M. Stone, Whitesville, W. Va.
 PA—E. D. Cummins, Whitesville, W. Va.
 EM—H. B. Thompson, Whitesville, W. Va.
 EE—W. A. Gleason, Whitesville, W. Va.
 SA—Address the Company. Buyer, Frank Fancinelli, Whitesville, W. Va.
 SA—L. J. Siler, 1206 Union Bldg., Charleston, W. Va.

Seng Creek Mine; Drift; Winifrede Seam, 52 in. thick.
 PO—Whitesville, W. Va.; SP—Same; CTY—Boone; RR—C. & O.
 S of H—1 storage battery and 8 trolley pole type locos. Track gage 42 in.
 S of M—4 shortwall machs.
 PP—Power purchased 2,200 K. W. rotary converter, 250 volts D. C.
 EMP—125. Last years tonnage 86,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Gravity Screens.

SEQUI COAL COMPANY

Now the Kanawha Black Band Coal Co.

SEREPI COAL COMPANY.

Now A. L. Black Coal Co.

SESAMINE COAL COMPANY

General Office, Morgantown, W. Va.
 PR—J. H. McGrew, Morgantown, W. Va.
 TR—R. L. Brock, Morgantown, W. Va.
 GM—M. F. Connell, Morgantown, W. Va.
 GS—M. F. Connell, Morgantown, W. Va.
 PA—M. F. Connell, Morgantown, W. Va.
 EM—Barrett Bros., Morgantown, W. Va.
 SA—Mon-Scott Fuel Co., Morgantown, W. Va.

Sesamine No. 1 Mine; Drift; Pgh. Red-stone and Sewickley Seam, 60-66 inches thick.
 PO—Randall, W. Va.; SP—Same; CTY—Monongalia; RR—Penna.; P. & L.E.
 S of H—Mules, rope and storage battery loco. Track gage 42 inches.
 S of M—Hand and shortwall machs.
 PP—Power purchased. Transformer 220 volts A. C.
 EMP—50.
 SIZES SHIPT—Run of Mine.

SEWELL SMOKELESS COAL CO.

General Office, 1444 Oliver Bldg., Bldg., Pittsburgh, Pa.

PR—S. A. Gilmore, Pittsburgh, Pa.
 VP—J. S. Lewis, Oakhill, W. Va.
 TR—E. L. Morris, Pittsburgh, Pa.
 GM—E. L. Morris, Pittsburgh, Pa.
 GS—E. L. Morris, Pittsburgh, Pa.
 PA—J. I. Boyd, Pittsburgh, Pa.
 CE—John M. Rayburn, House Bldg., Pittsburgh, Pa.
 EM—H. M. Schmidt, Oliver Bldg., Pittsburgh, Pa.
 SA—Address the Company. Buyer, C. A. Kincaid, Caperton, W. Va.
 SA—Hulmer Coal & Trans. Co., Philadelphia, Pa.

Sewell Mine; Drift; Sewell Seam, 46 to 50 in. thick.
 PO—Caperton, W. Va.; SP—Same; CTY—Fayette; RR—C. & O.
 MS—Alex Bryce, Caperton, W. Va.
 S of H—2 trolley pole type locos. Track gage, 44 in.
 S of M—1 chain breast and 2 shortwall machs.
 PP—1 fire tube boiler, 150 H. P., 1—200 K. W., 500 volts D. C., 2 pumps.
 EMP—50. Daily tonnage 250.
 SIZES SHIPT—Run of Mine.

SEWELL VALLEY COAL COMPANY

General Office, Secoma, W. Va.
 PR—Clinton DeWitt, Jr., Lynchburg, Va.
 VP—E. C. Minter, Beckley, W. Va.
 TR—J. E. Decker, Secoma, W. Va.
 GM—J. I. Absalom, Secoma, W. Va.
 GS—J. I. Absalom, Secoma, W. Va.
 PA—J. I. Absalom, Secoma, W. Va.
 EM—E. C. Roesser, Kanawha Falls, W. Va.
 SA—Address the Company. Buyer, J. E. Decker, Secoma, W. Va.
 SA—Chesapeake & Virginian Coal Co., Lynchburg, Va.

Benrytown Mine; Drift; Pocahontas No. 6 Seam, 48 in. thick.
 PO—Secoma, W. Va.; SP—Meadow Creek, W. Va.; CTY—Summers; RR—S. V. and C. & O.

S of H—Trolley pole type, storage battery and steam locos. Track gage 48 in.
 S of M—1 electric overhead cutter mach
 PP—1—150 H. P. and 1—75 H. P. fire tube boilers, M. G. Set, 100 K. W. 250 volts A. C., 1 pump.
 EMP—50. Last years tonnage 38,000.
 SIZES SHIPT—Run of Mine.

SHAMROCK COAL CO.

PR—R. R. Smith, Huntington, W. Va.
 VP—A. Z. Litz, Tazewell, Va.
 TR—W. P. Neekamp, Huntington, W. Va.
 GM—A. Z. Litz, Tazewell, Va.
 GS—J. B. Agee, Logan, W. Va.
 PA—J. B. Agee, Logan, W. Va.
 EM—J. B. McCorkle, Logan, W. Va.
 SA—Address the Company. Buyer, W. S. Morris, Omar, W. Va.
 SA—Litz-Smith Fuel Company, Huntington, W. Va.

Litz-Smith No. 1 Mine; Drift; Alma Seam, 48 in. thick.
 PO—Logan, W. Va.; SP—Shamrock; CTY—Logan; RR—C. & O.
 S of H—Mules and storage battery locos. Track gage 44 in.
 S of M—2 elec. mach.
 PP—Power purchased. Transformer 2300-550 volts A. C., M. G. Sets, 550 volts D. C., 1 pump.
 EMP—23. Daily tonnage 100.
 SIZES SHIPT—Run of Mine.

Litz-Smith No. 2 Mine; Drift; Island Creek Seam, 72 to 78 in. thick.
 PO—Logan, W. Va.; SP—Shamrock; CTY—Logan; RR—C. & O.
 S of H—Mules and 1 elec. loco. Track gage 48 in.
 S of M—4 elec. machs.
 PP—Power purchased. Transformer 2300-550 volts D. C.
 EMP—61. Daily tonnage 440.
 SIZES SHIPT—Run of Mine, Slack, Lump, Block.
 PREP. EQUIPT—Gravity Screens.

SHAMROCK FUEL COMPANY

General Office, Morgantown, W. Va.
 PR—W. W. Greene, Morgantown, W. Va.
 VP—A. Q. Davis, Uniontown, Pa.
 TR—Geo. L. Rodgers, Morgantown, W. Va.
 GM—A. Q. Davis, Uniontown, Pa.
 GS—A. Q. Davis, Uniontown, Pa.
 PA—A. Q. Davis, Uniontown, Pa.
 SA—Mon-Scott Fuel Co., Morgantown, W. Va.

Shamrock Mine; Drift; Sewickley Seam, 60 in. thick.
 PO—Hout, W. Va.; SP—Same; CTY—Marion; RR—B. & O.
 MS—Charles Upchurch, Hout, W. Va.
 S of H—Mules, elec. hoist on incline, storage battery loco. Track gage 42 inches.
 S of M—2 shortwall machs.
 PP—Power purchased. Transformer 22000 volts A. C., M. G. Set, 220 volts D. C.
 Last years tonnage 15,000.
 SIZES SHIPT—Run of Mine.

SHARLOW GAS COAL CO.

General Office, Huntington, W. Va.
 PR—J. O. Bledsoe, St. Albans, W. Va.
 TR—Wm. J. Harvie, Huntington, W. Va.
 GM—J. O. Bledsoe, St. Albans, W. Va.
 GS—H. H. O'Neal, Sharlow, W. Va.
 PA—Lake & Export Coal Co., Huntington, W. Va.
 EM—R. P. Ribbhart, Mt. Hope, W. Va.
 EE—O. B. Thompson, Sharlow, W. Va.
 SA—McClurg & Morgan, South Charleston, W. Va.
 Sales Agents—W. Va. Standard Coal Co., Huntington, W. Va.

Sharlow Nos. 1 and 2 Mines; Drifts; No. 2 Gas Seams, 54 to 66 in. thick.
 PO—Sharlow, W. Va.; SP—Same; CTY—Boone; RR—C. & O.
 MS—Wm. Warner, Huntington, W. Va.
 SM—Harry Proctor, Sharlow, W. Va.
 S of H—4 storage battery locos. Track gage 44 in.
 S of M—4 mining machs.
 PP—3 150 H. P. fire tube boilers, gen. units, 250 volts D. C., 1 pump.
 EMP—65. Last years tonnage 68,000
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.

SHAWNEE COAL & COKE CO.

PR—Jas. R. Gillman, Eckman, W. Va.
 TR—Morris Watts, Eckman, W. Va.
 GM—Morris Watts, Eckman, W. Va.
 GS—Morris Watts, Eckman, W. Va.
 PA—H. A. Henthorn, Eckman, W. Va.
 EM—F. J. Kyle, Eckman, W. Va.
 EE—A. S. Buchanan, Eckman, W. Va.
 SA—Address the Company; Buyer, C. D. Broyles, Eckman, W. Va.
 SA—Pocahontas Coal Sales Co., Cincinnati, O.

(Continued on Next Page)

Shawnee Coal & Coke Co.—Cont.

Shawnee Mine; Drift; No. 3 Seam, 84 in. thick.
 PO—Lekman, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
 MS—Thos. Norris, Eckman, W. Va.
 S of H—Mules and trolley pole type loco, Track gage, 36 in.
 S of M—Hand.
 PP—3 150 H. P. fire tube boilers, gen. units, 250 volts D. C., 3 pumps.
 EMP—110. Last fiscal year output, 98,309 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut Egg, Lump.
 PREP. EQUIPT—Gravity Screens

SHOENAKER, C. M. & CO
 New J. M. Macdonald Coal Mining Co

SHREWSBURY COAL CO.
 Shrewsbury, W. Va.
 Franklin Mine; CTY—Kanawha.
 No report.

SHRIVER COAL COMPANY
 General Office, Morgantown, W. Va.
 PR—Everhart Bierer, Morgantown, W. Va.
 VP—Frank C. Shriver, Morgantown, W. Va.
 TR—W. B. Chapman, Morgantown, W. Va.
 GM—Everhart Bierer, Morgantown, W. Va.
 GS—Joseph Falter, Morgantown, W. Va.
 PA—Frank C. Shriver, Morgantown, W. Va.
 EM—C. W. McCutcheon, Morgantown, W. Va.

Shriver Mine; Slope; Sewickley Seam, 72 inches thick.
 PO—Morgantown, W. Va.; SP—Randall, W. Va.; CTY—Monongalia; RR—M & W
 MS—J. E. Falter, Morgantown, W. Va.
 S of H—Mules and rope. Track gage 42 inches.
 S of M—Shortwall machs.
 PP—Power purchased. Transformer 2200 to 220 volts A. C.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Screens for coal

SIGNAL KNOB COAL CO
 General Office, Ansted, W. Va.
 PR—W. H. Evans, Ansted, W. Va.
 VP—S. H. Croft, Ansted, W. Va.
 TR—S. H. Croft, Ansted, W. Va.
 GM—W. H. Evans, Ansted, W. Va.
 GS—Evan Massey, Ansted, W. Va.
 PA—Evan Massey, Ansted, W. Va.
 EM—Phillip Konrad, Kanawha Falls, W. Va.
 SCO—Croft & Evans Store; Buyer, S. H. Croft, Ansted, W. Va.
 SA—Leckie Coal Company, Inc., Columbus, O.

Signal Knob Mine; Drift; No. 2 Gas Seam, 60 in. thick.
 PO—Ansted, W. Va.; SP—Same; CTY—Fayette; RR—C. & O., Hawks Nest Br.
 S of H—12 mules, rope, 1 trolley pole and 2 steam locos. Track gage 34 inches.
 S of M—2 shortwall machs.
 PP—Power purchased. Transformer 44,000 to 23,000 volts A. C., M. G. sets, 250 volts D. C.
 EMP—150. Last years tonnage 60,000.
 SIZES SHIPT—Run of Mine.

SILUSH COAL CO.
 General Office, Charleston, W. Va.
 PR—T. E. B. Siler, Charleston, W. Va.
 VP—Wm. Jones, Silush, W. Va.
 TR—A. O. Siler, Silush, W. Va.
 GM—F. F. Dixon, Silush, W. Va.
 GS—J. B. Evans, Silush, W. Va.
 PA—F. F. Dixon, Silush, W. Va.
 EM—J. Fenno, Silush, W. Va.
 EE—W. L. Earls, Silush, W. Va.
 SCO—Address the Company, Buyer, J. E. Perkins, Silush, W. Va.
 SA—Siler & Siler, Charleston, W. Va.

Red Star Mine; Drift; No. 5 Seam, 48 to 52 in. thick.
 PO—Silush, W. Va.; SP—Same; CTY—Boone; RR—C. & O., Coal River Br.
 MS—G. L. Altizer, Silush, W. Va.
 S of H—Mules and 3 Goodman locos. Track gage 44 in.
 S of M—3 Morgan machs.
 PP—1 return tubular boiler, 150 H. P., 1 gen. unit, 250 volts D. C., 5 pumps.
 EMP—75. Daily tonnage 400.
 PRODUCES—Steam, Domestic.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens.

SILVER COAL CO.
 General Office, Beryl, W. Va.
 Hampshire No. 11 Mine
 PO—Beryl, W. Va.; CTY—Mineral; RR—B. & O.
 No report.

SIMMS BRANCH COAL CO.
 Longacre, W. Va.
 Simms Branch Mine; CTY—Fayette.
 No report.

SIMPSON & COBB.
 Roanoke, W. Va.
 Riverlow No. 2 Mine; CTY—Fayette.
 No report.

SIMPSON CREEK COAL CO
 General Office, 25 Beaver St. New York, N. Y.
 Galloway Nos. 1, 2, 3, Mines
 PO—Simpson, W. Va.; CTY—Taylor, RR—B. & O.
 No report.

SINCELL, C. M.
 OPERATOR—C. M. Sinell, Kingwood, W. Va.
 Sinell Mine; Drift; Bakerstown Seam, 34 in. thick.
 PO—Kingwood, W. Va.; SP—Caddell, W. Va.; CTY—Preston; RR—M. L. J.
 MS—C. M. Sinell, Kingwood, W. Va.
 S of H—Mules. Track gage 30 in.
 S of M—Hand.
 EMP—6. Daily tonnage 20.
 PRODUCES—Domestic.
 SIZES SHIPT—Slack, Lump.

SINSEL COAL CO.
 Grafton, W. Va.
 No. 1 Mine; CTY—Taylor.
 No report.

SLAB FORK COAL COMPANY.
 PR—G. H. Caperton, Charleston, W. Va.
 TR—W. G. Caperton, Slab Fork, W. Va.
 GM—W. G. Caperton, " " " "
 PA—J. H. Reid, " " " "
 GS—W. M. Warwick, " " " "
 EM—Jas. Halstead, " " " "
 MM—H. H. Mayse, " " " "
 EE—H. H. Mayse, " " " "
 SM—J. H. Reid, " " " "

Slab Fork Mine, 5 openings, Drift, Beckley Seam, 3 ft. 8 in. to 6 ft. thick.
 PO—Slab Fork, W. Va. SP—Sama. CTY—Raleigh, RR—Virginia Ry.
 S of H—Mules and 18 elec. locos. Track gage 44 in.
 S of M—Pick and 11 elec. machs.
 PP—525 volts D. C., 5 pumps. Purchase power.
 EMP—375. Last fiscal year output 304,186 tons.
 PRODUCES—Steam.
 SIZES SHIPT—Run of Mine.

SLACK BRANCH COAL CO.
 General Office, P. O. Box 1375, Charleston, W. Va.
 PR—R. Labov, Charleston, W. Va.
 VP—L. K. Landau, Charleston, W. Va.
 GM—R. Labov, Charleston, W. Va.
 GS—L. K. Landau, Charleston, W. Va.
 PA—L. K. Landau, Charleston, W. Va.

Slack Branch Mine; Drift; Block No. 5 Seam, 48-60 in. thick.
 PO—Quick, W. Va.; SP—Same; CTY—Kanawha; RR—K. & W. Va.
 MS—E. L. Williams, Quick, W. Va.
 S of H—Mules. Track gage, 42 in.
 S of M—Shortwall machs.
 PP—M. G. set, 250 volts D. C.
 EMP—50. Daily tonnage 150.
 PRODUCES—Steam, Domestic.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Bar Screens.

SLOAN LUCE COAL CO.
 Now Dale Coal Company
SMITH & WILBURN
 Now Smith, Ernest G.

SMITH BROTHERS COAL COMPANY
 General Office, Meyersdale, Pa.
 PR—A. G. Smith, Meyersdale, Pa.
 VP—H. G. Smith, Clarksburg, W. Va.
 TR—A. G. Smith, Clarksburg, W. Va.
 GM—H. G. Smith, Clarksburg, W. Va.
 GS—James McKeehan, Clarksburg, W. Va.
 EM—Carl Horner, Clarksburg, W. Va.

Adamstown No. 1 Mine; Drift; Pittsburgh Seam; 96 inches thick.
 PO—Clarksburg, W. Va.; SP—Lumberport, W. Va.; CTY—Harrison; RR—B. & O.
 S of H—Mules. Track gage 42 inches.
 S of M—Hand.
 EMP—50. Last fiscal year output, 10,000 tons.
 SIZES SHIPT—Run of Mine.

SMITH COAL COMPANY
 General Office, Kingwood, W. Va.
 CM—H. T. Lincoln, Kingwood, W. Va.
 PA—H. T. Lincoln.
 R. F. D. No. 2, Kingwood, W. Va.
 EN—H. E. Wilhelm.
 R. F. D. No. 2, Kingwood, W. Va.
 SA—H. H. Lineweaver & Co., Philadelphia, Pa.

Miller Mine; Drift; Upper Freeport Seam, 52 in. thick.
 PO—Kingwood, W. Va.; SP—Same; CTY—Preston; RR—Morgantown & Kingwood.
 MS—J. A. Smith, Kingwood, W. Va.

S of H—Mules. Track gage, 36 in.
 S of M—Hand.
 PP—Gasoline engine.
 EMP—25. Last years tonnage 35,000.
 SIZES SHIPT—Run of Mine.

SMITH COAL COMPANY, THE
 General Office, Adrian, W. Va.
 PR—L. J. Smith, Adrian, W. Va.
 TR—Clark Colbrider, Adrian, W. Va.
 PA—Clark Colbrider, Adrian, W. Va.

Smith Mine; Slope; Freeport Seam, 70 in. thick.
 PO—Adrian, W. Va.; SP—Same; CTY—Fisher; RR—Coal & Coke.
 S of H—Mules.
 S of M—Hand.
 Daily tonnage 100.
 SIZES SHIPT—Run of Mine.

SMITH COAL MINING Co.
 Horner, W. Va.
 Horner Mine; CTY—Lewis.
 No report.

SMITH, ERNEST G.
 Out of business.

SMITH MINING AND FUEL COMPANY.
 Now O. P. Smith Coal Co.

SMITH, O. P. COAL COMPANY
 General Office, Plus, W. Va.
 TR—G. M. Smith, Plus, W. Va.
 GM—C. E. Smith, Plus, W. Va.
 GS—C. E. Smith, Plus, W. Va.
 PA—J. R. Smith Plus, W. Va.
 CE—R. M. Green, Charleston, W. Va.
 SA—Kanawha Valley Coal Co., Charleston, W. Va.

No. 1 Mine; Drift; No. 2 Gas Seam, 48 inches thick.
 PO—Plus, W. Va.; SP—Levi, W. Va.; CTY—Kanawha; RR—K. & M.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 PP—Power purchased, 250 volts D. C.
 EMP—25. Last years tonnage 15,000.
 SIZES SHIPT—Run of Mine.
 Cedar Grove No. 1 Mine; Drift; Cedar Grove Seam, 36-42 inches thick.
 PO—Plus, W. Va.; SP—Levi, W. Va.; CTY—Kanawha; RR—K. & M.
 S of H—Mules. Track gage 42 inches.
 S of M—Hand.
 PP—Power purchased, 250 volts D. C.
 EMP—10.
 SIZES SHIPT—Run of Mine.

SMITH, OTTO, CO.
 General Office, Rdva, W. Va.
 Otto Smith Mine.
 PO—Rdva, W. Va.; CTY—Nicholas; RR—C. & O.
 No report.

SMITH-POCAHONTAS COAL COMPANY.
 General Office, Tralee, W. Va.
 PR—Jno. J. Morrison, Tralee, W. Va.
 TR—J. C. Sullivan, Tralee, W. Va.
 GM—J. C. Sullivan, Tralee, W. Va.
 PA—C. B. Helwig, Tralee, W. Va.
 EE—J. P. Barksdale, Tralee, W. Va.
 SCO—Address the Company, Buyer, B. G. Scott, Tralee, W. Va.
 SA—U. & O. Coal Agency Co., Boston, Mass.; Wyoming Coal Sales Co., Bluefield, W. Va.

Drift Mine; Pocahontas No. 3 Seam, 48 to 66 in. thick.
 PO—Caloric, W. Va.; SP—Same (Prepay); CTY—Wyoming; RR—Virginian.
 S of H—2 elec. locos. Track gage 44 in.
 S of M—2 elec. machs.
 PP—150 K. W., gen. unit, 250 volts D. C. Purchase power.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Screens.

SMITH-POND CREEK COAL COMPANY
 General Office, Macdonald, W. Va.
 PR—H. A. Smith, Macdonald, W. Va.
 VP—P. C. Grane, Sprigg, W. Va.
 TR—H. A. Smith, Macdonald, W. Va.
 GM—P. C. Grane, Sprigg, W. Va.
 GS—P. C. Grane, Sprigg, W. Va.
 CE—D. M. Good, Williamson, W. Va.
 SA—Lake & Export Coal Corp., Huntington, W. Va.

Smith-Pond Creek Mine; Drift; Pond Creek and Alma Seams, 62-48 in. thick.
 PO—Sprigg, W. Va.; SP—Same; CTY—Mingo; RR—N. & W.
 S of H—Trolley pole type loco. Track gage 44 in.
 S of M—1 shortwall mach.
 PP—Power purchased. Transformer 2,200 to 250 volts A. C., rotary converters, 100 K. W., 250 volts D. C.
 EMP—40.
 SIZES SHIPT—Run of Mine.
 Note Successors to Sprigg Coal Co

SMOKELESS COAL & COKE CO
 General Office, Hiawatha, W. Va.
 PR—D. H. Barger, Bluefield, W. Va.

VP—O. N. Mooman, Bluefield, W. Va.
 TR—P. M. Chisman, Mataro, W. Va.
 GM—D. H. Barger, Bluefield, W. Va.
 GS—P. L. Vest, Hiawatha, W. Va.
 PA—D. S. Hunt, Hiawatha, W. Va.
 EM—W. A. Hooper, Mataro, W. Va.
 EE—P. L. Vest, Hiawatha, W. Va.
 SCO—Address the Company; Buyer, D. S. Hunt, Hiawatha, W. Va.
 Sales Agency, Bluefield Coal & Coke Co. Bluefield, W. Va.
 Smokeless Mine, Drift, Pocahontas No. 3 Seam; 54 to 60 in. thick.
 PO—Hiawatha, W. Va.; SP—Smokeless, W. Va.; CTY—Mercer; RR—N. & W., Widemouth Branch.
 S of H—Mules and trolley pole type locos. Track gage, 56½ in.
 S of M—2 shortwall machs.
 PP—Power purchased, transformer 13,000 to 2300 volts A. C., M. G. set, 250 volts D. C., 4 pumps.
 EMP—100.
 SIZES SHIPT—Run of Mine.

SNOW HILL COAL COMPANY
 General Office, Charleston, W. Va.
 PR—W. T. George, Charleston, W. Va.
 VP—Samuel Moranz, Charleston, W. Va.
 TR—Samuel Moranz, Charleston, W. Va.

Snow Hill Mine; Drift; Winifrede Seam, 60 inches thick.
 PO—Charleston, W. Va.; SP—Same; CTY—Kanawha; RR—K. & M.
 S of H—Mules.
 S of M—Hand.
 Old information

SNYDER COAL COMPANY
 General Office, 312 Union Trust Bldg., Charleston, W. Va.

GM—H. L. Snyder, Charleston, W. Va.
 GS—H. L. Snyder, Charleston, W. Va.
 PA—H. L. Snyder, Charleston, W. Va.
 SA—Harold L. Snyder, Charleston, W. Va.

Snyder Mine; Drift; Gas No. 2 Seam, 54 inches thick.
 PO—Charleston, W. Va.; SP—Hughes, W. Va.; CTY—Kanawha; RR—K. & M.
 S of H—Mules. Track gage, 20 in.
 S of M—Hand.
 EMP—4. Daily output, 40 tons.
 SIZES SHIPT—Run of Mine.
 Old information.

SOLVAY COLLIERIES COMPANY
 General Office, Syracuse, N. Y.

PR—P. K. Mallin, Syracuse, N. Y.
 VP—A. B. Rawn, Huntington, W. Va.
 TR—E. L. Lancaster, Syracuse, N. Y.
 GM—A. B. Rawn, Huntington, W. Va.
 CE—J. C. Rawn, Harrisburg, Pa.
 EM—G. L. Cox, Huntington, W. Va.
 SCO—Address the Company, Buyer, W. C. Petty, Huntington, W. Va.

Marytown Mine; Drift; Sewell or Davy Seam, 42 in. thick.
 PO—Marytown, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
 MS—A. J. Bartlett, Marytown, W. Va.
 SM—D. E. Elsel, Marytown, W. Va.
 S of H—Mules and 5 trolley pole type elec. locos. Track gage 48 in.
 S of M—4 shortwall machs.
 PP—2 return tubular boilers, total 300 H. P., gen. units, 150 K. W., 90 K. W. and 60 K. W., 250 volts D. C., 3 pumps.
 EMP—130. Last fiscal year output, 18,640 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

Pig Sandy Mine; Drift; Sewell or Davy Seam, 42 in. thick.
 PO—Big Sandy, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
 MS—A. J. Bartlett, Marytown, W. Va.
 SM—C. M. Lane, Marytown, W. Va.
 S of H—Mules and 5 trolley pole type elec. locos. Track gage 48 in.
 S of M—3 shortwall machs.
 PP—2 return tubular boilers, total 300 H. P., 2 gen. units, 150 K. W. and 90 K. W., 250 volts D. C., 2 pumps.
 EMP—90. Last fiscal year output, 76,916 tons.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

Orkney Mine; Drift; Welch Seam, 53 in. thick.
 PO—Hempill, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
 MS—W. P. Goodwin, Hempill, W. Va.
 SM—H. B. Jarrett, Hempill, W. Va.
 S of H—Mules, 1 trolley pole type elec., 2 storage battery locos. Track gage, 48 in.
 S of M—3 shortwall machs.
 PP—Power purchased, transformer 2700 to 410 volts, M. G. sets, 250 volts D. C., 3 pumps.
 EMP—125. Last fiscal year output, 98,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 (Continued on Next Page)

Spruce River Coal Co. (The)—Cont.
 Damage or Spruce River No. 4 Mine;
 Drift; Gas Seam, 60 in. thick.
 PO—Ramage, W. Va.; SP—Same; CTY—
 Boone; RR—C. & O.
 S of H—2 trolley pole type and 8 storage
 battery locos. Track gage 42 in.
 S of M—10 shortwall and 2 chain breast
 machs.
 PP—Power purchased. 3 pumps.
 Last years tonnage 102,000.
 SIZES SHIPT—Run of Mine, Slack.
 PREP. EQUIPT—Shaker Screens, Pickling
 Tables.

SPRUCE VALLEY COAL CO.
 Now Held Collieries Co.

STANDARD COAL COMPANY, THE
 Copen, W. Va.
 Standard Mine; CTY Braxton
 No report

STANDARD EAGLE COAL CO.
 General Office, Huntington, W. Va.
 PR—A. J. King, Huntington, W. Va.
 VP—L. H. Early, Logan, W. Va.
 TR—F. E. King, Huntington, W. Va.
 GM—A. J. King, Huntington, W. Va.
 GS—J. G. Bligg, Huntington, W. Va.
 PA—A. C. King, Huntington, W. Va.
 CE—A. J. King, Huntington, W. Va.
 EM—M. L. Jarret, Huntington, W. Va.
 SCO—Address the Company, Buyer, W.
 F. Does, Secoal, W. Va.
 SA—Lake & Export Coal Corp., Hunting-
 ton, W. Va.

Additional Information on Pages 1020,
 1021

Standard Eagle Mine; Drift; Eagle Seam,
 54 to 62 in. thick.
 PO—Secoal, W. Va.; SP—Same; CTY—
 Boone; RR—C. & O.
 S of H—2 storage battery locos.
 S of M—3 shortwall machs.
 PP—Power purchased. Transformers 2300
 -178 volts A. C., 200 K. W. M. G.
 Sets 250 volts D. C., 3 pumps.
 EMP—140. Last years tonnage 60,000.
 SIZES SHIPT—Run of Mine.

STANDARD ISLAND CREEK COAL CO.
 PR—F. E. Taplin, Cleveland, O.
 VP—A. P. King, Cleveland, O.
 TR—C. F. Taplin, Cleveland, O.
 GM—A. W. Fay, Bellaire, O.
 GS—J. H. Sewell, Taplin, W. Va.
 PA—R. Downing, Cleveland, O.
 CE—W. E. Hobson, Taplin, W. Va.
 EM—L. Creelins, Cleveland, O.
 SCO—Address the company, Buyer, C. L.
 Burgess, Taplin, W. Va.
 Sales Agency—Cleveland & Western Coal
 Co., Cleveland, O.

Loma No. 1, 2 and 3 Mines; Drift;
 Eagle Seam, 66 inches thick.
 PO—Taplin, W. Va.; SP—Same; CTY—
 Logan; RR—C. & O.
 S of H—3 trolley pole type and 4 storage
 battery locos. Track gage 44
 inches.
 S of M—5 shortwall machs.
 PP—Power purchased. Transformer 44-
 000 to 2,200 volts A. C., rotary
 converters, 250 volts D. C., 5
 pumps.
 EMP—275. Daily tonnage 875.
 SIZES SHIPT—Run of Mine, Slack, Nut,
 Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Pickling
 Tables.

STANDARD KANAWHA COAL MINING CO.
 General Office, 808 Peoples Nat'l Bank
 Bldg., Scranton, Pa.
 PR—Ronald P. Gleason, Scranton, Pa.
 VP—J. M. Walker, Scranton, Pa.
 TR—Arthur A. Welschenb, Scranton, Pa.
 GM—A. W. Black, Richard St., Charles-
 ton, W. Va.
 GS—D. W. Vineyard, Quick, W. Va.
 PA—D. W. Vineyard, Quick, W. Va.
 EM—W. G. Critchton, Charleston, W. Va.
 EE—J. P. Naylor, Quick, W. Va.
 SCO—Coalridge, Stone, Buyer, J. M.
 Kinder, Quick, W. Va.
 SA—Oakland Coal Co., Toledo, O.

Coalridge No. 1 and 2 Mines; Drift; No.
 5 and Lewiston Seams, 56-62 inches
 thick.
 PO—Quick, W. Va.; SP—Coalridge; CTY—
 Kanawha; RR—K. & W. Va.
 S of H—2 6-ton locos, and 12 mules.
 Track gage 42 inches.
 S of M—4 shortwall machs.
 PP—2 return tubular boilers, 150 H. P.,
 each; 2-100 K. W. gen. units, 250
 volts D. C., 5 pumps.
 EMP—75.

STANDARD LIME & STONE CO.
 Copen, W. Va.
 Lake Mine; CTY—Braxton.
 No report.

STANDARD THACKER COAL COMPANY.
 General Office, Williamson, W. Va.
 PR—G. R. C. Wiles, Charleston, W. Va.
 VP—L. G. Bray, Williamson, W. Va.
 TR—J. L. Dunn, Williamson, W. Va.
 GM—L. G. Bray, Williamson, W. Va.
 GS—L. G. Bray, Williamson, W. Va.
 PA—L. G. Bray, Williamson, W. Va.
 EM—D. M. Good, Williamson, W. Va.

No. 1 Mine; Drift; Thacker Seam, 42 to
 48 in. thick.
 PO—Chattahoo, W. Va.; SP—Same; CTY—
 Mingo; RR—N. & W.
 S of H—Mules, electric and storage bat-
 tery locos. Track gage 44 in.
 S of M—Shortwall machs.
 PP—Power purchased. Transformer 2300
 to 220 volts A. C.
 EMP—25. Daily tonnage 150.
 SIZES SHIPT—Run of Mine.

STANGE-ELLIOTT COAL CO.
 General Office, Charleston, W. Va.
 PR—Ortmar Strange, Washington, D. C.
 VP—Mrs. Nettie L. Elliott, Columbus, O.
 TR—Homer P. Elliott, Charleston, W.
 Va.
 GM—Homer P. Elliott, Charleston, W.
 Va.
 GS—Homer P. Elliott, Charleston, W. Va.
 PA—Homer P. Elliott, Charleston, W. Va.
 CE—Clark & Krebs, Charleston, W. Va.

Hitop Mine; Drift; No. 5 Block Seam,
 62 in. thick.
 PO—Blakeley, W. Va.; SP—Same; CTY—
 Kanawha; RR—Kanawha & W.
 Va.
 MS—P. N. Clark, Blakeley, W. Va.
 S of H—Mules. Track gage 42 in.
 PP—1 return tubular boiler, 150 H. P.,
 1-100 K. W. gen. unit, 250 volts
 D. C., 2 pumps.
 EMP—40. Last years tonnage 40,000.
 SIZES SHIPT—Run of Mine.

STAR COAL & COKE CO.
 General Office, Red Star, W. Va.
 PR—Geo. W. Jones, Redstar, W. Va.
 TR—Geo. W. Jones, " "
 GM—Geo. W. Jones, " "
 GS—John Whitehead, Red Star, W. Va.
 PA—Geo. W. Jones, " "
 EM—Clark & Krebs, Charleston, W. Va.
 EE—John Edwards, Charleston, W. Va.
 SCO—Address the company, Buyer, P. B.
 Frantz, Charleston, W. Va.
 SA—Amberst Fuel Co., Lundale, W. Va.

Star Mine, Drift, Sewell Seam, 4 to 6
 ft. thick.
 PO—Redstar, W. Va.; SP—Same, CTY—
 Fayette. RR—C. & O., Loup Creek
 Branch.
 MS—Ino. Whitehead, Red Star, W. Va.
 S of H—Rope, mules and 4 electric loco.
 Track gage 44 in.
 S of M—3 chain breast type and 2 short-
 wall machs.
 PP—5 fire tube boilers, 150 H. P., 2-
 150 K. W. gen. units, 500 volts
 D. C., 9 pumps.
 EMP—175.
 SIZES SHIPT—Run of Mine, Slack, Egg,
 Lump.
 PREP. EQUIPT—Shaker Screens, Pickling
 Tables, Loading Booms.

STAR MINING & FUEL COMPANY
 PR—John Bonovitch, Sr., Belle, W. Va.
 VP—John Bonovitch, Jr., Belle, W. Va.
 TR—John Bonovitch, Sr., Belle, W. Va.
 GM—John Bonovitch, Sr., Belle, W. Va.
 PA—John Bonovitch, Sr., Belle, W. Va.
 EM—Thos. Tomson, Belle, W. Va.
 SCO—Address the Company, Buyer, John
 Bonovitch, Sr., Belle, W. Va.

Star Mining and Fuel Mine; Drift; Nos.
 1 and 2 Gas Seams; 24-36 in.
 thick.
 PO—Plus, W. Va.; SP—Same; CTY—
 Kanawha; RR—K. & M.
 S of H—Mules. Track gage 42 in.
 S of M—Hand.
 PP—1 pump.
 EMP—15. Daily tonnage 60.
 SIZES SHIPT—Run of Mine.

STARFORD GAS COAL CO.
 General Office, RFD, No. 6, Grafton,
 W. Va.
 PR—Mrs. Jas. Starford, Grafton, W. Va.
 TR—Mrs. Jas. Starford, Grafton, W. Va.
 GS—A. J. Starford, Grafton, W. Va.
 CE—Clarksburg Engineering Co., Clarks-
 burg, W. Va.
 SA—J. E. Long Coal Co., Clarksburg,
 W. Va.

Rig 4 Mine; Drift; Pittsburgh Seam, 72
 inches thick.
 PO—R. P. D. No. 6, Grafton, W. Va.;
 SP—Frt., Brydon, W. Va.; Exp.,
 Simpson, W. Va.; CTY—Taylor; RR—
 B. & O.
 S of H—Mule. Track gage 42 inches.
 S of M—Hand.
 EMP—22. Daily tonnage 200.
 SIZES SHIPT—Run of Mine.

STATE HILL COAL COMPANY
 General Office, Morgantown, W. Va.
 PR—Geo. B. Vieweg, Morgantown, W. Va.
 TR—D. R. Richards, Morgantown, W. Va.
 GM—Geo. B. Vieweg, Morgantown, W. Va.
 GS—Thomas Longhrey, Morgantown, W. Va.
 PA—Geo. B. Vieweg, Morgantown, W. Va.
 CE—Baritell Bros., Morgantown, W. Va.
 Mecks Mine; Drift; Pittsburgh Seam, 96
 inches thick.
 PO—Morgantown, W. Va.; SP—Same;
 CTY—Monongalia; RR—B. & O.
 S of H—Mules, rope, elec. locos. Track
 gage 36 inches

S of M—Hand.
 PP—Power purchased. Transformer 660-
 220 volts A. C.
 EMP—10. Last years tonnage 60,000.
 SIZES SHIPT—Run of Mine, Lump.
 PREP. EQUIPT—Bar Screens.
 NOTE—Formerly operated by the Pollock
 Coal Company.

STEAMWELL COAL COMPANY
 General Office, 1st National Bank Bldg.,
 Huntington, W. Va.
 PR—Geo. Hunt, Ashland, Ky.
 TR—J. W. Bosley, Ashland, Ky.
 TR—M. I. Forbes, Huntington, W. Va.
 GM—M. I. Forbes, Huntington, W. Va.
 PA—M. I. Forbes, Huntington, W. Va.

Steamwell Mine; Drift; No. 2 Gas Seam,
 10 in. thick.
 PO—Logan, W. Va.; SP—McConnell, W.
 Va.; CTY—Logan; RR—C. & O.
 S of H—Mules. Track gage 44 in.
 S of M—1 shortwall mach.
 PP—Power purchased. Transformer 44-
 000 to 2,300 volts A. C., M. G.
 set, 1-50 K. W., 250 volts D.
 C., 1 pump.
 EMP—18. Daily tonnage 100.
 SIZES SHIPT—Run of Mine.

**STEEL & TUBE COMPANY OF AMERICA,
 THE.**
 General Office, Chicago, Ill.
 PR—A. A. Schelsinger, Milwaukee, Wis.
 VP—H. J. Schelsinger, Milwaukee, Wis.
 TR—A. A. Schelsinger, Milwaukee, Wis.
 GM—D. R. Phillips, Huntington, W. Va.
 GS—L. E. Scholl, Dehue, W. Va.
 PA—J. P. McGuigan, Milwaukee, Wis.
 CE—J. J. Finch, Huntington, W. Va.
 EM—J. W. Aistock, Dehue, W. Va.
 EE—J. H. Edwards, Huntington, W. Va.
 SCO—Dehue Commissary, Dehue, W. Va.
 Buyer, J. R. Bailey, Huntington, W.
 Va.

No. 1 Mine; Shaft; Eagle Seam, 60 in.
 thick.
 PO—Dehue, W. Va.; SP—Same; CTY—
 Logan; RR—C. & O.
 SM—R. R. Arrington, Dehue, W. Va.
 S of H—9 trolley pole type locos. Track
 gage 48 in.
 S of M—3 shortwall machs and 5 over-
 head cutters.
 PP—Power purchased. Transformer 44000
 to 2200 volts A. C., rotary convert-
 ers, 250 volts D. C., 7 pumps.
 EMP—191. Daily tonnage 840.
 SIZES SHIPT—Run of Mine, Slack, Pea,
 Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Pickling
 Tables, Loading Booms.

No. 5 Mine; Slope; Eagle Seam, 60 in.
 thick.
 PO—Dehue, W. Va.; SP—Same; CTY—
 Logan; RR—C. & O.
 SM—R. R. Arrington, Dehue, W. Va.
 S of H—6 trolley pole type locos. Track
 gage 48 in.
 S of M—6 shortwall machs.
 S of M—2 shortwall machs.
 PP—Power purchased. Transformer 44000
 to 2200 volts A. C., rotary convert-
 ers, 250 volts D. C., 5 pumps.
 EMP—84. Daily tonnage, 550.
 SIZES SHIPT—Run of Mine, Slack, Pea,
 Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Loading
 Booms, Pickling Tables.

STERLING BLOCK COAL COMPANY
 General Office, St. Albans, W. Va.
 PR—W. C. Sharpe, St. Albans, W. Va.
 TR—A. P. Sharpe, Huntington, W. Va.
 GM—W. C. Sharpe, St. Albans, W. Va.
 GS—W. C. Sharpe, St. Albans, W. Va.
 PA—W. C. Sharpe, St. Albans, W. Va.
 CE—Hugh M. Eaton, Charleston, W. Va.
 SCO—Gilbert & Sharpe Stores; Buyer,
 O. L. Gilbreth, Altman, W. Va.
 SA—Hooper-Mankin Fuel, Co., Hunting-
 ton, W. Va.

Sterling Block Nos. 1 and 2 Mines;
 Drift; Lewiston and No. 5 Block
 Seams, 60 in. thick.
 PO—Altman, W. Va.; SP—Same; CTY—
 Boone; RR—C. & O., Coal River Rr.
 S of H—Mules and trolley pole type
 locos. Track gage 44 in.
 S of M—Electric shortwall machs.
 PP—Fire tube boiler, 150 H. P., 125
 K. W. gen. unit, 250 volts D. C.,
 1 pump.
 EMP—75. Daily output, 300 tons.
 SIZES SHIPT—Run of Mine, Nut, Slack,
 PREP. EQUIPT—Pickling Tables.

STERLING COAL CO. LTD.
 General Office, Cleveland, O.
 PR—C. B. McNaught, Toronto, Can.
 TR—H. G. Batcliffe, Toronto, Can.
 GM—H. D. Hileman, Cleveland, O.
 GS—F. M. Kirk, Cleveland, O.
 PA—Geo. F. Weber, Cleveland, O.
 CE—F. M. Kirk, Cleveland, O.
 EE—Walter Holt, Sallneville, O.
 Note—One mine in West Virginia, two
 in Ohio.
 Cecil Mine; Drift; Freeport Seam, 60
 in. thick.
 PO—Cecil, W. Va.; SP—Same; CTY—
 Taylor; RR—B. & O.

MS—H. D. Gail, Cecil, W. Va.
 SM—H. D. Gail, Cecil, W. Va.
 S of H—2 trolley pole type locos and
 mules. Track gage, 42 in.
 S of M—1 chain breast type and 3 short-
 wall machs.
 PP—2-110 H. P. fire tube boilers, 1-
 150 K. W. and 1-100 K. W. gen.
 unit, 250 volts D. C., 2 pumps.
 EMP—60. Last years tonnage 40,000.
 SIZES SHIPT—Run of Mine, Slack,
 Lump.
 PREP. EQUIPT—Gravity Screens.

STERLING COLLIERY COMPANY.
 Now Kanawha Consolidated Coal Co.

STONE & SCOTT COAL COMPANY
 Now Peora Coal Co.

STONE BRANCH COAL COMPANY
 General Office, Huntington, W. Va.
 PR—R. R. Smith, Huntington, W. Va.
 TR—W. P. Neckamp, Huntington, W. Va.
 GM—A. Z. Litz, Huntington, W. Va.
 PA—H. S. McKalip, Stone Branch, W.
 Va.
 SCO—Address the Company; Buyer, Litz
 Smith Fuel Co., Huntington, W.
 Va.

SA—Litz-Smith Fuel Co., Huntington,
 W. Va.
 Litz-Smith No. 5 Mine; Drift; Alma
 Seam, 45 in. thick.
 PO—Stone Branch, W. Va.; SP—Same,
 CTY—Logan; RR—C. & O.
 MS—Harry S. McKalip, Stone Branch,
 W. Va.
 S of H—4 trolley pole type and 1 storage
 battery loco. Track gage, 44
 inches.
 S of M—6 shortwall machs.
 PP—3 125 H. P. water tube boilers,
 gen. units, 200 K. W., 250 volts
 D. C., 3 pumps.
 EMP—80. Daily tonnage 500.
 SIZES SHIPT—Run of Mine, Slack, Egg,
 Lump.
 PREP. EQUIPT—Shaker Screens.

STONE, BRUCE B. COAL COMPANY
 General Office, Silica, W. Va.
 OPERATOR—Bruce B. Stone, Silica, W.
 Va.
 SCO—Address the Company, Buyer,
 Bruce B. Stone, Silica, W. Va.
 SA—M. B. Courtright, 2215 Land Title
 Bldg., Philadelphia, Pa.

Quality Mine; Drift; New River Seam,
 40 in. thick.
 PO—Silica, W. Va.; SP—Same; CTY—
 Randolph; RR—E. & O., Pickens
 Branch.
 S of H—Mules and gasoline fan engine
 Track gage 42 in.
 S of M—Hand.
 PP—1 pump.
 EMP—16. Daily tonnage 60.
 SIZES SHIPT—Run of Mine
 Note—Formerly operated by the Quality
 Coal & Coke Co.
 old information.

STONE CLIFF COAL & COKE CO
 Now West Virginia Coal Co.

STONE COAL COMPANY
 Now part of Diamond Operating Co.

STONE LICK COAL CO.
 General Office, Weston, W. Va.
 PR—W. W. Brewer, Belington, W. Va.
 VP—L. S. Norris, Weston, W. Va.
 GM—W. W. Brewer, Belington, W. Va.
 GS—Bryce Davis, Belington, W. Va.
 SA—Wm. S. Harmon, Columbus, O.

Stone Lick Mine; Drift; Redstone Seam
 56 in. thick.
 PO—Weston, W. Va.; SP—Same, CTY—
 Lewis; RR—B. & O.
 S of H—Mules; Track gage 42 in.
 S of M—Hand.
 Daily tonnage 200.
 SIZES SHIPT—Run of Mine

STONE MOUNTAIN COAL CORP.
 General Office, Roanoke, Va.
 PR—H. C. Elliott, Roanoke, Va.
 TR—H. C. Elliott, " "
 GM—H. C. Elliott, " "
 GS—P. J. Smith, Mican, W. Va.
 PA—P. J. Smith, Mican, W. Va.
 CE—D. M. Good, Williamson, W. Va.
 SCO—Address the Company, Buyer, J.
 D. Saunders, Mican, W. Va.

Marvin Mine; Drift; Alma & Thacker
 Seams, 40 in. thick.
 PO—Matewan, W. Va.; SP—Same, CTY—
 Mingo; RR—N. & W.
 SM—J. D. Saunders, Matewan, W. Va.
 S of H—Trolley pole type loco. Track
 gage 36 in.
 S of M—Electric punchers and short-
 wall machs.
 PP—Power purchased. Transformer 31-
 000 to 250 volts A. C., rotary con-
 verters, 250 volts D. C., 2 pumps.
 EMP—75. Last years tonnage 76,448.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Bar Screens.

STONEWALL BLOCK COAL CO.

East Lynn, W. Va.

No. 1 Mine; CTY—Wayne.
No report.**STORCK COAL MINING CO.**

General Office, 215 S. 17th St., Philadelphia, Pa.

PR—Charles A. Storck, Buffalo, N. Y.
TR—North H. Swayne, Philadelphia, Pa.
GM—Chas. A. Storck, Buffalo, N. Y.
GS—D. B. Edwards, Pikes Run, W. Va.
SA—Swayne & Co., Philadelphia, Pa.Agnes Mine; Drift; Pittsburgh Seam, 48 in. thick.
PO—Buckhannon, W. Va.; SP—Same; CTY—Upshur; RR—B. & O.S of H—Mules.
S of M—Hand.
EMP—26. Daily tonnage 100.
SIZES SHIPT—Run of Mine.**STOTTMAYER COAL COMPANY**General Office, Gassaway, W. Va.
PR—S. Stottmeyer, Mt. Lake, Md.
VP—L. M. Adams, Vindex, Md.
TR—R. A. Price, Gassaway, W. Va.
GM—W. L. Camden, Mt. Lake, Md.
GS—S. Stottmeyer, Mt. Lake, Md.
PA—W. L. Camden, Mt. Lake, Md.
SA—W. L. Camden, Mt. Lake, Md.Stottmeyer Mine; Drift; Fire Block Seam, 72 to 84 in. thick.
PO—Ira, W. Va.; SP—Same; CTY—Clay; RR—B. & O.
S of H—Mules and steam loco. Track gage 42 inches.
S of M—Hand.
PP—1 water tube boiler, 25 H. P.
EMP—50. Daily tonnage 150.
SIZES SHIPT—Run of Mine.
NOTE—Coaling Stations for engines on Charleston Division of B. & O. R. R.**STOUT COAL COMPANY**General Office, 701 Goff Bldg., Clarksburg, W. Va.
PR—Alexander Stout, Clarksburg, W. Va.
TR—W. Frank Stout, Clarksburg, W. Va.
GM—W. Frank Stout, Clarksburg, W. Va.
EM—Hornor Bros., Clarksburg, W. Va.Stout No. 1 Mine; Pittsburgh Seam, PO—Clarksburg, W. Va.; SP—Same; CTY—Harrison; RR—B. & O.
MS—Jos. S. Evans, Clarksburg, W. Va.
S of H—Mules.
S of M—Hand.
Daily tonnage 20.
SIZES SHIPT—Run of Mine.**STOUT, ROSS F. & BROS.**

New Interstate Fuel Co.

STOVER COAL COMPANYGeneral Office, Fisher Bldg., Chicago, Ill.
PR—Holly Stover, Chicago, Ill.
VP—D. P. Thompson, Chicago, Ill.
TR—W. F. Truesdale, Chicago, Ill.
GS—Wm. Nicholson, Nuttallburg, W. Va.
PA—Wm. Nicholson, Nuttallburg, W. Va.
EM—E. W. Brooks, House Bldg., Pittsburgh, Pa.
EE—R. R. Morton, Nuttallburg, W. Va.
SCO—Address the Company, Buyer, Earl Crandall, Nuttallburg, W. Va.
SA—Holly Stover, Fisher Bldg., Chicago, Ill.Stover Mine; Drift; Sewell and New River Pocahontas Seams, 48 in. thick.
PO—Nuttallburg, W. Va.; SP—South Nuttall, W. Va.; CTY—Fayette; RR—C. & O.
MS—Geo. Darlington, Nuttallburg, W. Va.
S of H—Mules, trolley pole type and storage battery locos. Track gage 42 in.
S of M—7 shortwall machs.
PP—2 water tube boilers, total 200 H. P., 250 K. W. gen. unit, 550 volts D. C., 4 pumps.
EMP—100. Last years tonnage 90,000.
SIZES SHIPT—Run of Mine, Slack, Nut Egg, Lump.
PREP. EQUIPT—Shaker Screens, Loading Booms.
Note—Formerly operated by the Brown Coal Co.**SUODARTH COAL COMPANY**General Office, Grafton, W. Va.
PR—F. S. Sudarth, Grafton, W. Va.
VP—Joe. Federer, Morgantown, W. Va.
TR—John W. Snider, Grafton, W. Va.
GM—John W. Snider, Grafton, W. Va.
PA—John W. Snider, Grafton, W. Va.
Outright Mine; Drift; Masontown Seam, 48 in. thick.
PO—Sago, W. Va.; SP—Same; CTY—Upshur; RR—B. & O.
S of H—Mules.
S of M—Hand.
Last years tonnage 12,000.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by the Humphreys Fuel Co.**SUGAR CREEK COAL AND COKE CO.**General Office, Huntington, W. Va.
PR—A. J. King, Huntington, W. Va.
VP—I. R. Early, Logan, W. Va.
GM—A. J. King, Huntington, W. Va.
GS—J. H. Pirrung, Mount Hope, W. Va.PA—A. C. King, Huntington, W. Va.
CE—N. P. Rhinehart, Mount Hope, W. Va.
SCO—Address the Company, Buyer, F. P. Hicklin, Mount Hope, W. Va.
SA—Lake & Export Coal Corp., Huntington, W. Va.

Additional Information on Pages 1020, 1021

Sugar Creek Mine, Drift, Sewell Seam, 6 ft. thick.
PO—Mount Hope, W. Va.; SP—Macdonald, W. Va.; CTY—Fayette; RR—C. & O., K. G. J. & E.
S of H—Mules and rope. Track gage, 42 in.
S of M—Hand and 1 chain breast mach.
PP—Power purchased. Transformer 2300, 550 volts D. C., rotary converter, 9 pumps.
EMP—125. Last years tonnage 100,000.
SIZES SHIPT—Run of Mine.**SULLIVAN COAL & COKE CO.**General Office, Princeton, W. Va.
OWNER—H. E. Hines, Princeton, W. Va.
GS—J. M. Hines, Sullivan, W. Va.
Sullivan Mine; Drift; Beckley Seam, 52 in. thick.
PO—Sullivan, W. Va.; SP—Same (Prepay station); CTY—Raleigh; RR—C. & O. and Virginian.
S of H—Mules, trolley pole type and steam locos. Track gage, 42 in.
S of M—1 chain breast type mach.
PP—3 water tube boilers, total 450 H. P., 2 gen. units, 250 K. W., 250 volts D. C., 7 pumps.
EMP—60. Last fiscal year output, 50,000 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.**SUMMIT COAL COMPANY**General Office, Beckley, W. Va.
PR—E. L. Ellison, Beckley, W. Va.
TR—J. Q. Hutchinson, Beckley, W. Va.
GM—John Anderson, Metatlon, W. Va.
GS—John Anderson, Metatlon, W. Va.
PA—E. L. Ellison, Beckley, W. Va.
EM—J. E. Lawey, Beckley, W. Va.
SCO—Address the Company, Buyer, A. P. Payne, Metatlon, W. Va.
SA—Minter Fuel Co., Beckley, W. Va.Summit Mine; Drift; Sewell Seam; 67 inches thick.
PO—Metatlon, W. Va.; SP—Same; CTY—Raleigh; RR—Va.
S of H—Mules, trolley pole type, storage battery and combination locos. Track gage 44 in.
S of M—Hand, overcut machs.
PP—2 water tube boilers, 250 H. P., 250 volts D. C.
EMP—140. Daily tonnage 400.
SIZES SHIPT—Run of Mine.**SUNBEAM COAL COMPANY**General Office, Logan, W. Va.
PR—A. J. King, Huntington, W. Va.
VP—Robt. Wallace, Pocahontas, Va.
TR—C. M. Galway, Pocahontas, W. Va.
GM—A. J. King, Huntington, W. Va.
CE—A. J. King, Huntington, W. Va.
EM—M. L. Jarrett, Huntington, W. Va.
PA—M. A. Maxwell, Huntington, W. Va.
SCO—Address the Company, Buyer, Ira B. Early, Logan, W. Va.
SA—Lake & Export Coal Corp., Huntington, W. Va.

Additional Information on Pages 1020, 1021

Sunbeam Mine; Drift; Chilton Seam, 54 in. thick.
PO—Fort Branch, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
MS—Jno. Jones, Fort Branch, W. Va.
SM—H. W. Karnes, Ft. Branch, W. Va.
S of H—4 trolley pole type locos.
S of M—3 shortwall machs.
PP—Gen. units, 250 volts D. C., 2 pumps. Purchase power.
EMP—60. Last fiscal year output, 60,000 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaking Screens, Loading Booms, Picking Tables.**SUNSET MINING COMPANY**General Office, Sun, W. Va.
PR—J. M. McVey, Thurmond, W. Va.
TR—Chas. Ash, Glen Jean, W. Va.
GM—Chas. Ash, Glen Jean, W. Va.
GS—Chas. Ash, Glen Jean, W. Va.
PA—C. G. Blake & Co., Cincinnati, O.
EM—N. P. Rhinehart, Mount Hope, W. Va.Sunset Mine; Slope; Sewell Seam, 60 to 72 in. thick.
PO—Sun, W. Va.; SP—Same; CTY—Fayette; RR—Virginian, K. G. J. & E. Branch.
S of H—Mules and rope hoist. Track gage 44 in.
S of M—Hand.
PP—2 water tube boilers, total 50 H. P., 1 gen. unit, 250 volts D. C., 2 pumps. Purchase power.
EMP—20. Last fiscal year output, 15,000 tons.
SIZES SHIPT—Run of Mine.
Old information.**SUPERBA COAL COMPANY**General Office, Connellsville, Pa.
PR—A. C. Stickel, Connellsville, Pa.
TR—A. C. Stickel, Connellsville, Pa.
GM—G. Brooks Ross, Connellsville, Pa.
GS—G. Brooks Ross, Connellsville, Pa.
PA—C. M. Stone, Connellsville, Pa.
EM—Hornor Bros., Clarksburg, W. Va.
SA—International Fuel & Iron Corp., Pittsburgh, Pa.Dola Mine; Drift; Pittsburgh Seam, 72 in. thick.
PO—Dola, W. Va.; SP—Same; CTY—Harrison; RR—B. & O.
MS—G. B. Greybold, Dola, W. Va.
S of H—Mules.
S of M—Hand.
SIZES SHIPT—Run of Mine.**SUPERIOR CONNELLSVILLE COKE CO.**General Office, Greensburg, Pa.
PR—M. L. Painter, Greensburg, Pa.
VP—C. H. Fogg, Greensburg, Pa.
TR—H. S. Scheibler, Greensburg, Pa.
GM—H. S. Scheibler, Greensburg, Pa.
GS—A. A. Allan, Cheat Haven, Pa.
PA—H. S. Scheibler, Greensburg, Pa.
CE—C. H. Fogg, Greensburg, Pa.
EM—Homer L. Eubank, Uniontown, Pa.
SCO—Superior Mercantile Co. Buyer, J. C. Long, Opekiska, W. Va.Opekiska Mine; Drift; Pittsburgh Seam, 60-72 inches thick.
PO—Opekiska, W. Va.; SP—Same; CTY—Monongalia; RR—B. & O.
MS—J. C. Long, Opekiska, W. Va.
S of H—Mules and 2 gasoline locos. Track gage 42 inches.
S of M—Hand.
EMP—31. Last fiscal year output, 26,890 tons.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Gravity Screens.**SUPERIOR EAGLE COAL CO.**General Office, Huntington, W. Va.
PR—A. J. Dalton, Huntington, W. Va.
VP—J. A. Kelly, Huntington, W. Va.
TR—J. A. Kelly, Robson-Prichard Bldg., Huntington, W. Va.
GM—W. T. Jones, Omar, W. Va.
GS—G. C. Walker, Omar, W. Va.
PA—J. S. Shepherd, Omar, W. Va.
EM—J. F. Healey, Omar, W. Va.
EE—John Ketter, Omar, W. Va.
SA—Huntington Coal Sales Co., Huntington, W. Va.Superior Eagle Mine; Drift; Big Eagle Seam; 60 in. thick.
PO—Jeffrey, W. Va.; SP—Same; CTY—Boone; RR—C. & O.
MS—C. H. Perry, Jeffrey, W. Va.
S of H—2 storage battery locos. Track gage 48 in.
S of M—1 electric and 2 longwall machs.
PP—220 volts A. C. Purchase power. Daily tonnage 400.
SIZES SHIPT—Run of Mine.**SUPERIOR POCAHONTAS COAL CO.**General Office, Davy, W. Va.
PR—Justus Collins, Charleston, W. Va.
VP—Geo. R. Collins, Charleston, W. Va.
TR—Geo. R. Collins, Charleston, W. Va.
GM—L. Epperly, Winding Gulf, W. Va.
GS—J. D. Swim, Davy, W. Va.
PA—B. C. Burr, Davy, W. Va.
EM—C. C. Bailey, Davy, W. Va.
EE—J. H. Parks, Davy, W. Va.
SCO—Address the Company, Buyer, J. M. Hendon, Davy, W. Va.
Salez Agents Smokeless Fuel Co., Charleston, W. Va.

Additional Information on Page 1050

No. 1 Blackstone Mine worked out.
No. 2 Davy Crockett Mine; Drift; Davy Sewell Seam, 36 in. thick.
PO—Davy, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
MF—A. H. Hubbard, Davy, W. Va.
S of H—Mules and 2 trolley pole type locos. Track gage, 48 in.
S of M—Hand.
PP—Power by central power plant, 500 volts D. C.
EMP—109. Last years tonnage 53,617.
SIZES SHIPT—Run of Mine.
No. 3 Helena Mine; Drift; Davy-Sewell Seam, 36 in. thick.
PO—Davy, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
MF—T. M. Cline, Davy, W. Va.
S of H—Mules and 1 trolley pole type loco. Track gage, 48 in.
S of M—Hand.
PP—3 return tubular boilers, total 450 H. P., 2 200 K. W. gen. units, 500 volts D. C., 6 pumps.
EMP—108. Last years tonnage 53,617.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Gravity Screens.
No. 4 Cletus Mine; Drift; Davy-Sewell Seam, 36 in. thick.
PO—Davy, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
MF—Bee Cook, Davy, W. Va.
S of H—Mules and 4 trolley pole type locos. Track gage, 48 in.S of M—4 longwall machs.
PP—Power from central power plant, 1 pump.
EMP—108. Last years tonnage 53,617.
SIZES SHIPT—Run of Mine, Slack.**SUPERIOR THACKER COAL COMPANY**

Now operated by the Bailey Thacker Coal Company.

SUTTON CHEMICAL COMPANY, THEGeneral Office, 110 William St., New York, N. Y.
PR—H. H. Miner, New York, N. Y.
VP—A. Cameron, 220 S. State St., Chicago, Ill.
TR—H. T. Edgar, 110 William St., New York, N. Y.
GM—L. J. Sanders, Sutton, W. Va.
ASST. GM—Ross H. Miner, Sutton, W. Va.
PA—Marvin L. Leeds, 110 William St., New York, N. Y.
CE—Dudley Britt, Clarksburg, W. Va.Sutton No. 3 Mine.
PO—Sutton, W. Va.; SP—Same; CTY—Braxton; RR—B. & O.
MS—W. C. McMahon, Sutton, W. Va.
S of H—Mules. Track gage 24 in.
S of M—3 punchers and air drills.
PP—50 H. P. upright boiler, 2 pumps.
EMP—30. Daily tonnage 200.
SIZES SHIPT—Run of Mine.**SWISS BI-PRODUCT COAL CO.**General Office, Charleston, W. Va.
GM—Jos. Barna, Charleston, W. Va.
PA—Jos. Barna, Charleston, W. Va.
SA—L. Z. Netzorg Coal Co., Toledo, O.Swiss Mine; Drift; Coalburg Seam 60 in. thick.
PO—Swiss, W. Va.; SP—Same; CTY—Nicholas; RR—K. & M.
S of H—Trolley pole type locos. Track gage 42 in.
S of M—2 shortwall machs.
PP—Gen. units.
Daily tonnage 400.
SIZES SHIPT—Run of Mine, Slack, Lump, Block.
PREP. EQUIPT—Gravity Screens.**SWITZER COLLIERIES**General Office, Huntington, W. Va.
GS—A. E. Morgan, Switzer, W. Va.
PA—A. E. Morgan, Switzer, W. Va.
CE—A. E. Morgan, Switzer, W. Va.
SCO—Address the Company, Buyer, G. S. Murray, Switzer, W. Va.Switzer Mine; Drift; Cedar Grove Seam, 78 inches thick.
PO—Switzer, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
S of H—Mules and electric loco. Track gage 48 inches.
S of M—Shortwall mach.
PP—Power purchased. Transformer 44,000 to 2,300 volts A. C., rotary converters, 250 volts D. C.
EMP—112. Last years tonnage 117,200.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.**SYCAMORE COAL CO.**General Office, Vivian, W. Va.
PR—S. W. Patterson, Vivian, W. Va.
VP—H. D. Hatfield, Huntington, W. Va.
GS—G. S. Patterson, Vivian, W. Va.
IR—G. S. Patterson, " "
GM—G. S. Patterson, " "
PA—G. S. Patterson, " "
EM—Chas. A. Hamil, Vivian, W. Va.
EE—R. P. Whittaker, Cinderella, W. Va.
SCO—Address the Company, Buyer, M. H. Gilreath, Cinderella, W. Va.
Sales Agents, Castner, Curran & Bullitt, Cincinnati, O.Cinderella Mine, Drift, Winifrede Seam, 3 1/2 to 6 ft. thick. Operate washery.
PO—Cinderella, W. Va.; SP—Frt Same; Exp. Williamson, W. Va.; CTY—Mingo; RR—N. & W., Sycamore Br.
MS—Evan Thomas, Cinderella, W. Va.
S of H—Mules and 3 trolley pole type locos., 3 storage battery locos. Track gage 48 in.
S of M—2 shortwall and 7 longwall machs.
PP—Power purchased, 2 rotary converters, 250 volts D. C., 8 pumps.
EMP—130. Last years tonnage 83,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.**TAIT BROTHERS COAL COMPANY**General Office, Morgantown, W. Va.
GM—A. G. Tait, Morgantown, W. Va.
GS—John F. Tait, Morgantown, W. Va.
PA—A. G. Tait, Morgantown, W. Va.
Tait Bros. Mine; Drift; Sewickley Seam, 54 in. thick.
PO—Morgantown, W. Va.; SP—Randall, W. Va.; CTY—Monongalia; RR—Monongalia.

(Continued on Next Page)

Tait Bros Coal Co.—Cont.

S of H—2 trolley pole type and 2 storage battery locos. Track gage 42 in.
S of M—3 shortwall mchs.
PP—Power purchased. Transformer 6600-2300 volts A. C., 100 K. W. M. G. Set, 250 volts D. C., 2 pumps.
EMP—80. Daily tonnage 650.
SIZES SHIPT—Run of Mine.

TALBOTT-McHALE COAL CO.

General Office, Philippi, W. Va.
PR—W. B. Talbott, Philippi, W. Va.
VP—W. D. Talbott, Philippi, W. Va.
TR—Edw. F. McHale, Philippi, W. Va.
GM—Edw. F. McHale, Philippi, W. Va.
EM—Lorlin R. Robinson, Philippi, W. Va.
SA—Talbott-McHale Coal Co.

Talbott-McHale Mine; Drift; Kiltanning Seam, 60 in. thick.
PO—Philippi, W. Va.; SP—Crim Mine Siding, W. Va.; CTY—Barbour; RR—B. & O.
MS—W. D. Talbott, Philippi, W. Va.
S of H—Mules.
PP—Gen. unit, 550 volts D. C.
EMP—25.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.

TALBOTT, ROBERT

General Office, Fairmont, W. Va.
PR Owner—Robert Talbott, Fairmont, W. Va.
PA—Paul Talbott, Fairmont, W. Va.

Agnes Mine; Drift; Sewickley Seam; 72 inches thick.
PO—Lowesville, W. Va.; SP—Same; CTY—Monongalia; RR—Monongalia.
MS—Paul Talbott, Fairmont, W. Va.
S of H—Mules, elec. and gasoline locos. Track gage 42 inches.
S of M—Shortwall mchs.
PP—Power purchased, 250 volts A. C.
EMP—28. Daily tonnage 500.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

TAYLOR, J. C., COAL CO.

General Office, Flemington, W. Va.
Taylor No. 1 Mine.
PO—Flemington, W. Va.; CTY—Taylor; RR—B. & O.
No report.

TENNANT COAL CO.

Morgantown, W. Va.
Tennant Mine; CTY—Monongalia.
No report.

TETER, CHAS. W. COAL CO.

Out of business.

THACKER COAL AND COKE CO.

General Office, 1522 Union Trust Bldg., Cincinnati, O.
PR—T. E. Houston, Cincinnati, O.
VP—J. Frank Black, Philadelphia, Pa.
TR—N. H. Franklin, Cincinnati, O.
GM—N. H. Franklin, Cincinnati, O.
GS—Benj. Lewis, Elkhorn, W. Va.
PA—N. H. Franklin, Cincinnati, O.
CE—George Wright, Cincinnati, O.
EM—John M. Lewis, Cincinnati, O.
EE—John C. Newman, Thacker, W. Va.
SCO—Address the Company, Buyer, V. E. Lay and P. P. Miller, Thacker, W. Va.
Sales Agency—Houston Coal Co., Cincinnati, O.

Thacker No. 2 Mine; Drift; Thacker Seam, 60 in. thick.
PO—Thacker Mines, W. Va.; SP—Thacker, W. Va.; CTY—Mingo; RR—N. & W.
MS—W. A. Wilson, Thacker Mines, W. Va.
S of H—Mules, 6 elec. and 2 storage battery locos. Track gage 44 in.
S of M—5 elec. mchs.
PP—Power purchased.
EMP—250.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Gravity Screens Picking Tables.

Thacker No. 11 Mine; Drift; Thacker Seam, 60 in. thick.
PO—Thacker Mines, W. Va.; SP—Thacker, W. Va.; CTY—Mingo; RR—N. & W.
MS—W. A. Wilson, Thacker Mines, W. Va.
S of H—Mules, 6 elec. and 2 storage battery locos. Track gage 44 in.
S of M—9 elec. mchs.
PP—Power purchased.
EMP—250.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Rooms.

Thacker No. 18 Mine; Drift; Thacker Seam, 60 in. thick.
PO—Thacker Mines, W. Va.; SP—Thacker, W. Va.; CTY—Mingo; RR—N. & W.
MS—W. A. Wilson, Thacker Mines, W. Va.

S of H—Mules, trolley pole type and storage battery locos. Track gage 44 in.
S of M—Hand.
PP—Power purchased.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

THACKER COAL MINING COMPANY

General Office, Rose Siding, W. Va.
PR—J. K. Anderson, Charleston, W. Va.
VP—John T. McKinney, Lynchburg, Va.
TR—J. K. Anderson, Charleston, W. Va.
GM—J. K. Anderson, Charleston, W. Va.
Supt.—G. M. Slaughter, Rose Siding, W. Va.
PA—G. M. Slaughter, Rose Siding, W. Va.
CE—W. P. Melring, Williamson, W. Va.
EE—J. W. Helms, Rose Siding, W. Va.
SCO—Address the Company, Buyer, S. B. Cox, Rose Siding, W. Va.
Sales Agent—W. P. Slaughter, 1111 Union Trust Bldg., Cincinnati, O.

Thacker Mine; Drift; Thacker Seam, 54 in. thick.
PO—Rose Siding, W. Va.; SP—Same; CTY—Mingo; RR—N. & W.
S of H—Mules and 4 trolley pole type locos. Track gage, 48 in.
S of M—3 chainbreast type mchs.
PP—Power purchased. Transformer 2300 to 275 volts A. C., rotary converters, 250 volts D. C., 3 pumps.
EMP—80. Last fiscal year output, 75,000 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

THERMAL COAL COMPANY

General Office, 425 Goff Bldg., Clarksburg, W. Va.
PR—D. J. Carter, Clarksburg, W. Va.
TR—B. B. Jarvis, Clarksburg, W. Va.
GM—V. E. Goeke, Clarksburg, W. Va.
PA—V. E. Goeke, Clarksburg, W. Va.
CE—C. A. Osborn, Clarksburg, W. Va.

Swisher Mine; Drift; Redstone & Pittsburgh Seam; 78 in. thick.
PO—Lost Creek, W. Va.; SP—Same; CTY—Harrison; RR—B. & O., Righter Branch.
MS—John Quilon, Lost Creek, W. Va.
SIZES SHIPT—Run of Mine, Slack, Lump.
Old information.

THERMO-POCAHONTAS COAL CO.

General Office, Logan, W. Va.
PR—A. J. King, Huntington, W. Va.
VP—Robt. Wallace, Pocahontas, W. Va.
TR—C. M. Galway, Pocahontas, W. Va.
GM—A. J. King, Huntington, W. Va.
GS—F. E. King, Huntington, W. Va.
PA—A. C. King, Huntington, W. Va.
EM—M. L. Jarrett, Huntington, W. Va.
EE—M. A. Maxwell, Huntington, W. Va.
SCO—Address the Company, Buyer, Ira B. Early, Logan, W. Va.
SA—Castner, Curran & Bullitt, No. 1 Broadway, New York, N. Y.
Thermo Mine; Drift; Beckley Seam, 69 inches thick.
PO—Bud, W. Va.; SP—Same; CTY—Wyoming; RR—Virginia R. R. Co.
MS—M. P. Brady, Bud, W. Va.
S of H—6 trolley pole type locos. Track gage 44 inches.
S of M—3 chain breast type and 2 overhead cutter mchs.
PP—Power purchased. Transformer 2300 to 178 volts A. C., M. G. sets, 250 volts D. C.
EMP—100. Last years tonnage 105,000.
SIZES SHIPT—Run of Mine.

THOMAS COAL COMPANY

General Office, Bramwell, W. Va.
PR—George H. Patton, Chattanooga, Tenn.
VP—W. T. Berry, Philadelphia, Pa.
TR—Newton T. Roberts, Bramwell, W. Va.
GM—Eugene Powell, Crystal, W. Va.
GS—Eugene Powell, Crystal, W. Va.
PA—Eugene Powell, Crystal, W. Va.
EM—James G. Baldwin, Crystal, W. Va.
EE—John Corbran, McComas, W. Va.
SCO—Address the Company, Buyer, Steve Williams, McComas, W. Va.
Sales Agency—Flat Top Fuel Co., Bluefield, W. Va.
Thomas Nos. 1 and 2 Mines; Drift; Pocahontas No. 3 Seam, 54 in. thick.
PO—McComas, W. Va.; SP—Same; CTY—Mercer; RR—N. & W.
SM—N. T. Roberts, McComas, W. Va.
S of H—3 trolley pole type locos. Track gage 48 in. thick.
S of M—Hand.
PP—Power purchased. Transformer 13,000 to 170 volts A. C., rotary converters, 250 volts D. C., 360 K. W. gen. units, 250 volts D. C., 2 pumps.
EMP—180. Last years tonnage 105,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Rolling and Shaker Screens, Picking Tables, Loading Rooms, Washeries.

THOMAS, O. C. COAL CO.

Blair, W. Va.
Thomas Nos. 1 and 2 Mines.
PO—Blair, W. Va.; CTY—Logan; RR—C. & O.
No report.

THOMAS-LOVE COAL & COKE CO.

General Office, Suite 43 Hutchinson Bldg., Fairmont, W. Va.
PR—G. W. Miller, Fayette City, Pa.
TR—James H. Thomas, Fairmont, W. Va.
GM—W. N. McCom, Elizabeth, Pa.
PA—Thomas P. Joyce, Fairmont, W. Va.
CE—C. A. Riggs, Fairmont, W. Va.
EM—E. A. Cammell, Fairmont, W. Va.
Nora Mine; Shaft; Pittsburgh Seam, 96 inches thick.
PO—Worthington, W. Va.; SP—Same; CTY—Harrison; RR—B. & O. and W. M.
MS—Alexander Parks, Worthington, W. Va.
S of H—Mules. Track gage 42 inches.
S of M—Chain breast type mchs.
PP—Power purchased. Transformer 22,000 to 220 volts A. C., rotary converters, 220 volts D. C.
Last years tonnage 2264.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

THOMAS SMOKELESS COAL COMPANY

General Office, Boncar, W. Va.
PR—J. B. Charlton, Boncar, W. Va.
VP—J. E. Gray, Richmond, Va.
TR—G. H. Thomas, Boncar, W. Va.
GM—G. H. Thomas, Boncar, W. Va.
GS—G. H. Thomas, Boncar, W. Va.
PA—G. H. Thomas, Boncar, W. Va.
EE—A. J. Pruman, Boncar, W. Va.
Additional Information on Page 989

Nos. 1 and 2 Mines; Drift; Pocahontas Seam; 54 in. thick.
PO—Morganette, W. Va.; SP—Meadow Bridge, W. Va.; CTY—Fayette; RR—Sewell Valley, C. & O. outlet.
S of H—Mules and storage battery locos. Track gage 44 inches.
S of M—Hand and shortwall mchs.
PP—Purchase power. Transformer 44,000 to 2,300, M. G. sets, 440 volts A. C.
EMP—30.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Picking Tables.

THOMPSON BLOCK COAL COMPANY

General Office, Dorfee, W. Va.
PR—J. W. S. Miller, Dorfee, W. Va.
VP—D. F. Dillard, Blackstone, Va.
TR—J. W. Thomas, Petersburg, Va.
GM—J. W. S. Miller, Dorfee, W. Va.
SCO—Address the Company, Buyer, P. A. Hamrick, Dorfee, W. Va.

Dorfee Nos. 1 & 2 Mines; Drift; Coalburg Seam, 60 in. thick.
PO—Dorfee, W. Va.; SP—Same; CTY—Clay; RR—B. & O.
S of H—12 mules, 1 8-ton trolley pole type and 1 6-ton combination loco. Track gage 42 inches.
S of M—4 shortwall mchs.
PP—Power purchased. Transformer 13000-2200 volts A. C., 2-150 K. W. M. G. Sets, 250 volts D. C., 1 pump.
EMP—80. Last years tonnage 50,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Gravity Screens, Link Belt, Picking Tables.

THORNTON FIRE BRICK COMPANY

General Office, Clarksburg, W. Va.
PR—T. J. McAvay, Grafton, W. Va.
VP—J. R. Hardy, Grafton, W. Va.
TR—D. R. Potter, Clarksburg, W. Va.
GM—D. R. Potter, Clarksburg, W. Va.
GS—H. O. Garrison, Thornton, W. Va.
PA—D. R. Potter, Clarksburg, W. Va.
EM—Carl Horner, Clarksburg, W. Va.
Thornton No. 1 Mine; Drift; Mahoning Seam, 52 in. thick.
PO—Thornton, W. Va.; SP—Same; CTY—Taylor; RR—B. & O.
S of H—Mules. Track gage 32 inches.
S of M—Hand.
Old information.

THREE FORK COAL CO.

General Office, Ellamore, W. Va.
PR—Joe B. Moore, Ellamore, W. Va.
GM—Joe B. Moore, Ellamore, W. Va.
PA—C. F. Martin, Ellamore, W. Va.
SCO—Moore, Kepple & Co.; Buyer, C. F. Martin, Ellamore, W. Va.
SA—M. R. Courtright & Co., Philadelphia, Pa.

Three Fork Mine; Drift; New River Seam, 38 in. thick.
PO—Ellamore, W. Va.; SP—Midvale, W. Va.; CTY—Blandolph; RR—B. & O.
MS—M. R. Kittle, Ellamore, W. Va.
S of H—Storage battery loco. Track gage 42 in.
EE—C. F. Moore, Ellamore, W. Va.
S of M—2 shortwall mchs.
PP—1 fire tube boiler, 120 H. P. gen. units, 100 K. W., 250 volts D. C.
EMP—24. Last years tonnage 10,445.
SIZES SHIPT—Run of Mine.

THREE FORKS COAL COMPANY

General Office, Lunda, W. Va.
PR—Geo. M. Jones, Lunda, W. Va.
VP—J. N. Schweitzer, Lunda, W. Va.
TR—F. P. Chambers, Lunda, W. Va.
GM—Thos. F. Downing, Jr., Lunda, W. Va.
GS—W. W. Beldow, Lunda, W. Va.
PA—J. B. Kirkpatrick, Lunda, W. Va.
CE—H. F. Randolph, Pittsburgh, Pa.
EM—F. M. Herr, Lunda, W. Va.
EE—H. F. Randolph, Pittsburgh, Pa.
SCO—Address the Company, Buyer, J. B. Kirkpatrick, Lunda, W. Va.
SA—Amherst Fuel Co., Lunda, W. Va.
Additional Information on Page 1026

Three Forks Mine; Drift; Wmiff de Seam, 76 in. thick.
PO—Three Forks, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
MS—R. W. Waldron, Three Forks, W. Va.
SM—F. M. McLean, Three Forks, W. Va.
S of H—8 trolley pole type and 1 storage battery loco. Track gage 44 in.
S of M—1 shortwall mch. and 3 overhead cutters.
PP—Power purchased. Transformer 41000-2200 volts A. C., M. G. S. ts, 250 volts D. C.
EMP—220. Last years tonnage 112,100.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables.

THURMOND COAL COMPANY

General Office, Logan, W. Va.
PR—J. S. Thurmond, Alderson, W. Va.
VP—J. Cary Alderson, Logan, W. Va.
TR—W. R. Thurmond, Logan, W. Va.
GM—W. R. Thurmond, Logan, W. Va.
PA—Rolt, J. Selman, Logan, W. Va.
SCO—Address the Company, Buyer, C. A. Brennan, Kleencoal, W. Va.

Thurmond Mine; Shaft; Eagle Seam; PO—Kleencoal, W. Va.; SP—Halney, W. Va.; CTY—Logan; RR—C. & O. G. V. Div.
MS—W. T. Harvey, Kleencoal, W. Va.
SM—Robert J. Selman, Logan, W. Va.
S of H—Mules, electric locos. Track gage 44 inches.
S of M—Shortwall mchs.
PP—Purchase power. Transformer 44,000-2,200, 250 volts A. C., M. G. sets, 250 volts D. C.
EMP—90. Daily tonnage 500.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Bar Screens.

TIDEWATER COAL & COKE COMPANY

General Office, Vivian, W. Va.
PR—W. B. Clifford, Cincinnati, O.
TR—G. N. Prenter, Vivian, W. Va.
GM—T. E. Houston, Cincinnati, O.
GS—Benjamin Lewis, Elkhorn, W. Va.
PA—N. H. Franklin, Cincinnati, O.
CE—George Wright, Cincinnati, O.
EM—John M. Lewis, Cincinnati, O.
EE—John C. Newman, Thacker, W. Va.
SCO—Address the Company, Buyer, R. T. Early, Vivian, W. Va.
SA—Houston Coal Co., Cincinnati, Ohio.

Tidewater No. 1 Mine; Drift; Sewell Seam, 66 inches thick.
PO—Vivian, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
MS—Wm. Barriek, Vivian, W. Va.
S of H—Mules, 2 elec. and 1 storage battery loco. Track gage 44 in.
S of M—Hand, 1 shortwall mch.
PP—6 return tubular boilers, total 710 H. P., 3 gen. units, 250 volts D. C. Purchase power.
EMP—290. Last fiscal year output, 170,000 tons.
SIZES SHIPT—Run of Mine.

Tidewater No. 4 Mine; Drift; Sewell Seam, 72 in. thick.
PO—Vivian, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
MS—Wm. Barriek, Vivian, W. Va.
S of H—Mules, trolley pole type and storage battery loco. Track gage 14 in.
S of M—Hand.
PP—Purchase power.
EMP—25.
SIZES SHIPT—Run of Mine.

TIGER COAL COMPANY

General Office, Huntington, W. Va.
PR—N. J. Wood, Huntington, W. Va.
VP—R. C. Rogers, Huntington, W. Va.
TR—Otis H. Ashley, Charleston, W. Va.
GM—Otis H. Ashley, Charleston, W. Va.
PA—Otis H. Ashley, Charleston, W. Va.
SCO—Tiger Store Co., Hartland, W. Va.
Buyer, Otis H. Ashley, Charleston, W. Va.
SA—Central W. Va. Fuel Co., Huntington, W. Va.

Tiger Nos. 1 and 2 Mines; Drift; Coalburg Seam, 68 inches thick.
PO—Hartland, W. Va.; SP—Same; CTY—Clay; RR—B. & O.
MS—F. O. Butcher, Hartland, W. Va.
S of H—Mules. Track gage 48 inches.
S of M—Hand.
EMP—16. Daily tonnage 100.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

TIAGA COAL COMPANY.

General Office, Tioga, W. Va.
 PR—Robert L. Parter, Tioga, W. Va.
 VP—F. N. Anderson, Richmond, W. Va.
 TR—Robert L. Parter, Tioga, W. Va.
 GM—Robert L. Parter, Tioga, W. Va.
 GS—Robert L. Parter, Tioga, W. Va.
 PA—Robert L. Parter, Tioga, W. Va.
 EM—W. G. Crichton, Charleston, W. Va.
 SCO—Tioga State Coal, Buyer, J. H. Berth, Tioga, W. Va.

Adl Eagle Mine; Drift; Lower Kittanning Seam, 46 in. thick.
 PO—Tioga, W. Va.; SP—Allingdale, W. Va.; CTY—Nicholas; RR—B. & O.
 MS—Walter Dale, Tioga, W. Va.
 SM—C. E. Morton, Tioga, W. Va.
 S of H—Mules. Track gage, 42 in.
 S of M—Hand.

PP—Purchase power, M. G. sets, 250 volts D. C.
 EMP—75. Last years tonnage 72,000.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens, Picking Tables.

Beaver Mine; Drift, No. 5 Block Seam, 52 in. thick.
 PO—Tioga, W. Va.; SP—Allingdale, W. Va.; CTY—Nicholas; RR—B. & O.
 MS—Walter Dale, Tioga, W. Va.
 SM—C. E. Morton, Tioga, W. Va.
 S of H—Mules. Track gage, 42 in.
 S of M—Hand.
 PP—Purchase power, 250 volts D. C.
 EMP—75. Last years tonnage 3,000
 SIZES SHIPT—Run of Mine.

TOLBERT SMOKELESS COAL CO.

Cash Orchard, W. Va.
 Tolbert Nos. 1 and 2 Mines.
 PO—Mabscott, W. Va.; CTY—Raleigh; RR—C. & O.
 No report.

TOMMY CREEK COAL CO.

General Office, Tralee, W. Va.
 PR—J. C. Sullivan, Tralee, W. Va.
 VP—J. C. Sullivan, Tralee, W. Va.
 GM—J. C. Sullivan, Tralee, W. Va.
 PA—C. B. Helwig, Tralee, W. Va.
 EE—J. P. Barksdale, Tralee, W. Va.
 SCO—Address the Company, Buyer, B. G. Scott, Tralee, W. Va.
 SA—C. & O. Coal Agency Co., Boston, Mass., and Wyoming Coal Sales Co., Bluefield, W. Va.

TOMPKINS BY-PRODUCT COAL CO.

General Office, Box 666, Huntington, W. Va.
 PR—W. E. Tompkins, Huntington, W. Va.
 VP—A. E. Morgan, Switzer, W. Va.
 TR—C. R. Conner, Huntington, W. Va.
 GM—W. E. Tompkins, Huntington, W. Va.
 CE—C. R. Conner, Huntington, W. Va.
 SA—Chesapeake & Virginia Coal Co., Huntington, W. Va.

Tompkins No. 1 Mine; Drift; Alma Seam, 54 in. thick.
 PO—Chapmanville, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
 S of H—Mules. Track gage 44 in.
 S of M—Hand.
 PP—Generate power. 220 volts D. C.
 EMP—30. Daily tonnage 150.
 SIZES SHIPT—Run of Mine.

TONY FORK COAL COMPANY.

General Office, Lundale, W. Va.
 PR—Geo. M. Jones, Lundale, W. Va.
 VP—J. N. Schweiter, Lundale, W. Va.
 ASST TREAS—F. P. Chambers, Lundale, W. Va.
 GM—Thos F. Downing, Jr., Lundale, W. Va.
 GS—W. W. Beddow, Lundale, W. Va.
 PA—J. B. Kirkpatrick, Lundale, W. Va.
 CE—H. F. Randolph, Pittsburgh, Pa.
 EM—F. M. Herr, Lundale, W. Va.
 SCO—Address the Company, Buyer, J. B. Kirkpatrick, Lundale, W. Va.
 SA—Amherst Fuel Company, Lundale, W. Va.

Tony Fork Mine; Drift; Winifrede Seam, 69 in. thick.
 PO—Lundale, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
 MS—J. B. Markman, Lundale, W. Va.
 SM—L. A. Fisher, Lundale, W. Va.
 S of H—2 trolley pole type locos Track gage 44 in.
 S of M—2 shortwall machs.
 PP—Power purchased. Transformer 44000-2200 volts A. C., M. G. Sets, 250 volts D. C.
 EMP—115. Daily tonnage 100
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.

TONY POCAHONTAS COAL CO. INC.

General Office, Avondale, W. Va.
 PR—Tony Lafolla, Avondale, W. Va.
 VP—S. M. Lafolla, Welch, W. Va.
 TR—C. R. Beach, War, W. Va.
 GM—Tony Lafolla, War, W. Va.

Tony Mine; Drift; Red Ash Seam, 30-36 in. thick.
 PO—Avondale, W. Va.; SP—Mile Branch, W. Va.; CTY—McDowell; RR—N. & W.

MS—Jas. Scoggs, Avondale, W. Va.
 S of H—Mules, rope, gasoline and steam locos. Track gage, 48 in.
 S of M—Hand.
 EMP—30. Daily tonnage 100.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Bar Screens.

TRACE FORK COAL COMPANY.

General Office, Tracool, W. Va.
 PR—H. R. Tribou, Tracool, W. Va.
 VP—W. H. Ruby, Tracool, W. Va.
 GM—W. H. Ruby, Tracool, W. Va.
 GS—W. H. Ruby, Tracool, W. Va.
 PA—W. H. Ruby, Tracool, W. Va.
 EM—O. L. Coiler, Mullens, W. Va.
 EE—W. H. Billiard, Tracool, W. Va.
 SCO—Address the Company, Buyer, D. S. Nichols, Tracool, W. Va.
 SA—C. H. Sprague & Sons Co., Boston, Mass.

Trace Fork No. 1 Mine; Drift; No. 3 Pocahontas Seam, 48 in. thick.
 PO—Tracool, W. Va.; SP—Same; CTY—Wyoming; RR—Virginian.
 MS—William Cook, Tracool, W. Va.
 S of H—Trolley pole type locos. Track gage 44 inches.
 S of M—2 shortwall machs.
 PP—Power purchased. Transformer 13,000 to 220 volts A. C., M. G. sets, 250 volts D. C., 1 pump.
 EMP—70. Last years tonnage 72,000.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Picking Tables.

TRADERS COAL COMPANY.

Out of Business.

TRIAD COAL COMPANY

General Office, Reedsville, W. Va.
 PR—T. J. Barnard, Reedsville, W. Va.
 VP—W. R. Michener, Reedsville, W. Va.
 TR—Geo. C. Michener, Reedsville, W. Va.
 GM—W. R. Michener, Reedsville, W. Va.
 GS—W. R. Michener, Reedsville, W. Va.
 PA—Frank Rush, Reedsville, W. Va.
 EM—Harry Lovering, California, Pa.

Triad Mine; Drift; Lower Freeport Seam, 60 in. thick.
 PO—Reedsville, W. Va.; SP—Lyons, W. Va.; CTY—Preston; RR—M. & K.
 S of H—Mules and electric loco.
 S of M—Hand.
 SIZES SHIPT—Run of Mine.

TRINITY COAL COMPANY.

Now operated by the Pax Mining Co

TROLL COAL CO.

General Office, Clarksburg, W. Va.
 Vincen Mine.
 PO—Helen Run, W. Va.; CTY—Marion; RR—B. & O.
 No report.

TROFF COAL COMPANY

General Office, Morgantown, W. Va.
 PR—Fred Troff, Morgantown, W. Va.
 VP—F. L. Bowman, Morgantown, W. Va.
 TR—F. L. Bowman, Morgantown, W. Va.
 GS—Fred Troff, Morgantown, W. Va.
 CE—Monongahela Valley Engr. Co., Morgantown, W. Va.

Great Scott Nos. 1 and 2 Mines; Drift; Pittsburgh Seam, 96 in. thick.
 PO—Morgantown, W. Va.; SP—Star City and Randall, W. Va.; CTY—Monongalia; RR—B. & O., Penna., P. & L. E.
 S of H—Mules and endless rope, trolley pole type loco. Track gage 42 in.
 S of M—5 longwall machs.
 PP—Power purchased. Transformer 2,300 to 250 volts A. C., M. G. sets, 250 volts D. C., 1 pump.
 EMP—140. Last years tonnage 133,800.
 SIZES SHIPT—Run of Mine.

TUNNELL COAL COMPANY.

General Office, Dingess, W. Va.
 PR—W. A. Lindsey, Dingess, W. Va.
 VP—C. Plymale, Dingess, W. Va.
 TR—E. L. Hawks, Dingess, W. Va.
 GM—W. A. Lindsey, Dingess, W. Va.
 PA—W. A. Lindsey, Dingess, W. Va.
 EM—D. M. Good, Williamson, W. Va.

Tunnell Mine; Drift; Renshaw Seam; 96 inches thick.
 SP—Dingess, W. Va.; CTY—Mingo; RR—N. & W.
 MS—Hugh Willman, Dingess, W. Va.
 S of H—Mules. Track gage 40 inches.
 S of M—Hand.
 Old information.

TUNNELTON-FREEPORT COAL CO.

General Office, Tunnelton, W. Va.
 PR—J. S. Hunt, Tunnelton, W. Va.
 VP—Jos. M. Brady, Frostburg, Md.
 TR—J. Wm Hunt, Cumberland, Md.
 SECY—J. Wm Hunt, Cumberland, Md.
 GM—J. S. Hunt, Tunnelton, W. Va.

Blaser Mine; Drift; Upper Freeport Seam, 48 to 60 in. thick.
 PO—Tunnelton, W. Va.; SP—Same; CTY—Preston; RR—B. & O.
 S of H—Mules. Track gage 42 in.

S of M—Hand.
 PP—Power purchased. Rotary converters, gen. units.
 Daily tonnage 50.
 SIZES SHIPT—Run of Mine.

TURKEY GAP COAL & COKE COMPANY

General Office, Dott, W. Va.
 PR—F. P. Harman, Washington, D. C.
 VP—Edward I. McQuail, Dott, W. Va.
 TR—Jas. A. McQuail, Dott, W. Va.
 GM—Edw. J. McQuail, Dott, W. Va.
 PA—J. E. Ohlinger, Dott, W. Va.
 EM—A. H. Creveling, Dott, W. Va.
 EE—F. M. Reigher, Dott, W. Va.
 SA—William C. Atwater & Co., New York, N. Y.

Josephine and Joanna Collieries; Drift; Pocahontas No. 9 Seam, 48-72 in. thick.
 PO—Ennis, W. Va.; SP—Elkhorn, W. Va.; CTY—McDowell; RR—N. & W.
 MS—Jas. Howes, Ennis, W. Va.
 SM—J. L. Grady, Ennis, W. Va.
 S of H—Mules and 4 comb. locos. Track gage 44 in.
 S of M—3 longwall machs.
 PP—Power purchased, transformer 13,000-250 volts A. C., M. G. sets, 206 volts D. C., 3 pumps.
 EMP—110. Last years tonnage 41,600.
 SIZES SHIPT—Run of Mine.

Wenonah Nos. 1, 2 and 3 Mines; Drift; Pocahontas No. 3 Seam, 50 in. thick.
 PO—Dott, W. Va.; SP—Springton, W. Va.; CTY—Merger; RR—N. & W.
 MS—H. C. Price, Dott, W. Va.
 S of H—Mules and 12 trolley pole type locos. Track gage 52½ in.
 S of M—12 longwall machs.
 PP—Power purchased, transformer 13,000-250 volts A. C., M. G. sets, 206 volts D. C., 6 pumps.
 EMP—325. Last years tonnage 200,700
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Picking Tables.

Modoc Mine; Drift; Pocahontas No. 3 Seam, 54 in. thick.
 PO—Springton, W. Va.; SP—Same (prepay); CTY—Merger; RR—N. & W.
 MS—H. C. Knouff, Springton, W. Va.
 SM—E. E. Tomlinson, Dott, W. Va.
 S of H—Mules and 6 trolley pole type locos. Track gage 48 in.
 S of M—5 longwall machs.
 PP—Power purchased, transformer 13,000-250 volts A. C., rotary converters, 206 volts D. C., 4 pumps.
 EMP—140. Last years tonnage 106,800
 SIZES SHIPT—Run of Mine, Lump, Slack.
 PREP. EQUIPT—Picking Tables.

Turkey Gap Mine abandoned.

TURKEY KNOB COAL COMPANY.

General Office, Charleston, W. Va.
 PR—C. C. Beury, Charleston, W. Va.
 TR—Joseph H. Boyd, Charleston, W. Va.
 GS—J. G. Thayer, Turkey Knob, W. Va.
 PA—J. G. Thayer, Turkey Knob, W. Va.
 EM—H. E. Wilson, Thurmond, W. Va.
 EE—O. R. Blazer, Turkey Knob, W. Va.
 SCO—Address the Company, Buyer, H. A. Collawn Turkey Knob, W. Va.
 SA—Flat Top Fuel Co., Bluefield, W. Va.

Turkey Knob Mine; Drift; Sewell Seam, 72 in. thick.
 PO—Turkey Knob, W. Va.; SP—Same (Prepay); CTY—Fayette; RR—Chesapeake & Ohio.
 S of H—Mules and trolley pole type locos Track gage 44 in.
 S of M—1 chain breast type and 1 shortwall mach.
 PP—Power purchased. Transformer 2200 to 110-220-440 volts A. C., M. G. Sets, 550 volts D. C., 4 pumps.
 EMP—275. Last years tonnage 92,139.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Shaking Screens, Loading Booms.

TURNER DOUGLAS COAL CO.

General Office, Goff Bldg., Clarksburg, W. Va.
 PR—L. Sigwart, Morgantown, W. Va.
 VP—W. L. Harrington, Clarksburg, W. Va.
 TR—H. W. Sheets, Clarksburg, W. Va.
 GM—A. J. MacDaniels, Clarksburg, W. Va.
 GS—G. W. Butt, Crellin, Md.
 PA—A. J. MacDaniels, Clarksburg, W. Va.
 CE—E. W. Laubenstein, Clarksburg, W. Va.
 EM—Horner Bros., Clarksburg, W. Va.
 SCO—Turner-Douglas Supply Co., Buyer, G. W. Butt, Crellin, Md.
 SA—A. J. MacDaniels, Goff Bldg., Clarksburg, W. Va.

Banner No. 1 Mine; Drift; Catane Seam, 90 in. thick.
 PO—Crellin, Md.; SP—Hutton, Md.; CTY—Preston, W. Va.; RR—B. & O.

MS—J. W. Butt, Oakland, Md.
 S of H—Mules. Track gage, 42 in.
 S of M—Hand.
 PP—Power purchased, 3 pumps.
 EMP—40. Daily tonnage 200.
 SIZES SHIPT—Run of Mine.
 Old Information.

TWIN BROTHERS MINING COMPANY.

Out of business.

TWIN MOUNTAIN COAL COMPANY

General Office, Piedmont, W. Va.
 PR—A. F. Gross, Cumberland, Md.
 GM—John M. Fahey, Piedmont, W. Va.
 PA—P. H. Fahey, Piedmont, W. Va.

Fahey Mine; Drift; Kittanning Seam, 72 in. thick.
 PO—Piedmont, W. Va.; SP—Same; CTY—Mineral; RR—B. & O.
 MS—J. M. Fahey, Piedmont, W. Va.
 S of H—Mules. Track gage 42 in.
 S of M—Hand.
 PP—2 40 H. P. water tube boilers.
 EMP—75.
 SIZES SHIPT—Run of Mine.
 Note—Successors to Piedmont Coal Corp.

TWO-SEAM COAL COMPANY

General Office, Winding Gulf, W. Va.
 PR—H. B. Turner, Winding Gulf, W. Va.
 VP—Dr. A. N. Tiche, Winding Gulf, W. Va.
 TR—S. W. Shumate, Winding Gulf, W. Va.
 GM—L. K. Perkins, Boomer, W. Va.
 GS—L. B. Perkins, Boomer, W. Va.
 PA—L. B. Perkins, Boomer, W. Va.
 EM—H. B. Turner, Winding Gulf, W. Va.

Nos. 1, 2 and 3 Mines; Drift; Eagle and No. 2 Gas Seams; 38 and 68 in. thick.
 PO—Boomer, W. Va.; SP—Same; CTY—Fayette; RR—K. & M.
 S of H—Mules. Track gage 42 inches.
 S of M—Hand.
 SIZES SHIPT—Run of Mine.

TWYFORD COAL COMPANY

General Office, Reedsville, W. Va.
 PR—G. W. Twyford, West Union, W. Va.
 VP—C. T. Twyford, Hagerstown, Md.
 TR—J. S. Lantz, Reedsville, W. Va.
 GS—J. S. Lantz, Reedsville, W. Va.
 GM—G. W. Twyford, West Union, W. Va.
 PA—J. S. Lantz, Reedsville, W. Va.
 CE—G. T. Twyford, Hagerstown, Md.
 EM—McMurtett & Barlett, Morgan town, W. Va.

Twyford Mine; Drift; Upper Freeport Seam, 78 in. thick.
 PO—Reedsville, W. Va.; SP—Same; CTY—Preston; RR—M. & K.
 S of H—Mules and rope. Track gage, 36 in.
 S of M—Hand.
 EMP—18. Last years tonnage 13,700.
 SIZES SHIPT—Run of Mine.

TYGARTS RIVER COAL COMPANY

General Office, Philippi, W. Va.
 PR—C. Breitweiser, Pittsburgh, Pa.
 VP—Geo. Martin, Westford, Pa.
 TR—A. L. Gephart, Pittsburgh, Pa.
 GM—C. Breitweiser, Pittsburgh, Pa.
 PA—A. L. Gephart, Pittsburgh, Pa.

Westford Nos. 1 and 2 Mines; Drift; Mahoning Seam, 60 inches thick.
 PO—Philippi, W. Va.; SP—Lillian, W. Va.; CTY—Barbour; RR—B. & O.
 MS—Walter Streets, Philippi, W. Va.
 S of H—Mules, electric and gasoline locos. Track gage 42 inches.
 S of M—Hand, comp. air puncher and chain breast machs.
 PP—2 water tube boilers, 300 H. P., generates power 250 volts D. C.
 EMP—100. Daily tonnage 400.
 SIZES SHIPT—Run of Mine.

UNION GAS COAL CO.

General Office, Clarksburg, W. Va.
 Lambert Mine.
 PO—Lost Creek, W. Va.; CTY—Harrison; RR—B. & O.
 No report.

UNITED BITUMINOUS COAL COMPANY

Out of Business.

UNITED COAL COMPANY

General Office, 1011 Chestnut St., Philadelphia, Pa.
 PR—R. Raymond Biddle, Phila., Pa.
 VP—John D. Flood, Philadelphia, Pa.
 TR—Frank O'Kane, Philadelphia, Pa.
 GS—Y. A. McIver, Bower, W. Va.
 SECTY—Frank O'Kane, Phila., Pa.

Katherine Mine; Drift; Pittsburgh No. 8 Seam; 75 inches thick.
 PO—Bower, W. Va.; SP—Same; CTY—Gilmer; RR—Coal & Coke.
 S of H—Mules. Track gage 36 inches.
 S of M—1 chain breast type mach.
 PP—Power purchased, 250 volts D. C., 1 pump.
 Daily output, 100 tons.
 SIZES SHIPT—Run of Mine.

(Continued on Next Page)

United Coal Company—Cont.

Brackett Mine; Drift; Pittsburgh No. 8 Seam; 75 inches thick.
 PO—Bower, W. Va.; SP—Same; CTY—Gilmor; RR—Coal & Coke.
 S of H—Mules. Track gauge 36 inches.
 S of M—1 chain breast type mach.
 PP—Power purchased, 250 volts D. C., 1 pump.
 Daily output, 100 tons.
 SIZES SHIPT—Run of Mine.
 Darnall Mine; Drift; Pittsburgh No. 8 Seam; 75 inches thick.
 PO—Bower, W. Va.; SP—Same; CTY—Gilmor; RR—Coal & Coke.
 S of H—Mules. Track gauge 36 inches.
 S of M—1 chain breast type mach.
 PP—Power purchased, 250 volts D. C.
 Daily output, 150 tons.
 SIZES SHIPT—Run of Mine.
 NOTE—Successors to Quaker Split Coal Company.
 Old information.

UNITED POCAHONTAS COAL COMPANY

General Office, Crumpler, W. Va.
 PR—Worth Kilpatrick, Connellsville, Pa.
 VP—Alvah Stone, Roanoke, Va.
 TR—J. A. Armstrong, Connellsville, Pa.
 GM—H. C. Faust, Worth, W. Va.
 EM—L. P. Wood, Crumpler, W. Va.
 EE—W. O. Lambert, Crumpler, W. Va.
 SCO—Address the Company; Buyer, C. E. Lauderhill, Crumpler, W. Va.
 SA—Castner, Curran & Bullitt Co., Inc., No. 1 Broadway, New York, N. Y.

Indian Ridge Mine; Drift; No. 3 Pocahontas Seam; 54 to 60 in. thick.
 PO—Worth, W. Va.; SP—Crumpler, W. Va.; CTY—McDowell, RR—N. & W., North Fork Br.
 MS—H. H. Honaker, Crumpler, W. Va.
 S of H—Mules and 10 trolley pole type locos. Track gauge 48 in.
 S of M—7 shortwall machs.
 PP—Power purchased, Transformer 13200-440 volts A. C., 1-200 K. W. rotary converter, 250 volts D. C., 3 pumps.
 EMP—150. 48 Bee Hive coke ovens.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms, Washeries.

Zenith Nos. 1 and 2 Mines; Drifts; No. 3 Pocahontas Seam, 54 to 60 in. thick.
 PO—Crumpler, W. Va.; SP—Same; CTY—McDowell; RR—N. & W., North Fork Br.
 MS—H. H. Honaker, Crumpler, W. Va.
 S of H—Mules and 10 trolley pole type locos. Track gauge 56½ in.
 S of M—6 shortwall machs.
 PP—Purchase power, transformer 13,200 to 440 volts A. C., 2 M. G. sets, 300 and 200 K. W., 250 volts D. C., 4 pumps.
 EMP—200.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms, Washeries.

Wyoming Nos. 1 and 2 Mines; Drifts; No. 3 Pocahontas Seam, 56 in. thick.
 PO—Crumpler, W. Va.; SP—Frt., Same; Exp., North Fork, W. Va.; CTY—Wyoming; RR—N. & W.
 MS—H. H. Honaker, Crumpler, W. Va.
 S of H—Mules and 2 trolley pole type locos. Track gauge 56½ in.
 S of M—6 shortwall machs.
 PP—Power purchased, Transformers 13200-440 volts A. C., 1-200 K. W. rotary converter, 250 volts D. C., 6 pumps.
 EMP—50.
 SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms, Washeries.

U. S. BLOCK COAL CO.
 Altman, W. Va.
 U. S. Block Mine; CTY—Boone.
 No report.

UNITED STATES COAL & COKE CO.

General Office, Carnegie Building, Pittsburgh, Pa.
 PR—W. H. Clingerman, Carnegie Bldg., Pittsburgh, Pa.
 TR—J. D. McGreevy, 1456 Frick Bldg., Annex, Pittsburgh, Pa.
 SECY—J. D. McGreevy, 1456 Frick Bldg., Annex, Pittsburgh, Pa.
 AUDITOR—C. P. Parker, Pittsburgh, Pa.
 GS—Edward O. Toole, G. W. Va.
 PA—T. S. Duncan, Carnegie Bldg., Pittsburgh, Pa.
 EE—Eli Clemens, Gary, W. Va.

No. 1 Mine, Shaft, Pocahontas No. 3 and No. 4 Seams, No. 3, 5 ft. 8 in. thick, and No. 4, 5 ft. 6 in. thick.
 PO—Wilcox, W. Va.; SP—Same; CTY—McDowell RR—N. & W., Tug Fork MS—A. E. Riley, Gary, W. Va.

No. 2 Mine, Shaft, Pocahontas No. 4 Seam, 4 ft. 8 in. thick.
 PO—Garry, W. Va.; SP—Alpheus, W. Va.; CTY—McDowell; RR—N. & W., Tug Fork Branch.
 MS—A. E. Riley, Gary, W. Va.
 S of H—Mules and 5 elec. locos. Track gauge, 48 in.
 S of M—7 elec. machs.
 PP—Power from central power plant, 1 air comp., 2 pumps.
 Coke Ovens, 300 Bee Hive.
 CENTRAL PP—12 R. & W. Cahall water tube boilers, total 4,484 H. P., 6 generators, 4,500 K. W. capacity, 6 gen. units, 6,600 volts A. C., 3 phase, 25 cycle.
 SUPT—Everett & Woodson, Gary, W. Va.

No. 3 Mine, Drift, Pocahontas No. 4 Seam, 4 ft. 8 in. thick.
 PO—Garry, W. Va.; SP—Same; CTY—McDowell RR—N. & W., Tug Fork Branch.
 MS—J. L. Sullivan, Gary, W. Va.
 S of H—3 electric locos. and mules. Track gauge, 48 in.
 S of M—7 electric machs.
 PP—Power from central power plant, 1 air comp., 2 pumps.
 Coke Ovens, 300 Bee Hive.

No. 6 Mine, Drift, Pocahontas No. 4 Seam, 6 ft. thick.
 PO—Garry, W. Va.; SP—Beam, W. Va.; CTY—McDowell, RR—N. & W., Tug Fork Branch.
 MS—Neil Frick, Gary, W. Va.
 S of H—Mules and 5 electric locos. Track gauge, 48 in.
 S of M—9 elec. machs.
 PP—Power furnished from central power plant, 1 air comp., 3 pumps.
 Coke Ovens, 308 Bee Hive.

Nos. 7 and 8 Mines, Drifts, Pocahontas No. 4 Seam, 6 ft. thick.
 PO—Elbert, W. Va.; SP—Same; CTY—McDowell RR—N. & W., Tug Fork Branch.
 MS—W. P. Kearns, Elbert, W. Va.
 S of H—Mules and 9 electric locos. Track gauge 48 in.
 S of M—12 electric machs.
 PP—Power furnished from central power plant, 1 air comp., 2 pumps.

No. 9 Mine; Drift; Pocahontas No. 4 Seam, 66 to 96 in. thick.
 PO—Elbert; SP—Same; CTY—McDowell; RR—N. & W., Tug River branch.
 MS—W. P. Kearns, Elbert, W. Va.
 S of H—8 electric locos. Track gauge 48 in.
 S of M—12 electric machs.
 PP—Power furnished from central power plant, 1 air comp., 2 pumps.

No. 10 Mine, Drift, Pocahontas No. 3 and 4, No. 3, 5 ft. 8 in. thick, and No. 4, 4 ft. 8 in. thick.
 PO—Garry, W. Va.; SP—Venus, W. Va.; CTY—McDowell, RR—N. & W., Tug Fork Branch.
 MS—A. N. Harris, Thorpe, W. Va.
 S of H—Mules and 5 electric locos. Track gauge 48 in.
 S of M—10 elec. machines.
 PP—Power furnished from central power plant, 1 air comp., 1 pump.

No. 12 Mine, Drift, Pocahontas No. 3 Seam, 8 ft. thick.
 PO—Anawalt, W. Va.; SP—Same; CTY—McDowell, RR—N. & W., Tug Fork Branch.
 MS—A. N. Harris, Anawalt, W. Va.
 S of H—Mules and 2 elec. loco. track gauge 48 in.
 S of M—5 Elec. machines.
 PP—Power furnished from central power plant, 1 air comp., 1 pump.

S of H—Elec., track gauge 48 in.
 Not in operation. 360 Bee Hive coke ovens, charged from No. 2 Mine.

No. 2 Mine, Slope, Pocahontas No. 4 Seam, 6 ft. thick.
 PO—Garry, W. Va.; SP—Alpheus, W. Va.; CTY—McDowell; RR—N. & W., Tug Fork Branch.
 MS—A. E. Riley, Gary, W. Va.
 S of H—Mules and 5 elec. locos. Track gauge, 48 in.
 S of M—7 elec. machs.
 PP—1 air comp. and 3 pumps. Power furnished from central power plant. Coke Ovens, 350 Bee Hive.

No. 3 Mine, Drift, Pocahontas No. 4 Seam, 4 ft. 8 in. thick.
 PO—Garry, W. Va.; SP—Same; CTY—McDowell RR—N. & W., Tug Fork Branch.
 MS—J. L. Sullivan, Gary, W. Va.
 S of H—3 electric locos. and mules. Track gauge, 48 in.
 S of M—7 electric machs.
 PP—Power from central power plant, 1 air comp., 2 pumps.
 Coke Ovens, 300 Bee Hive.

Central PP—12 R. & W. Cahall water tube boilers, total 4,484 H. P., 6 generators, 4,500 K. W. capacity, 6 gen. units, 6,600 volts A. C., 3 phase, 25 cycle.
 SUPT—Everett & Woodson, Gary, W. Va.

Nos. 4 and 5 Mines, Drifts, Pocahontas No. 3 Seam, 6 ft. 3 in. to 7 ft. thick.

PO—Thorpe, W. Va.; SP—Same; CTY—McDowell RR—N. & W., Tug Fork Branch.
 MS—A. N. Harris, Thorpe, W. Va.
 S of H—Mules and 6 electric locos. Track gauge 48 in.

S of M—10 electric machs.
 PP—Power furnished from central power plant, 1 air comp., 2 pumps.
 Coke Ovens, 311 Bee Hive.

No. 6 Mine, Drift, Pocahontas No. 4 Seam, 6 ft. thick.
 PO—Garry, W. Va.; SP—Beam, W. Va.; CTY—McDowell, RR—N. & W., Tug Fork Branch.

MS—Neil Frick, Gary, W. Va.
 S of H—Mules and 5 electric locos. Track gauge, 48 in.
 S of M—9 elec. machs.
 PP—Power furnished from central power plant, 1 air comp., 3 pumps.
 Coke Ovens, 308 Bee Hive.

Nos. 7 and 8 Mines, Drifts, Pocahontas No. 4 Seam, 6 ft. thick.
 PO—Elbert, W. Va.; SP—Same; CTY—McDowell RR—N. & W., Tug Fork Branch.

MS—W. P. Kearns, Elbert, W. Va.
 S of H—Mules and 9 electric locos. Track gauge 48 in.
 S of M—12 electric machs.
 PP—Power furnished from central power plant, 1 air comp., 2 pumps.

No. 9 Mine; Drift; Pocahontas No. 4 Seam, 66 to 96 in. thick.
 PO—Elbert; SP—Same; CTY—McDowell; RR—N. & W., Tug River branch.
 MS—W. P. Kearns, Elbert, W. Va.
 S of H—8 electric locos. Track gauge 48 in.
 S of M—12 electric machs.
 PP—Power furnished from central power plant, 1 air comp., 2 pumps.

No. 10 Mine, Drift, Pocahontas No. 3 and 4, No. 3, 5 ft. 8 in. thick, and No. 4, 4 ft. 8 in. thick.
 PO—Garry, W. Va.; SP—Venus, W. Va.; CTY—McDowell, RR—N. & W., Tug Fork Branch.

MS—A. N. Harris, Thorpe, W. Va.
 S of H—Mules and 5 electric locos. Track gauge 48 in.
 S of M—10 elec. machines.
 PP—Power furnished from central power plant, 1 air comp., 1 pump.

No. 11 Mine, Drift, Pocahontas Nos. 3 and 4 Seams, No. 3, 5 ft. 6 in. thick, and No. 4, 5 ft. thick.
 PO—Thorpe, W. Va.; SP—Same; CTY—McDowell, RR—N. & W., Tug Fork Branch.

MS—A. N. Harris, Thorpe, W. Va.
 S of H—Mules and 5 electric locos. Track gauge, 48 in.
 S of M—10 electric machs.
 PP—Power furnished from central power plant, 1 air comp., 1 pump.

No. 12 Mine, Drift, Pocahontas No. 3 Seam, 8 ft. thick.
 PO—Anawalt, W. Va.; SP—Same; CTY—McDowell, RR—N. & W., Tug Fork Branch.

MS—A. N. Harris, Anawalt, W. Va.
 S of H—Mules and 2 elec. loco. track gauge 48 in.
 S of M—5 Elec. machines.
 PP—Power furnished from central power plant, 1 air comp., 1 pump.

No. 40 Mine; Shaft; Freeport S. Am. 66 in. thick.
 PO—Phillippi, W. Va.; SP—Boylon, W. Va.; CTY—Barbour; RR—B. & O.
 MS—T. J. McFarland, Phillippi, W. Va.
 S of H—Mules and 2 trolley pole type locos. Track gauge 42 in.
 S of M—3 longwall machs.
 PP—5 fire tube boilers, total 700 H. P., 2-165 K. W. gen. unit, 1-200 K. W. M. G. Set, 250 volts D. C., 5 pumps.

EMP—75. Coke Ovens, 101 Bee Hive.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens, Loading Booms.

UPLAND COAL & COKE CO.

General Office, Elkhorn, W. Va.
 PR—Lucas R. Page, Philadelphia, Pa.
 VP—Jno. P. Crozer, Upland, Pa.
 TR—Edward C. Page, Philadelphia, Pa.
 GM—John J. Lincoln, Elkhorn, W. Va.
 GS—R. A. Ruff, Elkhorn, W. Va.
 EM—Allen Ruff, Elkhorn, W. Va.
 PA—Thomas Miller, Elkhorn, W. Va.
 CE—Crozer Land Ass'n.
 EM—R. A. Nowlin, Elkhorn, W. Va.
 EE—Allen Ruff.
 SCO—Address the Company, Buyer, Thomas Miller, Elkhorn, W. Va.
 Sales Agents—Crozer Pocahontas Co., Bluefield, W. Va., and Philadelphia, Pa.

Upland No. 1 Mine, Drift Mine, Pocahontas No. 3 Seam from 7 to 9 ft. thick.

PO—Elkhorn, W. Va.; SP—Same; CTY—McDowell, RR—N. & W.
 MS—Jos. McFriedrich, Elkhorn, W. Va.
 S of H—4 elec. locos. Track gauge 44 in.
 S of M—Hand and 3 elec. machs.
 PP—5 return tubular boilers, total 550 H. P., 1 gen. unit, 500 volts D. C., 8 pumps.
 EMP—270. Annual tonnage 250,000.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Gravity and Shaker Screens.

URSULA COAL COMPANY

Now Hopke & Marsh.

VALCO COAL COMPANY.

General Office, Charleston, W. Va.
 PR—Otto J. Cox, Charleston, W. Va.
 TR—E. M. Cox, Charleston, W. Va.
 GM—E. M. Cox, Charleston, W. Va.
 GS—J. H. Carter, Charleston, W. Va.
 PA—E. M. Cox.
 EM—Hassel Miller, Madison, W. Va.
 SCO—Address the Company, Buyer, E. M. Cox, Charleston, W. Va.
 Sales Agency—Kanawha Valley Coal Co., Charleston, W. Va.

Valco Mine; Drift; Eagle Seam, 58 in. thick.
 PO—Greenville, W. Va.; SP—Same; CTY—Boone; RR—C. & O.
 SM—W. P. Bryant, Greenville, W. Va.
 S of H—Storage battery locos. Track gauge, 40 in.
 S of M—2 shortwall machs.
 PP—Power purchased, transformer 2200-250 volts A. C., M. G. sets, 250 volts D. C., 1 pump.
 EMP—35. Last years tonnage 40,000.
 SIZES SHIPT—Run of Mine, Slack, Lump, Block.
 PREP. EQUIPT—Gravity Screens.
 Old information.

VALLEY FALLS FUEL COMPANY.

General Office, 25 Church St., New York, N. Y.
 RECEIVER—H. E. Davison, Clarksburg, W. Va.
 PR—S. J. Robannan, New York, N. Y.
 VP—J. Clyde Lewis, Grafton, W. Va.
 TR—H. E. Field, New York, N. Y.
 GM—A. J. Robannan, New York, N. Y.
 CE—Homer Bros., Clarksburg, W. Va.

Valley Falls Mine; Drift; Upper and Lower Kittanning Seam, 48 to 66 in. thick.
 PO—R. D. No. 3, Grafton W. Va.; SP—Coffman, W. Va. (Prepay); CTY—Taylor; RR—B. & O., Wheeling Div.
 S of H—Mules and 1 steam loco. Track gauge, 42 in.
 S of M—4 chain breast type machs.
 PP—2 fire tube boilers, 200 H. P., 1 gen. unit, 250 volts D. C., 4 pumps.
 EMP—63. Six months tonnage 19,000.
 SIZES SHIPT—Run of Mine.

VALLEY FUEL CO.

General Office, Piedmont, W. Va.
 PR—W. S. Brydon, Philippi, W. Va.
 VP—E. Richard Brydon, Bloomington, Md.
 TR—Howard P. Brydon, Cumberland, Md.
 GM—E. Richard Brydon, Bloomington, Md.
 GS—W. S. Brydon, Philippi, W. Va.
 PA—H. K. Wood, Piedmont, W. Va.

Mt. Royal Mine; Drift; Kittanning Seam 72 in. thick.
 PO—Belington, W. Va.; SP—Same; CTY—Barbour; RR—B. & N., W. M., and B. & O.
 S of H—Elec. loco. Track gauge 42 in.
 S of M—Acrewall mach.
 PP—3 30 H. P. fire tube boilers and 2-250 H. P. water tube boilers, 1-150 K. W. gen. unit, 250 volts D. C.
 EMP—110. Daily tonnage 600.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

VAN WERT COAL COMPANY, THE

General Office, Van Wert, O.
 PR—F. O. Brattwton, Delphos, O.
 TR—C. F. Manshup, Van Wert, O.
 GM—F. O. Brattwton, Delphos, O.
 GS—B. Newburg, Lagers, W. Va.
 PA—R. B. Curry, Lagers, W. Va.
 SCO—Address the Company, Buyer, R. B. Curry, Lagers, W. Va.
 SA—The Tildesley Coal Co., Cincinnati, O.

Lone Jack Mine; Drift; Red Ash and Sewell Seams, 32 to 10 in. thick.
 PO—Lagers, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
 S of H—Mules. Track gauge 48 in.
 S of M—Hand.
 PP—1 pump.
 EMP—30.
 SIZES SHIPT—Run of Mine.
 Old information.

VANBAIL COAL COMPANY

General Office, Silush, W. Va.
 PR—D. C. Adell, Homestead, Pa.
 VP—Daniel Askey, Homestead, Pa.
 TR—J. T. Frank, Silush, W. Va.
 GM—J. T. Frank, Silush, W. Va.
 GS—John Black, Silush, W. Va.
 PA—J. T. Frank, Silush, W. Va.

Vanbail Nos. 1 & 2 Mines; Drift; No. 5 Block Seam, 54 inches thick.
 PO—Silush, W. Va.; SP—Same; CTY—Boone; RR—C. & O.
 S of H—Elec. loco. Track gauge 44 in.
 S of M—Mining machs.
 PP—Power purchased, 250 volts D. C.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump, Block.

VANCE COAL COMPANY

General Office, 1004 Finance Bldg., Philadelphia, Pa.
 PR—V. H. Burtner, Osceola Mills, Pa.
 VP—E. Burtner, Osceola Mills, Pa.
 TR—C. P. Burtner, Philadelphia, Pa.
 GM—V. H. Burtner, Osceola Mills, Pa.
 GS—T. D. Samples, Exchange, W. Va.
 PA—V. H. Burtner, Osceola Mills, Pa.
 SA—Burtner Coal Co., Philadelphia, Pa.

Venison Mine; Drift; Pittsburgh Seam, 60 in. thick.
 PO—Exchange, W. Va.; SP—Same; CTY—Braxton; RR—B. & O.
 S of H—Mules. Track gauge 42 in.
 S of M—Hand.
 EMP—25. Last years tonnage 32,000.
 SIZES SHIPT—Run of Mine.
 Note—Formerly operated by Venison Coal Co.

VAUN-BLACK COAL CO.

General Office, Morgantown, W. Va.
 PR—L. D. Vaughn, Morgantown, W. Va.
 TR—J. R. Blackburn, Morgantown, W. Va.
 GM—J. R. Blackburn, Morgantown, W. Va.
 GS—L. D. Vaughn, Morgantown, W. Va.
 PA—J. R. Blackburn, Morgantown, W. Va.
 VAUN-Black Mine; Drift; Pittsburgh Seam, 96 inches thick.
 PO—Morgantown, W. Va.; SP—Sabraton, W. Va.; CTY—Monongalia; RR—M. & K.
 MS—R. R. Boveridge, Morgantown, W. Va.
 S of H—Mules and gasoline loco.
 S of M—Hand.
 EMP—30. Daily tonnage 200.
 SIZES SHIPT—Run of Mine.
 NOTE—Formerly operated by the Hartman Run Coal Co.

VEAZEY, V. S. COAL COMPANY

General Office, Mt. Hope, W. Va.
 PR—V. S. Veazey, Mt. Hope, W. Va.
 GM—V. S. Veazey, Mt. Hope, W. Va.
 EM—Roy F. Sutton, Mardondah, W. Va.
 SA—Holly Stover Co., Chicago, Ill.

Hi Top Mine; Slope; Sewell Seam, 72 in. thick.
 PO—Mt. Hope, W. Va.; SP—Perryhale, W. Va.; CTY—Fayette; RR—C. & O.
 MS—L. A. Veazey, Glen Jean, W. Va.
 (Continued on Next Page)

Veazey, V. S. Coal Company—Cont

S of M—Hand.
PP—Power purchased. Transformer 2,200 to 220 volts A. C.
EMP—40. Daily tonnage 250.
SIZES SHIPT—Run of Mine.

VENISON COAL COMPANY
New Vane Coal Co.**VERA POCAHONTAS COAL CO., THE**

General Office, Iaeger, W. Va.
PR—S. E. Clendennen, Bluefield, W. Va.
VP—G. G. Keller, Berwind, W. Va.
TR—C. S. Bridges, Iaeger, W. Va.
GM—J. W. Strickler, Iaeger, W. Va.
GS—J. W. Strickler, Iaeger, W. Va.
PA—J. W. Strickler, Iaeger, W. Va.
EM—Harvey Williams, Welch, W. Va.
SA—Central Pocahontas Coal Co., Welch, W. Va.

Vera Pocahontas Mine; Drift; Pocahontas Red Ash Seam, 36 in. thick.
PO—Iaeger, W. Va.; SP—Same; CTY—McDowell; RR—Norfolk & Western.
S of H—Mules. Track gage 48 in.
S of M—Hand.
EMP—25. Daily tonnage 100.
SIZES SHIPT—Run of Mine.

VERNON COAL CO., INC.

PR—R. G. Bailey, Williamson, W. Va.
VP—J. B. Saunders, Williamson, W. Va.
TR—W. J. Bailey, Williamson, W. Va.
GM—R. G. Bailey, Williamson, W. Va.
GS—R. G. Bailey, Williamson, W. Va.
PA—W. J. Bailey, Williamson, W. Va.
EM—Mingo Keadle, Williamson, W. Va.
EE—Mingo Keadle, Williamson, W. Va.
SA—B. G. Bailey Coal Co., Williamson, W. Va.

Thacker Mine; Drift; Thacker Seam, 48 inches thick.
PO—Williamson, W. Va.; SP—Naugatuck, W. Va.; CTY—Mingo; RR—N. & W.
S of H—Mules. Track gage 44 inches.
S of M—Shortwall mach.
EMP—24. Daily tonnage 100.
SIZES SHIPT—Run of Mine.

VERONA COAL COMPANY

General Office, Wellsburg, W. Va.
PR—G. R. Waddell, Wellsburg, W. Va.
VP—R. Shephard, Wellsburg, W. Va.
TR—M. Chulick, Wellsburg, W. Va.
GM—G. R. Waddell, Wellsburg, W. Va.
GS—G. R. Waddell, Wellsburg, W. Va.
PA—G. R. Waddell, Wellsburg, W. Va.
EM—John Kain, Jr., Wellsburg, W. Va.
SA—M. Chulick, Wellsburg, W. Va.

No. 1 Anna and No. 2 Jean Mines; Drift; No. 8 Pittsburgh Seam, 60 inches thick.
PO—Wellsburg, W. Va.; SP—Same; CTY—Brooke; RR—P. W. Va.; P. B. R.
S of H—Mules and elec. equipment. Track gage 42 inches.
S of M—Chain breast type mach.
PP—Power purchased. 250 volts A. C. and D. C.
SIZES SHIPT—Run of Mine.

VERY TOP SEAM COAL CO., THE

General Office, Beckley, W. Va.
PR—L. M. Dorsey, Beckley, W. Va.
TR—J. B. Clinton, Beckley, W. Va.
GM—L. M. Dorsey, Beckley, W. Va.
GS—L. M. Dorsey, Beckley, W. Va.
PA—L. M. Dorsey, Beckley, W. Va.
EM—E. M. Merrill Engineering Co., Beckley, W. Va.
SA—Raleigh Smokeless Fuel Co., Beckley, W. Va.

Very Top Mine; Drift; Beckley Seam, 48 in. thick.
PO—Beckley, W. Va.; SP—Raleigh, W. Va.; CTY—Raleigh; RR—C. & O.
MS—Frank McClain, Daniels, W. Va.
S of H—Mules, 1 trolley pole type and 1 steam loco. Track gage 44 inches.
S of M—Hand.
PP—2 150 H. P. fire tube boilers, 1 150 K. W. gen. unit, 250 volts D. C., 3 pumps.
EMP—75. Last years tonnage 35,242.
SIZES SHIPT—Run of Mine.

VIACOVA SMOKELESS FUEL COMPANY

General Office, Beckley, W. Va.
PR—C. J. Scheffren, Boston, Mass.
VP—Simon Cohen, Boston, Mass.
TR—G. C. Hedrick, Beckley, W. Va.
GM—G. L. Hedrick, Beckley, W. Va.
PA—C. W. Crews, Viacova, W. Va.
EM—Fred Wilfong, Beckley, W. Va.
SA—Beckley Machine & Electric Co. Buyer, C. W. Crews, Viacova, W. Va. Sales Agency, G. C. Hedrick, Beckley, W. Va.

Viacova Mine; Drift; S-well Seam, 42 in. thick.
PO—Viacova, W. Va.; SP—Same; CTY—Raleigh; RR—C. & O., U. G. N.
MS—N. V. Rutrough, Viacova, W. Va.
S of H—5-ton loco. Track gage 44 in. S of M—1 shortwall mach.
PP—10 K. W. generator set, 250 volts D. C., 2 pumps.
EMP—30. Last years tonnage 1,360.
SIZES SHIPT—Run of Mine.

VICTORY COAL CO., THE

General Office, 822 Quinley Ave., Wooster, O.
PR—T. E. Steiner, Wooster, O.
TR—William Shantz, Orrville, O.
GM—T. E. Steiner, Wooster, O.
GS—T. N. Keener, Tunnelton, W. Va.
PA—T. N. Keener, Tunnelton, W. Va.
EM—S. R. Guesman, Tunnelton, W. Va.
SA—G. C. Blake, Cumberland, Md.

Victory Mine; Drift; Upper Freeport Seam, 60 in. thick.
PO—Tunnelton, W. Va.; SP—Same; CTY—Preston; RR—W. Va. N.
S of H—Mules. Track gage 36 inches.
S of M—Hand.
EMP—25. Last years tonnage 16,800.
SIZES SHIPT—Run of Mine.

VIEHMEIER, W. F.

General Office, P. O. Box 1501, Pittsburgh, Pa.

Mt. States Mines; Drift; Redstone Seam; 54 inches thick.
PO—Horner, W. Va.; SP—Same; CTY—Lewis; RR—B. & O.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
PP—Power purchased.
EMP—12. Last years tonnage 5,784.
SIZES SHIPT—Run of Mine.

VIRANA COAL COMPANY

General Office, 1414 Kirby Bldg., Cleveland, O.
PR—Jos. Pursglove, Cleveland, O.
VP—David Pursglove, Cleveland, O.
TR—Samuel Pursglove, Cleveland, O.
GM—S. F. Elkins, Morgantown, W. Va.
PA—Jos. Stewart, Pursglove, W. Va.
ME—James B. Benson, Pursglove, W. Va.
FE—John Fox, Pursglove, W. Va.
SCO—Pursglove Supply Company Buyer R. L. Grisswell, Pursglove, W. Va.
SA—Pursglove Coal Mining Co., Cleveland, O.

Virana Mine; Drift; Sewickley Seam, 63 in. thick.
PO—Pursglove, W. Va.; SP—Frt., Osage, W. Va.; Exp. Morgantown, W. Va.; RR—M. & W.
MS—John Fox, Pursglove, W. Va.
S of H—Mules and 1-5-ton loco. Track gage 42 in.
PP—Power purchased.
S of M—Hand.
EMP—35. Daily tonnage 300.
SIZES SHIPT—Run of Mine.
Note—Successors to the Elkins Stone Coal Co.

VIRGINIA AND PITTSBURGH COAL AND COKE COMPANY

General Office, Fairmont, W. Va.
PR—R. M. Hite, Fairmont, W. Va.
VP—Glenn F. Barnes, Fairmont, W. Va.
TR—Joseph R. Tiedall, Philadelphia, Pa.
GS—R. M. Hite, Fairmont, W. Va.
GM—R. M. Hite, Fairmont, W. Va.
PA—R. R. Hunsacker, Kingmont, W. Va.
CE—Hiram Larcw, Independence, W. Va.
EE—Arthur Jarrett, Kingmont, W. Va.
SCO—Address the Company Buyer, F. O. Hinebaugh, Kingmont, W. Va.
Additional Information on Page 1051

Kingmont Mine; Drift; Pittsburgh Seam, 84 to 108 in. thick.
PO—Fairmont, W. Va.; SP—Kingmont, W. Va.; CTY—Marion; RR—B. & O.
MF—Wm. Jarrett, Fairmont, W. Va.
S of H—Mules and 4 elec. locos. Track gage 36 in.
S of M—3 elec. machs.
PP—Power purchased, 250 volts D. C., 3 pumps.
EMP—375. Last years tonnage 375,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Bar Screens.

Morgan Mine; Drift; Pittsburgh Seam, 84 to 108 in. thick.
PO—Rivesville, W. Va.; SP—Same; CTY—Marion; RR—B. & O.
MF—James Dullin, Rivesville, W. Va.
SM—C. B. Martin, Rivesville, W. Va.
S of H—Mules and 3 elec. locos. Track gage 42 in.
S of M—9 elec. machs.
PP—Power purchased, 250 volts D. C., 4 pumps.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
PREP. EQUIPT—Bar Screens.

VIRGINIA-MARYLAND COAL CORP.

PR—Liburn T. Myers, Richmond, Va.
TR—A. P. Adams, Baltimore, Md.
GM—Irving Adams, Baltimore, Md.
PA—A. L. White, Adamston, W. Va.
EM—Horner Bros., Clarksburg, W. Va.
SCO—Address the Company Buyer, T. N. Mason, Shinnston, W. Va.
Sales Agency—S. M. Hamilton Coal Co., 104 Marine Bank Bldg., Baltimore, Md.

Willard Nos. 1, 3, 4 and 5 Mines; Drifts; Pittsburgh Seam, 72 to 102 in. thick.
PO—Adamston, W. Va.; SP—Shinnston, W. Va.; CTY—Harrison; RR—B. & O., Willard, W. Va.

MS—A. J. White, Adamston, W. Va.
S of H—3 gasoline locos. Track gage 42 in.
S of M—13 comp. air machs.
PP—Power purchased, 440 volts A. C., 250 volts D. C., 3 phase 60 cycles, 2 air compressors, 3 return tubular boilers, total 450 H. P., 8 pumps.
EMP—175. Last fiscal year output 175,000 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Screens.

VIRGINIA SMOKELESS FUEL CO.

General Office, Huntington, W. Va.
PR—W. E. Deegans, Mt. Hope, W. Va.
GM—W. E. Deegans, Mt. Hope, W. Va.
TR—J. Frank Grimet, Huntington, W. Va.
CE—Philip Konrad, Kanawha Falls, W. Va.

Shaft Mine; Pocahontas No. 3 Seam; 44 to 56 in. thick.
PO—Newest, W. Va.; SP—Same; CTY—Wyoming; RR—Virginian.
SM—N. H. Trent, Newest, W. Va.
S of H—1 storage battery loco. Track gage 44 in.
S of M—1 elec. mach.
EMP—50.
SIZES SHIPT—Run of Mine

VOLCA COAL COMPANY.

Out of business.

VULCAN COLLIERY

N. & W. R. R. Fuel Mine.
GM—Geo. Dungleison, Jr., Bluefield, W. Va.
PA—W. A. Wilson, Vulcan, W. Va.
EM—J. H. Dickerson, Vulcan, W. Va.
EE—C. E. Reed, Vulcan, W. Va.
SCO—Address the Company Buyer, D. R. Norvell, Vulcan, W. Va.

Vulcan Mine; Drift; Freeburn, Glen Alum and Thacker Seams, 66, 60, 60 in. thick.
PO—Vulcan, W. Va.; SP—Same; CTY—Pike, Ky.; RR—N. & W.
S of H—Mules, 6 trolley pole type and 2 storage battery locos. Track gage 56 1/2 in.
S of M—6 shortwall machs.
PP—Power purchased. Transformer 22000-2200 volts A. C., M. G. Sets, 275 volts D. C., 4 pumps.
EMP—120. Daily tonnage 700.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.
Note—Mine owned and entire output consumed by the Norfolk & Western Railroad.

WADDELL COAL COMPANY.

PR—George Waddell, Phillippi, W. Va.
TR—George Waddell, Phillippi, W. Va.
MS—George Waddell, Phillippi, W. Va.
PA—A. G. Waddell, Phillippi, W. Va.

Humphreys No. 1 Mine; Drift; Upper Freeport Seam; 48 to 60 in. thick.
PO—Phillippi, W. Va.; SP—Same; CTY—Barbour; RR—B. & O.
S of H—2 elec. locos. Track gage 36 in.
S of M—3 elec. machs.
PP—2 return tubular boilers, total 200 H. P., 1 gen. unit, 250 volts D. C.
EMP—75. Last fiscal year output 50,000 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
Old information.

WAKE FOREST MINING CO.

PR—J. C. Grymes, Wake Forest, W. Va.
VP—J. R. Thomas, Charleston, W. Va.
TR—J. C. Grymes, Wake Forest, W. Va.
GM—J. C. Grymes, Wake Forest, W. Va.
GS—J. C. Grymes, Wake Forest, W. Va.
SA—Sales Agency—Carbon Fuel Co., Cincinnati, O.

Wake Forest Mine; Drift; No. 2 Kanawha, No. 2 Gas Seam, 54 to 78 in. thick.

PO—Wake Forest, W. Va. SP—Same. CTY—Kanawha. RR—C. & O.
SM—R. D. Jones, Wake Forest, W. Va.
S of H—Mules and 2 Elec. loco.; track gage 42 in.
S of M—Hand.
PP—2 Return tubular boilers, total 150 H. P., 1 gen. unit, 500 volts D. C., 3 pumps.
EMP—70. Last fiscal year output, 56,000 tons.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Bar Screens.

WALKER COAL CO.

Riverview, W. Va.

No. 2 Mine; CTY—Kanawha

No report.

WALNUT HILL FUEL COMPANY

General Office, Vaughan, W. Va.
GS—G. C. Backus, Vaughan, W. Va.
PA—G. C. Backus, Vaughan, W. Va.
Sales Agency—Kanawha Valley Coal Co., Charleston, W. Va.

Walnut Hill Mine; Drift; Little Eagle Seam, 36 in. thick.

PO—Vaughan, W. Va.; SP—Same; CTY—Nicholas; RR—C. & O., Gauley Branch.
S of H—Mules and rope. Track gage, 40 in.
S of M—Hand.
PP—1 fire tube boiler, 12 H. P.
EMP—20.
SIZES SHIPT—Run of Mine.
Old information.

WAR CREEK COAL COMPANY

General Office, Yukon, W. Va.
PR—W. F. Harmon, Tazewell, Va.
TR—W. T. Gillespie, Tazewell, Va.
GM—A. M. Harman, War, W. Va.
GS—M. Hatmaker, War, W. Va.
PA—A. M. Harman, War, W. Va.
EM—H. A. Kiser, War, W. Va.
SCO—War Creek Supply Co., Buyer, J. W. Vernon, War, W. Va.
SA—Fort Dearborn Coal & Export Co., Norfolk, W. Va.

Additional Information on Page 998

War Creek Mine; Drift; War Creek Seam, 48 in. thick.
PO—War, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
S of H—Mules, trolley pole type loco. Track gage 48 in.
S of M—2 cutting machs. and 1 drill.
PP—Power purchased. Gen. units, 250 volts D. C., 1 pump.
EMP—45. Daily tonnage 200.
SIZES SHIPT—Run of Mine, Lump.
PREP. EQUIPT—Bar Screens.

WAR EAGLE COAL CO.

General Office, War Eagle, W. Va.
PR—Geo. W. Coffey, War Eagle, W. Va.
VP—W. R. Hurst, Williamson, W. Va.
TR—Alex. Bishop, Williamson, W. Va.
GM—Geo. W. Coffey, War Eagle, W. Va.
GS—G. W. Coffey, War Eagle, W. Va.
PA—Geo. W. Coffey, War Eagle, W. Va.
CE—D. M. Good, Williamson, W. Va.
EE—M. F. Stone, War Eagle, W. Va.
SCO—Address the Company Buyer, Geo. W. Coffey, War Eagle, W. Va.
SA—Bluefield Coal & Coke Co., Bluefield, W. Va.

War Eagle, Traders and Pappose Mines; Drift; War Eagle Nos. 1 and 2 Seams, 60 in. thick.
PO—War Eagle, W. Va. SP—Same (Prepay); CTY—Mingo; RR—N. & W.
S of H—Mules and elec. motors. Track gage 44 in.
S of M—8 comp. air punchers and 3 shortwall machs.
PP—Power purchased. Transformer 2,300 volts A. C., M. G. set, 150 volts D. C., 9 fire tube boilers, 1,200 H. P.
EMP—300. Last years tonnage 147,000.
SIZES SHIPT—Run of Mine.

WARD POCAHONTAS COAL CO.

General Office, Iaeger, W. Va.
PR—T. A. Lambert, Welch, W. Va.
VP—J. Logan Hill, Welch, W. Va.
TR—J. W. Johnson, Iaeger, W. Va.
GS—S. E. Ward, Iaeger, W. Va.
PA—S. E. Ward, Iaeger, W. Va.
EM—G. J. Cooper, Welch, W. Va.
SCO—Lone Jack Supply Co., Buyer, W. T. Vass, Iaeger, W. Va.

Ward Pocahontas Mine; Drift; Red Ash & Iaeger Seam, 36 in. thick.
PO—Iaeger, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
S of H—Mules. Track gage 48 in.
S of M—Hand.
EMP—30.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.

WARFIELD COAL CO.

Kermit, W. Va.

No. 1 Mine; CTY—Mingo.

No report.

WARNER BLOCK COAL COMPANY.

Now operated by Morrisvale Coal Co.

WARNER COLLIERIES COMPANY

General Office, Union Commerce Natl. Bank Bldg., Cleveland, O.
PR—W. H. Warner, Cleveland, O.
VP—W. H. Warner, Cleveland, O.
TR—Whitney Warner, Cleveland, O.
PA—F. A. Needham, Cleveland, O.
GM—E. L. Thrower, Cleveland, O.
EM—E. L. Thrower, Cleveland, O.
SA—W. H. Warner & Co., Cleveland, O.

Nina Mine; Drift; Pittsburgh Seam, 84 in. thick.
PO—Morgantown, W. Va.; SP—Maidsville, W. Va.; CTY—Monongalia; RR—Monongalia.
S of H—Mules, trolley pole locos. Track gage 44 in.
S of M—3 shortwall machs.
PP—Power purchased, 250 volts D. C.
EMP—175. Last years tonnage 75,000.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.
Note—Formerly operated by Har-Mar Coal Co.

WARNICK COAL COMPANY

General Office, Barnum, W. Va.
PR—Harley L. Warnick, Barnum, W. Va.
TR—Harley L. Warnick, Barnum, W. Va.
SA—Big Vein Coal Co., Cumberland, Va.

Warnick Mine; Drift; Split Six Seam, 60 inches thick.
PO—Barnum, W. Va.; SP—Same; CTY—Mineral; RR—W. Md.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
Last years tonnage 71,877.
SIZES SHIPT—Run of Mine.

WARRICK, G. W.

Cassville, W. Va.
Moser Mine; CTY—Monongalia.
No report.

WARRICK COAL COMPANY

General Office, War, W. Va.
PR—H. E. Harman, Tazewell, Va.
VP—J. T. Wilson, Bluefield, W. Va.
TR—G. D. Davidson, War, W. Va.
GM—H. E. Harman, Tazewell, Va.
GS—G. D. Davidson, War, W. Va.
PA—H. D. Bryant, War, W. Va.
EM—H. A. Kiser, War, W. Va.
EJ—Geo. W. Moody, War, W. Va.
SCO—Address the Company, Buyer, H. D. Bryant, War, W. Va.
Sales Agency—Norfolk and Chesapeake Coal Co., Detroit, Mich.

Warrior Mine; Drift; Beckley or War Creek Seam, 60 to 84 in. thick.
PO—War, W. Va.; SP—Same; CTY—McDowell; RR—N. & W., Dry Fork Branch.
S of H—8 6-ton gathering motors and 1 10-ton gathering motor. Track S of M—4 electric machs. gage 48 inches.
PP—Power purchased from Appalachian Power Co. 2—150 M. G. Sets, 250 volts D. C., 3 pumps.
EMP—200. Last years tonnage 190,000.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

WASHINGTON IRVING COAL CO.

Clarksburg, W. Va.
Wilbert Mine; CTY—Harrison.
No report.

WASHINGTON PIKE COAL COMPANY

General Office, 97 Eighth St., Wellsburg, W. Va.
PR—Marlin P. Duffy, 1305 Commerce St., Wellsburg, W. Va.
TR—John W. Duffy, Main St., Wellsburg, W. Va.
GM—Ed. A. Duffy, 712 High St., Wellsburg, W. Va.
GS—Ed. A. Duffy, 712 High St., Wellsburg, W. Va.
PA—B. F. Fitchett, Wellsburg, W. Va.
EM—W. Balde, Wellsburg, W. Va.
Washington Pike Mine; Drift; Pittsburgh No. 8 Seam, 72 inches thick.
PO—Wellsburg, W. Va.; SP—Same; CTY—Brooke; RR—Penn., P. K. & W. Br.
S of H—Mules and rope. Track gage 38 in.
S of M—1 shortwall mach.
PP—Power purchased. Transformer 220 volts A. C., 2 pumps.
EMP—24. Last years tonnage 20,000.
SIZES SHIPT—Run of Mine, Slack, Lump.

WATSON, ALEX. B.

General Office, Fairmont, W. Va.
Volga Mine.
PO—Volga, W. Va.; CTY—Barbour; RR—M. & O.
No report.

WEBB COAL MINING CO.

General Office, First Natl. Bank Bldg., Cincinnati, O.
PR—L. M. Webb, Cincinnati, O.
VP—E. H. Shonk, Cincinnati, O.
TR—L. M. Webb, Cincinnati, O.
GM—John Holmes, Garrison, W. Va.
EM—Clark & Krebs, Charleston, W. Va.
SCO—Address the Company; Buyer, J. T. Holmes, Garrison, W. Va.
Sales Agency, The Webb Fuel Co., Cincinnati, O.

Webb Mine; Drift; Coalburg Seam, 80 to 98 in. thick.
PO—Garrison, W. Va.; SP—Ferndale, W. Va.; CTY—Roone; RR—C. & O., Cabin Creek Br.
S of H—Trolley pole type loco. Track gage 42 in.
S of M—5 chain breast type and 3 longwall machs.
PP—Power purchased from Virginian Power Co., M. G. set, 200 K. W., 3 pumps.
EMP—150. Last years tonnage 125,000.
SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

WEEVINN COAL COMPANY

PR—H. P. Thomas, Newlyn, W. Va.
GM—H. P. Thomas, " "

GS—H. P. Thomas, " "
TR—E. A. Thomas, " "
PA—E. A. Thomas, " "
VP—P. H. Henry, Cincinnati, O.
EM—Philip Konrad, Kanawha Falls, W. Va.
SCO—Buyer, E. A. Thomas, Newlyn, W. Va.
Weewinn Mine; Drift; Fire Creek Seam, 54 in. thick.
PO—Newlyn, W. Va.; SP—Thurmond, W. Va.; CTY—Fayette; RR—C. & O., South Side Br.
S of H—Mules. Track gage 42 in.
S of M—Hand.
EMP—15.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Revolving Screens.
Old information.

WEIRICH, J. H., COAL CO.

General Office, Kingwood, W. Va.
Weirich Mine.
PO—Kingwood, W. Va.; CTY—Preston; RR—W. Va. Northern.
No report.

WEST FORK COAL COMPANY

General Office, Fairmont, W. Va.
PR—W. D. Evans, Fairmont, W. Va.
VP—L. D. Perry, Harrisburg, Pa.
TR—B. F. Evans, Fairmont, W. Va.
GM—B. F. Evans, Fairmont, W. Va.
PA—B. F. Evans, Fairmont, W. Va.
EM—Straight & McClure, Fairmont, W. Va.
SA—West Virginia Fuel Co., Fairmont, W. Va.
Central Mine; Drift; Pittsburgh Seam, 108 in. thick.
PO—Fairmont, W. Va.; SP—Monongah. W. Va.; CTY—Marion; RR—B. & O.
MS—H. L. Ice, Enterprise, W. Va.
S of H—Mules. Track gage 42 in.
S of M—Hand.
PP—Power purchased, 220 volts A. C., 1 pump.
EMP—20. Last fiscal year output, 26,296 tons.
SIZES SHIPT—Run of Mine.

WEST JUNIOR COAL CO.

General Office, Junior, W. Va.
West Junior Mine.
PO—Junior, W. Va.; CTY—Barbour; RR—W. M.
No report.

WEST PITTSBURGH COAL COMPANY

General Office, Box 1082, Charleston, W. Va.
PR—W. S. Hallmann, Charleston, W. Va.
VP—Wm. York, Williamson, W. Va.
TR—A. B. York, Charleston, W. Va.
GM—A. B. York, Charleston, W. Va.
GS—A. B. York, Charleston, W. Va.
PA—A. B. York, Charleston, W. Va.
EM—B. M. Green, Charleston, W. Va.
SCO—Address the Company, Buyer, A. B. York, Charleston, W. Va.
SA—Logan & Kan. Coal Co., Cincinnati, O.; S. J. Patterson, Dayton, O.

Braxton Mine; Drift; Pittsburgh Seam; 78 to 132 inches thick.
PO—Braxton, W. Va.; SP—Catlip, W. Va.; CTY—Braxton.
MS—P. S. York, Braxton, W. Va.
S of H—Mules. Track gage 42 inches.
S of M—6 punchers.
PP—1 boiler, 150 H. P., air compressor, 150 lb. pressure, 4 pumps.
EMP—50. Last years tonnage 65,000.
SIZES SHIPT—Run of Mine, Nut.

WEST VIRGINIA & PENNSYLVANIA COAL & COKE COMPANY

General Office, Buckhannon, W. Va.
PR—Gustave Quertinmont, Buckhannon, W. Va.
VP—Edgar J. Quertinmont, Buckhannon, W. Va.
TR—O. S. Talbott, Buckhannon, W. Va.
GM—A. M. Miner, Buckhannon, W. Va.
GS—Geo. A. Quertinmont, Buckhannon, W. Va.
PA—George A. Quertinmont, Buckhannon, W. Va.
EM—R. S. Tillson, Buckhannon, W. Va.
Adam Post Mine; Drift; Bedstone Seam; 64 inches thick.
PO—Buckhannon, W. Va.; SP—Pecks Run, W. Va.; CTY—Upshur; RR—B. & O.
MS—A. M. Miner, Buckhannon, W. Va.
S of H—Gasoline loco. Track gage 42 inches.
S of M—Hand.
SIZES SHIPT—Run of Mine.
Iris Mine; Drift; Redstone Seam, 60 in thick.
PO—Buckhannon, W. Va.; SP—Pecks Run, W. Va.; CTY—Upshur; RR—B. & O.
MS—A. M. Miner, Buckhannon, W. Va.
S of H—1 6-ton gasoline motor. Track gage 42 in.
S of M—Hand.
EMP—40.
SIZES SHIPT—Run of Mine.
NOTE—New Mine.

WEST VIRGINIA BY-PRODUCT COAL CO.

PR—Alex. Bishop, Williamson, W. Va.
TR—W. P. T. Varney, " "
VP—J. B. Smith, " "
GM—W. P. T. Varney, Williamson, W. Va.
PA—W. P. T. Varney, Williamson, W. Va.
Drift Mine; 38 to 44 in. thick.
PO—Williamson, W. Va.; SP—Leckeeville, Ky.; CTY—Mingo; RR—Williamson & Pond Creek.
MS—R. H. Satterfield, Williamson, W. Va.
EMP—30.
SIZES SHIPT—Run of Mine.
Old information.

WEST VIRGINIA COAL AND COKE CO

General Office, Elkins, W. Va.
PR—E. Drennon, Elkins, W. Va.
TR—W. E. Decker, 113 Liberty St., New York, N. Y.
GM—J. W. Bischoff, Elkins, W. Va.
GS—C. L. Chapman, Elkins, W. Va.
PA—Leonard Everett, Elkins, W. Va.
EM—G. B. Southward, Elkins, W. Va.
SCO—Junior Merc. Co. Buyer, E. W. Ziller, Elkins, W. Va.
Coalton No. 1 Mine; Drift; Kittanning Seam, 84 in. thick.
PO—Coalton, W. Va.; SP—Same; CTY—Randolph; RR—B. & O.
MS—Jos. Hoylman, Coalton, W. Va.
SM—J. B. Shreeve, Coalton, W. Va.
S of H—Mules and 5 trolley pole type locos. Track gage 42 inches.
S of M—3 arewall machs.
PP—6 150 H. P. fire tube boilers, 2—250 K. W. gen. units, 500 volts D. C., 10 pumps.
EMP—168. Last years tonnage 185,842.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Loading Booms, Picking Tables.

Norton No. 2 Mine; Drift; Kittanning Seam, 84 in. thick.
PO—Norton, W. Va.; SP—Same; CTY—Randolph; RR—B. & O.
MS—W. S. Wilson, Norton, W. Va.
SM—W. H. Bowers, Norton, W. Va.
S of H—Mules, 3 trolley pole type and 3 storage battery locos. Track gage 42 in.
S of M—1 shortwall and 4 overhead cutter machs.
PP—Power from Mine No. 3, 500 volts D. C., 6 pumps.
EMP—252. Last years tonnage 325,662.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Gravity Screens.
Harding No. 3 Mine; Drift; Kittanning Seam, 72 in. thick.
PO—Harding, W. Va.; SP—Norton, W. Va.; CTY—Randolph; RR—Western Maryland.
MS—A. C. Davis, Harding, W. Va.
SM—H. H. Howell, Harding, W. Va.
S of H—Mules, 2 trolley pole type and 2 storage battery locos. Track gage 45 in.
S of M—3 shortwall machs.
PP—3 150 H. P. fire tube boilers, 1—250 K. W. and 2—150 K. W. gen. units, 500 volts D. C., 6 pumps.
EMP—105. Last years tonnage 86,126.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Gravity Screens.

Junior No. 4 Mine; Slope; Kittanning Seam, 60 in. thick.
PO—Junior, W. Va.; SP—Same; CTY—Barbour; RR—W. Md.
MS—J. W. Holt, Junior, W. Va.
S of H—1 electric loco. Track gage 42 inches.
S of M—2 shortwall machs.
PP—Power from No. 3 Mine, 500 volts D. C., 4 pumps.
EMP—90. Last years tonnage 71,046.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

Mable No. 6 Mine; Drift; Kittanning Seam, 108 to 120 in. thick.
PO—Mable, W. Va.; SP—Coalton, W. Va.; CTY—Randolph; RR—B. & O.
MS—Isaac Isner, Mable, W. Va.
SM—E. Miller, Mable, W. Va.
S of H—Mules and 2 trolley pole type locos. Track gage 42 in.
S of M—Hand.
PP—Power purchased, 500 volts D. C., 2 pumps.
EMP—67. Last years tonnage 106,570.
SIZES SHIPT—Run of Mine.

Bower No. 10 Mine; Drift; Pittsburgh No. 8 Seam, 72 to 84 in. thick.
PO—Bower, W. Va.; SP—Same; CTY—Braxton; RR—B. & O.
MS—Jno. T. Fallon, Bower, W. Va.
S of H—Mules, 4 trolley pole type and 2 storage battery locos. Track gage 42 in.
SM—L. W. Skidmore, Bower, W. Va.
S of M—5 chain breast type and 7 shortwall machs.
PP—3 150 H. P. fire tube boilers, 2—150 K. W. gen. units, 500 volts D. C., 16 pumps.

EMP—178. Last years tonnage 79,120.
SIZES SHIPT—Run of Mine, Slack, Nut, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

Copen No. 11 Mine; Drift; Pittsburgh No. 8 Seam, 72 to 84 in. thick.
PO—Bower, W. Va.; SP—Same; CTY—Braxton; RR—B. & O.
MS—Jno. T. Fallon, Bower, W. Va.
SM—L. W. Skidmore, Bower, W. Va.
S of H—Mules and 1 trolley pole type loco. Track gage 42 in.
S of M—Hand.
PP—Power purchased, 500 volts D. C., 2 pumps.
EMP—13. Last years tonnage 9,872.
SIZES SHIPT—Run of Mine, Slack, Nut, Block.
PREP. EQUIPT—Shaker Screens, Loading Booms.

Coal Station No. 5 Mine; Drift; Kittanning Seam, 78 in. thick.
PO—Norton, W. Va.; SP—Same; CTY—Randolph; RR—B. & O.
MS—W. S. Wilson, Norton, W. Va.
SM—W. H. Bowers, Norton, W. Va.
S of H—Mules. Track gage 42 in.
S of M—Hand.
EMP—7. Last years tonnage 9,710.
SIZES SHIPT—Run of Mine.
Arlana No. 7 Mine; Drift; Kittanning Seam, 108 to 120 in. thick.
PO—Mable, W. Va.; SP—Coalton, W. Va.; CTY—Randolph; RR—B. & O.
MS—Isaac Isner, Mable, W. Va.
SM—Emmert Miller, Mable, W. Va.
S of H—Mules and 1 trolley pole type loco. Track gage 42 in.
S of M—Hand.
PP—Power purchased, 500 volts D. C., 1 pump.
EMP—43. Last years tonnage 45,722.
SIZES SHIPT—Run of Mine.
Note—Formerly operated by J. R. Jenkins Coal & Coke Co.
Drennon No. 12 Mine; Drift; Pittsburgh Seam, 72 in. thick.
PO—Bower, W. Va.; SP—Same; CTY—Braxton; RR—B. & O.
MS—Jno. T. Fallon, Bower, W. Va.
SM—L. W. Skidmore, Bower, W. Va.
S of H—Mules and 1 trolley pole type loco. Track gage 42 in.
S of M—2 shortwall machs.
PP—Power purchased, 500 volts D. C., 1 pump.
EMP—42. Last years tonnage 51,302.
SIZES SHIPT—Run of Mine, Slack, Nut, Block.
PREP. EQUIPT—Gravity Screens.

WEST VIRGINIA COAL & MFG. CO.

General Office, Box 204, Charleston, W. Va.
PR—Arthur L. Sheldon, Charleston, W. Va.
TR—F. S. Fisher, Charleston, W. Va.
GM—Arthur L. Sheldon, " "
GS—W. E. McCombs, Cedar Grove, W. Va.
EM—Arthur L. Sheldon, " "
PA—Arthur L. Sheldon, " "
EM—Arthur L. Sheldon, Charleston, W. Va.
EE—Nathan Hudnall, Glasgow, W. Va.

Cedar Grove No. 1 Mine; Drift; No. 2 Gas Seam, 42 in. thick.
PO—Cedar Grove, W. Va.; SP—Same; CTY—Kanawha; RR—K. & M.
MS—W. E. McCombs, Cedar Grove, W. Va.
S of H—1 storage battery loco. Track gage 44 in.
S of M—1 shortwall mach.
PP—Power purchased. Transformer 2200 to 220 volts A. C., 1—100 K. W. gen. units, 250 volts D. C.
EMP—12. Last fiscal year output, 5,000 tons.
SIZES SHIPT—Run of Mine.

WEST VIRGINIA COAL COMPANY, THE

General Office, Richmond, Va.
PR—E. S. Simpson, Richmond, Va.
VP—L. E. Arnett, Richmond, Va.
TR—M. L. Norvell, Richmond, Va.
GM—M. L. Moon, Richmond, Va.
GS—C. A. Brockman, Charleston, W. Va.
EM—Harold E. Wilson, Thurmond, W. Va.
SCO—Address the Company, Buyer, C. R. Wilson, Stone Cliff, W. Va.
Stone Cliff Mine; Drift; Fire Creek Seam, 36 to 48 inches thick.
PO—Stone Cliff, W. Va.; SP—Same; CTY—Fayette; RR—C. & O.
S of H—Mules, 3 elec. locos. Track gage 44 in.
S of M—Hand.
PP—2—125 H. P. water tube boilers, 1—200 H. P. engine, 1—150 K. W. generator, 500 volts D. C., 2 pumps.
EMP—40. Daily tonnage 150.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
PREP. EQUIPT—Gravity Screens.
Note—Formerly operated by The Stone Cliff Coal & Coke Co.

WEST VIRGINIAN COAL MINING CO.
out of business

W. VA. EAGLE COAL COMPANY

General Office, Charleston, W. Va.
 PR—W. G. Conley, Charleston, W. Va.
 VP—L. S. Tully, Mount Hope, W. Va.
 GM—J. R. Charlton, Charleston, W. Va.
 US—G. H. Thomas, Boncar, W. Va.
 PA—J. R. Charlton, Charleston, W. Va.
 EM—N. P. Blinchart, Mount Hope, W. Va.
 SC—Address the Company, Buyer, W. O. Caldwell, Boncar, W. Va.
 SA—Coalfield Fuel Co., Charleston, W. Va.
 Additional Information on Page 989
 Nos. 1 and 2 Mines; Drift; Eagle, No. 2 Gas Seams, 102-54 in. thick.
 PO—Boncar, W. Va.; SP—Same; CTY—Fayette; RR—K. & M.
 S of H—2 elec. and 1 storage battery locos. Track gage 44 in.
 S of M—Shortwall machs.
 PP—Power purchased, Transformer 2200 to 250 volts A. C., M. G. S. ts, 250 volts D. C.
 EMP—100. Last years tonnage 43,000
 SIZES SHIPT—Run of Mine, Slack, Lump
 PREP. EQUIPT—Bar Screens

WEST VIRGINIA MINING CO.

General Office, Skelton, W. Va.
 Griffith Mine.
 PO—Skelton, W. Va.; CTY—Raleigh; RR—C. & O.
 No report.

WEST VIRGINIA PITTSBURGH COAL CO.

General Office, Cleveland, O.
 PR—F. W. Paine, Boston, Mass.
 TR—U. C. Hatch, Cleveland, O.
 GM—A. W. Dean, Cleveland, O.
 GS—O. J. Keyes, Wellsburg, W. Va.
 PA—D. N. Snetsinger, Cleveland, O.
 CE—R. J. Bryan, Martins Ferry, O.
 EM—H. J. Watson, Wellsburg, W. Va.
 EE—Wm. Kinney, Wellsburg, W. Va.
 SC—Colliers Merc. Co. Buyer, H. K. Nethkin, Pittsburgh, Pa.
 Sales Agency—Pittsburgh and Ohio Mining Co., Cleveland, O.
 Locust Grove Mine; Drift; Pittsburgh No. 8 Seam, 54 to 58 inches thick.
 PO—Colliers, W. Va.; SP—Same; CTY—Brooke; RR—P. C. & St. L.
 MS—Thos. Mitchell, Colliers, W. Va.
 S of H—7 trolley pole type locos. Track gage 42 inches.
 S of M—5 chain breast type and 12 shortwall machs.
 PP—Power purchased, Transformer 25000 to 2200 volts A. C., 3—200 K. W. M. G. S. ts, 20 pumps.
 EMP—350. Last year tonnage 350,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity and Shaker Screens, Picking Tables, Loading Booms.
 Gilechrist No. 3 Mine; Drift; Pittsburgh Seam, 54 to 66 in. thick.
 PO—Wellsburg, W. Va.; SP—Same; CTY—Brooke; RR—P. W. K.
 MS—John Mathia, Wellsburg, W. Va.
 S of H—1 elec. loco. Track gage 40 in.
 S of M—2 chain breast type and 8 shortwall machs.
 PP—Power purchased, Transformer 25,000 to 2,200 volts A. C., 1—150 K. W. and 1—200 K. W. M. G. S. ts, 250 volts D. C., 10 pumps.
 EMP—170. Last years tonnage 112,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.
 La Belle No. 4 Mine; Drift; Pittsburgh No. 8 Seam, 54 to 56 inches thick.
 PO—Wellsburg, W. Va.; SP—Same; CTY—Brooke; RR—P. W. K.
 S of H—2 elec. locos. Track gage 42 in.
 S of M—4 chain breast type and 8 shortwall machs.
 PP—Power purchased, Transformer 25,000 to 2,200 volts A. C., 1—200 K. W. M. G. S. ts, 500 volts D. C., 10 pumps.
 EMP—180. Last years tonnage 142,000.
 SIZES SHIPT—Run of Mine, Slack, Lump.
 PREP. EQUIPT—Gravity Screens.

WEST VIRGINIA POCAHONTAS COAL CO.

General Office, Welch, W. Va.
 PR—Wm. Leckie, Welch, W. Va.
 TR—A. E. Jennings, Welch, W. Va.
 GM—Wm. Leckie, Welch, W. Va.
 GS—Robt. Smith, Leckie, W. Va.
 EM—Geo. W. Leckie, Welch, W. Va.
 SC—Address the Company, Buyer, R. H. Whittaker, Leckie, W. Va.
 Leckie Nos. 1 and 2 Mines; Drift; Pocahontas No. 3 Seam, 90 to 100 in. thick.
 PO—Leckie, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
 S of H—1 electric loco, mules and hoists. Track gage 36 in.
 S of M—2 electric machs.
 PP—Power purchased, 2 gen. units, 250 volts, 1 pump.
 EMP—16.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Bar Screens.
 Old information.

WEST VIRGINIA RAIL & RIVER COAL CO.

Now Reilly Coal Co.
 COAL CATALOG

WEST VIRGINIA WHITE ASH COAL CO.

Now Royal White Ash Coal Company.
WEST WILLIAMSON COAL CO.
 General Office, Williamson, W. Va.
 PR—A. S. Waugh, Williamson, W. Va.
 VP—A. N. Hawlen, Williamson, W. Va.
 TR—M. R. Waugh, Williamson, W. Va.
 GM—G. S. Waugh, Williamson, W. Va.
 GS—C. S. Waugh, Williamson, W. Va.
 PA—C. S. Waugh, Williamson, W. Va.
 EM—D. M. Good, Williamson, W. Va.
 SC—Address the Company, Buyer, A. N. Hawlen, Williamson, W. Va.
 SA—Greg Valley Fuel Co., Williamson, W. Va.
 Tunnel Mine; Drift; Thacker Seam, 51 in. thick.
 PO—Williamson, W. Va.; SP—Same; CTY—Mingo; RR—N. & W.
 Mules, endless rope. Track gage 36 in.
 S of M—Hand.
 EMP—30. Last years tonnage 6,000
 SIZES SHIPT—Run of Mine.

WESTERN MARYLAND COAL CO.

Blaine, W. Va.
 Freeport and Kittanning Mines; CTY—Mineral. No report.

WESTERN POCAHONTAS FUEL COMPANY.

Now the C. & O. Ry. Fuel Co.

WESTON FUEL COMPANY

General Office, 412 Professional Bldg., Fairmont, W. Va.
 PR—G. B. Hartley, Fairmont, W. Va.
 VP—R. B. Satterfield, Fairmont, W. Va.
 TR—T. W. Powell, Fairmont, W. Va.
 GM—G. B. Hartley, Fairmont, W. Va.
 GS—A. Hartley, Morgantown, W. Va.
 PA—T. W. Powell, Fairmont, W. Va.
 EM—A. Hartley, Morgantown, W. Va.
 SA—B. Nicoll & Company, 149 Broadway, New York, N. Y.
 Homer Mine; Drift; Redstone Seam, 60 in. thick.
 PO—Weston, W. Va.; SP—Same; CTY—Lewis; RR—B. & O., Pilekens Br.
 MS—W. J. Madill, Weston, W. Va.
 S of H—Mules. Track gage 42 inches.
 S of M—1 shortwall machs.
 PP—Power purchased, 220 volts A. C., 1 pump.
 EMP—25. Daily tonnage 150.
 SIZES SHIPT—Run of Mine.

WET BRANCH MINING COMPANY

General Office, Charleston, W. Va.
 PR—J. P. Cameron, 2218 Farmers Bank Bldg., Pittsburgh, Pa.
 TR—L. F. Crawford, 2218 Farmers Bank Bldg., Pittsburgh, Pa.
 GM—Wm. Farrell, Dry Branch, W. Va.
 PA—J. E. Hieserman, 209 Union Trust Bldg., Charleston, W. Va.
 CE—R. M. Green, Charleston, W. Va.
 EM—R. D. Miller, Dry Branch, W. Va.
 SC—Address the company, Buyer, Geo. Slack, Dry Branch, W. Va.
 SA—J. E. Hieserman, 209 Union Trust Bldg., Charleston, W. Va.
 Wet Branch Nos. 1, 2 & 3 Mines; Drift; Peerless, Belmont and Coalburg Seams, 38-60 inches thick.
 PO—Dry Branch, W. Va.; SP—Same; CTY—Kanawha; RR—C. & O.
 MS—C. O. Hudson, Dry Branch, W. Va.
 S of H—10 elec. locos. Track gage 44 inches.
 S of M—10 elec. machs.
 PP—Power purchased, 2—100 K. W. gen. units and 1—200 K. W. gen. unit, 250 volts D. C., 3 pumps.
 EMP—150. Daily tonnage 1,000.
 SIZES SHIPT—Run of Mine, Slack.
 PREP. EQUIPT—Running Screens.
 Old information.

WEYANOKO COAL & COKE CO.

General Office, Dayton, O.
 PR—R. D. Patterson, Lowe, W. Va.
 VP—R. L. McKee, Chicago, Ill.
 TR—H. J. Dreese, Dayton, O.
 GM—R. D. Patterson, Lowe, W. Va.
 GS—E. S. McCorkle, Lowe, W. Va.
 PA—E. S. McCorkle, Lowe, W. Va.
 EM—D. R. Cruikshank, Lowe, W. Va.
 EE—L. T. Williams, Lowe, W. Va.
 SC—Address the Company, Buyer, C. L. Leeds, Lowe, W. Va.
 Sales Agency—J. Patterson Co., Dayton, O.
 Weyanoke Mine; Drift; Pocahontas No. 3 Seam, 54 in. thick.
 PO—Lowe, W. Va.; SP—Weyanoke, W. Va.; CTY—Mercer; RR—Virginian Ry., Widemouth Branch, N. & W.
 S of H—9 trolley pole type locos. Track gage, 56½ in.
 S of M—6 overhead cutter machs.
 PP—2 fire tube boilers, 300 H. P., M. G. S. ts, 300 K. W., 250 volts D. C., 11 pumps.
 EMP—230. Last fiscal year output, 260,000 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

WHEELING QUALITY COAL CO.

General Office, R. P. D. No. 4, Wheeling, W. Va.
 PR—Otto Schenk, Wheeling, W. Va.

VP—D. Henderson, Wheeling, W. Va.
 TR—H. Campbell, Wheeling, W. Va.
 GM—J. F. Gebhart, Wheeling, W. Va.
 PA—J. F. Gebhart, Wheeling, W. Va.
 CE—O. Kohler, Wheeling, W. Va.
 EG—Louis Freismuth, Wheeling, W. Va.
 SC—Address the Company, Buyer, J. F. Gebhart, Wheeling, W. Va.
 "Country Club" Mine; Drift; No. 8 Seam, 60 inches thick.
 PO—Wheeling, W. Va.; SP—Same, R. F. D. No. 4; CTY—Ohio; RR—B. & O.
 MS—Mat Anderson, Wheeling, W. Va.
 S of H—Mules and elec. hoist. Track gage 42 in.
 S of M—Shortwall machs.
 PP—220 volts A. C., 1 pump
 EMP—40. Daily tonnage 200.
 SIZES SHIPT—Run of Mine, Slack.
 PREP. EQUIPT—Bar Screens.

WHEELING STEEL AND IRON CO.

General Office, Wheeling, W. Va.
 PR—John Duncan, Wheeling, W. Va.
 VP—C. J. Hunter, Wheeling, W. Va.
 TR—C. J. Hunter, Wheeling, W. Va.
 GS—J. W. Carpenter, Wheeling, W. Va.
 TRAFFIC MGR.—W. H. Higgins, Wheeling, W. Va.
 PA—Chas. Meishans, Wheeling, W. Va.
 CE—C. C. Smith, Wheeling, W. Va.
 EE—C. E. Bedell, Wheeling, W. Va.
 Renwood Mill Mine; Drift; Pittsburgh No. 8 Seam, 66 to 72 in. thick.
 PO—Renwood, W. Va.; SP—Renwood, W. Va.; CTY—Marshall; RR—B. & O., P. C. & St. L.
 MS—Geo. W. Gehrs, Wheeling, W. Va.
 S of H—8 elec. locos. Track gage 42 in.
 S of M—6 elec. machs.
 PP—Purchase power.
 EMP—240. Daily tonnage 950.
 SIZES SHIPT—Run of Mine.
 Note—Mine for own use only.

WHITAKER-CLESSNER COMPANY

General Office, Wheeling, W. Va.
 Two mines in West Virginia, one in Ohio.
 PR—Andrew Glass, Portsmouth, O.
 VP—N. Price Whitaker, Wheeling, W. Va.
 TR—W. H. Manning, Wheeling, W. Va.
 GM—N. P. Whitaker, Wheeling, W. Va.
 GS—W. H. Kessler, Wheeling, W. Va.
 PA—W. B. Greer, Wheeling, W. Va.
 EM—C. C. Smith, Wheeling, W. Va.
 CE—C. H. Verwohlt, Wheeling, W. Va.
 EE—Thos. Swaney, Wheeling, W. Va.
 SC—Address the Company, Buyer, Frank Holstead, Clothier, W. Va.
 Carter Mine; Drift; Pittsburgh No. 8 Seam, 60 in. thick.
 PO—Wheeling, W. Va.; SP—Same; CTY—Ohio; RR—B. & O., P. R. R.
 MS—Andrew Ernes, Wheeling, W. Va.
 S of H—Mules and 2 trolley pole type electric locos. Track gage, 34 in.
 S of M—6 shortwall machs.
 PP—1 150 K. W. gen. unit, 250 volts D. C.
 EMP—60. Last years tonnage 91,921.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.
 Mifflin Mine; Drift; No. 2 Gas Seam, 60 in. thick.
 PO—Clothier, W. Va.; SP—Mifflin, W. Va.; CTY—Logan; RR—C. & O., Coal Branch.
 MS—C. G. Norris, Clothier, W. Va.
 S of H—12 trolley pole locos. Track gage 44 inches.
 S of M—Hand and 4 shortwall machs.
 PP—Purchase power, transformer 44,000 to 2200 volts A. C., 1 175, 1 100 and 1 150 K. W. M. G. S. ts, 250 volts D. C.
 EMP—150. Last years tonnage 119,000.
 SIZES SHIPT—Run of Mine, Slack, Egg, Lump.
 PREP. EQUIPT—Gravity and Shaker Screens.
 Note—Consume their own output.

WHITE ASH COAL COMPANY

General Office, Lexington, Va.
 PR—H. C. Grawert, Lexington, Va.
 TR—A. W. Robertson, Lexington, Va.
 GM—A. W. Robertson, Lexington, Va.
 GS—Thos. Brazzel, Ferguson, W. Va.
 PA—Thos. Brazzel, Ferguson, W. Va.
 SC—Noll & Wellman, Buyer, Henry Taylor, Ferguson, W. Va.
 White Ash Mine; Drift; Winefred Seam, 48 inches thick.
 PO—Ferguson, W. Va.; SP—Same; CTY—Wayne; RR—N. & W.
 S of H—Mules and elec. locos. Track gage 48 inches.
 S of M—Shortwall machs.
 PP—2 150 H. P. fire tube boilers, 1—375 K. W. M. G. S. ts, 250 volts D. C.
 EMP—2. Daily tonnage 100.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump, Block.
 PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

WHITE, E. E., COAL CO.

General Office, Glen White, W. Va.
 PR—E. E. White, Glen White, W. Va.
 VP—T. E. Snyder, Hazleton, Pa.
 TR—P. A. Vought, Mount Carmel, Pa.
 GM—E. E. White, Glen White, W. Va.
 GS—C. R. Stahl, Stotesbury, W. Va.

PA—E. B. Wray, Glen White, W. Va.
 CE—It. F. Roth, Glen White, W. Va.
 EM—George McLellan, Glen White, W. Va.
 EE—C. R. Stahl, Stotesbury, W. Va.
 SC—Glen White and Stotesbury Stores; Buyer, C. L. Pauley, Glen White, W. Va.
 SA—Castner, Curran & Bullitt, Inc., 1 Broadway, New York, N. Y.
 Glen White Nos. 1 and 2 Mines; Beckley Seam, 4 to 7 ft. thick.
 PO—Glen White, W. Va.; SP—Same, and Lester, W. Va.; CTY—Fateigh, RR C. & O., Piney Branch, Virginian.
 MS—J. A. Blake, Glen White, W. Va.
 SA—C. L. Pauley, Glen White, W. Va.
 S of H—17 trolley pole type and 2 combination locos. Track gage, 44 inches.
 S of M—5 shortwall and 1 overhead cutter machs.
 PP—6 water tube boilers, total 2100 H. P., 3 300 K. W. gen. units, 300 volts D. C., 7 pumps.
 EMP—350. Last years tonnage 325,606.
 SIZES SHIPT—Run of Mine.
 Stotesbury Mine, Drift, Beckley Seam, 4 to 7 ft. thick.
 PO—Stotesbury, W. Va.; SP—Same; CTY—Raleigh; RR—C. & O., Piney Creek Branch.
 MS—E. E. Jones, Stotesbury, W. Va.
 SM—J. K. Hodges, Stotesbury, W. Va.
 S of H—22 trolley pole type locos. Track gage, 44 in.
 S of M—3 chain breast type and 11 shortwall machs.
 PP—Power furnished from Glen White mines, 3 200 K. W. rotary converters, 300 volts D. C., 12 pumps.
 EMP—375. Last years tonnage 317,758.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables.

WHITE HORSE COAL CO.

General Office, Flemington, W. Va.
 PR—W. T. Gates, Flemington, W. Va.
 GS—W. J. Roderich, Flemington, W. Va.
 PA—W. J. Roderich, Flemington, W. Va.
 SA—W. J. Roderich, Flemington, W. Va.
 White Horse Mine; Drift; Pittsburgh Seam, 74-108 inches thick.
 PO—Flemington, W. Va.; SP—Same; CTY—Taylor; RR—B. & O., Parkersburg Br.
 MS—J. W. Jones, Flemington, W. Va.
 S of H—Mules. Track gage 36 inches.
 S of M—Hand.
 EMP—35. Last years tonnage 20,000.
 SIZES SHIPT—Run of Mine.

WHITE STAR MINING COMPANY.

General Office, Dayton, O.
 PR—R. D. Patterson, Lowe, W. Va.
 VP—E. J. Tisdelle, Detroit, Mich.
 TR—H. J. Dreese, Dayton, O.
 GM—R. D. Patterson, Lowe, W. Va.
 GS—Geo. W. Welch, Merrimac, W. Va.
 PA—George W. Welch, Merrimac, W. Va.
 EE—Samuel Short, Merrimac, W. Va.
 EM—D. M. Good, Williamson, W. Va.
 SC—Address the Company, Buyer, Geo. H. Perkins, Merrimac, W. Va.
 Sales Agent—S. J. Patterson Co., Dayton, O.
 White Star No. 1 Mine; Drift; Freeburn Seam, 54 in. thick.
 PO—Merrimac, W. Va.; SP—Same; CTY—Mingo; RR—N. & W.
 S of H—Mules and trolley pole type locos. Track gage, 48 in.
 S of M—5 shortwall machs.
 PP—Power purchased, M. G. S. ts, 200 K. W., 250 volts D. C., 4 pumps.
 EMP—84. Last fiscal year output, 25,000 tons.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

WHITE STAR NO. 2 MINE; Drift; Freeburn Seam, 54 in. thick.

PO—Merrimac, W. Va.; SP—Same; CTY—Mingo; RR—N. & W.
 S of H—Mules and trolley pole type locos. Track gage, 48 in.
 S of M—2 shortwall machs.
 PP—Power furnished from No. 1 Mine.
 EMP—40. Last fiscal year output, 45,000 tons.
 SIZES SHIPT—Run of Mine.
 PREP. EQUIPT—Gravity Screens.

WHITE STICK COAL CO.

Beckley, W. Va.
 White Stick Mine
 PO—Beckley, W. Va.; CTY—Raleigh; RR—C. & O. No report.

WICARB MINING COMPANY

General Office, Williamson, W. Va.
 PR—L. E. Armentrout, Roderland, W. Va.
 GM—C. M. Gates, Williamson, W. Va.
 TR—Geo. Rausewine, Jr., " "
 GS—M. V. Crigger, Goodman, W. Va.
 PA—Geo. Rausewine, Jr., " "
 EM—G. Goff, Roderland, W. Va.
 SC—Address the Company, Buyer, Noah Stepp, Goodman, W. Va.
 Sales Agents—Roderland Coal Sales Co., Cincinnati, O.
 (Continued on Next Page)

Wigarb Mining Company—Cont.
Wigarb Mine; Drift; Winfrede and Thacker Seams, 48 to 72 in. thick.
PO—Goodman, W. Va.; SP—Same; CTY—Mingo; RR—N. & W.
S of H—1 combination loco. Track gage, 48 in.
S of M—4 shortwall machs.
PP—2 water tube boilers, total 250 H. P., 150 K. W. gen. unit, 250 volts D. C.
EMP—100. Last fiscal year output, 50,000 tons.
SIZES SHIPT—Run of Mine, Slack, Egg, Lump, Block.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

WILHELMINA COAL CO.
General Office, Williamson, W. Va.
PR—Charles Boldt, Cincinnati, O.
VP—H. A. Goodloe, Williamson, W. Va.
TR—S. H. Goodloe, Williamson, W. Va.
GM—H. A. Goodloe, Williamson, W. Va.
GS—L. D. Williamson, Williamson, W. Va.
PA—L. D. Williamson, Williamson, W. Va.
EM—D. M. Good, Williamson, W. Va.
EE—J. A. Evans, Williamson, W. Va.
SCO—Address the company, Buyer, T. B. Osborne, Williamson, W. Va.
Wilhelmina Mine; Drift; Pond Creek Seam, 42 inches thick.
S of H—2 trolley pole type and 2 storage battery locos. Track gage 42 in.
S of M—2 elec. punchers and 3 shortwall machs.
PP—Power purchased, 1—75 K. W. and 1—100 K. W. gen. units, M. G. sets 250 volts D. C., 2 pumps.
EMP—60. Last years tonnage 39,993.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Screens.

WILLIAMS-COMBS COAL COMPANY
General Office, Beckley, W. Va.
PR—Nick Loftus, Beckley, W. Va.
VP—H. C. Landis, 859 Perkiomen St., Philadelphia, Pa.
TR—Henry Loftus, Beckley, W. Va.
GM—Henry Loftus, Beckley, W. Va.
GS—Henry Loftus, Beckley, W. Va.
PA—Henry Loftus, Beckley, W. Va.
EM—O. J. Daugherty, Prince, W. Va.
SCO—Address the Company, Beckley, W. Va.
Williams-Combs Mine; Drift; Fire Creek Seam, 48 in. thick.
PO—Lawton, W. Va.; SP—Hemlock Hollow, W. Va.; CTY—Fayette; RR—C. & O.
MS—O. J. Daugherty, Prince, W. Va.
SM—O. J. Daugherty, Prince, W. Va.
S of H—Mules, rope, elec. locos. Track gage 48 in.
S of M—Hand.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.

WILLIAMS, J. H. COAL COMPANY
Out of business.

WILLIAMS POCANTONAS COAL CO.
General Office, Beckley, W. Va.
PR—Philip De Ronde, 39 Broadway, New York, N. Y.
VP—R. A. Nicol, 39 Broadway, New York, N. Y.
TR—James F. Gill, 39 Broadway, New York, N. Y.
GM—Henry F. Warden, Bluefield, W. Va.
GS—J. D. Kirby, War, W. Va.
PA—Henry F. Warden, Bluefield, W. Va.
EM—H. E. Ewing, Berwind, W. Va.
EE—Roe Baird, War, W. Va.
SCO—Howard Stores Co. Buyer, E. H. Lowe, War, W. Va.
SA—W. C. Atwater & Co., 1 Broadway, New York, N. Y.
Howard Mine; Drift; War Creek Seam, 60 inches thick.
PO—War, W. Va.; SP—Same; CTY—McDowell; RR—N. & W.
S of H—Trolley pole type and storage battery locos. Track gage, 48 in.
S of M—Chain breast type and shortwall machs.
PP—Power purchased, rotary converters, 250 volts D. C., 1 pump.
EMP—125. Last years tonnage 80,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.

WILLIAMSON COAL AND COKE CO.
Now Williamson Fuel Company.

WILLIAMSON FUEL COMPANY
General Office, Norfolk, Va.
PR—F. E. Hasler, Producers Exchange Bldg., New York, N. Y.
VP—R. T. Hasler, Board of Trade Bldg., Norfolk, Va.
TR—J. W. Watson, Producers Exchange Bldg., New York, N. Y.
GM—R. T. Hasler, Board of Trade Bldg., Norfolk, Va.
GS—J. R. Huddy, Williamson, W. Va.
PA—T. Thompson, Williamson, W. Va.
SA—Retach Coal Corp., Board of Trade Bldg., Norfolk, Va.
Williamson Mine; Drift; Winfrede, Coalburg and Thacker Seams, 46-72 in. thick.

PO—Williamson, W. Va.; SP—Same; CTY—Mingo; RR—N. & W.
S of H—8 elec. and 2 steam locos. Track gage 48 in.
S of M—8 elec. machs.
PP—4 return tubular boilers, total 500 H. P., 2 gen. units, 250 volts D. C., 7 pumps.
EMP—150. Last years tonnage 120,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump, Block.
Note—Successor to Williamson Coal & Coke Co.

WILLIS BRANCH COAL COMPANY.
General Office, Glen Jean, W. Va.
PR—C. B. Lee, Glen Jean, W. Va.
GM—Thomas Nichol, Glen Jean, W. Va.
ASST GM—A. M. Filtrio, Glen Jean, W. Va.
PA—A. M. Filtrio, Glen Jean, W. Va.
EM—N. P. Rhinehart, Mount Hope, W. Va.
SCO—J. S. Davis & Co. Buyer, Louis Noman, Willis Branch, W. Va.
SA—The C. G. Blake Co., Cincinnati, O.
Willis Branch Mine; Drift; Long Branch Seam, 70 to 82 in. thick.
PO—Willis Branch, W. Va.; SP—Frt., Same; Ex., Pax, W. Va.; TY—Fayette; RR—Virginian.
MS—P. A. Grady, Willis Branch, W. Va.
S of H—Mules, 3 trolley pole type locos. Track gage 44 in.
S of M—1 arewall mach.
PP—Power purchased, Transformer 2200 volts A. C., M. G. sets 250 volts D. C., 3 pumps.
EMP—150. Daily tonnage 750.
SIZES SHIPT—Run of Mine.

WILLS, JOHN
Now operated by the Clermont Coal Mining Company.

WILLOUGHSON COAL COMPANY
General Office, Elkins, W. Va.
PR—H. G. Lucas, Morgantown, W. Va.
VP—O. R. Shaffer, Davis, W. Va.
GM—Albert Wilt, Elkins, W. Va.
GS—E. P. Sandridge, Hall, W. Va.
PA—Albert Wilt, Elkins, W. Va.
EM—R. J. Tillson, Buckhannon, W. Va.
SCO—Address the Company, Buyer, Albert Wilt, Elkins, W. Va.
SA—Coale & Co., Inc., Cumberland, Md.
Wilt Nos. 1 and 2 Mines; Drift; Freeport and Bakerstown Seams, 48-58 in. thick.
PO—Hall, W. Va.; SP—Same; CTY—Barbour; RR—B. & O.
S of H—Mules. Track gage 42 inches.
S of M—Hand.
PP—1 ore tube boiler, 125 H. P., 2 pumps.
EMP—30. Last years tonnage 18,000.
SIZES SHIPT—Run of Mine.

WILMAR COAL COMPANY
General Office, Shinnston, W. Va.
PR—E. J. Whiteman, Shinnston, W. Va.
VP—W. J. L. Harmer, Shinnston, W. Va.
TR—W. C. Wyatt, Shinnston, W. Va.
GM—F. C. Wilson, Shinnston, W. Va.
GS—F. C. Wilson, Shinnston, W. Va.
PA—W. T. Wiley, Shinnston, W. Va.
EM—S. A. Shuttlesworth, Fairmont, W. Va.
Wilmar Mine; Drift; Pittsburgh Seam, 96-120 inches thick.
PO—Shinnston, W. Va.; SP—Same; CTY—Harrison; RR—W. Md.
S of H—Mules and horses. Track gage 42 inches.
S of M—Hand.
EMP—20.
SIZES SHIPT—Run of Mine.
NOTE—Formerly operated by the United Bituminous Coal Co.

WILMORE-POCANTONAS COAL COMPANY
General Office, Wilmore, W. Va.
PR—L. O. McLean, Wilmore, W. Va.
VP—W. P. Patterson, Jr., Welch, W. Va.
GM—L. O. McLean, Wilmore, W. Va.
PA—A. W. McLean, Wilmore, W. Va.
CE—G. J. Cooper, Welch, W. Va.
Wilmore Mine; Drift; Sewell Seam, 32 in. thick.
PO—Wilmore, W. Va.; SP—Frt., Wilmore, W. Va.; Ex., Iaeger, W. Va.; CTY—McDowell; RR—N. & W.
S of H—Mules. Track gage 48 in.
S of M—Hand.
SIZES SHIPT—Run of Mine.

WILMOTH COAL COMPANY
General Office, Connellsville, Pa.
PR—C. S. Pore, Connellsville, Pa.
VP—J. W. Bair, Homestead, Pa.
TR—S. R. Goldsmith, Connellsville, Pa.
GM—C. S. Pore, Connellsville, Pa.
GS—Leslie Wilmoth, Kingwood, W. Va.
PA—Leslie Wilmoth, Kingwood, W. Va.
SA—C. S. Pore, Connellsville, Pa.
Vivian Mine; Drift; Freeport Seam; 60 inches thick.
PO—Kingwood, W. Va.; SP—Same; CTY—Preston; RR—W. Va. Northern.
S of H—Mules. Track gage 42 in.
S of M—Hand.
EMP—60. Daily output, 200 tons.
SIZES SHIPT—Run of Mine.

WILSON, H. T. COAL COMPANY
General Office, 919 Bank Bldg., Detroit, Mich.
PR—H. T. Wilson, Detroit, Mich.
VP—L. C. Stanley, Detroit, Mich.
TR—Allen B. Moore, Detroit, Mich.
GM—H. T. Wilson, Detroit, Mich.
GS—R. L. Jenkins, Logan, W. Va.
PA—R. L. Jenkins, Logan, W. Va.
CE—J. R. Meekle, Logan, W. Va.
SCO—H. T. Wilson Supply Co. Buyer, B. L. Tinsley, Logan, W. Va.
SA—Norfolk & Chesapeake Coal Co., 919 Bank Bldg., Detroit, Mich.
Wilson No. 1 Mine; Drift; Draper Seam 54 in. thick.
PO—Logan, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
S of H—6 locos. Track gage 44 in.
S of M—3 shortwall machs.
PP—Power purchased, Transformer 2,300 to 250 volts A. C., M. G. set, 160 K. W., 250 volts D. C., 1 pump.
EMP—95. Last years tonnage 47,935.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables, Loading Booms.
Wilson No. 2 Mine; Slope; Draper Seam 60 in. thick.
PO—Logan, W. Va.; SP—Same; CTY—Logan; RR—C. & O.
S of H—Mules. Track gage 44 in.
S of M—1 shortwall machs.
PP—Power purchased, Transformer 2300-250 volts A. C., rotary converters 250 volts D. C., 1 pump.
EMP—12.
SIZES SHIPT—Run of Mine.

WILTON SMOKELESS COAL CO.
General Office, Tracool, W. Va.
PR—J. B. Clifton, Beckley, W. Va.
VP—C. H. Meador, Beckley, W. Va.
TR—H. R. Tribou, Tams, W. Va.
GM—W. H. Ruby, Tracool, W. Va.
GS—W. H. Ruby, Tracool, W. Va.
PA—W. H. Ruby, Tracool, W. Va.
EM—N. P. Rhinehart, Mt. Hope, W. Va.
EE—W. H. Meadows, Jonben, W. Va.
SCO—Address the company, Buyer, J. H. Looney, Jonben, W. Va.
SA—Kaleigh Smokeless Fuel Co., Beckley, W. Va.
Wilton Mine; Drift; Firecreek Seam, 55 inches thick.
PO—Jonben, W. Va.; SP—Same; CTY—Kaleigh; RR—Virginian.
MS—W. H. Meadows, Beckley, W. Va.
S of H—Mule and elec. locos. Track gage 44 inches.
S of M—Shortwall mach.
PP—Power purchased, Transformer 2200 to 160 volts, rotary converters, 250 volts D. C.
EMP—90. Daily tonnage 400.
SIZES SHIPT—Run of Mine.

WINCHESTER COAL COMPANY.
General Office, Box 400, Clarksburg, W. Va.
PR—James Laulls, Clarksburg, W. Va.
VP—T. F. McIntire, R. F. D. No. 4, Monongah, W. Va.
GM—Thos. H. Laulls, Clarksburg, W. Va.
GS—Andrew J. Laulls, Enterprise, W. Va.
PA—Thos. H. Laulls, Clarksburg, W. Va.
CE—Chas. Laulls, Clarksburg, W. Va.
EM—Honor Bros., Clarksburg, W. Va.
EP—Chas. Laulls, Clarksburg, W. Va.
SCO—Kuhn & Wharton, Enterprise, W. Va. Buyer, C. L. Duckworth, Arden, W. Va.
SA—Laulls Coal Co. (Brokers), Clarksburg, W. Va.
Additional Information on Page 1056
Winchester Mine; Drift; Pittsburgh Seam, 84 to 108 in. thick.
PO—Enterprise, W. Va.; SP—Same; CTY—Harrison; RR—B. & O. M. & R. Br.
MS—James Laulls, Enterprise, W. Va.
SM—John H. Kuhn, Enterprise, W. Va.
S of H—Mules.
S of M—1 electric puncher and 2 chain breast type machs.
PP—1 pump. Purchase power.
EMP—25. Daily output 100 tons.
SIZES SHIPT—Run of Mine.
McIntire Mine abandoned.

Virginia Mine; Slope; Freeport Vein, 54 to 72 in. thick.
PO—Arden, W. Va.; SP—Same; CTY—Barbour; RR—B. & O. G. & B. Br.
MS—C. L. Duckworth, Arden, W. Va.
SM—C. L. Duckworth, " "
S of H—Mules.
S of M—Hand.
EMP—20. Daily output, 150 tons.
SIZES SHIPT—Run of Mine.
WINDING GULF COLLIERY COMPANY
General Office, Winding Gulf, W. Va.
PR—Justus Collins, Charleston, W. Va.
TR—Geo. R. Collins, Charleston, W. Va.
GM—L. Epperly, Winding Gulf, W. Va.
PA—L. Epperly, Winding Gulf, W. Va.
EM—H. B. Turner, Winding Gulf, W. Va.
SCO—Address the Company, Buyer, J. M. Herndon, Winding Gulf, W. Va.

SA—Smokeless Fuel Company, Charles ton, W. Va.
Additional Information on Page 1050
Winding Gulf No. 1 Mine; Slope; Beckley Seam, 48 to 68 in. thick.
PO—Winding Gulf, W. Va.; SP—Same; CTY—Kaleigh; RR—Virginian.
MS—W. H. Baker, Winding Gulf, W. Va.
S of H—7 trolley pole type locos. Track gage 44 in.
S of M—4 shortwall machs.
PP—3 water tube boilers, 300 H. P., 3 225 K. W. gen. units, 250 volts D. C., 3 pumps.
EMP—150. Daily output, 600 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Picking Tables.
Winding Gulf No. 2 Mine; Shaft; Beckley Seam; 48 to 72 in. thick.
PO—Winding Gulf, W. Va.; SP—Same; CTY—Kaleigh; RR—C. & O.
MS—W. H. Baker, Winding Gulf, W. Va.
S of H—10 trolley pole type locos. Track gage 44 in.
S of M—4 shortwall machs.
PP—Power purchased, transformer 44,000 2200 volts A. C., rotary converters, 250 volts D. C., 6 pumps.
EMP—150. Daily output, 600 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking Tables.
Winding Gulf No. 3 Mine; Slope; Beckley Seam; 48 to 72 in. thick.
PO—Winding Gulf, W. Va.; SP—Same; CTY—Kaleigh; RR—Virginian.
MS—W. H. Baker, Winding Gulf, W. Va.
S of H—3 trolley pole type and 2 storage battery locos. Track gage, 44 inches.
S of M—3 shortwall machs.
PP—3 water tube boilers, 300 H. P., 3 225 K. W. gen. units, 250 volts D. C., 4 pumps.
EMP—100. Daily output, 300 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Picking Table.

WINDSOR COAL COMPANY
General Office, West Penn Bldg., 14 Wood St., Pittsburgh, Pa.
PR—A. M. Lynn, Pittsburgh, Pa.
VP—R. B. Keating, Pittsburgh, Pa.
TR—C. C. McBride, Pittsburgh, Pa.
GS—R. C. Berhow, Pittsburgh, Pa.
PA—W. E. Higgins, Pittsburgh, Pa.
CE—John Rayburn, House Bldg., Pittsburgh, Pa.
EM—L. W. Cooper, Pittsburgh, Pa.
Reich Bottom Mine; Drift; Pittsburgh Seam; 44 to 84 inches thick.
PO—Short Creek, W. Va.; SP—Wellburg, W. Va.; CTY—Brooke; RR—Penn.
MS—Jno. W. Heller, Short Creek, W. Va.
S of H—Trolley pole type loco. Track gage 42 in.
S of M—10 longwall machs.
PP—Power purchased, 550 volts D. C., 8 pumps.
EMP—400. Daily tonnage 1,350.
SIZES SHIPT—Run of Mine, Slack.
Note—Successors to Kleland Block Coal Co. Entire output of the mine will be consumed by the Windsor Power Plant.

WINFIELD COAL COMPANY
General Office, Fairmont, W. Va.
PR—G. B. Hartley, Fairmont, W. Va.
VP—R. B. Satterfield, Lumbert, W. Va.
TR—E. W. Powell, Fairmont, W. Va.
GM—G. B. Hartley, Fairmont, W. Va.
GS—G. B. Hartley, Fairmont, W. Va.
PA—T. W. Powell, Fairmont, W. Va.
CE—A. C. Hartley, Morgantown, W. Va.
EM—Monongahela Valley Engineering Co., Morgantown, W. Va.
SA—Morgantown Coal Co., Morgantown, W. Va.
Riverdale Mine; Drift; Swickley Seam, 70 inches thick.
PO—Riverville, W. Va.; SP—Montana, W. Va.; CTY—Morton; RR—Baltimore & Ohio.
MS—Arthur Sturm, Riverville, W. Va.
S of H—Mules. Track gage 42 inches.
S of M—3 chain breast type machs.
PP—Power purchased, Transformers, 2,220 to 220 volts A. C., 250 volts D. C.
EMP—25. Daily output 150 tons.
SIZES SHIPT—Run of Mine.
Note—Formerly operated by Chesapeake Coal Co.

WINFREDE COAL CO.
General Office, Winding Gulf, W. Va.
PR—Frank R. Stewart, Cincinnati, O.
TR—Ralph G. Wilson, Philadelphia, Pa.
GS—L. I. White, Winfrede, W. Va.
PA—W. H. W. M. Winfrede, W. Va.
CE—C. B. Wilson, Charleston, W. Va.
EE—Jas. Lee, W. Va.
SCO—Address the Company, Buyer, R. F. Collins, Winfrede, W. Va.
Sales Agents, Winfrede Coal Co., Frank R. Stewart, Cincinnati, O.
Additional Information on Pages 1054, 1055
(Continued on Next Page)

Winifrede Coal Co.—Cont.

Stewart, No. 2, North, West & South
Mines; Drift; Winifrede Seam, 50-
74 in. thick.

PO—Winifrede, W. Va.; SP—Winifrede
Jct., W. Va.; CTY—Kanawha.

RR—C. & O., Winifrede Br.
S of H—Mules and 6 elec. loco., track
gauge 42 in.

S of M—Hand and 12 elec. machines.
PP—Purchase power.

Belmont Mine, Drift, Old Coalburg
Seam, 4 ft. 8 in. to 6 ft. 6 in.
thick.

PO—Crown Hill, W. Va.; SP—Same;
CTY—Kanawha; RR—C. & O.

S of M—Hand and 8 elec. machs.
S of H—Mules and 2 elec. loco. Track
gauge 42 inches.

PP—Purchase power.

WINIFREDE-THACKER COAL COMPANY

General Office, Nolan, W. Va.
TR—H. G. Van Hoose, Nolan, W. Va.
VP—W. A. Dotson, Edgerton, W. Va.
TR—T. R. Joseph, Nolan, W. Va.
GM—H. G. Van Hoose, Nolan, W. Va.
PA—T. R. Joseph, Nolan, W. Va.
EE—J. D. Murray, Nolan, W. Va.

SCD—Address the Company Buyer, T. R.
Joseph, Nolan, W. Va.
SA—Castner, Curran & Bullitt, Cincin-
nati, O.

Winifrede-Thacker Mine; Drift; Seam, 38
to 48 in. thick.

PO—Nolan, W. Va.; SP—Same; CTY—
Kanawha; RR—N. & W. Kenova Br.
S of H—4 storage battery locos. Track
gauge 42 in.

S of M—4 shortwall machs.
FP—Gen. units, 250 volts D. C.
SIZES SHIPT—Run of Mine, Slack, Lump.

WITCHER CREEK COAL COMPANY

Now operated by the Climax Coal Co.

WOLF SUMMIT COAL COMPANY

General Office, Clarksburg, W. Va.
PR—Geo. F. Craig, Philadelphia, Pa.
VP—David Baird, Camden, N. J.
TR—S. Y. Warner, Philadelphia, Pa.
GM—T. R. Craig, Clarksburg, W. Va.
GS—Edwin Williams, Clarksburg, W. Va.
EM—D. D. Britt, Clarksburg, W. Va.

Summit Mine; Shaft; Pittsburgh Seam; 78
inches thick.

PO—Wolf Summit, W. Va.; SP—Same;
CTY—Harrison; RR—B. & O.

S of H—Trolley pole type locos. Track
gauge 42 in.

S of M—1 arewall and 1 shortwall cut-
ting machs.

PP—Power purchased. Transformer 22-
000 to 2,200 volts A. C., M. G.
sets, 250 volts D. C., 2 pumps.

EMP—50.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP EQUIPT—Bar Screens.

WOOD COAL COMPANY.

General Office, Charleston, W. Va.
PR—W. S. Wood, Charleston, W. Va.
VP—R. G. Altizer, Charleston, W. Va.
TR—L. A. Seyffert, Charleston, W. Va.
GM—W. S. Wood, Charleston, W. Va.
PA—W. S. Wood, Charleston, W. Va.

EM—W. C. McCao, Logan, W. Va.
GS—Lee Howell, Ethel, W. Va.
SCD—Address the Company; Buyer, J.
R. Hook, Ethel, W. Va.

SA—Wood & Morton Fuel Co., Charle-
ston, W. Va.

Additional Information on Page 999
Wood Nos. 1 & 2 Mines; Drift; Chilton
Seam, 50 to 54 in. thick.

PO—Ethel, W. Va.; SP—Same; CTY—
Logan; RR—C. & O.

S of H—6 gathering locos. Track gauge
44 inches.

S of M—4 shortwall machs.
PP—Power purchased, 250 volts D. C.,
3 pumps.

EMP—80. Last year tonnage 72,000.
SIZES SHIPT—Run of Mine, Slack, Egg.
Lump.

PREP EQUIPT—Shaker Screens.

WOOD-PECK COAL COMPANY.

General Office, Sullivan, W. Va.
PR—J. R. Clifton, Beckley, W. Va.
VP—C. H. Meador, Beckley, W. Va.
TR—C. H. Meador, Beckley, W. Va.
GM—W. I. Smith, Beckley, W. Va.
PA—W. G. Golf, Sullivan, W. Va.

EM—Hunter Smith, Sullivan, W. Va.
SCD—Address the Company. Buyer, W.
G. Golf, Sullivan, W. Va.

SA—Raleigh Smokeless Fuel Company,
Beckley, W. Va.

Wood-Peck Mine; Drift; Beckley Seam, 54
in. thick.

PO—Sullivan, W. Va.; SP—Same; CTY—
Raleigh; RR—C. & O.

S of H—Mules, main and tail rope. Track
gauge 44 in.

PP—1-150 H. P. water tube boiler 2
pumps.
EMP—38. Last years tonnage 38,500.
SIZES SHIPT—Run of Mine.

NOTE—Formerly operated by Lilly Coal
Mining Co.

WOOD SULLIVAN COAL COMPANY

General Office, Tralee, W. Va.

PR—J. A. Wood Pratt, W. Va.

GM—J. C. Sullivan, Tralee, W. Va.
PA—C. E. Helwig, Tralee, W. Va.

EE—J. P. Barksdale, Tralee, W. Va.
SCD—Address the Company. Buyer, B.
G. Scott, Tralee, W. Va.

SA—C. & O. Coal Agency Co., Boston,
Mass.; Wyoming Coal Sales Co.,
Bluefield, W. Va.

Wood Sullivan Mine; Drift; Beckley Seam,
48 in. thick.

PO—Vanwood, W. Va.; SP—Same; CTY—
Raleigh; RR—Virginian.

S of H—3 elec. locos. Track gauge 44 in.
S of M—5 shortwall machs.

PP—Gen. units, 250 volts D. C., 3
pumps.

SIZES SHIPT—Run of Mine.
PREP EQUIPT—Picking Tables.

WOODS RUN COAL COMPANY

General Office, 700 Bowman Bldg., Pitts-
burgh, Pa.

PR—Samuel E. Coe, Pittsburgh, Pa.
VP—J. Perry Thompson, Fairmont, W. Va.
TR—Thomas R. Heyward, Jr., Pitts-
burgh, Pa.

SECY—C. E. Hughes, Pittsburgh, Pa.
GM—J. Perry Thompson, Fairmont, W. Va.
PA—Samuel E. Coe, Pittsburgh, Pa.

EM—J. Perry Thompson, Fairmont, W. Va.
SCD—Thomas R. Heyward Co., Bowman
Bldg., Pittsburgh, Pa.

Woods Run Mine; Drift; Waynesburg
Seam; 72 in. thick.

PO—Fairmont, W. Va.; SP—Same; CTY
—Marion; RR—B. & O., Paw-Paw
Branch.

MS—Frederick Hoult, Fairmont, W. Va.
S of H—Mules.

S of M—Hand.
EMP—25.

SIZES SHIPT—Run of Mine, Slack, Lump.

WOODLAND COAL COMPANY.

General Office, Scottsdale, Pa.
PR—Chas. H. Loucks, Scottsdale, Pa.
VP—E. P. Rush, Uniontown, Pa.

TR—M. L. Hasness, Scottsdale, Pa.
GM—E. L. Stoner, Scottsdale, Pa.
GS—Carl F. Keck, Capitina, W. Va.

PA—E. L. Stoner, Scottsdale, Pa.
CE—Baton & Elliott, Pittsburgh, Pa.
SCD—Woodland Supply Co., Capitina, W.
Va. Buyer, C. S. Kirkman, Cap-
itina, W. Va.

Woodland Mine; Shaft; Pittsburgh Seam,
72 in. thick.

PO—R. F. D. No. 1, Capitina, W. Va.;
SP—Whittaker, Siding, W. Va.;
CTY—Marshall; RR—B. & O.

S of H—Mules and electric machs. Track
gauge, 42 in.

S of M—Shortwall machs.
PP—1 500 H. P. water tube boiler, gen.
units, 250 volts D. C., 3 pumps.

SIZES SHIPT—Run of Mine, Slack, Nut.
PREP EQUIPT—Shaker Screens, Loading
Booms.

WRIGHT COAL & COKE COMPANY

PR—C. R. Elliott, New York, N. Y.
GM—D. E. Evendoll, Royal, W. Va.
PA—E. E. Huddleston, Royal, W. Va.

EM—Merrill Engineering Co., Beckley, W.
Va.

EE—J. B. Sterrett, Royal, W. Va.
SCD—Address the Company. Buyer, A. S.
Crews, Royal, W. Va.

SA—A. McNell & Sons Co., Newport News,
Va.

Nos. 1 and 2 Mines; Drift; Fire Creek
Seam, 44 inches thick.

PO—Wright, W. Va.; SP—Ex., Same;
Frt., Newell, W. Va.; CTY—Raleigh;
RR—C. & O., Pliny Br.

MS—A. R. Reese, Wright, W. Va.
S of H—Mules and 1 trolley pole type
and 1 storage battery loco. Track
gauge 44 inches.

S of M—Hand and 1 combination mach.
PP—2 150 H. P. boilers, 1-150 K. W.
gen., 250 volts D. C., 3 pumps.

EMP—85. Last years tonnage 36,000.
SIZES SHIPT—Run of Mine.

WRIGHT MINING COMPANY

General Office, Matoaka, W. Va.
TR—Roy T. Wright, Matoaka, W. Va.
GM—Roy T. Wright, Matoaka, W. Va.

SECY—W. P. Haller, Matoaka, W. Va.
PA—W. P. Haller, Matoaka, W. Va.
SA—Norfolk & Chesapeake Coal Co.,
Detroit, Mich.

Wagon Mine; Drift; No. 3 Pocahontas
Seam, 58 in. thick.

PO—Matoaka, W. Va.; SP—Same; CTY
—Mercer; RR—N. & W.

MS—C. A. George, Matoaka, W. Va.
S of H—Mules.

S of M—Hand.
EMP—30. Daily tonnage 70.
SIZES SHIPT—Run of Mine.

WYATT-GINGAMON COAL COMPANY

General Office, Greensburg, Pa.
PR—R. H. Jamison, Greensburg, Pa.
VP—J. B. Brunot, Greensburg, Pa.

TR—J. R. Fisman, Greensburg, Pa.
GM—T. P. Latta, Greensburg, Pa.
GS—W. C. Dobbie, Fairmont, W. Va.

PA—A. Turney McConnell, Greensburg,
Pa.

CE—C. E. Cowan, Greensburg, Pa.

EM—R. A. Ramsay, Greensburg, Pa.
EE—J. P. Barry, Greensburg, Pa.

SCD—Marion Supply Co. Buyer, C. H.
Latta, Greensburg, Pa.

SA—Operators Fuel Agency Greensburg,
Pa.

Josephine Mine; Drift; Pittsburgh Seam,
96 inches thick.

PO—Worthington, W. Va.; SP—Sam;
CTY—Harrison; RR—W. M.

MS—C. R. Martio, Worthington, W. Va.
S of H—Mules and trolley pole type
locos. Track gauge, 42 in.

S of M—2 longwall machs.
PP—Power purchased, 250 volts A. C.
EMP—50. Daily output, 200 tons.

SIZES SHIPT—Run of Mine, Slack, Lump.

WYATT COAL CO.

General Office, Charleston, W. Va.
PR—John Laing, Charleston, W. Va.
VP—John Laing, Charleston, W. Va.

TR—T. J. Robson, Charleston, W. Va.
GM—John Laing, Charleston, W. Va.
GS—James Martin, Sharon, W. Va.

PA—E. O. Byrd, Charleston, W. Va.
EM—B. M. Green, Charleston, W. Va.
SCD—Sharon, Giles & Laing; Buyer, E.
O. Byrd, Sharon, W. Va.

Laing Mine; Drift; No. 2 Gas Seam, 60
to 72 in. thick.

PO—Laing, W. Va.; SP—Berlin, W.
Va.; CTY—Kanawha; RR—C. &
O., Cabin Creek Branch.

MS—D. W. Martin, Sharon, W. Va.
S of H—Mules and trolley pole type locos.
Track gauge 44 inches.

S of M—1 chain breast type mach.
PP—Power purchased, transformer, 44-
000 to 2,200 volts A. C., M. G. set,
150 K. W., 550 volts D. C., 1
pump.

EMP—40. Last years tonnage 29,823.
SIZES SHIPT—Run of Mine.

Horton Nos. 1, 2, 3 & 4 Mines; Drifts;
Coalburg Seam, 54 to 72 inches
thick.

PO—Sharon, W. Va.; SP—Same; CTY—
Kanawha; RR—C. & O., Cabin
Creek Branch.

MS—D. W. Martin, Sharon, W. Va.
S of H—Mules, trolley pole type and
storage battery locos. Track gauge,
44 in.

S of M—2 chain breast type and 8 short-
wall machs.

PP—Power purchased. Transformer 44-
000 to 2,200 volts A. C., 2-150
K. W. M. G. sets, 500 volts D. C.,
2 pumps.

EMP—25. Last years tonnage 203,503.
SIZES SHIPT—Run of Mine, Slack, Nut,
Egg, Lump, Block.

PREP EQUIPT—Shaker Screens, Picking
Tables, Loading Booms.

Oakley Mine; Drift; Lewiston Seam; 42
to 66 in. thick.

PO—Giles, W. Va.; SP—Same, and
Fairfield, W. Va.; CTY—Kanawha;
RR—C. & O.

MS—D. W. Martin, Sharon, W. Va.
S of H—Mules and trolley pole type
loco. Track gauge, 44 in.

S of M—1 chain breast type and 3 short-
wall machs.

PP—Power purchased, transformer, 44-
000 to 2,200 volts A. C., 1 150
K. W., M. G. set, 550 volts D. C.,
2 pumps.

EMP—60. Last years tonnage 39,286.
SIZES SHIPT—Run of Mine, Slack, Pea,
Nut, Egg, Lump, Block.

PREP EQUIPT—Gravity Screens.

WYOMING COAL COMPANY.

General Office, Tams, W. Va.
PR—W. P. Tams, Jr., Tams, W. Va.

VP—G. E. Vaughan, Lynchburg, Va.
TR—J. O. Watts, Lynchburg, W. Va.

GM—J. W. Wilson, Wyco, W. Va.
SUPT—E. R. Lynch, Wyco, W. Va.

EM—V. E. Vaughan, Tams, W. Va.
SCD—Address the Company. Buyer, J.
P. Kelley, Tams, W. Va.

Wyco Mine; Drift; Pocahontas No. 3
Seam, 48 in. thick.

PO—Wyco, W. Va.; SP—Same; CTY—
Wyoming; RR—Virginian.

MS—E. R. Lynch, Wyco, W. Va.
SM—H. Lushbaugh, Wyco, W. Va.

S of H—7 trolley pole type locos. Track
gauge 44 in.

S of M—4 shortwall machs.
PP—Power purchased, rotary converter,
250 volts D. C., 1-100 H. P.
fire tube boiler, 4 pumps.

EMP—175. Daily tonnage 1,000.
SIZES SHIPT—Run of Mine, Slack, Lump.

PREP EQUIPT—Gravity Screens, Picking
Tables.

WYSON-McGOY COAL & LAND CO.

General Office, Princeton, W. Va.
PA—A. F. Wyson, Princeton, W. Va.

VP—J. K. McCoy, Mullens, W. Va.
TR—W. J. F. Hott, Princeton, W. Va.

GM—J. N. Berthly, Jr., Wainville, W.
Va.

PA—J. N. Berthly, Jr., Wainville, W. Va.

CE—Howard N. Eavenson, Pittsburgh, Pa.

EM—D. J. Nunan, Wainville, W. Va.

SCD—Wainville Store Co. Buyer, J. N.
Berthly, Wainville, W. Va.

NOTE—Operations under development.

WYTHE BLOCK COAL COMPANY

General Office, Huntington, W. Va.
PR—J. R. Rich, Erbacon, W. Va.

VP—W. G. Rich, Wytheville, W. Va.
TR—John S. Sheppard, Huntington, W. Va.

GM—J. R. Rich, Huntington, W. Va.
GS—J. R. Rich, Erbacon, W. Va.

PA—J. R. Rich, Erbacon, W. Va.
EM—J. R. Rich, Erbacon, W. Va.

SCD—Thomas Rich & Co., Erbacon, W.
Va. Buyer, W. H. Frame, Erbacon,
W. Va.

SA—Twin States Fuel Co., Huntington,
W. Va.

Sutton Mine; Drift; Lower Kittanning
Seam, 56 in. thick.

PO—Erbacon, W. Va.; SP—Same; CTY
—Webster; RR—B. & O., W. Va. &
P. Branch.

S of H—Mules and rope. Track gauge
38 in.

S of M—Hand.
EMP—20. Daily tonnage 100.
SIZES SHIPT—Run of Mine.

Old information.

X-RAY COAL & COKE COMPANY.

Now Philmont Coal Co.

Y. & O. COAL CO.
Vao, W. Va.

Y. & O. Nos. 1 and 2 Mines; CTY—
Boone. No report.

YERGER, H. C.

See Pennsylvania Bituminous Information

YOUNG COAL COMPANY

General Office, Nutter Fort, W. Va.
PR—L. L. Young, Nutter Fort, W. Va.

VP—W. G. Kester, Nutter Fort, W. Va.
GM—C. G. Young, Nutter Fort, W. Va.

GS—C. G. Young, Nutter Fort, W. Va.
SA—Pittsburgh Plate Glass Co.

Southern Mine; Slope; Pittsburgh Seam,
72 inches thick.

PO—Nutter Fort, W. Va.; SP—Clarksburg,
W. Va.; CTY—Harrison; RR—B.
& O.

S of H—Mules and rope. Track gauge 42
inches.

S of M—Hand.
EMP—10. Daily tonnage 65.
SIZES SHIPT—Run of Mine.

YUKON POCAHONTAS COAL COMPANY

General Office, Yukon, W. Va.
PR—W. F. Harman, Tazewell, Va.

TR—W. T. Gillespie, Tazewell, Va.
GM—S. F. Harman, Yukon, W. Va.

GS—E. C. Lambert, Yukon, W. Va.
PA—S. F. Harman, Yukon, W. Va.

EM—H. A. Kiser, Yukon, W. Va.
SCD—Address the Company. Buyer, G.
C. Wade, Yukon, W. Va.

Additional Information on Page 998
Nos. 1 and 2 Mines; Drift; War Creek
Seam, 48-54 in. thick.

PO—Yukon, W. Va.; SP—Susanna, W.
Va.; CTY—McDowell; RR—N. & W.

S of H—12 elec. locos. Track gauge 44
in.

S of M—8 elec. machs.
PP—2 water tube boilers, total 300 H.
P., 1 gen. unit, 250 volts D. C.,
1 pump.

Last years tonnage 200,000.

YUMA COAL & COKE CO., THE

General Office, Wilkinson, W. Va.
PR—A. D. Robertson, Shamokin, Pa.

VP—G. W. Robertson, Shamokin, Pa.
TR—C. K. Robertson, " "

GM—

Directory of Mines by Counties

WEST VIRGINIA

BARBOUR COUNTY

Company	Mines	Post Office of Mines
Barbour Fuel Co.	Willmouth	B-lington
Bar-Jay Coal Co.	Morral	Philippi
Berryburg Coal Co.	Berryburg No. 1	Berryburg
Big Chief Coal Co.	Big Chief	Junior
Big Run Coal Co.	Big Run Nos. 1 and 2	Century
Boulder Coal Co.	Boulder	Philippi
Cam Coal Company	River	Volga
Century Coal Co. of W. Va.	Century Nos. 1 and 2	Century
Chair Coal Company	Meadowdale	Arden
Consolidation Coal Co.	Mine No. 37	Berryburg
Crawford, H. M. Coal Co.	Black Jo	Bellington
Crawford, H. M. Coal Co.	Lanella	Arden
Davis Coal & Coke Co.	Dartmoor No. 4	Dartmoor
Davis Coal & Coke Co.	Weaver Nos. 7 & 8	Weaver
Diamond Fuel Co.	Diamond No. 1	Arden
Diamond Operating Co.	Diamond No. 4 and 6	Arden
Estella Coal Mining Co.	Estella No. 1	Philippi
Fairmont & Boulder Coal Co.	Chas. E. Hawkes	Boulder
Fairmont-Kittanning Coal Co.	Byrer	Volga
Fernell Coal Co.	Rathland	Bellington
Gage Coal & Coke Co.	Gage Nos. 1 & 2	Junior
Gates Coal Co.	Gates	Berryburg
Graymont Coal Co.	Graymont	Langson
Hendricks Coal Co.	Lehigh No. 1	Bellington
Hocking Valley Coal Co.	Hocking Valley	Philippi
Humphreys, A. N. Coal Co.	Monser	Philippi
Ida May Coal Co.	Elizabeth	Bellington
Lee Collieries Co.	Edith	Philippi
Maine Collieries Co.	Maine Collieries	Flamington
M. Eden Smokeless Coal Co.	Meriden	Meriden
Mildred Coal Co.	Mildred	Junior
Nordlaw Coal Co.	Nordlaw No. 1	Hall
Radehill & Somerville Coal Co.	No. 10	Arden
Salefield Coal Company	Empire	Bellington
Sandridge, H. M. Coal Co.	City Grove	Junior
Savage Colliery Co.	Crin	R. F. D. 3, Philippi
Southern Coal Co., The	Edwards	Volga
Talbot-Mellale Coal Co.	Talbot-Mellale	Philippi
Tygart River Coal Co.	Westford Nos. 1 & 2	Philippi
United States Coal Co.	No. 40	Philippi
Valley Fuel Co.	Mt. Royal	Bellington
Waddell Coal Co.	Humphreys No. 1	Philippi
Watson, Alex. R.	Volga	Volga
West Junior Coal Co.	West Junior	Junior
West Virginia Coal & Coke Co.	Junior No. 4	Junior
Willchester Coal Co.	Willt Nos. 1 and 2	Hall
Winchell Coal Co.	Virginia	Arden

BOONE COUNTY

Altman Coal Co.	Altman	Altman
Anchor Coal Co.	Anchor Nos. 1 and 2	Highcoal
Ashford Coal & Coke Co.	Ashford	Charleston
Biddison, E. G., & Co.	Rockbottom	Rockbottom
Boone Block Mining Co.	Boone Block	Silush
Boone County Coal Corp.	Boone No. 1	Clothier
Bradley Mining Co.	Bradley	Costa
Brush Creek Coal Co.	Brush Creek	Brush Creek
Buffalo-Thacker Coal Co.	Monte Nos. 1, 2 and 3	Ottawa
Cameva Coal Co.	Cameva	Maxine
Coal Mountain Mining Co.	Coal Mountain	Pond
Coal River Collieries Co.	Coal River	Huntington
Cronin, A. D., Coal Co.	Franklin	Altman
Dartmont Coal Co.	Dartmont	Javins
Halcon Coal Co.	Halcon	Coal Bloom
Hopkins Fork Coal Co.	Hopkins Fork	Walburn
Horse Creek Block Coal Co.	Horse Creek	Morrisvale
Kanawha Consolidated Coal Co.	Sterling	Sterling
Kendrick Coal Co.	Kendrick	Madison
Laurel Branch Coal Co.	Laurel Branch	Johns
Laurel Creek Fuel Co.	Laurel Creek	Seth
Lewiston Block Coal Co.	Fred	Seth
Lory Coal & Coke Co.	Lory	Lory
Madison Coal Co.	Madison	Hadaltan
Maxine Coal Co.	Maxine	Maxine
Midway Coal Co.	Rockbottom	Rockbottom
Mordue Collieries Co.	Nos. 1 and 2 Splint	Mordue
Morrisvale Coal Co.	Morrisvale	Morrisvale
Nellis Coal Co.	Nellis	Costa
Peytona Mining Co.	Peytona Nos. 1 and 2	Peytona
Rich Block Coal Co.	Rich Block	Morrisvale
Rock Bottom Coal Co.	Rock Creek	Rockbottom
Royal Block Coal Co.	Royal Block	Morrisvale
Scott Coal Co.	Scott No. 4	Silush
Song Creek Coal Co.	Song Creek	Whitesville
Sharlow Gas Coal Co.	Sharlow Nos. 1 and 2	Sharlow
Silush Coal Co.	Red Star Mine	Silush
Southern States Coal Co.	No. 1	Orange
Splint-Organ Coal Co.	Splint-Organ	Organ
Spruce River Coal Co. (The)	Damage or Spruce River Nos. 2, 3 & 4	Bamarg
Sterling Block Coal Co.	Sterling Block Nos. 1 and 2	Altman
Superior Eagle Coal Co.	Superior Eagle	Jeffrey
U. S. Block Coal Co.	U. S. Block	Altman
Valco Coal Company	Valco	Greenview
Vanbail Coal Co.	Vanbail Nos. 1 & 2	Silush
Webb Coal Mining Co.	Webb	Garrison
Y. & O. Coal Co.	Y. & O. Nos. 1 & 2	Van

BRAXTON COUNTY

American-Slovak Coal & Coke Co.	Leth	Exchange
Antler Coal Co.	Sue	Braxton
Bens Run Coal Co.	Hyer	Hyer
Braxton County Coal Co.	Braxton	Sutton
Braxton-Pittsburgh Coal Co.	H-fner	Gilmer
Cedar Creek Coal & Coke Co.	Cedar Creek	Exchange
Colonial Operating & Development Co.	Holly No. 1	Palmer
Copen Gas Coal Mines, Inc.	Vanwith	Bower
Herd-List Coal & Coke Co.	Herd-List	Palmer
Moon Lumber Co.	Moon No. 1	Centralia
Old Foundation Coal Co.	Old Foundation	Braxton
Pershing Coal Co.	Pershing	Palmer

Company	Mines	Post Office of Mines
Pittsburgh Summit Coal Co.	Sal. m. No. 3	Cutlip
Robinson Coal & Coke Co., The	Eleanor Nos. 1 & 2	Palmer
Scarboro Coal & Coke Co.	Wesherill, Lynch & Arcadia	Prestonia
Standard Eagle Coal Co.	Standard Eagle	Seecal
Standard Lim. & Stone Co.	Lake	Capell
Sutton Chemical Co., The	Sutton No. 3	Sutton
Vance Coal Company	Venison	Exchange
West Pittsburgh Coal Co.	Braxton	Braxton
West Virginia Coal & Coke Co.	Bower No. 10, Drennen No. 12, Copen No. 11	Bower

BROOKE COUNTY

Carnegie-Wellburg Coal Co.	Goddie	Wellburg
Consumers Fuel Co.	Louise	Louise
Cross Creek Coal Co.	Arnold No. 3	Wellburg
Follanshee Gas Coal Co., Inc.	Arnold No. 2	Wellburg
New Cumberland Coal Co., Inc.	Margaret	Colli
P. V. & K. Coal Co.	Jennetta	Follanshee
Panhandle Block Coal Co.	Maison	Whaling
Richland Coal Co.	Standard Nos. 1 and 2	Wellburg
Verona Coal Co.	No. 1 Anna and No. 2 Jean	Wellburg
Washington Pike Coal Co.	Washington Pike	Wellburg
West Virginia-Pittsburgh Coal Co.	Gilchrist No. 3 and La Belle No. 4	Wellburg
West Virginia-Pittsburgh Coal Co.	Locust Grove	Colliers
Windsor Coal Co.	Beach Bottom	Short Creek

CLAY COUNTY

Big Block Coal Co.	Clone	Elkhurst
Blue Ridge Fuel Co., Inc.	Blue Ridge	Ira
Carver Fork Colliery Co.	Leatherwood	Clay
Christina Coal Co.	Christina No. 2	Blackmore
Clay Coal Co.	Clay	Clay
Clay Gas Coal Co., The	Elbridge	Harland
Coalbell Coal Co.	Gunbar, Trees & Flynn	Harlow
Deberry & Leonard Coal Co.	Deberry	Clay
Elk River Coal & Lumber Co.	Rich Run	Widen
Elkland Coal Mining Co.	Burdette	Elkhurst
Elliott-Splint Coal Co.	York No. 1	Clay
Foy Splint Coal Co.	Foy	Dorfee
Freer Coal Co., The	Freer Coal	Birch Run
French Collieries Co.	French Nos. 1 and 2	Pancost
Johnson, T. L. Coal Co.	Ira No. 25	Ira
Jones-Winfrede Coal Co.	Steddel and Patis	Harland
Kanawha Standard Coal Co., Inc.	Jones	Clay
Leathwood Creek Fuel Co.	Upwood	Upwood
Lima Coal Co., The	Goetschus	Harland
Merrill, W. A. & Co.	Slick	Duck
Mid-Lothian Jewel Coal Co.	Mid-Lothian	Harland
Middle Creek Coal Co.	Middle Creek	Blackmore
Mulligan Coal Co.	Middle Creek	Pancost
Penn. Coal & Realty Co.	Queen Shoals	Queen Shoals
Rex Colliery Company	Queen Shoals	Queen Shoals
Stottlemeyer Coal Co.	Stottlemeyer	Ira
Thompson Block Coal Co.	Dorfee No. 1	Dorfee
Tiger Coal Co.	Tiger Nos. 1 & 2	Harland

FAYETTE COUNTY

Ajax Coal Co.	Ajax	Fayette
American Rolling Mills Co.	Marling	Marling
Atlantic Coal & Iron Co.	Atlantic Nos. 1 & 2	Bachman
Baldock Coal & Coke Co.	Cliff Top No. 4 & 6	Cliff Top
Ballinger Coal Company	Ballinger	Winona
Beckwood Coal & Coke Co.	Beckwood Nos. 1 & 2	Claremont
Beckwood Coal & Coke Co.	Nos. 1 and 2	Claremont
Beelick Knob Coal Co.	Beelick Knob	Meadow Bridge
Berry Bros. Coal & Coke Co.	Echo	Berry
Big Bend Coal Co.	Big Bend	Dimmock
Boomer Coal & Coke Co.	No. 2 North, 2 South, 3, 4 & 5	Boomer
Branch Coal & Coke Co.	Elverton	Elverton
Cadle Ridge Coal Co.	Cadle Ridge Nos. 1, 2, & 3	Thurmond
Callaway Coal Co.	Callaway	Glen Jean
Cannelton Coal & Coke Co.	Nos. 1, 2, 3, 4 & 5	Cannelton
Christian Colliery Co.	Christian No. 1	Mahan
Coal Run Coal Co.	Coal Run	Canard
Duck Colliery Co.	Duck	Wyndal
Durkett Coal Co.	Bellwood	Bellwood
Eagle By-Products Colliery Co.	Krebs No. 1	Krebs
Eagle Coal Company	Eagle Coal Co.	Montgomery
Elkhorn Piney Coal Mining Co.	Vulcan No. 1, New South No. 3, Eagle Nos. 4 & 5	Powellton
Elmo Mining Co. (The)	Elmo	Elmo
Ephraim Creek C. & C. Co.	Buffalo & Slater	Thayer
Export Coal Co.	Export	Export
Fayette-Kanawha Coal Co.	Nos. 1 & 2	Montgomery
Fire Creek Coal & Coke Co.	Fire Creek	Fire Creek
Ganley Mountain Coal Co., The	Buck Run No. 1 and Rich Creek Nos. 2 & 3	Jodie
Ganley Mtn Coal Co.	Ansted	Ansted
Gaymont Coal & Coke Co.	Gaymont	Hawks Nest
Glencoe Coal Co.	Glencoe	Page
Glen Ferris Fuel Co.	Glen Ferris	Glen Ferris
Greenwood Coal Co.	Greenwood	Lawton
Griffiths, W. E. Coal Co.	Griffiths	Morganette
Harmon, W. S. Coal Co.	Springdale	Springdale
Hemlock Hollow Coal Co.	Hemlock Hollow	Lawton
Ingram Branch Coal Co.	Ingram Branch	Ingram Branch
Indian Run Collieries Co.	Elkridge Nos. 1, 3 & 21	Elk Ridge
Indian Run Collieries Co.	Nos. 4 & 5	Kimberly
Kanawha & Hocking Coal & Coke Co.	Nos. 111 and 112	Carbondale
Kanawha & Hocking Coal & Coke Co.	Nos. 113 and 114	Longacre
Kanawha & Hocking Coal & Coke Co.	No. 116	Boomer
Laurel Creek Coal Co.	Laurel	Laurel Creek
Lee Coal Company	Lee No. 2	Mt. Hope
Lick Fork Colliery Co.	Lick Fork 1 & 2	Lick Fork
Long Branch Coal Co.	Long Branch	Long Branch
Loup Creek Colliery Co.	Loup Creek Nos. 1 and 2	Page
Loup Creek Colliery Co.	Beards Fork	Beards Fork
Low Moor Iron Co. of Virginia	Kay Moor No. 1	Kay Moor
Low Moor Iron Co. of Virginia	Kay Moor No. 2	South Fayette
Low Volatile Consolidated Coal Co.	Rock Lick and Concho	Minden

(Continued on Next Page)

Fayette County—Continued.

Company.	Mines.	Post Office of Mines.
Lynchburg Coal Co.	Lynchburg	Vanetta
McDonald Coal Co.	McDonald	McDonald
McKee Coal & Coke Co.	Kilsyth	Kilsyth
McKee Coal & Coke Co.	Derryhale	Derryhale
Meigs & New River Coal Co.	Boone, Smokeless, Dubree and Rasedale	Winona
Meadow Fork Fuel Co.	Meadow Fork	Wicklow
Milburn Ry-Product Coal Co.	Milburn Nos. 1 & 2	Gamoca
Mill Creek Colliery Co.	Mill Creek	Ansted
New River Co.	Macdonald	Macdonald
New River Co.	Collins	Glen Jean
New River Co.	Dunlop	Dunlop
New River Co.	Harvey	Harvey
New River Co.	Harvey	Prudence
New River Co.	Prudence	Scarbro
New River Co.	Scarbro	Whipple
New River Co.	Whipple	Carlisle
New River Co.	Oakwood	Carlisle
New River Co.	Summerlee	Summerlee
New River Co.	Lochelly	Lochelly
New River Collieries Co.	Sun Nos. 1 and 2	Sun
New River & Pocahontas Con. Coal Co.	Minden Mines	Minden
New River & Pocahontas Con. Coal Co.	Layland	Layland
New River & Pocahontas Con. Coal Co.	Weirwood	Pax
New River Export Smokeless Coal Co.	Blum and Lockout	Lockout
New River Export Smokeless Coal Co.	Michigan	Pageite
Newlyn Coal Co.	Newlyn	Glen Jean
Nichol Colliery Co.	Nichol	Nuttallburg
Nuttallburg Smokeless Fuel Co.	Nuttallburg	Nuttallburg
Oakland Coal Co.	Oakland & Crescent	Smithers
Oakland Coal Co.	Glen Falls	Glen Ferris
Packs Branch Coal Co.	Packs Branch	Pax
Paint Creek Coal Mining Co.	Hickory Camp	Collinsdale
Phoenix Coal Co.	Phoenix	Thayer
Quinnmont Coal Co.	Big Q	Lawton
St. Clair Coal Mining Co.	Eagle	Bagle
Scotia Coal & Coke Co.	Brooklyn	Finlow
Scotia Coal & Coke Co.	Rush Run	Rush Run
Sewell Smokeless Coal Co.	Caperton	Caperton
Signal Knob Coal Co.	Signal Knob	Ansted
Simms Branch Coal Co.	Simms Branch	Longacre
Simpson & Co.	Riverside No. 2	Boomer
Solvay Collieries Co.	Kingston Nos. 1, 3, 4 and 5	Kingston
Solvay Collieries Co.	Westerly	Westerly
South Side Co.	Brooklyn	Finlow
Star Coal & Coke Co.	Star	Redstar
Stover Coal Co.	Stover	Nuttallburg
Sugar Creek Coal & Coke Co.	Sugar Creek	Mt. Hope
Sunset Mining Co.	Sunset	Sun
Thomas Smokeless Coal Co.	Nos. 1 & 2	Morgantown
Turkey Knob Coal Co.	Turkey Knob	Turkey Knob
Two-Sum Coal Co.	Nos. 1, 2 & 3	Boomer
Vazear, V. S. Coal Co.	Hi Top and Sweetwood	Mt. Hope
Wewinn Coal Co.	Wewinn	Newlyn
West Virginia Coal Co., The	Stone Cliff	Stone Cliff
W. Va. Eagle Coal Co.	Nos. 1 & 2	Boncar
Williams-Combs Coal Co.	Williams-Combs	Lawton
Willis Branch Coal Co.	Willis Branch	Willis Branch

GARRETT COUNTY

Hamill Coal & Coke Co.	Hamill Nos. 1, 2, 3, 4 and Freeport	Blaine
McKanwig Coal Co.	Nethken	Hayard

GILMER COUNTY

Davis Colliery Co.	Jontee	Gilmer
Gilmer Fuel Co.	Gilmer	Gilmer
Pennsylvania & West Virginia Coal Co.	Bridge Siding No. 47	Gilmer
United Coal Company	Kathrine, Brackett & Darnall	Bower

GRANT COUNTY

Davis Coal & Coke Co.	Henry No. 22	Henry
Emmons Coal Mining Co. of W. Va., The	Culpeper No. 1	Bayard
Jordan, S. H.	Nos. 1 and 2	Gorman

GREENBRIER COUNTY

Imperial Smokeless Coal Co.	Quinnwood	Quinnwood
Meadow River Smokeless Coal Co.	Dwyer	Rainelle

HANCOCK COUNTY

American Sewer Pipe Co.	No. 22 Coal and Clay	New Cumberland
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HARRISON COUNTY

Allied Coal Co.	Allied No. 1	Willard
Alpha Portland Cement Co.	Phoenix	Wolf Summit
Antler Coal Company	Kathrine	Lumberport
Balkan Coal Co.	Balkan	Dola
Bethlehem Coal Co.	Scott Nos. 1, 2 and Peoria	Shinnston
Bingham Valley Coal Co.	Bice	Shinnston
Bowers Coal Co.	Roggers	Lumberport
Britt, Hornor & Craig	Corona	Hepzibah
Calif Coal Co.	Calif	Lost Creek
Canby Coal Co.	Cambria	Lumberport
Canby Coal Company	Isabel	Meadowbrook
Canby Coal Co.	Java	Enterprise
Champion Collieries Co., The	Carter	Lost Creek
Connellsville-Hygrade Coal Co.	Hygrade	McWhorter
Consolidation Coal Co.	Consolidation Nos. 21 & 91	Gypsy
Consolidation Coal Co., The	Consolidation No. 25	Clarksburg
Consolidation Coal Co., The	Consolidation No. 27 and 48	Glen Falls
Consolidation Coal Co., The	Consolidation No. 29, R. F. D. 8, Clarksburg	Owings
Consolidation Coal Co., The	Consolidation No. 32	Viopra
Consolidation Coal Co., The	Consolidation No. 40	Viopra
Consolidation Coal Co., The	Consolidation Nos. 50, 62 and 94	Adamston
Consolidation Coal Co., The	Consolidation No. 54	Haywood
Consolidation Coal Co.	Consolidation No. 55	Meadowbrook
Consolidation Coal Co., The	Consolidation Nos. 51 and 66	Shinnston
Consolidation Coal Co.	Cons. Nos. 88, 89 and 90	Wheat
Corona Coal Co.	Corona	Hepzibah
Corrado-Fairmont Coal Co.	Cunningham	Lumberport
Cortright-Corning Collieries Co.	Cortright	Box 551, Clarksburg
Dale Coal Co.	Jennie B.	Meadowbrook
Delta Coal Co.	Albert	Reynoldsville
Dawson Coal Co.	Dawson	Pawmont
Despard Fuel Company	Despard	Box 140, Clarksburg
Dodge Coal Co.	Dodge	Mt. Clair
Douglass Coal Co.	Douglass	Meadowbrook
Eastern Utilities Coal Co.	Righter	Lost Creek
Elk Horn Coal Corporation	Interstate Nos. 44, 52 and 64	Interstate
Everett Coal Company	Martin	Haywood
Fairmont & Baltimore Coal & Coke Co.	Fairmont	Adamston
Fairmont Big Vein Coal Co.	Fairmont Nos. 1 & 2	Two Lick
Fairmont Mining Co.	Trainer	R.F.D. No. 4 Monongah

Company.	Mines.	Post Office of Mines.
Fairmont-Reynoldsville Collieries Co.	Oreta	Wilsnburg
Farnum Coal Co.	Farnum	Box 747, Clarksburg
Fleming & Crane	Fleming	R.F.D. No. 1, Monongah
Fort Clark Coal Co.	Carper	Mt. Clare
Fort Clark Coal Co.	Wilsonburg	Wilsonburg
Fort Pitt Coal Co.	Fort Pitt	Clarksburg
Fortray Coal Co.	Fortray	Viopra
Francis T. J. Coal Co.	Park	Clarksburg
Francis Coal Co.	Norwood Nos. 1 & 2	Nutter Fort
Franklin Gas Coal Co.	Franklin	Clarksburg
Freemont Coal Company	Florence	Mt. Clare
Fulton Gas Coal Co.	Pitcairn	Clarksburg
Harry, B. Coal & Coke Co.	Monroe	Shinnston
Haywood Coal Mng. Co.	High Point	Clarksburg
High Point Coal Co.	Hood	Shinnston
Hond Coal Co.	Paleb	Lumberport
Hough, H. M. Coal Co.	Fairmont No. 4	McWhorter
Howard & Quinn	Snake Hill	Clarksburg
Howard Gathers & Co.	Lewis	Wolf Summit
Hudson Coal Co.	Miller	Wilsonburg
Hudson Coal Co.	Helen	Gypsy
Hughes Coal Co.	Lauralee and Robey	Lumberport
Hutchinson Coal Co.	Hutchinson	Mt. Clare
Hutchinson Coal Co.	McCandlish	Meadowbrook
Hutchinson Coal Co.	Girard	Dola
Hutchinson Coal Co.	York	Keydelsville
Hutchinson Coal Co.	Erie	Hepzibah
Interstate Fuel Company	Stout	Clarksburg
Lambert Run Coal Co.	Claudio	Meadowbrook
Lauretta Coal Co.	Gordon No. 1	Meadowbrook
Lewis Coal Co.	Grasselle No. 3	Clarksburg
Long Coal Mining Co.	Florida Nos. 1 and 2, Gladys Nos. 1 and 2	Wolf Summit
Long Fuel Co.	Kester	Clarksburg
Long, J. E. Coal Co.	Burke	Clarksburg
Lost Creek Coal Co.	Whiteman	Clarksburg
McWhorter Coal Co.	Raven	McWhorter
McWhorter, J. M. Coal Mng. Co., The	Rosebud Nos. 1 and 2 and Gilbert	Rosebud
Mack Coal Co.	Mack	Viopra
Madera-Hill Clark Coal Co.	Waldo, 1, 2, 3 and 4	Wilsonburg
Marbelle Coal Mining Co.	Marion	Wolf Summit
Marshall Coal Co.	Marshall	Mt. Clare
Mason & Mason	Gainer No. 1	Clarksburg
Melross Coal Co.	Enterprise	Enterprise
Micheal Coal Co.	Micheal	Dola
Monarch Coal Co.	Fairmont No. 3	McWhorter
Monongah Fuel Co.	Gallihue Nos. 1 and 2	Monongah
Montfair Gas Coal Co.	Althea	Fairmont
Mt. Clare Colliery Co.	Mudlick	Mt. Clare
Mudlick Coal Co.	"Robert"	Shinnston
New Superior Coal & Coke Co.	Louise	Shinnston
Peacock Coal Co.	Penn	Clarksburg
Penn Coal Co.	Penn	Clarksburg
Penneco Coal Co.	McWhorter	McWhorter
Pora Coal Co.	Louise & Goldie	Shinnston
R. S. Coal Co.	R. S. No. 1	Clarksburg
Raybert Coal Co.	Raybert	Dola
Riley Coal Co.	Lorain	Shinnston
Robinson & Hardesty Coal Co.	Blackburn	Shinnston
Ryan Coal Company	Haymond	Clarksburg
Savaria Coal Co.	Ronay	Mt. Clare
Seminole Gas Coal Co.	Seminole	Clays
Sloan Luce Coal Co.	Lonny B	Meadowbrook
Smith Brothers Coal Co.	Adamston No. 1	Clarksburg
Stout Coal Co.	Stout No. 1	Clarksburg
Superba Coal Company	Dola	Dola
Thermal Coal Co.	Swisher	Lost Creek
Thomas-Love Coal & Coke Co.	Nora	Worthington
Union Gas Coal Co.	Lambert	Lost Creek
Virginia-Maryland Coal Corp.	Willard Nos. 1, 3, 4 and 5	Adamston
Washington Irving Coal Co.	Wilbert	Shinnston
Wilmar Coal Co.	Wilmar	Shinnston
Winchester Coal Co.	Winchester	Enterprise
Wolf Summit Coal Co.	Summit	Wolf Summit
Wyatt-Ringamon Coal Co.	Josephine	Worthington
Young Coal Co.	Southern	Nutter Fort

JACKSON COUNTY

Cobb, G. H., Coal Co.	Cobb	Loop
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KANAWHA COUNTY

Alexander By-Product Coal Co.	Jefferson	Heatherman
American Collieries Co.	Snow Hill	Charleston
Barren Creek Colliery Co.	Barren Creek	Barren Creek
Becky-Jane Coal Co.	Becky-Jane	Lewisston
Big Bottom Coal Co.	Big Bottom	Tad
Black Band Cons. Coal Co.	Nos. 1 & 2, Reynolds No. 5 and Knickerbocker	Olcott
Blue Band Coal Co.	Blue Band No. 1	Coco
Blue Creek Coal & Land Co.	Blakely Nos. 2, 4 & 5 and Lewiston No. 6	Blakeley
Blue Creek Fuel Co.	No. 1	Coco
Bregle Coal Co.	Bregle	Dana
Buffalo-Kanawha Coal Corp.	Buffalo-Kanawha	Putney
Cabin Creek Consolidated Coal Co.	Kayford Nos. 1 & 2, Thistle, Shamrock Raceoon Nos. 1 & 2, Rose	Kayford
Cabin Creek Con. Coal Co.	Red Warrior	Ohley
Cabin Creek Con. Coal Co.	Davis	Warrior
Cabin Creek Con. Coal Co.	Holly & Cherokee	Leewood
Cabin Creek Con. Coal Co.	Quarrier	Wake Forest
Cabin Creek Con. Coal Co.	Bicklare and Ruby	Decota
Cabin Creek Con. Coal Co.	United Nos. 1 and 2	Wewaco
Cabin Creek Consolidated Coal Co.	Acme, Empire, Buckeye and Black Tulip	Acme
Callan Coal Co.	Callan	Charleston
Campbells Creek Coal Co., The	Nos. 1 and 3	Putney
Cannell Coal & Coke Co.	No. 6	Cannell
Carbon Fuel Co.	No. 1	Nabob
Carbon Fuel Co.	Nos. 2 and 3	Carbon
Carbon Fuel Co.	Nos. 4, 5 and 6	Jochio
Carbon Fuel Co.	No. 7	Wewaco
Carbon Fuel Co.	Nos. 9 and 11	Notomlue
Carter Coal & Mining Co.	Carter	Belle
Central By-Product Coal Co.	Central By-Product	Heatherman
Charleston Co-operative Coal Co.	Black Hawk	Charleston
Chesapeake Mng. Co.	Chesapeake	Handley
Climax Coal Co.	Climax	Diamond
Coalburg Colliery Co.	Ronda	Ronda
Coalburg-Kanawha Mining Co.	A. & B.	Coalburg
Coalfork Coal Company	Coalfork	Cofoco
Coleman Coal Co.	Coleman	Biverside
Columbia Coal Co.	Columbia	Cinco

(Continued on Next Page)

Kanawha County—Continued.

Company.	Mines.	Post Office of Mines.
Cooper, J. M. Coal Co.	Cooper	Lewiston
Crown Hill Coal Company	No. 8	Crown Hill
Dana Coal Co.	Dana	Dana
Davenport Coal Co.	Davenport	Big Chimney
Davis Creek Land & Coal Co.	Davis Creek	Charleston
Daylaw Coal Mining Co.	Daylaw & Peerless	Eureka, Chesapeake
Deep Hollow Coal Co.	Deep Hollow	Coalburg
Dempster, William, Coal Co.	Dempster	Shradler
Dun Coal Co.	Dun Nos. 2, 4 and 5	Eskdale
Doreen By-Products Coal Co.	Max Nos. 2 and 2	Charleston
Dry Branch Coal Co.	Dry Branch	Dry Branch
East Bank Mng. Co.	East Bank	East Bank
Elkanaw Coal Co.	Becky Jane	Winifrede
Empire Coal Mines Co.	Empire	Big Chimney
Empire Fuel Co.	Nos. 1 & 2	Hughston
Eureka Coal Co.	Eureka Nos. 1, 2, 5 and 6	Donwood
Faulkner Coal Co.	Faulkner	Mallory
Georges Creek Coal Corp.	Malden	Charleston
Grauney Branch Coal Co.	Empire No. 2	Big Chimney
H. C. Coal & Coke Co.	Helen	Dana
Hackett Coal Co.	Hackett Nos. 1 & 4	Cedar Grove
Halsstead Coal Co.	Hershaw	Hernshaw
Holt Fuel Co.	Holt	Pratt
Huddleston, E. P.	Huddleston	Charleston
Hughston Coal Co.	Hughston	Hughston
Huntington Coal & Mining Co.	Bells	Belle
Imperial Colliery Company	Imperial Nos. 1, 3 and 4	Burnwell
Kanawha & Hocking Coal & Coke Co.	No. 104	Cedar Grove
Kanawha & Hocking Coal & Coke Co.	Nos. 105 and 108	Mammoth
Kanawha Black Land Coal Co.	Black Diamond	Elcott
Kanawha City Coal Co.	Kanawha City	Charleston
Kanawha Homestead Coal Co.	Frye	Hughston
Kelly's Creek Colliery Co.	Nos. 1, 2, 3, 4, 5 and 6	Ward
Left Fork Coal Co.	Left Fork	Marmet
Lewiston Block Coal Co.	Lewiston	Lewiston
Mammoth Mining Co.	Mammoth Nos. 1 and 2	Big Chimney
March Coal Co.	March	Charleston
Marmet, Edwin.	Black Band, Cedar Grove, Lens Creek and Winifrede	Marmet
Marmet-Oliver Coal Co.	Shrewsbury	Shrewsbury
Marshall Fuel Co.	Sara-Jean & Mary-Elizabeth	Dana
Meadow Lick Coal Co.	Meadow Lick	Oleott
Miami Coal & Coke Co.	Miami	Miami
Middle Fork Block Coal Co.	Middle Fork Block	Middle Fork
Montgomery Coal Co.	Nos. 1 & 2	Montgomery
Mount Morris Mining Co.	Mount Morris	Montgomery
Mountain Eagle Collieries Co.	Lucy-Ray-Jefferson	Heatherman
Nelson, H. R. Coal Co.	H. R. Nelson	Winifrede
New Export Coal Co.	New Export	Cineo
No. 2 Gas Coal Co.	No. 2 Gas	Charleston
Paint Creek Coal Mining Co.	Greenbrier and Gross	Whittaker
Paint Creek Coal Mining Co.	Paint Creek and Seranton	Gallagher
Paint Creek Coal Mining Co.	Standard	Standard
Paint Creek Coal Mining Co.	Wacoma	Livingstone
Pax Mining Co.	Trinity	Grippe
Pen Mar Coal Co.	Pen-Mar	Big Chimney
Pinnacle Coal & Coke Co.	Pinnacle	Dana
Point Lick Coal Co.	Point Lick Nos. 1 & 2	Coalfork
Quincy Coal Co.	Nos. 1, 2 and 3	Quincy
Ray-Burdett Coal Co.	Barton	Big Chimney
Riverview Coal Co.	Riverview	Anstead
Sandberg Coal & Land Co.	Carkin	Charleston
Sanderson Mining Co.	Sanderson	Sanderson
Shrewsbury Coal Co.	Franklin	Shrewsbury
Slack Branch Coal Co.	Slack Branch	Quick
Smith O. P. Coal Co.	No. 1 and Cedar Grove No. 1	Plus
Snow Hill Coal Company	Snow Hill	Charleston
Snyder Coal Co.	Snyder	Charleston
Southern Splint Fuel Co.	Black Cat	Crown Hill
Standard Kanawha Coal Mining Co.	Blackridge Nos. 1 and 2	Quick
Stange-Elliott Coal Co.	Hill	Blackley
Star Mining & Fuel Co.	Star Mining and Fuel	Plus
Wake Forest Mining Co.	Wake Forest	Wake Forest
West Virginia Coal & Mfg. Co.	Cedar Grove No. 1	Cedar Grove
West Branch Mining Co.	West Branch Nos. 1, 2, 3	Dry Branch
Winifrede Coal Co.	Stewart No. 2, North, West & South	Winifrede
Wyatt Coal Co.	Horton Nos. 1, 2, 3 and 4	Sharon
Wyatt Coal Co.	Lalng	Lalng
Wyatt Coal Co.	Oakley	Giles

LEWIS COUNTY

Apex Coal Co.	Apex	Box 587, Clarksburg
Brewer Harrison Coal Co.	Brewer-Harrison	Bollington
Cap Run Coal Co.	Cap Run	Walkersville
Diamond Operating Company	Diamond No. 1	Weston
Ford-Lyon Coal Co.	Blanco	McWhorter
Iris Coal Company, Inc.	Summit No. 1	Fisher Summit
Late-Koozer Coal Co.	R-dstone No. 1	Hornor
Lewis County Colliery Co.	Hornor	Hornor
Lynch, P. C. Coal Co., The	No. 1	Weston
National Coal Mining Co.	Polar Nos. 1 and 2	McWhorter
Reserve Gas Co.	Kennedy	Weston
Smith Coal Mining Co.	Hornor	Hornor
Stone Lick Coal Co.	Stone Lick	Weston
Victor, L. R. W. P.	Mt. States	Hornor
Weston Fuel Co.	Hornor	Weston

LINCOLN COUNTY

Guyan River Coal Co.	Guyan River	Hobball
Guyan River Coal Co.	Branchland	Branchland
Ivy Branch Coal Co.	Ivy Branch	Ivaton
Ivy White Ash Coal Co.	Ivy White Ash Nos. 1 and 2	Ivaton
Lincoln Coal & Coke Co.	Macco	McCordle
Logan Black Band Coal Co.	Logan Black Band	Smith
Malleable Coal Co.	Malleable	McCordle
Peter Cave Coal Co.	Carbelle	Alkol
Ranger Coal Co.	Ranger	Ranger
Right Fork Mining Co.	Right Fork	Ivaton
Royal White Ash Coal Co.	Royal	Alkol

LOGAN COUNTY

Amherst Coal Co.	Amherst No. 1	Amherstdale
Amherst Coal Company	Amherst Nos. 2 and 3	Branchholm
Araoma Coal Company	Araoma	Logan
Argyle Coal Co.	Argyle No. 1	Yolyn
Argyle Coal Co.	Argyle No. 2	Ethel
Bengal Coal Co.	Lincoln	Kistler
Big Creek Coal Co.	Black Hawk	Big Creek
Boone County Coal Corp.	Boone Nos. 2 & 3	Montelo
Boone County Coal Corp.	Boone No. 4 & 5	Andross
Boone County Coal Corp.	Boone Nos. 6 & 10	Sharples

Company.	Mines.	Post Office of Mines.
Boone County Coal Corp.	Boone No. 12	Blair
Buffalo Eagle Coal Co.	Nos. 1, 2 and 3	Branchholm
Chafin Jones Heatherman Coal Co.	Chafin Jones Heatherman	Peach Creek
Cleveland Cliffs Iron Co. (The)	Ethel Nos. 1 & 2	Ethel
Cleveland Cliffs Iron Co. (The)	Ethel No. 3	Keyes
Cummins & B. Coal Co.	Switzer Nos. 1 & 2	Alcmoo
Cummins & B. Coal Co.	Switzer	Acroville
Cub Fork Coal Co.	Cub Fork	Yolyn
Cunningham, Miller & Enslow	Sky	Kistler
Daisy Coal Co.	Daisy	Big Creek
Degans Eagle Coal Co.	Degans Eagle	Acroville
Donald Coal Company	Donald	Stollings
Draper Eagle Coal Co.	Draper Nos. 1 & 2	Logan
Eagle Island Coal Co.	Nos. 1 and 2	Kistler
Fort Branch Coal Corp.	Fort Branch	Fort Branch
Gay Coal & Coke Co., The	Gay Nos. 1 and 2	Mount Gay
Georges Creek Coal Co.	Georges Creek	Ethel
Gilby By-Product Coal Co.	Gilby Branch	Chapmanville
Guyan Mining Co.	Guyan Valley	Manbar
Guyan Valley Coal Co.	Guyan Valley	Crown
Guyandotte Coal Co.	Guyandotte	Kitchen
Holdred Collieries of W. Va.	Holdred Collieries	Blair
Illinois Commercial & Mining Co.	R-x Nos. 1 and 2	Ethel
Island Creek Coal Co.	Nos. 1, 2, 5, 6, 7, 8, 9, 10, 15, 16, 17, 18 and 19	Hold'n
Island Creek Coal Co.	Nos. 3, 4 and 14	Whlman
Island Creek Coal Co.	Nos. 11, 12	Monaville
Island Creek Coal Co.	No. 13	Switzer
Johnson, E. R. Coal Mining Co.	Johnson	Hughy
Jones Coal Land Co.	Isabella Nos. 1 and 2	Stollings
King Fuel Co., The	King Fuel No. 1	Christian
Lillybranch Coal Co.	Lillybranch	Big Creek
Litz-Smith Coal Co.	Litz-Smith No. 3	Acroville
Litz-Smith Island Creek Coal Co.	Litz-Smith No. 4	Omar
Logan-Eagle Coal Co.	Logan Eagle Nos. 1 & 2	Lafrohe
Logan Mining Co.	Earling	Manbar
Logan Mining Co.	Mona	Monaville
Logan Mining Co.	Monitoba & Wanda	Ethel
Logan Mining Co.	Rossmore	Rossmore
Logan Thin Vein Coal Co.	Logan Thin Vein	Stollings
Long Flame Coal Co.	Long Flame	Lundale
Lorain Coal & Dock Co.	Lorado Nos. 1 and 2	Lorado
Low Ash Coal Co., Inc.	Low Ash	Crown
Lundale Coal Co.	Lundale	Lundale
Lundale Coal Co.	Lafrohe	Lafrohe
McCall Coal Co.	McCall	Christian
McConnell Coal Co.	McConnell	Anold
McGregor Coal Co.	McGregor Nos. 1, 3 and 4	Slagle
Mabel Coal Co.	Faulkner	Mallory
Macbeth Coal Co.	Macbeth	Forbue
Madne North and South	Madne North and South	Robn'te
Main Island Creek Coal Co.	Nos. 2 and 3	Mico
Main Island Creek Coal Co.	Nos. 4, 5 and 6	Omar
Main Island Creek Coal Co.	Nos. 7, 9 and 14	Banabas
Main Island Creek Coal Co.	Nos. 16, 17, 18, 19, 20, 21 and 22	Sterral
Mallory Coal Co.	Mallory No. 1	Mallory
Mallory Coal Co.	Mallory No. 2	Man
Man Mining Co.	No. 1	Man
Manbar Coal Co.	Manbar	Manbar
Marshall Coal Mines, Inc.	Nos. 1 A, 1 B and 2 B	Henlawson
Merrill Coal Mines, Inc.	Merrill	Henlawson
Middle Fork Mining Co.	Josephine Nos. 1 & 2	Chamney
Monitor Coal & Coke Co.	Monitor Nos. 1, 2, 3 and 4	Wilkinson
Number Five Block Coal Co.	Number Five Block	Macneer
Omar Coal Co.	Omar	Omar
Opperman Coal Co.	Opperman No. 2	Blair
Oreille Coal Co., The	Oreille	Hughy
Paragon Colliery Co.	Paragon	Yolyn
Peach Creek Coal Co.	Peach Creek	Hughy
Phillips Mining Co.	Phillips	Chapmanville
Procter Coal Co.	Procter	Amh rsdale
Procter-Winifrede Coal Co.	Procter	Amh rsdale
Procter Eagle Coal Co.	Procter Eagle	Robinette
Red Campbell Coal Co.	Red Campbell	Fort Branch
Rich Creek Coal Co.	Lyburn	Lyburn
Rich Creek Coal Co.	Willbourn	Manbar
Rum Creek Collieries & By-Products Co.	Rum Nos. 1, 2 and 3	Dehue
Shamrock Coal Co.	Litz-Smith Nos. 1 and 2	Logan
South Madne Coal Co.	South Madne	Pony
Sovereign Coal Co.	Sovereign Nos. 1 & 2	Sovereign
Standard Island Creek Coal Co.	Loma Nos. 1, 2 and 3	Taplin
Steamwell Coal Company	Steamwell	Logan
Stell & Tube Co. of America, The	Nos. 1 & 5	Dehue
Stone Branch Coal Co.	Litz-Smith No. 5	Stone Branch
Sunbeam Coal Co.	Sunbeam	Fort Branch
Switzer Collieries	Switzer	Switzer
Three Forks Coal Company	Three Forks	Three Forks
Thurmond Coal Co.	Thurmond	Klenkoal
Tompkins By-Product Coal Co.	Tompkins No. 1	Chapmanville
Toney Fork Coal Co.	Toney Fork	Lundale
Whittaker-Glessner Coal Co.	Whittaker	Clotcher
Wilson, H. T. Coal Co.	Wilson Nos. 1 & 2	Logan
Wood Coal Co.	Wood Nos. 1 & 2	Ethel
Yuma Coal & Coke Co. (The)	Yuma	Wilkinson

McDOWELL COUNTY

Algoma Coal & Coke Co.	Algoma	Algoma
Ashland Coal & Coke Co.	Ashland and Greber	Ashland
Atlantic Smokeless Coal Company	Atlantic	Asco
Beech Fork Coal Co.	Beech Fork	Beech Fork
Black Wolf Coal & Coke Co.	Black Wolf	Dearing
Bottom Creek Coal & Coke Co.	Bottom Creek No. 1	Vivian
Bradshaw Coal Co.	Bradshaw	Dan
Buchanan Coal Co.	Buchanan	Yolyn
By-Products Parahontas Co.	By-Product No. 1	Big Four
Carter Coal Co.	Carretta No. 5	Carter
Carter Coal Co.	Olga and Nora No. 8	Alabond
Carter Coal Co.	Thelma No. 6	Six
Central Parahontas Coal Co.	Nos. 1 and 2	Alabond
Central Parahontas Coal Co.	Nos. 3 & 5	Calder
Central Parahontas Coal Co.	No. 4	Hempfill
Christian Coal Co.	Christian	War
Colonial Parahontas Coal Co., The	Colonial Parahontas	Avondale
Crozier Coal & Coke Co.	Nos. 1 and 2	Elkhorn
Dexar Parahontas Coal Co.	Nos. 1, 2, 3, 4 & 5	Two Branch
Dry Fork Colliery Co.	Dry Fork	Yolyn
Eclipse Parahontas Coal Co.	Eclipse Parahontas 1 & 2	Dan
Elk Ridge Coal & Coke Co.	Elk Ridge	North Fork
Elkhorn Coal & Coke Co.	Elkhorn	Mayberry
Empire Coal & Coke Co.	Empire	Lansgraf
Eureka Coal & Coke Co.	Eureka	Eureka
Excelsior Parahontas Coal Co.	Excelsior Nos. 1 and 2	Excelsior
Fall River Poca Collieries Co.	Fall River	Roderfield

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McDowell County—Continued.

Company.	Mines.	Post Office of Mines.
Flanagan Coal Co.	Flanagan Nos. 1 & 2.	Rod-rhield
Fiat Top Coal Mng. Co.	Thomas	English
Forman Pocahontas Coal Co., Inc.	Forman Pocahontas	War
Garland Pocahontas Coal Co.	Garland Nos. 1 & 2	Avondale
Gem Pocahontas Coal Co.	Gem	Lex
Gilliam Coal & Coke Co.	Gilliam	Gilliam
Greenbrier Coal & Coke Co.	Greenbrier	McDowell
Hampton Road Collieries Co., Inc.	Hampton Roads No. 1.	Big Sandy
Houston Coal & Coke Co.	Houston	Elkhorn
Houston Collieries Co.	Carswell	Carswell
Houston Collieries Co.	Maitland	Maitland
Hubbard Coal Company	Hubbard No. 85	Lex
Jaeger Pocahontas Coal Company	Anville	Jaeger
Indian Pocahontas Coal Co.	Indian No. 1.	Leckie
John's ranch Coal Co.	No. 2	War
Junior Pocahontas Coal Co.	Junior Pocahontas	Welch
Keystone Coal & Coke Co.	Keystone	Keystone
King Coal Co.	King	Kimball
Lake Superior Coal Co.	Lake Superior Nos. 1 and 2.	Superior
Lathrop Coal Co.	Lathrop	Pauther
Litz-Smith Pocahontas Coal Co.	Litz-Smith	Cucumber
Lynchburg Coal & Coke Co.	Lynchburg	Kyle
McDowell Coal & Coke Co.	McDowell	McDowell
Marine & Commerce Pocahontas Corp.	Nos. 1 and 2.	Roderfield
Marine Smokeless Coal Co.	Marine	Juvenia
Marine Smokeless Coal Co.	Ocean	Yerba
Mohawk Coal & Coke Co.	Mohawk	Mohawk
Mountain State Coal Corp.	Gertrine & Beets	Avondale
New Pocahontas Coal Co.	No. 1	Deegans
New River & Pocah. Con. Coal Co.	Berwind	Berwind
New River & Pocah. Con. Coal Co.	Havaco	Havaco
Page Coal & Coke Co.	Page Nos. 1, 2 and 3.	Pageston
Pao Coal Co.	Pan Nos. 1 & 2.	Avondale
Panther Coal Co.	Panther	Panther
Peerless Coal & Coke Co.	Nos. 1 and 2	Vivian
Perkins Coal Co.	Perkins	Lex
Pocahontas Domestic Coal Co.	Nos. 1 and 2.	War
Pocahontas Fuel Co.	Cherokee	Ashland
Pocahontas Fuel Co., Inc.	Norfolk and Angle	Mayberry
Pocahontas Fuel Co., Inc.	Baile	Worth
Pocahontas Fuel Co.	Pocahontas Nos. 6, 7 and 8.	Jenkins
Pocahontas Fuel Co., Inc.	Lick Branch, Shamokin & Delta.	Switchback
Powhatan Coal & Coke Co.	Powhatan	Powhatan
Permier Pocahontas Collieries Co.	Premier Pocah. Nos. 1, 2, 3 & 4.	Premier
Pulaski Iron Co.	Pulaski	Eckman
Purity-Pocahontas Coal Co.	Purity-Pocahontas	Lex
Red Ash Coal Co.	Red Ash	Jaeger
Roanoke Coal & Coke Co.	Roanoke	Worth
Rock Pocahontas Coal Co.	Rock Pocahontas	Anawalt
Sayers Pocahontas Coal Co.	Sayers	Yukon
Shawnee Coal & Coke Co.	Shawnee	Eckman
Solvay Collieries Company	Big Sandy	Big Sandy
Solvay Collieries Co.	Marytown	Marytown
Superior Pocahontas Coal Co.	Orkey, Warwick, Harvard and Exeter.	Hemphill
	No. 2, Davy Crockett, No. 3 Helena and No. 4 Cletus.	Davy
Tidewater Coal & Coke Co.	Tidewater Nos. 1 & 4.	Vivian
Tony Pocahontas Coal Co., Inc.	Tony	Avondale
Turkey Gap Coal & Coke Co.	Josephine and Joanna	Ennis
United Pocahontas Coal Co.	Indian Ridge	Worth
United Pocahontas Coal Co.	Zenith Nos. 1 and 2, Wyoming Nos. 1 and 2.	Crumpler
United States Coal & Coke Co.	No. 1	Wilcoe
United States Coal & Coke Co.	Nos. 2, 3, and 10.	Gary
United States Coal & Coke Co.	Nos. 4, 5 and 11.	Tharpe
United States Coal & Coke Co.	Nos. 7 and 8.	Elbert
United States Coal & Coke Co.	No. 12	Anawalt
United States C. & C. Co.	No. 9	Filbert
Upland Coal & Coke Co.	Upland No. 1.	Elkhorn
Van Wert Coal Company, The.	Lone Jack	Jaeger
Vera Pocahontas Coal Co., The.	Vera Pocahontas	Jaeger
War Creek Coal Co.	War Creek	War
Ward Pocahontas Coal Co.	Ward Pocahontas	Jaeger
Warrior Coal Co.	Warrior	War
West Virginia Pocahontas Coal Co.	Leckie Nos. 1 and 2.	Leckie
Williams Pocahontas Coal Co.	Howard	War
Willmore-Pocahontas Coal Co.	Willmore	Wilmore
Yukon Pocahontas Coal Co.	Nos. 1 & 2	Yukon

MARION COUNTY

Anns Run Coal Co.	Anns Run	Fairview
Arkwright Coal Co.	Norway	Fairmont
Barrackville Collieries Co., The.	Satterfield	Fairmont
Bethlehem Coal Co.	Bethlehem Nos. 1 and 3.	Helens Run
Bethlehem Mines Corp.	No. 41	Barrackville
Big Four Coal Co.	No. 42	Fairmont
Butcher Coal Co.	Eagle	Hepzibah
Byrne Gas Coal Co.	Jackson No. 1.	Fairmont
Byrne Gas Coal Company	Byrne Gas	Scottdale
Chesapeake Coal Co.	Byrne Gas	Scottdale
Clearwater Coal Co.	Chesapeake	Barrackville
Connellsville-Fairmont Coal Co.	Clearwater	Fairmont
Consolidation Coal Co.	Connellsville-Fairmont	Fairmont
Consolidation Coal Co.	Con. No. 24.	Montana Mines
Consolidation Coal Co.	Con. Nos. 38 and 57.	Fairmont
Consolidation Coal Co.	Con. No. 26.	Watson
Consolidation Coal Co.	Con. Nos. 22, 43, 53 and 63.	Monongah
Consolidation Coal Co.	Con. No. 68.	Everson
Consolidation Coal Co., The.	Consolidation No. 84.	Hutchison
Consolidation Coal Co., The.	Consolidation No. 86.	Caroline
Consolidation Coal Co., The.	Consolidation No. 87.	Idamay
Consolidation Coal Co., The.	Consolidation Nos. 36, 47 and 92.	Middleton
Consolidation Coal Co., The.	Consolidation Nos. 45 and 93.	Scottdale
Consumers Fuel Co.	Rachel	Broomfield
Dawson-Connellsville Collieries Co.	Tarr	Fairmont
East Side Utility Co.	Hughes	Fairmont
Fairmont & Cleveland Coal Co.	Parker Run	Riverside
Fair-Mor Coal Co.	White Rock	R. F. D. Fairmont
Four States Coal Co.	Annabella	Worthington
Greater Fairmont Investment Co.	Aurora	Hoult
Harry R. Coal Company.	Junior	R. F. D. No. 4, Monongah
Hudson Coal Co.	Betty & Tucker	R. F. D. No. 1, Fairmont
Jamison Coal & Coke Co.	Jamison Nos. 8 and 9, R. D. 2.	Farmington
La-Mar Coal Co.	La-Mar No. 1.	Fairmont
Lesco Coal Co.	Amos	Fairmont
Liberty Mining Co.	Banner	Hammond
McKay Coal Co.	McKay	Fairmont
Marion Gas Coal Co.	Gingamon & Fortney.	Worthington
Martin & Williams	Martin	Fairview
Monongahela Powder Co.	Riverside and Rita	Fairmont
Monongahela Valley Traction Co.	Stafford	Baxter
Monongahela Valley Traction Co.	Traction No. 2	Riverside
Montfair Gas Coal Co.	Frances	Fairmont

Company.	Mines.	Post Office of Mines.
New England Fuel & Transportation Co.	Federal	Grant Town
Nuzum Coal Co.	Nuzum	Fairmont
Oak Point Coal Co.	Shady Brook	Hutchinson
Phillips Coal Co.	Phillips	Fairmont
Pine Bluff Coal Co.	Pine Bluff	Fairmont
Riverside Coal Co.	Kook	Riverside
Salvatore Coal Co.	Grigg	Helens Run
Shamrock Fuel Company	Shamrock	Hoult
Troll Coal Co.	Vincen	Helen Run
Virginia & Pittsburgh Coal & Coke Co.	Kingmont	Fairmont
Virginia & Pittsburgh Coal & Coke Co.	Morgan	Riverside
West Fork Coal Co.	Central	Fairmont
Winfield Coal Co.	Riverside	Riverside
Woods Run Coal Co.	Woods Run	Fairmont

MARSHALL COUNTY

Ben Franklin Coal Co.	Panama	Hammondsville
Cameron Mining & Development Co.	Cameron	Cameron
Consolidated Fuel Company	Francis No. 1.	Capitina
Glendale Coal Co.	Glendale	Glendale
Hitchman Coal & Coke Co.	Hitchman	Wheeling
McKeeley Coal Co. of W. Va.	McKeeley	Moundsville
McMillan Coal Co.	McMillan	Wheeling
Mineral State Coal Co.	Parrs Run	Moundsville
Richland Coal Co.	Mound	Moundsville
Richland-Marshall Coal Co.	Mound and Mound Slope	Moundsville
Review Coal Co.	Review	McMechen
Whirling Steel & Iron Co.	Benwood	Roswood
Woodland Coal Co.	Woodland	R. F. D. No. 1, Capitina

MASON COUNTY

Beech Grove Coal Co.	Beech Grove	Mason
Clifton Coal Mining Co.	Clifton No. 1.	Clifton
Hutchinson Coal Co.	Linden	Mason
Icenhower J. F.	Icenhower	Mason
Jackson Coal & Mining Co., The.	Jackson	Hartford
Mason Coal & Chemical Co.	Sliding Hill	Hartford
Ohio River Salt Co.	Dixie	Mason
Reilly Coal Co.	Halwood	Spillman

MERCER COUNTY

Algonquin Coal Co.	Algonquin	Algonquin
American Coal Co. of Allegheny Co.	Piedmont	Widemouth
American Coal Co. of Allegheny Co.	Pinnacle and Crane Creek	McComas
Booth Bowen Coal & Coke Co.	Booth Bowen	Freeman
Buckeye Coal & Coke Co.	Buckeye Nos. 1 and 2.	Freeman
Crystal Coal & Coke Co.	Crystal Nos. 1 and 2.	Crystal
Emis Coal Co.	Hiawatha	Hiawatha
Louisville Coal & Coke Co.	Louisville and Goodwill	Goodwill
Mill Creek Coal & Coke Co.	Mill Creek	Coopers
Mill Creek Coal & Coke Co.	Coaldale	Coaldale
Norwest Fuel Co.	Norwest	Goodwill
Parsons & Stokes.	Parson	Bramwell
Patterson S. J. Pocahontas Coal Co.	Arista Nos. 1 and 2.	Arista
Pawama Coal & Coke Co.	Pawama	Matoaka
Pocahontas Fuel Co., Inc.	Casswell Creek	Freeman
Pocahontas Fuel Co., Inc.	Sagamore	McComas
Smokeless Coal & Coke Co.	Smokeless	Hiawatha
Solvay Collieries Co.	Spring	Springton
Thomas Coal & Coke Company	Thomas Nos. 1 and 2.	McComas
Turkey Gap Coal & Coke Co.	Wenonah Nos. 1, 2 and 3.	McComas
Turkey Gap Coal & Coke Co.	Modoc	Springton
Weyanoke Coal & Coke Co.	Weyanoke	Lowes
Wright Mining Co.	Wagon	Matoaka

MINERAL COUNTY

Bakertown Coal Company	Bakertown	Emoryville
Big Vein Coal Co. of W. Va.	Shaw	Shaw
Brady Coal Corp.	Sprams Creek No. 1.	Oakmont
Carroll Cross Coal Company	Cross and Imperial	Emoryville
Davis Coal & Coke Co.	Lower Potomac Nos. 19, 50 and 51.	Beryl
Davis Coal & Coke Co.	Elk Garden No. 208, Virginia No. 10.	Elk Garden
Dean Coal Company	Dean Nos. 1, 2 and 3.	Elk Garden
Deep Run Big Vein Coal Co.	Nos. 2, 3, 4 & 5.	Elk Garden
Eddy Coal Co.	War	Oakmont
Elk Garden Big Vein Co.	Dixon	Elk Garden
Glade Run Coal & Coke Co.	Florence	Schell
Gleason Coal & Coke Co.	Gleason Nos. 1, 2 and 3.	Gleason
Hoffa Bros. Coal Co.	Potomac and Potomac Little Vein.	Piedmont
Hubbard Coal Mining Co.	Hubbard	Hubbard
Jaffy Coal Mining Co.	Jaffy	Elk Garden
Kalbaugh Coal Company, The.	Kalbaugh	Barnum
Love Coal Co.	Love	Emoryville
Low Volatile Collieries Co.	Low Volatile No. 1.	Emoryville
Mapleville Coal Co.	Mapleville	Elk Garden
Masteller Coal Co.	Hampshire Nos. 4 & 5, New Creek.	Koyser
Potomac Valley Coal Co.	Peerless and Louise	Blaine
Pitts Brothers Coal Co.	Pitts	Emoryville
St. Cloud Coal Mining Co.	St. Cloud Nos. 1 & 2.	Blaine
Silver Coal Co.	Hampshire No. 11.	Beryl
Twin Mountain Coal Company	Finey	Piedmont
Warnick Coal Co.	Warnick	Barnum

MINGO COUNTY

Bailey Thacker Coal Co.	Bailey Thacker	Williamson
Borderland Coal Co.	Nos. 1 and 2.	Borderland
Buffalo-Thacker Coal Co.	Buffalo	Chattaroy
Burning Creek Coal Co.	Burning Creek	Kermit
Chattaroy Coal Co.	Mary Helen	Hatfield
Coalton Coal Corp.	Coalton	Williamson
Crystal Block Coal & Coke Co.	Crystal Block Nos. 1 and 3.	Rawl
Crystal Block Coal & Coke Co.	Crystal Block No. 2.	Spring
Crystal Block Mining Co.	Gates	Labato
Cub Mountain Coal & Coke Co., The.	Cub Mountain No. 2.	Nolan
Delphos & West Virginia Coal Co., The.	Cedar	Urand
Dempsey Coal Company	Dempsey	Armor
Flow Mining Co.	Flow	Flow
Franklin Coal Co.	Franklin	Thacker
Glen Alum Coal Co.	Nos. 1, 2, 3 and 4.	Glen Alum
Grey Eagle Coal Co.	Grey Eagle Nos. 1, 2 & 3.	Grey Eagle
Guyan Collieries Corp.	No. 1.	Gilbert
Howard Colliery Co.	Howard, Howard, Jr., and Frederick.	Chattaroy
Hunt-Forbes Coal Co.	Hunt-Forbes	Williamson
Knox Creek Coal Co.	Knox Creek	O'Keefe
Lyno Coal & Coke Co.	Thacker	McCarr
Matta Co-Operative Coal Co.	Matta Co-Operative	Himler
Naugatuck Coal Co.	Naugatuck	Electon
New Howard Coal Co.	New Howard Nos. 1 and 2.	Matewan
North Matewan Coal Co.	North Matewan	Matewan
Red Jacket Cons. Coal & Coke Co., Inc.	Grapevine	Edgarton

(Continued on Next Page)

Company	Mines.	Post Office of Mines.
Rid Jacket Cons. Coal & Coke Co., Inc.	Mitchell Branch, Rutherford and No. 32	Rid Jacket
Red Jacket Jr. Coal Co.	Jordan	Rid Jacket
Smith-Pond Creek Coal Company	Smith-Pond	Spring
Standard Thacker Coal Co.	No. 1	Chattahoochee
Stone Mountain Coal Corp.	Marvin	Marvin
Strommen Coal Co.	Underella	Underella
Thacker Coal & Coke Co.	Thacker Nos. 2, 11 & 18	Thacker Mines
Tunnel Coal Co., Inc.	Tunnel	Dingess
Verdon Coal Co., Inc.	Thacker	Williamson
War Eagle Coal Co.	War Eagle, Traders & Papoose	War Eagle
West Virginia By-Product Coal Co.	West Virginia	Williamson
West Williamson Coal Co.	Tunnel	Williamson
White Star Mining Co.	White Star Nos. 1 and 2	Merrimac
Wigard Mining Co.	Wigard	Goodman
Wilhelmina Coal Co.	Wilhelmina	Williamson
Williamson Fuel Co.	Williamson	Williamson
Winifrede-Thacker Coal Co.	Winifrede-Thacker	Nolan

MONONGALIA COUNTY

Alco Coal & Coke Company	Demison No. 1	Little Falls
American Gas Coal Co.	Knob & Liberty	Beechwood
Andrew Coal Co.	Andrew	Morgantown
Antler Coal Co.	Grant	Elkington
Arcford Coal Mining Co.	Arcford	Scottdale
Barbara Mining Co.	Barbara No. 1	Cassville
Beechwood Coal Mining Co.	Beechwood	Beechwood
Bethlehem Mines Corp.	No. 25 Sabraton, R. F. D.	Morgantown
Bethlehem Mines Corp.	Richard Nos. 21 & 23	Richard
Bierer Coal Co.	Bierer	Morgantown
Black, A. L. Coal Company	Star	Morgantown
Brady Coal Corp.	Monon Nos. 1 & 2	Beechwood
Brady Coal Corp.	Osage Nos. 1 & 2	Morgantown
Runker Coal Co.	Scott's Run	Cassville
Buttermore, J. J. Coal Co.	Elizabeth	Beechwood
By-Product Coal Co.	By-Product No. 1	Randall
Byrne Gas Coal Co.	Byrne Gas	Scottdale
Canyon Coal & Coke Co.	Canyon	R. D. No. 4, Morgantown
Cass Hill Coal Company	Cass Hill	Cassville
Chaplin Collieries Co.	Louise & Virginia	Osage
Chest Canyon Coal Co.	Pike	Morgantown
Chittum Coal Co.	McRee	Morgantown
Cleveland & Morgantown Coal Co.	Nos. 1 & 2	Purselove
Clinton Coal Co.	Clinton	Morgantown
Connellsville Basin Coal Co.	Rock Forge Nos. 1, 2 & 3	Morgantown
Connellsville Big Vein Coal Co.	Horton Nos. 2, 4 & 5	Point Marion
Connellsville By-Product Coal Co.	Connellsville No. 1	Barker
Consumers Fuel Co.	Eureka	Morgantown
Cox, Joe, Coal Co.	Cox	Lowville
Dellslow Coal Company	Ania	Dellslow
Delmar Coal Co.	Ruth	Morgantown
Diamond Coal Co.	Liberty	Morgantown
E. L. & W. Coal Co.	E. L. & W. No. 1	Morgantown
Fairmont Fuel Co.	Hilltop	Almina
Fairmont-Lowville Coal Company	John Y.	Lowville
Forest Coal Company	Forest	Cassville
Fort Grand Coal Co.	Fort Grand	Lowville
Francis Coal Co.	Anna May	Clarksburg
Gilbert-Davis Coal Co.	Gilbert-Davis Nos. 1, 2 & 3, Anchor and South Penn	Morgantown
Gilbert-Davis Coal Co.	South Pittsburgh	Almina
Gilbert Fuel Company	Gilbert	Morgantown
Glasscock Collieries Co.	Glasscock Collieries	Cassville
Granville Coal Co.	Gent	Mona
Greenmont Fuel Co.	Greenmont	Morgantown
Guston Run Coal Co., Inc.	Guston Run	Morgantown
Hess Coal & Coke Co.	Hess Nos. 1 & 2	Mona
Hice Coal Co.	Hice	Dellslow
Hickman-Miller Coal Company	Body	Morgantown
Higgins Coal Co.	Higgins	Morgantown
Jamison Coal & Coke Co.	No. 11	Brady
Jarvis Coal Co.	Jarvis No. 1	Morgantown
Lee, R. Coal Co.	Lee	Morgantown
Maxwell Coal Co.	Moser	Cassville
Mill Ground Coal Co.	McBoe	Morgantown
Monongalia Fuel Co.	Martin	Cassville
MT. Morris Coal Co.	Mc Morris	Morgantown
Mutual Coal Co.	Malden	Beechwood
National Fuel Co.	No. 1	Point Marion, Pa.
Nellie Coal & Coke Co.	Aldo	Morgantown
New England Fuel & Transportation Co.	Federal No. 3	Evertville
North American Coal Co.	Maldsville	Morgantown
Oakhill Coal Co.	Oakhill	Cassville
Park Coal Co.	Park	Morgantown
Pittsford Coal Co.	Pittsford Nos. 1 and 2	Beechwood
Purselove Coal Mining Co.	Purselove	Purselove
Randall Coal Co.	Randall No. 1	Morgantown
Reed Run Coal Co.	Reed	Masontown
River Seam Coal Co.	South	Morgantown
Rosedale Coal Co.	Rosedale No. 1	Van Voorhis
Sasamina Coal Co.	Sasamina No. 1	Randall
Shriver Coal Co.	Shriver	Morgantown
Sommerville Coal Co.	Sommerville	Opokiska
Soper-Mitchell Coal Company	Mammoth, Berry and Brock	Morgantown
South Penn Coal Company	South Penn	Morgantown
South Pittsburgh Coal Co.	Almina	Morgantown
State Hill Coal Co.	Meeks	Morgantown
Superior Connellsville Coke Co.	Opokiska	Opokiska
Tait Bros. Coal Co.	Tait Bros.	Morgantown
Talbot, Robert	Agnes	Lowville
Tennant Coal Co.	Tennant	Morgantown
Tropf Coal Company	Great Scott Nos. 1 and 2	Morgantown
Vann-Black Coal Co.	Vann-Black	Morgantown
Virana Coal Co.	Virana	Purselove
Warner Collieries Company	Nina	Morgantown
Warwick, G. W.	Moser	Cassville

MUNROE COUNTY

Kanawha-Elborn Collieries Co.	Buffalo Nos. 1 & 2	
Marcoal Coal Co.	No. 1	Woodlands

NICHOLAS COUNTY

Alexander Coal Co.	Alexander	Relva
Rear Run Coal Co.	Bear Run	Tioga
Beech Glenn Coal Co.	Reech Glenn	Beech Glenn
Coalball Coal Co.	Dunbar, Trees & Flynn	Bentree
Flk Lick Coal Co.	Smice Knob	Elkwood
Gauley-Concord Coal Co.	Gauley-Concord	Vaughan
Kanawha Collieries Co.	Little Elk Nos. 1 and 2	Swiss
Laurie Coal Co.	Laurie	Vaughan
Pardoe & Curdin Coal Co.	Pardoe, Curdin	Gaulay
Saxman Coal & Coke Co.	Nos. 1, 3 & 4	Saxman
Schaper & Hannigan Coal Co.	Schaper & Hannigan	Vaughan
Smith, Otto, Co.	Otto Smith	Belva
Swiss-Rl-Product Coal Co.	Swiss	Swiss

Company	Mines.	Post Office of Mines.
Auto Coal Company	Auto	Wooddale (Wheeling)
Caloric Coal Co., The	Juan	Elm Grove
Costanza, Frank	Warwood	Warwood
East Wheeling Coal Company	East Wheeling	Elm Grove
Echo Coal Co.	No. 1 W. Street	Wheeling
Edgington Coal Co.	Edgington	Elm Grove
Elm Grove Mining Company	Elm Grove	Elm Grove
Elm Grove Mining Company	Elm Grove	Elm Grove
Glendale Gas Coal Company	Good & Skillbourn or No. 2	Elm Grove
Glennora Coal Company	Security	Elm Grove
La Belle Iron Works	Glenns Run	Warwood
Pittsburgh-Wheeling Coal Co.	Wheeling	Wheeling
Richland Coal Co.	Edgewood	Edgewood
Wheeling Quality Coal Co.	Richland	Wheeling
Whittaker Glessner Co.	Country Club	Wheeling
	Carter	Wheeling

PRESTON COUNTY

Albright Smokeless Coal Co.	Baker	Tunnelton
Atlantic Coal & Coke Co.	Atlantic	Tunnelton
Austen Coal & Coke Co.	Austen Nos. 1, 2 and 3	Austen
Ballpen Coal Co.	Ballpen	Independence
Barford Coal Company	Sarah	Kingwood
Bethlehem Mines Corp.	No. 27	Masontown
Bethlehem Mines Corp.	No. 26	Kingwood
Bethlehem Mines Corp.	No. 24	Itzetz
Bethlehem Mines Corp.	No. 22	Itzetz
Rig Flye Coal Co.	Albright	Albright
Bonafide Coal Co.	Louder	Tunnelton
Borgman Coal Co.	Borgman Nos. 1, 2 and 3	Tunnelton
Callish Lumber & Coal Company	Callish No. 1	Albright
Car Diff Smokeless Coal Co.	Keino	Tunnelton
Carlton Mining & Power Company	Carlton	Kingwood
Castle Falls Coal Corp.	Nancy Nos. 1 & 2	Independence
Cheat Mountain Coal Co.	Cheat Mountain	Kingwood
Cheat River Coal Co.	Trumbull	Kingwood
Clement Coal Mining Co.	Clement No. 1	Corinth
Craig Coal Mining Company	Hoxessville	Hoxessville
Davis Coal & Coke Co.	Kempton No. 42	Kempton
Decker Coal, The	Decker & Florence	Kingwood
Enterprise Coal Co.	Masontown	Masontown
Fredlock Coal Co.	Fredlock	Albright
Freeport Coal Co.	Kerns & Crane, R. F. D.	Terra Alta
Greenidge Coal Company	Green Ridge	Kingwood
H. B. W. Coal Company	Freeport	Tunnelton
Hartman Brothers	Hartman	Tunnelton
Hartman Bros. Coal Co.	Maxwell	Tunnelton
Heather Run Coal Co.	Heather	Kingwood
Hura Coal Co.	Vulcan	Blora
Hutchins Coal Mining Co.	Elkridge	Kingwood
Horchler Coal Mining Co.	Frederick No. 1	Newburg
Houch-Roidler Bros. Coal Mining Co.	Houch-Roidler	Austen
Irona Coal Company	Irona Nos. 1 and 2	Invermere
Kane Creek Coal Co.	Iona	Route No. 2, Kingwood
Kildow Coal Co.	Kildow	Crellin
La Rue By-Product Colliery Co.	Gibson	Tunnelton
Laurel Run Coal Co.	Laurel Run	Crellin
Lick Run Collieries Co.	Lick Run	Kingwood
Lucky Jack Mining Co.	Lucky Jack	Kingwood
Merchants Coal Corp.	Tunnelton	Tunnelton
Miller, Joseph	Miller Nos. 1 and 2	Reedsville
Morgan Coal Co.	Lyons	Kingwood
Morgan Run Coal Co.	Morgan Run	Kingwood
National Fuel Co.	National No. 1	Kingwood
Nethen Coal Mining Co.	Scotch Hill	Newburg
Ocean Coal Co.	Preston	Independence
P. N. & R. W. Coal Co.	P. N. & R. W.	Albright
Preston Coal Co.	Preston No. 1	Independence
Preston County Coke Co.	Cascade, Hawley and Murphy	Cascade
Reedsville Coal Co.	Richardson	Reedsville
Saxon Coal Company	Jessop	Kingwood
Sinclair, C. M.	Sinclair	Kingwood
Smith Coal Co.	Miller	Kingwood
Triad Coal Co.	Triad	Reedsville
Tunnelton-Freeport Coal Co.	Haser	Tunnelton
Turner Douglas Coal Co.	Banner No. 1	Crellin, Md.
Twyford Coal Co.	Twyford	Reedsville
Victory Coal Co., The	Victory	Tunnelton
Weirich, J. H. Coal Co.	Weirich	Kingwood
Wilmoth Coal Co.	Vivian	Kingwood
Zinn-Richardson Coal Co.	Zinn	Bretz

PUTNAM COUNTY

Black Betsey Cons. Coal Co.	Black Betsey	Black Betsey
Oak Forest Coal Co.	Oak Forest	Winfield
Otto Marmet Coal & Mining Co.	Big Otto Nos. 3, 4, 7 and 9	Baymond City
Plymouth Coal & Mining Co.	Plymouth	Plymouth

RALEIGH COUNTY

American Eagle Colliery	American Eagle	Amaglo
Amigo Coal Co.	Amigo	Amaglo
Bailey-Wood Coal Co.	Bailey-Wood	MacAlpin
Beard Smokeless Coal Co.	Beard No. 1	Pemberton
Beeley Firebrick Coal Co.	Sullivan	Sullivan
Beeley-Peachmont Coal Co.	Beeley & Clyde	Beeley
Birch Fork Coal Co.	Birchton	Birchton
Blue Jay Lumber Co.	Blue Jay No. 5	Blue Jay
Boone Smokeless Coal Co.	Boone Smokeless	Abney
Bowyer Smokeless Coal Co.	Bowyer	Whitby
Calloway, C. P.	Ceppece	Glenn Jean
C. & O. Railway Fuel Dept.	Dorothy & Sarita	Bonny
C. & O. Railway Fuel Dept.	Emico	Birchton
City Coal Co.	City Coal	Beeley
Cotcora Coal Co.	Montreal 1, 2 & 3, Mill Hollow	Montreal
Cook & Carter Coal Co.	Nos. 1 & 2	Terry
Crab Orchard Fuel Company	Crab Orchard	Crab Orchard
Douglas Coal Company	Douglas	Fireco
East Gulf Coal Co.	East Gulf Nos. 3, 4 & 5	Helen
Elkhorn Piney Coal Mining Co.	No. 1	Stanford
Elkhorn Piney Coal Mining Co.	Nos. 3, 4 & 6	Biley
Fire Creek Smokeless Fuel Co.	Lego	Lego
Four Vein Coal Co.	Four Vein	Lamar
Gloria Coal Co.	Stikney No. 10	Stikney
Gulf Coal Co.	Hotoal	Hotoal
Gulf Smokeless Coal Co.	Tams Nos. 1, 2, 3 and 4	Tams
Hazy Eagle Coal Co.	Hazy Eagle	Edwight
Hoo Hoo Coal Co.	Hoo Hoo	Lester
Laurel Smokeless Coal Co.	Laurel Smokeless	Lego
Leckle Fire Creek Coal Company	Leckle	Fireco
Leevale Coal Co.	Leevale	Leevale
Lillybrook Coal Co.	Lillybrook Nos. 1 and 2	Lillybrook
Lynwin Coal Co.	Lynwin	Winding Gulf
McKell Coal & Coke Co.	Oswald	Oswald
McKell Coal & Coke Co.	Tamroy	Tamroy

(Continued on Next Page)

Raleigh County—Continued.

Company.	Mines.	Post Office of Mines.
Mabscott Coal & Coke Co.	Mabscott	Mabscott
Mac Alpin Coal Co.	MacAlpin	MacAlpin
Marsh Fork Coal Co.	Marsh Fork, Thacker & Marsh Fork No. 2	Marfolk
Mead, C. H. Coal Co.	Killarney	Eastgulf
Mead-Tolliver Coal Co.	Killarney	Killarney
Minter, E. C. Coal Co.	Minter	Rhodell
Neal Coal Co.	Neal	Lester
New River Co.	Cranberry No. 1	Cranberry
New River Co.	Cranberry No. 2	Shelton
New River Co.	Cranberry No. 3	Sprague
New River Co.	Beckley	Wickham
New River Co.	Mabscott	Mabscott
New River Collieries Co.	Beckley Nos. 3, 5, 6	Eccles
Pemberton Coal & Coke Co.	Affinity, Big Stick, Phillis & Wat-Wise	Affinity
Pemberton Fuel Co.	Pemberton	Pemberton
Pickshin Coal Co.	Pickshin	Tralee
Piney Creek Coal Co.	No. 1	Sullivan
Piney Pocahontas Coal Co.	Pinepoca	Beckley
Price Hill Colliery Co.	Price Hill	Price Hill
Prince-Wick Coal Co.	Prince-Wick	Prince-Wick
Ragland Coal Co.	Ragland	Pemberton
Ragland Coal & Coke Co.	Ragland Nos. 3, 4, 6 & 7	Ragland
Raleigh Fire Creek Coal Co.	Battleship	Jonhson
Raleigh Wyoming Coal Co.	Edaught No. 1	Edaught
Rhodell Coal Co.	Nos. 1 & 2	Rhodell
Royal Coal Co.	Royal Nos. 1 and 2	Royal
Slab Fork Coal Co.	Slab Fork	Slab Fork
Sullivan Coal & Coke Co.	Sullivan	Sullivan
Summit Coal Co.	Summit	Metatton
Very Top Seam Coal Co., The	Very Top	Beckley
Vlacova Smokeless Fuel Co.	Vlacova	Vlacova
West Virginia Mining Co.	Griffith	Skelton
White, E. E. Coal Co.	Glen White Nos. 1 & 2	Glen White
White, E. E. Coal Co.	Stotesbury	Stotesbury
Wilton Smokeless Coal Co.	Wilton	Jonhson
Winding Gulf Colliery Co.	Nos. 1, 2, and 3	Winding Gulf
Wood-Peck Coal Co.	Wood-Peck	Sullivan
Wood-Sullivan Coal Co.	Wood-Sullivan	Vanwood
Wright Coal & Coke Co.	Wright Nos. 1 and 2	Wright

RANDOLPH COUNTY

Beaver Creek Coal Company	Beaver Creek No. 2	Weaver
Brady, A. Spates	Brady	Mable
Davis Coal & Coke Co.	Weaver No. 2	Weaver
Loop Coal Co.	Loop	Elkins
Randolph Colliery Co.	Randolph	Elkins
Stone, Bruch B. Coal Company	Quality	Silica
Three Fork Coal Co.	Three Fork	Ellamore
West Virginia Coal & Coke Co.	Coalton No. 1	Coalton
West Virginia Coal & Coke Co.	Harding No. 3	Harding
West Virginia Coal & Coke Co.	Norton No. 2 & Coal Station No. 5	Norton
West Virginia Coal & Coke Co.	Mable No. 6 and Arlana No. 7	Mable

SUMMERS COUNTY

Hump Mountain Smokeless Coal Co.	Hump Mountain	Humaco
Sewell Valley Coal Co.	Burytown	Secoma

TAYLOR COUNTY

Adelaide Coal Co.	Bartlett	Grafton
Aster Coal Co.	Aster No. 1	Flemington
Darby Coal Co.	Darby Nos. 1 & 2	Rosemont
Delmar Coal Co.	Delmar Nos. 1, 3 & 4	Flemington
East Grafton Coal Mining Co., The	East Grafton	Thornton
Fahy Coal Co.	Fahy No. 2	Simpson
Gabe Fork Coal Co.	Half Way	Flemington
Ghost Hill Coal Co.	Ghost	Flemington
Grafton Coal & Coke Co.	Sand Lek	Simpson
Hardman Fuel Co.	Mary Belle No. 1	Independence
Harrison Coal Company	Harrison	Rosemont
Jerry Run Coal Co.	Jerry Run	Rosemont
McClellan Coal Co.	Winona	R. D. No. 3, Grafton
Maryland Coal Co. of W. Va.	Wendel Nos. 1 and 2	Wendel
Pyramid Coal Co.	Pyramid Nos. 1 and 2	Independence
Reilly, W. J. Coal & Coke Co.	Winona	Cuffman
Reilly, W. J. Coal & Coke Co.	Winona	R. F. D. No. 3, Grafton
Reynolds Coal Co.	Snider	Grafton
Robinson Coal Co.	Davis	Flemington
Rosemont Coal Co.	Rosemont	Rosemont
Simpson Creek Coal Co.	Galloway Nos. 1, 2 & 3	Simpson
Starford Gas Coal Co.	Big 4	R. F. D. No. 6, Grafton
Sterling Coal Co., Ltd.	Peel	Well
Taylor, J. C. Coal Co.	Taylor	Flemington

Company.	Mines.	Post Office of Mines.
Thornton Fire Brick Co.	Thornton	Thornton
Valley Falls Fuel Co.	Valley Falls	R. D. No. 3, Grafton
White Horse Coal Co.	White Horse	Flemington

TUCKER COUNTY

Blackwater Coal Co.	Blackwater	Davis
Cumberland Coal Co.	Douglas	Albert
Davis Coal & Coke Co.	Thomas Nos. 23, 25 & 34	Thomas
Davis Coal & Coke Co.	Thomas Nos. 29 and 29 1/2	Davis
Davis Coal & Coke Co.	Beckhush Nos. 26, 28 & 38	Beckhush
Davis Coal & Coke Co.	Coketon Nos. 24, 36, 37 & 35	Coketon
Davis Coal & Coke Co.	Pierce Nos. 39, 40 & 43	Pierce
Davis Coal & Coke Co.	Fairfax Nos. 60 and 61	Kempton

UPSHUR COUNTY

Barbour-Upshur Coal Co.	Marple	Buckhannon
Bauserman Coal Co.	Boger	Lorentz
Beveridge-Laughlin Coal Mining Co.	Midway	Buckhannon
Buckeye & West Virginia Coal Co., The	Penco	Lorentz
Buckhannon-Pittsburgh Coal Co.	Buckhannon-Pittsburgh	Buckhannon
Buckhannon River Coal Co.	Florence and Adria	Adrian
Crown Coal Co.	Crown	Sand Run
Fairmont Masontown Coal Co.	Dale	Adrian
Florence Coal Mining Company	Sarah No. 1	Lorentz
French Creek Fuel Co.	Arch	Sago
Green, W. H.	Vandoe	Adrian
Greenmar Coal Company	Strader	Tallmossville
Hamilton & Lutz	Lutz	Sago
Hesper Coal & Coke Co.	Hesper	R. F. D. No. 6, Buckhannon
Imperial Coal Co.	Indian	Imperial
Jenkins Coal Corp.	Jenkins No. 1	Hall
Kiddy Coal Co.	Deal	Buckhannon
Laurel Coal & Mining Co.	Laurel	Buckhannon
Miller Coal Co.	Ella	Adrian
Miner Coal Mining Co.	Miner	Adrian
Ours Mill Coal Co.	Ours Mill	Sago
Peck's Run Coal Co.	Kano	Hall
Peerless Coal Mining Co.	Red Rock	Red Rock
Philmont Coal Co.	Pittsburgh Nos. 1, 2 & 4	Teter
R. B. & R. C. Coal Co.	R. B. & R. C.	Imperial
Ridgeline Coal Mining Co.	Beveridge No. 9	Imperial
Smith Coal Co., The	Smith	Adrian
Splint Coal & Coke Co.	Griffith & Rice	Adrian
Storck Coal Mining Co.	Agnes	Buckhannon
Suddarth Coal Co.	Suddarth	Sago
West Virginia & Penna. Coal & Coke Co.	Adam Post and Iris	Buckhannon

WAYNE COUNTY

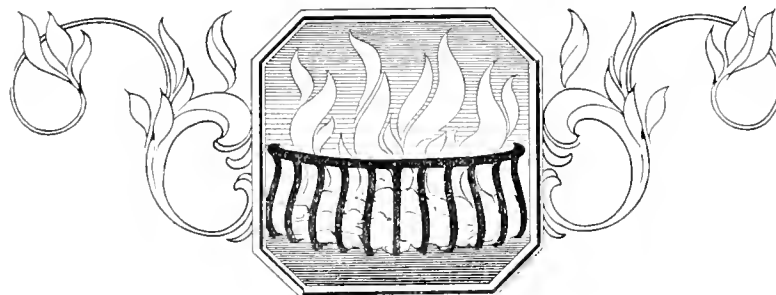
Bartram Fork Coal Co.	Bartram	East Lynn
Camp Creek Coal Co.	Camp Creek	East Lynn
East Lynn Coal Co.	Dixie Lynn	East Lynn
Huntington Coal & Mining Co.	No. 2	Ferguson
Hurricane Branch Coal Co.	Hurricane Branch	Genoa
Sanford Coal Co.	Sanford No. 1	East Lynn
Stonewall Block Coal Co.	No. 1	East Lynn
White Ash Coal Co.	White Ash	Ferguson

WEBSTER COUNTY

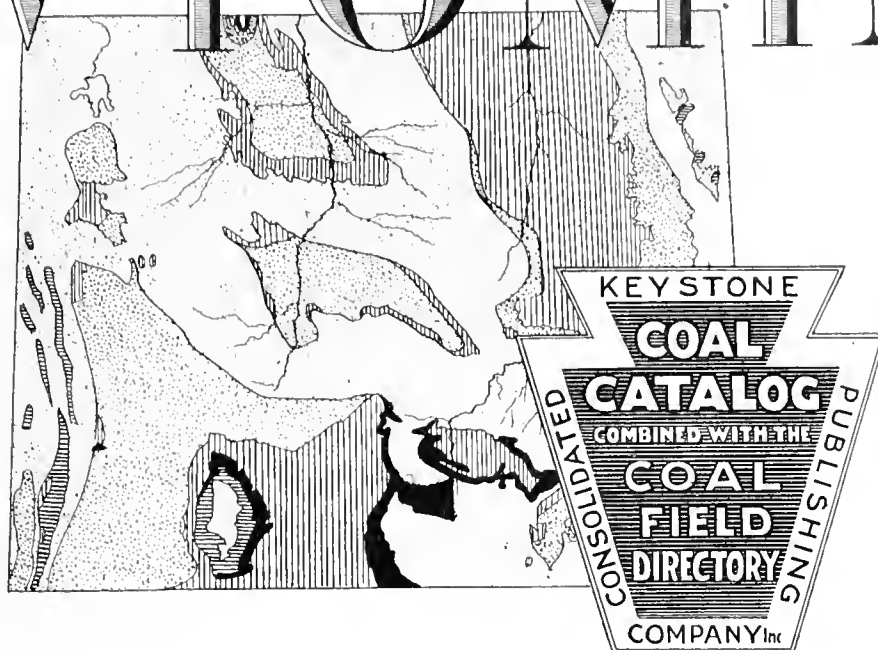
Aquilla Coal Co.	Aquilla	Prestonia
Lilly Coal Co.	Lilly	Arcola
Morton, S. A. Coal Co.	Sam	Erbacon
Peerless Smokeless Coal Co.	Meyers, Peerless & Wayne	Marcus
Swarbro Coal & Coke Co.	Wetherill, Lynch & Arcadia	Prestonia
Wythe Block Coal Co.	Wetherill	Erbacon

WYOMING COUNTY

Alpha-Pocahontas Coal Co.	Alpha	Alpoca
Barkers Creek Coal Co.	Barkers Creek	Tralee
Devils Fork Coal Co.	Devil's Fork	Devil's Fork
Flat Top Pocahontas Coal Co.	Flat Top Pocahontas	Herdoo
Harty Coal Co.	Harty	Tralee
Iroquois Coal Company	Iroquois	Iroquois
Mary Elizabeth Coal Co.	Mary Elizabeth	Huntington
Mead-Pocahontas Coal Co.	Mead	Tralee
Micajah Pocahontas Coal Co.	Micajah	Princeton
Miller Pocahontas Coal Co.	Miller Pocahontas & Virginian	Corinne
Monticello Smokeless Coal Co.	Monte Carlo	Mone Carlo
Morris Smokeless Coal Co.	No. 1	Morco
Pocahontas Fuel Co.	Itmann	Itmann
Raleigh Wyoming Coal Co.	Glen Rogers No. 2	Glen Rogers
Sabine Collieries Corp.	Sabine	Otsego
Smith-Pocahontas Coal Co.	Smith-Pocahontas	Calorie
Thermo-Pocahontas Coal Co.	Thermo	Bud
Trace Fork Coal Co.	Trace Fork No. 1	Tracal
Virginia Smokeless Fuel Co.	Virginia Smokeless	Newest
Wyoming Coal Co.	Wyco	Wyco



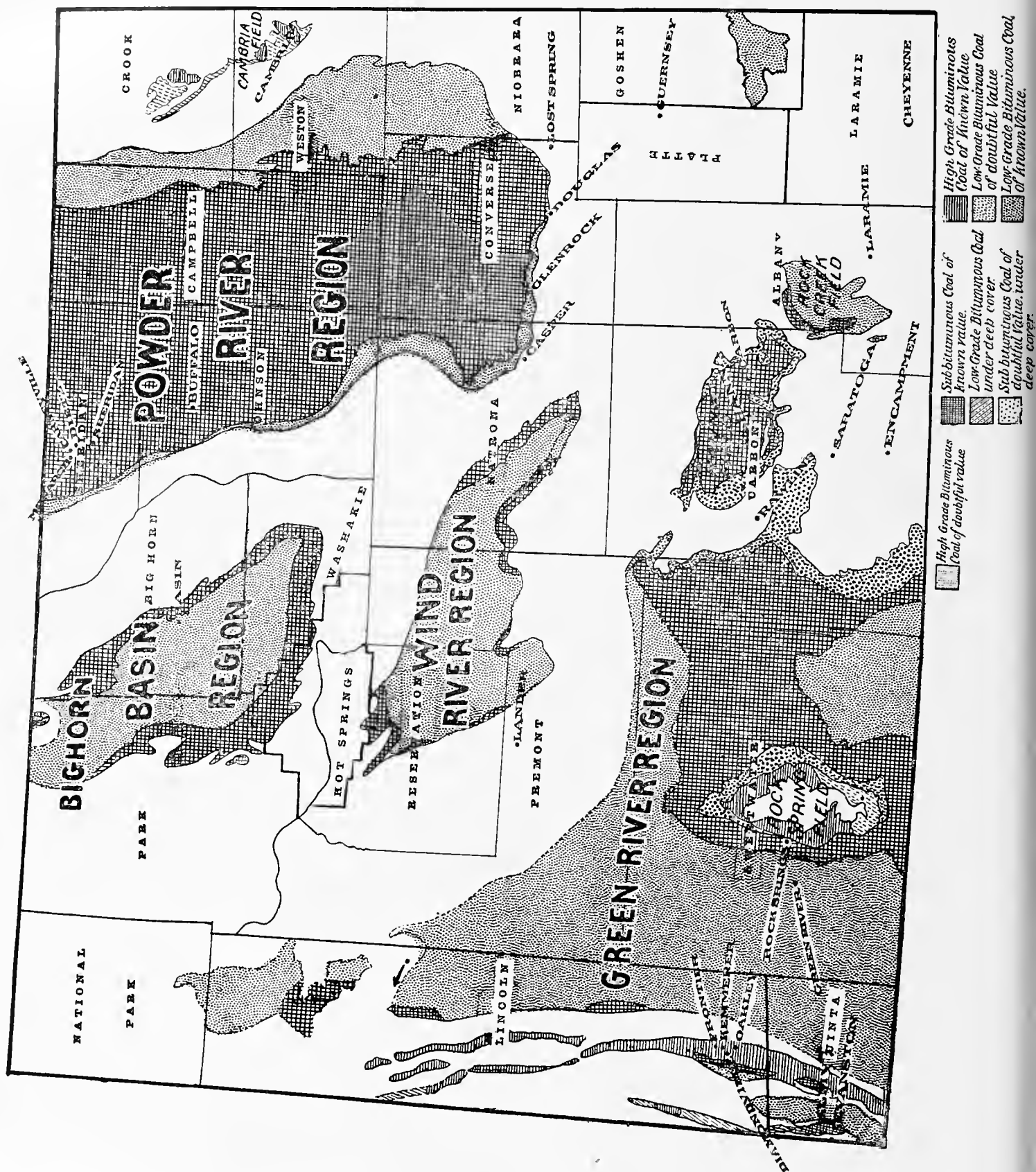
WYOMING



CONTENTS

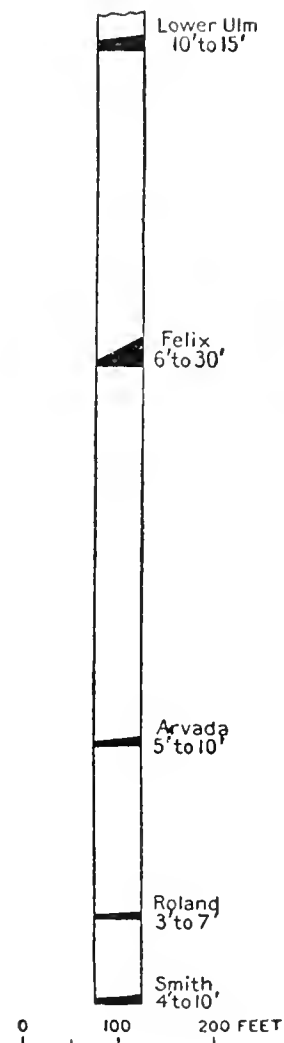
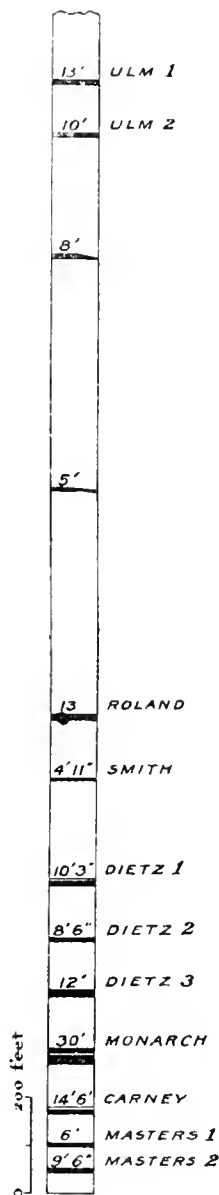
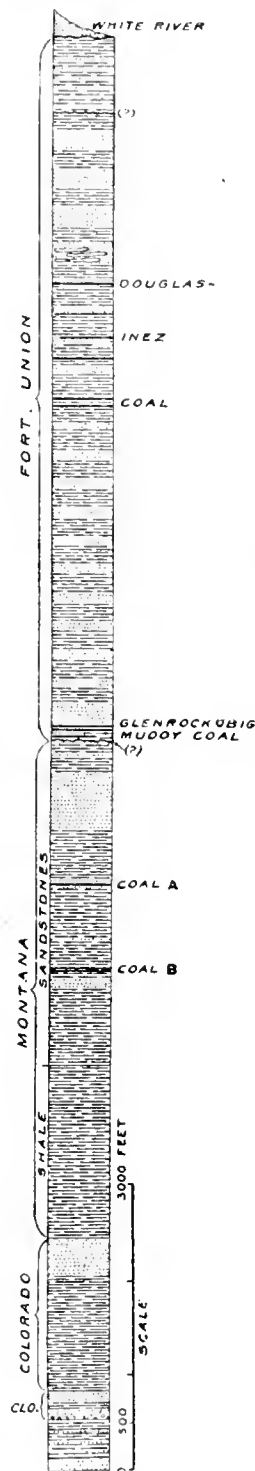
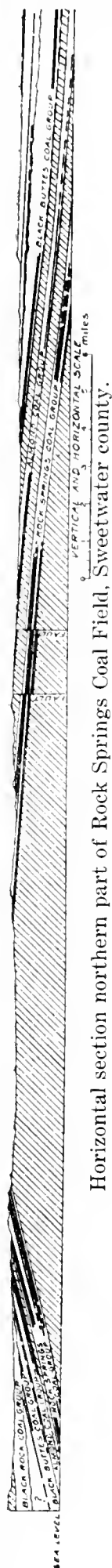
Map of Mining Fields.....	1156
Sectional View of Coal Formations.....	1157
General Description of Coal Resources.....	1158
Sweetwater County Coal.....	1158
Lincoln County Coal.....	1159
Sheridan County Coal.....	1159
Carbon County Coal.....	1160
Hot Springs County Coal.....	1160
Weston County Coal.....	1161
Fremont County Coal.....	1161
Uinta County Coal.....	1161
Converse County Coal.....	1161
Preparation and Sizing of Coal.....	1161
Supplementary Analyses.....	1162, 1163
Descriptive Advertisements.....	1164, 1165
List of Mines by Seams.....	1166
Alphabetical Directory of Coal Mines...	1167 to 1169

MAP OF MINING FIELDS—WYOMING



WYOMING

With Cross Sections Showing Arrangement of Coal Seams*



*From Bulletins 341 and 381 of the U. S. G. S.

WYOMING*

General Description of the Coal Resources of the State, With the Ranks of Coal Produced; Treats of the Counties In Which the Producing Beds Occur:
Map of the State Showing Mining Fields; Sectional Views of Formations; Analyses, Etc.

The coal bearing rocks underlie a larger proportion of Wyoming than of any other Rocky Mountain state. Most of this area, however, is included within the plains region, while the fields of Colorado are adjacent to the main mountain ranges. The same is to a large extent true of the fields of Montana, hence, with a few exceptions, the coals of the various fields of this state are of a lower grade than those of Colorado and Montana.

There is no field in the state where mining operations are now conducted in which the coal will produce a good grade of coke, nor has any marketable anthracite been discovered within its limits. There are extensive areas through the southern and eastern portions of the state underlain by the Laramie formation, which contain beds of lignitic coal, and a large area in the southwestern portion containing coal of subbituminous rank.

It is estimated that approximately 19,000,000 acres of land in Wyoming are coal bearing and that there is a total of 1,078,620,100,000 short tons of workable coal consisting mainly of subbituminous and bituminous rank. The heat value of Wyoming coal averages fairly high, ranging from 9,500 British thermal units in the lignites to 13,500 in the bituminous coals. The Newcastle bituminous coking coal and the coals from southwestern Wyoming show the highest values.

The annual production ranges between seven and nine million tons. The producing counties, named in the order of tonnage, are: Sweetwater, Lincoln, Sheridan, Carbon, Hot Springs, Weston, Freemont, Uinta and Converse. The product from the mines of this state find a ready market along the line of the Union Pacific railroad and its immediate connections from the Missouri River westward to San Francisco and Portland. Other railroads traversing the coal fields of the state are: Chicago, Burlington & Quincy; Chicago & Northwestern; and Oregon Short Line.

The coal producing sections of Wyoming will be discussed by counties.

SWEETWATER COUNTY

The coals of Sweetwater county belong to four formations. Of most importance is the Lower Mesaverde, or Rock Springs, coals which are bituminous in rank, and of minor importance the Upper Mesaverde, or Almond, coals which contain more moisture and are lighter in weight than those of the lower group and slack considerably on exposure to the air. The Knobs-Cherokee and the Black Butte coal groups are of lesser importance in this coal field. These coals fall in the subbituminous class. Most of the production of the county comes from the Lower Mesaverde or Rock Springs group. This group contains at least twelve coal beds ranging from two to ten feet in thickness and many other beds less than three feet thick. The total aggregate of coal beds over two feet thick in the Rock Springs coal group in the vicinity of Superior is more than 80 feet, and in the vicinity of Rock Springs it is more than 90 feet. These beds occur somewhat irregularly throughout the group, but are fairly persistent along the strike. Mines are in operation on upper beds of this group at Sweetwater, Rock Springs and Superior.

The Rock Springs coal is jet black as it comes from the mine, has a bright or even glassy luster, and in places shows iridescent colors. The structure of the bedding planes is as a rule well preserved, but jointing is not strongly developed. The coal is dense in texture and somewhat brittle. Many slickensided surfaces are present in this coal, as well as numerous faults. Considerable deposits of salts occur on the faces of the coal and on the sandstone along the entries in the mines. The coal on exposure to the air remains firm and compact

and stands shipping without breaking down. On burning it produces no clinker and leaves a small bulk of red-white or reddish ash. Samples taken from surface prospects and placed in airtight cans soon lose their bright luster and the surface becomes covered with a velvety-brown coating, which is probably due to the alteration of the weathered coal. The chief impurities of the coal are sulphur balls and small lenses of pyrite that are scattered somewhat irregularly through the bed.

The coals of the Almond group are also distinctly black, with a bright luster as they come from the mine. They show more traces of iron stain than the Rock Springs coal and contain considerable gypsum and salt flakes in the joints or bedding planes. On exposure to the air they alter more readily than the lower coals, lose their bright luster and become a dull black. As they break down cracks form along and perpendicular to the bedding planes, producing somewhat regular blocks instead of the irregular pieces resulting from conchoidal fracture. These coals somewhat resemble the Adaville coal of Lincoln county, but they seem to be affected less on exposure to the air and their fractures and joints are more regular and quite different from the conchoidal fracture of the Adaville coal. These coals fall in the lowest grade of bituminous or the highest grade of subbituminous coals. The coal beds in both groups give comparatively clean coal having a low content of ash, averaging less than 6 per cent.

*The information here presented on Wyoming coals has been gathered largely from U. S. G. S. Bulletins Nos. 316, 341, 381, 471; and the 22nd Annual Report, Part 3.

The lower coals of the Rock Springs coal group stand shipment well and do not slack on exposure to the air. They belong in the bituminous non-coking class of coals. The Rock Springs coal as a locomotive fuel or steam coal has few superiors in the west. It operates under a forced draft without heavy spark, leaving but little ash.

GENERAL ANALYSIS

	Rock Springs
Moisture	13.00
Volatile Matter	34.00
Fixed Carbon	48.00
Ash	5.00
Sulphur	0.80
B. t. u.	11,300

LINCOLN COUNTY

The activity in mining operations in this county is centered about Diamondville, Frontier and Kemmerer. The principal coal, known as the main Kemmerer bed, lies in the Lazear syncline and has a thickness ranging from 5 to 20 feet. At Frontier three seams have been opened, one of which, known as the A seam, lies 35 feet vertically below the Kemmerer bed with a thickness of six feet and a thin parting about one foot from the top.

The Willow Creek coal is about 550 feet below the main Kemmerer coal and has a thickness varying from 3 to 6 feet. Tests show that the Willow Creek coal produces a coke of fair quality.

The coal formations of Lincoln county belong to the Hams Fork field, which occupies a varying synclinal trough about 60 miles in length. The field is about 10 miles wide at the northern end, gradually decreasing to the south owing to the encroachment of the overlying Tertiary system.

The operations in this county are confined almost entirely to large corporate interests, the Union Pacific Company operating the southernmost extension of the workable coal, the Diamond Coal & Coke Company controlling the central district, and the Kemmerer Coal Company the northern. Most of the output of the Diamond Coal & Coke Company is used at the mines and smelters at Butte and Anaconda. There are a large number of lignite seams of enormous thickness lying to the west of Kemmerer, but all are of a rather low grade.

The coals worked in this field form two distinct classes. The best coals are comprised in the first class, which include all the coals of the Frontier formation, of Benton (Cretaceous) age. It is these coals which are being worked in the Kemmerer

district. The second and inferior class includes all the coals of the Adaville formation, of uppermost Montana and lower Laramie age, and those of the Evanston formation, of Tertiary or upper Laramie age.

The coals of the first class, which rank as high-grade bituminous, have much the same physical characteristics throughout the field and are remarkably uniform in their properties. They are black, moderately hard, and usually compact, and for the most part have a bright luster. As a rule they contain small partings of clay and shale and some irregular nodules of pyrite (sulphur balls). The coal as a rule is not so clean as the Adaville coal, but contains much less moisture. Generally the coal does not slack to any appreciable extent on exposure to the weather. In two localities the coking properties of these coals have been tested with fairly good results.

The coals of the Adaville formation rank as high-grade bituminous. They are black and fairly hard, have a bright luster, and break with a conchoidal fracture. When scratched the streak is a dark brown. The coal comes from the mines in fair-sized blocks, but slacks readily on exposure to the air, breaking into small irregular pieces. When a large block of coal is exposed to the air for a few hours small cracks appear over the entire surface owing to the large percentage of moisture given off.

GENERAL ANALYSIS

Moisture	5.50
Volatile Matter	38.50
Fixed Carbon	51.00
Ash	5.00
Sulphur	1.00
B. t. u.	12,750

SHERIDAN COUNTY

The coals of Sheridan county belong to the Sheridan coal field. The rocks containing the coal consist of comparatively soft shale and sandstone, alternately stratified and in apparently conformable succession. The coal bearing rocks are divisible in two parts, which may be called the Lower and Upper Members. The dividing line is near the middle of the rock section exposed in the Sheridan field and is marked approximately by the Carney coal bed, as it is known at Tongue River.

There are seven workable beds of coal in the Upper Member. These occur throughout the lower 800 feet of rock measured from the base upward. This formation is known as the Tongue River coal group. The lowest workable bed of this group is known as the Carney bed, and occurs in two benches in the Tongue River valley, separated by a thin parting of slate. The upper bench is 4 feet 6 inches thick and the lower between 10 and 11 feet.

The next workable bed occurs about 86 feet higher in the section of Tongue River, and it is known as the Monarch bed. This bed also is divided into two benches. The upper division is nearly 10 feet thick, while the lower is from 18 to 22 feet thick. The upper bench contains partings of shale.

Immediately above the Monarch coal bed are the No. 3, No. 2 and No. 1 Dietz coals. No. 3 bed is reported to be from 12 to 14 feet thick, the No. 2 from 8 to 9 feet with a local thickness of 14 feet, and the No. 1 bed is 8½ feet thick near Dietz.

The sixth coal bed in the Tongue River group, exposed about 210 feet above the Dietz bed No. 1, is nearly 5 feet thick. The uppermost bed of this group is known as the Roland coal, and attains a thickness at places reaching as high as 15 feet. It is questionable, however, whether the Roland coal is of sufficient purity to be regarded as workable.

The Ulm coal group is the highest group in the Upper Member formation, and contains two workable beds of coal of considerable areal extent. They are separated by about a hundred feet of shale and soft sandstone beds similar to the sandstone and shale lying below. These beds vary both in section and thickness and are broken by shale partings usually in two or more benches, but the total coal in each is ample for mining.

The coal beds in the Tongue River group are so nearly uniform in physical character that select specimens from one bed can scarcely be distinguished from like specimens from other beds. All these coals are distinctly black and have a shiny luster when fresh. On exposure in dry air the blackness is intensified by a partial loss of the shiny luster and the coal assumes a dull, dead blackness. At the same time it undergoes a rapid change by the loss of free moisture, which causes it to check or crack in various directions. Though weakened by shrinkage through a partial loss of water, the coal will adhere together as mined for an indefinite time if protected from the weather. When it is subjected to alternate wetting and drying, however, it breaks into small lumps and finally is reduced to a powder-like dust. For these reasons the coals are marketed more successfully by shipment in box cars. The streak of fine dust produced by abrading the coal is distinctly brown. The coals in the thicker beds especially are not as a rule distinctly laminated, but are for the most part massive. In mining they break into angular or subcubical blocks that present hackly and con-

choidal surfaces. The coal in this district is not regularly or distinctly jointed and in mining is undercut by pick or machine and shot from the solid.

Though the coals of the Tongue River group contain a comparatively high percentage of water and disintegrate on exposure, like the lignites, they do not show woody structure. Some of the coal beds in the upper part of the intermediate group and in the Ulm group show the texture or fiber of certain plants that took part in forming the coal. These coals are homogenous, however, and black like the coal beds lower in the section, but their water content is a little greater than that of the coals of Tongue River. Their fuel value also is a little lower, as indicated by the calorific determinations.

The coal from all the beds now mined in this county is used extensively in locomotives and stationary engines. A large part of the production is used by the Burlington Railroad. It is marketed in Wyoming and Nebraska as far west as Omaha, in the Black Hills region at Billings, Dubuque and other points in Montana and as far west as Idaho and Washington.

GENERAL ANALYSIS

Moisture	24.00
Volatile Matter	35.00
Fixed Carbon	36.00
Ash	5.00
Sulphur	1.00
B. t. u.	9,000

CARBON COUNTY

Although there are extensive coal fields throughout Carbon county, the production at the present time comes from what is known as the Hanna field. The coals of this field are both bituminous and subbituminous in rank. The coal bearing rocks occur in two basins, the first of which is known as the Kindt basin and the second is known as the Hanna basin. This latter basin is a broad trough 40 miles long and 25 miles wide. It shows minor folds and faults in the center and near its edges a somewhat marked irregularly plunging anticline.

The coals of this field range from poor to high-grade bituminous. They are as a rule bright, brittle and noncoking. The best coals in the area are found in the Mesaverde formation, which contains the high-grade coals of the Routt county, Colo. field. These Mesaverde coals are not so good as the Benton coals of Lincoln county, mined at Cumberland, Diamondville and Frontier, and are perhaps inferior to the coal at Rock Springs. The coals of the "Upper Laramie," extensively mined at

Carbon and Dana, are distinctly inferior to the Cumberland and Rock Springs coal, though superior to much of the coal of Laramie age in northeastern Wyoming and eastern Montana. The coal mined at Carbon was rather dirty, and the much cleaner coal at Dana proved so light that in the forced draft of the railroad locomotive it nearly all went out of the smokestack, covering the cars with showers of sparks. After several years, in which it suffered many disastrous car fires, the railroad was forced to abandon the use of coal from this mine. The Hanna coal is now extensively and satisfactorily used in the locomotives of the Union Pacific Railroad.

GENERAL ANALYSIS

	Hanna	Rawlins
Moisture	11.50	14.00
Volatile Matter	41.50	33.00
Fixed Carbon	41.50	47.00
Ash	5.50	6.00
Sulphur	0.45	0.45
B. t. u.	11,200	10,200

HOT SPRINGS COUNTY

The coal production of Hot Springs county is from what is known as the Gebo coal field, which extends from Bighorn River near Kirby westward between Meeyero and Owl Creeks and along the Cottonwood Creek to the foothills of the mountains. The most extensive coal beds are in the eastern part of the field. The coal locally attains a thickness of 11 feet, with dips running as high as 22

degrees. The production of the mines is used largely by the railroads.

GENERAL ANALYSIS

Moisture	17.00
Volatile Matter	33.00
Fixed Carbon	45.00
Ash	5.00
Sulphur	0.55
B. t. u.	10,900

WESTON COUNTY

All the coals of Weston county are subbituminous and have a high moisture and ash content. By reason of the rapid disintegration of the coal on exposure to the air, the chief value of the output in this county lies in the limitless supply of fuel which it offers for the settlers of this treeless Plains Region.

The beds vary from 6 to 20 feet in thickness and are generally rather free from partings.

GENERAL ANALYSIS

Moisture	10.00
Volatile Matter	39.00
Fixed Carbon	35.00
Ash	16.00
Sulphur	4.85
B. t. u.	10,400

FREMONT COUNTY

Very little mining is being done in Fremont county, although there are extensive coal deposits varying in thickness from 2 inches up to 10 feet. The coal from this county is best adapted for domestic fuel, but it has been employed satisfactorily in stationary boilers, in lime kilns and similar places where a forced draft is not required. Under forced draft, however, it breaks up before burning and part of the coal is blown from the fire box and out through the stack before it is consumed. Owing to the rapidity with which it disintegrates the coal must be shipped in box cars and can be held in

storage bins only a short time after it is mined. In spite of these objectionable features, it is regarded a good domestic fuel and will be in constant demand in markets which are easily reached.

GENERAL ANALYSIS

Moisture	21.00
Volatile Matter	32.50
Fixed Carbon	41.00
Ash	5.50
Sulphur	0.50
B. t. u.	9,500

UINTA COUNTY

The coal from Uinta county comes from the Almy field, which lies 7 miles west of the southern end of the Hams Fork field. The outcrop of the coal bearing rocks forms an area of 12 miles in length north and south, by 6 miles in width. There is one seam worked which has an average thickness of 22 feet of clean coal which is a low grade subbituminous. It contains a much lower percentage

of moisture than the same class of coals of the Plains Region.

GENERAL ANALYSIS

Moisture	14.25
Volatile Matter	36.00
Fixed Carbon	38.50
Ash	11.25
Sulphur	0.30
B. t. u.	10,400

CONVERSE COUNTY

There are two producing fields in Converse county, known as the Lost Spring coal field in the easterly part and the Glenrock field in the extreme western part. All the coal which is exposed in the Lost Spring field belongs to the Fort Union formation, and is classed as subbituminous. A fresh sample of the coal is bright, black, hard and usually very homogenous. On being exposed to a dry atmosphere for a short time the surface cracks and the coal generally breaks up in small angular, irregular fragments. This characteristic of breaking down by weathering has a serious affect upon the marketing of the coal and serves to distinguish it from bituminous coal. It makes a very good domestic fuel if used soon after mining, but the major portion of the output is used for locomotive purposes.

The coals found between Casper and Douglas are all classed as subbituminous, but some are

almost good enough to be called bituminous. They are placed in the lower class because all yield rapidly to weathering. The coal is black, but when it is exposed to the air it cracks and the surface becomes slightly brown. At the mines piles of slack sometimes take fire spontaneously. Considerable of the output of this fuel is disposed of in Nebraska, where it is used as a steam and domestic fuel, while a considerable portion finds usage with the railroads.

GENERAL ANALYSIS

Moisture	27.00
Volatile Matter	31.50
Fixed Carbon	34.00
Ash	7.50
Sulphur	0.90
B. t. u.	8,000

PREPARATION OF COAL

Much of the coal of Wyoming deteriorates so rapidly on exposure to air that storage either at the mine or at the point of usage is not practicable. For this reason mines supplying a domestic trade only are worked principally during the winter months. Box cars are used much more for shipment than in the eastern states, as the coal is

thereby protected from the weather. For the purpose of loading in box cars, machinery is in common use. There are very few installations of picking tables, but a separation of impurities is made at the working places and to a lesser extent by hand picking on the tipple and on the cars.

See descriptions of coal mines, following Supplementary Analyses, for additional information on uses and analyses of Wyoming coals.

Analyses of Wyoming Seams by Counties and Localities

(ALL ANALYSES MADE ON NINE SAMPLES "AS RECEIVED")

COUNTY AND LOCATION	SEAM	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Determined B. T. U.	Carbon	Oxygen	RATIOS		
											Carbon	F. C.	V. M.
Bighorn, Kirby	*	Price & Jones	16.11	32.96	48.09	2.84	0.50	11,211	62.50	27.15	2.08	1.46	
Bighorn, 24 mi. e. of Kirby	*	Gapin	25.43	38.62	27.80	8.15	0.38	8,231	53.27	25.54	1.36	0.72	
Bighorn, 1½ mi. n. of Manderson	*		14.94	33.43	37.90	13.73	1.76	9,506				1.13	
Carbon, 4½ mi. n. e. of Baggs	*		26.02	30.08	37.85	6.05	1.01	8,354				1.26	
Carbon, 27 mi. n. of Baggs	*		10.26	22.23	57.68	9.83	0.87	10,354	67.94	17.87	2.45	2.59	
Carbon, 5 mi. s. w. of Copperton	*	Carbondale	13.02	33.37	45.51	8.10	1.10	10,719	60.39	23.36	1.92	1.36	
Carbon, 6 mi. s. w. of Copperton	*	Stemp Springs	10.78	36.01	46.27	6.94	2.25	11,218	62.77	20.86	2.26	1.28	
Carbon, 5 mi. e. of Dixon	*	Angier	14.29	31.82	48.89	5.00	0.46	10,600	60.70	27.20	1.89	1.54	
Carbon, 12 mi. s. w. of Fort Steele	*	McCord	8.85	36.58	50.99	3.58	0.92	12,062	68.68	19.33	3.00	1.39	
Carbon, Hanna	*	Hanna No. 2	11.45	42.58	39.33	6.64	0.38	10,890	59.66	27.11	1.77	0.92	
Carbon, 11 mi. n. e. of Hanna	*	Conlter	15.33	33.63	45.34	5.70	2.27	10,245	57.02	27.34	1.73	1.35	
Carbon, 2 mi. s. e. of Iron	*	Penn-Wyoming	18.41	34.50	43.38	3.71	0.28	9,130	53.87	35.33	1.38	1.26	
Carbon, 8 mi. s. e. of Rawlins	*	Nebraska	19.20	36.46	40.56	3.78	0.34	9,772	58.88	29.92	1.75	1.11	
Carbon, 27 mi. s. w. of Rawlins	*	Robertson	13.62	34.55	43.14	8.69	1.44	10,339	58.79	24.66	1.76	1.25	
Converse, 14 mi. n. of Big Muddy	*	Outcrop	35.01	28.46	28.82	7.71	0.28	5,931				1.01	
Converse, 4 mi. s. w. of Glenrock	*	Prospect	15.58	23.28	22.68	38.46	1.17	2,294	51.96	30.79	1.26	0.97	
Converse, ½ mi. s. e. of Glenrock	*	Glenrock No. 2	19.92	49.25	20.25	10.58	0.68	8,732				0.41	
Converse, 1½ mi. s. of Inez	*	Diamond	25.55	32.73	30.33	11.39	1.25	7,866	45.34	38.55	0.97	0.99	
Converse, 1 mi. s. of Inez	*	Inez	27.88	32.10	31.70	8.32	0.71	4,328	45.75	36.29	0.99	1.34	
Converse, 8 mi. n. of Lost Spring	*	Rosin	27.65	26.70	35.66	9.99	1.03	7,808				1.07	
Converse, Sand Creek	*	Outcrop	27.4	30.9	33.2	8.5	0.36	7,870				1.23	
Crook, Aladdin	*	Stilwell	15.12	34.36	33.82	16.70	0.66	8,928	48.16	22.58	1.23	0.98	
Crook, 5 mi. s. w. of Oxus	*	Kendrick	28.55	29.43	38.31	3.71	0.28	8,233	48.52	40.30	1.10	1.30	
Crook, 7½ mi. w. of Sundance	*	Belshe	19.34	35.35	34.24	11.07	4.38	5,110	51.02	26.88	1.34	0.97	
Freemont, 1 mi. w. of Hudson	*	Indian	20.39	33.07	40.69	5.85	0.58	9,553				1.23	
Freemont, 5 mi. from Hudson	*	Mitchell	19.53	34.69	39.57	6.21	0.71	9,743	56.03	29.65	1.56	1.14	
Freemont, 14 mi. s. w. of Liberty	*	Muddy Creek	15.7	28.5	47.7	8.1	0.35	9,920				1.67	
Freemont, 15 mi. s. e. of Riverton	*	Shipton	34.11	30.41	29.27	6.21	0.59	6,080				0.96	
Freemont, 18 mi. s. e. of Rongis	*	Speyer	23.60	44.30	28.00	4.10	0.29	9,023	53.60	35.20	1.36	0.63	
Hot Springs, 2 mi. from Kirby	*	Big Horn	17.87	31.26	43.48	7.39	0.66	10,062	57.41	27.27	1.66	1.39	
Hot Springs, 2 mi. from Kirby	*	Gebo	15.86	33.01	47.39	3.74	0.59	10,984	62.03	26.29	2.07	1.44	
Hot Springs, 18 mi. s. e. of Meeteetse	*	Dickie No. 1	14.75	37.77	38.08	9.40	0.70	10,057				1.01	
Hot Springs, 19 mi. s. e. of Meeteetse	*	Mayfield No. 2	10.67	37.99	43.99	7.35	0.35	11,072				1.16	
Johnson	*	Puggsley	23.5	35.6	35.7	5.17	0.49	9,050	51.24	35.90	1.25	1.00	
Johnson	*		18.8	35.8	37.9	7.5	0.57	9,160				1.06	
Johnson, 1 mi. n. e. of Buffalo	*	Mitchell	29.05	29.07	34.67	7.21	0.39	7,697	44.64	40.73	0.93	1.19	
Johnson, 50 mi. n. of Casper	*		16.83	31.40	36.78	14.99	1.54	8,480	48.93	28.01	1.14	1.17	
Lincoln, 2 mi. s. w. of Bondurant	*		19.02	39.68	27.83	13.47	2.60	8,392				0.70	
Lincoln, 14 mi. s. w. of Bondurant	*		3.49	35.90	50.59	10.02	0.92	12,870				1.41	
Lincoln, 15 mi. s. w. of Bondurant	*		14.36	32.48	48.73	4.43	3.56	10,303				1.50	
Lincoln, 1 mi. w. of Cumberland	*		6.78	39.79	47.43	6.00	0.43	12,267				1.19	
Lincoln, Elkol	*		21.45	35.29	40.42	2.84	0.61	10,256				1.15	
Lincoln, 5 mi. n. of Frontier	*		3.96	36.16	55.11	4.77	0.77	13,502				1.52	
Lincoln, 1½ mi. w. of Kemmerer	*		18.07	37.09	42.34	2.50	1.95	10,629				1.14	
Lincoln, 3 mi. w. of Kemmerer	*		22.37	34.50	40.21	2.92	0.50	9,792				1.17	
Lincoln, 14 mi. w. of Merna	*		9.60	38.71	46.92	4.77	0.32	11,999				1.21	
Lincoln, 8 mi. s. of Stanley	*		35.70	28.85	28.02	7.43	0.58	5,845				0.97	
Lincoln, Susie	*		6.56	39.20	47.78	6.46	1.37	12,359				1.22	
Natrona, 25 mi. s. w. of Casper	*	Red Ash	29.50	27.48	37.66	5.36	0.47	7,898				1.37	

(Continued on Next Page)

†United States Geological Survey Reports.

*Bulletins Bureau of Mines.

COAL CATALOG

ANALYSES OF WYOMING SEAMS BY COUNTIES AND LOCALITIES—Continued

COUNTY AND LOCATION	SEAM	MINE	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	In Terminal B. T. 1	Carbon	Oxygen	RATIOS	
											Carbon	F. C.
											Oxy. + A. S.	V. M.
Natrona, 2½ mi. n. w. of Oil City.	*	Black Diamond.	28.34	30.33	34.14	7.19	0.43	7,526	.....	.....	.....	1.13
Park.	*	West Wiley.	17.8	30.9	43.5	7.8	0.20	9,590	.....	.....	.....	1.41
Park.	*	East Wiley.	14.8	35.1	38.5	11.6	0.68	9,510	.....	.....	.....	1.10
Park.	*	Cody.	15.8	35.4	41.0	7.8	0.90	10,210	.....	.....	.....	1.16
Park, 3 mi. n. e. of Cody.	*	McGuffey.	17.29	31.33	45.89	5.49	0.35	10,055	59.15	28.52	1.74	1.46
Park, 9 mi. s. e. of Cody.	*	Wilson.	15.52	35.95	40.51	8.02	0.91	10,202	.....	.....	.....	1.13
Park, Meeteetse.	*	Black Diamond.	14.2	35.8	37.7	12.3	0.92	9,600	.....	.....	.....	1.05
Park, 3 mi. n. w. of Meeteetse.	*	Acme No. 1.	17.67	27.28	47.46	7.59	0.17	9,688	57.08	28.97	1.56	1.74
Sheridan, Arvada.	*	Arvada.	22.57	32.53	40.36	4.55	0.30	9,218	53.43	34.33	1.40	1.24
Sheridan, Dietz.	*	Bethourem.	29.39	26.99	37.90	5.72	1.92	7,715	.....	.....	.....	1.40
Sheridan, Carneyville.	*	Carney No. 1.	24.70	37.55	33.04	4.71	0.39	8,903	51.50	36.09	1.26	0.88
Sheridan, just n. of Carneyville.	*	Dietz No. 4.	25.2	32.9	39.1	2.75	0.32	9,160	53.49	36.05	1.38	1.19
Sheridan, 3½ mi. n. e. of Carneyville.	*	Evans.	22.88	32.51	36.74	3.40	0.40	9,144	50.59	33.06	1.24	1.13
Sheridan, 1½ mi. s. of Kooi.	*	Hughes.	20.38	34.19	42.04	7.87	1.11	8,996	.....	.....	.....	1.23
Sheridan, Kooi.	*	Kooi.	21.6	35.2	35.3	4.9	0.31	9,783	.....	.....	.....	1.00
Sheridan, Monarch.	*	Monarch.	23.35	33.86	38.08	4.71	0.64	8,680	53.10	34.00	1.37	1.12
Sheridan, 1½ mi. n. of Kendrick.	*	Sweat's.	22.25	35.01	39.01	3.73	0.37	9,617	53.28	33.28	1.49	1.11
Sweetwater, s. of Alkali Butte.	*	Wyoming Smokeless.	18.30	34.64	40.69	6.37	1.15	9,207	53.93	31.84	1.41	1.17
Sweetwater, Black Buttes.	*	Signor.	30.32	30.79	31.90	6.90	1.25	7,700	44.76	39.73	0.96	1.04
Sweetwater, 4 mi. w. of Creston.	*	Black Buttes.	26.05	30.74	38.15	5.06	0.61	8,761	.....	.....	.....	1.24
Sweetwater, n. w. of Gunn.	*	Latham.	12.85	30.36	52.48	4.31	0.56	10,579	60.27	28.18	1.85	1.73
Sweetwater, 15 mi. s. of Maxon.	*	Gunn-Quealy "B".	37.80	25.86	22.30	14.04	1.46	4,385	.....	.....	.....	0.86
Sweetwater, Rock Springs.	*	Koskie.	15.71	33.50	48.40	2.39	0.93	11,144	63.11	26.16	2.21	1.44
Sweetwater, Superior.	*	U. Pac. No. 1.	12.43	39.14	36.90	11.53	5.44	10,127	55.78	20.29	2.86	1.36
Sweetwater, 12 mi. n. w. of Superior.	*	B.	8.53	35.60	50.39	5.48	0.78	11,833	66.15	21.04	2.49	1.42
Sweetwater, Black Butte.	*	Rock Springs.	11.79	36.96	47.88	3.37	0.99	11,999	67.87	20.43	2.85	1.30
Sweetwater, Gunn.	*	Gunn-Quealy.	26.26	32.13	37.47	4.14	0.39	7,321	47.16	41.62	1.03	1.17
Sweetwater, Rock Springs.	*	Wyoming.	20.8	28.4	47.1	3.73	0.36	9,913	57.11	31.76	1.61	1.66
Sweetwater, Sweetwater.	*	No. 7.	15.7	33.5	48.4	2.39	0.93	11,144	63.11	26.16	2.21	1.44
Uinta, Almy.	*	No. 5.	11.5	36.8	50.1	1.62	0.75	12,224	68.29	22.24	2.86	1.36
Uinta, 7 mi. n. of Almy.	*	Main Almy.	8.64	38.47	48.30	4.59	1.09	12,175	69.55	17.71	3.12	1.26
Uinta, Kemmerer.	*	Almy.	14.43	36.81	41.54	7.22	0.21	10,447	59.97	26.08	1.80	1.13
Washakie, 12 mi. s. w. of Ten Sleep.	*	Kimball.	14.11	35.34	34.40	16.15	4.45	8,816	48.91	24.37	1.21	0.97
Weston.	*	Antelope No. 1.	19.00	36.61	41.24	3.12	0.49	10,307	59.38	29.62	1.81	1.13
Weston, Cambria.	*	Jumbo.	16.30	35.81	32.62	15.27	0.96	8,558	50.84	26.59	1.21	0.91
Weston, 7 mi. w. of Horton.	*	Holwell.	26.1	31.0	36.9	6.01	0.56	8,370	49.36	36.90	1.15	1.19
Weston, 2 mi. s. w. of Moorcroft.	*	Antelope No. 4.	8.60	37.13	32.37	21.90	4.94	9,709	53.33	16.16	1.44	0.92
Weston, 12 mi. s. of Moorcroft.	*	Weston, 6½ mi. from Newcastle.	9.93	36.52	33.76	20.79	4.03	10,001	53.33	16.16	1.44	0.92
Weston, 6½ mi. from Newcastle.	*		13.97	29.85	38.02	24.16	2.11	8,280	46.78	21.54	1.02	1.59
	*		30.0	28.8	34.5	6.7	0.92	.....	.....	.....	.....	1.20
	*		26.08	31.05	36.86	6.01	0.56	8,365	49.36	36.90	1.15	1.19
	*		10.77	39.10	35.10	15.03	4.87	10,341	56.09	17.81	1.71	0.90

*Bull-thus Bureau of Mines.

†United States Geological Survey Reports.

PEABODY COAL COMPANY

SHERIDAN, WYOMING

BRANCHES

OMAHA, NEBRASKA
KANSAS CITY, MISSOURI
MINNEAPOLIS, MINNESOTA
DEADWOOD, SOUTH DAKOTA
SPOKANE, WASHINGTON

General Office

332 South Michigan Avenue

CHICAGO, ILL.

Sales Agent for Sheridan-Wyoming Coal Co., Inc.

The Sheridan Field

There are six large mines in Sheridan County, Northern Wyoming, owned by the Sheridan-Wyoming Coal Co., Inc. These mines are operated by Peabody Coal Company who also are Sales Agent for the output.

All six of these mines operate in the Carney and Monarch seams, both of which are remarkable for their unusual thickness, at places reaching as high as 34 feet.

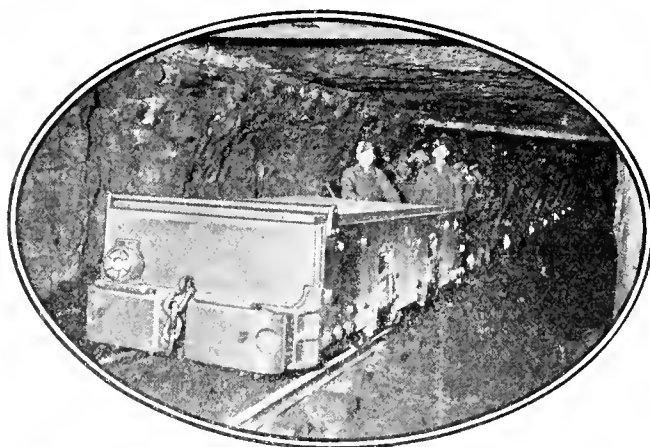
The six *KLEENBURN* mines are located within a radius of seven miles and there is very little, if any, difference in the quality of the coal produced at the different operations.

Quality

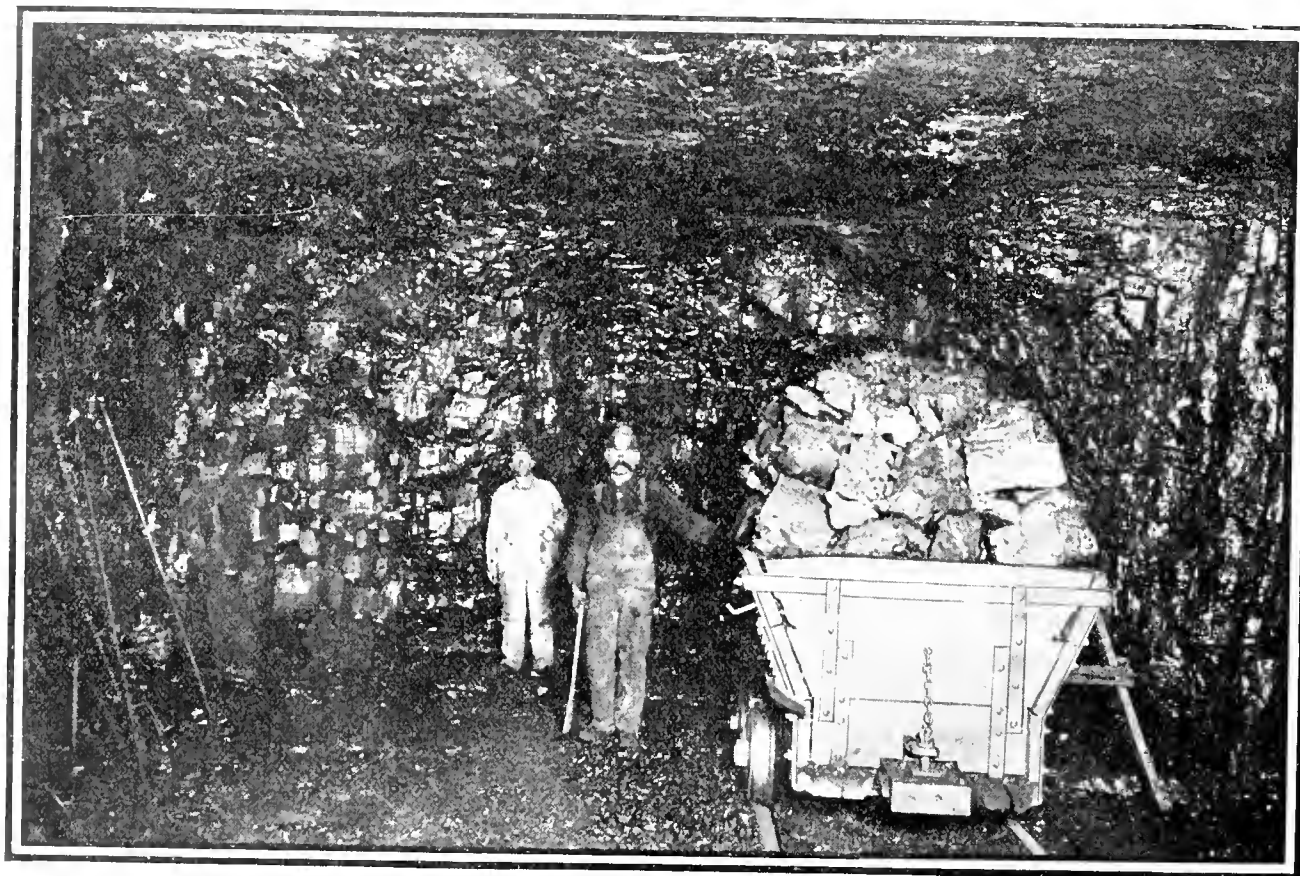
Coal from these properties is sold under the trade name of *KLEENBURN*, this name having been selected on account of the clean-burning properties of the coal.

KLEENBURN coal is remarkably free from dirt. It is absolutely sootless, makes very little smoke, does not clinker and holds fire well over night. Repeated analyses show that the ash content is approximately 3%.

On account of a relatively high moisture content, *KLEENBURN* coal is subject to considerable degradation if exposed to the weather. To offset this tendency, all domestic sizes are shipped in sealed box cars which not only provide protection from the weather but also prevent pilferage and loss in transit.



Modern Haulage Methods Are Used in All *KLEENBURN* Mines



PEABODY COAL COMPANY

SHERIDAN, WYOMING

BRANCHES
OMAHA, NEBRASKA
KANSAS CITY, MISSOURI
MINNEAPOLIS, MINNESOTA
DEADWOOD, SOUTH DAKOTA
SPOKANE, WASHINGTON

General Office
332 South Michigan Avenue
CHICAGO, ILL.

Sales Agent for Sheridan-Wyoming Coal Co., Inc.

Preparation

Each of the *KLEENBURN* Mines is equipped with mining machines, shaker screens, loading booms and box car loaders. No picking tables are necessary as the coal contains no rock, slate or other impurities. Every care is taken to screen the coal into evenly graded sizes and to prevent breakage in loading.

For this purpose the Manniere box car loaders are particularly well adapted, as it is possible to

so adjust them that coal passing into the cars does not drop more than one to two feet, the conveyor being gradually raised as the car is filled.

Sizes Produced

KLEENBURN coal is prepared in the following sizes:
Lump—Over 6" Screen.
Egg—Through 6", over 2½" Screen.
Nut—Through 2½", over 1½" Screen.
Screenings—Through 1½" Screen.



Manniere Box Car Loader in Operation at *KLEENBURN* No. 41

Capacity

Owing to the thickness of the vein and the modern methods and machinery employed, the *KLEENBURN* mines are capable of an enormous production, the total capacity of the six mines being approximately 20,000 tons a day. This tremendous potential production gives assurance of our ability to fill orders promptly at all times.

Territory Supplied

KLEENBURN coal moves on favorable rates to points in the following states:

Washington	South Dakota
Idaho	Nebraska
Montana	Kansas
Wyoming	Missouri
North Dakota	Iowa
	Minnesota

Freight rates to any points in these states will be quoted upon request.

List of Mines, Including Name of Company, General Office Address, County,
Railroad and Shipping Point

WYOMING

CARBON COUNTY COALS

Bituminous and Subbituminous ranks. Suitable for Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Union Pacific Coal Co., The	Rock Springs, Wyo.	No. 2	Carbon	Union Pacific	Hanna, Wyo.
Union Pacific Coal Co., The	Rock Springs, Wyo.	No. 3	Carbon	Union Pacific	Hanna, Wyo.
Union Pacific Coal Co., The	Rock Springs, Wyo.	No. 4-A	Carbon	Union Pacific	Hanna, Wyo.

LINCOLN COUNTY COAL

Bituminous rank. Suitable for Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Diamond Coal & Coke Co.	Butte, Mont.	Diamondville No. 1	Lincoln	O. S. L.	Diamondville, Wyo.
Diamond Coal & Coke Co.	Butte, Mont.	Glence No. 4	Lincoln	O. S. L.	Glence, Wyo.
Diamond Coal & Coke Co.	Butte, Mont.	Oakley No. 2	Lincoln	O. S. L.	Diamondville, Wyo.
Kemmerer Coal Co.	Frontier, Wyo.	Elkol	Lincoln	O. S. L.	Kemmerer, Wyo.
Kemmerer Coal Co.	Frontier, Wyo.	No. 1	Lincoln	O. S. L.	Kemmerer, Wyo.
Kemmerer Coal Co.	Frontier, Wyo.	No. 4	Lincoln	O. S. L.	Kemmerer, Wyo.
Kemmerer Coal Co.	Frontier, Wyo.	No. 5	Lincoln	O. S. L.	Kemmerer, Wyo.
Kemmerer Coal Co.	Frontier, Wyo.	No. 6	Lincoln	O. S. L.	Kemmerer, Wyo.
Lincoln-Kemmerer Coal Co.	Ogden, Utah	Lincoln-Kemmerer	Lincoln	O. S. L.	Kemmerer, Wyo.
Union Pacific Coal Co., The	Rock Springs, Wyo.	Cumberland No. 1	Lincoln	O. S. L.	Cumberland, Wyo.
Union Pacific Coal Co., The	Rock Springs, Wyo.	Cumberland No. 2	Lincoln	O. S. L.	Cumberland, Wyo.
Union Pacific Coal Co., The	Rock Springs, Wyo.	Cumbr.-r. No. 2 South	Lincoln	O. S. L.	Cumberland, Wyo.

SHERIDAN COUNTY COAL

Subbituminous rank. Suitable for Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Peabody Coal Co.	332 S. Michigan Ave., Chicago, Ill.	No. 41	Sheridan	C. B. & Q.	Sheridan, Wyo.
Peabody Coal Co.	332 S. Michigan Ave., Chicago, Ill.	No. 42	Sheridan	C. B. & Q.	Alger, Wyo.
Peabody Coal Co.	332 S. Michigan Ave., Chicago, Ill.	No. 43	Sheridan	C. B. & Q.	Sheridan, Wyo.
Peabody Coal Co.	332 S. Michigan Ave., Chicago, Ill.	No. 44	Sheridan	C. B. & Q.	Sheridan, Wyo.
Peabody Coal Co.	332 S. Michigan Ave., Chicago, Ill.	No. 45	Sheridan	C. B. & Q.	Alger, Wyo.
Peabody Coal Co.	332 S. Michigan Ave., Chicago, Ill.	No. 46	Sheridan	C. B. & Q.	Alger, Wyo.

SWEETWATER COUNTY COAL

Bituminous and Subbituminous rank. Suitable for Domestic, Locomotive Fuel, Producer Gas and Steam uses.

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Blazon Coal Co.	Salt Lake City, Utah	Blazon No. 1	Sweetwater	Union Pacific	Point of Rocks, Wyo.
Central Coal & Coke Co.	Kansas City, Mo.	No. 2	Sweetwater	Union Pacific	Rock Springs, Wyo.
Colony Coal Co.	Denver, Colo.	Dine No. 6	Sweetwater	Union Pacific	Hay, Wyo.
Colony Coal Co.	Denver, Colo.	Dines No. 8	Sweetwater	Union Pacific	Hay, Wyo.
Colony Coal Co.	Denver, Colo.	Dines No. 9	Sweetwater	Union Pacific	Hay, Wyo.
Colony Coal Co.	Denver, Colo.	Dines No. 10	Sweetwater	Union Pacific	Hay, Wyo.
Gunn-Quealey Coal Co.	Gunn, Wyo.	"C"	Sweetwater	Union Pacific	Rock Springs, Wyo.
Gunn-Quealey Coal Co.	Gunn, Wyo.	"B"	Sweetwater	Union Pacific	Rock Springs, Wyo.
Gunn-Quealey Coal Co.	Gunn, Wyoming	Sweetwater	Sweetwater	Union Pacific	Rock Springs, Wyo.
Lion Coal Co.	Ogden, Utah	Lion No. 1	Sweetwater	Union Pacific	Rock Springs, Wyo.
Lion Coal Co.	Ogden, Utah	Lion No. 3	Sweetwater	Union Pacific	Rock Springs, Wyo.
Lion Coal Co.	Ogden, Utah	Wyo. No. 1	Sweetwater	Union Pacific	Rock Springs, Wyo.
Lion Coal Co.	Ogden, Utah	Wyo. No. 4	Sweetwater	Union Pacific	Rock Springs, Wyo.
Lion Coal Co.	Ogden, Utah	Wyo. No. 7	Sweetwater	Union Pacific	Rock Springs, Wyo.
Megeath Coal Co.	Omaha, Neb.	No. 3	Sweetwater	Union Pacific	Rock Springs, Wyo.
Premier Coal Co.	Ogden, Utah	Premier	Sweetwater	Union Pacific	Superior, Wyo.
Rock Springs Fuel Co.	Rock Springs, Wyo.	Rock Springs	Sweetwater	Union Pacific	Superior, Wyo.
Superior Rock Springs Coal Co.	Ogden, Utah	No. 1	Sweetwater	Union Pacific	Superior, Wyo.
Union Pacific Coal Co., The	Rock Springs, Wyo.	No. 4	Sweetwater	Union Pacific	Rock Springs, Wyo.
Union Pacific Coal Co., The	Rock Springs, Wyo.	No. 7	Sweetwater	Union Pacific	Rock Springs, Wyo.
Union Pacific Coal Co., The	Rock Springs, Wyo.	No. 8	Sweetwater	Union Pacific	Rock Springs, Wyo.
Union Pacific Coal Co., The	Rock Springs, Wyo.	No. 10	Sweetwater	Union Pacific	Rock Springs, Wyo.
Union Pacific Coal Co., The	Rock Springs, Wyo.	A	Sweetwater	Union Pacific	Superior, Wyo.
Union Pacific Coal Co., The	Rock Springs, Wyo.	B	Sweetwater	Union Pacific	Hay, Wyo.
Union Pacific Coal Co., The	Rock Springs, Wyo.	C	Sweetwater	Union Pacific	Superior, Wyo.
Union Pacific Coal Co., The	Rock Springs, Wyo.	D	Sweetwater	Union Pacific	Superior, Wyo.
Union Pacific Coal Co., The	Rock Springs, Wyo.	E	Sweetwater	Union Pacific	Superior, Wyo.
Union Pacific Coal Co., The	Rock Springs, Wyo.	Reliance	Sweetwater	Union Pacific	Reliance, Wyo.
Union Pacific Coal Co., The	Rock Springs, Wyo.	Rock Springs	Sweetwater	Union Pacific	Rock Springs, Wyo.

MISCELLANEOUS SEAMS

NAME OF COMPANY	GENERAL OFFICE ADDRESS	NAME OF MINE	COUNTY	RAILROAD	SHIPPING POINT
Bear River Coal Co.	Evanston, Wyo.	Bear River No. 1	Uinta	Union Pacific	Evanston, Wyo.
Rig Horn Collieries Co.	Denver, Colo.	Big Horn	Hot Springs	C. B. & Q.	Crosby, Wyo.
Buffalo-Wyoming Coal Co.	Cedar Rapids, Ia.	Buffalo	Johnson	Wyoming	Buffalo, Wyo.
Cambria Fuel Co. (The)	Cambria, Wyo.	Cambria	Weston	C. B. & Q.	Cambria, Wyo.
Owl Creek Coal Co.	Gibo, Wyo.	Gebo	Hot Springs	C. B. & Q.	Kirby, Wyo.
Poposia Coal Co.	Lander, Wyo.	Poposia No. 1	Fremont	Wyo. & N. W.	Hudson, Wyo.
Poposia Coal Co.	Lander, Wyo.	Poposia No. 2	Fremont	Wyo. & N. W.	Hudson, Wyo.

WYOMING

Alphabetical Directory of Coal Mines, Giving Complete Detailed Information Covering Each Mine

For List of Abbreviations See Page 13.

ACME COAL CO.

New Peabody Coal Co.

AMALGAMATED DEVELOPMENT CORP.

New Peabody Coal Co.

BEAR RIVER COAL COMPANY

PR—Geo. E. Pexton, Evanston, Wyo.
VP—J. H. Martin, Evanston, Wyo.
TR—O. E. Bradburg, Evanston, Wyo.
GM—J. H. Martin, Evanston, Wyo.
GS—J. H. Martin, Evanston, Wyo.
PA—O. E. Bradburg, Evanston, Wyo.
EM—O. E. Bradburg, Evanston, Wyo.

Bear River No. 1 Mine; Slope; Evanston Seam, 219 inches thick.
PO—Evanston, Wyo.; SP—Same; CTY—Union; RR—Union Pacific.
S of H—Mules, rope, comp. air and steam locos. Track gage 30 inches.
S of M—Hand and comp. air punchers.
PP—1 100 H. P. fire tube boiler and 2—150 H. P. water tube boilers.
EMP—50. Last years tonnage 50,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens.

BIG HORN COLLIERIES CO.

General Office, Denver, Colo.
PR—Jas. R. Thorpe, Denver, Colo.
VP—Herbert Addison, Denver, Colo.
TR—Herbert Addison, Denver, Colo.
GS—Frank Anderson, Jr., Crosby, Wyo.
PA—Herbert Addison, Denver, Colo.
EE—Cleve Fugua, Crosby, Wyo.
SCO—Big Horn Trading Co.; Buyer, Colin Anderson, Crosby, Wyo.
SA—Herbert Addison, Denver, Colo.

Big Horn Mine; Slope; Big Horn Seam, 48-168 in. thick.
PO—Crosby, Wyo.; SP—Kirkby, Wyo.; CTY—Hot Spring; RR—C. B. & O.
S of H—Mules, rope and 2 trolley pole type locos. Track gage, 36 in.
S of M—4 comp. air punchers and 6 showwall machs.
PP—5 water tube boilers, total 750 H. P. 2—375 K. W. gen. units, transformer, 2,300-440 volts A. C. M. G. Sets, 250 volts D. C. 12 pumps.
EMP—250. Last years tonnage 245,000.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Revolving and Shaker Screens, Picking Tables.

BLAZON COAL COMPANY

General Office, Salt Lake City, Utah.
PR—L. F. Rains, Salt Lake City, Utah.
VP—A. H. Jenkinson, Salt Lake City, Utah.
TR—L. F. Rains, Salt Lake City, Utah.
PA—J. K. Rans, Salt Lake City, Utah.
CE—A. H. Jenkinson, Salt Lake City, Utah.
SCO—Rains Mercantile Co. No. 2, Buyer, J. M. Scott.
SA—Carbon Coal & Sales Co.

Blazon No. 1 Mine; Slope; Lignite Seam; 84 inches thick.
PO—Point of Rocks, Wyo.; SP—Same; CTY—Sweetwater; RR—Union Pac.
MS—R. E. Montgomery, Point of Rocks, Wyo.
S of H—Mules, rope and 1 gasoline engine. Track gage 36 in.
S of M—Hand.
EMP—80. Last fiscal year output, 50 116 tons.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Bar Screens.

BUFFALO-WYOMING COAL COMPANY

General Office, Cedar Rapids, Ia.
PR—Isaac B. Smith, Cedar Rapids, Iowa.
VP—Geo. W. Munkres, Buffalo, Wyo.
TR—Geo. G. Belt, Buffalo, Wyo.
GM—Geo. G. Belt, Buffalo, N. Y.
PA—Geo. G. Belt, Buffalo, Wyo.
CE—J. W. Wardle, Cedar Rapids, Ia.
SCO—Address the Company, Buyer, Geo. G. Belt, Buffalo, Wyo.

Buffalo Mine; Shaft; Seam, 108 in. thick.
PO—Buffalo, Wyo.; SP—Same; CTY—Johnson; RR—Wyoming.
S of H—Mules. Track gage, 30 in.
S of M—6 chain breast type machs.
PP—Power purchased, transformer 2100-220 volts A. C. 2 fire tube boilers, 25 H. P. 1 pump.
EMP—10. Daily tonnage 100.
SIZES SHIPT—Run of Mine, Slack.
PREP. EQUIPT—Bar Screens.

CAMBRIA FUEL COMPANY (THE)

General Office, Cambria, Wyo.
PR—Lewis T. Wolfe, Akron, O.
GM—Lewis T. Wolfe, New York, N. Y.
VP—Wm. Morris Imbrie, 61 Broadway, New York, N. Y.
TR—Walter Schoonmaker, Cambria, Wyo.
GS—Phas. V. Westover, Cambria, Wyo.
PA—Walter Schoonmaker, Cambria, Wyo.
SCO—Cambria Commercial Co., Cambria, Wyo.

Cambria Mines; Drift; An Orphan Seam, 36 to 141 in. thick.
PO—Cambria, Wyo.; SP—Same; CTY—Weston; RR—C. B. & O.
SM—H. H. DeVolt, Cambria, Wyo.
S of H—Mules, 4 comp. air and 2 trolley pole type locos. Track gage, 42 inches.
S of M—Comp. air punchers.
PP—4 water tube boilers, 1750 H. P. 1 750 K. W. gen. unit, 220 volts D. C. 9 pumps.
EMP—210. Last years tonnage 244,359.
SIZES SHIPT—Slack, Lump, Crushed.
PREP. EQUIPT—Shaker Screens, Picking Tables.

CARNEY COAL COMPANY.

New Peabody Coal Co.

CENTRAL COAL & COKE COMPANY

General Office, Kansas City, Mo.
Operations in Arkansas, Kansas, Missouri, Oklahoma and Wyoming.
PR—C. S. Keith, Kansas City, Mo.
VP—H. N. Taylor, Kansas City, Mo.
TR—E. E. Riley, Kansas City, Mo.
GS—Wm. Harkins, Kansas City, Mo.
PA—Thomas Mackie, Kansas City, Mo.
EM—L. S. O'Flaherty, Kansas City, Mo.
SCO—Address the Company, Buyer, P. W. Dooley, Bevier, Mo.

No. 2 Mine; Slope; A-1 and No. 7 Seams, 84 in. thick.
PO—Rock Springs, Wyo.; SP—Same; CTY—Sweetwater; RR—U. P.
MS—Arthur Vall, Rock Springs, Wyo.
S of H—Mules, rope, trolley pole type loco. Track gage 36 in.
S of M—10 shortwall machs.
PP—3 fire tube boilers, 999 H. P. gen. units, 1000 K. W., 250 volts A. C. 9 pumps.
EMP—220. Last years tonnage 349,186.
SIZES SHIPT—Run of Mine; Slack, Nut, Egg, Lump.
PREP. EQUIPT—Shaker Screens, Picking

COLONY COAL COMPANY

General Office, Denver, Colo.
PR—G. W. Harris, Denver, Colo.
VP—J. W. Gilchrist, Davenport, Ia.
TR—R. A. Harris, Mt. Harris, Colo.
GM—B. A. Harris, Mt. Harris, Colo.
Asst. Gen. Mgr.—G. C. Davis, Dines, Colo.
Chief Engr.—G. T. Haldeman, Denver, Colo.
PA—H. L. Settergren 1st Ntl. Bk. Bldg., Denver, Colo.
EM—Park Allison, Dines, Wyo.
EE—R. C. Grout, Dines, Wyo.
SCO—Address the Company, Buyer, H. L. Settergren, Denver, Colo.
SA—J. F. Emmert, Denver, Colo.

Dines Nos. 6, 8, 9 and 10 Mines; No. 8, 9, 10, Drift, No. 6, Slope; Nos. 6 1/2, 8, 9, 10 Seams, 78-96-108-120 in. thick.
PO—Dines, Wyo.; SP—Hay, Wyo.; CTY—Sweetwater; RR—Union Pacific.
MS—G. C. Davis, Dines, Wyo.
SM—J. H. Kelley, Dines, Wyo.
S of H—Mules, 1 trolley pole type loco. Track gage 36 in.
S of M—11 shortwall machs.
PP—Power purchased, Transformer 33000 to 2300 volts A. C. 2 M. G. sets, 275 volts D. C.
EMP—375. Last years tonnage 261,942.
SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
PREP. EQUIPT—Marcus Shaker Screen, Loading Booms.

DIAMOND COAL & COKE CO.

General Office, Butte, Mont.
PR—John D. Ryan, New York, N. Y.
GM—F. W. C. Whyte, Anaconda, Mont.
PA—D. A. Welch, Butte, Mont.
GS—T. C. Russell, Diamondville, Wyo.
EM—R. R. Vall.

MM—A. Swanson, Diamondville, Wyo.
EE—C. Seethess, Diamondville, Wyo.

Diamondville No. 1 Mine; Slope; Kemmerer Seam, 7 to 14 ft. thick.
PO—Diamondville, Wyo.; SP—Same; CTY—Lincoln; RR—O. S. L.
MS—Jas. Hunter, Diamondville, Wyo.
S of H—Mules and rope; track gauge 3 ft S of M—H and 5 Comp. air mach.
PP—11 Return tubular boilers, 1 gen. unit, 440 volts A. C., 3 phases, 1 comp., 2 pumps.
EMP—160. Last fiscal year output 174,938 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

Oakley No. 2 Mine, Slope, Kemmerer Seam 7 to 14 ft. thick.
PO—Oakley Wyo.; SP—Diamondville, CTY—Lincoln; RR—O. S. L.
MS—Wm. Armstrong, Diamondville, Wyo.
S of H—Mules and rope; track gauge 3 ft S of M—Hand and 3 Comp. air mach.
PP—8 Return tubular boilers, 1 Air comp., 1 pump.
EMP—160. Last fiscal year output 247,981 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.

Glencoe No. 4 Mine, Slope, Kemmerer Seam 7 to 14 ft. thick.
PO—Glencoe, Wyo.; SP—Same; CTY—Lincoln; RR—O. S. L.; Cumberland R.
MS—R. T. Sneddon, Diamondville, Wyo.
S of H—Mules and rope; track gauge 3 ft S of M—Hand and 10 Comp. air mach.
PP—7 Return tubular boilers, 1 compressor and 1 pump.
EMP—150. Last fiscal year output 196,338 tons.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
(Old Information)

GUNN-QUEALEY COAL COMPANY

General Office, Gunn, Wyo.
PR—P. J. Quealey, Kemmerer, Wyo.
VP—W. B. Thompson, Gunn, Wyo.
TR—Wm. E. Decker, New York, N. Y.
GS—G. A. Knox, Gunn, Wyo.
PA—G. A. Knox, Gunn, Wyo.
EM—B. C. Roberts, Gunn, Wyo.
EE—James Coals, Gunn, Wyo.
SCO—Desert Trading Co. Buyer, C. W. Peterson, Gunn, Wyo.
Sales Agent—T. J. O'Brien, Salt Lake City, Utah.

"E" Mine; Slope; Seam 84 in. thick.
PO—Gunn, Wyo.; SP—Rock Springs, Wyo.; CTY—Sweetwater; RR—Union Pacific.
MS—G. A. Knox, Gunn, Wyo.
S of H—Mules and trolley pole type loco. Track gage 42 in.
S of M—8 shortwall machs.
PP—Purchase power.
EMP—250. Daily tonnage 1,200.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

"C" Mine; Slope; Seam 84 in. thick.
PO—Gunn, Wyo.; SP—Rock Springs, Wyo.; CTY—Sweetwater; RR—Union Pacific.
MS—G. A. Knox, Gunn, Wyo.
S of H—Mules and trolley pole type loco. Track gage 42 in.
S of M—8 shortwall machs.
PP—Power purchased.
EMP—250. Daily tonnage 1,200.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

Sweetwater Mine; Slope; Seam 72 inches thick.
PO—Gunn, Wyo.; SP—Rock Springs, Wyo.; CTY—Sweetwater; RR—Union Pacific.
SM—J. A. Peterson, Sweetwater, Wyo.
S of H—Mules, 2 trolley pole 5-ton locos.
S of M—7 shortwall machs.
EMP—125. Daily tonnage 800.
SIZES SHIPT—Run of Mine, Lump, Nut, Slack.
PREP. EQUIPT—Shaker Screens.

KEMMERER COAL COMPANY

General Office, Frontier, Wyo.
PR—M. S. Kemmerer, 143 Liberty St., New York, N. Y.
VP—P. J. Quealey, Frontier, Wyo.

TR—J. L. Kemmerer, 143 Liberty St., New York, N. Y.
SECY—J. L. Kemmerer, 113 Liberty St., New York, N. Y.
GM—P. J. Quealey, Frontier, Wyo.
GS—Gomer Reese, Frontier, Wyo.
PA—P. J. Quealey, Frontier, Wyo.
EM—C. S. Beach, Frontier, Wyo.
EE—B. L. Betcher, Frontier, Wyo.
SCO—Frontier Supply Co.; Buyer, R. M. Turner, Frontier, Wyo.
SA—T. J. O'Brien, Salt Lake City, Utah.

No. 5 Mine; Slope; Laramie or Cretaceous Seam, 60 in. thick.
PO—Sublet, Wyo.; SP—Kemmerer, Wyo.; CTY—Lincoln; RR—O. S. L.
MS—John Oakley, Sublet, Wyo.
SM—Tom Holland, Sublet, Wyo.
S of H—Mules and 4 5-ton P. C. trolley pole locos. Track gage 42 in.
S of M—Hand.
PP—Power purchased, Transformer 13,000 to 2,300 volts A. C. M. G. sets, 220 volts A. C. and D. C., 1 fire tube boiler, 150 H. P., 2 pumps.
EMP—118. Last years tonnage 160,451.
PREP. EQUIPT—Shaker Screens.

No. 6 Mine; Slope; Crataceous Seam, 60 in. thick.
PO—Sublet, Wyo.; SP—Kemmerer, Wyo.; CTY—Lincoln; RR—O. S. L.
MS—John Mates, Sublet, Wyo.
SM—Frank Toni, Sublet, Wyo.
S of H—Mules and 3 trolley pole type locos. Track gage, 42 in.
S of M—Hand.
PP—Power purchased, Transformer 13,000 to 2,300 volts A. C. M. G. sets, 220 volts A. C. and D. C., 4 fire tube boilers, total 600 H. P., 3 pumps.
EMP—98. Last years tonnage 142,381.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Shaker Screens.

No. 1 Mine; Slope; Crataceous Seam, 84 in. thick.
PO—Frontier, Wyo.; SP—Kemmerer, Wyo.; CTY—Lincoln; RR—O. S. L.
MS—Joe Inama, Frontier, Wyo.
SM—R. M. Turner, Frontier, Wyo.
S of H—Mules, main rope and steam locos. Track gage 42 in.
S of M—Hand.
PP—Power purchased, Transformer 13,000 to 2,300 volts A. C. M. G. sets, 220 volts A. C. and D. C., 6 fire tube boilers, total 900 H. P., 5 pumps.
EMP—175. Last years tonnage 171,668.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Shaker Screens.

Elkol No. 1 Mine; Slope; Cretaceous Seam, 40 in. thick.
PO—Elkol, Wyo.; SP—Kemmerer, Wyo.; CTY—Lincoln; RR—O. S. L.
MS—John Kataari, Elkol, Wyo.
SM—M. L. Thomas, Elkol, Wyo.
S of H—Mules, track gage, 42 in.
S of M—Hand.
PP—Power purchased, Transformer 13,000 to 2,300 volts A. C. M. G. sets, 220 volts A. C. and D. C., 4 fire tube boilers, total 600 H. P., 2 pumps.
EMP—42. Last years tonnage 121,952.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

Note—No. 3 Mine Idle.

No. 4 Mine; Slope; Cretaceous Seam, 48 to 60 in. thick.
PO—Susie, Wyo.; SP—Kemmerer, Wyo.; CTY—Lincoln; RR—O. S. L.
MS—Samuel Daniels, Susie, Wyo.
S of H—Mules, main rope, steam and elec. locos. Track gage 42 in.
S of M—Hand.
PP—Power purchased, Transformer 13,000 to 2,300 volts A. C. M. G. sets, 220 volts A. C. and D. C., 2 fire tube boilers, total 300 H. P., 1 pump.
EMP—25. Last years tonnage 25,149.
SIZES SHIPT—Run of Mine.
PREP. EQUIPT—Shaker Screens.

KIRBY CREEK COAL COMPANY

Out of business.

KOOL, PETER.

New Peabody Coal Co.

LINCOLN-KEMMERER COAL COMPANY

General Office, 2009 Wash. Ave., Ogden, Utah.
 PR—W. H. Draney, Frontier, Wyo.
 VP—T. D. Ryan, Frontier, Wyo.
 TR—C. H. Gosling, " "
 GM—W. H. Draney, " "
 GS—Bing Cowlishaw, Frontier, Wyo.
 PA—W. H. Draney, " "
 CE—R. Vail, Diamondville, Wyo.
 EM—B. Cowlishaw, Frontier, Wyo.
 EE—R. L. Cowlishaw, Frontier, Wyo.
 SA—F. H. Kollapp Co., Box 14, Salt Lake City, Utah.

Lincoln-Kemmerer Mine; Slope; Cretaceous Seam, 66 to 120 in. thick.
 PO—Frontier, Wyo.; SP—K-mm rer, Wyo.; CTY—Lincoln; RR—O. S. L.
 S of H—Rope. Track gage, 36 in.
 S of M—Hand.
 PP—4 fire tube boilers, 100 H. P., 1 water tube boiler, 35 H. P., 1 150 K. W. gen. unit, 250 volts D. C., 3 pumps.
 EMP—40. Last years tonnage 27,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Gravity Screens.

LION COAL COMPANY.

General Office, Ogden, Utah.
 PR—Joseph Scowcroft, Ogden, Utah.
 VP—Adam Peterson, Ogden, Utah.
 TR—Royal Eccles, Ogden, Utah.
 GM—D. H. Pape, Ogden, Utah.
 GS—F. H. Burnell, Ogden, Utah.
 LOCAL SUPT.—John Carr, Lionok, Wyo.
 PA—L. K. Adams, Ogden, Utah.
 EE—E. E. Brown, Rock Springs, Wyo.
 SCO—Lion Trading Co. Buyer, John Correlletti, Lionok, Wyo.
 SA—James T. Hill, Ogden, Utah.

Lion No. 1 Mine; Shaft; Laramie-Cretaceous Seam, 96 in. thick.
 PO—Lionok, Wyo.; SP—Rock Springs, Wyo.; CTY—Sweetwater; RR—Union Pacific.
 MS—F. G. Cundy, Lionok, Wyo.
 S of H—Mules and rope. Track gage, 42 in.
 S of M—10 shortwall machs.
 PP—Generate power, 440 volts A. C., 3 pumps.
 EMP—70. Daily tonnage 1,200.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables.

Lion No. 3 Mine; Slope; Laramie-Cretaceous Seam, 60 in. thick.
 PO—Lionok, Wyo.; SP—Rock Springs, Wyo.; CTY—Sweetwater; RR—Union Pacific.
 MS—Matt Marshall, Lionok, Wyo.
 S of H—Mules and rope. Track gage 42 in.
 S of M—4 shortwall machs.
 PP—Power purchased, 440 volts A. C., 2 pumps.
 EMP—40. Daily output, 250 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens

Wyo. No. 1 Mine; Slope and Shaft.
 PO—Rock Springs, Wyo.; SP—Same; CTY—Sweetwater; RR—U. P.
 MS—J. D. Carr, Rock Springs, Wyo.
 S of H—Mules and main and tail rope. Track gage 36 inches.
 S of M—Elec. mach.
 PP—Power purchased. Transformer 2200 to 440 volts A. C., 2—500 K. W. gen. units, 110 volts D. C., 4 water tube boilers, total 1,000 H. P., 8 pumps.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables.

Wyo. No. 7 Mine; Slope and Shaft.
 PO—Rock Springs, Wyo.; SP—Same; CTY—Sweetwater; RR—U. P.
 MS—J. D. Carr, Rock Springs, Wyo.
 S of H—Mules and main and tail rope. Track gage 36 inches.
 PP—Get power from Wyo. No. 1 (Central Station).
 EMP—50. Last years tonnage 79,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PBEP. EQUIPT—Shaker Screens, Picking Tables.

Wyo. No. 4 Mine; Slope.
 PO—Rock Springs, Wyo.; SP—Same; CTY—Sweetwater; RR—U. P.
 MS—J. D. Carr, Rock Springs, Wyo.
 S of H—Mules, main and tail rope. Track gage 36 inches.
 S of M—3 shortwall machs.
 PP—Get power from Wyo. No. 1 Mine (Central Plant).
 EMP—85. Last years tonnage 26,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables.

NOTE—Lion No. 3 Mine closed down at present.
 NOTE—Wyo. No. 1 and No. 7 formerly operated by the Wyoming Coal Co.

MEGEATH COAL COMPANY.

General Office, Omaha, Neb.
 PR—W. F. Megeath, Omaha, Neb.
 VP—J. E. Megeath, Omaha, Neb.
 TR—G. A. Rehm, Omaha, Neb.
 GM—J. E. Megeath, Omaha, Neb.
 GS—R. S. Robbins, Megeath, Wyo.
 PA—M. L. Garvey, Omaha, Neb.
 SA—G. A. Davis, Cheyenne, Wyo.

No. 3 Mine; Slope; No. 1 Seam.
 PO—Rock Springs, Wyo.; SP—Same; CTY—Sweetwater; RR—Union Pac.
 S of H—Mules and rope. Track gage, 30 in.
 S of M—2 shortwall machs.
 PP—Power purchased, 250 volts D. C.
 EMP—35. Daily output, 300 tons.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens, Picking Tables.

MONARCH COAL MINING COMPANY

New Peabody Coal Co.

OWL CREEK COAL CO.

General Office, Gebu, Wyo.
 PR—R. J. Ireland, Amityville, N. Y.
 VP—S. P. Hildreth, Amityville, N. Y.
 TR—M. P. Myton, " "
 GS—James C. Rae, Gebu, Wyo.
 PA—R. J. Ireland, Jr., Gebu, Wyo.
 CE—James O'Neal, Gebu, Wyo.
 EM—John Merton, Gebu, Wyo.
 EE—Walter Wright, Gebu, Wyo.
 FE—James C. Rae, " "
 SCO—The Owl Creek Mercantile Co.
 Buyer, J. E. Patterson, Gebu, Wyo.
 SA—M. E. Congdon, Gebu, Wyo.

Gebu Mine; Slope; Gebu Seam, 96 to 144 in. thick.
 PO—Gebu, Wyo.; SP—Kirby; CTY—Hot Springs; RR—C. R. & Q., Billings, Denver Br.
 MS—John R. Kirby, Gebu, Wyo.
 S of H—Mules and 4 6-ton elec. locos. Track gage 42 inches.
 S of M—4 chain breast type and 8 shortwall machs.
 PP—5—250 H. P. and 3—200 H. P. water tube boilers, 2—200 K. V. A. gen. units, 2300 volts, 3 phase 60 cycles, 1—200 K. W., 1—37½ K. W. and 1—25 K. W., 250 volts D. C., 11 pumps.
 EMP—300. Last years tonnage 348,000.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

PEABODY COAL COMPANY

Operating and Sales Agent for Sheridan-Wyoming Coal Co., Inc.
 General Office, 332 S. Michigan Ave., Chicago, Ill.
 Chairman of Board—Francis S. Peabody, Chicago, Ill.
 PR—Stuyvesant Peabody, Chicago, Ill.
 VP—Clarence J. Gray, Chicago, Ill.
 VP—Moses F. Peltier, Chicago, Ill.
 VP—(In charge of Operations), Hiram M. Young, Chicago, Ill.
 VP—(In charge of Sales and Traffic), George W. Reed, Chicago, Ill.
 VP—(In charge of Finance), Chas. E. Schrage, Chicago, Ill.
 VP—(In charge of Accounts), Charles S. Ellis, Chicago, Ill.
 ASST to VP—(In charge of Sales)—J. L. Pierson, Chicago, Ill.
 TR—Chas. E. Schrage, Chicago, Ill.
 Secy.—Joseph Solar, Chicago, Ill.
 Asst. Secy.—Treas.—Walter A. Fisher, Chicago, Ill.
 Mgr. of Traffic—James B. Duggan, Chicago, Ill.
 Asst. to VP in charge of Operations—George C. McFadden, Chicago, Ill.
 PA—Harry E. Campbell, Chicago, Ill.

Additional Information on Pages 1164, 1165

No. 40 Mine abandoned.

No. 41 Mine; Shaft; Monarch Seam; 408 inches thick.
 PO—Sheridan, Wyo.; SP—Dietz, Wyo.; CTY—Sheridan; RR—C. R. & Q.
 S of H—Horses, trolley locomotive.
 S of M—Machine and hand.
 PP—Power purchased.
 SIZES SHIPT—Lump Egg, Nut, Run of Mine, Slack.

No. 42 Mine; Drift; Monarch Seam; 408 inches thick.
 PO—Acme, Wyo.; SP—Dietz, Wyo.
 S of H—4 trolley pole type locos. Track gage 42 inches.
 S of M—Machine and hand.
 PP—Power purchased, 2 gen. units, 2,200 volts A. C., 3 fire tube boilers, total 333 H. P., 6 pumps.
 EMP—275.
 SIZES SHIPT—Lump, Egg, Nut, Slack, Run of Mine.
 PREP. EQUIPT—Crusher and Shaker Screens.

No. 43 Mine; Shaft; Carney Seam, 146 in. thick.
 PO—Carneyville, Wyo.; SP—Dietz, Wyo.; CTY—Sheridan; RR—C. R. & Q.

S of H—Mules, trolley pole type locos. Track gage 42 inches.
 S of M—2 chain breast type machs.
 PP—Power purchased, 1 pump.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

No. 44 Mine; Drift; Carney Seam; 146 inches thick.
 PO—Carneyville, Wyo.; SP—Kleenburn, Wyo.; CTY—Sheridan; RR—C. R. & Q.
 S of H—Main and tail rope, 8 trolley pole type locos. Track gage 42 inches.
 S of M—11 chain breast machs.
 PP—4 fire tube boilers, total 600 H. P., 2 gen. units, 250 volts D. C., 3 pumps.
 EMP—425.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Revolving and Shaker Screens.

No. 45 Mine; Drift; Monarch Seam; 408 inches thick.
 PO—Monarch, Wyo.; SP—Kleenburn, Wyo.; CTY—Sheridan; RR—C. B. & Q.
 S of H—Mules, 6 trolley pole type and 3 storage battery locos. Track gage 42 inches.
 S of M—8 chain breast type machs.
 PP—Power purchased, 5 pumps.
 EMP—400.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

No. 46 Mine; Drift; Monarch Seam; 408 inches thick.
 PO—Koon, Wyo.; SP—Kleenburn, Wyo.; CTY—Sheridan; RR—C. B. & Q.
 S of H—Mules, 5 trolley pole type locos. Track gage 42 inches.
 S of M—5 shortwall machs.
 PP—Power purchased, 2 gen. units, 250 volts D. C., 2 fire tube boilers, total 300 H. P., 1 pump.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

NOTE—Sale of output of mines 41, 42, 43, 44, 45 and 46 handled by Peabody Coal Co., Sheridan, Wyo.

POPOSLA COAL COMPANY.

General Office, Lander, Wyo.
 PR—H. O. Barber, Lander, Wyo.
 VP—Carey Barber, Lander, Wyo.
 TR—J. O. Connor, Casper, Wyo.
 GM—Guy Robertson, Poposla, Wyo.
 GS—Guy Robertson, Poposla, Wyo.
 PA—Guy Robertson, Poposla, Wyo.
 EM—Guy W. Higby, Lander, Wyo.
 EE—Richard Bevington, Hudson, Wyo.
 SCO—Address the Company, Buyer, Walker Mitchell, Hudson, Wyo.
 SA—Guy F. Collins, Chadron, Neb.

Poposla No. 1 Mine; Slope; Washakie Seam, 120 in. thick.
 PO—Poposla, Wyo.; SP—Hudson, Wyo.; CTY—Fremont; RR—Wyo. & N. W.
 MS—Geo. W. Race, Poposla, Wyo.
 S of H—Mules and hoist.
 S of M—Hand.
 PP—4—100 H. P. and 3—125 H. P. boilers, gen. unit, 250 volts D. C., 4 pumps.
 EMP—250. Last years tonnage for both mines 300,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

Poposla No. 2 Mine; Slope; Washakie Seam, 120 in. thick.
 PO—Dunne, Wyo.; SP—Hudson, Wyo.; CTY—Fremont; RR—C. & N. W.
 MS—Van Wilson, Dunne, Wyo.
 S of H—Mules and hoist.
 S of M—Hand.
 PP—2—125 H. P. and 2—100 H. P. boilers, gen. unit 250 volts D. C., 3 pumps.
 EMP—100.
 PREP. EQUIPT—Shaker Screens.

PREMIER COAL COMPANY

General Office, 528 Eccles Bldg., Ogden, Utah.
 PR—H. C. Day, Ogden, Utah.
 VP—C. A. Day, Ogden, Utah.
 TR—F. N. Bletcher, Ogden, Utah.
 GM—F. N. Bletcher, Ogden, Utah.
 GS—Thomas Whalen, Superior, Wyo.
 PA—F. N. Bletcher, Ogden, Utah.
 Gen. Sales Mgr.—N. R. Erickson, Salt Lake City, Utah.
 SALES MGR.—N. R. Erickson, Ogden, Utah.

Premier Mine; Slope; No. 1 Seam; 108 inches thick.
 PO—Superior, Wyo.; SP—Same; CTY—Sweetwater; RR—Union Pacific.
 S of H—Horses and elec. hoists. Track gage 36 in.
 S of M—Shortwall machs.
 PP—Purchase power, 440 volts A. C.
 EMP—100. Last years tonnage 175,000.
 SIZES SHIPT—Run of Mine, Slack, Pea, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

ROCK SPRINGS FUEL CO.

General Office, Rock Springs, Wyo.
 PR—P. C. Running, Rock Springs, Wyo.
 VP—Aug. Martello, Rock Springs, Wyo.
 TR—V. J. Facinelli, Rock Springs, Wyo.
 GM—P. C. Running, Rock Springs, Wyo.

Rock Springs Mine; Slope; Rock Springs Seam, 96 inches thick.
 PO—South Superior, Wyo.; SP—Superior, Wyo.; CTY—Sweetwater; RR—U. P.
 S of H—Mules, rope and elec. loco. Track gage 36 inches.
 S of M—Hand and shortwall mach.
 PP—Power purchased. Transformer 2300-440 volts A. C.
 EMP—140. Last years tonnage 182,000.
 SIZES SHIPT—Run of Mine, Slack, Nut, PREP. EQUIPT—Shaker Screens.

SHERIDAN COAL COMPANY, THE

New Peabody Coal Co.

SUPERIOR ROCK SPRINGS COAL CO.

General Office, 425 Eccles Bldg., Ogden, Utah.
 PR—M. S. Browning, Ogden, Utah.
 VP—L. T. Dee and W. H. Wattis, Ogden, Utah.
 TR—E. A. Bowen, Ogden, Utah.
 GM—H. C. Marchant, Ogden, Utah.
 GS—L. A. Hay, Superior, Wyo.
 PA—L. T. Dee, Ogden, Utah.
 EM—E. E. Grimes, Ogden, Utah.

Superior No. 1 Mine; Slope; No. 1 Seam, 108 in. thick.
 PO—Superior, Wyo.; SP—Same; CTY—Sweetwater; RR—Union Pacific.
 S of H—Mules. Track gage, 36 in.
 S of M—3 shortwall machs.
 PP—Power purchased. Transformers 2300-440 volts A. C.
 EMP—120. Last years tonnage 165,700.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

UNION PACIFIC COAL COMPANY, THE.

General Office, Rock Springs, Wyo.
 PR—E. S. Brooks, Rock Springs, Wyo.
 TR—E. G. Smith, New York, N. Y.
 ASST TR—A. H. Doane, Cheyenne, Wyo.
 GM—E. E. Calvin, Omaha, Neb.
 GM—E. S. Brooks, Rock Springs, Wyo.
 GS—G. B. Pryde, Rock Springs, Wyo.
 CHIEF ENGR—C. E. Swann, Rock Springs, Wyo.
 PA—W. K. Lee, Rock Springs, Wyo.
 EE—D. C. McKeenan, Rock Springs, Wyo.
 SCO—U. P. Store, Boyer, E. B. Treat, Rock Springs, Wyo.

No. 2 Mine; Slope; Lower Hanna Seam, 432 in. thick.
 PO—Hanna, Wyo.; SP—Same; CTY—Carbon; RR—Union Pacific.
 MS—T. H. Butler, Hanna, Wyo.
 SM—S. D. Briggs, Hanna, Wyo.
 S of H—Mules and trolley pole type locos. Track gage, 42 in.
 S of M—4 shortwall machs.
 PP—3 fire tube boilers, 450 H. P., gen. units, 250 volts D. C., 7 pumps.
 Last years tonnage 236,668.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Gravity Screens.

No. 3 Mine abandoned.

No. 3½ Mine; Slope; Upper Hanna Seam, 288 in. thick.
 PO—Hanna, Wyo.; SP—Same; CTY—Carbon; RR—Union Pacific.
 MS—R. Bober, Hanna, Wyo.
 S of H—Mules. Track gage, 42 in.
 S of M—1 shortwall mach.
 PP—Gen. units, 220 volts.
 Last years tonnage 64,860.
 SIZES SHIPT—Run of Mine.

No. 4-A Mine; Slope; Lower Hanna Seam.
 PO—Hanna, Wyo.; SP—Same; CTY—Carbon; RR—Union Pacific.
 MS—T. H. Butler, Hanna, Wyo.
 SM—S. D. Briggs, Hanna, Wyo.
 S of H—Trolley pole type locos. Track gage, 42 in.
 S of M—6 shortwall machs.
 PP—1 500 K. W. 1—1,000 K. W. gen. units, 230 volts A. C., 10 pumps.
 Last years tonnage 343,217.
 SIZES SHIPT—Run of Mine, Slack, Nut, Egg, Lump.
 PREP. EQUIPT—Shaker Screens.

No. 4 Mine; Slope; Rock Springs No. 1 Seam, 60-84 in. thick.
 PO—Rock Springs, Wyo.; SP—Same; CTY—Sweetwater; RR—Union Pac.
 MS—Frank L. McCarty, Rock Springs, Wyo.
 SM—Harry D. Clark, Rock Springs, Wyo.
 S of H—Trolley pole type locos. Track S of M—2 chain breast and 5 shortwall machs.
 PP—3 pumps.
 Last years tonnage 331,462.
 SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
 PREP. EQUIPT—Shaker Screens.

(Continued on Next Page)

Union Pacific Coal Company, The—Contl.

No. 7 Mine; Drift; Rock Springs Seam, 40-84 in. thick.
PO—Rock Springs, Wyo.; SP—Same; CTY—Sweetwater; RR—Union Pac.
MS—Frank L. McCarty, Rock Springs, Wyo.
SM—Harry D. Clark, Rock Springs, Wyo.
S of H—Trolley pole type locos. Track gage, 30 in.
S of M—2 chain breast type and 6 short-wall machs.
Last years tonnage 194,999.
SIZES SHIPT—Run of Mine.

No. 8 Mine; Shaft; No. 7 Rock Springs Seam, 84-96 in. thick.
PO—Rock Springs, Wyo.; SP—Same; CTY—Sweetwater; RR—Union Pac.
MS—Frank L. McCarty, Rock Springs, Wyo.
SM—Harry D. Clark, Rock Springs, Wyo.
S of H—Mules and trolley pole type locos. Track gage, 30 in.
S of M—2 chain breast type and 6 short-wall machs.
PP—1 pump.
Last years tonnage 233,214.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

No. 10 Mine; Slope; No. 7 Rock Springs Seam, 72-84 in. thick.
PO—Rock Springs, Wyo.; SP—Same; CTY—Sweetwater; RR—Union Pac.
MS—Frank L. McCarty, Rock Springs, Wyo.
SM—Harry D. Clark, Rock Springs, Wyo.
S of H—Mules and trolley pole type locos. Track gage, 30 in.
S of M—2 chain breast type and 5 short-wall machs.
PP—12 water tube boilers, 3,600 H. P., 2—2,500 K. W. turbines and 1—1,000 K. W. turbines, gen. units, 9 pumps.
Last years tonnage 213,213.
SIZES SHIPT—Run of Mine, Slack, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

A Mine; Slope; Nos. 1 and 1 Seams, 84 in. thick.
PO—Superior, Wyo.; SP—Same; CTY—Sweetwater; RR—Union Pacific
MS—John O. Holen, Superior, Wyo.
SM—Jas. Syme, Superior, Wyo.
S of H—Mules, rope and trolley pole type locos. Track gage, 30 in.
S of M—4 chain breast type and 4 short-wall machs.
PP—Power purchased, transformer 3300-2300 volts, M. G. sets, 250 volts D. C., 2 pumps.
Last years tonnage 17,518.
SIZES SHIPT—Run of Mine, Nut, Lump.
PREP. EQUIPT—Shaker Screens.

R Mine; Slope; Van Dyke Seam, 72-84 in. thick.
PO—Superior, Wyo.; SP—Same; CTY—Sweetwater; RR—Union Pacific.
MS—John O. Holen, Superior, Wyo.
SM—Jas. Syme, Superior, Wyo.
S of H—Mules, rope and trolley pole type locos. Track gage, 30 in.
S of M—1 chain breast type and 1 short-wall machs.
PP—2 pumps.
Last years tonnage 110,129.
SIZES SHIPT—Run of Mine.

C Mine; Slope; No. 1 Seam, 84-96 in. thick.
PO—Superior, Wyo.; SP—Same; CTY—Sweetwater; RR—Union Pacific.
MS—John O. Holen, Superior, Wyo.
SM—Jas. Syme, Superior, Wyo.
S of H—Mules, rope and trolley pole type locos. Track gage, 30 in.
S of M—2 chain breast type and 4 short-wall machs.
PP—6 pumps.
Last years tonnage 256,996.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

D Mine; Drift and Slope; No. 1 Seam, 96 in. thick.
PO—Superior, Wyo.; SP—Same; CTY—Sweetwater; RR—Union Pacific.
MS—John O. Holen, Superior, Wyo.

SM—Jas. Syme, Superior, Wyo.
S of H—Mules.
S of M—3 chain breast type and 6 short-wall machs.
PP—2 pumps.
Last years tonnage 170,594.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Shaker Screens.

E Mine; Shaft; No. 7 Seam, 84 in. thick.
PO—Superior, Wyo.; SP—Same; CTY—Sweetwater; RR—Union Pacific.
MS—John O. Holen, Superior, Wyo.
SM—Jas. Syme, Superior, Wyo.
S of H—4 shortwall machs.
S of M—2 chain breast type and 4 short-wall machs.
PP—1 pumps.
Last years tonnage 91,451.
SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Egg, Lump.
PREP. EQUIPT—Gravity and Shaker Screens.

Reliance No. 1 Mine; Seam, 144 in. thick.
PO—Reliance, Wyo.; SP—Same; CTY—Sweetwater; RR—Union Pacific.
MS—Thomas Foster, Reliance, Wyo.
SM—J. E. Griffith, Reliance, Wyo.
S of H—Mules and trolley pole type locos. Track gage, 30 in.
S of M—10 shortwall machs.
PP—Power from Rock Springs power plant, transformer 13,200-2300, M. G. sets, 250 volts D. C., 2 pumps.
Last years tonnage 434,265.
SIZES SHIPT—Run of Mine, Slack, Nut, Pea, Egg, Lump.
PREP. EQUIPT—Gravity Screens.

Cumberland No. 1 Mine; Slope; Seam, 60-180 in. thick.
PO—Cumberland, Wyo.; SP—Same; CTY—Lincoln; RR—Oregon Short Line.
MS—Geo. A. Brown, Cumberland, Wyo.
SM—W. E. Williams, Cumberland, Wyo.
S of H—Mules. Track gage, 42 in.
S of M—Hand.

PP—4 water tube boilers, 1,200 H. P., 1—150 K. W. and 1—300 K. W. gen. units, 220 volts A. C., 8 pumps.

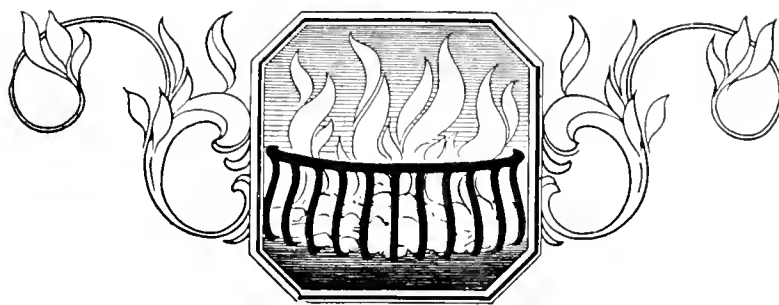
Last years tonnage 18,568.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

Cumberland No. 2 Mine; Slope; Kemmerer Seam, 60-180 in. thick.
PO—Cumberland, Wyo.; SP—Same; CTY—Lincoln; RR—Oregon Short Line.
MS—Geo. A. Brown, Cumberland, Wyo.
S of H—Mules. Track gage, 42 in.
S of M—Hand.
PP—6 fire tube boilers, 2200 H. P., 1 150 K. W. gen. units 220 volts D. C., 5 pumps.
Last years tonnage 202,952.
SIZES SHIPT—Run of Mine, Slack, Lump.
PREP. EQUIPT—Gravity Screens.

Cumberland No. 2 South Mine; Slope; Seam, 144 in. thick.
PO—Cumberland, Wyo.; SP—Same; CTY—Lincoln; RR—Oregon Short Line.
MS—Geo. A. Brown, Cumberland, Wyo.
SM—W. E. Williams, Cumberland, Wyo.
S of H—Mules. Track gage, 42 in.
S of M—Hand.
PP—1 100 H. P. fire tube boiler, 220 volts A. C., 1 pump.
Last years tonnage 104,297.
SIZES SHIPT—Run of Mine.

Megarth Mines; Slopes; Seam, 84 in. thick.
PO—Winton, Wyo.; SP—Hay, Wyo.; CTY—Sweetwater; RR—U. P.
MS—Wm. Redshaw, Winton, Wyo.
S of H—Mules, hoist and motors.
S of M—Hand and elev. machs.
PP—Power purchased from Rock Springs.
SIZES SHIPT—Run of Mine, Lump, Slack.

WYOMING COAL COMPANY
Now operated by the Lion Coal Co.



PART FOUR



LIST OF NATIONAL AND LOCAL ORGANIZATIONS

Of Interest To

Coal Mine Operators, Mining Officials, Wholesalers and Retailers of Coal

Name of Organization, Headquarters, and Officers as of December 1st, 1921

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(Continued on Next Page)

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National Coal Association—Continued

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(Continued on Next Page)

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L. H. Fernstrom, Pres., Salt Lake City, Utah.
S. L. Billings, Jr., Secy., Salt Lake City, Utah.

WASHINGTON STATE FUEL MERCHANTS' ASSOCIATION

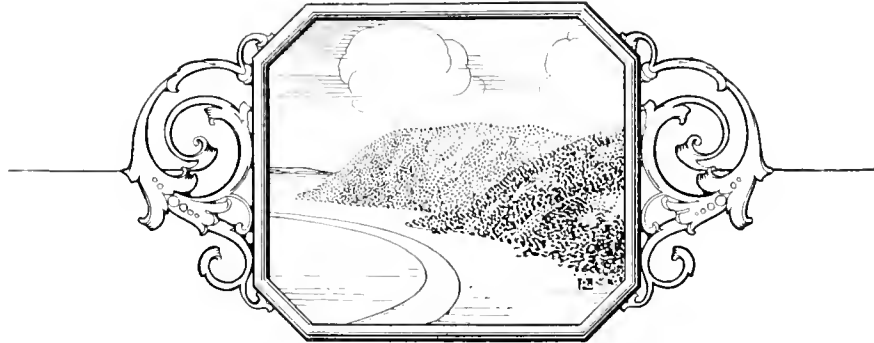
Thompson Bldg., Seattle, Wash.

Blake D. Mills, Pres., Seattle, Wash.
Roy Bungay, V. P., Spokane, Wash.
David H. Jones, Secy.-Treas., Seattle, Wash.
Carl Bush, Executive Secy., Seattle, Wash.

YORK COAL EXCHANGE

York, Pa.

John W. Mumma, Pres.
Paul Smysler, V. P.
Elmer E. Frey, Treas.
Niles H. Grove, Secy.



LIST OF COAL SALES OFFICES

Arranged Alphabetically By States and Principal Cities

ALABAMA

BIRMINGHAM

Alabama Co., The
Adams, Rowe & Norman, Brown-Marx Bldg.
 Benners, T. H., & Co., American Trust Bldg.
 Birmingham-Trussville Iron Co.
 Black Diamond Coal Mining Co.
 Brown, D. H. & Co., Brown-Marx Bldg.
 Conville, K. A., American Trust Bldg.
 Corona Coal Co., First Natl. Bank Bldg.
 Donaldson-Stobert Coal Co., Brown-Marx Bldg.
 East Pratt Coal Co., Woodward Bldg.
 Gore, S. N.
Grider Coal Sales Agency, American Trust Bldg.
 Gulf States Steel Co.
 Hall, H. S., American Trust Bldg.
 Hammond-Byrd Iron Co., American Trust Bldg.
 Horne, W. A.
 Isthmian Coal & Trading Co., Woodward Bldg.
 Jagger Coal Co.
 Keystone Coal & Coke Co., Brown-Marx Bldg.
 Lou-Ala. Coal Co.
 Lovell, D. G.
Monro-Warrior Coal & Coke Co., Jefferson County Bk. Bldg.
 National Coal & Coke Co., 431 S. 22d St.
 Nelson Coal Corp., 708 Brown-Marx Bldg.
 New Castle Coal Co., 1918-1919 American Trust Bldg.
 Porter, J. W.
 Pratt Consolidated Coal Co.
 Robinson, J. B. & Co., American Trust Bldg.
 Roden Coal Co., 1001 Brown-Marx Bldg.
 Shelburne, S. V. Sales Co., Brown-Marx Bldg.
 Sloss-Sheffield Steel & Iron Co.
 Southern Coal Co.
 Tennessee Coal, Iron & R. R. Co.
 U. S. Fuel Co., Inc., American Trust Bldg.
 Waldron & Kirkwood, 340 Brown-Marx Bldg.
 West Helena Coal Co., American Trust Bldg.
 Wilson, Willard
 Wind Rock Coal & Coke Co.
 Wyatt, M. A., Brown-Marx Bldg.
Yolande Coal & Coke Co., Brown-Marx Bldg.

CORDOVA

Kilgore, S. D.

HOLT

Central Iron & Coal Co.

JASPER

Jasper Land Co.

MOBILE

Bay City Fuel Co., Van Antwerp Bldg.
 Gibboney, Jas., & Co., Antwerp Bldg.
 Zimmern's Coal Co., 51 No. Royal St.

MONTGOMERY

Cobbs-Gay Coal Co., Lawrence & Randolph St.

RED STAR

Nelson Coal Corp.

WARRIOR

Rogers, W. A.

ARKANSAS

CLARKSVILLE

McAlester Fuel Co.
 Midland Coal Co.
 Spadra-Clarksville Coal Co.

FORT SMITH

Midland Coal Co.

LITTLE ROCK

Southern States Coal Co., Thayer St.

PARIS

Paris Fuel Co.

CALIFORNIA

LOS ANGELES

Spreckels Bros. Commercial Co., Citizens Nat'l Bank Bldg.

OAKLAND

King, Buck, 206 Bacon Bk.

SAN DIEGO

Pacific Wood & Coal Co., 411 E. St.
 Spreckel Bros. Commercial Co., Santa Fe Wharf.

SAN FRANCISCO

Allen, Chas. R., 582 Market St.
 Bear Coal Co., 329 Market St.

King Coal Co.
 Sinclair Coal Co., 369 Pine St.
 Standard Coal Co., 410 Balfour Bldg.

COLORADO

CANON CITY

Gibson Lumber & Fuel Co.

DENVER

Aurelius, F. A.
 Barrett, C. W.
 Big Four Coal Selling Agency, The.
 Big Horn Collieries Co., 412-414 Colorado Bldg.
 Black Canon Coal & Fuel Co., 509 Tabor Bldg.
 Burnett Fuel Co., Guardian Trust Bldg.
 Brown, C. W.
 Calumet Fuel Co., Judge Bldg.
 Cedar Hill Coal & Coke Co., 505 Temple Court Bldg.
 Colony Coal Co.
 Colorado Fuel & Iron Co., Boston Bldg.
 Colvin, W. W.
 Consolidated Coal & Coke Co., The, Empire Bldg.
 Emmert, J. F., First Natl. Bank Bldg.
 Ewing, F. C., 850 Equitable Bldg.
 Ferguson, W. C., Equitable Bldg.
 Hercules Coal Co., 616 Denham Bldg.
 Houghtelin, G. R.
 Huerfano Coal Co., First Nat'l Bank Bldg.
 Johnson, A. M., 302 Ernest & Cramer Bldg.
 McDonald, W. B., A. C. Foster Bldg.
 Miller, G. H., Cooper Bldg.
 Minnequa Coal Co.
 Mitchell, John C., 519 Colorado Bldg.
 Moffat Coal Co., 503 Gas & Electric Bldg.
 Nash, H. F., 922 Gas & Electric Bldg.
 Rocky Mountain Fuel Co.
 Rugby Fuel Co., The, Exchange Bldg.
 Russell, William E. Coal Co., The, 1523 Welton St.
 Schepf, H. C., G. & E. Bldg.
 Snyder, S. A., 830 18th St.
 Stewart, H. E., 750 Equitable Bldg.
 Union Coal & Coke Co.
 Victor American Fuel Co.

FLORENCE

Florence-Canon Coal Co., The.

HESPERUS

Hesperus Fuel Co., The

TRINIDAD

Alercrombie, J. J. J.
 Corning, L. B.
 Hoyer, Jas. F.
 Jeffries Fuel Co., Bank Bldg.
 Western Fuel & Lumber Co., First Natl. Bk. Bldg.

WALSENBURG

Huerfano Agency Co.

CONNECTICUT

BRIDGEPORT

Karm Terminal Co., The, 447 N. Washington Ave.
 McNeil, Archibald C., & Son Co., 447 No. Washington Ave.

HARTFORD

Eastern Coal & Coke Co.
Mason, W. C., & Co., 195 Trumbull St.
 Parkville Coal Co.
Pennsylvania Coal & Coke Corp., 36 Pearl St.
 Stineman-Gorman Coal Co.

NEW HAVEN

Benedict & Pardee Co., 129 Church St.
Campbell, Peacock & Kinzer, Inc., 722 Second Nat'l Bk. Bldg.
 Dodson, Weston & Co., Inc.
 Frame, Friend & Stineman, Inc., 177 Church St.
 Gilbert, W. F. Co., 127 Church St.
Keystone Coal & Coke Co., Colonial Bldg.
 New England Coal Agency Co., Malley Bldg.
 New Haven Coal Co.
 Powell, A. H., & Co., 152 Temple St.
 Williams & Peters, 39 Church St.

NEW LONDON

Chappell, F. H. & A. H. Co., 286 Bank St.

SOUTH NORWALK

Norwalk Coal & Supply Co.

WATERBURY

Hartwell & Lester, Inc., 42 Bank St.

Companies Shown in Black Face Type Are Advertisers in This Book. See Index on Pages 14 and 15.

DELAWARE

WILMINGTON

Bush, Geo. W., & Sons Co.
Diamond Ice & Coal Co., 911 Market St.

DISTRICT OF COLUMBIA

WASHINGTON

Agnew, John P., & Co., Inc., 728 14th St. N. W.
Chesapeake & Ohio Coal & Coke Co., The, 607 Albee Bldg.
Consolidation Coal Co., The, Union Traction Bldg.
Lake & Export Coal Corp., Union Trust Bldg.
Leckemman & Kendall.
New River Co., Woodward Bldg.
Philadelphia & Reading Coal & Iron Co., 308 Ouray Bldg.
White Oak Coal Co., The, Woodward Bldg.

FLORIDA

JACKSONVILLE

Jewett, Bigelow & Brooks, Inc.

PENSACOLA

Zimmerman's Coal Co., American Natl. Bk. Bldg.

GEORGIA

ATLANTA

Atlantic Ice & Coal Corp.
Bewley-Darst Coal Co., Candler Bldg.
Blue Diamond Coal Sales Co., Candler Bldg.
Brown, D. H., & Co.
Campbell, R. O., Co., 232 Marietta St.
Federal Coal Co.
Harman, William S.
Jewett, Bigelow & Brooks, Inc.
Logan-Pocahontas Fuel Co.
Randall Bros., Inc., Peters Bldg.
Riddle Coal Co., 515 Forsyth Bldg.
Seabrook Coal Co., Candler Bldg.
Sewanee Coal Co.
Standard Coal Co.
Standard Harlan Coal Co.
Stocks Coal Co., Candler Bldg.

BRUNSWICK

Coney & Parker Co.

MACON

Riddle Coal Co., Bibb Realty Bldg.

ROME

Graves-Harper Co., 312 Broad St.

SAVANNAH

Taggart Coal Co.

ILLINOIS

CHAMPAIGN

Howell Coal Co.

CHICAGO

Abbott-Irwin Coal Co., Fisher Bldg.
Adams, E. R., 343 So. Dearborn St.
Addy, Matthew Co., The
Ambler, Eugene & Co., 343 S. Dearborn St.
American Coal & Supply Co., 108 S. La Salle St.
Arrow Coal Co., 675 Old Colony Bldg., 37 W. Van Buren St.
Assumption Coal & Mining Co., 37 W. Van Buren St.
Atlas Coal & Coke Co., Old Colony Bldg.
Atwater, Wm. C. & Co., Old Colony Bldg.
Atwill-Makemson Coal & Coke Co., McCormick Bldg.
Belke, Chas. A., 343 S. Dearborn St.
Bell & Zoller Coal Co., Fisher Bldg.
Berry Smithing Coal Co., 20 W. Jackson Blvd.
Berwind Fuel Co., Peoples Gas Bldg.
Berwind-White Coal Mining Co., Peoples Gas Bldg.
Best, Jacob, Coal Co.
Bickett Coal & Coke Co., McCormick Bldg.
Big City Fuel Co., 2151 No. Lincoln St.
Big Creek Coals, Inc., Peoples Gas Bldg.
Bigane, John, & Sons, 3596 Archer Ave.
Biggert, C. E., 606 Michigan Ave.
Binkley, L. G. & Co., 926 Lumbermans Exchange Bldg.
Binkley Coal Co., 11 South La Salle St.
Bishop-Hamlin Coal Co., 61st St. & State.
Black Comet Coal Mining Co., 608 S. Dearborn St.
Black Gem Coal & Coke Co., Old Colony Bldg.
Blake, C. G., Co., The, Lytton Bldg.
Bledsoe, Walter & Co., Old Colony Bldg.
Bob-La Coal & Sales Corp., 53 West Jackson Blvd.
Bogle, W. S., & Co., Inc., Union Bank Bldg.
Bon Air Coal & Iron Corp., 38 So. Dearborn St.
By-Products Coke Corp., McCormick Bldg.
Brofer Coal & Mining Co., 343 S. Dearborn St.
Brothers Valley Coal Co.
Buesing, Hohman & Co., 2143 No. Lincoln.
Bunsen Coal Co., 208 So. La Salle St.
Burnett, O. M., 2011 Fisher Bldg.
Burton Coal Co., 331 McCormick Bldg.
Carterville-Herrin Coal Co., 53 W. Jackson Blvd.
Carland, Frank C., Co., Old Colony Bldg.
Carterville & Franklin Coal Co., Monadnock Bldg.
Castner, Curran & Bullitt, Inc., Peoples Gas Bldg.
Central Indiana Coal Co., 112 W. Adams St.
Chicago & Eng. Muddy Coal Co., 313 So. Dearborn St.
Chicago Coal & Mining Co., 111 W. Washington St.
Chicago, Wilmington & Franklin Coal Co., 332 S. Michigan Ave.
Coal Valley Mining Co., 129 W. Van Buren St.
Circle City Coal Co., 37 W. Van Buren St.
Citizens Coal, Coke & Mining Co., Fisher Bldg.
Clinton Coal Co., First National Bank Bldg.
Collieries & Commerce Corp., Atlanta Trust Bldg.
Columbus Mining Co., McCormick Bldg.
Consolidation Coal Co., The, Fisher Bldg.
Consolidated Coal Co. of St. Louis, The, Old Colony Bldg.
Consolidated Indiana Coal Co., La Salle & Van Buren Sts.
Consumers Co., 11 W. Washington St.
Cosgrove & Co., Old Colony Bldg.
Craig, A. B., 37 W. Van Buren St.
Crescent Coal & Mining Co., The, Rookery.
Crescent Coal Co., 417 So. Dearborn St.
Crown Coal & Mining Co., 25 No. Dearborn St.
Crown, Wood & Coal Co., 745 Old Colony Bldg.
Crozer-Pocahontas Co., Fisher Bldg.
Daniels Coal & Coke Co., 20 W. Jackson Blvd.
Daniels, Edwin P., & Co., Inc., 20 W. Jackson Blvd.
Darby, R. L., 1558 McCormick Bldg.
Deering, Chas. L., Old Colony Bldg.
Deegans, W. E., Coal Co.
Deep Vein Coal Co., Fisher Bldg.
Dering, J. K., Coal Co., McCormick Bldg.
Dickinson Fuel Co.
Domhoff & Joyce Co., The.
East Coal Co., Fisher Bldg.
Ehrlich-Pierce Coal Co., Fisher Bldg.
Elk Horn Coal Corp., 343 So. Dearborn.
Ender Coal & Coke Co., Fisher Bldg.
Evans, Richards & Co., 417 So. Dearborn St.
Ferguson Coal Co., First National Bank Bldg.
Ferguson Coal Distributing Co., 2816 Taylor St.
Fidelity Coal Co., Inc., 417 S. Dearborn St.
Fitzgerald, Thos. A., 537 S. Dearborn St.
Fort Dearborn Coal Co., Fisher Bldg.
Fort Dearborn Coal & Export Co., Inc., 343 S. Dearborn St.
Fowler, Chas. O., 417 S. Dearborn St.
Franklin Coal Co., 37 W. Van Buren St.
Franklin Tandy Coal Co., Fisher Bldg.
General Fuel Co., 38 S. Dearborn St.
Glen Alum Fuel Co., Fisher Bldg.
Gilmore, C. W., & Co., 343 S. Dearborn St.
Globe Coal Co., 332 S. Michigan Ave.
Golsen-Dorn Coal Co., Old Colony Bldg.
Grant Coal Mining Co., First Nat'l Bank Bldg.
Great Lakes Coal Co., 112 W. Adams St.
Great Lakes Coal & Coke Co., 910 S. Michigan Ave.
Great West Coal & Lumber Co., 343 S. Dearborn St.
Greenhouse Coal Co., 606 So. Dearborn St.
Gruschow, Robt. H., Inc., Old Colony Bldg.
Gruschow-McCabe Coal Co., Inc., 1315 Old Colony Bldg.
Hamilton Coal & Coke Co., 343 S. Dearborn St.
Hanna, M. A., & Co., Fisher Bldg.
Hanna, M. A., Coal & Dock Co., 1264 Elston Ave.
Harris-Dillayon Dimond Co., Old Colony Bldg.
Harris, W. H., Inc., Fisher Bldg.
Harrisburg Colliery Co., 37 W. Van Buren St.
Harrisburg-Franklin Coal Co., 28 E. Jackson Blvd.
Hart Coal Corp.
Hartwell, P. G., Co., 122 S. Michigan Ave.
Hedrich, Otto H., & Co., Inc., Room 1640, 320 So. Dearborn St.
Hedstrom, E. L. & Co., Peoples Gas Bldg.
Hedstrom Schenck Coal Co., 37 W. Van Buren St.
Hicks & Taylor, 928 So. Kedzie Ave.
Holvorscheid, Henry & Co., Old Colony Bldg.
Hopkins, Farley & Co., The, 343 S. Dearborn St.
Hostler Coal & Lbr. Co., 537 S. Dearborn St.
Houston Coal Co., Old Colony Bldg.
Hubbard Coal Co., 14 E. Jackson Blvd.
Humphreys, E. B., & Bros., 1242-44 Conway Bldg.
Hymero Coal Mining Co., 28 E. Jackson St.
Ideal Fuel Co., 332 S. Michigan Ave.
Illinois Coal & Coke Corp., 37 W. Van Buren St.
Illinois Fuel & Mining Co., 39 So. La Salle St.
Illinois Third Vein Coal Co., 37 W. Van Buren St.
Illinois Sixth Vein Coal Co., 37 W. Van Buren St.
Illinois Western Coal Co., 1508 Fisher Bldg.
Indiana & Illinois Coal Corp., Old Colony Bldg.
Interstate Coal Co., 14 E. Jackson Blvd.
Interstate Coal & Dock Co., Fisher Bldg.
Jackson Coal Co., The, Fisher Bldg.
Johnson City Coal Co., Conway Bldg.
Jones & Adams Coal Co., The, Steger Bldg.
Jones, Lorin W.
Irwin, E. H., 910 Fisher Bldg.
Jackson Coal & Coke Co., 343 S. Dearborn St.
Jaffray & Stern Coal Co., 130 N. Wells St.
Kanawha Valley Coal Co., 140 N. Dearborn St.
Keelin Bros. & Co., 1025 W. Madison St.
Keller, T. C. & Co., Old Colony Bldg.
Kentucky Fire Brick Co., Transcontinental Com. Bank Bldg.
Kentucky River Coal Mining Co., Transportation Bldg.
Keystone Coal & Mining Co., Fisher Bldg.
Keystone Fuel Co., 343 S. Dearborn St.
Kilgallen Coal & Coke Co., Corn Exchange Bldg.
Kilmer, F. D., 750 Old Colony Bldg.
Kirkpatrick, W. H., Fuel Co., Great Northern Bldg.
Komur Fuel Co., Old Colony Bldg.
Lafayette Coal Co., 37 W. Van Buren St.
Lake & Export Coal Corp., Old Colony Bldg.
Lamkey, Arthur E., McCormick Bldg.
Lamkey Coal & Dock Co., 2155 Elston Ave.
Latham Lincoln Mining Co., 28 E. Jackson Ave.
Lee Coal Co., The, 343 S. Dearborn St.
Lehigh Valley Coal Sales Co., McCormick Bldg.
Liberty Coal Mining Co., 11 S. La Salle St.
Linton White Ash Coal Co., 37 W. Van Buren St.

(Continued on Next Page)

Companies Shown in Black Face Type Are Advertisers in This Book. See Index on Pages 14 and 15.

ILLINOIS—Continued

CHICAGO—Continued

Logan Coal Co., 20 W. Jackson Blvd.
Logan, Jno. A. Coal Co., The, 76 W. Monroe St.
Lorr, Albert J. & Bros., 3020 S. Spaulding Ave.
Low Seam Coal Co., 140 S. Dearborn St.
Lytton, Harry, Old Colony Bldg.
MacComas, Duke S., 343 S. Dearborn St.
McElvain-Hoy Coal Co., 809-10 Fisher Bldg.
McMillan, D. E. & Bro., Old Colony Bldg.
Macon County Coal Co., 37 W. Van Buren St.
Maloney, A. J., McCormick Bldg.
Marquette Coal & Mining Co., 343 S. Dearborn St.
Martin-Howe Coal Co., McCormick Bldg.
Meiner, J. B. & Son, 338 W. 71st St.
Merchants Coal & Coke Co., Old Colony Bldg.
Miami Coal Co., McCormick Bldg.
Middle States Coal & Mining Co., McCormick Bldg.
Mid Valley Coal Sales Co., 417 S. Dearborn St.
Midway Coal Mining Co., 343 S. Dearborn St.
Mitchell & Dillon Coal Co., Bedford Bldg.
Moderwell, C. M. & Co., McCormick Bldg.
Mohawk Coal Co., 21 E. Van Buren St.
Monro-Warrior Coal & Coke Co., 417 S. Dearborn St.
Mordne, Thos. N. Coal Co., Peoples Gas Bldg.
Moweaqua Coal Mining & Mfg. Co., 37 W. Van Buren St.
Murray Coal & Coke Co., 343 S. Dearborn St.
Nason Coal Co., Old Colony Bldg.
New Erie Coal Co.
New Kentucky Coal Co., Fisher Bldg.
Newsam Bros. Coal Co., 37 Van Buren St.
New Stanton Coal Co., 343 S. Dearborn St.
Nokomis Coal Co., 37 W. Van Buren St.
Norfolk & Chesapeake Coal Co., 343 S. Dearborn St.
Northern Central Coal Co., 37 W. Van Buren St.
Northern Illinois Coal Bureau, 334 S. Dearborn St.
Northern States Coal & Mining Co., Lytton Bldg.
Northwestern Coal & Coke Co., Old Colony Bldg.
Northern Wood Fuel Co., 332 S. Michigan Ave.
Oberheide, C. & Son, 1335 Bradley St.
O'Gara Coal Co., Fisher Bldg.
Ogle Coal Co., 37 W. Van Buren St.
Old Ben Coal Corp., McCormick Bldg.
Orchard Coal Co., 343 S. Dearborn St.
Otter Creek Coal Co., 417 S. Dearborn St.
Pana Coal Co., 37 W. Van Buren St.
Patterson, S. J. Co., 1400 Old Colony Bldg.
Payne, T. D., Old Colony Bldg.
Peabody Coal Co., McCormick Bldg.
Peerless Coal Co., McCormick Bldg.
Peninsular Coal Co., 343 S. Dearborn St.
Pennsylvania Coal Co., 203 S. Dearborn St.
Philadelphia & Reading Coal & Iron Co., Old Colony Bldg.
Phoenix Coal Co., Fisher Bldg.
Pike County Coal Co., 332 S. Michigan Ave.
Pittsburgh Coal Co., Old Colony Bldg.
Platt & Brahm Coal Co., Old Colony Bldg.
Pocahontas Coal Sales Co., 1208 Fisher Bldg.
Polonia Coal Co., North and Easton Aves.
Pope, Geo. G. & Co., Fisher Bldg.
Pottinger-Flynn Coal Co., 2221 S. Ashland St.
Power Coal Co., Fisher Bldg.
Producers' Coal & Coke Co., 29 S. La Salle St.
Puritan Coal Co., Not Inc., 28 E. Jackson Blvd.
Reeves Coal & Dock Co., 417 S. Dearborn St.
Rend, W. P. Co., McCormick Bldg.
Reiner Coal Co., 1804 W. 59th St.
Reliable Coal & Mining Co., 343 S. Dearborn St.
Republic Coal & Coke Co., Steger Bldg.
Requa, H. A., McCormick Bldg.
Rialto Coal Co., Old Colony Bldg.
Richards, Evans, & Co., 417 S. Dearborn St.
Richards & Sons, Old Colony Bldg.
Rock Island Coal Mining Co., 139 W. Van Buren St.
Rogers, Brown & Co., 134 S. La Salle St.
Rosengrant Coal Co., McCormick Bldg.
Rutledge & Taylor Coal Co., Fisher Bldg.
Rowland-Power Consolidated Collieries Co., Fisher Bldg.
Rutter, David, & Co., 343 S. Dearborn St.
S. & S. Fuel Co., Fisher Bldg.
Sage & Co., 608 S. Dearborn St.
Sangamon Coal Co., 1416 Fisher Bldg.
Sangamon County Mining Co., Marquette Bldg.
Schroeder, W. C., Old Colony Bldg.
Security Coal & Mining Co., 343 S. Dearborn St.
Sesser Coal Co., 37 W. Van Buren St.
Shippers Coal Co., 37 W. Van Buren St.
Shoal Creek Coal Co., 332 S. Michigan Ave.
Shoemaker, D. C. Coal Co., 740 McCormick Bldg.
Simpson, Geo., Coal & Coke Co., 53 W. Jackson Blvd.
Smokeless Fuel Co.
Snyder, Paul N., 9022 Commercial Ave.
Southern Coal, Coke & Mining Co., Steger Bldg.
Southern Gem Coal Co., 37 W. Van Buren St.
Spring Creek Coal Co., 53 W. Jackson Blvd.
Spring Valley Coal Co., 37 W. Van Buren St.
Stanton, L. O. Coal Co., Old Colony Bldg.
Sterling-Midland Coal Co., Fisher Bldg.
Stover Coal Co., Fisher Bldg.
Stover-Elkhorn Coal Co., 343 S. Dearborn St.
Stover, Holly Co., Inc., 343 S. Dearborn St.
Sunday Creek Coal Co., 28 E. Jackson Blvd.
Sutton Coal Co., 343 S. Dearborn St.
Tauher, Max Sons, Corp., 4000 Fullerton Ave.
Taylor Coal Co., Old Colony Bldg.
Tazewell Coal Co., Conway Bldg.
Thorne, Neale & Co., Inc., 37 W. Van Buren St.
Toluca Coal Co., 37 W. Van Buren St.
Union Colliery Co., Old Colony Bldg.
Union Fuel Co., Union Fuel Bldg.
U. S. Coal & Coke Corp., 53 W. Jackson Blvd.
Valier Coal Co., 547 W. Jackson Blvd.
Valley Smokeless Coal Co., 37 W. Van Buren St.
Vandalia Coal Co., 37 W. Van Buren St.
Victor Coal Co., 440 S. Dearborn St.
Wade Coal Co., 203 S. Dearborn St.
Wasson Coal Co., Fisher Bldg.
Waubun Coal Co., 6 N. Clark St.
Weil, J. H. Coal Co., 333 S. Dearborn St.
West, Frank M., 417 Dearborn St.
West Clinton Coal Co., McCormick Bldg.
Wheeler, E. J., Old Colony Bldg.
White Oak Coal Co., 1948 Peoples Gas Bldg.
Whitsett, R. C. Coal & Mining Co., 608 S. Dearborn St.
Wilcoxson Coal & Coke Co., Fisher Bldg.
Wilcox Co., 3700 Milwaukee Ave.
Williams & Peters, 203 S. Dearborn St.
Willis, D. S. Coal Co., 112 W. Adams St.
Wilmington Coal Mining & Mfg. Co., Fisher Bldg.
Wilmington Coal Sales Co., 343 S. Dearborn St.
Windsor Coal Co., Old Colony Bldg.
Winifrede Coal Co.
Wisconsin Lime & Cement Co., 603 Chamber of Com. Bldg.
Wolverine Coal & Mining Co., 343 S. Dearborn St.
Wood, Geo. S. & Co., Fisher Bldg.
Worth-Huskey Coal Co., Old Colony Bldg.
Wright, H. G. Coal Co., Majestic Bldg.
Zimmerman, J. V. Coal Co., 343 S. Dearborn St.

EAST ST. LOUIS
Hart Coal Corp.

GALESBURG

Big Creek Coals, Inc.
Hatch Maple Coal Co.
Hawkins, W. R.
Producers Coal Sales Co., No. 7 Commercial Bldg.
Star Coal Co. of Galesburg.

MOLINE

Block, W. G. Co., 315 Twelfth St.
Liberty Coal Co.
Mueller Lumber Co., 2300 Third Ave.

PEORIA

B. & B. Coal Co., Jefferson Bldg.
Central West Coal Co., Jefferson Bldg.
Citizens Coal, Coke & Mining Co.
Clark Coal & Coke Co.
Crescent Coal Co., Jefferson Bldg.
Mahannah, J. W.
National Coal Mining Co.
Newsam Brothers
Peabody Coal Co.
Sharon Coal Co., Jefferson Bldg.
Wolschlag Co-operative Coal Co.

ROCK ISLAND

Black Hawk Coal & Dock Co., 130 20th St.
Block, W. G. Co., 117 Nineteenth St.
Mueller Lumber Co., Third Ave. & Twenty-fourth St.
Spoon River Colliery Co.

SPRINGFIELD

Chicago-Springfield Coal Co., Illinois Nat'l Bank Bldg.
Columbia Coal & Coke Co., Ferguson Bldg.
Great-West Coal & Lumber Co., 412 West Capitol St.
Peabody Coal Co.
Heilner, Percy, & Son., Stearns Bldg.
Heldinger, John.
Hickey, James P., 605-6 Ferguson Bldg.
Scott Coal Co., 327 S. 5th St.
Spring Creek Coal Co.
Springfield District Coal Mining Co.
Union Fuel Co., Reisch Bldg.

INDIANA

CLINTON

Clinton Coal Co.
Ferguson Coal Co.
Nichols, F. L.
Vermilion Coal Co.
Walsh, E. C.

EVANSVILLE

Archbold, John Coal Co.
Bosse Coal Co., 320 Sagamore St.
Cox Coal Co.
Crescent Coal Co.
Diamond Coal Co., 325 S. Third St.
Fricke & Blair Co.
Julian, L. G.
Key Coal Co.
Sunnyside Coal & Coke Co.
Suwanee Coal Co.
Wooley, J. W. Coal Co.

HUNTINGTON

Utilities Coal Co.

INDIANAPOLIS

Aetna Coal Sales Co., 1008 Merchants Bank Bldg.
American Coal Mining Co., Fletcher Trust Bldg.
Bain, R. C. Coal Co., Traction Terminal Bldg.
Bledsoe, Walter & Co., Traction Terminal Bldg.
Cedar Creek Coal Co., Merchants Bank Bldg.
Central Indiana Coal Co., 1016 Merchants Bank Bldg.
Central West Coal & Lumber Co., The.
Cochran Coal Co., State Life Bldg.
Collier Coal Co.

(Continued on Next Page)

Companies Shown in Black Face Type Are Advertisers in This Book. See Index on Pages 14 and 15.

INDIANA—Continued

INDIANAPOLIS—Continued

Consumers Coal Co., Traction Terminal Bldg.
 Cost. Anthony S., 524 Merchants Bank Bldg.
Deep Vein Coal Co., Traction Terminal Bldg.
 Donihoff & Joyce Co., The Majestic Bldg.
 Fort Branch Coal Mining Co., Merchants Bank Bldg.
Fort Dearborn Coal Co., Saks Bldg.
 Hampson, J. L., Coal Co., 1117 Merchants Bldg.
 Indian Creek Coal & Mining Co., Traction Terminal Bldg.
 King, J. E., Coal Sales Co., 805 State Life Bldg.
 Kingsbury Coal Co., Merchants Bank Bldg.
 Knox County Fourth Vein Coal Co., Traction Terminal Bldg.
Lake & Export Coal Corp., Merchants Bank Bldg.
 Lindley, D. R.
 Linton Coal Co., 701 Terminal Bldg.
 Linton Collieries Co., Fletcher Savings & Trust Bldg.
 Lundblad, E. A.
Main Island Creek Coal Co., 1510 Merchants Bk. Bldg.
 Meyer, A. B. & Co., 225 N. Pennsylvania St.
 Morris, J. R., Coal Co., Occidental Bldg.
Oakland Coal Co., The, Merchants Bank Bldg.
Ogle Coal Co., Fletcher Savings & Trust Bldg.
 Oliphant-Johnston Coal Co., Merchants Bank Bldg.
 Rader Coal Co., 403-04 Traction Bldg.
 Ragan-McAbee Coal Co., Traction Terminal Bldg.
 Republic Coal & Coke Co., Traction Terminal Bldg.
 Rose Hill Coal Co., Fletcher Savings & Trust Bldg.
Rowland-Power Consolidated Collieries Co., Merchants Bk. Bldg.
 Schrlucke Coal Co., 1506 Fletcher Sav. & Trust Bldg.
 Sigmon Coal Co., 955 W. New York St.
 Star City Coal Mining Co., Merchants Bank Bldg.
Sterling-Midland Coal Co., Traction Terminal Bldg.
 Sunlight Coal Co., Fletcher Trust Bldg.
 Taylor, Cliff H., 1008 Merchants Bank Bldg.
 Teter, W. J. Coal Co., Traction Bldg.
 Union Coal & Coke Co., 524 Merchants Bank Bldg.
White Oak Coal Co., 1512 Merchants Bldg.

LAFAYETTE

Randolph, Jas. S., La Fayette Life Bldg.
 Wabash Valley Coal Co.

MIDDLETOWN

Caroline Mining Co.

TERRE HAUTE

Block Hawk Mining Co., 111 No. Seventh St.
Bledsoe, Walter, & Co., Terre Haute Trust Bldg.
 Calora Coal Co., Opera House Bldg.
 Coal Bluff Mining Co.
Deep Vein Coal Co., 111 S. 7th St.
 Eureka Block Coal Co.
 Glendale Coal Co.
 Hall Zimmerman Coal Co.
 Jackson Hill Coal & Coke Co.
 Kirchner, Jos. G.
 Le Noir Coal Co.
 Lower Vein Coal Co.
 Murphy-Spensley Coal Co., Trust Bldg.
 Neutral Coal Producers Co., Tribune Bldg.
 Power Coal Co., 723 S. 6th St.
 Richards & Sons, 409-410 Grand Opera Block.
Rowland-Power Consolidated Collieries Co.
 Sale, B. W. Coal Co., Opera House Block
 Shirkie Coal Co.
 Smith, H. P.
Sterling-Midland Coal Co.
 Standard Coal Co.
 Sugar Valley Coal Co., 945 Chestnut St.
 Sunbeam Coal Co.
 Vandalia Coal Co.
 West Clinton Coal Co.
 Zimmerman, William Paul

VINCENNES

Oliphant Johnson Coal Co.

IOWA

CEDAR RAPIDS

Block, W. G. Co., 902 Second St.

CENTERVILLE

Carbon Fuel Co.
 Centerville Block Coal Co.
 McConville Coal Co.
 Prairie Coal Co.
 Woodland Coal Co.

DAVENPORT

Block Hawk Coal & Dock Co., Foot of Perry St.
 Block, W. G. Co., 319 E. Fourth St.
 Crowe, C. H.
 Ley Fuel Co., Hickey Bldg.
 Mueller Lumber Co., 130 Scott St.
 Rock Island Fuel Co., 802 E. River St.
 Sangamon Coal Co.

DES MOINES

Bloomfield Coal & Mining Co.
 Coal Hill Coal Co., Good Bldg.
 Dole, F. V.
 Gross, Harry L., Univ. Place P. O.
 Keystone Fuel & Supply Co., Crocker Bldg.
 Maple Block Coal Co.
 Northwestern Coal Co., Hippee Bldg.
 Zook, F. H.

MASON CITY

Block, W. G. Co., 501 Third St., N. E.
 Great-West Coal & Lumber Co., 504 S. Georgia Ave.

McElvain-Hoy Coal Co.

Ogle Coal Co.

Sterling-Midland Coal Co., M. B. A. Bldg., M. G. Phillippe, Mgr.

SIOUX CITY

Booth & Olson, Inc., 120 Virginia St.
 Brown Coal Co.
 Everist, L. G., Inc.
 Hoskins Cantine Fuel Co., Davidson Bldg.
 Wells Coal Co., Inc.

KANSAS

CSAGE CITY

Black Diamond Coal Co.
 Cahill Coal Co.
 Miners' Fuel Co.
 Western Fuel Co.

PITTSBURG

Ellsworth Coal Co.
 Mackie-Clemens Fuel Co.
 Midland Coal Co., Commerce Bldg.
 Pittsburg & Midway Coal Mining Co.
 Sinclair Coal Co.

TOPEKA

Jackson-Walker Coal & Mining Co., 118 E. 7th St.

WICHITA

Huerfano Agency Co., The.
 Jackson, Hunter & Gould.
 Jackson-Walker Coal & Mining Co., 142 N. Lawrence St.
 Pittsburg & Midway Coal Mining Co.
 Southwestern Coal Co., Beacon Bldg.

KENTUCKY

ASHLAND

Ajax Elkhorn Coal Co., Gaylord Bldg.
 Ashland Coal Sales Co.
 Ashland Iron & Mining Co.
Eaton, Rhodes & Co., Gaylord Bldg.
 Elkhorn Block Coal Co., Second Natl. Bank Bldg.
Elkhorn Star Coal Co.
 Ellis Coal Co.
 King Coal Co.
Lackey Mining Co., Gaylord Bldg.
 Sandy & Guyan Coal Co.
United Collieries, Inc., Second National Bank Bldg.

COVINGTON

Acup Creek Coal Co., Lawyer Bldg.
Bertha Coal Co.
 Hatfield Coal Co.
 Jones, Harry P., Lawyers Bldg.
 Wholesale Coal Co., Lawyers Bldg.

HOPKINSVILLE

Hart Coal Corp.

LEXINGTON

Bullock, H. E., 702 City Natl. Bank Bldg.
 Ryley, C. L. Coal Co., Fayette Bank Bldg.
 Cassidy Coal Co., Fayette Bank Bldg.
Harlan Co-Operative Coal Co., Fayette National Bank Bldg.
 Kentucky Block Coal Mining Co., 1st & City Bank Bldg.
 Lexington Coal & Coke Co., City Bank Bldg.
 Marian Coal Co., City Bank Bldg.
 Whitesburg Coal Co.
 Wilson Coal Co., 1104 Fayette Bank.

LOUISVILLE

Allied Coal Co., Stark Bldg.
 Atlas Coal Co., 315 River Rd.
 Barker Fuel Co., 406 Louisville Trust Bldg.
 Brown Coal Co., Speed Bldg.
 Cherokee Coal Co., Inter-Southern Bldg.
 Citizens Coal Co., C. J. Bldg.
 Consolidation Coal Co., The, Marion Taylor Bldg.
 Cory, H. L. Coal Co.
 Dixie Fuel Co.
 Elbert Coal & Teaming Co., 1400 S. 7th St.
Federal Coal Co.
 Hackett, Edw. J., 2938 Portland Ave.
 Harlan Coal Co., Starks Bldg.
Hart Coal Corp.
 Kirkpatrick Coal Co., Inter-Southern Bldg.
 Louisville Coal & Coke Co., 718 E. Market St.
 Malcolmson, Alex. Y. Coal Co., Inter-Southern Bldg.
 Newhouse Coal Co., 1039 S. 8th St.
 Pacific Coal Mining Co.
 Phoenix Fuel Co., Starks Bldg.
 Rail & River Coal Co., 611 Republic Bldg.
 Reed, B. F.
 Southern Brick & Tile Co., 13th & Ormsby Ave.
 Southern Coal Co.
 Southwestern Fuel Co., 412 Starks Bldg.
 Standard Harlan Coal Co.
Tildesley Coal Co.
 Tway, R. C. Coal Sales Co.

MADISONVILLE

Coil Coal Co.
 Gordon Mining Co.
 Grapevine Coal Co., Main St.
Hart Coal Corp.
 W. R. Lynn.

(Continued on Next Page)

KENTUCKY—Continued

MIDDLESBORO

Cloverleaf Coal Co.
Gunn, W. E. & Co.
Low Ash Mining Co.
Manning Coal Exchange.
Raney, J. R.
Smythe, Chas. G.
Southern Coal Exchange.

MORTONS GAP

Hart Coal Corp.

NORTONVILLE

Monro-Warrior Coal & Coke Co.

PADUCAH

West Jellico Coal Co.
West Kentucky Coal Co.

PINEVILLE

Barker Fuel Co., 607 Bell Natl. Bank Bldg.
Logan Pocahontas Fuel Co.
Moss, W. L., Coal Co.
Peabody Coal Co.
Riddle Coal Co., Bell National Bank Bldg.
Standard Harlan Coal Co.
Stewart & Starbuck, Bell Bldg.
United States Fuel Corp.
White Moss Coal Co.

PRESTONSBURG

Blue Beaver Coal Co.
Blue Beaver Elkhorn Fuel Co.

PROVIDENCE

W. Fred Hume.
Memphis Coal Co.
Ruckman Coal Co.

STEARNS

Stearns Coal & Lumber Co.

WINCHESTER

Paynter, H. A., Coal Co., McEldowney Bldg.

LOUISIANA

NEW ORLEANS

Dixie Fuel Co.
McDonald Coal Co., Maison Blanche Annex.
Southern Coal Co.
Zimmern's Coal Co., 1112 Hibernia Natl. Bk. Bldg.

MAINE

PORTLAND

Kennebec Wharf & Coal Co.
Pocahontas Fuel Co., Pocahontas Wharf.

SEARSPORT

Sprague, C. H., & Son Co.

WATERVILLE

Flood, G. S., Co., Inc.

MARYLAND

BALTIMORE

Banner Coal Mining Co., 617 Munsey Bldg.
Berwind White Coal Mining Co., Keyser Bldg.
Bradford, W. H. & Co., Inc., Lexington Bldg.
Brothers Valley Coal Co., Union Trust Bldg.
Buck Bros., Equitable Bldg.
Burtner Coal Co., Fidelity Bldg.
Century Coal Co., 10 South St.
Cory, Mann, George Corp.
Consolidation Coal Co., The, Continental Bldg.
Cumberland Coal Co., Continental Bldg.
Davis Coal & Coke Co., Continental Bldg.
Dexter & Carpenter, Inc., Lexington Bldg.
Dodson, Weston & Co., Inc., Lexington Bldg.
Dominion Coal & Coke Co., Maryland Trust Bldg.
Emerson & Morgan Coal Mining Corp.
Enterprise Fuel Co.
Erie Coal & Coke Corp.
Equitable Fuel Co., Maryland Trust Bldg.
Hall Bros. & Co., Continental Bldg.
Hamilton, S. M., Coal Co., Marine Bank Bldg.
Hanna, M. A. & Co., Chamber of Commerce Bldg.
Hendley, C. W. & Co., Fidelity Bldg.
Hillman Coal & Coke Co., Maryland Trust Bldg.
Jenkins & McCall Coal Co., 602 Stewart Bldg.
Jewett, Bigelow & Brooks, Inc.
Johnstown Coal & Coke Co., 549 Title Bldg.
Keystone Coal & Coke Co., Continental Bldg.
Knoblock, C. C.
Lewis Fuel Co., Garrett Bldg.
Lynch & Read, 510 Maryland Trust Bldg.
Manhasset Coal Co.
Maryland Coal & Coke Co., Calvert Bldg.
Maryland Coal Co., Munsey Bldg.
New England Coal & Coke Co., Continental Bldg.
New England Fuel & Transportation Co., Continental Bldg.
Nicoll, B. & Co., American Bldg.
Old Colony Smokeless Coal Co.
P. & S. Coal Co., Inc., American Bldg.
Peerless Coal Mining Co.

Philadelphia & Reading Coal & Iron Co., The, Calvert Bldg.
Price-Ryan Coal Co., 110 E. Lexington St.
Reid Coal & Coke Co., Phoenix Bldg.
Semans, Wm. R., Co., Munsey Bldg.
Simpson Creek Coal Co., Munsey Bldg.
Sitnek Fuel Co., Munsey Bldg.
Sparks, R. B., Fidelity Bldg.
Swayne & Co., Lexington Bldg.
Taylor & McCoy Coal & Coke Co., Union Trust Bldg.
Thorne, Neale & Co., Inc., 429 Calvert Bldg.
Willard, Sutherland & Co., Garrett Bldg.
Wittenberg Coal Co., Continental Bldg.

CUMBERLAND

Coale & Co., Third Natl. Bank Bldg.
Cross Fuel Co.
Midland Mining Co., Third Natl. Bank Bldg.
Nethken, W. R., & Co.
Stony River Coal Co.

FROSTBURG

Annan & Jeffries, First Natl. Bank Bldg.
Frostburg Big Vein Coal Co., First Natl. Bank Bldg.
Jenkins & McCall Coal Co.
Piedmont & Georges Creek Coal Co.

MASSACHUSETTS

BOSTON

Alden, Edward M. Co., 94 Milk St.
Alley & Page, 185 Devonshire St.
Atlantic Coal Co. of Massachusetts, 141 Milk St.
Atwater, Wm. C. & Co., Inc., 50 Congress St.
Bader Coal Co., 141 Milk St.
Berwind White Coal Mining Co., 4 No. Ferry Ave.
Blaisdell, Edw. G., 141 Milk St.
Bradford, W. H., Inc., 200 Devonshire St.
Bunnell, R. R., & Co.
Burton, S. P. & Co., 50 Congress St.
Butler Coal Co., 79 Milk St.
Campbell, Peacock & Kinzer, Inc., 113 State St.
Carbon Coal & Coke Co., 85 Devonshire St.
Castner, Curran & Bullitt, Inc., 50 Congress St.
Cladin, C. W., & Co., 85 Kilby St.
Chesapeake & Ohio Coal Agency Co., 141 Milk St.
Coastwise Coal Co., 113 State St.
Cobb, M. L., Co., Post Office Square.
Commonwealth Coal Co., 27 Overland St.
Consolidation Coal Co., 50 Congress St.
Crozer-Pocahontas Co., 50 Congress St.
Debevoise-Anderson Co., Inc., Exchange Bldg.
Dexter & Carpenter, Inc., 85 Devonshire St.
Dickson & Eddy, 50 Congress St.
Empire Coal Mining Co.
Garfield & Proctor Coal Co., 92 State St.
Hanson & Parker, Ltd.
Hartwell & Lester, Inc., 70 Kilby St.
Hartwell, H. N., & Son, Inc., 73 Water St.
Heilner, Percy, & Son, Bankers Bldg.
Hinckley Coal Co., 112 Water St.
Hudson Coal Co.
Imperial Coal Corp., 120 Milk St.
Island Creek Coal Co., 55 Congress St.
Jepson, Wm. A., Corp., 68 Devonshire St.
Lawsonham Coal Co., 814 No. 50 Congress St.
Lehigh Coal & Navigation Co., 141 Milk St.
Lehigh Valley Coal Sales Co., Oliver Bldg.
Lehigh & Wilkes-Barre Coal Co. of Mass., 141 Milk St.
Logan Coal Co., 141 Milk St.
Longbridge, C. H., 141 Milk St.
Mehaffey, Wm. A., 4 Liberty Square.
Morris Run Coal Co., 141 Milk St.
New England Coal & Coke Co., 111 Devonshire St.
New England Fuel & Supply Co., 141 Milk St.
New England Fuel & Transportation Co., 111 Devonshire St.
Northern Coal Co., 141 Milk St.
Norton, E. Russell, 85 Water St.
Page, E., 111 Devonshire St.
Pennsylvania Coal & Coke Corp., 141 Milk St.
Philadelphia & Reading Coal & Iron Co., The, 141 Milk St.
Pittsburg & Shawmut Coal Co., 10 State St.
Pocahontas Fuel Co., Board of Trade Bldg.
Potts, Frederic A. & Co., 79 Milk St.
Potts Run Coal Sales Corp. of Massachusetts, 18 Tremont St.
Powell, A. H., & Co., Inc., 141 Milk St.
Pratt, Frank S., 35 Congress St.
Pratt, R. K., Coal Co., 141 Milk St.
Reed Fears & Miller, Inc., 141 Milk St.
Rogers, Brown & Co., Exchange Bldg.
Russell Coal Co.
Schipper Bros. Coal Mining Co., 141 Milk St.
Shawnee Fuel Co., Inc., Oliver Bldg.
Smith, Frederick A., 89 State St.
Sprague, C. H. & Son, 70 Kilby St.
Spring Coal Co., 50 Congress St.
Staples & Bell, Inc., 141 Milk St.
Thorne, Neale & Co., Inc.
Townsend, E. B. Coal Co., 27 Kilby St.
Tredennick, John, 49 Federal St.
Urquhart, Arthur S.
Warren Export Coal Co., Inc., 35 Congress St.
Warren, Geo. E., Co., 35 Congress St.
White Oak Coal Co., 85 Devonshire St.
Whitney & Kemmerer.
Whittemore's, John A., Sons, 16 Belgrade Ave.
Williams & Peters, 141 Milk St.
Wravin Coal Co., Dexter Bldg.
Zepf & Childs, 141 Milk St.

FALL RIVER

Atwater, Wm. C. Co.

(Continued on Next Page)

Companies Shown in Black Face Type Are Advertisers in This Book. See Index on Pages 14 and 15.

MASSACHUSETTS—Continued

SPRINGFIELD

Allied Mining Companies.
Bunnell, R. R., Coal Co., 289 Main St.
Eastern Coal & Coke Co., Fuller Bldg.
Heilner, Percy & Son.
Lehigh Coal & Navigation Co., The, 3d Natl. Bank Bldg.
Nicol, B. & Co., Inc.

WORCESTER

Empire Coal Mining Co., Park Bldg.
Gorman-Leonard Coal Co., Park Bldg.

MICHIGAN

BAY CITY

Gage, Robt., Coal Co., 212 Davidson Bldg.
Republic Fuel Co., Davidson Bldg.
What Cheer Coal Mining Co.

DETROIT

Agnew Coal Co., Dime Bank Bldg.
American Coal & Coke Co., Union Trust Bldg.
American Export & Inland Coal Corp., 414 Leightner Bldg.
Ayers & Lang, Dime Bank Bldg.
Beech Creek Coal Co., 1102 Majestic Bldg.
Bertha Coal Co., General Motors Bldg.
Blindbury, C. V., 803 Ford Bldg.
Brown-Ward Coal Co., Hammond Bldg.
Buffalo Creek Coal Co., 461 Book Bldg.
Cate-Churchman Coal Co., Dime Bank Bldg.
Central Fuel Co.
Commercial Coal Co., Majestic Bldg.
Consolidation Coal Co., The, Dime Bk. Bldg.
Corbett, Edw. J., Majestic Bldg.
Corey, C. C., 2427-30 First Natl Bk. Bldg.
Davison Coal Co., 1570 E. Davison Rd.
Delaware, Lackawanna & Western Coal Co., Penobscot Bldg.
Detroit Coal Sales Co., Ford Bldg.
Dodson, Weston & Co., Inc., Dime Bank Bldg.
Dunn, Chas. F., Majestic Bldg.
Dykstra, J. W. & Co., Hammond Bldg.
Elk Coal & Coke Co.
Evans Coal Co., The, Book Bldg.
Everhart, C. C., 1002 Book Bldg.
Federal Coal & Coke Co., 759-760 Book Bldg.
Ford Collieries Co., Ford Bldg.
Gleason, F. D., Coal Co., Campan Bldg.
Glenwood Coal Co., Campan Bldg.
Guyan Coal & Coke Co., Dime Bank Bldg.
Harman, William S., 803 Ford Bldg.
Hatton, Brown & Co., Inc.
Hesser, John T., Coal Co., 1854 Penobscot Bldg.
Houston Coal Co., 1632 Dime Bank Bldg.
Hurley, J. & T. Co., Inc., 102 West Jefferson St.
Imperial Elkhorn Coal Co., Hammond Bldg.
Indian Run Coal Co.
International Coal Co., Ford Bldg.
Island Creek Coal Co., Ford Bldg.
Jewett, Bigelow & Brooks, Penobscot Bldg.
Kennedy Floyd & Co., Dime Bank Bldg.
Kenton Coal Sales Co., Hammond Bldg.
Koenig, P. Coal Co., 454 Gratiot Ave.
Lehigh Valley Coal Sales Co., Ford Bldg.
Logan-Pocahontas Fuel Co.
Loony Creek Coal Co., Book Bldg.
MacHard Coal Co., The.
Main Island Creek Coal Co., Dime Bank Bldg.
Mancourt-Winters Coal Co., Dime Bank Bldg.
Millspaugh & Green Co., The, Ford Bldg.
Monarch Coal Co., Dime Bank Bldg.
Mordue, Thos. N., Coal Co., 17 Cadillac Square.
Moran, J. E. & Co., 1324 Penobscot Bldg.
Norfolk & Chesapeake Coal Co., Book Bldg.
Ogle Coal Co.
Ohio & Kentucky Coal Co., Free Press Bldg.
Ohio & Michigan Coal Co., Dime Bank Bldg.
Pine Ridge Coal Co., 1134 Majestic Bldg.
Pittsburgh Coal Co., Dime Bank Bldg.
Pittsburgh & Ohio Mining Co., Ford Bldg.
Puritan Coal Co., Not Inc., 1555 Delaware.
Raleigh Smokeless Fuel Co., 410 Moffat Bldg.
Roberts Coal Co., Real Estate Exchange Bldg.
Sallee, Webster I., 410 Moffat Bldg.
Seiler Coal Co., Moffat Bldg.
Semet-Solvay Co.
Smith, E. M. Coal Co., Union Trust Bldg.
Southern Fuel Co., 1214 Dime Bk. Bldg.
Southland Coal Co., 1217 Book Bldg.
Star Coal Co., Empire Bldg.
Sun Coal Co., Dime Bank Bldg.
Sunday Creek Coal Co., 1613 Dime Bank Bldg.
Sunnybrook Coal Co., Dime Savings Bank Bldg.
Superior Colliery Co., Hammond Bldg.
Sweeney, C. F. Coal Co., Majestic Bldg.
United Coal Sales Co., Majestic Bldg.
United Fuel & Supply Co., Free Press Bldg.
Wentz Co., Dime Bank Bldg.
Wholesale Coal Co., 3-140 General Motors Bldg.
Wyatt Coal Sales Co., Dime Bank Bldg.

GRAND RAPIDS

Bennett Fuel & Ice Co., 144 W. Fulton St.
Century Fuel & Materials Co., G. R. Savings Bank Bldg.
Commercial Coal Co., Murray Bldg.
Kentucky & West Virginia Coal Co., Michigan Trust Bldg.
Knowlson, A. B. Co., Powers Theater Bldg.
Larrabee, Perry E., 215 Highland St.
Schram, Bruce.
York & Co.

LANSING

Deegans, W. E., Coal Co.
Royal Coal Co.

MUSKEGON

Baukneht Bros., 9th St. & Western Ave.
Kentucky-West Virginia Coal Co.
Magoon, Conger & Swason Co., 107 W. Western Ave.

SAGINAW

Banner Coal Co., J. O. Scholtz, Sales Agt.
Bliss Coal Co., C. E. Linton, Sales Agt.
Consolidated Coal Co.
Kennedy, Floyd & Co.

MINNESOTA

DULUTH

Hanna, M. A. Coal & Dock Co., Fidelity Bldg.
North Western Fuel Co.
Pittsburgh Coal Co., Fourth Ave. W. & Superior St.

MINNEAPOLIS

Addy, Matthew Co., Palace Bldg.
Bell & Zoller Coal Co., 533 Lumber Exchange.
Berwind Fuel Co.
Big Creek Coals, Inc.
Chicago, Wilmington & Franklin Coal Co., McKnight Bldg.
Clarkson Coal & Dock Co., First National Soo Line Bldg.
Dakota Coal Co., Metropolitan Bank Bldg.
DeLaittre-Dixon Coal Co., 1301 20th St.
Gateway Coal Co., 526-527 Andrus Bldg.
Great Lakes Coal & Dock Co.
Hanna, M. A. Coal & Dock Co., Metropolitan Bank Bldg.
Interstate Coal & Dock Co., Metropolitan Bank Bldg.
Laird Coal Co., Lumber Exchange.
Lehigh Valley Coal Sales Co., Security Bldg.
Long Branch Coal Sales Co.
Maderwell, C. M., & Co., Steger Bldg.
North Western Fuel Co.
O'Gara Coal Co., 518 McKnight Bldg.
Old Ben Coal Corp., Lumber Exchange Bldg.
Peabody Coal Co., Metropolitan Bank Bldg.
Philadelphia & Reading Coal & Iron Co., Lumber Ex. Bldg.
Pittsburgh Coal Co., First National-Soo Line Bldg.
Reeves Coal & Dock Co., Lumber Exchange.
Reiss, C., Coal Co., The, 704 Marquette Ave.
Republic Coal Co., Metropolitan Bank Bldg.
Sterling Midland Coal Co., First National-Soo Line Bldg.
Superior Coal & Dock Co.
Taylor Coal Co., Builders Exchange Bldg.
Valley Camp Coal Co.

ST. PAUL

Clarkson Coal & Dock Co., Merchants Bank Bldg.
Clarkson Coal Mining Co.
Hanna, M. A. Coal & Dock Co., Merchants National Bk. Bldg.
North Western Fuel Co., Merchants Nat'l Bank Bldg.
Philadelphia & Reading Coal & Iron Co.
Pittsburgh Coal Co., Pioneer Bldg.
Reiss, C., Coal Co., The, 85 East 4th St.
Williams, F. D., Coal Co., 82 E. 4th St.

WINONA

Gillette-Solomon Coal Co., Exchange Bldg.

MISSOURI

JOPLIN

Midland Coal Co., Cunningham Bldg.
Norris, E. A., & Co.
Pittsburg & Midway Coal Mining Co.
Sinclair Coal Co., Miners Bank Bldg.

KANSAS CITY

American Coal & Material Co., Dwight Bldg.
Arkansas Fuel Co., Gloyd Bldg.
Beatty Coal Co.
Central Coal & Coke Co.
Cherokee Fuel Co., Dwight Bldg.
Davies Fuel Co., The, Dwight Bldg.
Fort Dearborn Coal Co., Dwight Bldg.
Gray, Bryan & Sweeney Coal Co.
Hamilton Coal & Coke Co., Dwight Bldg.
Jackson-Walker Coal & Mining Co., Commerce Bldg.
Knippin, L. D.
Laning-Harris Coal & Grain Co., Gloyd Bldg.
Leonard, J. H. Coal Co., Bryant Bldg.
McAlester Fuel Co., Ridge Arcade Bldg.
McElheine, A. F.
Mackie Clemens Fuel Co., The, Dwight Bldg.
Mayer Coal Co.
Marceline Coal & Mining Co., Commerce Bldg.
Martin & Hubbell, Long Bldg.
Midland Coal Co., 40 O'Rear Leslie Bldg.
Missouri & Kansas Coal Co., Security Bldg.
National Fuel Co., 512 N. Y. Life Bldg.
Parker, G. H., 1510 Commerce Bldg.
Peabody Coal Co., Dwight Bldg.
Perry-McMahon Coal Co., Dwight Bldg.
Perry, W. C., 605 R. A. Long Bldg.
Pittsburg & Midway Coal Mining Co., Dwight Bldg.
Price, Edwin C. Co., Commerce Bldg.
Sheridan Coal Co., O'Rear-Leslie Bldg.
Sinclair Coal Co., Gloyd Bldg.
Sinclair Coal & Coke Co., Gloyd Bldg.
Star Coal Co., Commerce Bldg.
Southern Coal Co., Commerce Bldg.
Superior Fuel Co., Dwight Bldg.
Tompkins-Bolen Coal Co., Grossman Bldg.
Waverly Coal Co., Rialto Bldg.
Western Coal & Mining Co., Railway Exchange Bldg.

(Continued on Next Page)

Companies Shown in Black Face Type Are Advertisers in This Book. See Index on Pages 14 and 15.

MISSOURI—Continued

ST. JOSEPH

Brinson, Frank M., 607 Corby-Forsee Bldg.
Central Coal & Coke Co.
Greenleaf, T. L., Logan Bldg.

ST. LOUIS

Addy, Matthew Co., The, Third Nat'l Bank Bldg.
Barnett-Fisher Coal & Mining Co., Arcade Bldg.
Bell & Zoller Coal Co., 705 Boatmen's Bank Bldg.
Berry-Bergs Coal Co., 3401 Chouteau Ave.
Bickett Coal & Coke Co., Syndicate Trust Bldg.
Boehmer, W. H.
Breese-Trenton Mining Co., 415 Locust St.
Chicago, Wilmington & Franklin Coal Co., Boatmen's Bk. Bldg.
Clarkson Coal Co., Syndicate Trust Bldg.
Columbia Coal Co.
Consolidated Coal Co. of St. Louis.
Cosgrove & Co., Central National Bank Bldg.
Cramer, Clinch & Co., Laclede Gas Bldg.
Crown, Wood & Coal Co., Wainright Bldg.
Devoy & Kuhn, 1225 Central National Bank Bldg.
Domhoff & Joyce Co., The.
Donk Bros. Coal & Coke Co., 314 N. 4th St.
Eggebrecht, E. E.
Ellis & Richner Coal Co., Syndicate Trust Bldg.
Franklin Coal Co. of St. Louis, 1090 Arcade Bldg.
Glendale Coal & Mining Co., 506 Granite Bldg.
Great-West Coal & Lumber Co., 2092 Railway Exchange Bldg.
Harris-Dillavou-Diamond Co., 514 Wainworth Bldg.
Hart Coal Corp.
Henderson, John, Boatmen's Bank Bldg.
Hesser, John T. Coal Co., Rialto Bldg.
Indiana & Illinois Coal Corp., International Life Bldg.
Jeffers, J. A., Twelfth St. and Lucas Ave.
Johnson, W. C., 314 N. Fourth St.
Kerens-Donnewald Coal Co., 12th St. & Lucas Ave.
Kolb Coal Co., Boatmen's Bank Bldg.
Lake & Export Coal Sales Corp., Arcade Bldg.
Larimore, Prigge & Co., Inc., Pontiac Bldg.
Lumaghi Coal Co., Equitable Bldg.
McMillan, D. E. & Bro., Victoria Bldg.
Maguire Coal Co., Boatmen's Bank Bldg.
May, E. L. Coal Co., Syndicate Trust Bldg.
Meteor Coal Co., Boatmen's Bank Bldg.
Midvale Coal Co., Chemical Bldg.
Miller Coal & Coke Co.
Missouri & Illinois Coal Co., Railway Exchange Bldg.
Moffat Coal Co., Arcade Bldg.
Peabody Coal Co., Syndicate Trust Bldg.
Pioneer Coal & Coke Co., Syndicate Trust Bldg.
Rogers, Brown & Co., Security Bldg.
Rutledge & Taylor Coal Co., Boatmen's Bank Bldg.
St. Clair Coal & Mining Co.
St. Louis Coal Co.
St. Louis Coal & Iron Co., 918 Boatmen's Bank Bldg.
St. Louis Coke & Chemical Co., Boatmen's Bank Bldg.
Stephan Coal Co., Third & Pine Sts.
Sterling-Midland Coal Co., Boatmen's Bank Bldg.
Taylor Coal Co., Wright Bldg.
Tirre, Frank F.
Union Colliery Co., Union Electric Bldg.
Warren, M. W. Coke Co., Laclede Gas Bldg.
Wayne Mining Co., 12th St. & Locust Ave.
Weissenborn, S. A. & Son, 715-719 Boatmen's Bank Bldg.
Western Coal & Mining Co.
West Virginia Coal Co. of Missouri, Boatmen's Bank Bldg.
White Ash Coal Co., 1314 Syndicate Trust Bldg.
Wickham Coal Co., Pierce Bldg.
Williamson County Coal Co., 613 Locust St.
Willis Coal & Mining Co., 710 Fullerton Bldg.

MONTANA

BEAR CREEK

International Coal Co.

BILLINGS

Consolidated Coal Co., Security Bank Bldg.
Crystal Ice & Fuel Co.
Innes, W. B., & Co., Inc., Electric Bldg.
International Coal Co., Stapleton Bldg.
National Fuel Co., Stapleton Bldg.

BUTTE

Allen, Joel F., O'Rourke Estate Bldg.
Blinn, Geo., 104 W. Granite St.
Consolidated Coal Co.
Griffith, H. H.
National Fuel Co., 111 Hamilton St.

GREAT FALLS

Elising, I. C., & Co.
Consolidated Coal Co., 515 1st Nat'l Bank Bldg.
National Fuel Co., First Nat'l Bank Bldg.
Nelson Coal Co.
Sturm & Yaw, First Nat'l Bank Bldg.

WASHOE

Montana Coal & Iron Co.

NEBRASKA

LINCOLN

Miles, H. B., 1025 Terminal Bldg.
National Supply Co.

OMAHA

Acme Coal Co., Omaha Nat'l Bank Bldg.
Allen & Reynolds Coal Co.
Big Creek Coals, Inc.

Carbon Coal & Supply Co., 1905 Harney St.
Carrigan, E. B. Co.

Central Coal & Coke Co.

Chicago, Wilmington & Franklin Coal Co., Woodman of World Building.

Coal Hill Coal Co., 211 S. 19th St.

Crown, Wood & Coal Co., City National Bank Bldg.

Currie, A. B. Co., City Nat'l Bank Bldg.

Donoho Coal Co., Omaha Nat'l Bank Bldg.

Engler Coal & Supply Co.

Farmers Union State Exchange

Fort Dearborn Coal & Export Co.

Gardner-Miller Coal Co., 706-708 Peters Trust Bldg.

Greenleaf, T. L., 535 Securities Bldg.

Harris-Dilavou-Diamond Co., City Nat'l Bk. Bldg.

Hull, C. W. Co., 1616 Farnam St.

Martin, F. S. & Co., City Nat'l Bank Bldg.

Megeath Coal Co., G. E. Davis, Sales Agt.

Midland Coal Co., 502 Securities Bldg.

Nebraska Fuel Co., 2016 Farnam St.

Peabody Coal Co., Woodmen Bldg.

Pollock-Ross Coal Co., First Nat'l Bank Bldg.

Rutledge & Taylor Coal Co., City Nat'l Bank Bldg.

Sheridan Coal Co., Omaha Nat'l Bank Bldg.

Sinclair Coal Co., Omaha Nat'l Bank Bldg.

Sunderland Bros. Co., Keeline Bldg.

Welsh Bros. Co., City Nat'l Bank Bldg.

NEW HAMPSHIRE

MANCHESTER

Johnson & Co., Inc., Bell Bldg.

PORTSMOUTH

Consolidation Coal Co., The, 137 Market St., J. L. Jacoby, Mgr.

NEW JERSEY

ELIZABETH

Lehigh & Wilkes-Barre Coal Co.

NEWARK

Beckwith, Paul Coal Co., Kinney Bldg.
Delaware, Lackawanna & Western Coal Co., Broad & Market
Lehigh Valley Coal Sales Co., Union Bldg.
Lehigh & Wilkes-Barre Coal Co. of N. J., 48 Congress St.

PASSAIC

Campbell, Morrell & Co., 1 Park Place

TRENTON

Beccaria-Moshannon Coal & Coke Co.

NEW MEXICO

ALBUQUERQUE

Aber, K. H.
Albuquerque & Cerrillos Coal Co.
Coal Supply & Lumber Co., 523 John St.
Defiance Coal Co.
Diamond Coal Co.
Enterprise Coal Co.
Kaseman, Geo. A.
Miller, L. J.
Santa Fe County Coal Mining Co.

DAWSON

Dawson Fuel Sales Co.

EATON

Larkin, J. C.
St. Louis, Rocky Mtn. & Pacific Co., J. C. Larkin, S. Agt.
Swastika Fuel Co.

TOKAY

Kinney, E. H.

NEW YORK

ALBANY

Empire Coal Mining Co.
Imperial Coal Corp.
McEwan, Wm., Coal Co., 26 Clinton Ave.
Marquette Coal Co., Inc., D. & H. Bldg.
Maybrook Coal Co., 1st N. B. Bldg.
Morton, W. G., 130 State St.
Operators Fuel Agency, Humphrey Bldg.
Saxton, W. C., Coal Co., 47 Maiden Lane.
Somers, Henry W., 35 State St.

BINGHAMTON

Powell Coal Co., 29 Clinton St.
Thermot Coal & Coke Co.

BUFFALO

Brady, J. R., Co., Inc., Ellicott Square.
Bertha Coal Co.
Buffalo & Susquehanna Coal & Coke Co., Marine Nat. Bk. Bldg.
Chisholm, R. W. & Co., Prudential Bldg.
Consumers Collieries Corp., White Bldg.
Delaware, Lackawanna & Western Coal Co., The,
Dickson & Eddy, Marine Trust Bldg.
Dodson, Weston & Co., Inc.
Durdan, F. J., Marine Trust Bldg.
Eagan, J. J., Coal Co., Prudential Bldg.
Frontier Coal Co., Prudential Bldg.
Hedstrom, E. L., Ellicott Square.

(Continued on Next Page)

Companies Shown in Black Face Type Are Advertisers in This Book. See Index on Pages 14 and 15.

NEW YORK—Continued

BUFFALO—Continued

Henderson Coal Co., Inc., Marine Trust Bldg.
Hillman Coal & Coke Co., Prudential Bldg.
 Lake Erie Coal Co., Inc., Prudential Bldg.
 Lehigh Coal & Navigation Co., The, Prudential Bldg.
Lake City Coal Co., Prudential Bldg.
 Lehigh Valley Coal Sales Co., Marine Trust Co. Bldg.
 McClurg-Helsdon Coal Co., Ellicott Square.
 McGuinness, F. J., 660 Ellicott Square.
 McMurrich, J. B., Prudential Bldg.
 Maxim Coal & Coke Corp., 256-268 Main St.
 Monongahela-Youghiogheny Coal Co., Prudential Bldg.
 Montour Coal & Coke Co., Prudential Bldg.
 Nicol, W. B. & Co., 544 Ellicott Square.
 Noble, J. W. Coal Co., Prudential Bldg.
 North American Coal & Coke Co., Ellicott Sq.
 Paragon Coal & Coke Co., Inc., Prudential Bldg.
Penn-Empire Coal, Inc., 724 Ellicott Square.
 Philadelphia & Reading Coal & Iron Co., The, Pittsburgh Coal Co., Ellicott Square.
 Pittsburgh & Ohio Mining Co., Ellicott Square.
 Pittsburgh & Shawmut Coal Co., Marine Bank Bldg.
Prudential Coal Sales Co., Inc., Prudential Bldg.
Queen City Coal & Coke Co., Prudential Bldg.
 Roberts, J. T., 944 Ellicott Square.
 Rochester & Pittsburgh Coal & Iron Co., The.
Rogers, Brown & Co., Erie County Bank Bldg.
 Ross, J. Bert, Coal Co., Inc., Prudential Bldg.
Seneca Coal Mining Co., Fidelity Bldg.
 Shuck, E. F., Little Bldg.
Southern Fuel Co., Mutual Life Bldg.
 Spaulding & Spaulding, White Bldg.
 Stickney, D. J., Coal Co., 161 Pearl St.
Stone, W. A., & Co.
 Tait, W. C., 1012 Marine Trust Bldg.
 Thorne, Neale & Co., Marine Natl. Bank Bldg.
 Trounce, J. W., 1538 Marine Trust Bldg.
 Underhill Coal Co.
 Wabash Fuel Co., Inc., Prudential Bldg.
 Weaver Coal Co., Inc., Prudential Bldg.
 Westmoreland-Youghiogheny Coal Co., Marine Bank Bldg.
 Wholesale Coal Co., 322 White Bldg.
Whitney & Kemmerer, Marine Bank Bldg.
 Wick, H. K. & Co., Erie County Savings Bank Bldg.
Widnoon Coal Mining Co., Ellicott Square.
 Williams & Peters, 1112 Prudential Bldg.
 Winifrede Coal Mining Co., 708 Fidelity Bldg.
 Yates Lehigh Coal Co., 291 Grote St.
 Youghiogheny & Ohio Coal Co., The, Prudential Bldg.

ELMIRA

Blight, Wm. H., 612 Hulett Bldg.
 Mooers, C. W., Robinson Bldg.
 Smith, D. F., & Co., 519-523 Realty Bldg.

NEW YORK

Acme Coal Mining Co., 20 Broad St.
 Adams, Henry H. Co., 149 Broadway.
Addy, Matthew Co., The
 Adolphia Coal Co., No. 1 Broadway.
Alden Coal Mining Co., Central Sq. Bldg., 125 E. 46th St.
 Allegheny Mining & Coal Export Corp., 11 Broadway.
 Alley & Page, 261 Broadway.
 Allison, Eddy & Co., Inc., 115 Broadway.
 Allison & Pratt Corp., 115 Broadway.
 American Coal Export Co., 154 Nassau St.
 American Foreign Service Corp., 116 Broad St.
 Anderson & Anderson, Inc., 299 Madison Ave.
 Anthony, Daniel, 143 Liberty St.
 Anthracite Production Corp., 40 Wall St.
 Archibald, McNeil & Sons Co., Inc., 46th St. & Lexington Ave.
 Atlantic & Eastern Coal Co., 8 Bridge St.
 Atlantic Coal Co., No. 1 Broadway.
 Atlas Fuel Corp., 17 E. 42nd St.
Astor Collieries Corp., 115 Broadway.
Atwater, Wm. C. & Co., No. 1 Broadway.
 Austen Coal & Coke Co., 120 Broadway.
 Ayers, Francis B., 111 Broadway.
 Bader Coal Co., 2 Rector St.
 Baer, R. P., 90 West St.
 Barnes, Douglas Corp., 673 5th Ave.
 Benedict & Pardee Co., 25 Beaver St.
Bertha Coal Co., 50 Church St.
 Berwind White Coal Mining Co., 11 Broadway.
Beccaria-Moshannon Coal & Coke Co., 505 Fifth Ave.
 Elaine Mining Co., 1 Broadway.
Blake, C. G., Co., The, 25 Beaver St.
Blake, Townsend, 149 Broadway.
Borden & Lovell, 11 Broadway.
 Bowater, W. H., Inc., 66 Broadway.
 Bowns, Howard S., No. 1 Broadway.
 Boyd, M. C., 1 Broadway.
 Bouchard & Sands, Inc., 1525 White Hall.
 Brackenridge, C. D., 90 West St.
Bradford, W. H. & Co., Inc., 17 E. 42nd.
 Bragadin, A., & Co., Inc., 32 Broadway.
 Brand, Wm. T., No. 1 Broadway.
 Brier Hill Collieries, 25 Broad St.
 Brodhead, C. P., 29 Broadway.
Brothers Valley Coal Co., 90 West St.
Brown, Robt. Y., Grand Central Terminal.
 Buckalen, F. W., 90 West St.
Buffalo Coal & Export Co., 32 Broadway.
 Bulah Coal Mining Co., 120 Broadway.
 Byrd, Geo. R., 11 Moore St.
Campbell, Peacock & Kinzer, Inc., 30 Church St.
 Carl Coal Co., Inc., 17 E. 42nd St.
 Cartright Coal Mining Co., 17 Battery Place.
Castner, Curran & Bullitt, Inc., No. 1 Broadway.
Central Fuel Co., 916-918 Woolworth Bldg.
 Central Iron & Coal Co., 90 West St.
Central Pocahtontas Coal Co., 32 Broadway.
 Chamberlain, A. H., 113 Liberty St.
 Chappell, F. H. & A. H. Co., 25 Beaver St.
Chesapeake & Ohio Coal & Coke Co., 120 Broadway.
Chesapeake & Virginian Coal Co., Inc., 11 Broadway.
 Clark Bros. Coal Mining Co., 300 Madison Ave.
 Clearfield Colliery Co., 149 Broadway.
 Clearfield County Coal Co., 21 State St.
 Climbfield Fuel Co., 21 Broad St.
Coaldale Mining Co. of N. Y., 350 Broadway.
 Coale & Co., Inc., 11-13 Stone St.
 Coal Export Co., 125 E. 46th St.
 Colby, F. D., Co., 29 Broadway.
Collieries & Commerce Corp., 27 William St.
 Colliery Investment Trust of America, Inc., 291 Broadway.
 Columbia Coal Mining Co., 11 Moore St.
 Consolidation Coal Co., The, 67 Wall St.
 Consumers Fuel Co., 50 Church St.
 Continental Coal Co., Inc., 90 West St.
Copen Gas Coal Mines, Inc., 11 Moore St.
 Cory Bros. & Co., Ltd., 109 Broad St.
Cory-Mann-George Corp., 26-28 Beaver St.
Cosgrove & Co., 149 Broadway.
 Courtright, Dummick & Cunningham, Inc., 115 Broadway.
 Craghton J. M., No. 1 Broadway.
 Crescent Fuel Co., Inc., 40 Rector St.
 Crocker Bros., 21 East 40th St.
Crystal Block Coal & Coke Co., 32 Broadway.
 Cullen Fuel Co., 17 Battery Place.
Dalton Coal & Coke Co., Inc., 501 5th Ave.
 Davenport, C. E., 25 Broad St.
 Davenport, Wm. W., Jr., 165 Broadway.
 Davey Coal Co., 802 Liggett Bldg.
 Davis Coal & Coke Co., 71 Broadway.
 Davidson, R. A., 1 Broadway.
 Davison, J. Henry, 255 W. 100th St.
 Debeboise-Anderson Co., Inc., 56 Liberty St.
Deegans, W. E. Coal Co., 23 West 13rd St. and 233 Broadway.
 Deegans Export Coal Co., 23 West 43 43rd St.
 Delano Coal Co., Inc., 59 East 42nd St.
 Delano, Warren, 59 E. 12d St.
 Delaware, Lackawanna & Western Coal Co., The, 120 Broadway.
 Dexter & Carpenter, Inc., 12 Broadway.
 Diamond Fuel Co., 25 W. 43rd St.
Dickerman & Engles, Inc., 42 Broadway.
 Dickinson, G. E., 1 Broadway.
 Dickinson, G. E., No. 1 Broadway.
 Dickson & Eddy, 17 Battery Place.
 Dodson, Weston & Co., 233 Broadway.
 Dollard, A. H., 25 W. 43rd St.
 East Coast Coaling Co., Pier 62 N. R.
Eastern Coal & Export Corp., 16 Beaver St.
 Eastern Coal Sales Co., 150 Nassau St.
Eastern Fuel Co., 302 Broadway.
 Ebbert, C. E., 2 Rector St.
 Elem Coal Co., Inc., 172nd & Webster Sts.
 Elkhorn Coal Corp., 67 Wall St.
 Elkins Coal & Coke Co., 23 Beaver St.
 Elkins, S. B., 25 Beaver St.
Emmons Coal Mining Co., Singer Bldg.
 Empire Coal Mines Co., Inc., 70 Wall St.
Empire Coal Mining Co., No. 1 Broadway.
Ephraim Creek Coal & Coke Co., 11 Broadway.
Erie Coal & Coke Corp., 11 Broadway.
Erie Coal & Coke Corp., 63 Park Row.
 Evans, Brian, 45 John St.
 Export Coal & Mining Co., 23 Water St.
 Eyre Fuel Co., 300 Madison Ave.
 Fairmont Coal Co., 14 Wall St.
 Farber Coal Co., 302 Madison Ave.
 Faville, H. E., 233 Broadway.
Flack, D. L. & Son, 29 Broadway.
 Flat Top Fuel Co., Inc., 149 Broadway.
 Fobes, Stanley D., 149 Broadway.
 Foreston Coal Co., 103 Park Ave.
Fort Dearborn Coal Co., Woolworth Bldg.
 Frame, Friend & Stineman, Inc., Grand Central Terminal.
 Freeman Fuel Co., 140 Nassau St.
Gano, Moore Co., Tribune Bldg., 154 Nassau St.
 Gauley Coal Mining Co., 25 Church St.
 Gauley Mining Co.
 Guernsey Coal Co., Grand Central Terminal.
 Garfield & Proctor Coal Co., 25 Beaver St.
 General Coal Co., 24 Broad St.
Gilbert Coal Co., 63 Park Row.
 Gillespie, R. C., 16 Beaver St.
 Gordon, Robt. & Son, Inc., 6 Church St.
 Gordy Coal Corp., 299 Broadway.
 Graceton Coal & Coke Co., 50 East 42nd St.
 Guyan Coal Co., 20 Broad St.
 Hamilton, S. M., Coal Co., 90 West St.
Hanna, M. A., & Co., 333 Broadway.
 Harris, Geo. D., & Co., Inc., 522 5th Ave.
 Hartman-Blanchard Co., 50 Church St.
 Hartwell & Lester, Inc., 154 Nassau St.
 Havana Coal Co., 11 Broadway.
 Hellner, Percy, & Son, 143 Liberty St.
Hendrickson, D. de L. & Co., 17 Battery Place.
 Henrietta Coal Mining Co., 11 Moore St.
 Hill, A. F. & Co., 29 Broadway.
 Hill, James A., 1 Broadway.
Hillebrand, A. W. Co., 1 Broadway.
Hillman Coal & Coke Co., Whitehall Bldg.
 Hillside Coal & Iron Co., 165 Broadway.
 Hite & Rafetto, 1 Broadway.
 Hobbs, J. J., 1 Broadway.
 Hoff, H. B. W., 1 Broadway.
 Horre, William & Co., 1 Broadway.
Houston Coal Co.
 Houston Coal Mfg. Co., 1161 Broadway.

(Continued on Next Page)

NEW YORK—Continued

NEW YORK—Continued

- Imperial Coal Corp.**, Whitehall Bldg.
Industrial Coal & Coke Corp., 111 Broadway.
Inglesby-Patterson & Co., 11 Broadway.
International Coal Co., 11 Broadway.
International Coal Products Corp., 511 Fifth Ave.
Interstate Coal & Dock Co., 32 Broadway.
Iron Trade Products Co., 30 Church St.
Island Creek Coal Co., 1 Broadway
Jagels & Bellis, Fuller Bldg.
James, Paul L., 32 Broadway.
Jewett Bigelow & Brooks, 17 Battery Place.
Johnson & Co., 90 West St.
Johnstown Coal & Coke Co., 80 Broad St.
Keelers Coal Pocket, 1 Broadway.
Kemmerer, Jno. L., 143 Liberty St.
Kentonia Coal Co., 7 E. 42nd St.
Kentucky Block Cannel Coal Co., 15 William St.
Knickerbocker Corp., 44 Whitehall Bldg.
Knickerbocker Fuel Co., 1 Broadway
Lake & Export Coal Corp., 32 Broadway
Lambert Bros., Inc., 17 State St.
Lediard & Co., Inc., 17 Battery Place.
Lee Coal Co., Inc., 2 W. 45th St.
Leeds, Wm. D., 1 Broadway
Lehigh Valley Coal Co., 143 Liberty St.
Lehigh Valley Coal Sales Co., 90 West St.
Lehigh & Wilkes-Barre Coal Co., 143 Liberty St.
Lehigh Coal & Navigation Co., 143 Liberty St.
Leshner, Geo. F., 1 Broadway
Lincoln Coal Co., 25 Beaver St.
Lineaweaver, H. H. & Co., Inc., 342 Madison Ave.
Logan Coal Co., 253 Broadway.
Long, F. R., & Co., 1328 Broadway.
Loughridge, C. H., Whitehall Bldg.
Lowe, J. W., Co., 149 Broadway.
Lynch, B. J., 25 Beaver St.
McElair, Geo. & Co., 11 Broadway.
McCann-Camp Co., Inc., 143 Liberty St.
McCann-Canton Coal Co., 90 West St.
Mellroy, Geo. A., 1 Broadway
McNeil, A. & Soss, 1106 Grand Central Place.
Madeira, Hill & Co., 143 Liberty St.
Magee, J. Howard, 25 Beaver St.
Majestic Coal Co., Equitable Bldg.
Manhasset Coal Co., 17 Battery Place.
Manhattan Fuel Corp., 11 Cortlandt St.
Man-MacNeil & Carr, U. S. A., Ltd., 2 Stone St.
Maple Ridge Coal Co., 25 Beaver St.
Marshall, W. A. & Co., 25 Beaver St.
Marshall, W. A. & Co. of Canada, Ltd., 25 Beaver St.
Martin, Willett, 143 Liberty St.
Maryland Coal Co., 25 Beaver St.
Maryland Coal & Coke Co., 17 Battery Place
Mason, W. C., & Co., Inc., 143 Liberty St.
Matlack Coal & Iron Corp., 52 Vanderbilt Ave.
Meeker & Co., 143 Liberty St.
Miller, H. Allan, Inc., 44 Beaver St.
Miller, Jos., 505 Fifth Ave.
Minds, Wm. R., 120 Broadway
Mobile Coal Co., 90 West St.
Morrell, C. P., 11 Broadway.
Morrisdale Coal Co., 15 Whitehall Bldg.
Morris Run Coal Co., 300 Madison Ave.
Murdock, S. H., 143 Liberty St.
Musso, Alfred, 52 William St.
New Central Coal Co., 17 Battery Place
New England Coal & Coke Co., Cunard Bldg.
New England Coal & Transportation Co., 17 Battery Place
New England Fuel & Transportation Co., 542 Cunard Bldg.
New River Co., 2 Rector St.
New River Collieries Co., 120 Broadway.
N. Y. Coal & Shipping Co., 60 Broadway.
N. Y. & Phila. Coal & Coke Co., Prod. Exchange Annex
N. Y. Susquehanna & Western Coal Co., 165 Broadway
N. Y. Weighing Barge & Coaling Co., 17 Battery Place
Nicoll, B. & Co., 149 Broadway
North American Coal Co., 17 Battery Place
North River Coal Wharf Co., 17 Battery Place
North Western Mining & Exchange Co., 165 Broadway
Norton, E. Russell, 11 Broadway.
O'Connor, J. P., 1 Broadway
Old Colony Smokeless Coal Co., 50 Broadway.
Operators Coal Sales Co., 300 Madison Ave.
Oriental Navigation Co., 39 Broadway.
Parrish, Phillips & Co., 1 Broadway
Parsons, J. E., 67 Wall St.
Patterson, S. J. Coal Co., 1137 Singer Bldg.
Pattison & Bowns, Inc., 25 Broadway.
Peale, Peacock & Kerr, 2708-2718 Grand Central Terminal.
Pendleton, Geo. H., 17 Battery Place.
Pennsylvania Coal Co., 165 Broadway
Pennsylvania Coal & Coke Corp., 17 Battery Place.
Pennsylvania Collieries, 500 Fifth Ave.
Pennsylvania Smithing Coal Co., 90 West St.
Pennsylvania & West Virginia Co., 350 Broadway.
Perry & Co., 350 Madison Ave.
Philadelphia & Reading Coal & Iron Co., The, 143 Liberty St.
Phoenix Coal Co., 90 West St.
Piedmont & Georges Creek Coal Co., 30 Church St.
Pilling & Co., 71 Broadway.
Pine Hill Coal Co., 17 Battery Place.
Pioneer Coal & Coke Co., National City Bldg.
Piper, W. H. & Co., 17 Battery Place
Pittsburgh & Allegheny Coal Co., 51 Chambers St.
Pittsburgh Coal Co., 2 Rector St.
Pittsburgh & West Virginia Coal Co., 50 East 42nd St.
Plymouth Co., Inc., 17 Battery Place.
Pocahontas & New River Coal Co., 11 Broadway
Pocahontas Fuel Co., Inc., 1 Broadway
Pocahontas Westmoreland Co., Inc., 17 Battery Place.
Pond Creek Coal Co., 1 Broadway
Porto Rico Coal Co., Inc., 11 Broadway.
Potts, F. A. & Co., 143 Liberty St.
Powell, A. H., & Co., 2054 Grand Central Terminal.
Producers' Coal & Coke Co., 143 Liberty St.
Producers Fuel Co., 149 Broadway
Rainey, W. J., 52 Vanderbilt Ave.
Rankin, A., 1 Broadway
Reed, Fears & Miller, 30 Church St.
Regia Coal Co., 112 Wall St.
Relsah Coal Corp.
Roberts, H. S., 1 Broadway
Robinson Hayden & Co., 143 Liberty St.
Rochester & Pittsburgh Coal & Iron Co., 90 West St.
Roehling Coal Co., 6 Church St.
Rogers, Brown & Co., 30 Church St.
Ross, David, 299 Broadway.
Rowe, Gavin, 90 West St.
Russell, E. H., 80 Broad St.
Russell, Frederick C., 1 Broadway
St. George Coal Co., 149 Broadway
Sadsewitz, Irving, 103 Park Ave.
Sandford & Talbot, 1 Broadway
Sargent, M. W. & Co., 1 Broadway
Scholz, R. C., 1 Broadway
Seranton & Wyoming Coal Co., 6 Church St.
Seranton Coal Sales Co., 24 West 26th St.
Seaboard Coal Co., 25 Broad St.
Searles, J. W., 911 Whitehall Bldg.
Serviss & Reynolds, Inc., 50 Church St.
Seiler Coal Co., Inc., 90 West St.
Shawnee Fuel Corp., 90 West St.
Shea, Martin F., 6 Church St.
Sheldon, Fred C., 11 Broadway
Signal Mountain Coal Sec. Corp., 141 West 36th St.
Slattery Bros., Inc., 143 Liberty St.
Smith, W. L., 11 Broadway.
Smokeless Coal & Dock Co., Inc., 2 Rector.
Smokeless Fuel Co., 154 Nassau St.
Southern Fuel Co., 100 Hudson St.
Spring Coal Co., 501 Fifth Ave.
Stanton, D. P., 253 Broadway.
Starke, W. H., 90 West St.
Steam & Gas Coal Export Coal Co., 291 Broadway
Stephens Fuel Co., Inc., 220 E. 138th St.
Sterling Coal Co., 29 Broadway
Stineman Coal & Coke Co., 29 Broadway
Stokes Coal Co., Inc., 17 E. 42nd St.
Stonega Coke & Coal Co., 90 West St.
Sturges, Clarence E., 17 Battery Place
Temple, Wm. H., 29 Broadway
Tennessee Coal, Iron & R. R. Co., 30 Church St.
Thomas, C. K., 165 Broadway.
Thorne, Neale & Co., Inc., 17 Battery Place
Thrill Trading Co. of America.
Tuttle Corp., 15 Broad St.
United Coal Corp., 17 Battery Place.
United Marine & Fuel Corp., 113 Broad St.
Vaky Coal Corp., 7 East 42nd St.
Valley Camp Coal Co.
Van Ess, Oliver A., 152 W. 42nd St.
Vernon, W. B., 59 Pearl St.
Victoria Coal Mining Co., 11 Broadway.
Vinton Colliery Co., 50 E. 42nd St.
Virginia Smokeless Coal Co., 16 Exchange Place.
Warren Collieries, Ltd., Grand Central Terminal
Warren Export Coal Co., Grand Central Terminal.
Warren, Geo. E., Co., Grand Central Terminal.
Watkins Coal Co., 366 Madison Ave.
Weaver, J. H., & Co., 25 Broadway.
Wentz Co., 90 West St.
West Virginia Coal Co., 23 Beaver St.
West Virginia & Pennsylvania Coal Co., Inc., 1 Broadway
White Oak Coal Co., The, 2 Rector St.
Whiteley & Poedish, 90 West St.
Whitestone Coal Pockets, 1 Broadway.
Whitney & Kemmerer.
Wholesale Coal Co., 1870 Hudson Terminal Bldg.
Wholesale Coal Trade Assn. of N. Y., 90 West St.
Willard Sutherland & Co., 8 Bridge St.
Willett, Martin, 143 Liberty St.
Williams & Peter, 1 Broadway
Williams, C. W., Fuel Co., 25 Beaver St.
Williar, John A., 1 Broadway
Wittenberg Coal Co., 11 Broadway
Wolf Den Coal Co., 25 Beaver St.
Wolfe, L. E., 63 Park Row.
Wolff, S. E., 14 Wall St.
Wright-Gibson Co., 68 William St.
Wyatt Coal Co., 1 Broadway
Wyatt Coal Sales Co., 149 Broadway.
Wynkoop Coal Mining Co., Inc., 149 Broadway.
Yorkshire Coal Co., 143 Liberty St.
Youngman, V. H. & Co., 17 Battery Place

NIAGARA FALLS

- International Coal & Coke Co.**
Maloney, Frank E.

ROCHESTER

- Jefferson & Clearfield Coal & Iron Co**
Jenkins & Macy Co., Cutler Bldg.
Lehigh Valley Coal Sales Co., Wilder Bldg.
Marshall, W. A., & Co., 1155 Park Ave.
Nanete Coal & Coke Co., Inc.
Nelson, J. M.
Philadelphia & Reading Coal & Iron Co., The, Wilder Bldg.
Rochester & Pittsburgh Coal & Iron Co.
Stewart & Hammer, Wilder Bldg.
Union Coal Co., Inc., 210 Wilder Bldg.
Weaver Coal Co., Inc., Wilder Bldg.

(Continued on Next Page)

Companies Shown in Black Face Type Are Advertisers in This Book. See Index on Pages 14 and 15.

NEW YORK—Continued

SYRACUSE

Amos, C. L. Coal Co., 200 E. Genesee St.
Campbell, Peacock & Kinzer, Inc., Post Standard Bldg.
 Churchill, H. J., City Bank Bldg.
 Delaware, Lackawanna & Western Coal Co., 1620 W. Fayette
 Lehigh Valley Coal Sales Co., Onondaga County Savings Bank
 Nanette Coal & Coke Co., Inc., 309 Seltz Bldg.
 Peck, Fred R., Coal Co., Gridley Bldg.
Pennsylvania Coal & Coke Corp., Union Bldg.
 Potts Run Coal Sales Corp. of N. Y., 423 S. Salina St.
 Sement Solvay Co.
 Solvay Collieries Co.
 Thompson, Mark A., Union Bldg.

TROY

Child, James J., Coal Co., Burdett Bldg.

UTICA

Delaware, Lackawanna & Western Coal Co., The Martin Bldg.
 Greenman, Geo. H., Stewart Bldg.
 Hankinson, J. D., Co., 1 McGlaughlin Bldg.
 Heilner, Percy, & Son, Mayrd Bldg.
 Max, J. Conrad, & Co., 240 Genesee St.
 Town, John J., Martin Bldg.

OHIO

AKRON

Baler, A. F., Coal Co., 48 E. Exchange St.
 Converse, Jay E., Second Nat'l Bank Bldg.
 Kempton Coal Co., The, 946 Grant St.
 Klages Coal & Ice Co., 551 S. High St.
 Odibert Coal Co.
 Philadelphia & Cleveland Coal Co., 501 Herberich Bldg.
 Pittsburgh Coal Co., Second National Bk. Bldg.
 Smith, Geo. T., Peoples Savings & Trust Bldg.
 Stillwater Coal Mining Co., Ohio Bldg.

CANTON

Canton Coal Co.
 Plattenburg, F. W.
 Steiner Coal Co., Cleveland Ave. & Second St.

CHILLICOTHE

Carbondale Coal Co., The

CINCINNATI

Addy, Matthew Co., The, First Nat'l Bank Bldg.
American Export & Inland Coal Corp., 1334 Union Trust Bldg.
Amherst Fuel Co., Union Central Bldg.
Atwater, Wm. C. & Co.
 Bewley-Darst Coal Co., Union Central Bldg.
Blake, C. G., & Co., The, First National Bank Bldg.
Bledsoe, Walter & Co., Union Central Life Bldg.
 Blue Ash Coal Co., The, First Nat'l Bank Bldg.
Blue Diamond Coal Sales Co., Inc., Union Central Bldg.
 Blum, H. P., Coal Co., Union Central Bldg.
 Bolger, Jas. E., Coal Co., 325 W. 4th St.
 Boone Coal Sales Co., Union Trust Bldg.
 Borderland Coal Sales Co., Fourth Nat'l Bank Bldg.
 Burlingham Coal Co., First Nat'l Bank Bldg.
 Cabin Creek Consolidated Coal Co., 2111 Union Central Bldg.
 Campbell, R. O., Coal Co., First Nat'l Bk. Bldg.
 Campbell's Creek Coal Co., The, Union Central Bldg.
Carbon Fuel Co., The, Traction Bldg.
Caroline Mining Co., 332 W. Sixth St.
Carter Coal Co., Dixie Terminal Bldg.
Castner, Curran & Bullitt, Inc., Union Trust Bldg.
Central Fuel Co., Union Central Bldg.
Central Pocahontas Coal Co., Union Central Bldg.
Chesapeake & Ohio Coal & Coke Co., The First Nat'l Bk. Bldg.
Chesapeake & Virginian Coal Co., Inc., Union Trust Bldg.
 Cincinnati Coal Co., The, Provident Bank Bldg.
 Coal Service Co., 2401 Union Central Bldg.
 Consolidation Coal Co., Union Central Bldg.
 Consumers Coal & Supply Co., 511 Madison Ave.
 Creech Coal Co., Inc., 1314 Union Trust Bldg.
Crystal Block Coal & Coke Co., Union Central Bldg.
 Darby Coal & Coke Co., Union Trust Bldg.
 Darby Coal Sales Co., 1306 Union Trust Bldg.
Deegans, W. E., Coal Co.
 Dexter & Carpenter, Inc.
Dickinson Fuel Co., 405 Neave Bldg.
 Domhoff & Joyce Co., The
 Eagle Elkhorn Coal Co., 411 First Nat'l Bank Bldg.
Eaton, Rhodes & Co., First Nat'l Bank Bldg.
 Elkhorn, R. H., Coal Co., Johnson Bldg.
Emmons Coal Mining Co., 306 Union Traction Bldg.
 Flat Top Fuel Co., Union Trust Bldg.
Fort Dearborn Coal Co., Union Trust Bldg.
 Glen Alum Fuel Co., Union Trust Bldg.
 Gunn & Butler
 Hager Coal Co., First Nat'l Bank Bldg.
Hanna, M. A. & Co., Union Trust Bldg.
 Heilner, Percy & Son, Union Trust Bldg.
 Hesser, John T., Coal Co., 801-2 Neave Bldg.
Houston Coal Co., Union Trust Bldg.
 Hughes Coal Co., 619 First National Bank Bldg.
 Humphrey, J. M., Coal Co., Union Central Bldg.
Humphrey Coal Co., The, Union Central Bldg.
Hutchinson Coal Co., Union Central Bldg.
Imperial Coal Sales Co., Union Central Bldg.
International Fuel & Iron Co., Union Trust Bldg.
 Interstate Coal & Dock Co., Union Central Bldg.
Iron Trade Products Co.
 Island Creek Coal Co., Union Central Bldg.
 Jackson Coal Mining Company
Jewett, Bigelow & Brooks, Union Central Bldg.
 Kearns Coal Co., Union Central Bldg.
 Kentenia Coal Sales Co., Union Central Bldg.

Kentucky Fuel Co., Union Central Bldg.
 Kresge Coal & Mining Co., 701 St. Paul Bldg.
 Kroger-Gayle Coal Co., Provident Bldg.
Lake & Export Coal Corp., First National Bank Bldg.
Leckie Coal Co., Inc., Hartman Bldg.
 Liggett Bros. Coal Co., Inc., First National Bank Bldg.
Logan & Kanawha Coal Co., The, First National Bank Bldg.
Logan Mining Co., Union Central Bldg.
Logan-Pocahontas Fuel Co.
 MacBard Coal Co., The, Union Trust Bldg.
 MacDonald, J. M., Coal Mining Co., 2009 Union Central Bldg.
Main Island Creek Coal Co., Union Central Bldg.
 Marmet, Edwin, Central Ave. & Water St.
 Marmet-Halm Coal & Coke Co., Union Trust Bldg.
 Marrowbone Mining Co., Inc., 1515 First National Bank Bldg.
 Middle West Coal Co., 1603 First National Bank Bldg.
 Midland Mining Co., First National Bank Bldg.
 Mohio Coal & Mining Co., Fourth National Bank Bldg.
 Monarch Fuel Co., Union Trust Bldg.
 Mordue Coal Co., First National Bank Bldg.
 Norfolk & Chesapeake Coal Co., Union Central Bldg.
 Norwood Coal & Coke Co., 421 Main Ave.
Ogle Coal Co., Dixie Terminal Bldg.
 Ohio & Kentucky Fuel Co., 801 Dixie Terminal Bldg.
 Old Colony Smokeless Coal Co., Union Trust Bldg.
Old Dominion Coal Corp., Dixie Terminal Bldg.
Peabody Coal Co., Union Trust Bldg.
 Perkins-Harlan Coal Co., Inc.
 Pittsburgh Coal Co., Fourth National Bank Bldg.
 Pocahontas & Sewanee Coal & Coke Co., 16 Cohen Bldg.
 Pocahontas Coal Sales Co., Union Trust Bldg.
 Pocahontas Fuel Co., Traction Bldg.
 Producers Coal Co., Union Central Bldg.
Queen City Coal Co., 401 Fourth National Bank Bldg.
Raleigh Coal & Coke Company, First National Bank Bldg.
Raleigh Smokeless Fuel Co.
 Red Ash-Pocahontas Coal Co., 520 Gwyne Bldg.
 Reliance Coal & Coke Co., Union Trust Bldg.
 Richman Coal Co.
Rich Creek Coal Co., Union Central Bldg.
 Richfield Coal Co., Union Central Bldg.
 Richvein Coal Co., First Nat'l Bank Bldg.
 Riddle Coal Company, Dixie Terminal Bldg.
 Riverside Coal Co., Union Trust Bldg.
Rogers, Brown & Co., Carew Bldg.
 Roth Coal Co., First National Bank Bldg.
 Slaughter, W. P., Union Trust Bldg.
 Smith Bros. Coal Co., Fourth National Bank Bldg.
 Smith, W. F., Coal Co., Thomas Bldg.
Southeastern Coal Co., Union Trust Bldg.
 Southerland Coal & Coke Co., Neave Bldg.
 Southern Coal & Coke Co., Neave Bldg.
 Superior Fuel Co., Lyric Theatre Bldg.
Taylor Coal Co., Union Central Bldg.
 Tennessee Coal, Iron & R. R. Co., 1016 Union Trust Bldg.
Tildesley Coal Co., Ingalls Bldg.
 Told, Jos. H., Coal Co.
Tribbey Coal Co., The, First National Bank Bldg.
Tuttle Corp., Union Trust Bldg.
 Ulland Coal Co., Meade Bldg.
United Collieries, Inc., Dixie Terminal Bldg.
 Vinson-Knob Coal Company, First National Bank Bldg.
 Virginia Coal Mining Co., First National Bank Bldg.
Virginia Fuel Co., Union Central Bldg.
 Wayne Mining Co.
 Webb, Fuel Co., The, First Nat'l Bank Bldg.
 Western Coal Co., Union Central Bldg.
Winifrede Coal Co., First Nat'l Bank Bldg.
 Wyatt Coal Sales Co., Union Central Bldg.
 Wyoming Coal Sales Co., First National Bank Bldg.

CLEVELAND

American Fire Clay Co., 910 American Trust Bldg.
 Anchor Coal Co., Kirby Bldg.
 Apex Coal Co., Kirby Bldg.
 Appalachian Coal Co., Hanna Bldg.
Astel Coal Co., Room 302, 2047 East Ninth St.
Atwater, Wm. C. & Co.
 Ayers, C. L., Coal Co., The, Kirby Bldg.
 Baler, A. F., Coal Co., Leader-News Bldg.
 Bergholz Coal Mining Co., 256 The Arcade.
Bertha Coal Co., 38th St. & Lakeside Ave.
 Berwind Fuel Co., 829 Kirby Bldg.
 Big Vein Coal Co., Hanna Bldg.
 Black Burn Coal Co., 501 National City Bldg.
 Bourne-Fuller Co., Hanna Bldg.
Brown, Robt. Y., 1016 Hippodrome Bldg.
 Burton-Beidler & Phillips Co., National City Bldg.
 Burton, J. P., Coal Co., 825 National City Bldg.
 Cambria Coal Co., Hipp Bldg.
 Cambridge Collieries Co., 1050 Kirby Bldg.
 Canadian Import Co., Leader-News Bldg.
 Cannelton Coal & Coke Co., Hickox Bldg.
 Capitol Fuel Co., Leader-News Bldg.
 Carlton, A. D., 1100 Kirby Bldg.
Carter Coal Co., Dixie Terminal Bldg.
 Central Coal Mining Co., 303 Kirby Bldg.
 Century Coal Co., Kirby Bldg.
Chesapeake & Virginian Coal Co., Inc., Kirby Bldg.
 Citizens Coal, Coke & Mining Co., Kirby Bldg.
 Clarkson Coal & Dock Co., Kirby Bldg.
 Clarkson Coal Mining Co., Kirby Bldg.
 Classingham, C. L., 607 Electric Bldg.
 Cleveland Akron Coal Co., 1740 St. Clair Ave.
 Cleveland Canton Coal Co., Leader-News Bldg.
 Cleveland-Chartiers Coal Co., Citizens Bldg.
 Cleveland & Western Coal Co., Hanna Bldg.
 Cleveland Coal Mining Co., Kirby Bldg.
 Cleveland & Morgantown Coal Co., Kirby Bldg.
Cleveland-Cliffs Iron Co., Kirby Bldg.
 Coal Ridge Mining Co., Kirby Bldg.
 Consumers Fuel Co., Cuyahoga Bldg.

(Continued on Next Page)

OHIO—Continued

CLEVELAND—Continued

Continental Coal Co. of Ohio, Altamont Bldg.
 Copen Creek Coal Co., Old Arcade.
 Culbertson, R. L. Coal Co., Hanna Bldg.
 Danielson, F. G., Coal Co., Citizens Bldg.
 Domestic Coke Corp., Harvard Ave.
 Domhoff & Joyce Co., The
 Drake Coal Co., 914 Kirby Bldg.
Eaton, Rhodes & Co., Fidelity Mortgage Bldg.
Elm Grove Mining Co. of Ohio
 Ellsworth, Jas. W. & Co., Kirby Bldg.
 Enos, Geo. A. Coal Co., The, Kirby Bldg.
 Fairbanks & Company, Wade Bldg.
 Findlay, H. L.
 Forest City Coal Co., The, Leader-News Bldg.
 French, J. Bedford, Kirby Bldg.
 Glen Run Coal Co., Kirby Bldg.
 Goff Kirby Coal Co., Electric Bldg.
 Grant Coal Co., Leader-News Bldg.
 Great Lakes Coal Mining Co., Kirby Bldg.
 Groch-Wyman Coal Co., Hickox Bldg.
 Hammond, Frances W., 5919 Euclid Ave.
Hanna, M. A. & Co., Leader-News Bldg.
 Hanover Coal Co., Kirby Bldg.
Hutchinson Coal Co., Kirby Bldg.
 Hut-on Coal Co., The, Park Bldg.
 Indian Hill Coal Co., C. A. C. Bldg.
 Jefferson Coal Company, Citizens Bldg.
 Kanawha & Hocking Coal & Coke Co., Union Nat'l Bank Bldg.
 Kempton Coal Co., The, 521 Kirby Bldg.
 Kendall Coal Mining Co., Kirby Bldg.
Keystone Coal & Coke Co., Kirby Bldg.
 Kiener Coal Co., 10220 Berea Road
 Kimbolton Coal Mining Co., Park Bldg.
 Kirk, F. M. Coal Co., Sweetland Bldg.
 Kirk-Dunn Coal Co., Sweetland Bldg.
 Kortz, J. C., Cuyahoga Bldg.
 La Fayette Fuel Co., Illuminating Bldg.
Lake City Coal Co., The, Kirby Bldg.
 Lake Erie Coal Co., Kirby Bldg.
 Lakewood Coal & Supply Co., Williamson Bldg.
 Lehigh Valley Coal Sales Co., Cuyahoga Bldg.
 Liggetts Creek Anthracite Co., National City Bldg.
Logan Mining Co., Kirby Bldg.
Lorain Coal & Dock Co., 813-815 Kirby Bldg.
 MacKenzie & Schroyer Co., 507 Union Bldg.
 McGinnis, Jno. H., Kirby Bldg.
 McIntyre, P. O. Coal Co., Hanna Bldg.
 McVicker Coal & Coke Co., Kirby Bldg.
 Maconal Coal Co., Kirby Bldg.
 Maher Collieries Company, Kirby Bldg.
 Manuel, W. S. and J. S., Kirby Bldg.
 Markley, Geo. J. Co., 2301 Willey Ave.
 Massillon-Tuscarawas Coal Co., Electric Bldg.
 Metropolitan Coal Mining Co., Kirby Bldg.
 Midvale Goshen Coal Co., Union National Bank Bldg.
 Miller, R. G. Coal Co., 1935 Euclid Ave.
 Millsbaugh & Green Co., 1011 Citizens Bldg.
 Milwaukee-Western Fuel Co., Kirby Bldg.
 Montour & Northwestern Coal Co., 1448 Kirby Bldg.
 Moore, T. C. Co., Euclid Ave. & N. P. R. R.
 Morris Coal Co., Citizens Bldg.
 Morris, Jas. B., Wade Bldg.
 Morris-Poston Coal Co., Citizens Bldg.
 Mullen, Robt. J., Kirby Bldg.
Myers Coal & Coke Co., Arcade Bldg.
 National Coal Co., Kirby Bldg.
 National Sales & Trading Co., 1105 Chestnut St.
 Needs, S. H. & Sons, The Arcade
 Newman, A. B., Leader-News Bldg.
 Newman-Harper Coal Co., Leader-News Bldg.
 Nicholson Smith Coal Co., 415 Kirby Bldg.
 Northern Ohio Coal Co., 865 E. 67th.
 Northwestern Coal & Coke Corp., Kirby Bldg.
 Northwestern Fuel Co., Kirby Bldg.
 Odbert H. S. Coal Co., Kirby Bldg.
 Ohio & Pennsylvania Coal Co., Williamson Bldg.
 Ohio Coal & Supply Co., Arcade Bldg.
Paisley, J. A.
 Philadelphia & Cleveland Coal Co., The, Kirby Bldg.
 Pickands, Mather & Co., Western Reserve Bldg.
 Pittsburgh & Bessemer Coal Co., Hanna Bldg.
 Pittsburgh & Ohio Mining Co., Kirby Bldg.
 Pittsburgh Coal Co., Kirby Bldg.
 Pittsburgh & Erie Coal Co., Kirby Bldg.
 Poston Consolidated Coal Co., 906 Citizens Bldg.
 Pursglove Coal Mining Co., Kirby Bldg.
 Rail & River Coal Co., Kirby Bldg.
 Reiss, C. Coal Co., 404 Kirby Bldg.
Reserve Fuel Co., Citizens Bldg.
Rich Creek Coal Co., Kirby Bldg.
Rogers, Brown & Company, Kirby Bldg.
 Salineville Coal Mining Co., Kirby Bldg.
Sauters Coal Co., Leader-News Bldg.
Schroeder-Kelly Coal Co., Union National Bank Bldg.
 Sommers, J. H. Coal Co., Cuyahoga Bldg.
 Sterling Coal Co., Ltd., Leader-News Bldg.
 Stillwater Coal Mining Co., Kirby Bldg.
 Taylor Coal & Coke Co., Hanna Bldg.
 Thouron Coal Co., The, National City Bldg.
 Trevorton Collieries Co., Citizens Bldg.
 Tuscora Sand & Coal Co., Schofield Bldg.
Twin States Fuel Co., Kirby Bldg.
 Union Coal Co., Hickox Bldg.
 Union Coal Stripping & Mining Co., 952 Hanna Bldg.
 United States Coal Co., 1206 Citizens Bldg.
Valley Camp Coal Co., Kirby Bldg.
Van Epps Coal Co., The, 502-3 Bulkley Bldg.
 Van Kirk Coal & Coke Co., Kirby Bldg.
 Victoria Coal Co., Union National Bank Bldg.

Wabash Fuel Co., Inc., Kirby Bldg.
Warner, W. H. & Co., Union Commerce Bldg.
 West Virginia & Ohio Coal & Coke Co., Electric Bldg.
 Wilson, R. L., Leader-News Bldg.
 Wholesale Coal Co., E. 38th St. & Lakeside Ave.
Wolf Run Coal Co., Union National Bank Bldg.
 Woods, R. A. Coal Co., The, Kirby Bldg.
 Yates, J. V. N., 850 Kirby Bldg.
 Youghiogeny & Ohio Coal Co., Hanna Bldg.
 Zehner, Wm. E., Kirby Bldg.

COLUMBUS

Abacus Associated Select Co., 147 Innison Ave.,
 Ajax Block Coal Co., Commerce Bldg.
 Alma Thacker Fuel Co., Huntington Bank Bldg.
 Anderson, C. M., Ferris Bldg.
 Black Diamond Coal Co., New Hayden Bldg.
 Brenholtz, A. N. R., Outlook Bldg.
 Buckeye Coal & Supply Co., 145 N. Front
 Buckingham Coal Company, Huntington Bank Bldg.
 Burns Coal & Supply Co., 365 W. Town St.
 Burnwell Coal Co., 480 So. Fifth Ave.
 Central Hocking Coal Co., 308 Huntington Bank Bldg.
Central West Coal & Lumber Co., Brunson Bldg.
 Cole, E. A. & Co., Outlook Bldg.
 Colonial Coal & Supply Co., Brunson Bldg.
 Colonial Pocahontas Coal Co., Brunson Bldg.
Consolidated Mining Company, 8 East Broad St.
Crab Orchard Mining Co., The, Ferris Bldg.
 Crockett, T. S., Hartman Bldg.
 Dean Coal & Coke Co., Ferris Bldg.
 Elder, J. R. Company, 560 Wilson Ave.
 Elk Coal Co., Ferris Bldg.
 Elk River Coal & Lumber Co., Ferris Bldg.
Essex Coal Co., Hayden Bldg.
 Falk Coal Co., Huntington Bank Bldg.
 Fifth Ave. Coal Co., 479 E. 5th Ave.
 Fitzer, J. R. Coal Co., 516 Citizens Bank Bldg.
 Gem Coal Supply Co.
 General Hocking Fuel Co., 44 E. Broad St.
 Gibraltar Coal & Coke Co., The, 208 James Bldg.
 Gibson-Spence Coal Co., The, Ferris Bldg.
 Great Lakes Coal Mining Co., 509 Spahr Bldg.
Hamilton, S. J., Coal & Coke Co., Brunson Bldg.
 Hardy Coal Co., 815 Ferris Bldg.
Harman, William S., Hartman Bldg.
Hatton-Brown & Co., New Hayden Bldg.
Hersylvania Coal Co.
 Hitt-Davis Coal & Mining Co., The, Schultz Bldg.
 Hocking Valley Products Co., Lazarus Bldg.
 Interstate Co., Wheeler Bldg.
 Jenkins, H. W. Coal Co., Gasco Bldg.
 Jones, Geo. M. Co., The, Huntington Bldg.
 Kanawha & Ohio Coal Co., 418 Gasco Bldg.
 Kinwood Coal Co., 61 Ruggery Bldg.
 Lakin-McDonnell Co., New Hayden Bldg.
 Lama, W. A. Coal Co., Ferris Bldg.
 Lawler, J. L. & Sons, Gasco Bldg.
Leckie Coal Co., Inc., Hartman Bldg.
Lorain Coal & Dock Co., Huntington Bank Bldg.
 Maple Hill Coal Co., Wheeler Bldg.
 Maxfield, E. W. Coal Co., Brunson Bldg.
 Maynard Coal Co., Hayden-Clinton Bldg.
Midwest Coal & Coke Co., Ferris Bldg.
 Miller Jay Coal Co., 406 James Bldg.
 Mills & Felty Coal & Coke Co., 141 So. 3rd St.
 Monsarrat Bros., Gasco Bldg.
 Mutual Coal & Supply Company, The
 National Fuel Co., 506 Schultz Bldg.
 New Consolidated Coal Co., The, Columbus Sav. & Tr. Bldg.
 New York Coal Co., 8 E. Broad St.
 Northland Coal Co., Franklin Bldg.
 Northwestern Coal Co., Ferris Bldg.
 Ohio & West Virginia Coal Co., New Hayden Bldg.
 Ohio Coal & Foundry Supply Co., 345 S. High St.
 Ohio Consolidated Coal Company, Ferris Bldg.
 Orient Coal Co., Ferris Bldg.
 Packard Coal Mining Co., Gogle Bldg.
 Paramount Coal Sales Co., Huntington Bank Bldg.
 Penn Coal Co., 150 E. Broad St.
 Philadelphia & Cleveland Coal Co., 821 Ferris Bldg.
 Pittsburgh Bessemer Coal Co., Ferris Bldg.
 Pittsburgh Coal Co., Spahr Bldg.
 Pitz Bros., 204 E. Mound St.
 Progress Coal Co., Ferris Bldg.
 Puritan Coal Co., Huntington Bank Bldg.
 Quality Coal Co., 8 E. Broad St.
 Roan Coal Co., Huntington Bank Bldg.
 Roberts Coal & Supply Co., 1183 Leonard Ave.
 Schuler Coal Mining Company, 207 Commerce Bldg.
 Silcott, G. C. Coal Co., 902 Brunson Bldg.
 Simons, A. & Son, Huntington Bank Bldg.
 Spencer, F. M., Ferris Bldg.
 States Coal Co., Ferris Bldg.
 Standard Coal Company, Hayden Bldg.
 Sunday Creek Coal Co., The, Outlook Bldg.
 Swift Run Coal Co., Commerce Bldg.
 Taylor, John M. Coal Co., 526-527 Ferris Bldg.
 Taylor-Williams Coal Co., Ferris Bldg.
 Thorn Hill Coal Company, Ferris Bldg.
United Coal Sales Company, 1107 Brunson Bldg.
 Watson, F. H., 414-417 Gasco Bldg.
 West Virginia Coal & Coke Co., Ferris Bldg.
 York Clay & Mining Co., Gogle Bldg.

DAYTON

Davis, J. S. Coal Co.
 Fluhart, Harry, 1028 Lindsay Bldg.
 Fluhart-McCloud Collieries Co., The, Lindsay Bldg.
 General Jackson Fuel Co.
 Jackson & West Virginia Fuel Co., Mutual Home Bldg.
Kanawha Valley Coal Co., Schwind Bldg.

(Continued on Next Page)

OHIO—Continued

DAYTON—Continued

Logan Fuel Co., 218-219 D. S. & T. Bldg.
Patterson, S. J., Coal Company, 226 So. Tudlow.
 Rehance-Jellico Coal Co., 2216 E. Third St.
 Rice Coal Co., Mutual Home Bldg.
 Rice, W. P. Mining Co., Mutual Home Bldg.
 Sheridan Coal Co.
Tildesley Coal Co., Union Bank Bldg.

HAMILTON

Caroline Mining Co.
 Freickling, E. J. Coal Co., 41 High St.
 Sloan-Darragh Coal Co.

LIMA

Caroline Mining Co.

PORTSMOUTH

Atwater, Wm. C. & Co., Inc.

SANDUSKY

Myers Coal & Coke Co., Kingsbury Bldg.

SPRINGFIELD

Bruner Coal Mining Co., 417 Bushnell Bldg.
 Blumensteil Coal Co.
 Harris & Co., Fairbanks Bldg.

TOLEDO

Addy Mathew Co.
Astel Coal Co., Spitzer Bldg.
 Big Four Coal Co., The, 508 Madison Ave. (Ground Floor)
Buffalo Coal & Export Coal Corp.
 Central States Coal Co., Second Nat'l Bank Bldg.
Central West Coal & Lumber Co., Nicholas Bldg.
 Cleveland & Western Coal Co., Second National Bank Bldg.
 Cole-Basinger Coal Co., Spitzer Bldg.
Deegans, W. E. Coal Co.
 Delaware, Lackawanna & Western Coal Co., Nicholas Bldg.
 Fellabaum, E. & Co.
 France Coal Co., Spitzer Bldg.
 General Western Fuel Co., Ohio Bldg.
 Giese Bros. Co., The, Starr Ave. & W. & L. E. Ry.
 Go-line, W. A. & Co., Ohio Bldg.
Hanna, M. A. & Co., Millard St.
 Holbrook, B. T. Coal Co., Spitzer Bldg.
Hoyt, Clyde H., 1211 Nicholas Bldg.
 Hubbs, W. P., Spitzer Bldg.
 Independent Coal Co., 940 Buckeye St.
 Inter-State Coal Co., 570-1-2 Spitzer Bldg.
 Jones George M. Co., The, 721 Ohio Bldg.
 Long Fork Coal Co., Inc., Nicholas Bldg.
Manhasset Coal Co.
 Manufacturers Coal Co., Spitzer Bldg.
 Maynard Coal Co., Nicholas Bldg.
 Miller, Elmer Coal Co., Nicholas Bldg.
 Netzorg, L. Z. Coal Co., Ohio Bldg.
 Northern Ohio Coal Co., Spitzer Bldg.
Oakland Coal Co., Ohio Bldg.
Paterson Coal Co., Ohio Bldg.
 Palmer-Short Coal Co., Inc., Nicholas Bldg.
 Roberts-Brenneman Coal Co., Ohio Bldg.
 Schenck, S. C. Co., Nicholas Bldg.
 Sunday Creek Coal Co., The
 Taylor, A. A. Coal Co., Ohio Bldg.
 Toledo Fuel Co., 50 Main St.
Walbolt Coal Co., Nicholas Bldg.
 West-Crescent Fuel Co., 620 Madison Ave.

YOUNGSTOWN

Fort Pitt Coal & Coke Co., Mahoning Bank Bldg.
 Hamilton Coal Co.
 Pittsburgh Coal Co., Stambaugh Bldg.
 Witch Hazel Coal Co.

OKLAHOMA

McALESTER

Edwards Coal Co.
 Hughes Coal Co.
 McAlester Fuel Co., The
 Midland Coal Co.
Southern Fuel Co.
 Southwestern Coal Co., 114½ Choctaw Ave.

MUSKOGEE

Consolidated Fuel Co., Barnes Bldg.
 Fidelity Fuel Co.

OKLAHOMA CITY

Blue Ridge Coal Co., Colcord Bldg.
 McAlester Fuel Co., The, Colcord Bldg.
 Midland Coal Co., First National Bank Bldg.
 Sinclair Coal Co., 712 Southwest National Bank Bldg.
Southern Fuel Co., Insurance Bldg.

TULSA

Pioneer Coal & Mining Co., Mayo Bldg., A. B. Roberts, S. Agt.

OREGON

PORTLAND

Acorn Wood & Coal Co., 89 Mason St.
 Boyd, A. S., Oregon Bldg.
 Carbon Coal Co., 321 Hawthorne St.
 Columbia River Coal Co., Worcester Bldg.
 Commercial Coal Sales Co., Oregon Bldg.
 Continental Coal Co., Gasco Bldg.
 Ellefsen Fuel Co., 301 Oak St.

Liberty Fuel Co., Oregon Bldg.
 Pacific Coast Coal Co., Front & Raleigh St.
 Superior Rock Springs Coal Co., Oregon Bldg.
 Utah Fuel Co., N. W. Bank Bldg.

PENNSYLVANIA

ALLENTOWN

Eaker Bros., D. & B. Bldg.
 Lehigh Valley Coal Sales Co., Penn Trust Bldg.
 Miles Biting Co., 1022 Hamilton St.
 Schaeffer Coal Mining Co., Commonwealth Bldg.

ALTOONA

American Coal Co.
 Cambria-Moshannon Coal Co.
 Campbell Ridge Coal Co., Altoona Trust Bldg.
 Carbon Coal & Coke Co.
 Dale, John C. Coal Co., Inc., Altoona Trust Bldg.
 Dexter & Carpenter, Inc., Goldsblum Bldg.
Eastern Fuel Co., Elder-Fishbone Bldg.
Emmons Coal Mining Co.
 Fair, H. M.
 Hartwell, H. N. & Son, Inc., 56 Altoona Trust Bldg.
 Hoffman, J. N. Co.
 Hughes, C. A. & Co.
 Hughes, W. H. & Co., Altoona Trust Bldg.
 Lantz, C. H. Coal Co.
 Newton & Moyer
 Powell, A. H. & Co., Altoona Trust Bldg.
 Spendley Coal Co.
 Whitney Coal Mining Co., Central Trust Bldg.
Whitney & Kemmerer, Altoona Trust Bldg.

BETHLEHEM

Bethlehem Mines Corp.
 Dodson, Weston & Co., Inc.

CHEAT HAVEN

Fancy Hill Coal Co.

CLEARFIELD

Continental Bituminous Coal Co., Penn Public Service Bldg.
 Halden-Kelley Coal Company, 209 Market St.
 Imperial Coal Co.
 Regal Coal Mining Co.

CONNELLSVILLE

Beldoe Coal Co., First National Bank Bldg.
Corrado Coal & Coke Interests, Inc.
 Federal Fuel Co., First Nat'l Bank Bldg.
 Kramer Coal Co.
 Penn Coal Co., Title & Trust Bldg.
 Rice Fuel Co.
 Superba Coal Co.

DU BOIS

Coal Hill Mining Co., Inc., 36 North Brady St.
 Finance & Fuel Corp.
 Pendleton Coal Co.
 Reed, Fears & Miller, Deposit National Bank Bldg.

ERIE

Pittsburgh & Erie Coal Co.
 Pittsburgh Coal Co., Penn Bldg.
 Thompson, C. L. Coal Co., Marine Bank Bldg.

GLEN CAMPBELL

Superior Coal Co.

GREENSBURG

Acme Gas Coal Co., Huff Bldg.
Argyle Coal Co., Huff Bldg.
 Atlantic Crushed Coke Co.
 Cambria-Westmoreland Coal & Coke Co.
Grace Coal & Coke Co., Rialto Bldg.
 Harrison-Smith Co.
Inland Coal Co., Huff Bldg.
 Irvin Gas Coal Co.
Keystone Coal & Coke Co., Huff Bldg.
Latrobe-Connellsville Coal & Coke Co., Huff Bldg.
Mangold, R. G., Tribune Bldg.
 Marion Gas Coal Co.
 Miller, F. B.
Mountain Coal Co., Huff Bldg.
Operators Fuel Agency, Irwin Gas Coal Bldg.
 Shawnee Fuel Co.
 Westmoreland-Fayette Coal & Coke Co.
 Westmoreland Fuel Co.

HARRISBURG

Harrisburg Pennsylvania Company
Keystone Coal & Coke Co., Kunkel Bldg.
 Lerch, M. P. & Son, 599 Schuylkill St.

JOHNSTOWN

Brown, Robt. Y., Medea Bldg.
 Bunnell, R. R. Coal Co., First National Bank Bldg.
Campbell, Peacock & Kinzer, Inc., Swank Bldg.
 Coale & Co.
Cosgrove & Co., Swank Bldg.
 Dodson, Weston & Co., Inc.
Eastern Coal & Coke Co., Otto Bldg.
 Emerson & Morgan Coal Mining Corp.
Emmons Coal Mining Co., Inc., Lincoln Bldg.
 Garfield & Proctor Coal Co.
 Grazier Coal & Coke Co., Johnstown Trust Bldg.
Hall Bros. & Co., Inc., Swank Bldg.
Imperial Coal Corp., Johnstown Trust Bldg.
International Fuel & Iron Corp., Medea Bldg.
 Johnstown Coal & Coke Co., 497 Main St.
 Knickerbocker Fuel Co., Knickerbocker Bldg.
Marshall, W. A. & Co., Otto Bldg.

(Continued on Next Page)

PENNSYLVANIA—Continued

JOHNSTOWN—Continued

Miller-Stineman Coal Co.
 New England Coal & Coke Co.
 New England Fuel & Transportation Co., 123 Market St.
 Operators Coal Mining Co. Swank Bldg.
 Peerless Coal Co.
 Penelec Coal Corp.
 Pennsylvania Collieries, 906 First National Bank Bldg.
 Swayne & Co., Medea Bldg.
 Warren, Geo. E. Corp., Medea Bldg.

MAHAFFEY

Allied Mining Companies

PATTON

Maurer Coal Mining Co., Inc.

PHILADELPHIA

Addy, Matthew Co., The, Real Estate Trust Bldg.
 Ainsworth Coal & Iron Co., 400 Chestnut St.
 Ajax Coal & Mining Co., The Bourse Bldg.
 Altamus, L. C., Drexel Bldg.
 Althouse, A. K., Widener Bldg.
 Althouse, W. D. & Co., 424 Perry Bldg.
 Ames, Chas. D., Finance Bldg.
 Amherst Fuel Co., Land Title Bldg.
 Anita Coal Mining Co., Land Title Bldg.
 Argyle Coal Co., Widener Bldg.
 Arrow Coal Mining Co., Stock Exchange Bldg.
 Austen Coal & Coke Co., Real Estate Trust Bldg.
 Avery, W. Hemsay, Finance Bldg.
 Bailey, Geo. W. Co., 36 So. 7th St.
 Bailey, W. J., Pennsylvania Bldg.
 Baker, Geo. L., Bulletin Bldg.
 Balkan Coal Co., Liberty Bldg.
 Barnes & Tucker Co., Harrison Bldg.
 Barnes Coal Co., 718 Harrison Bldg.
 Barr, H. C., Land Title Bldg.
 Beaver Coal Co., Drexel Bldg.
 Beccaria Coal & Coke Co., Inc., Pennsylvania Bldg.
 Becarra-Moshannon Coal & Coke Co., Pennsylvania Bldg.
 Bell Union Coal & Mining Co., 1619 Arch St.
 Berwind-White Coal Mining Co., The, Commercial Trust Bldg.
 Betz Coal Mining Co., Pennsylvania Bldg.
 Big Bend Coal Mining Co., Real Estate Trust Bldg.
 Biggs, L. B., Land Title Bldg.
 Bishop, H. W., Franklin Trust Bldg.
 Bituminous Coal Co., Commercial Trust Bldg.
 Black Creek Impl. Co., 608 Chestnut St.
 Black Lick Coal Mining Co., Widener Bldg.
 Black Rock Fuel Co., Drexel Bldg.
 Blaisdell, W. S., Land Title Bldg.
 Blaisdell & Williamson, 2215 Land Title Bldg.
 Blair-Parke Coal & Coke Co., Real Estate Trust Bldg.
 Blaklee, E. W., Commercial Trust Bldg.
 Blue Ribbon Coal Co., 41 S. 15th.
 Boone County Coal Corp., 133 So. Fourth St.
 Bowers, H. G., Finance Bldg.
 Bradford, W. H. & Co., Inc., Commercial Trust Bldg.
 Bradley, John A., 421 Chestnut St.
 Brady Coal Corp., 1332 Commercial Trust Bldg.
 Brighton Coal Mining Co., Harrison Bldg.
 Brown, Walter P., Stephen Girard Bldg.
 Boyd, M. C., 725 Bulletin Bldg.
 Burtner Coal Co., Finance Bldg.
 Butler, Lawrence, North American Bldg.
 Byers, W. L. & Co., Real Estate Trust Bldg.
 Cameron Coal Co., Real Estate Trust Bldg.
 Campbell Coal Co., Harrison Bldg.
 Campbell, Jos. B. Coal Co., 1414 So. Penn Square
 Campbell Coal & Coke Co., Real Estate Trust Bldg.
 Campbell, Peacock & Kinzer, Inc., Widener Bldg.
 Carty, Andrew J., Stephen Girard Bldg.
 Casanave J. H., Commercial Trust Bldg.
 Caswin Coal Mining Co., Harrison Bldg.
 Chadwick, F. F. & Co., Land Title Bldg.
 Champion Collieries Co., Morris Bldg.
 Clark Bros. Coal Mining Co., Commercial Trust Bldg.
 Clemmency Hammer & Co., North American Bldg.
 Climax Coal Co., Land Title Bldg.
 Coale & Co., Inc., Real Estate Trust Bldg.
 Coal Export Corp., New Franklin Bank Bldg.
 Coalmont Moshannon Coal Co., Otis Bldg.
 Commercial Coal Co., Franklin Trust Bldg.
 Commercial Collieries Co., Franklin Trust Bldg.
 Commercial Coal Mining Co., Commercial Trust Bldg.
 Consolidation Coal Co., Land Title Bldg.
 Cornog, H. B., Pennsylvania Bldg.
 Corrado Coal & Coke Interests, Inc., Real Estate Bldg.
 Cortright Coal Co., Pennsylvania Bldg.
 Cory, Mann George Corp., The, 121 Walnut St.
 Cosgrove & Co., Inc., Pennsylvania Bldg.
 Coulter, Wm. R., Commercial Trust Bldg.
 Courtright-Dimmick Co., Franklin Bank Bldg.
 Courtright, M. B. & Co., Franklin Bank Bldg.
 Cox, Justice, Jr., & Co., 716 Land Title Bldg.
 Cramp, Henry M., Commercial Trust Bldg.
 Cranberry Creek Coal Co., 437 Chestnut St.
 Crozer-Pocahontas Co., North American Bldg.
 Cunard Coal Co., Real Estate Trust Bldg.
 Cymbria Coal Co., Liberty Bldg.
 Daetwyler & Door, Pennsylvania Bldg.
 Darlington, Otley & Co., Mutual Life Bldg.
 Davis Coal & Coke Co., Land Title Bldg.
 Davis, R. M. Coal Co., 525 Widener Bldg.
 Davison, C. A., Widener Bldg.
 Dawson Coal Co., Land Title Bldg.
 Debevoise-Anderson Co., Inc., Stephen Girard Bldg.
 Delano Coal Co., Inc., 1106 Widener Bldg.
 Dilks, Geo. W., 1610 Spruce St.
 Dexter & Carpenter, Inc., Land Title Bldg.
 Dodson, Weston & Co., Inc., 1610 Spruce St.
 Duncan-Spangler Coal Co., Finance Bldg.
 Earnshaw, W. G., 718 Harrison Bldg.
 Eastern Coal & Coke Co., 503 Liberty Bldg.
 Eastern Fuel Co.
 Ebensburg Coal Co., Land Title Bldg.
 Emmons Coal Mining Co., Land Title Bldg.
 Empire Coal Mining Co., Stephen Girard Bldg.
 Erie Coal & Coke Corp.
 Expedit Coal Co., Widener Bldg.
 Eyre Coal Co., Widener Bldg.
 Fidelity Coal Mining Co., Land Title Bldg.
 Feedisch, F. W. & Co., Penna. Bldg.
 Forge Coal Mining Co., Liberty Bldg.
 Francois Coal Mining Co., Stephen Girard Bldg.
 Franklin Coal & Coke Co., Franklin Trust Bldg.
 Franklin Fuel Co., Franklin Trust Bldg.
 Fuel Corporation of America, 1411 Walnut St.
 Gano, Moore Co., Land Title Bldg.
 Garfield Proctor Coal Co., Penna. Bldg.
 Georges Creek & Phoenix Mining Corp., Parkway Bldg.
 Given, Wm. H. & Co., Bourse Bldg.
 Glen Brook Coal Co., Land Title Bldg.
 Glen Brook Collieries Co., Land Title Bldg.
 Glen Brook Mining Co., Land Title Bldg.
 Greensburg Coal & Coke Co., Commercial Trust Bldg.
 Greenville Coaling & Export Corp., Stephen Girard Bldg.
 Grone, Geo. H. & Sons, Widener Bldg.
 Hall Bros. & Co., Inc., Stock Exchange Bldg.
 Hamilton Coal & Coke Co., Perry Bldg.
 Hanna, M. A. & Co., Commercial Trust Bldg.
 Haslam, Geo. W. Co., Widener Bldg.
 Hatfield & Hilles, Real Estate Trust Bldg.
 Haupt, Herman, 811 Harrison Bldg.
 Heigle, F. C., 316 Parkway Bldg.
 Heilner, Percy & Son, Land Title Bldg.
 Hesper Coal & Coke Co., Widener Bldg.
 Hillman Coal & Coke Co., Pennsylvania Bldg.
 Hite & Raffetto, Stephen Girard Bldg.
 Hollenbach, Wm. M., Harrison Bldg.
 Houck, G. E. & Co., Otis Bldg.
 Howard, Daniel & Co., Land Title Bldg.
 Huber, W. C. & Co., Stock Exchange Bldg.
 Hughes, D. W. & Co., Real Estate Trust Bldg.
 Hulmer Coal & Transportation Co., Stock Exchange Bldg.
 Huntington & West Virginia Co., Harrison Bldg.
 Hutchinson Coal Co., Stock Exchange Bldg.
 Imperial Coal Corporation, Widener Bldg.
 Inland Coal Co., Widener Bldg.
 International Coal Corp., Finance Bldg.
 International Fuel & Iron Co., Stock Exchange Bldg.
 Irish, W. L. & Co., Inc., Commercial Trust Bldg.
 Irona Coal Co., Land Title Bldg.
 Iron Trade Products Co., Pennsylvania Bldg.
 Irwin Valley Coal & Coke Co., Widener Bldg.
 Jamison Coal & Coke Co., Widener Bldg.
 Jenkins, T. K., 804 Land Title Bldg.
 Jewett, Bigelow & Brooks, Real Estate Bldg.
 Johnson, Geo. T., Widener Bldg.
 Jonathan Coal Mining Co., Franklin Bank Bldg.
 Jones-Koblegard Coal Co.
 Kanawha Consolidated Coal Co., Widener Bldg.
 Keatin Coal Co., West End Trust Bldg.
 Kennedy, F. W. & Co., 501-502 North American Bldg.
 Kenrock Coal Co., 330 Land Title Bldg.
 Keystone Coal Co., Commercial Trust Bldg.
 Keystone Coal & Coke Co., Widener Bldg.
 Kittanning Coal Co., Bullitt Bldg.
 Knickerbocker Fuel Co., Pennsylvania Bldg.
 Knipp, Llewellyn O., Widener Bldg.
 Lake Erie Coal Co., Inc., Morris Bldg.
 Latrobe Connellsville Coal & Coke Co., Widener Bldg.
 Law, E. & Co., Harrison Bldg.
 Lawsonhan Coal Co., 1105 Otis Bldg.
 Lea, J. Tatnall & Co., Stephen Girard Bldg.
 Lehigh Coal & Navigation Co., 437 Chestnut St.
 Lehigh Valley Coal Sales Co., Liberty Bldg.
 Lenox Coal Co., Pennsylvania Bldg.
 Lineawaver, H. H. & Co., Inc., West End Trust Bldg.
 Locust Colliery Co., Franklin Trust Bldg.
 Logan Coal Co., Harrison Bldg.
 Logan Mining Co., Stock Exchange Bldg.
 Long, J. E. Coal Co., Land Title Bldg.
 Loughridge, C. Howard, Finance Bldg.
 Loyal Hanna Coal & Coke Co., Land Title Bldg.
 McDougal, S. A., Land Title Bldg.
 McFarland, A. C. & Co., Real Estate Trust Bldg.
 McTurk, W. R. & Co., 314 Pennsylvania Bldg.
 Madeira, Hill & Co., North American Bldg.
 Majestic Coal Co., Land Title Bldg.
 Maple Run Coal Co., Commercial Trust Bldg.
 Maretti, A. G., Inc., Bulletin Bldg.
 Marshall Coal Co., Land Title Bldg.
 Marshall, W. A. & Co., Real Estate Trust Bldg.
 Mary D. Coal Co., Land Title Bldg.
 Maryland Coal & Coke Co., Stephen Girard Bldg.
 Maryland New River Coal Co., Stephen Girard Bldg.
 Matlack Coal & Iron Corp., Real Estate Trust Bldg.
 Merrill, W. A. & Sons Co., Pennsylvania Bldg.
 Mertens Fry & Co., 308 Chestnut St.
 Mid Valley Coal Co., Land Title Bldg.
 Miles Bitting Co., 617 Widener Bldg.
 Mill Creek Coal Co., Widener Bldg.
 Mills, Chas. W., Land Title Bldg.
 Miller Coal Co., North Stock Exchange Bldg.
 Monroe Coal Mining Co., Land Title Bldg.
 Montfair Gas Coal Co., Finance Bldg.
 Moore & Co., Inc., Land Title Bldg.
 Moravian Coal Mining Co., Harrison Bldg.
 Morgan Coal Sales Co., Liberty Bldg.

(Continued on Next Page)

Companies Shown in Black Face Type Are Advertisers in This Book. See Index on Pages 14 and 15.

PENNSYLVANIA—Continued

PHILADELPHIA—Continued

Morgantown Coal Co., 1112 Pennsylvania Bldg.
 Morisdale Coal Co., The Real Estate Trust Bldg.
 Moshannon Creek Coal Mining Co., Bulletin Bldg.
 Mount Hope Coal Co., Harrison Bldg.
 Mountain Coal Co., Widener Bldg.
 Nant-Y-Clo Coal Mining Co., 727 Land Title Bldg.
 National Sales & Trading Co., Finance Bldg.
 New Central Coal Co., Harrison Bldg.
 Newell, D. H., Western Bldg.
 New York & Philadelphia Coal & Coke Co., 121 Walnut St.
 Nicoll, E. & Co., Land Title Bldg.
 Nicolls, Wm. J., La Fayette Bldg.
 North East Coal Co., Commercial Trust Bldg.
 Norton, Chas. D. Coal Co., Stephen Girard Bldg.
 Old Foundation Coal Co., Finance Bldg.
 Old Moshannon Coal Co., Otis Bldg.
 Operators Fuel Agency, Real Estate Trust Bldg.
 Oval Basin Coal Co., Franklin Bank Bldg.
 Pardee, A. & Co., Drexel Bldg.
 Pardee Bros. & Co., 447 Drexel Bldg.
 Park & Williams, Inc., Real Estate Trust Bldg.
 Patchel, Geo. & Co., Commercial Trust Bldg.
 Peale, Peacock & Kerr, North American Bldg.
 Pearl, H. P. & Co., Inc., Widener Bldg.
 Pearson, Henry C., Penna. Bldg.
 Peerless Coal Co., Commercial Trust Bldg.
 Penmore Fuel & Iron Co., Inc., 26 Sq. 15th St.
 Pennsylvania Coal & Coke Corp., Land Title Bldg.
 Pennsylvania & Ohio Coal Corp., Land Title Bldg.
 Pennsylvania & West Virginia Coal Co., 1001 Chestnut St.
 Pennsylvania Collieries, 316 Perry Bldg.
 Pfeiffer, Howard D., Real Estate Trust Bldg.
 Philadelphia & Reading Coal & Iron Co., The Reading Term.
 Philadelphia Export Co., Bourse Bldg.
 Philmont Coal Co., Widener Bldg.
 Pierpont, Jas. & Sons Co., Franklin Trust Bldg.
 Pilling & Co., Real Estate Trust Bldg.
 Pine Ridge Coal Co., Finance Bldg.
 Piper, Wm. H. & Co., Commercial Trust Bldg.
 Pittsburgh Terminal R. R. & Coal Co., Land Title Bldg.
 Pochontas & New River Coal Co., Bourse Bldg.
 Potomac & Cumberland Coal Co., 810 Penn Square Bldg.
 Potts Run Coal Co., Harrison Bldg.
 Producers Fuel Co., Widener Bldg.
 Prudential Coal Co., Weightman Bldg.
 Pullman & Stevens, Pennsylvania Bldg.
 Punxsutawney Coal Mining Co., Land Title Bldg.
 Quaker City Coal & Coke Co., Land Title Bldg.
 Quemahoning Coal Co., Pennsylvania Bldg.
 Raffeto, Chas. F. Co., Inc., Finance Bldg.
 Rainey, W. J., Real Estate Trust Bldg.
 Rainey-Wood Coke Co., Widener Bldg.
 Reed, Fears & Miller, 514 Stock Exchange Bldg.
 Reed, J. C. & Co., Finance Bldg.
 Reilly, Jos. H. Coal Co., 305 Finance Bldg.
 Rhine Coal Co.
 Rich Creek Coal Co., Stock Exchange Bldg.
 Roaring Creek Coal Co., 1112 Chestnut St.
 Robinson, Earl B., Liberty Bldg.
 Rohwill Coal Co., Liberty Bldg.
 Rochester & Pittsburgh Coal & Iron Co., Stephen Girard Bldg.
 Rockhill Coal & Iron Co., 900 North American Bldg.
 Rogers, Brown & Co., Morris Bldg.
 Rosemont Coal Co., Land Title Bldg.
 Saxman Coal & Coke Co., Commonwealth Bldg.
 Saxman, E. F., 1114 Commonwealth Bldg.
 Seaboard Coal & Coke Co., 437 Chestnut St.
 Seiler Coal Co., Widener Bldg.
 Seyms, G. B., 224 South 3rd St.
 Shade Run Coal Co., Stephen Girard Bldg.
 Shamokin Valley Coal Co., Franklin Bank Bldg.
 Shawnee Fuel Co., Finance Bldg.
 Shoemaker Coal Mining Co., Real Estate Trust Bldg.
 Sidney Coal Mining Co., 240 West Susque St.
 Sitnek Fuel Co., Pennsylvania Bldg.
 Slattery Bros., Stephen Girard Bldg.
 Smokeless Coal Co., Widener Bldg.
 Southern Fuel Co., Old Stock Exchange Bldg.
 South Fork Coal Mining Co., 421 Chestnut St.
 Spates, Geo. P., Stephen Girard Bldg.
 Sterling Coal Co., 421 Chestnut St.
 Stineman Coal & Coke Co., 421 Chestnut St.
 Stineman Coal Mining Co., Pennsylvania Bldg.
 Stonega Coal & Coke Co., 1727 Land Title Bldg.
 Stony River Coal Co., Real Estate Trust Bldg.
 Struse, B. F. D., North American Bldg.
 Styer, Samuel, 1529 Real Estate Trust Bldg.
 Superior Coal Co., Commercial Trust Bldg.
 Susque Coal Co., Commercial Trust Bldg.
 Susquehanna Collieries Co., Commercial Trust Bldg.
 Swain Bros., Pennsylvania Bldg.
 Swatara Coal Co., Widener Bldg.
 Swayne & Co., 215 S. 17th St.
 Taylor-Offutt Coal Co., Inc., 300 Chestnut St.
 Thorne, Neale & Co., Inc., Franklin Bank Bldg.
 Tierney, J. J., 1503 North American Bldg.
 Town Coal Co., 1619 Arch St.
 Turley Coal Mining Co., Land Title Bldg.
 Tyler, W. R., Land Title Bldg.
 Undeck, J. P., Finance Bldg.
 Union Coal & Coke Co., Widener Bldg.
 Union Fuel Co., Widener Bldg.
 United Coal Co., 1001 Chestnut St.
 United Coal Corp., Pennsylvania Bldg.
 Upper Lehigh Coal Co., Land Title Bldg.
 Van Dusen Bros. & Co., Stephen Girard Bldg.
 Van Winkle, A. S., Pennsylvania Bldg.
 Victor Coal Mining Co., Commercial Trust Bldg.
 Victoria Coal Mining Co., Bourse Bldg.

Victory Coal Mining Co., 1033 Chestnut St.
 Walker Coal Co., 106 Morris Bldg.
 Watt, Geo. D. & Co., Bellevue City Bldg.
 Weaver, J. H. & Co., Land Title Bldg.
 Webster Coal & Coke Co., Land Title Bldg.
 Wentz Co., Land Title Bldg.
 Wentz, J. S. Co., 1727 Land Title Bldg.
 Westmoreland Coal Co., 224 S. 3rd St.
 West Penn Coal Mining Co., Harrison Bldg.
 West Virginia & Pennsylvania Coal Co., Finance Bldg.
 Wheaton-Brown Coal Co., Land Title Bldg.
 Wheaton, G. L. Coal Co., Real Estate Trust Bldg.
 Whiteley & Foodisch, Widener Bldg.
 Whitney & Kemmerer, Stephen Girard Bldg.
 Whitney Coal Mining Co., Land Title Bldg.
 Williams, Barnell & Co., Drexel Bldg.
 Williams, David E. & Co., Liberty Bldg.
 Williams Run Coal Co., Land Title Bldg.
 Wills, John, Inc., Pennsylvania Bldg.
 Winifrede Coal Co., 214 West Washington Square
 Wittenberg Coal Co., Bourse Bldg.
 Wittman, N. B. & Co., Commercial Trust Bldg.
 Woodruff Coal & Iron Co., Franklin Bank Bldg.
 Wright & Co., Schubert Bldg.
 Zane, A. A. & Co., Real Estate Trust Bldg.

PITTSBURGH

Aabandale Fuel Co., Oliver Bldg.
 Acme Coal & Coke Co., Park Bldg.
 Addy, Matthew Co.
 Amalgamated Coal Co., Rowman Bldg.
 American Connellsville Coal & Coke Co., Oliver Bldg.
 Arcade Coal Co., Union Arcade Bldg.
 Argentine Coal Co., Union Arcade Bldg.
 Armstrong Coal Co., Frick Bldg.
 Armstrong Fuel Co., First National Bank Bldg.
 Arnold, J. J., 922 Frick Bldg.
 Arrow Coal Mining Co., Oliver Bldg.
 Ball, Edw., Union Arcade
 Bassett, G. P. & Co., Oliver Bldg.
 Bellbridge Coal & Coke Co., Oliver Bldg.
 Ben Franklin Coal Co. of W. Va., Park Bldg.
 Berger-Aiken Coal Co., Park Bldg.
 Bertha Coal Co., Chamber of Commerce Bldg.
 Bess-Etta Coal Co., Union Arcade
 Bessemer Coal & Coke Co., Oliver Bldg.
 Bessemer Fuel Co., 230 Fifth Ave.
 Bixler Coal & Coke Co., Fulton Bldg.
 Blair, Reed F. Co., Union Arcade
 Blanchard Coal Co., 426 Fulton Bldg.
 Bob Lo Coal & Sales Corp., Benedum Trees Bldg.
 Bortz, P. C., 410 Union Arcade
 Bostaph Coal Co., First National Bank Bldg.
 Bradford, W. H. & Co., Inc., Oliver Bldg.
 Brown, Robt. Y., Oliver Bldg.
 Brown, W. Harry, First National Bank Bldg.
 Buckeye Steam Coal Co., Arrott Bldg.
 Bulger Block Coal Co., 6366 Frankstown Ave.
 Burgettstown Coal Co., 1519 Oliver Bldg.
 Bygate, Chas. S. Co., Union Arcade
 Byrne Fuel Co., Union Arcade
 Canonsburg Gas Coal Co., First Nat'l Bank Bldg.
 Caribou Co., Schmidt Bldg.
 Carnegie Coal Co., Oliver Bldg.
 Central Coal Co., 1510 First National Bank Bldg.
 Central Yough Coal Co., Union Arcade
 Century Coal Co., Century Bldg.
 Charbon Co., Oliver Bldg.
 Champion Collieries Co., Bessemer Bldg.
 Charleroi Gas Coal Co., First National Bank Bldg.
 Charters Creek Coal Co., Park Bldg.
 Cleveland & Western Coal Co., First National Bank Bldg.
 Clyde Coal Co., Bessemer Bldg.
 Coal Bell Coal Co., Benedum Trees Bldg.
 Cochrane, W. H., 246 Third Ave.
 Colonial Coal & Coke Co., Keenan Bldg.
 Commercial and By-Product, Lincoln Ave., Bellevue
 Commonwealth Fuel Co., Oliver Bldg.
 Conemaugh Coal Mining Co., 103 McCance Bldg.
 Connellsville Central Coke Co., 1211 Empire Bldg.
 Country Club Coal Co., First National Bank Bldg.
 Crescent Coal Co., First National Bank Bldg.
 Crown Coal & Coke Co., Union Arcade
 Crucible Fuel Co., Empire Bldg.
 Dalton Coal & Coke Co., Inc., Oliver Bldg.
 Delmont Gas Coal Co., Park Bldg.
 Diamond Coal & Coke Co., First National Bank Bldg.
 Dietz, W. P. Co., Commonwealth Bldg.
 Dodson, Weston Co., Inc., Oliver Bldg.
 Donohoe, T. J., House Bldg.
 Dunne Coal & Coke Co., Germania Bldg.
 Duquesne Coal & Coke Co., 244-348 Oliver Bldg.
 Eastern Fuel Co., Frick Bldg.
 Eaton, Rhodes & Co., Oliver Bldg.
 Eclipse Gas Coal Co., Oliver Bldg.
 Emma Coal Mining Co., Park Bldg.
 Emmons Coal Mining Co., Union Arcade
 Equitable Coal & Coke Co., 435 Sixth Ave.
 Erie Coal Mining Co., Keenan Bldg.
 Euclid Coal Co., Oliver Bldg.
 Euclid Gas Coal Co., First National Bank Bldg.
 Eureka Coal Co., House Bldg.
 Export Coal Co., First National Bank Bldg.
 Fair Haven Coal Co., 167 Union Arcade
 Fairview Mining Co., Wabash Bldg.
 Fancy Hill Coal Co., Oliver Bldg.
 Farrell Fuel Corp., Bessemer Bldg.
 Fayette Coal Co., 306 Fourth Ave.
 Fayette Coal Corp., Union Arcade
 Federal Gas Coal Co., Magee Bldg.
 Ferguson Coal & Coke Co., Oliver Bldg.

(Continued on Next Page)

Companies Shown in Black Face Type Are Advertisers in This Book. See Index on Pages 14 and 15.

PENNSYLVANIA—Continued

PITTSBURGH—Continued

Fidelity Coal & Coke Co., Chamber of Commerce Bldg.
Fish, F. A. Coal Co., Ltd., Union Arcade
 Flanagan, W. J., Schmidt Bldg.
Fort Pitt Coal & Coke Co., Farmers Bank Bldg.
 Four States Coal Co., First National Bank Bldg.
 Fownes Fuel Co., Farmers Bank Bldg.
 Fox Coal Co., Oliver Bldg.
 Frauenheim-Logansport Coal Corp., Keenan Bldg.
 Fuel Transport Co., Jenkins Arcade
 Georges Creek Coal Mining Co., Frick Bldg.
 Gilda Coal Co., First National Bank Bldg.
 Gilmore Coal Mining Co., Oliver Bldg.
 Goucher Mine Co., Chamber of Commerce Bldg.
 Gracemont Coal Co., Keenan Bldg.
 Graff & Dietzel, Park Bldg.
 Gray, G. H. D., Oliver Bldg.
 Greensburg Connellsville Coal & Coke Co., First National Bank Bldg.
 Hamilton, A. R. & Co., Commonwealth Bldg.
Hammill, B. S., 11 Crafton Ave., Crafton Sta.
 Hancock Sales Co., Renshaw Bldg.
Hanna, M. A. & Co., Oliver Bldg.
 Hanover Coal Co., The Bessemer Bldg.
 Harbison Co., Germania Bldg.
 Harmon Creek Coal Co., Oliver Bldg.
 Harmony Coal Co., Empire Bldg.
 Hartman Blanchard Co., Inc., 810 Keenan Bldg.
Hays, Edward F., Jr., Berger Bldg.
 Henderson Coal Co., 1708-11 Commonwealth Bldg.
Heyward, Thomas E. Co., Bowman Bldg.
Hillman Coal & Coke Co., First National Bank Bldg.
Hillman, J. H. & Sons Co., First National Bank Bldg.
 Hoffacker Coal Co., Park Bldg.
 Hopedale Coal Co., Oliver Bldg.
 Howard F. M., Oliver Bldg.
 Howe Coal Co., Jackson Bldg.
 Humphreys, E. B. & Bro., 1601 First National Bank Bldg.
 Hurd Coal Co., Union Bank Bldg.
 Hyndman, N. P., First National Bank Bldg.
International Fuel & Iron Corp., Frick Bldg.
International Fuel Corp., Frick Bldg.
 Iron City Coal & Coke Co., Columbia Bldg.
 Iron City Supply Co., Fitzsimmons Bldg.
Iron Trade Products Co., Farmers Bank Bldg.
 Ivill Coal Co., Inc., Empire Bldg.
 Jackson Coal Mining Co., Park Bldg.
Jamison Coal & Coke Co., Oliver Bldg.
 Jefferson Gas Coal Co., Farmers Bank Bldg.
 Jenner Quemahoning Coal Co., First National Bank Bldg.
 Jennings & Scott, Park Bldg.
 Jo Ann Coal Co., House Bldg.
 Johnson & Co., Inc., 230 Fifth Ave.
 Jones Coal Co., Oliver Bldg.
Keister MacQuown Fuel Co., Union Arcade
 Kennedy-Floyd & Co., Union Arcade
Keystone Coal & Coke Co., Park Bldg.
 Kirkbride, Geo. T., Oliver Bldg.
 Lackawanna Coal & Coke Co., Farmers Bank Bldg.
 Lake Erie Coal Co., Inc., Bessemer Bldg.
 Langeloth Coal Co., 512 Oliver Bldg.
 Lattimer, Thos. M. Co., Wabash Bldg.
Latrobe-Connellsville Coal & Coke Co., Park Bldg.
 Lawrence Sales Agency, Highland Bldg.
Lincoln Gas Coal Co., Farmers Bank Bldg.
 Lober Gas Coal Co., House Bldg.
 Loos, R. B., 901 First National Bank Bldg.
 Luzerne Coal & Coke Co., First National Bank Bldg.
 Lyric Coal & Coke Co., Inc., 230 Fifth Ave.
 McCarty, Gilmore & Co., Inc., Oliver Bldg.
 McDonald Coal Co., Park Bldg.
 McIlvain, E. S., First National Bank Bldg.
 McKeesport Coal Sales Co., Union Arcade
 McNulty Coal Co., Bakewell Bldg.
 Mackenzie Coal Co., Magee Bldg.
 Maher Coal & Coke Co., Farmers Bank Bldg.
 Maher & Graff, Farmers Bank Bldg.
 Martin, J. J., 751 Franklin St.
Marvel & Co., Oliver Bldg.
 Meadowlands Coal Co., First National Bank Bldg.
 Mercer Gas Coal Co., Frick Bldg.
 Merchants Coal Corp., First National Bank Bldg.
 Miners Block Coal Co., Chamber of Commerce Bldg.
 Miners Co-Operative Co., Chamber of Commerce Bldg.
 Monessen Coal & Coke Co., Union Arcade
 Montour & Lake Erie Coal Co., Vanadium Bldg.
 Mordue, Thos. N. Coal Co., Union Arcade
 Moreland, A. M. & Co., Jenkins Arcade
 Moreland Coke Co., Bessemer Bldg.
 Mudge, Edmund W. & Co., Frick Bldg.
 Naomi Coal Co., First National Bank Bldg.
 National Mining Co., Carnegie Bldg.
 New Cumberland Coal Co., Fulton Bldg.
 New Texas Coal Co., Berger Bldg.
Nicoll, B. & Co., Wabash Bldg.
 North East Coal Mining Co., Keenan Bldg.
 North Penn Coal Co., Commonwealth Bldg.
 Northeastern Coal & Export Corp., Oliver Bldg.
 Ocean Coal Co., House Bldg.
 O'Connor, A. J. & Co., First National Bank Bldg.
 Ontario Gas Coal Co., House Bldg.
 Operators Coal & Coke Co., Citizens Bldg.
Operators Fuel Agency, Park Bldg.
 Park & Williams, Inc., Oliver Bldg.
 Paxton Coal Co., Oliver Bldg.
Peabody Fuel Co., Oliver Bldg.
 Pearson, A. L. & Co., Chamber of Commerce Bldg.
Peerless Coal Co., House Bldg.
Penn-Empire Coal, Inc., 406 Empire Bldg.
 Penn Franklin Coal Co., Oliver Bldg.
 Penn Smokeless Coal Co., Union Bank Bldg.
 Penn York Coal & Coke Co., Keenan Bldg.
 Pennsylvania Fuel Corp., Park Bldg.
 Pennsy Gas Coal Co., 332 Frick Bldg.
 Peoples Coal Co., 7 Wood St.
 Peters Creek Gas Coal Co., Oliver Bldg.
 Pickands, Mather & Co., First National Bank Bldg.
Pioneer Coal & Coke Co., Oliver Bldg.
Pitt Fuel & Iron Co., House Bldg.
 Pittsburgh & Baltimore Coal Co., First National Bank Bldg.
 Pittsburgh & Bessemer Coal Co., First National Bank Bldg.
 Pittsburgh & Erie Coal Co., House Bldg.
 Pittsburgh Block Coal Co., Oliver Bldg.
 Pittsburgh By-Product Coke Co.
 Pittsburgh-Cambridge Coal Co., Union Arcade
 Pittsburgh Coal Co., Oliver Bldg.
 Pittsburgh Coal Exchange, Oliver Bldg.
 Pittsburgh Connellsville Coal & Coke Co., House Bldg.
 Pittsburgh, Great Lakes & N. W. Coal Corp., Wabash Bldg.
 Pittsburgh Hanover Coal Co., 323 Fourth Ave.
 Pittsburgh Ohio Coal Co., Bessemer Bldg.
 Pittsburgh Pocahontas Higrade Coal Co., Wabash Bldg.
Pittsburgh Terminal R. R. & Coal Co., Wabash Bldg.
Pletcher, J. W., 403 McCance Bldg.
Poland Coal Co., House Bldg.
 Premier-Pittsburgh Coal Co., Fulton Bldg.
 Premier Fuel Co., Oliver Bldg.
 Prescott, W. B., Oliver Bldg.
 Producers Coal Corp., Keenan Bldg.
Producers Fuel Co., Oliver Bldg.
 Rainey, W. J., Oliver Bldg.
 Raridan & East Brady Coal Co., Frick Bldg.
 Red Bank Coal Co., 62 Vandergrift Bldg.
 Reflector Coal Co., McGeagh Bldg.
Reilly-Peabody Fuel Co., 408 Oliver Bldg.
 Reliance Coal & Coke Co., Park Bldg.
 Richland Coal Co., Bessemer Bldg.
 River Seam Coal Co., First Natl. Bk. Bldg.
 Robbins Coal Co., Ferguson Bldg.
Rogers, Brown & Co., Farmers Bank Bldg.
 Romney Coal Mining Co., Oliver Bldg.
Salkeld Coal & Coke Co., Oliver Bldg.
 Salyers Coal Co., Ltd., Jenkins Arcade
 Sankey, F. B., 1022-1023 Park Bldg.
 Saw Mill Run Coal Co., 8 Market St.
 Schmidt & McCandless, Schmidt Bldg.
 Schultz, Frederick J., Co., Jenkins Arcade.
 Shinn Coal Co., Diamond Bank Bldg.
 Short Creek Coal Co., First Natl. Bk. Bldg.
 Skelly, W. B., Coal Co., Frick Bldg.
 Sloan, F. E., & Co., First Natl. Bank Bldg.
 Snowden Coke Co.
Snowden, G. H. Co., Oliver Bldg.
 Somerset & Cambria Smokeless Coal Mining Co., Oliver Bldg.
 South Fayette Coal Co., Oliver Bldg.
 Springer Coal Co., Oliver Bldg.
 Standard Coal Sales Co., Union Arcade.
 Star Coal Co., 307 Fifth Ave.
 Steel City Gas Coal Co., Oliver Bldg.
 Stone, W. N., House Bldg.
Straub-Atkinson Coal & Coke Co., Union Arcade
 Sugar Creek Coal Co.
 Superba Coal & Coke Co., Frick Bldg.
 Tasa Coal Co., Oliver Bldg.
 Taubman Co., Fitzsimmons Bldg.
 Tennessee Coal, Iron & R. R. Co., Carnegie Bldg.
 Thacher, Albert H. & Co., Inc., Union Arcade.
 Theiss, Geo. H., Oliver Bldg.
 Thompson, J. Harold Co., Union Arcade Bldg.
 Tidewater Coal Co., Oliver Bldg.
 Tri-State Coal & Coke Co., 1510 1st Natl. Bank Bldg.
 Union Coal & Coke Co., Oliver Bldg.
 Union Collieries Co., Union Arcade.
 Union Valley Coal Co., Union Arcade.
 United Fuel & Iron Co., Keenan Bldg.
 United States Fuel Co., Oliver Bldg.
 United Marine & Fuel Corp., 230 Fifth Ave.
Valley Camp Coal Co., First National Bank Bldg.
Verner Coal & Coke Co., Oliver Bldg.
Ward, C. S. B. & Co., 901 First National Bank Bldg.
Warner, W. H. & Co., First National Bank Bldg.
 Warner Youghiogheny Coal Co., First Natl. Bank Bldg.
 Warren, Geo. E. Corp., 416 House Bldg.
Washington Gas Coal Co., First National Bank Bldg.
 Waverly Coal & Coke Co., Oliver Bldg.
 Wayne Coal Co., Benedum-Trees Bldg.
 Weaver Coal Co., Inc., Oliver Bldg.
 West Bethlehem Coal & Coke Co., Penn Bldg.
 Westmoreland-Connellsville Coal & Coke Co., Frick Bldg.
 Westmoreland Fuel Co., Union Arcade.
 West Penn By-Product Coal Co., First Natl. Bank Bldg.
 West Penn Fuel Co., Keenan Bldg.
Whitney & Kemmerer, Oliver Bldg.
 Wholesale Coal Co., 1211 Chamber of Commerce Bldg.
 Wilcott Coal Co., Fitzsimmons Bldg.
 Wilkins, John H. Co., Bakewell Bldg.
 Wilson-Beagle Coal Co., Keenan Bldg.
 Wolfe, H. H., First Natl. Bank Bldg.
 Woodruff Coal & Iron Co., Oliver Bldg.
 Woods Run Coal Co., Bowman Bldg.
 Wright-Gibson Coal Co., The Union Bank Bldg.
 Youghahela Coal Co., Oliver Bldg.
 Youghiogheny & Ohio Coal Co., House Bldg.
 Youghiogheny & Pittsburgh Coal Co., Oliver Bldg.
 Youghiogheny Coal & Coke Co., House Bldg.
 Zenith Coal Co., Union Arcade.

PITTSBURGH
Pittston Coal Mining Co.
Pittston Coal Sales Co.

(Continued on Next Page)

Companies Shown in Black Face Type Are Advertisers in This Book. See Index on Pages 14 and 15.

PENNSYLVANIA—Continued

READING

Hellner, Percy, & Son, Colonial Trust Bldg.
Empire Coal Mining Co.
 Leitch, M. P., & Son,
 Philadelphia & Reading Coal & Iron Co., 2nd Natl. Bk. Bldg.
 Price, C. H., Colonial Trust Bldg.

SCRANTON

Alden, Edw. M., Co.
 Archbald Coal Corp.
 Dawson, H. A.
 Delaware, Lackawanna & Western Coal Co.
 Dexter & Carpenter, Inc., Mears Bldg.
 Dodson, Weston & Co., Inc.
 Farrel, Andrew D., Coal Co., 903-904 Mears Bldg.
 Hartwell, H. N. & Son, Inc., 1108 Union National Bank Bldg.
Hudson Coal Co.
 McCann-Camp, Co., Inc., Scranton Life Bldg.
 McLaughlin Coal Co., Scranton Life Bldg.
 Mid City Coal Co.
 Pine Hill Coal Co., Brooks Bldg.
 Quinn Coal Co.
 St. Clair Coal Co.
 Sarjeant-Oliver Coal Co., 401 Miller Bldg.
 Scranton-Taylor Coal Co.
 Shurtliff, E. R., Traders Bank Bldg.
 Staples & Bell, Inc., Mears Bldg.
 Stelle, H. A., Miller Bldg.
 Stephens, Walter M. & Co., Reg'd, 513 Connell Bldg.
 Weaver Coal Co., Inc., Union Natl. Bk. Bldg.

SNOW SHOE

Kelly Brothers Coal Co.

UNIONTOWN

Ardon Fuel Co., Fayette Title & Trust Bldg.
 Byers, W. L. & Co.
 Continental Fuel Corp., Fayette Title & Trust Bldg.
 Crozier Run Coal Co.
Eastern Coal & Coke Co., 46 E. Main St.
 Fayette Fuel Co., Fayette Title & Trust Bldg.
 Freedom Fuel Co., Fayette Title & Trust Bldg.
Gadd-Shaw Fuel Co.
 Gaddis Coal & Iron Co.
 General Fuel Co.
 Hayden Coal Co.
 Hilltop Coal & Coke Co., 23 W. Main
 Hochheimer & Co.
 Husted, J. E., Fayette Title & Trust Bldg.
Iron Trade Products Co., Thompson-Ruby Bldg.
 Meadow Brook Fuel Co.
 Mitchell Fuel Co., Masonic Bldg.
 Morgan Coal Co., 46 E. Main St.
 Mutual Coal & Coke Co.
Nicholson Coal Co.
Pioneer Coal & Coke Co., Union Trust Bldg.
 Point Marion Coal Co.
 Producers Coke Co., First Natl. Bldg.
 Puritan Coke Co.
Reilly-Callaghan Coal & Coke Co.
Reilly, W. J., Coal & Coke Co.
Reilly, W. J., Sales Co.
 Semans, Wm. R., Co., Fayette Title & Trust Bldg.
Sitnek Fuel Co., Fayette T. & T. Bldg.
 Standard Fuel Co., Fayette Title & Trust Bldg.
Stone, W. A., & Co.
 Tunnel Coal & Coke Co.
 Whyel Coke Co.

WILKES-BARRE

Central Coal Sales Co., Coal Exchange Bldg.
Dalton Coal & Coke Co., Bennett Bldg.
 Haddock Mining Co.
 Lee Coal Co., Inc., Miners Bank Bldg.
 Lee, Geo. F., Co.
 Lehigh Valley Coal Co.
 Lehigh & Wilkes-Barre Coal Co., 16 S. River St.
Morris Run Coal Co., Inc., Miners Bank Bldg.
 Payne Coal Co., Inc., Miners Bank Bldg.

WILLIAMSPORT

Hanna, M. A. & Co., Hart Bldg.

RHODE ISLAND

PROVIDENCE

Alley & Page, 212 Hospital Trust Bldg.
 Castner, Curran & Bullitt, Inc.
 Sprague, C. H. & Son

SOUTH CAROLINA

CHARLESTON

Consumers Coal Co.
Emmons Coal Mining Co.
Erie Coal & Coke Corp.
Federal Coal Co.
Jewett, Bigelow & Brooks, Inc.
 Johnson, Wm., & Co.
 Pan Handle Coal Co., 133 E. Bay St.
Stonega Coke & Coal Co., Exchange Bldg.

COLUMBIA

Barker Fuel Co., 804 L. & E. Bank Bldg.

SPARTANSBURG

Bewley-Darst Coal Co.
 Clinchfield Fuel Co.
Federal Coal Co.
 Rice, C. F., Jr.
Stonega Coke & Coal Co., Allen & Law Bldg.

SOUTH DAKOTA

DEADWOOD

Peabody Coal Co.

TENNESSEE

CHATTANOOGA

American Coal & Coke Co., First Natl. Bank Bldg.
 Barnes, J. R., Coal Co., Volunteer Life Bldg.
 Chattanooga Iron & Coal Corp.
 Cumberland Coal Co., Hamilton Bank Bldg.
 Cory, H. L., Coal Co., Hamilton Natl. Bank Bldg.
Federal Coal Co., Hamilton Bank Bldg.
 Lee, Jas. C., 1021 Hamilton Natl. Bk. Bldg.
 Riddle Coal Co., Hamilton Natl. Bank Bldg.
 Sewanee Coal Co.
 Sewanee Fuel & Iron Co.
 Signal Mountain Coal Mining Co., James Bldg.
 South Fork Coal Co.
 Stephenson, A. C.
 Stephenson, Geo. T.
 U. S. Fuel Corp., Hamilton Bank Bldg.
 Whiteside Coal Co.

JELICO

Southern Jellico Coal Co., Josiah Smith Bldg.

JOHNSON CITY

Blue Grass Coal Corp.
 Dixie Fuel Co., Harr Bldg.
 Floyd Elkhorn Consolidated Collieries Co.
 Heaton Coal Co.

KNOXVILLE

Atlas Coal Mining Co.
 Bear Wallow Coal & Coke Co.
 Bennett P. E.
 Bewley Darst Coal Co., Robbins Bldg.
 Block Coal & Coke Co., 400 Empire Bldg.
Blue Diamond Coal Sales Co., Holston Bank Bldg.
 Bon Jellico Coal Co., 203 West Clinch St.
 Boyd, J. L.
 Brown, D. H., & Co.
 Cambria Coal Mining Co.
 Campbell, D. C. Coal Co.
 Cherokee Coal & Coke Co.
 Clinch River Coal Co., Empire Bldg.
 Coal Creek Coal Co.
 Coalfield Coal Co.
 Comargo Coal Co., Empire Bldg.
 Cumberland Coal Co.
 East Tennessee Coal Co., Holston Bank Bldg.
 Floyd, J. F.
 Jellico Coal Mining Co., Burnwell Bldg.
Kentucky Fuel Co., The, Burwell Bldg.
 Loony Creek Coal Co.
 Perkins-Harlan Coal Co., Inc.
 Pruden Coal & Coke Co.
 Red Ash Coal Co., Holston Natl. Bank Bldg.
 Roth Coal Co., 404 Burwell Bldg.
 Saddereth, J. H., Coal Co.
 Southern Coal & Coke Co.
 Stony Fork Collieries, Inc., Burwell Bldg.
 Superior Coal Co.
 Tennessee & Southeastern Coal Co.
 Tennessee Jellico Coal Co., Empire Bldg.
Wheeler Coal Co., 306-07 Burwell Bldg.
 Witherspoon Coal Co.

MEMPHIS

Broadway Coal & Ice Co., Exchange Bldg.
 Brown Coal Co., Exchange Bldg.
Hart Coal Corp.
 Kirkpatrick Coal Co., 63 Madison Ave.
 McDonald Coal Co., Union Planters Bank Bldg.
 Memphis Coal Co., Exchange Bldg.
 Minter, W. Co., Exchange Bldg.
 Patton, Percy H.
 Southern Coal Co.
West Kentucky Coal Co.

NASHVILLE

Bon Air Coal & Iron Co.
 Dealers Coal Mining Co., Stahlman Bldg.
 Dixie Fuel Co., 4th & 1st Natl. Bank Bldg.
 Gooch, C. M.
Hart Coal Corp.
Kirkpatrick, W. H., Fuel Co., Stahlman Bldg.
 Southland Coal Co., 212 Third Ave.

TEXAS

AMARILLO

Southwestern Coal Co., Smith Bldg.

DALLAS

Central Coal & Coke Co.
 Huerfano Agency Co., The.
 Jackson, Hunter & Gould.
 Midland Coal Co., Southwestern Life Bldg.
 McAlester Fuel Co.
 McKay Coal Co.
 Sinclair Coal Co., 1223 Busch Bldg.
 Southern Coal Co.
 Southwestern Fuel Co., 1206 Busch Bldg.

EL PASO

Awbrey Coal & Coke Co.
 Dawson Coal Co.
 Western Fuel & Lumber Co., 509 Mills Bldg.

(Continued on Next Page)

TEXAS—Continued

FORT WORTH

Burton-Lingo Co.
Cobden Fuel Co., First Nat'l Bank Bldg.
Williams, H., Coal Co.

GREENVILLE

High-Grade Lignite Co.

ROCKDALE

Rockdale Lignite Co.
Carr Coal Co.
Texas Coal Co.
Vogel Coal & Mfg. Co.

SAN ANTONIO

Bertetti Coal Co.
Carr Coal Co., 1428 S. Alamo St.

WICHITA FALLS

Belknap Coal Co.

UTAH

OGDEN

Hill, Jas. T., 723 Eccles Bldg.
Lion Coal Co.
Premier Coal Co., 528 Eccles Bldg.

SALT LAKE CITY

American Fuel Co. of Utah, Utah Savings & Trust Bldg.
Calvin, H. H.
Cameron Coal Co., Newhouse Bldg.
Carbon Fuel Co., Clift Bldg.
Castle Gate Coal Co., Judge Bldg.
Central Coal & Coke Co., 406 Clift Bldg.
Clear Creek Coal Co., Judge Bldg.
Coffin, M. H., 422 Ness Bldg.
Cohen, Herbert, Box 1328.
Cook, Roy, Walker Bldg.
Erickson, Ferdinand, Judge Bldg.
Great Western Coal Mines, Newhouse Bldg.
Gunn-Quealey Coal Co.
Independent Coal & Coke Co., Walker Bldg.
Kemmerer Coal Co., Boston Bldg.
Keystone Coal Co., Boston Bldg.
Kinney Coal Co., Newhouse Bldg.
Liberty Fuel Co., Kearns Bldg.
Lyons, B. D., 1105 Newhouse Bldg.
McFarlane, Arthur, 69 S. Main St.
MacLean, W. D., 918 Kearns Bldg.
Mutual Coal Co., Ness Bldg.
National Coal Co., McCormick Bldg.
O'Brien, T. J.
Peerless Coal Co., 1103-1107 Newhouse Bldg.
Pierson, A. D.
Pleasant Valley Coal Co., Judge Bldg.
Rolapp, F. H., & Co., Newhouse Bldg.
Royal Coal Sales Co.
Service Coal Co., Newhouse Bldg.
Spring Canyon Coal Co., Newhouse Bldg.
Stallings, J. A., 817 Newhouse Bldg.
Standard Coal Co., Kearns Bldg.
Standard Fuel Co., 69 S. Main St.
Sun Coal Co., Clift Bldg.
Sweet, F. A., Kearns Bldg.
United States Fuel Co., Kearns Bldg.
Utah Coal Sales Co., Kearns Bldg.
Utah Fuel Co., Judge Bldg.
Van Derck, R. W., Utah Sav. & Tr. Bldg.
Weber Coal Co.
Weber, L. R., Kearns Bldg.

VERMONT

BURLINGTON

Adsit, E. S., Coal Co., 154 College St.
Citizens Coal Co.
Lyman, Elias, Coal Co., 206 College St.

VIRGINIA

BIG STONE GAP

Allen Brokerage Co.
Baker & Morrell.
Goodloe Bros. Co., Inc.
Pierson, D. B.
Stonega Coke & Coal Co.

LYNCHBURG

Berger Coal Co., 503 Krise Bldg.
Chesapeake & Virginian Coal Co., Peoples Bank Bldg.
Nowlin, A. S., & Co.
Imperial Coal Sales Co., Lynch Bldg.

NEWPORT NEWS

Benson-Phillips Co.
Blake, C. G., Co., Inc., Morewitz Bldg.
Chesapeake & Ohio Coal Agency Co.
Cory Mann George Corp.
Eastern Coal & Export Corp., C. & O. Railway Bldg.
Kenton Coal Co.
Lake & Export Coal Corp., River Road.
Maryland Coal & Coke Co.
Matlack Coal & Iron Corp., Reynier Bldg.
New River Co., Hogshire Bldg.
Relsah Coal Corp.
Sprague, C. H., & Son Co., C. & O. Bldg.
West Virginia Coal Co., West Ave.
Wittenberg Coal Co., West Avenue

NORFOLK

American Coal Exporting Co., National Bank of Com. Bldg.
Atwater, Wm. C. & Co.
Blake, C. G., Co., The, Haddington Bldg.
Castner, Curran & Bullitt, Inc.
Central Pocahontas Coal Co., Flat Iron Bldg.
Chesapeake & Ohio Coal & Coke Co., The, B'd of Trade Bldg.
Chesapeake & Virginian Coal Co., Inc., Board of Trade Bldg.
Coale & Co., Inc.
Cory Mann George Corp.
Crozer-Pocahontas Co., Citizens Bank Bldg.
Crystal Block Coal & Coke Co., Citizens Bank Bldg.
Cumnock Coal Mining Co.
Dexter & Carpenter, Inc., Board of Trade Bldg.
Dodson, Weston & Co., Inc.
Eastern Coal & Export Corp., Board of Trade Bldg.
Emmons Coal Mining Co.
Flat Top Fuel Co., Citizens Bank Bldg.
Fort Dearborn Coal & Export Co., 416 Flat Iron Bldg.
Hall Bros. & Co., Inc., Law Bldg.
Houston Coal Co., Seaboard Bank Bldg.
Imperial Coal Corp.
Inglesby-Patterson & Co., Board of Trade Bldg.
Interstate Coal & Dock Co., Board of Trade Bldg.
Jewett, Bigelow & Brooks
Kenton Coal Co.
Lake & Export Coal Corp., Bankers Trust Bldg.
Leckie Coal Co., Inc., Seaboard Bank Bldg.
Manhasset Coal Co.
Matlack Coal & Iron Corp., Board of Trade Bldg.
New England Coal & Coke Co., Citizens Bank Bldg.
New England Fuel & Transportation Co., Citizens Bank Bldg.
New River Coal Co., Nat'l Bank of Commerce Bldg.
Norfolk & Chesapeake Coal Co.
Nottingham & Wrenn Co.
Old Colony Smokeless Coal Co.
Panhandle Coal Co., Bank of Commerce Bldg.
Pocahontas Fuel Co., 117 Main St.
Raleigh Pocahontas Coal Co.
Raleigh Smokeless Fuel Co., Arcade Bldg.
Relsah Coal Corp.
Smokeless Fuel Co.
Southgate Export Coal Co., Southgate Terminal.
Sprague, C. H., & Son Co.
Stonega Coke & Coal Co., Haddington Bldg.
Tuttle Corp.
Virginia Smokeless Coal Co., Flat Iron Bldg.
Warren, Geo. E., Corp., Bank of Commerce Bldg.
Warren Export Coal Co., Inc., Bank of Commerce Bldg.
West Virginia Coal Co., Citizens Bank Bldg.
White Oak Coal Co., Hogshire Bldg.
Winifrede Coal Co.
Wittenberg Coal Co., Seaboard Bank Bldg.

NORTON

Allen Brokerage Co., First Nat'l Bank Bldg.
Hall & MacDonald.
Paine-Pepper Co.
Power Fuel Co.
Virginia Coal & Coke Agency.
Virginia Coal Sales Co.
Whitney & Kemmerer Co., First National Bank Bldg.

PENNINGTON GAP

Penn Lee Coal Co.

RICHMOND

Cabin Creek Consolidated Coal Co., American Nat'l Bk. Bldg.
Chesapeake & Ohio Coal Agency Co.
Crenshaw, L. G., Coal Co.
Eastern Coal & Export Corp., First National Bank Bldg.
Fort Branch Coal Corp., American National Bank Bldg.
Gauley Mountain Coal Co., 523 American National Bk. Bldg.
Interstate Coal & Dock Co., Chamber of Commerce Bldg.
Logan-Pocahontas Fuel Co.
New River Coal Co., American Nat'l Bank Bldg.
Old Dominion Coal Corp., Carneal Bldg.
Raleigh Smokeless Fuel Co.
Smith, Oak, & Sons, 650 N. W. 2nd St.
Warren-Dadley Coal Co., American National Bank Bldg.
West Virginia Coal Co., Va. Ry. & Power Bldg.
White Oak Coal Co., American Bank Bldg.
Wyatt Coal Sales Co., American National Bank Bldg.
Wyoming Coal Sales Co.

ROANOKE

Castner, Curran & Bullitt, Inc., First Nat'l Bank Bldg.
Chesapeake & Virginian Coal Co., Inc.
Hatton, Brown & Co., First Nat'l Bank Bldg.
Hunter, J. F.
Old Dominion Coal, Iron & Coke Co., First Nat'l Bank Bldg.
National Collieries Co., Mountain Trust Bldg.
Virginia Iron Coal & Coke Co.

ST. CHARLES

Benedict Coal Corp.
United Collieries, Inc.

TAZEWELL

Virginia Smokeless Coal Co.

WASHINGTON

SEATTLE

Arrow Coal Co., 809 White Bldg.
Carbon Coal Mines Co.
Carbon Hill Coal Co.
Central Coal Co., Security Bldg.
Continental Coal Co.

(Continued on Next Page)

WASHINGTON—Continued

SEATTLE—Continued

Ketcham & Wilson, L. C. Smith Bldg.
Lantz, Frazer H. Co., Inc., L. C. Smith Bldg.
Langren, G., Pioneer Bldg.
Pacifi Coast Coal Co.
Pacifi Shipping & Fuel Co., 659 Colman Bldg.
Pearce, W. E., 167 Conn. St.
Roslyn Fuel Co., 818 White Bldg.
Stedman Coal Co., Burke Bldg.
Western Coal Co., 3821 10th Ave. N. E.
Wilmet, J. M., Electric Bldg.

SPOKANE

Aberdeen Agency, Hutton Bldg.
Big Horn Collieries Co., 301 Jamieson Bldg.
Burckhalter, W. M., 301 Jamieson Bldg.
Coal Sellers, Ltd., 307 Fernwell Bldg.
Continental Coal Co., Terminal Bldg.
Corbin Coal & Coke Co., Terminal Bldg.
Idaho Coal Mines Co., Hutton Bldg.
Koerner, E. C., Hutton Bldg.
Peabody Coal Co., 301 Jamieson Bldg.
Roslyn-Cascade Coal Co., 1725 3rd St.
Talbot, R. S., Hutton Bldg.
Union Coal Co., Old National Bank Bldg.
Union Fuel & Ice Co., Old National Bank Bldg.

TACOMA

Love, F. M., 229 Tacoma Bldg.
Northwestern Improvement Co.
Pacifi Coast Coal Co.

WEST VIRGINIA

AMHERSTDALE

Amherst Coal Co.

ANSTED

Ganley Mountain Coal Co.

BECKLEY

Eastern Coal & Export Corp.
Fort Dearborn Coal & Export Co.
Lake & Export Coal Corp.
Mead, C. H. Coal Co.
Mead-Toliver Coal Co.
Minter, E. C. Coal Co.
Minter Fuel Company
Raleigh Smokeless Fuel Co.

BLUEFIELD

Atwater, Wm. C. & Co.
Bluefield Coal & Coke Co., Law & Commerce Bldg.
Castner, Curran & Bullitt, Inc.
Central Pocahontas Coal Co.
Co-operative Fuel Company, Law and Commerce Bldg.
Crozer-Pocahontas Co., Law and Commerce Bldg.
Crystal Block Coal & Coke Co.
Dexter & Carpenter, Coal and Coke Bldg.
Eastern Coal & Export Corp.
Flat Top Fuel Co., Inc., Law and Commerce Bldg.
Fort Dearborn Coal Company
Lake & Export Coal Corp., Coal and Coke Bldg.
Pocahontas Fuel Co.
Producers Coal Co., K. & M. Bldg.
Smokeless Fuel Co.
Three States Coal Company, Law and Commerce Bldg.
Virginia Smokeless Coal Co., Law & Commerce Bldg.
West Virginia Coal Co., Law & Commerce Bldg.
Wyoming Coal Sales Co.

BONCAP

Coalfield Fuel Co.
Thomas Smokeless Coal Co.
West Virginia Eagle Coal Co.

BOWER

Copen Gas Coal Mines, Inc.

CHARLESTON

Adrian Steamship & Commerce Corp., Union Bldg.
Barren Creek Coal Co.
Big Bottom Coal Co., Charleston Natl. Bank Bldg.
Blue Creek Coal & Land Co., Kanawha Bank & Trust Bldg.
Bob-Lo Coal & Sales Corp.
Branch Coal & Coke Co., Kanawha National Bank Bldg.
Cabin Creek Consolidated Coal Co.
Central Fuel Co.
Charleston Co-operative Coal Co.
Coalfield Fuel Co., Union Bldg.
Colcord Coal Co., Union Bldg.
Coal Run Coal Co.
Consolidated Coal & Coke Co.
Davis Creek Land & Coal Co., Union Trust Bldg.
Deegans, W. E. Coal Co.
Dickinson Fuel Co., Union Trust Bldg.
Eagle By-Product Coal Company, 403 Davidson Bldg.
Eclipse Coal Co., Boyd Bldg.
Elk Coal & Coke Co.
Fort Dearborn Coal Co.
Grosvenor Coal Sales Co., 611 Union Bldg.
Guyan Coal Co., 216 Professional Bldg.
Imperial Coal Sales Co.
Indian Run Coal Co., Kanawha Banking & Trust Bldg.
Ivy Branch Coal Co.
Jewett, Bigelow & Brooks, Inc.
Kanawha & Ohio Coal Co., 302 Kanawha National Bank Bldg.
Kanawha Valley Coal Co.
Kearn Coal Co.
Kelly's Creek Colliery Co.

Logan Fuel Co., Union Bldg.
Logan Pocahontas Fuel Co., Union Bldg.
Mandt Mining Co.
Manhasset Coal Co., Virginian Land Bank Bldg.
Moore & Hetzel, Union Trust Bldg.
Mountaineer Coal Co., 205 Kanawha Bank Bldg.
Mountaineer Fuel Co., Kanawha Banking & Trust Bldg.
New Export Coal Co.
New River Coal Co., Kanawha Valley Bank Bldg.
Old Dominion Coal Corp., Kanawha Bank & Trust Bldg.
Quality Coal Company, Kanawha National Bank Bldg.
Raleigh-Wyoming Coal Co., 209 Professional Bldg.
Seolia Coal & Coke Co.
Siler & Siler
Slab Fork Coal Co.
Smokeless Fuel Co., Kanawha Banking & Trust Bldg.
South Side Co.
Standard Tide & Inland Coal Sales Co., Union Trust Bldg.
Turkey Knob Coal Co.
Valley Camp Coal Co.
West Virginia Coal & Mfg. Co.
West Virginia Coal Co., Union Bldg.
West Virginian Fuel Company, Professional Bldg.
Wyatt Coal Sales Co.

CHATTAROY

Fall Branch Coal Co.

CLARKSBURG

Fort Clark Coal Co.
Fisher Summit Coal Co., Purity Bldg.
Francois Coal Co.
Hall Bros. & Co., Inc., Union Bank Bldg.
Horner, J. Lee, Inc., Horner Bldg.
Howard, Daniel & Co., Union Bank Bldg.
Howard, Guthery & Co.
Indian Run Collieries Co.
Jones-Koblegara Coal Co., Union National Bank Bldg.
Laulis Coal Co., 315-316 Elk Bridge Bldg.
Long, J. E. Coal Co., 601-610 Goff Bldg.
Lost Creek Coal Co., Goff Bldg.
Macfarlane Coal Co.
Mt. Clare Colliery Co., 702 Union Bank Bldg.
Philmont Coal Co.
Thermal Coal Co., Goff Bldg.
Turner Douglas Coal Co.
Waldron, Chas. & Co.
Winchester Coal Co., Elk Bridge Bldg.

COALWOOD

Carter Coal Co.

ELKINS

Arbogast, C. W.
Brady, A. Spates
Green, W. H. Coal Co.
Randolph Colliery Co.
West Virginia Coal & Coke Co.

ELM GROVE

Elm Grove Mining Co.

ETHEL

Cleveland-Cliffs Iron Co.

FAIRMONT

Antler Coal Co.
Arkwright Coal Co.
Bethlehem Coal Co.
Brady Coal Corp., 206 Deveny Bldg.
Central Fuel Co.
Crescent Fuel Co.
Delmar Coal Co.
Diamond Coal Co.
Diamond Fuel Co.
Drum, Harry C. Co., The, 11 Adams St.
Fairmont & Cleveland Coal Co.
Hall Bros. & Co.
Har-Mar Coal Co.
Hutchinson Coal Co.
Logan Mining Co.
Madeira, Hill & Co.
Marshall, W. A. & Co.
Monongahela Valley Traction Co.
Monongalia Coal Co.
Northern Central Coal Co.
Osage Coal Co.
Patton Coal Co., Inc.
Pioneer Coal & Coke Co., Fairmont Trust Bldg.
Rich Creek Coal Co.
Robinson Artificial Fuel Co.
Robinson Coal Co.
Southern Coal Corp., Deveny Bldg.
Valley Camp Coal Co.
Virginia & Pittsburgh Coal & Coke Co.
Watson, Alex. R.
West Virginia Fuel Co., Professional Bldg.

GLENDALE

Glendale Gas Coal Co.

GRAFTON

Davis Coal Mining Co., Grafton Bank & Trust Bldg.

HUNTINGTON

American Export & Inland Coal Corp., Thompson Pierce Bldg.
Black Gem Coal Co.
Buffalo Coal & Export Corp., First National Bank Bldg.
Buffalo-Thacker Coal Co.
Carry On Coal Co.
Central West Virginia Fuel Co.
Chesapeake & Virginian Coal Co., Inc., The.
Robson-Britchard Bldg.

(Continued on Next Page)

Companies Shown in Black Face Type Are Advertisers in This Book. See Index on Pages 14 and 15.

WEST VIRGINIA—Continued

HUNTINGTON—Continued

Daleport Coal Corp.
 Dalton Kelly Coal Corp.
Deegans, W. E. Coal Co.
 Don Coal Co.
 Downing, T. F.
Eastern Coal & Export Corp., First National Bank Bldg.
 General Coal Co.
Hooper-Mankin Fuel Co., 518 10th St.
 Hoosier Mankin Fuel Co.
Huntington Coal & Mining Co., 601½ Ninth St.
 Huntington Coal Mining & Sales Co.
 Independent Coal Co.
 Island Creek Coal Co.
 Kentenia Coal Co.
Lake & Export Coal Corp., Robson-Pritchard Bldg.
 Lick Fork Colliery Co.
 Litz-Smith Fuel Company, 501-4 Vinson-Thompson Bldg.
Logan Elkhorn Coal Corp.
Logan-Elkhorn Fuel Co.
Main Island Creek Coal Co., 310 Robson-Pritchard Bldg.
 Mallory Coal Co.
 Monitor Coal & Coke Company, Vinson Thompson Bldg.
Morris, H. H.
 New Howard Coal Co., First Nat'l Bank Bldg.
Pritchard Co., The
 Progressive Fuel Co.
Sterling Block Coal Co.
Twin States Fuel Co.
 West Virginia Coal Co., Robson-Pritchard Bldg.
West Virginia Standard Coal Co., First National Bank Bldg.
 Yuma Coal & Coke Company, Vinson Thompson Bldg.

LOGAN

Argyle Coal Co., Wilkinson Bldg.
 Central Fuel Co.
Lake & Export Coal Corp., White & Browning Bldg.
 Manhasset Coal Co.
 Thurmond Coal Co., Wilkinson Bldg.

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MACDONALD

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Blue Flame Fuel Co.
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Cornellsville Py-Product Coal Co.
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Davis, R. M. Coal Co., Monongahela Bldg.
 Eldred, H. Jarvis
 Elkins Fuel Co., Monongahela Bldg.
Fiedler Coal & Coke Co.
Gadd-Shaw Fuel Co., Strand Bldg.
 Guston Run Coal Co., Inc., John L. Maust, Sales Agt.
Higgins Coal Co.
 La Mar Coal Co.
Marshall, W. A. & Co., Inc., Union Utilities Bldg.
Morgantown Coal Co., 165 High St.
 Mon-Scott Fuel Co., Monongahela Bldg.
 National Fuel Co.
Preston County Coke Co.
Producers Fuel Co., F. & M. Bank Bldg.
 Randall Coal Co.
Rosedale Coal Co.
 Scott Run Coal Co.
Southern Fuel Co., Monongahela Bldg.
Swisher, Howard L. & Co.
 Tait Bros. Coal Co.
 Tropp Coal Co.
Valley Camp Coal Co.
Watson, C. E. Coal Co.

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 Madne Coal Co.
Main Island Creek Coal Co.

POWHATAN

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 Tierney Mining Co.

SHARPLES

Boone County Coal Corp.

THAYER

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THURMOND

Blake, C. G. Co., The

VIVIAN

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 Sycamore Coal Co.

WELCH

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Crystal Block Coal & Coke Co.
 Flannagan Coal Sales Company, First National Bank Bldg.
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 Whyte, W. W.

WHEELING

Gebhart, J. F.
Oxtoby, A. F. Co.
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Valley Camp Coal Co.
 Wheeling Steel Products Corp.

WILLIAMSON

Greg Valley Fuel Co.
 Tug Valley Fuel Company
 Williamson Pond Creek Sales Co.

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 Reiss, C. Coal Co., The

JANESVILLE

Baxter Mining Co.

LA CROSSE

Yerly Coal Co.

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Manitowoc Land & Fuel Co.
 Reiss, C. Coal Co., The

MILWAUKEE

Callaway Fuel Co., N. Water & Cherry Sts.
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 Elkhorn Piney Coal Mining Co.
Ferguson Coal Co., First National Bank Bldg.
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 Hayes, William
 Kiesel, Arthur Coal Co., 114 Grand Ave.
 Lehigh Valley Coal Sales Co., 1st Wisconsin Natl. Bank Bldg.
 Milwaukee Coke & Gas Co.
 Milwaukee Western Fuel Co., 120 Wisconsin St.
 Milwaukee-Western Fuel Co., Wells Bldg.
 Phila. & Reading Coal & Iron Co., The, 704 Majestic Bldg.
 St. Clair Coal Mining Co.
 Standard Harlan Coal Company, 410 Jefferson St.
 United Coal & Dock Co.
Valley Camp Coal Co., 425 E. Water St.
 Wenthur Coal & Coke Co., First National Bank Bldg.
Wisconsin Great Lakes Coal & Dock Co.
 Youghiogheny & Ohio Coal Co., The, Colby-Abbott Bldg.

SHEBOYGAN

Reiss, C. Coal Co., The

SUPERIOR

Chesapeake & Virginian Coal Co., Inc., Lake Docks.
Hanna, M. A. Coal & Dock Co.
 North Western Fuel Co.
 Pittsburgh Coal Co., 111 Tower Ave.
 Reiss, C. Coal Co., The

WYOMING

SHERIDAN

Peabody Coal Co., Rialto Bldg.

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BLAIRMORE

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BOLIVAR

Ridgeview Coal Co.

CALGARY

Ardley Coal Co., Ltd.
 Binie Lumber & Coal Co.
 Canadian Pacific Ry. Co., Dept. of National Resources
 Coal Sellers, Ltd., 904 Lancaster Bldg.
 Coon, B. T.
 Crescent Coal Co., Ltd., Beveridge Bldg.
 Great West Coal Co., Ltd., 209-210 Lancaster Bldg.
 McCullough, Alex. Sons, Ltd.
 Toole, Peet & Co.

DRUMHELLER

North Western Fuel Supply Co.

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Alberta Coal Mining Co., Bank of Montreal Bldg.
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 Cardiff Collieries Co., Ltd.
 Coal Sellers, Ltd., 714-715 McLeod Bldg.
 Crown Coal Co.
 Dunn, James C., P. O. Box 1866
 Great Northern Coal Co.
 Great West Coal Co., Ltd.
 Humberstone Coal Co., Ltd., McLeod Block
 Mountain Park Coal Co., Ltd.
 North West Coal Co.
 Patterson & Boorer, 811 McLeod Bldg.
 Sturgeon Consolidated Collieries Co., Ltd.
 Tolfield Coal Co., Ltd.

LETHBRIDGE

Chinook Coal Co., Ltd.

(Continued on Next Page)

Companies Shown in Black Face Type Are Advertisers in This Book. See Index on Pages 14 and 15.

BRITISH COLUMBIA

FERNIE

Crow's Nest Pass Coal Co.
Irvine, J. S.

KAMLOOPS

Max, C. E.

NANAIMO

Lawrence, J. G.
Western Fuel Corp. of Canada, Ltd.

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Fleming Coal Co.
Granby Consolidated Mining, Smelting & Power Co., Ltd.
Middlesboro Collieries Co.
Quigley, E. A., 10-425 Hamilton.

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Thomas, C. E., Belmont Bldg.
Wellington-Comox Agency

MANITOBA

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Great West Coal Co., Ltd., Strand Bldg.

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Cadomin Coal Co., Ltd., Cadomin Bldg.
Coal Sellers, Ltd., Union Trust Bldg.
Durham Coal Co., Ltd.
Empire Coal Co., Ltd.
Pothills Collieries, Ltd.
Great West Coal Co., Ltd., 506 Merchants Bank Bldg.
Haliday Bros., Ltd.
Manitola & Saskatchewan Coal Co., Ltd.
North American Collieries, Ltd.
Osler, Hammond & Nulton
Sons Co., Sales Co., Paris Bldg.
Windatt Coal Co.

NOVA SCOTIA

GLACE BAY

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IRONTON

LeBlanc, Jno. D.

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Lithgow, W.
Nova Scotia Steel & Coal Co., Ltd.

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Inverness Railway & Coal Co.

STELLARTON

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ONTARIO

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HAMILTON

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Connell Anthracite Mining Co.
Lawsonhan Coal Co. 58 Sun Life Bldg.

Queen City Coal & Coke Co., Inc., Clyde Bldg.
Shawmut Coal & Coke Co., 46 Hess St.

Valley Camp Coal Co. of Canada

Weaver, F. P. Coal Co., Ltd., Bank of Hamilton Bldg.

SMITH FALLS

Wholesale Coal Co., 14 Main St.

TORONTO

Acme Coal & Coke Co., Ltd., C. P. R. Bldg.
American Fuel Co., Ltd.
Blue Diamond Coal Co., Ltd.
Brazee Collieries, Ltd.
Canada Coal Co., Ltd., The Harbor Commission Bldg.
Conger-Leigh Coal Co., Ltd., The 95 Bay St.
Consumers Supply Co., Sun Life Bldg.
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Doan & Charles, Ltd., 383 Spadina Ave.
Dunlop Coal Co., Ltd., 908 Royal Bank Bldg.
Fish, F. A. Coal Co., 70 King St., West
Imperial Coal Co., C. P. R. Bldg.
Johnstone, B. J. Royal Bank Bldg.
Loughridge, C. H., C. P. R. Bldg.
McGill, Wm. & Co., 1113 Young St.
Marshall, W. A. & Co. of Canada, 166 Bay St.
Milnes Coal Co., Ltd.
Montour Coal & Coke Co., Ltd., 88 King St.
Queen City Coal & Coke Co., Inc., Excelsior Life Bldg.
Sarjeant-Oliver Coal Co., Lumsden Bldg.
Standard Fuel Co. of Toronto, Ltd., 58 King St., E.
Sterling Coal Co., Ltd.
Underhill Coal Co., Reliance Bldg.
Universal Coal Co., Ltd., 85 Bay St.
Warren, Geo. E. Corp., 9 Wellington St., East
Weaver, F. P. Coal Co., Ltd., Royal Bank Bldg.
Wilson, C. A. & Co., Ltd., 57 W. Queen St.

WINDSOR

Hurley, J. & T., Inc.

QUEBEC

British Columbia Skeena Coal Co., Ltd.
Canadian Import Co., The, 83 Dalhousie St.
Dobell Coal Co., Ltd.

MONTREAL

Acadia Coal Co.
Acme Coal & Coke Co.
Bradford, W. H. & Co., McGill Bldg.
Canadian Import Co., 318-320 Board of Trade Bldg.
Century Coal & Coke Co.
Dick, Alexander, 112 St. James St.
Dominion Coal Co., Ltd.
Empire Coal Co., Ltd., Shaughnessy Bldg.
Hall, George Coal Co. of Canada, Ltd.
Hart & Adair Coal Co.
Hill Crest Collieries, Ltd.
Intercolonial Coal Mining Co.
Lee Coal Co., Ltd., McGill Bldg.
Marshall, W. A. & Co. of Canada, 86 Notre Dame St.
Minudie Coal Co., Ltd.
Ogdensburg Coal & Towing Co., 134 McCord St.
Routh, F. A. & Son, Board of Trade Bldg.
Weaver, F. P. Coal Co., Ltd., 263 St. James St.

SASKATCHEWAN

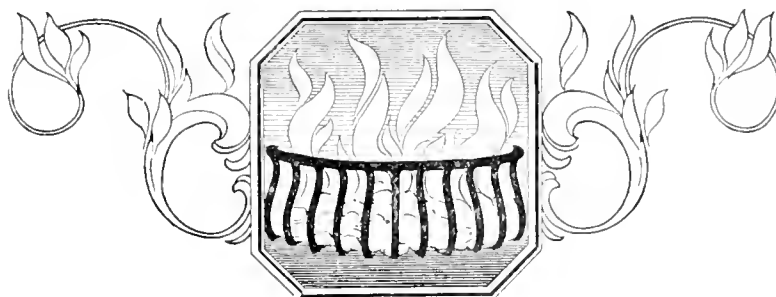
REGINA

Coal Sellers, Ltd., 25 Canada Life Bldg.

SASKATCON

Coal Sellers, Ltd., 213 22nd St.
Doyle, W. E.
Wholesale Fuel Co.

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New England States

NEW ENGLAND consumes annually about 30,000,000 tons of bituminous and 10,000,000 tons of anthracite coal. Of the bituminous coal, between 8,000,000 and 10,000,000 tons come in all-rail and the balance by water, transshipments being made from the ports of New York, Philadelphia, Baltimore, Hampton Roads and Charleston.

The first three named ports provide low volatile coals from the Central Pennsylvania, Meyersdale, Somerset and Georges Creek regions, and high volatile coals from the Pittsburgh, Youghiogeny and Fairmont regions. The three Hampton Roads terminals ship low volatile coals from the New River, Pocahontas and Tug River districts, and high volatile coal from the Kanawha, Elkhorn, Clinch Valley and Southwestern Virginia districts. Charleston sends a small amount of coal from the last named district.

None of the bituminous coal shipped into New England is used for domestic purposes.

Anthracite coal is brought in both by rail and by water. It is used largely for domestic purposes, the smaller sizes serving for the generation of steam.

Distributing Agencies and Wholesale Coal Dealers, with offices in the cities below mentioned, will be found represented on the pages which follow.

BOSTON

HARTFORD

New England Coal & Coke Co.

Miners and Shippers of

Standard Steam and Gas Coals

From the

New River, Pocahontas, Pennsylvania
and Fairmont Fields

Own and Operate Largest Modern Coal Carrying Fleet Under American Flag

FLEET COMPRISES

Three modern steamers, carrying capacity of each 7,300 tons; two steamers—
carrying capacity of each 3,000 tons. Five sea-going tugs.

Fourteen sea-going barges—capacity of each ranging from 1,000 to 2,400 tons.

Combined carrying capacity steamers and barges—61,000 tons.

LOAD COAL AT ALL ATLANTIC PIERS

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Cable Address—Massco, Boston

See Page 1043

Scotts Tenth Edition

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542 Cunard Building
NEW YORK, N. Y.

1305 Continental Building,
BALTIMORE, Md.

Pennsylvania Field Office - - - 123 Market Street, Johnstown, Pa.

Northern Coal Company

141 Milk Street
BOSTON, MASSACHUSETTS

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COALS

Originating in West Virginia

As Well as the Better Grades of
Bituminous Mined in Pennsylvania

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Cable Address: NORTHCOAL., Boston, Mass., and Norfolk, Va.

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C. & O. Building
Newport News, Va.

SHIPPING PIERS
Hampton Roads, Va., Ports
Baltimore, Md., Ports
New York, N. Y., Ports
Philadelphia, Pa., Ports

C. H. Sprague & Son Co.

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70 Kilby Street, BOSTON, MASS.

New River
Pocahontas
Amherst By-Product
Amherst Gas
Suffolk

} **COALS**

Unexcelled Fuels for Steam, By-Product and Gas Purposes

Domestic and Export Cargoes Loaded and
Bunkers Furnished all Ports

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Capacity, 20 Cars Daily

*We Invite Correspondence with both Miners and Consumers
of High Grade Bituminous Coals*

ATLANTIC STATES

New York

Delaware

New Jersey

Maryland

Pennsylvania (Eastern)

Virginia

THE Atlantic states are heavy users of both anthracite and bituminous coal. Anthracite is in general use for household purposes as far south as Washington, D. C., and as far west as the Allegheny mountains. About 60 per cent. of the entire production of the mines is used by this group, this including the smaller sizes used in power plants.

In addition to the vast amount of coal consumed by local industries, much of that sent to Philadelphia and New York is used for bunkers, for export and for coastwise trade. The Central Pennsylvania fields provide most of the coal transshipped from New York.

Other districts furnishing coal for this group of states are the Northern Pennsylvania, Pittsburgh, Connellsville, Greensburg, Clearfield, Somerset, Georges Creek, Randolph-Barbour, Upper Potomac and Fairmont. Fairmont steam coal enjoys a high standing among the industries of Eastern Pennsylvania and New Jersey. Coal from the smokeless fields of West Virginia is much used in the District of Columbia and Virginia.

Distributing Agencies and Wholesale Coal Dealers, with offices in the cities below mentioned, will be found represented on the pages which follow.

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STEAM
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STEAM

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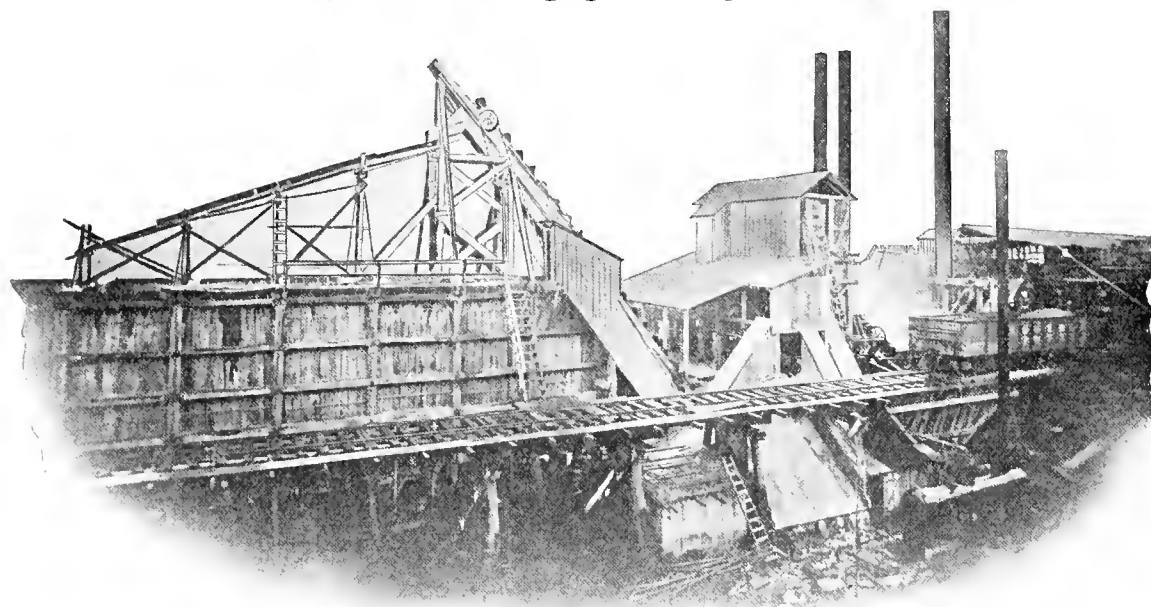
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115 BROADWAY, NEW YORK, N. Y.

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QUALITY

TENNESSE COAL



ANALYSES OF TENNESSEE ASTOR COLLIERIES CORPORATION COALS*

SAMPLE NO. 4263, ENTRY E., NELSON SEAM

Moisture	1.38
Volatile Matter	34.19
Fixed Carbon	61.19
Ash	3.24
Sulphur .....	.162
B. T. U.	14,706
Fusion Point of Ash.....	2525° F.
Total Carbon	81.04
Hydrogen	5.35
Nitrogen	3.35
Oxygen	6.86

SAMPLE NO. 4264, MT. PIKE, NELSON SEAM

Moisture	1.29
Volatile Matter	33.59
Fixed Carbon	60.77
Ash	4.35
Sulphur .....	.560
B. T. U.	14,569
Total Carbon	82.02
Hydrogen	6.13
Nitrogen	3.34
Oxygen	3.60

SAMPLE NO. 4262, PROSPECT, NELSON SEAM

Moisture	1.50
Volatile Matter	28.47
Fixed Carbon	63.03
Ash	7.00
Sulphur .....	.364
B. T. U.	14,163
Fusion Point of Ash.....	2432° F.
Total Carbon	79.22
Hydrogen	6.04
Nitrogen	3.07
Oxygen	4.34

SAMPLE NO. 4265, NORTH POLE, SEWANEE SEAM

Moisture	1.20
Volatile Matter	32.81
Fixed Carbon	62.74
Ash	3.25
Sulphur .....	.952
B. T. U.	13,741
Total Carbon	81.06
Hydrogen	7.15
Nitrogen	3.48
Oxygen	4.11

SAMPLE NO. 51698, NELSON MINE, NELSON SEAM

(Analysis by Roane Iron Company)

Moisture	1.27
Volatile Matter	35.60
Fixed Carbon	60.22
Ash	4.18
Sulphur57

*Made by Chattanooga Chemical Laboratory, Chattanooga, Tenn.

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QUALITY

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CAPSTONE Youghiogeny—Westmoreland
and Kanawha Gas Coals

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1468

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Green } 7712
 } 7713
 } 7714

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RELIABILITY AND SERVICE

Only a handful of people, relatively speaking, can in memory recall Lincoln's first call for volunteers, yet at that time our house had been in existence twenty-five years.

Founded in 1836, and with a trail of 85 years behind us, we have learned thoroughly the parts which RELIABILITY and SERVICE play in business success. In our pioneering days there was far less opportunity for sales agencies to discriminate in the selection of fuels than there is today, nevertheless from the day of our founding our name has always been synonymous with high quality and dependability.

Four-score years have demonstrated to us the value of good will. They have shown us that public esteem is based on keeping faith and that keeping faith is based on good goods and an unfailing service. We glory in our years only for what they have taught us. We are not resting on our laurels. We are as keen to serve you as yearlings, whether it be to advise with you on your fuel requirements, or to supply your needs. The opportunity of conferring with you is solicited.

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Anthracite & Bituminous Mines

WHITE ASH ANTHRACITE
RED ASH ANTHRACITE
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MARYLAND GEORGES CREEK SMITHING COAL
WEST VIRGINIA SMOKELESS COAL
WEST VIRGINIA HIGH VOLATILE STEAM COAL
WEST VIRGINIA GAS AND BY-PRODUCT COAL

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on Individual Cargoes and Time Contracts

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Unexcelled for Steam and Domestic Purposes

Also

"B. V." SMITHING COAL



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SELLING AGENTS FOR



Produced by

The New River Collieries Company

See Page 1044 of This Book for Description of Mines, Analysis, Etc.

Southern Office
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Shipping Offices
Sun, W. Va., and Eccles, W. Va.

Tidewater Office
Board of Trade Bldg., Norfolk, Va.

New England Distributors
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35 Congress St., Boston, Mass.

Western Distributors
The Consolidation Coal Company
Dime Bank Bldg., Detroit, Mich.

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River Plate
Chadwick, Weir & Co., Ltd.
Buenos Aires, Montevideo

West Indies
Prudencio Bravo
Royal Bank of Canada Bldg.
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Chile
Geo. C. Kenrick & Co.
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JOHNSTOWN, PA.
Phone Bell 220

1016 Hippodrome Bldg.
CLEVELAND, OHIO
Phone Main 130

See Page 980 in the West Virginia Section

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General Office
27 William St., New York City

Southern Office
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Cable Address, "Collieries," New York, U.S.A.

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INCORPORATED

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Anthracite and Bituminous Dependable Coal and Coke

COKE, LOW IN SULPHUR AND ASH FOR BLAST FURNACES AND FOUNDRIES

ALL SIZES AND ANY QUANTITY

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CLEARFIELD, PA.

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BOARDMAN MILLER VEIN COAL

PRODUCTIVE CAPACITY ABOUT 1200 TONS DAILY

Location of Mines

The mines of the Potts Run Coal Company are located in Clearfield County, Pennsylvania, on the Beech Creek Division of the New York Central Railroad. The low or Clearfield rate of freight applies to all Eastern points.

Quality

Boardman is a low sulphur coal with a high fusing point of ash and excellent evaporating powers. It runs low in ash content because Boardman coal is mined by the most modern devices and receives the best of preparation under the supervision of experienced engineers.

AVERAGE ANALYSIS

Moisture .....	.56
Volatile Matter	21.98
Fixed Carbon	70.76
Ash	6.70
	<hr/>
	100.00

Sulphur91
B. T. U.	14,643
Fusing Point	2,600°

"QUALITY WITH SERVICE"

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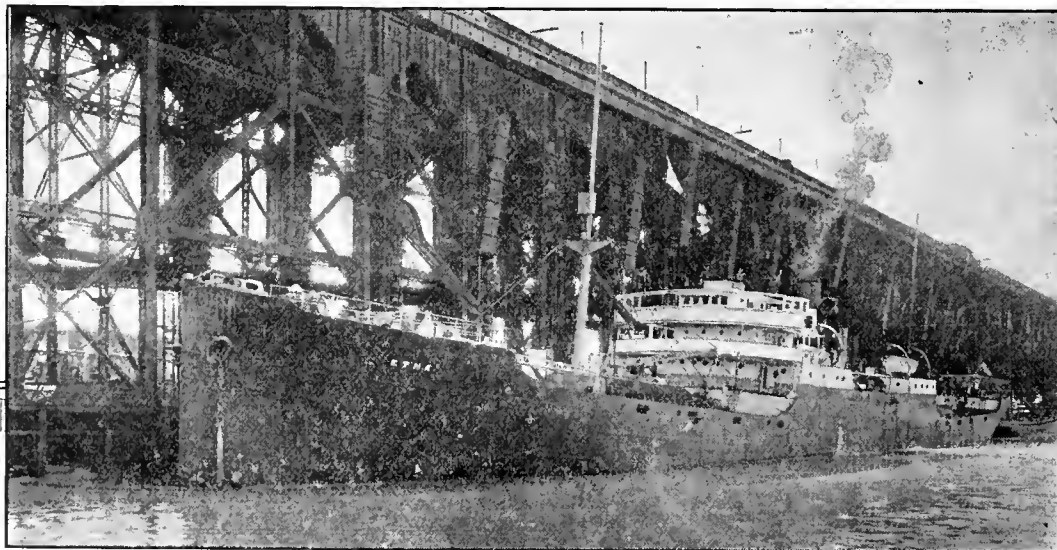


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THIS CERTIFICATE, executed in triplicate, is forwarded to the consignee of every shipment of "SURESTEAM" COAL, as an evidence that every specification has been faithfully observed before the consignment leaves port.

S. S. "Etna"

Cargo and Bunker—Loading at Hampton Roads for Buenos Aires Bunker Station



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 COAL

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and MEDITERRANEAN COUNTRIES

Agent General for Italy
C. TOMASSETTI
Cable Address: "Cetomas, Genova" GENOA, ITALY

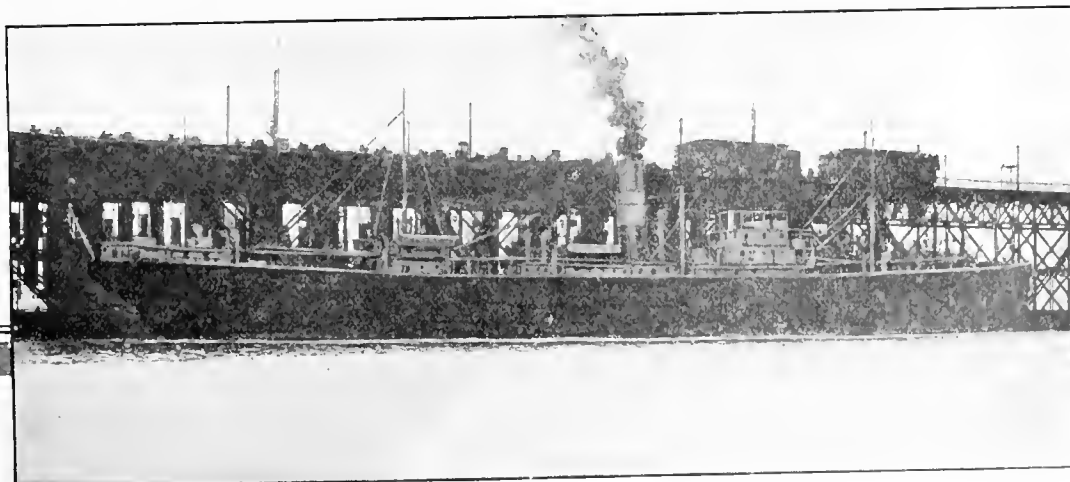
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CUBA AND THE WEST INDIES
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In dealing with the ERIE COAL AND COKE CORPORATION, you are in direct contact with mine owners and shippers, operating a world-wide organization equipped to give you SERVICE, without the additional profit of the middleman.

S. S. "Caprera"

cargo and Bunkers—Loading "SURESTEAM"
COAL at Hampton Roads, November, 1921



ERIE COAL AND COKE CORPORATION

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Bituminous **ERIE SURESTEAM COAL** Locomotive

MINE OWNERS AND SHIPPERS

WITH a capacity of 1,000,000 tons per annum, the ERIE COAL AND COKE CORPORATION can offer a sure and continuous supply of high-grade fuel.

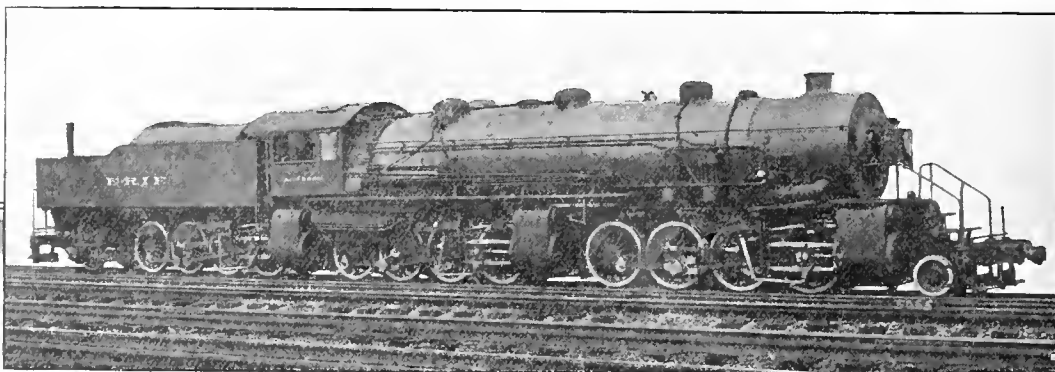
In the last five years, there has never been a day lost through the failure of the shipment of a single ton of coal due to strikes, lockouts or labor troubles of any nature whatsoever, from the mines of this Company or its parent or associated corporations.

The Locomotive Coal of the ERIE COAL AND COKE CORPORATION is particularly high in cohesive strength—among the highest of the bituminous coals mined in this country. Shipments of lump coal have shown an unusually small break-up due to the wear-and-tear of ordinary handling, or working in shipment.

*The Most Efficient Fuel Being Supplied for
American-Type Locomotives in Foreign Countries*

The Largest Locomotive
in the World

Uses "SURESTEAM" COAL on one of
the heaviest grades in the Eastern States



Courtesy
Baldwin
Locomotive
Company

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Erie SUREOIL Brand

"12+" C. I. F.	"14/16 Bunker C" Single Cargoes or Period Contracts	"19/21" F. O. B.	"24 26" F. O. B.
-------------------	--	---------------------	---------------------

F. O. B.	Domestic Fuel and Diesel Bunker Gas Oil	C. I. F.
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KEROSENE 150 W. W.			
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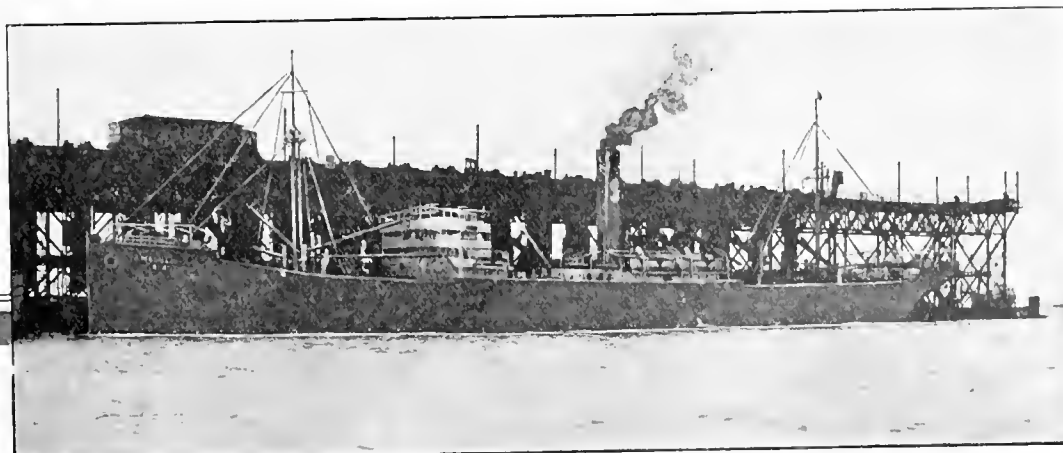
"60/62" F. O. B.	GASOLENE "58/60 (New Navy)" Cargoes or Cases	"64/66" C. I. F.
---------------------	--	---------------------

Barrels	LUBRICATING OILS Tank Cargoes	Cases
---------	----------------------------------	-------

A "SURESTEAM" COAL SHIPMENT

S. S. "M. S. Dollar"

Cargo and Bunkers—Loading at Hampton Roads, C.I.F., for Genoa, Italy



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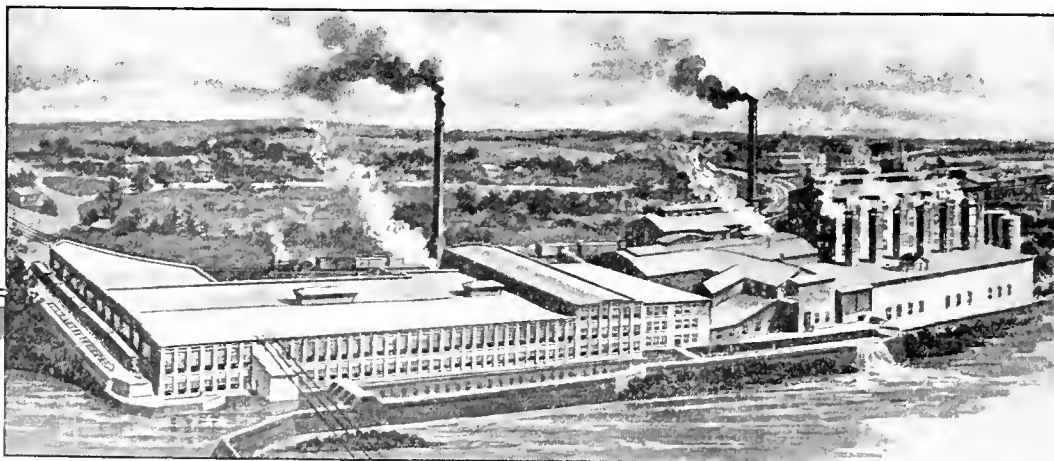
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Manufacturing, Steamship and Railroad Use

COAL FOR

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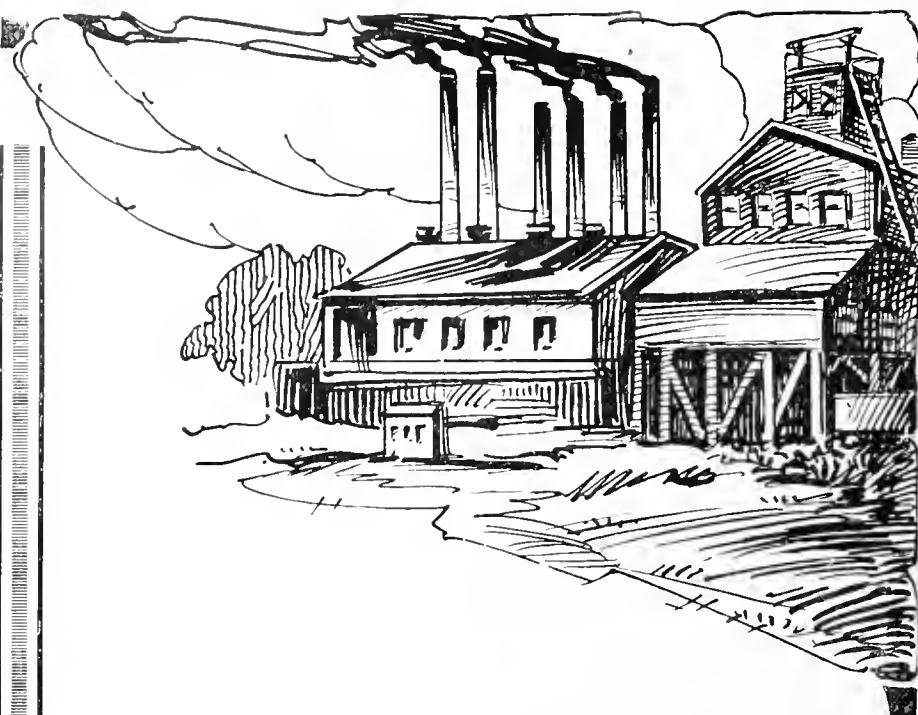
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Mt. Vernon

Bethel

Havmar

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LOW VOLATILE		MEDIUM LOW VOLATILE		MEDIUM HIGH VOLATILE		HIGH VOLATILE STEAM		ILLUMINATING GAS, BI-PRODUCT, AND METALLURGICAL COAL - Hard Structure				CONNELLSVILLE COKING COAL	
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Under 20%		20% to 27%		OVER 27%		Run of Mine		OVER 31% VOLATILE				OVER 36% VOLATILE	
Class No.		Class No.		Class No.		Class No.	Class No.	Class No.	Class No.	Class No.	Class No.	Class No.	Class No.
100	Ash under 7.50%	110	Ash under 7.50%	120	Ash under 7.50%	130	140	150	160	170	180	190	Ash under 7.50%
	Sulphur under 1.25%		Sulphur under 1.25%		Sulphur under 1.25%								Sulphur under 1.25%
101	Ash 7.50% to 9.50%	111	Ash 7.50% to 9.50%	121	Ash 7.50% to 9.50%	131	141	151	161	171	181	191	Ash 7.50% to 9.50%
	Sulphur under 1.25%		Sulphur under 1.25%		Sulphur under 1.25%								Sulphur under 1.25%
102	Ash 9.50% to 12%	112	Ash 9.50% to 12%	122	Ash 9.50% to 12%	132	142	152	162	172	182		
	Sulphur under 1.25%		Sulphur under 1.25%		Sulphur under 1.25%								
103	Ash under 7.50%	113	Ash under 7.50%	123	Ash under 7.50%	133	143	153	163	173	183	193	Ash under 7.50%
	Sulphur 1.25% to 2%		Sulphur 1.25% to 2%		Sulphur 1.25% to 2%								Sulphur 1.25% to 2%
104	Ash 7.50% to 9.50%	114	Ash 7.50% to 9.50%	124	Ash 7.50% to 9.50%	134	144	154	164	174	184	194	Ash 7.50% to 9.50%
	Sulphur 1.25% to 2%		Sulphur 1.25% to 2%		Sulphur 1.25% to 2%								Sulphur 1.25% to 2%
105	Ash 9.50% to 12%	115	Ash 9.50% to 12%	125	Ash 9.50% to 12%	135	145	155	165	175	185		
	Sulphur 1.25% to 2%		Sulphur 1.25% to 2%		Sulphur 1.25% to 2%								
106	Ash under 7.50%	116	Ash under 7.50%	126	Ash under 7.50%	136	146	156	166	176	186		
	Sulphur over 2%		Sulphur over 2%		Sulphur over 2%								
107	Ash 7.50% to 9.50%	117	Ash 7.50% to 9.50%	127	Ash 7.50% to 9.50%	137	147	157	167	177	187		
	Sulphur over 2%		Sulphur over 2%		Sulphur over 2%								
108	Ash 9.50% to 12%	118	Ash 9.50% to 12%	128	Ash 9.50% to 12%	138	148	158	168	178	188		
	Sulphur over 2%		Sulphur over 2%		Sulphur over 2%								
109	Ash over 12%	119	Ash over 12%	129	Ash over 12%	139	149	159	169	179	189		
250	Best Stained under 30% Volatile	300	Poorer Stained under 30% Volatile				200	200	Slack		200	Slack	
350	Best Stained over 30% Volatile	400	Poorer Stained over 30% Volatile										

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Extensive facilities to supplement its own production by securing tonnage from other operations by maintaining a personnel at all three of its offices having a thorough knowledge of the products of individual mines, and knowing by experience the coal best suited to a particular plant condition.

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High grade Pennsylvania and West Virginia
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*Mined from the "B" or Miller Seam, and the "D" or Old Moshannon Seam.
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Established 1902

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South Fork
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Empire Coal Mining Company

INCORPORATED 1895

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MINED IN THE CLEARFIELD REGION

SHIPMENTS ALL-RAIL AND
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We maintain a separate department in the field for the purchase of all grades of high and low volatile coals and as a result are in a position at all times to furnish coals of any character.

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Shaft
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Ashman
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Foster
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BITUMINOUS

"OVER EIGHTY YEARS OF FAITHFUL SERVICE"

THE HISTORY OF THE COMPANY SPEAKS FOR ITSELF

This well known company is one of the pioneer coal firms of Pennsylvania, having been established originally in 1838, under the name of Roberts, Walton & Co., the firm being composed of Asa Packer, Joseph B. Van Dusen, Joseph Walton and William H. Roberts. Mr. Walton and Mr. Roberts retired from the firm about 1843, and in the year 1846 Asa Packer retired at the time the Lehigh Valley Railroad was incorporated, and became its first President.

Mr. Van Dusen associated Mr. Chas. F. Norton with him in 1848, under the firm name of Van Dusen, Norton & Co., and continued until 1860, when Mr. Van Dusen retired and Mr. Audenried, father of the present Judge of the Common Pleas Court of Philadelphia County, joined with Mr. Norton under the title of Audenried, Norton & Co. Some years later, after the death of both Mr. Audenried and Mr. Norton, the business was continued by Charles D. Norton, son of Chas. F. Norton, under the firm name of Gorrell, Norton & Co., and later was changed to Chas. D. Norton & Co.

In 1903 the company was incorporated as the Chas. D. Norton Company, and continued until the death of Mr. Norton in July, 1916.

The present corporation, Chas. D. Norton Coal Company, was then formed from the organization of the old company, and has for its officers Walter P. Brown, as President, a brother-in-law of the late Charles D. Norton, and Joseph B. Givin, as Secretary and Treasurer, both of whom were associated with the Chas. D. Norton Co. for many years. Mr. George M. Chew formerly connected with the old company, is Sales Manager of the Chas. D. Norton Coal Company.

The Company is sole mine agents and shippers of Anthracite and Bituminous into all regions of the United States and Canada, specializing on Anthracite from mines located on the Philadelphia & Reading, Pennsylvania, and Delaware & Hudson Railroads, and Bituminous coal from the Pennsylvania, West Virginia, Western Maryland and Georges Creek fields.

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President

T. R. WILLIAMS
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PHILADELPHIA

SALES AGENTS

Dilltown Smokeless Coal Company

Shipments over B. R. & P. and P. R. R.

Bald Eagle Coal Mining Company

Low Sulphur Westmoreland Gas Coal

Equipped to Screen All Coals to Any Desired Size

INQUIRIES INVITED



SHIPPERS
BITUMINOUS

SCOTTS RUN (W. Va.) DISTRICT

Especially adapted for Locomotive Fuel, Cement Kilns, Rolling Mills, Brick Burning, and all general steam purposes where a quick burning long flame coal is required. Special preparation.

SMITHING

CAMBRIA COUNTY
Miller Vein
DECACTOP
Barnett Seam

SEMI-GAS

CONNELLSVILLE STEAM
AND BY-PRODUCT
Sewickley & Pittsburgh
Seams

LOW VOLATILE

WINDBER, LILLY, MOSHANNON,
JOHNSTOWN
Miller Vein, Clearfield & C. Prime

GREENSBURG & UPPER
FREEPORT R/M

MEDIUM VOLATILE

B. E. & P., LATROBE
Upper Freeport & Pittsburgh Seam

MONONGAHELA, PITTS-
BURGH SEAM

BEST COALS FOR AUTOMATIC STOKERS AND RAILROAD FUEL

GAS COALS

WESTMORELAND, YOUGHIOGHENY
AND FAIRMONT

COKE

Standard Connellsville
FOUNDRY AND FURNACE
Low Sulphur, Low Ash

CONSUMERS: Selection from the above coals will settle
your fuel problems.

OPERATORS: We can place your coals to advantage.

General Office

Fayette T. & T. Building

Uniontown, Pa.

Eastern Sales Offices

Pennsylvania Building

Philadelphia, Pa.

Munsey Building

Baltimore, Md.

J. H. WEAVER & Co.

Sole Agents

Colver and Revloc Bituminous Coal

Unexcelled for All Steam Purposes

PARTICULARLY ADAPTED FOR STEAMSHIP BUNKERING

Low Volatile Matter, Ash and Sulphur
High Fusing Point of the Ash
High British Thermal Units

Large Output; Uniform Quality

THE COAL PASSES OVER PICKING TABLES, INSURING PERFECT PREPARATION

Cost of Transportation is Such an Important Factor that Only the Best Quality, low Ash Coal is Worthy of Consideration, Therefore We Recommend

Colver and Revloc

As Containing the Elements of Economy and Efficiency

J. H. Weaver & Co.

Miners and Shippers

Bituminous and Gas Coal

General Offices
Land Title Building
PHILADELPHIA, PA.

Branch Office
25 Broadway
NEW YORK, N. Y.

Shipping Piers
NEW YORK PHILADELPHIA BALTIMORE

WENTZ COMPANY

Miners and Shippers

of

**DEPENDABLE
COAL**

ANTHRACITE

Hazle Brook
Maryd
Midvalley
Upper Lehigh
Raven Run

COKE

Foundry
Furnace

BITUMINOUS

PENNSYLVANIA

LOW VOLATILE

Somerset
Clearfield

HIGH VOLATILE GAS

Westmoreland
Youghiogeny

WEST VIRGINIA

Gas and Steam
Coking Coals

**Garfield, Miller Vein, Smokeless
Orrmont - Fairmont**

*Our Combustion Engineering Department will furnish you
with information regarding the type of fuel best suited to
your installation and the most efficient method of handling it*

EASTERN OFFICE
90 West Street
NEW YORK

GENERAL OFFICE
1727 Land Title Building
PHILADELPHIA

WESTERN OFFICE
Dime Bank Building
DETROIT

See Pages 926, 927, 1007

WHITNEY & KEMMERER

Distributors of

Anthracite Bituminous and Coke

from any region to any point North, South, East or West.

HIGH GRADE GAS COALS

BEST GRADES OF LOW VOLATILE BITUMINOUS

Coal for Railroad and
Bunkering Purposes

ANTHRACITE
Prepared and Steam Sizes

INQUIRIES SOLICITED

Pennsylvania Offices

Philadelphia

Mauch Chunk Pittsburgh Altoona

New York
New York City Buffalo

Massachusetts
Boston

Maryland
Baltimore

Virginia
Norton

Whitney & Kemmerer

Cable Code: WHIT KEM

Campbell, Peacock & Kinzer

INCORPORATED

Miners and Shippers

Quality

BITUMINOUS COAL
Coke

Service

Ajax South Fork

Miller Vein Smokeless

Caldwell

Miller Vein Smokeless

Hercules

Smokeless

Monitor

High Volatile

GENERAL OFFICES

Syracuse, N. Y.
Post Standard Bldg.

Widener Building, Philadelphia

Mine Office
Johnstown, Pa.

Boston Office
Coastwise Coal Co.
113 State St.

New Haven Office
Second Nat'l Bank Bldg.

New York Office
D. F. Gallagher, Sales Mgr.
30 Church St.

Montreal Office
F. A. Routh & Son
Board of Trade Bldg.

Crozer-Pocahontas Company

1503-09 NORTH AMERICAN BUILDING,

PHILADELPHIA, U. S. A.

TIDE WATER PIERS
LAMBERTS POINT, VA.
GREAT LAKES
SANDUSKY DOCKS, O.
TOLEDO, O.



MINES IN McDOWELL CO., W. VA.
ON NORFOLK & WESTERN RY.
CROZER COAL & COKE CO.
UPLAND COAL & COKE CO.
POWHATAN COAL & COKE CO.
LYNCHBURG COAL & COKE CO.
EUREKA COAL & COKE CO.
PEERLESS COAL & COKE CO.
PAGE COAL & COKE CO.

Shippers, Exporters and Bunker Suppliers of

STANDARD POCAHONTAS COAL

OVER 2,000,000 TONS ANNUALLY

CHICAGO
1105 Fisher Bldg.

NORFOLK, VA.
Citizens Bank Bldg.

BLUEFIELD, W. VA.
Law and Commerce Bldg.

BOSTON
50 Congress St.

LONDON
17 St. Helens Place

Logan Coal Company

502 Harrison Building

Philadelphia

Pennsylvania

Steam and Smithing Coals

COAL is being sold more and more by its trade name or trade mark. The custom originated a good many years ago, possibly in the anthracite region, but Illinois was the state that put life into it.

Considering the 7,000 coal mines in the United States, the number of well known brands is comparatively small. Geographical location, plentitude of coal deposits and prohibitive freight rates will always act as a deterrent to nation-wide usage of any particular coal, no matter how well and favorably it may be known.

Within reasonable limits, however, any good coal may aspire to leadership and fame. If it be a steam coal, it should, like flour, be used "Eventually, Why Not Now?" If its qualifications are, like soap, chiefly domestic, it may be pertinent to inquire, "Have you a bin full of Black Beauties in your home?" Short, snappy and expressive trade names are as effective in establishing a brand of coal in the public mind as with any other commodity. May their use increase.

J. J. BROWN, President
M. W. O'BOYLE, Treasurer

J. F. O'BOYLE, Secretary
C. M. O'BOYLE, General Manager

PITTSTON COAL MINING COMPANY

PITTSTON, PA.

MINERS AND SHIPPERS OF THE

CELEBRATED

HADLEIGH HIGH GRADE
ANTHRACITE COAL

A clean fresh mined free burning coal of a quality without comparison for Domestic and Steam usage.

Hadleigh High Grade Coal holds its place in the best known market centers where the highest grade Anthracite is in demand.

When you say it with fuel, Hadleigh High Grade Anthracite speaks for itself.

PITTSTON COAL MINING COMPANY

GENERAL OFFICE - - - PITTSTON, PA.

HADLEIGH COLLIERY, SUGAR NOTCH, PA.

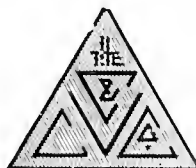
PITTSTON COAL SALES COMPANY

General Sales Agents

W. E. KEARNEY, Representative

The Chesapeake & Virginian Coal Co., Inc.

Quality



Preparation

Service

Annual Capacity 1,500,000 tons

Via

All RailLakesTidewater

"Coals of Quality"

"Ceveco" "Thermos" Brands

For All Purposes

**Splint, Gas, Cannel, Smokeless, By-Product
Steam, Domestic, Smithing**

Run-of-Mine, Lump, Egg, Nut and Slack Sizes From
WEST VIRGINIA OHIO KENTUCKY PENNSYLVANIA

Service Unexcelled for Operator and Consumer. Inquiries Solicited.

Main Office: LYNCHBURG, VA.

BRANCHES

Cleveland, Ohio

Huntington, W. Va.

Cincinnati, Ohio

Roanoke, Va.

LAKE DOCKS

Reeves Coal & Dock Co., Inc.

Minneapolis, Minn.

Superior, Wis.

Imperial Coal Sales Company

Lynchburg, Virginia

EXCLUSIVE SALES AGENTS

IMPERIAL COLLIERY COMPANY IVY WHITE ASH COAL COMPANY
Burnwell, Kanawha Co., W. Va. Ivaton, Lincoln Co., W. Va.

EXCLUSIVE EASTERN AGENTS

IMPERIAL SMOKELESS COAL COMPANY
Quinwood, Greenbrier Co., W. Va.

PRODUCERS OF

THE CHOICE COAL OF WEST VIRGINIA

FOR

Domestic, Steam, Gas, By-Product and Smithing

IMPERIAL SEMI-SMOKELESS COAL

One pound of coal evaporates eleven pounds of water. This plant is fully equipped with the most modern equipment in the way of shaker screens, boom loaders, picking tables, etc., enabling us to give you the most desirable preparation for your particular use. The high carbon content of IMPERIAL SEMI-SMOKELESS COAL gives it a heating power greater than any West Virginia coal of similar character. It is low in ash and sulphur, and is particularly adaptable for BY-PRODUCT, STEAM, ILLUMINATING GAS purposes, and for use in ANNEALING OVENS.

The LUMP and EGG sizes are carefully prepared, being shaker screened and boom loaded, and are especially suited for furnace use.

IMPERIAL SMITHING COAL

Low in sulphur, high fusing temperature. This coal has been successfully used by large railroads and manufacturing plants for a number of years. A trial car will convince you of its economical value.

NO. FIVE BLOCK COAL

IVY WHITE ASH BLOCK, mined at Ivy White Ash Coal Company, a free burning, non-clinkering, ideal domestic splint coal. This coal is big and blocky and being very hard in structure does not disintegrate in transit. It is also excellent for stocking. The mines are fully equipped with modern shaker screens and boom loaders.

IMPERIAL SMOKELESS COAL

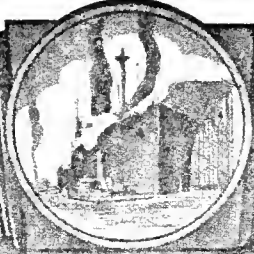
NEW RIVER SMOKELESS COAL of the highest quality, very low in ash and high in carbon. It is unexcelled as a steam producer. Excellent for all uses to which the best Smokeless coal is adapted.

We respectfully solicit your inquiries on any and all grades of coal for which we are agents, referring you to pages 1016 and 1017 for further description as to origin and producers.

Write, Phone or Wire Our Nearest Office

General Office
LYNCHBURG, VA.
C. Lynch Christian, General Manager

Western Office
Union Central Bldg., CINCINNATI, OHIO
R. S. Rogers, Western Manager



EASTERN COAL & EXPORT CORPORATION

COAL

for all purposes

**EXPORTERS OF LOW VOLATILE (SMOKELESS)
AND HIGH VOLATILE (GAS AND
SPLINT) COALS**

Furnished in mine run and prepared sizes

**Shipments from New River, Pocahontas, Kanawha, Thacker,
Fairmont and Pennsylvania Coal Fields**

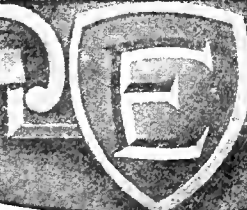
**Steamships bunkered and Export shipments made
at Newport News, Sewalls Point, Lamberts
Point (Norfolk) and other Atlantic Ports**

CORRESPONDENCE SOLICITED

Experienced and responsible representatives desired in foreign countries

**16 BEAVER STREET
NEW YORK, U. S. A.**

Cable Address. EASTCOALEX



Western New York and Canada

ANTHRACITE coal is the standard for domestic use in Western New York, the small sizes being used for making steam. Owing to its proximity to the Eastern Pennsylvania coal fields, the bulk of the anthracite shipped to Lake points is loaded at Buffalo. Bituminous coal is supplied by the Northern Pennsylvania, Central Pennsylvania, Pittsburgh, Panhandle and Belmont districts.

Canada imports from the United States each year from four to five million tons of anthracite and from twelve to sixteen million tons of bituminous coal. Shipments are made by rail through the gateways at Buffalo, Detroit and New England points, and by water across Lakes Superior, Huron, Erie, Ontario and the St. Lawrence River. The bituminous coal used in Canada is drawn largely from the Central Pennsylvania, Northern Pennsylvania, Pittsburgh and Panhandle districts, with lesser amounts from the Greensburg, Youghiogeny, Connellsville, Fairmont, Southern Ohio, Kanawha and Pocahontas districts.

Distributing Agencies and Wholesale Coal Dealers, with offices in the cities below mentioned, will be found represented on the pages which follow.

BUFFALO

TORONTO

SENECA

COAL

MINING

MEMBER AMERICAN WHOLESALE COAL ASSOCIATION

MEMBER ASSOCIATION OF BITUMINOUS COAL OPERATORS OF CENTRAL PENNSYLVANIA

F. W. ALDERMAN, President
H. B. ALDERMAN, Sec. & Treas.
R. H. DAVISON, Gen. Sales Agt.

Specializing in

Reynoldsville Coal

An Efficient Steam Coal—Low in Sulphur and Ash
Screened Sizes

Punxsutawney Stoker Coal

Especially Adapted for Use in Automatic Stokers
Prepared in Nut and Slack Size

Operating
Seneca Mines 1 and 2 on B. R. & P. Ry.
Sales Agents
LANE MINE, Lanes Mills, Pa., on B. R. & P. Ry.
MC EWEN MINE, Near Brockwayville, Pa., on P. R. R.

BROKERS
Shawmut, Algoma, Youghiogheny, Clear-
field Low Volatile, Mecca, Smithing
and Merwin Cannel Coals

**Seneca Coal Mining
Company**
GENERAL OFFICES
708-712 Fidelity Building
BUFFALO, N. Y.

COMPANY

Read Detailed Description of Our Mines on Page 752

Queen City Coal & Coke Co., Inc.

PRUDENTIAL BLDG., BUFFALO, N. Y.

Shippers of High Grade

Anthracite and Bituminous Coals

909 Excelsior Life Bldg., Toronto, Ont.

Branch Offices

106 Clyde Bldg., Hamilton, Ont.

THE publishers of the COAL CATALOG will be pleased at all times to receive criticisms and suggestions on the improvement of the book.

A work of this nature must reflect the needs of the user. While the growth in size of the COAL CATALOG must always be kept within the bounds of convenience, a consideration which must account for our failure to include material of benefit to the few instead of the masses, we, nevertheless, welcome suggestions of all kinds as a means of gauging the needs of the user and the extent of the demands.

E. T. BLINE, President and Sales Manager

Prudential Coal Sales Co.

INCORPORATED

Selling Agents for

Pennsy Coal Company

Producers of

High Grade Steam Coals

MINES LOCATED IN JEFFERSON AND
CLARION COUNTIES
PENNSYLVANIA

SHIPMENTS MADE DIRECT VIA PENNSYLVANIA
OR NEW YORK CENTRAL RAILROADS

834-836 Prudential Building, Buffalo, N. Y.

WIDNOON LUMP—The Spur Behind the Crow

Widnoon Coal Mining Co.

944-946 Ellicott Square

BUFFALO, N. Y.

Producers

**Widnoon Gas and
Steam Coal**

Shippers

Allegheny Valley Steam Coal
Reynoldsville Steam Coal
Vindale Smokeless Coal

F. A. Fish Coal Co., Ltd.

GENERAL OFFICE

TORONTO, CANADA

Mine Office

Union Arcade

- - - - -

Pittsburgh, Pa.

COAL AND COKE

Years of experience enable us to select the proper fuel for a particular need.

The careful service and complete satisfaction rendered our many customers furnishes a responsible outlet for a large tonnage of good quality coal.

LOW SULPHUR GAS COALS

STEAM COALS

SMOKELESS—SMITHING

COKE

We Sell SERVICE as Well as QUALITY

UNIVERSAL COAL CO.

LIMITED

85 Bay Street

TORONTO

CANADA

DISTRIBUTORS

OF

HIGH GRADE

Anthracite & Bituminous

DOMESTIC

COAL

STEAM

Western Pennsylvania and Northern West Virginia

COAL mined within limits of these sections supplies almost all of the local demands, with a considerable surplus remaining. Natural gas is abundant in West Virginia, and this, along with the fact that there are relatively few industries, forces the great bulk of the coal produced to seek outlets in both the East and West.

Much of the coal mined in Western Pennsylvania is used locally in beehive and by-product ovens, for railroad fuel, and for general steam purposes. The balance goes to the East and West, where Western Pennsylvania coals have always been held in high regard.

Both sections supply great quantities of coal for Lake trade during the warm-weather months and a considerable portion goes to Canada.

Distributing Agencies and Wholesale Coal Dealers, with offices in the cities and towns below mentioned, will be found represented on the pages which follow.

Western Pennsylvania

PITTSBURGH	CLEARFIELD
CONNELLSVILLE	PATTON
UNIONTOWN	MAHAFFEY
GREENSBURG	

Northern West Virginia

CLARKSBURG	MORGANTOWN
FAIRMONT	WHEELING

Standard Connellsville Furnace, Foundry and Crushed Coke

Fourteen years of continuous and satisfactory service, in the same location, has made the name — "BIXLER" — stand for quality and fair treatment.

May we not serve you?

Choicest Grades of Pennsylvania, Ohio and
West Virginia Gas, Steam and Domestic Coal

Bixler Coal & Coke Co.

PITTSBURGH, PA.

B. S. HAMMILL

OWNER

HAMMILL MINE No. 2

Service and Quality

PITTSBURGH and YOUGHIOGHENY

GAS—STEAM—BY—PRODUCT

COAL

CAPACITY 1000 TONS DAILY

MINE ON MONTOUR R. R.

SHIPMENTS VIA

PENNSYLVANIA LINES	BESSEMER & LAKE ERIE R. R.
PITTSBURGH & LAKE ERIE R. R.	MONTOUR R. R. and Connections
NEW YORK CENTRAL LINES	ERIE R. R.
BALTIMORE & OHIO R. R.	

Mail and Telegraph Address

CRAFTON - - - PITTSBURGH, PA.

Bell Telephone—WALNUT 218-219

OFFICE: 11 CRAFTON AVE., CRAFTON, PA.

Hillman Coal & Coke Company

First National Bank Building
PITTSBURGH, PA.

Miners and Shippers of
HIGH GRADE HIGH VOLATILE
LOW SULPHUR

PITTSBURGH COAL

— FOR —

GAS MANUFACTURING—ANNEALING—OPEN HEARTH—LOCOMOTIVE FUEL
BY - PRODUCT COKE OVENS
GLASS, LIME, BRICK, CEMENT, TILE, POTTERY AND CHINA BURNING

SOMERSET COUNTY

SMOKELESS
Government Standard

LOW VOLATILE COAL

— FOR —

HIGH GRADE STEAM BY-PRODUCT COKING STEAMSHIP BUNKER

CONNELLSVILLE COKE

— FOR —

BLAST FURNACES FOUNDRIES COPPER & LEAD SMELTERS
Domestic Sizes of Crushed Coke

LARGE TONNAGES SHIPPED PROMPTLY

By Any Railroad Delivery, to Any Part of the U. S. or Canada, or to Seaboard for
Export to Any Part of the World.
River Deliveries by Our Own Transportation Line.

INTERNATIONAL FUEL —AND— IRON CORPORATION

Shippers of
COAL and COKE



Youghiogeny and West Virginia Gas Coals
Pittsburgh, Connellsville, Fairmont and Central
Pennsylvania District Steam Coals

By-Product Coal

Connellsville and By-Product Coke
Foundry, Furnace, Heating, Crushed

YOUR INQUIRIES SOLICITED

PITTSBURGH—Frick Bldg.
CINCINNATI—Union Trust Bldg.

PHILADELPHIA—Stock Exchange Bldg.
JOHNSTOWN—Medea Bldg.

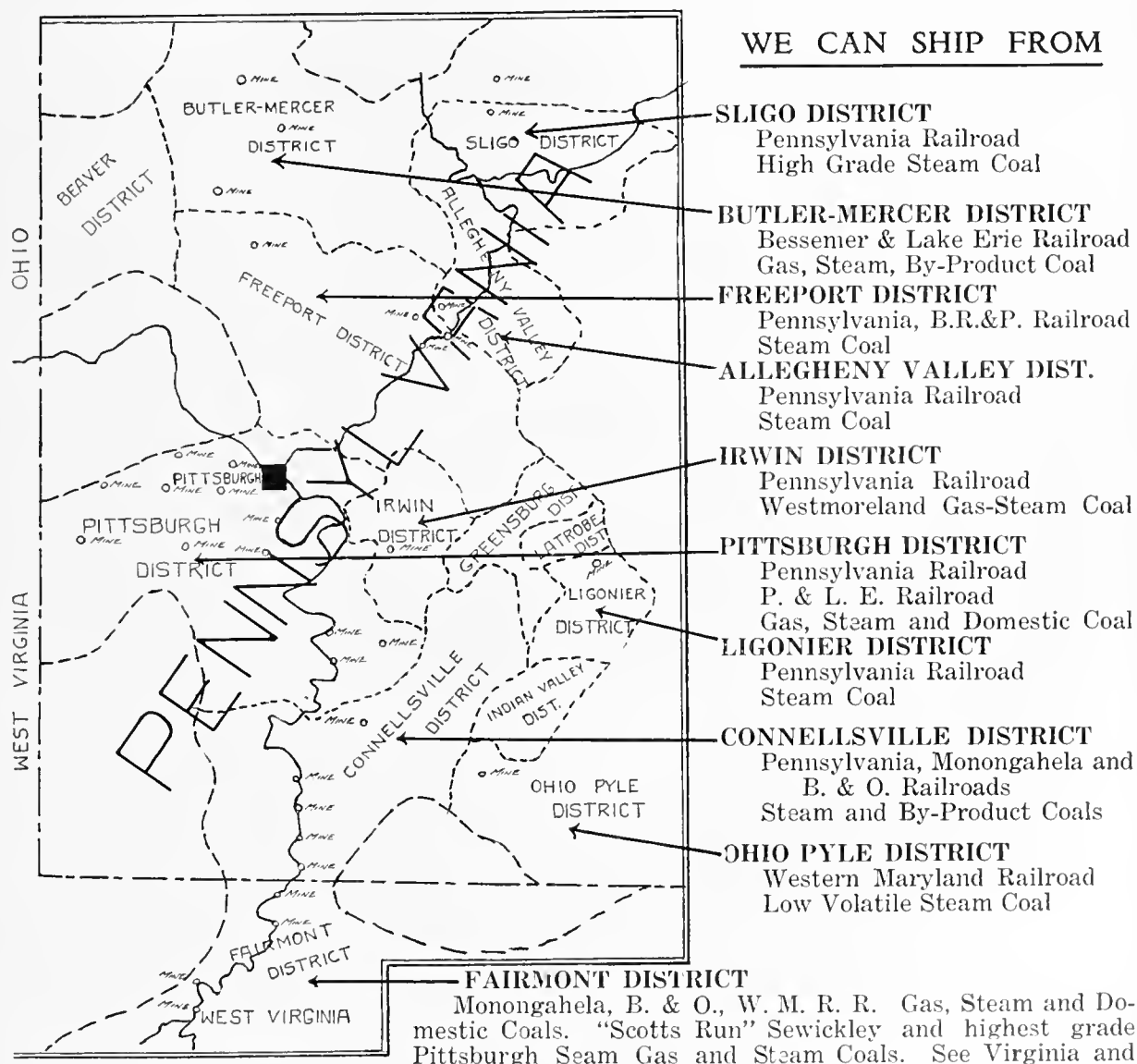
Keister-MacQuown Fuel Co.

"Direct" and "Exclusive"
SALES AGENTS

Mines
Ohio—West Virginia—Pennsylvania

Producing

"HIGH GRADE" GAS, STEAM, BY-PRODUCT COALS
STANDARD CONNELLSVILLE COKE



We have a coal that will fill your requirements and save you money.

SERVICE

QUALITY

FAIR DEALING

UNION ARCADE

PITTSBURGH, PENNA.



PITT FUEL & IRON COMPANY

HOUSE BUILDING, PITTSBURGH, PA.

COAL

Gas
Steam
Smithing
By-Product

COKE

Foundry
Furnace
Heating
Domestic

PIG IRON

ANY RAILROAD DELIVERY

We Can Cut Your Costs With Our Low Sulphur, Low Ash Coals

Let Us Demonstrate

SALES AGENTS FOR

GILL HALL COAL CO.

Gas Coal Mines on
West Side Belt R. R.
In Pennsylvania
500 TONS DAILY

P. & W. COAL CO.

Steam Coal Mines on
P. & L. E. R. R.
In Pennsylvania
500 TONS DAILY

WIRE—PHONE—WRITE FOR QUOTATIONS AND DELIVERIES

GAS COAL

POLAND COAL COMPANY

HOUSE BUILDING, PITTBURGH, PA.

Julian Kennedy President
 R. C. Crawford Vice Pres. & Gen. Mgr.
 J. O. Miller Sec'y & Treas.

MINES AND WORKS

STEAM COAL

Poland, Pa.	-	-	-	Monongahela R. R.	-	-	-	Steam Coal
Preston, Independence, W. Va.				B. & O. R. R.	-	-	-	Smokeless Coal

IRWIN BASIN—WESTMORELAND DISTRICT

Lowber, Pa.	-	-	-	P. R. R.	-	-	-	Gas Coal
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YOUGHIOGHENY DISTRICT

Fayette City, Pa.	-	-	P. & L. E. R. R.	-	-	-	Gas Coal
Ontario Mine, Mancha	-	-	P. R. R.	-	-	-	Gas Coal

I. W. BRISON, Sales Manager

Canonsburg Gas Coal Co. Washington Gas Coal Co. Country Club Coal Co.

Miners and shippers of high grade Pittsburgh thin vein gas coal of the following sizes: 1¼"—¾"—mine run—nut and slack—slack.

This coal is carefully prepared and is especially adapted for use in industrial gas producers, and for steam and domestic purposes.

Mines are located at Canonsburg, Washington and Meadowlands, Pennsylvania, on the Chartiers Division of the Pennsylvania R. R.

Sales Office at
804 First National Bank Building - - - Pittsburgh, Pa.

—Phones—
Bell, Court 2830 P. & A., Main 866

GEO. PAULL, President

GEO. A. MAGOON, Vice-Pres.

Commonwealth Fuel Company

ESTABLISHED 1908

OLIVER BLDG., PITTSBURGH, PA.

BRANCHES: CLARKSBURG, W. VA.; PHILADELPHIA, PA.

Fairmont District—PITTSBURGH SEAM HIGH VOLATILE STEAM AND GAS COALS
B. & O. and Monongahela Railroads

Western Sales Agents For
MARYLAND COAL COMPANY OF WEST VIRGINIA
SIMPSON CREEK COAL CO. (WEST VIRGINIA)
Annual Production 1,200,000 Tons

Operating
DOUGLAS MINE OF DOUGLASS COAL COMPANY, ON
B. & O. R. R. AT ERIE, W. VA.

Pittsburgh District—GAS, BY-PRODUCT, STEAM AND DOMESTIC COALS

Westmoreland—Low Sulphur Gas—P. R. R.
Pittsburgh Steam—Montour R. R., P. C. Y. R. R. and Pgh. & W. Va. Ry.
Double Freeport Steam (6 feet of clean coal)—B. & L. E. R. R.

COKE

STANDARD CONNELLSVILLE FOUNDRY AND FURNACE COKE
HAND DRAWN CRUSHED COKE

MARVEL AND COMPANY

SHIPPERS AND SELLING AGENTS

COAL

STEAM
GAS
COKING
DOMESTIC

TIDEWATER

LAKE
AND
ALL RAIL

COKE

FURNACE
FOUNDRY
CRUSHED
BY-PRODUCT

GENERAL OFFICES

940-944 Oliver Building
PITTSBURGH, PA.

PENN-EMPIRE COAL, INCORPORATED



OUR AFFILIATED OPERATIONS PRODUCE OVER 10,000 TONS PER DAY

WESTMORELAND, YOUGHIOGHENY AND PANHANDLE GAS COALS
—BY-PRODUCT COAL

HIGH, MEDIUM AND LOW VOLATILE STEAM COAL—ALL RAILROADS

STANDARD CONNELLSVILLE FURNACE AND FOUNDRY COKE—
CRUSHED COKE, ALL SIZES

Producers Fuel Company



GAS, STEAM
BY-PRODUCT



SHIPMENTS VIA RAIL, LAKE AND TIDEWATER

EXECUTIVE OFFICES

HENRY W. OLIVER BUILDING, PITTSBURGH, PA.

New York Office. 149 Broadway

Philadelphia Office: Widener Bldg.

Straub-Atkinson

Producers

Coal & Coke Shippers
Company

Furnace, Foundry & Heating Coke

Gas, Steam, By-Product Coal

Union Arcade

Pittsburgh, Pa.

THE G. H. SNOWDON COMPANY

COAL HIGH GRADE **COKE**

**Gas, By-Product, Steam
and Domestic Coals**

FURNACE, FOUNDRY AND CRUSHED COKE

Oliver Building

Phone—Grant 8797

Pittsburgh, Pa.

W. A. STONE & COMPANY

UNIONTOWN, PA.

Standard Connellsville

COKE

Bituminous and Anthracite

COAL

Bell No. 90
Tri-State No. 90

Branch Office
BUFFALO, N. Y.

Fairview Mining Company

Wabash Building

Pittsburgh, Pa.

COAL

FORT PITT COAL & COKE COMPANY

General Office

1015 Farmers Bank Building

PITTSBURGH, PA.

Shippers of

High Grade Steam, Gas and
Domestic Coal

Foundry and Furnace Coke

Exclusive Sales Agents for

McCLANE MINING CO. CLINTON BLOCK COAL CO.

Pittsburgh Gas Coal

Gas and Steam Coal

Sales Agents

Youghiogheny Gas

Panhandle Steam

Westmoreland Gas

Allegheny Valley

Fairmont Steam

Ohio No. 8

Lilly Smithing

Coal and Coke

PENNSYLVANIA, OHIO, MARYLAND,
WEST VIRGINIA AND KENTUCKY
PRODUCTION

Iron and Steel Products, Including Rails

IRON TRADE PRODUCTS COMPANY

Farmers Bank Building

PITTSBURGH, PA.

Branch Offices:

30 Church Street
NEW YORK, N. Y.

Pennsylvania Bldg.
PHILADELPHIA, PA.

THOMAS R. HEYWARD COMPANY

BOWMAN BLDG., PITTSBURGH, PA.

—Miners and Shippers of—

Gas, By-Product, Steam, Smithing

Furnace, Foundry, By-Product

COAL

COKE

Member American Wholesale Coal Association

CONTINENTAL COALS

"All that you can expect of coal at all
that is fair in price"

CONTINENTAL No. 1—Accepted Substitute for Pocahontas
CONTINENTAL No. 2—High Grade Low Volatile
CONTINENTAL No. 3—Good Low Volatile
CONTINENTAL No. 4—Medium Grade Low Volatile
CONTINENTAL No. 5—High Grade Medium Volatile
CONTINENTAL No. 6—High Grade High Volatile
CONTINENTAL No. 7—High Grade Gas Coal

CONTINENTAL COALS depend absolutely upon their merits. They are sold on an analysis basis and win their favor through price, and the satisfaction and service given the consumer.

CONTINENTAL COALS are economical. Their low sulphur and ash count much for savings in the boiler room. Their high heating value gives maximum return per dollar.

CONTINENTAL No. 1 COAL has been extensively accepted in New England and the East in place of West Virginia Pocahontas, because of its almost equal quality, and much lower price. We recommend trial shipments to firms seeking greater coal value.

CONTINENTAL COALS are mined in Central Pennsylvania and take the Clearfield freight rate, the lowest bituminous freight rate East.

CONTINENTAL COAL has never been refused. It is further backed by responsibility in guaranteed satisfaction.

Full information, analysis, and price will be supplied.

Write for "COAL ECONOMY", a Monthly Publication of Interest to Coal Users. It will be sent free upon request.

Continental Bituminous Coal Co.

PENN PUBLIC SERVICE BUILDING
CLEARFIELD, PENNSYLVANIA

Corrado Coal & Coke Interests, Inc.

General Office

Colonial National Bank Bldg., CONNELLSVILLE, PA.

Miners and Shippers of High Grade

**Pittsburgh Gas, By-Product, Steam, Low Volatile
and Domestic Coal**

Manufacturers of

**Connellsville Low Sulphur, Furnace, Foundry and
Heating Coke**

Shipping to All Points on P. R. R., N. Y. C. R. R., and B. & O. R. R.

NELLIE COAL & COKE COMPANY

ALDEN Mine—B. & O. R. R.
Steam Coal and Low Sulphur
Connellsville Coke.
NELLIE Mine—P. & L. E. R. R.
Steam Coal and Low Sulphur
Connellsville Coke.

CORRADO COAL COMPANY

NOS. 1 and 2 Mines—P. & L. E. R. R.
Medium Volatile Steam and Do-
mestic Coal.

BRADDOCK COAL COMPANY

RAINEY Mine—B. & O. R. R.
Low Sulphur Connellsville Coal.

BROADFORD COAL COMPANY

COX Mine—B. & O. R. R.
Low Sulphur Connellsville Coal.

SUTERVILLE COAL COMPANY

CORRADO Mine—B. & O. R. R.
Youghiogheny Gas Coal.

CORRADO GAS COAL COMPANY

ANGELINA Mine—Montour R. R.
Hard Structure Pittsburgh Coal.

LAUREL COAL MINING COMPANY

KEPHART Mine—Western Mary-
land R. R.
Low Volatile Coal.

JIMTOWN COAL COMPANY

COX No. 1 Mine—B. & O. R. R.
Low Sulphur By-Product Coal.

BELL COAL & COKE COMPANY

JOSEPHINE Mine—B. & O. R. R.
Standard Low Sulphur By-
Product Coal.

FINLEYVILLE GAS COAL COMPANY

ELM Mine—B. & O. R. R.
Hard Structure Gas Coal.

CORRADO-SCHENK COAL COMPANY

EAGLE Mine—B. & O. R. R.
Connellsville By-Product Coal.

VANDERBILT COAL & COKE COMPANY

CLARISSA WORKS—P. & L. E. R. R.
Low Sulphur NELLIE BRAND
Connellsville Foundry Coke.
By-Product Coal.

FEDERAL CONNELLS- VILLE COAL & COKE COMPANY

IDA Mine—C. H. & E. R. R.
(B. & O. connection).
Pittsburgh Steam Coal.

CRAWFORD COAL & COKE COMPANY

CRAWFORD Mine—B. & O. R. R.
Low Sulphur By-Product Coal.

CORRADO-FAIRMONT COAL COMPANY

CUNNINGHAM Mine—B. & O. R. R.
Fairmont Gas Coal.

OFFICERS

G. CORRADO
President and General Manager

A. C. CORRADO
Vice President

F. R. YODER
Secretary

JAS. J. ASH
Sales Manager

We are located in the center of the greatest Coal and Coke producing area in Pennsylvania and West Virginia, and in a position to supply the needs of particular consumers of Coal and Coke for any specified purpose.

TELEPHONES Bell 701-702
P. & A. 2

Grace Coal & Coke Company

Miners and Shippers of

Bituminous Gas, Steam and Smithing Coal
Connellsville Foundry, Furnace and Crushed Coke

Rialto Building
GREENSBURG, PA.

To the Consumer:

THIS COMMUNICATION is addressed to the consumer who appreciates the VALUE of using HIGH GRADE COAL.

Our ORGANIZATION does not have an EMPLOYEE who has not spent his ENTIRE LIFE working at the COAL MINES and training at the different MANUFACTURING INDUSTRIES where our FUEL is used, consequently we feel that we know what GOOD COAL and COKE looks like and can SELECT the BEST GRADE of FUEL SUITABLE for the CONSUMER'S PARTICULAR USE.

We have a large tonnage of our own coal and are selling agents for a number of other operators. WE FULFILL OUR CONTRACT OBLIGATIONS AND CAN SUPPLY YOU WITH EXACTLY THE COAL YOU WISH.

YOUR INQUIRIES ARE SOLICITED.

To the Operator:

WE ARE IN THE MARKET AT ALL TIMES FOR ALL OF THE BEST GRADES OF COAL AND COKE AND REQUEST THAT YOU COMMUNICATE WITH US FOR PRICES.

We have a number of operations owned and controlled by the various parties composing this selling agency and YOU will receive the same PRICES and CAREFUL CONSIDERATION as we give to our own COAL.

We have tried since the organization of this company to conduct all transactions on a SQUARE business BASIS. In other words, when we buy coal or coke, WE PAY for it in accordance with standard dates of settlement and the OPERATOR is THROUGH with the TRANSACTION. If acting as the operator's agent on commission, WE FIGHT his BATTLES for HIM and relieve him of the trouble and expense.

We have SALESMEN and agents permanently situated in all parts of the EAST and as far WEST as Chicago, and will be glad at any time to give you references and full reports of our financial standing.

DO YOU NOT THINK IT WILL PAY TO AT LEAST COMMUNICATE WITH US?

R. H. JAMISON, President
J. B. BRUNOT, Vice President

J. R. EISAMAN, Treasurer
A. T. McCONNELL, Secy. & Asst. Treas.

Operators Fuel Agency

Distributors for

BEST BASINS BITUMINOUS

IRWIN GAS COAL COMPANY
MARION GAS COAL COMPANY
WYATT-BINGAMON COAL CO.
AMEND COAL COMPANY



ATLANTIC CRUSHED COKE CO.
NEW ALEXANDRIA COKE CO.
AVELLA COAL COMPANY
PRYOR COAL COMPANY

NINEVEH COAL COMPANY

POOLS 9—10—15—21—31—32—33—34—39—40—60—61

WE BUY AND SELL:

Low Volatile and Steam Coal
High Volatile By-Product Coal
Furnace, Foundry and Crushed Coke

We render a real service and place intelligently with strong concerns each grade of fuel in its normal and natural market.

The management of the Operators Fuel Agency is efficiently conducted by a Board composed of the executive heads of operating companies.

YOUR BUSINESS IS RESPECTFULLY SOLICITED.

GENERAL OFFICES
IRWIN GAS COAL BUILDING
GREENSBURG, PA.
Bell Phone 2100
PAUL JOHNSON, Manager

NEW ENGLAND OFFICE
HUMPHREY BUILDING
ALBANY, N. Y.
Bell Phone Main 6556
CHARLES E. PRITCHARD, Manager

WESTERN OFFICE
PARK BUILDING
PITTSBURGH, PA.
Bell Phone Grant 4089
RICHARD DONALDSON, Manager

EASTERN OFFICE
REAL ESTATE TRUST BUILDING
PHILADELPHIA, PA.
Bell Phone Walnut 6790
JOHN M. WOLFE, Manager

ALLIED MINING COMPANIES



Springfield, Mass.
New England Office

Mahaffey, Pa.
Clearfield County

Quality and Service in Bituminous Coals

Maurer Coal Mining Co., Inc.

PRODUCERS AND SHIPPERS

Bituminous Coal

Service, Satisfaction, Quality

PATTON (Cambria County) PENNSYLVANIA

Fiedler Coal & Coke Company

MORGANTOWN, WEST VIRGINIA

MINERS, SHIPPERS AND WHOLESALERS
OF
THE BEST GRADES OF

Monongahela River	- - - -	Gas
Fairmont-Pittsburgh Vein	- - -	Gas
Scotts Run-Pittsburgh Vein	- -	Gas
Scotts Run-Sewickley Vein	- -	Gas
Connellsville By-Product	- - -	Gas
Connellsville - Kittanning	- - -	Steam
W. Va. Low Sulphur, Upper Freeport		Steam

**C
O
A
L**

Connellsville Furnace and Foundry
W. Va. Low Sulphur Furnace and Foundry

**C
O
K
E**

Capacity 1,000,000 Tons Annually

WE SPECIALIZE IN RAILROAD FUEL

W. AARON GADD
Vice President

C. E. GADD
Sec'y-Treas. and Sales Manager

Gadd-Shaw Fuel Company

General Office

Strand Building, MORGANTOWN, W. Va.

Branch Office

Fayette Title and Trust Building, UNIONTOWN, PA.

Coal Youghiogheny Low Sulphur Gas **Coal**
 By-Product Steam Coking

Coke Standard Connellsville **Coke**
 Foundry Furnace Smelter

OUR MOTTO:
QUALITY, PRICE, SERVICE

Wire—Phone—Write

We Invite and Appreciate Your Inquiries

Bell Phone: Morgantown 1283, 1284, 879-J, 821-W

MORGANTOWN COAL COMPANY

New York City
Philadelphia

General Offices
Morgantown, W. Va.



The Morgantown Coal Company has headquarters in the heart of the most rapidly growing coal fields of America. Its history is one of continuous expansion.

There's a reason, yes, three of them

QUALITY SERVICE
SATISFACTION

No reputable physician will prescribe the same medicine for all ailments—neither will a reliable coal sales agency recommend the same coal for all usages. This is the reason why the Morgantown Coal Company sells coal from mines located in Pennsylvania, West Virginia, Ohio and Maryland, all expertly chosen and closely inspected. From the wide range of mines with output at our disposal we are enabled to supply a coal entirely suited to your needs, whatever they may be.

COAL

STEAM — Bunker coal, locomotive fuel, industrial and power plant use.

GAS — Illuminating, producer and water.

CEMENT BURNING.

TILE AND POTTERY BURNING.

SMITHING.

BY-PRODUCT.

EXPORT.

COKE

BY-PRODUCT — An excellent low-sulphur coke prepared in run-of-oven, stove and nut sizes. Takes West Virginia freight rate to all points.

BEEHIVE — We distribute one of the best produced.

FURNACE COKE.

FOUNDRY COKE.

Let Us Advise With You on Your Coal and Coke Needs

Southern Fuel Company.

MORGANTOWN, W. VA.

BITUMINOUS { Gas
Steam
By-Product

SIZES { Mine Run
Slack
Lump

VEINS { Pittsburgh
Sewickley
Freeport

BRANCH OFFICES

BUFFALO—921 Mutual Life Building (*W. J. Dugan*)

NEW YORK CITY—100 Hudson Street (*E. B. Muns*)

PHILADELPHIA—8 Old Stock Exchange (*T. L. Palmer*)

DETROIT—1214 Dime Bank Building (*John G. White*)

C. S. B. WARD & COMPANY, Inc.

FORMERLY WALTER-WALLINGFORD COAL CO.

MINERS AND SHIPPERS

HIGHEST GRADE STEAM & GAS COALS & COKE

"LET US BE OF SERVICE TO YOU"

901 FIRST NATIONAL BANK BLDG.

PITTSBURGH, PA

C. E. Watson Coal Company

SHIPPERS OF

COAL

COKE

By-Product, Steam and Gas.

Furnace and Foundry.

MR. OPERATOR:—*Your Coal placed to Best Advantage.*

MR. CONSUMER:—*Coal suited to Your Needs is Our First Consideration.*

General Offices: MORGANTOWN, W. VA.

J. M. STROUSS, President

N. S. LOUGH, Vice President

JOHN M. LOUGH, Jr., Gen. Mgr.

JOHN M. HIGGINS, Secretary

W. R. HIGGINS, Treasurer

SHIPMENTS

Monongahela Railroad
Pennsylvania Railroad
New York Central Lines

Higgins Coal Company

Farmers and Merchants Bank Building

MORGANTOWN — — — — WEST VIRGINIA

SAMUEL D. BRADY, President

S. D. BRADY, Jr., Treasurer

A. P. BRADY, Vice-President

Brady Coal Corporation

General Offices

206 DEVENY BUILDING, FAIRMONT, W. VA.

Producers and Shippers

EXCEPTIONAL COALS FOR LOCOMOTIVE FUEL,
EXPORT AND FACTORY USE

Osage Fairmont Gas and Steam Coal

Monon Fairmont Gas and Steam Coal

Abrams Creek Low Volatile Smokeless Coal

Sales Agents

PRODUCERS FUEL COMPANY

Executive Office:

Henry W. Oliver Building
Pittsburgh, Pa.

Branch Offices:

1023 Singer Bldg., New York City
304 Perry Bldg., Philadelphia, Pa.

Shipments Via

BALTIMORE & OHIO RAILROAD

PENNSYLVANIA RAILROAD

NEW YORK CENTRAL LINES

MONONGAHELA RAILROAD

WESTERN MARYLAND RAILWAY

SPECIAL ATTENTION GIVEN TO PREPARATION

Fairmont & Cleveland Coal Company

Miners and Shippers

Fairmont Gas Coal

Daily Capacity 3000 Tons

Shipments via:

Baltimore & Ohio Railroad

Pennsylvania Railroad

New York Central Lines

Refer to Page 996 for Description of Mine

When We Sell, We Ship

General Sales Office

Jacobs Building

--

FAIRMONT, WEST VA.

HARRY C. DRUM, Pres. & Mgr.
Residence Phone 674-J

Office Phone 1691

ROY W. SULLIVAN, Sales Mgr.
Residence Phone 7123 R-13

"The Harry C. Drum Company"

COAL AND COKE

"COAL"

Mines
Fields
Tonnage

"COAL"

Fairmont, Westmoreland,
Connellsville, Preston County,
Gas, Steam and By-Product

"COKE"

Preston County
Connellsville
Foundry, Furnace

Rooms 20-21 American Bldg., 111 Adams St.

FAIRMONT, WEST VIRGINIA

J. E. GASKILL, President
E. M. POWELL, Vice-President

Phone 1597

A. J. SALZER, General Manager
H. M. HILL, Secretary & Treasurer

SOUTHERN COAL CORPORATION

FAIRMONT, WEST VIRGINIA

MINERS AND SHIPPERS

WEST VIRGINIA COALS

STEAM GAS AND DOMESTIC LUMP

Genuine No. 3 Pocahontas	-	-	-	-	-	Run of Mine
" " 3 "	-	-	-	-	-	4 Inch Lump
" " 3 "	-	-	-	-	-	Slack
Salden Block Gas	-	-	-	-	-	Run of Mine
" " " "	-	-	-	-	-	4 Inch Lump
" " " "	-	-	-	-	-	2 x 4 Egg
" " " "	-	-	-	-	-	Slack
Pittsburgh-Fairmont Gas	-	-	-	-	-	Run of Mine
" " " "	-	-	-	-	-	¾ Inch Lump
West Virginia Splint	-	-	-	-	-	Run of Mine
" " " "	-	-	-	-	-	4 Inch Lump
" " " "	-	-	-	-	-	2 x 4 Egg
" " " "	-	-	-	-	-	1 ¼ Inch Lump

J. LEE HORNOR, Inc.

SHIPPERS OF

PITTSBURGH COAL

Fairmont District

Rooms 14-15-16 Hornor Building

CLARKSBURG, W. VA.

Union Bank Building
CLARKSBURG, W. VA.

Land Title Building
PHILADELPHIA

Heat Made Hades Famous

UNCLE DAN HOWARD'S COAL

Made Fairmont Gas Coal Famous

BEST DOMESTIC LUMP IN THE REGION

Also All-Around Fuel for All Purposes
FURNACE, FOUNDRY, LOCOMO-
TIVE AND ALL STEAM PURPOSES

DANIEL HOWARD & COMPANY

CLARKSBURG, WEST VIRGINIA

CLARKSBURG

PHILADELPHIA

Jones-Koblegard Coal Company

Anthracite and Bituminous

COALS

Union National Bank Bldg.

CLARKSBURG, W. VA.

“STOP, LOOK AND LISTEN” has become so familiar a notice to tourists that its warning is frequently disregarded, the penalty in many instances being the loss of life and property.

“Kindly Mention Our Publication When Writing Advertisers” is a standing request of all publishers, but has been urged so often as to become trite and ineffective as a means of connecting the inquirer and the medium.

Both are capital pieces of advice—addressed chiefly in behalf of him who reads. Our interest right now is in the latter. It is our belief that each time a letter of inquiry states the publication which initiated it, there is a direct benefit to the writer. The advertiser is always alert for direct evidence of results. This evidence can come only from the reader. The more evidence, the more support; the more support, the better the medium.

For our mutual interest, therefore—MENTION THE COAL CATALOG.

A. P. OXTOBY COMPANY

WHEELING BANK & TRUST BUILDING
WHEELING, W. VA.

We will be pleased to quote you at any time on:

Pittsburgh Steam and Gas Coals

No. 8 Ohio Steam Coals

Pocahontas By-Product Coal

West Virginia's Best Domestic Coals

Standard Connellsville Coke

Metallurgical or Domestic By-Product Coke

Open Hearth and Blast Furnace Limestone

Refractories, Iron, Steel, Rails

Satisfied Customers are our biggest Asset. Every order, whether large or small, is given earnest and prompt attention, and this, in conjunction with the high quality of the fuels we handle, invariably results in pleasant relationships.

TRY OXTOBY SERVICE ONCE—AND YOU'LL TRY, TRY AGAIN

SOUTHERN WEST VIRGINIA and OHIO

HUNTINGTON, Charleston and Bluefield are the only local industrial centers drawing upon the coal resources of Southern West Virginia, and, in fact, many of the industries in these cities use natural gas. Other than this relatively small amount, plus that used by the railroads, the balance is shipped to the East, finding a ready outlet through tidewater, and to the West to supply steam, domestic and by-product demands.

The location of Ohio with respect to freight rates precludes Eastern shipments, but much of the Ohio output, not used locally, supplies states to the West. Anthracite coal is but sparingly used for domestic purposes.

A considerable portion of the coal mined in these sections is shipped by boat on the Lakes to Canada and the Northwestern states. This coal comes mainly from the Belmont, Cambridge and Hocking Valley districts of Ohio and the Coal River, Logan, Kanawha, Kenova, Pocahontas and Tug River districts of West Virginia.

Distributing Agencies and Wholesale Coal Dealers, with offices in the cities and towns below mentioned, will be found represented on the pages which follow.

Southern West Virginia

HUNTINGTON
CHARLESTON
BLUEFIELD
BECKLEY
MACDONALD

VIVIAN
WELCH
LOGAN
LUNDALE

Ohio

CINCINNATI
CLEVELAND

SPRINGFIELD
COLUMBUS

B. N. FORD, Vice President
Sales Manager



The Matthew Addy Co.

Cincinnati, Ohio

**Operators and Distributors of Heavy
Tonnages Annually**

BY-PRODUCT—DOMESTIC—GAS—STEAM—SMITHING

WEST VIRGINIA

SMOKELESS—SPLINT—GAS—SMITHING

KENTUCKY

ELKHORN—HAZARD—HARLAN

TENNESSEE

JELICO

PENNSYLVANIA

LILLY SMITHING

INDIANA — OHIO

STEAM

COKE

FOUNDRY, FURNACE, DOMESTIC—FROM ALL FIELDS

BRANCH OFFICES

Philadelphia

Pittsburgh

Chicago

St. Louis

Quality—Service—Finance—100 Per Cent.

The C. G. Blake Company

ESTABLISHED 1887

Main Office

1112-1114 First National Bank Building, Cincinnati, Ohio

Export Office: 25 Beaver Street, New York

Southern Office: Haddington Building, Norfolk, Va.

Western Office: Lytton Building, Chicago, Ill.

Newport News, Va. Thurmond, W. Va.

Agents for United Kingdom: Ernest Bigland & Co., Ltd., 7 East India Avenue.
London, E. C. 3, England

Cable Address: BLAKOAL, Cincinnati, New York, Norfolk

Codes: Scott's 10th Ed.; A.B.C. 5th Ed.; Western Union; Watkins; Bentley's; Lieber's
Loading Piers: Newport News, Va.; Sewall's Point, Va.; Lamberts Point, Va.; Toledo, Ohio

COAL

COKE



Cargo and Bunker

Steam and Domestic

BLAKE NAVY STANDARD NEW RIVER SMOKELESS

For Domestic and Export—Steam and Bunker

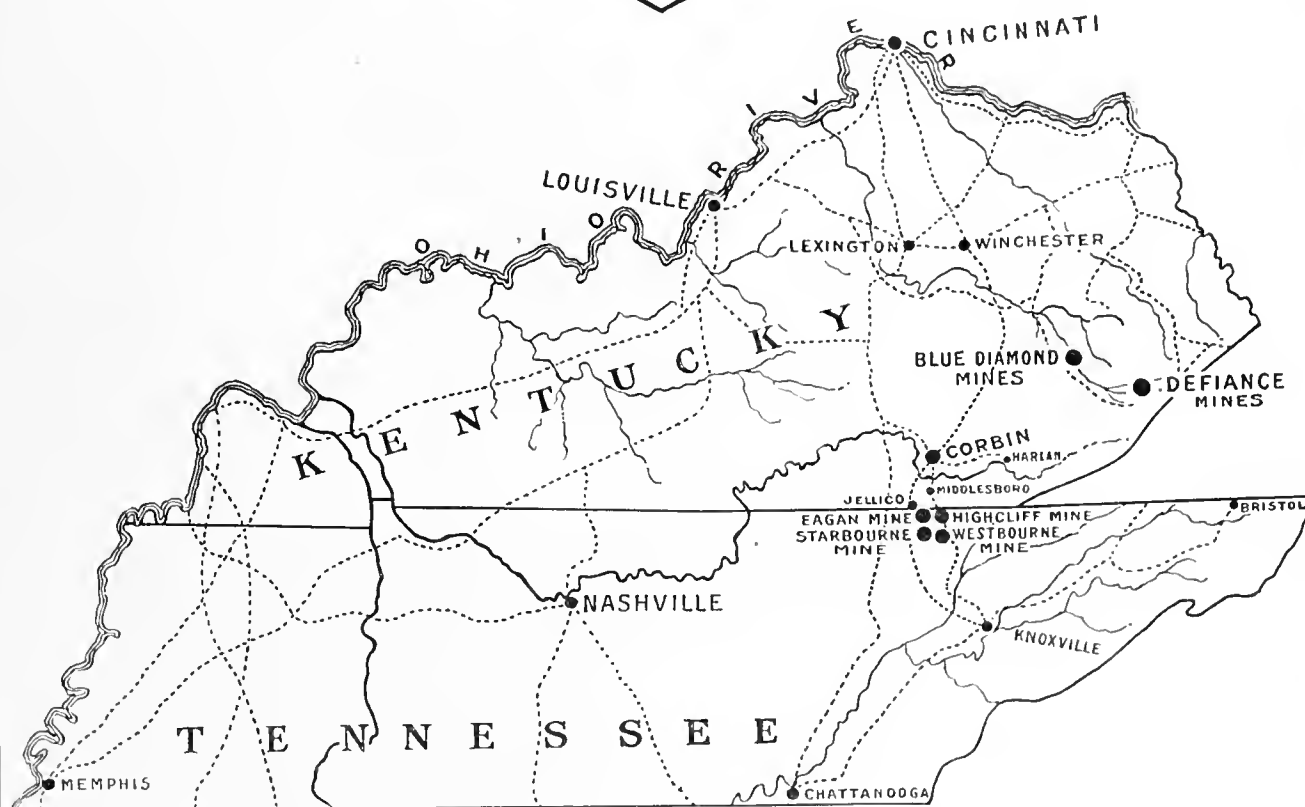
BLAKE PENDENNIS SCREENED SPLINT LUMP

For Domestic and Export

ELKHORN FOR BY-PRODUCT AND STEAM

BLAKE CHAMPION FIRE CREEK SMITHING

With our output of upward of one million tons annually, our experience of 35 years in producing and distributing West Virginia coal and coke enables us to serve the domestic and export trade intelligently and satisfactorily—QUALITY, SERVICE and PRICE considered.



Selling Agents for a group of allied properties in Eastern Kentucky and East Tennessee on L. & N R. R. and Southern Rwy. Systems.

900,000 to 1,000,000 Tons Annual Production Hazard District.

425,000 to 450,000 Tons Annual Production East Tenn. Jellico District.

225,000 to 250,000 Tons Annual Production Harlan Ky. District.

Blue Diamond Coal Sales Co., Inc.

ALEX BONNYMAN
President
Knoxville, Tenn.

CALVIN HOLMES
Vice-President
Cincinnati, O.

FRED E. GORE
Southern Manager
Atlanta, Ga.

The Carbon Fuel Co.

Traction Building, CINCINNATI

Miners and Distributers of

Carbon Splint Coal

The best splint coal produced in America. Highest in heat value. Lowest in Ash and Sulphur. Positively non-clinkering. Firm structure. Perfectly screened in all sizes by most modern shaker screens and carefully loaded by conveyor booms.

CARBON SPLINT is unequalled for use in brick, tile and pottery kilns, for malleable iron manufacturing and all metallurgical purposes. A Domestic coal of the highest class.

Carbon Steam, Gas and By-Product Coals

(MINED FROM THE POWELLTON AND EAGLE SEAMS)

These coals have an established reputation with discriminating consumers for exceptional quality and uniformity.

Inquiries solicited from consumers requiring highest grade By-Product, Producer Gas and Steam Coal.

Mines on

Cabin Creek, Kanawha County, West Va.

Chesapeake & Ohio R. R.

KENTUCKY—WEST VA.
OHIO—PENNSYLVANIA

COAL

STEAM—DOMESTIC
BY-PRODUCT
SPLINT-GAS



A TYPICAL KENTUCKY—WEST VIRGINIA MINE

BY-PRODUCT
BEE HIVE

COKE

FOUNDRY FURNACE
DOMESTIC
MANUFACTURING

SERVICE

"Man serves throughout his life one thing or another. He can aim at no higher object than service well and intelligently done"

FOR THE CONSUMER

We study your needs and supply the proper grades and qualities. OUR SATISFIED CUSTOMERS ARE OUR BEST SALESMEN.

FOR THE OPERATOR

Your coal is best adapted for certain uses and certain markets. Our sales service is based upon two important points: OUR RETURN TO YOU MUST YIELD YOU A PROFITABLE FIGURE: YOUR PRODUCTION MUST GO TO THE PLACE BEST SUITED FOR ITS USE.

WRITE OUR OFFICE NEAREST YOU CONCERNING YOUR NEEDS AND PROBLEMS

EATON, RHODES & COMPANY

GENERAL OFFICES

FIRST NATIONAL BANK BUILDING
CINCINNATI, OHIO

OLIVER BUILDING
PITTSBURGH

FIDELITY MORTGAGE BUILDING
CLEVELAND

GAYLORD BUILDING
ASHLAND, KY.

EXCLUSIVE SALES AGENTS

KENTUCKY—IRONTON—PORTSMOUTH SOLVAY COKE



KENTUCKY SOLVAY COKE CO.

ASHLAND, KENTUCKY

HOUSTON

QUALITY PREPARATION SERVICE

P
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C
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T
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S

STEAM AND DOMESTIC

COALS

T
H
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K
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R

OVER 2,000,000 TONS ANNUALLY

MINED EXCLUSIVELY BY

Houston Coal & Coke Co.
Keystone Coal & Coke Co.
Houston Collieries Co.
Maitland Operation
Carswell Operation.

Thacker Coal & Coke Co.
Operation No. 2
Operation No. 11
Operation No. 18

Franklin Coal Co.

Tidewater Coal & Coke Co.
King Coal Company
Junior Pocahontas Coal Co.

AND SOLD SOLELY BY

HOUSTON COAL COMPANY

KUPER HOOD, General Manager

1509-32 Union Trust Building
CINCINNATI, OHIO

CHICAGO

NORFOLK

NEW YORK

DETROIT

The Kentucky Fuel Company

Union Central Building

CINCINNATI, OHIO

Live Wires in Southeastern Kentucky

KENTUCKY COALS

HARLAN, BELL, KNOX AND CLAY COUNTIES

		Columbia	Dixie Dean		
Atlas	Crystal	Pinnacle	Sunbeam	Turner Jellico	Poplar Lick
		Steam	Gas	Domestic	By-Product
Special Prepared Washed Coal					

TO BY-PRODUCT COAL CONSUMERS

See Report of Analysis on Pages 474 and 475

OHIO COALS

COALDALE HOCKING No. 5 AND No. 6

Mined at Coaldale, Ohio, on B. & O. R. R.

Quality

Preparation

Service

THE KENTUCKY FUEL COMPANY
26th Floor Union Central Building
Cincinnati, Ohio

L. F. KORING, Sales Manager

SOUTHERN OFFICE
307 Burwell Building
Knoxville, Tenn.

T. J. GILBERT, Manager

R. S. MAGEE
President

W. E. DARNABY
Vice-President

A. L. MOSES
Secretary-Treasurer

The Southeastern Coal Co.

General Offices

1322-1324 UNION TRUST BUILDING
CINCINNATI, OHIO

BITUMINOUS COALS

WEST VIRGINIA

KENTUCKY

TENNESSEE

VIRGINIA

For Domestic, Steam, Gas and By-Product Purposes

EACH COAL SELECTED FOR

QUALITY and PREPARATION

WRITE US FOR DETAILS

MEMBERS AMERICAN WHOLESALE COAL ASSOCIATION

DOMINO

(HAZARD)

Mined in Perry County, in Eastern Kentucky.

Big, blocky, firm structure, low ash coal. Prepared over shaker screens and boom loaded. On account of its structure it is an ideal coal for Domestic trade and for Malleable use. Prepared in 4" Block and 2x4" Egg sizes.

Write us about our exclusive sale arrangement in your town.

PARAGON

(ELKHORN)

Highest grade Gas, By-Product and Steam coal. Prepared for market with greatest care.

POCAHONTAS

LUMP, EGG AND SLACK

CHILTON AND EAGLE

LUMP, EGG, MINE RUN AND SLACK

Careful Attention Given to Inquiries and Orders

Tuttle Corporation

Union Trust Building, - Cincinnati, Ohio

Western Coal Company

Union Central Tower
CINCINNATI, OHIO

ALL GRADES HIGH AND LOW VOLATILE
From West Virginia and Eastern Kentucky

—Selling Agents For—

Fourseam Block Collieries Company

Producing No. 4 and No. 7 Hazard Coal

— a n d —

Elkhornseam Collieries Company

Producing Genuine Elkhorn Coal

SHIPMENTS OVER L. & N., C. & O. AND N. & W.

TIDEWATER — LAKES — ALL RAIL

At Your



Service

Caroline Mining Company

Main Office

403 Rawson Bldg., CINCINNATI, OHIO

Branches

Hamilton, Ohio

Lima, Ohio

Middletown, Ind.

Ralweigh Pocahontas

Our Ralweigh Pocahontas is one of West Virginia's new products. The best appearing, finest prepared and highest grade coal in its class.

Sales Agents Charleston Cooperative Coal Co.
WINIFREDE SEAM COAL. SIX HUNDRED TON PER DAY.

The Tildesley Coal Co.

General Offices

41 Ingalls Bldg., Cincinnati, Ohio

Branch Office: Dayton, Ohio

High Grade Gas and By-Product Coals

Our whole plan is one of



with our trade to secure the best results

GET IN TOUCH WITH US BEFORE CONTRACTING

Sales Agents for a Considerable Tonnage of Pond Creek,
Ky., Elkhorn, Ky. and Eagle Gas, West Virginia Coal

ALSO HANDLE A LARGE TONNAGE OF STEAM AND DOMESTIC SIZES OF
WEST VIRGINIA AND KENTUCKY COALS

C. A. TRIBBEY, Pres. & Gen. Manager

JOHN F. GLASER, Sales Manager

The Tribbey Coal Company

817 First National Bank Bldg., CINCINNATI, OHIO

MINERS AND DISTRIBUTORS

COAL of QUALITY

From EASTERN KENTUCKY, HAZARD FIELD, on the L. & N. Ry.



NUMBER SEVEN SEAM

FIRM STRUCTURE. MINES LARGE AND BLOCKY. STOCKS AND HANDLES with little breakage. Burns Freely. Perfectly prepared in Domestic and Steam sizes by the most modern **SHAKER SCREENS** and carefully loaded by **CONVEYOR BOOMS**.



NUMBER FOUR SEAM

LOW in ASH. FREE from IMPURITIES. Not as firm as "TRICO," but demanded by discriminate **DOMESTIC DEALERS.** **UNEXCELLED for STEAM and BY-PRODUCT** purposes.

Prepared over Shaker Screens; Boom loaded.
ALSO MARKETING as STRAIGHT MINE RUN.

We MINE this coal and are the **EXCLUSIVE DISTRIBUTORS**

FRED LEGG, President
W. I. DONNELLY, Secretary and Treasurer

THE LOGAN & KANAWHA COAL COMPANY

First National Bank Building
CINCINNATI, OHIO

Quality --- Service

DOMESTIC, STEAM,
BY-PRODUCT, GAS

KENTUCKY MINES IN HARLAN AND HAZARD
DISTRICTS

WEST VIRGINIA MINES IN KANAWHA, GUYAN,
NEW RIVER AND POCAHONTAS DISTRICTS

KING OF SMITHING COALS



THE BLACK KNIGHT
RALEIGH COAL & COKE CO.

*Mine Owners and Shippers*1509-10 FIRST NATIONAL BANK BUILDING
CINCINNATI, OHIO

RAIL - LAKE - EXPORT

Hatton, Brown & Co.

INCORPORATED



Sales Agents



for

Pocahontas
Banner Red Ash
Kanawha Splint
Elkhorn
Hocking

STEAM - BY-PRODUCT - DOMESTIC

DETROIT
MICH.

General Offices
COLUMBUS
OHIO

ROANOKE
VA.

The Lorain Coal & Dock Company

General Offices--Columbus, Ohio.

Branch Office--Cleveland, Ohio.

PRODUCERS AND SHIPPERS OF

Lorado and Pittsburgh No. 8

Fifty Years Experience in Mining and Selling Coal.
You May Have the Benefit of this Experience.
Our Present Excellent Coals Are the Achievement
of a Lifetime Devoted to Coal.

LORADO MINES

Lorado
Logan County
West Virginia
On the C. & O. Railroad

A HIGH-GRADE
DOMESTIC, STEAM,
GAS, BY-PRODUCT
AND MALLEABLE
COAL

**Daily
Tonnage
Capacity
12,000
Tons**

PITTSBURGH NUMBER EIGHT

Mined at
BLAINE, CRESCENT,
LANSING, STANLEY,
AND WHEELING CREEK

Mines in
BELMONT COUNTY
OHIO

On B. & O. Railroad

A GOOD
GENERAL PURPOSE
COAL

FOR ANALYSIS AND COMPLETE DESCRIPTION OF LORADO SEE PAGE 1024.

PITTSBURGH No. 8 PAGE 611.

THE CRAB ORCHARD MINING CO.

FERRIS BUILDING, COLUMBUS, OHIO

MINERS AND SHIPPERS OF
STILLWATER COAL

Mines at Freeport, Harrison County, Ohio

Ohio
Kentucky
West Virginia

} By-Product
Steam
Domestic
Smithing

E. E. LEARNED,
Secretary and Manager

ASK ABOUT
"COMCO"

The Astel Coal Company

Northern National Bank Bldg.

CLEVELAND

B. C. & C. Pocahontas
Pond Creek By-Product
Pittsburgh Gas and Steam

B. C. & C. Old Va. Red Ash
W. Va. Gas and Splint
Pittsburgh No. 8

QUALITY—PREPARATION—SERVICE

Rail, Lake and Tide Shipments

TOLEDO OFFICE

604 SPITZER BUILDING

THE UNITED COAL SALES COMPANY

1107 Brunson Bldg., COLUMBUS, OHIO

—Miners and Shippers—

POMEROY BEND
(H. V. Ry.)

MILLFIELD HOCKING
(T. & O. C. Ry.)

BLUE BANNER ELKHORN
(C. & O. Ry.)

GENUINE No. 2 JACKSON
(D. T. & I. Ry.)

A. & E. HOCKING
(H. V. Ry.)

PRODUCING 2,000 TONS DAILY

INQUIRIES SOLICITED

HANNA

BITUMINOUS ANTHRACITE COAL

Mined in Pennsylvania, Ohio, West Virginia and Kentucky for Domestic, Steam, By-Product and Smithing Purposes

Connellsville and By-Product Coke

AMBRICOAL

Low Priced Briquetts made from the best, free burning, high carbon, low ash anthracite

Shipments by Rail, Lake and Ocean

M.A. HANNA & Co.

SALES AGENTS

SALES OFFICES

H. E. BOOTH, Manager Bituminous Sales
Leader News Building Cleveland, Ohio

H. W. PERRIN, Manager Anthracite Sales
907 Commercial Trust Bldg. Philadelphia, Pa.

JOSEPH MITCHELTREE
Leader-News Building
Cleveland, Ohio

F. P. COLLINS
410 Fisher Building
Chicago, Ill.

W. H. LEWIS
233 Broadway
New York, N. Y.

G. D. BUCKWELL
1319 Oliver Building
Pittsburgh, Pa.

T. S. JANNEY
Chamber of Commerce
Baltimore, Md.

W. T. McELROY
710 Union Trust Building
Cincinnati, Ohio

O. P. WALDRON
1436 Commercial Trust Bldg.
Philadelphia, Pa.

E. C. O'BRIEN
Millard Streer
Toledo, Ohio

J. PRENDERGAST
Leader-News Building
Cleveland, Ohio

W. H. CURTIS
Hart Building
Williamsport, Pa.

FRED R. ROHL, Inc., Export Agents
32 Broadway, New York

COAL

COKE

The Lake City Coal Co.

Operators and Shippers

POCOCK—MASSILLON
BELMONT—SHAKER SCREEN
PITTSBURGH NO. 8
CAMBRIDGE

Quality and Service
Our Specialty

KIRBY BUILDING :: CLEVELAND

The Reserve Fuel Co.

CLEVELAND

DISTRIBUTORS

High Grade Gas, Steam, Domestic
COAL and COKE

Sales Agents for

UNION BLOCK

"That Satisfying Lump"



MINED BY

**THE UNION COAL STRIPPING &
MINING COMPANY**

LAFFERTY, OHIO

Offices at
615 Hanna Building
Cleveland

Mines at
Gnadenhutzen, Ohio
Lafferty, Ohio
Mineral City, Ohio

The Valley Camp Coal Co.

General Offices

KIRBY BUILDING, CLEVELAND, OHIO

Miners and Shippers of

RAIL, LAKE AND TIDEWATER COALS

Annual Production 6,000,000 Tons

The following are our affiliated and subsidiary companies:

ARKWRIGHT COAL CO., Fairmont, W. Va.
 ARKWRIGHT SUPPLY CO., Fairmont, W. Va.
 CONNELLSVILLE BY-PRODUCT COAL CO., Morgantown, W. Va.
 ELM GROVE MINING CO., Elm Grove, W. Va.
 ELM GROVE MINING CO. OF OHIO, Cleveland, Ohio.
 ELM GROVE STORE CO., Elm Grove, W. Va.
 FORT WILLIAM COAL DOCK CO., LTD., Fort William, Ontario, Canada.
 GLENDALE GAS COAL CO., Glendale, W. Va.
 GLENDALE STORE CO., Glendale, W. Va.
 GREAT LAKES COAL & DOCK CO., Minneapolis, Minn.
 GREAT LAKES TRANSPORTATION CO., LTD., Midland, Ontario.
 KELLEY'S CREEK COLLIERY CO., Charleston, W. Va.
 KELLEY'S CREEK & NORTH WESTERN R. R., Charleston, W. Va.
 KELLEY'S CREEK SUPPLY CO., Charleston, W. Va.
 MORROW STEAMSHIP CO., Cleveland, Ohio.
 OCO SUPPLY CO., Lafferty, Ohio.
 PAISLEY STEAMSHIP CO., Cleveland, Ohio.
 J. A. PAISLEY CO., Cleveland, Ohio.
 RIDGEVIEW COAL CO., Bolivar, Pa.
 SOUDAN SUPPLY CO., Pittsburgh, Pa.
 VALLEY CAMP COAL CO. OF CANADA, LTD., Hamilton, Ontario, Canada.
 WISCONSIN GREAT LAKES COAL & DOCK CO., Milwaukee, Wis.

The following tabulation gives briefly the extent of our mines and docks:

KINLOCH MINE
 Parnassus, Pa.—P. R. R.
 Freeport Seam—Shaker Screens

VALLEY CAMP NO. 1 MINE
 Valley Camp, Pa.—P. R. R.
 Freeport Seam

SOUDAN MINE
 Van Voorhis, Pa.—P. R. R.
 Thin Vein Yonghiogheny Gas

RIDGEVIEW MINE
 Bolivar, Pa.—P. R. R.
 "E" Seam

COLUMBIA MINE
 Fairpoint, Ohio—B. & O. R. R.
 Pittsburgh No. 8

LUCY MINE
 Stewartsville, Ohio—B. & O. R. R.
 Pittsburgh No. 8

WEST WHEELING MINE
 Bridgeport, Ohio—P. R. R.
 Pittsburgh No. 8

OCO MINE
 Lafferty, Ohio—B. & O. R. R.
 Pittsburgh No. 8

CONNELLSVILLE BY-PRODUCT NO. 1 MINE
 Barker, W. Va.—M. R. R. for P. R. R. or N. Y. C.
 Pittsburgh Seam—Shaker Screens

ARKWRIGHT NO. 1 MINE
BOYD NO. 3 MINE
SKILLCORN NO. 2 MINE—(Shaker Screens)
 Elm Grove, W. Va.—B. & O. R. R.
 Pittsburgh Seam

GLENDALE MINE
 Glendale, W. Va.—B. & O. R. R.
 Pittsburgh Seam

SECURITY MINE
 Security, W. Va.—B. & O. R. R.
 Pittsburgh Seam

NORWAY MINE
 Fairmont, W. Va.—B. & O. R. R.
 Sewickley Seam

KELLY'S CREEK NO. 2 MINE
KELLY'S CREEK NO. 4 MINE
 Cedar Grove, W. Va.—K. & M. R. R.
 Coalburg Seam

KELLY'S CREEK NO. 5 MINE
 Cedar Grove, W. Va.—K. & M. R. R.
 No. 5 Block Seam and LEWISTON Seam

DOCKS

SUPERIOR, WIS.
 Great Lakes Coal & Dock Co.
 800,000 tons capacity

MILWAUKEE, WIS.
 Wisconsin Great Lakes Coal &
 Dock Co.
 300,000 tons capacity

FORT WILLIAM, Ontario, Canada
 Fort William Coal Dock Co., Ltd.
 800,000 tons capacity

W. H. WARNER

WHITNEY WARNER

H. L. WARNER

W. H. Warner and Company

UNION COMMERCE BANK BUILDING. CLEVELAND

WHOLESALE COAL

"COAL & PERSONNEL"

Of course you want your Coal to fill definite requirements—of course you have your requirements analyzed and adequately known—of course this means, generally speaking, the best returns on the money you are investing in your Coal, BUT—have you ever stopped to think that probably the most valuable thing about your Coal is the person or persons back of it.

Have you realized that it is the HUMAN ELEMENT back of your Coal that makes it a good investment, a satisfactory business transaction, or one which is possibly not to your taste for several reasons.

For FIFTY-THREE YEARS this organization has been mining the best Coals from Ohio, Pennsylvania, West Virginia and Kentucky, and from Mine to Market has gone with these Coals the keenest kind of Personal Interest, Co-operation and Desire for the best interests of those to whom the Coal went. We have been and are producers of only the BEST COALS in the various fields in which we operate and believe we can make good investments from whatever responsibilities are placed upon us.

Here Is What We Produce

DOMESTIC

POCAHONTAS
COALBURG SPLINT
NO. 5 BLOCK
SEDALIA 4-INCH
WOLF RUN-BIG LUMP
ELLIOTT SPLINT
HAZARD NO. 4, 6 AND 7

STEAM AND GAS COALS

SMITHERS CREEK COAL
KANAWHA SPLINT
YOUGHIOGHENY GAS
PITTSBURGH NO. 8
WOLF RUN
ELKHORN BY-PRODUCT
THIN VEIN HOCKING

Furnace—COKE—Foundry

The Sauters Coal Company

Leader-News Bldg., Cleveland, Ohio

Producers and Shippers of

GAYLORD COAL

MINES AT MARTINS FERRY, OHIO

PENNSYLVANIA R. R. WEST

C. T. DENLY, President

THE SCHROEDER-KELLY COAL COMPANY

CLEVELAND

Anthracite

Lake

Pocahontas

Tidewater

Bituminous

Rail Shipments

COALS OF CHARACTER

THE publishers of the COAL CATALOG will be pleased at all times to receive criticisms and suggestions on the improvement of the book.

A work of this nature must reflect the needs of the user. While the growth in size of the COAL CATALOG must always be kept within the bounds of convenience, a consideration which must account for our failure to include material of benefit to the few instead of the masses, we, nevertheless, welcome suggestions of all kinds as a means of gauging the needs of the user and the extent of the demands.

THE VAN EPPS COAL COMPANY

BULKLEY BLDG.

CLEVELAND, OHIO

Bituminous

Ohio
West Virginia
Kentucky



Anthracite

Seranton District
Lackawanna and Wyoming
Counties

Member American Wholesale Coal Association

P. H. BRUNER
President and General Manager

EDWARD SHUIER
Vice-President and Treasurer

The Bruner Coal Mining Co.

INCORPORATED

Producers and Shippers

HIGH-GRADE

STEAM and DOMESTIC COAL

TIERNEY
EGG
HAZARD
HARLAN
BY-PRODUCT COAL

W. VIRGINIA
SPLINT
SEMI-SMOKELESS
POCAHONTAS

ANALYSIS TIERNEY EGG

Moisture	1.29
Volatile Matter	34.55
Fixed Carbon	60.42
Ash	3.74
	<hr/>
	100.00

Sulphur .....	.62
B. T. U.'s.....	14,621

417-418-419 Bushnell Building - Springfield, Ohio

BLUEFIELD Coal & Coke Company

(Established 1900)

OFFICERS

Frank S. Easley
Wm. D. Cofer
Jas. Stevenson Hewitt
Jas. E. Anderson

WHOLESALE SHIPPERS
AND EXPORTERS
OF

Originating Railroads

Norfolk & Western
Virginian
Carolina, Clinchfield
and Ohio
Chesapeake & Ohio

Pocahontas, Genuine Raven Red Ash
Pond Creek and Elkorn By-Product

STEAM—DOMESTIC—BY-PRODUCT

QUALITY **COAL** SERVICE

414-417 Law and Commerce Bldg.
BLUEFIELD, W. VA.

Cable Address:
"RALECO"—NORFOLK

Codes:
A. B. C. and Scotts 10th

RALEIGH SMOKELESS FUEL CO.

Colliery Agents and Shippers of

EXPORT



BUNKER

THE BEST

COAL

MINED IN U. S. A.

NEW RIVER—POCAHONTAS
(Low Volatile)

HIGH VOLATILE—GAS—SPLINT
At All Tidewater Piers and Lake Docks

For Those at Home

COAL OF CHARACTER FOR EVERY PURPOSE
SHIPPED DIRECT FROM PREMIER FIELDS OF WEST VIRGINIA
TO THE CONSUMER

Steam—Domestic—By-Product—Producer Gas—Smithing

"RALECO PREPARED" A SPECIALTY

Assisted by

Coal RALECO Service

Eastern Export Offices:
NORFOLK, VA. NEW YORK CITY

Western Office:
DETROIT, MICH.
410 Moffat Bldg.
W. I. Sallee, Dist. Mgr.

Eastern Office:
RICHMOND, VA.
Old Dominion Trust Bldg.
C. H. Mason, Jr., Dist. Mgr.

GENERAL OFFICES: BECKLEY, W. VA.

RALEIGH SMOKELESS FUEL CO.

EXCLUSIVE AGENTS

Detroit Office:
410 Moffat Bldg.
W. I. Sallee, Dist. Mgr.

Main Offices:
BECKLEY, W. VA.

Richmond Office:
Old Dominion Trust Bldg.
C. H. Mason, Jr., Dist. Mgr.

Genuine Raven Red Ash

Mined at Red Ash, Virginia. Originating on N. & W. R. R.

HAS NO EQUAL IN ANY FIELD

For Domestic

STOVE

EGG 2x4"

LUMP 4"

Best By Test



For Steam

NUT, PEA AND SLACK

RUN-OF-MINE

SLACK

ANALYSIS

Moisture .....	.16
Volatile	33.92
Fixed Carbon...	63.04
Ash	2.88
	<hr/> 100.00
Sulphur .....	.74
B. t. u.'s.....	15,156

Mines Most Modern in This Section. Equipped With Electrically Operated Shaker Screens, Loading Booms and Hand Picking Tables.

Get Right -:- Stay Right

WITH

Genuine Raven Red Ash

GEO. W. ST. CLAIR, Tazewell, Va.

THOS. H. SETTLE, Bluefield, W. Va.

Virginia Smokeless Coal Company

GENERAL OFFICES: TAZEWELL, VA.

—BRANCH OFFICES—

16 Exchange Place, New York City

Flat Iron Bldg., Norfolk, Va.

Law and Commerce Bldg., Bluefield, W. Va.

MINERS, SHIPPERS, EXPORTERS AND BUNKER SUPPLIERS OF

Pocahontas, New River and Jewell Ridge

SMOKELESS COAL

—AND—

Kanawha, Pond Creek and Clinch Valley

STEAM, GAS AND BY-PRODUCT COAL

—TIDEWATER SHIPPING PIERS—

Lambert's Point, Va.

Sewall's Point, Va.

Newport News, Va.

CODES

Western Union

Universal and Five Letter

A.B.C.

CABLE ADDRESS

"Coalroslin"

COAL is being sold more and more by its trade name or trade mark. The custom originated a good many years ago, possibly in the anthracite region, but Illinois was the state that put life into it.

Considering the 7,000 coal mines in the United States, the number of well known brands is comparatively small. Geographical location, plentitude of coal deposits and prohibitive freight rates will always act as a deterrent to nation-wide usage of any particular coal, no matter how well and favorably it may be known.

Within reasonable limits, however, any good coal may aspire to leadership and fame. If it be a steam coal, it should, like flour, be used "Eventually, Why Not Now?" If its qualifications are, like soap, chiefly domestic, it may be pertinent to inquire, "Have you a bin full of Black Beauties in your home?" Short, snappy and expressive trade names are as effective in establishing a brand of coal in the public mind as with any other commodity. May their use increase.

A. H. LAND, President

C. C. DICKINSON, Vice President

JOHN L. DICKINSON, Treasurer

DICKINSON FUEL CO.

CHARLESTON, W. VA.

WEST VIRGINIA COALS

TO THE TRADE

Naturally, you want at all times to know where your coal is coming from, and as we are Mine Agents, selling the entire production of Specific Mines, we take pleasure in furnishing you this information, which we believe will be of considerable value to you.

Kanawha District Mines—Chesapeake & Ohio Railway

Coalburg Colliery Company, Ronda, W. Va.

Dry Branch Coal Company, Dry Branch, W. Va.

Chesapeake Mining Company, Handley, W. Va.

Black Band Consolidated Coal Company, Olcott, W. Va.

Kanawha District Mines—Kanawha & Michigan Railway

Quincy Coal Company, Quincy, W. Va.

Kanawha District Mines—Campbell's Creek Railroad

New Export Coal Company, Perryville, W. Va. (P. O. Cinco, W. Va.)

Thacker District Mines—Norfolk & Western Railway

Sudduth Fuel Company, Stone, Ky.

Bailey Fuel Company, Toler, Ky.

Annual Capacity of Above Mines—1,500,000 Tons

DOMESTIC—STEAM—MALLEABLE
BY-PRODUCT—GAS

Mines equipped to prepare all sizes. Prices quoted upon request.

DICKINSON FUEL COMPANY

Eclipse Coal Company

CHARLESTON, WEST VIRGINIA

*Is Composed of a Number of West Virginia Operators Who Have
Organized and Incorporated a Company With the View of*

Selling Coal Direct to the Customer



Miners and Shippers of

GAS

SMITHING

STEAM

MALLEABLE

DOMESTIC

SMOKELESS

BY-PRODUCT

*Direct Shipment From Mines to All Points
Reached by Railroad*

General Offices

Boyd Building

CHARLESTON, WEST VIRGINIA

Smokeless Fuel Company

CHARLESTON, W. VA.

NEW YORK CITY
154 Nassau Street

NORFOLK, VA.
Board of Trade Bldg.

MINERS AND SHIPPERS

“MILTRENA”

Pocahontas and New River Smokeless

“QUALITY”

Splint and Gas Coals

— ALL GRADES —

Annual Capacity 3,000,000 Tons

Inland, Export and Bunker

Available for Export and Bunker all Hampton Roads Piers

Available at Lake Docks Sandusky and Toledo, Ohio

CABLE ADDRESS—Miltrena, New York

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President

GEO. H. WHITE
Vice-President

JOHN B. POSTON
Secretary-Treasurer

MANHASSET COAL COMPANY

*Pocahontas and
New River Smokeless*

EXPORT — BUNKER
ALL RAIL — LAKES

*Westmoreland and
Youghiogheny Gas*

Virginian Land Bank Building
CHARLESTON, W. VA.

17 Battery Place
NEW YORK CITY

Cable Address: "MANCOAL", New York

O. J. COX, President

ROY COX, Secretary

E. M. COX, Treasurer

Kanawha Valley Coal Co.

"At Your Service"

**STEAM, DOMESTIC
BY-PRODUCT COALS**

MAIN OFFICE

Kanawha National Bank Building
Charleston, W. Va.

Phone—Capitol 983-984

BRANCH OFFICE

Schwind Building, Dayton, Ohio
C. A. Ogle, Dist. Manager

Phone—Main 2434

W. R. J. ZIMMERMAN, President

W. K. BRIDGES, Sec'y-Treasurer

Old Dominion Coal Corporation

Main Office, Kanawha Banking & Trust Bldg., CHARLESTON, W. VA.

**New River, Pocahontas, Logan, Kanawha, Elkhorn,
Hazard and Harlan Coals**

E. S. CULLEN, Eastern Manager
RICHMOND, VA.
Carneal Bldg.

A. M. HOBSON, Dist. Manager
DETROIT, MICH.
Empire Bldg.

R. B. ISNER, Western Manager
CINCINNATI, OHIO
Dixie Terminal Bldg.

AMERICAN EXPORT & INLAND COAL CORPORATION

Main Office,
HUNTINGTON, W. VA.

Western Office,
UNION TRUST BUILDING,
CINCINNATI, OHIO.

Exclusive Sales Agents For
High Grade West Virginia and Kentucky
COALS

Specializing on Elkhorn

Logan-Elkhorn Fuel Co.

General Offices

HUNTINGTON, WEST VIRGINIA

Sales Agents for and Control Tonnage of

Logan-Elkhorn Coal Corporation
INCORPORATED

600,000 TONS ANNUALLY

Logan County, West Virginia

ISLAND CREEK SEAM

EAGLE SEAM

Letcher County, Kentucky

ELKHORN SEAM

BY-PRODUCT

STEAM

DOMESTIC

WE HAVE THE CREAM OF BY-PRODUCT COAL

FRANK ENSLOW
President

G. D. MILLER
Vice-President

W. H. CUNNINGHAM
Treasurer

ROY CUNNINGHAM, Secretary and General Sales Manager

Twin States Fuel Company

General Office, Huntington, W. Va.

MINERS AND SHIPPERS OF

West Virginia and Kentucky By-Product,
Steam, Malleable and Domestic Coal

DISTRIBUTORS FOR

Cunningham, Miller and Enslow Mines

ALL RAIL — EXPORT — LAKES

IF INTERESTED
in
PURCHASE OR SALE
of
COAL ACREAGE
or
OPERATING MINES

Communicate with

H. H. Morris

Huntington, West Virginia

West Virginia Standard Coal Company

Huntington, - - - West Virginia

Smokeless,
By-Product, Steam,
Gas and Domestic

COAL

ALBERT J. HARRIS, PRESIDENT

From Mines in West Virginia and Kentucky

J. S. THURMOND
President

W. R. THURMOND
General Manager

R. J. SELLMAN,
Sales Manager

Thurmond Coal Company Argyle Coal Company

General Office
WILKINSON BUILDING, LOGAN, W. VA.

By-Product and Coking Coals

MINES AT KLEENKOAL, W. VA., YOLYN, W. VA., ETHEL, W. VA.
MINES LOCATED ON THE CHESAPEAKE & OHIO RAILROAD

OPERATING

The Famous "Eagle" and "Chilton" Seams

PRODUCING

Coals Unexcelled for Gas, Steam, By-Product and
Coking Purposes

SECURE THE COAL BEST SUITED TO YOUR REQUIREMENTS, WITHOUT SUBSTITUTION, BY NEGOTIATING DIRECT WITH OUR SALES DEPARTMENT

Address All Communications to the Company's General Office

AMHERST FUEL COMPANY

Our mines are located in the Logan County, West Virginia, field. We produce high grade By - Product - Coking, Gas, Steam and Malleable coals. Our mines are operated on the "American Open Shop Plan" and our customers are assured of a constant, steady and dependable supply of Quality Coal. We ship what we sell and stand behind what we ship.

C. W. HENRY, General Sales Manager

Union Central Bldg.
CINCINNATI, OHIO

Branch Sales Office
PHILADELPHIA, PA.
Land Title Bldg.

Branch Sales Office
Mine Offices
LUNDALE, W. VA.

Tidewater Agent
C. H. SPRAGUE & SON
Boston Newport News

SEE PAGE 1026



"White Oak"

New River Smokeless Coal

There

is as much difference between

WHITE OAK

and other smokeless coals as
there is between day and night

You say they are all Smokeless Coals. Yes, but there is a big difference in Smokeless Coals.

For instance, "WHITE OAK" Smokeless Coal contains more heat units and less impurities than any other Smokeless Coal produced. Then again, WHITE OAK is more uniform in quality and is cleaner and better prepared.

There must be some difference, and it is a big difference too, or why should there be so many more dealers handling this coal to the exclusion of all other Smokeless Coals?

This is why this coal is the most popular Smokeless Coal on the market today.

To demonstrate there is a difference just try a car or two and they will show just how large the difference is.

It is mined in the heart of the New River District in West Virginia and is prepared in the following sizes—Lump, Egg, Mine Run, Stoker or Nut and Slack and Smithing.

For Description of White Oak Coal See Pages 1057, 1058 and 1059

WRITE OR WIRE OUR NEAREST OFFICE FOR QUOTATIONS

White Oak Coal Company

MACDONALD

WEST VIRGINIA

C. B. EBBERT, Manager of Sales
2 Rector Street, New York, N. Y.

BRANCH OFFICES

Chicago, Ill.
Indianapolis, Ind.

London, England

Norfolk, Va.
Newport News, Va.
Richmond, Va.

CINDERELLA COAL

Low Ash

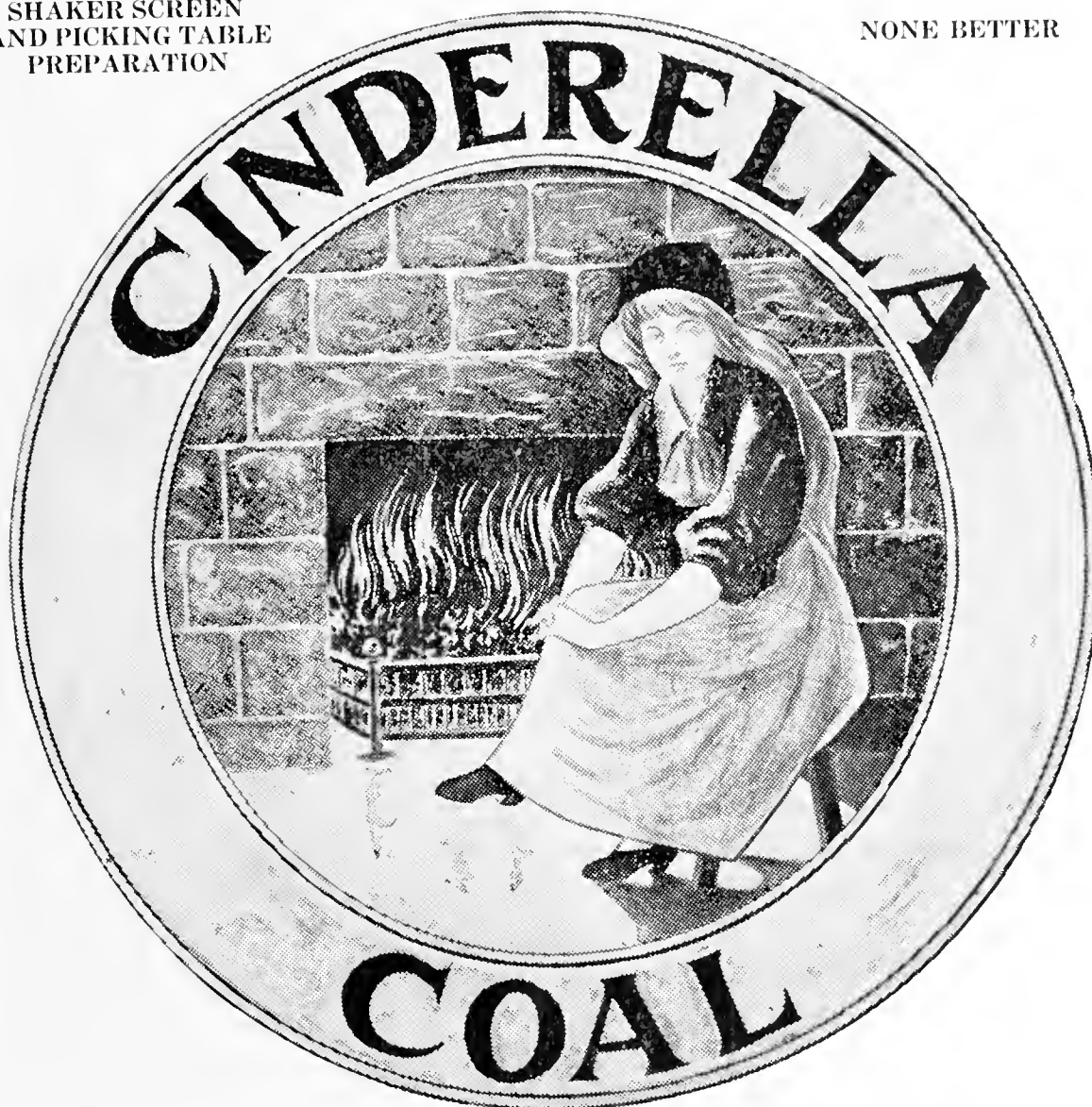
Non-Clinkering

White Ash

LUMP, EGG AND STOVE FOR DOMESTIC USE
SLACK FOR STOKERS

SHAKER SCREEN
AND PICKING TABLE
PREPARATION

NONE BETTER



A Favorite Domestic Coal With No Slack and Large Lumps

Mined By

SYCAMORE COAL COMPANY

Cinderella, Mingo Co., W. Va., on Norfolk & Western Ry.

MAIN OFFICE: VIVIAN, W. VA.

Sales Agents. CASTNER, CURRAN & BULLITT
Cincinnati, Ohio

L. E. WOODS
President

W. J. O'TOOLE
Vice-Pres. and Mgr. of Sales

J. H. BARKER
Treasurer

D. A. PLUNKETT
Secretary

CENTRAL POCAHONTAS

CRYSTAL BLOCK
CRYSTAL STOVE

CRYSTAL EGG
RAWL MINE RUN



2,000,000 TONS ANNUALLY

Low Ash Low Sulphur Non-Clinkering
Free Burning Unexcelled for Stocking



BRANCH OFFICES

CINCINNATI, OHIO
William Heitzman, Mgr.
Union Central Building

NORFOLK, VA.
R. M. Foster, Mgr.
Flat Iron Building

BLUEFIELD, W. VA.
C. M. Davis, Mgr.
Coal & Coke Building

LAKE ERIE PORTS: Sandusky and Toledo, Ohio

TIDEWATER PIERS: Lamberts Point and Sewalls Point, Norfolk; and Newport News, Va.

Shipped from Ten Mines in West Virginia

MINERS, SHIPPERS, EXPORTERS AND BUNKER SUPPLIERS

Central Pocahontas Coal Co.

General Offices: WELCH, WEST VIRGINIA

Cable Address "CENTOPOCA" all Codes

See Our Pages 984 and 985 in the West Virginia Section

SOUTHERN STATES

Eastern Kentucky Tennessee Alabama

PRACTICALLY all of the coal produced in Eastern Kentucky is shipped outside the state, most of it going to the Middle West states. During the Lake season heavy shipments are made to the ports on Lake Erie for consumption in Canada and the Northwestern states.

About 35 per cent. of Tennessee's yearly output is used locally, and a slightly greater amount is delivered to the railroads. A considerable quantity is shipped to the states lying to the South, Georgia, North Carolina, South Carolina and Alabama being the largest consumers. Tennessee coal for domestic purposes has a growing market in the Middle West states. Comparatively little is sent to the Great Lakes or to Tidewater.

More than half the coal produced in Alabama is used locally, the steel plants being heavy consumers, as well as the beehive and by-product ovens connected therewith. More than one-quarter is used by the railroads, the balance being shipped to adjoining states, and exported through the ports of Pensacola and Mobile.

Distributing Agencies and Wholesale Coal Dealers, with offices in the cities and towns below mentioned, will be found represented on the pages which follow.

ASHLAND
CHATTANOOGA

WINCHESTER
JELICO

BIRMINGHAM

Monro-Warrior Coal & Coke Co.

Miners and Shippers of High Grade

COAL AND COKE

Directing the Operations and Sales of Our Associated Companies Under the Same Management

NORTON COAL MINING CO., NORTONVILLE, KENTUCKY
 SUNLIGHT COLLIERIES CO., NORTONVILLE, KENTUCKY
 EMPIRE COAL COMPANY, EMPIRE, KENTUCKY
 ILSLEY MINING COMPANY, ILSLEY, KENTUCKY
 WESTERN COLLIERIES CO., ILSLEY, KENTUCKY
 HARLAN SUPERIOR COAL CO., HARLAN (P. O. Chevrolet), KENTUCKY
 GLENMARY COAL CO., GLENMARY, ALABAMA
 STERLING BLACK CREEK MINES, NAUVOO, ALABAMA

(See Mine Statistics in Directory Section on Each of Companies Listed)

Producing

Locomotive, Industrial and Bunker Fuel; By-Product, Gas, Malleable and Smithing Coal; All Sizes of Washed and Prepared Steam and Domestic Coal; Special Fuel for Manufacturers of Brick, Clay Products and Cement; For Distribution Throughout the South, the Middle and Northwest

ALABAMA

STERLING BLACK CREEK AND CAHABA RED ASH
 FANCY DOMESTIC AND WASHED STEAM COAL

Furnace and Foundry Coke

Mine Agents for the Best Quality of

Pennsylvania Anthracite

West Virginia Smokeless

COMBUSTION ENGINEERING OUR SPECIALTY

MONRO E. LANIER, President
 STERLING S. LANIER, Gen. Mgr. of Operations

H. B. ROBINSON, Acting Sec. & Treas.
 RUSSEL D. LANIER, Gen. Sales Agent

GENERAL OFFICES

C. O. FOWLER
 Northern Mgr.
 417 South Dearborn St.
 CHICAGO, ILL.

19th Floor Jefferson County Bank Bldg.
 BIRMINGHAM, ALABAMA

R. L. SCHLOTMAN, Mgr.
 Kentucky Office
 NORTONVILLE, KY.

Adams, Rowe & Norman

COAL and COKE

For Every Purpose

EXPORTERS THROUGH GULF AND SOUTH ATLANTIC PORTS

BIRMINGHAM - - - ALABAMA

F. A. GRIDER

S. L. YERKES

Grider Coal Sales Agency

Mine Agents

Steam and Domestic Coal

Distributing 2,500,000 Tons Annually

Mines on Louisville & Nashville, Southern, Illinois Central,
Frisco and Northern Alabama Railroads

1414-18 American Trust Building

- - -

BIRMINGHAM ALA

H. A. PAYNTER COAL COMPANY

WINCHESTER, KENTUCKY

The Gateway City to
Eastern Kentucky
Coal Fields

WINCHESTER

Right at
the Mines

YOUR ORDERS FOR KENTUCKY STEAM, AND DOMESTIC COALS
WILL BE GIVEN OUR CAREFUL ATTENTION

305-6 McELDOWNEY BUILDING

Yolande Coal & Coke Company

High-Grade 72 Hour Foundry Coke

Washed and Sized Blacksmith Coal

Steam Coal - Coking Coal

Mines and Ovens at Yolande, Ala.

General Office:

BROWN-MARX BUILDING,
BIRMINGHAM, ALABAMA

BUY YOUR COAL DIRECT FROM JELICO, TENN., AND GET THE GENUINE ARTICLE

W. J. McKINLEY, Pres. & Gen. Mgr.

F. L. SMITH, Vice Pres.

C. W. JONES, Sec. & Treas.

SOUTHERN JELICO COAL COMPANY

INCORPORATED

HIGH GRADE JELICO, HARLAN, BLUE GEM AND CLAY COUNTY

STEAM AND DOMESTIC COAL

Josiah Smith Building, JELICO, TENN.

THE ONLY EXCLUSIVE WHOLESALE COAL DEALER IN THE JELICO DISTRICT

FEDERAL COAL Co.

CHATTANOOGA, TENN.

Operators

Jobbers

Exporters

Producers of

Federal Straight Creek Coal

Jobbers of Coal Produced in West Virginia, Virginia,
Kentucky, Tennessee and Alabama

Nothing But High Grade Coals Handled

Special Attention Given To Export Business

General Office: CHATTANOOGA, TENN.

BRANCH SALES OFFICES:

LOUISVILLE, KY.

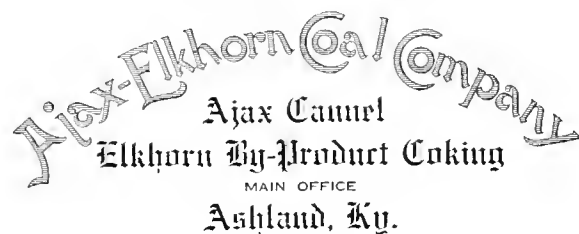
SPARTANSBURG, S. C.

ATLANTA, GA.

EXPORT OFFICES

CHARLESTON, S. C.

NEW ORLEANS, LA.



Exclusive Sales Agents For

SUPERIOR ELKHORN COAL CO. LACKEY MINING COMPANY
ZELLA MINING COMPANY

Producers of

AJAX-ELKHORN COAL AJAX-CANNEL COAL

Superior Fuels For

STEAM DOMESTIC BY-PRODUCT GAS MAKING
MALLEABLE and CERAMIC USES

High in Heat Value
Low in Ash

High in Volatile Matter
Low in Sulphur

RETAIL DEALERS SHOULD KNOW ALL ABOUT OUR AJAX-CANNEL
LET US SEND YOU FULL PARTICULARS

WITH A PRODUCTION OF 1,000 TONS PER DAY—ALL OF IT COMING FROM THE RE-
OWNED ELKHORN No. 1 SEAM YOU ARE SAFE IN RELYING UPON
OUR SERVICE AND THE UNIFORM QUALITY OF OUR SHIPMENTS

For Full Particulars on AJAX-ELKHORN and AJAX-CANNEL Coals See Pages 462 and 463

Middle West States

*Indiana**Illinois**Michigan**Wisconsin*

MORE than 40 per cent of Indiana's coal production is used within the borders of the state, and about 30 per cent is used by the railroads. To take care of the difference between production and requirements, coal is supplied in the largest quantities by West Virginia, Illinois and Kentucky.

About 80 per cent of the Illinois output is used in approximately equal quantities by the railroads and industries within the state. Much coal is supplied to Illinois by Indiana, West Virginia and Kentucky, and also a considerable amount through the Lake docks.

The yearly coal production of Michigan is small and all of it is used by the railroads and local industries. Owing to the size and importance of its manufacturing enterprises, Michigan is a heavy consumer of coal, most of this being supplied by the states of West Virginia, Ohio, Kentucky, Indiana, Illinois and Pennsylvania. About one-seventh of its yearly requirements is met by Lake shipments.

Over half of Wisconsin's fuel needs are supplied through the Lake docks, with Illinois and West Virginia and Indiana furnishing most of the balance required.

Distributing Agencies and Wholesale Coal Dealers, with offices in the cities below mentioned will be found represented on the pages which follow.

CHICAGO
DETROIT
MILWAUKEE

INDIANAPOLIS
TERRE HAUTE

American Coal & Supply Co.

General Office
Suite 618-630
108 SOUTH LA SALLE STREET., CHICAGO, ILL.

Exclusive Distributors of

SUNRISE

Produced in
Williamson County, Illinois

"Sunrise" is Mined at
CAMBRIA, ILL.
Shipping Point
CARTERVILLE
Served By
ILLINOIS CENTRAL RAILROAD

DAILY
TONNAGE
CAPACITY
1000 TONS

ANALYSIS	
Moisture	7.10
Volatile Matter.....	34.09
Fixed Carbon.....	52.59
Ash	6.22
Sulphur	1.20
B.t.u. (Dry)	13,200

Also Exclusive Agents for

POCAHONTAS
PITTSBURGH NO. 8

ELKHORN
ILLINOIS
KENTUCKY—ALL SIZES

INDIANA
KANAWHA

See Our Page 317 in the Illinois Section

ATWILL-MAKEMSON COKE AND COAL CO.

BY-PRODUCT COKE BEEHIVE COKE
DOMESTIC COKE

The Atwill-Makemson Coke & Coal Company was organized in 1912 by F. C. Atwill and J. L. Makemson, both of whom have specialized in the distribution of coke for a period of over twenty years.

The entire sales force is composed of men trained in the knowledge and sale of coke, and who, in the majority of cases, have been in the employ of this organization since its inception.

This company specializes in coke and handle same exclusively, representing coke producing concerns whose output is respectively By-Product, Beehive and Gas Cokes.

Rendering best service and fair treatment both to PRINCIPALS and CUSTOMERS is the desire of

Atwill-Makemson Coke & Coal Co.

McCormick Bldg., Chicago, Ill.

COKE

FOR EVERY PURPOSE

BERRY SMITHING COAL COMPANY

20 W. JACKSON BOULEVARD, CHICAGO, ILL.

STEAM, DOMESTIC and SMITHING COALS

HISYLVANIA HOCKING	FAUX-LOGAN SMITHING
ESSEX-POMEROY	APEX SMITHING
ZUR WELLE PREPARED SMITHING	

Our smithing coal is used in every state from the Atlantic to the Pacific.

Exclusive Western Sales Agents for

HISYLVANIA COAL COMPANY
COLUMBUS, OHIO

ESSEX COAL COMPANY
COLUMBUS, OHIO

LOGAN COAL COMPANY
PHILADELPHIA, PA.

Shippers of High Grade

West Virginia Pocahontas	Illinois Steam and Domestic
Indiana Steam and Domestic	

OUR TONNAGE IS LARGE BECAUSE
WE SERVE SO WELL

ARTHUR E. LAMKEY

SALES AGENT

McCORMICK BUILDING
Michigan Boulevard at Van Buren Street

CHICAGO, ILLINOIS

Long Distance Telephones
Harrison 6748-2164

LAKE **COAL** RAIL

Wholesale Distributors to Industries,
Dealers and Railroads

FOR OUR MUTUAL BENEFIT, LET'S GET TOGETHER

NASON

COAL COMPANY

Old Colony Building, CHICAGO

Producers and Distributors

of



and



Produced in the following sizes:

6" Lump (hand picked)
 1 1/2" " " "
 6x3" Egg (hand picked)
 6x2" " " "
 3x2" Nut
 1 1/2" and 2" Screenings

SHIPMENT VIA

Chicago & Eastern Illinois
 Big Four

FROM

NOKOMIS, ILL.

6" Lump
 1 1/2" " "
 6x2" Egg
 6x1 1/2" " "
 3x2" Nut
 1 1/2" and 2" Screenings

SHIPMENT VIA

Chicago & Alton
 Chicago, Burlington & Quincy
 Chicago, Peoria & St. Louis
 Chicago & Northwestern

FROM

Springfield Auburn
 Virden Girard

Clean and Always the Same

RICHARDS, EVANS & COMPANY

417 SOUTH DEARBORN STREET
CHICAGO, ILLINOIS

Specializing on

High Grade Indiana Coal

Domestic and Steam

SALES AGENTS

Fort Branch Coal Mining Co., Fort Branch, Ind.
Indian Creek Coal & Mining Co., Littles and Blackburn, Ind.
Newburg Coal Company, Newburg, Ind.

Indiana's Best Domestic Coal is

GOOD COAL

REAL COAL AND REAL SERVICE
MAKE
SATISFIED CUSTOMERS

We Solicit Your Inquiries
on

All High Grade Bituminous Coals and Coke

OGLE COAL COMPANY

Distributors of the Best
Indiana, West Virginia
and Kentucky Coals

15 MINES

1200 Fletcher Savings & Trust Building
INDIANAPOLIS, INDIANA

418 First National Bank Bldg.
MASON CITY, IOWA

200 Old Colony Bldg.
CHICAGO, ILLINOIS

820 Dixie Terminal Bldg.
CINCINNATI, OHIO

Walter Bledsoe & Company

Home Office

Terre Haute Trust Building
TERRE HAUTE, INDIANA

Walter Bledsoe, President

C. G. Hall, General Manager

Earl Shagley, Treasurer

INDIANAPOLIS OFFICE
TRACTION TERMINAL BUILDING
Otto Gumberts, Secretary
R. L. Reed, Vice President

CHICAGO OFFICE
OLD COLONY BUILDING
Harry Ziv, Resident Manager

CINCINNATI OFFICE
UNION CENTRAL LIFE BUILDING
H. L. Jump, Resident Manager

"All the wild ideas of unbalanced radical agitators the world over, in their ignorant and pitiable quest for happiness through revolution, confiscation of property, and crime, cannot overthrow the eternal truth that the one route to happiness through property or government is over the broad and open highway of service. And service always means industry, thrift, respect for authority, and recognition of the rights of others."

During this period of unrest the above words of W. G. Sibley appeal to us with striking force, and we offer them to you as a sort of personal introduction. For more than ten years we have served an increasing number of discriminating and representative coal users, both in our own home cities and farther afield. We have found them not only to be institutions whose success has been founded on fair dealing and efficient service, but they also have a full appreciation of the proper effort on the part of others to serve them. In most cases we have taken care of their coal requirements continuously year after year. We cannot help feeling a certain pride in the quality of the concerns we serve. We have earnestly tried to give them the service they have a right to expect from the firm to whom they entrust the important duty of supplying them with a basic necessity.

SEE OUR PAGES 382 to 388 IN THE INDIANA SECTION

QUALITY

QUANTITY

SERVICE

ROWLAND-POWER CONSOLIDATED COLLIERIES CO.

INDIANA BITUMINOUS COAL

We operate ten mines on five railroads in five counties in Indiana, working four different seams. These mines have a combined capacity of 12,000 tons per day.

We mine Block and No. 4 Vein coals on the Monon, Big Four and Chicago, Milwaukee & St. Paul Railways; No. 3 Vein coal on the Pennsylvania Lines, and No. 6 Vein coal on the Illinois Central and Monon.

The output of these mines is especially suited to a variety of needs, such as for steam plants, domestic purposes, metallurgical works, tile and terra cotta plants.

We give our coal the most careful preparation, using shaker screens and picking tables and giving it a final picking as it goes into the car.

Because of the number of our mines, their location and their capacity, we can give the very best service to users of steam coal in large quantities.

SEE THE VIEWS OF OUR OPERATIONS ON PAGES 395 to 399

General Office: TERRE HAUTE, IND.

Merchants Bank Bldg.
Indianapolis, Ind.

Fisher Bldg.
Chicago, Ill.

Jewett, Bigelow & Brooks

INCORPORATED

OFFICERS

E. H. JEWETT, Pres.
H. M. JEWETT, V. P.
E. L. DOUGLASS, V. P.
L. H. STONE, V. P.
J. D. McKAY, Sec.
WALTER BROOKS, Treas.

General Office
DETROIT, MICH.

BRANCH OFFICES

CINCINNATI, OHIO
ATLANTA, GA.
JACKSONVILLE, FLA.
NEW YORK, N. Y.
BALTIMORE, MD.
HAMPTON ROADS, VA.
CHARLESTON, S. C.

OPERATORS WHOLESALERS EXPORTERS

West Virginia Low Volatile (Smokeless) Coal—"Pocahontas"

West Virginia High Volatile By-Product Coal—"Iroquois"

West Virginia High Volatile Steam Coal—"Seminole"

J. B. B. Kentucky Gas Coal

J. B. B. Kentucky By-Product Coal

J. B. B. Black Joe Domestic Coal

Jewett, Bigelow and Brooks, Inc., has served the public with high grade coals for 25 years. At the present time we control through ownership the output of 15 mines in Eastern Kentucky and 7 in West Virginia. These mines are so located as to give us a kind of coal suited to every industrial requirement. Orders, when received, are filled with the coal that through years of usage has demonstrated its ability to serve the purpose. The wide range of coals at our command, the location of our mines on various railroads, the services of our various branch offices, added to the experience of a quarter century in playing fair and square with the trade is our best guarantee of satisfaction.

Export and Bunkering Coals

Low Volatile Coal for Bunker and Steam Use

J. B. B. Famous Kentucky Gas Coal for Gas Plants

High Volatile West Virginia Coal for Locomotives

Sales Office for Export Business

17 BATTERY PLACE, NEW YORK

CABLE ADDRESS "JAYBEEBEE"

ALL CODES



ANTHRACITE
POCAHONTAS

WEST VIRGINIA
OHIO

The Evans Coal Company

STEAM, GAS AND DOMESTIC COAL

747 Book Building

DETROIT, MICH.

D. C. Cratty Coal Company

Service

STEAM--GAS--DOMESTIC--MALLEABLE

First Wisconsin National Bank Building

MILWAUKEE, WIS.

“STOP, LOOK AND LISTEN” has become so familiar a notice to tourists that its warning is frequently disregarded, the penalty in many instances being the loss of life and property.

“Kindly Mention Our Publication When Writing Advertisers” is a standing request of all publishers, but has been urged so often as to become trite and ineffective as a means of connecting the inquirer and the medium.

Both are capital pieces of advice—addressed chiefly in behalf of him who reads. Our interest right now is in the latter. It is our belief that each time a letter of inquiry states the publication which initiated it, there is a direct benefit to the writer. The advertiser is always alert for direct evidence of results. This evidence can come only from the reader. The more evidence, the more support; the more support, the better the medium.

For our mutual interest, therefore—MENTION THE COAL CATALOG.

Geologists
Engineers
Reports
Coal Lands
Timber Lands
Mining Properties
Credit Agencies
Motor Trucks

CLARK & KREBS, Inc.

EIGHTH FLOOR, UNION BUILDING
CHARLESTON, W. VA

CIVIL AND MINING ENGINEERING
IN ALL ITS BRANCHES



Detail Reports on Coal, Oil and Gas Lands
Appraisement of Lands for Taxation Purposes
Detail Plans for Coal Tipples and Colliery Development

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Continuous Prints Up To 54 Inches Wide, In Any Length,
At Prevailing Prices, With Prompt Service

LARGE MINE MAPS A SPECIALTY

DEPENDABLE COAL

Prompt, regular shipments of uniform, high quality coals at reasonable cost.

Dependable properties bought or sold for responsible principals or agents.

Our every Co-operation is available

EDWARD F. HAYS, JR.

Berger Building

BELL PHONE: 5582 COURT

Pittsburgh, Pa.

To Corporations or Individuals desiring to purchase

COAL PROPERTIES

either Smokeless or Splint in West Virginia
or Kentucky

*I have going mines and large blocks of acreage and
am in position to deliver at*

ATTRACTIVE PRICES

Jean F. Smith

FIRST NATIONAL BANK BLDG.,

HUNTINGTON, WEST VA.

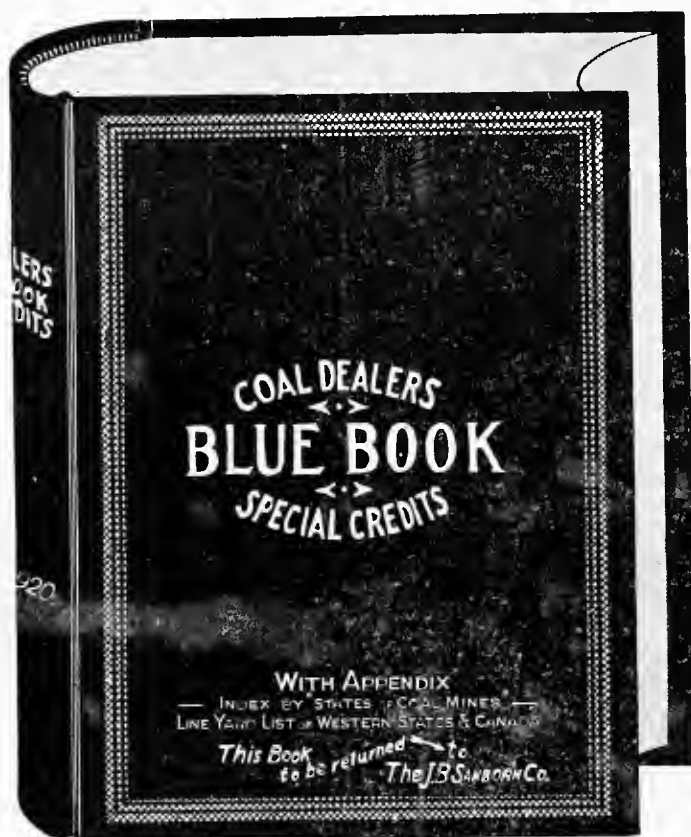
The J. B. Sanborn Co.

ESTABLISHED 1886

Coal Trade Mercantile Agency

Publishers of the

Coal Dealers Blue Book



The COAL DEALERS BLUE BOOK issued by this agency contains a complete list of the Coal Dealers, Miners and Shippers and Car Lot buyers of Coal and Coke in the United States and Canada, with their capital and pay ratings. This reference book is issued in March and September of each year. Weekly sheets show changes in the trade, delinquent trade reports, etc., and is the most complete list of this character issued by any agency. Supplements issued monthly, each supplement superseding previous issues.

Over one thousand of the large shippers of Coal and Coke are subscribers to this service, and their continued use of the same is our recommendation to you. We would be pleased to receive your advance order, as these advance subscriptions greatly aid us in determining the size of the editions.

SIZE OF BOOK IS 10½"x8"x3"
AND CONTAINS 1700 PAGES

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Collections handled throughout United States and Canada at current rates. Representatives in all principal cities.

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TO SUBSCRIBERS ONLY, FOR USE OF THEIR SALESMEN

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440 South Dearborn Street

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The Coal Credit Agency Company

BURCH & PETERS, Counsel

The Collection Medium of the Coal Trade for the
Ohio Valley

*Bank and Business References
on Application*

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Coal Mines, Coal Lands, and Timber Lands

In West Virginia and Adjacent States

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Howard L. Swisher & Co.

(INCORPORATED)

LAND MERCHANTS

Morgantown

West Virginia

“MACCAR TRUCKS”

Model “L”	1	1-2 tons chassis	-	\$2700.00
Model “H-A”	2	tons chassis	-	3100.00
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Model “M-2”	4	tons chassis	-	4200 00
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DEMOUNTABLE POWER PLANT
THE TRUCK OF CONTINUOUS SERVICE

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